Wetlands Delineation Report
IH 94 (North-South)
Milwaukee County, Wisconsin

DOT Project ID: 1030-20-07

September 2014

Prepared for
Wisconsin Department of Transportation
Southeast Region
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Waukesha, WI 53187

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Project No.: 2014-0041.12

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APPENDICES

1.0 INTRODUCTION

Per the request of the Wisconsin Department of Transportation, GRAEF conducted a wetlands delineation update and verification of previously delineated wetlands within two designated Study Areas along Interstate Highway 94 (Figure 1, Appendix A). Study Area A is located from 3,000 feet south of Ryan Road to 2,000 feet north of Puetz Road in an area that generally ranges from 130 feet to 650 feet from the shoulder of the road in parts of Sections 18, 19, and 30; Township 5 North; Range 22 East in Milwaukee County, Wisconsin. Study Area B is located approximately from 1,970 feet south of Rawson Avenue to approximately 2,560 feet south of Rawson Avenue in an area approximately 110 feet from the shoulder of the road in parts of Section 7, Township 5 North, Range 22 East in Milwaukee County, Wisconsin.

The purpose of this wetland delineation was to verify and, when needed, revise the wetland boundaries that were previously delineated in 2009 by GRAEF. Our study is presented here in terms of methodology, results, and conclusions.

The wetlands delineation field investigation was conducted by GRAEF scientists Geoffrey B. Parish and Ronald A. Londré on August 1st, 4th, 6th, 18th, and 19th of 2014. A Statement of Qualifications on the field investigators is provided in Appendix J.

2.0 METHODS

This delineation was conducted in accordance with the guidelines of the Corps of Engineers Wetland Delineation Manual (Environmental Laboratory, 1987) and the Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Midwest Region (Version 2.0, 2010) and in general accordance with Wisconsin Department of Natural Resources guidelines (WI Department of Administration, WI Coastal Management Program, 1995) and Wisconsin Department of Transportation Wetland Mitigation Banking Technical Guidelines (1993). National Wetland Indicator status and taxonomic nomenclature is referenced from The National Wetland Plant List (Lichvar 2014). National Wetland Indicator status is based on the Midwest Region.

Prior to conducting fieldwork, GRAEF scientists reviewed a previous wetland delineation report from 2009 and several maps including the United States Geological Survey (USGS) 7.5' Quadrangle maps, Wisconsin Wetland Inventory Map, Natural Resource Conservation Service (NRCS) Soil Survey Map, and aerial photographs. *Note: NRCS no longer releases their NRCS Wetland Inventory Maps to other than the landowner or operator without documented permission from the landowner or operator; therefore they were not reviewed nor are they included with this report.*

Precipitation data from approximately 90 days prior to the field investigation was obtained from a weather station near the Study Area and compared with 30-year average precipitation data obtained from a NRCS WETS Table for the County where the Study Area was located to determine if antecedent hydrologic conditions at the time of the site visit were normal for the time of the year.

The wetland verification process was conducted by uploading the wetland shape files from the previous 2009 wetland delineation onto a sub-meter accurate handheld GPS device (Trimble Geo-XH). The GPS device containing the wetland shape files and wetland boundary maps from the 2009 wetland delineation were used to walk and evaluate each previously delineated wetland boundary and determine whether any of the boundaries had changed over the past five years. Verified wetland boundaries, newly delineated wetlands, and revised boundaries are clearly identified on Exhibit A, Appendix E.

Sampling points were located in areas where new wetlands were determined to be present or where revisions to wetland boundaries were identified. The points were placed in areas exhibiting wetland and upland characteristics to document the presence and/or absence of wetlands and to provide support for the delineated wetland boundaries. At each sampling point, data were collected to document the vegetation, soils, and indicators of wetland hydrology. The wetland boundaries were staked using wire pin flags and when needed flagging tape. Wetland boundaries were generally determined by distinct to subtle differences in the abundance of hydrophytic vegetation and upland vegetation, apparent topographic breaks, and regular probing of soils.

A Floristic Quality Assessment (FQA) of each newly delineated wetland was conducted using the guidelines described in Development of a Floristic Quality Assessment for Wisconsin (Bernthal, 2003) as adopted and amended from the Plants of the Chicago Region (Swink and Wilhelm, 1994). A meander survey was performed for each wetland area to identify and document all vascular plant species present and identifiable at the time of the site visit. Based on the data collected, mean C and Floristic Quality Index (FQI) values were calculated using coefficients of conservatism values made available by the University of Wisconsin-Madison Herbarium's "Checklist of the Vascular Plants of Wisconsin".

3.0 RESULTS AND DISCUSSION

3.1 BACKGROUND REVIEW

3.1.1 Topography

Topography and surface water drainage within the Study Area is largely a result of grades and drainage of the highway. Generally, surface water flows into ditches alongside the highway and is directed towards tributaries of Oak Creek. Topographic contours are shown on maps (Figure 2) in Appendix A.

3.1.2 Wisconsin Wetland Inventory

The Wisconsin Wetland Inventory (WWI) map (Figure 3, Appendix A) depicted 19 wetlands within Study Area A and 2 wetlands within Study Area B. The types of wetlands within the Study Areas shown on the WWI map are listed in Table 1 below.

Table 1. Mapped WWI Wetland Types

Study Area	Map Unit Symbol	Description
A	W0Hx	Open water; subclass unknown; Standing water, palustrine; excavated
A	E2H	Emergent/wet meadow; narrow-leaved persistent; Standing water, palustrine
A	E2K	Emergent/wet meadow; narrow-leaved persistent; Wet soil, palustrine
A	E2Ka	Emergent/wet meadow; narrow-leaved persistent; Wet soil, palustrine; Abandoned
A	E2Kx	Emergent/wet meadow; narrow-leaved persistent; Wet soil, palustrine; Excavated
A, B	T3/E2K	Forested; Broad-leaved deciduous / Emergent/wet meadow; narrow-leaved persistent; Wet soil, palustrine
B	T3K	Forested; Broad-leaved deciduous; Wet soil, palustrine

3.1.3 Soils

According to the NRCS Soil Survey map (Figure 4, Appendix A) 13 mapped soil units are located within Study Area A and 5 units are located within Study Area B. The types of mapped soils are listed on Table 2 below.

Table 2. Mapped Soils

Study Area	Map Unit Symbol	Taxonomic Classification	Hydric Classification
A, B	AsA	Ashkum silty clay loam, 0-3% slopes	All hydric
A	AzB	Aztalan loam, 2-6% slopes	Not hydric
A, B	BlA	Blount silt loam, 1-3% slopes	Not hydric
A	HeB	Hebron loam, 2 to 6 percent slopes	Not hydric
A	HtA	Houghton muck, 0 to 2 percent slopes	All hydric
A	MmA	Matherton silt loam, 1 to 3 percent slopes	Not hydric
A, B	MzdB	Morley silt loam, 2 to 6 percent slopes	Not hydric
A, B	MzdB2	Morley silt loam, 2 to 6 percent slopes, eroded	Not hydric
A, B	MzdC2	Morley silt loam, 6 to 12 percent slopes, eroded	Not hydric
A	MzdD2	Morley silt loam, 12 to 20 percent slopes, eroded	Not hydric
A	Mzg	Muskego muck	All hydric
A	PrA	Pistakee silt loam, 1 to 3 percent slopes	Not hydric
A	Sm	Sebewa silt loam	All hydric

3.1.4 Prior Wetland Delineation (2009)

The prior wetland delineation conducted by GRAEF in 2009, as a part of a larger project, showed twenty delineated wetlands (Appendix B) within the Study Area. Copies of the Wetland Determination Data Forms from the 2009 report are provided in Appendix C.

3.1.5 Precipitation Data.

The WETS analysis worksheet is provided in Appendix D. According to the MRCC cli-MATE database, the total precipitation from a nearby weather station (MILWAUKEE MITCHELL AP, WI839) for the 90 days prior to the start of the field investigation on August 1st, 2014 was approximately 11.21 inches. The precipitation data for the 90 day period preceding the month of August were entered into a WETS analysis worksheet to determine antecedent hydrologic conditions at the time of the site visit for field investigation purposes. Based on this analysis, the precipitation total for the 90 days prior to the site visits was considered to be within a normal range, suggesting that the surface or near-surface hydrology at the time of the site visit was normal and that hydrologic conditions during the site visit were typical. Approximately, 3.14 inches of precipitation occurred between the start of the field investigation on August 1st and the end of the field investigation on August 18th, 2014.

3.2 FIELD STUDY

3.2.1 Site Description

The wetland investigation included two Study Areas, A and B (Figure 1, Appendix A), that were generally along the IH 94 corridor. The majority of the landscape had been altered as a result of the construction of IH 94 and associated on and off ramps, ditches and culverts. Surface water was generally managed through a series of ditches and culverts directing water towards Oak Creek and its tributaries.

There were locations within Study Area A that were under active construction and other areas where construction had recently been completed. As a result, the current conditions are not shown on the aerial photographs in Appendix A.

The majority of newly delineated wetlands were wetlands located in roadside ditches that may have existed in 2009 but were not identified as wetlands in the 2009 report. The majority of revisions to wetland boundaries were a result of expanding the wetlands to include wetlands that existed in roadside ditches that were contiguous with the previously delineated wetland boundaries. The other primary reason for revisions to wetland boundaries resulted from roadway improvement projects where permitted wetland fills altered the wetland boundaries.

3.2.2 Wetlands

Thirty wetlands (W-1 through W-12, W7-1, W7-6, W8-6, W8-7, W8-8, W9-2, W9-3, W9-4, W9-4a, W9-5, W9-6, W9-7, W9-8, W9-9, W10-1, W10-2, W10-3, and W10-4) and their boundaries were newly delineated, revised, or verified. The delineated wetland boundaries and sample points are shown on Exhibit A in Appendix E. Data were collected and recorded on Wetland Determination Data Forms at 51 sample points (Appendix G) to document newly delineated wetlands or revised wetland boundaries that were a change from the 2009 wetland delineation. Photographs were taken at each sample point and other notable locations (Appendix F).

Table 3, Appendix I provides a detailed summary of each delineated wetland. The table provides, for each wetland, data on the name, size, C-value, FQI value, wetland sample points, adjacent upland

sample points, mapped WWI wetlands, wetland plant community descriptions, mapped wetland soils and classifications, comments on apparent connectivity to surface waters, comments on how wetland boundaries were determined, and other general comments.

3.2.3 Waterways

Oak Creek and various unnamed tributaries of Oak Creek were identified during the field investigation. The approximate locations of these waterways are shown on Exhibit A, Appendix E.

4.0 CONCLUSION

Based on the wetlands delineation update completed by GRAEF, thirty wetlands and their boundaries were delineated, revised, or verified with a total of 22.63 acres.

Any activity in delineated wetlands or waterways may require permits from the U.S. Army Corps of Engineers, Wisconsin Department of Natural Resources, and local governments prior to initiating work.

5.0 LIMITATIONS

The results of this field study are based on site conditions at the time of the field study, which was conducted in accordance with current regulatory policy and methods. Unknown and future conditions that affect observations of field indicators, and change in interpretation of regulatory policy, may modify future findings.

Statements within this report about the connectivity of the delineated wetlands to surface waters are the professional opinions of GRAEF's scientists and are not significant nexus determinations or jurisdictional determinations. Opinions on connectivity are based on general field observations and a cursory review of available map resources. The ultimate authority to determine jurisdiction resides with the U.S. Army Corps of Engineers and the Wisconsin Department of Natural Resources.

The U.S. Army Corps of Engineers and the Wisconsin Department of Natural Resources have the ultimate authority to determine wetland boundaries, and adjustments to wetland boundaries may occur based on decisions made by these regulatory agencies.

6.0 REFERENCES

Bernthal, Tom. 2003. Development of a Floristic Quality Assessment for Wisconsin. Wisconsin Department of Natural Resources, Bureau of Fisheries Management and Habitat Protection, 22 pp.

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Woodward , Donald E., ed. 1997. Hydrology Tools for Wetland Determination, Chapter 19. Engineering Field Handbook. U.S. Department of Agriculture, Natural Resources Conservation Service, Fort Worth, TX.

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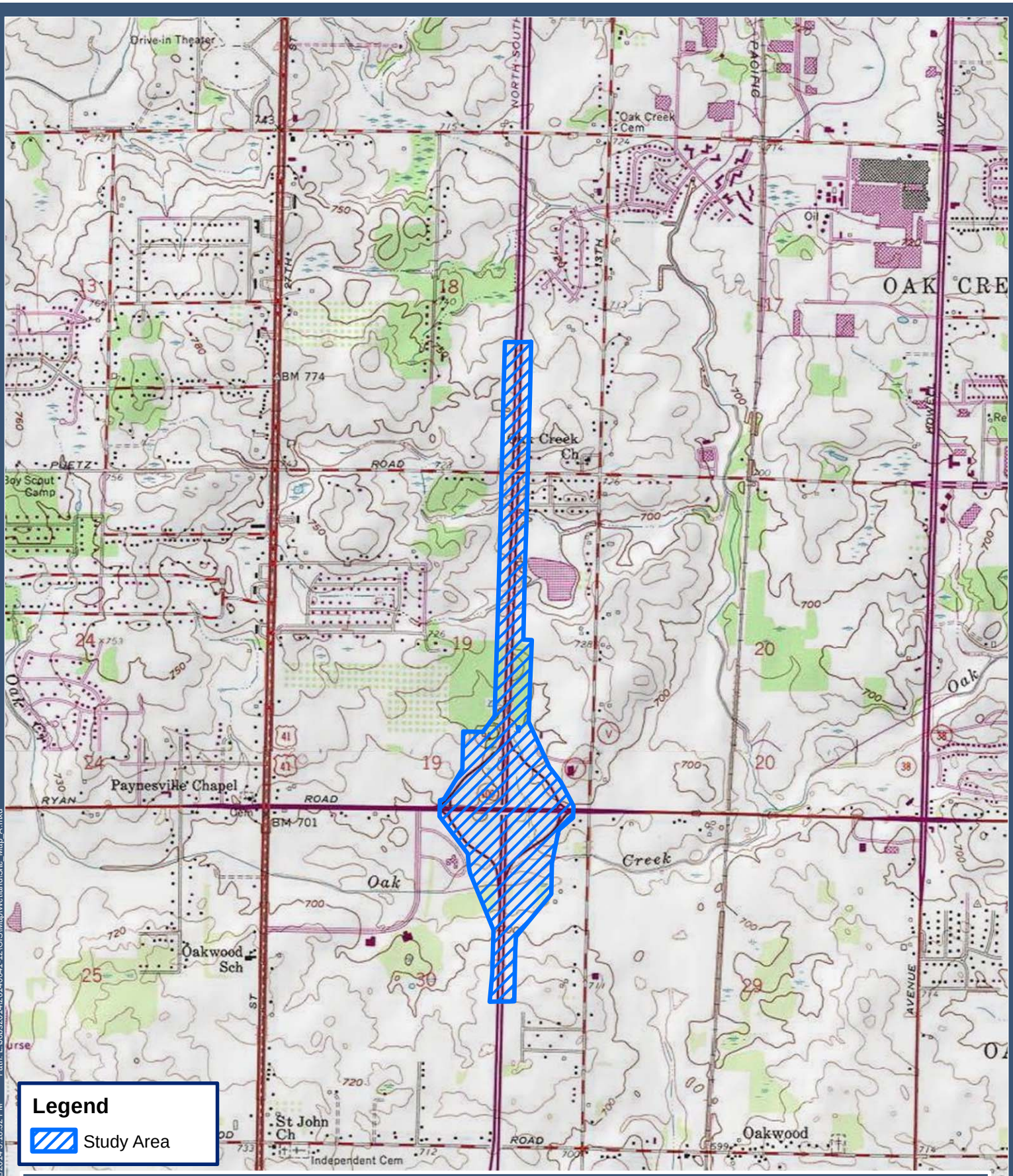
Wisconsin Department of Transportation Wetland Mitigation Banking Technical Guideline. 1993, revised March 2002. Wisconsin Department of Natural Resources, United States Army Corps of Engineers, United States Environmental Protection Agency, United States Fish and Wildlife Service, and the Federal Highway Administration.

APPENDICES

APPENDIX A

Figures



SITE LOCATION MAP (STUDY AREA A)

IH 94

WETLANDS DELINEATION UPDATE

PROJECT ID 1030-20-07

MILWAUKEE COUNTY, WISCONSIN

FIGURE # 1

GRAEF

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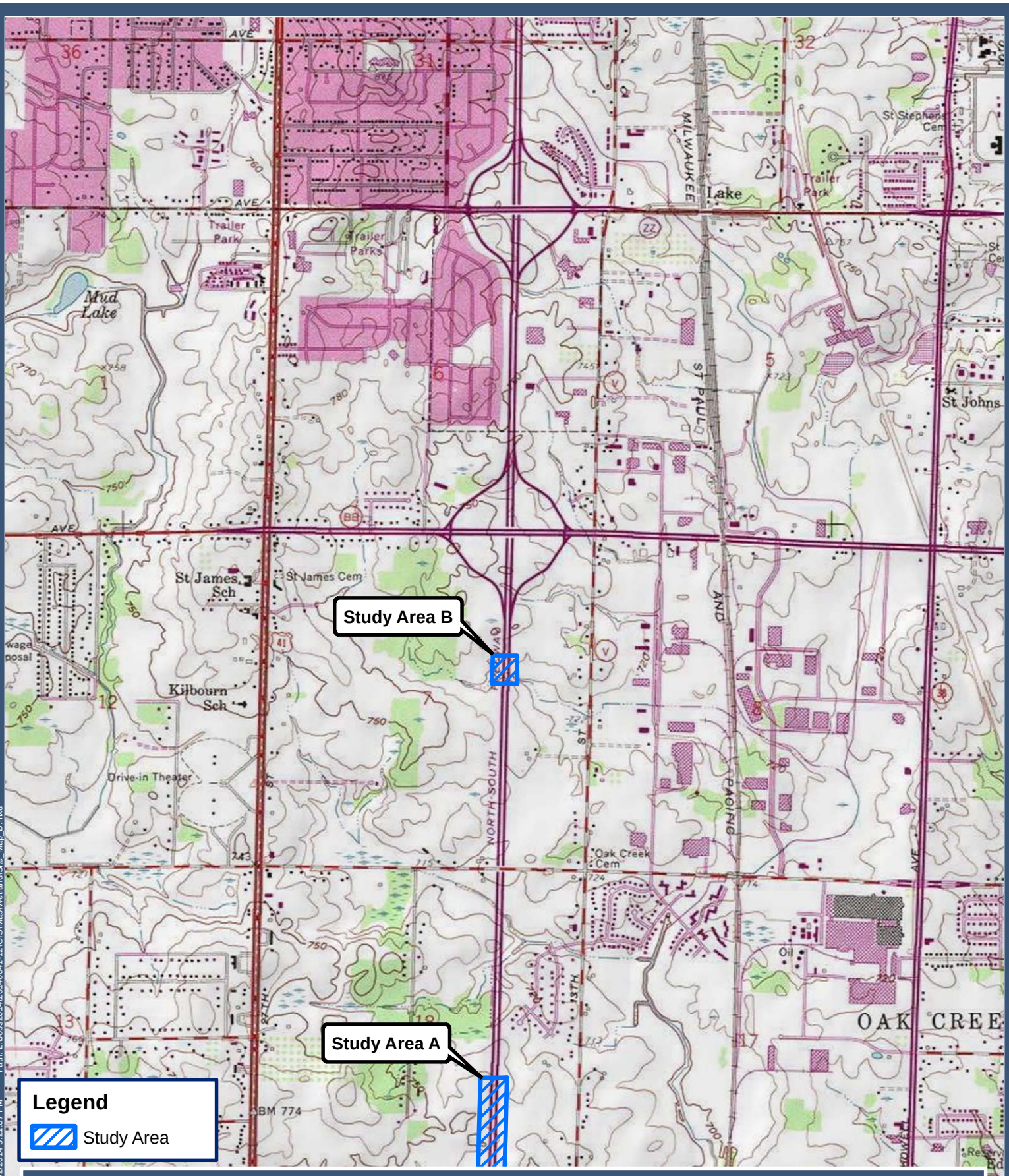

SITE LOCATION MAP (STUDY AREA B)

IH 94

WETLANDS DELINEATION UPDATE

PROJECT ID 1030-20-07

MILWAUKEE COUNTY, WISCONSIN

FIGURE # 1

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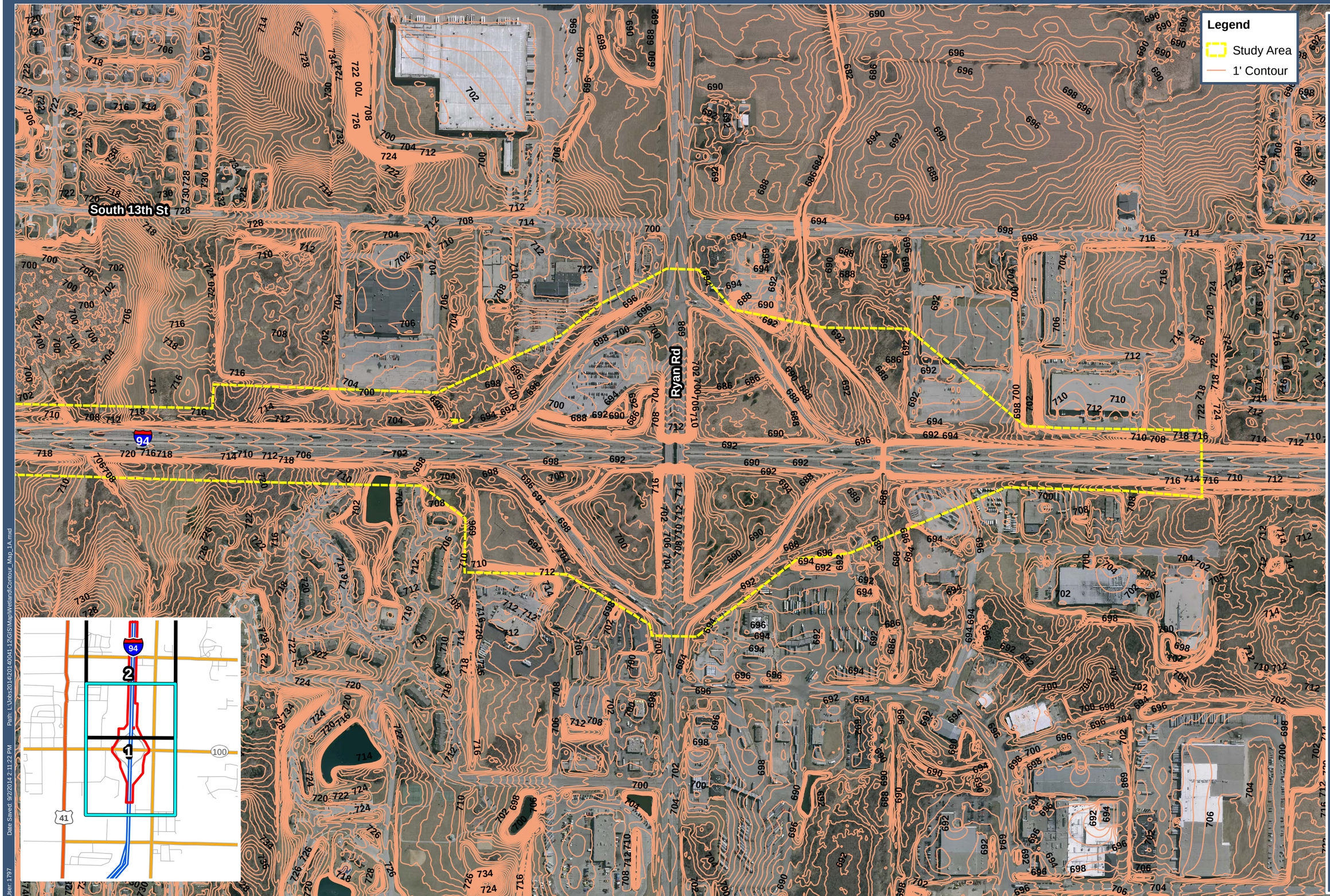

CONTOUR MAP (STUDY AREA A)

IH 94
WETLANDS DELINEATION UPDATE
PROJECT ID 1030-20-07
MILWAUKEE COUNTY, WISCONSIN

FIGURE #2-1

GRAEF

N

0 125 250 500
Feet

1 in = 500 ft

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FIGURE #2-2

GRAEF

CONTOUR MAP (STUDY AREA A)

IH 94

WETLANDS DELINEATION UPDATE

PROJECT ID 1030-20-07

MILWAUKEE COUNTY, WISCONSIN

Legend

- Study Area
- 1' Contour

South 13th St

Puetz Rd

94

41

100

1

2

N

0 125 250 500

Feet

1 in = 500 ft

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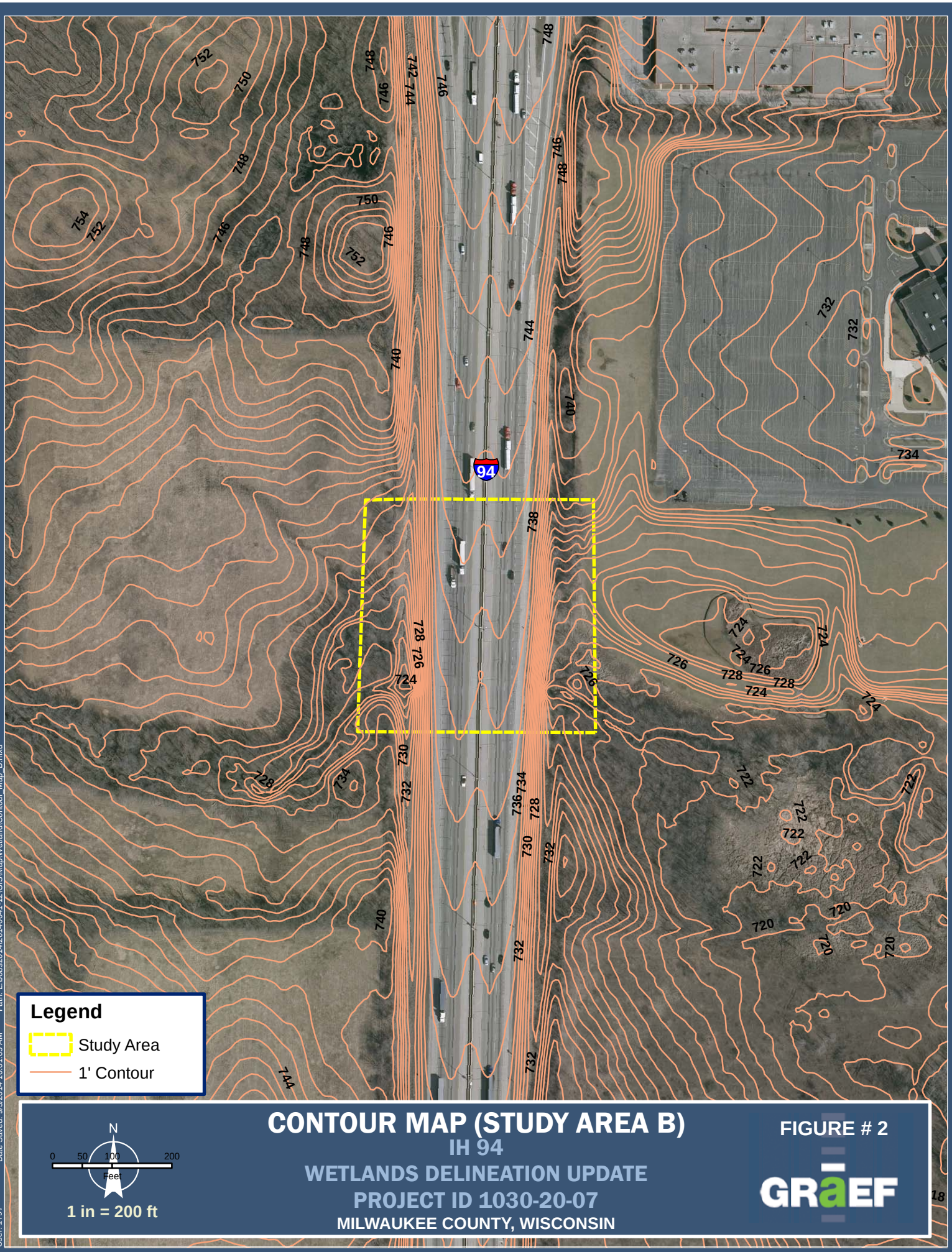

CONTOUR MAP (STUDY AREA B)

IH 94

WETLANDS DELINEATION UPDATE

PROJECT ID 1030-20-07

MILWAUKEE COUNTY, WISCONSIN

FIGURE # 2

GRAEF

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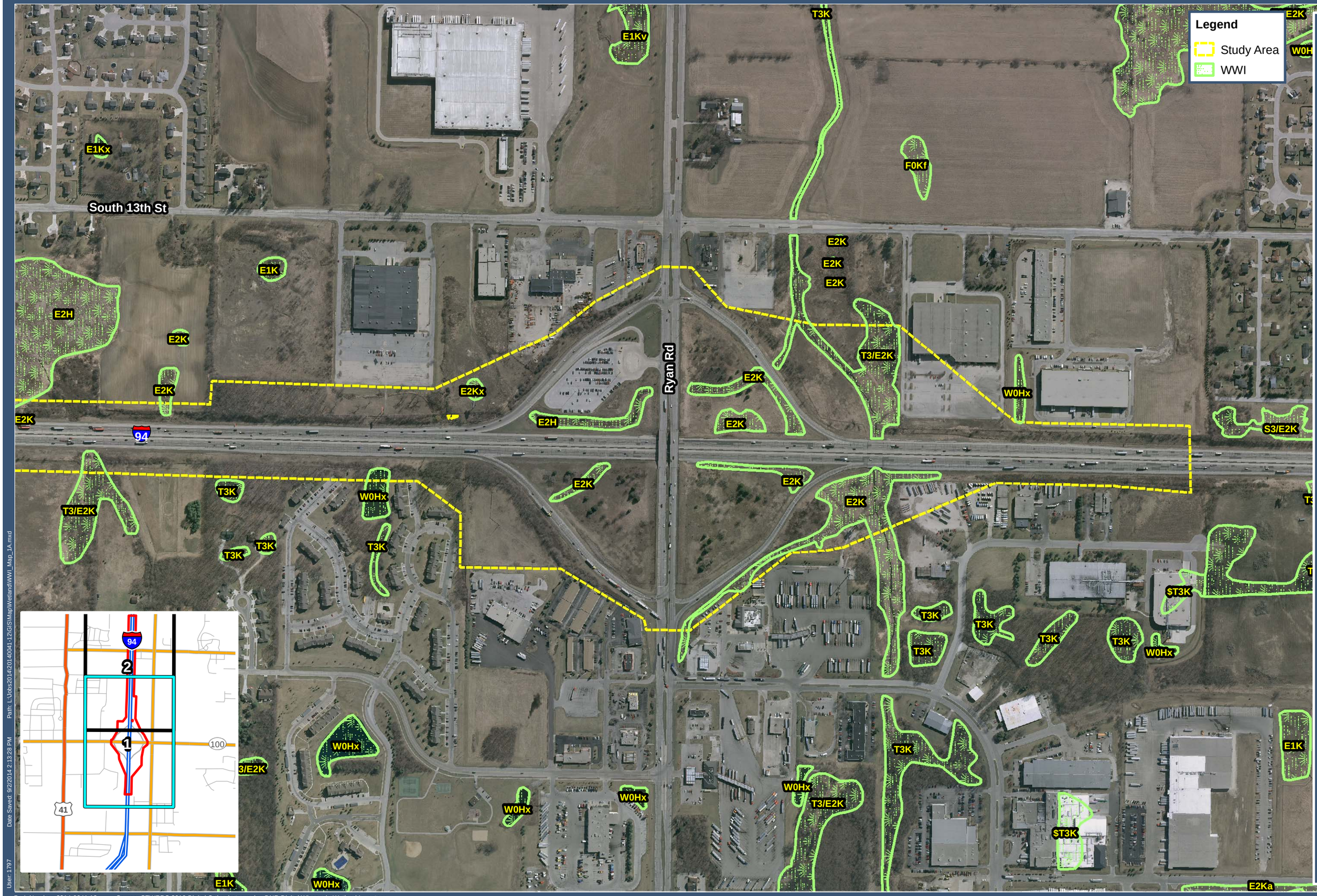

FIGURE #3-1

GRAEF

WWI MAP (STUDY AREA A)

IH 94
WETLANDS DELINEATION UPDATE
PROJECT ID 1030-20-07
MILWAUKEE COUNTY, WISCONSIN

1 in = 500 ft

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Proj. Number: 2014-0041.12

Source: SEWRPC 2010 Digital Orthophotography; DNR Digital Wisconsin Wetland Inventory

FIGURE #3-2

GRAEF

WWI MAP (STUDY AREA A)

IH 94

WETLANDS DELINEATION UPDATE

PROJECT ID 1030-20-07

MILWAUKEE COUNTY, WISCONSIN

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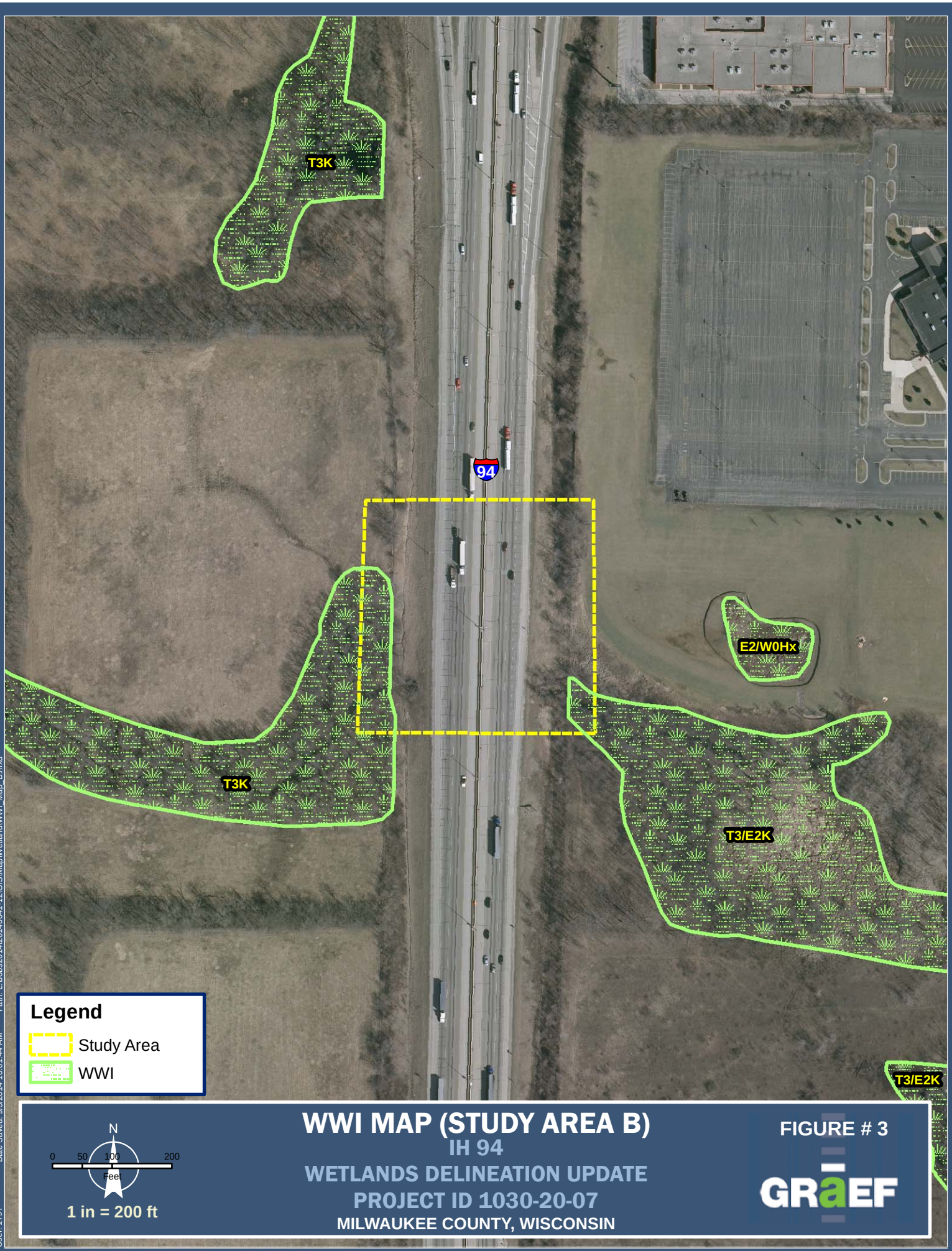

WWI MAP (STUDY AREA B)

IH 94

WETLANDS DELINEATION UPDATE

PROJECT ID 1030-20-07

MILWAUKEE COUNTY, WISCONSIN

FIGURE # 3

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Source: SEWRPC 2010 Digital Orthophotography; DNR Digital Wisconsin Wetland Inventory

FIGURE #4-1

SOILS MAP (STUDY AREA A)

IH 94
WETLANDS DELINEATION UPDATE
PROJECT ID 1030-20-07
MILWAUKEE COUNTY, WISCONSIN

GRAEF

Legend
- Study Area
- Soil Survey

South 13th St
Ryan Rd

Symbol	Name	Hydric Classification
AsA	Ashkum silty clay loam, 0 to 3 percent slopes	100
AzB	Aztalan loam, 2 to 6 percent slopes	0
BlA	Blount silt loam, 1 to 3 percent slopes	0
HeB	Hebron loam, 2 to 6 percent slopes	0
HtA	Houghton muck, 0 to 2 percent slopes	100
MmA	Matherton silt loam, 1 to 3 percent slopes	0
MzdB	Morley silt loam, 2 to 6 percent slopes	0
MzdB2	Morley silt loam, 2 to 6 percent slopes, eroded	0
MzdC2	Morley silt loam, 6 to 12 percent slopes, eroded	0
Mzg	Muskego muck	100
Sm	Sebewa silt loam	100
W	Water	0

N

0 125 250 500
Feet

1 in = 500 ft

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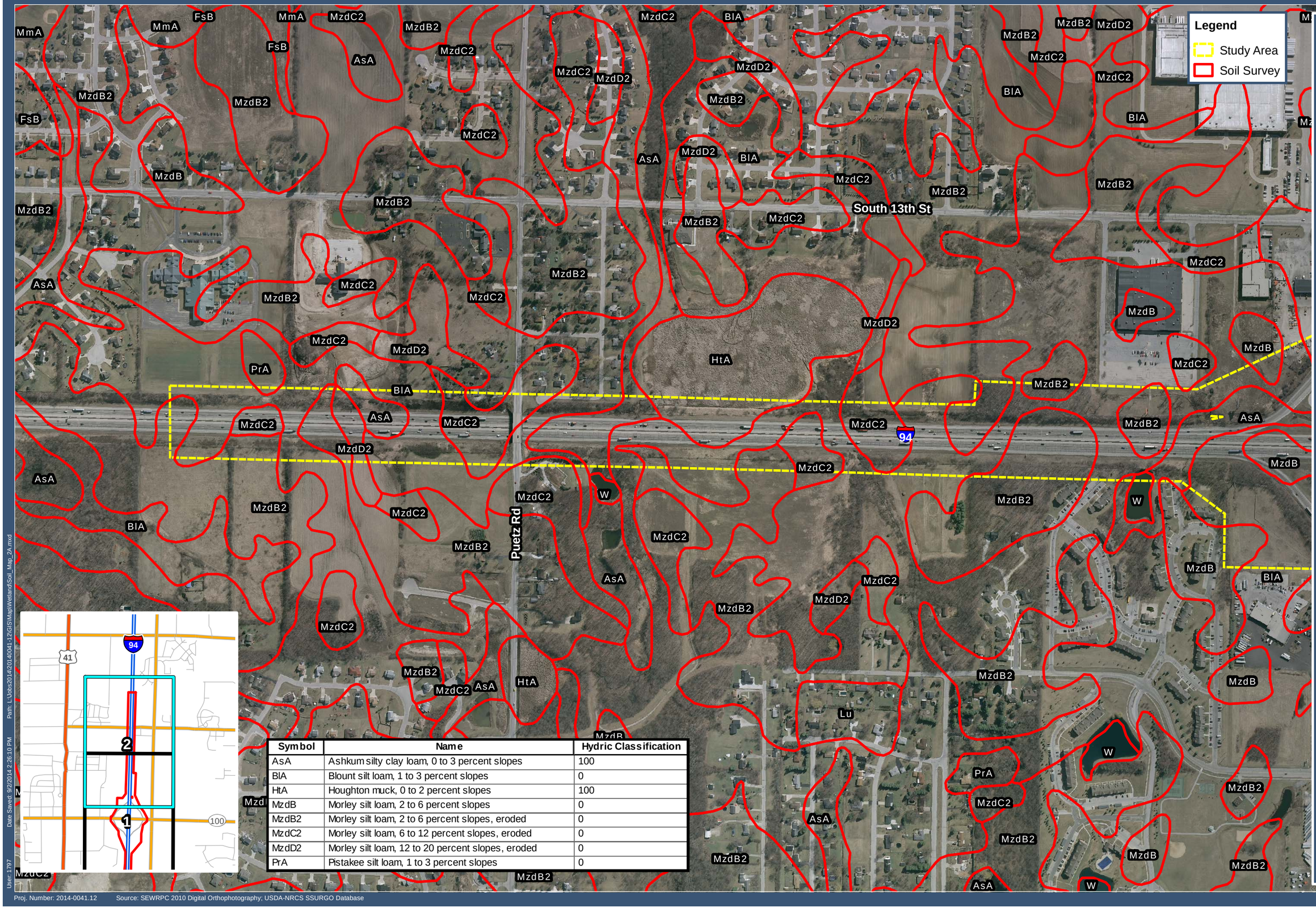

Symbol	Name	Hydric Classification
AsA	Ashkum silty clay loam, 0 to 3 percent slopes	100
BlA	Blount silt loam, 1 to 3 percent slopes	0
HtA	Houghton muck, 0 to 2 percent slopes	100
MzdB	Morley silt loam, 2 to 6 percent slopes	0
MzdB2	Morley silt loam, 2 to 6 percent slopes, eroded	0
MzdC2	Morley silt loam, 6 to 12 percent slopes, eroded	0
MzdD2	Morley silt loam, 12 to 20 percent slopes, eroded	0
PrA	Pistakee silt loam, 1 to 3 percent slopes	0

FIGURE #4-2

GRAEF

SOILS MAP (STUDY AREA A)
IH 94
WETLANDS DELINEATION UPDATE
PROJECT ID 1030-20-07
MILWAUKEE COUNTY, WISCONSIN

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Proj. Number: 2014-0041.12 Source: SEWRPC 2010 Digital Orthophotography; USDA-NRCS SSURGO Database

Symbol	Name	Hydric Classification
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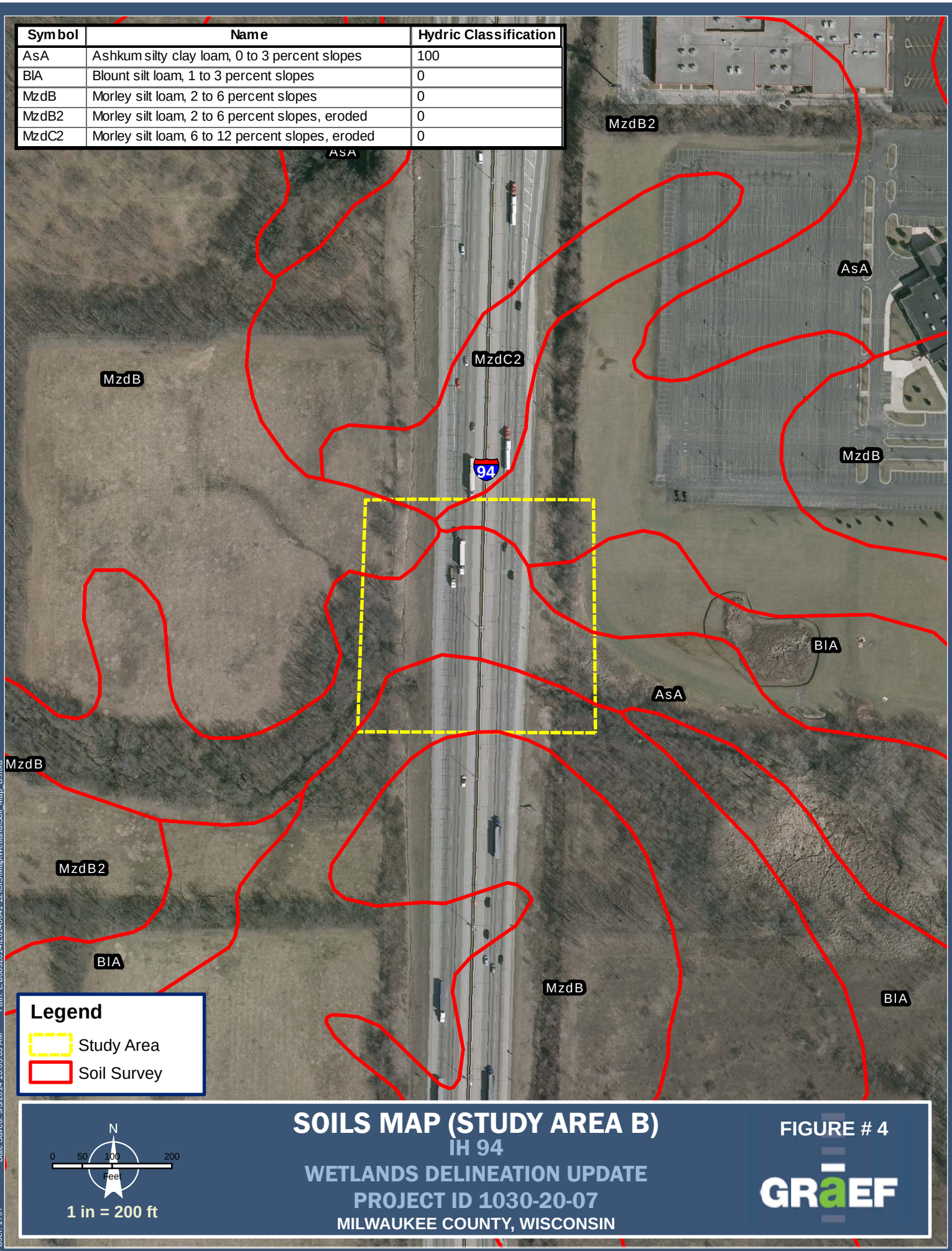
BlA	Blount silt loam, 1 to 3 percent slopes	0
MzdB	Morley silt loam, 2 to 6 percent slopes	0
MzdB2	Morley silt loam, 2 to 6 percent slopes, eroded	0
MzdC2	Morley silt loam, 6 to 12 percent slopes, eroded	0



SOILS MAP (STUDY AREA B)

IH 94

WETLANDS DELINEATION UPDATE

PROJECT ID 1030-20-07

MILWAUKEE COUNTY, WISCONSIN

FIGURE # 4

GRAEF

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Proj. Number: 2014-0041.12

Source: SEWRPC 2010 Digital Orthophotography; USDA-NRCS SSURGO Database

FIGURE #5-1

GRAEF

2013 AERIAL MAP (STUDY AREA A)

IH 94

WETLANDS DELINEATION UPDATE

PROJECT ID 1030-20-07

MILWAUKEE COUNTY, WISCONSIN

Legend

Study Area

South 13th St

Ryan Rd

94

N

0 125 250 500

Feet

1 in = 500 ft

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User: 1797

Proj. Number: 2014-0041.12

Source: 2013 Milwaukee County Pictometry Accuplus

FIGURE #5-2

GRAEF

2013 AERIAL MAP (STUDY AREA A)

IH 94

WETLANDS DELINEATION UPDATE

PROJECT ID 1030-20-07

MILWAUKEE COUNTY, WISCONSIN

Legend

Study Area

South 13th St

94

Puetz Rd

N

0 125 250 500

Feet

1 in = 500 ft

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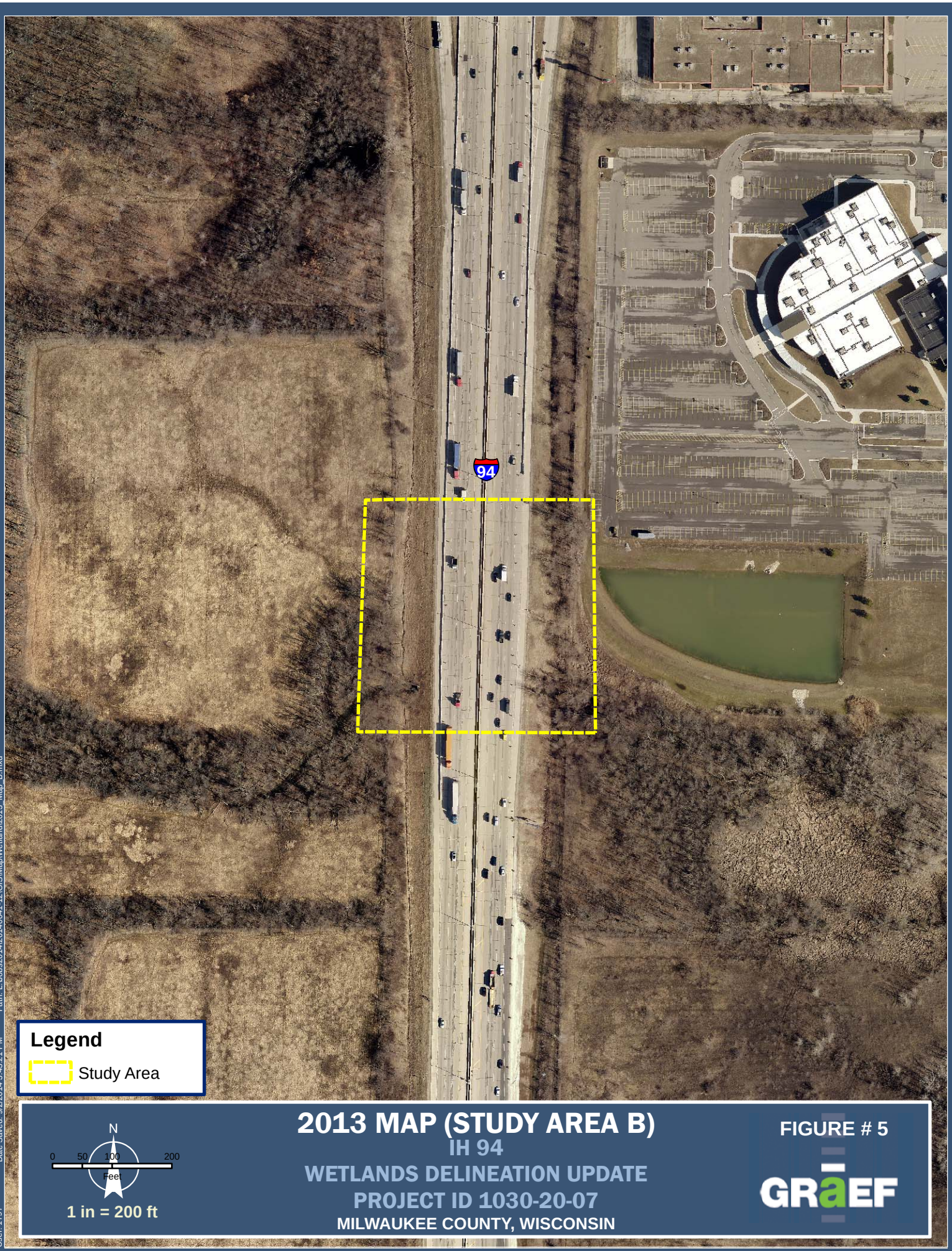

2013 MAP (STUDY AREA B)

IH 94

WETLANDS DELINEATION UPDATE

PROJECT ID 1030-20-07

MILWAUKEE COUNTY, WISCONSIN

FIGURE # 5

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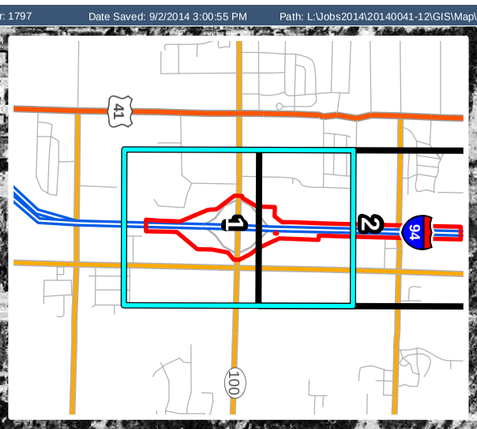


1995 AERIAL MAP (STUDY AREA A)

IH 94

WETLANDS DELINEATION UPDATE

PROJECT ID 1030-20-07

MILWAUKEE COUNTY, WISCONSIN

1 in = 500 ft

0 125 250 500 Feet

N

GRAEF

FIGURE #6-1

FIGURE #6-2

GRAEF

1995 AERIAL MAP (STUDY AREA A)

IH 94

WETLANDS DELINEATION UPDATE

PROJECT ID 1030-20-07

MILWAUKEE COUNTY, WISCONSIN

Legend

Study Area

South 13th St

94

Puetz Rd

41

100

1

2

N

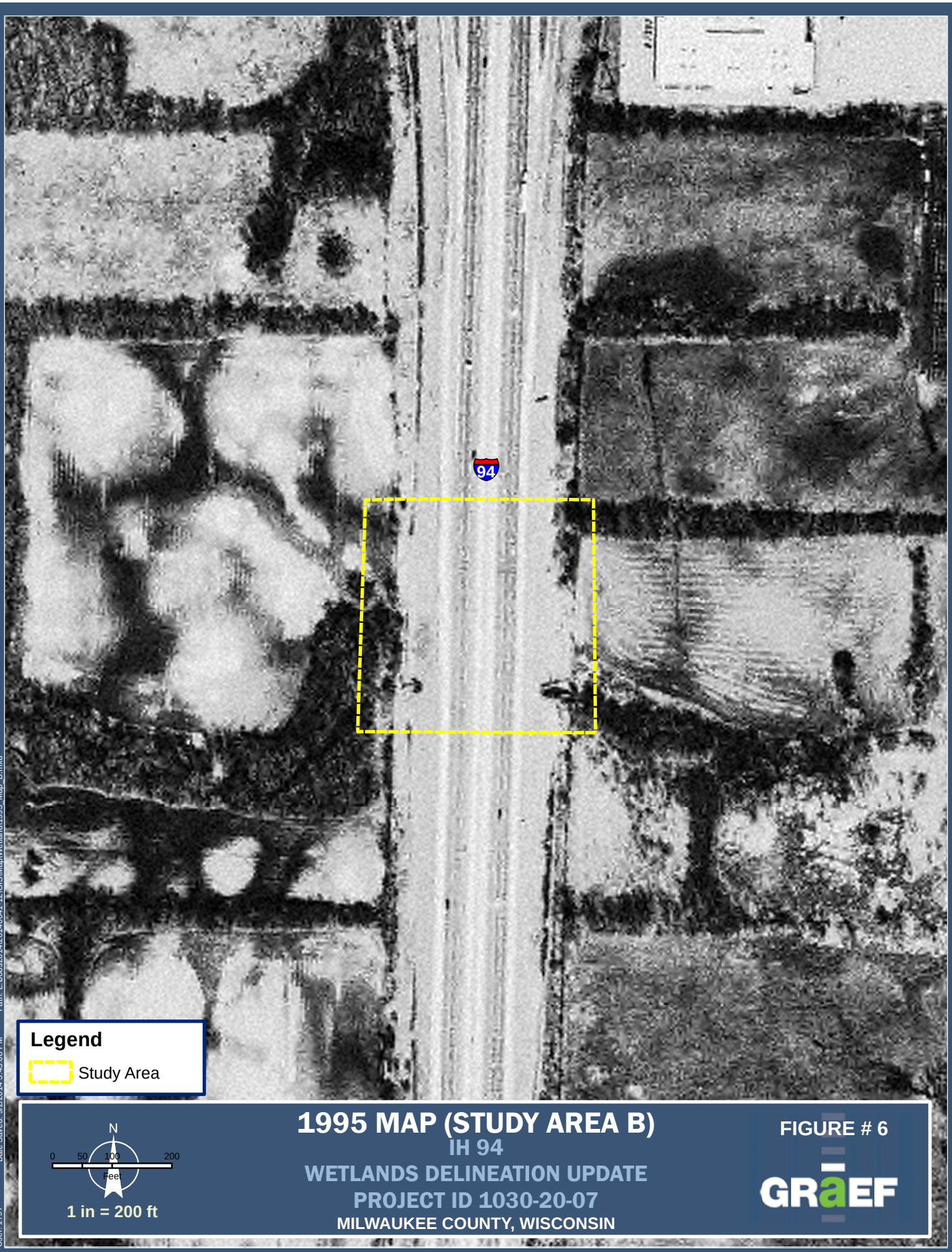
0 125 250 500

Feet

1 in = 500 ft

Proj. Number: 2014-0041.12 Source: SEWRPC 1995 Digital Orthophotography

Date Saved: 9/2/2014 2:57:54 PM Path: L:\Jobs\2014\2014041-12\GIS\Map\Wetland\1995_Map_2A.mxd User: 1797



1995 MAP (STUDY AREA B)

IH 94

WETLANDS DELINEATION UPDATE

PROJECT ID 1030-20-07

MILWAUKEE COUNTY, WISCONSIN

FIGURE # 6

GRAEF

Path: L:\Jobs2014\2014041-12\GIS\Map\Wetland\1995_Map_B.mxd

Date Saved: 9/2/2014 3:45:08 PM

User: 1797

Proj. Number: 2014-0041.12

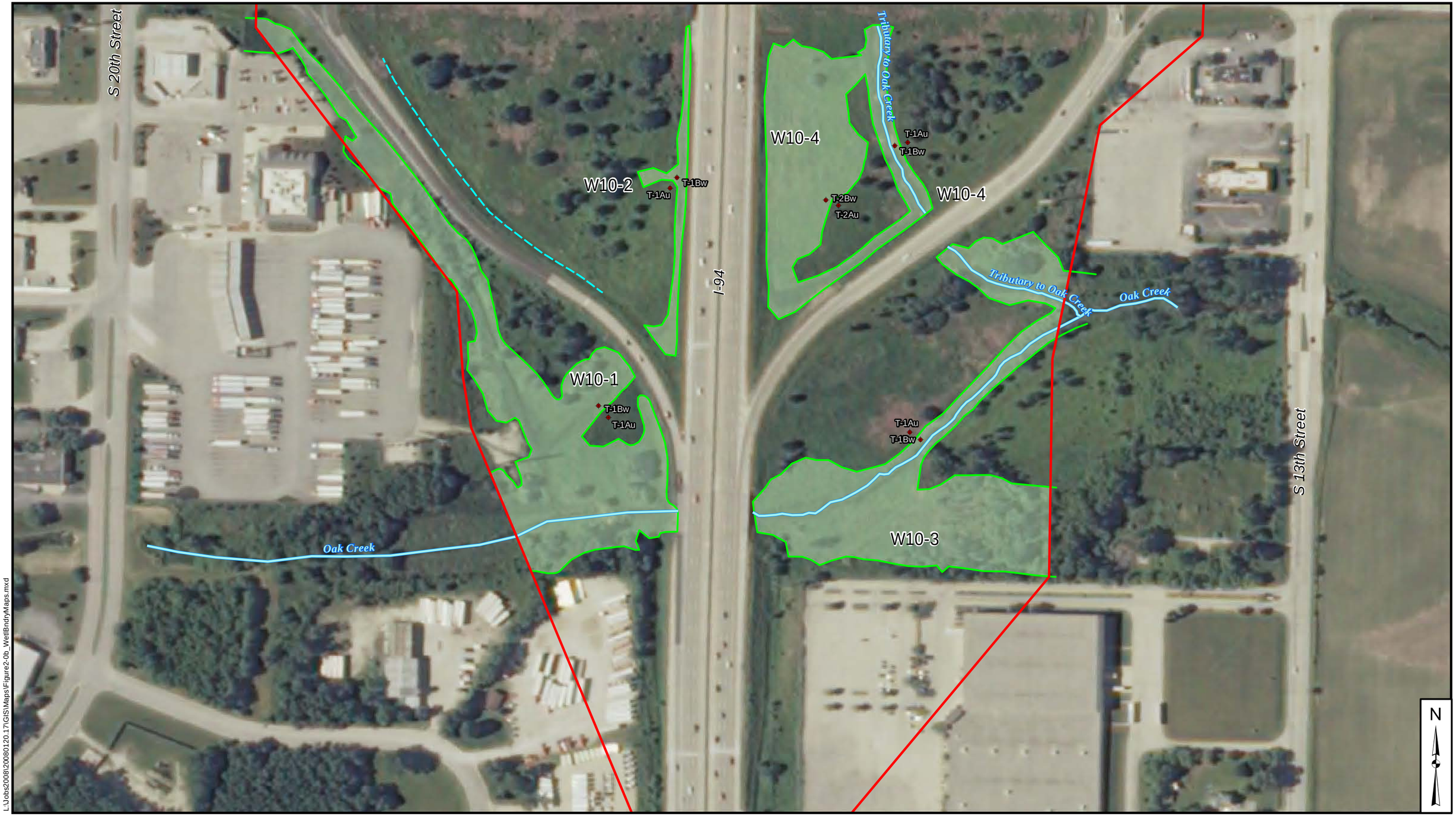
Source: SEWRPC 1995 Digital Orthophotography

GRĀEF

collaborāte / formulāte / innovāte

APPENDIX B

2009 Wetland Boundary Map



L:\Jobs2008\20080120.17\GIS\Maps\Figure2-0b_WetlBndryMaps.mxd

GRAEF

Legend

- Study Boundary
- Jurisdictional Waterway
- Non-Jurisdictional Ditch
- Wetland Boundary Field-Delineated (Surveyed)
- Wetland Boundary Inferred (Not Surveyed)
- Wetland Area

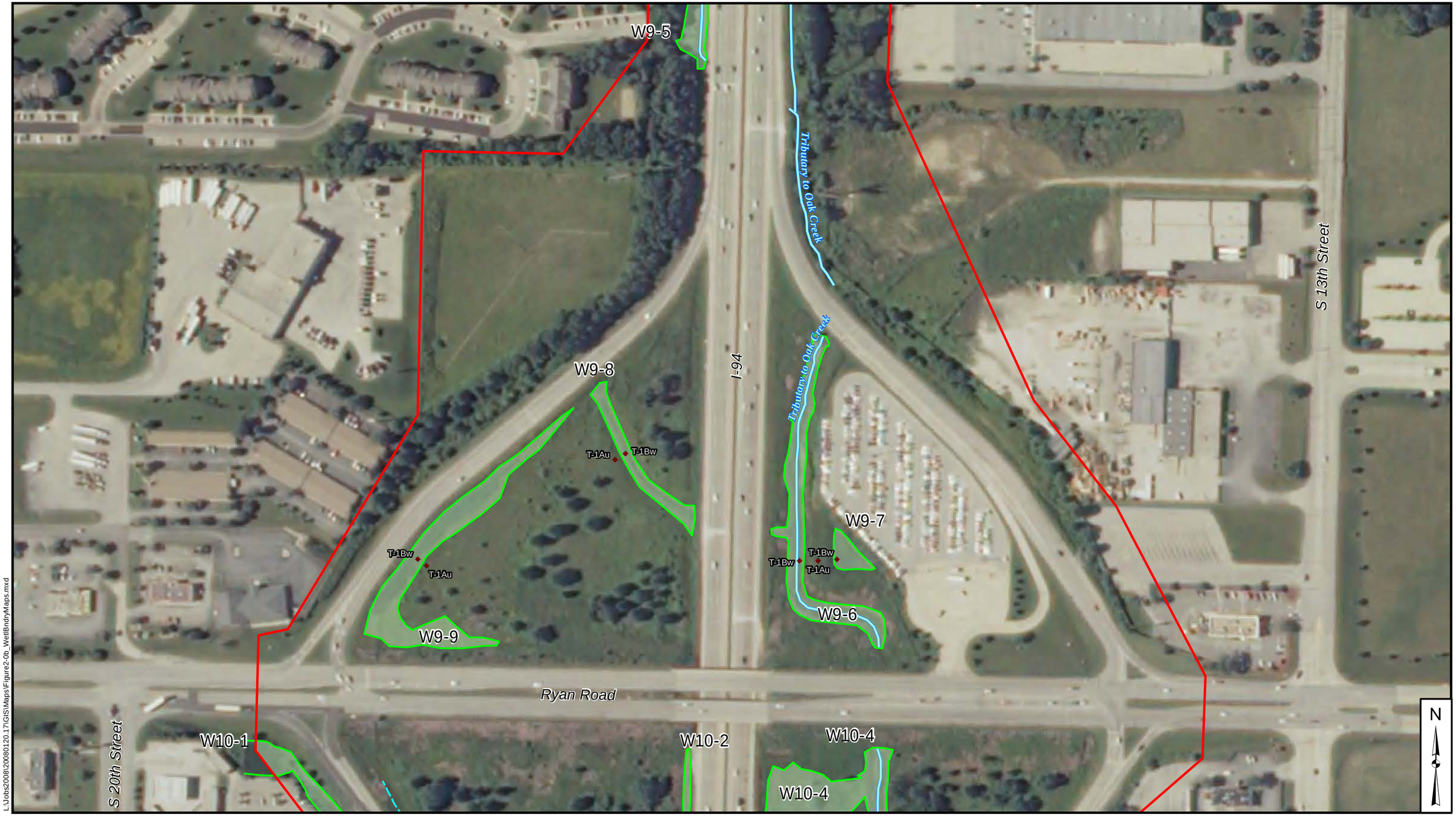
SOURCE: USDA, NAIP, FARM SERVICE AGENCY, 2008 AIR PHOTOS MILWAUKEE AND RACINE COUNTY

PROJ. NUMBER:	2008-0120.17
DATE:	01-05-2010
PROJECT MGR:	ECP
DRAWN BY:	CMV
SCALE:	1" = 200'
REVISED:	

WETLAND BOUNDARY MAP

WETLAND AND WATERWAY INVESTIGATION
IH-94 MAINLINE
MILWAUKEE AND RACINE COUNTIES, WISCONSIN
WISDOT ID: 1030-20-00

FIGURE 2.19



L:\Jobs2008\20080120.17\GIS\Maps\Figure2-0b_WetlBndryMaps.mxd

GRAEF

Legend

- Study Boundary
- Jurisdictional Waterway
- Non-Jurisdictional Ditch
- Wetland Boundary Field-Delineated (Surveyed)
- Wetland Boundary Inferred (Not Surveyed)
- Wetland Area

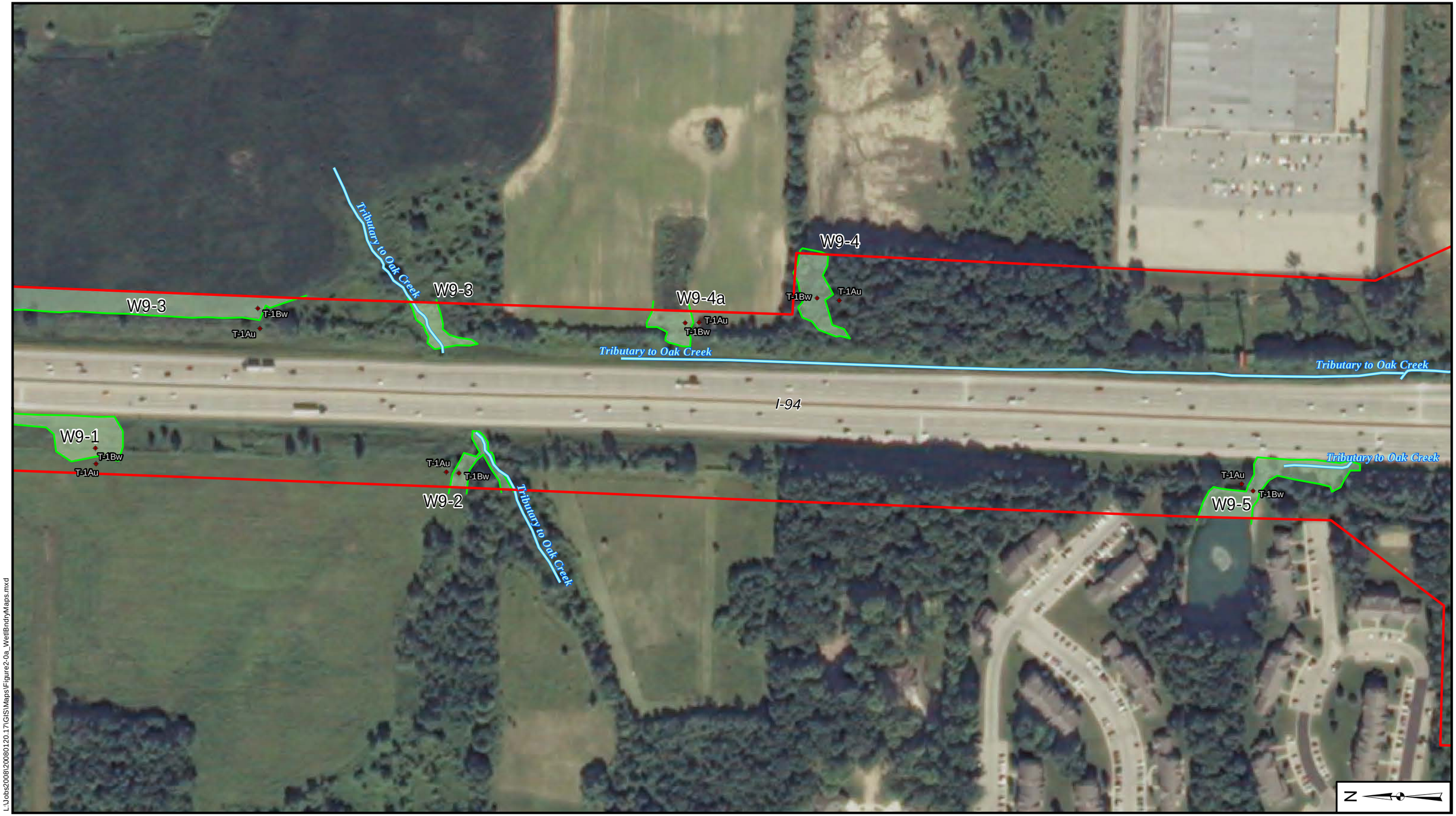
SOURCE: USDA, NAIP, FARM SERVICE AGENCY, 2008 AIR PHOTOS MILWAUKEE AND RACINE COUNTY

PROJ. NUMBER:	2008-0120.17
DATE:	01-05-2010
PROJECT MGR:	ECP
DRAWN BY:	CMV
SCALE:	1" = 200'
REVISED:	

WETLAND BOUNDARY MAP

WETLAND AND WATERWAY INVESTIGATION
IH-94 MAINLINE
MILWAUKEE AND RACINE COUNTIES, WISCONSIN
WISDOT ID: 1030-20-00

FIGURE 2.20



L:\Jobs2008\20080120.17\GIS\Maps\Figure2-0a_WetlBndryMaps.mxd

GRAEF

Legend

- Study Boundary
- Jurisdictional Waterway
- Non-Jurisdictional Ditch
- Wetland Boundary Field-Delineated (Surveyed)
- Wetland Boundary Inferred (Not Surveyed)
- Wetland Area

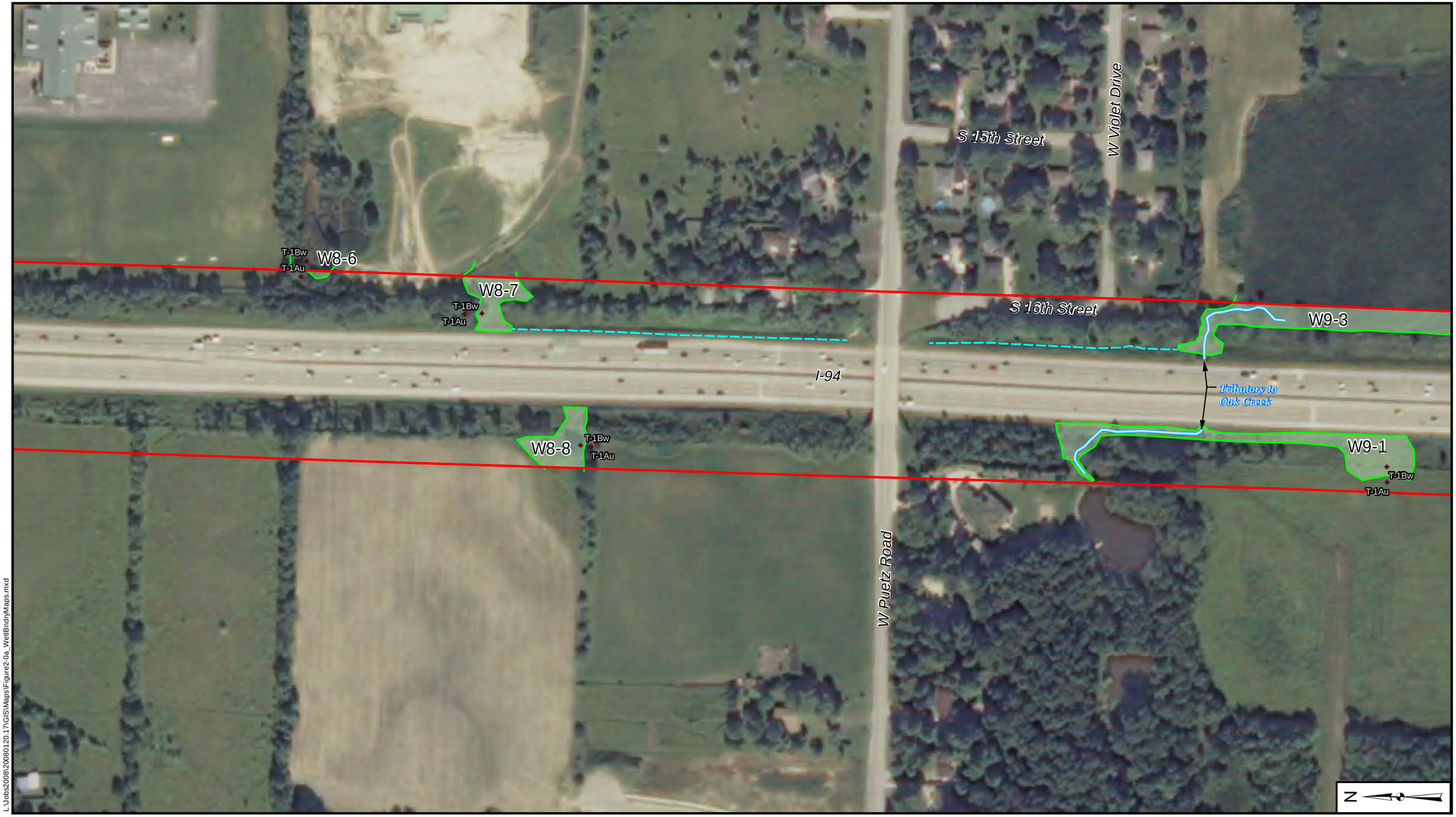
SOURCE: USDA, NAIP, FARM SERVICE AGENCY, 2008 AIR PHOTOS MILWAUKEE AND RACINE COUNTY

PROJ. NUMBER:	2008-0120.17
DATE:	01-05-2010
PROJECT MGR:	ECP
DRAWN BY:	CMV
SCALE:	1" = 200'
REVISED:	

WETLAND BOUNDARY MAP

WETLAND AND WATERWAY INVESTIGATION
IH-94 MAINLINE
MILWAUKEE AND RACINE COUNTIES, WISCONSIN
WISDOT ID: 1030-20-00

FIGURE 2.21



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GRAEF

Legend

- Study Boundary
- Jurisdictional Waterway
- Non-Jurisdictional Ditch
- Wetland Boundary Field-Delineated (Surveyed)
- Wetland Boundary Inferred (Not Surveyed)
- Wetland Area

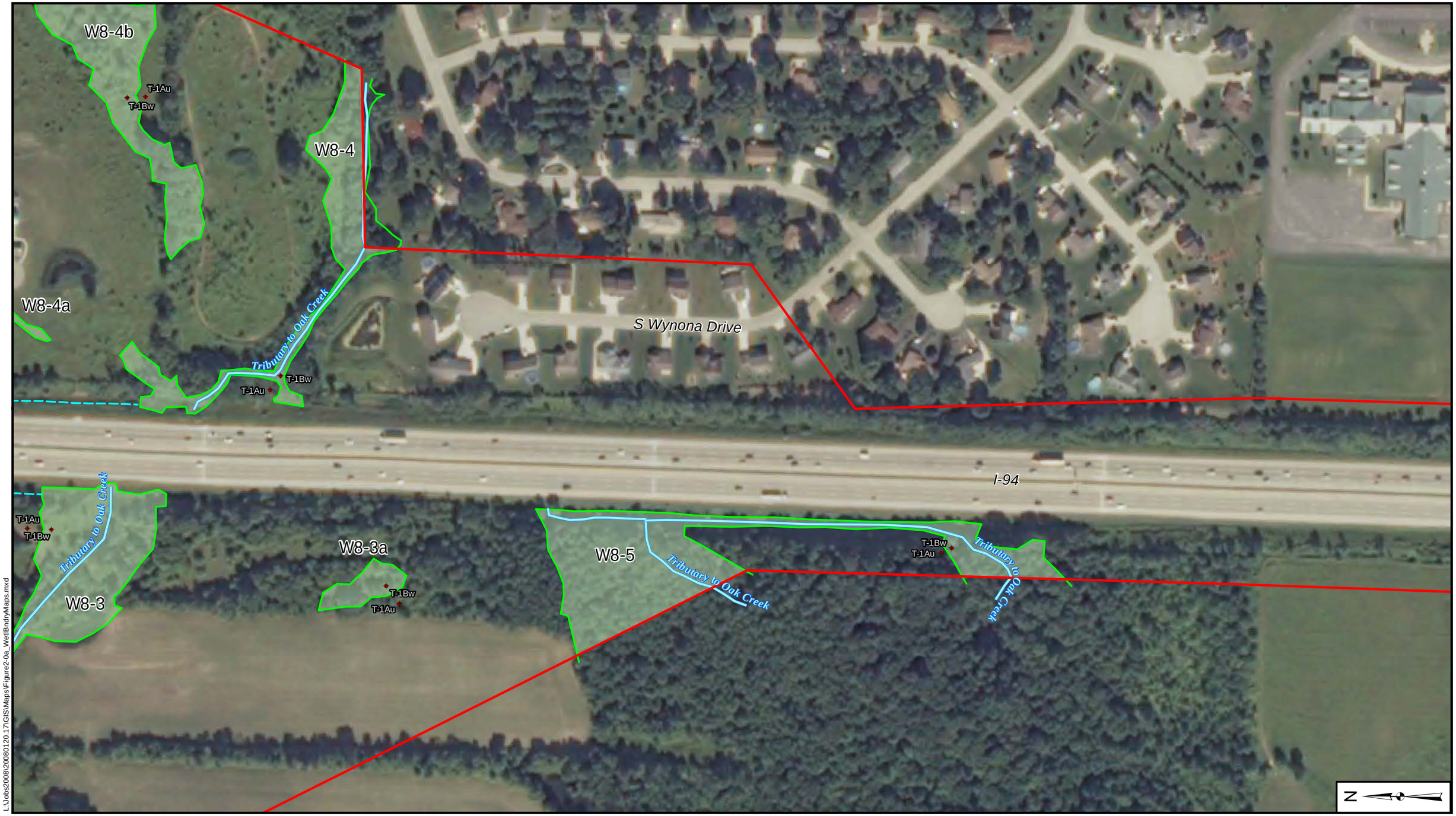
SOURCE: USDA, NAIP, FARM SERVICE AGENCY, 2008 AIR PHOTOS MILWAUKEE AND RACINE COUNTY

PROJ. NUMBER:	2008-0120.17
DATE:	01-05-2010
PROJECT MGR:	ECP
DRAWN BY:	CMV
SCALE:	1" = 200'
REVISED:	

WETLAND BOUNDARY MAP

WETLAND AND WATERWAY INVESTIGATION
IH-94 MAINLINE
MILWAUKEE AND RACINE COUNTIES, WISCONSIN
WISDOT ID: 1030-20-00

FIGURE 2.22



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GRAEF

Legend

- Study Boundary
- Jurisdictional Waterway
- Non-Jurisdictional Ditch
- Wetland Boundary Field-Delineated (Surveyed)
- Wetland Boundary Inferred (Not Surveyed)
- Wetland Area

SOURCE: USDA, NAIP, FARM SERVICE AGENCY,
2008 AIR PHOTOS MILWAUKEE AND RACINE COUNTY

PROJ. NUMBER:	2008-0120.17
DATE:	01-05-2010
PROJECT MGR:	ECP
DRAWN BY:	CMV
SCALE:	1" = 200'
REVISED:	

WETLAND BOUNDARY MAP

WETLAND AND WATERWAY INVESTIGATION
IH-94 MAINLINE
MILWAUKEE AND RACINE COUNTIES, WISCONSIN
WISDOT ID: 1030-20-00

FIGURE 2.23

W7-9

I-94

W Drexel Avenue

Tributary to Oak Creek

SP-1

T-1Au

T-1Bw

W8-3

W8-4a

W8-4

W8-4b

S 13th Street

N

L:\Jobs2008\2008012017\GIS\Maps\Figure2-0b_WetlBndryMaps.mxd

GRAEF

Legend

- Study Boundary
- Jurisdictional Waterway
- Non-Jurisdictional Ditch
- Wetland Boundary Field-Delineated (Surveyed)
- Wetland Boundary Inferred (Not Surveyed)
- Wetland Area

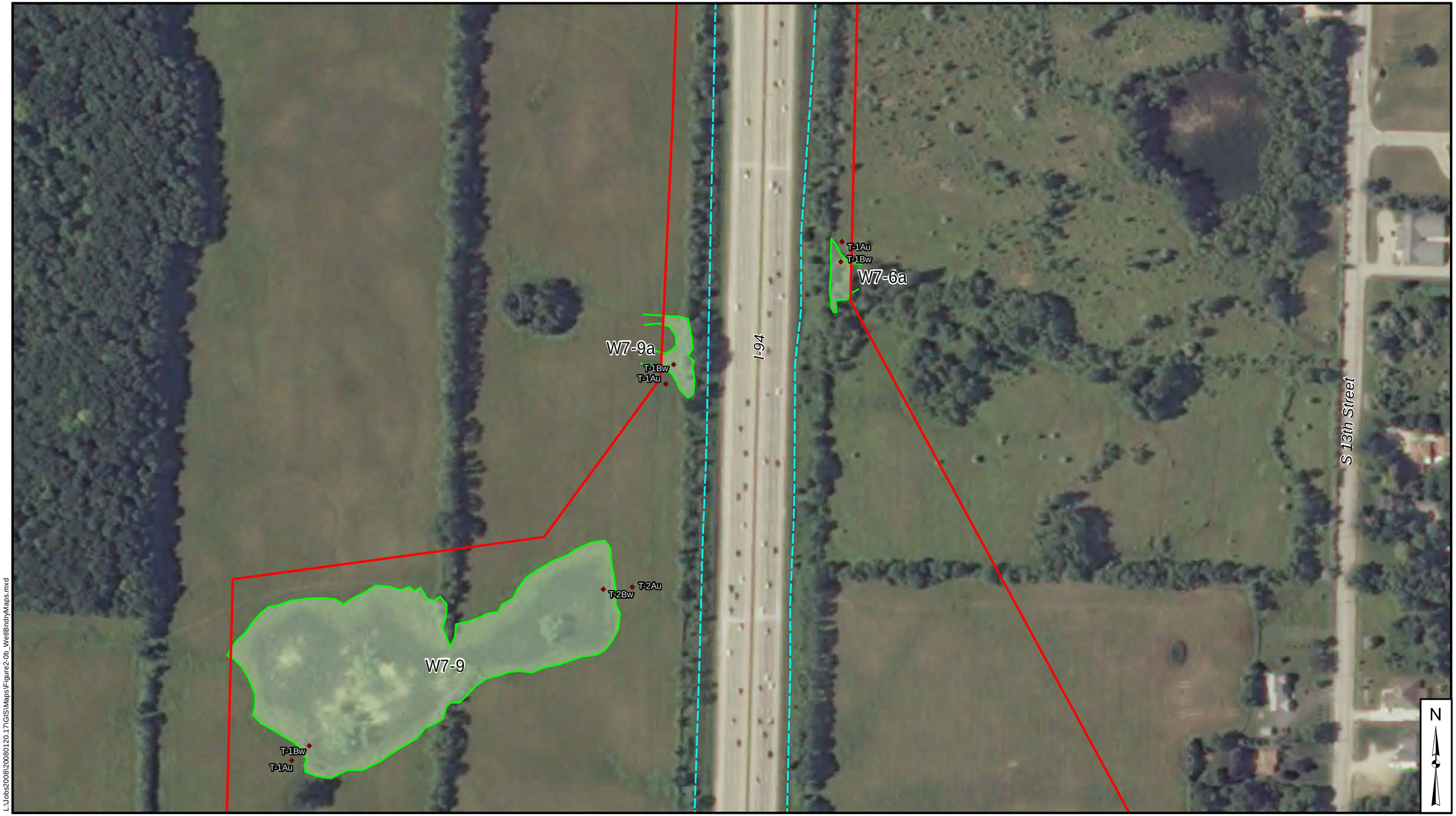
SOURCE: USDA, NAIP, FARM SERVICE AGENCY, 2008 AIR PHOTOS MILWAUKEE AND RACINE COUNTY

PROJ. NUMBER:	2008-0120.17
DATE:	01-05-2010
PROJECT MGR:	ECP
DRAWN BY:	CMV
SCALE:	1" = 200'
REVISED:	

WETLAND BOUNDARY MAP

WETLAND AND WATERWAY INVESTIGATION
IH-94 MAINLINE
MILWAUKEE AND RACINE COUNTIES, WISCONSIN
WISDOT ID: 1030-20-00

FIGURE 2.24



L:\Jobs2008\20080120.17\GIS\Maps\Figure2-0b_WetlBndryMaps.mxd

GRAEF

Legend

- Study Boundary
- Jurisdictional Waterway
- Non-Jurisdictional Ditch
- Wetland Boundary Field-Delineated (Surveyed)
- Wetland Boundary Inferred (Not Surveyed)
- Wetland Area

SOURCE: USDA, NAIP, FARM SERVICE AGENCY, 2008 AIR PHOTOS MILWAUKEE AND RACINE COUNTY

PROJ. NUMBER:	2008-0120.17
DATE:	01-05-2010
PROJECT MGR:	ECP
DRAWN BY:	CMV
SCALE:	1" = 200'
REVISED:	

WETLAND BOUNDARY MAP

WETLAND AND WATERWAY INVESTIGATION
IH-94 MAINLINE
MILWAUKEE AND RACINE COUNTIES, WISCONSIN
WISDOT ID: 1030-20-00

FIGURE 2.25

W7-1d
W7-1a
T-1Bw
T-1Au
T-1Au
T-1Bw
W7-1c
W7-1f
T-1Au
T-1Bw
W7-1e
T-1Au
T-1Bw
W7-1h
T-1Bw
T-1Au
W7-1g
I-94
S 13th Street
W7-1
T-1Au
T-1Bw
W7-1
T-2Bw
T-2Au
T-1Au
T-1Bw
W7-6
Tributary to Oak Creek
N

L:\Jobs2008\20080120.17\GIS\Maps\Figure2-0b_WetlBndryMaps.mxd

GRAEF

Legend

- Study Boundary
- Jurisdictional Waterway
- Non-Jurisdictional Ditch
- Wetland Boundary Field-Delineated (Surveyed)
- Wetland Boundary Inferred (Not Surveyed)
- Wetland Area

SOURCE: USDA, NAIP, FARM SERVICE AGENCY, 2008 AIR PHOTOS MILWAUKEE AND RACINE COUNTY

PROJ. NUMBER:	2008-0120.17
DATE:	01-05-2010
PROJECT MGR:	ECP
DRAWN BY:	CMV
SCALE:	1" = 200'
REVISED:	

WETLAND BOUNDARY MAP

WETLAND AND WATERWAY INVESTIGATION
IH-94 MAINLINE
MILWAUKEE AND RACINE COUNTIES, WISCONSIN
WISDOT ID: 1030-20-00

FIGURE 2.26

GRĀEF

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APPENDIX C

2009 Wetland Determination Data Forms

WETLAND DETERMINATION DATA FORM - Midwest Region

Project/Site: **IH-94 Mainline** City/County: **Oak Creek/ Milwaukee** Sampling Date: **10/27/2009**

Applicant/Owner: **WDOT** State: **WI** Sampling Point: **W7-1 T-1 A(u)**

Investigator(s): **Rachel E. Lang / Julie A. Paschal** Section, Township, Range: **Section 7, T5N R22E**

Landform (hillslope, terrace, etc.): **Hillslope** Local relief (concave, convex, none): **Convex**

Slope (%): **1-4%** Lat: **See Fig. 2** Long: **See Fig. 2** Datum: **NA**

Soil Map Unit Name: **Morley silt loam (MzdB2)** WWI Classification: **None**

Are climatic / hydrologic conditions on the site typical for this time of year? Yes ***X** No _____ (if no, explain in Remarks)

Are Vegetation ____ Soil ____ or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes **X** No ____

Are Vegetation ____ Soil ____ or Hydrology ____ naturally problematic? (if needed, explain any answers in Remarks)

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

Hydrophytic Vegetation Present?	Yes ____	No **X**			
Hydric Soil Present?	Yes ____	No **X**	Is the Sampled Area	Yes ____	No **X**
Wetland Hydrology Present?	Yes ____	No **X**	within a Wetland?		

Remarks:

*** The WETS Analysis indicates that weather conditions have been normal in recent months. This area, however, has received several inches of precipitation within the last two weeks.**

VEGETATION - Use scientific names for plants.

Tree Stratum (Plot Size: **30 ft. radius**)	Absolute % Cover	Dominant Species	Indicator Status
1. ***Prunus serotina***	**5%**	**Yes**	**FACU**
2.			
3.			
4.			
5.			
	5% = Total Cover		

Sapling/Shrub Stratum (Plot Size: **15 ft. radius**)			
1. ***Lonicera xbella***	**5%**	**Yes**	**FACU**
2. ***Rubus occidentalis***	**5%**	**Yes**	**UPL**
3.			
4.			
5.			
	10% = Total Cover		

Herb Stratum (Plot Size: **5 ft. radius**)			
1. ***Bromus inermis***	**85%**	**Yes**	**UPL**
2. ***Solidago canadensis***	**20%**	**No**	**FACU**
3. ***Phalaris arundinacea***	**2%**	**No**	**FACW**
4.			
5.			
6.			
7.			
8.			
9.			
10.			
	107% = Total Cover		

Woody Vine Stratum (Plot Size: **N/A**)			
1. **N/A**			
2.			
	0% = Total Cover		

Dominance Test Worksheet:

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

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

Percent of Dominant Species That Are OBL, FACW, or FAC: **0%** (A/B)

Prevalence Index Worksheet:

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

Prevalence Index = B/A =

Hydrophytic Vegetation Indicators:

____ Dominance Test is >50%

____ Prevalence Index is ≤ 3.0[1]

____ Morphological Adaptations[1] (Provide supporting data in Remarks or on separate sheet)

____ Problematic Hydrophytic Vegetation[1] (Explain)

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

Hydrophytic Vegetation Present? Yes ____ No **X**

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

This is an upland, old field plant community located near a riparian corridor.

SOIL

Sampling Point: **W7-1 T-1 A(u)**

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
0-10	**10YR 3/2**	**100**	**None**				**Silty clay loam**	
10-12	**10YR 4/2**	**100**	**None**				**Clay loam**	
12-22	**10YR 4/3**	**90**	**None**				**Clay loam**	**Trace sand observed**
12-22	**10YR 4/2**	**10**	**None**				**Clay loam**	

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

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ 2 cm Muck (A10)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ 5 cm Mucky Peat or Peat (S3)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ Coast Prairie Redox (A16)
- ___ Iron-Manganese Masses (F12)
- ___ Other (Explain in Remarks)

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

Restrictive Layer (if observed):

Type: **N/A**

Depth (inches): **N/A**

Hydric Soil Present? **Yes** ___ **No** **X**

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

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

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ True Aquatic Plants (B14)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Gauge or Well Data (D9)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present?	Yes ___	No **X**	Depth (inches): ___
Water Table Present?	Yes ___	No **X**	Depth (inches): ___
Saturation Present? (includes capillary fringe)	Yes ___	No **X**	Depth (inches): ___

Wetland Hydrology Present? **Yes** ___ **No** **X**

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

Remarks:

No wetland hydrology indicators observed.

WETLAND DETERMINATION DATA FORM - Midwest Region

Project/Site: **IH-94 Mainline** City/County: **Oak Creek/ Milwaukee** Sampling Date: **10/27/2009**

Applicant/Owner: **WDOT** State: **WI** Sampling Point: **W7-1 T-1 B(w)**

Investigator(s): **Rachel E. Lang / Julie A. Paschal** Section, Township, Range: **Section 7, T5N R22E**

Landform (hillslope, terrace, etc.): **Multiple drainage paths** Local relief (concave, convex, none): **Concave**

Slope (%): **0-1%** Lat: **See Fig. 2** Long: **See Fig. 2** Datum: **NA**

Soil Map Unit Name: **Ashkum silty clay loam (AtA)** WWI Classification: **T3K**

Are climatic / hydrologic conditions on the site typical for this time of year? Yes ***X** No _____ (if no, explain in Remarks)

Are Vegetation ____ Soil ____ or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes **X** No ____

Are Vegetation ____ Soil ____ or Hydrology ****X** naturally problematic? (if needed, explain any answers in Remarks)

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

Hydrophytic Vegetation Present?	Yes **X**	No ____		
Hydric Soil Present?	Yes **X**	No ____	Is the Sampled Area within a Wetland?	Yes **X** No ____
Wetland Hydrology Present?	Yes **X**	No ____		

Remarks:

*** The WETS Analysis indicates that weather conditions have been normal in recent months. This area, however, has received several inches of precipitation within the last two weeks.**

**** This wetland experiences seasonal hydrology.**

VEGETATION - Use scientific names for plants.

Tree Stratum (Plot Size: **30 ft. radius**)	Absolute % Cover	Dominant Species	Indicator Status
1. ***Fraxinus pennsylvanica***	**80%**	**Yes**	**FACW**
2. ***Ulmus americana***	**20%**	**No**	**FACW**
3.			
4.			
5.			
	100%	= Total Cover	

Sapling/Shrub Stratum (Plot Size: **15 ft. radius**)			
1. ***Prunus virginiana***	**25%**	**Yes**	**FAC**
2. ***Viburnum opulus***	**25%**	**Yes**	**UPL**
3. ***Rhamnus cathartica***	**5%**	**No**	**FACU**
4.			
5.			
	55%	= Total Cover	

Herb Stratum (Plot Size: **5 ft. radius**)			
1. ***Aster lateriflorus***	**10%**	**No**	**FACW**
2. ***Alliaria petiolata***	**20%**	**Yes**	**FAC**
3. ***Geum canadense***	**30%**	**Yes**	**FAC**
4. ***Solidago gigantea***	**5%**	**No**	**FACW**
5.			
6.			
7.			
8.			
9.			
10.			
	65%	= Total Cover	

Woody Vine Stratum (Plot Size: **N/A**)			
1. **N/A**			
2.			
	0%	= Total Cover	

Dominance Test Worksheet:

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

Total Number of Dominant Species Across All Strata: **5** (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: **80%** (A/B)

Prevalence Index Worksheet:

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

Prevalence Index = B/A = ____

Hydrophytic Vegetation Indicators:

X Dominance Test is >50%

____ Prevalence Index is ≤ 3.0[1]

____ Morphological Adaptations[1] (Provide supporting data in Remarks or on separate sheet)

____ Problematic Hydrophytic Vegetation[1] (Explain)

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

Hydrophytic Vegetation Present? **Yes X** **No** ____

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

This is a wet to wet mesic woods and drainageway.

SOIL

Sampling Point: **W7-1 T-1 B(w)**

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

Depth (inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-10	**10YR 3/1**	**100**	**10YR 4/6**	**10%**	**C**	**M**	**Silty clay loam**	
10-21	**10YR 4/1**	**100**	**10YR 4/6**	**10%**	**C**	**M**	**Clay loam**	
			10YR 4/4	**10%**	**C**	**M**		

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

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ 2 cm Muck (A10)
- ___ Depleted Below Dark Surface (A11)
- **X** Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ 5 cm Mucky Peat or Peat (S3)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- **X** Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ Coast Prairie Redox (A16)
- ___ Iron-Manganese Masses (F12)
- ___ Other (Explain in Remarks)

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

Restrictive Layer (if observed):

Type: **N/A**

Depth (inches): **N/A**

Hydric Soil Present? **Yes** **X** **No** ___

Remarks:

Redox features observed from 7-21 inches.

HYDROLOGY

Wetland Hydrology Indicators:

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

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- **X** Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ True Aquatic Plants (B14)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Gauge or Well Data (D9)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- **X** Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- **X** FAC-Neutral Test (D5)

Field Observations:

Surface Water Present?	Yes ___	No **X**	Depth (inches): ___
Water Table Present?	Yes ___	No **X**	Depth (inches): ___
Saturation Present? (includes capillary fringe)	Yes ___	No **X**	Depth (inches): ___

Wetland Hydrology Present? **Yes** **X** **No** ___

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

Remarks:

This sample point is located within wet to wet mesic woodlands with standing water in some drainage paths leading to the adjacent tributary of Oak Creek.

WETLAND DETERMINATION DATA FORM - Midwest Region

Project/Site: **IH-94 Mainline** City/County: **Oak Creek/ Milwaukee** Sampling Date: **10/14/2009**

Applicant/Owner: **WDOT** State: **WI** Sampling Point: **W7-6 T-1 A(u)**

Investigator(s): **Rachel E. Lang / Julie A. Paschal** Section, Township, Range: **Section 7, T5N R22E**

Landform (hillslope, terrace, etc.): **Slight hillslope** Local relief (concave, convex, none): **Convex**

Slope (%): **0-1%** Lat: **See Fig. 2** Long: **See Fig. 2** Datum: **NA**

Soil Map Unit Name: **Blount silt loam (BIA)** WWI Classification: **None**

Are climatic / hydrologic conditions on the site typical for this time of year? Yes ____ No ***X** (if no, explain in Remarks)

Are Vegetation ****X** Soil *****X** or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes **X** No ____

Are Vegetation ____ Soil ____ or Hydrology ____ naturally problematic? (if needed, explain any answers in Remarks)

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

Hydrophytic Vegetation Present?	Yes ____	No **X**			
Hydric Soil Present?	Yes ____	No **X**	Is the Sampled Area within a Wetland?	Yes ____	No **X**
Wetland Hydrology Present?	Yes ____	No **X**			

Remarks:

*** The WETS Analysis indicates that recent weather conditions have been drier than normal.**

**** Vegetation has been disturbed - this is a mowed lawn plant community.**

***** Soils potentially contain fill material as this is a mowed lawn.**

VEGETATION - Use scientific names for plants.

Tree Stratum (Plot Size: **N/A**)	Absolute % Cover	Dominant Species	Indicator Status
1. **N/A**			
2.			
3.			
4.			
5.			
	0% = Total Cover		

Sapling/Shrub Stratum (Plot Size: **N/A**)			
1. **N/A**			
2.			
3.			
4.			
5.			
	0% = Total Cover		

Herb Stratum (Plot Size: **5 ft. radius**)			
1. ***Poa pratensis***	**90%**	**Yes**	**FAC**
2. ***Taraxacum officinale***	**10%**	**No**	**FACU**
3. ***Trifolium repens***	**10%**	**No**	**FACU**
4.			
5.			
6.			
7.			
8.			
9.			
10.			
	110% = Total Cover		

Woody Vine Stratum (Plot Size: **N/A**)			
1. **N/A**			
2.			
	0% = Total Cover		

Dominance Test Worksheet:

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

Total Number of Dominant Species Across All Strata: **1** (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: **100%** (A/B)

Prevalence Index Worksheet:

Total % Cover of:		Multiply by:	
OBL species		x 1 =	
FACW species		x 2 =	
FAC species	**90%**	x 3 =	**270**
FACU species	**20%**	x 4 =	**80**
UPL species		x 5 =	
Column Totals:	**110%** (A)		**350** (B)

Prevalence Index = B/A = **3.18**

Hydrophytic Vegetation Indicators:

X Dominance Test is >50%

____ Prevalence Index is ≤ 3.0[1]

____ Morphological Adaptations[1] (Provide supporting data in Remarks or on separate sheet)

____ Problematic Hydrophytic Vegetation[1] (Explain)

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

Hydrophytic Vegetation Present? Yes ____ No **X**

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

The plant community in this area has been altered. This is a mowed lawn plant community dominated by *Poa pratensis*, a planted FAC- species. The Dominance Test is met; however, the Prevalence Index and the FAC Neutral Test are not met. Professional judgement indicates this is a non-hydrophytic plant community.

SOIL

Sampling Point: **W7-6 T-1 A(u)**

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

Depth (inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox Features %	Type[1]	Loc[2]	Texture	Remarks
0-16	**10YR 3/2**	**100**	**None**				**Silty clay loam**	
16-20	**10YR 2/2**	**100**	**None**				**Clay loam**	

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

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ 2 cm Muck (A10)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ 5 cm Mucky Peat or Peat (S3)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ Coast Prairie Redox (A16)
- ___ Iron-Manganese Masses (F12)
- ___ Other (Explain in Remarks)

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

Restrictive Layer (if observed):

Type: **None**

Depth (inches): **None**

Hydric Soil Present? **Yes** ___ **No** **X**

Remarks:

Possible fill material and grading occurred in this lawn area.

HYDROLOGY

Wetland Hydrology Indicators:

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

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ True Aquatic Plants (B14)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Gauge or Well Data (D9)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present?	Yes ___	No **X**	Depth (inches): ___
Water Table Present?	Yes ___	No **X**	Depth (inches): ___
Saturation Present? (includes capillary fringe)	Yes ___	No **X**	Depth (inches): ___

Wetland Hydrology Present? **Yes** ___ **No** **X**

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

Remarks:

This sample point is located upslope from the adjacent wetland. No wetland hydrology indicators observed.

WETLAND DETERMINATION DATA FORM - Midwest Region

Project/Site: **IH-94 Mainline** City/County: **Oak Creek/ Milwaukee** Sampling Date: **10/14/2009**

Applicant/Owner: **WDOT** State: **WI** Sampling Point: **W7-6 T-1 B(w)**

Investigator(s): **Rachel E. Lang / Julie A. Paschal** Section, Township, Range: **Section 7, T5N R22E**

Landform (hillslope, terrace, etc.): **Terrace** Local relief (concave, convex, none): **None**

Slope (%): **0-1%** Lat: **See Fig. 2** Long: **See Fig. 2** Datum: **NA**

Soil Map Unit Name: **Ashkum silty clay loam (AsA)** WWI Classification: **T3/E2K**

Are climatic / hydrologic conditions on the site typical for this time of year? Yes ____ No ***X** (if no, explain in Remarks)

Are Vegetation ____ Soil ____ or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes **X** No ____

Are Vegetation ____ Soil ____ or Hydrology ****X** naturally problematic? (if needed, explain any answers in Remarks)

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

Hydrophytic Vegetation Present?	Yes **X**	No ____			
Hydric Soil Present?	Yes **X**	No ____	Is the Sampled Area within a Wetland?	Yes **X**	No ____
Wetland Hydrology Present?	Yes **X**	No ____			

Remarks:

*** The WETS Analysis indicates that recent weather conditions have been drier than normal.**

**** This wetland experiences seasonal hydrology.**

This is a wet meadow wetland with an adjacent shallow marsh.

VEGETATION - Use scientific names for plants.

Tree Stratum (Plot Size: **30 ft. radius**)	Absolute % Cover	Dominant Species	Indicator Status
1. ***Salix alba***	**5%**	**No**	**FACW**
2. ***Populus deltoides***	**10%**	**Yes**	**FAC**
3. ***Fraxinus pennsylvanica***	**20%**	**Yes**	**FACW**
4.			
5.			
	35%	= Total Cover	

Sapling/Shrub Stratum (Plot Size: **15 ft. radius**)			
1. ***Rhamnus frangula***	**5%**	**Yes**	**FAC**
2.			
3.			
4.			
5.			
	5%	= Total Cover	

Herb Stratum (Plot Size: **5 ft. radius**)			
1. ***Typha angustifolia***	**30%**	**Yes**	**OBL**
2. ***Aster novae-angliae***	**10%**	**No**	**FACW**
3. ***Cirsium arvense***	**5%**	**No**	**FACU**
4. ***Solidago gigantea***	**50%**	**Yes**	**FACW**
5. ***Geum canadense***	**5%**	**No**	**FAC**
6. ***Phalaris arundinacea***	**40%**	**Yes**	**FACW**
7.			
8.			
9.			
10.			
	140%	= Total Cover	

Woody Vine Stratum (Plot Size: **N/A**)			
1. **N/A**			
2.			
	0%	= Total Cover	

Dominance Test Worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: **6** (A)

Total Number of Dominant Species Across All Strata: **6** (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: **100%** (A/B)

Prevalence Index Worksheet:

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

Prevalence Index = B/A =

Hydrophytic Vegetation Indicators:

X Dominance Test is >50%

____ Prevalence Index is ≤ 3.0[1]

____ Morphological Adaptations[1] (Provide supporting data in Remarks or on separate sheet)

____ Problematic Hydrophytic Vegetation[1] (Explain)

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

Hydrophytic Vegetation Present? **Yes X** **No** ____

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

This is a wet meadow plant community located near the edge of the adjacent shallow marsh.

SOIL

Sampling Point: **W7-6 T-1 B(w)**

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

Depth (inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox Features %	Type[1]	Loc[2]	Texture	Remarks
0-16	**10YR 3/2**	**100**	**10YR 4/6**	**10%**	**C**	**M**	**Silty clay loam**	
16-22	**10YR 2/1**	**100**	**10YR 4/6**	**20%**	**C**	**M**	**Silty clay loam**	**Small limestone pebbles present**

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

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ 2 cm Muck (A10)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ 5 cm Mucky Peat or Peat (S3)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- **X** Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ Coast Prairie Redox (A16)
- ___ Iron-Manganese Masses (F12)
- ___ Other (Explain in Remarks)

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

Restrictive Layer (if observed):

Type: **N/A**

Depth (inches): **N/A**

Hydric Soil Present? **Yes X** **No ___**

Remarks:

Redox features begin at 4 inches.

HYDROLOGY

Wetland Hydrology Indicators:

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

- **X** Surface Water (A1)
- ___ High Water Table (A2)
- **X** Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ True Aquatic Plants (B14)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Gauge or Well Data (D9)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- **X** Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- **X** Geomorphic Position (D2)
- **X** FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes **X** No ___ Depth (inches): **1.5**

Water Table Present? Yes **X** No ___ Depth (inches): **0**

Saturation Present? (includes capillary fringe) Yes **X** No ___ Depth (inches): **0**

Wetland Hydrology Present? **Yes X** **No ___**

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

Remarks:

This is a depressional wetland located along a perennial waterway that is tributary to Oak Creek.

WETLAND DETERMINATION DATA FORM - Midwest Region

Project/Site: **IH-94 Mainline** City/County: **Oak Creek/ Milwaukee** Sampling Date: **9/23/2009**

Applicant/Owner: **WDOT** State: **WI** Sampling Point: **W8-6 T-1 A(u)**

Investigator(s): **Eric C. Parker / Julie A. Paschal** Section, Township, Range: **Section 17, T5N R22E**

Landform (hillslope, terrace, etc.): **Slight hillslope** Local relief (concave, convex, none): **Convex**

Slope (%): **5-7%** Lat: **See Fig. 2** Long: **See Fig. 2** Datum: **NA**

Soil Map Unit Name: **Blount silt loam (BIA)** WWI Classification: **None**

Are climatic / hydrologic conditions on the site typical for this time of year? Yes ____ No ***X** (if no, explain in Remarks)

Are Vegetation ____ Soil ____ or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes **X** No ____

Are Vegetation ____ Soil ____ or Hydrology ____ naturally problematic? (if needed, explain any answers in Remarks)

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

Hydrophytic Vegetation Present?	Yes ____	No **X**			
Hydric Soil Present?	Yes ____	No **X**	Is the Sampled Area within a Wetland?	Yes ____	No **X**
Wetland Hydrology Present?	Yes ____	No **X**			

Remarks:

*** The WETS Analysis indicates that recent weather conditions have been drier than normal.**

VEGETATION - Use scientific names for plants.

Tree Stratum (Plot Size: **30 ft. radius**)	Absolute % Cover	Dominant Species	Indicator Status
1. ***Crataegus mollis***	**25%**	**Yes**	**FACW**
2.			
3.			
4.			
5.			
	25% = Total Cover		

Sapling/Shrub Stratum (Plot Size: **15 ft. radius**)			
1. ***Zanthoxylem americanum***	**80%**	**Yes**	**FACU**
2. ***Rhamnus cathartica***	**10%**	**No**	**FACU**
3.			
4.			
5.			
	90% = Total Cover		

Herb Stratum (Plot Size: **5 ft. radius**)			
1. ***Solidago canadensis***	**20%**	**Yes**	**FACU**
2. ***Rhamnus cathartica***	**20%**	**Yes**	**FACU**
3. ***Geum aleppicum***	**5%**	**No**	**FAC**
4. ***Oxalis stricta***	**2%**	**No**	**FACU**
5.			
6.			
7.			
8.			
9.			
10.			
	47% = Total Cover		

Woody Vine Stratum (Plot Size: **N/A**)			
1. **N/A**			
2.			
	0% = Total Cover		

Dominance Test Worksheet:

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

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

Percent of Dominant Species That Are OBL, FACW, or FAC: **25%** (A/B)

Prevalence Index Worksheet:

Total % Cover of:		Multiply by:	
OBL species		x 1 =	
FACW species	**25%**	x 2 =	**50**
FAC species	**5%**	x 3 =	**15**
FACU species	**132%**	x 4 =	**528**
UPL species		x 5 =	
Column Totals:	**162%** (A)		**593** (B)

Prevalence Index = B/A = **3.66**

Hydrophytic Vegetation Indicators:

____ Dominance Test is >50%

____ Prevalence Index is ≤ 3.0[1]

____ Morphological Adaptations[1] (Provide supporting data in Remarks or on separate sheet)

____ Problematic Hydrophytic Vegetation[1] (Explain)

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

Hydrophytic Vegetation Present? Yes ____ No **X**

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

Bare ground constitutes approximately 50-60% of the herbaceous stratum due to a dense tree and shrub canopy. This is an upland, woodland plant community.

SOIL

Sampling Point: **W8-6 T-1 A(u)**

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

Depth (inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-3	10YR 3/2	100	None				Silt loam	
3-6	10YR 3/1	100	None				Silty clay loam	
6-12	10YR 5/2	100	10YR 4/3	2%	C	M	Silty clay	
12-18	10YR 5/3	100	10YR 4/4	5%	C	M	Silty clay	

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

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ 2 cm Muck (A10)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ 5 cm Mucky Peat or Peat (S3)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ Coast Prairie Redox (A16)
- ___ Iron-Manganese Masses (F12)
- ___ Other (Explain in Remarks)

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

Restrictive Layer (if observed):

Type: **N/A**

Depth (inches): **N/A**

Hydric Soil Present? **Yes** ___ **No** **X**

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

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

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ True Aquatic Plants (B14)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Gauge or Well Data (D9)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes ___ No **X** Depth (inches): ___

Water Table Present? Yes ___ No **X** Depth (inches): ___

Saturation Present? (includes capillary fringe) Yes ___ No **X** Depth (inches): ___

Wetland Hydrology Present? **Yes** ___ **No** **X**

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

Remarks:

This sample point is located on a slight hillslope at a higher elevation in the topography than the adjacent wetland. No wetland hydrology indicators observed.

WETLAND DETERMINATION DATA FORM - Midwest Region

Project/Site: **IH-94 Mainline** City/County: **Oak Creek/ Milwaukee** Sampling Date: **9/23/2009**

Applicant/Owner: **WDOT** State: **WI** Sampling Point: **W8-6 T-1 B(w)**

Investigator(s): **Eric C. Parker / Julie A. Paschal** Section, Township, Range: **Section 17, T5N R22E**

Landform (hillslope, terrace, etc.): **Terrace** Local relief (concave, convex, none): **None**

Slope (%): **0-1%** Lat: **See Fig. 2** Long: **See Fig. 2** Datum: **NA**

Soil Map Unit Name: **Blount silt loam (BIA)** WWI Classification: **T3/E2K**

Are climatic / hydrologic conditions on the site typical for this time of year? Yes ____ No ***X** (if no, explain in Remarks)

Are Vegetation ____ Soil ____ or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes **X** No ____

Are Vegetation ____ Soil ____ or Hydrology ____ naturally problematic? (if needed, explain any answers in Remarks)

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

Hydrophytic Vegetation Present?	Yes **X**	No ____			
Hydric Soil Present?	Yes **X**	No ____	Is the Sampled Area	Yes **X**	No ____
Wetland Hydrology Present?	Yes **X**	No ____	within a Wetland?		

Remarks:

*** The WETS Analysis indicates that recent weather conditions have been drier than normal.**

This is a shallow marsh dominated by *Typha spp.*

VEGETATION - Use scientific names for plants.

Tree Stratum (Plot Size: **N/A**)	Absolute % Cover	Dominant Species	Indicator Status
1. **N/A**			
2.			
3.			
4.			
5.			
	0%	= Total Cover	

Sapling/Shrub Stratum (Plot Size: **15 ft. radius**)			
1. ***Zanthoxylem americanum***	**5%**	**Yes**	**FACU**
2.			
3.			
4.			
5.			
	5%	= Total Cover	

Herb Stratum (Plot Size: **5 ft. radius**)			
1. ***Typha angustifolia***	**75%**	**Yes**	**OBL**
2. ***Solidago gigantea***	**25%**	**No**	**FACW**
3. ***Aster novae-angliae***	**20%**	**No**	**FACW**
4. ***Epilobium coloratum***	**5%**	**No**	**OBL**
5. ***Cirsium arvense***	**5%**	**No**	**FACU**
6.			
7.			
8.			
9.			
10.			
	130%	= Total Cover	

Woody Vine Stratum (Plot Size: **15 ft. radius**)			
1. ***Vitis riparia***	**15%**	**Yes**	**FACW**
2.			
	15%	= Total Cover	

Dominance Test Worksheet:

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

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

Percent of Dominant Species That Are OBL, FACW, or FAC: **67%** (A/B)

Prevalence Index Worksheet:

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

Prevalence Index = B/A =

Hydrophytic Vegetation Indicators:

X Dominance Test is >50%

____ Prevalence Index is ≤ 3.0[1]

____ Morphological Adaptations[1] (Provide supporting data in Remarks or on separate sheet)

____ Problematic Hydrophytic Vegetation[1] (Explain)

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

Hydrophytic Vegetation Present? Yes **X** No ____

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

This is a shallow marsh plant community.

SOIL Sampling Point: **W8-6 T-1 B(w)**

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
0-18	**10YR 3/1**	**100**	**5YR 5/8**	**10%**	**C**	**M/PL**	**Silt loam**	

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

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ 2 cm Muck (A10)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ 5 cm Mucky Peat or Peat (S3)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- **X** Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ Coast Prairie Redox (A16)
- ___ Iron-Manganese Masses (F12)
- ___ Other (Explain in Remarks)

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

Restrictive Layer (if observed):

Type: **N/A**

Depth (inches): **N/A**

Hydric Soil Present? **Yes X** **No ___**

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

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

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ True Aquatic Plants (B14)
- ___ Hydrogen Sulfide Odor (C1)
- **X** Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Gauge or Well Data (D9)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- **X** Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- **X** Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- **X** FAC-Neutral Test (D5)

Field Observations:

Surface Water Present?	Yes ___	No **X**	Depth (inches): ___
Water Table Present?	Yes ___	No **X**	Depth (inches): ___
Saturation Present? (includes capillary fringe)	Yes ___	No **X**	Depth (inches): ___

Wetland Hydrology Present? **Yes X** **No ___**

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

Remarks:

WETLAND DETERMINATION DATA FORM - Midwest Region

Project/Site: **IH-94 Mainline** City/County: **Oak Creek/ Milwaukee** Sampling Date: **9/23/2009**

Applicant/Owner: **WDOT** State: **WI** Sampling Point: **W8-7 T-1 A(u)**

Investigator(s): **Eric C. Parker / Julie A. Paschal** Section, Township, Range: **Section 17, T5N R22E**

Landform (hillslope, terrace, etc.): **Slight hillslope** Local relief (concave, convex, none): **Convex**

Slope (%): **3-5%** Lat: **See Fig. 2** Long: **See Fig. 2** Datum: **NA**

Soil Map Unit Name: **Blount silt loam (BIA)** WWI Classification: **None**

Are climatic / hydrologic conditions on the site typical for this time of year? Yes ____ No ***X** (if no, explain in Remarks)

Are Vegetation ____ Soil ____ or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes ____ No ****X**

Are Vegetation ____ Soil ____ or Hydrology ____ naturally problematic? (if needed, explain any answers in Remarks)

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

Hydrophytic Vegetation Present?	Yes ____	No **X**			
Hydric Soil Present?	Yes ____	No **X**	Is the Sampled Area within a Wetland?	Yes ____	No **X**
Wetland Hydrology Present?	Yes ____	No **X**			

Remarks:

*** The WETS Analysis indicates that recent weather conditions have been drier than normal.**

****This field is currently under construction. However the immediate area surrounding this sample point has not yet been altered.**

VEGETATION - Use scientific names for plants.

Tree Stratum (Plot Size: **N/A**)	Absolute % Cover	Dominant Species	Indicator Status
1. **N/A**			
2.			
3.			
4.			
5.			
	0%	= Total Cover	

Sapling/Shrub Stratum (Plot Size: **N/A**)			
1. **N/A**			
2.			
3.			
4.			
5.			
	0%	= Total Cover	

Herb Stratum (Plot Size: **5 ft. radius**)			
1. ***Solidago canadensis***	**50%**	**Yes**	**FACU**
2. ***Cirsium arvense***	**10%**	**No**	**FACU**
3. ***Geum canadense***	**5%**	**No**	**FAC**
4. ***Daucus carota***	**5%**	**No**	**UPL**
5. ***Aster novae-angliae***	**20%**	**No**	**FACW**
6. ***Aster pilosus***	**40%**	**Yes**	**FACU**
7.			
8.			
9.			
10.			
	130%	= Total Cover	

Woody Vine Stratum (Plot Size: **N/A**)			
1. **N/A**			
2.			
	0%	= Total Cover	

Dominance Test Worksheet:

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

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

Percent of Dominant Species That Are OBL, FACW, or FAC: **0%** (A/B)

Prevalence Index Worksheet:

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

Prevalence Index = B/A =

Hydrophytic Vegetation Indicators:

____ Dominance Test is >50%

____ Prevalence Index is ≤ 3.0[1]

____ Morphological Adaptations[1] (Provide supporting data in Remarks or on separate sheet)

____ Problematic Hydrophytic Vegetation[1] (Explain)

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

Hydrophytic Vegetation Present? **Yes** ____ **No X**

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

This is an upland, old field plant community.

SOIL Sampling Point: **W8-7 T-1 A(u)**

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

Depth (inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox Features %	Redox Features Type[1]	Redox Features Loc[2]	Texture	Remarks
0-10	**10YR 3/2**	**100**	**None**				**Silt loam**	
10-18	**10YR 3/1**	**100**	**None**				**Silty clay loam**	

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

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ 2 cm Muck (A10)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ 5 cm Mucky Peat or Peat (S3)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ Coast Prairie Redox (A16)
- ___ Iron-Manganese Masses (F12)
- ___ Other (Explain in Remarks)

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

Restrictive Layer (if observed):

Type: **N/A**

Depth (inches): **N/A**

Hydric Soil Present? **Yes** ___ **No** **X**

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

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

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ True Aquatic Plants (B14)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Gauge or Well Data (D9)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present?	Yes ___	No **X**	Depth (inches): ___
Water Table Present?	Yes ___	No **X**	Depth (inches): ___
Saturation Present? (includes capillary fringe)	Yes ___	No **X**	Depth (inches): ___

Wetland Hydrology Present? **Yes** ___ **No** **X**

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

Remarks:

No wetland hydrology indicators observed.

WETLAND DETERMINATION DATA FORM - Midwest Region

Project/Site: **IH-94 Mainline** City/County: **Oak Creek/ Milwaukee** Sampling Date: **9/23/2009**

Applicant/Owner: **WDOT** State: **WI** Sampling Point: **W8-7 T-1 B(w)**

Investigator(s): **Eric C. Parker / Julie A. Paschal** Section, Township, Range: **Section 17, T5N R22E**

Landform (hillslope, terrace, etc.): **Terrace** Local relief (concave, convex, none): **Concave**

Slope (%): **0-1%** Lat: **See Fig. 2** Long: **See Fig. 2** Datum: **NA**

Soil Map Unit Name: **Ashkum silty clay loam (AsA)** WWI Classification: **E2Ka**

Are climatic / hydrologic conditions on the site typical for this time of year? Yes ____ No ***X** (if no, explain in Remarks)

Are Vegetation ____ Soil ____ or Hydrology ****X** significantly disturbed? Are "Normal Circumstances" present? Yes ____ No *****X**

Are Vegetation ____ Soil ____ or Hydrology ____ naturally problematic? (if needed, explain any answers in Remarks)

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

Hydrophytic Vegetation Present?	Yes **X**	No ____		
Hydric Soil Present?	Yes **X**	No ____	Is the Sampled Area within a Wetland?	Yes **X** No ____
Wetland Hydrology Present?	Yes **X**	No ____		

Remarks:

*** The WETS Analysis indicates that recent weather conditions have been drier than normal.**

**** Hydrology is disturbed in the vicinity of this sample point due to disturbance from current construction. Portions of this wetland exhibit disturbed vegetation, soils, and hydrology due to construction.**

***** Normal circumstances are not present - this field is currently under construction.**

This is a wet meadow wetland.

VEGETATION - Use scientific names for plants.

Tree Stratum (Plot Size: **N/A**)	Absolute % Cover	Dominant Species	Indicator Status
1. **N/A**			
2.			
3.			
4.			
5.			
	0%	= Total Cover	

Sapling/Shrub Stratum (Plot Size: **N/A**)			
1. **N/A**			
2.			
3.			
4.			
5.			
	0%	= Total Cover	

Herb Stratum (Plot Size: **5 ft. radius**)			
1. ***Phalaris arundinacea***	**100%**	**Yes**	**FACW**
2. ***Solidago canadensis***	**5%**	**No**	**FACU**
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
	105%	= Total Cover	

Woody Vine Stratum (Plot Size: **N/A**)			
1. **N/A**			
2.			
	0%	= Total Cover	

Dominance Test Worksheet:

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

Total Number of Dominant Species Across All Strata: **1** (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: **100%** (A/B)

Prevalence Index Worksheet:

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

Prevalence Index = B/A = ____

Hydrophytic Vegetation Indicators:

X Dominance Test is >50%

____ Prevalence Index is ≤ 3.0[1]

____ Morphological Adaptations[1] (Provide supporting data in Remarks or on separate sheet)

____ Problematic Hydrophytic Vegetation[1] (Explain)

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

Hydrophytic Vegetation Present? **Yes X** **No** ____

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

This is a *Phalaris arundinacea* dominated wet meadow.

SOIL

Sampling Point: **W8-7 T-1 B(w)**

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
0-14	**10YR 3/1**	**100**	**None**				**Silty clay loam**	
14-18	**10YR 5/3**	**100**	**7.5YR 4/6**	**5%**	**C**	**M**	**Silty clay loam**	
			7.5YR 2.5/1	**5%**	**D**	**M**		

[1] Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains.

[2] Location: PL=Pore Lining, M=Matrix

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ 2 cm Muck (A10)
- ___ Depleted Below Dark Surface (A11)
- **X** Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ 5 cm Mucky Peat or Peat (S3)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ Coast Prairie Redox (A16)
- ___ Iron-Manganese Masses (F12)
- ___ Other (Explain in Remarks)

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

Restrictive Layer (if observed):

Type: **N/A**

Depth (inches): **N/A**

Hydric Soil Present? **Yes X** **No ___**

Remarks:

Blocky soil structure. Soils are dry.

HYDROLOGY

Wetland Hydrology Indicators:

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

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ True Aquatic Plants (B14)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Gauge or Well Data (D9)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- **X** Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- **X** FAC-Neutral Test (D5)

Field Observations:

Surface Water Present?	Yes ___	No **X**	Depth (inches): ___
Water Table Present?	Yes ___	No **X**	Depth (inches): ___
Saturation Present? (includes capillary fringe)	Yes ___	No **X**	Depth (inches): ___

Wetland Hydrology Present? **Yes X** **No ___**

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

Remarks:

WETLAND DETERMINATION DATA FORM - Midwest Region

Project/Site: **IH-94 Mainline** City/County: **Oak Creek/ Milwaukee** Sampling Date: **9/17/2009**

Applicant/Owner: **WDOT** State: **WI** Sampling Point: **W8-8 T-1 A(u)**

Investigator(s): **Marcus S. Anderson** Section, Township, Range: **Section 18, T5N R22E**

Landform (hillslope, terrace, etc.): **Hillslope** Local relief (concave, convex, none): **Convex**

Slope (%): **5-10%** Lat: **See Fig. 2** Long: **See Fig. 2** Datum: **NA**

Soil Map Unit Name: **Blount silt loam (BIA)** WWI Classification: **None**

Are climatic / hydrologic conditions on the site typical for this time of year? Yes **X** No ____ (if no, explain in Remarks)

Are Vegetation ____ Soil ____ or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes **X** No ____

Are Vegetation ***X** Soil ____ or Hydrology ____ naturally problematic? (if needed, explain any answers in Remarks)

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

Hydrophytic Vegetation Present?	Yes ____	No **X**			
Hydric Soil Present?	Yes ____	No **X**	Is the Sampled Area within a Wetland?	Yes ____	No **X**
Wetland Hydrology Present?	Yes ____	No **X**			

Remarks:

*** Vegetation is naturally problematic due to a dominance of *Poa pratensis* , a FAC- species commonly found in planted, mowed lawns as is the case here.**

VEGETATION - Use scientific names for plants.

Tree Stratum (Plot Size: **N/A**)	Absolute % Cover	Dominant Species	Indicator Status
1. **N/A**			
2.			
3.			
4.			
5.			
	0%	= Total Cover	

Sapling/Shrub Stratum (Plot Size: **N/A**)			
1. **N/A**			
2.			
3.			
4.			
5.			
	0%	= Total Cover	

Herb Stratum (Plot Size: **5 ft. radius**)			
1. ***Poa pratensis***	**60%**	**Yes**	**FAC**
2. ***Taraxacum officinale***	**40%**	**Yes**	**FACU**
3. ***Plantago major***	**5%**	**No**	**FAC**
4. ***Phleum pratense***	**20%**	**No**	**FACU**
5.			
6.			
7.			
8.			
9.			
10.			
	125%	= Total Cover	

Woody Vine Stratum (Plot Size: **N/A**)			
1. **N/A**			
2.			
	0%	= Total Cover	

Dominance Test Worksheet:

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

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

Percent of Dominant Species That Are OBL, FACW, or FAC: **50%** (A/B)

Prevalence Index Worksheet:

Total % Cover of:		Multiply by:	
OBL species		x 1 =	
FACW species		x 2 =	
FAC species	**65%**	x 3 =	**195**
FACU species	**60%**	x 4 =	**240**
UPL species		x 5 =	
Column Totals:	**125%** (A)		**435** (B)

Prevalence Index = B/A = **3.48**

Hydrophytic Vegetation Indicators:

____ Dominance Test is >50%

____ Prevalence Index is ≤ 3.0[1]

____ Morphological Adaptations[1] (Provide supporting data in Remarks or on separate sheet)

____ Problematic Hydrophytic Vegetation[1] (Explain)

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

Hydrophytic Vegetation Present? Yes ____ No **X**

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

Vegetation is problematic due to a dominance of *Poa pratensis* , a FAC- species. However the Dominance Test, Prevalence Index, and FAC Neutral Test are not met which confirms that this is an upland plant community.

SOIL

Sampling Point: **W8-8 T-1 A(u)**

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

Depth (inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox Features %	Type[1]	Loc[2]	Texture	Remarks
0-9	**10YR 3/3**	**100**	**None**				**Silt loam**	
9-18	**10YR 3/2**	**100**	**None**				**Silt loam**	

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

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ 2 cm Muck (A10)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ 5 cm Mucky Peat or Peat (S3)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ Coast Prairie Redox (A16)
- ___ Iron-Manganese Masses (F12)
- ___ Other (Explain in Remarks)

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

Restrictive Layer (if observed):

Type: **N/A**

Depth (inches): **N/A**

Hydric Soil Present? **Yes** ___ **No** **X**

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

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

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ True Aquatic Plants (B14)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Gauge or Well Data (D9)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present?	Yes ___	No **X**	Depth (inches): ___
Water Table Present?	Yes ___	No **X**	Depth (inches): ___
Saturation Present? (includes capillary fringe)	Yes ___	No **X**	Depth (inches): ___

Wetland Hydrology Present? **Yes** ___ **No** **X**

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

Remarks:

No wetland hydrology indicators observed.

WETLAND DETERMINATION DATA FORM - Midwest Region

Project/Site: **IH-94 Mainline** City/County: **Oak Creek/ Milwaukee** Sampling Date: **9/17/2009**

Applicant/Owner: **WDOT** State: **WI** Sampling Point: **W8-8 T-1 B(w)**

Investigator(s): **Marcus S. Anderson** Section, Township, Range: **Section 18, T5N R22E**

Landform (hillslope, terrace, etc.): **Depression** Local relief (concave, convex, none): **Concave**

Slope (%): **0-2%** Lat: **See Fig. 2** Long: **See Fig. 2** Datum: **NA**

Soil Map Unit Name: **Blount silt loam (BIA)** WWI Classification: **E2Ka**

Are climatic / hydrologic conditions on the site typical for this time of year? Yes **X** No ____ (if no, explain in Remarks)

Are Vegetation ____ Soil ____ or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes **X** No ____

Are Vegetation ____ Soil ____ or Hydrology ____ naturally problematic? (if needed, explain any answers in Remarks)

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

Hydrophytic Vegetation Present?	Yes **X**	No ____			
Hydric Soil Present?	Yes **X**	No ____	Is the Sampled Area within a Wetland?	Yes **X**	No ____
Wetland Hydrology Present?	Yes **X**	No ____			

Remarks:

VEGETATION - Use scientific names for plants.

Tree Stratum (Plot Size: **30 ft. radius**)

	Absolute % Cover	Dominant Species	Indicator Status
1. ***Salix fragilis***	**40%**	**Yes**	**FAC**
2.			
3.			
4.			
5.			
	40% = Total Cover		

Sapling/Shrub Stratum (Plot Size: **N/A**)

1. **N/A**			
2.			
3.			
4.			
5.			
	0% = Total Cover		

Herb Stratum (Plot Size: **5 ft. radius**)

1. ***Phalaris arundinacea***	**80%**	**Yes**	**FACW**
2. ***Typha angustifolia***	**10%**	**No**	**OBL**
3. ***Solidago canadensis***	**10%**	**No**	**FACU**
4. ***Aster lanceolatus***	**5%**	**No**	**FACW**
5.			
6.			
7.			
8.			
9.			
10.			
	105% = Total Cover		

Woody Vine Stratum (Plot Size: **N/A**)

1. **N/A**			
2.			
	0% = Total Cover		

Dominance Test Worksheet:

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

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

Percent of Dominant Species That Are OBL, FACW, or FAC: **100%** (A/B)

Prevalence Index Worksheet:

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

Prevalence Index = B/A = ____

Hydrophytic Vegetation Indicators:

X Dominance Test is >50%

____ Prevalence Index is ≤ 3.0[1]

____ Morphological Adaptations[1] (Provide supporting data in Remarks or on separate sheet)

____ Problematic Hydrophytic Vegetation[1] (Explain)

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

Hydrophytic Vegetation Present? **Yes X** **No** ____

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

This is a wet meadow plant community.

SOIL

Sampling Point: **W8-8 T-1 B(w)**

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
0-6	**10YR 3/2**	**100**	**None**				**Silt loam**	
6-18	**10YR 3/1**	**100**	**10YR 4/6**	**2%**	**C**	**M**	**Silt loam**	

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

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ 2 cm Muck (A10)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ 5 cm Mucky Peat or Peat (S3)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- **X** Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ Coast Prairie Redox (A16)
- ___ Iron-Manganese Masses (F12)
- ___ Other (Explain in Remarks)

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

Restrictive Layer (if observed):

Type: **N/A**

Depth (inches): **N/A**

Hydric Soil Present? **Yes** **X** **No** ___

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

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

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ True Aquatic Plants (B14)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Gauge or Well Data (D9)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- **X** Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- **X** Geomorphic Position (D2)
- **X** FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes ___ No **X** Depth (inches): ___

Water Table Present? Yes ___ No **X** Depth (inches): ___

Saturation Present? (includes capillary fringe) Yes ___ No **X** Depth (inches): ___

Wetland Hydrology Present? **Yes** **X** **No** ___

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

Remarks:

WETLAND DETERMINATION DATA FORM - Midwest Region

Project/Site: **IH-94 Mainline** City/County: **Oak Creek/ Milwaukee** Sampling Date: **9/17/2009**

Applicant/Owner: **WDOT** State: **WI** Sampling Point: **W9-1 T-1 A(u)**

Investigator(s): **Eric C. Parker** Section, Township, Range: **Section 19, T5N R22E**

Landform (hillslope, terrace, etc.): **Hillslope** Local relief (concave, convex, none): **Concave**

Slope (%): **2%** Lat: **See Fig. 2** Long: **See Fig. 2** Datum: **NA**

Soil Map Unit Name: **Blount silt loam (BIA)** WWI Classification: **None**

Are climatic / hydrologic conditions on the site typical for this time of year? Yes **X** No ____ (if no, explain in Remarks)

Are Vegetation ____ Soil ____ or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes **X** No ____

Are Vegetation ____ Soil ____ or Hydrology ____ naturally problematic? (if needed, explain any answers in Remarks)

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

Hydrophytic Vegetation Present?	Yes ____	No **X**			
Hydric Soil Present?	Yes ____	No **X**	Is the Sampled Area within a Wetland?	Yes ____	No **X**
Wetland Hydrology Present?	Yes ____	No **X**			

Remarks:

VEGETATION - Use scientific names for plants.

Tree Stratum (Plot Size: **N/A**)	Absolute % Cover	Dominant Species	Indicator Status
1. **N/A**			
2.			
3.			
4.			
5.			
	0%	= Total Cover	

Sapling/Shrub Stratum (Plot Size: **N/A**)			
1. **N/A**			
2.			
3.			
4.			
5.			
	0%	= Total Cover	

Herb Stratum (Plot Size: **5 ft. radius**)			
1. ***Agrostis gigantea***	**15%**	**No**	**FACW**
2. ***Solidago canadensis***	**60%**	**Yes**	**FACU**
3. ***Aster novae-angliae***	**5%**	**No**	**FACW**
4. ***Aster pilosus***	**10%**	**No**	**FACU**
5. ***Phalaris arundinacea***	**5%**	**No**	**FACW**
6. ***Geum aleppicum***	**5%**	**No**	**FAC**
7. ***Cirsium arvense***	**5%**	**No**	**FACU**
8.			
9.			
10.			
	105%	= Total Cover	

Woody Vine Stratum (Plot Size: **N/A**)			
1. **N/A**			
2.			
	0%	= Total Cover	

Dominance Test Worksheet:

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

Total Number of Dominant Species Across All Strata: **1** (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: **0%** (A/B)

Prevalence Index Worksheet:

Total % Cover of:		Multiply by:	
OBL species		x 1 =	
FACW species	**25%**	x 2 =	**50**
FAC species	**5%**	x 3 =	**15**
FACU species	**75%**	x 4 =	**300**
UPL species		x 5 =	
Column Totals:	**105%** (A)		**365** (B)

Prevalence Index = B/A = **3.48**

Hydrophytic Vegetation Indicators:

____ Dominance Test is >50%

____ Prevalence Index is ≤ 3.0[1]

____ Morphological Adaptations[1] (Provide supporting data in Remarks or on separate sheet)

____ Problematic Hydrophytic Vegetation[1] (Explain)

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

Hydrophytic Vegetation Present? Yes ____ No **X**

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

This is an upland, old field plant community.

SOIL

Sampling Point: **W9-1 T-1 A(u)**

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

Depth (inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox Features %	Type[1]	Loc[2]	Texture	Remarks
0-6	**10YR 3/2**	**100**	**None**				**Silty clay loam**	
6-16	**10YR 4/2**	**100**	**None**				**Silty clay**	

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

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ 2 cm Muck (A10)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ 5 cm Mucky Peat or Peat (S3)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ Coast Prairie Redox (A16)
- ___ Iron-Manganese Masses (F12)
- ___ Other (Explain in Remarks)

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

Restrictive Layer (if observed):

Type: **Silty clay**

Depth (inches): **6**

Hydric Soil Present? **Yes** ___ **No** **X**

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

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

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ True Aquatic Plants (B14)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Gauge or Well Data (D9)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present?	Yes ___	No **X**	Depth (inches): ___
Water Table Present?	Yes ___	No **X**	Depth (inches): ___
Saturation Present? (includes capillary fringe)	Yes ___	No **X**	Depth (inches): ___

Wetland Hydrology Present? **Yes** ___ **No** **X**

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

Remarks:

No wetland hydrology indicators observed. Conditions are dry.

WETLAND DETERMINATION DATA FORM - Midwest Region

Project/Site: **IH-94 Mainline** City/County: **Oak Creek/ Milwaukee** Sampling Date: **9/17/2009**

Applicant/Owner: **WDOT** State: **WI** Sampling Point: **W9-1 T-1 B(w)**

Investigator(s): **Eric C. Parker** Section, Township, Range: **Section 19, T5N R22E**

Landform (hillslope, terrace, etc.): **Hillslope** Local relief (concave, convex, none): **Concave**

Slope (%): **2%** Lat: **See Fig. 2** Long: **See Fig. 2** Datum: **NA**

Soil Map Unit Name: **Blount silt loam (BIA)** WWI Classification: **E2K**

Are climatic / hydrologic conditions on the site typical for this time of year? Yes **X** No ____ (if no, explain in Remarks)

Are Vegetation ____ Soil ____ or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes **X** No ____

Are Vegetation ____ Soil ____ or Hydrology ____ naturally problematic? (if needed, explain any answers in Remarks)

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

Hydrophytic Vegetation Present?	Yes **X**	No ____			
Hydric Soil Present?	Yes **X**	No ____	Is the Sampled Area within a Wetland?	Yes **X**	No ____
Wetland Hydrology Present?	Yes **X**	No ____			

Remarks:

VEGETATION - Use scientific names for plants.

Tree Stratum (Plot Size: **N/A**)	Absolute % Cover	Dominant Species	Indicator Status
1. **N/A**			
2.			
3.			
4.			
5.			
	0%	= Total Cover	

Sapling/Shrub Stratum (Plot Size: **N/A**)			
1. **N/A**			
2.			
3.			
4.			
5.			
	0%	= Total Cover	

Herb Stratum (Plot Size: **5 ft. radius**)			
1. ***Phalaris arundinacea***	**40%**	**Yes**	**FACW**
2. ***Agrostis gigantea***	**15%**	**No**	**FACW**
3. ***Solidago canadensis***	**25%**	**Yes**	**FACU**
4. ***Euthamia graminifolia***	**20%**	**No**	**FACW**
5. ***Aster pilosus***	**5%**	**No**	**FACU**
6.			
7.			
8.			
9.			
10.			
	105%	= Total Cover	

Woody Vine Stratum (Plot Size: **N/A**)			
1. **N/A**			
2.			
	0%	= Total Cover	

Dominance Test Worksheet:

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

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

Percent of Dominant Species That Are OBL, FACW, or FAC: **50%** (A/B)

Prevalence Index Worksheet:

Total % Cover of:		Multiply by:	
OBL species		x 1 =	
FACW species	**75%**	x 2 =	**150**
FAC species		x 3 =	
FACU species	**30%**	x 4 =	**120**
UPL species		x 5 =	
Column Totals:	**105%** (A)		**270** (B)

Prevalence Index = B/A = **2.57**

Hydrophytic Vegetation Indicators:

____ Dominance Test is >50%

X Prevalence Index is ≤ 3.0[1]

____ Morphological Adaptations[1] (Provide supporting data in Remarks or on separate sheet)

____ Problematic Hydrophytic Vegetation[1] (Explain)

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

Hydrophytic Vegetation Present? **Yes X** **No** ____

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

This is a wet meadow plant community.

SOIL

Sampling Point: **W9-1 T-1 B(w)**

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

Depth (inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox Features %	Type[1]	Loc[2]	Texture	Remarks
0-8	10YR 4/2	100	None				Silty clay loam	
8-18	10YR 4/1	100	10YR 4/6	20%	C	M	Silty clay	

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

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ 2 cm Muck (A10)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ 5 cm Mucky Peat or Peat (S3)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- X Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ Coast Prairie Redox (A16)
- ___ Iron-Manganese Masses (F12)
- ___ Other (Explain in Remarks)

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

Restrictive Layer (if observed):

Type: **Silty clay**

Depth (inches): **8**

Hydric Soil Present? **Yes** X **No** ___

Remarks:

Soils are dry.

HYDROLOGY

Wetland Hydrology Indicators:

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

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ True Aquatic Plants (B14)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Gauge or Well Data (D9)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- X Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- X Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present?	Yes ___	No X	Depth (inches): ___
Water Table Present?	Yes ___	No X	Depth (inches): ___
Saturation Present? (includes capillary fringe)	Yes ___	No X	Depth (inches): ___

Wetland Hydrology Present? **Yes** X **No** ___

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

Remarks:

WETLAND DETERMINATION DATA FORM - Midwest Region

Project/Site: **IH-94 Mainline** City/County: **Oak Creek/ Milwaukee** Sampling Date: **9/17/2009**

Applicant/Owner: **WDOT** State: **WI** Sampling Point: **W9-2 T-1 A(u)**

Investigator(s): **Eric C. Parker** Section, Township, Range: **Section 19, T5N R22E**

Landform (hillslope, terrace, etc.): **Hillslope** Local relief (concave, convex, none): **None**

Slope (%): **4%** Lat: **See Fig. 2** Long: **See Fig. 2** Datum: **NA**

Soil Map Unit Name: **Blount silt loam (BIA)** WWI Classification: **None**

Are climatic / hydrologic conditions on the site typical for this time of year? Yes **X** No ____ (if no, explain in Remarks)

Are Vegetation ____ Soil ____ or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes **X** No ____

Are Vegetation ____ Soil ____ or Hydrology ____ naturally problematic? (if needed, explain any answers in Remarks)

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

Hydrophytic Vegetation Present?	Yes ____	No **X**			
Hydric Soil Present?	Yes ____	No **X**	Is the Sampled Area within a Wetland?	Yes ____	No **X**
Wetland Hydrology Present?	Yes ____	No **X**			

Remarks:

VEGETATION - Use scientific names for plants.

Tree Stratum (Plot Size: **N/A**)	Absolute % Cover	Dominant Species	Indicator Status
1. **N/A**			
2.			
3.			
4.			
5.			
	0%	= Total Cover	

Sapling/Shrub Stratum (Plot Size: **15 ft. radius**)			
1. ***Juglans nigra***	**5%**	**Yes**	**FACU**
2.			
3.			
4.			
5.			
	5%	= Total Cover	

Herb Stratum (Plot Size: **5 ft. radius**)			
1. ***Solidago canadensis***	**30%**	**Yes**	**FACU**
2. ***Solidago missouriensis***	**25%**	**Yes**	**UPL**
3. ***Aster ericoides***	**5%**	**No**	**FACU**
4. ***Aster drummondii***	**10%**	**No**	**UPL**
5. ***Euthamia graminifolia***	**5%**	**No**	**FACW**
6. ***Poa pratensis***	**25%**	**Yes**	**FAC**
7. ***Erigeron annuus***	**10%**	**No**	**FAC**
8. ***Fragaria virginiana***	**20%**	**No**	**FAC**
9. ***Daucus carota***	**10%**	**No**	**UPL**
10. ***Aster novae-angliae***	**2%**	**No**	**FACW**
	142%	= Total Cover	

Woody Vine Stratum (Plot Size: **N/A**)			
1. **N/A**			
2.			
	0%	= Total Cover	

Dominance Test Worksheet:

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

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

Percent of Dominant Species That Are OBL, FACW, or FAC: **25%** (A/B)

Prevalence Index Worksheet:

Total % Cover of:		Multiply by:	
OBL species		x 1 =	
FACW species	**7%**	x 2 =	**14**
FAC species	**55%**	x 3 =	**165**
FACU species	**40%**	x 4 =	**160**
UPL species	**45%**	x 5 =	**225**
Column Totals:	**147%** (A)		**564** (B)

Prevalence Index = B/A = **3.84**

Hydrophytic Vegetation Indicators:

____ Dominance Test is >50%

____ Prevalence Index is ≤ 3.0[1]

____ Morphological Adaptations[1] (Provide supporting data in Remarks or on separate sheet)

____ Problematic Hydrophytic Vegetation[1] (Explain)

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

Hydrophytic Vegetation Present? Yes ____ No **X**

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

This is an upland, old field plant community.

SOIL

Sampling Point: **W9-2 T-1 A(u)**

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

Depth (inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox Features %	Type[1]	Loc[2]	Texture	Remarks
0-8	**10YR 3/2**	**100**	**None**				**Silt loam**	
8-18	**10YR 5/3**	**100**	**10YR 4/4**	**2%**	**C**	**M**	**Silty clay**	

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

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ 2 cm Muck (A10)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ 5 cm Mucky Peat or Peat (S3)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ Coast Prairie Redox (A16)
- ___ Iron-Manganese Masses (F12)
- ___ Other (Explain in Remarks)

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

Restrictive Layer (if observed):

Type: **N/A**

Depth (inches): **N/A**

Hydric Soil Present? **Yes** ___ **No** **X**

Remarks:

Soils are dry.

HYDROLOGY

Wetland Hydrology Indicators:

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

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ True Aquatic Plants (B14)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Gauge or Well Data (D9)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present?	Yes ___	No **X**	Depth (inches): ___
Water Table Present?	Yes ___	No **X**	Depth (inches): ___
Saturation Present? (includes capillary fringe)	Yes ___	No **X**	Depth (inches): ___

Wetland Hydrology Present? **Yes** ___ **No** **X**

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

Remarks:

Conditions are dry.

WETLAND DETERMINATION DATA FORM - Midwest Region

Project/Site: **IH-94 Mainline** City/County: **Oak Creek/ Milwaukee** Sampling Date: **9/17/2009**

Applicant/Owner: **WDOT** State: **WI** Sampling Point: **W9-2 T-1 B(w)**

Investigator(s): **Eric C. Parker** Section, Township, Range: **Section 19, T5N R22E**

Landform (hillslope, terrace, etc.): **Hillslope** Local relief (concave, convex, none): **None**

Slope (%): **2%** Lat: **See Fig. 2** Long: **See Fig. 2** Datum: **NA**

Soil Map Unit Name: **Blount silt loam (BIA)** WWI Classification: **T3/E2K**

Are climatic / hydrologic conditions on the site typical for this time of year? Yes **X** No _____ (if no, explain in Remarks)

Are Vegetation _____ Soil _____ or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes **X** No _____

Are Vegetation _____ Soil _____ or Hydrology _____ naturally problematic? (if needed, explain any answers in Remarks)

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

Hydrophytic Vegetation Present?	Yes **X**	No _____		
Hydric Soil Present?	Yes **X**	No _____	Is the Sampled Area within a Wetland?	Yes **X** No _____
Wetland Hydrology Present?	Yes **X**	No _____		

Remarks:

VEGETATION - Use scientific names for plants.

Tree Stratum (Plot Size: **30 ft. radius**)	Absolute % Cover	Dominant Species	Indicator Status
1. ***Salix amygdaloides***	**20%**	**Yes**	**FACW**
2.			
3.			
4.			
5.			
	20% = Total Cover		

Sapling/Shrub Stratum (Plot Size: **15 ft. radius**)			
1. ***Cornus amomum***	**5%**	**Yes**	**FACW**
2.			
3.			
4.			
5.			
	5% = Total Cover		

Herb Stratum (Plot Size: **5 ft. radius**)			
1. ***Phalaris arundinacea***	**90%**	**Yes**	**FACW**
2. ***Cirsium arvense***	**2%**	**No**	**FACU**
3. ***Sonchus arvensis***	**5%**	**No**	**FAC**
4. ***Solidago canadensis***	**10%**	**No**	**FACU**
5. ***Aster firmus***	**2%**	**No**	**FACW**
6.			
7.			
8.			
9.			
10.			
	109% = Total Cover		

Woody Vine Stratum (Plot Size: **15 ft. radius**)			
1. ***Parthenocissus quinquefolia***	**2%**	**No**	**FAC**
2.			
	2% = Total Cover		

Dominance Test Worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: **3** (A)

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

Percent of Dominant Species That Are OBL, FACW, or FAC: **100%** (A/B)

Prevalence Index Worksheet:

	Total % Cover of:		Multiply by:
OBL species		x 1 =	
FACW species	**117%**	x 2 =	**234**
FAC species	**7%**	x 3 =	**21**
FACU species	**12%**	x 4 =	**48**
UPL species		x 5 =	
Column Totals:	**136%** (A)		**303** (B)

Prevalence Index = B/A = **2.23**

Hydrophytic Vegetation Indicators:

X Dominance Test is >50%

X Prevalence Index is ≤ 3.0[1]

_____ Morphological Adaptations[1] (Provide supporting data in Remarks or on separate sheet)

_____ Problematic Hydrophytic Vegetation[1] (Explain)

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

Hydrophytic Vegetation Present? Yes **X** No _____

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

This is a wet meadow/shrub scrub plant community.

SOIL

Sampling Point: **W9-2 T-1 B(w)**

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

Depth (inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox Features %	Type[1]	Loc[2]	Texture	Remarks
0-12	10YR 2/1	100	None				Silt loam	
12-20	10YR 3/1	100	10YR 4/4	20%	C	M	Silty clay loam	

[1] Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains.

[2] Location: PL=Pore Lining, M=Matrix

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ 2 cm Muck (A10)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ 5 cm Mucky Peat or Peat (S3)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- **X** Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ Coast Prairie Redox (A16)
- ___ Iron-Manganese Masses (F12)
- ___ Other (Explain in Remarks)

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

Restrictive Layer (if observed):

Type: **N/A**

Depth (inches): **N/A**

Hydric Soil Present? **Yes X** **No ___**

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

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

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ True Aquatic Plants (B14)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Gauge or Well Data (D9)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- **X** Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- **X** Geomorphic Position (D2)
- **X** FAC-Neutral Test (D5)

Field Observations:

Surface Water Present?	Yes ___	No **X**	Depth (inches): ___
Water Table Present?	Yes ___	No **X**	Depth (inches): ___
Saturation Present? (includes capillary fringe)	Yes ___	No **X**	Depth (inches): ___

Wetland Hydrology Present? **Yes X** **No ___**

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

Remarks:

Conditions are dry.

WETLAND DETERMINATION DATA FORM - Midwest Region

Project/Site: **IH-94 Mainline** City/County: **Oak Creek/ Milwaukee** Sampling Date: **9/17/2009**

Applicant/Owner: **WDOT** State: **WI** Sampling Point: **W9-3 T-1 A(u)**

Investigator(s): **Tina M. Myers** Section, Township, Range: **Section 20, T5N R22E**

Landform (hillslope, terrace, etc.): **Hillslope** Local relief (concave, convex, none): **None**

Slope (%): **50%** Lat: **See Fig. 2** Long: **See Fig. 2** Datum: **NA**

Soil Map Unit Name: **Blount silt loam (BIA)** WWI Classification: **None**

Are climatic / hydrologic conditions on the site typical for this time of year? Yes **X** No _____ (if no, explain in Remarks)

Are Vegetation _____ Soil ***X** or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes **X** No _____

Are Vegetation _____ Soil _____ or Hydrology _____ naturally problematic? (if needed, explain any answers in Remarks)

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

Hydrophytic Vegetation Present?	Yes ****X**	No			
Hydric Soil Present?	Yes	No **X**	Is the Sampled Area	Yes	No **X**
Wetland Hydrology Present?	Yes	No **X**	within a Wetland?		

Remarks:

*** This sample point is located on a road embankment - soils are disturbed due to the presence of fill material.**

**** The plant community is a mixture of hydrophytic and non-hydrophytic vegetation due to disturbed conditions.**

This upland sample point is located on a steep road embankment.

VEGETATION - Use scientific names for plants.

Tree Stratum (Plot Size: **N/A**)	Absolute % Cover	Dominant Species	Indicator Status
1. **N/A**			
2.			
3.			
4.			
5.			
	0%	= Total Cover	

Sapling/Shrub Stratum (Plot Size: **N/A**)			
1. **N/A**			
2.			
3.			
4.			
5.			
	0%	= Total Cover	

Herb Stratum (Plot Size: **5 ft. radius**)			
1. ***Phalaris arundinacea***	**50%**	**Yes**	**FACW**
2. ***Bromus inermis***	**60%**	**Yes**	**UPL**
3. ***Vitis riparia***	**40%**	**Yes**	**FACW**
4. ***Cornus stolonifera***	**5%**	**No**	**FACW**
5.			
6.			
7.			
8.			
9.			
10.			
	155%	= Total Cover	

Woody Vine Stratum (Plot Size: **N/A**)			
1. **N/A**			
2.			
	0%	= Total Cover	

Dominance Test Worksheet:

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

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

Percent of Dominant Species That Are OBL, FACW, or FAC: **67%** (A/B)

Prevalence Index Worksheet:

Total % Cover of:		Multiply by:
OBL species		x 1 =
FACW species	**95%**	x 2 = **190**
FAC species		x 3 =
FACU species		x 4 =
UPL species	**60%**	x 5 = **300**
Column Totals:	**155%** (A)	**490** (B)

Prevalence Index = B/A = **3.16**

Hydrophytic Vegetation Indicators:

X Dominance Test is >50%

_____ Prevalence Index is ≤ 3.0[1]

_____ Morphological Adaptations[1] (Provide supporting data in Remarks or on separate sheet)

_____ Problematic Hydrophytic Vegetation[1] (Explain)

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

Hydrophytic Vegetation Present? **Yes X** **No** _____

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

The vegetation is reflective of disturbed upland conditions as opposed to wetland conditions.

SOIL

Sampling Point: **W9-3 T-1 A(u)**

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	**10YR 3/2**	**100**	**None**				**Silt loam**	
8-18	**10YR 3/2**	**40**	**None**				**Silty clay loam**	**Mixed matrix**
8-18	**10YR 2/1**	**40**	**None**				**Silty clay loam**	**Mixed matrix**
8-18	**10YR 4/1**	**20**	**None**				**Silty clay loam**	**Mixed matrix**

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

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ 2 cm Muck (A10)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ 5 cm Mucky Peat or Peat (S3)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ Coast Prairie Redox (A16)
- ___ Iron-Manganese Masses (F12)
- ___ Other (Explain in Remarks)

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

Restrictive Layer (if observed):

Type: **N/A**

Depth (inches): **N/A**

Hydric Soil Present? **Yes** ___ **No** **X**

Remarks:

This area is within a road embankment - fill material/mixed matrix present. Numerous soil colors were observed within the soil profile due to the presence of fill material. The soils are dry at this time - there has been no precipitation in approximately 2 weeks.

HYDROLOGY

Wetland Hydrology Indicators:

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

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ True Aquatic Plants (B14)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Gauge or Well Data (D9)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- **X** FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes ___ No **X** Depth (inches): ___

Water Table Present? Yes ___ No **X** Depth (inches): ___

Saturation Present? (includes capillary fringe) Yes ___ No **X** Depth (inches): ___

Wetland Hydrology Present? **Yes** ___ **No** **X**

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

Remarks:

Except for passing the FAC Neutral Test, no wetland hydrology indicators observed. This is a well drained, steep slope with disturbed conditions.

WETLAND DETERMINATION DATA FORM - Midwest Region

Project/Site: **IH-94 Mainline** City/County: **Oak Creek/ Milwaukee** Sampling Date: **9/17/2009**

Applicant/Owner: **WDOT** State: **WI** Sampling Point: **W9-3 T-1 B(w)**

Investigator(s): **Julie A. Paschal** Section, Township, Range: **Section 20, T5N R22E**

Landform (hillslope, terrace, etc.): **Depression** Local relief (concave, convex, none): **Concave**

Slope (%): **0-2%** Lat: **See Fig. 2** Long: **See Fig. 2** Datum: **NA**

Soil Map Unit Name: **Houghton muck (HtA)** WWI Classification: **E2H**

Are climatic / hydrologic conditions on the site typical for this time of year? Yes **X** No ____ (if no, explain in Remarks)

Are Vegetation ____ Soil ____ or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes **X** No ____

Are Vegetation ____ Soil ____ or Hydrology ____ naturally problematic? (if needed, explain any answers in Remarks)

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

Hydrophytic Vegetation Present?	Yes **X**	No ____			
Hydric Soil Present?	Yes **X**	No ____	Is the Sampled Area within a Wetland?	Yes **X**	No ____
Wetland Hydrology Present?	Yes **X**	No ____			

Remarks:

This is a shallow marsh wetland connected to a waterway tributary to Oak Creek.

VEGETATION - Use scientific names for plants.

Tree Stratum (Plot Size: **N/A**)	Absolute % Cover	Dominant Species	Indicator Status
1. **N/A**			
2.			
3.			
4.			
5.			
	0%	= Total Cover	

Sapling/Shrub Stratum (Plot Size: **N/A**)			
1. **N/A**			
2.			
3.			
4.			
5.			
	0%	= Total Cover	

Herb Stratum (Plot Size: **5 ft. radius**)			
1. ***Phalaris arundinacea***	**80%**	**Yes**	**FACW**
2. ***Typha angustifolia***	**50%**	**Yes**	**OBL**
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
	130%	= Total Cover	

Woody Vine Stratum (Plot Size: **15 ft. radius**)			
1. ***Vitis riparia***	**15%**	**Yes**	**FACW**
2.			
	15%	= Total Cover	

Dominance Test Worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: **3** (A)

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

Percent of Dominant Species That Are OBL, FACW, or FAC: **100%** (A/B)

Prevalence Index Worksheet:

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

Prevalence Index = B/A = ____

Hydrophytic Vegetation Indicators:

X Dominance Test is >50%

____ Prevalence Index is ≤ 3.0[1]

____ Morphological Adaptations[1] (Provide supporting data in Remarks or on separate sheet)

____ Problematic Hydrophytic Vegetation[1] (Explain)

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

Hydrophytic Vegetation Present? Yes **X** No ____

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

This is a *Typha spp.* dominated shallow marsh wetland.

SOIL

Sampling Point: **W9-3 T-1 B(w)**

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

Depth (inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox Features %	Type[1]	Loc[2]	Texture	Remarks
0-18	10YR 3/1	100	None				Silt loam	
18-23	10YR 5/2	100	10YR 4/6	5%	C	M	Silty clay	

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

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ 2 cm Muck (A10)
- ___ Depleted Below Dark Surface (A11)
- X Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ 5 cm Mucky Peat or Peat (S3)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ Coast Prairie Redox (A16)
- ___ Iron-Manganese Masses (F12)
- ___ Other (Explain in Remarks)

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

Restrictive Layer (if observed):

Type: **Silty clay**

Depth (inches): **18**

Hydric Soil Present? **Yes** X **No** ___

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

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

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ True Aquatic Plants (B14)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Gauge or Well Data (D9)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- X Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- X Geomorphic Position (D2)
- X FAC-Neutral Test (D5)

Field Observations:

Surface Water Present?	Yes ___	No X	Depth (inches): ___
Water Table Present?	Yes ___	No X	Depth (inches): ___
Saturation Present? (includes capillary fringe)	Yes ___	No X	Depth (inches): ___

Wetland Hydrology Present? **Yes** X **No** ___

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

Light tones (*Phalaris arundinacea* and *Typha spp.*) visible on aerial.

Remarks:

This area is at a lower elevation in the topograhy than the adjacent farmed fields. This wetland is connected to a waterway that is tributary to Oak Creek.

WETLAND DETERMINATION DATA FORM - Midwest Region

Project/Site: **IH-94 Mainline** City/County: **Oak Creek/ Milwaukee** Sampling Date: **9/17/2009**

Applicant/Owner: **WDOT** State: **WI** Sampling Point: **W9-4 T-1 A(u)**

Investigator(s): **Julie A. Paschal/Tina M. Myers** Section, Township, Range: **Section 20, T5N R22E**

Landform (hillslope, terrace, etc.): **Hillslope** Local relief (concave, convex, none): **None**

Slope (%): **3%** Lat: **See Fig. 2** Long: **See Fig. 2** Datum: **NA**

Soil Map Unit Name: **Morley silt loam (MzdD2)** WWI Classification: **None**

Are climatic / hydrologic conditions on the site typical for this time of year? Yes **X** No ____ (if no, explain in Remarks)

Are Vegetation ____ Soil ____ or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes **X** No ____

Are Vegetation ____ Soil ____ or Hydrology ____ naturally problematic? (if needed, explain any answers in Remarks)

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

Hydrophytic Vegetation Present?	Yes ____	No **X**			
Hydric Soil Present?	Yes ____	No **X**	Is the Sampled Area	Yes ____	No **X**
Wetland Hydrology Present?	Yes ____	No **X**	within a Wetland?		

Remarks:

VEGETATION - Use scientific names for plants.

Tree Stratum (Plot Size: **30 ft. radius**)	Absolute % Cover	Dominant Species	Indicator Status
1. ***Tilia americana***	**40%**	**Yes**	**FACU**
2. ***Juglans nigra***	**40%**	**Yes**	**FACU**
3. ***Acer saccharum***	**35%**	**Yes**	**FACU**
4. ***Ulmus americana***	**3%**	**No**	**FACW**
5.			
	118%	= Total Cover	

Sapling/Shrub Stratum (Plot Size: **15 ft. radius**)			
1. ***Prunus virginiana***	**10%**	**Yes**	**FAC**
2. ***Fraxinus pennsylvanica***	**3%**	**No**	**FACW**
3.			
4.			
5.			
	13%	= Total Cover	

Herb Stratum (Plot Size: **5 ft. radius**)			
1. ***Parthenocissus quinquefolia***	**85%**	**Yes**	**FAC**
2. ***Prunus virginiana***	**3%**	**No**	**FAC**
3. ***Fraxinus pennsylvanica***	**3%**	**No**	**FACW**
4. ***Carex pennsylvanica***	**5%**	**No**	**UPL**
5. ***Circaea lutetiana***	**2%**	**No**	**FACU**
6.			
7.			
8.			
9.			
10.			
	98%	= Total Cover	

Woody Vine Stratum (Plot Size: **N/A**)			
1. **N/A**			
2.			
	0%	= Total Cover	

Dominance Test Worksheet:

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

Total Number of Dominant Species Across All Strata: **5** (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: **40%** (A/B)

Prevalence Index Worksheet:

Total % Cover of:		Multiply by:	
OBL species		x 1 =	
FACW species	**6%**	x 2 =	**12**
FAC species	**98%**	x 3 =	**294**
FACU species	**117%**	x 4 =	**468**
UPL species	**5%**	x 5 =	**25**
Column Totals:	**226%** (A)		**799** (B)

Prevalence Index = B/A = **3.53**

Hydrophytic Vegetation Indicators:

____ Dominance Test is >50%

____ Prevalence Index is ≤ 3.0[1]

____ Morphological Adaptations[1] (Provide supporting data in Remarks or on separate sheet)

____ Problematic Hydrophytic Vegetation[1] (Explain)

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

Hydrophytic Vegetation Present? Yes ____ No **X**

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

This is an upland, woodland plant community.

SOIL

Sampling Point: **W9-4 T-1 A(u)**

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

Depth (inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox Features %	Type[1]	Loc[2]	Texture	Remarks
0-7	**10YR 3/1**	**100**	**None**				**Silt loam**	
7-18	**10YR 4/3**	**100**	**None**				**Silty clay loam**	

[1] Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains.

[2] Location: PL=Pore Lining, M=Matrix

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ 2 cm Muck (A10)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ 5 cm Mucky Peat or Peat (S3)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ Coast Prairie Redox (A16)
- ___ Iron-Manganese Masses (F12)
- ___ Other (Explain in Remarks)

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

Restrictive Layer (if observed):

Type: **N/A**

Depth (inches): **N/A**

Hydric Soil Present? **Yes** ___ **No** **X**

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

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

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ True Aquatic Plants (B14)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Gauge or Well Data (D9)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes ___ No **X** Depth (inches): ___

Water Table Present? Yes ___ No **X** Depth (inches): ___

Saturation Present? (includes capillary fringe) Yes ___ No **X** Depth (inches): ___

Wetland Hydrology Present? **Yes** ___ **No** **X**

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

Remarks:

No wetland hydrology indicators observed.

WETLAND DETERMINATION DATA FORM - Midwest Region

Project/Site: **IH-94 Mainline** City/County: **Oak Creek/ Milwaukee** Sampling Date: **9/17/2009**

Applicant/Owner: **WDOT** State: **WI** Sampling Point: **W9-4 T-1 B(w)**

Investigator(s): **Tina M. Myers / Julie A. Paschal** Section, Township, Range: **Section 20, T5N R22E**

Landform (hillslope, terrace, etc.): **Depression** Local relief (concave, convex, none): **Concave**

Slope (%): **0-1%** Lat: **See Fig. 2** Long: **See Fig. 2** Datum: **NA**

Soil Map Unit Name: **Morley silt loam (MzdD2)** WWI Classification: **Wetland smaller than 2 acres**

Are climatic / hydrologic conditions on the site typical for this time of year? Yes **X** No ____ (if no, explain in Remarks)

Are Vegetation ____ Soil ____ or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes **X** No ____

Are Vegetation ____ Soil ____ or Hydrology ____ naturally problematic? (if needed, explain any answers in Remarks)

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

Hydrophytic Vegetation Present?	Yes **X**	No ____			
Hydric Soil Present?	Yes **X**	No ____	Is the Sampled Area within a Wetland?	Yes **X**	No ____
Wetland Hydrology Present?	Yes **X**	No ____			

Remarks:

This is a wooded swamp.

VEGETATION - Use scientific names for plants.

Tree Stratum (Plot Size: **30 ft. radius**)	Absolute % Cover	Dominant Species	Indicator Status
1. ***Ulmus americana***	**50%**	**Yes**	**FACW**
2. ***Fraxinus pennsylvanica***	**20%**	**Yes**	**FACW**
3.			
4.			
5.			
	70%	= Total Cover	

Sapling/Shrub Stratum (Plot Size: **15 ft. radius**)			
1. ***Crataegus mollis***	**5%**	**Yes**	**FACW**
2.			
3.			
4.			
5.			
	5%	= Total Cover	

Herb Stratum (Plot Size: **5 ft. radius**)			
1. ***Carex bebbii***	**10%**	**No**	**OBL**
2. ***Glyceria striata***	**40%**	**Yes**	**OBL**
3. ***Bidens frondosa***	**5%**	**No**	**FACW**
4. ***Pilea pumila***	**8%**	**No**	**FACW**
5. ***Vitis riparia***	**2%**	**No**	**FACW**
6.			
7.			
8.			
9.			
10.			
	65%	= Total Cover	

Woody Vine Stratum (Plot Size: **15 ft. radius**)			
1. ***Vitis riparia***	**10%**	**Yes**	**FACW**
2.			
	10%	= Total Cover	

Dominance Test Worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: **5** (A)

Total Number of Dominant Species Across All Strata: **5** (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: **100%** (A/B)

Prevalence Index Worksheet:

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

Prevalence Index = B/A = ____

Hydrophytic Vegetation Indicators:

X Dominance Test is >50%

____ Prevalence Index is ≤ 3.0[1]

____ Morphological Adaptations[1] (Provide supporting data in Remarks or on separate sheet)

____ Problematic Hydrophytic Vegetation[1] (Explain)

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

Hydrophytic Vegetation Present? Yes **X** No ____

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

Approximately 50% bare ground present due to dense tree canopy and assumed frequent inundation.

SOIL

Sampling Point: **W9-4 T-1 B(w)**

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
0-13	**10YR 2/1**	**100**	**None**				**Silt loam**	
13-20	**10YR 5/2**	**100**	**10YR 5/8**	**10%**	**C**	**M**	**Silty clay loam**	**Blocky structure**

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

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ 2 cm Muck (A10)
- ___ Depleted Below Dark Surface (A11)
- **X** Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ 5 cm Mucky Peat or Peat (S3)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ Coast Prairie Redox (A16)
- ___ Iron-Manganese Masses (F12)
- ___ Other (Explain in Remarks)

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

Restrictive Layer (if observed):

Type: **N/A**

Depth (inches): **N/A**

Hydric Soil Present? **Yes** **X** **No** ___

Remarks:

Soils are very loose and crumbly.

HYDROLOGY

Wetland Hydrology Indicators:

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

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- **X** Water Marks (B1)
- ___ Sediment Deposits (B2)
- **X** Drift Deposits (B3)
- **X** Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ True Aquatic Plants (B14)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Gauge or Well Data (D9)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- **X** Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- **X** Geomorphic Position (D2)
- **X** FAC-Neutral Test (D5)

Field Observations:

Surface Water Present?	Yes ___	No **X**	Depth (inches): ___
Water Table Present?	Yes ___	No **X**	Depth (inches): ___
Saturation Present? (includes capillary fringe)	Yes ___	No **X**	Depth (inches): ___

Wetland Hydrology Present? **Yes** **X** **No** ___

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

Remarks:

Fluted tree trunks also observed within this area. This sample point is within a depressional area within a woodland between IH-94 to the east and a farmed field to the west. This area is at a lower elevation in the topography than the surrounding woodland.

WETLAND DETERMINATION DATA FORM - Midwest Region

Project/Site: **IH-94 Mainline** City/County: **Oak Creek/ Milwaukee** Sampling Date: **9/17/2009**

Applicant/Owner: **WDOT** State: **WI** Sampling Point: **W9-4a T-1 A(u)**

Investigator(s): **Tina M. Myers / Julie A. Paschal** Section, Township, Range: **Section 20, T5N R22E**

Landform (hillslope, terrace, etc.): **Hillslope** Local relief (concave, convex, none): **None**

Slope (%): **~2%** Lat: **See Fig. 2** Long: **See Fig. 2** Datum: **NA**

Soil Map Unit Name: **Blount silt loam (BIA)** WWI Classification: **None**

Are climatic / hydrologic conditions on the site typical for this time of year? Yes **X** No ____ (if no, explain in Remarks)

Are Vegetation ***X** Soil ***X** or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes **X** No ____

Are Vegetation ____ Soil ____ or Hydrology ____ naturally problematic? (if needed, explain any answers in Remarks)

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

Hydrophytic Vegetation Present?	Yes ____	No **X**			
Hydric Soil Present?	Yes ____	No **X**	Is the Sampled Area within a Wetland?	Yes ____	No **X**
Wetland Hydrology Present?	Yes ____	No **X**			

Remarks:

*** The vegetation and soils are disturbed due to annual cropping and tilling.**

This is an upland soybean field.

VEGETATION - Use scientific names for plants.

Tree Stratum (Plot Size: **N/A**)	Absolute % Cover	Dominant Species	Indicator Status
1. **N/A**			
2.			
3.			
4.			
5.			
	0%	= Total Cover	

Sapling/Shrub Stratum (Plot Size: **N/A**)			
1. **N/A**			
2.			
3.			
4.			
5.			
	0%	= Total Cover	

Herb Stratum (Plot Size: **5 ft. radius**)			
1. ***Glycine max* (planted)**	**60%**	**Yes**	**UPL**
2. ***Ambrosia artemisiifolia***	**2%**	**No**	**FACU**
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
	62%	= Total Cover	

Woody Vine Stratum (Plot Size: **N/A**)			
1. **N/A**			
2.			
	0%	= Total Cover	

Dominance Test Worksheet:

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

Total Number of Dominant Species Across All Strata: **1** (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: **0%** (A/B)

Prevalence Index Worksheet:

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

Prevalence Index = B/A = ____

Hydrophytic Vegetation Indicators:

____ Dominance Test is >50%

____ Prevalence Index is ≤ 3.0[1]

____ Morphological Adaptations[1] (Provide supporting data in Remarks or on separate sheet)

____ Problematic Hydrophytic Vegetation[1] (Explain)

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

Hydrophytic Vegetation Present? Yes ____ No **X**

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

The soybean crop in this portion of the field appears healthy and robust.

SOIL

Sampling Point: **W9-4a T-1 A(u)**

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

Depth (inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox Features %	Type[1]	Loc[2]	Texture	Remarks
0-11	**10YR 3/2**	**100**	**None**				**Silt loam**	
11-20	**2.5Y 6/4**	**100**	**10YR 6/8**	**5%**	**C**	**M**	**Silt**	

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

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ 2 cm Muck (A10)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ 5 cm Mucky Peat or Peat (S3)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ Coast Prairie Redox (A16)
- ___ Iron-Manganese Masses (F12)
- ___ Other (Explain in Remarks)

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

Restrictive Layer (if observed):

Type: **N/A**

Depth (inches): **N/A**

Hydric Soil Present? **Yes** ___ **No** **X**

Remarks:

Soils appear to be plowed annually.

HYDROLOGY

Wetland Hydrology Indicators:

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

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ True Aquatic Plants (B14)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Gauge or Well Data (D9)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes ___ No **X** Depth (inches): ___

Water Table Present? Yes ___ No **X** Depth (inches): ___

Saturation Present? (includes capillary fringe) Yes ___ No **X** Depth (inches): ___

Wetland Hydrology Present? **Yes** ___ **No** **X**

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

Remarks:

No wetland hydrology indicators observed. This sample point is located on a very gradual hillslope within a cropped soybean field.

WETLAND DETERMINATION DATA FORM - Midwest Region

Project/Site: **IH-94 Mainline** City/County: **Oak Creek/ Milwaukee** Sampling Date: **9/17/2009**

Applicant/Owner: **WDOT** State: **WI** Sampling Point: **W9-4a T-1 B(w)**

Investigator(s): **Tina M. Myers / Julie A. Paschal** Section, Township, Range: **Section 20, T5N R22E**

Landform (hillslope, terrace, etc.): **Swale** Local relief (concave, convex, none): **Concave**

Slope (%): **2-4%** Lat: **See Fig. 2** Long: **See Fig. 2** Datum: **NA**

Soil Map Unit Name: **Blount silt loam (BIA)** WWI Classification: **E2K**

Are climatic / hydrologic conditions on the site typical for this time of year? Yes **X** No ____ (if no, explain in Remarks)

Are Vegetation ____ Soil ____ or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes **X** No ____

Are Vegetation ____ Soil ____ or Hydrology ____ naturally problematic? (if needed, explain any answers in Remarks)

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

Hydrophytic Vegetation Present?	Yes **X**	No ____			
Hydric Soil Present?	Yes **X**	No ____	Is the Sampled Area within a Wetland?	Yes **X**	No ____
Wetland Hydrology Present?	Yes **X**	No ____			

Remarks:

This is a wet meadow drainage swale.

VEGETATION - Use scientific names for plants.

Tree Stratum (Plot Size: **N/A**)	Absolute % Cover	Dominant Species	Indicator Status
1. **N/A**			
2.			
3.			
4.			
5.			
	0%	= Total Cover	

Sapling/Shrub Stratum (Plot Size: **N/A**)			
1. **N/A**			
2.			
3.			
4.			
5.			
	0%	= Total Cover	

Herb Stratum (Plot Size: **5 ft. radius**)			
1. ***Phalaris arundinacea***	**100%**	**Yes**	**FACW**
2. ***Solidago canadensis***	**5%**	**No**	**FACU**
3. ***Cirsium arvense***	**5%**	**No**	**FACU**
4.			
5.			
6.			
7.			
8.			
9.			
10.			
	110%	= Total Cover	

Woody Vine Stratum (Plot Size: **N/A**)			
1. **N/A**			
2.			
	0%	= Total Cover	

Dominance Test Worksheet:

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

Total Number of Dominant Species Across All Strata: **1** (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: **100%** (A/B)

Prevalence Index Worksheet:

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

Prevalence Index = B/A = ____

Hydrophytic Vegetation Indicators:

X Dominance Test is >50%

____ Prevalence Index is ≤ 3.0[1]

____ Morphological Adaptations[1] (Provide supporting data in Remarks or on separate sheet)

____ Problematic Hydrophytic Vegetation[1] (Explain)

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

Hydrophytic Vegetation Present? **Yes X** **No** ____

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

This is a wet meadow plant community dominated by *Phalaris arundinacea* .

SOIL

Sampling Point: **W9-4a T-1 B(w)**

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

Depth (inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox Features %	Type[1]	Loc[2]	Texture	Remarks
0-8	10YR 3/2	100	5YR 5/8	10%	C	M	Silt loam	
8-18	10YR 5/6	100	7.5YR 5/8	15%	C	M	Silty clay	

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

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ 2 cm Muck (A10)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ 5 cm Mucky Peat or Peat (S3)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- X Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ Coast Prairie Redox (A16)
- ___ Iron-Manganese Masses (F12)
- ___ Other (Explain in Remarks)

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

Restrictive Layer (if observed):

Type: **Silty clay**

Depth (inches): **8**

Hydric Soil Present? **Yes** X **No** ___

Remarks:

Increased silt content observed from 8-18 inches. One inch silt seam observed at 8 inches.

HYDROLOGY

Wetland Hydrology Indicators:

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

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ True Aquatic Plants (B14)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Gauge or Well Data (D9)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- X Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- X Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- X FAC-Neutral Test (D5)

Field Observations:

Surface Water Present?	Yes ___	No X	Depth (inches): ___
Water Table Present?	Yes ___	No X	Depth (inches): ___
Saturation Present? (includes capillary fringe)	Yes ___	No X	Depth (inches): ___

Wetland Hydrology Present? **Yes** X **No** ___

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

Light tones indicative of *Phalaris arundinacea* observed on aerial. Swale also visible.

Remarks:

This is a drainage swale within a farmed field sloping towards the IH-94 roadside ditch.

WETLAND DETERMINATION DATA FORM - Midwest Region

Project/Site: **IH-94 Mainline** City/County: **Oak Creek/ Milwaukee** Sampling Date: **9/17/2009**

Applicant/Owner: **WDOT** State: **WI** Sampling Point: **W9-5 T-1 A(u)**

Investigator(s): **Eric C. Parker** Section, Township, Range: **Section 19, T5N R22E**

Landform (hillslope, terrace, etc.): **Hillslope** Local relief (concave, convex, none): **Convex**

Slope (%): **5%** Lat: **See Fig. 2** Long: **See Fig. 2** Datum: **NA**

Soil Map Unit Name: **Blount silt loam (BIA)** WWI Classification: **None**

Are climatic / hydrologic conditions on the site typical for this time of year? Yes **X** No ____ (if no, explain in Remarks)

Are Vegetation ____ Soil ____ or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes **X** No ____

Are Vegetation ____ Soil ____ or Hydrology ____ naturally problematic? (if needed, explain any answers in Remarks)

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

Hydrophytic Vegetation Present?	Yes ____	No **X**			
Hydric Soil Present?	Yes ____	No **X**	Is the Sampled Area	Yes ____	No **X**
Wetland Hydrology Present?	Yes ____	No **X**	within a Wetland?		

Remarks:

This upland area is adjacent to an excavated pond. The site, however, appears to have stabilized some decades ago.

VEGETATION - Use scientific names for plants.

Tree Stratum (Plot Size: **30 ft. radius**)	Absolute % Cover	Dominant Species	Indicator Status
1. ***Juglans nigra***	**80%**	**Yes**	**FACU**
2.			
3.			
4.			
5.			
	80% = Total Cover		

Sapling/Shrub Stratum (Plot Size: **N/A**)			
1. **N/A**			
2.			
3.			
4.			
5.			
	0% = Total Cover		

Herb Stratum (Plot Size: **5 ft. radius**)			
1. ***Phalaris arundinacea***	**20%**	**No**	**FACW**
2. ***Poa pratensis***	**90%**	**Yes**	**FAC**
3. ***Arctium minus***	**15%**	**No**	**UPL**
4. ***Geum canadense***	**15%**	**No**	**FAC**
5. ***Elytrigia repens***	**5%**	**No**	**FACU**
6.			
7.			
8.			
9.			
10.			
	145% = Total Cover		

Woody Vine Stratum (Plot Size: **N/A**)			
1. **N/A**			
2.			
	0% = Total Cover		

Dominance Test Worksheet:

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

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

Percent of Dominant Species That Are OBL, FACW, or FAC: **50%** (A/B)

Prevalence Index Worksheet:

Total % Cover of:		Multiply by:	
OBL species		x 1 =	
FACW species	**20%**	x 2 =	**40**
FAC species	**105%**	x 3 =	**315**
FACU species	**85%**	x 4 =	**340**
UPL species	**15%**	x 5 =	**75**
Column Totals:	**225%** (A)		**770** (B)

Prevalence Index = B/A = **3.42**

Hydrophytic Vegetation Indicators:

____ Dominance Test is >50%

____ Prevalence Index is ≤ 3.0[1]

____ Morphological Adaptations[1] (Provide supporting data in Remarks or on separate sheet)

____ Problematic Hydrophytic Vegetation[1] (Explain)

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

Hydrophytic Vegetation Present? Yes ____ No **X**

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

This is an upland, mowed lawn plant community. Small quantities of *Phalaris arundinacea* present due to proximity to adjacent wetland.

SOIL

Sampling Point: **W9-5 T-1 A(u)**

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

Depth (inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox Features %	Type[1]	Loc[2]	Texture	Remarks
0-6	**10YR 3/2**	**100**	**None**				**Silt loam**	
6-12	**10YR 3/2**	**75**	**None**				**Silt loam**	
6-12	**10YR 4/2**	**25**	**None**				**Silty clay loam**	
12-18	**10YR 5/3**	**100**	**10YR 4/4**	**2%**	**C**	**M**	**Silty clay loam**	

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

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ 2 cm Muck (A10)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ 5 cm Mucky Peat or Peat (S3)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ Coast Prairie Redox (A16)
- ___ Iron-Manganese Masses (F12)
- ___ Other (Explain in Remarks)

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

Restrictive Layer (if observed):

Type: **N/A**

Depth (inches): **N/A**

Hydric Soil Present? **Yes** ___ **No** **X**

Remarks:

Soils are dry.

HYDROLOGY

Wetland Hydrology Indicators:

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

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ True Aquatic Plants (B14)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Gauge or Well Data (D9)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present?	Yes ___	No **X**	Depth (inches): ___
Water Table Present?	Yes ___	No **X**	Depth (inches): ___
Saturation Present? (includes capillary fringe)	Yes ___	No **X**	Depth (inches): ___

Wetland Hydrology Present? **Yes** ___ **No** **X**

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

Remarks:

No hydrology indicators observed.

WETLAND DETERMINATION DATA FORM - Midwest Region

Project/Site: **IH-94 Mainline** City/County: **Oak Creek/ Milwaukee** Sampling Date: **9/17/2009**

Applicant/Owner: **WDOT** State: **WI** Sampling Point: **W9-5 T-1 B(w)**

Investigator(s): **Eric C. Parker** Section, Township, Range: **Section 19, T5N R22E**

Landform (hillslope, terrace, etc.): **Swale** Local relief (concave, convex, none): **Concave**

Slope (%): **2%** Lat: **See Fig. 2** Long: **See Fig. 2** Datum: **NA**

Soil Map Unit Name: **Ashkum silty clay loam (AsA)** WWI Classification: **W0Hx directly west of sample point**

Are climatic / hydrologic conditions on the site typical for this time of year? Yes **X** No _____ (if no, explain in Remarks)

Are Vegetation _____ Soil _____ or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes **X** No _____

Are Vegetation _____ Soil _____ or Hydrology _____ naturally problematic? (if needed, explain any answers in Remarks)

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

Hydrophytic Vegetation Present?	Yes **X**	No _____		
Hydric Soil Present?	Yes **X**	No _____	Is the Sampled Area	Yes **X** No _____
Wetland Hydrology Present?	Yes **X**	No _____	within a Wetland?	

Remarks:

This is a *Phalaris arundinacea* dominated wet meadow fringe along an excavated pond. This wetland extends into the ditch along I-94.

VEGETATION - Use scientific names for plants.

Tree Stratum (Plot Size: **N/A**)	Absolute % Cover	Dominant Species	Indicator Status
1. **N/A**			
2.			
3.			
4.			
5.			
	0%	= Total Cover	

Sapling/Shrub Stratum (Plot Size: **N/A**)			
1. **N/A**			
2.			
3.			
4.			
5.			
	0%	= Total Cover	

Herb Stratum (Plot Size: **5 ft. radius**)			
1. ***Phalaris arundinacea***	**100%**	**Yes**	**FACW**
2.			
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
	100%	= Total Cover	

Woody Vine Stratum (Plot Size: **N/A**)			
1. **N/A**			
2.			
	0%	= Total Cover	

Dominance Test Worksheet:

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

Total Number of Dominant Species Across All Strata: **1** (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: **100%** (A/B)

Prevalence Index Worksheet:

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

Prevalence Index = B/A = _____

Hydrophytic Vegetation Indicators:

X Dominance Test is >50%

_____ Prevalence Index is ≤ 3.0[1]

_____ Morphological Adaptations[1] (Provide supporting data in Remarks or on separate sheet)

_____ Problematic Hydrophytic Vegetation[1] (Explain)

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

Hydrophytic Vegetation Present? **Yes X** **No** _____

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

This is a *Phalaris arundinacea* dominated wet meadow fringe along an excavated pond. This wetland extends into the ditch along I-94.

SOIL Sampling Point: **W9-5 T-1 B(w)**

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

Depth (inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-8	10YR 2/1	100	None				Silt loam	
8-13	10YR 3/1	100	10YR 4/6	10%	C	PL/M	Silty clay loam	
13-17	10YR 4/1	100	10YR 4/6	15%	C	M	Silty clay	

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

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ 2 cm Muck (A10)
- ___ Depleted Below Dark Surface (A11)
- X Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ 5 cm Mucky Peat or Peat (S3)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- X Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ Coast Prairie Redox (A16)
- ___ Iron-Manganese Masses (F12)
- ___ Other (Explain in Remarks)

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

Restrictive Layer (if observed):

Type: **Silty clay**

Depth (inches): **13**

Hydric Soil Present? **Yes** X **No** ___

Remarks:

Soils are dry.

HYDROLOGY

Wetland Hydrology Indicators:

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

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ True Aquatic Plants (B14)
- ___ Hydrogen Sulfide Odor (C1)
- X Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Gauge or Well Data (D9)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- X Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- X Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- X Geomorphic Position (D2)
- X FAC-Neutral Test (D5)

Field Observations:

Surface Water Present?	Yes ___	No X	Depth (inches): ___
Water Table Present?	Yes ___	No X	Depth (inches): ___
Saturation Present? (includes capillary fringe)	Yes ___	No X	Depth (inches): ___

Wetland Hydrology Present? **Yes** X **No** ___

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

Remarks:

Conditions are dry.

WETLAND DETERMINATION DATA FORM - Midwest Region

Project/Site: **IH-94 Mainline** City/County: **Oak Creek/ Milwaukee** Sampling Date: **9/9/2009**

Applicant/Owner: **WDOT** State: **WI** Sampling Point: **W9-6 T-1 C(w)**

Investigator(s): **Julie A. Paschal** Section, Township, Range: **Section 20, T5N R22E**

Landform (hillslope, terrace, etc.): **Wetland drainage swale** Local relief (concave, convex, none): **Concave**

Slope (%): **0-2%** Lat: **See Fig. 2** Long: **See Fig. 2** Datum: **NA**

Soil Map Unit Name: **Ashkum silty clay loam (AsA)** WWI Classification: **E2H**

Are climatic / hydrologic conditions on the site typical for this time of year? Yes **X** No ____ (if no, explain in Remarks)

Are Vegetation ____ Soil ____ or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes **X** No ____

Are Vegetation ____ Soil ____ or Hydrology ____ naturally problematic? (if needed, explain any answers in Remarks)

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

Hydrophytic Vegetation Present?	Yes **X**	No ____			
Hydric Soil Present?	Yes **X**	No ____	Is the Sampled Area within a Wetland?	Yes **X**	No ____
Wetland Hydrology Present?	Yes **X**	No ____			

Remarks:

This is a shallow marsh wetland within a drainage area at the Ryan Road interchange.

VEGETATION - Use scientific names for plants.

Tree Stratum (Plot Size: **N/A**)	Absolute % Cover	Dominant Species	Indicator Status
1. **N/A**			
2.			
3.			
4.			
5.			
	0%	= Total Cover	

Sapling/Shrub Stratum (Plot Size: **N/A**)			
1. **N/A**			
2.			
3.			
4.			
5.			
	0%	= Total Cover	

Herb Stratum (Plot Size: **5 ft. radius**)			
1. ***Typha angustifolia***	**80%**	**Yes**	**OBL**
2. ***Verbena hastata***	**10%**	**No**	**FACW**
3. ***Bidens frondosa***	**5%**	**No**	**FACW**
4. ***Phalaris arundinacea***	**25%**	**Yes**	**FACW**
5. ***Cirsium arvense***	**5%**	**No**	**FACU**
6.			
7.			
8.			
9.			
10.			
	125%	= Total Cover	

Woody Vine Stratum (Plot Size: **N/A**)			
1. **N/A**			
2.			
	0%	= Total Cover	

Dominance Test Worksheet:

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

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

Percent of Dominant Species That Are OBL, FACW, or FAC: **100%** (A/B)

Prevalence Index Worksheet:

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

Prevalence Index = B/A = ____

Hydrophytic Vegetation Indicators:

X Dominance Test is >50%

____ Prevalence Index is ≤ 3.0[1]

____ Morphological Adaptations[1] (Provide supporting data in Remarks or on separate sheet)

____ Problematic Hydrophytic Vegetation[1] (Explain)

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

Hydrophytic Vegetation Present? **Yes X** **No** ____

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

This is a shallow marsh plant community.

SOIL

Sampling Point: **W9-6 T-1 C(w)**

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

Depth (inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox Features %	Type[1]	Loc[2]	Texture	Remarks
0-6	N2.5/1	100	None				Fiberic muck	
6-18	2.5Y 7/1	100	2.5Y5/6	5%	C	M	Silty clay loam	

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

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- X 2 cm Muck (A10)
- X Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ 5 cm Mucky Peat or Peat (S3)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ Coast Prairie Redox (A16)
- ___ Iron-Manganese Masses (F12)
- ___ Other (Explain in Remarks)

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

Restrictive Layer (if observed):

Type: **N/A**

Depth (inches): **N/A**

Hydric Soil Present? **Yes** X **No** ___

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

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

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- X Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ True Aquatic Plants (B14)
- X Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Gauge or Well Data (D9)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- X Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- X FAC-Neutral Test (D5)

Field Observations:

Surface Water Present?	Yes ___	No X	Depth (inches):	
Water Table Present?	Yes X	No ___	Depth (inches):	6
Saturation Present? (includes capillary fringe)	Yes X	No ___	Depth (inches):	0

Wetland Hydrology Present? **Yes** X **No** ___

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

I-94 drainage swale observed on the aerial at this location.

Remarks:

This is a drainage swale between the I-94 mainline and the Park and Ride within the infield.

WETLAND DETERMINATION DATA FORM - Midwest Region

Project/Site: **IH-94 Mainline** City/County: **Oak Creek/ Milwaukee** Sampling Date: **9/9/2009**

Applicant/Owner: **WDOT** State: **WI** Sampling Point: **W9-6/W9-7 T-1 B(u)**

Investigator(s): **Julie A. Paschal** Section, Township, Range: **Section 20, T5N R22E**

Landform (hillslope, terrace, etc.): **Hillslope** Local relief (concave, convex, none): **Convex**

Slope (%): **10%** Lat: **See Fig. 2** Long: **See Fig. 2** Datum: **NA**

Soil Map Unit Name: **Blount silt loam (BIA)** WWI Classification: **None**

Are climatic / hydrologic conditions on the site typical for this time of year? Yes **X** No _____ (if no, explain in Remarks)

Are Vegetation _____ Soil ***X** or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes **X** No _____

Are Vegetation _____ Soil _____ or Hydrology _____ naturally problematic? (if needed, explain any answers in Remarks)

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

Hydrophytic Vegetation Present?	Yes _____	No **X**			
Hydric Soil Present?	Yes _____	No **X**	Is the Sampled Area within a Wetland?	Yes _____	No **X**
Wetland Hydrology Present?	Yes _____	No **X**			

Remarks:

*** Soils are disturbed and contain fill material due to historic construction of IH-94.**

VEGETATION - Use scientific names for plants.

Tree Stratum (Plot Size: **N/A**)	Absolute % Cover	Dominant Species	Indicator Status
1. **N/A**			
2.			
3.			
4.			
5.			
	0%	= Total Cover	

Sapling/Shrub Stratum (Plot Size: **N/A**)			
1. **N/A**			
2.			
3.			
4.			
5.			
	0%	= Total Cover	

Herb Stratum (Plot Size: **5 ft. radius**)			
1. ***Cirsium arvense***	**50%**	**Yes**	**FACU**
2. ***Melilotus alba***	**2%**	**No**	**FACU**
3. ***Erechtites hieraciifolia***	**2%**	**No**	**FACU**
4. ***Poa pratensis***	**30%**	**Yes**	**FAC**
5. ***Festuca elatior***	**25%**	**Yes**	**FACU**
6.			
7.			
8.			
9.			
10.			
	109%	= Total Cover	

Woody Vine Stratum (Plot Size: **N/A**)			
1. **N/A**			
2.			
	0%	= Total Cover	

Dominance Test Worksheet:

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

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

Percent of Dominant Species That Are OBL, FACW, or FAC: **33%** (A/B)

Prevalence Index Worksheet:

Total % Cover of:		Multiply by:	
OBL species		x 1 =	
FACW species		x 2 =	
FAC species	**30%**	x 3 =	**90**
FACU species	**79%**	x 4 =	**316**
UPL species		x 5 =	
Column Totals:	**109%** (A)		**406** (B)

Prevalence Index = B/A = **3.72**

Hydrophytic Vegetation Indicators:

_____ Dominance Test is >50%

_____ Prevalence Index is ≤ 3.0[1]

_____ Morphological Adaptations[1] (Provide supporting data in Remarks or on separate sheet)

_____ Problematic Hydrophytic Vegetation[1] (Explain)

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

Hydrophytic Vegetation Present? Yes _____ No **X**

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

This is an upland, roadside plant community.

SOIL

Sampling Point: **W9-6/W9-7 T-1 B(u)**

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
0-4	**10YR 3/3**	**100**	**None**				**Silt loam**	
4-18	**10YR 4/2**	**70**	**10YR 4/6**	**10%**	**C**	**M**	**Silty clay loam**	**Mixed matrix**
4-18	**10YR 5/3**	**30**	**10YR 4/6**	**10%**	**C**	**M**	**Silty clay loam**	**Mixed matrix**

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

Hydric Soil Indicators:

___ Histosol (A1)
___ Histic Epipedon (A2)
___ Black Histic (A3)
___ Hydrogen Sulfide (A4)
___ Stratified Layers (A5)
___ 2 cm Muck (A10)
___ Depleted Below Dark Surface (A11)
___ Thick Dark Surface (A12)
___ Sandy Mucky Mineral (S1)
___ 5 cm Mucky Peat or Peat (S3)
___ Sandy Gleyed Matrix (S4)
___ Sandy Redox (S5)
___ Stripped Matrix (S6)
___ Loamy Mucky Mineral (F1)
___ Loamy Gleyed Matrix (F2)
___ Depleted Matrix (F3)
___ Redox Dark Surface (F6)
___ Depleted Dark Surface (F7)
___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

___ Coast Prairie Redox (A16)
___ Iron-Manganese Masses (F12)
___ Other (Explain in Remarks)

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

Restrictive Layer (if observed):

Type: **N/A**

Depth (inches): **N/A**

Hydric Soil Present? **Yes** ___ **No** **X**

Remarks:

Fill material/mixed matrix. Redoximorphic features may be relic hydric conditions.

HYDROLOGY

Wetland Hydrology Indicators:

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

___ Surface Water (A1)
___ High Water Table (A2)
___ Saturation (A3)
___ Water Marks (B1)
___ Sediment Deposits (B2)
___ Drift Deposits (B3)
___ Algal Mat or Crust (B4)
___ Iron Deposits (B5)
___ Inundation Visible on Aerial Imagery (B7)
___ Sparsely Vegetated Concave Surface (B8)
___ Water-Stained Leaves (B9)
___ Aquatic Fauna (B13)
___ True Aquatic Plants (B14)
___ Hydrogen Sulfide Odor (C1)
___ Oxidized Rhizospheres on Living Roots (C3)
___ Presence of Reduced Iron (C4)
___ Recent Iron Reduction in Tilled Soils (C6)
___ Thin Muck Surface (C7)
___ Gauge or Well Data (D9)
___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

___ Surface Soil Cracks (B6)
___ Drainage Patterns (B10)
___ Dry-Season Water Table (C2)
___ Crayfish Burrows (C8)
___ Saturation Visible on Aerial Imagery (C9)
___ Stunted or Stressed Plants (D1)
___ Geomorphic Position (D2)
___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes ___ No **X** Depth (inches): ___

Water Table Present? Yes ___ No **X** Depth (inches): ___

Saturation Present? (includes capillary fringe) Yes ___ No **X** Depth (inches): ___

Wetland Hydrology Present? **Yes** ___ **No** **X**

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

Remarks:

No wetland hydrology indicators observed. This sample point is upslope from the adjacent wetlands.

WETLAND DETERMINATION DATA FORM - Midwest Region

Project/Site: **IH-94 Mainline** City/County: **Oak Creek/ Milwaukee** Sampling Date: **9/9/2009**

Applicant/Owner: **WDOT** State: **WI** Sampling Point: **W9-7 T-1 A(w)**

Investigator(s): **Julie A. Paschal** Section, Township, Range: **Section 20, T5N R22E**

Landform (hillslope, terrace, etc.): **Depression** Local relief (concave, convex, none): **Concave**

Slope (%): **0-2%** Lat: **See Fig. 2** Long: **See Fig. 2** Datum: **NA**

Soil Map Unit Name: **Blount silt loam (BIA)** WWI Classification: **Wetland smaller than 2 acres**

Are climatic / hydrologic conditions on the site typical for this time of year? Yes **X** No ____ (if no, explain in Remarks)

Are Vegetation ____ Soil ____ or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes **X** No ____

Are Vegetation ____ Soil ____ or Hydrology ____ naturally problematic? (if needed, explain any answers in Remarks)

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

Hydrophytic Vegetation Present?	Yes **X**	No ____			
Hydric Soil Present?	Yes **X**	No ____	Is the Sampled Area within a Wetland?	Yes **X**	No ____
Wetland Hydrology Present?	Yes **X**	No ____			

Remarks:

This is a shallow marsh wetland within a drainage area at the Ryan Road interchange.

VEGETATION - Use scientific names for plants.

Tree Stratum (Plot Size: **N/A**)	Absolute % Cover	Dominant Species	Indicator Status
1. **N/A**			
2.			
3.			
4.			
5.			
	0%	= Total Cover	

Sapling/Shrub Stratum (Plot Size: **N/A**)			
1. **N/A**			
2.			
3.			
4.			
5.			
	0%	= Total Cover	

Herb Stratum (Plot Size: **5 ft. radius**)			
1. ***Typha angustifolia***	**100%**	**Yes**	**OBL**
2. ***Cirsium arvense***	**5%**	**No**	**FACU**
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
	105%	= Total Cover	

Woody Vine Stratum (Plot Size: **N/A**)			
1. **N/A**			
2.			
	0%	= Total Cover	

Dominance Test Worksheet:

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

Total Number of Dominant Species Across All Strata: **1** (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: **100%** (A/B)

Prevalence Index Worksheet:

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

Prevalence Index = B/A = ____

Hydrophytic Vegetation Indicators:

X Dominance Test is >50%

____ Prevalence Index is ≤ 3.0[1]

____ Morphological Adaptations[1] (Provide supporting data in Remarks or on separate sheet)

____ Problematic Hydrophytic Vegetation[1] (Explain)

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

Hydrophytic Vegetation Present? **Yes X** **No** ____

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

This is a shallow marsh plant community dominated by *Typha angustifolia* .

SOIL Sampling Point: **W9-7 T-1 A(w)**

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
*N/A								

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

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ 2 cm Muck (A10)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ 5 cm Mucky Peat or Peat (S3)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ Coast Prairie Redox (A16)
- ___ Iron-Manganese Masses (F12)
- ___ Other (Explain in Remarks)

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

Restrictive Layer (if observed):

Type: **N/A**

Depth (inches): **N/A**

Hydric Soil Present? **Yes** **X** **No** ___

Remarks:

*** Soils are presumed to be hydric due to dominant obligate vegetation and inundation. Soils are saturated/inundated during the dry season.**

HYDROLOGY

Wetland Hydrology Indicators:

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

- **X** Surface Water (A1)
- ___ High Water Table (A2)
- **X** Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ True Aquatic Plants (B14)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Gauge or Well Data (D9)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- **X** Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- **X** FAC-Neutral Test (D5)

Field Observations:

Surface Water Present?	Yes **X**	No ___	Depth (inches):	**0.5**
Water Table Present?	Yes **X**	No ___	Depth (inches):	**0**
Saturation Present? (includes capillary fringe)	Yes **X**	No ___	Depth (inches):	**0**

Wetland Hydrology Present? **Yes** **X** **No** ___

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

Remarks:

This is a drainage area in the infield between the IH-94 mainline and the Park and Ride. This area is at a lower elevation in the topography than the adjacent uplands.

WETLAND DETERMINATION DATA FORM - Midwest Region

Project/Site: **IH-94 Mainline** City/County: **Oak Creek/ Milwaukee** Sampling Date: **9/17/2009**

Applicant/Owner: **WDOT** State: **WI** Sampling Point: **W9-8 T-1 A(u)**

Investigator(s): **Eric C. Parker** Section, Township, Range: **Section 19, T5N R22E**

Landform (hillslope, terrace, etc.): **Hillslope** Local relief (concave, convex, none): **None**

Slope (%): **15%** Lat: **See Fig. 2** Long: **See Fig. 2** Datum: **NA**

Soil Map Unit Name: **Blount silt loam (BIA)** WWI Classification: **None**

Are climatic / hydrologic conditions on the site typical for this time of year? Yes **X** No ____ (if no, explain in Remarks)

Are Vegetation ____ Soil ____ or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes **X** No ____

Are Vegetation ____ Soil ____ or Hydrology ____ naturally problematic? (if needed, explain any answers in Remarks)

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

Hydrophytic Vegetation Present?	Yes ____	No **X**			
Hydric Soil Present?	Yes ____	No **X**	Is the Sampled Area	Yes ____	No **X**
Wetland Hydrology Present?	Yes ____	No **X**	within a Wetland?		

Remarks:

VEGETATION - Use scientific names for plants.

Tree Stratum (Plot Size: **N/A**)	Absolute % Cover	Dominant Species	Indicator Status
1. **N/A**			
2.			
3.			
4.			
5.			
	0%	= Total Cover	

Sapling/Shrub Stratum (Plot Size: **N/A**)			
1. **N/A**			
2.			
3.			
4.			
5.			
	0%	= Total Cover	

Herb Stratum (Plot Size: **5 ft. radius**)			
1. ***Festuca elatior***	**40%**	**Yes**	**FACU**
2. ***Daucus carota***	**10%**	**Yes**	**UPL**
3. ***Aster ericoides***	**10%**	**Yes**	**FACU**
4. ***Poa pratensis***	**15%**	**Yes**	**FAC**
5. ***Aster drummondii***	**5%**	**No**	**UPL**
6. ***Solidago nemoralis***	**10%**	**Yes**	**FACU**
7. ***Fragaria virginiana***	**10%**	**Yes**	**FAC**
8. ***Asclepias verticillatus***	**2%**	**No**	**UPL**
9. ***Cornus foemina***	**10%**	**Yes**	**FACW**
10.			
	112%	= Total Cover	

Woody Vine Stratum (Plot Size: **N/A**)			
1. **N/A**			
2.			
	0%	= Total Cover	

Dominance Test Worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: **3** (A)

Total Number of Dominant Species Across All Strata: **7** (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: **43%** (A/B)

Prevalence Index Worksheet:

Total % Cover of:		Multiply by:
OBL species		x 1 =
FACW species	**10%**	x 2 = **20**
FAC species	**25%**	x 3 = **75**
FACU species	**60%**	x 4 = **240**
UPL species	**17%**	x 5 = **85**
Column Totals:	**112%** (A)	**420** (B)

Prevalence Index = B/A = **3.75**

Hydrophytic Vegetation Indicators:

____ Dominance Test is >50%

____ Prevalence Index is ≤ 3.0[1]

____ Morphological Adaptations[1] (Provide supporting data in Remarks or on separate sheet)

____ Problematic Hydrophytic Vegetation[1] (Explain)

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

Hydrophytic Vegetation Present? Yes ____ No **X**

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

This is an upland, old field plant community. The plant community is weedy but stabilized.

SOIL

Sampling Point: **W9-8 T-1 A(u)**

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
0-9	**10YR 3/1**	**100**	**None**				**Silty clay**	**Fill or cut area**
9-18	**10YR 5/3**	**100**	**None**				**Clay**	

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

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ 2 cm Muck (A10)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ 5 cm Mucky Peat or Peat (S3)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ Coast Prairie Redox (A16)
- ___ Iron-Manganese Masses (F12)
- ___ Other (Explain in Remarks)

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

Restrictive Layer (if observed):

Type: **N/A**

Depth (inches): **N/A**

Hydric Soil Present? **Yes** ___ **No** **X**

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

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

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ True Aquatic Plants (B14)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Gauge or Well Data (D9)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present?	Yes ___	No **X**	Depth (inches): ___
Water Table Present?	Yes ___	No **X**	Depth (inches): ___
Saturation Present? (includes capillary fringe)	Yes ___	No **X**	Depth (inches): ___

Wetland Hydrology Present? **Yes** ___ **No** **X**

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

Remarks:

No wetland hydrology indicators observed. Conditions are dry.

WETLAND DETERMINATION DATA FORM - Midwest Region

Project/Site: **IH-94 Mainline** City/County: **Oak Creek/ Milwaukee** Sampling Date: **9/17/2009**

Applicant/Owner: **WDOT** State: **WI** Sampling Point: **W9-8 T-1 B(w)**

Investigator(s): **Eric C. Parker** Section, Township, Range: **Section 19, T5N R22E**

Landform (hillslope, terrace, etc.): **Swale** Local relief (concave, convex, none): **Concave**

Slope (%): **2%** Lat: **See Fig. 2** Long: **See Fig. 2** Datum: **NA**

Soil Map Unit Name: **Blount silt loam (BIA)** WWI Classification: **E2K**

Are climatic / hydrologic conditions on the site typical for this time of year? Yes **X** No ____ (if no, explain in Remarks)

Are Vegetation ____ Soil ____ or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes **X** No ____

Are Vegetation ____ Soil ____ or Hydrology ____ naturally problematic? (if needed, explain any answers in Remarks)

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

Hydrophytic Vegetation Present?	Yes **X**	No ____			
Hydric Soil Present?	Yes **X**	No ____	Is the Sampled Area within a Wetland?	Yes **X**	No ____
Wetland Hydrology Present?	Yes **X**	No ____			

Remarks:
This wetland is predominately a *Typha spp.* dominated shallow marsh ditch. The edge of the marsh grades to a narrow wet meadow wetland.

VEGETATION - Use scientific names for plants.

Tree Stratum (Plot Size: **N/A**)	Absolute % Cover	Dominant Species	Indicator Status
1. **N/A**			
2.			
3.			
4.			
5.			
	0%	= Total Cover	

Sapling/Shrub Stratum (Plot Size: **N/A**)			
1. **N/A**			
2.			
3.			
4.			
5.			
	0%	= Total Cover	

Herb Stratum (Plot Size: **5 ft. radius**)			
1. ***Typha angustifolia***	**75%**	**Yes**	**OBL**
2. ***Geum aleppicum***	**25%**	**Yes**	**FAC**
3. ***Aster novae-angliae***	**20%**	**No**	**FACW**
4. ***Euthamia graminifolia***	**15%**	**No**	**FACW**
5. ***Achillea millefolium***	**2%**	**No**	**FACU**
6. ***Solidago canadensis***	**15%**	**No**	**FACU**
7. ***Fragaria virginiana***	**10%**	**No**	**FAC**
8. ***Monarda fistulosa***	**2%**	**No**	**FACU**
9. ***Agrostis gigantea***	**2%**	**No**	**FACW**
10.			
	166%	= Total Cover	

Woody Vine Stratum (Plot Size: **N/A**)			
1. **N/A**			
2.			
	0%	= Total Cover	

Dominance Test Worksheet:

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

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

Percent of Dominant Species That Are OBL, FACW, or FAC: **100%** (A/B)

Prevalence Index Worksheet:

Total % Cover of:		Multiply by:	
OBL species	**75%**	x 1 = **75**	
FACW species	**37%**	x 2 = **74**	
FAC species	**35%**	x 3 = **105**	
FACU species	**19%**	x 4 = **76**	
UPL species		x 5 =	
Column Totals:	**166%** (A)	**330**	(B)

Prevalence Index = B/A = **1.99**

Hydrophytic Vegetation Indicators:

X Dominance Test is >50%

X Prevalence Index is ≤ 3.0[1]

____ Morphological Adaptations[1] (Provide supporting data in Remarks or on separate sheet)

____ Problematic Hydrophytic Vegetation[1] (Explain)

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

Hydrophytic Vegetation Present? Yes **X** No ____

Remarks: (Include photo numbers here or on a separate sheet.)
This is a shallow marsh/wet meadow plant community.

SOIL

Sampling Point: **W9-8 T-1 B(w)**

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

Depth (inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox Features %	Type[1]	Loc[2]	Texture	Remarks
0-6	10YR 3/1	100	None				Silty clay loam	
6-15	2.5Y 5/2	100	10YR 4/6	20%	C	M	Silty clay loam	

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

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ 2 cm Muck (A10)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ 5 cm Mucky Peat or Peat (S3)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- X Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ Coast Prairie Redox (A16)
- ___ Iron-Manganese Masses (F12)
- ___ Other (Explain in Remarks)

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

Restrictive Layer (if observed):

Type: **N/A**

Depth (inches): **N/A**

Hydric Soil Present? **Yes** X **No** ___

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

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

- ___ Surface Water (A1)
- X High Water Table (A2)
- X Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ True Aquatic Plants (B14)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Gauge or Well Data (D9)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- X Surface Soil Cracks (B6)
- X Drainage Patterns (B10)
- X Dry-Season Water Table (C2)
- X Crayfish Burrows (C8)
- X Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- X Geomorphic Position (D2)
- X FAC-Neutral Test (D5)

Field Observations:

Surface Water Present?	Yes ___	No X	Depth (inches):	
Water Table Present?	Yes X	No ___	Depth (inches):	10
Saturation Present? (includes capillary fringe)	Yes X	No ___	Depth (inches):	10

Wetland Hydrology Present? **Yes** X **No** ___

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

Remarks:

This wetland is predominately a *Typha spp.* dominated shallow marsh ditch. The edge of the marsh grades to a narrow wet meadow wetland.

Standing water is present in the more central portion of the ditch.

WETLAND DETERMINATION DATA FORM - Midwest Region

Project/Site: **IH-94 Mainline** City/County: **Oak Creek/ Milwaukee** Sampling Date: **9/15/2009**

Applicant/Owner: **WDOT** State: **WI** Sampling Point: **W9-9 T-1 A(u)**

Investigator(s): **Eric C. Parker / Julie A. Paschal** Section, Township, Range: **Section 19, T5N R22E**

Landform (hillslope, terrace, etc.): **Hillslope** Local relief (concave, convex, none): **Concave**

Slope (%): **4%** Lat: **See Fig. 2** Long: **See Fig. 2** Datum: **NA**

Soil Map Unit Name: **Blount silt loam (BIA)** WWI Classification: **None**

Are climatic / hydrologic conditions on the site typical for this time of year? Yes **X** No ____ (if no, explain in Remarks)

Are Vegetation ____ Soil ____ or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes **X** No ____

Are Vegetation ____ Soil ____ or Hydrology ____ naturally problematic? (if needed, explain any answers in Remarks)

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

Hydrophytic Vegetation Present?	Yes ____	No **X**			
Hydric Soil Present?	Yes ____	No **X**	Is the Sampled Area within a Wetland?	Yes ____	No **X**
Wetland Hydrology Present?	Yes ____	No **X**			

Remarks:

VEGETATION - Use scientific names for plants.

Tree Stratum (Plot Size: **N/A**)	Absolute % Cover	Dominant Species	Indicator Status
1. **N/A**			
2.			
3.			
4.			
5.			
	0%	= Total Cover	

Dominance Test Worksheet:

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

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

Percent of Dominant Species That Are OBL, FACW, or FAC: **50%** (A/B)

Sapling/Shrub Stratum (Plot Size: **N/A**)			
1. **N/A**			
2.			
3.			
4.			
5.			
	0%	= Total Cover	

Prevalence Index Worksheet:

Total % Cover of:		Multiply by:	
OBL species		x 1 =	
FACW species		x 2 =	
FAC species	**60%**	x 3 =	**180**
FACU species	**35%**	x 4 =	**140**
UPL species	**26%**	x 5 =	**130**
Column Totals:	**121%** (A)		**450** (B)

Prevalence Index = B/A = **3.72**

Herb Stratum (Plot Size: **5 ft. radius**)			
1. ***Asclepias verticillata***	**20%**	**No**	**UPL**
2. ***Solidago canadensis***	**25%**	**Yes**	**FACU**
3. ***Daucus carota***	**5%**	**No**	**UPL**
4. ***Poa pratensis***	**60%**	**Yes**	**FAC**
5. ***Aster drummondii***	**1%**	**No**	**UPL**
6. ***Aster pilosus***	**5%**	**No**	**FACU**
7. ***Aster ericoides***	**5%**	**No**	**FACU**
8.			
9.			
10.			
	121%	= Total Cover	

Hydrophytic Vegetation Indicators:

____ Dominance Test is >50%

____ Prevalence Index is ≤ 3.0[1]

____ Morphological Adaptations[1] (Provide supporting data in Remarks or on separate sheet)

____ Problematic Hydrophytic Vegetation[1] (Explain)

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

Woody Vine Stratum (Plot Size: **N/A**)			
1. **N/A**			
2.			
	0%	= Total Cover	

Hydrophytic Vegetation Present? Yes ____ No **X**

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

This is an upland, old field plant community.

SOIL

Sampling Point: **W9-9 T-1 A(u)**

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

Depth (inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox Features %	Type[1]	Loc[2]	Texture	Remarks
0-8	**10YR 4/2**	**100**	**None**				**Silty clay loam**	
8-18	**10YR 5/3**	**100**	**None**				**Silty clay**	

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

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ 2 cm Muck (A10)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ 5 cm Mucky Peat or Peat (S3)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ Coast Prairie Redox (A16)
- ___ Iron-Manganese Masses (F12)
- ___ Other (Explain in Remarks)

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

Restrictive Layer (if observed):

Type: **N/A**

Depth (inches): **N/A**

Hydric Soil Present? **Yes** ___ **No** **X**

Remarks:

Soils were historically graded. No hydric soil indicators observed. Soils were observed to be dry.

HYDROLOGY

Wetland Hydrology Indicators:

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

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ True Aquatic Plants (B14)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Gauge or Well Data (D9)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present?	Yes ___	No **X**	Depth (inches): ___
Water Table Present?	Yes ___	No **X**	Depth (inches): ___
Saturation Present? (includes capillary fringe)	Yes ___	No **X**	Depth (inches): ___

Wetland Hydrology Present? **Yes** ___ **No** **X**

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

Remarks:

No wetland hydrology indicators observed.

WETLAND DETERMINATION DATA FORM - Midwest Region

Project/Site: **IH-94 Mainline** City/County: **Oak Creek/ Milwaukee** Sampling Date: **9/15/2009**

Applicant/Owner: **WDOT** State: **WI** Sampling Point: **W9-9 T-1 B(w)**

Investigator(s): **Eric C. Parker / Julie A. Paschal** Section, Township, Range: **Section 19, T5N R22E**

Landform (hillslope, terrace, etc.): **Toe of hillslope** Local relief (concave, convex, none): **Concave**

Slope (%): **2%** Lat: **See Fig. 2** Long: **See Fig. 2** Datum: **NA**

Soil Map Unit Name: **Blount silt loam (BIA)** WWI Classification: **None**

Are climatic / hydrologic conditions on the site typical for this time of year? Yes **X** No ____ (if no, explain in Remarks)

Are Vegetation ____ Soil ____ or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes **X** No ____

Are Vegetation ____ Soil ____ or Hydrology ____ naturally problematic? (if needed, explain any answers in Remarks)

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

Hydrophytic Vegetation Present?	Yes **X**	No ____			
Hydric Soil Present?	Yes **X**	No ____	Is the Sampled Area within a Wetland?	Yes **X**	No ____
Wetland Hydrology Present?	Yes **X**	No ____			

Remarks:

This is a shallow marsh/wet meadow wetland within a drainage area at the Ryan Road interchange.

VEGETATION - Use scientific names for plants.

Tree Stratum (Plot Size: **N/A**)	Absolute % Cover	Dominant Species	Indicator Status
1. **N/A**			
2.			
3.			
4.			
5.			
	0%	= Total Cover	

Sapling/Shrub Stratum (Plot Size: **N/A**)			
1. **N/A**			
2.			
3.			
4.			
5.			
	0%	= Total Cover	

Herb Stratum (Plot Size: **5 ft. radius**)			
1. ***Juncus tenuis***	**50%**	**Yes**	**FAC**
2. ***Poa pratensis***	**30%**	**Yes**	**FAC**
3. ***Typha angustifolia***	**2%**	**No**	**OBL**
4. ***Carex vulpinoidea***	**10%**	**No**	**OBL**
5. ***Aster novae-angliae***	**5%**	**No**	**FACW**
6. ***Phalaris arundinacea***	**1%**	**No**	**FACW**
7. ***Agrostis gigantea***	**5%**	**No**	**FACW**
8.			
9.			
10.			
	103%	= Total Cover	

Woody Vine Stratum (Plot Size: **N/A**)			
1. **N/A**			
2.			
	0%	= Total Cover	

Dominance Test Worksheet:

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

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

Percent of Dominant Species That Are OBL, FACW, or FAC: **100%** (A/B)

Prevalence Index Worksheet:

Total % Cover of:		Multiply by:	
OBL species	**12%**	x 1 = **12**	
FACW species	**11%**	x 2 = **22**	
FAC species	**80%**	x 3 = **240**	
FACU species		x 4 =	
UPL species		x 5 =	
Column Totals:	**103%** (A)	**274**	(B)

Prevalence Index = B/A = **2.66**

Hydrophytic Vegetation Indicators:

X Dominance Test is >50%

X Prevalence Index is ≤ 3.0[1]

____ Morphological Adaptations[1] (Provide supporting data in Remarks or on separate sheet)

____ Problematic Hydrophytic Vegetation[1] (Explain)

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

Hydrophytic Vegetation Present? Yes **X** No ____

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

This is a wet meadow plant community.

SOIL

Sampling Point: **W9-9 T-1 B(w)**

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
0-7	**10YR 4/2**	**100**	**None**				**Silty clay loam**	
7-15	**7.5YR 5/2**	**100**	**10YR 4/6**	**5%**	**C**	**M**	**Silty clay**	

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

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ 2 cm Muck (A10)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ 5 cm Mucky Peat or Peat (S3)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- **X** Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ Coast Prairie Redox (A16)
- ___ Iron-Manganese Masses (F12)
- ___ Other (Explain in Remarks)

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

Restrictive Layer (if observed):

Type: **N/A**

Depth (inches): **N/A**

Hydric Soil Present? **Yes X** **No ___**

Remarks:

The soils were historically disturbed due to the construction of IH-94. The soil profile indicates these are developing hydric soils.

HYDROLOGY

Wetland Hydrology Indicators:

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

- ___ Surface Water (A1)
- **X** High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ True Aquatic Plants (B14)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Gauge or Well Data (D9)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- **X** Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- **X** Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- **X** FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes ___ No **X** Depth (inches): ___

Water Table Present? Yes ___ No **X** Depth (inches): ___

Saturation Present? (includes capillary fringe) Yes ___ No **X** Depth (inches): ___

Wetland Hydrology Present? **Yes X** **No ___**

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

Remarks:

This sample point is at a lower elevation in the topography than the corresponding upland sample point. This wetland is within a drainage area at the Ryan Road interchange.

WETLAND DETERMINATION DATA FORM - Midwest Region

Project/Site: **IH-94 Mainline** City/County: **Oak Creek/ Milwaukee** Sampling Date: **9/9/2009**

Applicant/Owner: **WDOT** State: **WI** Sampling Point: **W10-1 T-1 A(u)**

Investigator(s): **Marcus S. Anderson / Tina M. Myers** Section, Township, Range: **Section 30, T5N R22E**

Landform (hillslope, terrace, etc.): **Hillslope** Local relief (concave, convex, none): **None**

Slope (%): **2-3%** Lat: **See Fig. 2** Long: **See Fig. 2** Datum: **NA**

Soil Map Unit Name: **Ashkum silty clay loam (AsA)** WWI Classification: **E2K**

Are climatic / hydrologic conditions on the site typical for this time of year? Yes **X** No ____ (if no, explain in Remarks)

Are Vegetation ____ Soil ____ or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes **X** No ____

Are Vegetation ***X** 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?	Yes ***X**	No ____			
Hydric Soil Present?	Yes ____	No **X**	Is the Sampled Area	Yes ____	No **X**
Wetland Hydrology Present?	Yes ____	No **X**	within a Wetland?		

Remarks:

*** The vegetation is naturally problematic; this is a degraded plant community with only two dominant species-one FACW species and one FACU species.**

**** The soils are naturally problematic due to a deep, dark A horizon.**

This area is higher in the elevation than the adjacent wetland, has questionable vegetation, and shows no signs of wetland hydrology. It is GRAEF's professional opinion that this area is non-wetland. The area appears to have been drained as a result of ditching.

VEGETATION - Use scientific names for plants.

Tree Stratum (Plot Size: **N/A**)	Absolute % Cover	Dominant Species	Indicator Status
1. **N/A**			
2.			
3.			
4.			
5.			
	0% = Total Cover		

Sapling/Shrub Stratum (Plot Size: **N/A**)			
1. **N/A**			
2.			
3.			
4.			
5.			
	0% = Total Cover		

Herb Stratum (Plot Size: **5 ft. radius**)			
1. ***Phalaris arundinacea***	**60%**	**Yes**	**FACW**
2. ***Cirsium arvense***	**60%**	**Yes**	**FACU**
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
	120% = Total Cover		

Woody Vine Stratum (Plot Size: **N/A**)			
1. **N/A**			
2.			
	0% = Total Cover		

Dominance Test Worksheet:

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

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

Percent of Dominant Species That Are OBL, FACW, or FAC: **50%** (A/B)

Prevalence Index Worksheet:

Total % Cover of:		Multiply by:	
OBL species		x 1 =	
FACW species	**60%**	x 2 =	**120**
FAC species		x 3 =	
FACU species	**60%**	x 4 =	**240**
UPL species		x 5 =	
Column Totals:	**120%** (A)		**360** (B)

Prevalence Index = B/A = **3.00**

Hydrophytic Vegetation Indicators:

____ Dominance Test is >50%

X Prevalence Index is ≤ 3.0[1]

____ Morphological Adaptations[1] (Provide supporting data in Remarks or on separate sheet)

____ Problematic Hydrophytic Vegetation[1] (Explain)

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

Hydrophytic Vegetation Present? **Yes X** **No** ____

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

The vegetation is problematic; this is a degraded plant community with only two dominant species-one FACW species and one FACU species. No other species were observed in this area.

SOIL

Sampling Point: **W10-1 T-1 A(u)**

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
0-25	**10YR 2/1**	**100**	**None**				**Silt loam**	
25-27	**10YR 2/1**	**100**	**7.5YR 4/6**	**1%**	**C**	**M**	**Silt loam**	

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

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ 2 cm Muck (A10)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ 5 cm Mucky Peat or Peat (S3)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ Coast Prairie Redox (A16)
- ___ Iron-Manganese Masses (F12)
- ___ Other (Explain in Remarks)

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

Restrictive Layer (if observed):

Type: **N/A**

Depth (inches): **N/A**

Hydric Soil Present? **Yes** ___ **No** **X**

Remarks:

Soils very dry throughout. These are well drained soils-spoils from ditching observed in this area.

HYDROLOGY

Wetland Hydrology Indicators:

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

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ True Aquatic Plants (B14)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Gauge or Well Data (D9)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes ___ No **X** Depth (inches): ___

Water Table Present? Yes ___ No **X** Depth (inches): ___

Saturation Present? (includes capillary fringe) Yes ___ No **X** Depth (inches): ___

Wetland Hydrology Present? **Yes** ___ **No** **X**

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

Remarks:

This area is higher in the elevation than the adjacent wetland and appears to have been drained as a result of ditching. No wetland hydrology indicators observed.

WETLAND DETERMINATION DATA FORM - Midwest Region

Project/Site: **IH-94 Mainline** City/County: **Oak Creek/ Milwaukee** Sampling Date: **9/9/2009**

Applicant/Owner: **WDOT** State: **WI** Sampling Point: **W10-1 T-1 B(w)**

Investigator(s): **Marcus S. Anderson / Tina M. Myers** Section, Township, Range: **Section 30, T5N R22E**

Landform (hillslope, terrace, etc.): **Hillslope** Local relief (concave, convex, none): **Concave**

Slope (%): **0-1%** Lat: **See Fig. 2** Long: **See Fig. 2** Datum: **NA**

Soil Map Unit Name: **Ashkum silty clay loam (AsA)** WWI Classification: **E2K**

Are climatic / hydrologic conditions on the site typical for this time of year? Yes **X** No ____ (if no, explain in Remarks)

Are Vegetation ____ Soil ____ or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes **X** No ____

Are Vegetation ____ Soil ____ or Hydrology ____ naturally problematic? (if needed, explain any answers in Remarks)

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

Hydrophytic Vegetation Present?	Yes **X**	No ____			
Hydric Soil Present?	Yes **X**	No ____	Is the Sampled Area within a Wetland?	Yes **X**	No ____
Wetland Hydrology Present?	Yes **X**	No ____			

Remarks:

VEGETATION - Use scientific names for plants.

Tree Stratum (Plot Size: **N/A**)	Absolute % Cover	Dominant Species	Indicator Status
1. **N/A**			
2.			
3.			
4.			
5.			
	0%	= Total Cover	

Sapling/Shrub Stratum (Plot Size: **N/A**)			
1. **N/A**			
2.			
3.			
4.			
5.			
	0%	= Total Cover	

Herb Stratum (Plot Size: **5 ft. radius**)			
1. ***Typha angustifolia***	**50%**	**Yes**	**OBL**
2. ***Phalaris arundinacea***	**60%**	**Yes**	**FACW**
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
	110%	= Total Cover	

Woody Vine Stratum (Plot Size: **N/A**)			
1. **N/A**			
2.			
	0%	= Total Cover	

Dominance Test Worksheet:

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

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

Percent of Dominant Species That Are OBL, FACW, or FAC: **100%** (A/B)

Prevalence Index Worksheet:

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

Prevalence Index = B/A = ____

Hydrophytic Vegetation Indicators:

X Dominance Test is >50%

____ Prevalence Index is ≤ 3.0[1]

____ Morphological Adaptations[1] (Provide supporting data in Remarks or on separate sheet)

____ Problematic Hydrophytic Vegetation[1] (Explain)

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

Hydrophytic Vegetation Present? **Yes X** **No** ____

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

This is a ditched, shallow marsh plant community.

SOIL

Sampling Point: **W10-1 T-1 B(w)**

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

Depth (inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-16	10YR 2/1	100	None				Silt loam	
16-22	10YR 2/1	100	10YR 4/4	2%	C	M	Silt loam	
22-24	10YR 2/1	70	None				Silt loam	Small shells observed
	10YR 5/2	30	10YR 5/6	10%	C	M	Silt loam	

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

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ 2 cm Muck (A10)
- ___ Depleted Below Dark Surface (A11)
- X Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ 5 cm Mucky Peat or Peat (S3)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ Coast Prairie Redox (A16)
- ___ Iron-Manganese Masses (F12)
- ___ Other (Explain in Remarks)

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

Restrictive Layer (if observed):

Type: **N/A**

Depth (inches): **N/A**

Hydric Soil Present? **Yes** X **No** ___

Remarks:

This is a problematic soil due to a deep, dark A horizon.

HYDROLOGY

Wetland Hydrology Indicators:

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

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ True Aquatic Plants (B14)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Gauge or Well Data (D9)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- X Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- X Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- X Geomorphic Position (D2)
- X FAC-Neutral Test (D5)

Field Observations:

Surface Water Present?	Yes ___	No X	Depth (inches): ___
Water Table Present?	Yes ___	No X	Depth (inches): ___
Saturation Present? (includes capillary fringe)	Yes ___	No X	Depth (inches): ___

Wetland Hydrology Present? **Yes** X **No** ___

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

Drainageway visible on aerial photograph.

Remarks:

WETLAND DETERMINATION DATA FORM - Midwest Region

Project/Site: **IH-94 Mainline** City/County: **Oak Creek/ Milwaukee** Sampling Date: **9/2/2009**

Applicant/Owner: **WDOT** State: **WI** Sampling Point: **W10-3 T-1 A(u)**

Investigator(s): **Tina M. Myers / Julie A. Paschal** Section, Township, Range: **Section 29, T5N R22E**

Landform (hillslope, terrace, etc.): **Hillslope** Local relief (concave, convex, none): **Concave**

Slope (%): **20%** Lat: **See Fig. 2** Long: **See Fig. 2** Datum: **NA**

Soil Map Unit Name: **Matherton silt loam (Mma)** WWI Classification: **None**

Are climatic / hydrologic conditions on the site typical for this time of year? Yes **X** No ____ (if no, explain in Remarks)

Are Vegetation ____ Soil ____ or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes **X** No ____

Are Vegetation ____ Soil ____ or Hydrology ____ naturally problematic? (if needed, explain any answers in Remarks)

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

Hydrophytic Vegetation Present?	Yes ____	No **X**			
Hydric Soil Present?	Yes ____	No **X**	Is the Sampled Area	Yes ____	No **X**
Wetland Hydrology Present?	Yes ____	No **X**	within a Wetland?		

Remarks:

VEGETATION - Use scientific names for plants.

Tree Stratum (Plot Size: **N/A**)	Absolute % Cover	Dominant Species	Indicator Status
1. **N/A**			
2.			
3.			
4.			
5.			
	0%	= Total Cover	

Sapling/Shrub Stratum (Plot Size: **N/A**)			
1. **N/A**			
2.			
3.			
4.			
5.			
	0%	= Total Cover	

Herb Stratum (Plot Size: **5 ft. radius**)			
1. ***Solidago canadensis***	**75%**	**Yes**	**FACU**
2. ***Phalaris arundinacea***	**25%**	**Yes**	**FACW**
3. ***Cirsium arvense***	**10%**	**No**	**FACU**
4.			
5.			
6.			
7.			
8.			
9.			
10.			
	110%	= Total Cover	

Woody Vine Stratum (Plot Size: **N/A**)			
1. **N/A**			
2.			
	0%	= Total Cover	

Dominance Test Worksheet:

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

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

Percent of Dominant Species That Are OBL, FACW, or FAC: **50%** (A/B)

Prevalence Index Worksheet:

Total % Cover of:		Multiply by:	
OBL species		x 1 =	
FACW species	**25%**	x 2 =	**50**
FAC species		x 3 =	
FACU species	**85%**	x 4 =	**340**
UPL species		x 5 =	
Column Totals:	**110%** (A)		**390** (B)

Prevalence Index = B/A = **3.54**

Hydrophytic Vegetation Indicators:

____ Dominance Test is >50%

____ Prevalence Index is ≤ 3.0[1]

____ Morphological Adaptations[1] (Provide supporting data in Remarks or on separate sheet)

____ Problematic Hydrophytic Vegetation[1] (Explain)

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

Hydrophytic Vegetation Present? Yes ____ No **X**

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

This is an upland, old field plant community.

SOIL

Sampling Point: **W10-3 T-1 A(u)**

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

Depth (inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox Features %	Type[1]	Loc[2]	Texture	Remarks
0-18	**10YR 2/1**	**100**	**None**				**Silt loam**	
18-22	**10YR 2/1**	**50**	**None**				**Silt loam**	
18-22	**10YR 4/3**	**50**	**7.5YR 4/6**	**5%**	**C**	**M**	**Loamy sand**	

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

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ 2 cm Muck (A10)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ 5 cm Mucky Peat or Peat (S3)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ Coast Prairie Redox (A16)
- ___ Iron-Manganese Masses (F12)
- ___ Other (Explain in Remarks)

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

Restrictive Layer (if observed):

Type: **N/A**

Depth (inches): **N/A**

Hydric Soil Present? **Yes** ___ **No** **X**

Remarks:

The soils are very dry.

HYDROLOGY

Wetland Hydrology Indicators:

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

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ True Aquatic Plants (B14)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Gauge or Well Data (D9)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes ___ No **X** Depth (inches): ___

Water Table Present? Yes ___ No **X** Depth (inches): ___

Saturation Present? (includes capillary fringe) Yes ___ No **X** Depth (inches): ___

Wetland Hydrology Present? **Yes** ___ **No** **X**

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

Remarks:

This sample point is located on a hillslope adjacent to a shallow marsh/wet meadow wetland along Oak Creek running beneath the Ryan Road northbound exit ramp. This area is at a higher elevation in the topography than the adjacent wetland and waterway.

WETLAND DETERMINATION DATA FORM - Midwest Region

Project/Site: **IH-94 Mainline** City/County: **Oak Creek/ Milwaukee** Sampling Date: **9/2/2009**

Applicant/Owner: **WDOT** State: **WI** Sampling Point: **W10-3 T-1 B(w)**

Investigator(s): **Tina M. Myers / Julie A. Paschal** Section, Township, Range: **Section 29, T5N R22E**

Landform (hillslope, terrace, etc.): **Terrace** Local relief (concave, convex, none): **Concave**

Slope (%): **0-2%** Lat: **See Fig. 2** Long: **See Fig. 2** Datum: **NA**

Soil Map Unit Name: **Sebewa silt loam (Sm)** WWI Classification: **T3/E2K**

Are climatic / hydrologic conditions on the site typical for this time of year? Yes **X** No ____ (if no, explain in Remarks)

Are Vegetation ____ Soil ____ or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes **X** No ____

Are Vegetation ____ Soil ____ or Hydrology ____ naturally problematic? (if needed, explain any answers in Remarks)

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

Hydrophytic Vegetation Present?	Yes **X**	No ____			
Hydric Soil Present?	Yes **X**	No ____	Is the Sampled Area within a Wetland?	Yes **X**	No ____
Wetland Hydrology Present?	Yes **X**	No ____			

Remarks:

This is a wet meadow/shallow marsh wetland located adjacent to Oak Creek running beneath the Ryan Road northbound exit ramp. East of this area, the wetland transitions into a forested riparian wetland.

VEGETATION - Use scientific names for plants.

Tree Stratum (Plot Size: **N/A**)	Absolute % Cover	Dominant Species	Indicator Status
1. **N/A**			
2.			
3.			
4.			
5.			
	0%	= Total Cover	

Sapling/Shrub Stratum (Plot Size: **N/A**)			
1. **N/A**			
2.			
3.			
4.			
5.			
	0%	= Total Cover	

Herb Stratum (Plot Size: **5 ft. radius**)			
1. ***Phalaris arundinacea***	**75%**	**Yes**	**FACW**
2. ***Typha angustifolia***	**25%**	**Yes**	**OBL**
3. ***Cirsium arvense***	**5%**	**No**	**FACU**
4. ***Solidago gigantea***	**20%**	**No**	**FACW**
5.			
6.			
7.			
8.			
9.			
10.			
	125%	= Total Cover	

Woody Vine Stratum (Plot Size: **N/A**)			
1. **N/A**			
2.			
	0%	= Total Cover	

Dominance Test Worksheet:

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

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

Percent of Dominant Species That Are OBL, FACW, or FAC: **100%** (A/B)

Prevalence Index Worksheet:

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

Prevalence Index = B/A = ____

Hydrophytic Vegetation Indicators:

X Dominance Test is >50%

____ Prevalence Index is ≤ 3.0[1]

____ Morphological Adaptations[1] (Provide supporting data in Remarks or on separate sheet)

____ Problematic Hydrophytic Vegetation[1] (Explain)

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

Hydrophytic Vegetation Present? **Yes X** **No** ____

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

This is a shallow marsh/wet meadow plant community dominated by invasive *Phalaris arundinacea* and *Typha spp*.

SOIL

Sampling Point: **W10-3 T-1 B(w)**

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

Depth (inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-6	10YR 3/1	100	None				Silt loam	
6-16	10YR 5/1	100	5YR 5/8	50%	C	PL/M	Silt	

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

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ 2 cm Muck (A10)
- X Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ 5 cm Mucky Peat or Peat (S3)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ Coast Prairie Redox (A16)
- ___ Iron-Manganese Masses (F12)
- ___ Other (Explain in Remarks)

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

Restrictive Layer (if observed):

Type: **N/A**

Depth (inches): **N/A**

Hydric Soil Present? **Yes** X **No** ___

Remarks:

Shells observed within the soil profile from 6-16 inches.

HYDROLOGY

Wetland Hydrology Indicators:

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

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- X Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- X Aquatic Fauna (B13)
- ___ True Aquatic Plants (B14)
- ___ Hydrogen Sulfide Odor (C1)
- X Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Gauge or Well Data (D9)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- X Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- X FAC-Neutral Test (D5)

Field Observations:

Surface Water Present?	Yes ___	No X	Depth (inches):	
Water Table Present?	Yes ___	No X	Depth (inches):	
Saturation Present? (includes capillary fringe)	Yes X	No ___	Depth (inches):	7

Wetland Hydrology Present? **Yes** X **No** ___

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

Oak Creek is visible on the aerial as well as some lighter tones in some adjacent areas suggesting dominance of *Phalaris arundinacea* .

Remarks:

This wet meadow/shallow marsh wetland is located adjacent to Oak Creek which is presumed to provide wetland hydrology. This area is at a lower elevation in the topography than the surrounding upland hillslopes.

WETLAND DETERMINATION DATA FORM - Midwest Region

Project/Site: **IH-94 Mainline** City/County: **Oak Creek/ Milwaukee** Sampling Date: **9/9/2009**

Applicant/Owner: **WDOT** State: **WI** Sampling Point: **W10-4 T-2 A(u)**

Investigator(s): **Marcus S. Anderson / Tina M. Myers** Section, Township, Range: **Section 29, T5N R22E**

Landform (hillslope, terrace, etc.): **Slight hillslope** Local relief (concave, convex, none): **None**

Slope (%): **1-3%** Lat: **See Fig. 2** Long: **See Fig. 2** Datum: **NA**

Soil Map Unit Name: **Sebewa silt loam (Sm)** WWI Classification: **None**

Are climatic / hydrologic conditions on the site typical for this time of year? Yes **X** No ____ (if no, explain in Remarks)

Are Vegetation ____ Soil ____ or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes **X** No ____

Are Vegetation ____ Soil ____ or Hydrology ____ naturally problematic? (if needed, explain any answers in Remarks)

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

Hydrophytic Vegetation Present?	Yes ____	No **X**			
Hydric Soil Present?	Yes **X**	No ____	Is the Sampled Area within a Wetland?	Yes ____	No **X**
Wetland Hydrology Present?	Yes ____	No **X**			

Remarks:

VEGETATION - Use scientific names for plants.

Tree Stratum (Plot Size: **30 ft. radius**)	Absolute % Cover	Dominant Species	Indicator Status
1. ***Fagus grandifolia***	**10%**	**Yes**	**FACU**
2.			
3.			
4.			
5.			
	10% = Total Cover		

Sapling/Shrub Stratum (Plot Size: **N/A**)			
1. **N/A**			
2.			
3.			
4.			
5.			
	0% = Total Cover		

Herb Stratum (Plot Size: **5 ft. radius**)			
1. ***Phalaris arundinacea***	**90%**	**Yes**	**FACW**
2. ***Cirsium arvense***	**15%**	**No**	**FACU**
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
	105% = Total Cover		

Woody Vine Stratum (Plot Size: **N/A**)			
1. **N/A**			
2.			
	0% = Total Cover		

Dominance Test Worksheet:

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

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

Percent of Dominant Species That Are OBL, FACW, or FAC: **50%** (A/B)

Prevalence Index Worksheet:

Total % Cover of:		Multiply by:	
OBL species		x 1 =	
FACW species	**90%**	x 2 =	**180**
FAC species		x 3 =	
FACU species	**25%**	x 4 =	**100**
UPL species		x 5 =	
Column Totals:	**115%** (A)		**280** (B)

Prevalence Index = B/A = **2.43**

Hydrophytic Vegetation Indicators:

____ Dominance Test is >50%

X Prevalence Index is ≤ 3.0[1]

____ Morphological Adaptations[1] (Provide supporting data in Remarks or on separate sheet)

____ Problematic Hydrophytic Vegetation[1] (Explain)

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

Hydrophytic Vegetation Present? Yes ____ No **X**

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

Phalaris arundinacea **becomes more dense downslope within the wetland boundaries and the** ***Cirsium arvense*** **is no longer present. The vegetation at this sample point meets the Prevalence Index and the FAC-Neutral Test but does not meet the Dominance Test. In addition, there were no wetland hydrology indicators observed at this sample point.** ***Phalaris arundinacea*** **is an opportunistic species often found within upland areas. It is professional opinion that this is an upland, old field plant community.**

SOIL

Sampling Point: **W10-4 T-2 A(u)**

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	**10YR 2/1**	**100**	**None**				**Silt loam**	
8-20	**10YR 2/1**	**100**	**10YR 4/4**	**2%**	**C**	**M**	**Silt loam**	

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

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ 2 cm Muck (A10)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ 5 cm Mucky Peat or Peat (S3)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- **X** Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ Coast Prairie Redox (A16)
- ___ Iron-Manganese Masses (F12)
- ___ Other (Explain in Remarks)

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

Restrictive Layer (if observed):

Type: **N/A**

Depth (inches): **N/A**

Hydric Soil Present? **Yes X** **No ___**

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

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

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ True Aquatic Plants (B14)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Gauge or Well Data (D9)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- **X** FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes ___ No **X** Depth (inches): ___

Water Table Present? Yes ___ No **X** Depth (inches): ___

Saturation Present? (includes capillary fringe) Yes ___ No **X** Depth (inches): ___

Wetland Hydrology Present? **Yes ___** **No X**

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

Remarks:

Except for the FAC-Neutral Test, no wetland hydrology indicators were observed.

WETLAND DETERMINATION DATA FORM - Midwest Region

Project/Site: **IH-94 Mainline** City/County: **Oak Creek/ Milwaukee** Sampling Date: **9/9/2009**

Applicant/Owner: **WDOT** State: **WI** Sampling Point: **W10-4 T-2 B(w)**

Investigator(s): **Marcus S. Anderson** Section, Township, Range: **Section 29, T5N R22E**

Landform (hillslope, terrace, etc.): **Depression** Local relief (concave, convex, none): **Concave**

Slope (%): **0-1%** Lat: **See Fig. 2** Long: **See Fig. 2** Datum: **NA**

Soil Map Unit Name: **Sebewa silt loam (Sm)** WWI Classification: **None**

Are climatic / hydrologic conditions on the site typical for this time of year? Yes **X** No ____ (if no, explain in Remarks)

Are Vegetation ____ Soil ____ or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes **X** No ____

Are Vegetation ____ Soil ____ or Hydrology ____ naturally problematic? (if needed, explain any answers in Remarks)

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

Hydrophytic Vegetation Present?	Yes **X**	No ____			
Hydric Soil Present?	Yes **X**	No ____	Is the Sampled Area within a Wetland?	Yes **X**	No ____
Wetland Hydrology Present?	Yes **X**	No ____			

Remarks:

This is a wet meadow wetland within a drainage area along IH-94 at the Ryan Road interchange.

VEGETATION - Use scientific names for plants.

Tree Stratum (Plot Size: **N/A**)	Absolute % Cover	Dominant Species	Indicator Status
1. **N/A**			
2.			
3.			
4.			
5.			
	0%	= Total Cover	

Sapling/Shrub Stratum (Plot Size: **N/A**)			
1. **N/A**			
2.			
3.			
4.			
5.			
	0%	= Total Cover	

Herb Stratum (Plot Size: **5 ft. radius**)			
1. ***Phalaris arundinacea***	**100%**	**Yes**	**FACW**
2.			
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
	100%	= Total Cover	

Woody Vine Stratum (Plot Size: **N/A**)			
1. **N/A**			
2.			
	0%	= Total Cover	

Dominance Test Worksheet:

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

Total Number of Dominant Species Across All Strata: **1** (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: **100%** (A/B)

Prevalence Index Worksheet:

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

Prevalence Index = B/A = ____

Hydrophytic Vegetation Indicators:

X Dominance Test is >50%

____ Prevalence Index is ≤ 3.0[1]

____ Morphological Adaptations[1] (Provide supporting data in Remarks or on separate sheet)

____ Problematic Hydrophytic Vegetation[1] (Explain)

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

Hydrophytic Vegetation Present? **Yes X** **No** ____

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

The plant community at this sample point is a *Phalaris arundinacea* monotype.

SOIL Sampling Point: **W10-4 T-2 B(w)**

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

Depth (inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox Features %	Type[1]	Loc[2]	Texture	Remarks
0-6	**10YR 2/1**	**100**					**Silt loam**	
6-18	**10YR 2/1**	**100**	**10YR 4/4**	**10%**	**C**	**M**	**Silt loam**	

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

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ 2 cm Muck (A10)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ 5 cm Mucky Peat or Peat (S3)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- **X** Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ Coast Prairie Redox (A16)
- ___ Iron-Manganese Masses (F12)
- ___ Other (Explain in Remarks)

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

Restrictive Layer (if observed):

Type: **N/A**

Depth (inches): **N/A**

Hydric Soil Present? **Yes X** **No ___**

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

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

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ True Aquatic Plants (B14)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Gauge or Well Data (D9)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- **X** Geomorphic Position (D2)
- **X** FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes ___ No **X** Depth (inches): ___

Water Table Present? Yes ___ No **X** Depth (inches): ___

Saturation Present? (includes capillary fringe) Yes **X** No ___ Depth (inches): **16**

Wetland Hydrology Present? **Yes X** **No ___**

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

Remarks:

This wetland is within a drainage area along IH-94 at the Ryan Road interchange.

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APPENDIX D

WETS Analysis

WETS Analysis

Project Site: IH 94 (North - South)
Period of interest: May - July
County: Milwaukee

Long-term rainfall records (from WETS table)

	Month	3 years in 10 less than	Normal	3 years in 10 greater than
1st month prior:	July	2.40	3.58	4.28
2nd month prior:	June	2.34	3.56	4.28
3rd month prior:	May	1.80	3.06	3.71
		Sum =	**10.20**	

Site determination

Site Rainfall (in)	Condition Dry/Normal*/Wet	Condition** Value	Month Weight	Product
2.30	Dry	1	3	3
6.11	Wet	3	2	6
2.80	Normal	2	1	2
Sum = **11.21**			Sum*** =	**11**

*Normal precipitation with 30% to 70% probability of occurrence

Determination:

	Wet
	Dry
X	Normal

**Condition value:

Dry =	1
Normal =	2
Wet =	3

***If sum is:

6 to 9	then period has been drier than normal
10 to 14	then period has been normal
15 to 18	then period has been wetter than normal

Precipitation data source: MILWAUKEE MITCHELL AP, WI839

WETS Station: MILWAUKEE MITCHELL AP, WI839

Reference: Donald E.Woodward, ed. 1997. *Hydrology Tools for Wetland Determination*, Chapter 19. Engineering Field Handbook. U.S. Department of Agriculture, Natural Resources Conservation Service, Fort Worth, TX.

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APPENDIX E

2014 Wetland Delineation Map

EXHIBIT A1

GRAEF

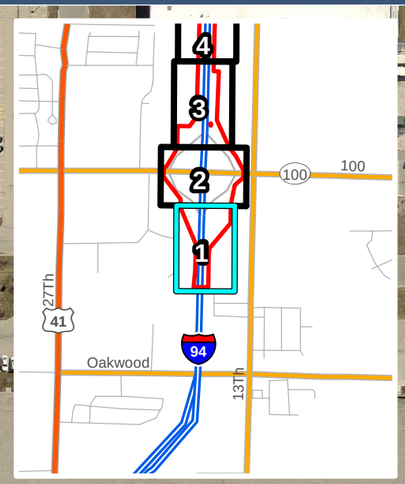
WETLAND DELINEATION UPDATE MAP (STUDY AREA A)

IH 94

WETLANDS DELINEATION UPDATE

PROJECT ID 1030-20-07

MILWAUKEE COUNTY, WISCONSIN



Legend

- Study Area
- New Wetland
- Revised Wetland
- Verified Wetland
- 2009 Sample Point
- 2014 Sample Point
- Secondary Environmental Corridor

SP-3
SP-4
T-1Bw
T-1Au
W10-3
4.21 Ac.
Oak Creek
SP-7
SP-8
W-1
0.33 Ac.
SP-1
SP-2
94
SP-50
SP-51
W-12
0.07 Ac.
T-1Au
SP-48
T-1Bw
SP-49
W10-1
3.71 Ac.
Oak Creek
Ridgeview Dr

N

0 37.5 75 150
Feet

1 in = 150 ft

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EXHIBIT A2

GRAEF

WETLAND DELINEATION UPDATE MAP (STUDY AREA A)

IH 94

WETLANDS DELINEATION UPDATE

PROJECT ID 1030-20-07

MILWAUKEE COUNTY, WISCONSIN

Legend

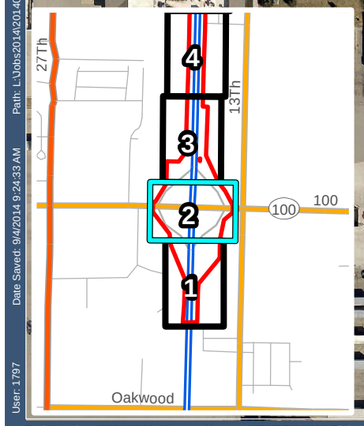
- Study Area
- New Wetland
- Revised Wetland
- Verified Wetland
- 2009 Sample Point
- 2014 Sample Point
- Waterway
- Secondary Environmental Corridor

W-10 0.02 Ac.
W9-8 0.51 Ac.
W9-9 0.84 Ac.
W9-6 0.6 Ac.
W9-7 0.1 Ac.
W-4 0.18 Ac.
W-11 0.14 Ac.
W10-1 3.71 Ac.
W10-2 0.4 Ac.
W10-4 1.56 Ac.
W-3 0.99 Ac.
W-2 0.07 Ac.
W10-3 4.21 Ac.

SP-43 SP-47 SP-46 SP-12 SP-11 SP-14 SP-13 SP-15 SP-19 SP-10 SP-9 SP-6 SP-5

T-1Bw T-1Au

Ryan Rd 100 94



N

0 37.5 75 150
Feet

1 in = 150 ft

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EXHIBIT A3

GRAEF

WETLAND DELINEATION UPDATE MAP (STUDY AREA A)

IH 94
WETLANDS DELINEATION UPDATE
PROJECT ID 1030-20-07
MILWAUKEE COUNTY, WISCONSIN

W9-4
0.25 Ac.

W9-4a
0.13 Ac.

W-6
2.35 Ac.

W-6
2.35 Ac.

W-7
0.02 Ac.

W-5
0.04 Ac.

W9-5
0.89 Ac.

W9-8
0.51 Ac.

Tributary to Oak Creek

Tributary to Oak Creek

T-1Au

T-1Bw

T-1Au

T-1Bw

T-1Au

T-1Bw

SP-16

SP-17

SP-18

SP-22

SP-23

SP-24

SP-25

SP-26

SP-27

SP-28

SP-29

SP-41

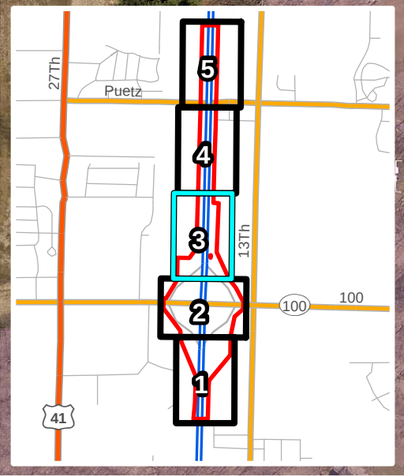
SP-42

SP-44

SP-45

94

Landscape/
Stormwater Pond



Legend

- Study Area
- New Wetland
- Revised Wetland
- Verified Wetland
- 2009 Sample Point
- 2014 Sample Point
- Secondary Environmental Corridor

N

0 37.5 75 150
Feet

1 in = 150 ft

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EXHIBIT A4

GRAEF

WETLAND DELINEATION UPDATE MAP (STUDY AREA A)

IH 94

WETLANDS DELINEATION UPDATE

PROJECT ID 1030-20-07

MILWAUKEE COUNTY, WISCONSIN

W9-3
1.47 Ac.

W9-3
0.14 Ac.

W9-4a
0.13 Ac.

W9-2
1.22 Ac.

W9-5
0.89 Ac.

T-1Bw

T-1Au

SP-31

SP-30

SP-20

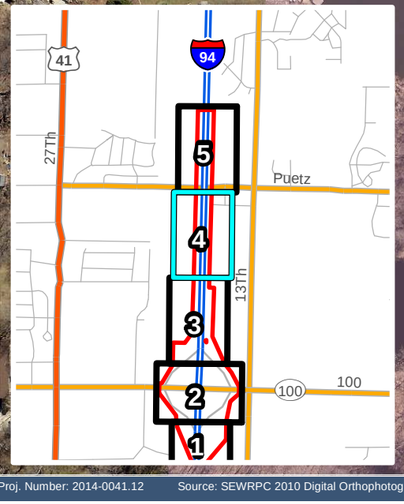
SP-21

SP-39

SP-40

Tributary to Oak Creek

94



Legend

- Study Area
- New Wetland
- Revised Wetland
- Verified Wetland
- 2009 Sample Point
- 2014 Sample Point
- Secondary Environmental Corridor

N

0 37.5 75 150
Feet

1 in = 150 ft

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Source: SEWRPC 2010 Digital Orthophotography

EXHIBIT A5

GRAEF

WETLAND DELINEATION UPDATE MAP (STUDY AREA A)

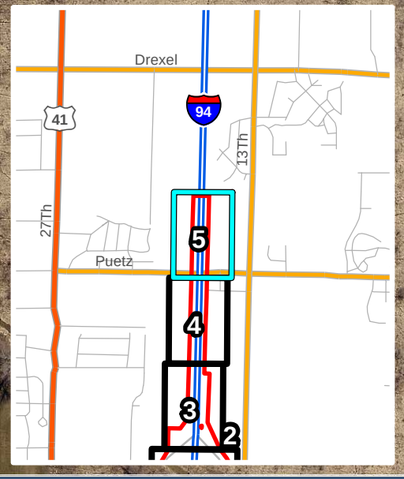
IH 94

WETLANDS DELINEATION UPDATE

PROJECT ID 1030-20-07

MILWAUKEE COUNTY, WISCONSIN

T-1Bw
W8-6
0.01 Ac.
T-1Au
94
W8-7
0.57 Ac.
T-1Au
T-1Bw
W-9
0.07 Ac.
SP-34
SP-32
SP-33
W-8
0.02 Ac.
SP-35
SP-36
Puetz Rd
SP-37
SP-38
T-1Bw
W8-8
0.86 Ac.
T-1Au



Legend

- Study Area
- New Wetland
- Revised Wetland
- Verified Wetland
- 2009 Sample Point
- 2014 Sample Point

N

0 37.5 75 150
Feet

1 in = 150 ft

Proj. Number: 2014-0041.12 Source: SEWRPC 2010 Digital Orthophotography

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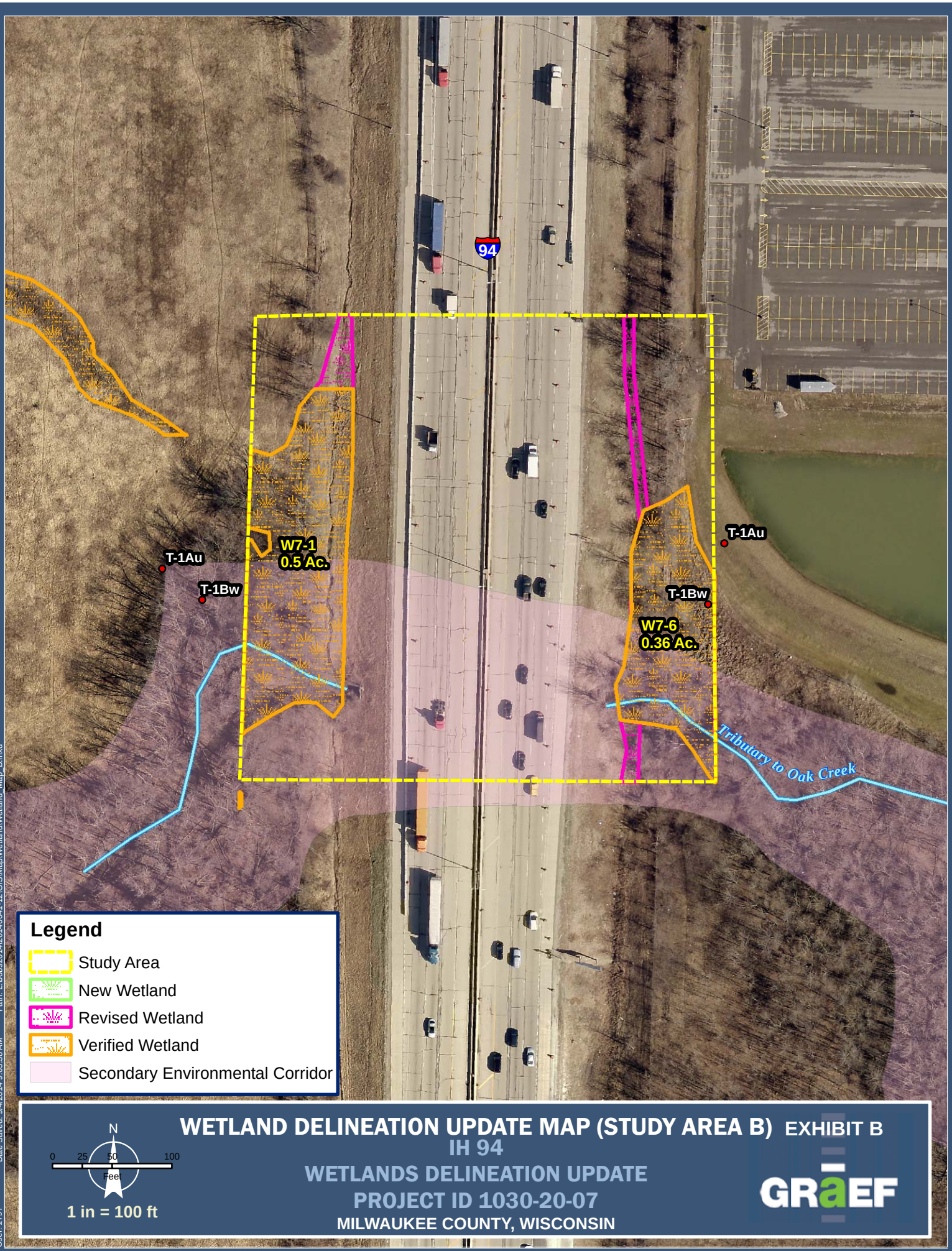

WETLAND DELINEATION UPDATE MAP (STUDY AREA B) EXHIBIT B

IH 94

WETLANDS DELINEATION UPDATE

PROJECT ID 1030-20-07

MILWAUKEE COUNTY, WISCONSIN

GRAEF

Path: L:\Jobs\2014\20140041-12\GIS\Map\Wetland\Wetland_Map_B.mxd
Date Saved: 9/4/2014 9:05:38 AM
User: 1797

Proj. Number: 2014-0041.12
Source: 2013 Milwaukee County Pictometry Accuplus

APPENDIX F

Site Photographs

SITE PHOTOGRAPHS

IH 94 (N-S Freeway)
Milwaukee County, Wisconsin

Photos Taken by GRAEF on August 1, 4, 6, 18, and 19, 2014

Photo #: 1

Direction of View:

North

Comment:

Photo of wetland W-1 contained within a roadside ditch.

Photo #: 2

Direction of View:

East

Comment:

Upland sample point SP-1. Paired with SP-2.

SITE PHOTOGRAPHS

IH 94 (N-S Freeway)
Milwaukee County, Wisconsin

Photos Taken by GRAEF on August 1, 4, 6, 18, and 19, 2014

Photo #: 3

Direction of View:

West

Comment:

Wetland W-1 sample point SP-2. Paired with SP-1.

Photo #: 4

Direction of View:

West

Comment:

South boundary of wetland W10-3 was revised due to the construction of a off ramp bridge over Oak Creek and associated rip rap.

SITE PHOTOGRAPHS

IH 94 (N-S Freeway)
Milwaukee County, Wisconsin

Photos Taken by GRAEF on August 1, 4, 6, 18, and 19, 2014

Photo #: 5

Direction of View:

North

Comment:

Upland sample point SP-3. Paired with SP-4.

Photo #: 6

Direction of View:

South-southwest

Comment:

Wetland W10-3 sample point SP-4. Paired with SP-3. North boundary was revised and an increase in wetland area resulted.

SITE PHOTOGRAPHS

IH 94 (N-S Freeway)
Milwaukee County, Wisconsin

Photos Taken by GRAEF on August 1, 4, 6, 18, and 19, 2014

Photo #: 7

Direction of View:

Northeast

Comment:

Southern end of wetland W10-3 was expanded to include a wetland within a ditch.

Photo #: 8

Direction of View:

West

Comment:

Upland sample point SP-5. Paired with SP-6.

SITE PHOTOGRAPHS

IH 94 (N-S Freeway)
Milwaukee County, Wisconsin

Photos Taken by GRAEF on August 1, 4, 6, 18, and 19, 2014

Photo #: 9

Direction of View:

West

Comment:

Wetland W10-3 sample point SP-6. Paired with SP-5. W10-3 was expanded to include a wetland area within a ditch.

Photo #: 10

Direction of View:

North

Comment:

Upland sample point SP-7. Paired with SP-8.

SITE PHOTOGRAPHS

IH 94 (N-S Freeway)
Milwaukee County, Wisconsin

Photos Taken by GRAEF on August 1, 4, 6, 18, and 19, 2014

Photo #: 11

Direction of View:

South

Comment:

Wetland W10-3 sample point SP-7. Boundary revised due to permitted roadway improvement resulting in fill and change to wetland boundary location.

Photo #: 12

Direction of View:

South

Comment:

Upland sample point SP-9. Paired with SP-10

SITE PHOTOGRAPHS

IH 94 (N-S Freeway)
Milwaukee County, Wisconsin

Photos Taken by GRAEF on August 1, 4, 6, 18, and 19, 2014

Photo #: 13

Direction of View:

North

Comment:
Wetland W-2 sample point SP-10. Paired with SP-9.

Photo #: 14

Direction of View:

South

Comment:

View of revised eastern boundary of wetland W10-4 as a result of the construction of a new off ramp from IH 94 towards STH 100.

SITE PHOTOGRAPHS

IH 94 (N-S Freeway)
Milwaukee County, Wisconsin

Photos Taken by GRAEF on August 1, 4, 6, 18, and 19, 2014

Photo #: 15

Direction of View:

South-southwest

Comment:

Upland sample point SP-11. Paired with SP-12.

Photo #: 16

Direction of View:

North

Comment:

Wetland W10-4 sample point SP-12. Paired with SP-11.

SITE PHOTOGRAPHS

IH 94 (N-S Freeway)
Milwaukee County, Wisconsin

Photos Taken by GRAEF on August 1, 4, 6, 18, and 19, 2014

Photo #: 17

Direction of View:

East

Comment:

Upland sample point SP-13. Paired with SP-14 and SP-15.

Photo #: 18

Direction of View:

Southwest

Comment:

Wetland W-3 sample point SP-14.

SITE PHOTOGRAPHS

IH 94 (N-S Freeway)
Milwaukee County, Wisconsin

Photos Taken by GRAEF on August 1, 4, 6, 18, and 19, 2014

Photo #: 19

Direction of View:

Southwest

Comment:

Wetland W-3 sample point SP-15.

Photo #: 20

Direction of View:

West

Comment:

Wetland W-3 sample point SP-19.
Wetland area located on a side slope.

SITE PHOTOGRAPHS

IH 94 (N-S Freeway)
Milwaukee County, Wisconsin

Photos Taken by GRAEF on August 1, 4, 6, 18, and 19, 2014

Photo #: 21

Direction of View:

South

Comment:

Upland sample point SP-16. Paired with SP-17 and SP-18.

Photo #: 22

Direction of View:

East

Comment:

Wetland W-4 sample point SP-17.

SITE PHOTOGRAPHS

IH 94 (N-S Freeway)
Milwaukee County, Wisconsin

Photos Taken by GRAEF on August 1, 4, 6, 18, and 19, 2014

Photo #: 23

Direction of View:

East

Comment:

Wetland W-5 sample point SP-18.

Photo #: 24

Direction of View:

South

Comment:

Upland sample point SP-20. Paired with SP-21.

SITE PHOTOGRAPHS

IH 94 (N-S Freeway)
Milwaukee County, Wisconsin

Photos Taken by GRAEF on August 1, 4, 6, 18, and 19, 2014

Photo #: 25

Direction of View:

East

Comment:

Wetland W-6 sample point SP-21.

Photo #: 26

Direction of View:

East

Comment:

Upland sample point SP-22. Paired with SP-23.

SITE PHOTOGRAPHS

IH 94 (N-S Freeway)
Milwaukee County, Wisconsin

Photos Taken by GRAEF on August 1, 4, 6, 18, and 19, 2014

Photo #: 27

Direction of View:

West

Comment:

Wetland W-6 sample point SP-23.

Photo #: 28

Direction of View:

East-northeast

Comment:

Upland sample point SP-24. Paired with SP-25.

SITE PHOTOGRAPHS

IH 94 (N-S Freeway)
Milwaukee County, Wisconsin

Photos Taken by GRAEF on August 1, 4, 6, 18, and 19, 2014

Photo #: 29

Direction of View:

Southwest

Comment:

Wetland W-6 sample point SP-25.

Photo #: 30

Direction of View:

East

Comment:

Upland sample point SP-26. Paired with SP-27.

SITE PHOTOGRAPHS

IH 94 (N-S Freeway)
Milwaukee County, Wisconsin

Photos Taken by GRAEF on August 1, 4, 6, 18, and 19, 2014

Photo #: 31

Direction of View:

Southwest

Comment:

Wetland W-7 sample point SP-27.

Photo #: 32

Direction of View:

Southeast

Comment:

Upland sample point SP-28. Paired with SP-29.

SITE PHOTOGRAPHS

IH 94 (N-S Freeway)
Milwaukee County, Wisconsin

Photos Taken by GRAEF on August 1, 4, 6, 18, and 19, 2014

Photo #: 33

Direction of View:

East

Comment:

Wetland W-6 sample point SP-29.

Photo #: 34

Direction of View:

Southeast

Comment:

Southern end of W9-6 was revised due to permitted roadway improvements resulting in fill and change in the boundary. Tributary to Oak Creek flows into culvert.

SITE PHOTOGRAPHS

IH 94 (N-S Freeway)
Milwaukee County, Wisconsin

Photos Taken by GRAEF on August 1, 4, 6, 18, and 19, 2014

Photo #: 35

Direction of View:

South

Comment:

Upland sample point SP-30. Paired with SP-31.

Photo #: 36

Direction of View:

North

Comment:

Wetland W9-3 sample point SP-31.

SITE PHOTOGRAPHS

IH 94 (N-S Freeway)
Milwaukee County, Wisconsin

Photos Taken by GRAEF on August 1, 4, 6, 18, and 19, 2014

Photo #: 37

Direction of View:

East

Comment:

Upland sample point SP-32. Paired with SP-33 and SP-34.

Photo #: 38

Direction of View:

South

Comment:

Wetland W-8 sample point SP-33.

SITE PHOTOGRAPHS

IH 94 (N-S Freeway)
Milwaukee County, Wisconsin

Photos Taken by GRAEF on August 1, 4, 6, 18, and 19, 2014

Photo #: 39

Direction of View:

East

Comment:

Wetland W-9 sample point SP-34.

Photo #: 40

Direction of View:

North

Comment:

Upland sample point SP-35. Paired with SP-36.

SITE PHOTOGRAPHS

IH 94 (N-S Freeway)
Milwaukee County, Wisconsin

Photos Taken by GRAEF on August 1, 4, 6, 18, and 19, 2014

Photo #: 41

Direction of View:

West

Comment:

Wetland W8-8 sample point SP-36.

Photo #: 42

Direction of View:

East

Comment:

Upland sample point SP-37. Paired with SP-38.

SITE PHOTOGRAPHS

IH 94 (N-S Freeway)
Milwaukee County, Wisconsin

Photos Taken by GRAEF on August 1, 4, 6, 18, and 19, 2014

Photo #: 43

Direction of View:

West

Comment:

Wetland W9-2 sample point SP-38.

Photo #: 44

Direction of View:

North

Comment:

Upland sample point SP-39. Paired with SP-40.

SITE PHOTOGRAPHS

IH 94 (N-S Freeway)
Milwaukee County, Wisconsin

Photos Taken by GRAEF on August 1, 4, 6, 18, and 19, 2014

Photo #: 45

Direction of View:

South

Comment:

Wetland W9-5 sample point SP-40.

Photo #: 46

Direction of View:

Northeast

Comment:

Upland sample point SP-41. Paired with SP-42 and SP-43.

SITE PHOTOGRAPHS

IH 94 (N-S Freeway)
Milwaukee County, Wisconsin

Photos Taken by GRAEF on August 1, 4, 6, 18, and 19, 2014

Photo #: 47

Direction of View:

West

Comment:

Wetland W9-5 sample point SP-42.

Photo #: 48

Direction of View:

West

Comment:

Wetland W-10 sample point SP-43.

SITE PHOTOGRAPHS

IH 94 (N-S Freeway)
Milwaukee County, Wisconsin

Photos Taken by GRAEF on August 1, 4, 6, 18, and 19, 2014

Photo #: 49

Direction of View:

South

Comment:

Upland sample point SP-44. Paired with SP-45.

Photo #: 50

Direction of View:

South

Comment:

Wetland W9-8 sample point SP-45.

SITE PHOTOGRAPHS

IH 94 (N-S Freeway)
Milwaukee County, Wisconsin

Photos Taken by GRAEF on August 1, 4, 6, 18, and 19, 2014

Photo #: 51

Direction of View:

Southeast

Comment:

Upland sample point SP-46. Paired with SP-47.

Photo #: 52

Direction of View:

North-northwest

Comment:

Wetland W-11 sample point SP-47.

SITE PHOTOGRAPHS

IH 94 (N-S Freeway)
Milwaukee County, Wisconsin

Photos Taken by GRAEF on August 1, 4, 6, 18, and 19, 2014

Photo #: 53

Direction of View:

East

Comment:

Upland sample point SP-48. Paired with SP-49.

Photo #: 54

Direction of View:

West

Comment:

Wetland W10-1 sample point SP-49.

SITE PHOTOGRAPHS

IH 94 (N-S Freeway)
Milwaukee County, Wisconsin

Photos Taken by GRAEF on August 1, 4, 6, 18, and 19, 2014

Photo #: 55

Direction of View:

South

Comment:

Upland sample point SP-50. Paired with SP-51.

Photo #: 56

Direction of View:

South

Comment:

Wetland W-12 sample point SP-51.

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APPENDIX G

2014 Wetland Determination Data Forms

WETLAND DETERMINATION DATA FORM - Midwest Region

Project/Site: IH 94 (N-S Freeway) City/County: Milwaukee County Sampling Date: 01-Aug-14

Applicant/Owner: Wisconsin Department of Transportation State: WI Sampling Point: **SP-1**

Investigator(s): Ron Londre, Geof Parish Section, Township, Range: S 30 T 5N R 22E

Landform (hillslope, terrace, etc.): Backslope Local relief (concave, convex, none): convex

Slope: 25.0% 14.0 ° Lat.: Long.: Datum:

Soil Map Unit Name: Morley silt loam (MzdB2), Not hydric WWI classification: None

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

Are Vegetation ☐ , Soil ☑ , or Hydrology ☐ significantly disturbed? Are "Normal Circumstances" present? Yes ◉ No ○

Are Vegetation ☐ , Soil ☐ , or Hydrology ☐ naturally problematic? (If needed, explain any answers in Remarks.)

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

Hydrophytic Vegetation Present?	Yes ○	No ◉	**Is the Sampled Area within a Wetland?** **Yes** ○ **No** ◉
Hydric Soil Present?	Yes ○	No ◉	
Wetland Hydrology Present?	Yes ○	No ◉	

Remarks:
This point is located on the side slope alongside IH 94.
None of the three parameters have been met at this point. Thus, this point is located in an upland.

VEGETATION - Use scientific names of plants.

	Absolute % Cover	Dominant Species? Rel.Strat. Cover	Indicator Status
Tree Stratum (Plot size: 30' r)			
1.	0	☐ 0.0%	
2.	0	☐ 0.0%	
3.	0	☐ 0.0%	
4.	0	☐ 0.0%	
5.	0	☐ 0.0%	
	0	= Total Cover	
Sapling/Shrub Stratum (Plot size: 15' r)			
1.	0	☐ 0.0%	
2.	0	☐ 0.0%	
3.	0	☐ 0.0%	
4.	0	☐ 0.0%	
5.	0	☐ 0.0%	
	0	= Total Cover	
Herb Stratum (Plot size: 5' r)			
1. Festuca rubra	75	☑ 61.0%	FACU
2. Cornus racemosa	15	☐ 12.2%	FAC
3. Poa pratensis	10	☐ 8.1%	FAC
4. Daucus carota	5	☐ 4.1%	UPL
5. Euthamia graminifolia	5	☐ 4.1%	FACW
6. Symphyotrichum novae-angliae	5	☐ 4.1%	FACW
7. Vitis riparia	5	☐ 4.1%	FACW
8. Parthenocissus quinquefolia	3	☐ 2.4%	FACU
9.	0	☐ 0.0%	
10.	0	☐ 0.0%	
	123	= Total Cover	
Woody Vine Stratum (Plot size: 30' r)			
1.	0	☐ 0.0%	
2.	0	☐ 0.0%	
	0	= Total Cover	

Dominance Test worksheet:

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

Total Number of Dominant Species Across All Strata: 1 (B)

Percent of dominant Species That Are OBL, FACW, or FAC: 0.0% (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	15	x 2 =	30
FAC species	25	x 3 =	75
FACU species	78	x 4 =	312
UPL species	5	x 5 =	25
Column Totals:	123 (A)		442 (B)

Prevalence Index = B/A = 3.593

Hydrophytic Vegetation Indicators:

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

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

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

Remarks: (Include photo numbers here or on a separate sheet.)
The criterion for hydrophytic vegetation is not met at this point.

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

SOIL

Sampling Point: **SP-1**

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

Depth (inches)	Matrix Color (moist)		%	Redox Features Color (moist)	%	Type [1]	Loc²	Texture	Remarks
0-14	10YR	4/2	100					Silty Clay Loam	
14-20	10YR	4/4	50					Sandy Clay Loam	
	10YR	4/2	50						

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

Hydric Soil Indicators:

- ☐ Histosol (A1)
- ☐ Histic Epipedon (A2)
- ☐ Black Histic (A3)
- ☐ Hydrogen Sulfide (A4)
- ☐ Stratified Layers (A5)
- ☐ 2 cm Muck (A10)
- ☐ Depleted Below Dark Surface (A11)
- ☐ Thick Dark Surface (A12)
- ☐ Sandy Muck Mineral (S1)
- ☐ 5 cm Mucky Peat or Peat (S3)
- ☐ Sandy Gleyed Matrix (S4)
- ☐ Sandy Redox (S5)
- ☐ Stripped Matrix (S6)
- ☐ Loamy Mucky Mineral (F1)
- ☐ Loamy Gleyed Matrix (F2)
- ☐ Depleted Matrix (F3)
- ☐ Redox Dark Surface (F6)
- ☐ Depleted Dark Surface (F7)
- ☐ Redox Depressions (F8)

Indicators for Problematic Hydric Soils [3]:

- ☐ Coast Prairie Redox (A16)
- ☐ Dark Surface (S7)
- ☐ Iron Manganese Masses (F12)
- ☐ Very Shallow Dark Surface (TF12)
- ☐ Other (Explain in Remarks)

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

Restrictive Layer (if observed):

Type: None

Depth (inches): NA

Hydric Soil Present? **Yes** ○ **No** ◉

Remarks:

Soil appears to be a roadside fill soil and thus disturbed.
The criterion for hydric soil is not met at this point.

HYDROLOGY

Wetland Hydrology Indicators:

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

- ☐ Surface Water (A1)
- ☐ High Water Table (A2)
- ☐ Saturation (A3)
- ☐ Water Marks (B1)
- ☐ Sediment Deposits (B2)
- ☐ Drift Deposits (B3)
- ☐ Algal Mat or Crust (B4)
- ☐ Iron Deposits (B5)
- ☐ Inundation Visible on Aerial Imagery (B7)
- ☐ Sparsely Vegetated Concave Surface (B8)
- ☐ Water-Stained Leaves (B9)
- ☐ Aquatic Fauna (B13)
- ☐ True Aquatic Plants (B14)
- ☐ Hydrogen Sulfide Odor (C1)
- ☐ Oxidized Rhizospheres on Living Roots (C3)
- ☐ Presence of Reduced Iron (C4)
- ☐ Recent Iron Reduction in Tilled Soils (C6)
- ☐ Thin Muck Surface (C7)
- ☐ Gauge or Well Data (D9)
- ☐ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ☐ Surface Soil Cracks (B6)
- ☐ Drainage Patterns (B10)
- ☐ Dry Season Water Table (C2)
- ☐ Crayfish Burrows (C8)
- ☐ Saturation Visible on Aerial Imagery (C9)
- ☐ Stunted or Stressed Plants (D1)
- ☐ Geomorphic Position (D2)
- ☐ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes ○ No ◉ Depth (inches): _____

Water Table Present? Yes ○ No ◉ Depth (inches): _____

Saturation Present? (includes capillary fringe) Yes ○ No ◉ Depth (inches): _____

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

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

Previous delineation, DNR WWI map, NRCS Soils map, Topographic map, Aerial photos

Remarks:

Based on a WETS analysis, antecedent precipitation was within a normal range.
The criterion for hydrology is not met at this point.

WETLAND DETERMINATION DATA FORM - Midwest Region

Project/Site: IH 94 (N-S Freeway) City/County: Milwaukee County Sampling Date: 01-Aug-14

Applicant/Owner: Wisconsin Department of Transportation State: WI Sampling Point: **SP-2**

Investigator(s): Ron Londre, Geof Parish Section, Township, Range: S 30 T 5N R 22E

Landform (hillslope, terrace, etc.): Toeslope Local relief (concave, convex, none): concave

Slope: 2.0% 1.1 ° Lat.: Long.: Datum:

Soil Map Unit Name: Morley silt loam (MzdB2), Not hydric WWI classification: None

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

Are Vegetation [ ], Soil [ ], or Hydrology [ ] significantly disturbed? Are "Normal Circumstances" present? Yes (●) No ( )

Are Vegetation [ ], Soil [✓], or Hydrology [ ] naturally problematic? (If needed, explain any answers in Remarks.)

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

Hydrophytic Vegetation Present?	Yes (●) No ( )	**Is the Sampled Area within a Wetland?** **Yes (●) No ( )**
Hydric Soil Present?	Yes (●) No ( )	
Wetland Hydrology Present?	Yes (●) No ( )	

Remarks:
This point is located in a roadside ditch. All three parameters have been met at this point. Thus, this point is located in a wetland.
Wetland ID: W-1

VEGETATION - Use scientific names of plants.

Tree Stratum (Plot size: 12' x 235')	Absolute % Cover	Dominant Species?	Rel.Strat. Cover	Indicator Status
1.	0	[ ]	0.0%	
2.	0	[ ]	0.0%	
3.	0	[ ]	0.0%	
4.	0	[ ]	0.0%	
5.	0	[ ]	0.0%	
	0	= Total Cover		
Sapling/Shrub Stratum (Plot size: 12' x 58')				
1.	0	[ ]	0.0%	
2.	0	[ ]	0.0%	
3.	0	[ ]	0.0%	
4.	0	[ ]	0.0%	
5.	0	[ ]	0.0%	
	0	= Total Cover		
Herb Stratum (Plot size: 5' r)				
1. Typha angustifolia	90	[✓]	81.1%	OBL
2. Solidago gigantea	10	[ ]	9.0%	FACW
3. Solidago canadensis	5	[ ]	4.5%	FACU
4. Festuca rubra	3	[ ]	2.7%	FACU
5. Sonchus arvensis	3	[ ]	2.7%	FACU
6.	0	[ ]	0.0%	
7.	0	[ ]	0.0%	
8.	0	[ ]	0.0%	
9.	0	[ ]	0.0%	
10.	0	[ ]	0.0%	
	111	= Total Cover		
Woody Vine Stratum (Plot size: 12' x 235')				
1.	0	[ ]	0.0%	
2.	0	[ ]	0.0%	
	0	= Total Cover		

Dominance Test worksheet:

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

Total Number of Dominant Species Across All Strata: 1 (B)

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

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	90	x 1 =	90
FACW species	10	x 2 =	20
FAC species	0	x 3 =	0
FACU species	11	x 4 =	44
UPL species	0	x 5 =	0
Column Totals:	111 (A)		154 (B)

Prevalence Index = B/A = 1.387

Hydrophytic Vegetation Indicators:

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

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

Hydrophytic Vegetation Present? **Yes (●) No ( )**

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

Vegetation at this point is representative of a shallow marsh plant community.
The criterion for hydrophytic vegetation is met at this point.

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

SOIL

Sampling Point: **SP-2**

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

Depth (inches)	Matrix Color (moist)		%	Redox Features Color (moist)		%	Type [1]	Loc [2]	Texture	Remarks
0-6	10YR	2/2	100						Silt Loam	
6-15	10YR	5/2	80	7.5YR	5/6	20	C	M	Silty Clay Loam	
15-20	10YR	5/1	90	7.5YR	5/6	10	C	M	Silty Clay	

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

Hydric Soil Indicators:

- ☐ Histosol (A1)
- ☐ Histic Epipedon (A2)
- ☐ Black Histic (A3)
- ☐ Hydrogen Sulfide (A4)
- ☐ Stratified Layers (A5)
- ☐ 2 cm Muck (A10)
- ☑ Depleted Below Dark Surface (A11)
- ☐ Thick Dark Surface (A12)
- ☐ Sandy Muck Mineral (S1)
- ☐ 5 cm Mucky Peat or Peat (S3)
- ☐ Sandy Gleyed Matrix (S4)
- ☐ Sandy Redox (S5)
- ☐ Stripped Matrix (S6)
- ☐ Loamy Mucky Mineral (F1)
- ☐ Loamy Gleyed Matrix (F2)
- ☑ Depleted Matrix (F3)
- ☐ Redox Dark Surface (F6)
- ☐ Depleted Dark Surface (F7)
- ☐ Redox Depressions (F8)

Indicators for Problematic Hydric Soils [3]:

- ☐ Coast Prairie Redox (A16)
- ☐ Dark Surface (S7)
- ☐ Iron Manganese Masses (F12)
- ☐ Very Shallow Dark Surface (TF12)
- ☐ Other (Explain in Remarks)

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

Restrictive Layer (if observed):

Type: None

Depth (inches): NA

Hydric Soil Present? **Yes** ◉ **No** ○

Remarks:

Soil appears to be a roadside fill soil and thus disturbed.
The criterion for hydric soil is met at this point.

HYDROLOGY

Wetland Hydrology Indicators:

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

- ☐ Surface Water (A1)
- ☐ High Water Table (A2)
- ☐ Saturation (A3)
- ☐ Water Marks (B1)
- ☐ Sediment Deposits (B2)
- ☐ Drift Deposits (B3)
- ☐ Algal Mat or Crust (B4)
- ☐ Iron Deposits (B5)
- ☐ Inundation Visible on Aerial Imagery (B7)
- ☐ Sparsely Vegetated Concave Surface (B8)
- ☐ Water-Stained Leaves (B9)
- ☐ Aquatic Fauna (B13)
- ☐ True Aquatic Plants (B14)
- ☐ Hydrogen Sulfide Odor (C1)
- ☐ Oxidized Rhizospheres on Living Roots (C3)
- ☐ Presence of Reduced Iron (C4)
- ☐ Recent Iron Reduction in Tilled Soils (C6)
- ☐ Thin Muck Surface (C7)
- ☐ Gauge or Well Data (D9)
- ☐ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ☐ Surface Soil Cracks (B6)
- ☐ Drainage Patterns (B10)
- ☐ Dry Season Water Table (C2)
- ☐ Crayfish Burrows (C8)
- ☐ Saturation Visible on Aerial Imagery (C9)
- ☐ Stunted or Stressed Plants (D1)
- ☑ Geomorphic Position (D2)
- ☑ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes ○ No ◉ Depth (inches): _____

Water Table Present? Yes ○ No ◉ Depth (inches): _____

Saturation Present? (includes capillary fringe) Yes ○ No ◉ Depth (inches): _____

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

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

Previous delineation, DNR WWI map, NRCS Soils map, Topographic map, Aerial photos

Remarks:

Based on a WETS analysis, antecedent precipitation was within a normal range.
The criterion for hydrology is met at this point.

WETLAND DETERMINATION DATA FORM - Midwest Region

Project/Site: IH 94 (N-S Freeway) City/County: Milwaukee County Sampling Date: 01-Aug-14

Applicant/Owner: Wisconsin Department of Transportation State: WI Sampling Point: **SP-3**

Investigator(s): Ron Londre, Geof Parish Section, Township, Range: S 30 T 5N R 22E

Landform (hillslope, terrace, etc.): Shoulder slope Local relief (concave, convex, none): convex

Slope: 0.0% 0.0 ° Lat.: Long.: Datum:

Soil Map Unit Name: Aztalan loam (AsA), not hydric WWI classification: None

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

Are Vegetation ☐ , Soil ☐ , or Hydrology ☐ significantly disturbed? Are "Normal Circumstances" present? Yes ◉ No ○

Are Vegetation ☐ , Soil ☐ , or Hydrology ☐ naturally problematic? (If needed, explain any answers in Remarks.)

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

Hydrophytic Vegetation Present?	Yes ○ No ◉	**Is the Sampled Area within a Wetland?** **Yes ○ No ◉**
Hydric Soil Present?	Yes ○ No ◉	
Wetland Hydrology Present?	Yes ○ No ◉	

Remarks:
None of the parameters have been met at this point. Thus, this point is located in an upland.

VEGETATION - Use scientific names of plants.

	Absolute % Cover	Dominant Species? Rel.Strat. Cover	Indicator Status
Tree Stratum (Plot size: 30' r)			
1.	0	☐ 0.0%	
2.	0	☐ 0.0%	
3.	0	☐ 0.0%	
4.	0	☐ 0.0%	
5.	0	☐ 0.0%	
	0	= Total Cover	
Sapling/Shrub Stratum (Plot size: 15' r)			
1.	0	☐ 0.0%	
2.	0	☐ 0.0%	
3.	0	☐ 0.0%	
4.	0	☐ 0.0%	
5.	0	☐ 0.0%	
	0	= Total Cover	
Herb Stratum (Plot size: 5' r)			
1. Euthamia graminifolia	60	☑ 50.0%	FACW
2. Solidago canadensis	25	☑ 20.8%	FACU
3. Solidago gigantea	15	☐ 12.5%	FACW
4. Agrimonia gryposepala	5	☐ 4.2%	FACU
5. Crataegus punctata	5	☐ 4.2%	UPL
6. Vitis riparia	5	☐ 4.2%	FACW
7. Ulmus americana	3	☐ 2.5%	FACW
8. Phalaris arundinacea	2	☐ 1.7%	FACW
9.	0	☐ 0.0%	
10.	0	☐ 0.0%	
	120	= Total Cover	
Woody Vine Stratum (Plot size: 30' r)			
1.	0	☐ 0.0%	
2.	0	☐ 0.0%	
	0	= Total Cover	

Dominance Test worksheet:

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

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

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

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	85	x 2 =	170
FAC species	0	x 3 =	0
FACU species	30	x 4 =	120
UPL species	5	x 5 =	25
Column Totals:	120 (A)		315 (B)

Prevalence Index = B/A = 2.625

Hydrophytic Vegetation Indicators:

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

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

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

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

This point is located in a mesic to wet-mesic praire plant community.
The criterion for hydrophytic vegetation is not met at this point.

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

SOIL

Sampling Point: **SP-3**

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

Depth (inches)	Matrix Color (moist)		%	Redox Features Color (moist)		%	Type [1]	Loc [2]	Texture	Remarks
0-13	10YR	3/2	100						Silty Clay Loam	
13-20	10YR	4/2	75	7.5YR	4/4	15	C	M	Sandy Clay Loam	
				10YR	4/1	10	D	M		

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

Hydric Soil Indicators:

- ☐ Histosol (A1)
- ☐ Histic Epipedon (A2)
- ☐ Black Histic (A3)
- ☐ Hydrogen Sulfide (A4)
- ☐ Stratified Layers (A5)
- ☐ 2 cm Muck (A10)
- ☐ Depleted Below Dark Surface (A11)
- ☐ Thick Dark Surface (A12)
- ☐ Sandy Muck Mineral (S1)
- ☐ 5 cm Mucky Peat or Peat (S3)
- ☐ Sandy Gleyed Matrix (S4)
- ☐ Sandy Redox (S5)
- ☐ Stripped Matrix (S6)
- ☐ Loamy Mucky Mineral (F1)
- ☐ Loamy Gleyed Matrix (F2)
- ☐ Depleted Matrix (F3)
- ☐ Redox Dark Surface (F6)
- ☐ Depleted Dark Surface (F7)
- ☐ Redox Depressions (F8)

Indicators for Problematic Hydric Soils [3]:

- ☐ Coast Prairie Redox (A16)
- ☐ Dark Surface (S7)
- ☐ Iron Manganese Masses (F12)
- ☐ Very Shallow Dark Surface (TF12)
- ☐ Other (Explain in Remarks)

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

Restrictive Layer (if observed):

Type: None

Depth (inches): NA

Hydric Soil Present? Yes ○ No ◉

Remarks:

The criterion for hydric soil is not met at this point.

HYDROLOGY

Wetland Hydrology Indicators:

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

- ☐ Surface Water (A1)
- ☐ High Water Table (A2)
- ☐ Saturation (A3)
- ☐ Water Marks (B1)
- ☐ Sediment Deposits (B2)
- ☐ Drift Deposits (B3)
- ☐ Algal Mat or Crust (B4)
- ☐ Iron Deposits (B5)
- ☐ Inundation Visible on Aerial Imagery (B7)
- ☐ Sparsely Vegetated Concave Surface (B8)
- ☐ Water-Stained Leaves (B9)
- ☐ Aquatic Fauna (B13)
- ☐ True Aquatic Plants (B14)
- ☐ Hydrogen Sulfide Odor (C1)
- ☐ Oxidized Rhizospheres on Living Roots (C3)
- ☐ Presence of Reduced Iron (C4)
- ☐ Recent Iron Reduction in Tilled Soils (C6)
- ☐ Thin Muck Surface (C7)
- ☐ Gauge or Well Data (D9)
- ☐ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ☐ Surface Soil Cracks (B6)
- ☐ Drainage Patterns (B10)
- ☐ Dry Season Water Table (C2)
- ☐ Crayfish Burrows (C8)
- ☐ Saturation Visible on Aerial Imagery (C9)
- ☐ Stunted or Stressed Plants (D1)
- ☐ Geomorphic Position (D2)
- ☐ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes ○ No ◉ Depth (inches): _____

Water Table Present? Yes ○ No ◉ Depth (inches): _____

Saturation Present? (includes capillary fringe) Yes ○ No ◉ Depth (inches): _____

Wetland Hydrology Present? Yes ○ No ◉

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

Previous delineation, DNR WWI map, NRCS Soils map, Topographic map, Aerial photos

Remarks:

Based on a WETS analysis, antecedent precipitation was within a normal range.
The criterion for hydrology is not met at this point.

WETLAND DETERMINATION DATA FORM - Midwest Region

Project/Site: IH 94 (N-S Freeway) City/County: Milwaukee County Sampling Date: 01-Aug-14

Applicant/Owner: Wisconsin Department of Transportation State: WI Sampling Point: **SP-4**

Investigator(s): Ron Londre, Geof Parish Section, Township, Range: S 30 T 5N R 22E

Landform (hillslope, terrace, etc.): Footslope Local relief (concave, convex, none): concave

Slope: 3.0% 1.7 ° Lat.: Long.: Datum:

Soil Map Unit Name: Aztalan loam (AsA), not hydric WWI classification: None

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

Are Vegetation ☐, Soil ☐, or Hydrology ☐ significantly disturbed? Are "Normal Circumstances" present? Yes ◉ No ○

Are Vegetation ☐, Soil ☐, or Hydrology ☐ naturally problematic? (If needed, explain any answers in Remarks.)

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

Hydrophytic Vegetation Present?	Yes ◉ No ○	**Is the Sampled Area within a Wetland?** **Yes** ◉ **No** ○
Hydric Soil Present?	Yes ◉ No ○	
Wetland Hydrology Present?	Yes ◉ No ○	

Remarks:
All three parameters have been met at this point. Thus, this point is located in a wetland.
Wetland ID: W10-3

VEGETATION - Use scientific names of plants.

	Absolute % Cover	Dominant Species? Rel.Strat. Cover	Indicator Status
Tree Stratum (Plot size: 30' r)			
1. Acer negundo	15	☑ 75.0%	FAC
2. Acer saccharinum	5	☑ 25.0%	FACW
3.	0	☐ 0.0%	
4.	0	☐ 0.0%	
5.	0	☐ 0.0%	
	20	= Total Cover	
Sapling/Shrub Stratum (Plot size: 15' r)			
1. Acer negundo	10	☑ 66.7%	FAC
2. Sambucus nigra	5	☑ 33.3%	FACW
3.	0	☐ 0.0%	
4.	0	☐ 0.0%	
5.	0	☐ 0.0%	
	15	= Total Cover	
Herb Stratum (Plot size: 5' r)			
1. Phalaris arundinacea	80	☑ 69.0%	FACW
2. Solidago gigantea	15	☐ 12.9%	FACW
3. Vitis riparia	10	☐ 8.6%	FACW
4. Arisaema triphyllum	5	☐ 4.3%	FACW
5. Rhamnus cathartica	3	☐ 2.6%	FAC
6. Maianthemum racemosum	3	☐ 2.6%	FACU
7.	0	☐ 0.0%	
8.	0	☐ 0.0%	
9.	0	☐ 0.0%	
10.	0	☐ 0.0%	
	116	= Total Cover	
Woody Vine Stratum (Plot size: 30' r)			
1.	0	☐ 0.0%	
2.	0	☐ 0.0%	
	0	= Total Cover	

Dominance Test worksheet:

Number of Dominant Species That are OBL, FACW, or FAC: 5 (A)

Total Number of Dominant Species Across All Strata: 5 (B)

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

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	120	x 2 =	240
FAC species	28	x 3 =	84
FACU species	3	x 4 =	12
UPL species	0	x 5 =	0
Column Totals:	151 (A)		336 (B)

Prevalence Index = B/A = 2.225

Hydrophytic Vegetation Indicators:

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

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

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

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

This point is located in a wooded wetland.
The criterion for hydrophytic vegetation is met at this point.

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

SOIL

Sampling Point: **SP-4**

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

Depth (inches)	Matrix Color (moist)		%	Redox Features Color (moist)		%	Type [1]	Loc [2]	Texture	Remarks
0-18	10YR	2/1	100						Sandy Clay Loam	
18-24	10YR	6/1	70	10YR	5/6	15	C	M	Sandy Clay Loam	
				10YR	5/1	10	D	M		
				10YR	6/6	5	C	M		

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

Hydric Soil Indicators:

- ☐ Histosol (A1)
- ☐ Histic Epipedon (A2)
- ☐ Black Histic (A3)
- ☐ Hydrogen Sulfide (A4)
- ☐ Stratified Layers (A5)
- ☐ 2 cm Muck (A10)
- ☐ Depleted Below Dark Surface (A11)
- ☑ Thick Dark Surface (A12)
- ☐ Sandy Muck Mineral (S1)
- ☐ 5 cm Mucky Peat or Peat (S3)
- ☐ Sandy Gleyed Matrix (S4)
- ☐ Sandy Redox (S5)
- ☐ Stripped Matrix (S6)
- ☐ Loamy Mucky Mineral (F1)
- ☐ Loamy Gleyed Matrix (F2)
- ☐ Depleted Matrix (F3)
- ☐ Redox Dark Surface (F6)
- ☐ Depleted Dark Surface (F7)
- ☐ Redox Depressions (F8)

Indicators for Problematic Hydric Soils [3]:

- ☐ Coast Prairie Redox (A16)
- ☐ Dark Surface (S7)
- ☐ Iron Manganese Masses (F12)
- ☐ Very Shallow Dark Surface (TF12)
- ☐ Other (Explain in Remarks)

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

Restrictive Layer (if observed):

Type: None

Depth (inches): NA

Hydric Soil Present? **Yes** ◉ **No** ○

Remarks:

The criterion for hydric soil is met at this point.

HYDROLOGY

Wetland Hydrology Indicators:

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

- ☐ Surface Water (A1)
- ☐ High Water Table (A2)
- ☐ Saturation (A3)
- ☐ Water Marks (B1)
- ☑ Sediment Deposits (B2)
- ☐ Drift Deposits (B3)
- ☐ Algal Mat or Crust (B4)
- ☐ Iron Deposits (B5)
- ☐ Inundation Visible on Aerial Imagery (B7)
- ☐ Sparsely Vegetated Concave Surface (B8)
- ☐ Water-Stained Leaves (B9)
- ☐ Aquatic Fauna (B13)
- ☐ True Aquatic Plants (B14)
- ☐ Hydrogen Sulfide Odor (C1)
- ☐ Oxidized Rhizospheres on Living Roots (C3)
- ☐ Presence of Reduced Iron (C4)
- ☐ Recent Iron Reduction in Tilled Soils (C6)
- ☐ Thin Muck Surface (C7)
- ☐ Gauge or Well Data (D9)
- ☐ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ☐ Surface Soil Cracks (B6)
- ☐ Drainage Patterns (B10)
- ☐ Dry Season Water Table (C2)
- ☐ Crayfish Burrows (C8)
- ☐ Saturation Visible on Aerial Imagery (C9)
- ☐ Stunted or Stressed Plants (D1)
- ☑ Geomorphic Position (D2)
- ☑ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes ○ No ◉ Depth (inches): _____

Water Table Present? Yes ○ No ◉ Depth (inches): _____

Saturation Present? (includes capillary fringe) Yes ○ No ◉ Depth (inches): _____

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

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

Previous delineation, DNR WWI map, NRCS Soils map, Topographic map, Aerial photos

Remarks:

Based on a WETS analysis, antecedent precipitation was within a normal range.
The criterion for hydrology is met at this point.

WETLAND DETERMINATION DATA FORM - Midwest Region

Project/Site: IH 94 (N-S Freeway) City/County: Milwaukee County Sampling Date: 01-Aug-14

Applicant/Owner: Wisconsin Department of Transportation State: WI Sampling Point: **SP-5**

Investigator(s): Ron Londre, Geof Parish Section, Township, Range: S 30 T 5N R 22E

Landform (hillslope, terrace, etc.): Summit Local relief (concave, convex, none): convex

Slope: 2.0% 1.1 ° Lat.: Long.: Datum:

Soil Map Unit Name: Matherton silt loam (MmA), not hydric WWI classification: None

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

Are Vegetation ☐ , Soil ☐ , or Hydrology ☐ significantly disturbed? Are "Normal Circumstances" present? Yes ◉ No ○

Are Vegetation ☐ , Soil ☐ , or Hydrology ☐ naturally problematic? (If needed, explain any answers in Remarks.)

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

Hydrophytic Vegetation Present?	Yes ○	No ◉	**Is the Sampled Area within a Wetland?** **Yes** ○ **No** ◉
Hydric Soil Present?	Yes ○	No ◉	
Wetland Hydrology Present?	Yes ○	No ◉	

Remarks:
None of the parameters have been met at this point. Thus, this point is located in an upland.

VEGETATION - Use scientific names of plants.

	Absolute % Cover	Dominant Species?	Rel.Strat. Cover	Indicator Status
Tree Stratum (Plot size: 30' r)				
1.	0	☐	0.0%	
2.	0	☐	0.0%	
3.	0	☐	0.0%	
4.	0	☐	0.0%	
5.	0	☐	0.0%	
	0	= Total Cover		
Sapling/Shrub Stratum (Plot size: 15' r)				
1.	0	☐	0.0%	
2.	0	☐	0.0%	
3.	0	☐	0.0%	
4.	0	☐	0.0%	
5.	0	☐	0.0%	
	0	= Total Cover		
Herb Stratum (Plot size: 5' r)				
1. Solidago canadensis	40	☑	33.9%	FACU
2. Phalaris arundinacea	25	☑	21.2%	FACW
3. Monarda fistulosa	25	☑	21.2%	FACU
4. Asclepias syriaca	10	☐	8.5%	FACU
5. Cirsium arvense	5	☐	4.2%	FACU
6. Poa pratensis	5	☐	4.2%	FAC
7. Parthenocissus quinquefolia	5	☐	4.2%	FACU
8. Coronilla varia	3	☐	2.5%	UPL
9.	0	☐	0.0%	
10.	0	☐	0.0%	
	118	= Total Cover		
Woody Vine Stratum (Plot size: 30' r)				
1.	0	☐	0.0%	
2.	0	☐	0.0%	
	0	= Total Cover		

Dominance Test worksheet:

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

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

Percent of dominant Species That Are OBL, FACW, or FAC: 33.3% (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	25	x 2 =	50
FAC species	5	x 3 =	15
FACU species	85	x 4 =	340
UPL species	3	x 5 =	15
Column Totals:	118 (A)		420 (B)

Prevalence Index = B/A = 3.559

Hydrophytic Vegetation Indicators:

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

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

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

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

This point is located in a old field weed plant community.
The criterion for hydrophytic vegetation is not met at this point.

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

SOIL

Sampling Point: **SP-5**

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

Depth (inches)	Matrix Color (moist)		%	Redox Features Color (moist)	%	Type [1]	Loc²	Texture	Remarks
0-10	10YR	3/1	100					Silty Clay Loam	
10-12	10YR	3/3	100					Silty Clay Loam	
12-20	10YR	3/2	100					Silty Clay Loam	

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

Hydric Soil Indicators:

- ☐ Histosol (A1)
- ☐ Histic Epipedon (A2)
- ☐ Black Histic (A3)
- ☐ Hydrogen Sulfide (A4)
- ☐ Stratified Layers (A5)
- ☐ 2 cm Muck (A10)
- ☐ Depleted Below Dark Surface (A11)
- ☐ Thick Dark Surface (A12)
- ☐ Sandy Muck Mineral (S1)
- ☐ 5 cm Mucky Peat or Peat (S3)
- ☐ Sandy Gleyed Matrix (S4)
- ☐ Sandy Redox (S5)
- ☐ Stripped Matrix (S6)
- ☐ Loamy Mucky Mineral (F1)
- ☐ Loamy Gleyed Matrix (F2)
- ☐ Depleted Matrix (F3)
- ☐ Redox Dark Surface (F6)
- ☐ Depleted Dark Surface (F7)
- ☐ Redox Depressions (F8)

Indicators for Problematic Hydric Soils [3]:

- ☐ Coast Prairie Redox (A16)
- ☐ Dark Surface (S7)
- ☐ Iron Manganese Masses (F12)
- ☐ Very Shallow Dark Surface (TF12)
- ☐ Other (Explain in Remarks)

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

Restrictive Layer (if observed):

Type: None

Depth (inches): NA

Hydric Soil Present? Yes ○ No ◉

Remarks:

The criterion for hydric soil is not met at this point.

HYDROLOGY

Wetland Hydrology Indicators:

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

- ☐ Surface Water (A1)
- ☐ High Water Table (A2)
- ☐ Saturation (A3)
- ☐ Water Marks (B1)
- ☐ Sediment Deposits (B2)
- ☐ Drift Deposits (B3)
- ☐ Algal Mat or Crust (B4)
- ☐ Iron Deposits (B5)
- ☐ Inundation Visible on Aerial Imagery (B7)
- ☐ Sparsely Vegetated Concave Surface (B8)
- ☐ Water-Stained Leaves (B9)
- ☐ Aquatic Fauna (B13)
- ☐ True Aquatic Plants (B14)
- ☐ Hydrogen Sulfide Odor (C1)
- ☐ Oxidized Rhizospheres on Living Roots (C3)
- ☐ Presence of Reduced Iron (C4)
- ☐ Recent Iron Reduction in Tilled Soils (C6)
- ☐ Thin Muck Surface (C7)
- ☐ Gauge or Well Data (D9)
- ☐ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ☐ Surface Soil Cracks (B6)
- ☐ Drainage Patterns (B10)
- ☐ Dry Season Water Table (C2)
- ☐ Crayfish Burrows (C8)
- ☐ Saturation Visible on Aerial Imagery (C9)
- ☐ Stunted or Stressed Plants (D1)
- ☐ Geomorphic Position (D2)
- ☐ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes ○ No ◉ Depth (inches): _____

Water Table Present? Yes ○ No ◉ Depth (inches): _____

Saturation Present? (includes capillary fringe) Yes ○ No ◉ Depth (inches): _____

Wetland Hydrology Present? Yes ○ No ◉

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

Previous delineation, DNR WWI map, NRCS Soils map, Topographic map, Aerial photos

Remarks:

Based on a WETS analysis, antecedent precipitation was within a normal range.
The criterion for hydrology is not met at this point.

WETLAND DETERMINATION DATA FORM - Midwest Region

Project/Site: IH 94 (N-S Freeway) City/County: Milwaukee County Sampling Date: 04-Aug-14

Applicant/Owner: Wisconsin Department of Transportation State: WI Sampling Point: **SP-6**

Investigator(s): Ron Londre, Geof Parish Section, Township, Range: S 30 T 5N R 22E

Landform (hillslope, terrace, etc.): Toeslope/ditch Local relief (concave, convex, none): concave

Slope: 2.0% 1.1 ° Lat.: Long.: Datum:

Soil Map Unit Name: Matherton silt loam (MmA), not hydric WWI classification: None

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

Are Vegetation ☐ , Soil ☑ , or Hydrology ☐ significantly disturbed? Are "Normal Circumstances" present? Yes ◉ No ○

Are Vegetation ☐ , Soil ☐ , or Hydrology ☐ naturally problematic? (If needed, explain any answers in Remarks.)

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

Hydrophytic Vegetation Present?	Yes ◉ No ○	**Is the Sampled Area within a Wetland?** **Yes** ◉ **No** ○
Hydric Soil Present?	Yes ◉ No ○	
Wetland Hydrology Present?	Yes ◉ No ○	

Remarks:
This point is located in a roadside ditch. All three parameters have been met at this point. Thus, this point is located in a wetland.
Wetland ID: W10-3

VEGETATION - Use scientific names of plants.

	Absolute % Cover	Dominant Species?	Rel.Strat. Cover	Indicator Status
Tree Stratum (Plot size: 15' x 100')				
1.	0	☐	0.0%	
2.	0	☐	0.0%	
3.	0	☐	0.0%	
4.	0	☐	0.0%	
5.	0	☐	0.0%	
	0	= Total Cover		
Sapling/Shrub Stratum (Plot size: 15' x 100')				
1.	0	☐	0.0%	
2.	0	☐	0.0%	
3.	0	☐	0.0%	
4.	0	☐	0.0%	
5.	0	☐	0.0%	
	0	= Total Cover		
Herb Stratum (Plot size: 5' r)				
1. Phalaris arundinacea	60	☑	46.9%	FACW
2. Scirpus atrovirens	30	☑	23.4%	OBL
3. Typha angustifolia	30	☑	23.4%	OBL
4. Solidago gigantea	5	☐	3.9%	FACW
5. Parthenocissus quinquefolia	3	☐	2.3%	FACU
6.	0	☐	0.0%	
7.	0	☐	0.0%	
8.	0	☐	0.0%	
9.	0	☐	0.0%	
10.	0	☐	0.0%	
	128	= Total Cover		
Woody Vine Stratum (Plot size: 15' x 100')				
1.	0	☐	0.0%	
2.	0	☐	0.0%	
	0	= Total Cover		

Dominance Test worksheet:

Number of Dominant Species That are OBL, FACW, or FAC: 3 (A)

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

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

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	60	x 1 =	60
FACW species	65	x 2 =	130
FAC species	0	x 3 =	0
FACU species	3	x 4 =	12
UPL species	0	x 5 =	0
Column Totals:	128	(A)	202 (B)

Prevalence Index = B/A = 1.578

Hydrophytic Vegetation Indicators:

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

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

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

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

This point is located in a plant community representative of a wet meadow / shallow marsh.
The criterion for hydrophytic vegetation is met at this point.

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

SOIL

Sampling Point: **SP-6**

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

Depth (inches)	Matrix Color (moist)		%	Redox Features Color (moist)		%	Type [1]	Loc [2]	Texture	Remarks
0-14	10YR	2/1	95	7.5YR	4/6	5	C	M	Silty Clay Loam	
14-24	10YR	5/2	90	7.5YR	5/6	10	C	M	Silty Clay Loam	

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

Hydric Soil Indicators:

- ☐ Histosol (A1)
- ☐ Histic Epipedon (A2)
- ☐ Black Histic (A3)
- ☐ Hydrogen Sulfide (A4)
- ☐ Stratified Layers (A5)
- ☐ 2 cm Muck (A10)
- ☐ Depleted Below Dark Surface (A11)
- ☑ Thick Dark Surface (A12)
- ☐ Sandy Muck Mineral (S1)
- ☐ 5 cm Mucky Peat or Peat (S3)
- ☐ Sandy Gleyed Matrix (S4)
- ☐ Sandy Redox (S5)
- ☐ Stripped Matrix (S6)
- ☐ Loamy Mucky Mineral (F1)
- ☐ Loamy Gleyed Matrix (F2)
- ☐ Depleted Matrix (F3)
- ☑ Redox Dark Surface (F6)
- ☐ Depleted Dark Surface (F7)
- ☐ Redox Depressions (F8)

Indicators for Problematic Hydric Soils [3]:

- ☐ Coast Prairie Redox (A16)
- ☐ Dark Surface (S7)
- ☐ Iron Manganese Masses (F12)
- ☐ Very Shallow Dark Surface (TF12)
- ☐ Other (Explain in Remarks)

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

Restrictive Layer (if observed):

Type: None

Depth (inches): NA

Hydric Soil Present? **Yes** ◉ **No** ○

Remarks:

Soil appears to be a roadside fill soil and thus disturbed.
The criterion for hydric soil is met at this point.

HYDROLOGY

Wetland Hydrology Indicators:

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

- ☐ Surface Water (A1)
- ☐ High Water Table (A2)
- ☐ Saturation (A3)
- ☐ Water Marks (B1)
- ☑ Sediment Deposits (B2)
- ☐ Drift Deposits (B3)
- ☐ Algal Mat or Crust (B4)
- ☐ Iron Deposits (B5)
- ☐ Inundation Visible on Aerial Imagery (B7)
- ☐ Sparsely Vegetated Concave Surface (B8)
- ☐ Water-Stained Leaves (B9)
- ☐ Aquatic Fauna (B13)
- ☐ True Aquatic Plants (B14)
- ☐ Hydrogen Sulfide Odor (C1)
- ☐ Oxidized Rhizospheres on Living Roots (C3)
- ☐ Presence of Reduced Iron (C4)
- ☐ Recent Iron Reduction in Tilled Soils (C6)
- ☐ Thin Muck Surface (C7)
- ☐ Gauge or Well Data (D9)
- ☐ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ☐ Surface Soil Cracks (B6)
- ☐ Drainage Patterns (B10)
- ☐ Dry Season Water Table (C2)
- ☐ Crayfish Burrows (C8)
- ☐ Saturation Visible on Aerial Imagery (C9)
- ☐ Stunted or Stressed Plants (D1)
- ☑ Geomorphic Position (D2)
- ☑ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes ○ No ◉ Depth (inches): _____

Water Table Present? Yes ○ No ◉ Depth (inches): _____

Saturation Present? (includes capillary fringe) Yes ○ No ◉ Depth (inches): _____

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

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

Previous delineation, DNR WWI map, NRCS Soils map, Topographic map, Aerial photos

Remarks:

Based on a WETS analysis, antecedent precipitation was within a normal range.
The criterion for hydrology is met at this point.

WETLAND DETERMINATION DATA FORM - Midwest Region

Project/Site: IH 94 (N-S Freeway) City/County: Milwaukee County Sampling Date: 04-Aug-14

Applicant/Owner: Wisconsin Department of Transportation State: WI Sampling Point: **SP-7**

Investigator(s): Ron Londre, Geof Parish Section, Township, Range: S 30 T 5N R 22E

Landform (hillslope, terrace, etc.): Footslope Local relief (concave, convex, none): concave

Slope: 5.0% 2.9 ° Lat.: Long.: Datum:

Soil Map Unit Name: Matherton silt loam (MmA), not hydric WWI classification: None

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

Are Vegetation ☑ , Soil ☑ , or Hydrology ☐ significantly disturbed? Are "Normal Circumstances" present? Yes ◉ No ○

Are Vegetation ☐ , Soil ☐ , or Hydrology ☐ naturally problematic? (If needed, explain any answers in Remarks.)

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

Hydrophytic Vegetation Present?	Yes ○	No ◉	**Is the Sampled Area within a Wetland?** **Yes** ○ **No** ◉
Hydric Soil Present?	Yes ○	No ◉	
Wetland Hydrology Present?	Yes ○	No ◉	

Remarks:
Area recently filled (permitted fill) within past 2 years for roadway improvements. This is the new normal circumstance.
None of the parameters have been met at this point. Thus, this point is located in an upland.

VEGETATION - Use scientific names of plants.

	Absolute % Cover	Dominant Species? Rel.Strat. Cover	Indicator Status
Tree Stratum (Plot size: 30' r)			
1.	0	☐ 0.0%	
2.	0	☐ 0.0%	
3.	0	☐ 0.0%	
4.	0	☐ 0.0%	
5.	0	☐ 0.0%	
	0	= Total Cover	
Sapling/Shrub Stratum (Plot size: 15' r)			
1.	0	☐ 0.0%	
2.	0	☐ 0.0%	
3.	0	☐ 0.0%	
4.	0	☐ 0.0%	
5.	0	☐ 0.0%	
	0	= Total Cover	
Herb Stratum (Plot size: 5' r)			
1. Lolium multiflorum	75	☑ 80.6%	FACU
2. Phalaris arundinacea	8	☐ 8.6%	FACW
3. Medicago sativa	5	☐ 5.4%	FACU
4. Barbarea vulgaris	5	☐ 5.4%	FAC
5.	0	☐ 0.0%	
6.	0	☐ 0.0%	
7.	0	☐ 0.0%	
8.	0	☐ 0.0%	
9.	0	☐ 0.0%	
10.	0	☐ 0.0%	
	93	= Total Cover	
Woody Vine Stratum (Plot size: 30' r)			
1.	0	☐ 0.0%	
2.	0	☐ 0.0%	
	0	= Total Cover	

Dominance Test worksheet:

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

Total Number of Dominant Species Across All Strata: 1 (B)

Percent of dominant Species That Are OBL, FACW, or FAC: 0.0% (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	8	x 2 =	16
FAC species	5	x 3 =	15
FACU species	80	x 4 =	320
UPL species	0	x 5 =	0
Column Totals:	93	(A)	351 (B)

Prevalence Index = B/A = 3.774

Hydrophytic Vegetation Indicators:

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

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

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

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

Vegetation is significantly disturbed due to presence of a nurse crop of annual rye being recently planted.
The criterion for hydrophytic vegetation is not met at this point.

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

SOIL

Sampling Point: **SP-7**

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

Depth (inches)	Matrix Color (moist)		%	Redox Features Color (moist)	%	Type [1]	Loc²	Texture	Remarks
0-15	10YR	3/1	100					Silty Clay Loam	fill soil
15-24	10YR	2/1	100					Muck	native soil layer

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

Hydric Soil Indicators:

- ☐ Histosol (A1)
- ☐ Histic Epipedon (A2)
- ☐ Black Histic (A3)
- ☐ Hydrogen Sulfide (A4)
- ☐ Stratified Layers (A5)
- ☐ 2 cm Muck (A10)
- ☐ Depleted Below Dark Surface (A11)
- ☐ Thick Dark Surface (A12)
- ☐ Sandy Muck Mineral (S1)
- ☐ 5 cm Mucky Peat or Peat (S3)
- ☐ Sandy Gleyed Matrix (S4)
- ☐ Sandy Redox (S5)
- ☐ Stripped Matrix (S6)
- ☐ Loamy Mucky Mineral (F1)
- ☐ Loamy Gleyed Matrix (F2)
- ☐ Depleted Matrix (F3)
- ☐ Redox Dark Surface (F6)
- ☐ Depleted Dark Surface (F7)
- ☐ Redox Depressions (F8)

Indicators for Problematic Hydric Soils [3]:

- ☐ Coast Prairie Redox (A16)
- ☐ Dark Surface (S7)
- ☐ Iron Manganese Masses (F12)
- ☐ Very Shallow Dark Surface (TF12)
- ☐ Other (Explain in Remarks)

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

Restrictive Layer (if observed):

Type: None

Depth (inches): NA

Hydric Soil Present? **Yes** ○ **No** ◉

Remarks:

Soil is disturbed as a result of ~15" of fill.
The criterion for hydric soil is not met at this point.

HYDROLOGY

Wetland Hydrology Indicators:

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

- ☐ Surface Water (A1)
- ☐ High Water Table (A2)
- ☐ Saturation (A3)
- ☐ Water Marks (B1)
- ☐ Sediment Deposits (B2)
- ☐ Drift Deposits (B3)
- ☐ Algal Mat or Crust (B4)
- ☐ Iron Deposits (B5)
- ☐ Inundation Visible on Aerial Imagery (B7)
- ☐ Sparsely Vegetated Concave Surface (B8)
- ☐ Water-Stained Leaves (B9)
- ☐ Aquatic Fauna (B13)
- ☐ True Aquatic Plants (B14)
- ☐ Hydrogen Sulfide Odor (C1)
- ☐ Oxidized Rhizospheres on Living Roots (C3)
- ☐ Presence of Reduced Iron (C4)
- ☐ Recent Iron Reduction in Tilled Soils (C6)
- ☐ Thin Muck Surface (C7)
- ☐ Gauge or Well Data (D9)
- ☐ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ☐ Surface Soil Cracks (B6)
- ☐ Drainage Patterns (B10)
- ☐ Dry Season Water Table (C2)
- ☐ Crayfish Burrows (C8)
- ☐ Saturation Visible on Aerial Imagery (C9)
- ☐ Stunted or Stressed Plants (D1)
- ☐ Geomorphic Position (D2)
- ☐ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes ○ No ◉ Depth (inches): _____

Water Table Present? Yes ○ No ◉ Depth (inches): _____

Saturation Present? (includes capillary fringe) Yes ○ No ◉ Depth (inches): _____

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

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

Previous delineation, DNR WWI map, NRCS Soils map, Topographic map, Aerial photos

Remarks:

Based on a WETS analysis, antecedent precipitation was within a normal range.
The criterion for hydrology is met at this point.

WETLAND DETERMINATION DATA FORM - Midwest Region

Project/Site: IH 94 (N-S Freeway) City/County: Milwaukee County Sampling Date: 04-Aug-14

Applicant/Owner: Wisconsin Department of Transportation State: WI Sampling Point: **SP-8**

Investigator(s): Ron Londre, Geof Parish Section, Township, Range: S 19 T 5N R 22E

Landform (hillslope, terrace, etc.): Toeslope Local relief (concave, convex, none): concave

Slope: 1.0% 0.6 ° Lat.: Long.: Datum:

Soil Map Unit Name: Ashkum silty clay loam (AsA), All hydric WWI classification: None

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

Are Vegetation ☑ , Soil ☑ , or Hydrology ☐ significantly disturbed? Are "Normal Circumstances" present? Yes ◉ No ○

Are Vegetation ☐ , Soil ☐ , or Hydrology ☐ naturally problematic? (If needed, explain any answers in Remarks.)

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

Hydrophytic Vegetation Present?	Yes ◉ No ○	**Is the Sampled Area within a Wetland?** **Yes ◉ No ○**
Hydric Soil Present?	Yes ◉ No ○	
Wetland Hydrology Present?	Yes ◉ No ○	

Remarks:
Area recently filled (permitted fill) within past 2 years for roadway improvements. This is the new normal circumstance.
All three parameters have been met at this point. Thus, this point is located in a wetland.

VEGETATION - Use scientific names of plants.

	Absolute % Cover	Dominant Species?	Rel.Strat. Cover	Indicator Status
Tree Stratum (Plot size: 30' r)				
1.	0	☐	0.0%	
2.	0	☐	0.0%	
3.	0	☐	0.0%	
4.	0	☐	0.0%	
5.	0	☐	0.0%	
	0	= Total Cover		
Sapling/Shrub Stratum (Plot size: 15' r)				
1.	0	☐	0.0%	
2.	0	☐	0.0%	
3.	0	☐	0.0%	
4.	0	☐	0.0%	
5.	0	☐	0.0%	
	0	= Total Cover		
Herb Stratum (Plot size: 5' r)				
1. Lolium multiflorum	60	☑	54.5%	FACU
2. Phalaris arundinacea	30	☑	27.3%	FACW
3. Barbarea vulgaris	10	☐	9.1%	FAC
4. Persicaria pensylvanica	10	☐	9.1%	FACW
5.	0	☐	0.0%	
6.	0	☐	0.0%	
7.	0	☐	0.0%	
8.	0	☐	0.0%	
9.	0	☐	0.0%	
10.	0	☐	0.0%	
	110	= Total Cover		
Woody Vine Stratum (Plot size: 30' r)				
1.	0	☐	0.0%	
2.	0	☐	0.0%	
	0	= Total Cover		

Dominance Test worksheet:

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

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

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

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	40	x 2 =	80
FAC species	10	x 3 =	30
FACU species	60	x 4 =	240
UPL species	0	x 5 =	0
Column Totals:	110 (A)		350 (B)

Prevalence Index = B/A = 3.182

Hydrophytic Vegetation Indicators:

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

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

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

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

Vegetation is significantly disturbed due to presence of a nurse crop of annual rye being recently planted.
Vegetation at a representative location ~20' south of this point: Herb stratum: Phalaris arundinacea (95%), Impatiens capensis (5%). Based on reference vegetation and presence of hydric soil and wetland hydrology, the criterion for hydrophytic vegetation is met at this point. It is anticipated that under normal circumstances that this area would support a hydrophytic plant community.

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

SOIL

Sampling Point: **SP-8**

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

Depth (inches)	Matrix Color (moist)		%	Redox Features Color (moist)		%	Type [1]	Loc [2]	Texture	Remarks
0-6	10YR	3/1	100						Silty Clay Loam	fill layer
6-20	10YR	2/1	95	7.5YR	4/6	5	C	M	Peaty Muck	native soil layer
20-24	10YR	4/2	90	7.5YR	4/6	10	C	M	Silt Loam	

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

Hydric Soil Indicators:

- ☐ Histosol (A1)
- ☐ Histic Epipedon (A2)
- ☐ Black Histic (A3)
- ☐ Hydrogen Sulfide (A4)
- ☐ Stratified Layers (A5)
- ☐ 2 cm Muck (A10)
- ☐ Depleted Below Dark Surface (A11)
- ☐ Thick Dark Surface (A12)
- ☐ Sandy Muck Mineral (S1)
- ☐ 5 cm Mucky Peat or Peat (S3)
- ☐ Sandy Gleyed Matrix (S4)
- ☐ Sandy Redox (S5)
- ☐ Stripped Matrix (S6)
- ☐ Loamy Mucky Mineral (F1)
- ☐ Loamy Gleyed Matrix (F2)
- ☐ Depleted Matrix (F3)
- ☑ Redox Dark Surface (F6)
- ☐ Depleted Dark Surface (F7)
- ☐ Redox Depressions (F8)

Indicators for Problematic Hydric Soils [3]:

- ☐ Coast Prairie Redox (A16)
- ☐ Dark Surface (S7)
- ☐ Iron Manganese Masses (F12)
- ☐ Very Shallow Dark Surface (TF12)
- ☐ Other (Explain in Remarks)

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

Restrictive Layer (if observed):

Type: None

Depth (inches): NA

Hydric Soil Present? **Yes** ◉ **No** ○

Remarks:

Soil is disturbed as a result of ~6" of fill.
The criterion for hydric soil is still met at this point.

HYDROLOGY

Wetland Hydrology Indicators:

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

- ☐ Surface Water (A1)
- ☐ High Water Table (A2)
- ☐ Saturation (A3)
- ☐ Water Marks (B1)
- ☐ Sediment Deposits (B2)
- ☐ Drift Deposits (B3)
- ☐ Algal Mat or Crust (B4)
- ☐ Iron Deposits (B5)
- ☐ Inundation Visible on Aerial Imagery (B7)
- ☐ Sparsely Vegetated Concave Surface (B8)
- ☐ Water-Stained Leaves (B9)
- ☐ Aquatic Fauna (B13)
- ☐ True Aquatic Plants (B14)
- ☐ Hydrogen Sulfide Odor (C1)
- ☐ Oxidized Rhizospheres on Living Roots (C3)
- ☐ Presence of Reduced Iron (C4)
- ☐ Recent Iron Reduction in Tilled Soils (C6)
- ☐ Thin Muck Surface (C7)
- ☐ Gauge or Well Data (D9)
- ☐ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ☑ Surface Soil Cracks (B6)
- ☐ Drainage Patterns (B10)
- ☐ Dry Season Water Table (C2)
- ☐ Crayfish Burrows (C8)
- ☐ Saturation Visible on Aerial Imagery (C9)
- ☐ Stunted or Stressed Plants (D1)
- ☑ Geomorphic Position (D2)
- ☐ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes ○ No ◉ Depth (inches): _____

Water Table Present? Yes ○ No ◉ Depth (inches): _____

Saturation Present? (includes capillary fringe) Yes ○ No ◉ Depth (inches): _____

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

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

Previous delineation, DNR WWI map, NRCS Soils map, Topographic map, Aerial photos

Remarks:

Based on a WETS analysis, antecedent precipitation was within a normal range.
The criterion for hydrology is met at this point.

WETLAND DETERMINATION DATA FORM - Midwest Region

Project/Site: IH 94 (N-S Freeway) City/County: Milwaukee County Sampling Date: 04-Aug-14

Applicant/Owner: Wisconsin Department of Transportation State: WI Sampling Point: **SP-9**

Investigator(s): Ron Londre, Geof Parish Section, Township, Range: S 30 T 5N R 22E

Landform (hillslope, terrace, etc.): Toeslope/ditch Local relief (concave, convex, none): concave

Slope: 5.0% 2.9 ° Lat.: Long.: Datum:

Soil Map Unit Name: Blount silt loam (BlA), Not hydric WWI classification: None

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

Are Vegetation ☐ , Soil ☑ , or Hydrology ☐ significantly disturbed? Are "Normal Circumstances" present? Yes ◉ No ○

Are Vegetation ☐ , Soil ☐ , or Hydrology ☐ naturally problematic? (If needed, explain any answers in Remarks.)

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

Hydrophytic Vegetation Present?	Yes ○ No ◉	**Is the Sampled Area within a Wetland?** **Yes ○ No ◉**
Hydric Soil Present?	Yes ○ No ◉	
Wetland Hydrology Present?	Yes ○ No ◉	

Remarks:
This point is located in a roadside ditch.
None of the three parameters have been met at this point. Thus, this point is located in an upland.

VEGETATION - Use scientific names of plants.

	Absolute % Cover	Dominant Species? Rel.Strat. Cover	Indicator Status
Tree Stratum (Plot size: 30' r)			
1. Fraxinus pennsylvanica	5	☑ 62.5%	FACW
2. Crataegus punctata	3	☑ 37.5%	UPL
3.	0	☐ 0.0%	
4.	0	☐ 0.0%	
5.	0	☐ 0.0%	
	8	= Total Cover	
Sapling/Shrub Stratum (Plot size: 15' r)			
1. Crataegus punctata	3	☐ 100.0%	UPL
2.	0	☐ 0.0%	
3.	0	☐ 0.0%	
4.	0	☐ 0.0%	
5.	0	☐ 0.0%	
	3	= Total Cover	
Herb Stratum (Plot size: 5' r)			
1. Festuca rubra	50	☑ 39.7%	FACU
2. Solidago canadensis	30	☑ 23.8%	FACU
3. Agrostis gigantea	20	☐ 15.9%	FACW
4. Poa pratensis	15	☐ 11.9%	FAC
5. Euthamia graminifolia	5	☐ 4.0%	FACW
6. Parthenocissus quinquefolia	3	☐ 2.4%	FACU
7. Vitis riparia	3	☐ 2.4%	FACW
8.	0	☐ 0.0%	
9.	0	☐ 0.0%	
10.	0	☐ 0.0%	
	126	= Total Cover	
Woody Vine Stratum (Plot size: 30' r)			
1.	0	☐ 0.0%	
2.	0	☐ 0.0%	
	0	= Total Cover	

Dominance Test worksheet:

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

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

Percent of dominant Species That Are OBL, FACW, or FAC: 25.0% (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	33	x 2 =	66
FAC species	15	x 3 =	45
FACU species	83	x 4 =	332
UPL species	6	x 5 =	30
Column Totals:	137 (A)		473 (B)

Prevalence Index = B/A = 3.453

Hydrophytic Vegetation Indicators:

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

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

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

Remarks: (Include photo numbers here or on a separate sheet.)
The criterion for hydrophytic vegetation is not met at this point.

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

SOIL

Sampling Point: **SP-9**

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

Depth (inches)	Matrix Color (moist)		%	Redox Features Color (moist)		%	Type [1]	Loc [2]	Texture	Remarks
0-14	10YR	2/1	100						Silty Clay Loam	
14-24	10YR	5/4	70	10YR	5/8	10	C	M	Silty Clay Loam	
	10YR	2/1	10	10YR	5/1	10	D	M		

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

Hydric Soil Indicators:

- ☐ Histosol (A1)
- ☐ Histic Epipedon (A2)
- ☐ Black Histic (A3)
- ☐ Hydrogen Sulfide (A4)
- ☐ Stratified Layers (A5)
- ☐ 2 cm Muck (A10)
- ☐ Depleted Below Dark Surface (A11)
- ☐ Thick Dark Surface (A12)
- ☐ Sandy Muck Mineral (S1)
- ☐ 5 cm Mucky Peat or Peat (S3)
- ☐ Sandy Gleyed Matrix (S4)
- ☐ Sandy Redox (S5)
- ☐ Stripped Matrix (S6)
- ☐ Loamy Mucky Mineral (F1)
- ☐ Loamy Gleyed Matrix (F2)
- ☐ Depleted Matrix (F3)
- ☐ Redox Dark Surface (F6)
- ☐ Depleted Dark Surface (F7)
- ☐ Redox Depressions (F8)

Indicators for Problematic Hydric Soils [3]:

- ☐ Coast Prairie Redox (A16)
- ☐ Dark Surface (S7)
- ☐ Iron Manganese Masses (F12)
- ☐ Very Shallow Dark Surface (TF12)
- ☐ Other (Explain in Remarks)

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

Restrictive Layer (if observed):

Type: None

Depth (inches): NA

Hydric Soil Present? Yes ○ No ◉

Remarks:

Soil appears to be a roadside fill soil and thus disturbed.
The criterion for hydric soil is not met at this point.

HYDROLOGY

Wetland Hydrology Indicators:

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

- ☐ Surface Water (A1)
- ☐ High Water Table (A2)
- ☐ Saturation (A3)
- ☐ Water Marks (B1)
- ☐ Sediment Deposits (B2)
- ☐ Drift Deposits (B3)
- ☐ Algal Mat or Crust (B4)
- ☐ Iron Deposits (B5)
- ☐ Inundation Visible on Aerial Imagery (B7)
- ☐ Sparsely Vegetated Concave Surface (B8)
- ☐ Water-Stained Leaves (B9)
- ☐ Aquatic Fauna (B13)
- ☐ True Aquatic Plants (B14)
- ☐ Hydrogen Sulfide Odor (C1)
- ☐ Oxidized Rhizospheres on Living Roots (C3)
- ☐ Presence of Reduced Iron (C4)
- ☐ Recent Iron Reduction in Tilled Soils (C6)
- ☐ Thin Muck Surface (C7)
- ☐ Gauge or Well Data (D9)
- ☐ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ☐ Surface Soil Cracks (B6)
- ☐ Drainage Patterns (B10)
- ☐ Dry Season Water Table (C2)
- ☐ Crayfish Burrows (C8)
- ☐ Saturation Visible on Aerial Imagery (C9)
- ☐ Stunted or Stressed Plants (D1)
- ☑ Geomorphic Position (D2)
- ☐ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes ○ No ◉ Depth (inches): _____

Water Table Present? Yes ○ No ◉ Depth (inches): _____

Saturation Present? (includes capillary fringe) Yes ○ No ◉ Depth (inches): _____

Wetland Hydrology Present? Yes ○ No ◉

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

Previous delineation, DNR WWI map, NRCS Soils map, Topographic map, Aerial photos

Remarks:

Based on a WETS analysis, antecedent precipitation was within a normal range.
The criterion for hydrology is not met at this point.

WETLAND DETERMINATION DATA FORM - Midwest Region

Project/Site: IH 94 (N-S Freeway) City/County: Milwaukee County Sampling Date: 04-Aug-14

Applicant/Owner: Wisconsin Department of Transportation State: WI Sampling Point: **SP-10**

Investigator(s): Ron Londre, Geof Parish Section, Township, Range: S 30 T 5N R 22E

Landform (hillslope, terrace, etc.): Toeslope/ditch Local relief (concave, convex, none): concave

Slope: 2.0% 1.1 ° Lat.: Long.: Datum:

Soil Map Unit Name: Blount silt loam (BlA - Meisc Aeric Epiaqualf) WWI classification: None

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

Are Vegetation ☐ , Soil ☑ , or Hydrology ☐ significantly disturbed? Are "Normal Circumstances" present? Yes ◉ No ○

Are Vegetation ☐ , Soil ☐ , or Hydrology ☐ naturally problematic? (If needed, explain any answers in Remarks.)

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

Hydrophytic Vegetation Present?	Yes ◉ No ○	**Is the Sampled Area within a Wetland?** **Yes ◉ No ○**
Hydric Soil Present?	Yes ◉ No ○	
Wetland Hydrology Present?	Yes ◉ No ○	

Remarks:
This point is located in a roadside ditch. All three parameters have been met at this point. Thus, this point is located in a wetland.
Wetland ID: W-2

VEGETATION - Use scientific names of plants.

Tree Stratum (Plot size: 25' x 115')	Absolute % Cover	Dominant Species?	Rel.Strat. Cover	Indicator Status
1.	0	☐	0.0%	
2.	0	☐	0.0%	
3.	0	☐	0.0%	
4.	0	☐	0.0%	
5.	0	☐	0.0%	
	0	= Total Cover		
Sapling/Shrub Stratum (Plot size: 25' x 28')				
1.	0	☐	0.0%	
2.	0	☐	0.0%	
3.	0	☐	0.0%	
4.	0	☐	0.0%	
5.	0	☐	0.0%	
	0	= Total Cover		
Herb Stratum (Plot size: 5' r)				
1. Phalaris arundinacea	90	☑	68.7%	FACW
2. Typha angustifolia	20	☐	15.3%	OBL
3. Ribes missouriense	8	☐	6.1%	UPL
4. Dipsacus laciniatus	8	☐	6.1%	UPL
5. Solidago canadensis	3	☐	2.3%	FACU
6. Euthamia graminifolia	2	☐	1.5%	FACW
7.	0	☐	0.0%	
8.	0	☐	0.0%	
9.	0	☐	0.0%	
10.	0	☐	0.0%	
	131	= Total Cover		
Woody Vine Stratum (Plot size: 25' x 115')				
1.	0	☐	0.0%	
2.	0	☐	0.0%	
	0	= Total Cover		

Dominance Test worksheet:

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

Total Number of Dominant Species Across All Strata: 1 (B)

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

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	20	x 1 =	20
FACW species	92	x 2 =	184
FAC species	0	x 3 =	0
FACU species	3	x 4 =	12
UPL species	16	x 5 =	80
Column Totals:	131 (A)		296 (B)

Prevalence Index = B/A = 2.260

Hydrophytic Vegetation Indicators:

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

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

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

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

Vegetation at this point is representative of a wet meadow / shallow marsh plant community.
The criterion for hydrophytic vegetation is met at this point.

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

SOIL

Sampling Point: **SP-10**

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

Depth (inches)	Matrix Color (moist)		%	Redox Features Color (moist)		%	Type [1]	Loc [2]	Texture	Remarks
0-15	10YR	2/1	100						Silty Clay Loam	
15-24	10YR	5/1	85	10YR	5/6	15	C	M	Silty Clay	

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

Hydric Soil Indicators:

- ☐ Histosol (A1)
- ☐ Histic Epipedon (A2)
- ☐ Black Histic (A3)
- ☐ Hydrogen Sulfide (A4)
- ☐ Stratified Layers (A5)
- ☐ 2 cm Muck (A10)
- ☐ Depleted Below Dark Surface (A11)
- ☑ Thick Dark Surface (A12)
- ☐ Sandy Muck Mineral (S1)
- ☐ 5 cm Mucky Peat or Peat (S3)
- ☐ Sandy Gleyed Matrix (S4)
- ☐ Sandy Redox (S5)
- ☐ Stripped Matrix (S6)
- ☐ Loamy Mucky Mineral (F1)
- ☐ Loamy Gleyed Matrix (F2)
- ☐ Depleted Matrix (F3)
- ☐ Redox Dark Surface (F6)
- ☐ Depleted Dark Surface (F7)
- ☐ Redox Depressions (F8)

Indicators for Problematic Hydric Soils [3]:

- ☐ Coast Prairie Redox (A16)
- ☐ Dark Surface (S7)
- ☐ Iron Manganese Masses (F12)
- ☐ Very Shallow Dark Surface (TF12)
- ☐ Other (Explain in Remarks)

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

Restrictive Layer (if observed):

Type: None

Depth (inches): NA

Hydric Soil Present? **Yes** ◉ **No** ○

Remarks:

Soil appears to be a roadside fill soil and thus disturbed.
The criterion for hydric soil is met at this point.

HYDROLOGY

Wetland Hydrology Indicators:

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

- ☐ Surface Water (A1)
- ☐ High Water Table (A2)
- ☐ Saturation (A3)
- ☐ Water Marks (B1)
- ☐ Sediment Deposits (B2)
- ☐ Drift Deposits (B3)
- ☐ Algal Mat or Crust (B4)
- ☐ Iron Deposits (B5)
- ☐ Inundation Visible on Aerial Imagery (B7)
- ☐ Sparsely Vegetated Concave Surface (B8)
- ☐ Water-Stained Leaves (B9)
- ☐ Aquatic Fauna (B13)
- ☐ True Aquatic Plants (B14)
- ☐ Hydrogen Sulfide Odor (C1)
- ☐ Oxidized Rhizospheres on Living Roots (C3)
- ☐ Presence of Reduced Iron (C4)
- ☐ Recent Iron Reduction in Tilled Soils (C6)
- ☐ Thin Muck Surface (C7)
- ☐ Gauge or Well Data (D9)
- ☐ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ☐ Surface Soil Cracks (B6)
- ☐ Drainage Patterns (B10)
- ☐ Dry Season Water Table (C2)
- ☐ Crayfish Burrows (C8)
- ☐ Saturation Visible on Aerial Imagery (C9)
- ☐ Stunted or Stressed Plants (D1)
- ☑ Geomorphic Position (D2)
- ☑ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes ○ No ◉ Depth (inches): _____

Water Table Present? Yes ○ No ◉ Depth (inches): _____

Saturation Present? (includes capillary fringe) Yes ○ No ◉ Depth (inches): _____

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

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

Previous delineation, DNR WWI map, NRCS Soils map, Topographic map, Aerial photos

Remarks:

Based on a WETS analysis, antecedent precipitation was a within a normal range.
The criterion for hydrology is met at this point.

WETLAND DETERMINATION DATA FORM - Midwest Region

Project/Site: IH 94 (N-S Freeway) City/County: Milwaukee County Sampling Date: 04-Aug-14

Applicant/Owner: Wisconsin Department of Transportation State: WI Sampling Point: **SP-11**

Investigator(s): Ron Londre, Geof Parish Section, Township, Range: S 30 T 5N R 22E

Landform (hillslope, terrace, etc.): Backslope Local relief (concave, convex, none): convex

Slope: 10.0% 5.7 ° Lat.: Long.: Datum:

Soil Map Unit Name: Matherton silt loam (MmA), not hydric WWI classification: None

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

Are Vegetation ☐, Soil ☑, or Hydrology ☐ significantly disturbed? Are "Normal Circumstances" present? Yes ◉ No ○

Are Vegetation ☐, Soil ☐, or Hydrology ☐ naturally problematic? (If needed, explain any answers in Remarks.)

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

Hydrophytic Vegetation Present?	Yes ○ No ◉	**Is the Sampled Area within a Wetland?** **Yes ○ No ◉**
Hydric Soil Present?	Yes ○ No ◉	
Wetland Hydrology Present?	Yes ○ No ◉	

Remarks:
This point is located on the backslope of a roadside swale.
None of the parameters have been met at this point. Thus, this point is located in an upland.

VEGETATION - Use scientific names of plants.

	Absolute % Cover	Dominant Species?	Rel.Strat. Cover	Indicator Status
Tree Stratum (Plot size: 30' r)				
1.	0	☐	0.0%	
2.	0	☐	0.0%	
3.	0	☐	0.0%	
4.	0	☐	0.0%	
5.	0	☐	0.0%	
	0	= Total Cover		
Sapling/Shrub Stratum (Plot size: 15' r)				
1.	0	☐	0.0%	
2.	0	☐	0.0%	
3.	0	☐	0.0%	
4.	0	☐	0.0%	
5.	0	☐	0.0%	
	0	= Total Cover		
Herb Stratum (Plot size: 5' r)				
1. Bromus inermis	80	☑	74.1%	FACU
2. Phalaris arundinacea	10	☐	9.3%	FACW
3. Cirsium arvense	5	☐	4.6%	FACU
4. Melilotus alba	5	☐	4.6%	FACU
5. Sonchus arvensis	5	☐	4.6%	FACU
6. Agrostis gigantea	3	☐	2.8%	FACW
7.	0	☐	0.0%	
8.	0	☐	0.0%	
9.	0	☐	0.0%	
10.	0	☐	0.0%	
	108	= Total Cover		
Woody Vine Stratum (Plot size: 30' r)				
1.	0	☐	0.0%	
2.	0	☐	0.0%	
	0	= Total Cover		

Dominance Test worksheet:

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

Total Number of Dominant Species Across All Strata: 1 (B)

Percent of dominant Species That Are OBL, FACW, or FAC: 0.0% (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	13	x 2 =	26
FAC species	0	x 3 =	0
FACU species	95	x 4 =	380
UPL species	0	x 5 =	0
Column Totals:	108 (A)		406 (B)

Prevalence Index = B/A = 3.759

Hydrophytic Vegetation Indicators:

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

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

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

Remarks: (Include photo numbers here or on a separate sheet.)
The criterion for hydrophytic vegetation is not met at this point.

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

SOIL

Sampling Point: **SP-11**

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

Depth (inches)	Matrix Color (moist)		%	Redox Features Color (moist)		%	Type [1]	Loc [2]	Texture	Remarks
0-10	10YR	3/1	100						Silty Clay Loam	
10-20	10YR	5/3	50	10YR	5/2	40	D	M	Sandy Clay Loam	
	10YR	5/4	10							

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

Hydric Soil Indicators:

- ☐ Histosol (A1)
- ☐ Histic Epipedon (A2)
- ☐ Black Histic (A3)
- ☐ Hydrogen Sulfide (A4)
- ☐ Stratified Layers (A5)
- ☐ 2 cm Muck (A10)
- ☐ Depleted Below Dark Surface (A11)
- ☐ Thick Dark Surface (A12)
- ☐ Sandy Muck Mineral (S1)
- ☐ 5 cm Mucky Peat or Peat (S3)
- ☐ Sandy Gleyed Matrix (S4)
- ☐ Sandy Redox (S5)
- ☐ Stripped Matrix (S6)
- ☐ Loamy Mucky Mineral (F1)
- ☐ Loamy Gleyed Matrix (F2)
- ☐ Depleted Matrix (F3)
- ☐ Redox Dark Surface (F6)
- ☐ Depleted Dark Surface (F7)
- ☐ Redox Depressions (F8)

Indicators for Problematic Hydric Soils [3]:

- ☐ Coast Prairie Redox (A16)
- ☐ Dark Surface (S7)
- ☐ Iron Manganese Masses (F12)
- ☐ Very Shallow Dark Surface (TF12)
- ☐ Other (Explain in Remarks)

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

Restrictive Layer (if observed):

Type: None

Depth (inches): NA

Hydric Soil Present? Yes ○ No ◉

Remarks:

Soil appears to be a roadside fill soil and thus disturbed.
The criterion for hydric soil is not met at this point.

HYDROLOGY

Wetland Hydrology Indicators:

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

- ☐ Surface Water (A1)
- ☐ High Water Table (A2)
- ☐ Saturation (A3)
- ☐ Water Marks (B1)
- ☐ Sediment Deposits (B2)
- ☐ Drift Deposits (B3)
- ☐ Algal Mat or Crust (B4)
- ☐ Iron Deposits (B5)
- ☐ Inundation Visible on Aerial Imagery (B7)
- ☐ Sparsely Vegetated Concave Surface (B8)
- ☐ Water-Stained Leaves (B9)
- ☐ Aquatic Fauna (B13)
- ☐ True Aquatic Plants (B14)
- ☐ Hydrogen Sulfide Odor (C1)
- ☐ Oxidized Rhizospheres on Living Roots (C3)
- ☐ Presence of Reduced Iron (C4)
- ☐ Recent Iron Reduction in Tilled Soils (C6)
- ☐ Thin Muck Surface (C7)
- ☐ Gauge or Well Data (D9)
- ☐ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ☐ Surface Soil Cracks (B6)
- ☐ Drainage Patterns (B10)
- ☐ Dry Season Water Table (C2)
- ☐ Crayfish Burrows (C8)
- ☐ Saturation Visible on Aerial Imagery (C9)
- ☐ Stunted or Stressed Plants (D1)
- ☑ Geomorphic Position (D2)
- ☐ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes ○ No ◉ Depth (inches): _____

Water Table Present? Yes ○ No ◉ Depth (inches): _____

Saturation Present? (includes capillary fringe) Yes ○ No ◉ Depth (inches): _____

Wetland Hydrology Present? Yes ○ No ◉

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

Previous delineation, DNR WWI map, NRCS Soils map, Topographic map, Aerial photos

Remarks:

Based on a WETS analysis, antecedent precipitation was within a normal range.
The criterion for hydrology is not met at this point.

WETLAND DETERMINATION DATA FORM - Midwest Region

Project/Site: IH 94 (N-S Freeway) City/County: Milwaukee County Sampling Date: 04-Aug-14

Applicant/Owner: Wisconsin Department of Transportation State: WI Sampling Point: **SP-12**

Investigator(s): Ron Londre, Geof Parish Section, Township, Range: S 30 T 5N R 22E

Landform (hillslope, terrace, etc.): Footslope/swale Local relief (concave, convex, none): concave

Slope: 0.0% 0.0 ° Lat.: Long.: Datum:

Soil Map Unit Name: Matherton silt loam (MmA), not hydric WWI classification: None

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

Are Vegetation ☐ , Soil ☑ , or Hydrology ☐ significantly disturbed? Are "Normal Circumstances" present? Yes ◉ No ○

Are Vegetation ☐ , Soil ☐ , or Hydrology ☐ naturally problematic? (If needed, explain any answers in Remarks.)

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

Hydrophytic Vegetation Present?	Yes ◉ No ○	**Is the Sampled Area within a Wetland?** **Yes** ◉ **No** ○
Hydric Soil Present?	Yes ◉ No ○	
Wetland Hydrology Present?	Yes ◉ No ○	

Remarks:
This point is located in a roadside swale.
All three parameters have been met at this point. Thus, this point is located in a wetland.

VEGETATION - Use scientific names of plants.

	Absolute % Cover	Dominant Species?	Rel.Strat. Cover	Indicator Status
Tree Stratum (Plot size: 40' x 70')				
1.	0	☐	0.0%	
2.	0	☐	0.0%	
3.	0	☐	0.0%	
4.	0	☐	0.0%	
5.	0	☐	0.0%	
	0	= Total Cover		
Sapling/Shrub Stratum (Plot size: 15' r)				
1.	0	☐	0.0%	
2.	0	☐	0.0%	
3.	0	☐	0.0%	
4.	0	☐	0.0%	
5.	0	☐	0.0%	
	0	= Total Cover		
Herb Stratum (Plot size: 5' r)				
1. Phalaris arundinacea	95	☑	96.9%	FACW
2. Cirsium arvense	3	☐	3.1%	FACU
3.	0	☐	0.0%	
4.	0	☐	0.0%	
5.	0	☐	0.0%	
6.	0	☐	0.0%	
7.	0	☐	0.0%	
8.	0	☐	0.0%	
9.	0	☐	0.0%	
10.	0	☐	0.0%	
	98	= Total Cover		
Woody Vine Stratum (Plot size: 40' x 70')				
1.	0	☐	0.0%	
2.	0	☐	0.0%	
	0	= Total Cover		

Dominance Test worksheet:

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

Total Number of Dominant Species Across All Strata: 1 (B)

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

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	95	x 2 =	190
FAC species	0	x 3 =	0
FACU species	3	x 4 =	12
UPL species	0	x 5 =	0
Column Totals:	98	(A)	202 (B)

Prevalence Index = B/A = 2.061

Hydrophytic Vegetation Indicators:

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

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

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

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

This point is located in a wet meadow.
The criterion for hydrophytic vegetation is met at this point.

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

SOIL

Sampling Point: **SP-12**

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

Depth (inches)	Matrix Color (moist)		%	Redox Features Color (moist)		%	Type [1]	Loc [2]	Texture	Remarks
0-15	10YR	3/1	92	10YR	5/2	3	D	M	Silty Clay Loam	
	10YR	5/4	3	7.5YR	5/6	3	C	M		
15-24	10YR	4/2	90	7.5YR	5/6	5	C	M	Silty Clay Loam	
	10YR	2/1	5							

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

Hydric Soil Indicators:

- ☐ Histosol (A1)
- ☐ Histic Epipedon (A2)
- ☐ Black Histic (A3)
- ☐ Hydrogen Sulfide (A4)
- ☐ Stratified Layers (A5)
- ☐ 2 cm Muck (A10)
- ☐ Depleted Below Dark Surface (A11)
- ☐ Thick Dark Surface (A12)
- ☐ Sandy Muck Mineral (S1)
- ☐ 5 cm Mucky Peat or Peat (S3)
- ☐ Sandy Gleyed Matrix (S4)
- ☐ Sandy Redox (S5)
- ☐ Stripped Matrix (S6)
- ☐ Loamy Mucky Mineral (F1)
- ☐ Loamy Gleyed Matrix (F2)
- ☐ Depleted Matrix (F3)
- ☑ Redox Dark Surface (F6)
- ☐ Depleted Dark Surface (F7)
- ☐ Redox Depressions (F8)

Indicators for Problematic Hydric Soils [3]:

- ☐ Coast Prairie Redox (A16)
- ☐ Dark Surface (S7)
- ☐ Iron Manganese Masses (F12)
- ☐ Very Shallow Dark Surface (TF12)
- ☐ Other (Explain in Remarks)

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

Restrictive Layer (if observed):

Type: None

Depth (inches): NA

Hydric Soil Present? **Yes** ◉ **No** ○

Remarks:

Soil appears to be a roadside fill soil and thus disturbed.
The criterion for hydric soil is met at this point.

HYDROLOGY

Wetland Hydrology Indicators:

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

- ☐ Surface Water (A1)
- ☐ High Water Table (A2)
- ☐ Saturation (A3)
- ☐ Water Marks (B1)
- ☐ Sediment Deposits (B2)
- ☐ Drift Deposits (B3)
- ☐ Algal Mat or Crust (B4)
- ☐ Iron Deposits (B5)
- ☐ Inundation Visible on Aerial Imagery (B7)
- ☐ Sparsely Vegetated Concave Surface (B8)
- ☐ Water-Stained Leaves (B9)
- ☐ Aquatic Fauna (B13)
- ☐ True Aquatic Plants (B14)
- ☐ Hydrogen Sulfide Odor (C1)
- ☐ Oxidized Rhizospheres on Living Roots (C3)
- ☐ Presence of Reduced Iron (C4)
- ☐ Recent Iron Reduction in Tilled Soils (C6)
- ☐ Thin Muck Surface (C7)
- ☐ Gauge or Well Data (D9)
- ☐ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ☐ Surface Soil Cracks (B6)
- ☐ Drainage Patterns (B10)
- ☐ Dry Season Water Table (C2)
- ☐ Crayfish Burrows (C8)
- ☐ Saturation Visible on Aerial Imagery (C9)
- ☐ Stunted or Stressed Plants (D1)
- ☑ Geomorphic Position (D2)
- ☑ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes ○ No ◉ Depth (inches): _____

Water Table Present? Yes ○ No ◉ Depth (inches): _____

Saturation Present? (includes capillary fringe) Yes ○ No ◉ Depth (inches): _____

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

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

Previous delineation, DNR WWI map, NRCS Soils map, Topographic map, Aerial photos

Remarks:

Based on a WETS analysis, antecedent precipitation was within a normal range.
The criterion for hydrology is met at this point.

WETLAND DETERMINATION DATA FORM - Midwest Region

Project/Site: IH 94 (N-S Freeway) City/County: Milwaukee County Sampling Date: 04-Aug-14

Applicant/Owner: Wisconsin Department of Transportation State: WI Sampling Point: **SP-13**

Investigator(s): Ron Londre, Geof Parish Section, Township, Range: S 30 T 5N R 22E

Landform (hillslope, terrace, etc.): Footslope Local relief (concave, convex, none): concave

Slope: 3.0% 1.7 ° Lat.: Long.: Datum:

Soil Map Unit Name: Blount silt loam (BlA), Not hydric WWI classification: None

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

Are Vegetation ☐ , Soil ☑ , or Hydrology ☐ significantly disturbed? Are "Normal Circumstances" present? Yes ◉ No ○

Are Vegetation ☐ , Soil ☐ , or Hydrology ☐ naturally problematic? (If needed, explain any answers in Remarks.)

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

Hydrophytic Vegetation Present?	Yes ○ No ◉	**Is the Sampled Area within a Wetland?** **Yes** ○ **No** ◉
Hydric Soil Present?	Yes ○ No ◉	
Wetland Hydrology Present?	Yes ○ No ◉	

Remarks:
This point is located in a basin.
None of the parameters have been met at this point. Thus, this point is located in an upland.

VEGETATION - Use scientific names of plants.

	Absolute % Cover	Dominant Species?	Rel.Strat. Cover	Indicator Status
Tree Stratum (Plot size: 30' r)				
1.	0	☐	0.0%	
2.	0	☐	0.0%	
3.	0	☐	0.0%	
4.	0	☐	0.0%	
5.	0	☐	0.0%	
	0	= Total Cover		
Sapling/Shrub Stratum (Plot size: 15' r)				
1.	0	☐	0.0%	
2.	0	☐	0.0%	
3.	0	☐	0.0%	
4.	0	☐	0.0%	
5.	0	☐	0.0%	
	0	= Total Cover		
Herb Stratum (Plot size: 5' r)				
1. Elymus canadensis	30	☑	26.5%	FACU
2. Lotus corniculatus	25	☑	22.1%	FACU
3. Melilotus alba	25	☑	22.1%	FACU
4. Daucus carota	10	☐	8.8%	UPL
5. Agrostis gigantea	5	☐	4.4%	FACW
6. Plantago major	5	☐	4.4%	FAC
7. Trifolium repens	5	☐	4.4%	FACU
8. Asclepias incarnata	3	☐	2.7%	OBL
9. Ambrosia artemisiifolia	3	☐	2.7%	FACU
10. Rumex crispus	2	☐	1.8%	FAC
	113	= Total Cover		
Woody Vine Stratum (Plot size: 30' r)				
1.	0	☐	0.0%	
2.	0	☐	0.0%	
	0	= Total Cover		

Dominance Test worksheet:

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

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

Percent of dominant Species That Are OBL, FACW, or FAC: 0.0% (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	3	x 1 =	3
FACW species	5	x 2 =	10
FAC species	7	x 3 =	21
FACU species	88	x 4 =	352
UPL species	10	x 5 =	50
Column Totals:	113 (A)		436 (B)

Prevalence Index = B/A = 3.858

Hydrophytic Vegetation Indicators:

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

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

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

Remarks: (Include photo numbers here or on a separate sheet.)
The criterion for hydrophytic vegetation is not met at this point.

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

SOIL

Sampling Point: **SP-13**

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

Depth (inches)	Matrix Color (moist)		%	Redox Features Color (moist)		%	Type [1]	Loc²	Texture	Remarks
0-10	10YR	2/1	60	5YR	4/4	5	C	M	Silty Clay Loam	
	10YR	3/2	35							
10-20	10YR	5/3	90	10YR	5/6	3	C	M	Silty Clay Loam	
				10YR	6/1	20	D	M		

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

Hydric Soil Indicators:

- ☐ Histosol (A1)
- ☐ Histic Epipedon (A2)
- ☐ Black Histic (A3)
- ☐ Hydrogen Sulfide (A4)
- ☐ Stratified Layers (A5)
- ☐ 2 cm Muck (A10)
- ☐ Depleted Below Dark Surface (A11)
- ☐ Thick Dark Surface (A12)
- ☐ Sandy Muck Mineral (S1)
- ☐ 5 cm Mucky Peat or Peat (S3)
- ☐ Sandy Gleyed Matrix (S4)
- ☐ Sandy Redox (S5)
- ☐ Stripped Matrix (S6)
- ☐ Loamy Mucky Mineral (F1)
- ☐ Loamy Gleyed Matrix (F2)
- ☐ Depleted Matrix (F3)
- ☐ Redox Dark Surface (F6)
- ☐ Depleted Dark Surface (F7)
- ☐ Redox Depressions (F8)

Indicators for Problematic Hydric Soils [3]:

- ☐ Coast Prairie Redox (A16)
- ☐ Dark Surface (S7)
- ☐ Iron Manganese Masses (F12)
- ☐ Very Shallow Dark Surface (TF12)
- ☐ Other (Explain in Remarks)

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

Restrictive Layer (if observed):

Type: None

Depth (inches): NA

Hydric Soil Present? **Yes** ○ **No** ◉

Remarks:

Soil appears to be a fill soil and thus disturbed.
The criterion for hydric soil is not met at this point.

HYDROLOGY

Wetland Hydrology Indicators:

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

- ☐ Surface Water (A1)
- ☐ High Water Table (A2)
- ☐ Saturation (A3)
- ☐ Water Marks (B1)
- ☐ Sediment Deposits (B2)
- ☐ Drift Deposits (B3)
- ☐ Algal Mat or Crust (B4)
- ☐ Iron Deposits (B5)
- ☐ Inundation Visible on Aerial Imagery (B7)
- ☐ Sparsely Vegetated Concave Surface (B8)
- ☐ Water-Stained Leaves (B9)
- ☐ Aquatic Fauna (B13)
- ☐ True Aquatic Plants (B14)
- ☐ Hydrogen Sulfide Odor (C1)
- ☐ Oxidized Rhizospheres on Living Roots (C3)
- ☐ Presence of Reduced Iron (C4)
- ☐ Recent Iron Reduction in Tilled Soils (C6)
- ☐ Thin Muck Surface (C7)
- ☐ Gauge or Well Data (D9)
- ☐ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ☐ Surface Soil Cracks (B6)
- ☐ Drainage Patterns (B10)
- ☐ Dry Season Water Table (C2)
- ☐ Crayfish Burrows (C8)
- ☐ Saturation Visible on Aerial Imagery (C9)
- ☐ Stunted or Stressed Plants (D1)
- ☑ Geomorphic Position (D2)
- ☐ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes ○ No ◉ Depth (inches):

Water Table Present? Yes ○ No ◉ Depth (inches):

Saturation Present? (includes capillary fringe) Yes ○ No ◉ Depth (inches):

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

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

Previous delineation, DNR WWI map, NRCS Soils map, Topographic map, Aerial photos

Remarks:

Based on a WETS analysis, antecedent precipitation was within a normal range.
The criterion for hydrology is not met at this point.

WETLAND DETERMINATION DATA FORM - Midwest Region

Project/Site: IH 94 (N-S Freeway) City/County: Milwaukee County Sampling Date: 04-Aug-14

Applicant/Owner: Wisconsin Department of Transportation State: WI Sampling Point: **SP-14**

Investigator(s): Ron Londre, Geof Parish Section, Township, Range: S 30 T 5N R 22E

Landform (hillslope, terrace, etc.): Toeslope Local relief (concave, convex, none): concave

Slope: 0.0% 0.0 ° Lat.: Long.: Datum:

Soil Map Unit Name: Blount silt loam (BlA), Not hydric WWI classification: None

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

Are Vegetation ☐ , Soil ☑ , or Hydrology ☐ significantly disturbed? Are "Normal Circumstances" present? Yes ◉ No ○

Are Vegetation ☐ , Soil ☐ , or Hydrology ☐ naturally problematic? (If needed, explain any answers in Remarks.)

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

Hydrophytic Vegetation Present?	Yes ◉ No ○	**Is the Sampled Area within a Wetland?** **Yes** ◉ **No** ○
Hydric Soil Present?	Yes ◉ No ○	
Wetland Hydrology Present?	Yes ◉ No ○	

Remarks:
This point is located in a basin.
All three parameters have been met at this point. Thus, this point is located in a wetland.

VEGETATION - Use scientific names of plants.

Tree Stratum (Plot size: 30' r)	Absolute % Cover	Dominant Species?	Rel.Strat. Cover	Indicator Status
1.	0	☐	0.0%	
2.	0	☐	0.0%	
3.	0	☐	0.0%	
4.	0	☐	0.0%	
5.	0	☐	0.0%	
	0	= Total Cover		
Sapling/Shrub Stratum (Plot size: 15' r)				
1.	0	☐	0.0%	
2.	0	☐	0.0%	
3.	0	☐	0.0%	
4.	0	☐	0.0%	
5.	0	☐	0.0%	
	0	= Total Cover		
Herb Stratum (Plot size: 5' r)				
1. Juncus canadensis	50	☑	51.0%	OBL
2. Elymus canadensis	40	☑	40.8%	FACU
3. Asclepias incarnata	5	☐	5.1%	OBL
4. Rumex crispus	3	☐	3.1%	FAC
5.	0	☐	0.0%	
6.	0	☐	0.0%	
7.	0	☐	0.0%	
8.	0	☐	0.0%	
9.	0	☐	0.0%	
10.	0	☐	0.0%	
	98	= Total Cover		
Woody Vine Stratum (Plot size: 30' r)				
1.	0	☐	0.0%	
2.	0	☐	0.0%	
	0	= Total Cover		

Dominance Test worksheet:

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

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

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

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	55	x 1 =	55
FACW species	0	x 2 =	0
FAC species	3	x 3 =	9
FACU species	40	x 4 =	160
UPL species	0	x 5 =	0
Column Totals:	98 (A)		224 (B)

Prevalence Index = B/A = 2.286

Hydrophytic Vegetation Indicators:

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

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

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

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

This point is located in a wet meadow.
The criterion for hydrophytic vegetation is met at this point.

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

SOIL

Sampling Point: **SP-14**

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

Depth (inches)	Matrix Color (moist)		%	Redox Features Color (moist)		%	Type [1]	Loc [2]	Texture	Remarks
0-7	10YR	3/1	100						Silty Clay Loam	
7-20	10YR	4/2	65	10YR	5/1	30	D	M	Silty Clay Loam	
				7.5YR	4/6	5	C	M		

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

Hydric Soil Indicators:

- ☐ Histosol (A1)
- ☐ Histic Epipedon (A2)
- ☐ Black Histic (A3)
- ☐ Hydrogen Sulfide (A4)
- ☐ Stratified Layers (A5)
- ☐ 2 cm Muck (A10)
- ☐ Depleted Below Dark Surface (A11)
- ☐ Thick Dark Surface (A12)
- ☐ Sandy Muck Mineral (S1)
- ☐ 5 cm Mucky Peat or Peat (S3)
- ☐ Sandy Gleyed Matrix (S4)
- ☐ Sandy Redox (S5)
- ☐ Stripped Matrix (S6)
- ☐ Loamy Mucky Mineral (F1)
- ☐ Loamy Gleyed Matrix (F2)
- ☑ Depleted Matrix (F3)
- ☐ Redox Dark Surface (F6)
- ☐ Depleted Dark Surface (F7)
- ☐ Redox Depressions (F8)

Indicators for Problematic Hydric Soils [3]:

- ☐ Coast Prairie Redox (A16)
- ☐ Dark Surface (S7)
- ☐ Iron Manganese Masses (F12)
- ☐ Very Shallow Dark Surface (TF12)
- ☐ Other (Explain in Remarks)

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

Restrictive Layer (if observed):

Type:

Depth (inches):

Hydric Soil Present? Yes ◉ No ○

Remarks:

Soil is disturbed due to recent grading to construct the basin. Erosion netting is still present on the ground.
The criterion for hydric soil is met at this point.

HYDROLOGY

Wetland Hydrology Indicators:

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

- ☐ Surface Water (A1)
- ☐ High Water Table (A2)
- ☐ Saturation (A3)
- ☐ Water Marks (B1)
- ☑ Sediment Deposits (B2)
- ☐ Drift Deposits (B3)
- ☐ Algal Mat or Crust (B4)
- ☐ Iron Deposits (B5)
- ☐ Inundation Visible on Aerial Imagery (B7)
- ☐ Sparsely Vegetated Concave Surface (B8)
- ☐ Water-Stained Leaves (B9)
- ☐ Aquatic Fauna (B13)
- ☐ True Aquatic Plants (B14)
- ☐ Hydrogen Sulfide Odor (C1)
- ☐ Oxidized Rhizospheres on Living Roots (C3)
- ☐ Presence of Reduced Iron (C4)
- ☐ Recent Iron Reduction in Tilled Soils (C6)
- ☐ Thin Muck Surface (C7)
- ☐ Gauge or Well Data (D9)
- ☐ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ☐ Surface Soil Cracks (B6)
- ☐ Drainage Patterns (B10)
- ☐ Dry Season Water Table (C2)
- ☐ Crayfish Burrows (C8)
- ☐ Saturation Visible on Aerial Imagery (C9)
- ☐ Stunted or Stressed Plants (D1)
- ☑ Geomorphic Position (D2)
- ☐ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes ○ No ◉ Depth (inches):

Water Table Present? Yes ○ No ◉ Depth (inches):

Saturation Present? (includes capillary fringe) Yes ○ No ◉ Depth (inches):

Wetland Hydrology Present? Yes ◉ No ○

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

Previous delineation, DNR WWI map, NRCS Soils map, Topographic map, Aerial photos

Remarks:

Based on a WETS analysis, antecedent precipitation was within a normal range.
The criterion for hydrology is met at this point.

WETLAND DETERMINATION DATA FORM - Midwest Region

Project/Site: IH 94 (N-S Freeway) City/County: Milwaukee County Sampling Date: 04-Aug-14

Applicant/Owner: Wisconsin Department of Transportation State: WI Sampling Point: **SP-15**

Investigator(s): Ron Londre, Geof Parish Section, Township, Range: S 30 T 5N R 22E

Landform (hillslope, terrace, etc.): Flat Local relief (concave, convex, none): concave

Slope: 0.0% 0.0 ° Lat.: Long.: Datum:

Soil Map Unit Name: Martinton silt loam (MgA), Not hydric WWI classification: None

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

Are Vegetation ☐ , Soil ☑ , or Hydrology ☐ significantly disturbed? Are "Normal Circumstances" present? Yes ◉ No ○

Are Vegetation ☐ , Soil ☐ , or Hydrology ☐ naturally problematic? (If needed, explain any answers in Remarks.)

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

Hydrophytic Vegetation Present?	Yes ◉ No ○	**Is the Sampled Area within a Wetland?** **Yes** ◉ **No** ○
Hydric Soil Present?	Yes ◉ No ○	
Wetland Hydrology Present?	Yes ◉ No ○	

Remarks:
This point is located in a basin.
All three parameters have been met at this point. Thus, this point is located in a wetland.

VEGETATION - Use scientific names of plants.

	Absolute % Cover	Dominant Species? Rel.Strat. Cover	Indicator Status
Tree Stratum (Plot size: 30' r)			
1.	0	☐ 0.0%	
2.	0	☐ 0.0%	
3.	0	☐ 0.0%	
4.	0	☐ 0.0%	
5.	0	☐ 0.0%	
	0	= Total Cover	
Sapling/Shrub Stratum (Plot size: 15' r)			
1.	0	☐ 0.0%	
2.	0	☐ 0.0%	
3.	0	☐ 0.0%	
4.	0	☐ 0.0%	
5.	0	☐ 0.0%	
	0	= Total Cover	
Herb Stratum (Plot size: 5' r)			
1. Typha angustifolia	40	☑ 45.5%	OBL
2. Schoenoplectus tabernaemontani	30	☑ 34.1%	OBL
3. Eleocharis obtusa	15	☐ 17.0%	OBL
4. Alisma subcordatum	3	☐ 3.4%	OBL
5.	0	☐ 0.0%	
6.	0	☐ 0.0%	
7.	0	☐ 0.0%	
8.	0	☐ 0.0%	
9.	0	☐ 0.0%	
10.	0	☐ 0.0%	
	88	= Total Cover	
Woody Vine Stratum (Plot size: 30' r)			
1.	0	☐ 0.0%	
2.	0	☐ 0.0%	
	0	= Total Cover	

Dominance Test worksheet:

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

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

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

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	88	x 1 =	88
FACW species	0	x 2 =	0
FAC species	0	x 3 =	0
FACU species	0	x 4 =	0
UPL species	0	x 5 =	0
Column Totals:	88 (A)		88 (B)

Prevalence Index = B/A = 1.000

Hydrophytic Vegetation Indicators:

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

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

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

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

This point is located in a shallow marsh.
The criterion for hydrophytic vegetation is met at this point.

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

SOIL

Sampling Point: **SP-15**

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

Depth (inches)	Matrix Color (moist)		%	Redox Features Color (moist)		%	Type [1]	Loc [2]	Texture	Remarks
0-7	10YR	3/2	95	10YR	4/6	5	C	M	Silty Clay Loam	
7-20	10YR	5/3	95	10YR	5/1	5	C	M	Silty Clay Loam	

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

Hydric Soil Indicators:

- ☐ Histosol (A1)
- ☐ Histic Epipedon (A2)
- ☐ Black Histic (A3)
- ☐ Hydrogen Sulfide (A4)
- ☐ Stratified Layers (A5)
- ☐ 2 cm Muck (A10)
- ☐ Depleted Below Dark Surface (A11)
- ☐ Thick Dark Surface (A12)
- ☐ Sandy Muck Mineral (S1)
- ☐ 5 cm Mucky Peat or Peat (S3)
- ☐ Sandy Gleyed Matrix (S4)
- ☐ Sandy Redox (S5)
- ☐ Stripped Matrix (S6)
- ☐ Loamy Mucky Mineral (F1)
- ☐ Loamy Gleyed Matrix (F2)
- ☐ Depleted Matrix (F3)
- ☑ Redox Dark Surface (F6)
- ☐ Depleted Dark Surface (F7)
- ☐ Redox Depressions (F8)

Indicators for Problematic Hydric Soils [3]:

- ☐ Coast Prairie Redox (A16)
- ☐ Dark Surface (S7)
- ☐ Iron Manganese Masses (F12)
- ☐ Very Shallow Dark Surface (TF12)
- ☐ Other (Explain in Remarks)

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

Restrictive Layer (if observed):

Type: None

Depth (inches): NA

Hydric Soil Present? **Yes** ◉ **No** ○

Remarks:

Soil is disturbed due to recent grading to construct the basin. Erosion netting is still present on the ground.
The criterion for hydric soil is met at this point.

HYDROLOGY

Wetland Hydrology Indicators:

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

- ☐ Surface Water (A1)
- ☑ High Water Table (A2)
- ☑ Saturation (A3)
- ☐ Water Marks (B1)
- ☐ Sediment Deposits (B2)
- ☐ Drift Deposits (B3)
- ☐ Algal Mat or Crust (B4)
- ☐ Iron Deposits (B5)
- ☐ Inundation Visible on Aerial Imagery (B7)
- ☐ Sparsely Vegetated Concave Surface (B8)
- ☐ Water-Stained Leaves (B9)
- ☐ Aquatic Fauna (B13)
- ☐ True Aquatic Plants (B14)
- ☐ Hydrogen Sulfide Odor (C1)
- ☐ Oxidized Rhizospheres on Living Roots (C3)
- ☐ Presence of Reduced Iron (C4)
- ☐ Recent Iron Reduction in Tilled Soils (C6)
- ☐ Thin Muck Surface (C7)
- ☐ Gauge or Well Data (D9)
- ☐ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ☐ Surface Soil Cracks (B6)
- ☐ Drainage Patterns (B10)
- ☐ Dry Season Water Table (C2)
- ☐ Crayfish Burrows (C8)
- ☐ Saturation Visible on Aerial Imagery (C9)
- ☐ Stunted or Stressed Plants (D1)
- ☑ Geomorphic Position (D2)
- ☑ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present?	Yes ○	No ◉	Depth (inches):
Water Table Present?	Yes ◉	No ○	Depth (inches): 4
Saturation Present? (includes capillary fringe)	Yes ◉	No ○	Depth (inches): 0

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

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

Previous delineation, DNR WWI map, NRCS Soils map, Topographic map, Aerial photos

Remarks:

Based on a WETS analysis, antecedent precipitation was within a normal range.
The criterion for hydrology is met at this point.

WETLAND DETERMINATION DATA FORM - Midwest Region

Project/Site: IH 94 (N-S Freeway) City/County: Milwaukee County Sampling Date: 04-Aug-14

Applicant/Owner: Wisconsin Department of Transportation State: WI Sampling Point: **SP-16**

Investigator(s): Ron Londre, Geof Parish Section, Township, Range: S 19 T 5N R 22E

Landform (hillslope, terrace, etc.): Toeslope/ditch Local relief (concave, convex, none): concave

Slope: 0.0% 0.0 ° Lat.: Long.: Datum:

Soil Map Unit Name: Blount silt loam (BlA), Not hydric WWI classification: None

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

Are Vegetation ☐ , Soil ☑ , or Hydrology ☐ significantly disturbed? Are "Normal Circumstances" present? Yes ◉ No ○

Are Vegetation ☐ , Soil ☐ , or Hydrology ☐ naturally problematic? (If needed, explain any answers in Remarks.)

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

Hydrophytic Vegetation Present?	Yes ○	No ◉	**Is the Sampled Area within a Wetland?** **Yes** ○ **No** ◉
Hydric Soil Present?	Yes ◉	No ○	
Wetland Hydrology Present?	Yes ○	No ◉	

Remarks:
This point is located in a roadside ditch.
Two of the three parameters have not been met at this point. Thus, this point is located in an upland.

VEGETATION - Use scientific names of plants.

Tree Stratum (Plot size: 4' x 80')	Absolute % Cover	Dominant Species?	Rel.Strat. Cover	Indicator Status
1.	0	☐	0.0%	
2.	0	☐	0.0%	
3.	0	☐	0.0%	
4.	0	☐	0.0%	
5.	0	☐	0.0%	
	0	= Total Cover		
Sapling/Shrub Stratum (Plot size: 4' x 80')				
1.	0	☐	0.0%	
2.	0	☐	0.0%	
3.	0	☐	0.0%	
4.	0	☐	0.0%	
5.	0	☐	0.0%	
	0	= Total Cover		
Herb Stratum (Plot size: 4' x 20')				
1. Elymus repens	75	☑	85.2%	FACU
2. Poa pratensis	10	☐	11.4%	FAC
3. Solidago canadensis	3	☐	3.4%	FACU
4.	0	☐	0.0%	
5.	0	☐	0.0%	
6.	0	☐	0.0%	
7.	0	☐	0.0%	
8.	0	☐	0.0%	
9.	0	☐	0.0%	
10.	0	☐	0.0%	
	88	= Total Cover		
Woody Vine Stratum (Plot size: 4' x 80')				
1.	0	☐	0.0%	
2.	0	☐	0.0%	
	0	= Total Cover		

Dominance Test worksheet:

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

Total Number of Dominant Species Across All Strata: 1 (B)

Percent of dominant Species That Are OBL, FACW, or FAC: 0.0% (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	0	x 2 =	0
FAC species	10	x 3 =	30
FACU species	78	x 4 =	312
UPL species	0	x 5 =	0
Column Totals:	88 (A)		342 (B)

Prevalence Index = B/A = 3.886

Hydrophytic Vegetation Indicators:

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

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

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

Remarks: (Include photo numbers here or on a separate sheet.)
The criterion for hydrophytic vegetation is not met at this point.

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

SOIL

Sampling Point: **SP-16**

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

Depth (inches)	Matrix Color (moist)		%	Redox Features Color (moist)		%	Type [1]	Loc [2]	Texture	Remarks
0-8	10YR	3/1	100						Silty Clay	
8-20	10YR	5/2	50	10YR	5/1	40	D	M	Silty Clay	
				7.5YR	5/6	10	C	M		

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

Hydric Soil Indicators:

- ☐ Histosol (A1)
- ☐ Histic Epipedon (A2)
- ☐ Black Histic (A3)
- ☐ Hydrogen Sulfide (A4)
- ☐ Stratified Layers (A5)
- ☐ 2 cm Muck (A10)
- ☑ Depleted Below Dark Surface (A11)
- ☐ Thick Dark Surface (A12)
- ☐ Sandy Muck Mineral (S1)
- ☐ 5 cm Mucky Peat or Peat (S3)
- ☐ Sandy Gleyed Matrix (S4)
- ☐ Sandy Redox (S5)
- ☐ Stripped Matrix (S6)
- ☐ Loamy Mucky Mineral (F1)
- ☐ Loamy Gleyed Matrix (F2)
- ☑ Depleted Matrix (F3)
- ☐ Redox Dark Surface (F6)
- ☐ Depleted Dark Surface (F7)
- ☐ Redox Depressions (F8)

Indicators for Problematic Hydric Soils [3]:

- ☐ Coast Prairie Redox (A16)
- ☐ Dark Surface (S7)
- ☐ Iron Manganese Masses (F12)
- ☐ Very Shallow Dark Surface (TF12)
- ☐ Other (Explain in Remarks)

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

Restrictive Layer (if observed):

Type: None

Depth (inches): NA

Hydric Soil Present? **Yes** ◉ **No** ○

Remarks:

Soil appears to be a roadside fill and thus disturbed.
The criterion for hydric soil is met at this point.

HYDROLOGY

Wetland Hydrology Indicators:

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

- ☐ Surface Water (A1)
- ☐ High Water Table (A2)
- ☐ Saturation (A3)
- ☐ Water Marks (B1)
- ☐ Sediment Deposits (B2)
- ☐ Drift Deposits (B3)
- ☐ Algal Mat or Crust (B4)
- ☐ Iron Deposits (B5)
- ☐ Inundation Visible on Aerial Imagery (B7)
- ☐ Sparsely Vegetated Concave Surface (B8)
- ☐ Water-Stained Leaves (B9)
- ☐ Aquatic Fauna (B13)
- ☐ True Aquatic Plants (B14)
- ☐ Hydrogen Sulfide Odor (C1)
- ☐ Oxidized Rhizospheres on Living Roots (C3)
- ☐ Presence of Reduced Iron (C4)
- ☐ Recent Iron Reduction in Tilled Soils (C6)
- ☐ Thin Muck Surface (C7)
- ☐ Gauge or Well Data (D9)
- ☐ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ☐ Surface Soil Cracks (B6)
- ☐ Drainage Patterns (B10)
- ☐ Dry Season Water Table (C2)
- ☐ Crayfish Burrows (C8)
- ☐ Saturation Visible on Aerial Imagery (C9)
- ☐ Stunted or Stressed Plants (D1)
- ☑ Geomorphic Position (D2)
- ☐ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes ○ No ◉ Depth (inches): _____

Water Table Present? Yes ○ No ◉ Depth (inches): _____

Saturation Present? (includes capillary fringe) Yes ○ No ◉ Depth (inches): _____

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

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

Previous delineation, DNR WWI map, NRCS Soils map, Topographic map, Aerial photos

Remarks:

Based on a WETS analysis, antecedent precipitation was within a normal range.
The criterion for hydrology is not met at this point.

WETLAND DETERMINATION DATA FORM - Midwest Region

Project/Site: IH 94 (N-S Freeway) City/County: Milwaukee County Sampling Date: 04-Aug-14

Applicant/Owner: Wisconsin Department of Transportation State: WI Sampling Point: **SP-17**

Investigator(s): Ron Londre, Geof Parish Section, Township, Range: S 19 T 5N R 22E

Landform (hillslope, terrace, etc.): Toeslope/ditch Local relief (concave, convex, none): concave

Slope: 0.0% 0.0 ° Lat.: Long.: Datum:

Soil Map Unit Name: Blount silt loam (BlA), Not hydric WWI classification: None

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

Are Vegetation ☐ , Soil ☑ , or Hydrology ☐ significantly disturbed? Are "Normal Circumstances" present? Yes ◉ No ○

Are Vegetation ☐ , Soil ☐ , or Hydrology ☐ naturally problematic? (If needed, explain any answers in Remarks.)

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

Hydrophytic Vegetation Present?	Yes ◉ No ○	**Is the Sampled Area within a Wetland?** **Yes** ◉ **No** ○
Hydric Soil Present?	Yes ◉ No ○	
Wetland Hydrology Present?	Yes ◉ No ○	

Remarks:
This point is located in a roadside ditch. All three parameters have been met at this point. Thus, this point is located in a wetland.
Wetland ID: W-4

VEGETATION - Use scientific names of plants.

Tree Stratum (Plot size: 8' x 350')	Absolute % Cover	Dominant Species?	Rel.Strat. Cover	Indicator Status
1.	0	☐	0.0%	
2.	0	☐	0.0%	
3.	0	☐	0.0%	
4.	0	☐	0.0%	
5.	0	☐	0.0%	
	0	= Total Cover		
Sapling/Shrub Stratum (Plot size: 8' x 90')				
1.	0	☐	0.0%	
2.	0	☐	0.0%	
3.	0	☐	0.0%	
4.	0	☐	0.0%	
5.	0	☐	0.0%	
	0	= Total Cover		
Herb Stratum (Plot size: 8' x 10')				
1. Typha angustifolia	75	☑	84.3%	OBL
2. Solidago sempervirens	8	☐	9.0%	FACW
3. Daucus carota	3	☐	3.4%	UPL
4. Festuca rubra	3	☐	3.4%	FACU
5.	0	☐	0.0%	
6.	0	☐	0.0%	
7.	0	☐	0.0%	
8.	0	☐	0.0%	
9.	0	☐	0.0%	
10.	0	☐	0.0%	
	89	= Total Cover		
Woody Vine Stratum (Plot size: 8' x 350')				
1.	0	☐	0.0%	
2.	0	☐	0.0%	
	0	= Total Cover		

Dominance Test worksheet:

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

Total Number of Dominant Species Across All Strata: 1 (B)

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

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	75	x 1 =	75
FACW species	8	x 2 =	16
FAC species	0	x 3 =	0
FACU species	3	x 4 =	12
UPL species	3	x 5 =	15
Column Totals:	89	(A)	118 (B)

Prevalence Index = B/A = 1.326

Hydrophytic Vegetation Indicators:

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

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

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

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

This point is located in a shallow marsh.
The criterion for hydrophytic vegetation is met at this point.

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

SOIL

Sampling Point: **SP-17**

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

Depth (inches)	Matrix Color (moist)		%	Redox Features Color (moist)		%	Type [1]	Loc [2]	Texture	Remarks
0-7	10YR	3/2	95	7.5YR	5/4	5	C	M	Silty Clay	
7-20	10YR	5/2	60	7.5YR	4/6	5	C	M	Silty Clay	
	10YR	4/3	35							

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

Hydric Soil Indicators:

- ☐ Histosol (A1)
- ☐ Histic Epipedon (A2)
- ☐ Black Histic (A3)
- ☐ Hydrogen Sulfide (A4)
- ☐ Stratified Layers (A5)
- ☐ 2 cm Muck (A10)
- ☑ Depleted Below Dark Surface (A11)
- ☐ Thick Dark Surface (A12)
- ☐ Sandy Muck Mineral (S1)
- ☐ 5 cm Mucky Peat or Peat (S3)
- ☐ Sandy Gleyed Matrix (S4)
- ☐ Sandy Redox (S5)
- ☐ Stripped Matrix (S6)
- ☐ Loamy Mucky Mineral (F1)
- ☐ Loamy Gleyed Matrix (F2)
- ☑ Depleted Matrix (F3)
- ☑ Redox Dark Surface (F6)
- ☐ Depleted Dark Surface (F7)
- ☐ Redox Depressions (F8)

Indicators for Problematic Hydric Soils [3]:

- ☐ Coast Prairie Redox (A16)
- ☐ Dark Surface (S7)
- ☐ Iron Manganese Masses (F12)
- ☐ Very Shallow Dark Surface (TF12)
- ☐ Other (Explain in Remarks)

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

Restrictive Layer (if observed):

Type: None

Depth (inches): NA

Hydric Soil Present? **Yes** ◉ **No** ○

Remarks:

Soil appears to be a roadside fill and thus disturbed.
The criterion for hydric soil is met at this point.

HYDROLOGY

Wetland Hydrology Indicators:

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

- ☐ Surface Water (A1)
- ☐ High Water Table (A2)
- ☐ Saturation (A3)
- ☐ Water Marks (B1)
- ☐ Sediment Deposits (B2)
- ☐ Drift Deposits (B3)
- ☐ Algal Mat or Crust (B4)
- ☐ Iron Deposits (B5)
- ☐ Inundation Visible on Aerial Imagery (B7)
- ☐ Sparsely Vegetated Concave Surface (B8)
- ☐ Water-Stained Leaves (B9)
- ☐ Aquatic Fauna (B13)
- ☐ True Aquatic Plants (B14)
- ☐ Hydrogen Sulfide Odor (C1)
- ☐ Oxidized Rhizospheres on Living Roots (C3)
- ☐ Presence of Reduced Iron (C4)
- ☐ Recent Iron Reduction in Tilled Soils (C6)
- ☐ Thin Muck Surface (C7)
- ☐ Gauge or Well Data (D9)
- ☐ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ☐ Surface Soil Cracks (B6)
- ☐ Drainage Patterns (B10)
- ☐ Dry Season Water Table (C2)
- ☐ Crayfish Burrows (C8)
- ☐ Saturation Visible on Aerial Imagery (C9)
- ☐ Stunted or Stressed Plants (D1)
- ☑ Geomorphic Position (D2)
- ☑ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes ○ No ◉ Depth (inches): _____

Water Table Present? Yes ○ No ◉ Depth (inches): _____

Saturation Present? (includes capillary fringe) Yes ○ No ◉ Depth (inches): _____

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

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

Previous delineation, DNR WWI map, NRCS Soils map, Topographic map, Aerial photos

Remarks:

Based on a WETS analysis, antecedent precipitation was within a normal range.
The criterion for hydrology is met at this point.

WETLAND DETERMINATION DATA FORM - Midwest Region

Project/Site: IH 94 (N-S Freeway) City/County: Milwaukee County Sampling Date: 04-Aug-14

Applicant/Owner: Wisconsin Department of Transportation State: WI Sampling Point: **SP-18**

Investigator(s): Ron Londre, Geof Parish Section, Township, Range: S 19 T 5N R 22E

Landform (hillslope, terrace, etc.): Toeslope/ditch Local relief (concave, convex, none): concave

Slope: 0.0% 0.0 ° Lat.: Long.: Datum:

Soil Map Unit Name: Ashkum silty clay loam (AsA), All hydric WWI classification: None

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

Are Vegetation ☐, Soil ☑, or Hydrology ☐ significantly disturbed? Are "Normal Circumstances" present? Yes ◉ No ○

Are Vegetation ☐, Soil ☐, or Hydrology ☐ naturally problematic? (If needed, explain any answers in Remarks.)

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

Hydrophytic Vegetation Present?	Yes ◉ No ○	**Is the Sampled Area within a Wetland?** **Yes** ◉ **No** ○
Hydric Soil Present?	Yes ◉ No ○	
Wetland Hydrology Present?	Yes ◉ No ○	

Remarks:
This point is located in a roadside ditch. All three parameters have been met at this point. Thus, this point is located in a wetland.
Wetland ID: W-5

VEGETATION - Use scientific names of plants.

Tree Stratum (Plot size: 20' x 150')	Absolute % Cover	Dominant Species?	Rel.Strat. Cover	Indicator Status
1.	0	☐	0.0%	
2.	0	☐	0.0%	
3.	0	☐	0.0%	
4.	0	☐	0.0%	
5.	0	☐	0.0%	
	0	= Total Cover		
Sapling/Shrub Stratum (Plot size: 20' x 35')				
1.	0	☐	0.0%	
2.	0	☐	0.0%	
3.	0	☐	0.0%	
4.	0	☐	0.0%	
5.	0	☐	0.0%	
	0	= Total Cover		
Herb Stratum (Plot size: 5' r)				
1. Typha angustifolia	30	☑	37.5%	OBL
2. Typha X glauca	30	☑	37.5%	OBL
3. Euthamia graminifolia	15	☐	18.8%	FACW
4. Phalaris arundinacea	5	☐	6.3%	FACW
5.	0	☐	0.0%	
6.	0	☐	0.0%	
7.	0	☐	0.0%	
8.	0	☐	0.0%	
9.	0	☐	0.0%	
10.	0	☐	0.0%	
	80	= Total Cover		
Woody Vine Stratum (Plot size: 20' x 150')				
1.	0	☐	0.0%	
2.	0	☐	0.0%	
	0	= Total Cover		

Dominance Test worksheet:

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

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

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

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	60	x 1 =	60
FACW species	20	x 2 =	40
FAC species	0	x 3 =	0
FACU species	0	x 4 =	0
UPL species	0	x 5 =	0
Column Totals:	80 (A)		100 (B)

Prevalence Index = B/A = 1.250

Hydrophytic Vegetation Indicators:

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

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

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

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

This point is located in a shallow marsh.
The criterion for hydrophytic vegetation is met at this point.

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

SOIL

Sampling Point: **SP-18**

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

Depth (inches)	Matrix Color (moist)		%	Redox Features Color (moist)		%	Type [1]	Loc [2]	Texture	Remarks
0-10	10YR	3/1	92	7.5YR	5/6	5	C	M	Silty Clay Loam	
				7.5YR	4/4	3	C	M		
10-20	10YR	5/2	70	7.5YR	5/6	20	C	M	Silty Clay Loam	
	10YR	2/1	10							

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

Hydric Soil Indicators:

- ☐ Histosol (A1)
- ☐ Histic Epipedon (A2)
- ☐ Black Histic (A3)
- ☐ Hydrogen Sulfide (A4)
- ☐ Stratified Layers (A5)
- ☐ 2 cm Muck (A10)
- ☑ Depleted Below Dark Surface (A11)
- ☐ Thick Dark Surface (A12)
- ☐ Sandy Muck Mineral (S1)
- ☐ 5 cm Mucky Peat or Peat (S3)
- ☐ Sandy Gleyed Matrix (S4)
- ☐ Sandy Redox (S5)
- ☐ Stripped Matrix (S6)
- ☐ Loamy Mucky Mineral (F1)
- ☐ Loamy Gleyed Matrix (F2)
- ☐ Depleted Matrix (F3)
- ☑ Redox Dark Surface (F6)
- ☐ Depleted Dark Surface (F7)
- ☐ Redox Depressions (F8)

Indicators for Problematic Hydric Soils [3]:

- ☐ Coast Prairie Redox (A16)
- ☐ Dark Surface (S7)
- ☐ Iron Manganese Masses (F12)
- ☐ Very Shallow Dark Surface (TF12)
- ☐ Other (Explain in Remarks)

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

Restrictive Layer (if observed):

Type: None

Depth (inches): NA

Hydric Soil Present? **Yes** ◉ **No** ○

Remarks:

Soil appears to be a roadside fill and thus disturbed.
The criterion for hydric soil is met at this point.

HYDROLOGY

Wetland Hydrology Indicators:

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

- ☐ Surface Water (A1)
- ☐ High Water Table (A2)
- ☐ Saturation (A3)
- ☐ Water Marks (B1)
- ☐ Sediment Deposits (B2)
- ☐ Drift Deposits (B3)
- ☐ Algal Mat or Crust (B4)
- ☐ Iron Deposits (B5)
- ☐ Inundation Visible on Aerial Imagery (B7)
- ☐ Sparsely Vegetated Concave Surface (B8)
- ☐ Water-Stained Leaves (B9)
- ☐ Aquatic Fauna (B13)
- ☐ True Aquatic Plants (B14)
- ☐ Hydrogen Sulfide Odor (C1)
- ☐ Oxidized Rhizospheres on Living Roots (C3)
- ☐ Presence of Reduced Iron (C4)
- ☐ Recent Iron Reduction in Tilled Soils (C6)
- ☐ Thin Muck Surface (C7)
- ☐ Gauge or Well Data (D9)
- ☐ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ☐ Surface Soil Cracks (B6)
- ☐ Drainage Patterns (B10)
- ☐ Dry Season Water Table (C2)
- ☐ Crayfish Burrows (C8)
- ☐ Saturation Visible on Aerial Imagery (C9)
- ☐ Stunted or Stressed Plants (D1)
- ☑ Geomorphic Position (D2)
- ☑ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes ○ No ◉ Depth (inches): _____

Water Table Present? Yes ○ No ◉ Depth (inches): _____

Saturation Present? (includes capillary fringe) Yes ○ No ◉ Depth (inches): _____

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

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

Previous delineation, DNR WWI map, NRCS Soils map, Topographic map, Aerial photos

Remarks:

Based on a WETS analys, antecedent precipitation was within a normal range.
The cirterion for hydrology is met at this point.

WETLAND DETERMINATION DATA FORM - Midwest Region

Project/Site: IH 94 (N-S Freeway) City/County: Milwaukee County Sampling Date: 04-Aug-14

Applicant/Owner: Wisconsin Department of Transportation State: WI Sampling Point: **SP-19**

Investigator(s): Ron Londre, Geof Parish Section, Township, Range: S 30 T 5N R 22E

Landform (hillslope, terrace, etc.): Backslope Local relief (concave, convex, none): convex

Slope: 25.0% 14.0 ° Lat.: Long.: Datum:

Soil Map Unit Name: Blount silt loam (BlA), Not hydric WWI classification: None

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

Are Vegetation ☐ , Soil ☑ , or Hydrology ☐ significantly disturbed? Are "Normal Circumstances" present? Yes ◉ No ○

Are Vegetation ☐ , Soil ☐ , or Hydrology ☐ naturally problematic? (If needed, explain any answers in Remarks.)

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

Hydrophytic Vegetation Present?	Yes ◉ No ○	**Is the Sampled Area within a Wetland?** **Yes ◉ No ○**
Hydric Soil Present?	Yes ◉ No ○	
Wetland Hydrology Present?	Yes ◉ No ○	

Remarks:
This point is located on a hillside seep on the side of a road.
All three parameters have been met at this point. Thus, this point is located in a wetland.

VEGETATION - Use scientific names of plants.

Tree Stratum (Plot size: 8' x 250')	Absolute % Cover	Dominant Species? Rel.Strat. Cover	Indicator Status
1.	0	☐ 0.0%	
2.	0	☐ 0.0%	
3.	0	☐ 0.0%	
4.	0	☐ 0.0%	
5.	0	☐ 0.0%	
	0	= Total Cover	
Sapling/Shrub Stratum (Plot size: 8' x 90')			
1.	0	☐ 0.0%	
2.	0	☐ 0.0%	
3.	0	☐ 0.0%	
4.	0	☐ 0.0%	
5.	0	☐ 0.0%	
	0	= Total Cover	
Herb Stratum (Plot size: 8' x 25')			
1. Scirpus atrovirens	60	☑ 58.8%	OBL
2. Schoenoplectus tabernaemontani	15	☐ 14.7%	OBL
3. Phalaris arundinacea	8	☐ 7.8%	FACW
4. Solidago sempervirens	8	☐ 7.8%	FACW
5. Typha angustifolia	5	☐ 4.9%	OBL
6. Agrostis gigantea	3	☐ 2.9%	FACW
7. Hordeum jubatum	3	☐ 2.9%	FAC
8.	0	☐ 0.0%	
9.	0	☐ 0.0%	
10.	0	☐ 0.0%	
	102	= Total Cover	
Woody Vine Stratum (Plot size: 8' x 250')			
1.	0	☐ 0.0%	
2.	0	☐ 0.0%	
	0	= Total Cover	

Dominance Test worksheet:

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

Total Number of Dominant Species Across All Strata: 1 (B)

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

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	80	x 1 =	80
FACW species	19	x 2 =	38
FAC species	3	x 3 =	9
FACU species	0	x 4 =	0
UPL species	0	x 5 =	0
Column Totals:	102 (A)		127 (B)

Prevalence Index = B/A = 1.245

Hydrophytic Vegetation Indicators:

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

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

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

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

The vegetation at this point is representative of a shallow marsh plant community.
The criterion for hydrophytic vegetation is met at this point.

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

SOIL

Sampling Point: **SP-19**

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

Depth (inches)	Matrix Color (moist)		%	Redox Features Color (moist)		%	Type [1]	Loc [2]	Texture	Remarks
0-6	10YR	3/1	95	7.5YR	4/6	5	C	M	Silty Clay Loam	
6-20	10YR	5/3	40	10YR	5/2	30	D	M	Sandy Clay Loam	
				7.5YR	5/6	15	C	M		
				10YR	5/1	15	D	M		

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

Hydric Soil Indicators:

- ☐ Histosol (A1)
- ☐ Histic Epipedon (A2)
- ☐ Black Histic (A3)
- ☐ Hydrogen Sulfide (A4)
- ☐ Stratified Layers (A5)
- ☐ 2 cm Muck (A10)
- ☐ Depleted Below Dark Surface (A11)
- ☐ Thick Dark Surface (A12)
- ☐ Sandy Muck Mineral (S1)
- ☐ 5 cm Mucky Peat or Peat (S3)
- ☐ Sandy Gleyed Matrix (S4)
- ☐ Sandy Redox (S5)
- ☐ Stripped Matrix (S6)
- ☐ Loamy Mucky Mineral (F1)
- ☐ Loamy Gleyed Matrix (F2)
- ☐ Depleted Matrix (F3)
- ☑ Redox Dark Surface (F6)
- ☐ Depleted Dark Surface (F7)
- ☐ Redox Depressions (F8)

Indicators for Problematic Hydric Soils [3]:

- ☐ Coast Prairie Redox (A16)
- ☐ Dark Surface (S7)
- ☐ Iron Manganese Masses (F12)
- ☐ Very Shallow Dark Surface (TF12)
- ☐ Other (Explain in Remarks)

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

Restrictive Layer (if observed):

Type: None

Depth (inches): NA

Hydric Soil Present? **Yes** ◉ **No** ○

Remarks:

Soil appears to be a roadside fill soil and thus disturbed.
The criterion for hydric soil is met at this point.

HYDROLOGY

Wetland Hydrology Indicators:

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

- ☐ Surface Water (A1)
- ☐ High Water Table (A2)
- ☑ Saturation (A3)
- ☐ Water Marks (B1)
- ☐ Sediment Deposits (B2)
- ☐ Drift Deposits (B3)
- ☐ Algal Mat or Crust (B4)
- ☐ Iron Deposits (B5)
- ☐ Inundation Visible on Aerial Imagery (B7)
- ☐ Sparsely Vegetated Concave Surface (B8)
- ☐ Water-Stained Leaves (B9)
- ☐ Aquatic Fauna (B13)
- ☐ True Aquatic Plants (B14)
- ☐ Hydrogen Sulfide Odor (C1)
- ☐ Oxidized Rhizospheres on Living Roots (C3)
- ☐ Presence of Reduced Iron (C4)
- ☐ Recent Iron Reduction in Tilled Soils (C6)
- ☐ Thin Muck Surface (C7)
- ☐ Gauge or Well Data (D9)
- ☐ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ☐ Surface Soil Cracks (B6)
- ☐ Drainage Patterns (B10)
- ☐ Dry Season Water Table (C2)
- ☐ Crayfish Burrows (C8)
- ☐ Saturation Visible on Aerial Imagery (C9)
- ☐ Stunted or Stressed Plants (D1)
- ☐ Geomorphic Position (D2)
- ☑ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes ○ No ◉ Depth (inches):

Water Table Present? Yes ○ No ◉ Depth (inches):

Saturation Present? (includes capillary fringe) Yes ◉ No ○ Depth (inches): 0

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

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

Previous delineation, DNR WWI map, NRCS Soils map, Topographic map, Aerial photos

Remarks:

Based on a WETS analysis, antecedent precipitation was above the normal range.
The criterion for hydrology is met at this point. Soil appears to be episaturated from 0-8 inches. No water table present.

WETLAND DETERMINATION DATA FORM - Midwest Region

Project/Site: IH 94 (N-S Freeway) City/County: Milwaukee County Sampling Date: 06-Aug-14

Applicant/Owner: Wisconsin Department of Transportation State: WI Sampling Point: **SP-20**

Investigator(s): Ron Londre, Geof Parish Section, Township, Range: S 19 T 5N R 22E

Landform (hillslope, terrace, etc.): Toeslope/ditch Local relief (concave, convex, none): concave

Slope: 10.0% 5.7 ° Lat.: Long.: Datum:

Soil Map Unit Name: Morley silt loam (MzdC2), Not hydric WWI classification: None

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

Are Vegetation ☐ , Soil ☑ , or Hydrology ☐ significantly disturbed? Are "Normal Circumstances" present? Yes ◉ No ○

Are Vegetation ☐ , Soil ☐ , or Hydrology ☐ naturally problematic? (If needed, explain any answers in Remarks.)

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

Hydrophytic Vegetation Present?	Yes ○ No ◉	**Is the Sampled Area within a Wetland?** **Yes** ○ **No** ◉
Hydric Soil Present?	Yes ○ No ◉	
Wetland Hydrology Present?	Yes ○ No ◉	

Remarks:
This point is located in a steeply sloped roadside ditch.
None of the parameters have been met at this point. Thus, this point is located in an upland.

VEGETATION - Use scientific names of plants.

	Absolute % Cover	Dominant Species?	Rel.Strat. Cover	Indicator Status
Tree Stratum (Plot size: 15' x 190')				
1.	0	☐	0.0%	
2.	0	☐	0.0%	
3.	0	☐	0.0%	
4.	0	☐	0.0%	
5.	0	☐	0.0%	
	0	= Total Cover		
Sapling/Shrub Stratum (Plot size: 15' x 50')				
1.	0	☐	0.0%	
2.	0	☐	0.0%	
3.	0	☐	0.0%	
4.	0	☐	0.0%	
5.	0	☐	0.0%	
	0	= Total Cover		
Herb Stratum (Plot size: 5' r)				
1. Festuca rubra	60	☑	46.9%	FACU
2. Symphyotrichum pilosum	20	☑	15.6%	FACU
3. Solidago canadensis	15	☐	11.7%	FACU
4. Elymus repens	10	☐	7.8%	FACU
5. Poa pratensis	10	☐	7.8%	FAC
6. Carex pellita	5	☐	3.9%	OBL
7. Daucus carota	5	☐	3.9%	UPL
8. Agrostis gigantea	3	☐	2.3%	FACW
9.	0	☐	0.0%	
10.	0	☐	0.0%	
	128	= Total Cover		
Woody Vine Stratum (Plot size: 15' x 190')				
1.	0	☐	0.0%	
2.	0	☐	0.0%	
	0	= Total Cover		

Dominance Test worksheet:

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

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

Percent of dominant Species That Are OBL, FACW, or FAC: 0.0% (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	5	x 1 =	5
FACW species	3	x 2 =	6
FAC species	10	x 3 =	30
FACU species	105	x 4 =	420
UPL species	5	x 5 =	25
Column Totals:	128 (A)		486 (B)

Prevalence Index = B/A = 3.797

Hydrophytic Vegetation Indicators:

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

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

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

Remarks: (Include photo numbers here or on a separate sheet.)
The criterion for hydrophytic vegetation is not met at this point.

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

SOIL

Sampling Point: **SP-20**

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

Depth (inches)	Matrix Color (moist)		%	Redox Features Color (moist)		%	Type [1]	Loc [2]	Texture	Remarks
0-7	10YR	3/2	100						Silty Clay Loam	
7-20	10YR	5/4	70	10YR	5/6	30	C	M	Silt Loam	

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

Hydric Soil Indicators:

- ☐ Histosol (A1)
- ☐ Histic Epipedon (A2)
- ☐ Black Histic (A3)
- ☐ Hydrogen Sulfide (A4)
- ☐ Stratified Layers (A5)
- ☐ 2 cm Muck (A10)
- ☐ Depleted Below Dark Surface (A11)
- ☐ Thick Dark Surface (A12)
- ☐ Sandy Muck Mineral (S1)
- ☐ 5 cm Mucky Peat or Peat (S3)
- ☐ Sandy Gleyed Matrix (S4)
- ☐ Sandy Redox (S5)
- ☐ Stripped Matrix (S6)
- ☐ Loamy Mucky Mineral (F1)
- ☐ Loamy Gleyed Matrix (F2)
- ☐ Depleted Matrix (F3)
- ☐ Redox Dark Surface (F6)
- ☐ Depleted Dark Surface (F7)
- ☐ Redox Depressions (F8)

Indicators for Problematic Hydric Soils [3]:

- ☐ Coast Prairie Redox (A16)
- ☐ Dark Surface (S7)
- ☐ Iron Manganese Masses (F12)
- ☐ Very Shallow Dark Surface (TF12)
- ☐ Other (Explain in Remarks)

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

Restrictive Layer (if observed):

Type: None

Depth (inches): NA

Hydric Soil Present? Yes ○ No ◉

Remarks:

Soil appears to be a road fill soil and thus disturbed.
The criterion for hydric soil is not met at this point.

HYDROLOGY

Wetland Hydrology Indicators:

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

- ☐ Surface Water (A1)
- ☐ High Water Table (A2)
- ☐ Saturation (A3)
- ☐ Water Marks (B1)
- ☐ Sediment Deposits (B2)
- ☐ Drift Deposits (B3)
- ☐ Algal Mat or Crust (B4)
- ☐ Iron Deposits (B5)
- ☐ Inundation Visible on Aerial Imagery (B7)
- ☐ Sparsely Vegetated Concave Surface (B8)
- ☐ Water-Stained Leaves (B9)
- ☐ Aquatic Fauna (B13)
- ☐ True Aquatic Plants (B14)
- ☐ Hydrogen Sulfide Odor (C1)
- ☐ Oxidized Rhizospheres on Living Roots (C3)
- ☐ Presence of Reduced Iron (C4)
- ☐ Recent Iron Reduction in Tilled Soils (C6)
- ☐ Thin Muck Surface (C7)
- ☐ Gauge or Well Data (D9)
- ☐ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ☐ Surface Soil Cracks (B6)
- ☐ Drainage Patterns (B10)
- ☐ Dry Season Water Table (C2)
- ☐ Crayfish Burrows (C8)
- ☐ Saturation Visible on Aerial Imagery (C9)
- ☐ Stunted or Stressed Plants (D1)
- ☐ Geomorphic Position (D2)
- ☐ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes ○ No ◉ Depth (inches): _____

Water Table Present? Yes ○ No ◉ Depth (inches): _____

Saturation Present? (includes capillary fringe) Yes ○ No ◉ Depth (inches): _____

Wetland Hydrology Present? Yes ○ No ◉

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

Previous delineation, DNR WWI map, NRCS Soils map, Topographic map, Aerial photos

Remarks:

Based on a WETS analysis, antecedent precipitation was within a normal range.
The criterion for hydrology is not met at this point.

WETLAND DETERMINATION DATA FORM - Midwest Region

Project/Site: IH 94 (N-S Freeway) City/County: Milwaukee County Sampling Date: 06-Aug-14

Applicant/Owner: Wisconsin Department of Transportation State: WI Sampling Point: **SP-21**

Investigator(s): Ron Londre, Geof Parish Section, Township, Range: S 19 T 5N R 22E

Landform (hillslope, terrace, etc.): Toeslope/ditch Local relief (concave, convex, none): concave

Slope: 2.0% 1.1 ° Lat.: Long.: Datum:

Soil Map Unit Name: Blount silt loam (BlA), Not hydric WWI classification: None

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

Are Vegetation [ ], Soil [✓], or Hydrology [ ] significantly disturbed? Are "Normal Circumstances" present? Yes (●) No ( )

Are Vegetation [ ], Soil [ ], or Hydrology [ ] naturally problematic? (If needed, explain any answers in Remarks.)

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

Hydrophytic Vegetation Present?	Yes (●) No ( )	**Is the Sampled Area within a Wetland?** **Yes (●) No ( )**
Hydric Soil Present?	Yes (●) No ( )	
Wetland Hydrology Present?	Yes (●) No ( )	

Remarks:
This point is located in a roadside ditch. All three parameters have been met at this point. Thus, this point is located in a wetland.
Wetland ID: W-6

VEGETATION - Use scientific names of plants.

	Absolute % Cover	Dominant Species? Rel.Strat. Cover	Indicator Status
Tree Stratum (Plot size: 15' x 190')			
1.	0	[ ] 0.0%	
2.	0	[ ] 0.0%	
3.	0	[ ] 0.0%	
4.	0	[ ] 0.0%	
5.	0	[ ] 0.0%	
	0	= Total Cover	
Sapling/Shrub Stratum (Plot size: 15' x 100')			
1.	0	[ ] 0.0%	
2.	0	[ ] 0.0%	
3.	0	[ ] 0.0%	
4.	0	[ ] 0.0%	
5.	0	[ ] 0.0%	
	0	= Total Cover	
Herb Stratum (Plot size: 5' r)			
1. Typha angustifolia	90	[✓] 90.0%	OBL
2. Vitis riparia	5	[ ] 5.0%	FACW
3. Sonchus arvensis	3	[ ] 3.0%	FACU
4. Cirsium arvense	2	[ ] 2.0%	FACU
5.	0	[ ] 0.0%	
6.	0	[ ] 0.0%	
7.	0	[ ] 0.0%	
8.	0	[ ] 0.0%	
9.	0	[ ] 0.0%	
10.	0	[ ] 0.0%	
	100	= Total Cover	
Woody Vine Stratum (Plot size: 15' x 190')			
1.	0	[ ] 0.0%	
2.	0	[ ] 0.0%	
	0	= Total Cover	

Dominance Test worksheet:

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

Total Number of Dominant Species Across All Strata: 1 (B)

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

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	90	x 1 =	90
FACW species	5	x 2 =	10
FAC species	0	x 3 =	0
FACU species	5	x 4 =	20
UPL species	0	x 5 =	0
Column Totals:	100 (A)		120 (B)

Prevalence Index = B/A = 1.200

Hydrophytic Vegetation Indicators:

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

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

Hydrophytic Vegetation Present? **Yes (●) No ( )**

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

This point is located in a shallow marsh plant community.
The criterion for hydrophytic vegetation is met at this point.

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

SOIL

Sampling Point: **SP-21**

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

Depth (inches)	Matrix Color (moist)		%	Redox Features Color (moist)		%	Type [1]	Loc [2]	Texture	Remarks
0-7	10YR	4/2	80	7.5YR	4/6	15	C	M	Silty Clay Loam	
	10YR	2/1	5							
7-20	7.5YR	5/3	60	7.5YR	6/2	40	D	M	Silty Clay Loam	

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

Hydric Soil Indicators:

- ☐ Histosol (A1)
- ☐ Histic Epipedon (A2)
- ☐ Black Histic (A3)
- ☐ Hydrogen Sulfide (A4)
- ☐ Stratified Layers (A5)
- ☐ 2 cm Muck (A10)
- ☐ Depleted Below Dark Surface (A11)
- ☐ Thick Dark Surface (A12)
- ☐ Sandy Muck Mineral (S1)
- ☐ 5 cm Mucky Peat or Peat (S3)
- ☐ Sandy Gleyed Matrix (S4)
- ☐ Sandy Redox (S5)
- ☐ Stripped Matrix (S6)
- ☐ Loamy Mucky Mineral (F1)
- ☐ Loamy Gleyed Matrix (F2)
- ☑ Depleted Matrix (F3)
- ☐ Redox Dark Surface (F6)
- ☐ Depleted Dark Surface (F7)
- ☐ Redox Depressions (F8)

Indicators for Problematic Hydric Soils [3]:

- ☐ Coast Prairie Redox (A16)
- ☐ Dark Surface (S7)
- ☐ Iron Manganese Masses (F12)
- ☐ Very Shallow Dark Surface (TF12)
- ☐ Other (Explain in Remarks)

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

Restrictive Layer (if observed):

Type: None

Depth (inches): NA

Hydric Soil Present? **Yes** ◉ **No** ○

Remarks:

Soil appears to be a roadside fill and thus disturbed.
The criterion for hydric soil is met at this point.

HYDROLOGY

Wetland Hydrology Indicators:

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

- ☐ Surface Water (A1)
- ☐ High Water Table (A2)
- ☑ Saturation (A3)
- ☐ Water Marks (B1)
- ☐ Sediment Deposits (B2)
- ☐ Drift Deposits (B3)
- ☐ Algal Mat or Crust (B4)
- ☐ Iron Deposits (B5)
- ☐ Inundation Visible on Aerial Imagery (B7)
- ☐ Sparsely Vegetated Concave Surface (B8)
- ☐ Water-Stained Leaves (B9)
- ☐ Aquatic Fauna (B13)
- ☐ True Aquatic Plants (B14)
- ☐ Hydrogen Sulfide Odor (C1)
- ☐ Oxidized Rhizospheres on Living Roots (C3)
- ☐ Presence of Reduced Iron (C4)
- ☐ Recent Iron Reduction in Tilled Soils (C6)
- ☐ Thin Muck Surface (C7)
- ☐ Gauge or Well Data (D9)
- ☐ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ☐ Surface Soil Cracks (B6)
- ☐ Drainage Patterns (B10)
- ☑ Dry Season Water Table (C2)
- ☐ Crayfish Burrows (C8)
- ☐ Saturation Visible on Aerial Imagery (C9)
- ☐ Stunted or Stressed Plants (D1)
- ☑ Geomorphic Position (D2)
- ☑ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes ○ No ◉ Depth (inches):

Water Table Present? Yes ◉ No ○ Depth (inches): 16

Saturation Present? (includes capillary fringe) Yes ◉ No ○ Depth (inches): 2

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

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

Previous delineation, DNR WWI map, NRCS Soils map, Topographic map, Aerial photos

Remarks:

Based on a WETS analysis, antecedent precipitation was within a normal range.
The criterion for hydrology is met at this point.

WETLAND DETERMINATION DATA FORM - Midwest Region

Project/Site: IH 94 (N-S Freeway) City/County: Milwaukee County Sampling Date: 06-Aug-14

Applicant/Owner: Wisconsin Department of Transportation State: WI Sampling Point: **SP-22**

Investigator(s): Ron Londre, Geof Parish Section, Township, Range: S 19 T 5N R 22E

Landform (hillslope, terrace, etc.): Backslope Local relief (concave, convex, none): convex

Slope: 25.0% 14.0 ° Lat.: Long.: Datum:

Soil Map Unit Name: Blount silt loam (BlA), Not hydric WWI classification: None

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

Are Vegetation ☐, Soil ☐, or Hydrology ☐ significantly disturbed? Are "Normal Circumstances" present? Yes ◉ No ○

Are Vegetation ☐, Soil ☐, or Hydrology ☐ naturally problematic? (If needed, explain any answers in Remarks.)

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

Hydrophytic Vegetation Present?	Yes ◉ No ○	**Is the Sampled Area within a Wetland?** **Yes** ○ **No** ◉
Hydric Soil Present?	Yes ○ No ◉	
Wetland Hydrology Present?	Yes ○ No ◉	

Remarks:
This point is located on the backslope of a drainage swale.
Two of the three parameters have not been met at this point. Thus, this point is located in an upland.

VEGETATION - Use scientific names of plants.

	Absolute % Cover	Dominant Species? Rel.Strat. Cover	Indicator Status
Tree Stratum (Plot size: 25' x 200')			
1.	0	☐ 0.0%	
2.	0	☐ 0.0%	
3.	0	☐ 0.0%	
4.	0	☐ 0.0%	
5.	0	☐ 0.0%	
	0	= Total Cover	
Sapling/Shrub Stratum (Plot size: 25' x 28')			
1. Fraxinus pennsylvanica	10	☑ 66.7%	FACW
2. Rhamnus cathartica	5	☑ 33.3%	FAC
3.	0	☐ 0.0%	
4.	0	☐ 0.0%	
5.	0	☐ 0.0%	
	15	= Total Cover	
Herb Stratum (Plot size: 5' r)			
1. Solidago canadensis	50	☑ 48.5%	FACU
2. Ribes americanum	25	☑ 24.3%	FACW
3. Poa pratensis	10	☐ 9.7%	FAC
4. Phalaris arundinacea	5	☐ 4.9%	FACW
5. Symphyotrichum pilosum	5	☐ 4.9%	FACU
6. Symphyotrichum cordifolium	5	☐ 4.9%	UPL
7. Euthamia graminifolia	3	☐ 2.9%	FACW
8.	0	☐ 0.0%	
9.	0	☐ 0.0%	
10.	0	☐ 0.0%	
	103	= Total Cover	
Woody Vine Stratum (Plot size: 25' x 200')			
1.	0	☐ 0.0%	
2.	0	☐ 0.0%	
	0	= Total Cover	

Dominance Test worksheet:

Number of Dominant Species That are OBL, FACW, or FAC: 3 (A)

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

Percent of dominant Species That Are OBL, FACW, or FAC: 75.0% (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	43	x 2 =	86
FAC species	15	x 3 =	45
FACU species	55	x 4 =	220
UPL species	5	x 5 =	25
Column Totals:	118 (A)		376 (B)

Prevalence Index = B/A = 3.186

Hydrophytic Vegetation Indicators:

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

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

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

Remarks: (Include photo numbers here or on a separate sheet.)
The criterion for hydrophytic vegetation is not met at this point.

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

SOIL

Sampling Point: **SP-22**

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

Depth (inches)	Matrix Color (moist)		%	Redox Features Color (moist)		%	Type [1]	Loc [2]	Texture	Remarks
0-4	10YR	4/3	90						Silty Clay Loam	
	10YR	2/1	10							
4-20	10YR	5/4	70	10YR	5/6	5	C	M	Silty Clay Loam	
	10YR	3/2	25							

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

Hydric Soil Indicators:

- ☐ Histosol (A1)
- ☐ Histic Epipedon (A2)
- ☐ Black Histic (A3)
- ☐ Hydrogen Sulfide (A4)
- ☐ Stratified Layers (A5)
- ☐ 2 cm Muck (A10)
- ☐ Depleted Below Dark Surface (A11)
- ☐ Thick Dark Surface (A12)
- ☐ Sandy Muck Mineral (S1)
- ☐ 5 cm Mucky Peat or Peat (S3)
- ☐ Sandy Gleyed Matrix (S4)
- ☐ Sandy Redox (S5)
- ☐ Stripped Matrix (S6)
- ☐ Loamy Mucky Mineral (F1)
- ☐ Loamy Gleyed Matrix (F2)
- ☐ Depleted Matrix (F3)
- ☐ Redox Dark Surface (F6)
- ☐ Depleted Dark Surface (F7)
- ☐ Redox Depressions (F8)

Indicators for Problematic Hydric Soils [3]:

- ☐ Coast Prairie Redox (A16)
- ☐ Dark Surface (S7)
- ☐ Iron Manganese Masses (F12)
- ☐ Very Shallow Dark Surface (TF12)
- ☐ Other (Explain in Remarks)

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

Restrictive Layer (if observed):

Type: None

Depth (inches): NA

Hydric Soil Present? Yes ○ No ◉

Remarks:

The criterion for hydric soil is not met at this point.

HYDROLOGY

Wetland Hydrology Indicators:

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

- ☐ Surface Water (A1)
- ☐ High Water Table (A2)
- ☐ Saturation (A3)
- ☐ Water Marks (B1)
- ☐ Sediment Deposits (B2)
- ☐ Drift Deposits (B3)
- ☐ Algal Mat or Crust (B4)
- ☐ Iron Deposits (B5)
- ☐ Inundation Visible on Aerial Imagery (B7)
- ☐ Sparsely Vegetated Concave Surface (B8)
- ☐ Water-Stained Leaves (B9)
- ☐ Aquatic Fauna (B13)
- ☐ True Aquatic Plants (B14)
- ☐ Hydrogen Sulfide Odor (C1)
- ☐ Oxidized Rhizospheres on Living Roots (C3)
- ☐ Presence of Reduced Iron (C4)
- ☐ Recent Iron Reduction in Tilled Soils (C6)
- ☐ Thin Muck Surface (C7)
- ☐ Gauge or Well Data (D9)
- ☐ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ☐ Surface Soil Cracks (B6)
- ☐ Drainage Patterns (B10)
- ☐ Dry Season Water Table (C2)
- ☐ Crayfish Burrows (C8)
- ☐ Saturation Visible on Aerial Imagery (C9)
- ☐ Stunted or Stressed Plants (D1)
- ☐ Geomorphic Position (D2)
- ☑ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes ○ No ◉ Depth (inches):

Water Table Present? Yes ○ No ◉ Depth (inches):

Saturation Present? (includes capillary fringe) Yes ○ No ◉ Depth (inches):

Wetland Hydrology Present? Yes ○ No ◉

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

Previous delineation, DNR WWI map, NRCS Soils map, Topographic map, Aerial photos

Remarks:

Based on a WETS analysis, antecedent precipitation was within a normal range.
The criterion for hydrology is not met at this point.

WETLAND DETERMINATION DATA FORM - Midwest Region

Project/Site: IH 94 (N-S Freeway) City/County: Milwaukee County Sampling Date: 06-Aug-14

Applicant/Owner: Wisconsin Department of Transportation State: WI Sampling Point: **SP-23**

Investigator(s): Ron Londre, Geof Parish Section, Township, Range: S 19 T 5N R 22E

Landform (hillslope, terrace, etc.): Toeslope/ditch Local relief (concave, convex, none): concave

Slope: 1.0% 0.6 ° Lat.: Long.: Datum:

Soil Map Unit Name: Blount silt loam (BlA), Not hydric WWI classification: None

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

Are Vegetation ☐, Soil ☐, or Hydrology ☐ significantly disturbed? Are "Normal Circumstances" present? Yes ◉ No ○

Are Vegetation ☐, Soil ☐, or Hydrology ☐ naturally problematic? (If needed, explain any answers in Remarks.)

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

Hydrophytic Vegetation Present?	Yes ◉ No ○	**Is the Sampled Area within a Wetland?** **Yes** ◉ **No** ○
Hydric Soil Present?	Yes ◉ No ○	
Wetland Hydrology Present?	Yes ◉ No ○	

Remarks:
This point is located in a storm water drainage swale on a commercial property.
All three parameters have been met at this point. Thus, this point is located in a wetland. Wetland ID: W-6

VEGETATION - Use scientific names of plants.

Tree Stratum (Plot size: 20' x 200')	Absolute % Cover	Dominant Species?	Rel.Strat. Cover	Indicator Status
1.	0	☐	0.0%	
2.	0	☐	0.0%	
3.	0	☐	0.0%	
4.	0	☐	0.0%	
5.	0	☐	0.0%	
	0	= Total Cover		
Sapling/Shrub Stratum (Plot size: 20' x 35')				
1. Frangula alnus	10	☑	31.3%	FACW
2. Salix interior	10	☑	31.3%	FACW
3. Fraxinus pennsylvanica	5	☐	15.6%	FACW
4. Salix amygdaloides	5	☐	15.6%	FACW
5. Ribes hirtellum	2	☐	6.3%	FACW
	32	= Total Cover		
Herb Stratum (Plot size: 5' r)				
1. Typha angustifolia	50	☑	55.6%	OBL
2. Ribes hirtellum	20	☑	22.2%	FACW
3. Phalaris arundinacea	20	☑	22.2%	FACW
4.	0	☐	0.0%	
5.	0	☐	0.0%	
6.	0	☐	0.0%	
7.	0	☐	0.0%	
8.	0	☐	0.0%	
9.	0	☐	0.0%	
10.	0	☐	0.0%	
	90	= Total Cover		
Woody Vine Stratum (Plot size: 20' x 200')				
1.	0	☐	0.0%	
2.	0	☐	0.0%	
	0	= Total Cover		

Dominance Test worksheet:

Number of Dominant Species That are OBL, FACW, or FAC: 5 (A)

Total Number of Dominant Species Across All Strata: 5 (B)

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

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	50	x 1 =	50
FACW species	72	x 2 =	144
FAC species	0	x 3 =	0
FACU species	0	x 4 =	0
UPL species	0	x 5 =	0
Column Totals:	122 (A)		194 (B)

Prevalence Index = B/A = 1.590

Hydrophytic Vegetation Indicators:

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

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

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

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

This point is located in a shallow marsh plant community.
The criterion for hydrophytic vegetation is met at this point.

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

SOIL

Sampling Point: **SP-23**

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

Depth (inches)	Matrix Color (moist)		%	Redox Features Color (moist)		%	Type [1]	Loc [2]	Texture	Remarks
0-4	10YR	3/1	90	7.5YR	5/6	10	C	M	Silty Clay Loam	
4-20	10YR	4/2	80	7.5YR	4/6	20	C	M	Silty Clay Loam	

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

Hydric Soil Indicators:

- ☐ Histosol (A1)
- ☐ Histic Epipedon (A2)
- ☐ Black Histic (A3)
- ☐ Hydrogen Sulfide (A4)
- ☐ Stratified Layers (A5)
- ☐ 2 cm Muck (A10)
- ☑ Depleted Below Dark Surface (A11)
- ☐ Thick Dark Surface (A12)
- ☐ Sandy Muck Mineral (S1)
- ☐ 5 cm Mucky Peat or Peat (S3)
- ☐ Sandy Gleyed Matrix (S4)
- ☐ Sandy Redox (S5)
- ☐ Stripped Matrix (S6)
- ☐ Loamy Mucky Mineral (F1)
- ☐ Loamy Gleyed Matrix (F2)
- ☑ Depleted Matrix (F3)
- ☑ Redox Dark Surface (F6)
- ☐ Depleted Dark Surface (F7)
- ☐ Redox Depressions (F8)

Indicators for Problematic Hydric Soils [3]:

- ☐ Coast Prairie Redox (A16)
- ☐ Dark Surface (S7)
- ☐ Iron Manganese Masses (F12)
- ☐ Very Shallow Dark Surface (TF12)
- ☐ Other (Explain in Remarks)

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

Restrictive Layer (if observed):

Type: None

Depth (inches): NA

Hydric Soil Present? **Yes** ◉ **No** ○

Remarks:

The criterion for hydric soil is met at this point.

HYDROLOGY

Wetland Hydrology Indicators:

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

- ☐ Surface Water (A1)
- ☐ High Water Table (A2)
- ☐ Saturation (A3)
- ☐ Water Marks (B1)
- ☐ Sediment Deposits (B2)
- ☐ Drift Deposits (B3)
- ☐ Algal Mat or Crust (B4)
- ☐ Iron Deposits (B5)
- ☐ Inundation Visible on Aerial Imagery (B7)
- ☐ Sparsely Vegetated Concave Surface (B8)
- ☐ Water-Stained Leaves (B9)
- ☐ Aquatic Fauna (B13)
- ☐ True Aquatic Plants (B14)
- ☐ Hydrogen Sulfide Odor (C1)
- ☐ Oxidized Rhizospheres on Living Roots (C3)
- ☐ Presence of Reduced Iron (C4)
- ☐ Recent Iron Reduction in Tilled Soils (C6)
- ☐ Thin Muck Surface (C7)
- ☐ Gauge or Well Data (D9)
- ☐ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ☐ Surface Soil Cracks (B6)
- ☐ Drainage Patterns (B10)
- ☐ Dry Season Water Table (C2)
- ☐ Crayfish Burrows (C8)
- ☐ Saturation Visible on Aerial Imagery (C9)
- ☐ Stunted or Stressed Plants (D1)
- ☑ Geomorphic Position (D2)
- ☑ FAC-Neutral Test (D5)

Field Observations:

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

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

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

Previous delineation, DNR WWI map, NRCS Soils map, Topographic map, Aerial photos

Remarks:

Based on a WETS analysis, antecedent precipitation was within a normal range.
The criterion for hydrology is met at this point.

WETLAND DETERMINATION DATA FORM - Midwest Region

Project/Site: IH 94 (N-S Freeway) City/County: Milwaukee County Sampling Date: 06-Aug-14

Applicant/Owner: Wisconsin Department of Transportation State: WI Sampling Point: **SP-24**

Investigator(s): Ron Londre, Geof Parish Section, Township, Range: S 19 T 5N R 22E

Landform (hillslope, terrace, etc.): Footslope Local relief (concave, convex, none): concave

Slope: 3.0% 1.7 ° Lat.: Long.: Datum:

Soil Map Unit Name: Blount silt loam (BlA), Not hydric WWI classification: None

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

Are Vegetation ☐ , Soil ☑ , or Hydrology ☐ significantly disturbed? Are "Normal Circumstances" present? Yes ◉ No ○

Are Vegetation ☐ , Soil ☐ , or Hydrology ☐ naturally problematic? (If needed, explain any answers in Remarks.)

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

Hydrophytic Vegetation Present?	Yes ○ No ◉	**Is the Sampled Area within a Wetland?** **Yes** ○ **No** ◉
Hydric Soil Present?	Yes ○ No ◉	
Wetland Hydrology Present?	Yes ○ No ◉	

Remarks:
None of the parameters have been met at this point. Thus, this point is located in an upland.

VEGETATION - Use scientific names of plants.

	Absolute % Cover	Dominant Species? Rel.Strat. Cover	Indicator Status
Tree Stratum (Plot size: 30' r)			
1.	0	☐ 0.0%	
2.	0	☐ 0.0%	
3.	0	☐ 0.0%	
4.	0	☐ 0.0%	
5.	0	☐ 0.0%	
	0	= Total Cover	
Sapling/Shrub Stratum (Plot size: 15' r)			
1.	0	☐ 0.0%	
2.	0	☐ 0.0%	
3.	0	☐ 0.0%	
4.	0	☐ 0.0%	
5.	0	☐ 0.0%	
	0	= Total Cover	
Herb Stratum (Plot size: 5' r)			
1. Lotus corniculatus	75	☑ 63.6%	FACU
2. Solidago canadensis	10	☐ 8.5%	FACU
3. Coronilla varia	10	☐ 8.5%	UPL
4. Phalaris arundinacea	15	☐ 12.7%	FACW
5. Oenothera biennis	8	☐ 6.8%	FACU
6.	0	☐ 0.0%	
7.	0	☐ 0.0%	
8.	0	☐ 0.0%	
9.	0	☐ 0.0%	
10.	0	☐ 0.0%	
	118	= Total Cover	
Woody Vine Stratum (Plot size: 30' r)			
1.	0	☐ 0.0%	
2.	0	☐ 0.0%	
	0	= Total Cover	

Dominance Test worksheet:

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

Total Number of Dominant Species Across All Strata: 1 (B)

Percent of dominant Species That Are OBL, FACW, or FAC: 0.0% (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	15	x 2 =	30
FAC species	0	x 3 =	0
FACU species	93	x 4 =	372
UPL species	10	x 5 =	50
Column Totals:	118	(A)	452 (B)

Prevalence Index = B/A = 3.831

Hydrophytic Vegetation Indicators:

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

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

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

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

This point is located in a fallow field.
The criterion for hydrophytic vegetation is not met at this point.

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

SOIL

Sampling Point: **SP-24**

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

Depth (inches)	Matrix Color (moist)		%	Redox Features Color (moist)	%	Type [1]	Loc²	Texture	Remarks
0-9	10YR	4/3	90					Clay Loam	10% pebbles
	10YR	2/1	10						
9-20	10YR	5/3	80					Sandy Clay Loam	25% gravel
	10YR	3/2	20						

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

Hydric Soil Indicators:

- ☐ Histosol (A1)
- ☐ Histic Epipedon (A2)
- ☐ Black Histic (A3)
- ☐ Hydrogen Sulfide (A4)
- ☐ Stratified Layers (A5)
- ☐ 2 cm Muck (A10)
- ☐ Depleted Below Dark Surface (A11)
- ☐ Thick Dark Surface (A12)
- ☐ Sandy Muck Mineral (S1)
- ☐ 5 cm Mucky Peat or Peat (S3)
- ☐ Sandy Gleyed Matrix (S4)
- ☐ Sandy Redox (S5)
- ☐ Stripped Matrix (S6)
- ☐ Loamy Mucky Mineral (F1)
- ☐ Loamy Gleyed Matrix (F2)
- ☐ Depleted Matrix (F3)
- ☐ Redox Dark Surface (F6)
- ☐ Depleted Dark Surface (F7)
- ☐ Redox Depressions (F8)

Indicators for Problematic Hydric Soils [3]:

- ☐ Coast Prairie Redox (A16)
- ☐ Dark Surface (S7)
- ☐ Iron Manganese Masses (F12)
- ☐ Very Shallow Dark Surface (TF12)
- ☐ Other (Explain in Remarks)

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

Restrictive Layer (if observed):

Type: None

Depth (inches): NA

Hydric Soil Present? **Yes** ○ **No** ◉

Remarks:

Soil appears to be a fill soil and thus disturbed.
The criterion for hydric soil is not met at this point.

HYDROLOGY

Wetland Hydrology Indicators:

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

- ☐ Surface Water (A1)
- ☐ High Water Table (A2)
- ☐ Saturation (A3)
- ☐ Water Marks (B1)
- ☐ Sediment Deposits (B2)
- ☐ Drift Deposits (B3)
- ☐ Algal Mat or Crust (B4)
- ☐ Iron Deposits (B5)
- ☐ Inundation Visible on Aerial Imagery (B7)
- ☐ Sparsely Vegetated Concave Surface (B8)
- ☐ Water-Stained Leaves (B9)
- ☐ Aquatic Fauna (B13)
- ☐ True Aquatic Plants (B14)
- ☐ Hydrogen Sulfide Odor (C1)
- ☐ Oxidized Rhizospheres on Living Roots (C3)
- ☐ Presence of Reduced Iron (C4)
- ☐ Recent Iron Reduction in Tilled Soils (C6)
- ☐ Thin Muck Surface (C7)
- ☐ Gauge or Well Data (D9)
- ☐ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ☐ Surface Soil Cracks (B6)
- ☐ Drainage Patterns (B10)
- ☐ Dry Season Water Table (C2)
- ☐ Crayfish Burrows (C8)
- ☐ Saturation Visible on Aerial Imagery (C9)
- ☐ Stunted or Stressed Plants (D1)
- ☐ Geomorphic Position (D2)
- ☐ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes ○ No ◉ Depth (inches): _____

Water Table Present? Yes ○ No ◉ Depth (inches): _____

Saturation Present? (includes capillary fringe) Yes ○ No ◉ Depth (inches): _____

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

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

Previous delineation, DNR WWI map, NRCS Soils map, Topographic map, Aerial photos

Remarks:

Based on a WETS analysis, antecedent precipitation was within a normal range.
The criterion for hydrology is not met at this point.

WETLAND DETERMINATION DATA FORM - Midwest Region

Project/Site: IH 94 (N-S Freeway) City/County: Milwaukee County Sampling Date: 06-Aug-14

Applicant/Owner: Wisconsin Department of Transportation State: WI Sampling Point: **SP-25**

Investigator(s): Ron Londre, Geof Parish Section, Township, Range: S 19 T 5N R 22E

Landform (hillslope, terrace, etc.): Toeslope Local relief (concave, convex, none): concave

Slope: 1.0% 0.6 ° Lat.: Long.: Datum:

Soil Map Unit Name: Blount silt loam (BlA), Not hydric WWI classification: E2Kx

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

Are Vegetation ☐ , Soil ☑ , or Hydrology ☐ significantly disturbed? Are "Normal Circumstances" present? Yes ◉ No ○

Are Vegetation ☐ , Soil ☐ , or Hydrology ☐ naturally problematic? (If needed, explain any answers in Remarks.)

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

Hydrophytic Vegetation Present?	Yes ◉ No ○	**Is the Sampled Area within a Wetland?** **Yes** ◉ **No** ○
Hydric Soil Present?	Yes ◉ No ○	
Wetland Hydrology Present?	Yes ◉ No ○	

Remarks:
All three parameters have been met at this point. Thus, this point is located in a wetland.
This wetland appears to have developed in fill material.

VEGETATION - Use scientific names of plants.

	Absolute % Cover	Dominant Species?	Rel.Strat. Cover	Indicator Status
Tree Stratum (Plot size: 30' r)				
1.	0	☐	0.0%	
2.	0	☐	0.0%	
3.	0	☐	0.0%	
4.	0	☐	0.0%	
5.	0	☐	0.0%	
	0	= Total Cover		
Sapling/Shrub Stratum (Plot size: 15' r)				
1. Salix interior	30	☑	100.0%	FACW
2.	0	☐	0.0%	
3.	0	☐	0.0%	
4.	0	☐	0.0%	
5.	0	☐	0.0%	
	30	= Total Cover		
Herb Stratum (Plot size: 5' r)				
1. Phalaris arundinacea	70	☑	59.3%	FACW
2. Solidago canadensis	20	☐	16.9%	FACU
3. Coronilla varia	10	☐	8.5%	UPL
4. Poa pratensis	10	☐	8.5%	FAC
5. Euthamia graminifolia	5	☐	4.2%	FACW
6. Cirsium arvense	3	☐	2.5%	FACU
7.	0	☐	0.0%	
8.	0	☐	0.0%	
9.	0	☐	0.0%	
10.	0	☐	0.0%	
	118	= Total Cover		
Woody Vine Stratum (Plot size: 30' r)				
1.	0	☐	0.0%	
2.	0	☐	0.0%	
	0	= Total Cover		

Dominance Test worksheet:

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

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

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

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	105	x 2 =	210
FAC species	10	x 3 =	30
FACU species	23	x 4 =	92
UPL species	10	x 5 =	50
Column Totals:	148	(A)	382 (B)

Prevalence Index = B/A = 2.581

Hydrophytic Vegetation Indicators:

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

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

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

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

This point is located in a scrub shrub.
The criterion for hydrophytic vegetation is met at this point.

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

SOIL

Sampling Point: **SP-25**

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

Depth (inches)	Matrix Color (moist)		%	Redox Features Color (moist)		%	Type [1]	Loc [2]	Texture	Remarks
0-6	10YR	3/2	50						Silty Clay Loam	10% gravel
	10YR	4/3	50							
6-20	10YR	4/2	95	7.5YR	4/6	5	C	M	Silty Clay Loam	20% gravel

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

Hydric Soil Indicators:

- ☐ Histosol (A1)
- ☐ Histic Epipedon (A2)
- ☐ Black Histic (A3)
- ☐ Hydrogen Sulfide (A4)
- ☐ Stratified Layers (A5)
- ☐ 2 cm Muck (A10)
- ☑ Depleted Below Dark Surface (A11)
- ☐ Thick Dark Surface (A12)
- ☐ Sandy Muck Mineral (S1)
- ☐ 5 cm Mucky Peat or Peat (S3)
- ☐ Sandy Gleyed Matrix (S4)
- ☐ Sandy Redox (S5)
- ☐ Stripped Matrix (S6)
- ☐ Loamy Mucky Mineral (F1)
- ☐ Loamy Gleyed Matrix (F2)
- ☑ Depleted Matrix (F3)
- ☐ Redox Dark Surface (F6)
- ☐ Depleted Dark Surface (F7)
- ☐ Redox Depressions (F8)

Indicators for Problematic Hydric Soils [3]:

- ☐ Coast Prairie Redox (A16)
- ☐ Dark Surface (S7)
- ☐ Iron Manganese Masses (F12)
- ☐ Very Shallow Dark Surface (TF12)
- ☐ Other (Explain in Remarks)

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

Restrictive Layer (if observed):

Type:

Depth (inches):

Hydric Soil Present? Yes ◉ No ○

Remarks:

Soil appears to be a fill soil and thus disturbed.
The criterion for hydric soil is met at this point.

HYDROLOGY

Wetland Hydrology Indicators:

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

- ☐ Surface Water (A1)
- ☐ High Water Table (A2)
- ☐ Saturation (A3)
- ☐ Water Marks (B1)
- ☐ Sediment Deposits (B2)
- ☐ Drift Deposits (B3)
- ☐ Algal Mat or Crust (B4)
- ☐ Iron Deposits (B5)
- ☐ Inundation Visible on Aerial Imagery (B7)
- ☐ Sparsely Vegetated Concave Surface (B8)
- ☐ Water-Stained Leaves (B9)
- ☐ Aquatic Fauna (B13)
- ☐ True Aquatic Plants (B14)
- ☐ Hydrogen Sulfide Odor (C1)
- ☐ Oxidized Rhizospheres on Living Roots (C3)
- ☐ Presence of Reduced Iron (C4)
- ☐ Recent Iron Reduction in Tilled Soils (C6)
- ☐ Thin Muck Surface (C7)
- ☐ Gauge or Well Data (D9)
- ☐ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ☐ Surface Soil Cracks (B6)
- ☐ Drainage Patterns (B10)
- ☐ Dry Season Water Table (C2)
- ☐ Crayfish Burrows (C8)
- ☐ Saturation Visible on Aerial Imagery (C9)
- ☐ Stunted or Stressed Plants (D1)
- ☑ Geomorphic Position (D2)
- ☑ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes ○ No ◉ Depth (inches):

Water Table Present? Yes ○ No ◉ Depth (inches):

Saturation Present? (includes capillary fringe) Yes ○ No ◉ Depth (inches):

Wetland Hydrology Present? Yes ◉ No ○

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

Previous delineation, DNR WWI map, NRCS Soils map, Topographic map, Aerial photos

Remarks:

Based on a WETS analysis, antecedent precipitation was within a normal range.
The criterion for hydrology is met at this point.

WETLAND DETERMINATION DATA FORM - Midwest Region

Project/Site: IH 94 (N-S Freeway) City/County: Milwaukee County Sampling Date: 06-Aug-14

Applicant/Owner: Wisconsin Department of Transportation State: WI Sampling Point: **SP-26**

Investigator(s): Ron Londre, Geof Parish Section, Township, Range: S 19 T 5N R 22E

Landform (hillslope, terrace, etc.): Backslope Local relief (concave, convex, none): convex

Slope: 0.0% 0.0 ° Lat.: Long.: Datum:

Soil Map Unit Name: Ashkum silty clay loam (AsA), All hydric WWI classification: None

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

Are Vegetation ☐ , Soil ☑ , or Hydrology ☐ significantly disturbed? Are "Normal Circumstances" present? Yes ◉ No ○

Are Vegetation ☐ , Soil ☐ , or Hydrology ☐ naturally problematic? (If needed, explain any answers in Remarks.)

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

Hydrophytic Vegetation Present?	Yes ◉	No ○	**Is the Sampled Area within a Wetland?** **Yes** ○ **No** ◉
Hydric Soil Present?	Yes ○	No ◉	
Wetland Hydrology Present?	Yes ○	No ◉	

Remarks:
This point is located in a fallow field.
Two of three parameters have not been met at this point. Thus, this point is located in an upland.

VEGETATION - Use scientific names of plants.

	Absolute % Cover	Dominant Species? Rel.Strat. Cover	Indicator Status
Tree Stratum (Plot size: 30' r)			
1.	0	☐ 0.0%	
2.	0	☐ 0.0%	
3.	0	☐ 0.0%	
4.	0	☐ 0.0%	
5.	0	☐ 0.0%	
	0	= Total Cover	
Sapling/Shrub Stratum (Plot size: 15' r)			
1. Salix interior	5	☑ 100.0%	FACW
2.	0	☐ 0.0%	
3.	0	☐ 0.0%	
4.	0	☐ 0.0%	
5.	0	☐ 0.0%	
	5	= Total Cover	
Herb Stratum (Plot size: 5' r)			
1. Poa pratensis	40	☑ 40.0%	FAC
2. Daucus carota	30	☑ 30.0%	UPL
3. Trifolium repens	15	☐ 15.0%	FACU
4. Phalaris arundinacea	10	☐ 10.0%	FACW
5. Elymus repens	5	☐ 5.0%	FACU
6.	0	☐ 0.0%	
7.	0	☐ 0.0%	
8.	0	☐ 0.0%	
9.	0	☐ 0.0%	
10.	0	☐ 0.0%	
	100	= Total Cover	
Woody Vine Stratum (Plot size: 30' r)			
1.	0	☐ 0.0%	
2.	0	☐ 0.0%	
	0	= Total Cover	

Dominance Test worksheet:

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

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

Percent of dominant Species That Are OBL, FACW, or FAC: 66.7% (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	15	x 2 =	30
FAC species	40	x 3 =	120
FACU species	20	x 4 =	80
UPL species	30	x 5 =	150
Column Totals:	105	(A)	380 (B)

Prevalence Index = B/A = 3.619

Hydrophytic Vegetation Indicators:

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

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

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

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

This point is located in a fallow field.
The criterion for hydrophytic vegetation is met at this point.

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

SOIL

Sampling Point: **SP-26**

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

Depth (inches)	Matrix Color (moist)		%	Redox Features Color (moist)	%	Type [1]	Loc [2]	Texture	Remarks
0-7	10YR	4/3	50					Silty Clay Loam	
	10YR	4/2	50						
7-20	10YR	4/3	100					Silty Clay Loam	10% gravel

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

Hydric Soil Indicators:

- ☐ Histosol (A1)
- ☐ Histic Epipedon (A2)
- ☐ Black Histic (A3)
- ☐ Hydrogen Sulfide (A4)
- ☐ Stratified Layers (A5)
- ☐ 2 cm Muck (A10)
- ☐ Depleted Below Dark Surface (A11)
- ☐ Thick Dark Surface (A12)
- ☐ Sandy Muck Mineral (S1)
- ☐ 5 cm Mucky Peat or Peat (S3)
- ☐ Sandy Gleyed Matrix (S4)
- ☐ Sandy Redox (S5)
- ☐ Stripped Matrix (S6)
- ☐ Loamy Mucky Mineral (F1)
- ☐ Loamy Gleyed Matrix (F2)
- ☐ Depleted Matrix (F3)
- ☐ Redox Dark Surface (F6)
- ☐ Depleted Dark Surface (F7)
- ☐ Redox Depressions (F8)

Indicators for Problematic Hydric Soils [3]:

- ☐ Coast Prairie Redox (A16)
- ☐ Dark Surface (S7)
- ☐ Iron Manganese Masses (F12)
- ☐ Very Shallow Dark Surface (TF12)
- ☐ Other (Explain in Remarks)

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

Restrictive Layer (if observed):

Type: None

Depth (inches): NA

Hydric Soil Present? Yes ○ No ◉

Remarks:

Soil appears to be a fill soil and thus disturbed.
The criterion for hydric soil is not met at this point.

HYDROLOGY

Wetland Hydrology Indicators:

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

- ☐ Surface Water (A1)
- ☐ High Water Table (A2)
- ☐ Saturation (A3)
- ☐ Water Marks (B1)
- ☐ Sediment Deposits (B2)
- ☐ Drift Deposits (B3)
- ☐ Algal Mat or Crust (B4)
- ☐ Iron Deposits (B5)
- ☐ Inundation Visible on Aerial Imagery (B7)
- ☐ Sparsely Vegetated Concave Surface (B8)
- ☐ Water-Stained Leaves (B9)
- ☐ Aquatic Fauna (B13)
- ☐ True Aquatic Plants (B14)
- ☐ Hydrogen Sulfide Odor (C1)
- ☐ Oxidized Rhizospheres on Living Roots (C3)
- ☐ Presence of Reduced Iron (C4)
- ☐ Recent Iron Reduction in Tilled Soils (C6)
- ☐ Thin Muck Surface (C7)
- ☐ Gauge or Well Data (D9)
- ☐ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ☐ Surface Soil Cracks (B6)
- ☐ Drainage Patterns (B10)
- ☐ Dry Season Water Table (C2)
- ☐ Crayfish Burrows (C8)
- ☐ Saturation Visible on Aerial Imagery (C9)
- ☐ Stunted or Stressed Plants (D1)
- ☐ Geomorphic Position (D2)
- ☐ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes ○ No ◉ Depth (inches): _____

Water Table Present? Yes ○ No ◉ Depth (inches): _____

Saturation Present? (includes capillary fringe) Yes ○ No ◉ Depth (inches): _____

Wetland Hydrology Present? Yes ○ No ◉

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

Previous delineation, DNR WWI map, NRCS Soils map, Topographic map, Aerial photos

Remarks:

Based on a WETS analysis, antecedent precipitation was within a normal range.
The criterion for hydrology is not met at this point.

WETLAND DETERMINATION DATA FORM - Midwest Region

Project/Site: IH 94 (N-S Freeway) City/County: Milwaukee County Sampling Date: 06-Aug-14

Applicant/Owner: Wisconsin Department of Transportation State: WI Sampling Point: **SP-27**

Investigator(s): Ron Londre, Geof Parish Section, Township, Range: S 19 T 5N R 22E

Landform (hillslope, terrace, etc.): Toeslope Local relief (concave, convex, none): concave

Slope: 2.0% 1.1 ° Lat.: Long.: Datum:

Soil Map Unit Name: Ashkum silty clay loam (AsA), All hydric WWI classification: None

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

Are Vegetation ☐ , Soil ☑ , or Hydrology ☐ significantly disturbed? Are "Normal Circumstances" present? Yes ◉ No ○

Are Vegetation ☐ , Soil ☐ , or Hydrology ☐ naturally problematic? (If needed, explain any answers in Remarks.)

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

Hydrophytic Vegetation Present?	Yes ◉ No ○	**Is the Sampled Area within a Wetland?** **Yes** ◉ **No** ○
Hydric Soil Present?	Yes ◉ No ○	
Wetland Hydrology Present?	Yes ◉ No ○	

Remarks:
All three parameters have been met at this point. Thus, this point is located in a wetland.
This wetland appears to have formed in fill material.

VEGETATION - Use scientific names of plants.

Tree Stratum (Plot size: 5' x 75')	Absolute % Cover	Dominant Species?	Rel.Strat. Cover	Indicator Status
1.	0	☐	0.0%	
2.	0	☐	0.0%	
3.	0	☐	0.0%	
4.	0	☐	0.0%	
5.	0	☐	0.0%	
	0	= Total Cover		
Sapling/Shrub Stratum (Plot size: 5' x 75')				
1. Salix interior	80	☑	100.0%	FACW
2.	0	☐	0.0%	
3.	0	☐	0.0%	
4.	0	☐	0.0%	
5.	0	☐	0.0%	
	80	= Total Cover		
Herb Stratum (Plot size: 5' x 25')				
1. Phalaris arundinacea	60	☑	54.5%	FACW
2. Eleocharis obtusa	30	☑	27.3%	OBL
3. Salix interior	10	☐	9.1%	FACW
4. Euthamia graminifolia	5	☐	4.5%	FACW
5. Typha angustifolia	5	☐	4.5%	OBL
6.	0	☐	0.0%	
7.	0	☐	0.0%	
8.	0	☐	0.0%	
9.	0	☐	0.0%	
10.	0	☐	0.0%	
	110	= Total Cover		
Woody Vine Stratum (Plot size: 5' x 75')				
1.	0	☐	0.0%	
2.	0	☐	0.0%	
	0	= Total Cover		

Dominance Test worksheet:

Number of Dominant Species That are OBL, FACW, or FAC: 3 (A)

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

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

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	35	x 1 =	35
FACW species	155	x 2 =	310
FAC species	0	x 3 =	0
FACU species	0	x 4 =	0
UPL species	0	x 5 =	0
Column Totals:	190 (A)		345 (B)

Prevalence Index = B/A = 1.816

Hydrophytic Vegetation Indicators:

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

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

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

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

Plot size is based on the size of the wetland.
This point is located in a scrub shrub.
The criterion for hydrophytic vegetation is met at this point.

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

SOIL

Sampling Point: **SP-27**

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

Depth (inches)	Matrix Color (moist)		%	Redox Features Color (moist)		%	Type [1]	Loc [2]	Texture	Remarks
0-8	10YR	3/2	95	7.5YR	4/4	5	C	M	Silty Clay	
8-20	10YR	5/3	45	7.5YR	5/6	5	C	M	Silty Clay	
	10YR	5/4	10	10YR	5/2	40	D	M		

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

Hydric Soil Indicators:

- ☐ Histosol (A1)
- ☐ Histic Epipedon (A2)
- ☐ Black Histic (A3)
- ☐ Hydrogen Sulfide (A4)
- ☐ Stratified Layers (A5)
- ☐ 2 cm Muck (A10)
- ☐ Depleted Below Dark Surface (A11)
- ☐ Thick Dark Surface (A12)
- ☐ Sandy Muck Mineral (S1)
- ☐ 5 cm Mucky Peat or Peat (S3)
- ☐ Sandy Gleyed Matrix (S4)
- ☐ Sandy Redox (S5)
- ☐ Stripped Matrix (S6)
- ☐ Loamy Mucky Mineral (F1)
- ☐ Loamy Gleyed Matrix (F2)
- ☐ Depleted Matrix (F3)
- ☑ Redox Dark Surface (F6)
- ☐ Depleted Dark Surface (F7)
- ☐ Redox Depressions (F8)

Indicators for Problematic Hydric Soils [3]:

- ☐ Coast Prairie Redox (A16)
- ☐ Dark Surface (S7)
- ☐ Iron Manganese Masses (F12)
- ☐ Very Shallow Dark Surface (TF12)
- ☐ Other (Explain in Remarks)

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

Restrictive Layer (if observed):

Type: None

Depth (inches): NA

Hydric Soil Present? **Yes** ◉ **No** ○

Remarks:

Soil appears to be a fill soil and thus disturbed.
The criterion for hydric soil is met at this point.

HYDROLOGY

Wetland Hydrology Indicators:

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

- ☐ Surface Water (A1)
- ☐ High Water Table (A2)
- ☐ Saturation (A3)
- ☐ Water Marks (B1)
- ☐ Sediment Deposits (B2)
- ☐ Drift Deposits (B3)
- ☐ Algal Mat or Crust (B4)
- ☐ Iron Deposits (B5)
- ☐ Inundation Visible on Aerial Imagery (B7)
- ☐ Sparsely Vegetated Concave Surface (B8)
- ☐ Water-Stained Leaves (B9)
- ☐ Aquatic Fauna (B13)
- ☐ True Aquatic Plants (B14)
- ☐ Hydrogen Sulfide Odor (C1)
- ☐ Oxidized Rhizospheres on Living Roots (C3)
- ☐ Presence of Reduced Iron (C4)
- ☐ Recent Iron Reduction in Tilled Soils (C6)
- ☐ Thin Muck Surface (C7)
- ☐ Gauge or Well Data (D9)
- ☐ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ☐ Surface Soil Cracks (B6)
- ☐ Drainage Patterns (B10)
- ☐ Dry Season Water Table (C2)
- ☐ Crayfish Burrows (C8)
- ☐ Saturation Visible on Aerial Imagery (C9)
- ☐ Stunted or Stressed Plants (D1)
- ☑ Geomorphic Position (D2)
- ☑ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes ○ No ◉ Depth (inches): _____

Water Table Present? Yes ○ No ◉ Depth (inches): _____

Saturation Present? (includes capillary fringe) Yes ○ No ◉ Depth (inches): _____

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

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

Previous delineation, DNR WWI map, NRCS Soils map, Topographic map, Aerial photos

Remarks:

Based on a WETS analysis, antecedent precipitation was within a normal range.
The criterion for hydrology is met at this point.

WETLAND DETERMINATION DATA FORM - Midwest Region

Project/Site: IH 94 (N-S Freeway) City/County: Milwaukee County Sampling Date: 06-Aug-14

Applicant/Owner: Wisconsin Department of Transportation State: WI Sampling Point: **SP-28**

Investigator(s): Ron Londre, Geof Parish Section, Township, Range: S 19 T 5N R 22E

Landform (hillslope, terrace, etc.): Backslope Local relief (concave, convex, none): convex

Slope: 6.0% 3.4 ° Lat.: Long.: Datum:

Soil Map Unit Name: Ashkum silty clay loam (AsA), All hydric WWI classification: None

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

Are Vegetation ☐ , Soil ☑ , or Hydrology ☐ significantly disturbed? Are "Normal Circumstances" present? Yes ◉ No ○

Are Vegetation ☐ , Soil ☐ , or Hydrology ☐ naturally problematic? (If needed, explain any answers in Remarks.)

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

Hydrophytic Vegetation Present?	Yes ○ No ◉	**Is the Sampled Area within a Wetland?** **Yes ○ No ◉**
Hydric Soil Present?	Yes ○ No ◉	
Wetland Hydrology Present?	Yes ○ No ◉	

Remarks:
This point is located in a fallow field.
Two of three parameters have not been met at this point. Thus, this point is located in an upland.

VEGETATION - Use scientific names of plants.

	Absolute % Cover	Dominant Species? Rel.Strat. Cover	Indicator Status
Tree Stratum (Plot size: 30' r)			
1.	0	☐ 0.0%	
2.	0	☐ 0.0%	
3.	0	☐ 0.0%	
4.	0	☐ 0.0%	
5.	0	☐ 0.0%	
	0	= Total Cover	
Sapling/Shrub Stratum (Plot size: 15' r)			
1.	0	☐ 0.0%	
2.	0	☐ 0.0%	
3.	0	☐ 0.0%	
4.	0	☐ 0.0%	
5.	0	☐ 0.0%	
	0	= Total Cover	
Herb Stratum (Plot size: 5' r)			
1. Lotus corniculatus	60	☑ 53.1%	FACU
2. Poa pratensis	40	☑ 35.4%	FAC
3. Phalaris arundinacea	5	☐ 4.4%	FACW
4. Elymus repens	3	☐ 2.7%	FACU
5. Daucus carota	3	☐ 2.7%	UPL
6. Agrostis gigantea	2	☐ 1.8%	FACW
7.	0	☐ 0.0%	
8.	0	☐ 0.0%	
9.	0	☐ 0.0%	
10.	0	☐ 0.0%	
	113	= Total Cover	
Woody Vine Stratum (Plot size: 30' r)			
1.	0	☐ 0.0%	
2.	0	☐ 0.0%	
	0	= Total Cover	

Dominance Test worksheet:

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

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

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

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	7	x 2 =	14
FAC species	40	x 3 =	120
FACU species	63	x 4 =	252
UPL species	3	x 5 =	15
Column Totals:	113 (A)		401 (B)

Prevalence Index = B/A = 3.549

Hydrophytic Vegetation Indicators:

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

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

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

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

This point is located in a fallow field.
The criterion for hydrophytic vegetation is not met at this point.

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

SOIL

Sampling Point: **SP-28**

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

Depth (inches)	Matrix Color (moist)		%	Redox Features Color (moist)	%	Type [1]	Loc [2]	Texture	Remarks
0-2	10YR	4/2	100					Sandy Clay Loam	
2-20	10YR	5/4	100					Loamy Sand	30% gravel

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

Hydric Soil Indicators:

- ☐ Histosol (A1)
- ☐ Histic Epipedon (A2)
- ☐ Black Histic (A3)
- ☐ Hydrogen Sulfide (A4)
- ☐ Stratified Layers (A5)
- ☐ 2 cm Muck (A10)
- ☐ Depleted Below Dark Surface (A11)
- ☐ Thick Dark Surface (A12)
- ☐ Sandy Muck Mineral (S1)
- ☐ 5 cm Mucky Peat or Peat (S3)
- ☐ Sandy Gleyed Matrix (S4)
- ☐ Sandy Redox (S5)
- ☐ Stripped Matrix (S6)
- ☐ Loamy Mucky Mineral (F1)
- ☐ Loamy Gleyed Matrix (F2)
- ☐ Depleted Matrix (F3)
- ☐ Redox Dark Surface (F6)
- ☐ Depleted Dark Surface (F7)
- ☐ Redox Depressions (F8)

Indicators for Problematic Hydric Soils [3]:

- ☐ Coast Prairie Redox (A16)
- ☐ Dark Surface (S7)
- ☐ Iron Manganese Masses (F12)
- ☐ Very Shallow Dark Surface (TF12)
- ☐ Other (Explain in Remarks)

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

Restrictive Layer (if observed):

Type: None

Depth (inches): NA

Hydric Soil Present? **Yes** ○ **No** ◉

Remarks:

Soil appears to be a fill soil and thus disturbed.
The criterion for hydric soil is not met at this point.

HYDROLOGY

Wetland Hydrology Indicators:

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

- ☐ Surface Water (A1)
- ☐ High Water Table (A2)
- ☐ Saturation (A3)
- ☐ Water Marks (B1)
- ☐ Sediment Deposits (B2)
- ☐ Drift Deposits (B3)
- ☐ Algal Mat or Crust (B4)
- ☐ Iron Deposits (B5)
- ☐ Inundation Visible on Aerial Imagery (B7)
- ☐ Sparsely Vegetated Concave Surface (B8)
- ☐ Water-Stained Leaves (B9)
- ☐ Aquatic Fauna (B13)
- ☐ True Aquatic Plants (B14)
- ☐ Hydrogen Sulfide Odor (C1)
- ☐ Oxidized Rhizospheres on Living Roots (C3)
- ☐ Presence of Reduced Iron (C4)
- ☐ Recent Iron Reduction in Tilled Soils (C6)
- ☐ Thin Muck Surface (C7)
- ☐ Gauge or Well Data (D9)
- ☐ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ☐ Surface Soil Cracks (B6)
- ☐ Drainage Patterns (B10)
- ☐ Dry Season Water Table (C2)
- ☐ Crayfish Burrows (C8)
- ☐ Saturation Visible on Aerial Imagery (C9)
- ☐ Stunted or Stressed Plants (D1)
- ☐ Geomorphic Position (D2)
- ☐ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes ○ No ◉ Depth (inches): _____

Water Table Present? Yes ○ No ◉ Depth (inches): _____

Saturation Present? (includes capillary fringe) Yes ○ No ◉ Depth (inches): _____

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

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

Previous delineation, DNR WWI map, NRCS Soils map, Topographic map, Aerial photos

Remarks:

Based on a WETS analysis, antecedent precipitation was within a normal range.
The criterion for hydrology is not met at this point.

WETLAND DETERMINATION DATA FORM - Midwest Region

Project/Site: IH 94 (N-S Freeway) City/County: Milwaukee County Sampling Date: 06-Aug-14

Applicant/Owner: Wisconsin Department of Transportation State: WI Sampling Point: **SP-29**

Investigator(s): Ron Londre, Geof Parish Section, Township, Range: S 19 T 5N R 22E

Landform (hillslope, terrace, etc.): Toeslope Local relief (concave, convex, none): concave

Slope: 0.0% 0.0 ° Lat.: Long.: Datum:

Soil Map Unit Name: Ashkum silty clay loam (AsA), All hydric WWI classification: None

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

Are Vegetation ☐ , Soil ☑ , or Hydrology ☐ significantly disturbed? Are "Normal Circumstances" present? Yes ◉ No ○

Are Vegetation ☐ , Soil ☐ , or Hydrology ☐ naturally problematic? (If needed, explain any answers in Remarks.)

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

Hydrophytic Vegetation Present?	Yes ◉ No ○	**Is the Sampled Area within a Wetland?** **Yes** ◉ **No** ○
Hydric Soil Present?	Yes ◉ No ○	
Wetland Hydrology Present?	Yes ◉ No ○	

Remarks:
All three parameters have been met at this point. Thus, this point is located in a wetland.
This wetland appears to have developed in fill material.

VEGETATION - Use scientific names of plants.

	Absolute % Cover	Dominant Species?	Rel.Strat. Cover	Indicator Status
Tree Stratum (Plot size: 30' r)				
1.	0	☐	0.0%	
2.	0	☐	0.0%	
3.	0	☐	0.0%	
4.	0	☐	0.0%	
5.	0	☐	0.0%	
	0	= Total Cover		
Sapling/Shrub Stratum (Plot size: 15' r)				
1.	0	☐	0.0%	
2.	0	☐	0.0%	
3.	0	☐	0.0%	
4.	0	☐	0.0%	
5.	0	☐	0.0%	
	0	= Total Cover		
Herb Stratum (Plot size: 5' r)				
1. Carex pellita	60	☑	42.9%	OBL
2. Juncus tenuis	30	☑	21.4%	FAC
3. Scirpus atrovirens	20	☐	14.3%	OBL
4. Juncus canadensis	15	☐	10.7%	OBL
5. Phalaris arundinacea	8	☐	5.7%	FACW
6. Euthamia graminifolia	3	☐	2.1%	FACW
7. Solidago sempervirens	2	☐	1.4%	FACW
8. Cirsium vulgare	2	☐	1.4%	FACU
9.	0	☐	0.0%	
10.	0	☐	0.0%	
	140	= Total Cover		
Woody Vine Stratum (Plot size: 30' r)				
1.	0	☐	0.0%	
2.	0	☐	0.0%	
	0	= Total Cover		

Dominance Test worksheet:

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

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

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

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	95	x 1 =	95
FACW species	13	x 2 =	26
FAC species	30	x 3 =	90
FACU species	2	x 4 =	8
UPL species	0	x 5 =	0
Column Totals:	140 (A)		219 (B)

Prevalence Index = B/A = 1.564

Hydrophytic Vegetation Indicators:

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

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

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

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

This point is located in a wet meadow.
The criterion for hydrophytic vegetation is met at this point.

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

SOIL

Sampling Point: **SP-29**

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

Depth (inches)	Matrix Color (moist)		%	Redox Features Color (moist)		%	Type [1]	Loc [2]	Texture	Remarks
0-7	10YR	4/1	95	7.5YR	4/6	5	C	M	Sandy Clay Loam	20% gravel
7-10	10YR	4/4	100						Sandy Clay Loam	
10-20	10YR	4/1	70	10YR	4/2	20	D	M	Sandy Clay Loam	
	10YR	2/1	5	10YR	5/6	5	C	M		

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

Hydric Soil Indicators:

- ☐ Histosol (A1)
- ☐ Histic Epipedon (A2)
- ☐ Black Histic (A3)
- ☐ Hydrogen Sulfide (A4)
- ☐ Stratified Layers (A5)
- ☐ 2 cm Muck (A10)
- ☐ Depleted Below Dark Surface (A11)
- ☐ Thick Dark Surface (A12)
- ☐ Sandy Muck Mineral (S1)
- ☐ 5 cm Mucky Peat or Peat (S3)
- ☐ Sandy Gleyed Matrix (S4)
- ☐ Sandy Redox (S5)
- ☐ Stripped Matrix (S6)
- ☐ Loamy Mucky Mineral (F1)
- ☐ Loamy Gleyed Matrix (F2)
- ☑ Depleted Matrix (F3)
- ☐ Redox Dark Surface (F6)
- ☐ Depleted Dark Surface (F7)
- ☐ Redox Depressions (F8)

Indicators for Problematic Hydric Soils [3]:

- ☐ Coast Prairie Redox (A16)
- ☐ Dark Surface (S7)
- ☐ Iron Manganese Masses (F12)
- ☐ Very Shallow Dark Surface (TF12)
- ☐ Other (Explain in Remarks)

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

Restrictive Layer (if observed):

Type: None

Depth (inches): NA

Hydric Soil Present? **Yes** ◉ **No** ○

Remarks:

Soil appears to be a fill soil and thus disturbed.
The criterion for hydric soil is met at this point.

HYDROLOGY

Wetland Hydrology Indicators:

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

- ☐ Surface Water (A1)
- ☐ High Water Table (A2)
- ☐ Saturation (A3)
- ☐ Water Marks (B1)
- ☐ Sediment Deposits (B2)
- ☐ Drift Deposits (B3)
- ☐ Algal Mat or Crust (B4)
- ☐ Iron Deposits (B5)
- ☐ Inundation Visible on Aerial Imagery (B7)
- ☐ Sparsely Vegetated Concave Surface (B8)
- ☐ Water-Stained Leaves (B9)
- ☐ Aquatic Fauna (B13)
- ☐ True Aquatic Plants (B14)
- ☐ Hydrogen Sulfide Odor (C1)
- ☐ Oxidized Rhizospheres on Living Roots (C3)
- ☐ Presence of Reduced Iron (C4)
- ☐ Recent Iron Reduction in Tilled Soils (C6)
- ☐ Thin Muck Surface (C7)
- ☐ Gauge or Well Data (D9)
- ☐ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ☐ Surface Soil Cracks (B6)
- ☐ Drainage Patterns (B10)
- ☐ Dry Season Water Table (C2)
- ☐ Crayfish Burrows (C8)
- ☐ Saturation Visible on Aerial Imagery (C9)
- ☐ Stunted or Stressed Plants (D1)
- ☑ Geomorphic Position (D2)
- ☑ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes ○ No ◉ Depth (inches): _____

Water Table Present? Yes ○ No ◉ Depth (inches): _____

Saturation Present? (includes capillary fringe) Yes ○ No ◉ Depth (inches): _____

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

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

Previous delineation, DNR WWI map, NRCS Soils map, Topographic map, Aerial photos

Remarks:

Based on a WETS analysis, antecedent precipitation was within a normal range.
The criterion for hydrology is met at this point.

WETLAND DETERMINATION DATA FORM - Midwest Region

Project/Site: IH 94 (N-S Freeway) City/County: Milwaukee County Sampling Date: 06-Aug-14

Applicant/Owner: Wisconsin Department of Transportation State: WI Sampling Point: **SP-30**

Investigator(s): Ron Londre, Geof Parish Section, Township, Range: S 19 T 5N R 22E

Landform (hillslope, terrace, etc.): Toeslope/ditch Local relief (concave, convex, none): concave

Slope: 5.0% 2.9 ° Lat.: Long.: Datum:

Soil Map Unit Name: Blount silt loam (BlA), Not hydric WWI classification: E2K

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

Are Vegetation ☐ , Soil ☑ , or Hydrology ☐ significantly disturbed? Are "Normal Circumstances" present? Yes ◉ No ○

Are Vegetation ☐ , Soil ☐ , or Hydrology ☐ naturally problematic? (If needed, explain any answers in Remarks.)

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

Hydrophytic Vegetation Present?	Yes ◉ No ○	**Is the Sampled Area within a Wetland?** **Yes** ○ **No** ◉
Hydric Soil Present?	Yes ◉ No ○	
Wetland Hydrology Present?	Yes ○ No ◉	

Remarks:
This point is located in a roadside ditch. One of three parameter has not been met at this point.
Thus, this point is located in an upland.

VEGETATION - Use scientific names of plants.

Tree Stratum (Plot size: 12' x 235')	Absolute % Cover	Dominant Species?	Rel.Strat. Cover	Indicator Status
1.	0	☐	0.0%	
2.	0	☐	0.0%	
3.	0	☐	0.0%	
4.	0	☐	0.0%	
5.	0	☐	0.0%	
	0	= Total Cover		
Sapling/Shrub Stratum (Plot size: 12' x 60')				
1.	0	☐	0.0%	
2.	0	☐	0.0%	
3.	0	☐	0.0%	
4.	0	☐	0.0%	
5.	0	☐	0.0%	
	0	= Total Cover		
Herb Stratum (Plot size: 5' r)				
1. Poa pratensis	80	☑	62.0%	FAC
2. Elymus repens	15	☐	11.6%	FACU
3. Cirsium arvense	8	☐	6.2%	FACU
4. Symphyotrichum novae-angliae	8	☐	6.2%	FACW
5. Daucus carota	5	☐	3.9%	UPL
6. Parthenocissus quinquefolia	5	☐	3.9%	FACU
7. Solidago canadensis	5	☐	3.9%	FACU
8. Vitis riparia	3	☐	2.3%	FACW
9.	0	☐	0.0%	
10.	0	☐	0.0%	
	129	= Total Cover		
Woody Vine Stratum (Plot size: 12' x 235')				
1.	0	☐	0.0%	
2.	0	☐	0.0%	
	0	= Total Cover		

Dominance Test worksheet:

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

Total Number of Dominant Species Across All Strata: 1 (B)

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

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	11	x 2 =	22
FAC species	80	x 3 =	240
FACU species	33	x 4 =	132
UPL species	5	x 5 =	25
Column Totals:	129	(A)	419 (B)

Prevalence Index = B/A = 3.248

Hydrophytic Vegetation Indicators:

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

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

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

Remarks: (Include photo numbers here or on a separate sheet.)
The criterion for hydrophytic vegetation is met at this point.

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

SOIL

Sampling Point: **SP-30**

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

Depth (inches)	Matrix Color (moist)		%	Redox Features Color (moist)		%	Type [1]	Loc [2]	Texture	Remarks
0-7	10YR	4/2	98	10YR	4/6	2	C	M	Silty Clay Loam	
7-20	10YR	5/4	40	10YR	5/2	20	D	M	Sandy Clay Loam	
	10YR	5/3	40							

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

Hydric Soil Indicators:

- ☐ Histosol (A1)
- ☐ Histic Epipedon (A2)
- ☐ Black Histic (A3)
- ☐ Hydrogen Sulfide (A4)
- ☐ Stratified Layers (A5)
- ☐ 2 cm Muck (A10)
- ☐ Depleted Below Dark Surface (A11)
- ☐ Thick Dark Surface (A12)
- ☐ Sandy Muck Mineral (S1)
- ☐ 5 cm Mucky Peat or Peat (S3)
- ☐ Sandy Gleyed Matrix (S4)
- ☐ Sandy Redox (S5)
- ☐ Stripped Matrix (S6)
- ☐ Loamy Mucky Mineral (F1)
- ☐ Loamy Gleyed Matrix (F2)
- ☑ Depleted Matrix (F3)
- ☐ Redox Dark Surface (F6)
- ☐ Depleted Dark Surface (F7)
- ☐ Redox Depressions (F8)

Indicators for Problematic Hydric Soils [3]:

- ☐ Coast Prairie Redox (A16)
- ☐ Dark Surface (S7)
- ☐ Iron Manganese Masses (F12)
- ☐ Very Shallow Dark Surface (TF12)
- ☐ Other (Explain in Remarks)

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

Restrictive Layer (if observed):

Type: None

Depth (inches): NA

Hydric Soil Present? **Yes** ◉ **No** ○

Remarks:

Soil appears to be a roadside fill and thus disturbed.
The criterion for hydric soil is met at this point.

HYDROLOGY

Wetland Hydrology Indicators:

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

- ☐ Surface Water (A1)
- ☐ High Water Table (A2)
- ☐ Saturation (A3)
- ☐ Water Marks (B1)
- ☐ Sediment Deposits (B2)
- ☐ Drift Deposits (B3)
- ☐ Algal Mat or Crust (B4)
- ☐ Iron Deposits (B5)
- ☐ Inundation Visible on Aerial Imagery (B7)
- ☐ Sparsely Vegetated Concave Surface (B8)
- ☐ Water-Stained Leaves (B9)
- ☐ Aquatic Fauna (B13)
- ☐ True Aquatic Plants (B14)
- ☐ Hydrogen Sulfide Odor (C1)
- ☐ Oxidized Rhizospheres on Living Roots (C3)
- ☐ Presence of Reduced Iron (C4)
- ☐ Recent Iron Reduction in Tilled Soils (C6)
- ☐ Thin Muck Surface (C7)
- ☐ Gauge or Well Data (D9)
- ☐ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ☐ Surface Soil Cracks (B6)
- ☐ Drainage Patterns (B10)
- ☐ Dry Season Water Table (C2)
- ☐ Crayfish Burrows (C8)
- ☐ Saturation Visible on Aerial Imagery (C9)
- ☐ Stunted or Stressed Plants (D1)
- ☑ Geomorphic Position (D2)
- ☐ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes ○ No ◉ Depth (inches): _____

Water Table Present? Yes ○ No ◉ Depth (inches): _____

Saturation Present? (includes capillary fringe) Yes ○ No ◉ Depth (inches): _____

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

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

Previous delineation, DNR WWI map, NRCS Soils map, Topographic map, Aerial photos

Remarks:

Based on a WETS analysis, antecedent precipitation was within a normal range.
The criterion for hydrology is not met at this point.

WETLAND DETERMINATION DATA FORM - Midwest Region

Project/Site: IH 94 (N-S Freeway) City/County: Milwaukee County Sampling Date: 06-Aug-14

Applicant/Owner: Wisconsin Department of Transportation State: WI Sampling Point: **SP-31**

Investigator(s): Ron Londre, Geof Parish Section, Township, Range: S 19 T 5N R 22E

Landform (hillslope, terrace, etc.): Toeslope/ditch Local relief (concave, convex, none): concave

Slope: 3.0% 1.7 ° Lat.: Long.: Datum:

Soil Map Unit Name: Houghton muck (HtA), All hydric WWI classification: E2K

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

Are Vegetation ☐ , Soil ☑ , or Hydrology ☐ significantly disturbed? Are "Normal Circumstances" present? Yes ◉ No ○

Are Vegetation ☐ , Soil ☐ , or Hydrology ☐ naturally problematic? (If needed, explain any answers in Remarks.)

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

Hydrophytic Vegetation Present?	Yes ◉ No ○	**Is the Sampled Area within a Wetland?** **Yes** ◉ **No** ○
Hydric Soil Present?	Yes ◉ No ○	
Wetland Hydrology Present?	Yes ◉ No ○	

Remarks:
This point is located in a roadside ditch. All three parameters have been met at this point. Thus, this point is located in a wetland.
Wetland ID: W9-3

VEGETATION - Use scientific names of plants.

Tree Stratum (Plot size: 12' x 350')	Absolute % Cover	Dominant Species?	Rel.Strat. Cover	Indicator Status
1.	0	☐	0.0%	
2.	0	☐	0.0%	
3.	0	☐	0.0%	
4.	0	☐	0.0%	
5.	0	☐	0.0%	
	0	= Total Cover		
Sapling/Shrub Stratum (Plot size: 12' x 60')				
1.	0	☐	0.0%	
2.	0	☐	0.0%	
3.	0	☐	0.0%	
4.	0	☐	0.0%	
5.	0	☐	0.0%	
	0	= Total Cover		
Herb Stratum (Plot size: 5' r)				
1. Phalaris arundinacea	75	☑	74.3%	FACW
2. Sonchus arvensis	8	☐	7.9%	FACU
3. Poa pratensis	5	☐	5.0%	FAC
4. Festuca rubra	5	☐	5.0%	FACU
5. Elymus repens	5	☐	5.0%	FACU
6. Verbena hastata	3	☐	3.0%	FACW
7.	0	☐	0.0%	
8.	0	☐	0.0%	
9.	0	☐	0.0%	
10.	0	☐	0.0%	
	101	= Total Cover		
Woody Vine Stratum (Plot size: 12' x 350')				
1.	0	☐	0.0%	
2.	0	☐	0.0%	
	0	= Total Cover		

Dominance Test worksheet:

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

Total Number of Dominant Species Across All Strata: 1 (B)

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

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	78	x 2 =	156
FAC species	5	x 3 =	15
FACU species	18	x 4 =	72
UPL species	0	x 5 =	0
Column Totals:	101 (A)		243 (B)

Prevalence Index = B/A = 2.406

Hydrophytic Vegetation Indicators:

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

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

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

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

This point is located in a wet meadow.
The criterion for hydrophytic vegetation is met at this point.

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

SOIL

Sampling Point: **SP-31**

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

Depth (inches)	Matrix Color (moist)		%	Redox Features Color (moist)		%	Type [1]	Loc [2]	Texture	Remarks
0-4	10YR	3/2	100						Sandy Clay Loam	
4-15	10YR	4/1	70	10YR	4/6	10	C	M	Sandy Clay Loam	
	10YR	3/1	10	10YR	5/1	10	D	M		
15-20	10YR	5/4	70	10YR	6/1	15	D	M	Sandy Clay Loam	
				10YR	5/6	15	C	M		

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

Hydric Soil Indicators:

- ☐ Histosol (A1)
- ☐ Histic Epipedon (A2)
- ☐ Black Histic (A3)
- ☐ Hydrogen Sulfide (A4)
- ☐ Stratified Layers (A5)
- ☐ 2 cm Muck (A10)
- ☑ Depleted Below Dark Surface (A11)
- ☐ Thick Dark Surface (A12)
- ☐ Sandy Muck Mineral (S1)
- ☐ 5 cm Mucky Peat or Peat (S3)
- ☐ Sandy Gleyed Matrix (S4)
- ☐ Sandy Redox (S5)
- ☐ Stripped Matrix (S6)
- ☐ Loamy Mucky Mineral (F1)
- ☐ Loamy Gleyed Matrix (F2)
- ☑ Depleted Matrix (F3)
- ☐ Redox Dark Surface (F6)
- ☐ Depleted Dark Surface (F7)
- ☐ Redox Depressions (F8)

Indicators for Problematic Hydric Soils [3]:

- ☐ Coast Prairie Redox (A16)
- ☐ Dark Surface (S7)
- ☐ Iron Manganese Masses (F12)
- ☐ Very Shallow Dark Surface (TF12)
- ☐ Other (Explain in Remarks)

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

Restrictive Layer (if observed):

Type: None

Depth (inches): NA

Hydric Soil Present? **Yes** ◉ **No** ○

Remarks:

Soil appears to be a roadside fill and thus disturbed.
The criterion for hydric soil is met at this point.

HYDROLOGY

Wetland Hydrology Indicators:

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

- ☐ Surface Water (A1)
- ☐ High Water Table (A2)
- ☐ Saturation (A3)
- ☐ Water Marks (B1)
- ☐ Sediment Deposits (B2)
- ☐ Drift Deposits (B3)
- ☐ Algal Mat or Crust (B4)
- ☐ Iron Deposits (B5)
- ☐ Inundation Visible on Aerial Imagery (B7)
- ☐ Sparsely Vegetated Concave Surface (B8)
- ☐ Water-Stained Leaves (B9)
- ☐ Aquatic Fauna (B13)
- ☐ True Aquatic Plants (B14)
- ☐ Hydrogen Sulfide Odor (C1)
- ☐ Oxidized Rhizospheres on Living Roots (C3)
- ☐ Presence of Reduced Iron (C4)
- ☐ Recent Iron Reduction in Tilled Soils (C6)
- ☐ Thin Muck Surface (C7)
- ☐ Gauge or Well Data (D9)
- ☐ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ☐ Surface Soil Cracks (B6)
- ☐ Drainage Patterns (B10)
- ☐ Dry Season Water Table (C2)
- ☐ Crayfish Burrows (C8)
- ☐ Saturation Visible on Aerial Imagery (C9)
- ☐ Stunted or Stressed Plants (D1)
- ☑ Geomorphic Position (D2)
- ☑ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes ○ No ◉ Depth (inches): _____

Water Table Present? Yes ○ No ◉ Depth (inches): _____

Saturation Present? (includes capillary fringe) Yes ○ No ◉ Depth (inches): _____

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

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

Previous delineation, DNR WWI map, NRCS Soils map, Topographic map, Aerial photos

Remarks:

Based on a WETS analysis, antecedent precipitation was within a normal range.
The criterion for hydrology is met at this point.

WETLAND DETERMINATION DATA FORM - Midwest Region

Project/Site: IH 94 (N-S Freeway) City/County: Milwaukee County Sampling Date: 18-Aug-14

Applicant/Owner: Wisconsin Department of Transportation State: WI Sampling Point: **SP-32**

Investigator(s): Ron Londre, Geof Parish Section, Township, Range: S 18 T 5N R 22E

Landform (hillslope, terrace, etc.): Toeslope/ditch Local relief (concave, convex, none): concave

Slope: 5.0% 2.9 ° Lat.: Long.: Datum:

Soil Map Unit Name: Blount silt loam (BlA), Not hydric WWI classification: None

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

Are Vegetation ☐ , Soil ☑ , or Hydrology ☐ significantly disturbed? Are "Normal Circumstances" present? Yes ◉ No ○

Are Vegetation ☐ , Soil ☐ , or Hydrology ☐ naturally problematic? (If needed, explain any answers in Remarks.)

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

Hydrophytic Vegetation Present?	Yes ○	No ◉	**Is the Sampled Area within a Wetland?** **Yes** ○ **No** ◉
Hydric Soil Present?	Yes ◉	No ○	
Wetland Hydrology Present?	Yes ○	No ◉	

Remarks:
This point is located in a roadside ditch.
Two of three parameters have not been met at this point. Thus, this point is located in an upland.

VEGETATION - Use scientific names of plants.

Tree Stratum (Plot size: 12' x 75')	Absolute % Cover	Dominant Species?	Rel.Strat. Cover	Indicator Status
1.	0	☐	0.0%	
2.	0	☐	0.0%	
3.	0	☐	0.0%	
4.	0	☐	0.0%	
5.	0	☐	0.0%	0
	0	= Total Cover		
Sapling/Shrub Stratum (Plot size: 12' x 75')				
1.	0	☐	0.0%	
2.	0	☐	0.0%	
3.	0	☐	0.0%	
4.	0	☐	0.0%	
5.	0	☐	0.0%	
	0	= Total Cover		
Herb Stratum (Plot size: 5' r)				
1. Poa pratensis	60	☑	42.0%	FAC
2. Cirsium arvense	50	☑	35.0%	FACU
3. Asclepias syriaca	15	☐	10.5%	FACU
4. Elymus repens	10	☐	7.0%	FACU
5. Phalaris arundinacea	8	☐	5.6%	FACW
6.	0	☐	0.0%	
7.	0	☐	0.0%	
8.	0	☐	0.0%	
9.	0	☐	0.0%	
10.	0	☐	0.0%	
	143	= Total Cover		
Woody Vine Stratum (Plot size: 12' x 75')				
1.	0	☐	0.0%	
2.	0	☐	0.0%	
	0	= Total Cover		

Dominance Test worksheet:

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

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

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

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	8	x 2 =	16
FAC species	60	x 3 =	180
FACU species	75	x 4 =	300
UPL species	0	x 5 =	0
Column Totals:	143 (A)		496 (B)

Prevalence Index = B/A = 3.469

Hydrophytic Vegetation Indicators:

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

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

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

Remarks: (Include photo numbers here or on a separate sheet.)
The criterion for hydrophytic vegetation is not met at this point.

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

SOIL

Sampling Point: **SP-32**

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

Depth (inches)	Matrix Color (moist)		%	Redox Features Color (moist)		%	Type [1]	Loc [2]	Texture	Remarks
0-7	10YR	2/1	100						Silty Clay Loam	
7-20	10YR	4/2	95	10YR	4/6	5	C	M	Silty Clay Loam	

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

Hydric Soil Indicators:

- ☐ Histosol (A1)
- ☐ Histic Epipedon (A2)
- ☐ Black Histic (A3)
- ☐ Hydrogen Sulfide (A4)
- ☐ Stratified Layers (A5)
- ☐ 2 cm Muck (A10)
- ☑ Depleted Below Dark Surface (A11)
- ☐ Thick Dark Surface (A12)
- ☐ Sandy Muck Mineral (S1)
- ☐ 5 cm Mucky Peat or Peat (S3)
- ☐ Sandy Gleyed Matrix (S4)
- ☐ Sandy Redox (S5)
- ☐ Stripped Matrix (S6)
- ☐ Loamy Mucky Mineral (F1)
- ☐ Loamy Gleyed Matrix (F2)
- ☑ Depleted Matrix (F3)
- ☐ Redox Dark Surface (F6)
- ☐ Depleted Dark Surface (F7)
- ☐ Redox Depressions (F8)

Indicators for Problematic Hydric Soils [3]:

- ☐ Coast Prairie Redox (A16)
- ☐ Dark Surface (S7)
- ☐ Iron Manganese Masses (F12)
- ☐ Very Shallow Dark Surface (TF12)
- ☐ Other (Explain in Remarks)

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

Restrictive Layer (if observed):

Type: None

Depth (inches): NA

Hydric Soil Present? **Yes** ◉ **No** ○

Remarks:

Soil appears to be a roadside fill and thus disturbed.
The criterion for hydric soil is met at this point.

HYDROLOGY

Wetland Hydrology Indicators:

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

- ☐ Surface Water (A1)
- ☐ High Water Table (A2)
- ☐ Saturation (A3)
- ☐ Water Marks (B1)
- ☐ Sediment Deposits (B2)
- ☐ Drift Deposits (B3)
- ☐ Algal Mat or Crust (B4)
- ☐ Iron Deposits (B5)
- ☐ Inundation Visible on Aerial Imagery (B7)
- ☐ Sparsely Vegetated Concave Surface (B8)
- ☐ Water-Stained Leaves (B9)
- ☐ Aquatic Fauna (B13)
- ☐ True Aquatic Plants (B14)
- ☐ Hydrogen Sulfide Odor (C1)
- ☐ Oxidized Rhizospheres on Living Roots (C3)
- ☐ Presence of Reduced Iron (C4)
- ☐ Recent Iron Reduction in Tilled Soils (C6)
- ☐ Thin Muck Surface (C7)
- ☐ Gauge or Well Data (D9)
- ☐ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ☐ Surface Soil Cracks (B6)
- ☐ Drainage Patterns (B10)
- ☐ Dry Season Water Table (C2)
- ☐ Crayfish Burrows (C8)
- ☐ Saturation Visible on Aerial Imagery (C9)
- ☐ Stunted or Stressed Plants (D1)
- ☑ Geomorphic Position (D2)
- ☐ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes ○ No ◉ Depth (inches): _____

Water Table Present? Yes ○ No ◉ Depth (inches): _____

Saturation Present? (includes capillary fringe) Yes ○ No ◉ Depth (inches): _____

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

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

Previous delineation, DNR WWI map, NRCS Soils map, Topographic map, Aerial photos

Remarks:

Based on a WETS analysis, antecedent precipitation was within a normal range.
The criterion for hydrology is not met at this point.

WETLAND DETERMINATION DATA FORM - Midwest Region

Project/Site: IH 94 (N-S Freeway) City/County: Milwaukee County Sampling Date: 18-Aug-14

Applicant/Owner: Wisconsin Department of Transportation State: WI Sampling Point: **SP-33**

Investigator(s): Ron Londre, Geof Parish Section, Township, Range: S 18 T 5N R 22E

Landform (hillslope, terrace, etc.): Toeslope/ditch Local relief (concave, convex, none): concave

Slope: 1.0% 0.6 ° Lat.: Long.: Datum:

Soil Map Unit Name: Morley silt loam (MzdC), Not hydric WWI classification: None

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

Are Vegetation ☐ , Soil ☑ , or Hydrology ☐ significantly disturbed? Are "Normal Circumstances" present? Yes ◉ No ○

Are Vegetation ☐ , Soil ☐ , or Hydrology ☐ naturally problematic? (If needed, explain any answers in Remarks.)

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

Hydrophytic Vegetation Present?	Yes ◉	No ○	**Is the Sampled Area within a Wetland?** **Yes** ◉ **No** ○
Hydric Soil Present?	Yes ◉	No ○	
Wetland Hydrology Present?	Yes ◉	No ○	

Remarks:
This point is located in a roadside ditch.
All three parameters have been met at this point. Thus, this point is located in a wetland.

VEGETATION - Use scientific names of plants.

	Absolute % Cover	Dominant Species?	Rel.Strat. Cover	Indicator Status
Tree Stratum (Plot size: 8' x 200')				
1.	0	☐	0.0%	
2.	0	☐	0.0%	
3.	0	☐	0.0%	
4.	0	☐	0.0%	
5.	0	☐	0.0%	
	0	= Total Cover		
Sapling/Shrub Stratum (Plot size: 8' x 200')				
1.	0	☐	0.0%	
2.	0	☐	0.0%	
3.	0	☐	0.0%	
4.	0	☐	0.0%	
5.	0	☐	0.0%	
	0	= Total Cover		
Herb Stratum (Plot size: 8' x 10')				
1. Phalaris arundinacea	60	☑	64.5%	FACW
2. Solidago sempervirens	15	☐	16.1%	FACW
3. Elymus repens	10	☐	10.8%	FACU
4. Poa pratensis	8	☐	8.6%	FAC
5.	0	☐	0.0%	
6.	0	☐	0.0%	
7.	0	☐	0.0%	
8.	0	☐	0.0%	
9.	0	☐	0.0%	
10.	0	☐	0.0%	
	93	= Total Cover		
Woody Vine Stratum (Plot size: 8' x 200')				
1.	0	☐	0.0%	
2.	0	☐	0.0%	
	0	= Total Cover		

Dominance Test worksheet:

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

Total Number of Dominant Species Across All Strata: 1 (B)

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

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	75	x 2 =	150
FAC species	8	x 3 =	24
FACU species	10	x 4 =	40
UPL species	0	x 5 =	0
Column Totals:	93 (A)		214 (B)

Prevalence Index = B/A = 2.301

Hydrophytic Vegetation Indicators:

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

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

Hydrophytic Vegetation Present? **Yes** ◉ **No** ○

Remarks: (Include photo numbers here or on a separate sheet.)

This point is located in a wet meadow.
The criterion for hydrophytic vegetation is met at this point.

*Indicator suffix = National status or professional decision assigned because Regional status not defined by FWS.

SOIL

Sampling Point: **SP-33**

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)		%	Redox Features Color (moist)		%	Type [1]	Loc [2]	Texture	Remarks
0-4	10YR	3/1	100						Sandy Clay Loam	
4-12	10YR	4/2	95	10YR	4/6	5	C	M	Sandy Clay Loam	
12-20	10YR	4/2	70	10YR	4/6	30	C	M	Sandy Clay Loam	

[1] Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. [2] Location: PL=Pore Lining. M=Matrix.

Hydric Soil Indicators:

- ☐ Histosol (A1)
- ☐ Histic Epipedon (A2)
- ☐ Black Histic (A3)
- ☐ Hydrogen Sulfide (A4)
- ☐ Stratified Layers (A5)
- ☐ 2 cm Muck (A10)
- ☑ Depleted Below Dark Surface (A11)
- ☐ Thick Dark Surface (A12)
- ☐ Sandy Muck Mineral (S1)
- ☐ 5 cm Mucky Peat or Peat (S3)
- ☐ Sandy Gleyed Matrix (S4)
- ☐ Sandy Redox (S5)
- ☐ Stripped Matrix (S6)
- ☐ Loamy Mucky Mineral (F1)
- ☐ Loamy Gleyed Matrix (F2)
- ☑ Depleted Matrix (F3)
- ☐ Redox Dark Surface (F6)
- ☐ Depleted Dark Surface (F7)
- ☐ Redox Depressions (F8)

Indicators for Problematic Hydric Soils [3]:

- ☐ Coast Prairie Redox (A16)
- ☐ Dark Surface (S7)
- ☐ Iron Manganese Masses (F12)
- ☐ Very Shallow Dark Surface (TF12)
- ☐ Other (Explain in Remarks)

[3] Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: None

Depth (inches): NA

Hydric Soil Present? **Yes** ◉ **No** ○

Remarks:

Soil appears to be a roadside fill and thus disturbed.
The criterion for hydric soil is met at this point.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ☐ Surface Water (A1)
- ☐ High Water Table (A2)
- ☐ Saturation (A3)
- ☐ Water Marks (B1)
- ☐ Sediment Deposits (B2)
- ☐ Drift Deposits (B3)
- ☐ Algal Mat or Crust (B4)
- ☐ Iron Deposits (B5)
- ☐ Inundation Visible on Aerial Imagery (B7)
- ☐ Sparsely Vegetated Concave Surface (B8)
- ☐ Water-Stained Leaves (B9)
- ☐ Aquatic Fauna (B13)
- ☐ True Aquatic Plants (B14)
- ☐ Hydrogen Sulfide Odor (C1)
- ☐ Oxidized Rhizospheres on Living Roots (C3)
- ☐ Presence of Reduced Iron (C4)
- ☐ Recent Iron Reduction in Tilled Soils (C6)
- ☐ Thin Muck Surface (C7)
- ☐ Gauge or Well Data (D9)
- ☐ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ☐ Surface Soil Cracks (B6)
- ☐ Drainage Patterns (B10)
- ☐ Dry Season Water Table (C2)
- ☐ Crayfish Burrows (C8)
- ☐ Saturation Visible on Aerial Imagery (C9)
- ☐ Stunted or Stressed Plants (D1)
- ☑ Geomorphic Position (D2)
- ☑ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes ○ No ◉ Depth (inches): _____

Water Table Present? Yes ○ No ◉ Depth (inches): _____

Saturation Present? (includes capillary fringe) Yes ○ No ◉ Depth (inches): _____

Wetland Hydrology Present? **Yes** ◉ **No** ○

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Previous delineation, DNR WWI map, NRCS Soils map, Topographic map, Aerial photos

Remarks:

Based on a WETS analysis, antecedent precipitation was within a normal range.
The criterion for hydrology is met at this point.

WETLAND DETERMINATION DATA FORM - Midwest Region

Project/Site: IH 94 (N-S Freeway) City/County: Milwaukee County Sampling Date: 18-Aug-14

Applicant/Owner: Wisconsin Department of Transportation State: WI Sampling Point: **SP-34**

Investigator(s): Ron Londre, Geof Parish Section, Township, Range: S 18 T 5N R 22E

Landform (hillslope, terrace, etc.): Toeslope Local relief (concave, convex, none): concave

Slope: 3.0% 1.7 ° Lat.: Long.: Datum:

Soil Map Unit Name: Blount silt loam (BlA), Not hydric WWI classification: None

Are climatic/hydrologic conditions on the site typical for this time of year? Yes ◉ No ○ (If no, explain in Remarks.)

Are Vegetation ☐ , Soil ☑ , or Hydrology ☐ significantly disturbed? Are "Normal Circumstances" present? Yes ◉ No ○

Are Vegetation ☐ , Soil ☐ , or Hydrology ☐ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes ◉ No ○	**Is the Sampled Area within a Wetland?** **Yes** ◉ **No** ○
Hydric Soil Present?	Yes ◉ No ○	
Wetland Hydrology Present?	Yes ◉ No ○	

Remarks:
This point is located in a roadside ditch.
All three parameters have been met at this point. Thus, this point is located in a wetland.

VEGETATION - Use scientific names of plants.

	Absolute % Cover	Dominant Species? Rel.Strat. Cover	Indicator Status
Tree Stratum (Plot size: 12' x 200')			
1. Fraxinus pennsylvanica	10	☑ 100.0%	FACW
2.	0	☐ 0.0%	
3.	0	☐ 0.0%	
4.	0	☐ 0.0%	
5.	0	☐ 0.0%	
	10	= Total Cover	
Sapling/Shrub Stratum (Plot size: 12' x 75')			
1. Fraxinus pennsylvanica	5	☑ 50.0%	FACW
2. Rhus aromatica	5	☑ 50.0%	UPL
3.	0	☐ 0.0%	
4.	0	☐ 0.0%	
5.	0	☐ 0.0%	
	10	= Total Cover	
Herb Stratum (Plot size: 5' r)			
1. Solidago sempervirens	60	☑ 52.2%	FACW
2. Phalaris arundinacea	30	☑ 26.1%	FACW
3. Cirsium arvense	20	☐ 17.4%	FACU
4. Dipsacus laciniatus	5	☐ 4.3%	UPL
5.	0	☐ 0.0%	
6.	0	☐ 0.0%	
7.	0	☐ 0.0%	
8.	0	☐ 0.0%	
9.	0	☐ 0.0%	
10.	0	☐ 0.0%	
	115	= Total Cover	
Woody Vine Stratum (Plot size: 12' x 200')			
1.	0	☐ 0.0%	
2.	0	☐ 0.0%	
	0	= Total Cover	

Dominance Test worksheet:

Number of Dominant Species That are OBL, FACW, or FAC: 4 (A)

Total Number of Dominant Species Across All Strata: 5 (B)

Percent of dominant Species That Are OBL, FACW, or FAC: 80.0% (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	105	x 2 =	210
FAC species	0	x 3 =	0
FACU species	20	x 4 =	80
UPL species	10	x 5 =	50
Column Totals:	135 (A)		340 (B)

Prevalence Index = B/A = 2.519

Hydrophytic Vegetation Indicators:

- ☐ **1 - Rapid Test for Hydrophytic Vegetation**
- ☑ **2 - Dominance Test is > 50%**
- ☑ **3 - Prevalence Index is ≤3.0** [1]
- ☐ **4 - Morphological Adaptations** [1] **(Provide supporting data in Remarks or on a separate sheet)**
- ☐ **Problematic Hydrophytic Vegetation** [1] **(Explain)**

[1] **Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.**

Hydrophytic Vegetation Present? **Yes** ◉ **No** ○

Remarks: (Include photo numbers here or on a separate sheet.)

This point is located in a wet meadow.
The criterion for hydrophytic vegetation is met at this point.

*Indicator suffix = National status or professional decision assigned because Regional status not defined by FWS.

SOIL

Sampling Point: **SP-34**

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)		%	Redox Features Color (moist)		%	Type [1]	Loc [2]	Texture	Remarks
0-6	10YR	3/1	100						Silty Clay Loam	
6-12	10YR	4/2	95	10YR	4/6	5	C	M	Silty Clay Loam	
12-20	10YR	2/1	45	10YR	4/6	5	C	M	Silty Clay Loam	
	10YR	3/1	45							
	10YR	3/2	5							

[1] Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. [2] Location: PL=Pore Lining. M=Matrix.

Hydric Soil Indicators:

- ☐ Histosol (A1)
- ☐ Histic Epipedon (A2)
- ☐ Black Histic (A3)
- ☐ Hydrogen Sulfide (A4)
- ☐ Stratified Layers (A5)
- ☐ 2 cm Muck (A10)
- ☑ Depleted Below Dark Surface (A11)
- ☐ Thick Dark Surface (A12)
- ☐ Sandy Muck Mineral (S1)
- ☐ 5 cm Mucky Peat or Peat (S3)
- ☐ Sandy Gleyed Matrix (S4)
- ☐ Sandy Redox (S5)
- ☐ Stripped Matrix (S6)
- ☐ Loamy Mucky Mineral (F1)
- ☐ Loamy Gleyed Matrix (F2)
- ☑ Depleted Matrix (F3)
- ☐ Redox Dark Surface (F6)
- ☐ Depleted Dark Surface (F7)
- ☐ Redox Depressions (F8)

Indicators for Problematic Hydric Soils [3]:

- ☐ Coast Prairie Redox (A16)
- ☐ Dark Surface (S7)
- ☐ Iron Manganese Masses (F12)
- ☐ Very Shallow Dark Surface (TF12)
- ☐ Other (Explain in Remarks)

[3] Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: None

Depth (inches): NA

Hydric Soil Present? **Yes** ◉ **No** ○

Remarks:

Soil appears to be a roadside fill and thus disturbed.
The criterion for hydric soil is met at this point.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ☐ Surface Water (A1)
- ☐ High Water Table (A2)
- ☐ Saturation (A3)
- ☐ Water Marks (B1)
- ☐ Sediment Deposits (B2)
- ☐ Drift Deposits (B3)
- ☐ Algal Mat or Crust (B4)
- ☐ Iron Deposits (B5)
- ☐ Inundation Visible on Aerial Imagery (B7)
- ☐ Sparsely Vegetated Concave Surface (B8)
- ☐ Water-Stained Leaves (B9)
- ☐ Aquatic Fauna (B13)
- ☐ True Aquatic Plants (B14)
- ☐ Hydrogen Sulfide Odor (C1)
- ☐ Oxidized Rhizospheres on Living Roots (C3)
- ☐ Presence of Reduced Iron (C4)
- ☐ Recent Iron Reduction in Tilled Soils (C6)
- ☐ Thin Muck Surface (C7)
- ☐ Gauge or Well Data (D9)
- ☐ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ☐ Surface Soil Cracks (B6)
- ☐ Drainage Patterns (B10)
- ☐ Dry Season Water Table (C2)
- ☐ Crayfish Burrows (C8)
- ☐ Saturation Visible on Aerial Imagery (C9)
- ☐ Stunted or Stressed Plants (D1)
- ☑ Geomorphic Position (D2)
- ☑ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes ○ No ◉ Depth (inches): _____

Water Table Present? Yes ○ No ◉ Depth (inches): _____

Saturation Present? (includes capillary fringe) Yes ○ No ◉ Depth (inches): _____

Wetland Hydrology Present? **Yes** ◉ **No** ○

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Previous delineation, DNR WWI map, NRCS Soils map, Topographic map, Aerial photos

Remarks:

Based on a WETS analysis, antecedent precipitation was within a normal range.
The criterion for hydrology is met at this point.

WETLAND DETERMINATION DATA FORM - Midwest Region

Project/Site: IH 94 (N-S Freeway) City/County: Milwaukee County Sampling Date: 18-Aug-14

Applicant/Owner: Wisconsin Department of Transportation State: WI Sampling Point: **SP-35**

Investigator(s): Ron Londre, Geof Parish Section, Township, Range: S 18 T 5N R 22E

Landform (hillslope, terrace, etc.): Toeslope/ditch Local relief (concave, convex, none): concave

Slope: 3.0% 1.7 ° Lat.: Long.: Datum:

Soil Map Unit Name: Blount silt loam (BlA), Not hydric WWI classification: None

Are climatic/hydrologic conditions on the site typical for this time of year? Yes ◉ No ○ (If no, explain in Remarks.)

Are Vegetation ☐, Soil ☑, or Hydrology ☐ significantly disturbed? Are "Normal Circumstances" present? Yes ◉ No ○

Are Vegetation ☐, Soil ☐, or Hydrology ☐ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes ○ No ◉	**Is the Sampled Area within a Wetland?** **Yes ○ No ◉**
Hydric Soil Present?	Yes ○ No ◉	
Wetland Hydrology Present?	Yes ○ No ◉	

Remarks:
This point is located in a roadside ditch.
None of the three parameters have been met at this point. Thus, this point is located in an upland.

VEGETATION - Use scientific names of plants.

Tree Stratum (Plot size: 15' x 200')	Absolute % Cover	Dominant Species? Rel.Strat. Cover	Indicator Status
1.	0	☐ 0.0%	
2.	0	☐ 0.0%	
3.	0	☐ 0.0%	
4.	0	☐ 0.0%	
5.	0	☐ 0.0%	
	0	= Total Cover	
Sapling/Shrub Stratum (Plot size: 15' x 50')			
1.	0	☐ 0.0%	
2.	0	☐ 0.0%	
3.	0	☐ 0.0%	
4.	0	☐ 0.0%	
5.	0	☐ 0.0%	
	0	= Total Cover	
Herb Stratum (Plot size: 5' r)			
1. Festuca rubra	80	☑ 65.0%	FACU
2. Poa pratensis	15	☐ 12.2%	FAC
3. Agrostis gigantea	10	☐ 8.1%	FACW
4. Solidago canadensis	8	☐ 6.5%	FACU
5. Euthamia graminifolia	5	☐ 4.1%	FACW
6. Symphyotrichum novae-angliae	3	☐ 2.4%	FACW
7. Daucus carota	2	☐ 1.6%	UPL
8.	0	☐ 0.0%	
9.	0	☐ 0.0%	
10.	0	☐ 0.0%	
	123	= Total Cover	
Woody Vine Stratum (Plot size: 15' x 200')			
1.	0	☐ 0.0%	
2.	0	☐ 0.0%	
	0	= Total Cover	

Dominance Test worksheet:

Number of Dominant Species That are OBL, FACW, or FAC: 0 (A)

Total Number of Dominant Species Across All Strata: 1 (B)

Percent of dominant Species That Are OBL, FACW, or FAC: 0.0% (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	18	x 2 =	36
FAC species	15	x 3 =	45
FACU species	88	x 4 =	352
UPL species	2	x 5 =	10
Column Totals:	123 (A)		443 (B)

Prevalence Index = B/A = 3.602

Hydrophytic Vegetation Indicators:

- ☐ **1 - Rapid Test for Hydrophytic Vegetation**
- ☐ **2 - Dominance Test is > 50%**
- ☐ **3 - Prevalence Index is ≤3.0** [1]
- ☐ **4 - Morphological Adaptations** [1] **(Provide supporting data in Remarks or on a separate sheet)**
- ☐ **Problematic Hydrophytic Vegetation** [1] **(Explain)**

[1] **Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.**

Hydrophytic Vegetation Present? **Yes ○ No ◉**

Remarks: (Include photo numbers here or on a separate sheet.)
The criterion for hydrophytic vegetation is not met at this point.

*Indicator suffix = National status or professional decision assigned because Regional status not defined by FWS.

SOIL

Sampling Point: **SP-35**

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)		%	Redox Features Color (moist)		%	Type [1]	Loc [2]	Texture	Remarks
0-7	10YR	3/2	100						Silty Clay	
7-20	10YR	5/3	90	10YR	6/1	5	D	M	Silty Clay Loam	
				10YR	5/6	5	C	M		

[1] Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. [2] Location: PL=Pore Lining. M=Matrix.

Hydric Soil Indicators:

- ☐ Histosol (A1)
- ☐ Histic Epipedon (A2)
- ☐ Black Histic (A3)
- ☐ Hydrogen Sulfide (A4)
- ☐ Stratified Layers (A5)
- ☐ 2 cm Muck (A10)
- ☐ Depleted Below Dark Surface (A11)
- ☐ Thick Dark Surface (A12)
- ☐ Sandy Muck Mineral (S1)
- ☐ 5 cm Mucky Peat or Peat (S3)
- ☐ Sandy Gleyed Matrix (S4)
- ☐ Sandy Redox (S5)
- ☐ Stripped Matrix (S6)
- ☐ Loamy Mucky Mineral (F1)
- ☐ Loamy Gleyed Matrix (F2)
- ☐ Depleted Matrix (F3)
- ☐ Redox Dark Surface (F6)
- ☐ Depleted Dark Surface (F7)
- ☐ Redox Depressions (F8)

Indicators for Problematic Hydric Soils [3]:

- ☐ Coast Prairie Redox (A16)
- ☐ Dark Surface (S7)
- ☐ Iron Manganese Masses (F12)
- ☐ Very Shallow Dark Surface (TF12)
- ☐ Other (Explain in Remarks)

[3] Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: None

Depth (inches): NA

Hydric Soil Present? Yes ○ No ◉

Remarks:

Soil appears to be a roadside fill and thus disturbed.
The criterion for hydric soil is not met at this point.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ☐ Surface Water (A1)
- ☐ High Water Table (A2)
- ☐ Saturation (A3)
- ☐ Water Marks (B1)
- ☐ Sediment Deposits (B2)
- ☐ Drift Deposits (B3)
- ☐ Algal Mat or Crust (B4)
- ☐ Iron Deposits (B5)
- ☐ Inundation Visible on Aerial Imagery (B7)
- ☐ Sparsely Vegetated Concave Surface (B8)
- ☐ Water-Stained Leaves (B9)
- ☐ Aquatic Fauna (B13)
- ☐ True Aquatic Plants (B14)
- ☐ Hydrogen Sulfide Odor (C1)
- ☐ Oxidized Rhizospheres on Living Roots (C3)
- ☐ Presence of Reduced Iron (C4)
- ☐ Recent Iron Reduction in Tilled Soils (C6)
- ☐ Thin Muck Surface (C7)
- ☐ Gauge or Well Data (D9)
- ☐ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ☐ Surface Soil Cracks (B6)
- ☐ Drainage Patterns (B10)
- ☐ Dry Season Water Table (C2)
- ☐ Crayfish Burrows (C8)
- ☐ Saturation Visible on Aerial Imagery (C9)
- ☐ Stunted or Stressed Plants (D1)
- ☑ Geomorphic Position (D2)
- ☐ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes ○ No ◉ Depth (inches): _____

Water Table Present? Yes ○ No ◉ Depth (inches): _____

Saturation Present? (includes capillary fringe) Yes ○ No ◉ Depth (inches): _____

Wetland Hydrology Present? Yes ○ No ◉

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Previous delineation, DNR WWI map, NRCS Soils map, Topographic map, Aerial photos

Remarks:

Based on a WETS analysis, antecedent precipitation was within a normal range.
The criterion for hydrology is met at this point.

WETLAND DETERMINATION DATA FORM - Midwest Region

Project/Site: IH 94 (N-S Freeway) City/County: Milwaukee County Sampling Date: 18-Aug-14

Applicant/Owner: Wisconsin Department of Transportation State: WI Sampling Point: **SP-36**

Investigator(s): Ron Londre, Geof Parish Section, Township, Range: S 18 T 5N R 22E

Landform (hillslope, terrace, etc.): Toeslope/ditch Local relief (concave, convex, none): concave

Slope: 3.0% 1.7 ° Lat.: Long.: Datum:

Soil Map Unit Name: Blount silt loam (BlA), Not hydric WWI classification: None

Are climatic/hydrologic conditions on the site typical for this time of year? Yes ◉ No ○ (If no, explain in Remarks.)

Are Vegetation ☐, Soil ☑, or Hydrology ☐ significantly disturbed? Are "Normal Circumstances" present? Yes ◉ No ○

Are Vegetation ☐, Soil ☐, or Hydrology ☐ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes ◉ No ○	**Is the Sampled Area within a Wetland?** **Yes ◉ No ○**
Hydric Soil Present?	Yes ◉ No ○	
Wetland Hydrology Present?	Yes ◉ No ○	

Remarks:
This point is located in a roadside ditch.
All three parameters have been met at this point. Thus, this point is located in a wetland.

VEGETATION - Use scientific names of plants.

Tree Stratum (Plot size: 10' x 285')	Absolute % Cover	Dominant Species?	Rel.Strat. Cover	Indicator Status
1.	0	☐	0.0%	
2.	0	☐	0.0%	
3.	0	☐	0.0%	
4.	0	☐	0.0%	
5.	0	☐	0.0%	
	0	= Total Cover		
Sapling/Shrub Stratum (Plot size: 10' x 70')				
1.	0	☐	0.0%	
2.	0	☐	0.0%	
3.	0	☐	0.0%	
4.	0	☐	0.0%	
5.	0	☐	0.0%	
	0	= Total Cover		
Herb Stratum (Plot size: 5' r)				
1. Typha angustifolia	60	☑	53.1%	OBL
2. Agrostis gigantea	20	☐	17.7%	FACW
3. Solidago canadensis	15	☐	13.3%	FACU
4. Festuca rubra	5	☐	4.4%	FACU
5. Achillea millefolium	5	☐	4.4%	FACU
6. Symphyotrichum puniceum	5	☐	4.4%	OBL
7. Daucus carota	3	☐	2.7%	UPL
8.	0	☐	0.0%	
9.	0	☐	0.0%	
10.	0	☐	0.0%	
	113	= Total Cover		
Woody Vine Stratum (Plot size: 10' x 285')				
1. Vitis riparia	5	☐	100.0%	FACW
2.	0	☐	0.0%	
	5	= Total Cover		

Dominance Test worksheet:

Number of Dominant Species That are OBL, FACW, or FAC: 2 (A)

Total Number of Dominant Species Across All Strata: 2 (B)

Percent of dominant Species That Are OBL, FACW, or FAC: 100.0% (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	65	x 1 =	65
FACW species	25	x 2 =	50
FAC species	0	x 3 =	0
FACU species	25	x 4 =	100
UPL species	3	x 5 =	15
Column Totals:	118 (A)		230 (B)

Prevalence Index = B/A = 1.949

Hydrophytic Vegetation Indicators:

- ☑ **1 - Rapid Test for Hydrophytic Vegetation**
- ☑ **2 - Dominance Test is > 50%**
- ☑ **3 - Prevalence Index is ≤3.0** [1]
- ☐ **4 - Morphological Adaptations** [1] **(Provide supporting data in Remarks or on a separate sheet)**
- ☐ **Problematic Hydrophytic Vegetation** [1] **(Explain)**

[1] **Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.**

Hydrophytic Vegetation Present? **Yes ◉ No ○**

Remarks: (Include photo numbers here or on a separate sheet.)

This point is located in a shallow marsh plant community.
The criterion for hydrophytic vegetation is met at this point.

*Indicator suffix = National status or professional decision assigned because Regional status not defined by FWS.

SOIL

Sampling Point: **SP-36**

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)		%	Redox Features Color (moist)		%	Type [1]	Loc [2]	Texture	Remarks
0-7	10YR	4/1	90	10YR	4/6	10	C	M	Silty Clay Loam	
7-20	10YR	5/3	80	10YR	6/1	10	D	M	Silty Clay Loam	
				10YR	5/6	10	C	M		

[1] Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. [2] Location: PL=Pore Lining. M=Matrix.

Hydric Soil Indicators:

- ☐ Histosol (A1)
- ☐ Histic Epipedon (A2)
- ☐ Black Histic (A3)
- ☐ Hydrogen Sulfide (A4)
- ☐ Stratified Layers (A5)
- ☐ 2 cm Muck (A10)
- ☐ Depleted Below Dark Surface (A11)
- ☐ Thick Dark Surface (A12)
- ☐ Sandy Muck Mineral (S1)
- ☐ 5 cm Mucky Peat or Peat (S3)
- ☐ Sandy Gleyed Matrix (S4)
- ☐ Sandy Redox (S5)
- ☐ Stripped Matrix (S6)
- ☐ Loamy Mucky Mineral (F1)
- ☐ Loamy Gleyed Matrix (F2)
- ☑ Depleted Matrix (F3)
- ☐ Redox Dark Surface (F6)
- ☐ Depleted Dark Surface (F7)
- ☐ Redox Depressions (F8)

Indicators for Problematic Hydric Soils [3]:

- ☐ Coast Prairie Redox (A16)
- ☐ Dark Surface (S7)
- ☐ Iron Manganese Masses (F12)
- ☐ Very Shallow Dark Surface (TF12)
- ☐ Other (Explain in Remarks)

[3] Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: None

Depth (inches): NA

Hydric Soil Present? **Yes** ◉ **No** ○

Remarks:

Soil appears to be a roadside fill and thus disturbed.
The criterion for hydric soil is met at this point.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ☐ Surface Water (A1)
- ☐ High Water Table (A2)
- ☐ Saturation (A3)
- ☐ Water Marks (B1)
- ☐ Sediment Deposits (B2)
- ☐ Drift Deposits (B3)
- ☐ Algal Mat or Crust (B4)
- ☐ Iron Deposits (B5)
- ☐ Inundation Visible on Aerial Imagery (B7)
- ☐ Sparsely Vegetated Concave Surface (B8)
- ☐ Water-Stained Leaves (B9)
- ☐ Aquatic Fauna (B13)
- ☐ True Aquatic Plants (B14)
- ☐ Hydrogen Sulfide Odor (C1)
- ☐ Oxidized Rhizospheres on Living Roots (C3)
- ☐ Presence of Reduced Iron (C4)
- ☐ Recent Iron Reduction in Tilled Soils (C6)
- ☐ Thin Muck Surface (C7)
- ☐ Gauge or Well Data (D9)
- ☐ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ☐ Surface Soil Cracks (B6)
- ☐ Drainage Patterns (B10)
- ☐ Dry Season Water Table (C2)
- ☐ Crayfish Burrows (C8)
- ☐ Saturation Visible on Aerial Imagery (C9)
- ☐ Stunted or Stressed Plants (D1)
- ☑ Geomorphic Position (D2)
- ☑ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes ○ No ◉ Depth (inches): _____

Water Table Present? Yes ○ No ◉ Depth (inches): _____

Saturation Present? (includes capillary fringe) Yes ○ No ◉ Depth (inches): _____

Wetland Hydrology Present? **Yes** ◉ **No** ○

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Previous delineation, DNR WWI map, NRCS Soils map, Topographic map, Aerial photos

Remarks:

Based on a WETS analysis, antecedent precipitation was within a normal range.
The criterion for hydrology is met at this point.

WETLAND DETERMINATION DATA FORM - Midwest Region

Project/Site: IH 94 (N-S Freeway) City/County: Milwaukee County Sampling Date: 19-Aug-14

Applicant/Owner: Wisconsin Department of Transportation State: WI Sampling Point: **SP-37**

Investigator(s): Ron Londre, Geof Parish Section, Township, Range: S 19 T 5N R 22E

Landform (hillslope, terrace, etc.): Backslope Local relief (concave, convex, none): convex

Slope: 5.0% 2.9 ° Lat.: Long.: Datum:

Soil Map Unit Name: Ashkum silty clay loam (AsA), All hydric WWI classification: None

Are climatic/hydrologic conditions on the site typical for this time of year? Yes ◉ No ○ (If no, explain in Remarks.)

Are Vegetation ☐, Soil ☑, or Hydrology ☐ significantly disturbed? Are "Normal Circumstances" present? Yes ◉ No ○

Are Vegetation ☐, Soil ☐, or Hydrology ☐ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes ○ No ◉	**Is the Sampled Area within a Wetland?** **Yes ○ No ◉**
Hydric Soil Present?	Yes ○ No ◉	
Wetland Hydrology Present?	Yes ○ No ◉	

Remarks:
This point is located on the backslope of roadside ditch.
None of the parameters have been met at this point. Thus, this point is lcoated in an upland.

VEGETATION - Use scientific names of plants.

	Absolute % Cover	Dominant Species? Rel.Strat. Cover	Indicator Status
Tree Stratum (Plot size: 20' x 140')			
1.	0	☐ 0.0%	
2.	0	☐ 0.0%	
3.	0	☐ 0.0%	
4.	0	☐ 0.0%	
5.	0	☐ 0.0%	
	0	= Total Cover	
Sapling/Shrub Stratum (Plot size: 20' x 35')			
1.	0	☐ 0.0%	
2.	0	☐ 0.0%	
3.	0	☐ 0.0%	
4.	0	☐ 0.0%	
5.	0	☐ 0.0%	
	0	= Total Cover	
Herb Stratum (Plot size: 5' r)			
1. Ambrosia artemisiifolia	60	☑ 54.5%	FACU
2. Phalaris arundinacea	25	☑ 22.7%	FACW
3. Carex pellita	10	☐ 9.1%	OBL
4. Sonchus arvensis	10	☐ 9.1%	FACU
5. Asclepias verticillata	5	☐ 4.5%	FACU
6.	0	☐ 0.0%	
7.	0	☐ 0.0%	
8.	0	☐ 0.0%	
9.	0	☐ 0.0%	
10.	0	☐ 0.0%	
	110	= Total Cover	
Woody Vine Stratum (Plot size: 20' x 140')			
1.	0	☐ 0.0%	
2.	0	☐ 0.0%	
	0	= Total Cover	

Dominance Test worksheet:

Number of Dominant Species That are OBL, FACW, or FAC: 1 (A)

Total Number of Dominant Species Across All Strata: 2 (B)

Percent of dominant Species That Are OBL, FACW, or FAC: 50.0% (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	10	x 1 =	10
FACW species	25	x 2 =	50
FAC species	0	x 3 =	0
FACU species	75	x 4 =	300
UPL species	0	x 5 =	0
Column Totals:	110 (A)		360 (B)

Prevalence Index = B/A = 3.273

Hydrophytic Vegetation Indicators:

- ☐ **1 - Rapid Test for Hydrophytic Vegetation**
- ☐ **2 - Dominance Test is > 50%**
- ☐ **3 - Prevalence Index is ≤3.0** [1]
- ☐ **4 - Morphological Adaptations** [1] **(Provide supporting data in Remarks or on a separate sheet)**
- ☐ **Problematic Hydrophytic Vegetation** [1] **(Explain)**

[1] **Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.**

Hydrophytic Vegetation Present? **Yes ○ No ◉**

Remarks: (Include photo numbers here or on a separate sheet.)
The criterion for hydrophytic vegetation is not met at this point.

*Indicator suffix = National status or professional decision assigned because Regional status not defined by FWS.

SOIL

Sampling Point: **SP-37**

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)		%	Redox Features Color (moist)	%	Type [1]	Loc [2]	Texture	Remarks
0-9	10YR	3/1	100					Sandy Clay Loam	
9-20	10YR	4/4	100					Loamy Sand	30% gravel

[1] Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. [2] Location: PL=Pore Lining. M=Matrix.

Hydric Soil Indicators:

- ☐ Histosol (A1)
- ☐ Histic Epipedon (A2)
- ☐ Black Histic (A3)
- ☐ Hydrogen Sulfide (A4)
- ☐ Stratified Layers (A5)
- ☐ 2 cm Muck (A10)
- ☐ Depleted Below Dark Surface (A11)
- ☐ Thick Dark Surface (A12)
- ☐ Sandy Muck Mineral (S1)
- ☐ 5 cm Mucky Peat or Peat (S3)
- ☐ Sandy Gleyed Matrix (S4)
- ☐ Sandy Redox (S5)
- ☐ Stripped Matrix (S6)
- ☐ Loamy Mucky Mineral (F1)
- ☐ Loamy Gleyed Matrix (F2)
- ☐ Depleted Matrix (F3)
- ☐ Redox Dark Surface (F6)
- ☐ Depleted Dark Surface (F7)
- ☐ Redox Depressions (F8)

Indicators for Problematic Hydric Soils [3]:

- ☐ Coast Prairie Redox (A16)
- ☐ Dark Surface (S7)
- ☐ Iron Manganese Masses (F12)
- ☐ Very Shallow Dark Surface (TF12)
- ☐ Other (Explain in Remarks)

[3] Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: None

Depth (inches): NA

Hydric Soil Present? **Yes** ○ **No** ◉

Remarks:

Soil appears to be a roadside fill and thus disturbed.
The criterion for hydric soil is not met at this point.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ☐ Surface Water (A1)
- ☐ High Water Table (A2)
- ☐ Saturation (A3)
- ☐ Water Marks (B1)
- ☐ Sediment Deposits (B2)
- ☐ Drift Deposits (B3)
- ☐ Algal Mat or Crust (B4)
- ☐ Iron Deposits (B5)
- ☐ Inundation Visible on Aerial Imagery (B7)
- ☐ Sparsely Vegetated Concave Surface (B8)
- ☐ Water-Stained Leaves (B9)
- ☐ Aquatic Fauna (B13)
- ☐ True Aquatic Plants (B14)
- ☐ Hydrogen Sulfide Odor (C1)
- ☐ Oxidized Rhizospheres on Living Roots (C3)
- ☐ Presence of Reduced Iron (C4)
- ☐ Recent Iron Reduction in Tilled Soils (C6)
- ☐ Thin Muck Surface (C7)
- ☐ Gauge or Well Data (D9)
- ☐ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ☐ Surface Soil Cracks (B6)
- ☐ Drainage Patterns (B10)
- ☐ Dry Season Water Table (C2)
- ☐ Crayfish Burrows (C8)
- ☐ Saturation Visible on Aerial Imagery (C9)
- ☐ Stunted or Stressed Plants (D1)
- ☐ Geomorphic Position (D2)
- ☐ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes ○ No ◉ Depth (inches): _____

Water Table Present? Yes ○ No ◉ Depth (inches): _____

Saturation Present? (includes capillary fringe) Yes ○ No ◉ Depth (inches): _____

Wetland Hydrology Present? **Yes** ○ **No** ◉

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Previous delineation, DNR WWI map, NRCS Soils map, Topographic map, Aerial photos

Remarks:

Based on a WETS analysis, antecedent precipitation was within a normal range.
The criterion for hydrology is not met at this point.

WETLAND DETERMINATION DATA FORM - Midwest Region

Project/Site: IH 94 (N-S Freeway) City/County: Milwaukee County Sampling Date: 19-Aug-14

Applicant/Owner: Wisconsin Department of Transportation State: WI Sampling Point: **SP-38**

Investigator(s): Ron Londre, Geof Parish Section, Township, Range: S 19 T 5N R 22E

Landform (hillslope, terrace, etc.): Toeslope/ditch Local relief (concave, convex, none): concave

Slope: 2.0% 1.1 ° Lat.: Long.: Datum:

Soil Map Unit Name: Ashkum silty clay loam (AsA), All hydric WWI classification: None

Are climatic/hydrologic conditions on the site typical for this time of year? Yes ◉ No ○ (If no, explain in Remarks.)

Are Vegetation ☐, Soil ☑, or Hydrology ☐ significantly disturbed? Are "Normal Circumstances" present? Yes ◉ No ○

Are Vegetation ☐, Soil ☐, or Hydrology ☐ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes ◉ No ○	**Is the Sampled Area within a Wetland?** **Yes ◉ No ○**
Hydric Soil Present?	Yes ◉ No ○	
Wetland Hydrology Present?	Yes ◉ No ○	

Remarks:
This point is located in a roadside ditch.
All three parameters have been met at this point. Thus, this point is located in a wetland.

VEGETATION - Use scientific names of plants.

Tree Stratum (Plot size: 20' x 140')	Absolute % Cover	Dominant Species?	Rel.Strat. Cover	Indicator Status
1.	0	☐	0.0%	
2.	0	☐	0.0%	
3.	0	☐	0.0%	
4.	0	☐	0.0%	
5.	0	☐	0.0%	0
	0	= Total Cover		
Sapling/Shrub Stratum (Plot size: 20' x 35')				
1. Salix discolor	15	☑	100.0%	FACW
2.	0	☐	0.0%	
3.	0	☐	0.0%	
4.	0	☐	0.0%	
5.	0	☐	0.0%	
	15	= Total Cover		
Herb Stratum (Plot size: 5' r)				
1. Typha angustifolia	60	☑	51.3%	OBL
2. Typha X glauca	30	☑	25.6%	OBL
3. Solidago sempervirens	8	☐	6.8%	FACW
4. Phalaris arundinacea	5	☐	4.3%	FACW
5. Euthamia graminifolia	5	☐	4.3%	FACW
6. Agrostis gigantea	3	☐	2.6%	FACW
7. Carex pellita	3	☐	2.6%	OBL
8. Sonchus arvensis	3	☐	2.6%	FACU
9.	0	☐	0.0%	
10.	0	☐	0.0%	
	117	= Total Cover		
Woody Vine Stratum (Plot size: 20' x 140')				
1.	0	☐	0.0%	
2.	0	☐	0.0%	
	0	= Total Cover		

Dominance Test worksheet:

Number of Dominant Species That are OBL, FACW, or FAC: 3 (A)

Total Number of Dominant Species Across All Strata: 3 (B)

Percent of dominant Species That Are OBL, FACW, or FAC: 100.0% (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	93	x 1 =	93
FACW species	36	x 2 =	72
FAC species	0	x 3 =	0
FACU species	3	x 4 =	12
UPL species	0	x 5 =	0
Column Totals:	132 (A)		177 (B)

Prevalence Index = B/A = 1.341

Hydrophytic Vegetation Indicators:

- ☑ **1 - Rapid Test for Hydrophytic Vegetation**
- ☑ **2 - Dominance Test is > 50%**
- ☑ **3 - Prevalence Index is ≤3.0** [1]
- ☐ **4 - Morphological Adaptations** [1] **(Provide supporting data in Remarks or on a separate sheet)**
- ☐ **Problematic Hydrophytic Vegetation** [1] **(Explain)**

[1] **Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.**

Hydrophytic Vegetation Present? **Yes ◉ No ○**

Remarks: (Include photo numbers here or on a separate sheet.)

This point is located in a shallow marsh plant community.
The criterion for hydrophytic vegetation is met at this point.

*Indicator suffix = National status or professional decision assigned because Regional status not defined by FWS.

SOIL

Sampling Point: **SP-38**

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)		%	Redox Features Color (moist)		%	Type [1]	Loc [2]	Texture	Remarks
0-10	10YR	4/1	75	7.5YR	4/4	5	C	M	Silty Clay Loam	
				10YR	4/2	20	D	M		
10-20	10YR	5/1	80	7.5YR	4/6	10	C	M	Sandy Clay	
				7.5YR	5/4	5	C	M		

[1] Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. [2] Location: PL=Pore Lining. M=Matrix.

Hydric Soil Indicators:

- ☐ Histosol (A1)
- ☐ Histic Epipedon (A2)
- ☐ Black Histic (A3)
- ☐ Hydrogen Sulfide (A4)
- ☐ Stratified Layers (A5)
- ☐ 2 cm Muck (A10)
- ☐ Depleted Below Dark Surface (A11)
- ☐ Thick Dark Surface (A12)
- ☐ Sandy Muck Mineral (S1)
- ☐ 5 cm Mucky Peat or Peat (S3)
- ☐ Sandy Gleyed Matrix (S4)
- ☐ Sandy Redox (S5)
- ☐ Stripped Matrix (S6)
- ☐ Loamy Mucky Mineral (F1)
- ☐ Loamy Gleyed Matrix (F2)
- ☑ Depleted Matrix (F3)
- ☐ Redox Dark Surface (F6)
- ☐ Depleted Dark Surface (F7)
- ☐ Redox Depressions (F8)

Indicators for Problematic Hydric Soils [3]:

- ☐ Coast Prairie Redox (A16)
- ☐ Dark Surface (S7)
- ☐ Iron Manganese Masses (F12)
- ☐ Very Shallow Dark Surface (TF12)
- ☐ Other (Explain in Remarks)

[3] Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: None

Depth (inches): NA

Hydric Soil Present? **Yes** ◉ **No** ○

Remarks:

Soil appears to be a roadside fill and thus disturbed.
The criterion for hydric soil is met at this point.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ☐ Surface Water (A1)
- ☐ High Water Table (A2)
- ☑ Saturation (A3)
- ☐ Water Marks (B1)
- ☐ Sediment Deposits (B2)
- ☐ Drift Deposits (B3)
- ☐ Algal Mat or Crust (B4)
- ☐ Iron Deposits (B5)
- ☐ Inundation Visible on Aerial Imagery (B7)
- ☐ Sparsely Vegetated Concave Surface (B8)
- ☐ Water-Stained Leaves (B9)
- ☐ Aquatic Fauna (B13)
- ☐ True Aquatic Plants (B14)
- ☐ Hydrogen Sulfide Odor (C1)
- ☐ Oxidized Rhizospheres on Living Roots (C3)
- ☐ Presence of Reduced Iron (C4)
- ☐ Recent Iron Reduction in Tilled Soils (C6)
- ☐ Thin Muck Surface (C7)
- ☐ Gauge or Well Data (D9)
- ☐ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ☐ Surface Soil Cracks (B6)
- ☐ Drainage Patterns (B10)
- ☑ Dry Season Water Table (C2)
- ☐ Crayfish Burrows (C8)
- ☐ Saturation Visible on Aerial Imagery (C9)
- ☐ Stunted or Stressed Plants (D1)
- ☑ Geomorphic Position (D2)
- ☑ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes ○ No ◉ Depth (inches):

Water Table Present? Yes ◉ No ○ Depth (inches): 16

Saturation Present? (includes capillary fringe) Yes ◉ No ○ Depth (inches): 0

Wetland Hydrology Present? **Yes** ◉ **No** ○

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Previous delineation, DNR WWI map, NRCS Soils map, Topographic map, Aerial photos

Remarks:

Based on a WETS analysis, antecedent precipitation was within a normal range.
The criterion for hydrology is met at this point.

WETLAND DETERMINATION DATA FORM - Midwest Region

Project/Site: IH 94 (N-S Freeway) City/County: Milwaukee County Sampling Date: 19-Aug-14

Applicant/Owner: Wisconsin Department of Transportation State: WI Sampling Point: **SP-39**

Investigator(s): Ron Londre, Geof Parish Section, Township, Range: S 19 T 5N R 22E

Landform (hillslope, terrace, etc.): Toeslope/ditch Local relief (concave, convex, none): concave

Slope: 6.0% 3.4 ° Lat.: Long.: Datum:

Soil Map Unit Name: Morley silt loam (MzdC2), Not hydric WWI classification: None

Are climatic/hydrologic conditions on the site typical for this time of year? Yes ◉ No ○ (If no, explain in Remarks.)

Are Vegetation ☐ , Soil ☑ , or Hydrology ☐ significantly disturbed? Are "Normal Circumstances" present? Yes ◉ No ○

Are Vegetation ☐ , Soil ☐ , or Hydrology ☐ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes ◉ No ○	**Is the Sampled Area within a Wetland?** **Yes** ○ **No** ◉
Hydric Soil Present?	Yes ○ No ◉	
Wetland Hydrology Present?	Yes ○ No ◉	

Remarks:
This point is located in a roadside ditch.
Two of three parameters have not been met at this point. Thus, this point is located in an upland.

VEGETATION - Use scientific names of plants.

Tree Stratum (Plot size: 12' x 75')	Absolute % Cover	Dominant Species?	Rel.Strat. Cover	Indicator Status
1.	0	☐	0.0%	
2.	0	☐	0.0%	
3.	0	☐	0.0%	
4.	0	☐	0.0%	
5.	0	☐	0.0%	
	0	= Total Cover		
Sapling/Shrub Stratum (Plot size: 12' x 75')				
1. Zanthoxylum americanum	10	☑	50.0%	FACU
2. Cornus obliqua	5	☑	25.0%	FACW
3. Rhamnus cathartica	5	☑	25.0%	FAC
4.	0	☐	0.0%	
5.	0	☐	0.0%	
	20	= Total Cover		
Herb Stratum (Plot size: 5' r)				
1. Festuca rubra	80	☑	84.2%	FACU
2. Agrostis gigantea	10	☐	10.5%	FACW
3. Solidago canadensis	5	☐	5.3%	FACU
4.	0	☐	0.0%	
5.	0	☐	0.0%	
6.	0	☐	0.0%	
7.	0	☐	0.0%	
8.	0	☐	0.0%	
9.	0	☐	0.0%	
10.	0	☐	0.0%	
	95	= Total Cover		
Woody Vine Stratum (Plot size: 12' x 75')				
1. Vitis riparia	10	☐	100.0%	FACW
2.	0	☐	0.0%	
	10	= Total Cover		

Dominance Test worksheet:

Number of Dominant Species That are OBL, FACW, or FAC: 3 (A)

Total Number of Dominant Species Across All Strata: 5 (B)

Percent of dominant Species That Are OBL, FACW, or FAC: 60.0% (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	25	x 2 =	50
FAC species	5	x 3 =	15
FACU species	95	x 4 =	380
UPL species	0	x 5 =	0
Column Totals:	125 (A)		445 (B)

Prevalence Index = B/A = 3.560

Hydrophytic Vegetation Indicators:

- ☐ **1 - Rapid Test for Hydrophytic Vegetation**
- ☑ **2 - Dominance Test is > 50%**
- ☐ **3 - Prevalence Index is ≤3.0** [1]
- ☐ **4 - Morphological Adaptations** [1] **(Provide supporting data in Remarks or on a separate sheet)**
- ☐ **Problematic Hydrophytic Vegetation** [1] **(Explain)**

[1] **Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.**

Hydrophytic Vegetation Present? **Yes** ◉ **No** ○

Remarks: (Include photo numbers here or on a separate sheet.)
The criterion for hydrophytic vegetation is met at this point.

*Indicator suffix = National status or professional decision assigned because Regional status not defined by FWS.

SOIL

Sampling Point: **SP-39**

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)		%	Redox Features Color (moist)		%	Type [1]	Loc [2]	Texture	Remarks
0-6	10YR	3/2	100						Sandy Clay Loam	
6-20	10YR	5/3	70	10YR	6/1	20	D	M	Sandy Clay Loam	
				7.5YR	5/6	10	C	M		

[1] Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. [2] Location: PL=Pore Lining. M=Matrix.

Hydric Soil Indicators:

- ☐ Histosol (A1)
- ☐ Histic Epipedon (A2)
- ☐ Black Histic (A3)
- ☐ Hydrogen Sulfide (A4)
- ☐ Stratified Layers (A5)
- ☐ 2 cm Muck (A10)
- ☐ Depleted Below Dark Surface (A11)
- ☐ Thick Dark Surface (A12)
- ☐ Sandy Muck Mineral (S1)
- ☐ 5 cm Mucky Peat or Peat (S3)
- ☐ Sandy Gleyed Matrix (S4)
- ☐ Sandy Redox (S5)
- ☐ Stripped Matrix (S6)
- ☐ Loamy Mucky Mineral (F1)
- ☐ Loamy Gleyed Matrix (F2)
- ☐ Depleted Matrix (F3)
- ☐ Redox Dark Surface (F6)
- ☐ Depleted Dark Surface (F7)
- ☐ Redox Depressions (F8)

Indicators for Problematic Hydric Soils [3]:

- ☐ Coast Prairie Redox (A16)
- ☐ Dark Surface (S7)
- ☐ Iron Manganese Masses (F12)
- ☐ Very Shallow Dark Surface (TF12)
- ☐ Other (Explain in Remarks)

[3] Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: None

Depth (inches): NA

Hydric Soil Present? Yes ○ No ◉

Remarks:

Soil appears to be a roadside fill and thus disturbed.
The criterion for hydric soil is not met at this point.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ☐ Surface Water (A1)
- ☐ High Water Table (A2)
- ☐ Saturation (A3)
- ☐ Water Marks (B1)
- ☐ Sediment Deposits (B2)
- ☐ Drift Deposits (B3)
- ☐ Algal Mat or Crust (B4)
- ☐ Iron Deposits (B5)
- ☐ Inundation Visible on Aerial Imagery (B7)
- ☐ Sparsely Vegetated Concave Surface (B8)
- ☐ Water-Stained Leaves (B9)
- ☐ Aquatic Fauna (B13)
- ☐ True Aquatic Plants (B14)
- ☐ Hydrogen Sulfide Odor (C1)
- ☐ Oxidized Rhizospheres on Living Roots (C3)
- ☐ Presence of Reduced Iron (C4)
- ☐ Recent Iron Reduction in Tilled Soils (C6)
- ☐ Thin Muck Surface (C7)
- ☐ Gauge or Well Data (D9)
- ☐ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ☐ Surface Soil Cracks (B6)
- ☐ Drainage Patterns (B10)
- ☐ Dry Season Water Table (C2)
- ☐ Crayfish Burrows (C8)
- ☐ Saturation Visible on Aerial Imagery (C9)
- ☐ Stunted or Stressed Plants (D1)
- ☑ Geomorphic Position (D2)
- ☐ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes ○ No ◉ Depth (inches):

Water Table Present? Yes ○ No ◉ Depth (inches):

Saturation Present? (includes capillary fringe) Yes ○ No ◉ Depth (inches):

Wetland Hydrology Present? Yes ○ No ◉

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Previous delineation, DNR WWI map, NRCS Soils map, Topographic map, Aerial photos

Remarks:

Based on a WETS analysis, antecedent precipitation was within a normal range.
The criterion for hydrology is met at this point.

WETLAND DETERMINATION DATA FORM - Midwest Region

Project/Site: IH 94 (N-S Freeway) City/County: Milwaukee County Sampling Date: 19-Aug-14

Applicant/Owner: Wisconsin Department of Transportation State: WI Sampling Point: **SP-40**

Investigator(s): Ron Londre, Geof Parish Section, Township, Range: S 19 T 5N R 22E

Landform (hillslope, terrace, etc.): Toeslope/ditch Local relief (concave, convex, none): concave

Slope: 2.0% 1.1 ° Lat.: Long.: Datum:

Soil Map Unit Name: Morley silt loam (MzdC2), Not hydric WWI classification: None

Are climatic/hydrologic conditions on the site typical for this time of year? Yes ◉ No ○ (If no, explain in Remarks.)

Are Vegetation ☐ , Soil ☑ , or Hydrology ☐ significantly disturbed? Are "Normal Circumstances" present? Yes ◉ No ○

Are Vegetation ☐ , Soil ☐ , or Hydrology ☐ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes ◉ No ○	**Is the Sampled Area within a Wetland?** **Yes** ◉ **No** ○
Hydric Soil Present?	Yes ◉ No ○	
Wetland Hydrology Present?	Yes ◉ No ○	

Remarks:
This point is located in a roadside ditch.
All three parameters have been met at this point. Thus, this point is located in a wetland.

VEGETATION - Use scientific names of plants.

Tree Stratum (Plot size: 15' x 190')	Absolute % Cover	Dominant Species? Rel.Strat. Cover	Indicator Status
1. Fraxinus pennsylvanica	3	☑ 100.0%	FACW
2.	0	☐ 0.0%	
3.	0	☐ 0.0%	
4.	0	☐ 0.0%	
5.	0	☐ 0.0%	
	3	= Total Cover	
Sapling/Shrub Stratum (Plot size: 15' x 50')			
1.	0	☐ 0.0%	
2.	0	☐ 0.0%	
3.	0	☐ 0.0%	
4.	0	☐ 0.0%	
5.	0	☐ 0.0%	
	0	= Total Cover	
Herb Stratum (Plot size: 5' r)			
1. Agrostis gigantea	50	☑ 42.4%	FACW
2. Typha angustifolia	30	☑ 25.4%	OBL
3. Festuca rubra	10	☐ 8.5%	FACU
4. Solidago canadensis	10	☐ 8.5%	FACU
5. Symphyotrichum novae-angliae	8	☐ 6.8%	FACW
6. Euthamia graminifolia	5	☐ 4.2%	FACW
7. Poa pratensis	5	☐ 4.2%	FAC
8.	0	☐ 0.0%	
9.	0	☐ 0.0%	
10.	0	☐ 0.0%	
	118	= Total Cover	
Woody Vine Stratum (Plot size: 15' x 190')			
1.	0	☐ 0.0%	
2.	0	☐ 0.0%	
	0	= Total Cover	

Dominance Test worksheet:

Number of Dominant Species That are OBL, FACW, or FAC: 3 (A)

Total Number of Dominant Species Across All Strata: 3 (B)

Percent of dominant Species That Are OBL, FACW, or FAC: 100.0% (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	30	x 1 =	30
FACW species	66	x 2 =	132
FAC species	5	x 3 =	15
FACU species	20	x 4 =	80
UPL species	0	x 5 =	0
Column Totals:	121 (A)		257 (B)

Prevalence Index = B/A = 2.124

Hydrophytic Vegetation Indicators:

- ☑ **1 - Rapid Test for Hydrophytic Vegetation**
- ☑ **2 - Dominance Test is > 50%**
- ☑ **3 - Prevalence Index is ≤3.0** [1]
- ☐ **4 - Morphological Adaptations** [1] **(Provide supporting data in Remarks or on a separate sheet)**
- ☐ **Problematic Hydrophytic Vegetation** [1] **(Explain)**

[1] **Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.**

Hydrophytic Vegetation Present? **Yes** ◉ **No** ○

Remarks: (Include photo numbers here or on a separate sheet.)

This point is located in a wet meadow.
The criterion for hydrophytic vegetation is met at this point.

*Indicator suffix = National status or professional decision assigned because Regional status not defined by FWS.

SOIL

Sampling Point: **SP-40**

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)		%	Redox Features Color (moist)		%	Type [1]	Loc [2]	Texture	Remarks
0-6	10YR	3/2	100						Sandy Clay Loam	
6-12	10YR	4/2	80	7.5YR	4/6	20	C	M	Sandy Clay Loam	
12-20	10YR	5/4	95						Sandy Clay Loam	
	10YR	6/3	50							

[1] Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. [2] Location: PL=Pore Lining. M=Matrix.

Hydric Soil Indicators:

- ☐ Histosol (A1)
- ☐ Histic Epipedon (A2)
- ☐ Black Histic (A3)
- ☐ Hydrogen Sulfide (A4)
- ☐ Stratified Layers (A5)
- ☐ 2 cm Muck (A10)
- ☑ Depleted Below Dark Surface (A11)
- ☐ Thick Dark Surface (A12)
- ☐ Sandy Muck Mineral (S1)
- ☐ 5 cm Mucky Peat or Peat (S3)
- ☐ Sandy Gleyed Matrix (S4)
- ☐ Sandy Redox (S5)
- ☐ Stripped Matrix (S6)
- ☐ Loamy Mucky Mineral (F1)
- ☐ Loamy Gleyed Matrix (F2)
- ☑ Depleted Matrix (F3)
- ☐ Redox Dark Surface (F6)
- ☐ Depleted Dark Surface (F7)
- ☐ Redox Depressions (F8)

Indicators for Problematic Hydric Soils [3]:

- ☐ Coast Prairie Redox (A16)
- ☐ Dark Surface (S7)
- ☐ Iron Manganese Masses (F12)
- ☐ Very Shallow Dark Surface (TF12)
- ☐ Other (Explain in Remarks)

[3] Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: None

Depth (inches): NA

Hydric Soil Present? **Yes** ◉ **No** ○

Remarks:

Soil appears to be a roadside fill and thus disturbed.
The criterion for hydric soil is met at this point.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ☐ Surface Water (A1)
- ☑ High Water Table (A2)
- ☑ Saturation (A3)
- ☐ Water Marks (B1)
- ☐ Sediment Deposits (B2)
- ☐ Drift Deposits (B3)
- ☐ Algal Mat or Crust (B4)
- ☐ Iron Deposits (B5)
- ☐ Inundation Visible on Aerial Imagery (B7)
- ☐ Sparsely Vegetated Concave Surface (B8)
- ☐ Water-Stained Leaves (B9)
- ☐ Aquatic Fauna (B13)
- ☐ True Aquatic Plants (B14)
- ☐ Hydrogen Sulfide Odor (C1)
- ☐ Oxidized Rhizospheres on Living Roots (C3)
- ☐ Presence of Reduced Iron (C4)
- ☐ Recent Iron Reduction in Tilled Soils (C6)
- ☐ Thin Muck Surface (C7)
- ☐ Gauge or Well Data (D9)
- ☐ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ☐ Surface Soil Cracks (B6)
- ☐ Drainage Patterns (B10)
- ☐ Dry Season Water Table (C2)
- ☐ Crayfish Burrows (C8)
- ☐ Saturation Visible on Aerial Imagery (C9)
- ☐ Stunted or Stressed Plants (D1)
- ☑ Geomorphic Position (D2)
- ☑ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present?	Yes ○	No ◉	Depth (inches):	
Water Table Present?	Yes ◉	No ○	Depth (inches):	10
Saturation Present? (includes capillary fringe)	Yes ◉	No ○	Depth (inches):	0

Wetland Hydrology Present? **Yes** ◉ **No** ○

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Previous delineation, DNR WWI map, NRCS Soils map, Topographic map, Aerial photos

Remarks:

Based on a WETS analysis, antecedent precipitation was within a normal range.
The criterion for hydrology is met at this point.

WETLAND DETERMINATION DATA FORM - Midwest Region

Project/Site: IH 94 (N-S Freeway) City/County: Milwaukee County Sampling Date: 19-Aug-14

Applicant/Owner: Wisconsin Department of Transportation State: WI Sampling Point: **SP-41**

Investigator(s): Ron Londre, Geof Parish Section, Township, Range: S 19 T 5N R 22E

Landform (hillslope, terrace, etc.): Toeslope/ditch Local relief (concave, convex, none): concave

Slope: 0.0% 0.0 ° Lat.: Long.: Datum:

Soil Map Unit Name: Blount silt loam (BlA), Not hydric WWI classification: None

Are climatic/hydrologic conditions on the site typical for this time of year? Yes ◉ No ○ (If no, explain in Remarks.)

Are Vegetation ☐ , Soil ☑ , or Hydrology ☐ significantly disturbed? Are "Normal Circumstances" present? Yes ◉ No ○

Are Vegetation ☐ , Soil ☐ , or Hydrology ☐ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes ◉	No ○	**Is the Sampled Area within a Wetland?** **Yes** ○ **No** ◉
Hydric Soil Present?	Yes ○	No ◉	
Wetland Hydrology Present?	Yes ○	No ◉	

Remarks:
This point is located in a roadside ditch.
Two of three parameters have not been met at this point. Thus, this point is located in an upland.

VEGETATION - Use scientific names of plants.

Tree Stratum (Plot size: 15' x 190')	Absolute % Cover	Dominant Species?	Rel.Strat. Cover	Indicator Status
1.	0	☐	0.0%	
2.	0	☐	0.0%	
3.	0	☐	0.0%	
4.	0	☐	0.0%	
5.	0	☐	0.0%	
	0		= Total Cover	
Sapling/Shrub Stratum (Plot size: 15' x 50')				
1. Ulmus americana	5	☑	100.0%	FACW
2.		☐	0.0%	
3.	0	☐	0.0%	
4.	0	☐	0.0%	
5.	0	☐	0.0%	
	5		= Total Cover	
Herb Stratum (Plot size: 5' r)				
1. Solidago canadensis	40	☑	26.1%	FACU
2. Poa pratensis	40	☑	26.1%	FAC
3. Daucus carota	30	☐	19.6%	UPL
4. Symphyotrichum lateriflorum	10	☐	6.5%	FACW
5. Symphyotrichum novae-angliae	10	☐	6.5%	FACW
6. Symphyotrichum cordifolium	8	☐	5.2%	UPL
7. Cornus racemosa	5	☐	3.3%	FAC
8. Prunus serotina	5	☐	3.3%	FACU
9. Fragaria virginiana	5	☐	3.3%	FACU
10.	0	☐	0.0%	
	153		= Total Cover	
Woody Vine Stratum (Plot size: 15' x 190')				
1.	0	☐	0.0%	
2.	0	☐	0.0%	
	0		= Total Cover	

Dominance Test worksheet:

Number of Dominant Species That are OBL, FACW, or FAC: 2 (A)

Total Number of Dominant Species Across All Strata: 3 (B)

Percent of dominant Species That Are OBL, FACW, or FAC: 66.7% (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	25	x 2 =	50
FAC species	45	x 3 =	135
FACU species	50	x 4 =	200
UPL species	38	x 5 =	190
Column Totals:	158 (A)		575 (B)

Prevalence Index = B/A = 3.639

Hydrophytic Vegetation Indicators:

- ☐ **1 - Rapid Test for Hydrophytic Vegetation**
- ☑ **2 - Dominance Test is > 50%**
- ☐ **3 - Prevalence Index is ≤3.0** [1]
- ☐ **4 - Morphological Adaptations** [1] **(Provide supporting data in Remarks or on a separate sheet)**
- ☐ **Problematic Hydrophytic Vegetation** [1] **(Explain)**

[1] **Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.**

Hydrophytic Vegetation Present? **Yes** ◉ **No** ○

Remarks: (Include photo numbers here or on a separate sheet.)
The criterion for hydrophytic vegetation is met at this point.

*Indicator suffix = National status or professional decision assigned because Regional status not defined by FWS.

SOIL

Sampling Point: **SP-41**

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)		%	Redox Features Color (moist)		%	Type [1]	Loc [2]	Texture	Remarks
0-8	10YR	3/2	100						Silty Clay Loam	
8-20	10YR	5/3	50	10YR	6/1	40	D	M	Silty Clay Loam	
				7.5YR	5/6	20	C	M		

[1] Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. [2] Location: PL=Pore Lining. M=Matrix.

Hydric Soil Indicators:

- ☐ Histosol (A1)
- ☐ Histic Epipedon (A2)
- ☐ Black Histic (A3)
- ☐ Hydrogen Sulfide (A4)
- ☐ Stratified Layers (A5)
- ☐ 2 cm Muck (A10)
- ☐ Depleted Below Dark Surface (A11)
- ☐ Thick Dark Surface (A12)
- ☐ Sandy Muck Mineral (S1)
- ☐ 5 cm Mucky Peat or Peat (S3)
- ☐ Sandy Gleyed Matrix (S4)
- ☐ Sandy Redox (S5)
- ☐ Stripped Matrix (S6)
- ☐ Loamy Mucky Mineral (F1)
- ☐ Loamy Gleyed Matrix (F2)
- ☐ Depleted Matrix (F3)
- ☐ Redox Dark Surface (F6)
- ☐ Depleted Dark Surface (F7)
- ☐ Redox Depressions (F8)

Indicators for Problematic Hydric Soils [3]:

- ☐ Coast Prairie Redox (A16)
- ☐ Dark Surface (S7)
- ☐ Iron Manganese Masses (F12)
- ☐ Very Shallow Dark Surface (TF12)
- ☐ Other (Explain in Remarks)

[3] Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: None

Depth (inches): NA

Hydric Soil Present? Yes ○ No ◉

Remarks:

Soil appears to be a roadside fill and thus disturbed.
The criterion for hydric soil is not met at this point.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ☐ Surface Water (A1)
- ☐ High Water Table (A2)
- ☐ Saturation (A3)
- ☐ Water Marks (B1)
- ☐ Sediment Deposits (B2)
- ☐ Drift Deposits (B3)
- ☐ Algal Mat or Crust (B4)
- ☐ Iron Deposits (B5)
- ☐ Inundation Visible on Aerial Imagery (B7)
- ☐ Sparsely Vegetated Concave Surface (B8)
- ☐ Water-Stained Leaves (B9)
- ☐ Aquatic Fauna (B13)
- ☐ True Aquatic Plants (B14)
- ☐ Hydrogen Sulfide Odor (C1)
- ☐ Oxidized Rhizospheres on Living Roots (C3)
- ☐ Presence of Reduced Iron (C4)
- ☐ Recent Iron Reduction in Tilled Soils (C6)
- ☐ Thin Muck Surface (C7)
- ☐ Gauge or Well Data (D9)
- ☐ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ☐ Surface Soil Cracks (B6)
- ☐ Drainage Patterns (B10)
- ☐ Dry Season Water Table (C2)
- ☐ Crayfish Burrows (C8)
- ☐ Saturation Visible on Aerial Imagery (C9)
- ☐ Stunted or Stressed Plants (D1)
- ☑ Geomorphic Position (D2)
- ☐ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes ○ No ◉ Depth (inches):

Water Table Present? Yes ○ No ◉ Depth (inches):

Saturation Present? (includes capillary fringe) Yes ○ No ◉ Depth (inches):

Wetland Hydrology Present? Yes ○ No ◉

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Previous delineation, DNR WWI map, NRCS Soils map, Topographic map, Aerial photos

Remarks:

Based on a WETS analysis, antecedent precipitation was within a normal range.
The criterion for hydrology is met at this point.

WETLAND DETERMINATION DATA FORM - Midwest Region

Project/Site: IH 94 (N-S Freeway) City/County: Milwaukee County Sampling Date: 19-Aug-14

Applicant/Owner: Wisconsin Department of Transportation State: WI Sampling Point: **SP-42**

Investigator(s): Ron Londre, Geof Parish Section, Township, Range: S 19 T 5N R 22E

Landform (hillslope, terrace, etc.): Toeslope/ditch Local relief (concave, convex, none): concave

Slope: 1.0% 0.6 ° Lat.: Long.: Datum:

Soil Map Unit Name: Blount silt loam (BlA), Not hydric WWI classification: None

Are climatic/hydrologic conditions on the site typical for this time of year? Yes ◉ No ○ (If no, explain in Remarks.)

Are Vegetation ☐, Soil ☑, or Hydrology ☐ significantly disturbed? Are "Normal Circumstances" present? Yes ◉ No ○

Are Vegetation ☐, Soil ☐, or Hydrology ☐ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes ◉ No ○	**Is the Sampled Area within a Wetland?** **Yes ◉ No ○**
Hydric Soil Present?	Yes ◉ No ○	
Wetland Hydrology Present?	Yes ◉ No ○	

Remarks:
This point is located in a roadside ditch.
All three parameters have been met at this point. Thus, this point is located in a wetland.

VEGETATION - Use scientific names of plants.

Tree Stratum (Plot size: 10' x 285')	Absolute % Cover	Dominant Species?	Rel.Strat. Cover	Indicator Status
1.	0	☐	0.0%	
2.	0	☐	0.0%	
3.	0	☐	0.0%	
4.	0	☐	0.0%	
5.	0	☐	0.0%	
	0	= Total Cover		
Sapling/Shrub Stratum (Plot size: 10' x 150')				
1. Cornus racemosa	5	☑	62.5%	FAC
2. Ulmus americana	3	☑	37.5%	FACW
3.	0	☐	0.0%	
4.	0	☐	0.0%	
5.	0	☐	0.0%	
	8	= Total Cover		
Herb Stratum (Plot size: 5' r)				
1. Phalaris arundinacea	80	☑	53.0%	FACW
2. Typha angustifolia	40	☑	26.5%	OBL
3. Symphyotrichum novae-angliae	15	☐	9.9%	FACW
4. Carex stipata	8	☐	5.3%	OBL
5. Lycopus americanus	5	☐	3.3%	OBL
6. Daucus carota	3	☐	2.0%	UPL
7.	0	☐	0.0%	
8.	0	☐	0.0%	
9.	0	☐	0.0%	
10.	0	☐	0.0%	
	151	= Total Cover		
Woody Vine Stratum (Plot size: 10' x 285')				
1.	0	☐	0.0%	
2.	0	☐	0.0%	
	0	= Total Cover		

Dominance Test worksheet:

Number of Dominant Species That are OBL, FACW, or FAC: 4 (A)

Total Number of Dominant Species Across All Strata: 4 (B)

Percent of dominant Species That Are OBL, FACW, or FAC: 100.0% (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	53	x 1 =	53
FACW species	98	x 2 =	196
FAC species	5	x 3 =	15
FACU species	0	x 4 =	0
UPL species	3	x 5 =	15
Column Totals:	159 (A)		279 (B)

Prevalence Index = B/A = 1.755

Hydrophytic Vegetation Indicators:

- ☐ **1 - Rapid Test for Hydrophytic Vegetation**
- ☑ **2 - Dominance Test is > 50%**
- ☑ **3 - Prevalence Index is ≤3.0** [1]
- ☐ **4 - Morphological Adaptations** [1] **(Provide supporting data in Remarks or on a separate sheet)**
- ☐ **Problematic Hydrophytic Vegetation** [1] **(Explain)**

[1] **Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.**

Hydrophytic Vegetation Present? **Yes ◉ No ○**

Remarks: (Include photo numbers here or on a separate sheet.)

This point is located in a wet meadow plant community.
The criterion for hydrophytic vegetation is met at this point.

*Indicator suffix = National status or professional decision assigned because Regional status not defined by FWS.

SOIL

Sampling Point: **SP-42**

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)		%	Redox Features Color (moist)		%	Type [1]	Loc [2]	Texture	Remarks
0-3	10YR	2/2	100						Silty Clay Loam	
3-8	10YR	3/2	95	7.5YR	4/6	5	C	M	Silty Clay Loam	
8-20	10YR	5/3	50	10YR	6/1	40	D	M	Silty Clay Loam	
				7.5YR	5/6	10	C	M		

[1] Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. [2] Location: PL=Pore Lining. M=Matrix.

Hydric Soil Indicators:

- ☐ Histosol (A1)
- ☐ Histic Epipedon (A2)
- ☐ Black Histic (A3)
- ☐ Hydrogen Sulfide (A4)
- ☐ Stratified Layers (A5)
- ☐ 2 cm Muck (A10)
- ☐ Depleted Below Dark Surface (A11)
- ☐ Thick Dark Surface (A12)
- ☐ Sandy Muck Mineral (S1)
- ☐ 5 cm Mucky Peat or Peat (S3)
- ☐ Sandy Gleyed Matrix (S4)
- ☐ Sandy Redox (S5)
- ☐ Stripped Matrix (S6)
- ☐ Loamy Mucky Mineral (F1)
- ☐ Loamy Gleyed Matrix (F2)
- ☐ Depleted Matrix (F3)
- ☑ Redox Dark Surface (F6)
- ☐ Depleted Dark Surface (F7)
- ☐ Redox Depressions (F8)

Indicators for Problematic Hydric Soils [3]:

- ☐ Coast Prairie Redox (A16)
- ☐ Dark Surface (S7)
- ☐ Iron Manganese Masses (F12)
- ☐ Very Shallow Dark Surface (TF12)
- ☐ Other (Explain in Remarks)

[3] Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: None

Depth (inches): NA

Hydric Soil Present? **Yes** ◉ **No** ○

Remarks:

Soil appears to be a roadside fill and thus disturbed.
The criterion for hydric soil is met at this point.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ☐ Surface Water (A1)
- ☑ High Water Table (A2)
- ☑ Saturation (A3)
- ☐ Water Marks (B1)
- ☐ Sediment Deposits (B2)
- ☐ Drift Deposits (B3)
- ☐ Algal Mat or Crust (B4)
- ☐ Iron Deposits (B5)
- ☐ Inundation Visible on Aerial Imagery (B7)
- ☐ Sparsely Vegetated Concave Surface (B8)
- ☐ Water-Stained Leaves (B9)
- ☐ Aquatic Fauna (B13)
- ☐ True Aquatic Plants (B14)
- ☐ Hydrogen Sulfide Odor (C1)
- ☐ Oxidized Rhizospheres on Living Roots (C3)
- ☐ Presence of Reduced Iron (C4)
- ☐ Recent Iron Reduction in Tilled Soils (C6)
- ☐ Thin Muck Surface (C7)
- ☐ Gauge or Well Data (D9)
- ☐ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ☐ Surface Soil Cracks (B6)
- ☐ Drainage Patterns (B10)
- ☐ Dry Season Water Table (C2)
- ☐ Crayfish Burrows (C8)
- ☐ Saturation Visible on Aerial Imagery (C9)
- ☐ Stunted or Stressed Plants (D1)
- ☑ Geomorphic Position (D2)
- ☑ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes ○ No ◉ Depth (inches):

Water Table Present? Yes ◉ No ○ Depth (inches): 11

Saturation Present? (includes capillary fringe) Yes ◉ No ○ Depth (inches): 0

Wetland Hydrology Present? **Yes** ◉ **No** ○

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Previous delineation, DNR WWI map, NRCS Soils map, Topographic map, Aerial photos

Remarks:

Based on a WETS analysis, antecedent precipitation was within a normal range.
The criterion for hydrology is met at this point.

WETLAND DETERMINATION DATA FORM - Midwest Region

Project/Site: IH 94 (N-S Freeway) City/County: Milwaukee County Sampling Date: 19-Aug-14

Applicant/Owner: Wisconsin Department of Transportation State: WI Sampling Point: **SP-43**

Investigator(s): Ron Londre, Geof Parish Section, Township, Range: S 19 T 5N R 22E

Landform (hillslope, terrace, etc.): Toeslope/ditch Local relief (concave, convex, none): concave

Slope: 2.0% 1.1 ° Lat.: Long.: Datum:

Soil Map Unit Name: Blount silt loam (BlA), Not hydric WWI classification: None

Are climatic/hydrologic conditions on the site typical for this time of year? Yes ◉ No ○ (If no, explain in Remarks.)

Are Vegetation ☐ , Soil ☑ , or Hydrology ☐ significantly disturbed? Are "Normal Circumstances" present? Yes ◉ No ○

Are Vegetation ☐ , Soil ☐ , or Hydrology ☐ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes ◉ No ○	**Is the Sampled Area within a Wetland?** **Yes ◉ No ○**
Hydric Soil Present?	Yes ◉ No ○	
Wetland Hydrology Present?	Yes ◉ No ○	

Remarks:
This point is located in a roadside ditch.
All three parameters have been met at this point. Thus, this point is located in a wetland.

VEGETATION - Use scientific names of plants.

Tree Stratum (Plot size: 8' x 75')	Absolute % Cover	Dominant Species?	Rel.Strat. Cover	Indicator Status
1.	0	☐	0.0%	
2.	0	☐	0.0%	
3.	0	☐	0.0%	
4.	0	☐	0.0%	
5.	0	☐	0.0%	
	0	= Total Cover		
Sapling/Shrub Stratum (Plot size: 8' x 75)				
1.	0	☐	0.0%	
2.	0	☐	0.0%	
3.	0	☐	0.0%	
4.	0	☐	0.0%	
5.	0	☐	0.0%	
	0	= Total Cover		
Herb Stratum (Plot size: 8' x 10')				
1. Typha angustifolia	75	☑	46.0%	OBL
2. Euthamia graminifolia	40	☑	24.5%	FACW
3. Agrostis stolonifera	25	☐	15.3%	FACW
4. Solidago sempervirens	15	☐	9.2%	FACW
5. Solidago canadensis	5	☐	3.1%	FACU
6. Daucus carota	3	☐	1.8%	UPL
7.	0	☐	0.0%	
8.	0	☐	0.0%	
9.	0	☐	0.0%	
10.	0	☐	0.0%	
	163	= Total Cover		
Woody Vine Stratum (Plot size: 8' x 75')				
1.	0	☐	0.0%	
2.	0	☐	0.0%	
	0	= Total Cover		

Dominance Test worksheet:

Number of Dominant Species That are OBL, FACW, or FAC: 2 (A)

Total Number of Dominant Species Across All Strata: 2 (B)

Percent of dominant Species That Are OBL, FACW, or FAC: 100.0% (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	75	x 1 =	75
FACW species	80	x 2 =	160
FAC species	0	x 3 =	0
FACU species	5	x 4 =	20
UPL species	3	x 5 =	15
Column Totals:	163 (A)		270 (B)

Prevalence Index = B/A = 1.656

Hydrophytic Vegetation Indicators:

- ☑ **1 - Rapid Test for Hydrophytic Vegetation**
- ☑ **2 - Dominance Test is > 50%**
- ☑ **3 - Prevalence Index is ≤3.0** [1]
- ☐ **4 - Morphological Adaptations** [1] **(Provide supporting data in Remarks or on a separate sheet)**
- ☐ **Problematic Hydrophytic Vegetation** [1] **(Explain)**

[1] **Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.**

Hydrophytic Vegetation Present? **Yes ◉ No ○**

Remarks: (Include photo numbers here or on a separate sheet.)

The size of the plot is based on the size of the wetland.
This point is located in a shallow marsh plant community.
The criterion for hydrophytic vegetation is met at this point.

*Indicator suffix = National status or professional decision assigned because Regional status not defined by FWS.

SOIL

Sampling Point: **SP-43**

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)		%	Redox Features Color (moist)		%	Type [1]	Loc [2]	Texture	Remarks
0-6	10YR	5/2	95	7.5YR	4/6	5	C	M	Silty Clay Loam	
6-20	10YR	6/4	90	7.5YR	5/6	5	C	M	Sandy Clay Loam	
				10YR	6/1	5	D	M		

[1] Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. [2] Location: PL=Pore Lining. M=Matrix.

Hydric Soil Indicators:

- ☐ Histosol (A1)
- ☐ Histic Epipedon (A2)
- ☐ Black Histic (A3)
- ☐ Hydrogen Sulfide (A4)
- ☐ Stratified Layers (A5)
- ☐ 2 cm Muck (A10)
- ☐ Depleted Below Dark Surface (A11)
- ☐ Thick Dark Surface (A12)
- ☐ Sandy Muck Mineral (S1)
- ☐ 5 cm Mucky Peat or Peat (S3)
- ☐ Sandy Gleyed Matrix (S4)
- ☐ Sandy Redox (S5)
- ☐ Stripped Matrix (S6)
- ☐ Loamy Mucky Mineral (F1)
- ☐ Loamy Gleyed Matrix (F2)
- ☑ Depleted Matrix (F3)
- ☐ Redox Dark Surface (F6)
- ☐ Depleted Dark Surface (F7)
- ☐ Redox Depressions (F8)

Indicators for Problematic Hydric Soils [3]:

- ☐ Coast Prairie Redox (A16)
- ☐ Dark Surface (S7)
- ☐ Iron Manganese Masses (F12)
- ☐ Very Shallow Dark Surface (TF12)
- ☐ Other (Explain in Remarks)

[3] Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: None

Depth (inches): NA

Hydric Soil Present? **Yes** ◉ **No** ○

Remarks:

Soil appears to be a roadside fill and thus disturbed.
The criterion for hydric soil is met at this point.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ☐ Surface Water (A1)
- ☐ High Water Table (A2)
- ☑ Saturation (A3)
- ☐ Water Marks (B1)
- ☐ Sediment Deposits (B2)
- ☐ Drift Deposits (B3)
- ☐ Algal Mat or Crust (B4)
- ☐ Iron Deposits (B5)
- ☐ Inundation Visible on Aerial Imagery (B7)
- ☐ Sparsely Vegetated Concave Surface (B8)
- ☐ Water-Stained Leaves (B9)
- ☐ Aquatic Fauna (B13)
- ☐ True Aquatic Plants (B14)
- ☐ Hydrogen Sulfide Odor (C1)
- ☐ Oxidized Rhizospheres on Living Roots (C3)
- ☐ Presence of Reduced Iron (C4)
- ☐ Recent Iron Reduction in Tilled Soils (C6)
- ☐ Thin Muck Surface (C7)
- ☐ Gauge or Well Data (D9)
- ☐ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ☐ Surface Soil Cracks (B6)
- ☐ Drainage Patterns (B10)
- ☑ Dry Season Water Table (C2)
- ☐ Crayfish Burrows (C8)
- ☐ Saturation Visible on Aerial Imagery (C9)
- ☐ Stunted or Stressed Plants (D1)
- ☑ Geomorphic Position (D2)
- ☑ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes ○ No ◉ Depth (inches):

Water Table Present? Yes ◉ No ○ Depth (inches): 17

Saturation Present? (includes capillary fringe) Yes ◉ No ○ Depth (inches): 0

Wetland Hydrology Present? **Yes** ◉ **No** ○

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Previous delineation, DNR WWI map, NRCS Soils map, Topographic map, Aerial photos

Remarks:

Based on a WETS analysis, antecedent precipitation was within a normal range.
The criterion for hydrology is met at this point.

WETLAND DETERMINATION DATA FORM - Midwest Region

Project/Site: IH 94 (N-S Freeway) City/County: Milwaukee County Sampling Date: 19-Aug-14

Applicant/Owner: Wisconsin Department of Transportation State: WI Sampling Point: **SP-44**

Investigator(s): Ron Londre, Geof Parish Section, Township, Range: S 19 T 5N R 22E

Landform (hillslope, terrace, etc.): Backslope Local relief (concave, convex, none): convex

Slope: 5.0% 2.9 ° Lat.: Long.: Datum:

Soil Map Unit Name: Morley silt loam (MzdB), Not hydric WWI classification: None

Are climatic/hydrologic conditions on the site typical for this time of year? Yes ◉ No ○ (If no, explain in Remarks.)

Are Vegetation ☐ , Soil ☑ , or Hydrology ☐ significantly disturbed? Are "Normal Circumstances" present? Yes ◉ No ○

Are Vegetation ☐ , Soil ☐ , or Hydrology ☐ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes ◉ No ○	**Is the Sampled Area within a Wetland?** **Yes** ○ **No** ◉
Hydric Soil Present?	Yes ○ No ◉	
Wetland Hydrology Present?	Yes ○ No ◉	

Remarks:
Two of three parameters have not been met at this point. Thus, this point is located in an upland.

VEGETATION - Use scientific names of plants.

Tree Stratum (Plot size: 30' r)	Absolute % Cover	Dominant Species?	Rel.Strat. Cover	Indicator Status
1.	0	☐	0.0%	
2.	0	☐	0.0%	
3.	0	☐	0.0%	
4.	0	☐	0.0%	
5.	0	☐	0.0%	0
	0	= Total Cover		
Sapling/Shrub Stratum (Plot size: 15' r)				
1.	0	☐	0.0%	
2.	0	☐	0.0%	
3.	0	☐	0.0%	
4.	0	☐	0.0%	
5.	0	☐	0.0%	
	0	= Total Cover		
Herb Stratum (Plot size: 5' r)				
1. Poa pratensis	60	☑	42.3%	FAC
2. Symphyotrichum lateriflorum	30	☑	21.1%	FACW
3. Coronilla varia	20	☐	14.1%	UPL
4. Elymus repens	20	☐	14.1%	FACU
5. Ambrosia artemisiifolia	3	☐	2.1%	FACU
6. Erigeron philadelphicus	3	☐	2.1%	FACW
7. Daucus carota	3	☐	2.1%	UPL
8. Festuca rubra	3	☐	2.1%	FACU
9.	0	☐	0.0%	
10.	0	☐	0.0%	
	142	= Total Cover		
Woody Vine Stratum (Plot size: 30' r)				
1.	0	☐	0.0%	
2.	0	☐	0.0%	
	0	= Total Cover		

Dominance Test worksheet:

Number of Dominant Species That are OBL, FACW, or FAC: 2 (A)

Total Number of Dominant Species Across All Strata: 2 (B)

Percent of dominant Species That Are OBL, FACW, or FAC: 100.0% (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	33	x 2 =	66
FAC species	60	x 3 =	180
FACU species	26	x 4 =	104
UPL species	23	x 5 =	115
Column Totals:	142	(A)	465 (B)

Prevalence Index = B/A = 3.275

Hydrophytic Vegetation Indicators:

- ☐ **1 - Rapid Test for Hydrophytic Vegetation**
- ☑ **2 - Dominance Test is > 50%**
- ☐ **3 - Prevalence Index is ≤3.0** [1]
- ☐ **4 - Morphological Adaptations** [1] **(Provide supporting data in Remarks or on a separate sheet)**
- ☐ **Problematic Hydrophytic Vegetation** [1] **(Explain)**

[1] **Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.**

Hydrophytic Vegetation Present? **Yes** ◉ **No** ○

Remarks: (Include photo numbers here or on a separate sheet.)
The criterion for hydrophytic vegetation is met at this point.

*Indicator suffix = National status or professional decision assigned because Regional status not defined by FWS.

SOIL

Sampling Point: **SP-44**

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)		%	Redox Features Color (moist)		%	Type [1]	Loc [2]	Texture	Remarks
0-8	10YR	3/2	100						Silty Clay Loam	
8-20	10YR	4/4	90	10YR	5/1	10	D	M	Silty Clay Loam	

[1] Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. [2] Location: PL=Pore Lining. M=Matrix.

Hydric Soil Indicators:

- ☐ Histosol (A1)
- ☐ Histic Epipedon (A2)
- ☐ Black Histic (A3)
- ☐ Hydrogen Sulfide (A4)
- ☐ Stratified Layers (A5)
- ☐ 2 cm Muck (A10)
- ☐ Depleted Below Dark Surface (A11)
- ☐ Thick Dark Surface (A12)
- ☐ Sandy Muck Mineral (S1)
- ☐ 5 cm Mucky Peat or Peat (S3)
- ☐ Sandy Gleyed Matrix (S4)
- ☐ Sandy Redox (S5)
- ☐ Stripped Matrix (S6)
- ☐ Loamy Mucky Mineral (F1)
- ☐ Loamy Gleyed Matrix (F2)
- ☐ Depleted Matrix (F3)
- ☐ Redox Dark Surface (F6)
- ☐ Depleted Dark Surface (F7)
- ☐ Redox Depressions (F8)

Indicators for Problematic Hydric Soils [3]:

- ☐ Coast Prairie Redox (A16)
- ☐ Dark Surface (S7)
- ☐ Iron Manganese Masses (F12)
- ☐ Very Shallow Dark Surface (TF12)
- ☐ Other (Explain in Remarks)

[3] Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: None

Depth (inches): NA

Hydric Soil Present? Yes ○ No ◉

Remarks:

Soil appears to be a fill soil and thus disturbed.
The criterion for hydric soil is not met at this point.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ☐ Surface Water (A1)
- ☐ High Water Table (A2)
- ☐ Saturation (A3)
- ☐ Water Marks (B1)
- ☐ Sediment Deposits (B2)
- ☐ Drift Deposits (B3)
- ☐ Algal Mat or Crust (B4)
- ☐ Iron Deposits (B5)
- ☐ Inundation Visible on Aerial Imagery (B7)
- ☐ Sparsely Vegetated Concave Surface (B8)
- ☐ Water-Stained Leaves (B9)
- ☐ Aquatic Fauna (B13)
- ☐ True Aquatic Plants (B14)
- ☐ Hydrogen Sulfide Odor (C1)
- ☐ Oxidized Rhizospheres on Living Roots (C3)
- ☐ Presence of Reduced Iron (C4)
- ☐ Recent Iron Reduction in Tilled Soils (C6)
- ☐ Thin Muck Surface (C7)
- ☐ Gauge or Well Data (D9)
- ☐ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ☐ Surface Soil Cracks (B6)
- ☐ Drainage Patterns (B10)
- ☐ Dry Season Water Table (C2)
- ☐ Crayfish Burrows (C8)
- ☐ Saturation Visible on Aerial Imagery (C9)
- ☐ Stunted or Stressed Plants (D1)
- ☐ Geomorphic Position (D2)
- ☑ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes ○ No ◉ Depth (inches): _____

Water Table Present? Yes ○ No ◉ Depth (inches): _____

Saturation Present? (includes capillary fringe) Yes ○ No ◉ Depth (inches): _____

Wetland Hydrology Present? Yes ○ No ◉

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Previous delineation, DNR WWI map, NRCS Soils map, Topographic map, Aerial photos

Remarks:

Based on a WETS analysis, antecedent precipitation was within a normal range.
The criterion for hydrology is not met at this point.

WETLAND DETERMINATION DATA FORM - Midwest Region

Project/Site: IH 94 (N-S Freeway) City/County: Milwaukee County Sampling Date: 19-Aug-14

Applicant/Owner: Wisconsin Department of Transportation State: WI Sampling Point: **SP-45**

Investigator(s): Ron Londre, Geof Parish Section, Township, Range: S 19 T 5N R 22E

Landform (hillslope, terrace, etc.): Toeslope/ditch Local relief (concave, convex, none): concave

Slope: 3.0% 1.7 ° Lat.: Long.: Datum:

Soil Map Unit Name: Morley silt loam (MzdB), Not hydric WWI classification: None

Are climatic/hydrologic conditions on the site typical for this time of year? Yes ◉ No ○ (If no, explain in Remarks.)

Are Vegetation ☐ , Soil ☑ , or Hydrology ☐ significantly disturbed? Are "Normal Circumstances" present? Yes ◉ No ○

Are Vegetation ☐ , Soil ☐ , or Hydrology ☐ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes ◉ No ○	**Is the Sampled Area within a Wetland?** **Yes ◉ No ○**
Hydric Soil Present?	Yes ◉ No ○	
Wetland Hydrology Present?	Yes ◉ No ○	

Remarks:
This point is located in a roadside ditch.
All three parameters have been met at this point. Thus, this point is located in a wetland.

VEGETATION - Use scientific names of plants.

Tree Stratum (Plot size: 20' x 140')	Absolute % Cover	Dominant Species?	Rel.Strat. Cover	Indicator Status
1.	0	☐	0.0%	
2.	0	☐	0.0%	
3.	0	☐	0.0%	
4.	0	☐	0.0%	
5.	0	☐	0.0%	
	0	= Total Cover		
Sapling/Shrub Stratum (Plot size: 20' x 35')				
1.	0	☐	0.0%	
2.	0	☐	0.0%	
3.	0	☐	0.0%	
4.	0	☐	0.0%	
5.	0	☐	0.0%	
	0	= Total Cover		
Herb Stratum (Plot size: 5' r)				
1. Phalaris arundinacea	70	☑	59.3%	FACW
2. Agrostis gigantea	30	☑	25.4%	FACW
3. Elymus repens	10	☐	8.5%	FACU
4. Symphyotrichum lateriflorum	5	☐	4.2%	FACW
5. Daucus carota	3	☐	2.5%	UPL
6.	0	☐	0.0%	
7.	0	☐	0.0%	
8.	0	☐	0.0%	
9.	0	☐	0.0%	
10.	0	☐	0.0%	
	118	= Total Cover		
Woody Vine Stratum (Plot size: 20' x 140')				
1.	0	☐	0.0%	
2.	0	☐	0.0%	
	0	= Total Cover		

Dominance Test worksheet:

Number of Dominant Species That are OBL, FACW, or FAC: 2 (A)

Total Number of Dominant Species Across All Strata: 2 (B)

Percent of dominant Species That Are OBL, FACW, or FAC: 100.0% (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	105	x 2 =	210
FAC species	0	x 3 =	0
FACU species	10	x 4 =	40
UPL species	3	x 5 =	15
Column Totals:	118 (A)		265 (B)

Prevalence Index = B/A = 2.246

Hydrophytic Vegetation Indicators:

- ☑ **1 - Rapid Test for Hydrophytic Vegetation**
- ☑ **2 - Dominance Test is > 50%**
- ☑ **3 - Prevalence Index is ≤3.0** [1]
- ☐ **4 - Morphological Adaptations** [1] **(Provide supporting data in Remarks or on a separate sheet)**
- ☐ **Problematic Hydrophytic Vegetation** [1] **(Explain)**

[1] **Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.**

Hydrophytic Vegetation Present? **Yes ◉ No ○**

Remarks: (Include photo numbers here or on a separate sheet.)

This point is located in a wet meadow plant community.
The criterion for hydrophytic vegetation is met at this point.

*Indicator suffix = National status or professional decision assigned because Regional status not defined by FWS.

SOIL

Sampling Point: **SP-45**

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)		%	Redox Features Color (moist)		%	Type [1]	Loc [2]	Texture	Remarks
0-6	10YR	3/1	100						Silty Clay Loam	
6-20	10YR	6/1	70	7.5YR	5/6	30	C	M	Silty Clay	

[1] Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. [2] Location: PL=Pore Lining. M=Matrix.

Hydric Soil Indicators:

- ☐ Histosol (A1)
- ☐ Histic Epipedon (A2)
- ☐ Black Histic (A3)
- ☐ Hydrogen Sulfide (A4)
- ☐ Stratified Layers (A5)
- ☐ 2 cm Muck (A10)
- ☑ Depleted Below Dark Surface (A11)
- ☐ Thick Dark Surface (A12)
- ☐ Sandy Muck Mineral (S1)
- ☐ 5 cm Mucky Peat or Peat (S3)
- ☐ Sandy Gleyed Matrix (S4)
- ☐ Sandy Redox (S5)
- ☐ Stripped Matrix (S6)
- ☐ Loamy Mucky Mineral (F1)
- ☐ Loamy Gleyed Matrix (F2)
- ☑ Depleted Matrix (F3)
- ☐ Redox Dark Surface (F6)
- ☐ Depleted Dark Surface (F7)
- ☐ Redox Depressions (F8)

Indicators for Problematic Hydric Soils [3]:

- ☐ Coast Prairie Redox (A16)
- ☐ Dark Surface (S7)
- ☐ Iron Manganese Masses (F12)
- ☐ Very Shallow Dark Surface (TF12)
- ☐ Other (Explain in Remarks)

[3] Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: None

Depth (inches): NA

Hydric Soil Present? **Yes** ◉ **No** ○

Remarks:

Soil appears to be a fill soil and thus disturbed.
The criterion for hydric soil is met at this point.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ☐ Surface Water (A1)
- ☐ High Water Table (A2)
- ☑ Saturation (A3)
- ☐ Water Marks (B1)
- ☐ Sediment Deposits (B2)
- ☐ Drift Deposits (B3)
- ☐ Algal Mat or Crust (B4)
- ☐ Iron Deposits (B5)
- ☐ Inundation Visible on Aerial Imagery (B7)
- ☐ Sparsely Vegetated Concave Surface (B8)
- ☐ Water-Stained Leaves (B9)
- ☐ Aquatic Fauna (B13)
- ☐ True Aquatic Plants (B14)
- ☐ Hydrogen Sulfide Odor (C1)
- ☐ Oxidized Rhizospheres on Living Roots (C3)
- ☐ Presence of Reduced Iron (C4)
- ☐ Recent Iron Reduction in Tilled Soils (C6)
- ☐ Thin Muck Surface (C7)
- ☐ Gauge or Well Data (D9)
- ☐ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ☐ Surface Soil Cracks (B6)
- ☐ Drainage Patterns (B10)
- ☑ Dry Season Water Table (C2)
- ☐ Crayfish Burrows (C8)
- ☐ Saturation Visible on Aerial Imagery (C9)
- ☐ Stunted or Stressed Plants (D1)
- ☑ Geomorphic Position (D2)
- ☑ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes ○ No ◉ Depth (inches):

Water Table Present? Yes ◉ No ○ Depth (inches): 18

Saturation Present? (includes capillary fringe) Yes ◉ No ○ Depth (inches): 0

Wetland Hydrology Present? **Yes** ◉ **No** ○

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Previous delineation, DNR WWI map, NRCS Soils map, Topographic map, Aerial photos

Remarks:

Based on a WETS analysis, antecedent precipitation was within a normal range.
The criterion for hydrology is met at this point.

WETLAND DETERMINATION DATA FORM - Midwest Region

Project/Site: IH 94 (N-S Freeway) City/County: Milwaukee County Sampling Date: 19-Aug-14

Applicant/Owner: Wisconsin Department of Transportation State: WI Sampling Point: **SP-46**

Investigator(s): Ron Londre, Geof Parish Section, Township, Range: S 30 T 5N R 22E

Landform (hillslope, terrace, etc.): Toeslope/ditch Local relief (concave, convex, none): concave

Slope: 6.0% 3.4 ° Lat.: Long.: Datum:

Soil Map Unit Name: Blount silt loam (BlA), Not hydric WWI classification: None

Are climatic/hydrologic conditions on the site typical for this time of year? Yes ◉ No ○ (If no, explain in Remarks.)

Are Vegetation ☐ , Soil ☑ , or Hydrology ☐ significantly disturbed? Are "Normal Circumstances" present? Yes ◉ No ○

Are Vegetation ☐ , Soil ☐ , or Hydrology ☐ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes ◉ No ○	**Is the Sampled Area within a Wetland?** **Yes** ○ **No** ◉
Hydric Soil Present?	Yes ○ No ◉	
Wetland Hydrology Present?	Yes ○ No ◉	

Remarks:
This point is located in a roadside swale.
Two of three parameters have not been met at this point. Thus, this point is located in an upland.

VEGETATION - Use scientific names of plants.

Tree Stratum (Plot size: 10' x 200')	Absolute % Cover	Dominant Species?	Rel.Strat. Cover	Indicator Status
1.	0	☐	0.0%	
2.	0	☐	0.0%	
3.	0	☐	0.0%	
4.	0	☐	0.0%	
5.	0	☐	0.0%	
	0	= Total Cover		
Sapling/Shrub Stratum (Plot size: 10' x 70')				
1.	0	☐	0.0%	
2.	0	☐	0.0%	
3.	0	☐	0.0%	
4.	0	☐	0.0%	
5.	0	☐	0.0%	
	0	= Total Cover		
Herb Stratum (Plot size: 5' r)				
1. Solidago canadensis	60	☑	38.0%	FACU
2. Symphyotrichum novae-angliae	30	☑	19.0%	FACW
3. Geum canadense	30	☑	19.0%	FAC
4. Fragaria virginiana	20	☐	12.7%	FACU
5. Poa pratensis	10	☐	6.3%	FAC
6. Phalaris arundinacea	5	☐	3.2%	FACW
7. Achillea millefolium	3	☐	1.9%	FACU
8.	0	☐	0.0%	
9.	0	☐	0.0%	
10.	0	☐	0.0%	
	158	= Total Cover		
Woody Vine Stratum (Plot size: 10' x 200')				
1.	0	☐	0.0%	
2.	0	☐	0.0%	
	0	= Total Cover		

Dominance Test worksheet:

Number of Dominant Species That are OBL, FACW, or FAC: 2 (A)

Total Number of Dominant Species Across All Strata: 3 (B)

Percent of dominant Species That Are OBL, FACW, or FAC: 66.7% (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	35	x 2 =	70
FAC species	40	x 3 =	120
FACU species	83	x 4 =	332
UPL species	0	x 5 =	0
Column Totals:	158 (A)		522 (B)

Prevalence Index = B/A = 3.304

Hydrophytic Vegetation Indicators:

- ☐ **1 - Rapid Test for Hydrophytic Vegetation**
- ☑ **2 - Dominance Test is > 50%**
- ☐ **3 - Prevalence Index is ≤3.0** [1]
- ☐ **4 - Morphological Adaptations** [1] **(Provide supporting data in Remarks or on a separate sheet)**
- ☐ **Problematic Hydrophytic Vegetation** [1] **(Explain)**

[1] **Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.**

Hydrophytic Vegetation Present? **Yes** ◉ **No** ○

Remarks: (Include photo numbers here or on a separate sheet.)
The criterion for hydrophytic vegetation is met at this point.

*Indicator suffix = National status or professional decision assigned because Regional status not defined by FWS.

SOIL

Sampling Point: **SP-46**

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)		%	Redox Features Color (moist)		%	Type [1]	Loc [2]	Texture	Remarks
0-6	10YR	3/1	100						Silty Clay Loam	
6-20	10YR	5/3	70	10YR	6/1	20	D	M	Silty Clay Loam	
				10YR	5/2	5	D	M		
				10YR	5/6	5	C	M		

[1] Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. [2] Location: PL=Pore Lining. M=Matrix.

Hydric Soil Indicators:

- ☐ Histosol (A1)
- ☐ Histic Epipedon (A2)
- ☐ Black Histic (A3)
- ☐ Hydrogen Sulfide (A4)
- ☐ Stratified Layers (A5)
- ☐ 2 cm Muck (A10)
- ☐ Depleted Below Dark Surface (A11)
- ☐ Thick Dark Surface (A12)
- ☐ Sandy Muck Mineral (S1)
- ☐ 5 cm Mucky Peat or Peat (S3)
- ☐ Sandy Gleyed Matrix (S4)
- ☐ Sandy Redox (S5)
- ☐ Stripped Matrix (S6)
- ☐ Loamy Mucky Mineral (F1)
- ☐ Loamy Gleyed Matrix (F2)
- ☐ Depleted Matrix (F3)
- ☐ Redox Dark Surface (F6)
- ☐ Depleted Dark Surface (F7)
- ☐ Redox Depressions (F8)

Indicators for Problematic Hydric Soils [3]:

- ☐ Coast Prairie Redox (A16)
- ☐ Dark Surface (S7)
- ☐ Iron Manganese Masses (F12)
- ☐ Very Shallow Dark Surface (TF12)
- ☐ Other (Explain in Remarks)

[3] Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: None

Depth (inches): NA

Hydric Soil Present? Yes ○ No ◉

Remarks:

Soil appears to be a roadside fill and thus disturbed.
The criterion for hydric soil is not met at this point.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ☐ Surface Water (A1)
- ☐ High Water Table (A2)
- ☐ Saturation (A3)
- ☐ Water Marks (B1)
- ☐ Sediment Deposits (B2)
- ☐ Drift Deposits (B3)
- ☐ Algal Mat or Crust (B4)
- ☐ Iron Deposits (B5)
- ☐ Inundation Visible on Aerial Imagery (B7)
- ☐ Sparsely Vegetated Concave Surface (B8)
- ☐ Water-Stained Leaves (B9)
- ☐ Aquatic Fauna (B13)
- ☐ True Aquatic Plants (B14)
- ☐ Hydrogen Sulfide Odor (C1)
- ☐ Oxidized Rhizospheres on Living Roots (C3)
- ☐ Presence of Reduced Iron (C4)
- ☐ Recent Iron Reduction in Tilled Soils (C6)
- ☐ Thin Muck Surface (C7)
- ☐ Gauge or Well Data (D9)
- ☐ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ☐ Surface Soil Cracks (B6)
- ☐ Drainage Patterns (B10)
- ☐ Dry Season Water Table (C2)
- ☐ Crayfish Burrows (C8)
- ☐ Saturation Visible on Aerial Imagery (C9)
- ☐ Stunted or Stressed Plants (D1)
- ☑ Geomorphic Position (D2)
- ☐ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes ○ No ◉ Depth (inches):

Water Table Present? Yes ○ No ◉ Depth (inches):

Saturation Present? (includes capillary fringe) Yes ○ No ◉ Depth (inches):

Wetland Hydrology Present? Yes ○ No ◉

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Previous delineation, DNR WWI map, NRCS Soils map, Topographic map, Aerial photos

Remarks:

Based on a WETS analysis, antecedent precipitation was within a normal range.
The criterion for hydrology is met at this point.

WETLAND DETERMINATION DATA FORM - Midwest Region

Project/Site: IH 94 (N-S Freeway) City/County: Milwaukee County Sampling Date: 19-Aug-14

Applicant/Owner: Wisconsin Department of Transportation State: WI Sampling Point: **SP-47**

Investigator(s): Ron Londre, Geof Parish Section, Township, Range: S 30 T 5N R 22E

Landform (hillslope, terrace, etc.): Toeslope/ditch Local relief (concave, convex, none): concave

Slope: 3.0% 1.7 ° Lat.: Long.: Datum:

Soil Map Unit Name: Ashkum silty clay loam (AsA), All hydric WWI classification: None

Are climatic/hydrologic conditions on the site typical for this time of year? Yes ◉ No ○ (If no, explain in Remarks.)

Are Vegetation ☐ , Soil ☑ , or Hydrology ☐ significantly disturbed? Are "Normal Circumstances" present? Yes ◉ No ○

Are Vegetation ☐ , Soil ☐ , or Hydrology ☐ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes ◉ No ○	**Is the Sampled Area within a Wetland?** **Yes** ◉ **No** ○
Hydric Soil Present?	Yes ◉ No ○	
Wetland Hydrology Present?	Yes ◉ No ○	

Remarks:
This point is located in a roadside ditch.
All three parameters have been met at this point. Thus, this point is located in a wetland.

VEGETATION - Use scientific names of plants.

	Absolute % Cover	Dominant Species? Rel.Strat. Cover	Indicator Status
Tree Stratum (Plot size: 6' x 450')			
1.	0	☐ 0.0%	
2.	0	☐ 0.0%	
3.	0	☐ 0.0%	
4.	0	☐ 0.0%	
5.	0	☐ 0.0%	
	0	= Total Cover	
Sapling/Shrub Stratum (Plot size: 6' x 120')			
1.	0	☐ 0.0%	
2.	0	☐ 0.0%	
3.	0	☐ 0.0%	
4.	0	☐ 0.0%	
5.	0	☐ 0.0%	
	0	= Total Cover	
Herb Stratum (Plot size: 6' x 14')			
1. Agrostis gigantea	75	☑ 68.2%	FACW
2. Phalaris arundinacea	15	☐ 13.6%	FACW
3. Festuca rubra	10	☐ 9.1%	FACU
4. Elymus repens	5	☐ 4.5%	FACU
5. Symphyotrichum puniceum	5	☐ 4.5%	OBL
6.	0	☐ 0.0%	
7.	0	☐ 0.0%	
8.	0	☐ 0.0%	
9.	0	☐ 0.0%	
10.	0	☐ 0.0%	
	110	= Total Cover	
Woody Vine Stratum (Plot size: 6' x 450')			
1.	0	☐ 0.0%	
2.	0	☐ 0.0%	
	0	= Total Cover	

Dominance Test worksheet:

Number of Dominant Species That are OBL, FACW, or FAC: 1 (A)

Total Number of Dominant Species Across All Strata: 1 (B)

Percent of dominant Species That Are OBL, FACW, or FAC: 100.0% (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	5	x 1 =	5
FACW species	90	x 2 =	180
FAC species	0	x 3 =	0
FACU species	15	x 4 =	60
UPL species	0	x 5 =	0
Column Totals:	110 (A)		245 (B)

Prevalence Index = B/A = 2.227

Hydrophytic Vegetation Indicators:

- ☑ **1 - Rapid Test for Hydrophytic Vegetation**
- ☑ **2 - Dominance Test is > 50%**
- ☑ **3 - Prevalence Index is ≤3.0** [1]
- ☐ **4 - Morphological Adaptations** [1] **(Provide supporting data in Remarks or on a separate sheet)**
- ☐ **Problematic Hydrophytic Vegetation** [1] **(Explain)**

[1] **Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.**

Hydrophytic Vegetation Present? **Yes** ◉ **No** ○

Remarks: (Include photo numbers here or on a separate sheet.)

This point is located in a wet meadow plant community.
The criterion for hydrophytic vegetation is met at this point.

*Indicator suffix = National status or professional decision assigned because Regional status not defined by FWS.

SOIL

Sampling Point: **SP-47**

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)		%	Redox Features Color (moist)		%	Type [1]	Loc²	Texture	Remarks
0-9	10YR	3/2	95	7.5YR	5/6	5	C	M,PL	Silty Clay Loam	
9-20	10YR	5/3	80	10YR	5/2	10	D	M	Silty Clay Loam	
				10YR	5/1	5	D	M		
				7.5YR	5/6	5	C	M		

[1] Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. [2]Location: PL=Pore Lining. M=Matrix.

Hydric Soil Indicators:

- ☐ Histosol (A1)
- ☐ Histic Epipedon (A2)
- ☐ Black Histic (A3)
- ☐ Hydrogen Sulfide (A4)
- ☐ Stratified Layers (A5)
- ☐ 2 cm Muck (A10)
- ☐ Depleted Below Dark Surface (A11)
- ☐ Thick Dark Surface (A12)
- ☐ Sandy Muck Mineral (S1)
- ☐ 5 cm Mucky Peat or Peat (S3)
- ☐ Sandy Gleyed Matrix (S4)
- ☐ Sandy Redox (S5)
- ☐ Stripped Matrix (S6)
- ☐ Loamy Mucky Mineral (F1)
- ☐ Loamy Gleyed Matrix (F2)
- ☐ Depleted Matrix (F3)
- ☑ Redox Dark Surface (F6)
- ☐ Depleted Dark Surface (F7)
- ☐ Redox Depressions (F8)

Indicators for Problematic Hydric Soils [3]:

- ☐ Coast Prairie Redox (A16)
- ☐ Dark Surface (S7)
- ☐ Iron Manganese Masses (F12)
- ☐ Very Shallow Dark Surface (TF12)
- ☐ Other (Explain in Remarks)

[3] Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: None

Depth (inches): NA

Hydric Soil Present? **Yes** ◉ **No** ○

Remarks:

Soil appears to be a roadside fill and thus disturbed.
The criterion for hydric soil is met at this point.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ☐ Surface Water (A1)
- ☑ High Water Table (A2)
- ☑ Saturation (A3)
- ☐ Water Marks (B1)
- ☐ Sediment Deposits (B2)
- ☐ Drift Deposits (B3)
- ☐ Algal Mat or Crust (B4)
- ☐ Iron Deposits (B5)
- ☐ Inundation Visible on Aerial Imagery (B7)
- ☐ Sparsely Vegetated Concave Surface (B8)
- ☐ Water-Stained Leaves (B9)
- ☐ Aquatic Fauna (B13)
- ☐ True Aquatic Plants (B14)
- ☐ Hydrogen Sulfide Odor (C1)
- ☐ Oxidized Rhizospheres on Living Roots (C3)
- ☐ Presence of Reduced Iron (C4)
- ☐ Recent Iron Reduction in Tilled Soils (C6)
- ☐ Thin Muck Surface (C7)
- ☐ Gauge or Well Data (D9)
- ☐ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ☐ Surface Soil Cracks (B6)
- ☐ Drainage Patterns (B10)
- ☐ Dry Season Water Table (C2)
- ☐ Crayfish Burrows (C8)
- ☐ Saturation Visible on Aerial Imagery (C9)
- ☐ Stunted or Stressed Plants (D1)
- ☑ Geomorphic Position (D2)
- ☑ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes ○ No ◉ Depth (inches):

Water Table Present? Yes ◉ No ○ Depth (inches): 6

Saturation Present? (includes capillary fringe) Yes ◉ No ○ Depth (inches): 0

Wetland Hydrology Present? **Yes** ◉ **No** ○

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Previous delineation, DNR WWI map, NRCS Soils map, Topographic map, Aerial photos

Remarks:

Based on a WETS analysis, antecedent precipitation was within a normal range.
The criterion for hydrology is met at this point.

WETLAND DETERMINATION DATA FORM - Midwest Region

Project/Site: IH 94 (N-S Freeway) City/County: Milwaukee County Sampling Date: 19-Aug-14

Applicant/Owner: Wisconsin Department of Transportation State: WI Sampling Point: **SP-48**

Investigator(s): Ron Londre, Geof Parish Section, Township, Range: S 30 T 5N R 22E

Landform (hillslope, terrace, etc.): Summit/mound Local relief (concave, convex, none): convex

Slope: 2.0% 1.1 ° Lat.: Long.: Datum:

Soil Map Unit Name: Ashkum silty clay loam (AsA), All hydric WWI classification: E2K

Are climatic/hydrologic conditions on the site typical for this time of year? Yes ◉ No ○ (If no, explain in Remarks.)

Are Vegetation ☑ , Soil ☑ , or Hydrology ☐ significantly disturbed? Are "Normal Circumstances" present? Yes ◉ No ○

Are Vegetation ☐ , Soil ☐ , or Hydrology ☐ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes ○	No ◉	**Is the Sampled Area within a Wetland?** **Yes** ○ **No** ◉
Hydric Soil Present?	Yes ○	No ◉	
Wetland Hydrology Present?	Yes ○	No ◉	

Remarks:
Construction has altered this area within the past two years. Current condition is the new normal.
None of the parameters have been met at this point. Thus, this point is located in an upland.

VEGETATION - Use scientific names of plants.

	Absolute % Cover	Dominant Species? Rel.Strat. Cover	Indicator Status
Tree Stratum (Plot size: 30' r)			
1.	0	☐ 0.0%	
2.	0	☐ 0.0%	
3.	0	☐ 0.0%	
4.	0	☐ 0.0%	
5.	0	☐ 0.0%	
	0	= Total Cover	
Sapling/Shrub Stratum (Plot size: 15' r)			
1.	0	☐ 0.0%	
2.	0	☐ 0.0%	
3.	0	☐ 0.0%	
4.	0	☐ 0.0%	
5.	0	☐ 0.0%	
	0	= Total Cover	
Herb Stratum (Plot size: 5' r)			
1. Festuca rubra	70	☑ 58.3%	FACU
2. Lolium multiflorum	40	☑ 33.3%	FACU
3. Cirsium arvense	5	☐ 4.2%	FACU
4. Phalaris arundinacea	5	☐ 4.2%	FACW
5.	0	☐ 0.0%	
6.	0	☐ 0.0%	
7.	0	☐ 0.0%	
8.	0	☐ 0.0%	
9.	0	☐ 0.0%	
10.	0	☐ 0.0%	
	120	= Total Cover	
Woody Vine Stratum (Plot size: 30' r)			
1.	0	☐ 0.0%	
2.	0	☐ 0.0%	
	0	= Total Cover	

Dominance Test worksheet:

Number of Dominant Species That are OBL, FACW, or FAC: 0 (A)

Total Number of Dominant Species Across All Strata: 2 (B)

Percent of dominant Species That Are OBL, FACW, or FAC: 0.0% (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	5	x 2 =	10
FAC species	0	x 3 =	0
FACU species	115	x 4 =	460
UPL species	0	x 5 =	0
Column Totals:	120 (A)		470 (B)

Prevalence Index = B/A = 3.917

Hydrophytic Vegetation Indicators:

- ☐ **1 - Rapid Test for Hydrophytic Vegetation**
- ☐ **2 - Dominance Test is > 50%**
- ☐ **3 - Prevalence Index is ≤3.0** [1]
- ☐ **4 - Morphological Adaptations** [1] **(Provide supporting data in Remarks or on a separate sheet)**
- ☐ **Problematic Hydrophytic Vegetation** [1] **(Explain)**

[1] **Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.**

Hydrophytic Vegetation Present? **Yes** ○ **No** ◉

Remarks: (Include photo numbers here or on a separate sheet.)

Vegetation is disturbed due to recent construction and planting of cool season grasses.
The criterion for hydrophytic vegetation is not met at this point.

*Indicator suffix = National status or professional decision assigned because Regional status not defined by FWS.

SOIL

Sampling Point: **SP-48**

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)		%	Redox Features Color (moist)	%	Type [1]	Loc²	Texture	Remarks
0-10	10YR	3/1	100					Silty Clay Loam	
10-24	10YR	3/2	100					Silty Clay Loam	

[1] Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. ²Location: PL=Pore Lining. M=Matrix.

Hydric Soil Indicators:

- ☐ Histosol (A1)
- ☐ Histic Epipedon (A2)
- ☐ Black Histic (A3)
- ☐ Hydrogen Sulfide (A4)
- ☐ Stratified Layers (A5)
- ☐ 2 cm Muck (A10)
- ☐ Depleted Below Dark Surface (A11)
- ☐ Thick Dark Surface (A12)
- ☐ Sandy Muck Mineral (S1)
- ☐ 5 cm Mucky Peat or Peat (S3)
- ☐ Sandy Gleyed Matrix (S4)
- ☐ Sandy Redox (S5)
- ☐ Stripped Matrix (S6)
- ☐ Loamy Mucky Mineral (F1)
- ☐ Loamy Gleyed Matrix (F2)
- ☐ Depleted Matrix (F3)
- ☐ Redox Dark Surface (F6)
- ☐ Depleted Dark Surface (F7)
- ☐ Redox Depressions (F8)

Indicators for Problematic Hydric Soils [3]:

- ☐ Coast Prairie Redox (A16)
- ☐ Dark Surface (S7)
- ☐ Iron Manganese Masses (F12)
- ☐ Very Shallow Dark Surface (TF12)
- ☐ Other (Explain in Remarks)

[3] Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: None

Depth (inches): NA

Hydric Soil Present? **Yes** ○ **No** ◉

Remarks:

Soil is disturbed due to recent construction and grading.
The criterion for hydric soil is not met at this point.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ☐ Surface Water (A1)
- ☐ High Water Table (A2)
- ☐ Saturation (A3)
- ☐ Water Marks (B1)
- ☐ Sediment Deposits (B2)
- ☐ Drift Deposits (B3)
- ☐ Algal Mat or Crust (B4)
- ☐ Iron Deposits (B5)
- ☐ Inundation Visible on Aerial Imagery (B7)
- ☐ Sparsely Vegetated Concave Surface (B8)
- ☐ Water-Stained Leaves (B9)
- ☐ Aquatic Fauna (B13)
- ☐ True Aquatic Plants (B14)
- ☐ Hydrogen Sulfide Odor (C1)
- ☐ Oxidized Rhizospheres on Living Roots (C3)
- ☐ Presence of Reduced Iron (C4)
- ☐ Recent Iron Reduction in Tilled Soils (C6)
- ☐ Thin Muck Surface (C7)
- ☐ Gauge or Well Data (D9)
- ☐ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ☐ Surface Soil Cracks (B6)
- ☐ Drainage Patterns (B10)
- ☐ Dry Season Water Table (C2)
- ☐ Crayfish Burrows (C8)
- ☐ Saturation Visible on Aerial Imagery (C9)
- ☐ Stunted or Stressed Plants (D1)
- ☐ Geomorphic Position (D2)
- ☐ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes ○ No ◉ Depth (inches): _____

Water Table Present? Yes ○ No ◉ Depth (inches): _____

Saturation Present? (includes capillary fringe) Yes ○ No ◉ Depth (inches): _____

Wetland Hydrology Present? **Yes** ○ **No** ◉

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Previous delineation, DNR WWI map, NRCS Soils map, Topographic map, Aerial photos

Remarks:

Based on a WETS analysis, antecedent precipitation was within a normal range.
The criterion for hydrology is met at this point.

WETLAND DETERMINATION DATA FORM - Midwest Region

Project/Site: IH 94 (N-S Freeway) City/County: Milwaukee County Sampling Date: 19-Aug-14

Applicant/Owner: Wisconsin Department of Transportation State: WI Sampling Point: **SP-49**

Investigator(s): Ron Londre, Geof Parish Section, Township, Range: S 30 T 5N R 22E

Landform (hillslope, terrace, etc.): Footslope Local relief (concave, convex, none): concave

Slope: 2.0% 1.1 ° Lat.: Long.: Datum:

Soil Map Unit Name: Martinton silt loam (MgA), Not hydric WWI classification: E2K

Are climatic/hydrologic conditions on the site typical for this time of year? Yes ◉ No ○ (If no, explain in Remarks.)

Are Vegetation ☐, Soil ☐, or Hydrology ☐ significantly disturbed? Are "Normal Circumstances" present? Yes ◉ No ○

Are Vegetation ☐, Soil ☐, or Hydrology ☐ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes ◉ No ○	**Is the Sampled Area within a Wetland?** **Yes ◉ No ○**
Hydric Soil Present?	Yes ◉ No ○	
Wetland Hydrology Present?	Yes ◉ No ○	

Remarks:
All three parameters have been met at this point. Thus, this point is located in a wetland.
Wetland ID: W10-1

VEGETATION - Use scientific names of plants.

	Absolute % Cover	Dominant Species? Rel.Strat. Cover	Indicator Status
Tree Stratum (Plot size: 30' r)			
1.	0	☐ 0.0%	
2.	0	☐ 0.0%	
3.	0	☐ 0.0%	
4.	0	☐ 0.0%	
5.	0	☐ 0.0%	
	0	= Total Cover	
Sapling/Shrub Stratum (Plot size: 15' r)			
1.	0	☐ 0.0%	
2.	0	☐ 0.0%	
3.	0	☐ 0.0%	
4.	0	☐ 0.0%	
5.	0	☐ 0.0%	
	0	= Total Cover	
Herb Stratum (Plot size: 5' r)			
1. Phalaris arundinacea	100	☑ 97.1%	FACW
2. Cirsium arvense	3	☐ 2.9%	FACU
3.	0	☐ 0.0%	
4.	0	☐ 0.0%	
5.	0	☐ 0.0%	
6.	0	☐ 0.0%	
7.	0	☐ 0.0%	
8.	0	☐ 0.0%	
9.	0	☐ 0.0%	
10.	0	☐ 0.0%	
	103	= Total Cover	
Woody Vine Stratum (Plot size: 30' r)			
1.	0	☐ 0.0%	
2.	0	☐ 0.0%	
	0	= Total Cover	

Dominance Test worksheet:

Number of Dominant Species That are OBL, FACW, or FAC: 1 (A)

Total Number of Dominant Species Across All Strata: 1 (B)

Percent of dominant Species That Are OBL, FACW, or FAC: 100.0% (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	100	x 2 =	200
FAC species	0	x 3 =	0
FACU species	3	x 4 =	12
UPL species	0	x 5 =	0
Column Totals:	103 (A)		212 (B)

Prevalence Index = B/A = 2.058

Hydrophytic Vegetation Indicators:

- ☑ **1 - Rapid Test for Hydrophytic Vegetation**
- ☑ **2 - Dominance Test is > 50%**
- ☑ **3 - Prevalence Index is ≤3.0** [1]
- ☐ **4 - Morphological Adaptations** [1] **(Provide supporting data in Remarks or on a separate sheet)**
- ☐ **Problematic Hydrophytic Vegetation** [1] **(Explain)**

[1] **Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.**

Hydrophytic Vegetation Present? **Yes ◉ No ○**

Remarks: (Include photo numbers here or on a separate sheet.)

This point is located in a wet meadow plant community.
The criterion for hydrophytic vegetation is met at this point.

*Indicator suffix = National status or professional decision assigned because Regional status not defined by FWS.

SOIL

Sampling Point: **SP-49**

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)		%	Redox Features Color (moist)		%	Type [1]	Loc [2]	Texture	Remarks
0-24	10YR	2/1	100						Muck	
24-26	10YR	3/1	100						Peaty Muck	
26-28	10YR	6/1	70	7.5YR	5/6	30	C	M	Fine Sandy Loam	

[1] Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. [2] Location: PL=Pore Lining. M=Matrix.

Hydric Soil Indicators:

- [x] Histosol (A1)
- [ ] Histic Epipedon (A2)
- [ ] Black Histic (A3)
- [ ] Hydrogen Sulfide (A4)
- [ ] Stratified Layers (A5)
- [ ] 2 cm Muck (A10)
- [ ] Depleted Below Dark Surface (A11)
- [ ] Thick Dark Surface (A12)
- [ ] Sandy Muck Mineral (S1)
- [ ] 5 cm Mucky Peat or Peat (S3)
- [ ] Sandy Gleyed Matrix (S4)
- [ ] Sandy Redox (S5)
- [ ] Stripped Matrix (S6)
- [ ] Loamy Mucky Mineral (F1)
- [ ] Loamy Gleyed Matrix (F2)
- [ ] Depleted Matrix (F3)
- [ ] Redox Dark Surface (F6)
- [ ] Depleted Dark Surface (F7)
- [ ] Redox Depressions (F8)

Indicators for Problematic Hydric Soils [3]:

- [ ] Coast Prairie Redox (A16)
- [ ] Dark Surface (S7)
- [ ] Iron Manganese Masses (F12)
- [ ] Very Shallow Dark Surface (TF12)
- [ ] Other (Explain in Remarks)

[3] Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: None

Depth (inches): NA

Hydric Soil Present? **Yes** ◉ **No** ○

Remarks:

The criterion for hydric soil is met at this point.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- [ ] Surface Water (A1)
- [ ] High Water Table (A2)
- [ ] Saturation (A3)
- [ ] Water Marks (B1)
- [ ] Sediment Deposits (B2)
- [ ] Drift Deposits (B3)
- [ ] Algal Mat or Crust (B4)
- [ ] Iron Deposits (B5)
- [ ] Inundation Visible on Aerial Imagery (B7)
- [ ] Sparsely Vegetated Concave Surface (B8)
- [ ] Water-Stained Leaves (B9)
- [ ] Aquatic Fauna (B13)
- [ ] True Aquatic Plants (B14)
- [ ] Hydrogen Sulfide Odor (C1)
- [ ] Oxidized Rhizospheres on Living Roots (C3)
- [ ] Presence of Reduced Iron (C4)
- [ ] Recent Iron Reduction in Tilled Soils (C6)
- [ ] Thin Muck Surface (C7)
- [ ] Gauge or Well Data (D9)
- [ ] Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- [ ] Surface Soil Cracks (B6)
- [ ] Drainage Patterns (B10)
- [ ] Dry Season Water Table (C2)
- [ ] Crayfish Burrows (C8)
- [ ] Saturation Visible on Aerial Imagery (C9)
- [ ] Stunted or Stressed Plants (D1)
- [x] Geomorphic Position (D2)
- [x] FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes ○ No ◉ Depth (inches): _____

Water Table Present? Yes ○ No ◉ Depth (inches): _____

Saturation Present? (includes capillary fringe) Yes ○ No ◉ Depth (inches): _____

Wetland Hydrology Present? **Yes** ◉ **No** ○

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Previous delineation, DNR WWI map, NRCS Soils map, Topographic map, Aerial photos

Remarks:

Based on a WETS analysis, antecedent precipitation was within a normal range.
The criterion for hydrology is met at this point.

WETLAND DETERMINATION DATA FORM - Midwest Region

Project/Site: IH 94 (N-S Freeway) City/County: Milwaukee County Sampling Date: 19-Aug-14

Applicant/Owner: Wisconsin Department of Transportation State: WI Sampling Point: **SP-50**

Investigator(s): Ron Londre, Geof Parish Section, Township, Range: S 30 T 5N R 22E

Landform (hillslope, terrace, etc.): Toeslope/ditch Local relief (concave, convex, none): concave

Slope: 6.0% 3.4 ° Lat.: Long.: Datum:

Soil Map Unit Name: Morley silt loam (MzdB), Not hydric WWI classification: None

Are climatic/hydrologic conditions on the site typical for this time of year? Yes ◉ No ○ (If no, explain in Remarks.)

Are Vegetation ☑ , Soil ☑ , or Hydrology ☐ significantly disturbed? Are "Normal Circumstances" present? Yes ◉ No ○

Are Vegetation ☐ , Soil ☐ , or Hydrology ☐ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes ○ No ◉	**Is the Sampled Area within a Wetland?** **Yes ○ No ◉**
Hydric Soil Present?	Yes ○ No ◉	
Wetland Hydrology Present?	Yes ○ No ◉	

Remarks:
This point is located in a recently constructed ditch and planted with cool season grasses.
None of the three parameter have been met at this point. Thus, this point is located in an upland.

VEGETATION - Use scientific names of plants.

	Absolute % Cover	Dominant Species? Rel.Strat. Cover	Indicator Status
Tree Stratum (Plot size: 10' x 285')			
1.	0	☐ 0.0%	
2.	0	☐ 0.0%	
3.	0	☐ 0.0%	
4.	0	☐ 0.0%	
5.	0	☐ 0.0%	
	0	= Total Cover	
Sapling/Shrub Stratum (Plot size: 10' x 70')			
1.	0	☐ 0.0%	
2.	0	☐ 0.0%	
3.	0	☐ 0.0%	
4.	0	☐ 0.0%	
5.	0	☐ 0.0%	
	0	= Total Cover	
Herb Stratum (Plot size: 5' r)			
1. Lolium multiflorum	60	☑ 66.7%	FACU
2. Festuca rubra	30	☑ 33.3%	FACU
3.	0	☐ 0.0%	
4.	0	☐ 0.0%	
5.	0	☐ 0.0%	
6.	0	☐ 0.0%	
7.	0	☐ 0.0%	
8.	0	☐ 0.0%	
9.	0	☐ 0.0%	
10.	0	☐ 0.0%	
	90	= Total Cover	
Woody Vine Stratum (Plot size: 10' x 285')			
1.	0	☐ 0.0%	
2.	0	☐ 0.0%	
	0	= Total Cover	

Dominance Test worksheet:

Number of Dominant Species That are OBL, FACW, or FAC: 0 (A)

Total Number of Dominant Species Across All Strata: 2 (B)

Percent of dominant Species That Are OBL, FACW, or FAC: 0.0% (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	0	x 2 =	0
FAC species	0	x 3 =	0
FACU species	90	x 4 =	360
UPL species	0	x 5 =	0
Column Totals:	90	(A)	360 (B)

Prevalence Index = B/A = 4.000

Hydrophytic Vegetation Indicators:

- ☐ **1 - Rapid Test for Hydrophytic Vegetation**
- ☐ **2 - Dominance Test is > 50%**
- ☐ **3 - Prevalence Index is ≤3.0** [1]
- ☐ **4 - Morphological Adaptations** [1] **(Provide supporting data in Remarks or on a separate sheet)**
- ☐ **Problematic Hydrophytic Vegetation** [1] **(Explain)**

[1] **Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.**

Hydrophytic Vegetation Present? **Yes ○ No ◉**

Remarks: (Include photo numbers here or on a separate sheet.)

Some shoulder gravel is in the plot and has restricted vegetation growth.
Vegetation is disturbed due to recent planting of cool season grasses.
The criterion for hydrophytic vegetation is not met at this point.

*Indicator suffix = National status or professional decision assigned because Regional status not defined by FWS.

SOIL

Sampling Point: **SP-50**

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)		%	Redox Features Color (moist)	%	Type [1]	Loc²	Texture	Remarks
0-4	10YR	2/1	100					Silty Clay Loam	
4-20	10YR	4/2	70					Silty Clay	
	10YR	4/3	30						

[1] Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. ²Location: PL=Pore Lining. M=Matrix.

Hydric Soil Indicators:

- ☐ Histosol (A1)
- ☐ Histic Epipedon (A2)
- ☐ Black Histic (A3)
- ☐ Hydrogen Sulfide (A4)
- ☐ Stratified Layers (A5)
- ☐ 2 cm Muck (A10)
- ☐ Depleted Below Dark Surface (A11)
- ☐ Thick Dark Surface (A12)
- ☐ Sandy Muck Mineral (S1)
- ☐ 5 cm Mucky Peat or Peat (S3)
- ☐ Sandy Gleyed Matrix (S4)
- ☐ Sandy Redox (S5)
- ☐ Stripped Matrix (S6)
- ☐ Loamy Mucky Mineral (F1)
- ☐ Loamy Gleyed Matrix (F2)
- ☐ Depleted Matrix (F3)
- ☐ Redox Dark Surface (F6)
- ☐ Depleted Dark Surface (F7)
- ☐ Redox Depressions (F8)

Indicators for Problematic Hydric Soils [3]:

- ☐ Coast Prairie Redox (A16)
- ☐ Dark Surface (S7)
- ☐ Iron Manganese Masses (F12)
- ☐ Very Shallow Dark Surface (TF12)
- ☐ Other (Explain in Remarks)

[3] Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: None

Depth (inches): NA

Hydric Soil Present? **Yes** ○ **No** ◉

Remarks:

Soil is disturbed due to recent construciotn and grading.
The criterion for hydric soil is not met at this point.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ☐ Surface Water (A1)
- ☐ High Water Table (A2)
- ☐ Saturation (A3)
- ☐ Water Marks (B1)
- ☐ Sediment Deposits (B2)
- ☐ Drift Deposits (B3)
- ☐ Algal Mat or Crust (B4)
- ☐ Iron Deposits (B5)
- ☐ Inundation Visible on Aerial Imagery (B7)
- ☐ Sparsely Vegetated Concave Surface (B8)
- ☐ Water-Stained Leaves (B9)
- ☐ Aquatic Fauna (B13)
- ☐ True Aquatic Plants (B14)
- ☐ Hydrogen Sulfide Odor (C1)
- ☐ Oxidized Rhizospheres on Living Roots (C3)
- ☐ Presence of Reduced Iron (C4)
- ☐ Recent Iron Reduction in Tilled Soils (C6)
- ☐ Thin Muck Surface (C7)
- ☐ Gauge or Well Data (D9)
- ☐ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ☐ Surface Soil Cracks (B6)
- ☐ Drainage Patterns (B10)
- ☐ Dry Season Water Table (C2)
- ☐ Crayfish Burrows (C8)
- ☐ Saturation Visible on Aerial Imagery (C9)
- ☐ Stunted or Stressed Plants (D1)
- ☑ Geomorphic Position (D2)
- ☐ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes ○ No ◉ Depth (inches): _____

Water Table Present? Yes ○ No ◉ Depth (inches): _____

Saturation Present? (includes capillary fringe) Yes ○ No ◉ Depth (inches): _____

Wetland Hydrology Present? **Yes** ○ **No** ◉

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Previous delineation, DNR WWI map, NRCS Soils map, Topographic map, Aerial photos

Remarks:

Based on a WETS analysis, antecedent precipitation was within a normal range.
The criterion for hydrology is not met at this point.

WETLAND DETERMINATION DATA FORM - Midwest Region

Project/Site: IH 94 (N-S Freeway) City/County: Milwaukee County Sampling Date: 19-Aug-14

Applicant/Owner: Wisconsin Department of Transportation State: WI Sampling Point: **SP-51**

Investigator(s): Ron Londre, Geof Parish Section, Township, Range: S 30 T 5N R 22E

Landform (hillslope, terrace, etc.): Toeslope/ditch Local relief (concave, convex, none): concave

Slope: 3.0% 1.7 ° Lat.: Long.: Datum:

Soil Map Unit Name: Morley silt loam (MzdB), Not hydric WWI classification: None

Are climatic/hydrologic conditions on the site typical for this time of year? Yes ◉ No ○ (If no, explain in Remarks.)

Are Vegetation ☐ , Soil ☑ , or Hydrology ☐ significantly disturbed? Are "Normal Circumstances" present? Yes ◉ No ○

Are Vegetation ☐ , Soil ☐ , or Hydrology ☐ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes ◉ No ○	**Is the Sampled Area within a Wetland?** **Yes** ◉ **No** ○
Hydric Soil Present?	Yes ◉ No ○	
Wetland Hydrology Present?	Yes ◉ No ○	

Remarks:
This point is located in a roadside ditch.
All three parameters have been met at this point. Thus, this point is located in a wetland.

VEGETATION - Use scientific names of plants.

Tree Stratum (Plot size: 10' x 285')	Absolute % Cover	Dominant Species?	Rel.Strat. Cover	Indicator Status
1.	0	☐	0.0%	
2.	0	☐	0.0%	
3.	0	☐	0.0%	
4.	0	☐	0.0%	
5.	0	☐	0.0%	
	0	= Total Cover		
Sapling/Shrub Stratum (Plot size: 10' x 70')				
1.	0	☐	0.0%	
2.	0	☐	0.0%	
3.	0	☐	0.0%	
4.	0	☐	0.0%	
5.	0	☐	0.0%	
	0	= Total Cover		
Herb Stratum (Plot size: 5' r)				
1. Typha angustifolia	50	☑	47.6%	OBL
2. Typha X glauca	40	☑	38.1%	OBL
3. Festuca rubra	10	☐	9.5%	FACU
4. Schoenoplectus fluviatilis	5	☐	4.8%	OBL
5.	0	☐	0.0%	
6.	0	☐	0.0%	
7.	0	☐	0.0%	
8.	0	☐	0.0%	
9.	0	☐	0.0%	
10.	0	☐	0.0%	
	105	= Total Cover		
Woody Vine Stratum (Plot size: 10' x 285')				
1.	0	☐	0.0%	
2.	0	☐	0.0%	
	0	= Total Cover		

Dominance Test worksheet:

Number of Dominant Species That are OBL, FACW, or FAC: 2 (A)

Total Number of Dominant Species Across All Strata: 2 (B)

Percent of dominant Species That Are OBL, FACW, or FAC: 100.0% (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	95	x 1 =	95
FACW species	0	x 2 =	0
FAC species	0	x 3 =	0
FACU species	10	x 4 =	40
UPL species	0	x 5 =	0
Column Totals:	105 (A)		135 (B)

Prevalence Index = B/A = 1.286

Hydrophytic Vegetation Indicators:

- ☑ **1 - Rapid Test for Hydrophytic Vegetation**
- ☑ **2 - Dominance Test is > 50%**
- ☑ **3 - Prevalence Index is ≤3.0** [1]
- ☐ **4 - Morphological Adaptations** [1] **(Provide supporting data in Remarks or on a separate sheet)**
- ☐ **Problematic Hydrophytic Vegetation** [1] **(Explain)**

[1] **Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.**

Hydrophytic Vegetation Present? **Yes** ◉ **No** ○

Remarks: (Include photo numbers here or on a separate sheet.)

This point is located in a shallow marsh plant community.
The criterion for hydrophytic vegetation is met at this point.

*Indicator suffix = National status or professional decision assigned because Regional status not defined by FWS.

SOIL

Sampling Point: **SP-51**

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)		%	Redox Features Color (moist)		%	Type [1]	Loc [2]	Texture	Remarks
0-7	10YR	3/1	90	10YR	4/6	5	C	M	Silty Clay Loam	
				5YR	4/4	5	C	M		
7-20	10YR	5/2	90	7.5YR	5/4	10	C	M	Silty Clay	

[1] Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. [2] Location: PL=Pore Lining. M=Matrix.

Hydric Soil Indicators:

- ☐ Histosol (A1)
- ☐ Histic Epipedon (A2)
- ☐ Black Histic (A3)
- ☐ Hydrogen Sulfide (A4)
- ☐ Stratified Layers (A5)
- ☐ 2 cm Muck (A10)
- ☑ Depleted Below Dark Surface (A11)
- ☐ Thick Dark Surface (A12)
- ☐ Sandy Muck Mineral (S1)
- ☐ 5 cm Mucky Peat or Peat (S3)
- ☐ Sandy Gleyed Matrix (S4)
- ☐ Sandy Redox (S5)
- ☐ Stripped Matrix (S6)
- ☐ Loamy Mucky Mineral (F1)
- ☐ Loamy Gleyed Matrix (F2)
- ☑ Depleted Matrix (F3)
- ☑ Redox Dark Surface (F6)
- ☐ Depleted Dark Surface (F7)
- ☐ Redox Depressions (F8)

Indicators for Problematic Hydric Soils [3]:

- ☐ Coast Prairie Redox (A16)
- ☐ Dark Surface (S7)
- ☐ Iron Manganese Masses (F12)
- ☐ Very Shallow Dark Surface (TF12)
- ☐ Other (Explain in Remarks)

[3] Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: None

Depth (inches): NA

Hydric Soil Present? **Yes** ◉ **No** ○

Remarks:

Soil appears to be a roadside fill and thus disturbed.
The criterion for hydric soil is met at this point.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ☐ Surface Water (A1)
- ☐ High Water Table (A2)
- ☐ Saturation (A3)
- ☐ Water Marks (B1)
- ☐ Sediment Deposits (B2)
- ☐ Drift Deposits (B3)
- ☐ Algal Mat or Crust (B4)
- ☐ Iron Deposits (B5)
- ☐ Inundation Visible on Aerial Imagery (B7)
- ☐ Sparsely Vegetated Concave Surface (B8)
- ☐ Water-Stained Leaves (B9)
- ☐ Aquatic Fauna (B13)
- ☐ True Aquatic Plants (B14)
- ☐ Hydrogen Sulfide Odor (C1)
- ☐ Oxidized Rhizospheres on Living Roots (C3)
- ☐ Presence of Reduced Iron (C4)
- ☐ Recent Iron Reduction in Tilled Soils (C6)
- ☐ Thin Muck Surface (C7)
- ☐ Gauge or Well Data (D9)
- ☐ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ☐ Surface Soil Cracks (B6)
- ☐ Drainage Patterns (B10)
- ☐ Dry Season Water Table (C2)
- ☐ Crayfish Burrows (C8)
- ☐ Saturation Visible on Aerial Imagery (C9)
- ☐ Stunted or Stressed Plants (D1)
- ☑ Geomorphic Position (D2)
- ☑ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes ○ No ◉ Depth (inches): _____

Water Table Present? Yes ○ No ◉ Depth (inches): _____

Saturation Present? (includes capillary fringe) Yes ○ No ◉ Depth (inches): _____

Wetland Hydrology Present? **Yes** ◉ **No** ○

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Previous delineation, DNR WWI map, NRCS Soils map, Topographic map, Aerial photos

Remarks:

Based on a WETS analysis, antecedent precipitation was within a normal range.
The criterion for hydrology is met at this point.

GRĀEF

collaborāte / formulāte / innovāte

APPENDIX H

Plant Lists / Floristic Quality Assessments

FLORISTIC QUALITY ASSESSMENT

IH 94 (N-S Freeway)

Plant Community ID: Wetland W-1 ***Observer(s):*** Ron Londre, Geof Parish

Community Classification:

WisDOT SM (D)

Dominant	Scientific Name	Common Name	Ind. Status	WI C Value
☐	Achillea millefolium	common yarrow	FACU	1
☐	Agrostis gigantea	redtop	FACW	
☐	Ambrosia artemisiifolia	annual bur-sage	FACU	0
☐	Asclepias incarnata	swamp milkweed	OBL	5
☐	Cirsium arvense	Canada thistle	FACU	
☐	Cornus racemosa	gray dogwood	FAC	2
☐	Daucus carota	Queen Anne's-lace		
☐	Elymus repens	quackgrass	FACU	
☐	Euthamia graminifolia	grass-leaved goldenrod	FACW	4
☐	Festuca rubra	red fescue	FACU	
☐	Fragaria virginiana	thick-leaved wild strawberry	FACU	1
☐	Fraxinus pennsylvanica	green ash	FACW	2
☐	Hordeum jubatum	foxtail barley	FAC	
☐	Juncus canadensis	Canadian rush	OBL	7
☐	Juncus tenuis	path rush	FAC	1
☐	Lythrum salicaria	purple loosestrife	OBL	
☐	Parthenocissus quinquefolia	Virginia creeper	FACU	5
☐	Persicaria maculosa	Lady's-Thumb	FACW	
☐	Phalaris arundinacea	reed canary grass	FACW	
☐	Phragmites australis	common reed	FACW	1
☐	Poa pratensis	Kentucky bluegrass	FAC	
☐	Rumex crispus	curly dock	FAC	
☐	Schoenoplectus tabernaemontani	soft-stem bulrush	OBL	4
☐	Solidago canadensis	Canadian goldenrod	FACU	1
☐	Solidago sempervirens	seaside goldenrod	FACW	
☐	Sonchus arvensis	field sow-thistle	FACU	
☐	Symphyotrichum novae-angliae	New England aster	FACW	3
☐	Symphyotrichum puniceum	Purple-Stem American-Aster	OBL	
☑	Typha angustifolia	narrow-leaved cat-tail	OBL	

FLORISTIC QUALITY ASSESSMENT

IH 94 (N-S Freeway)

Plant Community ID: Wetland W-1 ***Observer(s):*** Ron Londre, Geof Parish

Community Classification:

WisDOT SM (D)

☑	Typha X glauca	hybrid cat-tail	OBL	
☐	Vitis riparia	river-bank grape	FACW	2

$$FQI = \overline{C}\sqrt{N}$$

Where: FQI = Floristic Quality Index
$\overline{C}$ = Mean C Value
N = Number of native taxa

TOTAL =	**39**
N =	**15**
$\overline{C}$ =	**2.6**
FQI =	**10.1**

FLORISTIC QUALITY ASSESSMENT

GRAEF

IH 94 (N-S Freeway)

Plant Community ID: Wetland W-2 ***Observer(s):*** Ron Londre, Geof Parish

Community Classification:

WisDOT SM(D), M(D)

Dominant	Scientific Name	Common Name	Ind. Status	WI C Value
☐	Cirsium arvense	Canada thistle	FACU	
☐	Daucus carota	Queen Anne's-lace		
☐	Dipsacus laciniatus	cut-leaved teasel		
☐	Euthamia graminifolia	grass-leaved goldenrod	FACW	4
☐	Geum canadense	white avens	FAC	2
☐	Hackelia virginiana	beggar's-lice	FACU	3
☐	Oenothera biennis	bastard evening-primrose	FACU	1
☐	Parthenocissus quinquefolia	Virginia creeper	FACU	5
☑	Phalaris arundinacea	reed canary grass	FACW	
☐	Rhamnus cathartica	common buckthorn	FAC	
☐	Ribes missouriense	Missouri gooseberry		4
☐	Solidago gigantea	giant goldenrod	FACW	3
☐	Symphyotrichum novae-angliae	New England aster	FACW	3
☐	Toxicodendron radicans	common eastern poison-ivy	FAC	4
☑	Typha angustifolia	narrow-leaved cat-tail	OBL	
☐	Vitis riparia	river-bank grape	FACW	2

$$FQI = \bar{C}\sqrt{N}$$

Where: FQI = Floristic Quality Index
$\bar{C}$ = Mean C Value
N = Number of native taxa

TOTAL =	**31**
N =	**10**
$\bar{C}$ =	**3.1**
FQI =	**9.8**

FLORISTIC QUALITY ASSESSMENT

IH 94 (N-S Freeway)

Plant Community ID: Wetland W-3 ***Observer(s):*** Ron Londre, Geof Parish

Community Classification:

WisDOT SM(D), M(D)

Dominant	Scientific Name	Common Name	Ind. Status	WI C Value
☐	Alisma subcordatum	common water-plantain	OBL	3
☐	Asclepias incarnata	swamp milkweed	OBL	5
☐	Carex vulpinoidea	brown fox sedge	FACW	2
☐	Chelone glabra	turtlehead	OBL	7
☐	Cichorium intybus	blue chicory	FACU	
☐	Daucus carota	Queen Anne's-lace		
☐	Eleocharis obtusa	blunt spike-rush	OBL	3
☐	Elymus canadensis	Canada wild-rye	FACU	4
☐	Elymus virginicus	common eastern wild-rye	FACW	6
☐	Euthamia graminifolia	grass-leaved goldenrod	FACW	4
☐	Helenium autumnale	common sneezeweed	FACW	4
☐	Hordeum jubatum	foxtail barley	FAC	
☑	Juncus canadensis	Canadian rush	OBL	7
☐	Lotus corniculatus	bird's-foot deer-vetch	FACU	
☐	Lycopus americanus	American water-horehound	OBL	4
☐	Melilotus albus	white sweet-clover		
☐	Phalaris arundinacea	reed canary grass	FACW	
☐	Plantago major	broad-leaved plantain	FAC	
☐	Rumex crispus	curly dock	FAC	
☐	Schoenoplectus acutus	hard-stem bulrush	OBL	6
☐	Schoenoplectus tabernaemontani	soft-stem bulrush	OBL	4
☐	Scirpus atrovirens	dark-green bulrush	OBL	3
☐	Solidago sempervirens	seaside goldenrod	FACW	
☐	Sparganium eurycarpum	broad-fruit bur-reed	OBL	5
☐	Taraxacum officinale	common dandelion	FACU	
☑	Typha angustifolia	narrow-leaved cat-tail	OBL	
☐	Typha X glauca	hybrid cat-tail	OBL	

FLORISTIC QUALITY ASSESSMENT

IH 94 (N-S Freeway)

Plant Community ID: Wetland W-3 ***Observer(s):*** Ron Londre, Geof Parish

Community Classification:

WisDOT SM(D), M(D)

$$FQI = \bar{C} \sqrt{N}$$

Where: FQI = Floristic Quality Index
$\bar{C}$ = Mean C Value
N = Number of native taxa

TOTAL =	**67**
N =	**15**
$\bar{C}$ =	**4.5**
FQI =	**17.3**

FLORISTIC QUALITY ASSESSMENT

IH 94 (N-S Freeway)

Plant Community ID: Wetland W-4 ***Observer(s):*** Ron Londre, Geof Parish

Community Classification:

WisDOT SM(D)

Dominant	Scientific Name	Common Name	Ind. Status	WI C Value
☐	Agrostis gigantea	redtop	FACW	
☐	Carex blanda	common wood sedge	FAC	3
☐	Cirsium arvense	Canada thistle	FACU	
☐	Daucus carota	Queen Anne's-lace		
☐	Fragaria virginiana	thick-leaved wild strawberry	FACU	1
☐	Juncus tenuis	path rush	FAC	1
☐	Melilotus albus	white sweet-clover		
☐	Parthenocissus quinquefolia	Virginia creeper	FACU	5
☐	Persicaria maculosa	Lady's-Thumb	FACW	
☐	Poa pratensis	Kentucky bluegrass	FAC	
☐	Rudbeckia hirta	black-eyed Susan	FACU	4
☐	Rumex crispus	curly dock	FAC	
☐	Solidago canadensis	Canadian goldenrod	FACU	1
☐	Solidago sempervirens	seaside goldenrod	FACW	
☑	Typha X glauca	hybrid cat-tail	OBL	
☐	Vitis riparia	river-bank grape	FACW	2

$$FQI = \bar{C}\sqrt{N}$$

Where: **FQI = Floristic Quality Index**
$\bar{C}$ = Mean C Value
N = Number of native taxa

TOTAL =	**17**
N =	**7**
$\bar{C}$ =	**2.4**
FQI =	**6.4**

FLORISTIC QUALITY ASSESSMENT

IH 94 (N-S Freeway)

Plant Community ID: Wetland W-5 ***Observer(s):*** Ron Londre, Geof Parish

Community Classification:

WisDOT SM(D)

Dominant	Scientific Name	Common Name	Ind. Status	WI C Value
☐	Daucus carota	Queen Anne's-lace		
☐	Euthamia graminifolia	grass-leaved goldenrod	FACW	4
☐	Phalaris arundinacea	reed canary grass	FACW	
☐	Solidago gigantea	giant goldenrod	FACW	3
☐	Solidago sempervirens	seaside goldenrod	FACW	
☐	Symphyotrichum novae-angliae	New England aster	FACW	3
☑	Typha angustifolia	narrow-leaved cat-tail	OBL	
☑	Typha X glauca	hybrid cat-tail	OBL	

$$FQI = \bar{C} \sqrt{N}$$

Where: FQI = Floristic Quality Index
$\bar{C}$ = Mean C Value
N = Number of native taxa

TOTAL =	**10**
N =	**3**
$\bar{C}$ =	**3.3**
FQI =	**5.8**

FLORISTIC QUALITY ASSESSMENT

IH 94 (N-S Freeway)

Plant Community ID: Wetland W-6 ***Observer(s):*** Ron Londre, Geof Parish

Community Classification:

WisDOT SM(D), M(D), SS

Dominant	Scientific Name	Common Name	Ind. Status	WI C Value
☐	Agrostis gigantea	redtop	FACW	
☐	Alisma subcordatum	common water-plantain	OBL	3
☐	Asclepias syriaca	common milkweed	FACU	1
☐	Carex pellita	broad-leaved woolly sedge	OBL	4
☐	Cornus obliqua	Pale Dogwood	FACW	
☐	Coronilla varia	crown-vetch		
☐	Eleocharis obtusa	blunt spike-rush	OBL	3
☐	Erigeron philadelphicus	common fleabane	FACW	2
☐	Euthamia graminifolia	grass-leaved goldenrod	FACW	4
☐	Frangula alnus	Glossy False Buckthorn	FACW	
☐	Fraxinus pennsylvanica	green ash	FACW	2
☐	Juncus canadensis	Canadian rush	OBL	7
☐	Juncus tenuis	path rush	FAC	1
☐	Parthenocissus quinquefolia	Virginia creeper	FACU	5
☑	Phalaris arundinacea	reed canary grass	FACW	
☐	Poa pratensis	Kentucky bluegrass	FAC	
☐	Populus tremuloides	aspen	FAC	2
☐	Rhamnus cathartica	common buckthorn	FAC	
☐	Ribes americanum	American black currant	FACW	4
☐	Salix amygdaloides	peach-leaved willow	FACW	4
☐	Salix discolor	pussy willow	FACW	2
☐	Salix interior	Sandbar Willow	FACW	2
☐	Scirpus atrovirens	dark-green bulrush	OBL	3
☐	Solidago canadensis	Canadian goldenrod	FACU	1
☐	Solidago gigantea	giant goldenrod	FACW	3
☐	Solidago sempervirens	seaside goldenrod	FACW	
☐	Symphyotrichum novae-angliae	New England aster	FACW	3
☐	Toxicodendron radicans	common eastern poison-ivy	FAC	4
☑	Typha angustifolia	narrow-leaved cat-tail	OBL	

FLORISTIC QUALITY ASSESSMENT

IH 94 (N-S Freeway)

Plant Community ID: Wetland W-6 ***Observer(s):*** Ron Londre, Geof Parish

Community Classification:

WisDOT SM(D), M(D), SS

☑	Typha X glauca	hybrid cat-tail	OBL	
☐	Verbena hastata	blue vervain	FACW	3
☐	Vitis riparia	river-bank grape	FACW	2

$$FQI = \bar{C}\sqrt{N}$$

Where: FQI = Floristic Quality Index
$\bar{C}$ = Mean C Value
N = Number of native taxa

TOTAL =	**65**
N =	**22**
$\bar{C}$ =	**3.0**
FQI =	**13.9**

FLORISTIC QUALITY ASSESSMENT

IH 94 (N-S Freeway)

Plant Community ID: Wetland W-7 ***Observer(s):*** Ron Londre, Geof Parish

Community Classification:

WisDOT SS

Dominant	Scientific Name	Common Name	Ind. Status	WI C Value
☐	Agrostis gigantea	redtop	FACW	
☐	Eleocharis obtusa	blunt spike-rush	OBL	3
☐	Euthamia graminifolia	grass-leaved goldenrod	FACW	4
☐	Juncus canadensis	Canadian rush	OBL	7
☐	Juncus tenuis	path rush	FAC	1
☐	Lycopus americanus	American water-horehound	OBL	4
☑	Phalaris arundinacea	reed canary grass	FACW	
☐	Salix discolor	pussy willow	FACW	2
☑	Salix interior	Sandbar Willow	FACW	2
☐	Scirpus atrovirens	dark-green bulrush	OBL	3
☐	Solidago canadensis	Canadian goldenrod	FACU	1
☐	Typha angustifolia	narrow-leaved cat-tail	OBL	

$$FQI = \bar{C}\sqrt{N}$$

Where: FQI = Floristic Quality Index
$\bar{C}$ = Mean C Value
N = Number of native taxa

TOTAL =	**27**
N =	**9**
$\bar{C}$ =	**3.0**
FQI =	**9.0**

FLORISTIC QUALITY ASSESSMENT

IH 94 (N-S Freeway)

Plant Community ID: Wetland W-8 ***Observer(s):*** Ron Londre, Geof Parish

Community Classification:

WisDOT M(D)

Dominant	Scientific Name	Common Name	Ind. Status	WI C Value
☐	Agrostis gigantea	redtop	FACW	
☐	Festuca rubra	red fescue	FACU	
☑	Phalaris arundinacea	reed canary grass	FACW	
☐	Solidago canadensis	Canadian goldenrod	FACU	1
☑	Solidago sempervirens	seaside goldenrod	FACW	
☐	Sonchus arvensis	field sow-thistle	FACU	

$$FQI = \bar{C}\sqrt{N}$$

Where: **FQI = Floristic Quality Index**
$\bar{C}$ = Mean C Value
N = Number of native taxa

TOTAL =	**1**
N =	**1**
$\bar{C}$ =	**1.0**
FQI =	**1.0**

FLORISTIC QUALITY ASSESSMENT

GRAEF

IH 94 (N-S Freeway)

Plant Community ID: Wetland W-9 ***Observer(s):*** Ron Londre, Geof Parish

Community Classification:

WisDOT M(D)

Dominant	Scientific Name	Common Name	Ind. Status	WI C Value
☐	Agrostis gigantea	redtop	FACW	
☐	Cirsium arvense	Canada thistle	FACU	
☐	Euthamia graminifolia	grass-leaved goldenrod	FACW	4
☐	Fraxinus pennsylvanica	green ash	FACW	2
☑	Phalaris arundinacea	reed canary grass	FACW	
☐	Phragmites australis	common reed	FACW	1
☐	Poa pratensis	Kentucky bluegrass	FAC	
☐	Solidago gigantea	giant goldenrod	FACW	3
☐	Solidago sempervirens	seaside goldenrod	FACW	
☐	Sonchus arvensis	field sow-thistle	FACU	

$$FQI = \bar{C}\sqrt{N}$$

Where: FQI = Floristic Quality Index
$\bar{C}$ = Mean C Value
N = Number of native taxa

TOTAL =	**10**
N =	**4**
$\bar{C}$ =	**2.5**
FQI =	**5.0**

FLORISTIC QUALITY ASSESSMENT

IH 94 (N-S Freeway)

Plant Community ID: Wetland W-10 ***Observer(s):*** Ron Londre, Geof Parish

Community Classification:

WisDOT SM(D)

Dominant	Scientific Name	Common Name	Ind. Status	WI C Value
☐	Agrostis gigantea	redtop	FACW	
☐	Cirsium arvense	Canada thistle	FACU	
☐	Daucus carota	Queen Anne's-lace		
☐	Euthamia graminifolia	grass-leaved goldenrod	FACW	4
☐	Juncus tenuis	path rush	FAC	1
☐	Phalaris arundinacea	reed canary grass	FACW	
☐	Poa pratensis	Kentucky bluegrass	FAC	
☐	Rumex crispus	curly dock	FAC	
☐	Solidago canadensis	Canadian goldenrod	FACU	1
☐	Solidago sempervirens	seaside goldenrod	FACW	
☑	Typha angustifolia	narrow-leaved cat-tail	OBL	
☐	Verbena hastata	blue vervain	FACW	3

$$FQI = \bar{C}\sqrt{N}$$

Where: FQI = Floristic Quality Index
$\bar{C}$ = Mean C Value
N = Number of native taxa

TOTAL =	**9**
N =	**4**
$\bar{C}$ =	**2.3**
FQI =	**4.5**

FLORISTIC QUALITY ASSESSMENT

IH 94 (N-S Freeway)

Plant Community ID: Wetland W-11 ***Observer(s):*** Ron Londre, Geof Parish

Community Classification:

WisDOT M(D)

Dominant	Scientific Name	Common Name	Ind. Status	WI C Value
☐	Agrostis gigantea	redtop	FACW	
☐	Daucus carota	Queen Anne's-lace		
☐	Euthamia graminifolia	grass-leaved goldenrod	FACW	4
☑	Phalaris arundinacea	reed canary grass	FACW	
☐	Solidago canadensis	Canadian goldenrod	FACU	1
☐	Symphyotrichum novae-angliae	New England aster	FACW	3
☑	Typha angustifolia	narrow-leaved cat-tail	OBL	
☐	Verbena hastata	blue vervain	FACW	3

$$FQI = \bar{C}\sqrt{N}$$

Where: FQI = Floristic Quality Index
$\bar{C}$ = Mean C Value
N = Number of native taxa

TOTAL =	**11**
N =	**4**
$\bar{C}$ =	**2.8**
FQI =	**5.5**

FLORISTIC QUALITY ASSESSMENT

IH 94 (N-S Freeway)

Plant Community ID: Wetland W-12 ***Observer(s):*** Ron Londre, Geof Parish

Community Classification:

WisDOT SM(D)

Dominant	Scientific Name	Common Name	Ind. Status	WI C Value
☐	Achillea millefolium	common yarrow	FACU	1
☐	Euthamia graminifolia	grass-leaved goldenrod	FACW	4
☐	Lythrum salicaria	purple loosestrife	OBL	
☐	Phalaris arundinacea	reed canary grass	FACW	
☐	Solidago canadensis	Canadian goldenrod	FACU	1
☐	Solidago sempervirens	seaside goldenrod	FACW	
☑	Typha angustifolia	narrow-leaved cat-tail	OBL	
☐	Typha X glauca	hybrid cat-tail	OBL	
☐	Vitis riparia	river-bank grape	FACW	2

$$FQI = \bar{C}\sqrt{N}$$

Where: FQI = Floristic Quality Index
$\bar{C}$ = Mean C Value
N = Number of native taxa

TOTAL =	**8**
N =	**4**
$\bar{C}$ =	**2.0**
FQI =	**4.0**

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APPENDIX I

Wetland Summary Table

Table 3. Wetland Summary Table

Wetland ID	PLSS Location			Size Within Study Area (Acres)	C-value[1]	FQI vaue[1]	2014 Wetland Sample Point(s)	2014 Adjacent Upland Sample Point(s)	2009 Wetland Sample Point(s)	2009 Adjacent Upland Sample Point(s)	Wetland Plant Community Description(s)[2]	WWI Mapped Wetland(s)	Mapped Wetland Soil Type (Symbol)	Mapped Soil Taxonomic Classification	Mapped Soils Hydric Classification [3]	Comments on Apparent Connectivity to Surface Waters [4]	Comments on Boundary Determination	General Comments
	Township (N)	Range (E)	Section															
W-1	5	22	30	0.33	2.6	10.1	SP-2	SP-1	None	None	SM	None	MzdB2	Morley silt loam, 2 to 6 percent slopes, eroded	Not hydric	Surface water drains out of wetland through upland areas of ditch towards wetland W10-3 and to Oak Creek.	Boundary based on distinct topographic breaks along ditch, presence vs. absence of hydrophytes, and hydric vs. non-hydric soils.	Wetland is entirely contained within a roadside ditch. Wetland W-1 was not delineated in 2009.
W-2	5	22	30	0.07	3.1	9.8	SP-10	SP-9	None	None	SM, M	None	BlA	Blount silt loam, 1 to 3 percent slopes	Not hydric	Surface water drains out of wetland through upland areas of ditch towards tributary of Oak Creek.	Boundary based on distinct topographic breaks along ditch, presence vs. absence of hydrophytes, and hydric vs. non-hydric soils.	Wetland is entirely contained within a roadside ditch. Wetland W-2 was not delineated in 2009.
W-3	5	22	30	0.99	4.5	17.3	SP-14, SP-15, SP-19	SP-13	None	None	SM, M	None	BlA MmA	Blount silt loam, 1 to 3 percent slopes Matherton silt loam, 1 to 3 percent slopes	Not hydric Not hydric	Abuts unnamed tributary of Oak Creek.	Boundary based on subtle topographic breaks, presence and absence of hydrophytes, and frequent soil probing to evaluate presence vs. absence of hydric soil.	Wetland is newly formed as a result of rerouting unnamed tributary of Oak Creek. Wetland would not have been present in 2009.
W-4	5	22	19	0.18	2.4	6.4	SP-17	SP-16	None	None	SM	None	BlA	Blount silt loam, 1 to 3 percent slopes	Not hydric	Drains out of wetland through upland areas of a ditch, to W-5 then through upland areas of ditch, towards an unnamed tributary of Oak Creek.	Boundary based on distinct topographic breaks along ditch, presence vs. absence of hydrophytes, and hydric vs. non-hydric soils.	Wetland is entirely contained within a roadside ditch. Wetland W-4 was not delineated in 2009.
W-5	5	22	19	0.04	3.3	5.8	SP-18	SP-16	None	None	SM	None	AsA	Ashkum silty clay loam, 0 to 3 percent slopes	All hydric	Drains out of wetland through upland areas of a ditch towards an unnamed tributary of Oak Creek.	Boundary based on distinct topographic breaks along ditch, presence vs. absence of hydrophytes, and hydric vs. non-hydric soils.	Wetland is entirely contained within a roadside ditch. Wetland W-5 was not delineated in 2009.
W-6	5	22	19	2.35	2.9	14.0	SP-21, SP-23, SP-25, SP-29	SP-20, SP-22, SP-24, SP-28	None	None	SM, M, SS	E2Kx	BlA AsA	Blount silt loam, 1 to 3 percent slopes Ashkum silty clay loam, 0 to 3 percent slopes	Not hydric Not hydric	Abuts unnamed tributary of Oak Creek.	Portions of W-6 are contained within ditches where the boundary was primarily based on distinct topographic breaks. Remainder of wetland was based on subtle to moderate topographic breaks, frequent soil probing to evaluate presence vs. absence of hydric soils, and presence vs. absence of hydrophytes.	Wetland was not delineated in 2009. Portions of the wetland are contained within roadside ditches and storm water swales, other portions appears to have developed on fill soils.
W-7	5	22	19	0.02	3.0	9.0	SP-27	SP-26	None	None	SS	None	AsA	Ashkum silty clay loam, 0 to 3 percent slopes	All hydric	Wetland W-7 is located in a shallow depression with no apparent outlet for surface water.	Boundary was based on fairly distinct topographic break in a shallow depression and the presence vs. absence of hydrophytes and hydric soils.	Wetland appears to have formed in fill soils and was not delineated in 2009.
W-8	5	22	18	0.02	1.0	1.0	SP-33	SP-32	None	None	M	None	MzdC2	Morley silt loam, 6 to 12 percent slopes, eroded	Not hydric	Surface water drains north from wetland area through ditches beyond the Study Area towards an unnamed tributary of Oak Creek.	Boundary based on distinct topographic breaks along ditch, presence vs. absence of hydrophytes, and hydric vs. non-hydric soils.	Wetland is entirely contained within a roadside ditch. Wetland W-8 was not delineated in 2009.
W-9	5	22	18	0.07	2.5	5.0	SP-34	SP-32	None	None	M	None	BlA	Blount silt loam, 1 to 3 percent slopes	Not hydric	Surface water drains north from wetland area through ditches beyond the Study Area towards an unnamed tributary of Oak Creek.	Boundary based on distinct topographic breaks along ditch, presence vs. absence of hydrophytes, and hydric vs. non-hydric soils.	Wetland is entirely contained within a roadside ditch. Wetland W-9 was not delineated in 2009.
W-10	5	22	19	0.02	2.3	4.5	SP-43	SP-42	None	None	SM	None	BlA	Blount silt loam, 1 to 3 percent slopes	Not hydric	Surface water from W-10 would drain through a series of upland areas within ditches and culverts prior to reaching an unnamed tributary of Oak Creek.	Boundary based on distinct topographic breaks along ditch, presence vs. absence of hydrophytes, and hydric vs. non-hydric soils.	Wetland is entirely contained within a roadside ditch. Wetland W-10 was not delineated in 2009.
W-11	5	22	30	0.14	2.8	5.5	SP-47	SP-46	None	None	M	None	AsA	Ashkum silty clay loam, 0 to 3 percent slopes	All hydric	Surface water from W-11 would drain through a series of ditches and culverts east towards an unnamed tributary of Oak Creek.	Boundary based on distinct topographic breaks along ditch, presence vs. absence of hydrophytes, and hydric vs. non-hydric soils.	Wetland is entirely contained within a roadside ditch. Wetland W-11 was not delineated in 2009.
W-12	5	22	30	0.07	2.0	4.0	SP-51	SP-50	None	None	SM	None	MzdB	Morley silt loam, 2 to 6 percent slopes	Not hydric	Surface water from W-12 would drain north through upland areas within a ditch to Oak Creek.	Boundary based on distinct topographic breaks along ditch, presence vs. absence of hydrophytes, and hydric vs. non-hydric soils.	Wetland is entirely contained within a roadside ditch. Wetland W-12 was not delineated in 2009.
W7-1	5	22	7	0.50	NA	NA	None	None	T-1Bw	T-1Au	RPF	T3K	AsA	Ashkum silty clay loam, 0 to 3 percent slopes	All hydric	Abuts unnamed tributary of Oak Creek.	Wetland boundary was revised to include wetlands contained within roadside ditches extending north of original location. Remainder of wetland boundary was verified to not have changed from 2009.	Newly delineated areas are entirely contained within roadside ditches.
W7-6	5	22	7	0.36	NA	NA	None	None	T1-Bw	T-1Au	RPF, SM	T3/E2K	AsA BlA MzdB2	Ashkum silty clay loam, 0 to 3 percent slopes Blount silt loam, 1 to 3 percent slopes	All hydric Not hydric Not hydric	Abuts unnamed tributary of Oak Creek.	Wetland boundary was revised to include wetlands contained within roadside ditches extending north and south of original location. Remainder of wetland boundary was verified to not have changed from 2009.	Newly delineated areas are entirely contained within roadside ditches.
W8-6	5	22	18	0.01	NA	NA	None	None	T1-Bw	T-1Au	SM	T3/E2K	BlA	Blount silt loam, 1 to 3 percent slopes	Not hydric	Wetland W8-6 does not appear to have a surface water connection to other Waters of the US.	Wetland boundary was verified to not have changed from 2009.	

Table 3. Wetland Summary Table

Wetland ID	PLSS Location			Size Within Study Area (Acres)	C-value[1]	FQI vaue[1]	2014 Wetland Sample Point(s)	2014 Adjacent Upland Sample Point(s)	2009 Wetland Sample Point(s)	2009 Adjacent Upland Sample Point(s)	Wetland Plant Community Description(s)[2]	WWI Mapped Wetland(s)	Mapped Wetland Soil Type (Symbol)	Mapped Soil Taxonomic Classification	Mapped Soils Hydric Classification [3]	Comments on Apparent Connectivity to Surface Waters [4]	Comments on Boundary Determination	General Comments
	Township (N)	Range (E)	Section															
W8-7	5	22	18	0.57	NA	NA	None	None	T-1Bw	T-1Au	M, SM	None	AsA	Ashkum silty clay loam, 0 to 3 percent slopes	All hydric	Surface water from the wetland would drain both north and south through a series of ditches to various tributaries of Oak Creek.	Wetland boundary was revised to include wetlands contained within roadside ditches extending north and south of original location. Remainder of wetland boundary was verified to not have changed from 2009.	Newly delineated areas are entirely contained within roadside ditches.
W8-8	5	22	18	0.86	NA	NA	SP-36	SP-35	T-1Bw	T-1Au	M, SM	E2Ka	BlA	Blount silt loam, 1 to 3 percent slopes	Not hydric	Surface water from the wetland would drain both north and south through a series of ditches to various tributaries of Oak Creek.	Wetland boundary was revised to include wetlands contained within roadside ditches extending north and south of original location. Remainder of wetland boundary was verified to not have changed from 2009.	Newly delineated areas are entirely contained within roadside ditches.
W9-2	5	22	19	1.22	NA	NA	SP-38	SP-37	T-1Bw	T-1Au	RPE, SM	T3/E2K	AsA BlA	Ashkum silty clay loam, 0 to 3 percent slopes Blount silt loam, 1 to 3 percent slopes	All hydric Not hydric	Abuts unnamed tributary of Oak Creek.	Wetland boundary was revised to include wetlands contained within roadside ditches extending north and south of original location. Remainder of wetland boundary was verified to not have changed from 2009.	Newly delineated areas are entirely contained within roadside ditches.
W9-3	5	22	19	1.61	NA	NA	SP-31	SP-31	T-1Bw	T-1Au	RPE, RPF, SM	E2K E2H	HtA	Houghton muck, 0 to 2 percent slopes	All hydric	Abuts unnamed tributary of Oak Creek.	Wetland boundary was revised to include wetlands contained within roadside ditches extending north and south of original location. Remainder of wetland boundary was verified to not have changed from 2009.	Newly delineated areas are entirely contained within roadside ditches.
W9-4	5	22	19	0.25	NA	NA	None	None	T-1Bw	T-1Au	WS	None	MzdB2	Morley silt loam, 2 to 6 percent slopes, eroded	Not hydric	Wetland is adjacent to tributary of Oak Creek.	Wetland boundary was verified to not have changed from 2009.	
W9-4a	5	22	19	0.13	NA	NA	None	None	T-1Bw	T-1Au	M	E2K	BlA	Blount silt loam, 1 to 3 percent slopes	Not hydric	Wetland is adjacent to tributary of Oak Creek.	Wetland boundary was verified to not have changed from 2009.	
W9-5	5	22	19	0.89	NA	NA	SP-40, SP-42	SP-39, SP-41	T-1Bw	T-1Au	M, SM	None	MzdC2 BlA AsA	Morley silt loam, 6 to 12 percent slopes, eroded Blount silt loam, 1 to 3 percent slopes Ashkum silty clay loam, 0 to 3 percent slopes	Not hydric Not hydric All hydric	Abuts unnamed tributary of Oak Creek.	Wetland boundary was revised to include wetlands contained within roadside ditches extending north and south of original location. Remainder of wetland boundary was verified to not have changed from 2009.	A portion of the originally delineated area was identified as a storm water pond/landscape pond and is shown on wetland location map. Newly delineated areas are entirely contained within roadside ditches.
W9-6	5	22	19	0.6	NA	NA	None	None	T-1Bw	T-1Au	RPE	E2H	BlA	Blount silt loam, 1 to 3 percent slopes	Not hydric	Abuts unnamed tributary of Oak Creek.	South wetland boundary and location of tributary of Oak Creek was revised as a result of recent, permitted construction activity that filled a portion of the wetland and enclosed the tributary in a culvert. Remainder of wetland was verified to not have changed from 2009.	
W9-7	5	22	19	0.1	NA	NA	None	None	T1-Bw	T-1Au	SM	None	BlA	Blount silt loam, 1 to 3 percent slopes	Not hydric	Adjacent to unnamed tributary of Oak Creek. Possibly drains through a culvert to the tributary.	Wetland boundary was verified to not have changed from 2009.	Wetland area appears that it may be a storm water basin.
W9-8	5	22	19	0.51	NA	NA	SP-45	SP-44	T1-Bw	T-1Au	SM	E2K	MzdB BlA	Morley silt loam, 2 to 6 percent slopes Blount silt loam, 1 to 3 percent slopes	Not hydric Not hydric	Wetland appears to drain through a culvert to wetland W9-6 that abuts an unnamed tributary of Oak Creek.	Wetland boundary was revised to include wetlands contained within roadside ditches near the east end of W9-8. Remainder of wetland was verified to not have changed from 2009.	Wetland appears to be entirely contained within a roadside ditch and storm water swale.
W9-9	5	22	19	0.84	NA	NA	None	None	T1-Bw	T-1Au	SM	None	MzdB2	Morley silt loam, 2 to 6 percent slopes, eroded	Not hydric	Appears to be adjacent and drains to wetland W9-8 that drains through a culvert to an unnamed tributary of Oak Creek.	Wetland boundary was verified to not have changed from 2009.	
W10-1	5	22	30	3.71	NA	NA	SP-49	SP-48	T-1Bw	T-1Au	RPF, RPE	E2K	MmA	Matherton silt loam, 1 to 3 percent slopes	Not hydric	Abuts Oak Creek.	Eastern boundary revised as a result of permitted construction of Bridge over Oak Creek and IH 94 on ramp that filled part of W10-1. Remainder of wetland was verified to have not changed from 2009.	
W10-2	5	22	30	0.4	NA	NA	None	None	T-1Bw	T-1Au	SM, M	E2K	BlA	Blount silt loam, 1 to 3 percent slopes	Not hydric	Surface water appears to drain from wetland area through a culvert to Oak Creek.	Wetland boundary was verified to not have changed from 2009.	

Table 3. Wetland Summary Table

Wetland ID	PLSS Location			Size Within Study Area (Acres)	C-value[1]	FQI vaue[1]	2014 Wetland Sample Point(s)	2014 Adjacent Upland Sample Point(s)	2009 Wetland Sample Point(s)	2009 Adjacent Upland Sample Point(s)	Wetland Plant Community Description(s)[2]	WWI Mapped Wetland(s)	Mapped Wetland Soil Type (Symbol)	Mapped Soil Taxonomic Classification	Mapped Soils Hydric Classification [3]	Comments on Apparent Connectivity to Surface Waters [4]	Comments on Boundary Determination	General Comments
	Township (N)	Range (E)	Section															
W10-3	5	22	30	4.21	NA	NA	SP-4, SP-6, SP-8	SP-3, SP-4, SP-7	T-1Bw	T-1Au	RPE	T3/E2K	AzB MmA AsA Sm	Aztalan loam, 2 to 6 percent slopes Matherton silt loam, 1 to 3 percent slopes Ashkum silty clay loam, 0 to 3 percent slopes Sebewa silt loam	Not hydric Not hydric All hydric All hydric	Abuts Oak Creek.	Wetland boundary revised at southwest corner to include a ditch extending to the south. Northwest & west boundary was revised as a result of permitted construction of an off ramp that filled part of W10-3. The northwest boundary was revised and enlarged. The remainder of W10-3 boundary was verified to not have changed from 2009.	
W10-4	5	22	30	1.56	NA	NA	SP-11	SP-12	None	None	RPE	None	MmA	Matherton silt loam, 1 to 3 percent slopes	Not hydric	Surface water would drain east through culvert to unnamed tributary of Oak Creek.	South wetland boundary was revised to include a swale containing wetlands. East boundary was revised as a result of permitted construction that filled a portion of the eastern side of W10-4. Construction was active at the time of the field investigation and the eastern boundary is anticipated to change as a result.	Active construction taking place along eastern boundary. Boundary likely to change as a result.

[1] A Floristic Quality Assessment was conducted only for wetlands delineated in 20014 and not previously delineated in 2009.

[2] RPF - Riparian wetland (wooded), RPE - Riparian wetland (emergent), M - Wet meadow, SM - Shallow marsh, DM - Deep marsh, AB - Aquatic bed, SS - Shrub scrub, WS - Wooded swamp

[3] "Hydric" means that all components listed for a given map unit are rated as being hydric. "Predominantly hydric" means components that comprise 66 to 99 percent of the map unit are rated as hydric. "Partially hydric" means components that comprise 33 to 66 percent of the map unit are rated as hydric. "Predominantly nonhydric" means components that comprise up to 33 percent of the map unit are rated as hydric. "Nonhydric" means that none of the components are rated as hydric. The assumption here is that all components of the map unit are rated as hydric or nonhydric in the underlying database. A "Not rated or not available" map unit rating is displayed when none of the components within a map unit have been rated.

[4] Comments on connectivity are the professional opinion of the investigator based on general field observations at the time of the field visit and occasionally map resources. The ability to evaluate connectivity in the field may often be limited by public ROW access and private land access limitations. These opinions are subject to change based on further investigation and data availability. These opinions are not a jurisdictional determination nor a significant nexus determination.

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APPENDIX J

Statement of Qualifications

STATEMENT OF QUALIFICATIONS

FIELD INVESTIGATORS:

Ronald A. Londré, M.S., PWS, CE

Mr. Londré has M.S. and B.S. degrees in biological science with focused studies on plant community ecology from UW-Milwaukee and UW-Parkside, respectively. Ron is certified by the Society of Wetland Scientists as a Professional Wetland Scientist (PWS) and the Ecological Society of America as a Certified Ecologist (CE). Ron is also a Certified Wetland Specialist (CWS) in McHenry County and Lake County, Illinois. He has eight years professional experience as an ecological consultant working with natural resources. He specializes in wetland assessments and delineations, wetland and waterway permitting, mitigation site design and monitoring, ecological restoration, water resource studies and management planning, invasive species management, and threatened and endangered species investigations. Previously, Mr. Londré served as a college instructor and research scientist when he taught courses in biological science, environmental science, and botany while conducting research on the forces that structure plant communities and landscape and restoration ecology. Ron has completed the following wetland delineation technical training workshops: Advanced Wetland Delineation Training Workshop provided by the University of Wisconsin-La Crosse in 2013, Critical Methods in Wetland Delineation Workshop provided by the University of Wisconsin-La Crosse in 2013, Regional Supplement Seminar and Field Practicum provided by the Wetland Training Institute in 2012, Basic Wetland Delineation Training Workshop provided by the University of Wisconsin-La Crosse in 2011, and the Wetland Delineation Training Workshop provided by the University of Wisconsin-Milwaukee in 2004.

Geoffrey B. Parish, P.G., P.H.

Mr. Parish is a hydrologist and geologist with M.S. and B.S. degrees in geosciences from the University of Wisconsin-Milwaukee. He has studied wetland hydrology and soils in Wisconsin, and Illinois for almost twenty years. His wetland work has included wetland delineations, wetland mitigation projects, including enhancements, restorations and creations in Wisconsin and Illinois. Mr. Parish has worked on over 200 delineations in Wisconsin in the past two years. He was on a team of scientists that provided expert witness services to the US Department of Justice regarding impacts to a state of Wisconsin owned wetland.