

OMNNI ASSOCIATES, INC.
ONE SYSTEMS DRIVE
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July 8, 2014

Mr. Bryan Learst WisDOT – NE Region 944 Vanderperren Way Green Bay, WI 54304

RE: Wetland delineation report
WisDOT Project 1420-23-00
USH 151, CTH T overpass project
Towns of Fond du Lac and Empire, and City of Fond du Lac
Fond du Lac County, Wisconsin
OMNNI Project E2017B12

Dear Bryan,

This letter and attachments constitute the wetland delineation report for the USH 151/CTH T overpass project in the Towns of Fond du Lac and Empire and the City of Fond du Lac in Fond du Lac County. The WisDOT contact information for the project is Bryan Learst, WisDOT – NE Region, 944 Vanderperren Way, Green Bay, WI 54304; (920) 492-4139; Bryan.Learst@dot.wi.gov.

The construction project extends along CTH T from Country Lane on the west end to CTH K on the east end. (See project location map, topographic maps, and project overview, attached.) The project involves replacing the present at-grade USH 151/CTH T intersection with a CTH T overpass.

No wetland areas were identified along the portion of the project east of USH 151. The topography in that portion of the project slopes continuously downward from east to west.

To the west of USH 151, a stream crosses CTH T, flowing in a northerly direction. A wetland is associated with this stream within the project area. (See view of wetland area, attached.) Areas immediately adjacent to the stream are wooded, while the land further away on both sides of the stream has historically been farmed.

Wetland delineations were performed according to the Northcentral and Northeast Regional Supplement to the 1987 Corps of Engineers Wetland Delineation Manual. Wetland boundaries were established by transects, which included in most cases upland, wetland, and wetland/upland boundary locations. Upland points are indicated by a last letter "U" in the name, boundary points by a last letter "L" (for line), and non-boundary wetland points by a last letter "W".

The field work took place on May 29 – 30 and June 27, 2014. An attempt was made to observe water level measurements at the sampling locations, after allowing an appropriate period of time for water levels to recover. Water table or saturation conditions were not observed in most of the wetland boundary sample locations. Secondary indicators of hydrology were used to identify wetland conditions at wetland locations lacking primary indicators.

The delineation field sheets are attached.

According to the Fond du Lac County, Wisconsin, Soil Survey, the soils in the wetland areas within the project limits consist of Poygan silty clay loam (Py) and Kewaunee silty clay loam (KoB2). Poygan soils are poorly drained soils found in wide depressions on glacial till or lake deposits. Kewaunee soils are well drained soils found on uplands. The soils in wetland area A did not match the Kewaunee mapped description.

Wetland areas drain to the stream, which flows northward to Taycheedah Creek, which in turn flows northward into Lake Winnebago.

Approximately 0.864 acre of degraded meadow (M(D)) and 0.392 acre of degraded wooded riparian wetland (RPF(D)) will be unavoidably impacted by project activities. (See map of impacted areas, attached.)

Respectfully submitted,

Don Brittmacher

Don Brittnacher Wetland Specialist

Attachments

Attachment 1

Maps



Source: Mapquest, reviewed 6/25/2014.



Project Location Map

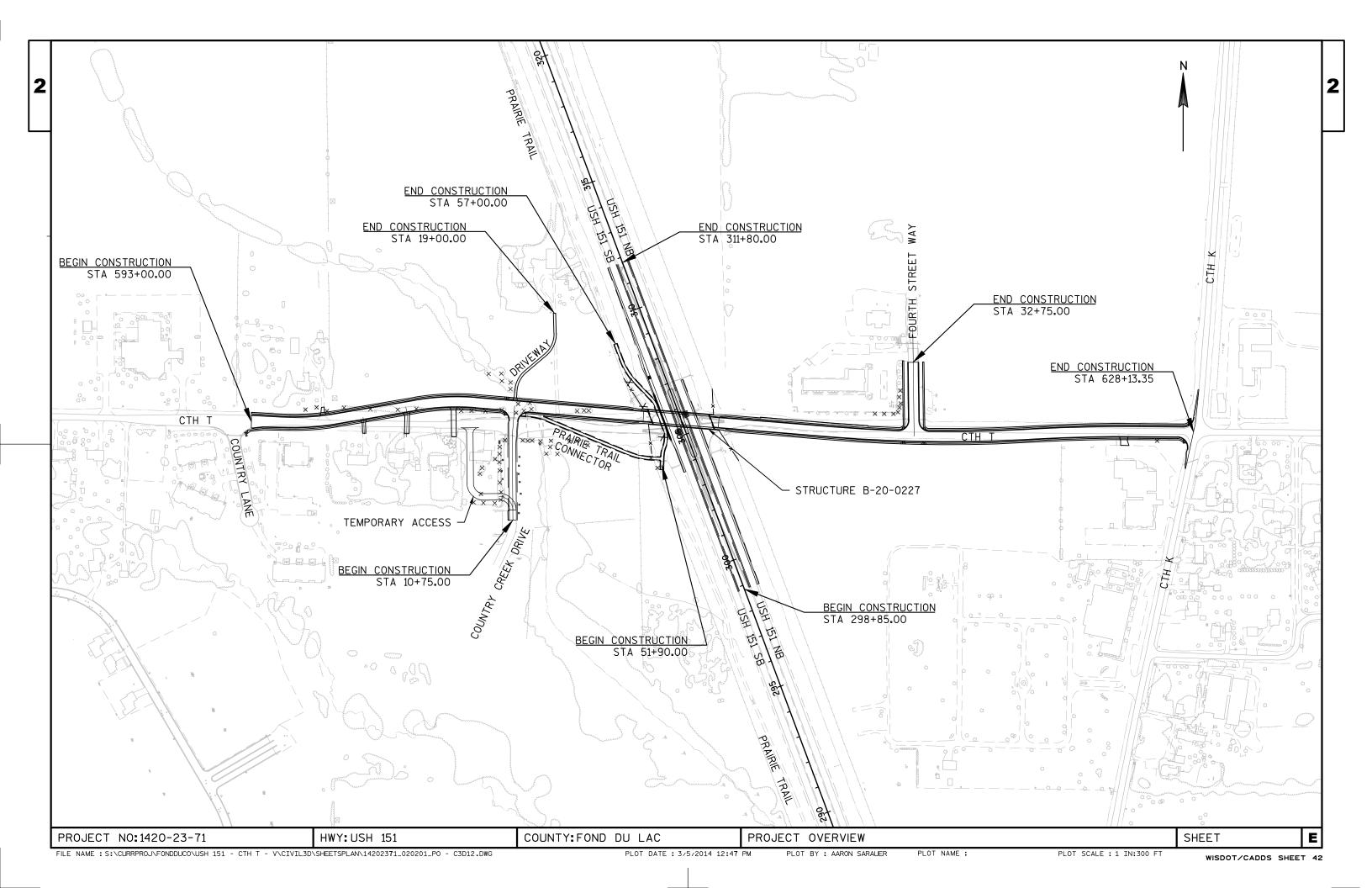
USH 151, CTH T Overpass Project Town of Fond du Lac, Town of Empire, and City of Fond du Lac Fond du Lac County, Wisconsin



Project Number: E2017B12

Date: June 25, 2014

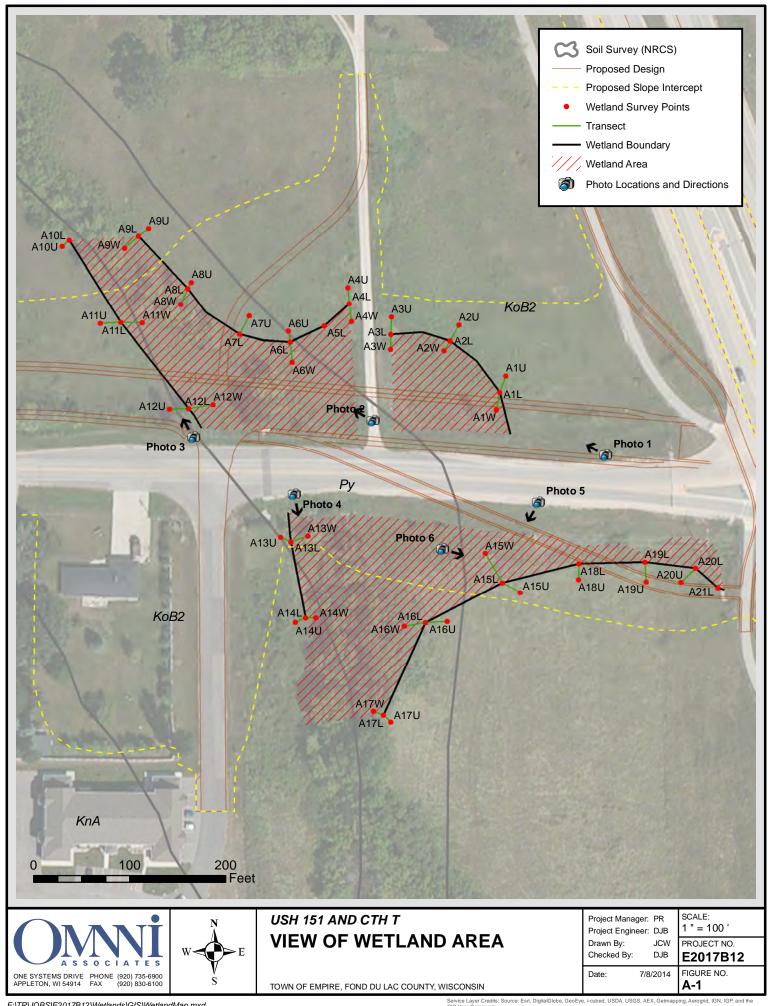
One Systems Drive, Appleton, Wisconsin 54914-1654 Phone: (920) 735-6900 Fax: (920) 830-6100

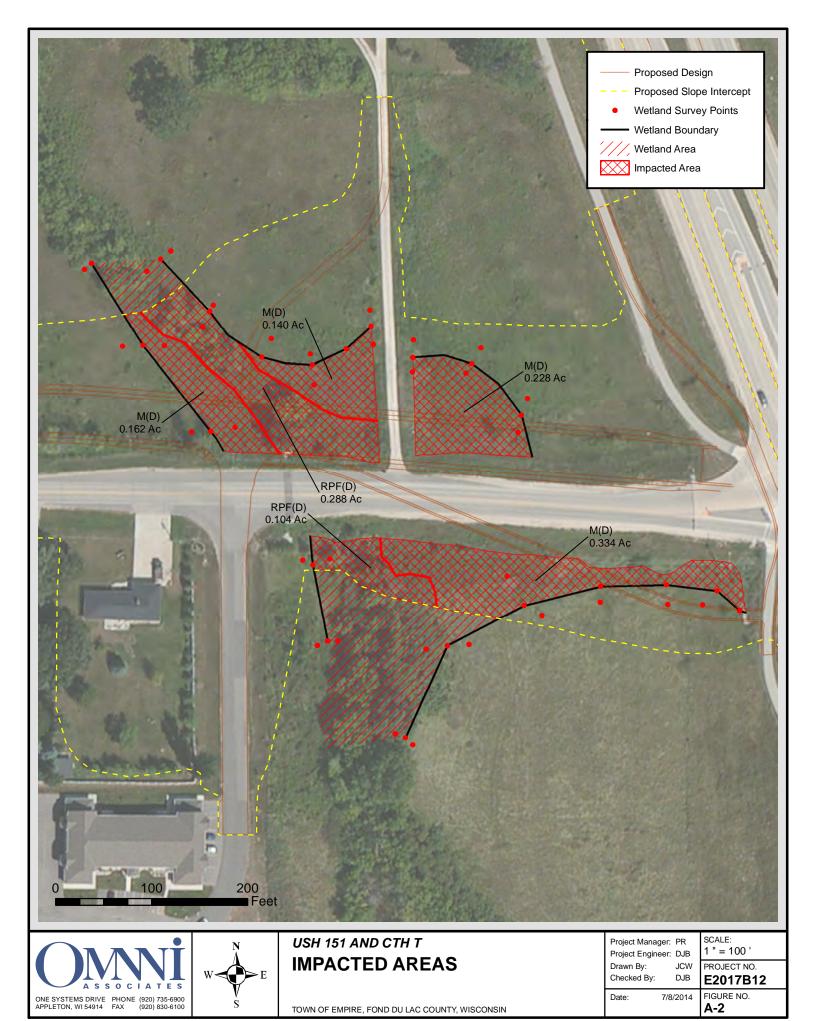


Topographic Maps of Project Area









Attachment 2

Views of Wetland Areas



Photo $1-\mbox{View}$ of portion of wetland area north of CTH T and east of driveway, looking northwest.



Photo 2- View of portion of wetland area north of CTH T and between driveway and stream, looking northwest.



Photo 3 – View of portion of wetland area north of CTH T and west of stream, looking north.



Photo 4-View of portion of wetland area south of CTH T and west of stream, looking south.



Photo 5 – View of portion of wetland area south of CTH T and east of stream, looking southwest towards stream.



Photo 6-View of portion of wetland area south of CTH T and east of stream, looking east towards USH 151.

Attachment 3

Field Sheets

Project/Site: USH 151/CTH T Overpass	City/County Town of Empire / Fond du Lac Sampling Dat 5/29/2014
Applicant/Owner: WisDOT	State: WI Sampling Point: A1L
Investigator(s): Don Brittnacher	Section, Township, Range: Sec. 18, T 15 N, R 18 E
Landform (hillslope, terrace, etc.): hillslope	Local relief (concave, convex, none): concave Slope (%):
Subregion (LRR or MLRA): K / 95A Lat: 43.7693	397 Long: <u>-88.398036</u> Datum: <u>WGS 1984</u>
Soil Map Unit Name: Kewaunee silty clay loam, 2 to 6 percent slo	ppes, eNWI Classification:
Are climatic / hydrologic conditions on the site typical for this time	• • • • • • • • • • • • • • • • • • • •
Are Vegetation: $oldsymbol{ odd}$, Soil $oldsymbol{\square}$, or Hydrology $oldsymbol{\square}$ significantly disturb	rbed? Are "Normal Circumstances" present? Yes No
Are Vegetation: \Box , Soil \Box , or Hydrology \Box naturally problem	atic? (If needed, explain any answers in Remarks.)
SUMMARY OF FINDINGS - Attach site map showing sa	ampling point locations, transects, important features, etc.
Hydrophytic Vegetation Present? ☐ Yes ☐ No Hydric Soil Present? ✓ Yes ☐ No	Is the Sampled Area Within a Wetland? ✓ Yes No
Wetland Hydrology Present? ✓ Yes ☐ No	If yes, optional Wetland Site ID:
Remarks: (Explain alternative procedures here or in a separate	report.)
Sample location in farm field.	
HYDROLOGY	
Wetland Hydrology Indicators:	Secondary Indicators (minimum of two required)
Primary Indicators (minimum of one is required; check all that a	
Surface Water (A1) Water-Stained	
High Water Table (A2)	<u> </u>
Saturation (A3) Marl Deposits	<u> </u>
	Ifide Odor (C1) Crayfish Burrows (C8)
<u> </u>	cospheres on Living Roots (C3) Saturation Visible on Aerial Imagery (C9) Reduced Iron (C4) Stunted or Stressed Plants (D1)
	Reduction in Tilled Soils (C6) Geomorphic Position (D2)
☐ Iron Deposits (B5) ☐ Thin Muck Su	
☐ Inundation Visible on Aerial Imagery (B7) ☐ Other (Explain	
Sparsely Vegetated Concave Surface (B8)	FAC-Neutral Test (D5)
Field Observations:	
Surface Water Present? Yes V No Depth (inche	es):
Water Table Present? ☐ Yes ✓ No Depth (inche	es):
Saturation Present? ☐ Yes ✓ No Depth (inche	es): Wetland Hydrology Present? Ves No
(includes capillary fringe)	
Describe Recorded Data (stream gauge, monitoring well, aerial	photos, previous inspections), if available:
Remarks:	

Sampling Poin	τ:	All	_
---------------	----	-----	---

T 0: : DI : 0:	Absolute % Cover	Dominant Indicator Species? Status	Dominance Test worksheet:
Tree Stratum Plot Size: 1		Opecies: Otatus	Number of Dominant Species That Are OBL, FACW, or FAC:0 (A)
2.			Total Number of Dominant Species Across All Strata: 0 (B)
3			Percent of Dominant Species That Are OBL, FACW, or FAC: 0% (A/E
5			Prevalence Index worksheet:
6.			Total % Cover of: Multiply by:
7			OBL species x 1 =
Sapling/Shrub Stratum Plot Size:	0	= Total Cover	FACW species x 2 =
1			FAC species x 3 =
			FACU species x 4 =
3			UPL species x 5 =
4			Column Totals: (A)
5.			Prevalence Index = B/A =
6			Hydrophytic Vegetation Indicators:
7			Rapid Test for Hydrophytic Vegetation
	0	= Total Cover	☐ Dominance Test is > 50%
Herb Stratum Plot Size:			☐ Prevalence Index is ≤ 3.0¹
1. 2.			Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet.)
3.			Problematic Hydrophytic Vegetation¹ (Explain.)
4.			¹Indicators of hydric soil and wetland hydrology
5.			must be present, unless disturbed or problematic.
6.			Definitions of Vegetation Strata:
7			Tree - Woody plants 3 in. (7.6 cm) or more in diame
9.			at breast height (DBH), regardless of height.
10.			Sapling/shrub - Woody plants less than 3 in. DBH, and greater than 3.28 ft. (1 m) tall.
11 12.			Herb - All herbaceous (non-woody) plants, regardles of size, and woody plants less than 3.28 ft. tall.
	0	= Total Cover	Woody Vines - All woody vines greater than 3.28 ft.
Woody Vine Stratum Plot Size:			height.
1			
2.			1
3.			Hydrophytic Vegetation Yes No
4			Present?
	0	= Total Cover	

SOIL Sampling Point: A1L

Donth	Matrix	e to the	_	dox Featu	res				
Depth (inches)	Color (moist)	%	Color (moist)	%	Type ¹	Loc. ²	Texture	Remarks	
0 - 10	10YR3/2	100			1,700		loam	Hemano	
10 - 16.5	10YR4/1	95	10YR4/6	5		M	clay loam		
16.5 - 18	7.5YR4/4	100		-			clay		
			-	-					
			_,						
	-			-					
			- ·	-					
				-					
¹Type: C=Co	ncentration, D=Deple	etion, RI	M=Reduced Matrix, M	S=Maske	d Sand Gr	ains.	² Location: PL	=Pore Lining, M=Matrix.	
Hydric Soil	Indicators:						Indicators for Proble	ematic Hydric Soils³:	
Histosol (A	A1)		☐ Polyvalue Below	Surface (S8) (LRR F	١,	2 cm Muck (A10) (I	LRR K, L, MLRA 149B)	
☐ Histic Epip	•		MLRA 149B)	`		,		(A16) (LRR K, L, R)	
☐ Black Histi			☐ Thin Dark Surfac	ce (S9) (L	RR R, MLR	A 149B)	5 cm Mucky Peat or Peat (S3) (LRR K, L, R)		
Hydrogen	Sulfide (A4)		Loamy Mucky M	ineral (F1) (LRR K, L	.)	☐ Dark Surface (S7) (LRR K, L)		
Stratified I	Layers (A5)		Loamy Gleyed M	atrix (F2)			Polyvalue Below Su	rface (S8) (LRR K, L)	
Depleted E	Below Dark Surface (A	A11)	✓ Depleted Matrix	(F3)			☐ Thin Dark Surface ((S9) (LRR K, L)	
Thick Dark	Surface (A12)		Redox Dark Surf	ace (F6)			☐ Iron-Manganese Masses (F12) (LRR K, L, R)		
Sandy Mu	cky Mineral (S1)		Depleted Dark S	urface (F	7)		☐ Piedmont Floodplain Soils (F19) (MLRA 149		
Sandy Gle	yed Matrix (S4)		Redox Depression	ns (F8)			☐ Mesic Spodic (TA6) (MLRA 144A, 145, 1498		
☐ Sandy Red	dox (S5)						Red Parent Materia	l (F21)	
Stripped M	1atrix (S6)						☐ Very Shallow Dark Surface (TF12)		
☐ Dark Surfa	ace (S7) (LRR R, MLR	A 149B)					Other (Explain in R	emarks.)	
³ Indicators of	hydrophytic vegetation	on and v	vetland hydrology mu	st be pres	ent, unles	s disturbe	d or problematic.		
	Layer (if observed)			· .					
Type:	, (2230.100)	•							
Depth (inches	s):		_				Hydric Soil Prese	ent? 🗸 Yes 🗌 No	
			-						
Remarks: (Ir	iclude photo numbers	s here o	r on a separate sheet	.)					

Project/Site: USH 151/CTH T Overpass	City/County Town of Empire / Fond du Lac Sampling Dat 5/29/2014				
Applicant/Owner: WisDOT	State: WI Sampling Point: A1U				
Investigator(s): Don Brittnacher	Section, Township, Range: Sec. 18, T 15 N, R 18 E				
Landform (hillslope, terrace, etc.): hillslope	Local relief (concave, convex, none): concave Slope (%):				
Subregion (LRR or MLRA): K / 95A Lat: 43.769444	Long: -88.398011 Datum: WGS 1984				
Soil Map Unit Name: Kewaunee silty clay loam, 2 to 6 percent slopes,	, e NWI Classification:				
Are climatic / hydrologic conditions on the site typical for this time of ye	rear? 🗸 Yes 🗌 No (If no, explain in Remarks.)				
Are Vegetation: $lackim 2$, Soil $lackim 2$, or Hydrology $lackim 2$ significantly disturbed?	? Are "Normal Circumstances" present? Yes No				
Are Vegetation: \Box , Soil \Box , or Hydrology \Box naturally problematic?	(If needed, explain any answers in Remarks.)				
SUMMARY OF FINDINGS - Attach site map showing sampl	ling point locations, transects, important features, etc.				
	the Sampled Area				
Hydric Soil Present? ☐ Yes ✓ No Wit	thin a Wetland?				
Wetland Hydrology Present? ☐ Yes ✓ No If you	es, optional Wetland Site ID:				
Remarks: (Explain alternative procedures here or in a separate repo	rt.)				
Sample location in farm field.					
HYDROLOGY					
Wetland Hydrology Indicators:	Secondary Indicators (minimum of two required)				
Primary Indicators (minimum of one is required; check all that apply)					
☐ Surface Water (A1) ☐ Water-Stained Lea	Surface Soil Cracks (Bb)				
High Water Table (A2) Aquatic Fauna (B1					
Saturation (A3) Marl Deposits (B15)					
Water Marks (B1) Hydrogen Sulfide (·				
l <u> </u>	eres on Living Roots (C3) Saturation Visible on Aerial Imagery (C9)				
☐ Drift Deposits (B3) ☐ Presence of Reduc					
l <u> </u>	ction in Tilled Soils (C6) Geomorphic Position (D2)				
☐ Iron Deposits (B5) ☐ Thin Muck Surface	\cdot , $ \cdot$ \cdot ,				
☐ Inundation Visible on Aerial Imagery (B7) ☐ Other (Explain in F					
Sparsely Vegetated Concave Surface (B8)	FAC-Neutral Test (D5)				
Field Observations:					
Surface Water Present? ☐ Yes ✓ No Depth (inches):					
Water Table Present? ☐ Yes ✓ No Depth (inches):					
Saturation Present? ☐ Yes ✓ No Depth (inches):	Wetland Hydrology Present? ☐ Yes ✓ No				
(includes capillary fringe)					
Describe Recorded Data (stream gauge, monitoring well, aerial photo	os, previous inspections), if available:				
Remarks:					

VEGETATION Use scientific names of plants		Sampling Point: A1U		
To Chushina Blat Cing	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet:
<u>Tree Stratum</u> Plot Size: 1.				Number of Dominant Species That Are OBL, FACW, or FAC: 0 (A)
2.				Total Number of Dominant Species Across All Strata: 0 (B)
3. 4				Percent of Dominant Species That Are OBL, FACW, or FAC: 0% (A/B)
5.				Prevalence Index worksheet:
6.				
7				Total % Cover of: Multiply by:
	0	= Total Co	over	OBL species x 1 =
Sapling/Shrub Stratum Plot Size:				FACW species x 2 =
1				FAC species x 3 =
2				FACU species x 4 =
3				UPL species x 5 =
4				Column Totals: (A) (B)
5.				Prevalence Index = B/A =
6.				Hydrophytic Vegetation Indicators:
7				Rapid Test for Hydrophytic Vegetation
	0	= Total Cov	/er	☐ Dominance Test is > 50%
Herb Stratum Plot Size:				Prevalence Index is ≤ 3.0¹
1.				☐ Morphological Adaptations¹ (Provide supporting
2				data in Remarks or on a separate sheet.)
3.				Problematic Hydrophytic Vegetation¹ (Explain.)
4				¹ Indicators of hydric soil and wetland hydrology
5				must be present, unless disturbed or problematic.
6.				Definitions of Vegetation Strata:
7				_
8.				Tree - Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.
9				Sapling/shrub - Woody plants less than 3 in. DBH, and greater than 3.28 ft. (1 m) tall.
11.				
12.				Herb - All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft. tall.
	0	= Total Co	over	Woody Vines - All woody vines greater than 3.28 ft. in
Woody Vine Stratum Plot Size:				height.
1				
2				l
3.	<u> </u>			Hydrophytic Vegetation Yes No
4.				Present?
	0	= Total Co	over	
Remarks: (Include photo numbers here or on a sep	narate shee			
			l-l planted i	with in the last two years
Vegetation was not assessed, since sample loca	ation is iii a	disturbed lie	la, pioweu v	within the last two years.

SOIL Sampling Point: A1U

Depth	Matrix	c to the	e depth needed to d Red	dox Featu					
(inches)	Color (moist)	%	Color (moist)	%	Type ¹	Loc.2	Texture	Remarks	
0 - 13	10YR3/2	100		11	<u> </u>		loam		
13 - 14.5	10YR3/1	75	10YR4/6	5	С	М	clay loam		
	7.5YR4/4	20							
14.5 - 16	7.5YR4/4	100	10YR4/6	5	С	М	clay		
				11					
				111					
				11					
			_						
				11					
			-						
					· ——				
			-,-	0.0					
¹Type: C=Co	oncentration, D=Dep	letion, RI	M=Reduced Matrix, M	S=Maske	d Sand Gra	ains.	² Location: PL=	=Pore Lining, M=Matrix.	
Hydric Soil	Indicators:						Indicators for Proble	matic Hydric Soils³:	
Histosol (A	A1)		Polyvalue Below	Surface (S8) (LRR R	λ,	☐ 2 cm Muck (A10) (L	RR K, L, MLRA 149B)	
Histic Epip	pedon (A2)		MLRA 149B)				Coast Prairie Redox (A16) (LRR K, L, R)		
Black Histi			Thin Dark Surfac)		
	Sulfide (A4)		Loamy Mucky Mi)	☐ Dark Surface (S7) (LRR K, L)		
	Layers (A5)		Loamy Gleyed M				Polyvalue Below Surface (S8) (LRR K, L)		
	Below Dark Surface ((A11)	☐ Depleted Matrix				☐ Thin Dark Surface (S9) (LRR K, L)		
	k Surface (A12)		Redox Dark Surf		_,		☐ Iron-Manganese Masses (F12) (LRR K, L, R)		
	cky Mineral (S1)		Depleted Dark S	•	/)		☐ Piedmont Floodplain Soils (F19) (MLRA 149B)☐ Mesic Spodic (TA6) (MLRA 144A, 145, 149B)		
Sandy GieSandy Red	yed Matrix (S4)		Redox Depressio	ns (F8)			Red Parent Material (F21)		
	Matrix (S6)						☐ Very Shallow Dark S	• •	
	ace (S7) (LRR R, MLI	RA 149B))				Other (Explain in Remarks.)		
	,	- ,						,	
³ Indicators of	hydrophytic vegetat	ion and v	wetland hydrology mus	st be pres	sent, unless	s disturbe	d or problematic.		
Restrictive	Layer (if observed) :							
Type:			_						
Depth (inches	s):		_				Hydric Soil Prese	nt? ☐ Yes 🗸 No	
Remarks: (Ir	nclude photo number	rs here o	r on a separate sheet.	.)					

Project/Site: USH 151/CTH T Overpass	City/County Town of Empire / Fond du Lac Sampling Dat 5/29/2014				
Applicant/Owner: WisDOT	State: WI Sampling Point: A1W				
Investigator(s): Don Brittnacher	Section, Township, Range: Sec. 18, T 15 N, R 18 E				
Landform (hillslope, terrace, etc.): hillslope	Local relief (concave, convex, none): concave Slope (%):				
Subregion (LRR or MLRA): K / 95A Lat: 43.76934	7 Long: -88.39805 Datum: WGS 1984				
Soil Map Unit Name: Kewaunee silty clay loam, 2 to 6 percent slope	es, e NWI Classification:				
Are climatic / hydrologic conditions on the site typical for this time of	f year? 🗹 Yes 🗌 No (If no, explain in Remarks.)				
Are Vegetation: \Box , Soil \Box , or Hydrology \Box significantly disturbed	ed? Are "Normal Circumstances" present? ✓ Yes ☐ No				
Are Vegetation: \square , Soil \square , or Hydrology \square naturally problemati	ic? (If needed, explain any answers in Remarks.)				
SUMMARY OF FINDINGS - Attach site map showing sam	npling point locations, transects, important features, etc.				
	is the Sampled Area				
Hydric Soil Present? ✓ Yes ☐ No	Within a Wetland?				
Wetland Hydrology Present? ✓ Yes ☐ No I	f yes, optional Wetland Site ID:				
Remarks: (Explain alternative procedures here or in a separate re	port.)				
HYDROLOGY					
Wetland Hydrology Indicators:	Secondary Indicators (minimum of two required)				
Primary Indicators (minimum of one is required; check all that app	□ Surface Soil Cracks (B6)				
Surface Water (A1) Water-Stained L	Leaves (B9)				
High Water Table (A2)					
Saturation (A3) Marl Deposits (E	`				
Water Marks (B1) Hydrogen Sulfid					
	spheres on Living Roots (C3) Saturation Visible on Aerial Imagery (C9)				
☐ Drift Deposits (B3) ☐ Presence of Rec	duced Iron (C4) Stunted or Stressed Plants (D1)				
☐ Algal Mat or Crust (B4) ☐ Recent Iron Rec	duction in Tilled Soils (C6)				
☐ Iron Deposits (B5) ☐ Thin Muck Surfa	ace (C7) Shallow Aquitard (D3)				
☐ Inundation Visible on Aerial Imagery (B7) ☐ Other (Explain i	in Remarks)				
☐ Sparsely Vegetated Concave Surface (B8)	✓ FAC-Neutral Test (D5)				
Field Observations:					
Surface Water Present? ☐ Yes ✓ No Depth (inches)):				
Water Table Present? ☐ Yes ✓ No Depth (inches)):				
Saturation Present? Yes V No Depth (inches) (includes capillary fringe)): Wetland Hydrology Present? ✓ Yes ☐ No				
Describe Recorded Data (stream gauge, monitoring well, aerial ph	notos, previous inspections), if available:				
Remarks:					
nomano.					

Tues Chustoms Dist Cine.	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet:
Tree Stratum Plot Size: 1.	-			Number of Dominant Species That Are OBL, FACW, or FAC:4 (A)
2.				Total Number of Dominant Species Across All Strata: 5 (B)
3. 4				Percent of Dominant Species That Are OBL, FACW, or FAC: 80% (A/B)
5.				Prevalence Index worksheet:
6.				
7.				Total % Cover of: Multiply by: OBL species x 1 =
0 1 (0 1 0 1 0 1 0 1		= Total C	Cover	FACW species x 2 =
Sapling/Shrub Stratum Plot Size:	05	V	E4 0)4/	FAC species x 3 =
1. cornus stolonifera		<u> </u>	FACW	FACU species x 4 =
2. ulmus americana		X	FACW	UPL species x 5 =
3.				Column Totals: (A) (B)
4 5.				Prevalence Index = B/A =
6				
7				Hydrophytic Vegetation Indicators:
	35	= Total Co	ver	Rapid Test for Hydrophytic Vegetation ✓ Dominance Test is > 50%
Herb Stratum Plot Size:				Prevalence Index is $\leq 3.0^{\circ}$
1. phalaris arundinacea	20	X	FACW	Morphological Adaptations¹ (Provide supporting
2. solidago canadensis	10	Х	FACU	data in Remarks or on a separate sheet.)
3.				☐ Problematic Hydrophytic Vegetation¹ (Explain.)
4				¹ Indicators of hydric soil and wetland hydrology
5				must be present, unless disturbed or problematic.
6.				Definitions of Vegetation Strata:
7				
8. 9.				Tree - Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.
10.	<u> </u>			Sapling/shrub - Woody plants less than 3 in. DBH, and greater than 3.28 ft. (1 m) tall.
11 12.				Herb - All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft. tall.
	30	= Total C	Cover	Woody Vines - All woody vines greater than 3.28 ft. in
Woody Vine Stratum Plot Size:				height.
1. vitis riparia	20	X	FAC	
2.				
				Hydrophytic Vegetation ✓ Yes □ No
3.				Present?
3. 4.				

SOIL Sampling Point: A1W

Depth Matrix	Re	dox Featu	ıres				
(inches) Color (moist) %	Color (moist)	%	Type ¹	Loc.2	Texture	Remarks	
0 - 10 10YR3/2 100			-		loam		
10 - 16 10YR4/1 95	10YR4/6	5	D	М	clay loam		
		_					
	_						
		_					
		-					
Type: C=Concentration, D=Depletion, F	RM=Reduced Matrix, M	S=Maske	ed Sand Gr	ains.	² Location: PL	=Pore Lining, M=Matrix.	
lydric Soil Indicators:					Indicators for Proble	matic Hydric Soils ³ :	
Histosol (A1)	Polyvalue Below	Surface (S8) (LRR F	۲,	2 cm Muck (A10) (L	RR K, L, MLRA 149B)	
Histic Epipedon (A2)	MLRA 149B)				Coast Prairie Redox (A16) (LRR K, L, R)		
Black Histic (A3)	☐ Thin Dark Surfac	ce (S9) (L	RR R, MLR	A 149B))		
☐ Hydrogen Sulfide (A4)	Loamy Mucky M	ineral (F1) (LRR K, L	.)	☐ Dark Surface (S7) (LRR K, L)		
Stratified Layers (A5)	Loamy Gleyed M	latrix (F2)	· ·		☐ Polyvalue Below Surface (S8) (LRR K, L)		
Depleted Below Dark Surface (A11)	✓ Depleted Matrix	(F3)			☐ Thin Dark Surface (S9) (LRR K, L)		
Thick Dark Surface (A12)	Redox Dark Surf	ace (F6)			☐ Iron-Manganese Masses (F12) (LRR K, L, R)		
☐ Sandy Mucky Mineral (S1)	Depleted Dark S		7)		☐ Piedmont Floodplain Soils (F19) (MLRA 149		
Sandy Gleyed Matrix (S4)	Redox Depression		,		Mesic Spodic (TA6) (MLRA 144A, 145, 149E		
Sandy Redox (S5)		` ,			Red Parent Material (F21)		
Stripped Matrix (S6)					☐ Very Shallow Dark S	Surface (TF12)	
Dark Surface (S7) (LRR R, MLRA 1498	3)				Other (Explain in Re		
	,					,	
Indicators of hydrophytic vegetation and	wetland hydrology mu	st be pres	sent, unles	s disturbe	d or problematic.		
Restrictive Layer (if observed):							
Type:							
	<u> </u>				Hydric Soil Prese	nt? ✓ Yes No	
Depth (inches):					nyuric Soil Prese	uti A les 140	
Remarks: (Include photo numbers here	or on a separate sheet	.)					

Project/Site: USH 151/CTH T Overpass	City/County Town of Empire / Fond du Lac Sampling Dat 5/29/2014		
Applicant/Owner: WisDOT	State: WI Sampling Point: A2L		
Investigator(s): Don Brittnacher	Section, Township, Range: Sec. 18, T 15 N, R 18 E		
Landform (hillslope, terrace, etc.): hillslope	Local relief (concave, convex, none): concave Slope (%):		
Subregion (LRR or MLRA): K / 95A Lat: 43.76954	43 Long: -88.398231 Datum: WGS 1984		
Soil Map Unit Name: Kewaunee silty clay loam, 2 to 6 percent slop	pes, e NWI Classification:		
Are climatic / hydrologic conditions on the site typical for this time of	of year? 🗹 Yes 🗌 No (If no, explain in Remarks.)		
Are Vegetation: $oldsymbol{arVert}$, Soil \Box , or Hydrology \Box significantly disturb	ped? Are "Normal Circumstances" present? ☐ Yes ✓ No		
Are Vegetation: \square , Soil \square , or Hydrology \square naturally problema	tic? (If needed, explain any answers in Remarks.)		
SUMMARY OF FINDINGS - Attach site map showing san	mpling point locations, transects, important features, etc.		
	Is the Sampled Area		
Hydric Soil Present? ✓ Yes ☐ No	Within a Wetland?		
Wetland Hydrology Present? ✓ Yes ☐ No	If yes, optional Wetland Site ID:		
Remarks: (Explain alternative procedures here or in a separate re	eport.)		
Sample location in farm field.			
HYDROLOGY			
	Secondary Indicators (minimum of two required)		
Wetland Hydrology Indicators: Primary Indicators (minimum of one is required; check all that app			
	Surface Soil Clacks (bb)		
☐ Surface Water (A1) ☐ Water-Stained ☐ High Water Table (A2) ☐ Aquatic Fauna	` ' ` ` '		
☐ High Water Table (A2) ☐ Aquatic Fauna ☐ Saturation (A3) ☐ Marl Deposits (☐ Marl Deposits	_ ` '		
☐ Water Marks (B1) ☐ Hydrogen Sulfin	` ` `		
	spheres on Living Roots (C3) Saturation Visible on Aerial Imagery (C9)		
	educed Iron (C4) Stunted or Stressed Plants (D1)		
	eduction in Tilled Soils (C6) Geomorphic Position (D2)		
☐ Iron Deposits (B5) ☐ Thin Muck Surf	` ' ' ' ' ' ' ' ' ' ' ' ' ' ' ' ' ' ' '		
☐ Inundation Visible on Aerial Imagery (B7) ☐ Other (Explain			
Sparsely Vegetated Concave Surface (B8)	FAC-Neutral Test (D5)		
Field Observations:			
Surface Water Present? ☐ Yes ✓ No Depth (inches	s):		
Water Table Present? ☐ Yes ✓ No Depth (inches	s):		
Saturation Present? Yes V No Depth (inches	s): Wetland Hydrology Present? ✓ Yes No		
(includes capillary fringe)	,		
Describe Recorded Data (stream gauge, monitoring well, aerial pl	hotos, previous inspections), if available:		
Remarks:			

VEGETATION	Use scientific nan	nes of plants
-------------------	--------------------	---------------

Trans Christians - Diet Cine.	Absolute % Cover	Dominant Indicator Species? Status	Dominance Test worksheet:
<u>Tree Stratum</u> Plot Size:	70 00101		Number of Dominant Species That Are OBL, FACW, or FAC: 0 (A)
1.			Total Number of Dominant
2. 3.			Species Across All Strata: 0 (B)
4			Percent of Dominant Species That Are OBL, FACW, or FAC: 0% (A/B)
5			That Are OBE, I AOW, OI I AO. (A/B)
			Prevalence Index worksheet:
7.			Total % Cover of: Multiply by:
	0	= Total Cover	OBL species x 1 =
Sapling/Shrub Stratum Plot Size:			FACW species x 2 =
1.			FAC species x 3 =
2.			FACU species x 4 =
3.			UPL species x 5 =
4.			Column Totals: (A) (B)
5.			Prevalence Index = B/A =
6			Hydrophytic Vegetation Indicators:
7			Rapid Test for Hydrophytic Vegetation
	0	= Total Cover	☐ Dominance Test is > 50%
<u>Herb Stratum</u> Plot Size:			☐ Prevalence Index is ≤ 3.0¹
1. 2.			Morphological Adaptations¹ (Provide supporting
			data in Remarks or on a separate sheet.)
4			Problematic Hydrophytic Vegetation¹ (Explain.)
5			¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
6.			, , ,
7.			Definitions of Vegetation Strata:
8.			Tree - Woody plants 3 in. (7.6 cm) or more in diameter
0			at breast height (DBH), regardless of height.
10.	-		Sapling/shrub - Woody plants less than 3 in. DBH,
· · ·	· ——		and greater than 3.28 ft. (1 m) tall.
11 12.			Herb - All herbaceous (non-woody) plants, regardless
12.	0	= Total Cover	of size, and woody plants less than 3.28 ft. tall.
Woody Vine Stratum Plot Size:		= Total Cover	Woody Vines - All woody vines greater than 3.28 ft. in height.
1.			
n			
3.			Hydrophytic
4			Vegetation
	0	= Total Cover	
B 1 (1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1			
Remarks: (Include photo numbers here or on a se			
Vegetation was not assessed, since sample lo	cation is in a	disturbed field, plowed	within the last two years.

Sampling Point: A2L

SOIL Sampling Point: A2L

Profile Des	scription: (Describ Matrix	e to the	_	l ocumen dox Featu		cator or o	confirm the absence o	f indicators.
(inches)	Color (moist)	%	Color (moist)	%	Type ¹	Loc.2	Texture	Remarks
0 - 3.5	10YR3/2	100			.,,,,,		loam	- Tomane
3.5 - 8	10YR3/2	98	10YR4/6	2	С	M	loam	
8 - 14	10YR4/1	95	10YR4/6	5	D	М	clay loam	_
14 - 17.5	7.5YR4/4	100					clay	
			_					
			_					
				-				
		. ———		-				
			_	-				
					- ——			
			_					
¹Type: C=Co	oncentration, D=Dep	letion, RI	M=Reduced Matrix, M	S=Maske	d Sand Gr	ains.	² Location: PL	=Pore Lining, M=Matrix.
Hydric Soil	Indicators:						Indicators for Proble	ematic Hydric Soils³:
Histosol (A1)		Polyvalue Below	Surface (S8) (LRR F	ξ ,	☐ 2 cm Muck (A10) (I	LRR K, L, MLRA 149B)
Histic Epip	pedon (A2)		MLRA 149B)				☐ Coast Prairie Redox (A16) (LRR K, L, R)	
☐ Black Hist	ic (A3)		☐ Thin Dark Surface (S9) (LRR R, MLRA 149B)			A 149B)	5 cm Mucky Peat or	r Peat (S3) (LRR K, L, R)
Hydrogen	Sulfide (A4)		☐ Loamy Mucky Mineral (F1) (LRR K, L)			.)	☐ Dark Surface (S7) ((LRR K, L)
☐ Stratified	Layers (A5)		Loamy Gleyed M	atrix (F2)			Polyvalue Below Su	rface (S8) (LRR K, L)
Depleted	Depleted Below Dark Surface (A11)		☐ Thin Dark Surface ((S9) (LRR K, L)				
☐ Thick Dar	k Surface (A12)		Redox Dark Surface (F6)				☐ Iron-Manganese Ma	asses (F12) (LRR K, L, R)
☐ Sandy Mu	cky Mineral (S1)		☐ Depleted Dark Surface (F7)			☐ Piedmont Floodplair	n Soils (F19) (MLRA 149B)	
Sandy Gle	☐ Sandy Gleyed Matrix (S4) ☐ Redox Depressions (F8)					☐ Mesic Spodic (TA6)	(MLRA 144A, 145, 149B)	
Sandy Re	dox (S5)						Red Parent Materia	l (F21)
Stripped N	Matrix (S6)						☐ Very Shallow Dark Surface (TF12)	
☐ Dark Surfa	ace (S7) (LRR R, MLI	RA 149B))				Other (Explain in Ro	emarks.)
³ Indicators of	hydrophytic vegetat	ion and	wetland hydrology mu	st be pres	sent, unles	s disturbe	d or problematic.	
Restrictive	Layer (if observed) :						
Type:			_					
Depth (inche	s):		_				Hydric Soil Prese	ent? 🗸 Yes 🗌 No
Remarks: (Ir	nclude photo number	rs here o	r on a separate sheet	.)				

Project/Site: USH 151/CTH T Overpass	City/County Town of Empire / Fond du Lac Sampling Dat 5/29/2014		
Applicant/Owner: WisDOT	State: WI Sampling Point: A2U		
Investigator(s): Don Brittnacher	Section, Township, Range: Sec. 18, T 15 N, R 18 E		
Landform (hillslope, terrace, etc.): hillslope	Local relief (concave, convex, none): concave Slope (%):		
Subregion (LRR or MLRA): K / 95A Lat: 43.769589	9 Long: -88.398196 Datum: WGS 1984		
Soil Map Unit Name: Kewaunee silty clay loam, 2 to 6 percent slope	es, e NWI Classification:		
Are climatic / hydrologic conditions on the site typical for this time of	f year? 🗹 Yes 🗌 No (If no, explain in Remarks.)		
Are Vegetation: $oldsymbol{arnothing}$, Soil \Box , or Hydrology \Box significantly disturbed	ed? Are "Normal Circumstances" present? Yes No		
Are Vegetation: \square , Soil \square , or Hydrology \square naturally problematic			
SUMMARY OF FINDINGS - Attach site map showing sam	pling point locations, transects, important features, etc.		
	s the Sampled Area Yes ✓ No		
Hydric Soil Present? ☐ Yes ✓ No	Vithin a Wetland?		
Wetland Hydrology Present? ☐ Yes ✓ No If	f yes, optional Wetland Site ID:		
Remarks: (Explain alternative procedures here or in a separate rep	port.)		
Sample location in farm field.			
HYDROLOGY			
Wetland Hydrology Indicators:	Secondary Indicators (minimum of two required)		
Primary Indicators (minimum of one is required; check all that appl			
	Surface Soil Cracks (BO)		
☐ Surface Water (A1) ☐ Water-Stained L☐ High Water Table (A2) ☐ Aquatic Fauna (I			
☐ High Water Table (A2) ☐ Aquatic Fauna (I ☐ Saturation (A3) ☐ Marl Deposits (B	<u> </u>		
☐ Water Marks (B1) ☐ Hydrogen Sulfide	`		
_ ` _	pheres on Living Roots (C3) Saturation Visible on Aerial Imagery (C9)		
☐ Drift Deposits (B3) ☐ Presence of Red			
l <u> </u>	duction in Tilled Soils (C6) Geomorphic Position (D2)		
☐ Iron Deposits (B5) ☐ Thin Muck Surfa	\cdot , $ \cdot$,		
☐ Inundation Visible on Aerial Imagery (B7) ☐ Other (Explain in			
Sparsely Vegetated Concave Surface (B8)	FAC-Neutral Test (D5)		
Field Observations:			
Surface Water Present? ☐ Yes ✓ No Depth (inches):	:		
Water Table Present? ☐ Yes ✓ No Depth (inches):	:		
Saturation Present? ☐ Yes ✓ No Depth (inches):	: Wetland Hydrology Present? Yes V No		
(includes capillary fringe)			
Describe Recorded Data (stream gauge, monitoring well, aerial pho	otos, previous inspections), if available:		
Remarks:			

	Absolute	Dominant Indicator	Dominance Test worksho	eet:
ee Stratum Plot Size:	% Cover	Species? Status	- Number of Dominant Specie	es
			That Are OBL, FACW, or FA	AC: 0 (A)
			Total Number of Dominant Species Across All Strata:	0 (B)
			- Percent of Dominant Specie	
			That Are OBL, FACW, or FA	
			Prevalence Index works	heet:
			Total % Cover of:	Multiply by:
	0	= Total Cover	OBL species	x 1 =
pling/Shrub Stratum Plot Size:			FACW species	x 2 =
			FAC species	x 3 =
			FACU species	x 4 =
			UPL species	x 5 =
			Column Totals:	(A) (F
			Prevalence Index = B/A =	
			Hydrophytic Vegetation	Indicators:
			Rapid Test for Hydrophy	tic Vegetation
e <u>rb Stratum</u> Plot Size:	0	= Total Cover	☐ Dominance Test is > 50°	%
			Prevalence Index is ≤ 3.	01
			- Morphological Adaptation	ns¹ (Provide supporting
			data in Remarks or on a	separate sheet.)
			Problematic Hydrophytic	Vegetation¹ (Explain.)
			¹Indicators of hydric soil an	
			must be present, unless dis	turbed or problematic.
			Definitions of Vegetation	ı Strata:
			-	
			Tree - Woody plants 3 in. (7 at breast height (DBH), rega	
			Sapling/shrub - Woody plan	
			and greater than 3.28 ft. (1	
•			Herb - All herbaceous (non-	woody) plants regardless
·			of size, and woody plants le	
	0	= Total Cover	Woody Vines - All woody vir	nes greater than 3.28 ft. ir
oody Vine Stratum Plot Size:			height.	
			_	
			<u>.</u>	
			Hydrophytic Vegetation Yes	□ No
			Present?	⊔ NO
	0	= Total Cover	-	

SOIL Sampling Point: A2U

Depth Matrix		Redox Features		
(inches)	Color (moist) %		Z. ² Texture Remarks	
0 - 9	10YR3/2 10	<u> </u>	loam 	
9 - 12.5	10YR4/1 10	0	clay loam	
12.5 - 18	7.5YR4/4 10	0	clay	
				
			-	
			-	
			-	
Type: C=Coi	ncentration, D=Depletion,	RM=Reduced Matrix, MS=Masked Sand Grains.	² Location: PL=Pore Lining, M=Matrix.	
lydric Soil I	Indicators:		Indicators for Problematic Hydric Soils ³ :	
Histosol (A	A1)	Polyvalue Below Surface (S8) (LRR R,	2 cm Muck (A10) (LRR K, L, MLRA 149B)	
Histic Epipe	edon (A2)	MLRA 149B)	☐ Coast Prairie Redox (A16) (LRR K, L, R)	
☐ Black Histic (A3) ☐ Thin Dark Surface (S9) (LRR R, MLR		☐ Thin Dark Surface (S9) (LRR R, MLRA 149	B) \Box 5 cm Mucky Peat or Peat (S3) (LRR K, L, R)	
Hydrogen S	Hydrogen Sulfide (A4)		☐ Dark Surface (S7) (LRR K, L)	
Stratified Layers (A5)		Loamy Gleyed Matrix (F2)	Polyvalue Below Surface (S8) (LRR K, L)	
Depleted Below Dark Surface (A11) Depleted Matrix (F3)			☐ Thin Dark Surface (S9) (LRR K, L)	
_	Surface (A12)	Redox Dark Surface (F6)	☐ Iron-Manganese Masses (F12) (LRR K, L, R)	
Sandy Mucky Mineral (S1)		Depleted Dark Surface (F7)	Piedmont Floodplain Soils (F19) (MLRA 1498	
_ Sandy Gley ☐ Sandy Red	yed Matrix (S4)	Redox Depressions (F8)		
Stripped M			☐ Very Shallow Dark Surface (TF12)	
	ace (S7) (LRR R, MLRA 14)	98)	Other (Explain in Remarks.)	
	(27) (2.00.10)	,-,		
Indicators of	hydrophytic vegetation ar	d wetland hydrology must be present, unless distu	rbed or problematic.	
Restrictive L	Layer (if observed):			
Гуре:				
	s):		Hydric Soil Present? ☐ Yes 🗸 No	
Depth (inches				
Depth (inches	clude photo numbers here	or on a congrate cheet)		

Project/Site: USH 151/CTH T Overpass	City/County Town of Empire / Fond du Lac Sampling Dat 5/29/2014			
Applicant/Owner: WisDOT	State: WI Sampling Point: A2W			
Investigator(s): Don Brittnacher	Section, Township, Range: Sec. 18, T 15 N, R 18 E			
Landform (hillslope, terrace, etc.): hillslope	Local relief (concave, convex, none): concave Slope (%):			
Subregion (LRR or MLRA): K / 95A Lat: 43.769517	Long: -88.398255 Datum: WGS 1984			
Soil Map Unit Name: Kewaunee silty clay loam, 2 to 6 percent slopes	s, e NWI Classification:			
Are climatic / hydrologic conditions on the site typical for this time of	year? 🗹 Yes 🗌 No (If no, explain in Remarks.)			
Are Vegetation: $lackim Q$, Soil \Box , or Hydrology \Box significantly disturbed	d? Are "Normal Circumstances" present? ☐ Yes 🗸 No			
Are Vegetation: \Box , Soil \Box , or Hydrology \Box naturally problematic	? (If needed, explain any answers in Remarks.)			
SUMMARY OF FINDINGS - Attach site map showing samp	pling point locations, transects, important features, etc.			
	the Sampled Area			
Hydric Soil Present? ✓ Yes ☐ No	ithin a Wetland?			
Wetland Hydrology Present? ✓ Yes No If	yes, optional Wetland Site ID:			
Remarks: (Explain alternative procedures here or in a separate rep	ort.)			
Sample location in farm field.				
HYDROLOGY				
Wetland Hydrology Indicators:	Secondary Indicators (minimum of two required)			
Primary Indicators (minimum of one is required; check all that apply				
Surface Water (A1) Water-Stained Le	Surface Soil Clacks (50)			
High Water Table (A2) Aquatic Fauna (B				
Saturation (A3) Marl Deposits (B:				
☐ Water Marks (B1) ☐ Hydrogen Sulfide	<u> </u>			
	wheres on Living Roots (C3) Saturation Visible on Aerial Imagery (C9)			
☐ Drift Deposits (B3) ☐ Presence of Redu	_			
	uction in Tilled Soils (C6) Geomorphic Position (D2)			
☐ Iron Deposits (B5) ☐ Thin Muck Surface	` '			
Inundation Visible on Aerial Imagery (B7) Other (Explain in				
Sparsely Vegetated Concave Surface (B8)	FAC-Neutral Test (D5)			
Field Observations:				
Surface Water Present?				
Water Table Present? ☐ Yes ✓ No Depth (inches):				
Saturation Present? ☐ Yes ✓ No Depth (inches): (includes capillary fringe)	Wetland Hydrology Present? ✓ Yes ☐ No			
Describe Recorded Data (stream gauge, monitoring well, aerial pho	otos, previous inspections), if available:			
Remarks:				

VEGETATION Use scientific names of plants	Abaduta	Deminent Indicator	Sampling Point: A2W
Tree Stratum Plot Size:	Absolute % Cover	Dominant Indicator Species? Status	Dominance Test worksheet:
1.			Number of Dominant Species That Are OBL, FACW, or FAC: 0 (A)
2.			Total Number of Dominant Species Across All Strata: 0 (B)
3.			Percent of Dominant Species That Are OBL, FACW, or FAC: 0% (A/B)
5.			Prevalence Index worksheet:
6			Total % Cover of: Multiply by:
7			OBL species x 1 =
C. " (Charle Charles Dist Cine)	0	= Total Cover	FACW species x 2 =
Sapling/Shrub Stratum Plot Size:			FAC species x 3 =
1.			FACU species x 4 =
2. 3.			UPL species x 5 =
			Column Totals: (A) (B)
-			Prevalence Index = B/A =
6.			Hydrophytic Vegetation Indicators:
7.			Rapid Test for Hydrophytic Vegetation
·	0	= Total Cover	Dominance Test is > 50%
Herb Stratum Plot Size:			Prevalence Index is ≤ 3.0¹
1			
2.			 Morphological Adaptations¹ (Provide supporting data in Remarks or on a separate sheet.)
3.			Problematic Hydrophytic Vegetation ¹ (Explain.)
4.			¹Indicators of hydric soil and wetland hydrology
5			must be present, unless disturbed or problematic.
6.			Definitions of Vegetation Strata:
7			Definitions of Vegetation Strata.
8			Tree - Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.
9			
10			Sapling/shrub - Woody plants less than 3 in. DBH, and greater than 3.28 ft. (1 m) tall.
11			, ,
12			Herb - All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft. tall.
	0	= Total Cover	Woody Vines - All woody vines greater than 3.28 ft. in
Woody Vine Stratum Plot Size:			height.
1			
2			
3			Hydrophytic Vegetation Yes No
4			Present?
	0	= Total Cover	

SOIL Sampling Point: A2W

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.								
Depth	Matrix		Redox Features				_	
(inches) 0 - 5	Color (moist) 10YR3/2	% 100	Color (moist)	%	Type ¹	Loc. ²	Texture	Remarks
5 - 12.5	10YR3/2 10YR4/1	98	10YR4/6				loam clay loam	
		. —			- ——			_
12.5 - 15.5	7.5YR4/4	100					clay	_
İ								
					-			_
		• ———	-	-				_
		• •	-	-				
				-				
			_					
	-) (_
		•	-	-				_
			-					_
¹Type: C=Co	oncentration, D=Depl	letion, RI	M=Reduced Matrix, M	S=Maske	d Sand Gr	ains.	² Location: PL=	=Pore Lining, M=Matrix.
Hydric Soil Indicators:						Indicators for Problem	matic Hydric Soils³:	
Histosol (A1)	Polyvalue Below Surface (S8) (LRR R,				2 cm Muck (A10) (L	RR K, L, MLRA 149B)	
☐ Histic Epip	pedon (A2)	MLRA 149B)				Coast Prairie Redox (A16) (LRR K, L, R)		
☐ Black Histic (A3)			☐ Thin Dark Surface (S9) (LRR R, MLRA 149B)				☐ 5 cm Mucky Peat or Peat (S3) (LRR K, L, R)	
☐ Hydrogen Sulfide (A4)			Loamy Mucky Mineral (F1) (LRR K, L)				☐ Dark Surface (S7) (LRR K, L)	
Stratified	Layers (A5)	☐ Loamy Gleyed Matrix (F2)				Polyvalue Below Surface (S8) (LRR K, L)		
Depleted Below Dark Surface (A11)			✓ Depleted Matrix (F3)				☐ Thin Dark Surface (S9) (LRR K, L)	
☐ Thick Dark Surface (A12)			Redox Dark Surface (F6)				☐ Iron-Manganese Masses (F12) (LRR K, L, R)	
☐ Sandy Mucky Mineral (S1)			☐ Depleted Dark Surface (F7)				☐ Piedmont Floodplain Soils (F19) (MLRA 149B)	
Sandy Gle	eyed Matrix (S4)	Redox Depressions (F8)				Mesic Spodic (TA6) (MLRA 144A, 145, 149B)		
☐ Sandy Redox (S5)							Red Parent Material (F21)	
Stripped Matrix (S6)						☐ Very Shallow Dark Surface (TF12)		
☐ Dark Surface (S7) (LRR R, MLRA 149B)						☐ Other (Explain in Remarks.)		
3Indicators of	hvdrophytic vegetat	ion and v	vetland hydrology mu	st he nres	sent unles	s disturbe	d or problematic	
	Layer (if observed			, , , , , , , , , , , , , , , , , , ,			, 	
Depth (inches):						Hydric Soil Preser	nt? ✓ Yes No	
	·		_				,	
Remarks: (Include photo numbers here or on a separate sheet.)								
1								

Project/Site: USH 151/CTH T Overpass	City/County Town of Empire / Fond du Lac Sampling Dat 5/29/2014
Applicant/Owner: WisDOT	State: WI Sampling Point: A3L
Investigator(s): Don Brittnacher	Section, Township, Range: Sec. 18, T 15 N, R 18 E
Landform (hillslope, terrace, etc.): hillslope	Local relief (concave, convex, none): concave Slope (%):
Subregion (LRR or MLRA): K / 95A Lat: 43.769562	2 Long: -88.398465 Datum: WGS 1984
Soil Map Unit Name: Kewaunee silty clay loam, 2 to 6 percent slope	es, e NWI Classification:
Are climatic / hydrologic conditions on the site typical for this time of	f year? 🗹 Yes 🗌 No (If no, explain in Remarks.)
Are Vegetation: $lackim Q$, Soil \Box , or Hydrology \Box significantly disturbe	ed? Are "Normal Circumstances" present? ☐ Yes 🗸 No
Are Vegetation: \square , Soil \square , or Hydrology \square naturally problematic	c? (If needed, explain any answers in Remarks.)
SUMMARY OF FINDINGS - Attach site map showing sam	pling point locations, transects, important features, etc.
	s the Sampled Area
Hydric Soil Present? ✓ Yes ☐ No	Vithin a Wetland?
Wetland Hydrology Present? ✓ Yes ☐ No If	f yes, optional Wetland Site ID:
Remarks: (Explain alternative procedures here or in a separate rep	port.)
Sample location in farm field.	
HYDROLOGY	
Wetland Hydrology Indicators:	Secondary Indicators (minimum of two required)
Primary Indicators (minimum of one is required; check all that appl	
Surface Water (A1) Water-Stained Lo	Surface Soil Cracks (BO)
High Water Table (A2) Aquatic Fauna (B	
Saturation (A3) Marl Deposits (B	_ ` '
☐ Water Marks (B1) ☐ Hydrogen Sulfide	<u> </u>
	pheres on Living Roots (C3) Saturation Visible on Aerial Imagery (C9)
☐ Drift Deposits (B3) ☐ Presence of Red	
	luction in Tilled Soils (C6) Geomorphic Position (D2)
☐ Iron Deposits (B5) ☐ Thin Muck Surfa	, ,
☐ Inundation Visible on Aerial Imagery (B7) ☐ Other (Explain in	
Sparsely Vegetated Concave Surface (B8)	FAC-Neutral Test (D5)
Field Observations:	
Surface Water Present?	:
Water Table Present? ☐ Yes ☑ No Depth (inches):	:
Saturation Present?	: Wetland Hydrology Present? 🗸 Yes 🗌 No
Describe Recorded Data (stream gauge, monitoring well, aerial pho	otos, previous inspections), if available:
Remarks:	

VEGETATION	Use scientific	names of	plants
------------	----------------	----------	--------

Tree Stratum Plot Size:	Absolute % Cover	Dominant Indicator Species? Status	Dominance Test worksheet:
	70 0010.		Number of Dominant Species That Are OBL, FACW, or FAC: 0 (A)
1.			That Are OBL, FACW, or FAC:0 (A) Total Number of Dominant
2.			Species Across All Strata: 0 (B)
3.			Percent of Dominant Species
4			That Are OBL, FACW, or FAC:0% (A/B)
5.			Prevalence Index worksheet:
6. 7.			Total % Cover of: Multiply by:
7.		= Total Cover	OBL species x 1 =
Sapling/Shrub Stratum Plot Size:		= Total Cover	FACW species x 2 =
1.			FAC species x 3 =
2			FACU species x 4 =
3.			UPL species x 5 =
4.			Column Totals: (A) (B)
5.			Prevalence Index = B/A =
6.			Hydrophytic Vegetation Indicators:
7.			Rapid Test for Hydrophytic Vegetation
	0	= Total Cover	Dominance Test is > 50%
<u>Herb Stratum</u> Plot Size:			Prevalence Index is ≤ 3.0¹
1			☐ Morphological Adaptations¹ (Provide supporting
2.			data in Remarks or on a separate sheet.)
3.			Problematic Hydrophytic Vegetation¹ (Explain.)
4.			¹ Indicators of hydric soil and wetland hydrology
5			must be present, unless disturbed or problematic.
6.			Definitions of Vegetation Strata:
7.			
8.			Tree - Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.
9.	_		Sapling/shrub - Woody plants less than 3 in. DBH,
10.			and greater than 3.28 ft. (1 m) tall.
11.			Herb - All herbaceous (non-woody) plants, regardless
12.			of size, and woody plants less than 3.28 ft. tall.
	0	= Total Cover	Woody Vines - All woody vines greater than 3.28 ft. in
Woody Vine Stratum Plot Size:			height.
1.			
2			Hydrophytic
3			Vegetation
4			Present?
	0	= Total Cover	
Remarks: (Include photo numbers here or on a s	eparate shee	t.)	
Vegetation was not assessed, since sample lo	ocation is in a	disturbed field, plowed	within the last two years.

Sampling Point: A3L

SOIL Sampling Point: A3L

		e to the	_			cator or o	confirm the absence of	f indicators.
Depth (inches)	Matrix			dox Featu				
0 - 5	Color (moist)	100	Color (moist)	%	Type ¹	Loc. ²	Texture loam	Remarks
5 - 11	10 YR3/2 10 YR3/1	95	10YR4/6	5			loam	
			10184/6	- 		IVI		
11 - 18	10YR4/1	100	_				clay loam	
				_				
		-	-	-				
			-	-				
			_	-				
			_					
¹Type: C=Co	oncentration, D=Depl	etion, RI	M=Reduced Matrix, M	S=Maske	d Sand Gr	ains.	² Location: PL:	=Pore Lining, M=Matrix.
Hydric Soil	Indicators:						Indicators for Proble	matic Hydric Soils³:
Histosol (A1)		☐ Polyvalue Below	Surface (S8) (LRR F	₹,	2 cm Muck (A10) (L	.RR K, L, MLRA 149B)
	pedon (A2)		MLRA 149B)	· ·	, ,	•		(A16) (LRR K, L, R)
☐ Black Hist	ic (A3)		☐ Thin Dark Surfac	ce (S9) (L	RR R, MLR	A 149B)	5 cm Mucky Peat or	Peat (S3) (LRR K, L, R)
Hydrogen	Sulfide (A4)		Loamy Mucky M	ineral (F1) (LRR K, L	_)	☐ Dark Surface (S7) (LRR K, L)
Stratified	Layers (A5)		Loamy Gleyed M	latrix (F2)			Polyvalue Below Sur	rface (S8) (LRR K, L)
☐ Depleted	Below Dark Surface (A11)	Depleted Matrix	(F3)			☐ Thin Dark Surface (S9) (LRR K, L)
☐ Thick Dar	k Surface (A12)		✓ Redox Dark Surf	ace (F6)			☐ Iron-Manganese Ma	esses (F12) (LRR K, L, R)
☐ Sandy Mu	cky Mineral (S1)		☐ Depleted Dark S	urface (F7	7)		☐ Piedmont Floodplair	n Soils (F19) (MLRA 149B)
Sandy Gle	eyed Matrix (S4)		Redox Depression	ons (F8)			☐ Mesic Spodic (TA6)	(MLRA 144A, 145, 149B)
Sandy Re	dox (S5)						Red Parent Material	(F21)
Stripped N	Matrix (S6)						☐ Very Shallow Dark S	Surface (TF12)
☐ Dark Surfa	ace (S7) (LRR R, MLF	RA 149B)					Other (Explain in Re	emarks.)
³ Indicators of	hydrophytic vegetati	ion and v	vetland hydrology mu	st be pres	sent, unles	s disturbe	d or problematic.	
Restrictive	Layer (if observed):						
Type:			_					
Depth (inche	s):		<u></u>				Hydric Soil Prese	nt? ✓ Yes 🗌 No
Remarks: (Ir	nclude photo number	s here o	r on a separate sheet	.)			,	
,	·		·	,				

Project/Site: USH 151/CTH T Overpass	City/County Town of Empire / Fond du Lac Sampling Dat 5/29/2014
Applicant/Owner: WisDOT	State: WI Sampling Point: A3U
Investigator(s): Don Brittnacher	Section, Township, Range: Sec. 18, T 15 N, R 18 E
Landform (hillslope, terrace, etc.): hillslope	Local relief (concave, convex, none): concave Slope (%):
Subregion (LRR or MLRA): K / 95A Lat: 43.769612	Long: -88.398463 Datum: WGS 1984
Soil Map Unit Name: Kewaunee silty clay loam, 2 to 6 percent slopes	s, e NWI Classification:
Are climatic / hydrologic conditions on the site typical for this time of y	year? ✓ Yes No (If no, explain in Remarks.)
Are Vegetation: $lackim Q$, Soil $lackim$, or Hydrology $lackim$ significantly disturbed	? Are "Normal Circumstances" present? ☐ Yes ✓ No
Are Vegetation: \Box , Soil \Box , or Hydrology \Box naturally problematic?	? (If needed, explain any answers in Remarks.)
SUMMARY OF FINDINGS - Attach site map showing samp	ling point locations, transects, important features, etc.
	the Sampled Area
Hydric Soil Present? ☐ Yes ✓ No Wit	thin a Wetland?
Wetland Hydrology Present? ☐ Yes ✔ No If y	yes, optional Wetland Site ID:
Remarks: (Explain alternative procedures here or in a separate repo	ort.)
Sample location in farm field.	
HYDROLOGY	
	Cocondow Indicators (asining use of the appring
Wetland Hydrology Indicators:	Secondary Indicators (minimum of two required)
Primary Indicators (minimum of one is required; check all that apply	Surface Soil Clacks (Bb)
Surface Water (A1) Water-Stained Lea	` '
☐ High Water Table (A2) ☐ Aquatic Fauna (B1	
Saturation (A3) Marl Deposits (B1	_ '
Water Marks (B1) Hydrogen Sulfide	
	neres on Living Roots (C3) Saturation Visible on Aerial Imagery (C9)
☐ Drift Deposits (B3) ☐ Presence of Redu	
	ction in Tilled Soils (C6) Geomorphic Position (D2)
☐ Iron Deposits (B5) ☐ Thin Muck Surface	
☐ Inundation Visible on Aerial Imagery (B7) ☐ Other (Explain in	Remarks)
Sparsely Vegetated Concave Surface (B8)	FAC-Neutral Test (D5)
Field Observations:	
Surface Water Present? Yes V No Depth (inches):	·
Water Table Present?	
Saturation Present? Yes V No Depth (inches): (includes capillary fringe)	Wetland Hydrology Present? ☐ Yes ✓ No
Describe Recorded Data (stream gauge, monitoring well, aerial phot	os, previous inspections), if available:
Remarks:	

ree Stratum Plot Size:	Absolute % Cover	Dominant Indicator Species? Status	Dominance Test workshee	Æ:
			Number of Dominant Species That Are OBL, FACW, or FAC	
·			Total Number of Dominant	C: (A)
-			- Species Across All Strata:	0 (B)
			Percent of Dominant Species That Are OBL, FACW, or FAC	
			Prevalence Index workshe	_ et:
			Total % Cover of:	Multiply by:
·			OBL species	x 1 =
Sapling/Shrub Stratum Plot Size:	0	= Total Cover	FACW species	x 2 =
			FAC species	x 3 =
			FACU species	x 4 =
			UPL species	x 5 =
-			Column Totals:	(A) (
i.			Prevalence Index = B/A =	
			Hydrophytic Vegetation In	idicators:
			Rapid Test for Hydrophytic	
	0	= Total Cover	☐ Dominance Test is > 50%	-3
derb Stratum Plot Size:			☐ Prevalence Index is ≤ 3.0¹	
			- Morphological Adaptations	¹ (Provide supporting
2.			data in Remarks or on a se	•
3			Problematic Hydrophytic Ve	
l			Indicators of hydric soil and must be present, unless disturbed.	
j			·	
S			Definitions of Vegetation S	Strata:
			Tree - Woody plants 3 in. (7.6	cm) or more in diame
o. 9.			at breast height (DBH), regard	
			Sapling/shrub - Woody plants	
-			and greater than 3.28 ft. (1 m	i) tali.
11 12.			Herb - All herbaceous (non-wo	
		= Total Cover	of size, and woody plants less	
Woody Vine Stratum Plot Size:			Woody Vines - All woody vines height.	3 greater than 3.20 it. i
2.				
3.			Hydrophytic	
i.			Vegetation Yes Present?	□ No
· ·	0	= Total Cover	•	
		- 1010. 411.		

SOIL Sampling Point: A3U

	cription: (Describ	e to the	_	ocumen		cator or o	confirm the absence of	f indicators.
Depth (inches)	Color (moist)	%	Color (moist)	%	Type ¹	Loc. ²	Texture	Remarks
0 - 14	10YR3/2	100	Color (moist)				loam	Hemans
14 - 17.5	10YR4/1	100	_				clay loam	
17.5 - 18.5	10YR3/1	100			- 		clay loam	
17.0 10.0			_				- Clay loan	
		-						
			-					
		-			· ——			
		-			· ——			
¹Type: C=Co	oncentration, D=Dep	letion, RI	M=Reduced Matrix, M	S=Maske	ed Sand Gra	ains.	² Location: PL:	=Pore Lining, M=Matrix.
Hydric Soil	Indicators:						Indicators for Proble	matic Hydric Soils³:
☐ Histosol (A	A1)		Polyvalue Below	Surface (S8) (LRR R	ζ,	2 cm Muck (A10) (L	.RR K, L, MLRA 149B)
☐ Histic Epip	pedon (A2)		MLRA 149B)				Coast Prairie Redox	(A16) (LRR K, L, R)
☐ Black Histi	ic (A3)		☐ Thin Dark Surfac	e (S9) (L	RR R, MLR	A 149B)	5 cm Mucky Peat or	Peat (S3) (LRR K, L, R)
Hydrogen	Sulfide (A4)		Loamy Mucky Mi	neral (F1) (LRR K, L)	☐ Dark Surface (S7) (LRR K, L)
Stratified I	Layers (A5)		Loamy Gleyed M	atrix (F2))		Polyvalue Below Sur	rface (S8) (LRR K, L)
Depleted I	Below Dark Surface	(A11)	Depleted Matrix	(F3)			☐ Thin Dark Surface (S9) (LRR K, L)
☐ Thick Dark	k Surface (A12)		Redox Dark Surf	ace (F6)			☐ Iron-Manganese Ma	sses (F12) (LRR K, L, R)
Sandy Mu	cky Mineral (S1)		Depleted Dark S	urface (F	7)		☐ Piedmont Floodplair	n Soils (F19) (MLRA 149B)
Sandy Gle	yed Matrix (S4)		Redox Depression	ns (F8)			☐ Mesic Spodic (TA6)	(MLRA 144A, 145, 149B)
Sandy Rec	dox (S5)						Red Parent Material	(F21)
☐ Stripped M	latrix (S6)						☐ Very Shallow Dark S	Surface (TF12)
☐ Dark Surfa	ace (S7) (LRR R, ML	RA 149B))				Other (Explain in Re	emarks.)
3Indicators of	hydrophytic vegetat	tion and	wetland hydrology mu	st be pres	sent, unless	s disturbe	d or problematic.	
Restrictive	Layer (if observed	I):						
Type:	.,.	_						
Depth (inches			_				Hydric Soil Prese	nt? Yes ✔ No
	·			`				
Remarks: (Ir	nclude photo numbe	rs nere o	r on a separate sheet	.)				

Project/Site: USH 151/CTH T Overpass	City/County Town of Empire / Fond du Lac Sampling Dat 5/29/2014
Applicant/Owner: WisDOT	State: WI Sampling Point: A3W
Investigator(s): Don Brittnacher	Section, Township, Range: Sec. 18, T 15 N, R 18 E
Landform (hillslope, terrace, etc.): hillslope	Local relief (concave, convex, none): concave Slope (%):
Subregion (LRR or MLRA): K / 95A Lat: 43.76952	Long: -88.398466 Datum: WGS 1984
Soil Map Unit Name: Kewaunee silty clay loam, 2 to 6 percent slopes	s, e NWI Classification:
Are climatic / hydrologic conditions on the site typical for this time of	year? 🗹 Yes 🗌 No (If no, explain in Remarks.)
Are Vegetation: $lackim Q$, Soil \Box , or Hydrology \Box significantly disturbed	d? Are "Normal Circumstances" present? ☐ Yes 🗸 No
Are Vegetation: \square , Soil \square , or Hydrology \square naturally problematic	:? (If needed, explain any answers in Remarks.)
SUMMARY OF FINDINGS - Attach site map showing samp	pling point locations, transects, important features, etc.
	the Sampled Area
Hydric Soil Present? ✓ Yes ☐ No	ithin a Wetland?
Wetland Hydrology Present? ✓ Yes No If	yes, optional Wetland Site ID:
Remarks: (Explain alternative procedures here or in a separate rep	ort.)
Sample location in farm field.	
HYDROLOGY	
Wetland Hydrology Indicators:	Secondary Indicators (minimum of two required)
Primary Indicators (minimum of one is required; check all that apply	
☐ Surface Water (A1) ☐ Water-Stained Le	Surface Soil Clacks (50)
☐ High Water Table (A2) ☐ Aquatic Fauna (B	
Saturation (A3) Marl Deposits (B:	
☐ Water Marks (B1) ☐ Hydrogen Sulfide	·
	oheres on Living Roots (C3) Saturation Visible on Aerial Imagery (C9)
☐ Drift Deposits (B3) ☐ Presence of Redu	_
	uction in Tilled Soils (C6) Geomorphic Position (D2)
☐ Iron Deposits (B5) ☐ Thin Muck Surface	
☐ Inundation Visible on Aerial Imagery (B7) ☐ Other (Explain in	
Sparsely Vegetated Concave Surface (B8)	FAC-Neutral Test (D5)
Field Observations:	
Surface Water Present?	
Water Table Present? ☐ Yes ✓ No Depth (inches):	
Saturation Present? ☐ Yes ✓ No Depth (inches): (includes capillary fringe)	Wetland Hydrology Present? ✓ Yes ☐ No
Describe Recorded Data (stream gauge, monitoring well, aerial pho	otos, previous inspections), if available:
Remarks:	

	Absolute	Dominant	Indicator	Dominance Test works	heet:	
ree Stratum Plot Size:	% Cover	Species?	Status	Number of Dominant Spec That Are OBL, FACW, or		(A)
				Total Number of Dominan Species Across All Strata:		(B)
				Percent of Dominant Spec That Are OBL, FACW, or		(A/B)
				Prevalence Index work	sheet:	
-				Total % Cover of:	Multiply by:	
				OBL species	x 1 =	
pling/Shrub Stratum Plot Size:	0	= Total Co	over	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	n Indicators:	
				Rapid Test for Hydroph	ytic Vegetation	
of Otratage Plat O'rea	0	= Total Cov	/er	☐ Dominance Test is > 5	0%	
erb Stratum Plot Size:				☐ Prevalence Index is ≤ 3	3.01	
				Morphological Adaptati data in Remarks or on		orting
				Problematic Hydrophyt	ic Vegetation1 (Expl	ain)
				¹Indicators of hydric soil a		
				must be present, unless d		
				Definitions of Vegetation	on Strata:	
				Tree - Woody plants 3 in. at breast height (DBH), re		diamete
					•	NDI I
				Sapling/shrub - Woody pla and greater than 3.28 ft. (вн,
·				Herb - All herbaceous (no		
·	0	= Total Co	over	of size, and woody plants Woody Vines - All woody v		
oody Vine Stratum Plot Size:				height.	cs greater triail s	0 16. 111
				Uuduank: 4! -		
				Hydrophytic Vegetation Yes	s □ No	
				Present?		
	0	= Total Co	over			

SOIL Sampling Point: A3W

Profile Des	scription: (Describ	e to the	depth needed to d	ocumen	t the indi	cator or	confirm the absence of	indicators.	
Depth	Matrix		Rec	dox Featu	ıres				
(inches)	Color (moist)	%	Color (moist)	%	Type ¹	Loc. ²	Texture	Remarks	
0 - 8.5	10YR3/2	100	_				loam		
8.5 - 15	10YR4/1	98	10YR4/6	2	D	М	clay loam		
			_					_	
		-							
					 ·			_	
			_						
					 ·			_	
¹Type: C=Co	oncentration, D=Depl	etion, RI	M=Reduced Matrix, M	S=Maske	ed Sand Gr	ains.	² Location: PL=	Pore Lining, M=Matrix.	
Hydric Soil	Indicators:						Indicators for Problem	matic Hydric Soils³:	
Histosol (A1)		Polyvalue Below	Surface (S8) (LRR R	₹,	2 cm Muck (A10) (L	RR K, L, MLRA 149B)	
Histic Epi	pedon (A2)		MLRA 149B)				Coast Prairie Redox	(A16) (LRR K, L, R)	
☐ Black Hist	tic (A3)		☐ Thin Dark Surfac	e (S9) (L	RR R, MLR	A 149B)	5 cm Mucky Peat or Peat (S3) (LRR K, L, R)		
Hydrogen	Sulfide (A4)		Loamy Mucky Mi	neral (F1) (LRR K, L	.)	☐ Dark Surface (S7) (LRR K, L)		
Stratified	Layers (A5)		Loamy Gleyed M	atrix (F2))		☐ Polyvalue Below Surface (S8) (LRR K, L)		
☐ Depleted	Below Dark Surface ((A11)	Depleted Matrix	(F3)			☐ Thin Dark Surface (S9) (LRR K, L)		
☐ Thick Dar	k Surface (A12)		Redox Dark Surf	ace (F6)			☐ Iron-Manganese Masses (F12) (LRR K, L, R)		
☐ Sandy Mu	ıcky Mineral (S1)		☐ Depleted Dark S	urface (F	7)		☐ Piedmont Floodplain Soils (F19) (MLRA 149B)		
Sandy Gle	eyed Matrix (S4)		Redox Depression	ns (F8)			☐ Mesic Spodic (TA6) (MLRA 144A, 145, 149B)		
Sandy Re	dox (S5)						Red Parent Material (F21)		
Stripped I	Matrix (S6)						☐ Very Shallow Dark Surface (TF12)		
Dark Surf	ace (S7) (LRR R, MLF	RA 149B)	8)				Other (Explain in Remarks.)		
³ Indicators o	t hydrophytic vegetat	ion and v	wetland hydrology mu	st be pres	sent, unless	s disturbe	d or problematic.		
Restrictive	Layer (if observed):							
Type:			_						
Depth (inche	es):		_				Hydric Soil Preser	nt? ✓ Yes 🗌 No	
Remarks: (I	nclude photo number	s here o	r on a separate sheet	.)					

Project/Site: USH 151/CTH T Overpass	City/County Town of Empire / Fond du Lac Sampling Dat 5/29/2014				
Applicant/Owner: WisDOT	State: WI Sampling Point: A4L				
Investigator(s): Don Brittnacher	Section, Township, Range: Sec. 18, T 15 N, R 18 E				
Landform (hillslope, terrace, etc.): hillslope	Local relief (concave, convex, none): concave Slope (%):				
Subregion (LRR or MLRA): K / 95A Lat: 43.7696	651 Long: -88.398628 Datum: WGS 1984				
Soil Map Unit Name: Kewaunee silty clay loam, 2 to 6 percent slo	ppes, e NWI Classification:				
Are climatic / hydrologic conditions on the site typical for this time	of year? 🗹 Yes 🗌 No (If no, explain in Remarks.)				
Are Vegetation: $lacktriangledown$, Soil \Box , or Hydrology \Box significantly distur	rbed? Are "Normal Circumstances" present? ☐ Yes 🗸 No				
Are Vegetation: \square , Soil \square , or Hydrology \square naturally problema	atic? (If needed, explain any answers in Remarks.)				
SUMMARY OF FINDINGS - Attach site map showing sa	mpling point locations, transects, important features, etc.				
Hydrophytic Vegetation Present? Yes No	Is the Sampled Area ✓ Yes No				
Hydric Soil Present? ✓ Yes ☐ No	Within a Wetland?				
Wetland Hydrology Present? ✓ Yes No	If yes, optional Wetland Site ID:				
Remarks: (Explain alternative procedures here or in a separate r	report.)				
Sample location in farm field.					
HYDROLOGY					
Wetland Hydrology Indicators:	Secondary Indicators (minimum of two required)				
Primary Indicators (minimum of one is required; check all that an					
	Surface Soil Clacks (Bo)				
☐ Surface Water (A1) ☐ Water-Stained ☐ High Water Table (A2) ☐ Aquatic Fauna					
Saturation (A3) Marl Deposits	, ,				
☐ Water Marks (B1) ☐ Hydrogen Sulf	<u> </u>				
	ospheres on Living Roots (C3) Saturation Visible on Aerial Imagery (C9)				
	educed Iron (C4) Stunted or Stressed Plants (D1)				
	eduction in Tilled Soils (C6) Geomorphic Position (D2)				
☐ Iron Deposits (B5) ☐ Thin Muck Sur	, ,				
☐ Inundation Visible on Aerial Imagery (B7) ☐ Other (Explain	_				
Sparsely Vegetated Concave Surface (B8)	FAC-Neutral Test (D5)				
Field Observations:					
Surface Water Present? ☐ Yes ✓ No Depth (inche	s):				
Water Table Present? ☐ Yes ✓ No Depth (inche					
Saturation Present? ☐ Yes ✔ No Depth (inche	ss): Wetland Hydrology Present? ✓ Yes No				
(includes capillary fringe)	, <u></u>				
Describe Recorded Data (stream gauge, monitoring well, aerial p	photos, previous inspections), if available:				
Remarks:					

VEGETATION Use scien	ntific names (מ זנ	lants
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Tree Christian Plat Cine.	Absolute % Cover		dicator Dominance Test worksheet:
Tree Stratum Plot Size:	70 00101		Number of Dominant Species That Are OBL, FACW, or FAC: 0 (A)
1 2.			Total Number of Dominant
2			Species Across All Strata: 0 (B)
4			Percent of Dominant Species That Are OBL, FACW, or FAC: 0% (A/B)
5.	<u> </u>		
6.			Prevalence Index worksheet:
7.			Total % Cover of: Multiply by:
	0	= Total Cover	
<u>Sapling/Shrub Stratum</u> Plot Size:			FACW species x 2 =
1			FAC species x 3 =
2			FACU species x 4 =
3			UPL species x 5 =
4.			Column Totals: (A) (B)
5			Prevalence Index = B/A =
6.			Hydrophytic Vegetation Indicators:
7			Rapid Test for Hydrophytic Vegetation
W 4 0	0	= Total Cover	☐ Dominance Test is > 50%
<u>Herb Stratum</u> Plot Size:			☐ Prevalence Index is $\leq 3.0^{1}$
1.			Morphological Adaptations¹ (Provide supporting
2			data in Remarks or on a separate sheet.)
3.			Problematic Hydrophytic Vegetation¹ (Explain.)
4			¹Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
5.			
6.			Definitions of Vegetation Strata:
7. 8.			Tree - Woody plants 3 in. (7.6 cm) or more in diameter
9.			at breast height (DBH), regardless of height.
10.	-		Sapling/shrub - Woody plants less than 3 in. DBH,
11.			and greater than 3.28 ft. (1 m) tall.
12.			Herb - All herbaceous (non-woody) plants, regardless
12.	0	= Total Cover	of size, and woody plants less than 3.28 ft. tall.
Woody Vino Stratum Plot Sizo:		= Total Cover	Woody Vines - All woody vines greater than 3.28 ft. in height.
Woody Vine Stratum Plot Size:			no.gra
1.			
2. 3.			Hydrophytic
4.	- ——		Vegetation ☐ Yes ☐ No Present?
4.	0	= Total Cover	
		= Total Cover	
Remarks: (Include photo numbers here or on a se	eparate shee	t.)	
Vegetation was not assessed, since sample lo	cation is in a	disturbed field, p	plowed within the last two years.

Sampling Point: A4L

SOIL Sampling Point: A4L

Depth	Matrix	e to the	_	dox Featu		cator or c	confirm the absence of	maicators.	
(inches)	Color (moist)	%	Color (moist)	%	Type ¹	Loc. ²	Texture	Remarks	
0 - 8	10YR3/2	100			- 7,00		loam		
8 - 10.5	7.5YR4/4	65	10YR4/6	5	С	М	clay loam		
	10YR3/1	20							
	10YR5/1	10							
10.5 - 15	7.5YR4/4	85	10YR4/6	5	С	М	clay		
	10YR5/1	10							
		. ———	_						
		. ———	_						
			_						
			_						
¹Type: C=Co	oncentration, D=Depl	letion, RI	M=Reduced Matrix, MS	S=Maske	ed Sand Gr	ains.	² Location: PL=	=Pore Lining, M=Matrix.	
Hydric Soil	Indicators:						Indicators for Proble	matic Hydric Soils³:	
Histosol (A1)			Polyvalue Below	Surface (S8) (LRR R	ι,	☐ 2 cm Muck (A10) (L	RR K, L, MLRA 149B)	
_	pedon (A2)		MLRA 149B)				Coast Prairie Redox (A16) (LRR K, L, R)		
☐ Black Hist	• •		Thin Dark Surface (S9) (LRR R, MLRA 149B)				5 cm Mucky Peat or Peat (S3) (LRR K, L, R)		
	Sulfide (A4) Layers (A5)		☐ Loamy Mucky Mineral (F1) (LRR K, L) ☐ Loamy Gleyed Matrix (F2)				☐ Dark Surface (S7) (LRR K, L) ☐ Polyvalue Below Surface (S8) (LRR K, L)		
	Below Dark Surface ((A11)	Depleted Matrix				☐ Thin Dark Surface (S9) (LRR K, L)		
	k Surface (A12)	,	Redox Dark Surfa				☐ Iron-Manganese Masses (F12) (LRR K, L, R)		
Sandy Mu	cky Mineral (S1)		Depleted Dark Su	urface (F	7)		☐ Piedmont Floodplain Soils (F19) (MLRA 149B)		
Sandy Gle	yed Matrix (S4)		Redox Depressions (F8)				Mesic Spodic (TA6) (MLRA 144A, 145, 149B)		
Sandy Red	dox (S5)						✓ Red Parent Material (F21)		
Stripped N	Matrix (S6)						☐ Very Shallow Dark Surface (TF12)		
Dark Surfa	ace (S7) (LRR R, MLI	RA 149B))			Other (Explain in Re	emarks.)		
³ Indicators of	hydrophytic vegetat	ion and v	wetland hydrology mus	st be pres	sent, unless	s disturbe	d or problematic.		
Restrictive	Layer (if observed):							
Type:			_						
Depth (inche	s):		_				Hydric Soil Prese	nt? Yes No	
Remarks: (Ir	nclude photo number	rs here o	r on a separate sheet.)					

Project/Site: USH 151/CTH T Overpass	City/County Town of Empire / Fond du Lac Sampling Dat 5/29/2014					
Applicant/Owner: WisDOT	State: WI Sampling Point: A4U					
Investigator(s): Don Brittnacher	Section, Township, Range: Sec. 18, T 15 N, R 18 E					
Landform (hillslope, terrace, etc.): hillslope	Local relief (concave, convex, none): concave Slope (%):					
Subregion (LRR or MLRA): K / 95A Lat: 43.769696	Long: -88.398633 Datum: WGS 1984					
Soil Map Unit Name: Kewaunee silty clay loam, 2 to 6 percent slopes,	, e NWI Classification:					
Are climatic / hydrologic conditions on the site typical for this time of ye	rear? 🗸 Yes 🗌 No (If no, explain in Remarks.)					
Are Vegetation: $oldsymbol{ odd}$, Soil $oldsymbol{\square}$, or Hydrology $oldsymbol{\square}$ significantly disturbed?	? Are "Normal Circumstances" present? Yes No					
Are Vegetation: \square , Soil \square , or Hydrology \square naturally problematic?						
SUMMARY OF FINDINGS - Attach site map showing sampl	ling point locations, transects, important features, etc.					
	he Sampled Area					
Hydric Soil Present?	thin a Wetland?					
Wetland Hydrology Present? ☐ Yes ✓ No If yo	es, optional Wetland Site ID:					
Remarks: (Explain alternative procedures here or in a separate repor	rt.)					
Sample location in farm field.						
HYDROLOGY						
Wetland Hydrology Indicators:	Secondary Indicators (minimum of two required)					
Primary Indicators (minimum of one is required; check all that apply)						
	Surface Soil Clacks (Bb)					
☐ Surface Water (A1) ☐ Water-Stained Lea ☐ High Water Table (A2) ☐ Aquatic Fauna (B1						
Saturation (A3) Marl Deposits (B15)						
☐ Water Marks (B1) ☐ Hydrogen Sulfide (·					
<u> </u>	eres on Living Roots (C3) Saturation Visible on Aerial Imagery (C9)					
☐ Drift Deposits (B3) ☐ Presence of Reduc	_					
l <u> </u>	ction in Tilled Soils (C6) Geomorphic Position (D2)					
☐ Iron Deposits (B5) ☐ Thin Muck Surface	\cdot , $ \cdot$ \cdot ,					
☐ Inundation Visible on Aerial Imagery (B7) ☐ Other (Explain in F						
Sparsely Vegetated Concave Surface (B8)	FAC-Neutral Test (D5)					
Field Observations:						
Surface Water Present? Yes V No Depth (inches):						
Water Table Present? ☐ Yes ✓ No Depth (inches):						
Saturation Present? ☐ Yes ✔ No Depth (inches): (includes capillary fringe)	Wetland Hydrology Present? ☐ Yes ✓ No					
Describe Recorded Data (stream gauge, monitoring well, aerial photo	os, previous inspections), if available:					
Remarks:						

					J
	Absolute	Dominant Indicator Species? Status	Dominance Test workshee	et:	
Tree Stratum Plot Size: 1.	76 COVEI	Species: Status	Number of Dominant Species That Are OBL, FACW, or FAC	S C:0	(A)
2.			Total Number of Dominant Species Across All Strata:	0	(B)
3. 4			Percent of Dominant Species That Are OBL, FACW, or FA		(A/B)
5.			Prevalence Index worksh	eet:	
6.			Total % Cover of:		
7			OBL species	Multiply by:	
	0	= Total Cover		x 1 =	
Sapling/Shrub Stratum Plot Size:			FACW species	x 2 =	
1.			FAC species	x 3 =	
2			FACU species	x 4 =	_
3.			UPL species	x 5 =	
4.			Column Totals:	(A)	(B)
5			Prevalence Index = B/A =	-	
6.			Hydrophytic Vegetation I	ndicators:	
7			Rapid Test for Hydrophytic	c Vegetation	
	0	= Total Cover	☐ Dominance Test is > 50%		
Herb Stratum Plot Size:			☐ Prevalence Index is ≤ 3.0	1	
1. 2.			Morphological Adaptations data in Remarks or on a s		orting
3.			Problematic Hydrophytic V		ain.)
4.			¹ Indicators of hydric soil and	` .	,
5.			must be present, unless distu		
6.			D (* '1' C)/	<u> </u>	
7.			Definitions of Vegetation	Strata:	
8.			Tree - Woody plants 3 in. (7.) at breast height (DBH), regar		diameter
9.			Sapling/shrub - Woody plants	•)RH
10			and greater than 3.28 ft. (1 r		, ווטל
11			Haub All baubaaaaa (nan	and a minute was	
12			Herb - All herbaceous (non-w of size, and woody plants less		
	0	= Total Cover	Woody Vines - All woody vine	es greater than 3	.28 ft. in
Woody Vine Stratum Plot Size:			height.		
1					
2.			Undrankutia		
3.			Hydrophytic Vegetation Yes	□ No	
4			Present?		
_	0	= Total Cover			
Remarks: (Include photo numbers here or on a se	parate shee	t.)			
Vegetation was not assessed, since sample loc			within the last two years		

SOIL Sampling Point: A4U

Profile Des Depth	cription: (Describe Matrix	e to the	_	ocumen dox Featu		cator or o	confirm the absence o	of indicators.	
(inches)	Color (moist)	%	Color (moist)	%	Type ¹	Loc.2	Texture	Remarks	
0 - 10	10YR3/2	100					loam		
10 - 14.5	10YR4/4	90			·		clay loam		
	10YR3/1	10	_						
14.5 - 17	10YR4/4	100			·		clay		
					- -				
					- -				
			_						
			_						
			_						
		-	_						
	<u> </u>	etion, R	M=Reduced Matrix, M	S=Maske	ed Sand Gr	ains.	² Location: Pl	L=Pore Lining, M=Matrix.	
Hydric Soil	Indicators:						Indicators for Proble	ematic Hydric Soils ³ :	
Histosol (A1)			Polyvalue Below Surface (S8) (LRR R, MLRA 149B)			ζ,	2 cm Muck (A10) (LRR K, L, MLRA 149B)		
	pedon (A2)						Coast Prairie Redox (A16) (LRR K, L, R)		
Black Histi			☐ Thin Dark Surface (S9) (LRR R, MLRA 149B)				5 cm Mucky Peat or Peat (S3) (LRR K, L, R)		
_	Sulfide (A4)		Loamy Mucky Mineral (F1) (LRR K, L)			.)	☐ Dark Surface (S7)		
	Layers (A5)		Loamy Gleyed Matrix (F2)				Polyvalue Below Surface (S8) (LRR K, L)		
	Below Dark Surface (A11)	Depleted Matrix (F3)				☐ Thin Dark Surface (S9) (LRR K, L)		
	k Surface (A12)		Redox Dark Surface (F6)				☐ Iron-Manganese Masses (F12) (LRR K, L, R)		
	cky Mineral (S1)		Depleted Dark Si	•	7)			in Soils (F19) (MLRA 149B)	
	eyed Matrix (S4)		Redox Depressions (F8)				Mesic Spodic (TA6) (MLRA 144A, 145, 149B)		
Sandy Rec							Red Parent Material (F21)		
Stripped M		NA 1400					☐ Very Shallow Dark Surface (TF12)		
☐ Dark Surfa	ace (S7) (LRR R, MLR	KA 149B)				Other (Explain in R	Remarks.)	
³ Indicators of	hydrophytic vegetati	on and	wetland hydrology mus	st be pres	sent, unless	s disturbe	d or problematic.		
Restrictive	Layer (if observed)):							
Туре:			<u></u>						
Depth (inches	s):		<u> </u>				Hydric Soil Prese	ent? Yes 🗸 No	
Remarks: (In	nclude photo number	s here o	r on a separate sheet.)			•		

Project/Site: USH 151/CTH T Overpass	City/County Town of Empire / Fond du Lac Sampling Dat 5/29/2014				
Applicant/Owner: WisDOT	State: WI Sampling Point: A4W				
Investigator(s): Don Brittnacher	Section, Township, Range: Sec. 18, T 15 N, R 18 E				
Landform (hillslope, terrace, etc.): hillslope	Local relief (concave, convex, none): concave Slope (%):				
Subregion (LRR or MLRA): K / 95A Lat: 43.769	Datum: WGS 1984				
Soil Map Unit Name: Kewaunee silty clay loam, 2 to 6 percent sl	opes, e NWI Classification:				
Are climatic / hydrologic conditions on the site typical for this time	e of year? 🗹 Yes 🗌 No (If no, explain in Remarks.)				
Are Vegetation: $oldsymbol{arVar}$, Soil \Box , or Hydrology \Box significantly disturbed in the context of t	ırbed? Are "Normal Circumstances" present? ☐ Yes 🗹 No				
Are Vegetation: \square , Soil \square , or Hydrology \square naturally problem	natic? (If needed, explain any answers in Remarks.)				
SUMMARY OF FINDINGS - Attach site map showing sa	ampling point locations, transects, important features, etc.				
Hydrophytic Vegetation Present?	Is the Sampled Area ✓ Yes No				
Hydric Soil Present? ✓ Yes ☐ No	Within a Wetland?				
Wetland Hydrology Present? ✓ Yes ☐ No	If yes, optional Wetland Site ID:				
Remarks: (Explain alternative procedures here or in a separate	report.)				
Sample location in farm field.					
HYDROLOGY					
	Cocondaw Indicators (minimum of two required)				
Wetland Hydrology Indicators:	Secondary Indicators (minimum of two required)				
Primary Indicators (minimum of one is required; check all that a	Surface Soil Clacks (Do)				
	d Leaves (B9)				
High Water Table (A2) Aquatic Faun And Deposition (A2)					
Saturation (A3) Marl Deposits We have Market (B1)	<u> </u>				
	Iffide Odor (C1) Crayfish Burrows (C8)				
	zospheres on Living Roots (C3) Saturation Visible on Aerial Imagery (C9) Reduced Iron (C4) Stunted or Stressed Plants (D1)				
	Reduced Iron (C4) Stunted or Stressed Plants (D1) Reduction in Tilled Soils (C6) Geomorphic Position (D2)				
☐ Iron Deposits (B5) ☐ Thin Muck St					
	in in Remarks)				
Sparsely Vegetated Concave Surface (B8)	FAC-Neutral Test (D5)				
Field Observations: Surface Water Present? ☐ Yes ✓ No Depth (inche)	as):				
Water Table Present?	·				
Saturation Present? Yes No Depth (inchi	· 				
(includes capillary fringe)	es) Wetland nydrology Present? V 1es [No				
Describe Recorded Data (stream gauge, monitoring well, aerial	photos, previous inspections), if available:				
Remarks:					

VEGETATION Use scientific names of plants	Sampling Point: A4W			
Tree Charles Diet Cine	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet:
Tree Stratum Plot Size: 1	-/0 00101			Number of Dominant Species That Are OBL, FACW, or FAC: 0 (A)
2				Total Number of Dominant Species Across All Strata: 0 (B)
3. 4				Percent of Dominant Species That Are OBL, FACW, or FAC: 0% (A/B)
5.				Prevalence Index worksheet:
6				Total % Cover of: Multiply by:
7				OBL species x 1 =
0 11 101 1 01 1 1 11 11	0	= Total Co	over	FACW species x 2 =
Sapling/Shrub Stratum Plot Size:				FAC species x 3 =
1.				FACU species x 4 =
2.				UPL species x 5 =
3				· — —
4.				Column Totals: (A) (B)
5				Prevalence Index = B/A =
6.				Hydrophytic Vegetation Indicators:
7				Rapid Test for Hydrophytic Vegetation
Harb Ctratum Diet Ciza	0	= Total Cov	/er	☐ Dominance Test is > 50%
Herb Stratum Plot Size:				☐ Prevalence Index is $\leq 3.0^{1}$
1 2.				Morphological Adaptations¹ (Provide supporting
				data in Remarks or on a separate sheet.)
3.				Problematic Hydrophytic Vegetation ¹ (Explain.)
4				¹Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
5.				made so process, amone distances of prosiematio.
6.				Definitions of Vegetation Strata:
7.				Tree - Woody plants 3 in. (7.6 cm) or more in diameter
8.				at breast height (DBH), regardless of height.
9.				Sapling/shrub - Woody plants less than 3 in. DBH,
10.				and greater than 3.28 ft. (1 m) tall.
11				Herb - All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft. tall.
	0	= Total C	over	Woody Vines - All woody vines greater than 3.28 ft. in
Woody Vine Stratum Plot Size:				height.
1.				
2.				
3.				Hydrophytic Vegetation Yes No
4.				Vegetation
	0	= Total C	over	
Domovico, (Includo abete aumbero bere er en e con	acrete check	• \		
Remarks: (Include photo numbers here or on a sep				
Vegetation was not assessed, since sample loc	ation is in a	disturbed fie	ld, plowed	within the last two years.

SOIL Sampling Point: A4W

Depth Matrix		Red	dox Featu	res				
(inches) Color (moist)	%	Color (moist)	%	Type ¹	Loc. ²	Texture	Remarks	
0 - 4.5 10YR3/2						loam		
4.5 - 8.5 10YR4/1		10YR4/6	5	D	М	loam		
8.5 - 11.5 10YR5/1		10YR4/6	5	D	М	clay loam		
11.5 - 18 7.5YR4/4						clay		
	111		111		·			
	11	_	11					
) (-) (
				. ——				
	0 (
¹ Type: C=Concentration, D=Depl	letion, RM	1=Reduced Matrix, M	S=Maske	d Sand Gra	ains.	² Location: PL=	Pore Lining, M=Matrix.	
Hydric Soil Indicators:						Indicators for Problem	matic Hydric Soils ³ :	
Histosol (A1)		Polyvalue Below MLRA 149B)	Surface (S8) (LRR R	ι,		RR K, L, MLRA 149B)	
Histic Epipedon (A2)						Coast Prairie Redox (A16) (LRR K, L, R)		
Black Histic (A3)		Thin Dark Surfac				5 cm Mucky Peat or Peat (S3) (LRR K, L, R)		
☐ Hydrogen Sulfide (A4) ☐ Stratified Layers (A5)		□ Loamy Mucky Mi□ Loamy Gleyed M			.)	☐ Dark Surface (S7) (LRR K, L) ☐ Polyvalue Below Surface (S8) (LRR K, L)		
Depleted Below Dark Surface ((A11)	✓ Depleted Matrix				☐ Thin Dark Surface (S9) (LRR K, L)		
☐ Thick Dark Surface (A12)	` '	Redox Dark Surfa				☐ Iron-Manganese Masses (F12) (LRR K, L, R)		
☐ Sandy Mucky Mineral (S1)		Depleted Dark Su	urface (F7	')		☐ Piedmont Floodplain Soils (F19) (MLRA 149B)		
Sandy Gleyed Matrix (S4)		Redox Depressio	ns (F8)			Mesic Spodic (TA6) (MLRA 144A, 145, 149B)		
Sandy Redox (S5)						Red Parent Material (F21)		
Stripped Matrix (S6)						☐ Very Shallow Dark Surface (TF12)		
☐ Dark Surface (S7) (LRR R, MLI	RA 149B)					Other (Explain in Re	marks.)	
³ Indicators of hydrophytic vegetat	ion and w	vetland hydrology mus	st be pres	ent, unless	s disturbe	d or problematic.		
Restrictive Layer (if observed):							
Type:		_						
Depth (inches):		_ _				Hydric Soil Preser	nt? ✓ Yes 🗌 No	
Remarks: (Include photo number	rs here or	on a separate sheet.	.)			L		
, .		·	•					

Project/Site: USH 151/CTH T Overpass	City/County Town of Empire / Fond du Lac Sampling Dat 5/29/2014				
Applicant/Owner: WisDOT	State: WI Sampling Point: A6L				
Investigator(s): Don Brittnacher	Section, Township, Range: Sec. 18, T 15 N, R 18 E				
Landform (hillslope, terrace, etc.): hillslope	Local relief (concave, convex, none): concave Slope (%):				
Subregion (LRR or MLRA): K / 95A Lat: 43.76954	Long: -88.398861 Datum: WGS 1984				
Soil Map Unit Name: Poygan silty clay loam	NWI Classification:				
Are climatic / hydrologic conditions on the site typical for this time o	of year? 🗹 Yes 🗌 No (If no, explain in Remarks.)				
Are Vegetation: $oldsymbol{arVar}$, Soil \Box , or Hydrology \Box significantly disturbed	ed? Are "Normal Circumstances" present? Yes No				
Are Vegetation: \square , Soil \square , or Hydrology \square naturally problemat	ic? (If needed, explain any answers in Remarks.)				
SUMMARY OF FINDINGS - Attach site map showing sam	npling point locations, transects, important features, etc.				
	is the Sampled Area				
Hydric Soil Present? ✓ Yes ☐ No	Within a Wetland?				
Wetland Hydrology Present? ✓ Yes ☐ No I	If yes, optional Wetland Site ID:				
Remarks: (Explain alternative procedures here or in a separate re	port.)				
Sample location in farm field.					
HYDROLOGY					
Wetland Hydrology Indicators:	Secondary Indicators (minimum of two required)				
Primary Indicators (minimum of one is required; check all that app					
Surface Water (A1) Water-Stained I	Surface Soil Clacks (Bb)				
High Water Table (A2) Aquatic Fauna (
Saturation (A3) Marl Deposits (I					
☐ Water Marks (B1) ☐ Hydrogen Sulfic	`				
	spheres on Living Roots (C3) Saturation Visible on Aerial Imagery (C9)				
	duced Iron (C4) Stunted or Stressed Plants (D1)				
	duction in Tilled Soils (C6)				
☐ Iron Deposits (B5) ☐ Thin Muck Surfa					
☐ Inundation Visible on Aerial Imagery (B7) ☐ Other (Explain i	in Remarks)				
☐ Sparsely Vegetated Concave Surface (B8)	☐ FAC-Neutral Test (D5)				
Field Observations:					
Surface Water Present? ☐ Yes ✓ No Depth (inches)):				
Water Table Present? ☐ Yes ✓ No Depth (inches)):				
Saturation Present? Yes V No Depth (inches)): Wetland Hydrology Present? Ves No				
Describe Recorded Data (stream gauge, monitoring well, aerial ph	notos, previous inspections), if available:				
Remarks:					

VEGETATION	Use scientific nan	nes of plants
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Trace Christian Diet Cine.	Absolute % Cover	Dominant Indicator Species? Status	Dominance Test worksheet:
<u>Tree Stratum</u> Plot Size:	70 00101	Openior: Status	Number of Dominant Species That Are OBL, FACW, or FAC: 0 (A)
1.			That Are OBL, FACW, or FAC:0 (A) Total Number of Dominant
2.			Species Across All Strata: 0 (B)
3.			Percent of Dominant Species
4			That Are OBL, FACW, or FAC:0% (A/B)
5.			Prevalence Index worksheet:
6.			Total % Cover of: Multiply by:
7			OBL species x 1 =
Sapling/Shrub Stratum Plot Size:	0	= Total Cover	FACW species x 2 =
			FAC species x 3 =
2			FACU species x 4 =
2			UPL species x 5 =
			Column Totals: (A) (B)
4			(,
5. 6.			Prevalence Index = B/A =
7			Hydrophytic Vegetation Indicators:
1.	0	= Total Cover	Rapid Test for Hydrophytic Vegetation
Herb Stratum Plot Size:		= Total Gover	Dominance Test is > 50%
1.			Prevalence Index is ≤ 3.0¹
2			Morphological Adaptations¹ (Provide supporting data in Remarks or on a separate sheet.)
3.			Problematic Hydrophytic Vegetation¹ (Explain.)
4.			¹Indicators of hydric soil and wetland hydrology
5.			must be present, unless disturbed or problematic.
6.	·		
7.			Definitions of Vegetation Strata:
8.			Tree - Woody plants 3 in. (7.6 cm) or more in diameter
9.			at breast height (DBH), regardless of height.
10.	•		Sapling/shrub - Woody plants less than 3 in. DBH, and greater than 3.28 ft. (1 m) tall.
11.			and greater than 3.26 ft. (1 ff) tall.
12.			Herb - All herbaceous (non-woody) plants, regardless
	0	= Total Cover	of size, and woody plants less than 3.28 ft. tall.
Woody Vine Stratum Plot Size:			Woody Vines - All woody vines greater than 3.28 ft. in height.
1.			
3.			Hydrophytic
4.			Vegetation
	0	= Total Cover	
Develop (Individual of the			
Remarks: (Include photo numbers here or on a se			
Vegetation was not assessed, since sample loa	cation is in a	disturbed field, plowed	within the last two years.

Sampling Point: A6L

SOIL Sampling Point: A6L

Depth (inches)			Red	dox Featu	res					
	Color (moist)	%	Color (moist)	%	Type ¹	Loc. ²	Texture	Remarks		
0 - 9.5	10YR3/2	100			71		loam			
9.5 - 14	10YR5/1	80	10YR4/6	5	D	М	clay loam			
	7.5YR4/4	15								
14 - 17	10YR4/1	95	10YR4/6	5	D	М	clay loam			
			_							
			_							
			_ ·_							
			_ ·_							
			_							
			_							
			_							
¹Type: C=Co	oncentration, D=Depl	etion, RI	M=Reduced Matrix, M	S=Maske	d Sand Gra	ains.	² Location: PL=	Pore Lining, M=Matrix.		
Hydric Soil	Indicators:						Indicators for Problem	matic Hydric Soils³:		
Histosol (A1)		Polyvalue Below	Surface (S8) (LRR R	λ,	☐ 2 cm Muck (A10) (LF	RR K, L, MLRA 149B)		
Histic Epi	pedon (A2)		MLRA 149B)				Coast Prairie Redox (A16) (LRR K, L, R)			
Black Hist	tic (A3)		☐ Thin Dark Surfac	e (S9) (L	RR R, MLR	A 149B)	5 cm Mucky Peat or Peat (S3) (LRR K, L, R)			
Hydrogen	Sulfide (A4)		Loamy Mucky Mi	neral (F1)	(LRR K, L)	Dark Surface (S7) (LRR K, L)			
	Layers (A5)		Loamy Gleyed M				Polyvalue Below Surface (S8) (LRR K, L)			
	Below Dark Surface (A11)	✓ Depleted Matrix				☐ Thin Dark Surface (S9) (LRR K, L)			
	k Surface (A12)		Redox Dark Surfa				☐ Iron-Manganese Masses (F12) (LRR K, L, R)			
	ıcky Mineral (S1)		Depleted Dark Su	•	')			Piedmont Floodplain Soils (F19) (MLRA 149B)		
	eyed Matrix (S4)		Redox Depressio	ns (F8)			Mesic Spodic (TA6) (MLRA 144A, 145, 149B)			
Sandy Re							Red Parent Material (F21)			
	Matrix (S6) ace (S7) (LRR R, MLF	οΛ 1/OR'					☐ Very Shallow Dark Surface (TF12)☐ Other (Explain in Remarks.)			
Dark Suri	ace (37) (LKK K, MLF	VA 1730,						marks.)		
³ Indicators o	f hydrophytic vegetati	ion and v	wetland hydrology mus	st be pres	ent, unless	s disturbe	d or problematic.			
	Layer (if observed):								
Type:			_							
Depth (inche	es):		<u> </u>				Hydric Soil Presen	it? 🗸 Yes 🗌 No		
Remarks: (I	nclude photo number	s here o	r on a separate sheet.)						

Project/Site: USH 151/CTH T Overpass	City/County Town of Empire / Fond du Lac Sampling Dat 5/29/2014				
Applicant/Owner: WisDOT	State: WI Sampling Point: A6U				
Investigator(s): Don Brittnacher	Section, Township, Range: Sec. 18, T 15 N, R 18 E				
Landform (hillslope, terrace, etc.): hillslope	Local relief (concave, convex, none): concave Slope (%):				
Subregion (LRR or MLRA): K / 95A Lat: 43.76957	² Long: -88.398869 Datum: WGS 1984				
Soil Map Unit Name: Kewaunee silty clay loam, 2 to 6 percent slope	es, e NWI Classification:				
Are climatic / hydrologic conditions on the site typical for this time of	f year? 🗹 Yes 🗌 No (If no, explain in Remarks.)				
Are Vegetation: $oldsymbol{arVar}$, Soil \Box , or Hydrology \Box significantly disturbed	ed? Are "Normal Circumstances" present? Yes No				
Are Vegetation: \square , Soil \square , or Hydrology \square naturally problemati	ic? (If needed, explain any answers in Remarks.)				
SUMMARY OF FINDINGS - Attach site map showing sam	npling point locations, transects, important features, etc.				
	is the Sampled Area Yes V No				
Hydric Soil Present? ☐ Yes 🗹 No	Within a Wetland?				
Wetland Hydrology Present? ☐ Yes ✓ No I:	if yes, optional Wetland Site ID:				
Remarks: (Explain alternative procedures here or in a separate re	port.)				
Sample location in farm field.					
HYDROLOGY					
Wetland Hydrology Indicators:	Secondary Indicators (minimum of two required)				
Primary Indicators (minimum of one is required; check all that app					
	Surface Soil Clacks (DO)				
☐ Surface Water (A1) ☐ Water-Stained L☐ High Water Table (A2) ☐ Aquatic Fauna ($\dot{}$				
☐ High Water Table (A2) ☐ Aquatic Fauna (☐ Saturation (A3) ☐ Marl Deposits (Bauta (Baut	· · · · · · · · · · · · · · · · · · ·				
☐ Water Marks (B1) ☐ Hydrogen Sulfid	`				
	spheres on Living Roots (C3) Saturation Visible on Aerial Imagery (C9)				
☐ Drift Deposits (B3) ☐ Presence of Rec	_				
l <u> </u>	duction in Tilled Soils (C6) Geomorphic Position (D2)				
☐ Iron Deposits (B5) ☐ Thin Muck Surfa	`				
☐ Inundation Visible on Aerial Imagery (B7) ☐ Other (Explain i					
Sparsely Vegetated Concave Surface (B8)	FAC-Neutral Test (D5)				
Field Observations:					
Surface Water Present? ☐ Yes ✓ No Depth (inches)):				
Water Table Present? ☐ Yes ✓ No Depth (inches)):				
Saturation Present? ☐ Yes ✓ No Depth (inches)	: Wetland Hydrology Present? ☐ Yes ✓ No				
(includes capillary fringe)					
Describe Recorded Data (stream gauge, monitoring well, aerial ph	notos, previous inspections), if available:				
Remarks:					

VEGETATION Use scientific names of plants				Sampling Point: A6U
T. 01 1 PL 01	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet:
<u>Tree Stratum</u> Plot Size: 1.	78 GOVCI	Ореспез	Otatus	Number of Dominant Species That Are OBL, FACW, or FAC:0 (A)
2.				Total Number of Dominant Species Across All Strata: 0 (B)
3. 4				Percent of Dominant Species That Are OBL, FACW, or FAC: 0% (A/B)
5.				Prevalence Index worksheet:
6.				Total % Cover of: Multiply by:
7				OBL species x 1 =
Operation (Objects Objects on Plat Objects	0	= Total C	over	FACW species x 2 =
<u>Sapling/Shrub Stratum</u> Plot Size:				FAC species x 3 =
1.				FACU species x 4 =
2.				UPL species x 5 =
3. 4.				Column Totals: (A) (B)
5.				Prevalence Index = B/A =
6.				Hydrophytic Vegetation Indicators:
7.				Rapid Test for Hydrophytic Vegetation
	0	= Total Cov	ver	Dominance Test is > 50%
Herb Stratum Plot Size:				Prevalence Index is $\leq 3.0^{\circ}$
1				☐ Morphological Adaptations¹ (Provide supporting
2				data in Remarks or on a separate sheet.)
3				☐ Problematic Hydrophytic Vegetation¹ (Explain.)
4				¹ Indicators of hydric soil and wetland hydrology
5				must be present, unless disturbed or problematic.
6				Definitions of Vegetation Strata:
7				bernicions of Vegetation Strata.
8				Tree - Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.
9.				Sapling/shrub - Woody plants less than 3 in. DBH,
10.				and greater than 3.28 ft. (1 m) tall.
11.				Herb - All herbaceous (non-woody) plants, regardless
12		T-1-1-0		of size, and woody plants less than 3.28 ft. tall.
Was da Was Obstana Blat O'ssa	0	= Total C	over	Woody Vines - All woody vines greater than 3.28 ft. in height.
Woody Vine Stratum Plot Size:				noghu
1.				
2.				Hydrophytic
3.			-	Vegetation Yes No
4		= Total C	'ovor	riesent:
	0		0761	<u> </u>
Remarks: (Include photo numbers here or on a sep	parate shee	t.)		
Vegetation was not assessed, since sample local	ation is in a	disturbed fie	eld, plowed	within the last two years.

SOIL Sampling Point: A6U

	cription: (Describ	e to the	_	ocumen		cator or	confirm the absence o	f indicators.	
Depth (inches)	Color (moist)	%	Color (moist)	%	Type ¹	Loc. ²	Texture	Remarks	
0 - 11	10YR3/2	100	Color (Illoist)	/6	Type	LUC	loam	nemarks	
11 - 13.5	10YR4/1	95	10YR4/6	5			loam		
13.5 - 17	10YR3/1	100					loam		
10.5 - 17	101113/1	100					IValli		
					- — — — — — — — — — — — — — — — — — — —				
¹Type: C=Co	oncentration, D=Dep	letion, RI	M=Reduced Matrix, M	S=Maske	ed Sand Gr	ains.	²Location: PL	=Pore Lining, M=Matrix.	
Hydric Soil	Indicators:						Indicators for Proble	ematic Hydric Soils³:	
Histosol (A Histic Epip Black Hist Hydrogen Stratified Depleted I Thick Darl Sandy Mu Sandy Gle Sandy Rec Stripped N Dark Surfa	A1) Dedon (A2) Dic (A3) Sulfide (A4) Layers (A5) Below Dark Surface C Surface (A12) Dicky Mineral (S1) Dyed Matrix (S4) Didox (S5) Matrix (S6) Diace (S7) (LRR R, ML)	RA 149B	Polyvalue Below Surface (S8) (LRR R, MLRA 149B) Thin Dark Surface (S9) (LRR R, MLRA 149B) Loamy Mucky Mineral (F1) (LRR K, L) Loamy Gleyed Matrix (F2) Depleted Matrix (F3) Redox Dark Surface (F6) Depleted Dark Surface (F7) Redox Depressions (F8)			A 149B) .)	☐ 2 cm Muck (A10) (LRR K, L, MLRA 149B) ☐ Coast Prairie Redox (A16) (LRR K, L, R) 149B) ☐ 5 cm Mucky Peat or Peat (S3) (LRR K, L, R) ☐ Dark Surface (S7) (LRR K, L) ☐ Polyvalue Below Surface (S8) (LRR K, L) ☐ Thin Dark Surface (S9) (LRR K, L) ☐ Iron-Manganese Masses (F12) (LRR K, L, R) ☐ Piedmont Floodplain Soils (F19) (MLRA 149B) ☐ Mesic Spodic (TA6) (MLRA 144A, 145, 149B) ☐ Red Parent Material (F21) ☐ Very Shallow Dark Surface (TF12) ☐ Other (Explain in Remarks.)		
Type: Depth (inches	e).		_				Hydric Soil Prese	ent? ☐ Yes ✓ No	
Dehm (mone)							nyuric Soil Prese	HILE I IES NIG	
Remarks: (Ir	nclude photo numbe	rs here o	r on a separate sheet	.)					

Project/Site: USH 151/CTH T Overpass	City/County Town of Empire / Fond du Lac Sampling Dat 5/29/2014
Applicant/Owner: WisDOT	State: WI Sampling Point: A6W
Investigator(s): Don Brittnacher	Section, Township, Range: Sec. 18, T 15 N, R 18 E
Landform (hillslope, terrace, etc.): hillslope	Local relief (concave, convex, none): concave Slope (%):
Subregion (LRR or MLRA): K / 95A Lat: 43.769	Datum: WGS 1984
Soil Map Unit Name: Poygan silty clay loam	NWI Classification:
Are climatic / hydrologic conditions on the site typical for this time	e of year? 🗹 Yes 🗌 No (If no, explain in Remarks.)
Are Vegetation: $lacktriangledown$, Soil \Box , or Hydrology \Box significantly disturbed by	urbed? Are "Normal Circumstances" present? ☐ Yes ✓ No
Are Vegetation: \square , Soil \square , or Hydrology \square naturally problem	natic? (If needed, explain any answers in Remarks.)
	, , , , , , , , , , , , , , , , , , , ,
SUMMARY OF FINDINGS - Attach site map showing sa	ampling point locations, transects, important features, etc.
Hydrophytic Vegetation Present?	Is the Sampled Area ✓ Yes No
Hydric Soil Present? ✓ Yes ☐ No	Within a Wetland?
Wetland Hydrology Present? ✓ Yes ☐ No	If yes, optional Wetland Site ID:
Remarks: (Explain alternative procedures here or in a separate	report.)
Sample location in farm field.	
HYDROLOGY	
Wetland Hydrology Indicators:	Secondary Indicators (minimum of two required)
Primary Indicators (minimum of one is required; check all that a	Surface Soil Cracks (B6)
Surface Water (A1) Water-Staine	ed Leaves (B9)
High Water Table (A2)	_ , ,
☐ Saturation (A3) ☐ Marl Deposits	s (B15) Dry-Season Water Table (C2)
☐ Water Marks (B1) ☐ Hydrogen Su	llfide Odor (C1) Crayfish Burrows (C8)
☐ Sediment Deposits (B2) ☐ Oxidized Rhiz	zospheres on Living Roots (C3) Saturation Visible on Aerial Imagery (C9)
	Reduced Iron (C4) Stunted or Stressed Plants (D1)
` ,	Reduction in Tilled Soils (C6)
☐ Iron Deposits (B5) ☐ Thin Muck Su	
	in in Remarks)
Sparsely Vegetated Concave Surface (B8)	FAC-Neutral Test (D5)
Field Observations:	
Surface Water Present? ☐ Yes ✓ No Depth (inch	es):
Water Table Present? ☐ Yes ✓ No Depth (inch	es):
Saturation Present? Yes V No Depth (inch	es): Wetland Hydrology Present? 🗸 Yes 🗌 No
(includes capillary fringe)	
Describe Recorded Data (stream gauge, monitoring well, aerial	photos, previous inspections), if available:
Remarks:	

Tree Stratum Plot Size:

Sapling/Shrub Stratum Plot Size:

Herb Stratum Plot Size:

Woody Vine Stratum Plot Size:

3.

5. 6.

2. 3.

6.

3.

6.

bsolute	Dominant In-	dicator Dominance Test	· · ·	g Point: A6	
% Cover	Species?	Status Number of Domina	nt Species	0	(4)
		That Are OBL, FAC	· · · -	0	(A)
		Species Across All		0	(B)
		Percent of Dominal That Are OBL, FAC		0%	(A/B)
		Prevalence Index	worksheet:		
		Total % Cover of:	M	1ultiply by:	
	Tatal Cause	OBL species	x 1		
0	= Total Cove	FACW species	x 2	! =	
		FAC species	x 3	:=	
		FACU species	x 4	-	
		UPL species	x 5	; =	
		Column Totals:	(A)		(B)
		Prevalence Index	` `		()
		Hydrophytic Veg	etation Indic	ators:	
		Rapid Test for H	lydrophytic Veg	getation	
0	= Total Cover	☐ Dominance Test	is > 50%		
		Prevalence Inde	x is ≤ 3.0^{1}		
		Morphological A			orting
		Problematic Hyd	Ironhytic Veaet	ation¹ (Exn	lain)
		¹Indicators of hydri must be present, u	c soil and wetl	and hydrolo	gy
		Definitions of Ve	getation Stra	ita:	
		Tree - Woody plant at breast height (D			n diameter
		Sapling/shrub - Wo and greater than 3.			DBH,
		Herb - All herbaceo			
0	= Total Cove				
		Hydrophytic Vegetation Present?	☐ Yes ☐	No	
0	= Total Cove	r			

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

Vegetation was not assessed, since sample location is in a disturbed field, plowed within the last two years.

SOIL Sampling Point: A6W

Depth (inches) Education Color (moist) Matrix Redox Features
0 - 5
5 - 13
7.5YR4/4 15 13 - 17.5 10YR3/1 98 10YR4/6 2 C M clay loam
13 - 17.5 10YR3/1 98 10YR4/6 2 C M clay loam
¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. ²Location: PL=Pore Lining, M=Matrix.
¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. ²Location: PL=Pore Lining, M=Matrix.
¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. ²Location: PL=Pore Lining, M=Matrix.
¹ Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. ² Location: PL=Pore Lining, M=Matrix.
¹ Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. ² Location: PL=Pore Lining, M=Matrix.
¹ Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. ² Location: PL=Pore Lining, M=Matrix.
¹ Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. ² Location: PL=Pore Lining, M=Matrix.
¹ Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. ² Location: PL=Pore Lining, M=Matrix.
¹ Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. ² Location: PL=Pore Lining, M=Matrix.
¹ Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. ² Location: PL=Pore Lining, M=Matrix.
¹ Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. ² Location: PL=Pore Lining, M=Matrix.
Hydric Soil Indicators: Indicators for Problematic Hydric Soils ³ :
☐ Histosol (A1) ☐ Polyvalue Below Surface (S8) (LRR R, ☐ 2 cm Muck (A10) (LRR K, L, MLRA 149B)
☐ Histic Epipedon (A2) ☐ Coast Prairie Redox (A16) (LRR K, L, R)
☐ Black Histic (A3) ☐ Thin Dark Surface (S9) (LRR R, MLRA 149B) ☐ 5 cm Mucky Peat or Peat (S3) (LRR K, L, R)
☐ Hydrogen Sulfide (A4) ☐ Loamy Mucky Mineral (F1) (LRR K, L) ☐ Dark Surface (S7) (LRR K, L)
☐ Stratified Layers (A5) ☐ Loamy Gleyed Matrix (F2) ☐ Polyvalue Below Surface (S8) (LRR K, L)
☐ Depleted Below Dark Surface (A11)
☐ Thick Dark Surface (A12) ☐ Redox Dark Surface (F6) ☐ Iron-Manganese Masses (F12) (LRR K, L, R)
☐ Sandy Mucky Mineral (S1) ☐ Depleted Dark Surface (F7) ☐ Piedmont Floodplain Soils (F19) (MLRA 149B)
☐ Sandy Gleyed Matrix (S4) ☐ Redox Depressions (F8) ☐ Mesic Spodic (TA6) (MLRA 144A, 145, 149B)
☐ Sandy Redox (S5) ☐ Red Parent Material (F21)
☐ Stripped Matrix (S6) ☐ Very Shallow Dark Surface (TF12)
☐ Dark Surface (S7) (LRR R, MLRA 149B) ☐ Other (Explain in Remarks.)
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? V Yes No
Remarks: (Include photo numbers here or on a separate sheet.)

Project/Site: USH 151/CTH T Overpass	City/County Town of Empire / Fond du Lac Sampling Dat 5/29/2014			
Applicant/Owner: WisDOT	State: WI Sampling Point: A7L			
Investigator(s): Don Brittnacher	Section, Township, Range: Sec. 18, T 15 N, R 18 E			
Landform (hillslope, terrace, etc.): stream terrace	Local relief (concave, convex, none): concave Slope (%):			
Subregion (LRR or MLRA): K / 95A Lat: 43.76956	3 Long: -88.399061 Datum: WGS 1984			
Soil Map Unit Name: Poygan silty clay loam	NWI Classification:			
Are climatic / hydrologic conditions on the site typical for this time of	f year? 🗹 Yes 🗌 No (If no, explain in Remarks.)			
Are Vegetation: $oldsymbol{arVar}$, Soil \Box , or Hydrology \Box significantly disturbed	ed? Are "Normal Circumstances" present? Yes No			
Are Vegetation: \square , Soil \square , or Hydrology \square naturally problemati	ic? (If needed, explain any answers in Remarks.)			
SUMMARY OF FINDINGS - Attach site map showing sam	opling point locations, transects, important features, etc.			
	is the Sampled Area			
Hydric Soil Present? ✓ Yes ☐ No	Within a Wetland?			
Wetland Hydrology Present? ✓ Yes No If	f yes, optional Wetland Site ID:			
Remarks: (Explain alternative procedures here or in a separate re	port.)			
Sample location in farm field.				
HYDROLOGY				
Wetland Hydrology Indicators:	Secondary Indicators (minimum of two required)			
Primary Indicators (minimum of one is required; check all that app				
Surface Water (A1) Water-Stained L	Surface Soil Cracks (BO)			
☐ High Water Table (A2) ☐ Aquatic Fauna (
☐ Saturation (A3) ☐ Marl Deposits (E				
☐ Water Marks (B1) ☐ Hydrogen Sulfid	<u> </u>			
	spheres on Living Roots (C3) Saturation Visible on Aerial Imagery (C9)			
☐ Drift Deposits (B3) ☐ Presence of Red	_			
	duction in Tilled Soils (C6)			
☐ Iron Deposits (B5) ☐ Thin Muck Surfa	ace (C7) Shallow Aquitard (D3)			
☐ Inundation Visible on Aerial Imagery (B7) ☐ Other (Explain in	in Remarks)			
☐ Sparsely Vegetated Concave Surface (B8)	FAC-Neutral Test (D5)			
Field Observations:				
Surface Water Present? ☐ Yes ✓ No Depth (inches)):			
Water Table Present? ☐ Yes ✓ No Depth (inches)):			
Saturation Present?	: Wetland Hydrology Present? ✓ Yes ☐ No			
Describe Recorded Data (stream gauge, monitoring well, aerial ph	notos, previous inspections), if available:			
Remarks:				

Samp	lina	Point:	A7L

T 0: : DI : 0:	Absolute % Cover	Dominant Indicator Species? Status	Dominance Test worksheet:
<u>Tree Stratum</u> Plot Size: 1.		Opecies: Otatus	Number of Dominant Species That Are OBL, FACW, or FAC:0 (A)
2.			Total Number of Dominant Species Across All Strata: 0 (B)
3			Percent of Dominant Species That Are OBL, FACW, or FAC: 0% (A/E
5			Prevalence Index worksheet:
6.			Total % Cover of: Multiply by:
7			OBL species x 1 =
Sapling/Shrub Stratum Plot Size:	0	= Total Cover	FACW species x 2 =
1			FAC species x 3 =
			FACU species x 4 =
3			UPL species x 5 =
4			Column Totals: (A)
5.			Prevalence Index = B/A =
6			Hydrophytic Vegetation Indicators:
7			Rapid Test for Hydrophytic Vegetation
	0	= Total Cover	☐ Dominance Test is > 50%
Herb Stratum Plot Size:			☐ Prevalence Index is ≤ 3.0¹
1. 2.			Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet.)
3.			Problematic Hydrophytic Vegetation¹ (Explain.)
4.			¹Indicators of hydric soil and wetland hydrology
5.			must be present, unless disturbed or problematic.
6.			Definitions of Vegetation Strata:
7			Tree - Woody plants 3 in. (7.6 cm) or more in diame
9.			at breast height (DBH), regardless of height.
10.			Sapling/shrub - Woody plants less than 3 in. DBH, and greater than 3.28 ft. (1 m) tall.
11 12.			Herb - All herbaceous (non-woody) plants, regardles of size, and woody plants less than 3.28 ft. tall.
	0	= Total Cover	Woody Vines - All woody vines greater than 3.28 ft.
Woody Vine Stratum Plot Size:			height.
1			
2.			1
3.			Hydrophytic Vegetation Yes No
4			Present?
	0	= Total Cover	

SOIL Sampling Point: A7L

	cription: (Describe	to the	-	locument		cator or o	confirm the absence of	f indicators.
Depth (inches)		%				1002	Toytura	Domostro
0 - 7	Color (moist)	100	Color (moist)	%	Type ¹	Loc. ²	Texture loam	Remarks
7 - 11	10YR5/1	95	10YR4/6	5			clay loam	
11 - 17	10YR4/1	95	10YR4/6	 5			clay loam	
	101H4/1	95	10 Y H4/6			IM	ciay loam	
¹Type: C=Cc		etion, RN		S=Maske	d Sand Gr	ains.	² Location: PL:	=Pore Lining, M=Matrix.
					co) (I DD 5			-
Histosol (A			☐ Polyvalue Below MLRA 149B)	Surface (S8) (LRR F	₹,		LRR K, L, MLRA 149B)
l	pedon (A2)		_	- (60) (11	DD D MID	A 140D)		(A16) (LRR K, L, R)
Black Hist			☐ Thin Dark Surfac					Peat (S3) (LRR K, L, R)
	Sulfide (A4)		Loamy Mucky Mi			.)	Dark Surface (S7) (
	Layers (A5)		Loamy Gleyed M					rface (S8) (LRR K, L)
	Below Dark Surface (411)	✓ Depleted Matrix				Thin Dark Surface (
☐ Thick Darl	k Surface (A12)		Redox Dark Surfa	ace (F6)			☐ Iron-Manganese Ma	asses (F12) (LRR K, L, R)
Sandy Mu	cky Mineral (S1)		Depleted Dark Su	urface (F7	7)		Piedmont Floodplair	n Soils (F19) (MLRA 149B)
-	yed Matrix (S4)		Redox Depressio	ns (F8)				(MLRA 144A, 145, 149B)
Sandy Red	dox (S5)						Red Parent Material	(F21)
Stripped N	1atrix (S6)						☐ Very Shallow Dark S	Surface (TF12)
☐ Dark Surfa	ace (S7) (LRR R, MLR	A 149B)					Other (Explain in Re	emarks.)
³ Indicators of	hydrophytic vegetati	on and v	vetland hydrology mus	st be pres	ent, unles	s disturbe	d or problematic.	
Restrictive	Layer (if observed)):						
Type:			_					
Depth (inches	s):		_				Hydric Soil Prese	nt? ✓ Yes 🗌 No
Remarks: (Ir	nclude photo numbers	here or	r on a separate sheet.	.)				

Project/Site: USH 151/CTH T Overpass	S	City/County Town of Empire / Fond du Lac Sampling Dat 5/29/201			
Applicant/Owner: WisDOT		State: WI Sampling Point: A7U			
Investigator(s): Don Brittnacher		Section, Township, Range: Sec. 18, T 15 N, R 18 E			
Landform (hillslope, terrace, etc.): hills	slope	Local relief (concave, convex, none): concave Slope (%):			
Subregion (LRR or MLRA): K / 95A	Lat: 43.769	9617 Long: -88.399023 Datum: WGS 1984			
Soil Map Unit Name: Poygan silty clay	loam	NWI Classification:			
Are climatic / hydrologic conditions on					
Are Vegetation: $lackim Q$, Soil $lackim Q$, or Hydro	ology \square significantly distu	urbed? Are "Normal Circumstances" present? ☐ Yes ✓ No			
Are Vegetation: \square , Soil \square , or Hydro	ology \square naturally problem	natic? (If needed, explain any answers in Remarks.)			
SUMMARY OF FINDINGS - Attac	h site map showing s	ampling point locations, transects, important features, etc.			
Hydrophytic Vegetation Present? Hydric Soil Present?	☐ Yes ☐ No ☐ Yes ✔ No	Is the Sampled Area Within a Wetland?			
Wetland Hydrology Present?	Yes V No	If yes, optional Wetland Site ID:			
Remarks: (Explain alternative proced	lures here or in a separate	report.)			
Sample location in farm field.					
HYDROLOGY					
Wetland Hydrology Indicators:		Secondary Indicators (minimum of two required)			
Primary Indicators (minimum of one i	_	Surface Soil cracks (50)			
Surface Water (A1)		ed Leaves (B9) Drainage Patterns (B10)			
☐ High Water Table (A2)	Aquatic Faur				
Saturation (A3)	Marl Deposit	<u> </u>			
Water Marks (B1)		ulfide Odor (C1) Crayfish Burrows (C8)			
Sediment Deposits (B2)		zospheres on Living Roots (C3) Saturation Visible on Aerial Imagery (C9)			
Drift Deposits (B3)		Reduced Iron (C4) Stunted or Stressed Plants (D1)			
☐ Algal Mat or Crust (B4)☐ Iron Deposits (B5)	☐ Recent Iron ☐ Thin Muck S	Reduction in Tilled Soils (C6) Geomorphic Position (D2) urface (C7) Shallow Aquitard (D3)			
Inundation Visible on Aerial Image	_	in in Remarks)			
Sparsely Vegetated Concave Surfa		☐ Microtopographic Reliei (D4) ☐ FAC-Neutral Test (D5)			
		Inc reduct rest (55)			
Field Observations:					
Surface Water Present? Yes		·			
Water Table Present? Yes		· · · 			
Saturation Present?	No Depth (inch	nes): Wetland Hydrology Present?			
Describe Recorded Data (stream gai		I photos, previous inspections), if available:			
Dooring Hood and Jake (50.55 3	igo, monitoring non, accus	photos, provious inspections, il available.			
Remarks:					

3.

5. 6.

2. 3. 4.

6.

3.

5. 6.

3.

	Absolute	Dominant	Indicator	Dominance Test works	heet:
ree Stratum Plot Size:	% Cover	Species?	Status	Number of Dominant Spe That Are OBL, FACW, or	
				Total Number of Dominan Species Across All Strata	t
				Percent of Dominant Spec	
				That Are OBL, FACW, or	FAC: 0% (A/B)
				Prevalence Index work	sheet:
				Total % Cover of:	Multiply by:
	0	= Total C	over	OBL species	x 1 =
oling/Shrub Stratum Plot Size:				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	n Indicators:
				Rapid Test for Hydroph	ytic Vegetation
	0	= Total Cov	/er	Dominance Test is > 5	0%
rb Stratum Plot Size:				Prevalence Index is ≤	3.0 ¹
				Morphological Adaptati	ons ¹ (Provide supporting
				data in Remarks or on	
				☐ Problematic Hydrophyt	ic Vegetation¹ (Explain.)
				¹ Indicators of hydric soil a	
				must be present, unless d	isturbed or problematic.
				Definitions of Vegetati	on Strata:
				Troe Woody plants 2 in	(7.6 cm) or more in diameter
-				at breast height (DBH), re	
				Sapling/shrub - Woody pla	
				and greater than 3.28 ft. (1 m) tall.
· ·				Herb - All herbaceous (no of size, and woody plants	n-woody) plants, regardless
	0	= Total C	over		vines greater than 3.28 ft. in
oody Vine Stratum Plot Size:				height.	greater alan 3,20 ft III
					_
				Hydrophytic Vegetation Yes	
				Vegetation Yes Present?	s ∐ No
	0	= Total C	over		

Vegetation was not assessed, since sample location is in a disturbed field, plowed within the last two years.

SOIL Sampling Point: A7U

Profile Desc	ription: (Describe Matrix	e to the	_	dox Featu		cator or o	confirm the absence of	f indicators.
(inches)	Color (moist)	%	Color (moist)	%	Type ¹	Loc. ²	Texture	Remarks
0 - 7.5	10YR3/2	100			71		loam	
7.5 - 18.5	10YR3/1	100					silt loam	
			_					
			_					
¹Type: C=Con	ncentration, D=Deple	etion, RI	M=Reduced Matrix, M	S=Maske	d Sand Gra	ains.	² Location: PL	=Pore Lining, M=Matrix.
Hydric Soil Ir	ndicators:						Indicators for Proble	matic Hydric Soils³:
☐ Histosol (A1	1)		Polyvalue Below	Surface (S8) (LRR R	ζ,	☐ 2 cm Muck (A10) (L	RR K, L, MLRA 149B)
Histic Epipe	edon (A2)		MLRA 149B)				Coast Prairie Redox	(A16) (LRR K, L, R)
☐ Black Histic	(A3)		☐ Thin Dark Surfac	e (S9) (L	RR R, MLR	A 149B)	5 cm Mucky Peat or	Peat (S3) (LRR K, L, R)
Hydrogen S	Sulfide (A4)		Loamy Mucky Mi	neral (F1) (LRR K, L)	☐ Dark Surface (S7) (LRR K, L)
Stratified La	ayers (A5)		Loamy Gleyed M	atrix (F2)			Polyvalue Below Sur	rface (S8) (LRR K, L)
Depleted Be	elow Dark Surface (A11)	☐ Depleted Matrix	(F3)			☐ Thin Dark Surface (S9) (LRR K, L)
☐ Thick Dark	Surface (A12)		Redox Dark Surf	ace (F6)			☐ Iron-Manganese Ma	sses (F12) (LRR K, L, R)
☐ Sandy Muck	ky Mineral (S1)		☐ Depleted Dark S	urface (F	7)		☐ Piedmont Floodplair	n Soils (F19) (MLRA 149B)
Sandy Gleye	ed Matrix (S4)		Redox Depression	ns (F8)			☐ Mesic Spodic (TA6)	(MLRA 144A, 145, 149B)
Sandy Redo	ox (S5)						Red Parent Material	(F21)
Stripped Ma	atrix (S6)						☐ Very Shallow Dark S	Surface (TF12)
☐ Dark Surfac	ce (S7) (LRR R, MLR	A 149B))				Other (Explain in Re	emarks.)
³ Indicators of h	nydrophytic vegetati	on and v	wetland hydrology mu	st be pres	ent, unless	s disturbe	d or problematic.	
Restrictive La	ayer (if observed)):						
Type:								
Depth (inches)			_				Hydric Soil Prese	nt? ☐ Yes 🗸 No
Remarks: (Inc	clude photo numbers	s here o	r on a separate sheet	.)			1	

Project/Site: USH 151/CTH T Overpass	City/County Town of Empire / Fond du Lac Sampling Dat 5/29/2014
Applicant/Owner: WisDOT	State: WI Sampling Point: A8L
Investigator(s): Don Brittnacher	Section, Township, Range: Sec. 18, T 15 N, R 18 E
Landform (hillslope, terrace, etc.): stream terrace	Local relief (concave, convex, none): concave Slope (%):
Subregion (LRR or MLRA): K / 95A Lat: 43.76969	5 Long: -88.399265 Datum: WGS 1984
Soil Map Unit Name: Poygan silty clay loam	NWI Classification:
Are climatic / hydrologic conditions on the site typical for this time of	f year? 🗹 Yes 🗌 No (If no, explain in Remarks.)
Are Vegetation: ${\color{red} \!$	ed? Are "Normal Circumstances" present? Yes No
Are Vegetation: \square , Soil \square , or Hydrology \square naturally problemati	ic? (If needed, explain any answers in Remarks.)
SUMMARY OF FINDINGS - Attach site map showing sam	pling point locations, transects, important features, etc.
	s the Sampled Area
Hydric Soil Present? ✓ Yes ☐ No	Vithin a Wetland?
Wetland Hydrology Present? ✓ Yes ☐ No If	f yes, optional Wetland Site ID:
Remarks: (Explain alternative procedures here or in a separate re	port.)
Sample location in farm field. Area has been filled.	
HYDROLOGY	
Wetland Hydrology Indicators:	Secondary Indicators (minimum of two required)
Primary Indicators (minimum of one is required; check all that app	l <u>y)</u> Surface Soil Cracks (B6)
Surface Water (A1) Water-Stained L	
High Water Table (A2)	_ ` '
☐ Saturation (A3) ☐ Marl Deposits (E	Dry-Season Water Table (C2)
☐ Water Marks (B1) ☐ Hydrogen Sulfid	e Odor (C1) Crayfish Burrows (C8)
☐ Sediment Deposits (B2) ☐ Oxidized Rhizos	pheres on Living Roots (C3) Saturation Visible on Aerial Imagery (C9)
☐ Drift Deposits (B3) ☐ Presence of Red	
` ,	duction in Tilled Soils (C6)
☐ Iron Deposits (B5) ☐ Thin Muck Surfa	
Inundation Visible on Aerial Imagery (B7) Other (Explain in	<u> </u>
Sparsely Vegetated Concave Surface (B8)	FAC-Neutral Test (D5)
Field Observations:	
Surface Water Present? ☐ Yes ✓ No Depth (inches)	·
Water Table Present? ☐ Yes ✔ No Depth (inches)	:
Saturation Present?	: Wetland Hydrology Present? 🗸 Yes 🗌 No
(includes capillary fringe)	
Describe Recorded Data (stream gauge, monitoring well, aerial ph	otos, previous inspections), if available:
Remarks:	

VEGETATION	Use scientific	names of	plants
------------	----------------	----------	--------

Tree Stratum Plot Size:	Absolute % Cover	Dominant Indicator Species? Status	Dominance Test worksheet:
	70 0010.		Number of Dominant Species That Are OBL, FACW, or FAC: 0 (A)
1.			That Are OBL, FACW, or FAC:0 (A) Total Number of Dominant
2.			Species Across All Strata: 0 (B)
3.			Percent of Dominant Species
4			That Are OBL, FACW, or FAC:0% (A/B)
5.			Prevalence Index worksheet:
6. 7.			Total % Cover of: Multiply by:
7.		= Total Cover	OBL species x 1 =
Sapling/Shrub Stratum Plot Size:		= Total Cover	FACW species x 2 =
1.			FAC species x 3 =
2			FACU species x 4 =
3.			UPL species x 5 =
4.			Column Totals: (A) (B)
5.			Prevalence Index = B/A =
6.			Hydrophytic Vegetation Indicators:
7.			Rapid Test for Hydrophytic Vegetation
	0	= Total Cover	Dominance Test is > 50%
Herb Stratum Plot Size:			Prevalence Index is ≤ 3.0¹
1			☐ Morphological Adaptations¹ (Provide supporting
2.			data in Remarks or on a separate sheet.)
3.			Problematic Hydrophytic Vegetation¹ (Explain.)
4.			¹ Indicators of hydric soil and wetland hydrology
5			must be present, unless disturbed or problematic.
6.			Definitions of Vegetation Strata:
7.			
8.			Tree - Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.
9.	_		Sapling/shrub - Woody plants less than 3 in. DBH,
10.			and greater than 3.28 ft. (1 m) tall.
11.			Herb - All herbaceous (non-woody) plants, regardless
12.			of size, and woody plants less than 3.28 ft. tall.
	0	= Total Cover	Woody Vines - All woody vines greater than 3.28 ft. in
Woody Vine Stratum Plot Size:			height.
1.			
2			Hydrophytic
3			Vegetation
4			Present?
	0	= Total Cover	
Remarks: (Include photo numbers here or on a s	eparate shee	t.)	
Vegetation was not assessed, since sample lo	ocation is in a	disturbed field, plowed	within the last two years.

Sampling Point: A8L

SOIL Sampling Point: A8L

Depth (inches) Color (moist) % Color (moist) % Type¹ Loc.² Texture Remarks
1 1 1 1 1 1 1 1 1 1
6.5 - 13
13 - 19 10YR5/1 90 10YR4/6 10 D M sandy clay loam 1Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. 2Location: PL=Pore Lining, M=Matrix
¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. ²Location: PL=Pore Lining, M=Matri
Today to Bush out
Hydric Soil Indicators: Indicators for Problematic Hydric Soils ³ :
☐ Histosol (A1) ☐ Polyvalue Below Surface (S8) (LRR R, ☐ 2 cm Muck (A10) (LRR K, L, MLRA 149B)
☐ Histic Epipedon (A2) ☐ Coast Prairie Redox (A16) (LRR K, L, R)
☐ Black Histic (A3) ☐ Thin Dark Surface (S9) (LRR R, MLRA 149B) ☐ 5 cm Mucky Peat or Peat (S3) (LRR K, L, I
☐ Hydrogen Sulfide (A4) ☐ Loamy Mucky Mineral (F1) (LRR K, L) ☐ Dark Surface (S7) (LRR K, L)
☐ Stratified Layers (A5) ☐ Loamy Gleyed Matrix (F2) ☐ Polyvalue Below Surface (S8) (LRR K, L)
□ Depleted Below Dark Surface (A11) □ Depleted Matrix (F3) □ Thin Dark Surface (S9) (LRR K, L)
☐ Thick Dark Surface (A12) ☐ Redox Dark Surface (F6) ☐ Iron-Manganese Masses (F12) (LRR K, L,
Sandy Mucky Mineral (S1) Depleted Dark Surface (F7) Piedmont Floodplain Soils (F19) (MLRA 145 146 147 147 147 147 147 147 147 147 147 147
□ Sandy Gleyed Matrix (S4) □ Redox Depressions (F8) □ Mesic Spodic (TA6) (MLRA 144A, 145, 145 □ Sandy Redox (S5) □ Red Parent Material (F21)
Stripped Matrix (S6) Stripped Matrix (S6) Very Shallow Dark Surface (TF12)
Dark Surface (S7) (LRR R, MLRA 149B) 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?
Remarks: (Include photo numbers here or on a separate sheet.)

Project/Site: USH 151/CTH T Overpass		City/County Town of Empire / Fond du Lac Sampling Dat 5/29/20
Applicant/Owner: WisDOT		State: WI Sampling Point: A8U
Investigator(s): Don Brittnacher		Section, Township, Range: Sec. 18, T 15 N, R 18 E
Landform (hillslope, terrace, etc.): hillslope	pe	Local relief (concave, convex, none): concave Slope (%):
Subregion (LRR or MLRA): K / 95A	Lat: 43.769	Datum: WGS 1984
Soil Map Unit Name: Poygan silty clay loa	am	NWI Classification:
Are climatic / hydrologic conditions on the	e site typical for this time	e of year? 🗹 Yes 🗌 No (If no, explain in Remarks.)
Are Vegetation: $lackim Q$, Soil $lackim Q$, or Hydrolog	$_{ extit{gy}} \square$ significantly distu	urbed? Are "Normal Circumstances" present? ☐ Yes ✓ No
Are Vegetation: \square , Soil \square , or Hydrolog	$_{ extsf{gy}}\square$ naturally problem	natic? (If needed, explain any answers in Remarks.)
SUMMARY OF FINDINGS - Attach	site map showing s	ampling point locations, transects, important features, etc.
Hydrophytic Vegetation Present?	Yes No	Is the Sampled Area Within a Wetland? ✓ Yes
Hydric Soil Present?	Yes No	
Wetland Hydrology Present?	Yes 🗸 No	If yes, optional Wetland Site ID:
Remarks: (Explain alternative procedure	es here or in a separate	report.)
Sample location in farm field. Area has	been filled.	
HYDROLOGY		
Wetland Hydrology Indicators:		Secondary Indicators (minimum of two required)
Primary Indicators (minimum of one is re	equired; check all that a	apply) Surface Soil Cracks (B6)
Surface Water (A1)	☐ Water-Staine	ed Leaves (B9) Drainage Patterns (B10)
High Water Table (A2)	Aquatic Faun	
Saturation (A3)	Marl Deposits	_ '
Water Marks (B1)		ulfide Odor (C1) Crayfish Burrows (C8)
Sediment Deposits (B2)		zospheres on Living Roots (C3) Saturation Visible on Aerial Imagery (C9)
☐ Drift Deposits (B3)	_	Reduced Iron (C4) Stunted or Stressed Plants (D1)
Algal Mat or Crust (B4)		Reduction in Tilled Soils (C6) Geomorphic Position (D2)
Iron Deposits (B5)	☐ Thin Muck Su	
Inundation Visible on Aerial Imagery		in in Remarks) Microtopographic Relief (D4)
Sparsely Vegetated Concave Surface	(B8)	FAC-Neutral Test (D5)
Field Observations:		
	No Depth (inche	·
	No Depth (inche	·
	✓ No Depth (inche	es): Wetland Hydrology Present?
(includes capillary fringe)		
Describe Recorded Data (stream gauge	, monitoring well, aerial	photos, previous inspections), if available:
Remarks:		

	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test work	sheet:	
ee Stratum Plot Size:	-% Cover	Species?	Status	Number of Dominant Sp That Are OBL, FACW, o		(A)
				Total Number of Domina Species Across All Strat		(B)
				Percent of Dominant Spo That Are OBL, FACW, o	ecies	(A/B)
				Prevalence Index wo		
				Total % Cover of:	Multiply by:	
				OBL species	x 1 =	
pling/Shrub Stratum Plot Size:	0	= Total Co	over	FACW species	x 1 = x 2 =	
ping/Smab Stratum 1 lot Size.				FAC species	x 3 =	
				FACU species	x 4 =	
				UPL species	x 5 =	
				Column Totals:	(A)	(B
				Prevalence Index = B/A	A =	
				Hydrophytic Vegetation	on Indicators:	
				☐ Rapid Test for Hydrop	ohytic Vegetation	
	0	= Total Cov	er	☐ Dominance Test is >	50%	
erb Stratum Plot Size:				☐ Prevalence Index is ≤	3.0¹	
				Morphological Adapta data in Remarks or o		
				☐ Problematic Hydrophy	tic Vegetation¹ (Ex	plain.)
				¹ Indicators of hydric soil	and wetland hydrol	ogy
				must be present, unless	disturbed or proble	matic.
				Definitions of Vegetat	tion Strata:	
				Tree - Woody plants 3 in	(7.6 cm) or more	in diamete
-				at breast height (DBH), i		
				Sapling/shrub - Woody p		DBH,
				and greater than 3.28 ft.	. (1 m) tall.	
·				Herb - All herbaceous (n of size, and woody plant		
	0	= Total Co	ver	Woody Vines - All woody		
oody Vine Stratum Plot Size:				height.	co greater triair	J.EJ 16. III
				Hydrophytic Vegetation 70	ne Ne	
				Present?	es U No	
	0	= Total Co	ver			

SOIL Sampling Point: A8U

(inches)									
	Color (moist)	%	Color (moist)	%	Type ¹	Loc.2	Texture	Remarks	
0 - 9.5	10YR3/2	100					loam		
9.5 - 11	10YR3/2	95	10YR4/6	5	С	М	loam	_	
11 - 14	10YR3/1	100					clay loam	fill?	
14 - 15.5	7.5YR4/6	100					clay	fill?	
15.5 - 19	10YR3/1	100	_	_			clay loam	_	
			_						
				_				_	
		-	_						
Type: C=Cor	ncentration, D=Depl	letion, RI	M=Reduced Matrix, M	IS=Maske	d Sand Gr	ains.	² Location	n: PL=Pore Lining, M=Matrix.	
Hydric Soil I	indicators:						Indicators for Pi	roblematic Hydric Soils³:	
Histosol (A			Polyvalue Below MLRA 149B)	Surface (S8) (LRR F	ζ,		10) (LRR K, L, MLRA 149B)	
Histic Epipe			_	(22) (1)				Redox (A16) (LRR K, L, R)	
Black Histic			☐ Thin Dark Surfac					eat or Peat (S3) (LRR K, L, R)	
_	Sulfide (A4)		Loamy Mucky M			.)	☐ Dark Surface (S7) (LRR K, L) ☐ Polyvalue Below Surface (S8) (LRR K, L)		
Stratified L	ayers (A3) Below Dark Surface (′Λ11\	☐ Loamy Gleyed M☐ Depleted Matrix					face (S9) (LRR K, L)	
	: Surface (A12)	(711)	Redox Dark Surf				_	se Masses (F12) (LRR K, L, R)	
_	cky Mineral (S1)		☐ Depleted Dark S		7)			dplain Soils (F19) (MLRA 149B)	
	yed Matrix (S4)		Redox Depression					(TA6) (MLRA 144A, 145, 149B)	
Sandy Red				(. 0)			Red Parent Ma		
Stripped M							☐ Very Shallow Dark Surface (TF12)		
	ce (S7) (LRR R, MLI	RA 149B))				Other (Explain		
Indicators of	hydrophytic vegetat	ion and	wetland hydrology mu	st be pres	sent, unles	s disturbe	d or problematic.		
Restrictive L	_ayer (if observed):							
Туре:			_						
Depth (inches	3):		<u> </u>				Hydric Soil P	Present? Yes V No	
Remarks: (In	clude photo number	rs here o	r on a separate sheet)					

Project/Site: USH 151/CTH T Overpass	City/County Town of Empire / Fond du Lac Sampling Dat 5/29/2014
Applicant/Owner: WisDOT	State: WI Sampling Point: A8W
Investigator(s): Don Brittnacher	Section, Township, Range: Sec. 18, T 15 N, R 18 E
Landform (hillslope, terrace, etc.): stream terrace	Local relief (concave, convex, none): concave Slope (%):
Subregion (LRR or MLRA): K / 95A Lat: 43.769	Datum: WGS 1984
Soil Map Unit Name: Poygan silty clay loam	NWI Classification:
Are climatic / hydrologic conditions on the site typical for this time	e of year? 🗹 Yes 🗌 No (If no, explain in Remarks.)
Are Vegetation: \Box , Soil \Box , or Hydrology \Box significantly distu	ırbed? Are "Normal Circumstances" present? ✓ Yes ☐ No
Are Vegetation: \square , Soil \square , or Hydrology \square naturally problem	natic? (If needed, explain any answers in Remarks.)
SUMMARY OF FINDINGS - Attach site map showing sa	ampling point locations, transects, important features, etc.
Hydrophytic Vegetation Present? ✓ Yes ☐ No	Is the Sampled Area
Hydric Soil Present? ✓ Yes ☐ No	Within a Wetland? ✓ Yes No
Wetland Hydrology Present? ✓ Yes ☐ No	If yes, optional Wetland Site ID:
Remarks: (Explain alternative procedures here or in a separate	report.)
HYDROLOGY	
Wetland Hydrology Indicators:	Secondary Indicators (minimum of two required)
Primary Indicators (minimum of one is required; check all that a	Surface Soil Cracks (B6)
☐ Surface Water (A1) ☐ Water-Staine	d Leaves (B9)
High Water Table (A2)	<u> </u>
Saturation (A3) Marl Deposits	<u> </u>
	Iffide Odor (C1) Crayfish Burrows (C8)
	zospheres on Living Roots (C3) Saturation Visible on Aerial Imagery (C9)
	Reduced Iron (C4) Stunted or Stressed Plants (D1) Reduction in Tilled Soils (C6) Geomorphic Position (D2)
☐ Iron Deposits (B5) ☐ Thin Muck St	\cdot , \equiv \cdot \cdot ,
	in in Remarks)
Sparsely Vegetated Concave Surface (B8)	FAC-Neutral Test (D5)
Field Observations:	
Surface Water Present? Yes V No Depth (inch	es):
Water Table Present? ☐ Yes ✓ No Depth (inch	es):
Saturation Present? ☐ Yes ✓ No Depth (inche (includes capillary fringe)	es): Wetland Hydrology Present? 🗸 Yes 🗌 No
Describe Recorded Data (stream gauge, monitoring well, aerial	photos, previous inspections), if available:
Powerd or	
Remarks:	

F 0: : DI : 0:	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test works	heet:
Tree Stratum Plot Size: 1. fraxinus pennsylvanica	20	X	FACW	Number of Dominant Spec That Are OBL, FACW, or I	
2.				Total Number of Dominant Species Across All Strata:	
3.				Percent of Dominant Spec That Are OBL, FACW, or I	
5				Prevalence Index work	sheet:
6				Total % Cover of:	Multiply by:
7				OBL species	x 1 =
Conline (Chr. th Ctratum Diet Cine)		= Total C	Cover	FACW species	x 2 =
Sapling/Shrub Stratum Plot Size:	5	V	FAC	FAC species	x 3 =
cornus racemosa cornus stolonifera	<u>5</u> 	$\frac{x}{x}$		FACU species	x 4 =
			FACW	UPL species	x 5 =
3.				Column Totals:	(A)(B)
ii.				Prevalence Index = B/A :	<u> </u>
S				Hydrophytic Vegetation	ı Indicators:
7				Rapid Test for Hydroph	
	10	= Total Co	ver	✓ Dominance Test is > 50	
Herb Stratum Plot Size:				☐ Prevalence Index is ≤ 3	
I. phalaris arundinacea	30	X	FACW	Morphological Adaptation	ons¹ (Provide supporting
2. bromus inermis	30	X	UPL	data in Remarks or on a	
3. carex (sedge), unknown	10		FACW	☐ Problematic Hydrophyti	c Vegetation¹ (Explain.)
1. poa pratensis	10		FACU	¹ Indicators of hydric soil a	
5. solidago canadensis	10		FACU	must be present, unless di	sturbed or problematic.
5. 7.				Definitions of Vegetation	on Strata:
3.				Tree - Woody plants 3 in. (at breast height (DBH), red	(7.6 cm) or more in diameter
). 				Sapling/shrub - Woody pla and greater than 3.28 ft. (nts less than 3 in. DBH,
I1.				and greater than 5.20 ft. (i my tan.
12.				Herb - All herbaceous (nor of size, and woody plants	n-woody) plants, regardless less than 3.28 ft. tall.
	90	= Total C	Cover		ines greater than 3.28 ft. in
Woody Vine Stratum Plot Size:				height.	
1. vitis riparia	5	X	FAC		
2.				Hydrophytic	
3.				Vegetation ✓ Yes	☐ No
4				Present?	
	5	= Total C	Cover		

SOIL Sampling Point: A8W

Depth	Matrix	e to the	_	dox Featu		cator or (confirm the absence of	r indicators.	
(inches)	Color (moist)	%	Color (moist)	%	Type ¹	Loc.2	Texture	Remarks	
0 - 10	10YR3/2	100					loam		
10 - 13.5	10YR4/1	80	10YR4/6	5	D	М	clay loam		
	7.5YR4/4	15							
13.5 - 18	10YR4/1	95	10YR4/6	5	D	М	clay loam		
			_						
	_		_						
			_						
			_						
	<u> </u>	letion, R	M=Reduced Matrix, M	S=Maske	ed Sand Gr	ains.	² Location: PL:	=Pore Lining, M=Matrix.	
Hydric Soil	Indicators:						Indicators for Proble	matic Hydric Soils ³ :	
Histosol (Polyvalue Below MLRA 149B)	Surface ((S8) (LRR F	₹,		RR K, L, MLRA 149B)	
	pedon (A2)			(55) (1				(A16) (LRR K, L, R)	
☐ Black Hist				Thin Dark Surface (S9) (LRR R, MLRA 149B)				Peat (S3) (LRR K, L, R)	
	Sulfide (A4) Layers (A5)		☐ Loamy Mucky Mi☐ Loamy Gleyed M			.)	☐ Dark Surface (S7) (rface (S8) (LRR K, L)	
	Below Dark Surface ((A11)	✓ Depleted Matrix		,		☐ Thin Dark Surface (
_	k Surface (A12)	(/111)	Redox Dark Surf					asses (F12) (LRR K, L, R)	
	cky Mineral (S1)		☐ Depleted Dark S		7)			n Soils (F19) (MLRA 149B)	
	yed Matrix (S4)		Redox Depressio	,	,			(MLRA 144A, 145, 149B)	
Sandy Re				` ,			Red Parent Material (F21)		
	Matrix (S6)						☐ Very Shallow Dark Surface (TF12)		
	ace (S7) (LRR R, MLI	RA 149B)				Other (Explain in Re		
³ Indicators of	hydrophytic vegetat	ion and	wetland hydrology mu:	st be pres	sent, unles	s disturbe	d or problematic.		
	Layer (if observed								
Type:		_							
Depth (inche	s):		_				Hydric Soil Prese	nt? ✓ Yes 🗌 No	
				\			•		
Remarks: (II	nciude photo numbei	rs nere d	or on a separate sheet.	.)					

Project/Site: USH 151/CTH T Overpass	City/County Town of Empire / Fond du Lac Sampling Dat 5/29/2014
Applicant/Owner: WisDOT	State: WI Sampling Point: A9L
Investigator(s): Don Brittnacher	Section, Township, Range: Sec. 18, T 15 N, R 18 E
Landform (hillslope, terrace, etc.): stream terrace	Local relief (concave, convex, none): concave Slope (%):
Subregion (LRR or MLRA): K / 95A Lat: 43.769844	4 Long: -88.399458 Datum: WGS 1984
Soil Map Unit Name: Poygan silty clay loam	NWI Classification:
Are climatic / hydrologic conditions on the site typical for this time of	f year? 🗹 Yes 🗌 No (If no, explain in Remarks.)
Are Vegetation: $oldsymbol{arVert}$, Soil \Box , or Hydrology \Box significantly disturbe	ed? Are "Normal Circumstances" present? ☐ Yes 🗹 No
Are Vegetation: \square , Soil \square , or Hydrology \square naturally problemation	c? (If needed, explain any answers in Remarks.)
SUMMARY OF FINDINGS - Attach site map showing sam	pling point locations, transects, important features, etc.
	s the Sampled Area
Hydric Soil Present? ✓ Yes ☐ No	Vithin a Wetland?
Wetland Hydrology Present? ✓ Yes No If	f yes, optional Wetland Site ID:
Remarks: (Explain alternative procedures here or in a separate rep	port.)
Sample location in farm field.	
HYDROLOGY	
Wetland Hydrology Indicators:	Secondary Indicators (minimum of two required)
Primary Indicators (minimum of one is required; check all that appl	
Surface Water (A1) Water-Stained L	Surface Soil Cracks (BO)
High Water Table (A2) Aquatic Fauna (I	
Saturation (A3) Marl Deposits (B	_ ` ` '
☐ Water Marks (B1) ☐ Hydrogen Sulfide	` ` ` ` ` ` ` ` ` ` ` ` ` ` ` ` ` ` ` `
	pheres on Living Roots (C3) Saturation Visible on Aerial Imagery (C9)
☐ Drift Deposits (B3) ☐ Presence of Red	
	fluction in Tilled Soils (C6)
☐ Iron Deposits (B5) ☐ Thin Muck Surfa	
☐ Inundation Visible on Aerial Imagery (B7) ☐ Other (Explain in	
Sparsely Vegetated Concave Surface (B8)	FAC-Neutral Test (D5)
Field Observations:	
Surface Water Present?	:
Water Table Present? ☐ Yes ✓ No Depth (inches):	:
Saturation Present?	: Wetland Hydrology Present? 🗸 Yes 🗌 No
Describe Recorded Data (stream gauge, monitoring well, aerial pho	otos, previous inspections), if available:
Remarks:	

VEGETATION	Use scientific	names of	plants
------------	----------------	----------	--------

Tree Stratum Plot Size:	Absolute % Cover	Dominant Indicator Species? Status	Dominance Test worksheet:
	70 0010.		Number of Dominant Species That Are OBL, FACW, or FAC: 0 (A)
1.			That Are OBL, FACW, or FAC:0 (A) Total Number of Dominant
2.			Species Across All Strata: 0 (B)
3.			Percent of Dominant Species
4			That Are OBL, FACW, or FAC:0% (A/B)
5.			Prevalence Index worksheet:
6. 7.			Total % Cover of: Multiply by:
7.		= Total Cover	OBL species x 1 =
Sapling/Shrub Stratum Plot Size:		= Total Cover	FACW species x 2 =
1.			FAC species x 3 =
2			FACU species x 4 =
3.			UPL species x 5 =
4.			Column Totals: (A) (B)
5.			Prevalence Index = B/A =
6.			Hydrophytic Vegetation Indicators:
7.			Rapid Test for Hydrophytic Vegetation
	0	= Total Cover	Dominance Test is > 50%
Herb Stratum Plot Size:			Prevalence Index is ≤ 3.0¹
1			☐ Morphological Adaptations¹ (Provide supporting
2.			data in Remarks or on a separate sheet.)
3.			Problematic Hydrophytic Vegetation¹ (Explain.)
4.			¹ Indicators of hydric soil and wetland hydrology
5			must be present, unless disturbed or problematic.
6.			Definitions of Vegetation Strata:
7.			
8.			Tree - Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.
9.	_		Sapling/shrub - Woody plants less than 3 in. DBH,
10.			and greater than 3.28 ft. (1 m) tall.
11.			Herb - All herbaceous (non-woody) plants, regardless
12.			of size, and woody plants less than 3.28 ft. tall.
	0	= Total Cover	Woody Vines - All woody vines greater than 3.28 ft. in
Woody Vine Stratum Plot Size:			height.
1.			
2			Hydrophytic
3			Vegetation
4			Present?
	0	= Total Cover	
Remarks: (Include photo numbers here or on a s	eparate shee	t.)	
Vegetation was not assessed, since sample lo	ocation is in a	disturbed field, plowed	within the last two years.

Sampling Point: A9L

SOIL Sampling Point: A9L

Depth	Matrix		-	dox Featu			confirm the absence of i	
(inches)	Color (moist)	%	Color (moist)	%	Type ¹	Loc.2	Texture	Remarks
0 - 5	10YR3/2	100					loam	
5 - 7.5	10YR3/2	50					clay loam	
	7.5YR4/4	50						
7.5 - 15	10YR3/1	98	10YR4/6	2	С	М	clay loam	
15 - 18.5	10YR5/1	98	10YR4/6	2	D	М	silty clay loam	
					· ·			
¹Type: C=Co	oncentration D=Depl	etion. RI	– ————————————————————————————————————	S=Maske	d Sand Gr	ains.	2l ocation: PI =F	Pore Lining, M=Matrix.
Hydric Soil	·						Indicators for Problem	
Histosol (A	A1) Dedon (A2) Ic (A3) Sulfide (A4) Layers (A5) Below Dark Surface (k Surface (A12) Cky Mineral (S1) Eyed Matrix (S4)		Polyvalue Below MLRA 149B) Thin Dark Surfact Loamy Mucky Mi Loamy Gleyed Matrix Pepleted Matrix Redox Dark Surfact Depleted Dark Surfact Redox Depression	e (S9) (L neral (F1) atrix (F2) (F3) ace (F6) urface (F7	RR R, MLR.) (LRR K, L	A 149B)	2 cm Muck (A10) (LR Coast Prairie Redox (A) 5 cm Mucky Peat or P Dark Surface (S7) (LR Polyvalue Below Surface Thin Dark Surface (S9) Iron-Manganese Mass	R K, L, MLRA 149B) A16) (LRR K, L, R) Peat (S3) (LRR K, L, R) RR K, L) ace (S8) (LRR K, L) O) (LRR K, L) Ses (F12) (LRR K, L, R) Soils (F19) (MLRA 149B) MLRA 144A, 145, 149B) F21) rface (TF12)
³ Indicators of	hydrophytic vegetat	ion and v	wetland hydrology mus	st be pres	sent, unless	s disturbe	d or problematic.	
	Layer (if observed):						
Type: Depth (inche	0).		_				Hydric Soil Present	:? ✓ Yes No
			<u> </u>				Hydric Son Present	. V ies ito
Hemarks: (li	nciude photo number	rs here o	r on a separate sheet.)				

Project/Site: USH 151/CTH T Overpass	City/County Town of Empire	City/County Town of Empire / Fond du Lac Sampling Dat State: WI Sampling Point: A				
Applicant/Owner: WisDOT	Stat					
Investigator(s): Don Brittnacher		Section, Township, Range:	Sec. 18, T 1	15 N, R 18 E		
Landform (hillslope, terrace, etc.): hills	slope	Local relief (concave, conve	x, none): concav	ve Slope (%):		
Subregion (LRR or MLRA): K / 95A	Lat: 43.76	S9866 Long: -88.399418		Datum: WGS 1984		
Soil Map Unit Name: Poygan silty clay	loam		NWI Cla	ssification:		
Are climatic / hydrologic conditions on	the site typical for this tir	ne of year? 🗹 Yes 🗌 No	(If no, explain	in Remarks.)		
Are Vegetation: $lackim J$, Soil \Box , or Hydro	ology significantly dis	turbed? Are "Normal Circumsta	nces" present?	Yes 🗸 No		
Are Vegetation: \square , Soil \square , or Hydro	ology naturally proble	matic? (If needed, explain any	answers in Rema	rks)		
7 re vegetation = 7 50 = 7 61 117 and	ology — Hatarany proble	made. (If needed) explain any	distreis in rema			
SUMMARY OF FINDINGS - Attac	h site map showing	sampling point locations, transec	cts, important fo	eatures, etc.		
Hydrophytic Vegetation Present?	☐ Yes ☐ No	Is the Sampled Area	Yes	✓ No		
Hydric Soil Present?	Yes V No	Within a Wetland?		▼ NO		
Wetland Hydrology Present?	☐ Yes 🗸 No	If yes, optional Wetland Site ID:				
Remarks: (Explain alternative proced	dures here or in a separat	re report.)				
Sample location in farm field.						
HYDROLOGY						
Wetland Hydrology Indicators:		<u>Secon</u>	dary Indicators (m	ninimum of two required)		
Primary Indicators (minimum of one i	is required; check all that	apply)	Surface Soil Crack	(s (B6)		
Surface Water (A1)		ned Leaves (B9)	Drainage Patterns			
High Water Table (A2)	Aquatic Fau	` ′ =	Moss Trim Lines (` '		
☐ Saturation (A3)	Marl Depos		Dry-Season Wate			
☐ Water Marks (B1)	☐ Hydrogen S	sulfide Odor (C1)	Crayfish Burrows	(C8)		
☐ Sediment Deposits (B2)	Oxidized Rh	nizospheres on Living Roots (C3)	Saturation Visible	on Aerial Imagery (C9)		
☐ Drift Deposits (B3)	Presence of	Reduced Iron (C4)	Stunted or Stress	ed Plants (D1)		
Algal Mat or Crust (B4)		Reduction in Tilled Soils (C6)	Geomorphic Posit			
Iron Deposits (B5)		Surface (C7)	Shallow Aquitard			
Inundation Visible on Aerial Image		ain in Remarks)	Microtopographic	` '		
Sparsely Vegetated Concave Surfa	ice (B8)		FAC-Neutral Test	(D5)		
Field Observations:						
Surface Water Present?	S No Depth (inc	hes):				
Water Table Present?	S No Depth (inc	hes):				
Saturation Present?	s 🗸 No Depth (inc	hes): Wetland Hy	drology Present	? ☐ Yes 🗸 No		
(includes capillary fringe)						
Describe Recorded Data (stream gau	ige monitoring well aeri:	al photos, previous inspections), if availa	ahle:			
Describe Necorded Data (stream gat	ige, monitoring wen, acre	ar priotos, previous inspections), ir availe	abic.			
Remarks:						

VEGETATION Use scientific names of plants				Sampling Point: A9U	
Tree Ctratum Plat Cine.	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet:	
<u>Tree Stratum</u> Plot Size: 1.	70 00101		Claido	Number of Dominant Species That Are OBL, FACW, or FAC: 0 (A)	
2.				Total Number of Dominant Species Across All Strata: 0 (B)	
3. 4				Percent of Dominant Species That Are OBL, FACW, or FAC: 0% (A/B)	
5.				Prevalence Index worksheet:	
6.				Total % Cover of: Multiply by:	
7				OBL species x 1 =	
0 / 0 / 0 / 0 / 0	0	= Total C	over	FACW species x 2 =	
Sapling/Shrub Stratum Plot Size:				FAC species x 3 =	
1.				FACU species x 4 =	
2				UPL species x 5 =	
3				· — —	D)
4				(,	B)
5				Prevalence Index = B/A =	
6.				Hydrophytic Vegetation Indicators:	
7				Rapid Test for Hydrophytic Vegetation	
Harle Christian Blot Cine	0	= Total Cov	/er	☐ Dominance Test is > 50%	
<u>Herb Stratum</u> Plot Size:				☐ Prevalence Index is $\leq 3.0^{1}$	
1.				☐ Morphological Adaptations¹ (Provide supporting	
2. 3.				data in Remarks or on a separate sheet.)	
				Problematic Hydrophytic Vegetation¹ (Explain.)	
4. 5.				¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.	
6.				Definitions of Vegetation Strata:	
7. 8.				Tree - Woody plants 3 in. (7.6 cm) or more in diamet	er
9.				at breast height (DBH), regardless of height.	
10.				Sapling/shrub - Woody plants less than 3 in. DBH, and greater than 3.28 ft. (1 m) tall.	
11					
12.				Herb - All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft. tall.	
	0	= Total C	over	Woody Vines - All woody vines greater than 3.28 ft. ir	ก
Woody Vine Stratum Plot Size:				height.	
1.					
2.					
3.				Hydrophytic Vegetation Yes No	
4.				Present?	
	0	= Total C	over		
Remarks: (Include photo numbers here or on a seg	arate sheet	t)		1	
			Laborato de	White the Leather was	
Vegetation was not assessed, since sample loca	ation is in a	aisturbed fie	ia, plowed v	within the last two years.	

U.S. Army Corps of Engineers

SOIL Sampling Point: A9U

	cription: (Describe	e to the	_	ocumen		cator or o	confirm the absence o	f indicators.
Depth (inches)	Color (moist)	%	Color (moist)	%	Type ¹	Loc. ²	Texture	Remarks
0 - 6	10YR3/2	100	Color (moist)		<u> </u>	<u> </u>	loam	Hemans
6 - 8	7.5YR4/4	100	_		<u> </u>		clay loam	
8 - 12.5	10YR3/1	100					loam	
12.5 - 17.5	7.5YR4/4	100					clay	
			_	0 (
				11				
			_	0.0				
			_					
			-	1 1				
¹Type: C=Co	oncentration, D=Deple	etion, RI	– M=Reduced Matrix, M	S=Maske	d Sand Gra	ains.	² Location: PL	=Pore Lining, M=Matrix.
Hydric Soil 1	Indicators:						Indicators for Proble	ematic Hydric Soils ³ :
☐ Histosol (A	A1)		Polyvalue Below	Surface (S8) (LRR R	ζ,	2 cm Muck (A10) (LRR K, L, MLRA 149B)
☐ Histic Epip			MLRA 149B)				_	(A16) (LRR K, L, R)
☐ Black Histi	ic (A3)		☐ Thin Dark Surfac	e (S9) (L	RR R, MLR	A 149B)	5 cm Mucky Peat o	r Peat (S3) (LRR K, L, R)
Hydrogen	Sulfide (A4)		Loamy Mucky Mi	neral (F1) (LRR K, L)	☐ Dark Surface (S7) ((LRR K, L)
☐ Stratified L	Layers (A5)		Loamy Gleyed M	atrix (F2)	ı		Polyvalue Below Su	rface (S8) (LRR K, L)
☐ Depleted E	Below Dark Surface (A11)	☐ Depleted Matrix	(F3)			☐ Thin Dark Surface ((S9) (LRR K, L)
☐ Thick Dark	Surface (A12)		Redox Dark Surf	ace (F6)			☐ Iron-Manganese Ma	asses (F12) (LRR K, L, R)
☐ Sandy Muc	cky Mineral (S1)		Depleted Dark S	urface (F	7)		☐ Piedmont Floodplai	n Soils (F19) (MLRA 149B)
Sandy Gle	yed Matrix (S4)		Redox Depressio	ns (F8)			☐ Mesic Spodic (TA6)	(MLRA 144A, 145, 149B)
Sandy Red	dox (S5)						Red Parent Materia	` ,
Stripped M							Very Shallow Dark	• •
☐ Dark Surfa	ace (S7) (LRR R, MLR	RA 149B))				Other (Explain in R	emarks.)
³ Indicators of	hydrophytic vegetati	on and	wetland hydrology mu	st be pres	sent, unless	s disturbe	d or problematic.	
Restrictive I	Layer (if observed)):						
Туре:			<u>_</u>					
Depth (inches	s):		_				Hydric Soil Prese	ent? Yes 🗸 No
Remarks: (In	nclude photo numbers	s here o	r on a separate sheet	.)				
	·		·					

Project/Site: USH 151/CTH T Overpass	City/County Town of Empire	City/County Town of Empire / Fond du Lac Sampling Dat			
Applicant/Owner: WisDOT	State	e: WI	Sampling Point: A9W		
Investigator(s): Don Brittnacher		Section, Township, Range:	Sec. 18, T 1	15 N, R 18 E	
Landform (hillslope, terrace, etc.): stream	ım terrace	Local relief (concave, conve	x, none): concav	ve Slope (%):	
Subregion (LRR or MLRA): K / 95A	Lat: 43.769	Long: -88.399513		Datum: WGS 1984	
Soil Map Unit Name: Poygan silty clay I	oam	_	NWI Cla	ssification:	
Are climatic / hydrologic conditions on th	ne site typical for this time	e of year? 🗹 Yes 🗌 No	(If no, explain	n in Remarks.)	
Are Vegetation: \square , Soil \square , or Hydrol	ogy \square significantly distu	ırbed? Are "Normal Circumstar	nces" present? 🗸	Yes No	
Are Vegetation: \square , Soil \square , or Hydrol	ogy naturally problem	natic? (If needed, explain any	answers in Rema	irks.)	
	-, ,,			,	
SUMMARY OF FINDINGS - Attach	site map showing sa	ampling point locations, transec	ts, important fo	eatures, etc.	
Hydrophytic Vegetation Present?	✓ Yes □ No	Is the Sampled Area	✓ Yes	□ No	
,	✓ Yes	Within a Wetland?			
Wetland Hydrology Present?	✓ Yes ☐ No	If yes, optional Wetland Site ID:			
Remarks: (Explain alternative procedu	res here or in a senarate	report)			
Remarks. (Explain alternative procedu	res here of in a separate	reporti			
LIVEROLOGY					
HYDROLOGY					
Wetland Hydrology Indicators:			dary Indicators (m	ninimum of two required)	
Primary Indicators (minimum of one is	required; check all that a	apply)	Surface Soil Crack	ks (B6)	
Surface Water (A1)			Drainage Patterns	` '	
☐ High Water Table (A2)	Aquatic Faun		Moss Trim Lines (
Saturation (A3)	Marl Deposits		Dry-Season Wate		
Water Marks (B1)			Crayfish Burrows	` '	
☐ Sediment Deposits (B2) ☐ Drift Deposits (B3)		zospheres on Living Roots (C3) Reduced Iron (C4)	Stunted or Stress	on Aerial Imagery (C9)	
Algal Mat or Crust (B4)	_	` ′	Geomorphic Posit	` '	
Iron Deposits (B5)	☐ Thin Muck Su		Shallow Aquitard		
Inundation Visible on Aerial Imager		• •	Microtopographic		
Sparsely Vegetated Concave Surfac			FAC-Neutral Test		
Field Observations:					
Surface Water Present? Yes	✓ No Depth (inch	es):			
Water Table Present? Yes	✓ No Depth (inch				
	_		dualagy Duagant	? ✓ Yes No	
Saturation Present? Yes (includes capillary fringe)	✓ No Depth (inch	es). wetland Hyd	drology Present	? ✓ Yes No	
(mondes capillary minge)					
Describe Recorded Data (stream gaug	e, monitoring well, aerial	photos, previous inspections), if availa	ıble:		
Remarks:					
Remarks:					

Tues Chushium Dist Cine.	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet:
Tree Stratum Plot Size: 1	70 00101			Number of Dominant Species That Are OBL, FACW, or FAC:3 (A)
2.				Total Number of Dominant Species Across All Strata: 5 (B)
3. 4				Percent of Dominant Species That Are OBL, FACW, or FAC: 60% (A/B)
5.				Prevalence Index worksheet:
6.				Total % Cover of: Multiply by:
7				OBL species x 1 =
	0	= Total C	over	FACW species x 2 =
Sapling/Shrub Stratum Plot Size:	0.5	V	EA C)A/	FAC species x 3 =
1. salix exigua (interior)	25	<u> </u>	FACW	FACU species x 4 =
2				UPL species x 5 =
3.				Column Totals: (A) (B)
4. 5.				Prevalence Index = B/A =
6.				Hydrophytic Vegetation Indicators:
7				Rapid Test for Hydrophytic Vegetation
	25	= Total Co	ver	✓ Dominance Test is > 50%
Herb Stratum Plot Size:				☐ Prevalence Index is $\leq 3.0^{\circ}$
1. bromus inermis	35	X	UPL	☐ Morphological Adaptations¹ (Provide supporting
phalaris arundinacea	25	X	FACW	data in Remarks or on a separate sheet.)
3. poa pratensis	20	X	FACU	Problematic Hydrophytic Vegetation¹ (Explain.)
4. carex (sedge), unknown5.	20	X	FACW	¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
6. 7.				Definitions of Vegetation Strata:
8.				Tree - Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.
9				Sapling/shrub - Woody plants less than 3 in. DBH, and greater than 3.28 ft. (1 m) tall.
11. 12.				Herb - All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft. tall.
	100	= Total C	over	Woody Vines - All woody vines greater than 3.28 ft. in
Woody Vine Stratum Plot Size:				height.
1				
2				Hydronbyskia
3				Hydrophytic Vegetation ✓ Yes □ No
4				Present?
	0	= Total C	over	
Remarks: (Include photo numbers here or on a se	parate shee	t.)		

SOIL Sampling Point: A9W

10YR3/2 10YR3/1 7.5YR4/4 10YR3/1	% 100 85 10 100	Color (moist) 10YR4/6	5	C C	M	Texture loam clay loam loam	Remarks
10YR3/2 10YR3/1 7.5YR4/4 10YR3/1	85 10	10YR4/6	5		M	clay loam	
7.5YR4/4 10YR3/1	10	10YR4/6	5	C	M		
10YR3/1						loam	
	100					loam	
iration D-Deplet				· —— ·			
tration D-Deplet		-		· ·			
tration D-Deplet				. ——			
iration D-Deplet							
tration D-Deplet		-		. ——			
iration D-Deplet				. ——			
ration D-Depleti				· —— ·			
tration D-Depleti							
	ion DN		S_Maska	d Sand Gr	nine	2l acation: PL _E	Pore Lining, M=Matrix.
ators:	ion, ni	w=neduced Matrix, M	S=IVIASNE	u Sanu Gr	aii i 5.	Indicators for Problem	
ators.		Dobazduo Polow	Curface (C0) /I DD D		2 cm Muck (A10) (LR	-
(A2)		☐ Polyvalue Below MLRA 149B)	Surface (30) (LKK K	.,	Coast Prairie Redox (A	
)		☐ Thin Dark Surfac	e (S9) (L	RR R, MLR	4 149B)		Peat (S3) (LRR K, L, R)
le (A4)		Loamy Mucky Mi	neral (F1) (LRR K, L)	☐ Dark Surface (S7) (LF	RR K, L)
s (A5)		Loamy Gleyed M	atrix (F2)			Polyvalue Below Surfa	ace (S8) (LRR K, L)
	11)					☐ Thin Dark Surface (S9	
							, , , , , , , ,
				7)			Soils (F19) (MLRA 149B)
		Redox Depression	ns (F8)				
							•
	. 149B))				Other (Explain in Ren	
onhytic vegetation	n and v	wetland hydrology mu	et he pres	ent unles	disturba	d or problematic	
		reading frydrology fflu	or ne hies	on, unics	, disturbe	a or problematic.	
		_				Hydric Soil Present	t? 🗸 Yes 🗌 No
nhata numbara	horo o		\			,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	
prioto numbers i	nere o	r on a separate sneet	.)				
16 S i 1 S! (() T	e (A4) (A5) Dark Surface (A ace (A12) neral (S1) atrix (S4) 5) (S6) 7) (LRR R, MLRA phytic vegetation	e (A4) (A5) Dark Surface (A11) ace (A12) neral (S1) atrix (S4) 5) (S6) 7) (LRR R, MLRA 149B) phytic vegetation and vertified to be served):	Loamy Mucky Mi (A5) Loamy Gleyed M Dark Surface (A11) Depleted Matrix ace (A12) Redox Dark Surf neral (S1) Depleted Dark S atrix (S4) Redox Depression (S6) 7) (LRR R, MLRA 149B) phytic vegetation and wetland hydrology mu (if observed):	Loamy Mucky Mineral (F1) (A5) Loamy Gleyed Matrix (F2) Dark Surface (A11) Depleted Matrix (F3) ace (A12) Redox Dark Surface (F6) neral (S1) Depleted Dark Surface (F7) atrix (S4) Redox Depressions (F8) (S6) 7) (LRR R, MLRA 149B) phytic vegetation and wetland hydrology must be press (if observed):	Loamy Mucky Mineral (F1) (LRR K, L (A5) Loamy Gleyed Matrix (F2) Dark Surface (A11) Depleted Matrix (F3) ace (A12) Redox Dark Surface (F6) neral (S1) Depleted Dark Surface (F7) atrix (S4) Redox Depressions (F8) (S6) 7) (LRR R, MLRA 149B) aphytic vegetation and wetland hydrology must be present, unless (if observed):	Loamy Mucky Mineral (F1) (LRR K, L) (A5)	Loamy Mucky Mineral (F1) (LRR K, L) (A5) Loamy Gleyed Matrix (F2) Dark Surface (S7) (LFR K, L) Dark Surface (S7) (LFR K, L) Dark Surface (S7) (LFR K, L) Dark Surface (S7) Dark Surface (S8) Dark Surface (A11) Depleted Matrix (F3) Thin Dark Surface (S8) ace (A12) Redox Dark Surface (F6) Iron-Manganese Mass Depleted Dark Surface (F7) Piedmont Floodplain S9 atrix (S4) Redox Depressions (F8) Red Parent Material (S6) (S6) Very Shallow Dark Surface (S7) (S6) Other (Explain in Rend) Phytic vegetation and wetland hydrology must be present, unless disturbed or problematic. (if observed): Hydric Soil Present

Project/Site: USH 151/CTH T Overpass	;	City/County Town of Empire	City/County Town of Empire / Fond du Lac		
Applicant/Owner: WisDOT	Stat	State: WI			
Investigator(s): Don Brittnacher		Section, Township, Range:	Sec. 18, T 1	15 N, R 18 E	
Landform (hillslope, terrace, etc.): stre	am terrace	Local relief (concave, conve	x, none): concav	ve Slope (%):	
Subregion (LRR or MLRA): K / 95A	Lat: 43.769	0832 Long: -88.399731		Datum: WGS 1984	
Soil Map Unit Name: Kewaunee silty c	lay loam, 2 to 6 percent sl	opes, e	NWI Cla	assification:	
Are climatic / hydrologic conditions on t	the site typical for this time	e of year? 🗹 Yes 🗌 No	(If no, explain	n in Remarks.)	
Are Vegetation: \square , Soil \square , or Hydro	ology \square significantly distu	urbed? Are "Normal Circumsta	nces" present? 🗸	' Yes 🗌 No	
Are Vegetation: \square , Soil \square , or Hydro	ology 🔲 naturally problem	natic? (If needed, explain any	answers in Rema	arks.)	
7 re vegetadom — 7 som — 7 or 117 and	nogy — natarany problem	(I needed) explain any	distreis in rema	intoly	
SUMMARY OF FINDINGS - Attac	h site map showing s	ampling point locations, transed	ts, important f	eatures, etc.	
Hydrophytic Vegetation Present?	✓ Yes □ No	Is the Sampled Area	✓ Yes	□ No	
Hydric Soil Present?	✓ Yes	Within a Wetland?	▼ Tes	NO	
Wetland Hydrology Present?	✓ Yes	If yes, optional Wetland Site ID:			
Describer (Combine the matice of the company)					
Remarks: (Explain alternative proced	ures nere or in a separate	report.)			
HYDROLOGY					
Wetland Hydrology Indicators:		Secon	dary Indicators (n	ninimum of two required)	
Primary Indicators (minimum of one i	s required; check all that a	apply)	Surface Soil Cracl	ks (B6)	
Surface Water (A1)	☐ Water-Staine	ed Leaves (B9)	Drainage Patterns		
☐ High Water Table (A2)	Aquatic Faun	na (B13)	Moss Trim Lines ((B16)	
☐ Saturation (A3)	☐ Marl Deposit	s (B15)	Dry-Season Wate	r Table (C2)	
☐ Water Marks (B1)	Hydrogen Su	ılfide Odor (C1)	Crayfish Burrows	(C8)	
Sediment Deposits (B2)	Oxidized Rhi	zospheres on Living Roots (C3)	Saturation Visible	e on Aerial Imagery (C9)	
Drift Deposits (B3)	_	Reduced Iron (C4)	Stunted or Stress	` '	
Algal Mat or Crust (B4)			Geomorphic Posit		
Iron Deposits (B5)	Thin Muck Su	` '	Shallow Aquitard		
Inundation Visible on Aerial Image		in in Remarks)	Microtopographic		
Sparsely Vegetated Concave Surfa	ce (B8)		FAC-Neutral Test	(נע)	
Field Observations:					
Surface Water Present?	✓ No Depth (inch	es):			
Water Table Present?	✓ No Depth (inch	es):			
Saturation Present?	✓ No Depth (inch	es): Wetland Hy	drology Present	:? ✓ Yes 🗌 No	
(includes capillary fringe)					
Describe Recorded Data (stream gau	uge monitoring well serial	photos, previous inspections), if availa	able:		
Describe necorded Data (stream gad	ge, monitoring well, aerial	priotos, previous inspections), ii avaik	able.		
Remarks:					

Tree Stratum Plot Size:

Sapling/Shrub Stratum Plot Size:

1. cornus racemosa

3. lonicera tatarica

2. fraxinus pennsylvanica

Herb Stratum Plot Size: 1. phalaris arundinacea

2. poa pratensis

3. bromus inermis

brassica rapa

Woody Vine Stratum Plot Size:

5. cornus racemosa

1. acer negundo

3.

6.

4.

6.

6.

= Total Cover

0

			Sa	mpling Point: A10L			
Absolute	Dominant	Indicator	Dominance Test workshe	et:			
% Cover	Species?	Status FAC	Number of Dominant Specie That Are OBL, FACW, or FA				
			Total Number of Dominant Species Across All Strata:	6 (B)			
			Percent of Dominant Specie That Are OBL, FACW, or FA				
			Prevalence Index worksheet:				
			Total % Cover of:	Multiply by:			
10			OBL species	x 1 =			
	= 101410	ovei	FACW species	x 2 =			
10	X	FAC	FAC species	x 3 =			
10	X	FACW	FACU species	x 4 =			
10	X	FACU	UPL species	x 5 =			
			Column Totals:	(A) <u>(B)</u>			
			Prevalence Index = B/A =				
			Hydrophytic Vegetation I	Indicators:			
			Rapid Test for Hydrophyt	ic Vegetation			
30	= Total Co	ver	✓ Dominance Test is > 50%				
50	V	EA 014/	☐ Prevalence Index is $\leq 3.0^{1}$				
20	X X	FACU FACU	Morphological Adaptation data in Remarks or on a s				
10		UPL	Problematic Hydrophytic	Vegetation¹ (Explain.)			
<u>5</u> 5		UPL FAC	¹Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.				
			Definitions of Vegetation	Strata:			
			_				
			Tree - Woody plants 3 in. (7 at breast height (DBH), rega				
			Sapling/shrub - Woody plant and greater than 3.28 ft. (1				
			Herb - All herbaceous (non-v of size, and woody plants les				
90	= Total C	over	Woody Vines - All woody vines height.	es greater than 3.28 ft. in			
<u> </u>			Hydrophytic Vegetation Present? Vegetation	□ No			

D	(Include photo				-11
Bemarks.	HINCHING DRIOTO	numbers ne	are or on	a senarate	SUPPL 1

SOIL Sampling Point: A10L

	scription: (Describ Matrix	e to the	_	l ocumen dox Featu		cator or	confirm the absence of	f indicators.	
Depth (inches)	Color (moist)	%	Color (moist)	%	Type ¹	Loc. ²	Texture	Remarks	
0 - 6	10YR3/2	100	Color (Illoist)	/0	Туре	LUC	loam	nemarks	
6 - 9	10YR3/2	95	10YR4/6	5	С	M	clay loam		
9 - 12	10YR3/1	98	10YR4/6	2	С	M	clay loam		
12 - 16	10YR3/1	100			. ——		clay loam		
					. ——				
-					· ——				
					. ——— .				
			_						
			_						
-									
¹Type: C=C	oncentration, D=Dep	letion, RI	M=Reduced Matrix, M	S=Maske	d Sand Gr	ains.	² Location: PL	=Pore Lining, M=Matrix.	
Hydric Soil	Indicators:						Indicators for Proble	matic Hydric Soils ³ :	
☐ Histosol (A1)		Polyvalue Below	Surface (S8) (LRR R	₹,	☐ 2 cm Muck (A10) (L	RR K, L, MLRA 149B)	
☐ Histic Epi	pedon (A2)		MLRA 149B)				Coast Prairie Redox	(A16) (LRR K, L, R)	
☐ Black Hist	tic (A3)		☐ Thin Dark Surfac	e (S9) (L	RR R, MLR	A 149B)	5 cm Mucky Peat or	r Peat (S3) (LRR K, L, R)	
	Sulfide (A4)		Loamy Mucky Mi			.)	Dark Surface (S7) (
	Layers (A5)		Loamy Gleyed M					rface (S8) (LRR K, L)	
	Below Dark Surface ((A11)	Depleted Matrix				☐ Thin Dark Surface (
	k Surface (A12) ucky Mineral (S1)		✓ Redox Dark Surf		71			asses (F12) (LRR K, L, R) n Soils (F19) (MLRA 149B)	
	eyed Matrix (S4)		Redox Depression		')			(MLRA 144A, 145, 149B)	
Sandy Re			Redox Depressio	113 (1 0)			Red Parent Material		
	Matrix (S6)						☐ Very Shallow Dark Surface (TF12)		
	ace (S7) (LRR R, MLI	RA 149B))				Other (Explain in Remarks.)		
3Indicators o	f hydrophytic yegetat	ion and	wetland hydrology mu:	et he pres	ent unles	e dieturbe	d or problematic		
			welland flydrology fild.	st be pres	sent, unics	s disturbe	d of problematic.		
	Layer (if observed								
Type: Depth (inche	ne).		_				Hydric Soil Prese	nt? ✓ Yes No	
			_				Tryunc 3011 Prese	III.	
Remarks: (I	nclude photo number	rs here o	r on a separate sheet.	.)					

Project/Site: USH 151/CTH T Overpass	City/County Town of Empire / Fond du Lac Sampling Dat 5/30/2014				
Applicant/Owner: WisDOT	State: WI Sampling Point: A10U				
Investigator(s): Don Brittnacher	Section, Township, Range: Sec. 18, T 15 N, R 18 E				
Landform (hillslope, terrace, etc.): stream terrace	Local relief (concave, convex, none): concave Slope (%):				
Subregion (LRR or MLRA): K / 95A Lat: 43.769814	Long: -88.399759 Datum: WGS 1984				
Soil Map Unit Name: Kewaunee silty clay loam, 2 to 6 percent slopes,	e NWI Classification:				
Are climatic / hydrologic conditions on the site typical for this time of y	ear? 🗹 Yes 🗌 No (If no, explain in Remarks.)				
Are Vegetation: \square , Soil \square , or Hydrology \square significantly disturbed?	? Are "Normal Circumstances" present? ✓ Yes ☐ No				
Are Vegetation: \Box , Soil \Box , or Hydrology \Box naturally problematic?	(If needed, explain any answers in Remarks.)				
SUMMARY OF FINDINGS - Attach site map showing sample	ling point locations, transects, important features, etc.				
	he Sampled Area				
Hydric Soil Present? ☐ Yes ✓ No Wit	hin a Wetland?				
Wetland Hydrology Present? ☐ Yes ✓ No If y	es, optional Wetland Site ID:				
Remarks: (Explain alternative procedures here or in a separate repo	rt.)				
LIVERGLOOV					
HYDROLOGY					
Wetland Hydrology Indicators:	Secondary Indicators (minimum of two required)				
Primary Indicators (minimum of one is required; check all that apply)	Surface Soil Cracks (B6)				
Surface Water (A1) Water-Stained Lea					
High Water Table (A2) Aquatic Fauna (B1)					
Saturation (A3) Marl Deposits (B15)	<u> </u>				
Water Marks (B1) Hydrogen Sulfide (
	eres on Living Roots (C3) Saturation Visible on Aerial Imagery (C9)				
☐ Drift Deposits (B3) ☐ Presence of Reduc					
	ction in Tilled Soils (C6) Geomorphic Position (D2)				
☐ Iron Deposits (B5) ☐ Thin Muck Surface					
☐ Inundation Visible on Aerial Imagery (B7) ☐ Other (Explain in F					
Sparsely Vegetated Concave Surface (B8)	FAC-Neutral Test (D5)				
Field Observations:					
Surface Water Present?					
Water Table Present? ☐ Yes ✓ No Depth (inches):					
Saturation Present? Yes Ver No Depth (inches): (includes capillary fringe)	Wetland Hydrology Present? ☐ Yes ✓ No				
Describe Recorded Data (stream gauge, monitoring well, aerial photo	os, previous inspections), if available:				
Remarks:					

	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksh	neet:
<u>Tree Stratum</u> Plot Size: 1.	70 GOVCI	Ореспез	<u> </u>	Number of Dominant Spec That Are OBL, FACW, or F	
2. 3.				Total Number of Dominant Species Across All Strata:	4 (B)
4				Percent of Dominant Spec That Are OBL, FACW, or F	
5				Prevalence Index works	sheet:
6.				Total % Cover of:	Multiply by:
7				OBL species 0	x 1 = 10
Canling/Chruh Ctratum Plat Cina	0	= Total C	Cover	FACW species 10	x = 20
Sapling/Shrub Stratum Plot Size:	10	V	FAC	FAC species 20	x = 3 = 60
cornus racemosa cornus stolonifera	10	<u> </u>	FACW	FACU species 20	x 4 = 80
3.			FACW	UPL species 65	x 5 = 325
				Column Totals: 115	(A) 485 (B)
4					_
5. 6.				Prevalence Index = B/A =	
o 7.				Hydrophytic Vegetation	
1.		= Total Co		Rapid Test for Hydrophy	
Herb Stratum Plot Size:	20	= 10(a) 00	vei	Dominance Test is > 50	
1. bromus inermis	60	X	UPL	☐ Prevalence Index is ≤ 3	
2. poa pratensis	20	X	FACU	 Morphological Adaptation data in Remarks or on a 	
3. cornus racemosa			FAC		•
4. brassica rapa			UPL	Problematic Hydrophytic	
5. urtica dioica			FAC	must be present, unless di	
6					
7.				Definitions of Vegetation	on Strata:
8.				Tree - Woody plants 3 in. (at breast height (DBH), reg	(7.6 cm) or more in diameter gardless of height.
9				Sapling/shrub - Woody pla and greater than 3.28 ft. (
11 12.				Herb - All herbaceous (non of size, and woody plants l	
	95	= Total C	over		ines greater than 3.28 ft. in
Woody Vine Stratum Plot Size:				height.	mes greater than 5120 ft m
1.					
				Hydrophytic Vegetation Yes	
2.					
2.				Present?	✓ No

SOIL Sampling Point: A10U

Profile Des	cription: (Describ	e to the	_	l ocumen dox Featu		cator or o	confirm the absence of	f indicators.	
(inches)	Color (moist)	%	Color (moist)	%	Type ¹	Loc. ²	Texture	Remarks	
0 - 8	10YR3/2	100	- Color (moist)		Турс		loam	Hemano	
8 - 12	10YR3/2	98	10YR4/6	2		-	clay loam		
12 - 16.5	10YR3/1	98	10YR4/6	2		M	clay loam		
12 - 16.5	10113/1	90	101114/0			IVI	Clay Ioam		
¹Type: C=Co		letion, RI	M=Reduced Matrix, M	S=Maske	d Sand Gr	ains.	² Location: PL:	=Pore Lining, M=Matrix.	
☐ Histosol (A	A1)		☐ Polyvalue Below	Surface (S8) (LRR R	١.	2 cm Muck (A10) (L	.RR K, L, MLRA 149B)	
	pedon (A2)		MLRA 149B)	ourrace (50) (Litat i	4		(A16) (LRR K, L, R)	
☐ Black Hist			☐ Thin Dark Surfac	e (S9) (L	RR R. MI R.	A 149B)		Peat (S3) (LRR K, L, R)	
_	Sulfide (A4)		Loamy Mucky Mi				☐ Dark Surface (S7) (
_	Layers (A5)		Loamy Gleyed M			-)		rface (S8) (LRR K, L)	
	Below Dark Surface ((Λ11)	Depleted Matrix				☐ Thin Dark Surface (
	k Surface (A12)	(711)	Redox Dark Surf				☐ Iron-Manganese Masses (F12) (LRR K, L, R)		
	cky Mineral (S1)		Depleted Dark S		7\			, , , , , , , ,	
	eyed Matrix (S4)		Redox Depression	•	()			n Soils (F19) (MLRA 149B) (MLRA 144A, 145, 149B)	
Sandy Rec			Redux Depressio	115 (10)			Red Parent Material		
							☐ Very Shallow Dark Surface (TF12)		
	Matrix (S6)	DA 140D	N				Other (Explain in Remarks.)		
	ace (S7) (LRR R, MLI							erriarks.)	
			wetland hydrology mu	st be pres	sent, unless	s aisturbe	o or problematic.		
	Layer (if observed) :							
Type:			_						
Depth (inche	s):		_				Hydric Soil Prese	nt? Yes ✓ No	
Remarks: (Ir	nclude photo numbei	rs here o	r on a separate sheet	.)					

Project/Site: USH 151/CTH T Overpass	City/County Town of Empire / Fond du Lac Sampling Dat 5/30/2014				
Applicant/Owner: WisDOT	State: WI Sampling Point: A11L				
Investigator(s): Don Brittnacher	Section, Township, Range: Sec. 18, T 15 N, R 18 E				
Landform (hillslope, terrace, etc.): stream terrace	Local relief (concave, convex, none): concave Slope (%):				
Subregion (LRR or MLRA): K / 95A Lat: 43.769597	Long: -88.399529 Datum: WGS 1984				
Soil Map Unit Name: Kewaunee silty clay loam, 2 to 6 percent slopes	s, e NWI Classification:				
Are climatic / hydrologic conditions on the site typical for this time of y	year? ✓ Yes				
Are Vegetation: ${f V}$, Soil ${f \Box}$, or Hydrology ${f \Box}$ significantly disturbed	l? Are "Normal Circumstances" present? ☐ Yes ✓ No				
Are Vegetation: \square , Soil \square , or Hydrology \square naturally problematic?	? (If needed, explain any answers in Remarks.)				
SUMMARY OF FINDINGS - Attach site map showing samp	ling point locations, transects, important features, etc.				
	the Sampled Area thin a Wetland? Yes No				
Hydric Soil Present?					
Wetland Hydrology Present? ✓ Yes ☐ No If y	yes, optional Wetland Site ID:				
Remarks: (Explain alternative procedures here or in a separate repo	ort.)				
Sample location in farm field.					
HYDROLOGY					
Wetland Hydrology Indicators:	Secondary Indicators (minimum of two required)				
Primary Indicators (minimum of one is required; check all that apply	Surface Soil Cracks (B6)				
Surface Water (A1) Water-Stained Lea	` '				
☐ High Water Table (A2) ☐ Aquatic Fauna (B:					
Saturation (A3) Marl Deposits (B1	_ '				
Water Marks (B1) Hydrogen Sulfide					
l <u> </u>	neres on Living Roots (C3) Saturation Visible on Aerial Imagery (C9)				
☐ Drift Deposits (B3) ☐ Presence of Redu☐ Algal Mat or Crust (B4) ☐ Recent Iron Redu☐ Recent Iron Redu ☐ Redu ☐ Recent Iron Redu ☐ Recent Iron Redu ☐ Recent Iron Redu ☐ Redu ☐ Recent Iron Redu ☐ Redu ☐ Recent Iron Redu ☐ R	ced Iron (C4)				
☐ Iron Deposits (B5) ☐ Thin Muck Surface					
☐ Inundation Visible on Aerial Imagery (B7) ☐ Other (Explain in					
Sparsely Vegetated Concave Surface (B8)	FAC-Neutral Test (D5)				
Field Observations:					
Surface Water Present? Yes V No Depth (inches):					
Water Table Present?					
Saturation Present? Yes V No Depth (inches):	Wetland Hydrology Present? ✓ Yes No				
(includes capillary fringe)	wettaliu nytrology Present:				
Describe Recorded Data (stream gauge, monitoring well, aerial photo	ios, previous inspections), if available:				
Remarks:					
nomano.					

Tree Stratum Plot Size:

Sapling/Shrub Stratum Plot Size:

Herb Stratum Plot Size:

Woody Vine Stratum Plot Size:

3.

5. 6.

2. 3. 4.

6.

3.

5. 6.

3.

Absolute

% Cover Species?

0 = Total Cover

	Sampling Point: A11L
Dominant Indicate	
Species? Status	- Number of Dominant Species That Are OBL, FACW, or FAC: 0 (A)
	Total Number of Dominant Species Across All Strata: 0 (B)
	Percent of Dominant Species That Are OBL, FACW, or FAC: 0% (A/B)
	Prevalence Index worksheet:
	Total % Cover of: Multiply by:
Tatal Occurs	OBL species x 1 =
= Total Cover	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:
	Rapid Test for Hydrophytic Vegetation
= Total Cover	☐ Dominance Test is > 50%
	☐ Prevalence Index is $\leq 3.0^{1}$
	Morphological Adaptations¹ (Provide supporting data in Remarks or on a separate sheet.)
	☐ Problematic Hydrophytic Vegetation¹ (Explain.)
	Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
	Definitions of Vegetation Strata:
	Tree - Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.
	Sapling/shrub - Woody plants less than 3 in. DBH, and greater than 3.28 ft. (1 m) tall.
	Herb - All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft. tall.
= Total Cover	Woody Vines - All woody vines greater than 3.28 ft. in height.
= Total Cover	Hydrophytic Vegetation Yes No Present?

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

Vegetation was not assessed, since sample location is in a disturbed field, plowed within the last two years.

0

SOIL Sampling Point: A11L

Depth (inches) 0 - 8 8 - 13 13 - 15 ¹Type: C=Con Hydric Soil In	10YR3/1 1 7.5YR4/4 9 10YR6/1 7.5YR4/4 1	% Color (moist) 00 10YR4/6 8 00	2	C C	M	Texture loam clay clay	Remarks
8 - 13 13 - 15 ¹Type: C=Con Hydric Soil In	10YR3/1 1 7.5YR4/4 9 10YR6/1 7.5YR4/4 1	00 10YR4/6 8				loam	
13 - 15 ¹Type: C=Con Hydric Soil In	10YR6/1 7.5YR4/4 1	8	2		M		
¹Type: C=Con	7.5YR4/4 1	 -				clay	
¹Type: C=Con		00				clay	
Hydric Soil I	ncentration, D=Depletion						
Hydric Soil I	ncentration, D=Depletion						
Hydric Soil I	ncentration, D=Depletion						
Hydric Soil I	ncentration, D=Depletion						
Hydric Soil I	ncentration, D=Depletion						
Hydric Soil I	ncentration, D=Depletion						
Hydric Soil I	ncentration, D=Depletion						
Hydric Soil I	ncentration, D=Depletion						
Hydric Soil I	ncentration, D=Depletion						
		n, RM=Reduced Matrix, M	S=Maske	d Sand Gra	ains.	² Location: PL=Po	ore Lining, M=Matrix.
☐ Histosol (A1	ndicators:					Indicators for Problema	ntic Hydric Soils³:
	1)	Polyvalue Below	Surface (58) (LRR R	,	2 cm Muck (A10) (LRR	K, L, MLRA 149B)
☐ Histic Epipe	edon (A2)	MLRA 149B)				Coast Prairie Redox (A	16) (LRR K, L, R)
☐ Black Histic	ck Histic (A3)		A 149B)	5 cm Mucky Peat or Peat (S3) (LRR K, L, R)			
Hydrogen S		Loamy Mucky M		(LRR K, L)	Dark Surface (S7) (LRF	
Stratified La		Loamy Gleyed M				Polyvalue Below Surface	
	Selow Dark Surface (A11) Surface (A12)	Depleted Matrix✓ Redox Dark Surf				☐ Thin Dark Surface (S9)☐ Iron-Manganese Masse	
	cky Mineral (S1)	☐ Depleted Dark S		')			oils (F19) (MLRA 149B)
	ed Matrix (S4)	Redox Depression		,		☐ Mesic Spodic (TA6) (M	
Sandy Redo			` ,			Red Parent Material (F	
Stripped Ma	atrix (S6)					☐ Very Shallow Dark Surface (TF12)	
☐ Dark Surfac	ce (S7) (LRR R, MLRA 14	49B)				Other (Explain in Rema	arks.)
³ Indicators of h	hydrophytic vegetation a	and wetland hydrology mu	st be pres	ent, unless	s disturbe	d or problematic.	
Restrictive La	_ayer (if observed):						
Type:							
Depth (inches)	s):					Hydric Soil Present?	? Yes No
Remarks: (Inc	clude photo numbers he	re or on a separate sheet	.)				

Project/Site: USH 151/CTH T Overpass	City/County Town of Empire / Fond du Lac Sampling Dat 5/30/2014				
Applicant/Owner: WisDOT	State: WI Sampling Point: A11U				
Investigator(s): Don Brittnacher	Section, Township, Range: Sec. 18, T 15 N, R 18 E				
Landform (hillslope, terrace, etc.): hillslope	Local relief (concave, convex, none): concave Slope (%):				
Subregion (LRR or MLRA): K / 95A Lat: 43.769595	5 Long: -88.399609 Datum: WGS 1984				
Soil Map Unit Name: Kewaunee silty clay loam, 2 to 6 percent slope	es, e NWI Classification:				
Are climatic / hydrologic conditions on the site typical for this time of	f year? 🗹 Yes 🗌 No (If no, explain in Remarks.)				
Are Vegetation: $oldsymbol{arnothing}$, Soil \Box , or Hydrology \Box significantly disturbed	ed? Are "Normal Circumstances" present? Yes No				
Are Vegetation: \square , Soil \square , or Hydrology \square naturally problematic					
SUMMARY OF FINDINGS - Attach site map showing sam	pling point locations, transects, important features, etc.				
	s the Sampled Area Yes ✓ No				
Hydric Soil Present? ☐ Yes ✓ No	Vithin a Wetland?				
Wetland Hydrology Present? ☐ Yes ✓ No If	f yes, optional Wetland Site ID:				
Remarks: (Explain alternative procedures here or in a separate rep	port.)				
Sample location in farm field.					
HYDROLOGY					
Wetland Hydrology Indicators:	Secondary Indicators (minimum of two required)				
Primary Indicators (minimum of one is required; check all that appl					
	Surface Soil Cracks (BO)				
Surface Water (A1) Water-Stained L					
High Water Table (A2) Aquatic Fauna (I	<u> </u>				
Saturation (A3) Marl Deposits (B	`				
☐ Water Marks (B1) ☐ Hydrogen Sulfide ☐ Sediment Deposits (B2) ☐ Oxidized Rhizosp	le Odor (C1)				
☐ Drift Deposits (B3) ☐ Presence of Red					
l <u> </u>	duction in Tilled Soils (C6) Geomorphic Position (D2)				
☐ Iron Deposits (B5) ☐ Thin Muck Surfa	\cdot , $ \cdot$,				
☐ Inundation Visible on Aerial Imagery (B7) ☐ Other (Explain in					
Sparsely Vegetated Concave Surface (B8)	FAC-Neutral Test (D5)				
Field Observations: Surface Water Present? ☐ Yes ✓ No Depth (inches):					
Water Table Present? Yes No Depth (inches)					
Saturation Present? Yes Ver No Depth (inches) (includes capillary fringe)	: Wetland Hydrology Present? ☐ Yes ✔ No				
Describe Recorded Data (stream gauge, monitoring well, aerial pho	otos, previous inspections), if available:				
Remarks:					

of Dominant Species OBL, FACW, or FAC: 0 (A) mber of Dominant
Across All Strata: 0 (B)
of Dominant Species OBL, FACW, or FAC: 0% (A/B)
nce Index worksheet:
Cover of: Multiply by:
cies x 1 =
pecies x 2 =
cies x 3 =
ecies x 4 =
x 5 =
Totals: (A) (B)
ence Index = B/A =
nytic Vegetation Indicators:
Test for Hydrophytic Vegetation
nance Test is > 50%
lence Index is ≤ 3.0¹
nological Adaptations¹ (Provide supporting n Remarks or on a separate sheet.)
·
ematic Hydrophytic Vegetation¹ (Explain.) ors of hydric soil and wetland hydrology
present, unless disturbed or problematic.
ons of Vegetation Strata:
oody plants 3 in. (7.6 cm) or more in diameter height (DBH), regardless of height.
hrub - Woody plants less than 3 in. DBH,
ter than 3.28 ft. (1 m) tall.
I herbaceous (non-woody) plants, regardless
nd woody plants less than 3.28 ft. tall.
ines - All woody vines greater than 3.28 ft. in
ytic
- – –
Uli

Sampling Point: A11U

SOIL Sampling Point: A11U

Profile De	scription: (Describe	to the	depth needed to d	ocumen	t the indi	cator or	confirm the absence of	f indicators.
Depth	Matrix		Rec	dox Featu	ires			
(inches)	Color (moist)	%	Color (moist)	%	Type ¹	Loc. ²	Texture	Remarks
0 - 10	10YR3/2	100					loam	
10 - 14	10YR3/1	85	10YR4/6	2	C	М	clay loam	
	7.5YR4/4	13	_					
14 - 18	7.5YR4/4	95	10YR4/6	5	С	М	clay	
					-	_		_
				-	· · · · · · · · · · · · · · · · · · ·			
	·			-				
	- 							
			-		· ·			
-			_		· ·			
			_					
¹Type: C=C	oncentration, D=Deple	etion, RN	M=Reduced Matrix, MS	S=Maske	d Sand Gra	ains.	²Location: PL	=Pore Lining, M=Matrix.
Hydric Soil	Indicators:						Indicators for Proble	matic Hydric Soils ³ :
Histosol ((A1)		☐ Polyvalue Below	Surface (S8) (LRR R	ξ,	☐ 2 cm Muck (A10) (L	.RR K, L, MLRA 149B)
☐ Histic Epi	pedon (A2)		MLRA 149B)				Coast Prairie Redox	(A16) (LRR K, L, R)
☐ Black His	tic (A3)		☐ Thin Dark Surfac	e (S9) (L	RR R, MLR	A 149B)	5 cm Mucky Peat or	Peat (S3) (LRR K, L, R)
☐ Hydroger	n Sulfide (A4)		Loamy Mucky Mi	neral (F1) (LRR K, L)	☐ Dark Surface (S7) (LRR K, L)
Stratified	Layers (A5)		Loamy Gleyed Ma	atrix (F2)			Polyvalue Below Sur	rface (S8) (LRR K, L)
☐ Depleted	Below Dark Surface (A	\11)	Depleted Matrix	(F3)			☐ Thin Dark Surface (S9) (LRR K, L)
☐ Thick Dar	rk Surface (A12)		Redox Dark Surfa	ace (F6)			☐ Iron-Manganese Ma	sses (F12) (LRR K, L, R)
	ucky Mineral (S1)		Depleted Dark Su		7)			n Soils (F19) (MLRA 149B)
	eyed Matrix (S4)		Redox Depressio	ns (F8)				(MLRA 144A, 145, 149B)
Sandy Re							Red Parent Material	
Stripped	` ,	A 4 40D)					☐ Very Shallow Dark Surface (TF12)	
☐ Dark Surf	face (S7) (LRR R, MLR	A 149B))				Other (Explain in Re	emarks.)
³ Indicators o	of hydrophytic vegetation	on and v	wetland hydrology mus	st be pres	sent, unless	s disturbe	d or problematic.	
Restrictive	Layer (if observed)	:						
Type:			<u> </u>					
Depth (inche	es):		_				Hydric Soil Prese	nt? Yes 🗸 No
Remarks: (I	Include photo numbers	here o	r on a separate sheet.)				

Project/Site: USH 151/CTH T Overpass	City/County Town of Empire / Fond du Lac Sampling Dat 5/30/2014			
Applicant/Owner: WisDOT	State: WI Sampling Point: A11W			
Investigator(s): Don Brittnacher	Section, Township, Range: Sec. 18, T 15 N, R 18 E			
Landform (hillslope, terrace, etc.): stream terrace	Local relief (concave, convex, none): concave Slope (%):			
Subregion (LRR or MLRA): K / 95A Lat: 43.769597	Long: -88.399443 Datum: WGS 1984			
Soil Map Unit Name: Poygan silty clay loam	NWI Classification:			
Are climatic / hydrologic conditions on the site typical for this time of y	year? 🗹 Yes 🗌 No (If no, explain in Remarks.)			
Are Vegetation: $lackim Q$, Soil \Box , or Hydrology \Box significantly disturbed	d? Are "Normal Circumstances" present? ☐ Yes ✓ No			
Are Vegetation: \square , Soil \square , or Hydrology \square naturally problematic	? (If needed, explain any answers in Remarks.)			
SUMMARY OF FINDINGS - Attach site map showing samp	oling point locations, transects, important features, etc.			
	the Sampled Area			
Hydric Soil Present? ✓ Yes ☐ No Wi	ithin a Wetland?			
Wetland Hydrology Present? ✓ Yes ☐ No If y	yes, optional Wetland Site ID:			
Remarks: (Explain alternative procedures here or in a separate repo	ort.)			
Sample location in farm field.				
HYPROLOGY				
HYDROLOGY				
Wetland Hydrology Indicators:	Secondary Indicators (minimum of two required)			
Primary Indicators (minimum of one is required; check all that apply	Surface Soil Cracks (Bb)			
Surface Water (A1) Water-Stained Le				
☐ High Water Table (A2) ☐ Aquatic Fauna (B)				
Saturation (A3) Marl Deposits (B1				
Water Marks (B1) Hydrogen Sulfide				
	heres on Living Roots (C3) Saturation Visible on Aerial Imagery (C9)			
□ Drift Deposits (B3) □ Presence of Redu				
• , ,	uction in Tilled Soils (C6) Geomorphic Position (D2)			
☐ Iron Deposits (B5) ☐ Thin Muck Surface ☐ Inundation Visible on Aerial Imagery (B7) ☐ Other (Explain in				
Sparsely Vegetated Concave Surface (B8)	FAC-Neutral Test (D5)			
Sparsely vegetated concave surface (bb)	The Neutai rest (D3)			
Field Observations:				
Surface Water Present? Yes V No Depth (inches):				
Water Table Present?				
Saturation Present?	Wetland Hydrology Present? ✓ Yes No			
Describe Recorded Data (stream gauge, monitoring well, aerial photo	tos, previous inspections), if available:			
Demonto				
Remarks:				

Tree Stratum Plot Size:	Absolute % Cover	Dominant Indic Species? Sta	cator Dominance Test worksheet:
	-/0 00:12		Number of Dominant Species That Are OBL, FACW, or FAC: 0 (A)
1 2.			Total Number of Dominant
3.			Species Across All Strata: 0 (B)
4			Percent of Dominant Species That Are OBL, FACW, or FAC: 0% (A/B)
5			
6.			Prevalence Index worksheet:
7.			
	0	= Total Cover	OBL species x 1 =
Sapling/Shrub Stratum Plot Size:			FACW species x 2 =
1			FAC species x 3 =
2			FACU species x 4 =
3			UPL species x 5 =
4			Column Totals: (A) (B)
5			Prevalence Index = B/A =
6			Hydrophytic Vegetation Indicators:
7			Rapid Test for Hydrophytic Vegetation
	0	= Total Cover	☐ Dominance Test is > 50%
Herb Stratum Plot Size:			☐ Prevalence Index is $\leq 3.0^{1}$
1.			Morphological Adaptations¹ (Provide supporting
2			data in Remarks or on a separate sheet.)
3.			Problematic Hydrophytic Vegetation¹ (Explain.)
4			Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
5.			must be present, unless distances of presionals.
6 7.			Definitions of Vegetation Strata:
			Tree - Woody plants 3 in. (7.6 cm) or more in diameter
8.			at breast height (DBH), regardless of height.
9 10.			Sapling/shrub - Woody plants less than 3 in. DBH,
· · ·			and greater than 3.28 ft. (1 m) tall.
11 12.			Herb - All herbaceous (non-woody) plants, regardless
12.	0	= Total Cover	of size, and woody plants less than 3.28 ft. tall.
Woody Vine Stratum Plot Size:		= Total Gover	Woody Vines - All woody vines greater than 3.28 ft. in height.
2			
3			Hydrophytic
			Vegetation ☐ Yes ☐ No Present?
	0	= Total Cover	
Remarks: (Include photo numbers here or on a se	parate shee	t.)	
Vegetation was not assessed, since sample loc			owed within the last two years.
regeration was not assessed, since sample les	allon lo in a	diotarbod noid, pre	shod main the last the years.

Sampling Point: A11W

SOIL Sampling Point: A11W

Profile Description: (Describe Depth Matrix	to the	-	ocument dox Featu		cator or o	confirm the absence of	f indicators.
(inches) Color (moist)	%	Color (moist)	%	Type ¹	Loc. ²	Texture	Remarks
0 - 7.5 10YR3/1	100			. , , , ,		loam	- Normanie
7.5 - 10 10YR3/1	98	10YR4/6	2	С	M	loam	
10 - 16 10YR5/1	85	10YR4/6	15		М	clay loam	
¹Type: C=Concentration, D=Deple	etion, RI	– – M=Reduced Matrix, M	S=Maske	d Sand Gr	ains.	² Location: PL	=Pore Lining, M=Matrix.
Hydric Soil Indicators:						Indicators for Proble	ematic Hydric Soils ³ :
Histosol (A1) Histic Epipedon (A2) Black Histic (A3) Hydrogen Sulfide (A4) Stratified Layers (A5) Depleted Below Dark Surface (A2) Sandy Mucky Mineral (S1) Sandy Gleyed Matrix (S4) Sandy Redox (S5) Stripped Matrix (S6) Dark Surface (S7) (LRR R, MLR)	A 149B on and v		re (S9) (LI neral (F1) atrix (F2) (F3) ace (F6) urface (F7 ns (F8)	RR R, MLR.) (LRR K, L	A 149B))	2 cm Muck (A10) (L Coast Prairie Redox 5 cm Mucky Peat or Dark Surface (S7) (Polyvalue Below Su Thin Dark Surface (Iron-Manganese Ma Piedmont Floodplair Mesic Spodic (TA6) Red Parent Material Very Shallow Dark S	LRR K, L, MLRA 149B) (A16) (LRR K, L, R) (Peat (S3) (LRR K, L, R) (LRR K, L) (S9) (LRR K, L) (S9) (LRR K, L) (Asses (F12) (LRR K, L, R) (MLRA 144A, 145, 149B) (MLRA 144A, 145, 149B) (F21) (Surface (TF12)
Type: Depth (inches):		_ _				Hydric Soil Prese	ent? ✓ Yes 🗌 No
Remarks: (Include photo numbers	s here o	r on a separate sheet.)				

Project/Site: USH 151/CTH T Overpass	City/County Town of Empire / Fond du Lac Sampling Dat 5/30/2014			
Applicant/Owner: WisDOT	State: WI Sampling Point: A12L			
Investigator(s): Don Brittnacher	Section, Township, Range: Sec. 18, T 15 N, R 18 E			
Landform (hillslope, terrace, etc.): stream terrace	Local relief (concave, convex, none): concave Slope (%):			
Subregion (LRR or MLRA): K / 95A Lat: 43.76935	Long: -88.399262 Datum: WGS 1984			
Soil Map Unit Name: Poygan silty clay loam	NWI Classification:			
Are climatic / hydrologic conditions on the site typical for this time of	year? 🗹 Yes 🗌 No (If no, explain in Remarks.)			
Are Vegetation: \square , Soil \square , or Hydrology \square significantly disturbed	d? Are "Normal Circumstances" present? ✓ Yes ☐ No			
Are Vegetation: \Box , Soil \Box , or Hydrology \Box naturally problematic	? (If needed, explain any answers in Remarks.)			
SUMMARY OF FINDINGS - Attach site map showing samp	pling point locations, transects, important features, etc.			
	the Sampled Area Yes No			
Hydric Soil Present? ✓ Yes ☐ No	lithin a Wetland?			
Wetland Hydrology Present? ✓ Yes No If	yes, optional Wetland Site ID:			
Remarks: (Explain alternative procedures here or in a separate rep	ort.)			
HYDROLOGY				
	Coordon, Indicators (minimum of two various)			
Wetland Hydrology Indicators:	Secondary Indicators (minimum of two required)			
Primary Indicators (minimum of one is required; check all that apply	Surface Soil Clacks (bb)			
Surface Water (A1) Water-Stained Le	` ' ` ` '			
☐ High Water Table (A2) ☐ Aquatic Fauna (B				
Saturation (A3) Marl Deposits (B:	<u> </u>			
Water Marks (B1) Hydrogen Sulfide				
	pheres on Living Roots (C3) Saturation Visible on Aerial Imagery (C9)			
□ Drift Deposits (B3) □ Presence of Redu □ Also Meters Crust (B4) □ Present Ivon Redu				
☐ Algal Mat or Crust (B4) ☐ Recent Iron Redu☐ Iron Deposits (B5) ☐ Thin Muck Surfac	uction in Tilled Soils (C6)			
☐ Inundation Visible on Aerial Imagery (B7) ☐ Other (Explain in	<u> </u>			
Sparsely Vegetated Concave Surface (B8)	✓ FAC-Neutral Test (D5)			
	▼ TAC-Neutral Test (D3)			
Field Observations: Surface Water Present?				
Saturation Present?	Wetland Hydrology Present? ✓ Yes No			
Describe Recorded Data (stream gauge, monitoring well, aerial pho	otos, previous inspections), if available:			
Remarks:				

Tree Stratum Plot Size:	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet:
acer saccharinum	15	X	FACW	Number of Dominant Species That Are OBL, FACW, or FAC: 4 (A)
2.			AOW	Total Number of Dominant Species Across All Strata: 6 (B)
3				Percent of Dominant Species
4				That Are OBL, FACW, or FAC: 67% (A/B)
5.				Prevalence Index worksheet:
6.				Total % Cover of: Multiply by:
7		Tatal C	<u> </u>	OBL species x 1 =
Sapling/Shrub Stratum Plot Size:	<u> 15 _</u>	= Total C	over	FACW species x 2 =
1. cornus racemosa	20	Х	FAC	FAC species x 3 =
2. cornus stolonifera	15	X	FACW	FACU species x 4 =
3.				UPL species x 5 =
4.				Column Totals: (A) (B)
5.				Prevalence Index = B/A =
6.				Hydrophytic Vegetation Indicators:
7.				Rapid Test for Hydrophytic Vegetation
	35	= Total Co	ver	✓ Dominance Test is > 50%
Herb Stratum Plot Size:				☐ Prevalence Index is ≤ 3.0¹
1. bromus inermis	60	X	UPL	☐ Morphological Adaptations¹ (Provide supporting
2. poa pratensis		X	FACU	data in Remarks or on a separate sheet.)
3. urtica dioica		X	FAC	Problematic Hydrophytic Vegetation¹ (Explain.)
 cornus racemosa . 	5		FAC	¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
6.				Definitions of Vegetation Strata:
7. 8.				Tree - Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.
9				Sapling/shrub - Woody plants less than 3 in. DBH,
11.				and greater than 3.28 ft. (1 m) tall.
12.				Herb - All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft. tall.
	105	= Total C	Cover	Woody Vines - All woody vines greater than 3.28 ft. in
Woody Vine Stratum Plot Size:				height.
1.				
2.				Hydrophytic
				Vegetation ✓ Yes No
3.				Present?
3. 4.		= Total C		

SOIL Sampling Point: A12L

Profile Descri	ption: (Describe Matrix	to the	_	l ocumen t dox Featu		cator or o	confirm the absence of	f indicators.		
(inches)	Color (moist)	%	Color (moist)	%	Type ¹	Loc. ²	Texture	Remarks		
0 - 8	10YR3/2						loam			
8 - 12	10YR3/1						clay loam			
12 - 18	10YR5/1		10YR4/6	10	D .	M	clay loam			
				n 1						
			_							
			_							
¹Type: C=Conce	entration, D=Deplet	ion, RM	I=Reduced Matrix, M	S=Maske	d Sand Gra	ains.	² Location: PL:	=Pore Lining, M=Matrix.		
Hydric Soil Inc	licators:						Indicators for Proble	matic Hydric Soils ³ :		
Histosol (A1)			Polyvalue Below	Surface (S8) (LRR R	ι,	☐ 2 cm Muck (A10) (L	RR K, L, MLRA 149B)		
☐ Histic Epiped	on (A2)		MLRA 149B)				Coast Prairie Redox	(A16) (LRR K, L, R)		
☐ Black Histic (A3)		☐ Thin Dark Surfac	e (S9) (LI	RR R, MLR	A 149B)	\square 5 cm Mucky Peat or Peat (S3) (LRR K, L, R)			
☐ Hydrogen Su	lfide (A4)		Loamy Mucky Mi	neral (F1)	(LRR K, L	.)	☐ Dark Surface (S7) (LRR K, L)			
Stratified Lay	ers (A5)		Loamy Gleyed M	atrix (F2)			Polyvalue Below Sur	rface (S8) (LRR K, L)		
✓ Depleted Beld	ow Dark Surface (Al	l1)	Depleted Matrix	(F3)			☐ Thin Dark Surface (S9) (LRR K, L)			
☐ Thick Dark Su	urface (A12)		Redox Dark Surf	ace (F6)			☐ Iron-Manganese Masses (F12) (LRR K, L, R)			
☐ Sandy Mucky	Mineral (S1)		Depleted Dark S	urface (F7	')		☐ Piedmont Floodplain Soils (F19) (MLRA 149B)			
Sandy Gleyed	d Matrix (S4)		Redox Depressio	ns (F8)			☐ Mesic Spodic (TA6)	(MLRA 144A, 145, 149B)		
Sandy Redox	(S5)						Red Parent Material	(F21)		
Stripped Mati							Very Shallow Dark S	Surface (TF12)		
	(S7) (LRR R, MLRA	149B)					Other (Explain in Re	emarks.)		
		,						,		
³ Indicators of hy	drophytic vegetatior	n and w	etland hydrology mu	st be pres	ent, unless	s disturbe	d or problematic.			
	er (if observed):									
Туре:			_							
Depth (inches):			_				Hydric Soil Prese	nt? ✓ Yes 🗌 No		
Remarks: (Inclu	ide photo numbers	here or	on a separate sheet	.)			•			
`	·		•	,						

Project/Site: USH 151/CTH T Overpass	City/County Town of Empire / Fond du Lac Sampling Dat 5/30/2014			
Applicant/Owner: WisDOT	State: WI Sampling Point: A12U			
Investigator(s): Don Brittnacher	Section, Township, Range: Sec. 18, T 15 N, R 18 E			
Landform (hillslope, terrace, etc.): hillslope	Local relief (concave, convex, none): concave Slope (%):			
Subregion (LRR or MLRA): K / 95A Lat: 43.76935	Long: -88.399337 Datum: WGS 1984			
Soil Map Unit Name: Kewaunee silty clay loam, 2 to 6 percent slopes	s, e NWI Classification:			
Are climatic / hydrologic conditions on the site typical for this time of	year? ✓ Yes ☐ No (If no, explain in Remarks.)			
Are Vegetation: \square , Soil \square , or Hydrology \square significantly disturbed	d? Are "Normal Circumstances" present? ✓ Yes ☐ No			
Are Vegetation: \square , Soil \square , or Hydrology \square naturally problematic	? (If needed, explain any answers in Remarks.)			
SUMMARY OF FINDINGS - Attach site map showing samp	oling point locations, transects, important features, etc.			
	the Sampled Area Yes No			
Hydric Soil Present? ☐ Yes ✔ No ₩	ithin a Wetland?			
Wetland Hydrology Present? ☐ Yes ✔ No If	yes, optional Wetland Site ID:			
Remarks: (Explain alternative procedures here or in a separate rep	ort.)			
HANDON OCA				
HYDROLOGY				
Wetland Hydrology Indicators:	Secondary Indicators (minimum of two required)			
Primary Indicators (minimum of one is required; check all that apply	Surface Soil Cracks (bo)			
Surface Water (A1) Water-Stained Le				
☐ High Water Table (A2) ☐ Aquatic Fauna (B				
Saturation (A3) Marl Deposits (B:	<u> </u>			
Water Marks (B1) Hydrogen Sulfide				
□ Sediment Deposits (B2) □ Oxidized Rhizosp □ Drift Deposits (B3) □ Presence of Redu	bheres on Living Roots (C3) Saturation Visible on Aerial Imagery (C9) uced Iron (C4) Stunted or Stressed Plants (D1)			
	uction in Tilled Soils (C6) Geomorphic Position (D2)			
☐ Iron Deposits (B5) ☐ Thin Muck Surface	, ,			
☐ Inundation Visible on Aerial Imagery (B7) ☐ Other (Explain in				
Sparsely Vegetated Concave Surface (B8)	FAC-Neutral Test (D5)			
Field Observations:				
Surface Water Present? ☐ Yes ✓ No Depth (inches):				
Water Table Present? ☐ Yes ✓ No Depth (inches):				
Saturation Present? ☐ Yes ✔ No Depth (inches): (includes capillary fringe)	Wetland Hydrology Present? ☐ Yes ✓ No			
Describe Recorded Data (stream gauge, monitoring well, aerial pho	otos, previous inspections), if available:			
Remarks:				

Tree Stratum Plot Size: 1. fraxinus pennsylvanica

Sapling/Shrub Stratum Plot Size:

1. cornus racemosa

2. cornus stolonifera

Herb Stratum Plot Size:

1. poa pratensis

2. bromus inermis

3. solidago canadensis

Woody Vine Stratum Plot Size:

4. geranium maculatum 5. parthenocissus quinquefolia

3.

5. 6.

3. 4.

6.

6.

			Sa	ampling Point: A12U
Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksh	eet:
% Cover	Species?	FACW	Number of Dominant Speci That Are OBL, FACW, or F	
			Total Number of Dominant Species Across All Strata:	4 (B)
			Percent of Dominant Speci That Are OBL, FACW, or F	es
			Prevalence Index works	sheet:
			Total % Cover of:	Multiply by:
	Total C		OBL species	x 1 =
10	= Total C	over	FACW species	x 2 =
20	X	FAC	FAC species	x 3 =
20	X	FACW	FACU species	x 4 =
		AOT	UPL species	x 5 =
			Column Totals:	(A) (B)
			Prevalence Index = B/A =	_ · · · · · ·
			Hydrophytic Vegetation	Indicators:
			Rapid Test for Hydrophy	
40	= Total Co	ver	✓ Dominance Test is > 50	%
			☐ Prevalence Index is ≤ 3.	.01
10	X	FACU UPL	Morphological Adaptatio data in Remarks or on a	
10		FACU	☐ Problematic Hydrophytic	·
5		FACU	¹ Indicators of hydric soil ar	
5		FACU	must be present, unless dis	
			Definitions of Vegetation	n Strata:
			Tree - Woody plants 3 in. (at breast height (DBH), reg	7.6 cm) or more in diameter ardless of height.
			Sapling/shrub - Woody plar and greater than 3.28 ft. (1	
			Herb - All herbaceous (non-	-woody) plants, regardless
80	= Total C	over	of size, and woody plants le	
	. ota. o	• • • • • • • • • • • • • • • • • • • •	Woody Vines - All woody vi height.	nes greater than 3.28 π. In
			Hydrophytic Vegetation Present? Yes	□ No
	= 10tai O	Ovei		

Domorko	(Include phot	a numbara	hara ar	00 0	aanarata	ahaat)
neiliaiks.	unclude briot	o numbers	nere or	ona	Separate	SHEEL.

SOIL Sampling Point: A12U

Profile Description: (Description Depth Matr		_	dox Featu		cator or c	confirm the absence of	r indicators.	
(inches) Color (moist)) %	Color (moist)	%	Type ¹	Loc. ²	Texture	Remarks	
0 - 7 10YR3/2	100					loam		
7 - 18 7.5YR4/4	100	_				clay		
			- ——					
		_						
	1				_			
		_						
¹Type: C=Concentration, D=D	Depletion, R	– ————————————————————————————————————	S=Masked	d Sand Gra	ains.	² Location: PL	=Pore Lining, M=Matrix.	
Hydric Soil Indicators:						Indicators for Proble	matic Hydric Soils ³ :	
Histosol (A1)		Polyvalue Below	Surface (S	58) (LRR R	.,	☐ 2 cm Muck (A10) (L	RR K, L, MLRA 149B)	
☐ Histic Epipedon (A2)		MLRA 149B)				Coast Prairie Redox	(A16) (LRR K, L, R)	
☐ Black Histic (A3)		☐ Thin Dark Surfac	e (S9) (LF	RR R, MLR	A 149B)	5 cm Mucky Peat or	r Peat (S3) (LRR K, L, R)	
☐ Hydrogen Sulfide (A4)		Loamy Mucky Mi	Loamy Mucky Mineral (F1) (LRR K, L)			☐ Dark Surface (S7) (LRR K, L)	
☐ Stratified Layers (A5)		Loamy Gleyed M	oamy Gleyed Matrix (F2)			Polyvalue Below Su	rface (S8) (LRR K, L)	
Depleted Below Dark Surfa	ice (A11)	☐ Depleted Matrix (F3)				☐ Thin Dark Surface (S9) (LRR K, L)	
☐ Thick Dark Surface (A12)		Redox Dark Surface (F6)				☐ Iron-Manganese Ma	asses (F12) (LRR K, L, R)	
☐ Sandy Mucky Mineral (S1)		Depleted Dark Surface (F7)				☐ Piedmont Floodplain Soils (F19) (MLRA 149B)		
☐ Sandy Gleyed Matrix (S4)		Redox Depressions (F8)				☐ Mesic Spodic (TA6) (MLRA 144A, 145, 149B)		
Sandy Redox (S5)						Red Parent Material	l (F21)	
Stripped Matrix (S6)						☐ Very Shallow Dark Surface (TF12)		
☐ Dark Surface (S7) (LRR R,	MLRA 149B)				Other (Explain in Remarks.)		
³ Indicators of hydrophytic vega	etation and	wetland hydrology mu	st be pres	ent, unless	s disturbe	d or problematic.		
Restrictive Layer (if observ	ved):							
Type:								
Depth (inches):		_				Hydric Soil Prese	nt? Yes ✓ No	
Remarks: (Include photo num	nbers here o	r on a separate sheet	.)			1		

Project/Site: USH 151/CTH T Overpass	City/County Town of Empire / Fond du Lac Sampling Dat 5/30/2014				
Applicant/Owner: WisDOT	State: WI Sampling Point: A12W				
Investigator(s): Don Brittnacher	Section, Township, Range: Sec. 18, T 15 N, R 18 E				
Landform (hillslope, terrace, etc.): stream terrace	Local relief (concave, convex, none): concave Slope (%):				
Subregion (LRR or MLRA): K / 95A Lat: 43.769363	Long: -88.399165 Datum: WGS 1984				
Soil Map Unit Name: Poygan silty clay loam	NWI Classification:				
Are climatic / hydrologic conditions on the site typical for this time of y	year? 🗹 Yes 🗌 No (If no, explain in Remarks.)				
Are Vegetation: \square , Soil \square , or Hydrology \square significantly disturbed	d? Are "Normal Circumstances" present? ✓ Yes ☐ No				
Are Vegetation: \square , Soil \square , or Hydrology \square naturally problematic	? (If needed, explain any answers in Remarks.)				
SUMMARY OF FINDINGS - Attach site map showing samp	oling point locations, transects, important features, etc.				
	the Sampled Area				
Hydric Soil Present? ✓ Yes ☐ No	ithin a Wetland?				
Wetland Hydrology Present? ✓ Yes ☐ No If y	yes, optional Wetland Site ID:				
Remarks: (Explain alternative procedures here or in a separate repo	ort.)				
HYDROLOGY					
	Cocondany Indicators (minimum of two required)				
Wetland Hydrology Indicators:	Secondary Indicators (minimum of two required)				
Primary Indicators (minimum of one is required; check all that apply	Surface Soil Cracks (bo)				
Surface Water (A1) Water-Stained Le					
☐ High Water Table (A2) ☐ Aquatic Fauna (B					
Saturation (A3) Marl Deposits (B1					
Water Marks (B1)					
	heres on Living Roots (C3) Saturation Visible on Aerial Imagery (C9)				
□ Drift Deposits (B3) □ Presence of Redu					
☐ Algal Mat or Crust (B4) ☐ Recent Iron Redu☐ Iron Deposits (B5) ☐ Thin Muck Surfac	uction in Tilled Soils (C6) ✓ Geomorphic Position (D2) te (C7) ☐ Shallow Aquitard (D3)				
☐ Inundation Visible on Aerial Imagery (B7) ☐ Other (Explain in					
Sparsely Vegetated Concave Surface (B8)	FAC-Neutral Test (D5)				
	TAC-Neutral Test (D3)				
Field Observations:					
Surface Water Present?					
Saturation Present?	Wetland Hydrology Present? ✓ Yes No				
Describe Recorded Data (stream gauge, monitoring well, aerial pho	tos, previous inspections), if available:				
Remarks:					

Dominance Test worksheet:	Indicator Status	Dominant Species?	Absolute % Cover	Trans Christian - Diet Cines
Number of Dominant Species That Are OBL, FACW, or FAC: 3 (A)				<u>Tree Stratum</u> Plot Size:
That Are OBL, FACW, or FAC:3 (A) Total Number of Dominant				1.
Species Across All Strata: 5 (B)				2.
Percent of Dominant Species			·	3.
That Are OBL, FACW, or FAC: (A/B)			·	4
Prevalence Index worksheet:				5.
Total % Cover of: Multiply by:				6. 7.
OBL species x 1 =	`ovor	= Total C		7
FACW species x 2 =	ovei	= 101a10		Sapling/Shrub Stratum Plot Size:
FAC species x 3 =	FAC	X	15	1. cornus racemosa
FACU species x 4 =	FACW	X	10	2. cornus stolonifera
UPL species x 5 =	<u> </u>			3
Column Totals: (A) (B)				4
Prevalence Index = B/A =				5.
Hydrophytic Vegetation Indicators:				6.
Rapid Test for Hydrophytic Vegetation				7.
✓ Dominance Test is > 50%	ver	= Total Co	25	
Prevalence Index is ≤ 3.0¹				Herb Stratum Plot Size:
Morphological Adaptations¹ (Provide supporting	FACU	X	50	1. poa pratensis
data in Remarks or on a separate sheet.)	FACU	X	20	2. solidago canadensis
☐ Problematic Hydrophytic Vegetation¹ (Explain.)	UPL		10	3. bromus inermis
¹ Indicators of hydric soil and wetland hydrology	FAC		10	4. urtica dioica
must be present, unless disturbed or problematic.				5.
Definitions of Vegetation Strata:				6.
Schmidons of Vegetation Strata				7
Tree - Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.				8.
			_	9.
Sapling/shrub - Woody plants less than 3 in. DBH, and greater than 3.28 ft. (1 m) tall.				10
				11
Herb - All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft. tall.				12
Woody Vines - All woody vines greater than 3.28 ft. in	Cover	= Total C	90	
height.				Woody Vine Stratum Plot Size:
	FAC	X	5	1. vitis riparia
				2
Hydrophytic Vegetation Ves No				3.
Present?				4
	Cover	= Total C	5	
	Cover			Remarks: (Include photo numbers here or on a

Sampling Point: A12W

SOIL Sampling Point: A12W

	scription: (Describ	e to the	-	ocumen lox Featu		cator or	confirm the absence of	findicators.	
Depth (inches)		0/				1 2	Tandona	Damada	
0 - 5	Color (moist)	100	Color (moist)	%	Type ¹	Loc. ²	Texture	Remarks	
5 - 12	10YR6/1	70	10YR4/6	5			clay loam		
	10YR4/4	25							
10 16	10VDE/1		10VP4/6			N4	olov loom		
12 - 16	10YR5/1	95	10YR4/6	5		М	clay loam		
			- °-						
			_						
			-						
ı									
			- -		- -				
					- -				
¹Type: C=Co	oncentration, D=Depl	etion, RI	M=Reduced Matrix, MS	S=Maske	d Sand Gr	ains.	² Location: PL:	=Pore Lining, M=Matrix.	
Hydric Soil	Indicators:						Indicators for Proble	matic Hydric Soils³:	
Histosol (A1)		Polyvalue Below	Surface ((S8) (LRR R	₹,	2 cm Muck (A10) (L	.RR K, L, MLRA 149B)	
Histic Epi	pedon (A2)		MLRA 149B)				Coast Prairie Redox	(A16) (LRR K, L, R)	
☐ Black Hist	tic (A3)		☐ Thin Dark Surfac	e (S9) (L	RR R, MLR	A 149B)	☐ 5 cm Mucky Peat or Peat (S3) (LRR K, L, R)		
Hydrogen	Sulfide (A4)		Loamy Mucky Min	neral (F1) (LRR K, L	.)	☐ Dark Surface (S7) (LRR K, L)		
Stratified	Layers (A5)		Loamy Gleyed Ma	atrix (F2))		☐ Polyvalue Below Surface (S8) (LRR K, L)		
Depleted	Below Dark Surface ((A11)	✓ Depleted Matrix ((F3)			☐ Thin Dark Surface (S9) (LRR K, L)		
☐ Thick Dar	k Surface (A12)		Redox Dark Surfa	ace (F6)			☐ Iron-Manganese Masses (F12) (LRR K, L, R)		
Sandy Mu	ıcky Mineral (S1)		Depleted Dark Su	urface (F	7)		☐ Piedmont Floodplain Soils (F19) (MLRA 149B)		
	eyed Matrix (S4)		Redox Depression				☐ Mesic Spodic (TA6) (MLRA 144A, 145, 149B)		
Sandy Re	dox (S5)			` ,			Red Parent Material (F21)		
	Matrix (S6)						☐ Very Shallow Dark Surface (TF12)		
	ace (S7) (LRR R, MLI	RA 149B))				Other (Explain in Remarks.)		
	,							,	
³ Indicators o	f hydrophytic vegetat	ion and v	wetland hydrology mus	st be pres	sent, unless	s disturbe	ed or problematic.		
Restrictive	Layer (if observed):							
Type:			_						
Depth (inche							Hydric Soil Prese	nt? 🗸 Yes 🗌 No	
Remarks: (I	nclude photo number	s here o	r on a separate sheet.)			<u> </u>		
,			,						

Project/Site: USH 151/CTH T Overpass		City/County Town of Empire	City/County Town of Empire / Fond du Lac Sampling Dat				
Applicant/Owner: WisDOT	State	State: WI Sampling Point: A1					
Investigator(s): Don Brittnacher		Section, Township, Range:	Sec. 18, T 1	5 N, R 18 E			
Landform (hillslope, terrace, etc.): stream	n terrace	Local relief (concave, conve	x, none): concav	se Slope (%):			
Subregion (LRR or MLRA): K / 95A	Lat: 43.768	969 Long: -88.398859		Datum: WGS 1984			
Soil Map Unit Name: Poygan silty clay loa	am		NWI Cla	ssification:			
Are climatic / hydrologic conditions on the	site typical for this time	e of year? 🗹 Yes 🗌 No	(If no, explain	in Remarks.)			
Are Vegetation: \square , Soil \square , or Hydrolog	gy 🗆 significantly distu	rbed? Are "Normal Circumstar	nces" present? 🗸	Yes 🗌 No			
Are Vegetation: \square , Soil \square , or Hydrolog	gy 🗌 naturally problem	natic? (If needed, explain any	answers in Rema	rks.)			
, ne vegetation — , son — , or m, arons	gy — natarany problem	(If needed) explain any	anovers in rema	1101)			
SUMMARY OF FINDINGS - Attach s	site map showing sa	ampling point locations, transec	ts, important f	eatures, etc.			
Hydrophytic Vegetation Present?	Yes 🗆 No	Is the Sampled Area	✓ Yes	□ No			
	Yes No	Within a Wetland?	▼ Tes	☐ NO			
Wetland Hydrology Present?	Yes No	If yes, optional Wetland Site ID:					
Remarks: (Explain alternative procedure	es here or in a senarate	report)					
remare. (Explain alternative procedure	is here or in a separate	Терогеј					
HYDROLOGY							
		Cocon	dan, Indicators (m	ninimum of two required)			
Wetland Hydrology Indicators:		- Colores		ninimum of two required)			
Primary Indicators (minimum of one is re			Surface Soil Crack				
Surface Water (A1)		· · ·	Drainage Patterns	` '			
☐ High Water Table (A2)	Aquatic Faun		Moss Trim Lines (
☐ Saturation (A3) ☐ Water Marks (B1)	Marl Deposits	_	Dry-Season Wate Crayfish Burrows				
Sediment Deposits (B2)		cospheres on Living Roots (C3)	•	on Aerial Imagery (C9)			
Drift Deposits (B3)		_	Stunted or Stress				
Algal Mat or Crust (B4)		` '	Geomorphic Posit	` '			
☐ Iron Deposits (B5)	☐ Thin Muck Su	_	Shallow Aquitard				
☐ Inundation Visible on Aerial Imagery			Microtopographic				
Sparsely Vegetated Concave Surface	(B8)		FAC-Neutral Test	(D5)			
Field Observations:							
	✓ No Depth (inch	es):					
	✓ No Depth (inch	·					
_	_	· -	drology Present	? ✓ Yes 🗌 No			
Saturation Present? Yes (includes capillary fringe)	✓ No Depth (inch	es) wetiand nyo	irology Present	. A les 140			
(ge)							
Describe Recorded Data (stream gauge	, monitoring well, aerial	photos, previous inspections), if availa	ıble:				
Demodes							
Remarks:							

Sampling	Point:	A13L	

Tues Chushium Dist Cine.	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet:	
Tree Stratum Plot Size: 1. acer negundo	10	X	FAC	Number of Dominant Species That Are OBL, FACW, or FAC: 3 (A)	
2.				Total Number of Dominant Species Across All Strata: 4 (B)	
3. 4				Percent of Dominant Species That Are OBL, FACW, or FAC: 75% (A/E	
5.				Prevalence Index worksheet:	_
6					
7				Total % Cover of: Multiply by:	
	10	= Total C	Cover	OBL species x 1 =	
Sapling/Shrub Stratum Plot Size:				FACW species x 2 =	
1.				FAC species x 3 =	
2				FACU species x 4 =	
3.				UPL species x 5 =	
4				Column Totals: (A)	(B)
5				Prevalence Index = B/A =	
5.				Hydrophytic Vegetation Indicators:	
7				Rapid Test for Hydrophytic Vegetation	
	0	= Total Co	ver	✓ Dominance Test is > 50%	
Herb Stratum Plot Size:				Prevalence Index is ≤ 3.0¹	
1. carex (sedge), unknown	50	X	FACW	☐ Morphological Adaptations¹ (Provide supporting	
2. poa pratensis	20	X	FACU	data in Remarks or on a separate sheet.)	
3. calystegia sepium	20	X	FAC	☐ Problematic Hydrophytic Vegetation¹ (Explain.)	
4. rubus idaeus	10		FAC	¹ Indicators of hydric soil and wetland hydrology	
5				must be present, unless disturbed or problematic.	
5.				Definitions of Vegetation Strata:	
7. 3.				Tree - Woody plants 3 in. (7.6 cm) or more in diam	eter
9.				at breast height (DBH), regardless of height.	
10.	<u> </u>			Sapling/shrub - Woody plants less than 3 in. DBH, and greater than 3.28 ft. (1 m) tall.	
11				Herb - All herbaceous (non-woody) plants, regardle	cc
12				of size, and woody plants less than 3.28 ft. tall.	55
	100	= Total C	Cover	Woody Vines - All woody vines greater than 3.28 ft.	in
Woody Vine Stratum Plot Size:				height.	
1					
2				l	
3				Hydrophytic Vegetation Vegetation No	
4.				Present?	
	0	= Total C	Cover		

SOIL Sampling Point: A13L

Profile Des	scription: (Describ Matrix	e to the	_	l ocumen dox Featu		cator or	confirm the absence of	indicators.	
(inches)	Color (moist)	%	Color (moist)	%	Type ¹	Loc.2	Texture	Remarks	
0 - 4.5	10YR3/2	100			.,,,,,		loam		
4.5 - 10	10YR3/1	100	_				loam		
10 - 12	10YR4/1	98	10YR4/6	2	D	М	silty clay loam		
12 - 16	10YR5/1	95	10YR4/6	5	D	М	silty clay loam		
			-						
			_		<u> </u>				
			_		<u> </u>				
					-				
					<u> </u>				
¹Type: C=C	oncentration, D=Depl	letion, RI	— M=Reduced Matrix, M	S=Maske	ed Sand Gr	ains.	² Location: PL=	Pore Lining, M=Matrix.	
Hydric Soil	Indicators:						Indicators for Probler	natic Hydric Soils³:	
☐ Histosol (A1)		Polyvalue Below	Surface ((S8) (LRR R	۲,	☐ 2 cm Muck (A10) (LI	RR K, L, MLRA 149B)	
	pedon (A2)		MLRA 149B)	·	. , .	,	Coast Prairie Redox		
☐ Black Hist	ic (A3)		☐ Thin Dark Surfac	e (S9) (L	RR R, MLR	A 149B)	5 cm Mucky Peat or	Peat (S3) (LRR K, L, R)	
Hydrogen	Sulfide (A4)		Loamy Mucky Mi	neral (F1) (LRR K, L	.)	☐ Dark Surface (S7) (L	RR K, L)	
Stratified	Layers (A5)		Loamy Gleyed M	atrix (F2))		Polyvalue Below Sur	face (S8) (LRR K, L)	
Depleted	Below Dark Surface ((A11)	✓ Depleted Matrix	(F3)			☐ Thin Dark Surface (S9) (LRR K, L)		
☐ Thick Dar	k Surface (A12)		Redox Dark Surf	ace (F6)			☐ Iron-Manganese Masses (F12) (LRR K, L, R)		
☐ Sandy Mu	cky Mineral (S1)		Depleted Dark S	urface (F	7)		☐ Piedmont Floodplain	Soils (F19) (MLRA 149B)	
Sandy Gle	eyed Matrix (S4)		Redox Depressio	ns (F8)			Mesic Spodic (TA6) (MLRA 144A, 145, 149B)		
Sandy Re							Red Parent Material (F21)		
	Matrix (S6)						☐ Very Shallow Dark Surface (TF12)		
☐ Dark Surf	ace (S7) (LRR R, MLI	RA 149B))				Other (Explain in Re	marks.)	
³ Indicators o	f hydrophytic vegetat	ion and	wetland hydrology mu	st be pres	sent, unless	s disturbe	d or problematic.		
Restrictive	Layer (if observed):							
Type:			<u>_</u>						
Depth (inche	s):		_				Hydric Soil Preser	nt? ✓ Yes 🗌 No	
Remarks: (I	nclude photo number	rs here o	r on a separate sheet.	.)					
,	•		·	,					

Project/Site: USH 151/CTH T Overpass	City/County Town of Empire / Fond du Lac Sampling Dat 5/30/2014
Applicant/Owner: WisDOT	State: WI Sampling Point: A13U
Investigator(s): Don Brittnacher	Section, Township, Range: Sec. 18, T 15 N, R 18 E
Landform (hillslope, terrace, etc.): stream terrace	Local relief (concave, convex, none): concave Slope (%):
Subregion (LRR or MLRA): K / 95A Lat: 43.7	768983 Long: -88.3989 Datum: WGS 1984
Soil Map Unit Name: Poygan silty clay loam	NWI Classification:
Are climatic / hydrologic conditions on the site typical for this ti	ime of year? ✓ Yes ☐ No (If no, explain in Remarks.)
Are Vegetation: \square , Soil \square , or Hydrology \square significantly di	sturbed? Are "Normal Circumstances" present? 🗹 Yes 🗌 No
Are Vegetation: \square , Soil \square , or Hydrology \square naturally probl	lematic? (If needed, explain any answers in Remarks.)
	(2) Necdedy explain any districts in remainer)
SUMMARY OF FINDINGS - Attach site map showing	sampling point locations, transects, important features, etc.
Hydrophytic Vegetation Present? ☐ Yes ✓ No	Is the Sampled Area Yes ✓ No
Hydric Soil Present? ☐ Yes ✓ No	Within a Wetland?
Wetland Hydrology Present? ☐ Yes ✓ No	If yes, optional Wetland Site ID:
Remarks: (Explain alternative procedures here or in a separa	ate report)
Terraine. (Explain alternative procedures here of in a separe	ac reportly
HYDROLOGY	
	Cocondaw Indicators (minimum of two required)
Wetland Hydrology Indicators:	Secondary Indicators (minimum of two required)
Primary Indicators (minimum of one is required; check all tha	Surface Son cracks (50)
	ined Leaves (B9)
☐ High Water Table (A2) ☐ Aquatic Fa	<u> </u>
☐ Saturation (A3) ☐ Marl Depo ☐ Water Marks (B1) ☐ Hydrogen	sits (B15)
	Rhizospheres on Living Roots (C3) Saturation Visible on Aerial Imagery (C9)
	of Reduced Iron (C4) Stunted or Stressed Plants (D1)
	on Reduction in Tilled Soils (C6) Geomorphic Position (D2)
	Surface (C7) Shallow Aquitard (D3)
	plain in Remarks) Microtopographic Relief (D4)
Sparsely Vegetated Concave Surface (B8)	FAC-Neutral Test (D5)
Field Observations:	
Surface Water Present? ☐ Yes ✓ No Depth (in	iches):
	· · · · · · · · · · · · · · · · · · ·
	·
Saturation Present?	ches): Wetland Hydrology Present?
(includes capillary fringe)	
Describe Recorded Data (stream gauge, monitoring well, aer	rial photos, previous inspections), if available:
Remarks:	

	% Cover	Species?	Status	Dominance rest worksneet.				
Tree Stratum Plot Size: 1.				Number of Dominant Species That Are OBL, FACW, or FAC:1 (A)				
2.				Total Number of Dominant Species Across All Strata: 2 (B)				
3.				Percent of Dominant Species				
4				That Are OBL, FACW, or FAC: (A/B)				
5.				Prevalence Index worksheet:				
6.				Total % Cover of: Multiply by:				
7		Tatal Ca		OBL species 0 x 1 = 20				
Sapling/Shrub Stratum Plot Size:		= Total Co	over	FACW species 20 $x 2 = 40$				
1.				FAC species 10 x 3 = 30				
2				FACU species 60 x 4 = 240				
3.				UPL species $0 x 5 = 0$				
4.				Column Totals: 90 (A) 310 (B)				
5.				Prevalence Index = B/A = 3.4				
6.				Hydrophytic Vegetation Indicators:				
7.				Rapid Test for Hydrophytic Vegetation				
	0	= Total Cover		Dominance Test is > 50%				
Herb Stratum Plot Size:				Prevalence Index is ≤ 3.0¹				
1. poa pratensis	60	X	FACU	- Morphological Adaptations¹ (Provide supporting				
2. phalaris arundinacea	20	X	FACW	data in Remarks or on a separate sheet.)				
3. calystegia sepium	10		FAC	☐ Problematic Hydrophytic Vegetation¹ (Explain.)				
4.				¹ Indicators of hydric soil and wetland hydrology				
5.				must be present, unless disturbed or problematic.				
6.				Definitions of Vegetation Strata:				
7								
8				Tree - Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.				
9	<u></u>			Sapling/shrub - Woody plants less than 3 in. DBH,				
10.				and greater than 3.28 ft. (1 m) tall.				
11.				Herb - All herbaceous (non-woody) plants, regardless				
12				of size, and woody plants less than 3.28 ft. tall.				
	90	= Total Co	ver	Woody Vines - All woody vines greater than 3.28 ft. in				
Woody Vine Stratum Plot Size:				height.				
1.								
2.				Hydrophytic				
3.				Vegetation ☐ Yes ✓ No				
4				Present?				
	0	= Total Co	ver					

Absolute Dominant

Indicator

SOIL Sampling Point: A13U

Profile Description: (Description: Matrix		_	locumen dox Featu		cator or o	confirm the absence o	f indicators.	
(inches) Color (moist)	%	Color (moist)	%	Type ¹	Loc.2	Texture	Remarks	
0 - 14 10YR3/2	100			.,,,,,		loam		
14 - 16.5 10YR3/1	98	10YR4/6	2	С	М	clay loam		
		_						
	_	_						
	_	_						
		_						
	_	_						
		_						
¹Type: C=Concentration, D=De	pletion, R	M=Reduced Matrix, M	S=Maske	d Sand Gr	ains.	² Location: PL	=Pore Lining, M=Matrix.	
Hydric Soil Indicators:						Indicators for Proble	ematic Hydric Soils ³ :	
Histosol (A1)		☐ Polyvalue Below Surface (S8) (LRR R,				☐ 2 cm Muck (A10) (LRR K, L, MLRA 149B)		
☐ Histic Epipedon (A2)		MLRA 149B)				☐ Coast Prairie Redox (A16) (LRR K, L, R)		
☐ Black Histic (A3)		☐ Thin Dark Surfac	ce (S9) (L	RR R, MLR	A 149B)	☐ 5 cm Mucky Peat or Peat (S3) (LRR K, L, R)		
☐ Hydrogen Sulfide (A4)		Loamy Mucky M	ineral (F1)) (LRR K, L	.)	☐ Dark Surface (S7) (LRR K, L)		
☐ Stratified Layers (A5)		Loamy Gleyed M	latrix (F2)			Polyvalue Below Surface (S8) (LRR K, L)		
☐ Depleted Below Dark Surface	e (A11)	Depleted Matrix	(F3)			☐ Thin Dark Surface (S9) (LRR K, L)		
☐ Thick Dark Surface (A12)		Redox Dark Surface (F6)				☐ Iron-Manganese Masses (F12) (LRR K, L, R)		
☐ Sandy Mucky Mineral (S1)		Depleted Dark Surface (F7)				☐ Piedmont Floodplain Soils (F19) (MLRA 149B)		
Sandy Gleyed Matrix (S4)						☐ Mesic Spodic (TA6) (MLRA 144A, 145, 149B)		
Sandy Redox (S5)						Red Parent Material (F21)		
Stripped Matrix (S6)						☐ Very Shallow Dark Surface (TF12)		
☐ Dark Surface (S7) (LRR R, MLRA 149B)						Other (Explain in Remarks.)		
³ Indicators of hydrophytic veget	ation and	wetland hydrology mu	st be pres	sent, unles	s disturbe	d or problematic.		
Restrictive Layer (if observe	ed):							
Type:		<u> </u>						
Depth (inches):		<u> </u>				Hydric Soil Prese	ent? Yes 🗸 No	
Remarks: (Include photo numb	ers here o	r on a separate sheet	.)					

Project/Site: USH 151/CTH T (Ov <u>erpass</u>		City/County	Town of Empire /	Fond du Lac	Sampling Dat	5/30/2014
Applicant/Owner: WisDOT				State:	WI	Sampling Point: A	413W
Investigator(s): Don Brittnach	ier		Section, Tov	wnship, Range:	Sec. 18, T 15	5 N, R 18 E	
Landform (hillslope, terrace, et	c.): stream terrac	е	Local relief ((concave, convex,	none): concave	e Slope (%	%):
Subregion (LRR or MLRA): K	/ 95A	Lat: 43.768	3986 Long:	-88.398793		Datum: WGS 19	984
Soil Map Unit Name: Poygan	silty clay loam				NWI Clas	ssification:	
Are climatic / hydrologic condit	tions on the site ty	pical for this time	ne of year? 🗹 Yes [No	(If no, explain	in Remarks.)	
Are Vegetation: \square , Soil \square ,	or Hydrology \square s	significantly distu	urbed? Are "No	ormal Circumstanc	es" present?	Yes No	
Are Vegetation: \square , Soil \square ,	or Hydrology \Box ı	naturally problen	natic? (If nee	eded, explain any a	answers in Remar	ks.)	
SUMMARY OF FINDINGS	- Attach site m	ap showing s	ampling point loca	tions, transects	s, important fe	atures, etc.	
Hydrophytic Vegetation Prese Hydric Soil Present?	ent?	□ No	Is the Sampled Area Within a Wetland?		✓ Yes	☐ No	
Wetland Hydrology Present?	✓ Yes	☐ No	If yes, optional Wetla	and Site ID:			
Remarks: (Explain alternativ	e procedures here	or in a separate	report.)				
HYDROLOGY							
Wetland Hydrology Indica				Seconda	ary Indicators (mi	inimum of two requ	uired)
Primary Indicators (minimum	of one is required				Surface Soil Cracks		
Surface Water (A1)			ed Leaves (B9)		Orainage Patterns		
✓ High Water Table (A2) ✓ Saturation (A3)		Aquatic FaunMarl Deposits		_	1oss Trim Lines (E Ory-Season Water		
Water Marks (B1)			ulfide Odor (C1)	_	Ory-Season water Crayfish Burrows (` '	
Sediment Deposits (B2)			izospheres on Living Ro			on Aerial Imagery	(C9)
Drift Deposits (B3)			Reduced Iron (C4)	_	Stunted or Stresse		(09)
Algal Mat or Crust (B4)			Reduction in Tilled Soils	_	Geomorphic Position	, ,	
☐ Iron Deposits (B5)		☐ Thin Muck Su		· · ·	Shallow Aquitard (, ,	
☐ Inundation Visible on Aeri	al Imagery (B7)		in in Remarks)		1icrotopographic I	• •	
Sparsely Vegetated Conca			,		AC-Neutral Test (
Field Observations:							
Surface Water Present?	☐ Yes 🗸 No	Depth (inch	nes):				
Water Table Present?	✓ Yes	Depth (inch	nes): 7.5				
Saturation Present? (includes capillary fringe)	✓ Yes	Depth (inch	nes): 0	Wetland Hydr	rology Present?	Yes	No
Describe Recorded Data (stre	eam gauge, monit	oring well, aerial	I photos, previous inspe	ections), if availab	le:		
Damada							
Remarks:							

Tree Stratum Plot Size:	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet:
acer negundo	10	X	FAC	Number of Dominant Species That Are OBL, FACW, or FAC: 2 (A)
2.				Total Number of Dominant Species Across All Strata: 2 (B)
3.				Percent of Dominant Species
4				That Are OBL, FACW, or FAC: 100% (A/B)
5				Prevalence Index worksheet:
6.				Total % Cover of: Multiply by:
7				OBL species $x 1 =$
Conline/Chruh Stratum Plot Size:	10	= Total C	over	FACW species x 2 =
<u>Sapling/Shrub Stratum</u> Plot Size: 1.				FAC species x 3 =
2				FACU species x 4 =
				UPL species x 5 =
				Column Totals: (A) (B)
5.	-			Prevalence Index = B/A =
6.	-			Hydrophytic Vegetation Indicators:
7.				Rapid Test for Hydrophytic Vegetation
	0	= Total Co	ver	✓ Dominance Test is > 50%
<u>Herb Stratum</u> Plot Size:				☐ Prevalence Index is ≤ 3.0¹
phalaris arundinacea	60	X	FACW	☐ Morphological Adaptations¹ (Provide supporting
2. calystegia sepium	10		FAC	data in Remarks or on a separate sheet.)
3. rubus idaeus	10		FAC	Problematic Hydrophytic Vegetation¹ (Explain.)
4.				¹Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
5.				must be present, unless distance of presiding and
6	· ——			Definitions of Vegetation Strata:
8	<u> </u>			Tree - Woody plants 3 in. (7.6 cm) or more in diameter
0				at breast height (DBH), regardless of height.
10				Sapling/shrub - Woody plants less than 3 in. DBH,
11.				and greater than 3.28 ft. (1 m) tall.
12.				Herb - All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft. tall.
	80	= Total C	over	Woody Vines - All woody vines greater than 3.28 ft. in
Woody Vine Stratum Plot Size:				height.
1.				
2.				
3.				Hydrophytic Vegetation ✓ Yes No
4.				Present?
	0	= Total C	over	
Remarks: (Include photo numbers here or on a se	eparate shee	t.)		

Sampling Point: A13W

SOIL Sampling Point: A13W

Profile Des	scription: (Describ Matrix	e to the	-	documen dox Featu		cator or	confirm the absence of	indicators.
(inches)	Color (moist)	%	Color (moist)	%	Type ¹	Loc.2	Texture	Remarks
0 - 4	10YR5/1	90	10YR4/6	10	D	M	silt loam	riomano
4 - 9	10YR5/1	98	10YR4/6	2	D		silty clay loam	
9 - 12.5	7.5YR4/4	85	10YR4/6	5	С	M	silty clay	
	10YR6/1	10	_					
				•				
		. ——						_
	<u> </u>	. ——			- ——			
								_
				•				
	. ———			-				
		- ——		- ——				
		- ——						
¹Type: C=C	oncentration, D=Depl	letion, R	M=Reduced Matrix, M	S=Maske	d Sand Gr	ains.	² Location: PL=	-Pore Lining, M=Matrix.
Hydric Soil	Indicators:						Indicators for Probler	matic Hydric Soils³:
Histosol ((A1)		Polyvalue Below	Surface ((S8) (LRR F	₹,	☐ 2 cm Muck (A10) (LF	RR K, L, MLRA 149B)
Histic Epi	ipedon (A2)		MLRA 149B)				Coast Prairie Redox	(A16) (LRR K, L, R)
☐ Black Hist	tic (A3)		☐ Thin Dark Surfac	ce (S9) (L	.RR R, MLR	A 149B)	5 cm Mucky Peat or	Peat (S3) (LRR K, L, R)
Hydroger	n Sulfide (A4)		Loamy Mucky Mi	ineral (F1) (LRR K, L	_)	☐ Dark Surface (S7) (L	.RR K, L)
☐ Stratified	Layers (A5)		Loamy Gleyed M	latrix (F2)	,		Polyvalue Below Surf	face (S8) (LRR K, L)
☐ Depleted	Below Dark Surface ((A11)	✓ Depleted Matrix	(F3)			☐ Thin Dark Surface (S	69) (LRR K, L)
☐ Thick Dar	rk Surface (A12)		Redox Dark Surfa	ace (F6)			☐ Iron-Manganese Mas	sses (F12) (LRR K, L, R)
☐ Sandy Mı	ucky Mineral (S1)		Depleted Dark S	urface (F	7)		☐ Piedmont Floodplain	Soils (F19) (MLRA 149B)
Sandy Gl	eyed Matrix (S4)		Redox Depressio	ons (F8)			Mesic Spodic (TA6) ((MLRA 144A, 145, 149B)
☐ Sandy Re	edox (S5)						Red Parent Material	(F21)
Stripped	Matrix (S6)						Very Shallow Dark S	urface (TF12)
☐ Dark Surf	face (S7) (LRR R, MLF	RA 149B	.)				Other (Explain in Re	marks.)
³ Indicators c	of hydrophytic vegetat	ion and	wetland hydrology mus	st be pres	sent, unles	s disturbe	ed or problematic.	
Restrictive	Layer (if observed	n:						
Type:	- Luyer (11 0550110u							
Depth (inche			_				Hydric Soil Presen	nt? ✓ Yes No
			_					
Remarks: (I	nclude photo number	rs here c	or on a separate sheet.	.)				

Project/Site: USH 151/CTH T Overpass	City/County Town of Empire / Fond du Lac Sampling Dat 5/30/2014
Applicant/Owner: WisDOT	State: WI Sampling Point: A14L
Investigator(s): Don Brittnacher	Section, Township, Range: Sec. 18, T 15 N, R 18 E
Landform (hillslope, terrace, etc.): stream terrace	Local relief (concave, convex, none): concave Slope (%):
Subregion (LRR or MLRA): K / 95A Lat: 43.768	752 Long: -88.398801 Datum: WGS 1984
Soil Map Unit Name: Kewaunee silty clay loam, 2 to 6 percent slo	opes, e NWI Classification:
Are climatic / hydrologic conditions on the site typical for this time	e of year? 🗹 Yes 🗌 No (If no, explain in Remarks.)
Are Vegetation: \Box , Soil \Box , or Hydrology \Box significantly disturbed in the context of the	rbed? Are "Normal Circumstances" present? ✓ Yes ☐ No
Are Vegetation: \Box , Soil \Box , or Hydrology \Box naturally problem	natic? (If needed, explain any answers in Remarks.)
SUMMARY OF FINDINGS - Attach site map showing sa	ampling point locations, transects, important features, etc.
Hydrophytic Vegetation Present? ✓ Yes ☐ No	Is the Sampled Area ✓ Yes No
Hydric Soil Present? ✓ Yes ☐ No	Within a Wetland?
Wetland Hydrology Present? ✓ Yes No	If yes, optional Wetland Site ID:
Remarks: (Explain alternative procedures here or in a separate	report.)
HYDROLOGY	
	Coordon, Indicators (minimum of two negrical)
Wetland Hydrology Indicators:	Secondary Indicators (minimum of two required)
Primary Indicators (minimum of one is required; check all that a	Surface Soil Clacks (bb)
	d Leaves (B9) ✓ Drainage Patterns (B10)
High Water Table (A2) Aquatic Fauna Aquatic Fauna And Denseits	
Saturation (A3) Marl Deposits Water Marks (B1)	` ` ` ` ` ` ` ` ` ` ' ` ' ` ' ` ' ` ` ` `
	Ifide Odor (C1) Crayfish Burrows (C8)
	cospheres on Living Roots (C3) Saturation Visible on Aerial Imagery (C9)
	Reduced Iron (C4) Stunted or Stressed Plants (D1)
• • • • • • • • • • • • • • • • • • • •	Reduction in Tilled Soils (C6)
☐ Iron Deposits (B5) ☐ Thin Muck Su	
	n in Remarks)
Sparsely Vegetated Concave Surface (B8)	✓ FAC-Neutral Test (D5)
Field Observations:	
Surface Water Present?	
Water Table Present? ☐ Yes ☑ No Depth (inche	· .
Saturation Present?	es): Wetland Hydrology Present? Yes No
Describe Recorded Data (stream gauge, monitoring well, aerial	photos, previous inspections), if available:
Remarks:	

Tree Stratum Plot Size:

Sapling/Shrub Stratum Plot Size:

1. cornus stolonifera

Herb Stratum Plot Size: 1. carex (sedge), unknown

2. solidago canadensis

Woody Vine Stratum Plot Size:

4. equisetum arvense

3. poa pratensis

5. brassica rapa

3.

5. 6.

2.

3.

4.

6.

6.

Absolute Dominant Indicator

= Total Cover

FACW

FACW

FACU

FACU

FAC

UPL

Hydrophytic Vegetation

Present?

Χ

10 = Total Cover

10

5

Χ Χ

Status

% Cover Species?

0

10

75

= 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
Number of Dominant Species That Are OBL, FACW, or FAC: 2 (A) Total Number of Dominant Species Across All Strata: 3 (B)
That Are OBL, FACW, or FAC: 2 (A) Total Number of Dominant Species Across All Strata: 3 (B)
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:
Rapid Test for Hydrophytic Vegetation
✓ Dominance Test is > 50%
☐ Prevalence Index is $\leq 3.0^{1}$
 Morphological Adaptations¹ (Provide supporting data in Remarks or on a separate sheet.)
Problematic Hydrophytic Vegetation¹ (Explain.)
¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
Definitions of Vegetation Strata:
Tree - Woody plants 3 in. (7.6 cm) or more in diamete at breast height (DBH), regardless of height.
Sapling/shrub - Woody plants less than 3 in. DBH, and greater than 3.28 ft. (1 m) tall.
Herb - All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft. tall. Woody Vines - All woody vines greater than 3.28 ft. in
height.

		0	= Total Cover

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

SOIL Sampling Point: A14L

Depth Matrix	Re	dox Featu	ires			
(inches) Color (moist) %	Color (moist)	%	Type ¹	Loc. ²	Texture	Remarks
0 - 9 10YR3/1 100			·		loam	
9 - 15 7.5YR4/4 85	10YR4/6	5	С	М	clay loam	
10YR6/1 10		-	· ——			
			· ——			
		-				
			· ——			
			- ——			
Гуре: C=Concentration, D=Depletion, I	RM=Reduced Matrix, M	S=Maske	d Sand Gr	ains.	² Location: PL:	=Pore Lining, M=Matrix.
lydric Soil Indicators:					Indicators for Proble	matic Hydric Soils ³ :
Histosol (A1)	Polyvalue Below	Surface (S8) (LRR F	₹,	☐ 2 cm Muck (A10) (L	.RR K, L, MLRA 149B)
Histic Epipedon (A2)	MLRA 149B)				Coast Prairie Redox	(A16) (LRR K, L, R)
Black Histic (A3)	☐ Thin Dark Surfac	ce (S9) (L	RR R, MLR	A 149B)	5 cm Mucky Peat or	Peat (S3) (LRR K, L, R)
Hydrogen Sulfide (A4)	Loamy Mucky M			-)	Dark Surface (S7) (
Stratified Layers (A5)	Loamy Gleyed M					face (S8) (LRR K, L)
Depleted Below Dark Surface (A11)	Depleted Matrix				Thin Dark Surface (
Thick Dark Surface (A12)	Redox Dark Surf					isses (F12) (LRR K, L, R)
Sandy Mucky Mineral (S1)	Depleted Dark S		7)		·	n Soils (F19) (MLRA 149B)
Sandy Gleyed Matrix (S4)	Redox Depression	ns (F8)			_	(MLRA 144A, 145, 149B)
Sandy Redox (S5)					✓ Red Parent Material	• •
Stripped Matrix (S6)					Very Shallow Dark S	
Dark Surface (S7) (LRR R, MLRA 149	B)				Other (Explain in Re	emarks.)
ndicators of hydrophytic vegetation and	d wetland hydrology mu	st be pres	sent, unles	s disturbe	d or problematic.	
estrictive Layer (if observed):						
ype:						
Pepth (inches):					Hydric Soil Prese	nt? ✓ Yes 🗌 No
	_	`				
Remarks: (Include photo numbers here	or on a separate sheet	.)				

Project/Site: USH 151/CTH T Overpass	City/County Town of Empire / Fond du Lac Sampling Dat 5/30/2014
Applicant/Owner: WisDOT	State: WI Sampling Point: A14U
Investigator(s): Don Brittnacher	Section, Township, Range: Sec. 18, T 15 N, R 18 E
Landform (hillslope, terrace, etc.): stream terrace	Local relief (concave, convex, none): concave Slope (%):
Subregion (LRR or MLRA): K / 95A Lat: 43.	768739 Long: -88.398842 Datum: WGS 1984
Soil Map Unit Name: Kewaunee silty clay loam, 2 to 6 percen	nt slopes, e NWI Classification:
Are climatic / hydrologic conditions on the site typical for this t	time of year? 🗹 Yes 🗌 No (If no, explain in Remarks.)
Are Vegetation: \Box , Soil \Box , or Hydrology \Box significantly d	listurbed? Are "Normal Circumstances" present? ✓ Yes ☐ No
Are Vegetation: \Box , Soil \Box , or Hydrology \Box naturally prob	olematic? (If needed, explain any answers in Remarks.)
SUMMARY OF FINDINGS - Attach site map showing	g sampling point locations, transects, important features, etc.
Hydrophytic Vegetation Present? ☐ Yes ✓ No	Is the Sampled Area ☐ Yes ✓ No
Hydric Soil Present? ☐ Yes ✓ No	Within a Wetland?
Wetland Hydrology Present? ☐ Yes ✓ No	If yes, optional Wetland Site ID:
Remarks: (Explain alternative procedures here or in a separ	rate report.)
HYDROLOGY	
	Cocondaw Indicators (minimum of two required)
Wetland Hydrology Indicators:	Secondary Indicators (minimum of two required)
Primary Indicators (minimum of one is required; check all th	Surface Soil Clacks (Bo)
\	ined Leaves (B9) Drainage Patterns (B10)
_ ` _ ` _ `	auna (B13) Moss Trim Lines (B16)
	osits (B15) Dry-Season Water Table (C2)
	Sulfide Odor (C1) Crayfish Burrows (C8)
	Rhizospheres on Living Roots (C3) Saturation Visible on Aerial Imagery (C9)
, , ,	of Reduced Iron (C4) Stunted or Stressed Plants (D1)
	on Reduction in Tilled Soils (C6) Geomorphic Position (D2)
	k Surface (C7) Shallow Aquitard (D3)
	plain in Remarks)
Sparsely Vegetated Concave Surface (B8)	FAC-Neutral Test (D5)
Field Observations:	
Surface Water Present? ☐ Yes ✓ No Depth (in	nches):
Water Table Present? ☐ Yes ✓ No Depth (in	· ———
Saturation Present? Yes Ver No Depth (in (includes capillary fringe)	nches): Wetland Hydrology Present? Yes V No
Describe Recorded Data (stream gauge, monitoring well, ae	rial photos, previous inspections), if available:
Remarks:	

3.

5. 6.

6.

5.

	Absolute	Dominant	Indicator	Dominance Test worksheet:		
ree Stratum Plot Size:	% Cover	Species?	Status	Number of Dominant Species That Are OBL, FACW, or FAC:	2 (A)	
				Total Number of Dominant Species Across All Strata:	4 (B)	
				Percent of Dominant Species That Are OBL, FACW, or FAC: 50%	∕ <u>√</u> (A/B)	
				Prevalence Index worksheet:		
				Total % Cover of: Multiply	by:	
	0	= Total C	over.	OBL species <u>0</u> x 1 = <u>15</u>	5	
apling/Shrub Stratum Plot Size:		- Total C	OVCI	FACW species 15 x 2 = 30	0	
cornus stolonifera	10	X	FACW	FAC species $5 x 3 = 15$	5	
fraxinus pennsylvanica	5	X	FACW	FACU species <u>85</u> x 4 = <u>34</u>	40	
				UPL species $0 x 5 = 0$		
				Column Totals: 105 (A) 38	85 (B)	
				Prevalence Index = B/A =	3.7	
				Hydrophytic Vegetation Indicators:		
				Rapid Test for Hydrophytic Vegetation	1	
	15	= Total Co	ver	☐ Dominance Test is > 50%		
erb Stratum Plot Size:				☐ Prevalence Index is $\leq 3.0^{\circ}$		
poa pratensis	50	X	FACU	Morphological Adaptations¹ (Provide s	supporting	
solidago canadensis	25	X	FACU	data in Remarks or on a separate she		
rosa carolina	10		FACU	Problematic Hydrophytic Vegetation ¹	(Explain.)	
viola sororia	5		FAC	¹ Indicators of hydric soil and wetland hyd		
				must be present, unless disturbed or pro	blematic.	
				Definitions of Vegetation Strata:		
				Tree - Woody plants 3 in. (7.6 cm) or mo	ore in diameter	
				at breast height (DBH), regardless of hei		
).				Sapling/shrub - Woody plants less than 3 and greater than 3.28 ft. (1 m) tall.	in. DBH,	
				Herb - All herbaceous (non-woody) plant	s. regardless	
2				of size, and woody plants less than 3.28		
Yoody Vine Stratum Plot Size:	90	= Total C	Cover	Woody Vines - All woody vines greater the height.	nan 3.28 ft. in	
. <u></u>						
				Hydrophytic Vegetation ☐ _{Yes} ✓ _{No}		
				Present?		
	0	= Total C	Cover			

SOIL Sampling Point: A14U

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of Depth Matrix Redox Features						f indicators.		
(inches)	Color (moist)	%	Color (moist)	%	Type ¹	Loc. ²	Texture	Remarks
0 - 10	10YR3/2	100			.,,,,		loam	. tomane
10 - 12	10YR3/1	98	10YR4/6	2	С	M	clay loam	
12 - 16	7.5YR4/4	88	10YR4/6	2	С	М	clay loam	
	10YR6/1	10						
	_		<u> </u>					
			_					
¹Type: C=C	oncentration, D=Dep	letion, R	M=Reduced Matrix, M	S=Maske	ed Sand Gr	ains.	² Location: PL	=Pore Lining, M=Matrix.
Hydric Soil	Indicators:						Indicators for Proble	matic Hydric Soils ³ :
Histosol (Histosol (A1)		Polyvalue Below Surface (S8) (LRR R,			ζ,	☐ 2 cm Muck (A10) (LRR K, L, MLRA 149B)	
☐ Histic Epi	pedon (A2)		MLRA 149B)				Coast Prairie Redox (A16) (LRR K, L, R)	
☐ Black His	tic (A3)		☐ Thin Dark Surface (S9) (LRR R, MLRA 149B)			A 149B)	5 cm Mucky Peat or	Peat (S3) (LRR K, L, R)
	Sulfide (A4)		Loamy Mucky Mineral (F1) (LRR K, L)			.)	Dark Surface (S7) (
	Layers (A5)		Loamy Gleyed Matrix (F2)				Polyvalue Below Surface (S8) (LRR K, L)	
	Below Dark Surface ((A11)	Depleted Matrix (F3)				☐ Thin Dark Surface (
	k Surface (A12)		Redox Dark Surface (F6) Depleted Dark Surface (F7)					asses (F12) (LRR K, L, R)
	ucky Mineral (S1) eyed Matrix (S4)		Redox Depressions (F8)				☐ Piedmont Floodplain Soils (F19) (MLRA 149B) ☐ Mesic Spodic (TA6) (MLRA 144A, 145, 149B)	
			Redux Depression	iis (ro)			Red Parent Material (F21)	
	Matrix (S6)						☐ Very Shallow Dark Surface (TF12)	
	ace (S7) (LRR R, MLI	RA 149B	0)				Other (Explain in Remarks.)	
Junt Jun			,					,
³ Indicators o	f hydrophytic vegetat	ion and	wetland hydrology mu	st be pres	sent, unles	s disturbe	d or problematic.	
Restrictive	Layer (if observed	l):						
Туре:			_					
Depth (inche	es):		_				Hydric Soil Prese	nt? ☐ Yes 🗸 No
Remarks: (I	nclude photo number	rs here c	or on a separate sheet	.)				
				,				

Project/Site: USH 151/CTH T Overpass	City/County Town of Empire / Fond du Lac Sampling Dat 5/30/2014				
Applicant/Owner: WisDOT	State: WI Sampling Point: A14W				
Investigator(s): Don Brittnacher	Section, Township, Range: Sec. 18, T 15 N, R 18 E				
Landform (hillslope, terrace, etc.): stream terrace	Local relief (concave, convex, none): concave Slope (%):				
Subregion (LRR or MLRA): K / 95A Lat: 43.768752	2 Long: -88.398761 Datum: WGS 1984				
Soil Map Unit Name: Kewaunee silty clay loam, 2 to 6 percent slopes	s, e NWI Classification:				
Are climatic / hydrologic conditions on the site typical for this time of	year? 🗹 Yes 🗌 No (If no, explain in Remarks.)				
Are Vegetation: \square , Soil \square , or Hydrology \square significantly disturbed	d? Are "Normal Circumstances" present? ✓ Yes ☐ No				
Are Vegetation: \square , Soil \square , or Hydrology \square naturally problematic	? (If needed, explain any answers in Remarks.)				
SUMMARY OF FINDINGS - Attach site map showing samp	pling point locations, transects, important features, etc.				
	the Sampled Area ithin a Wetland? Yes No				
Hydric Soil Present?	ithin a wettand?				
Wetland Hydrology Present? ✓ Yes No If	yes, optional Wetland Site ID:				
Remarks: (Explain alternative procedures here or in a separate repo	ort.)				
LIVERGIAGY					
HYDROLOGY					
Wetland Hydrology Indicators:	Secondary Indicators (minimum of two required)				
Primary Indicators (minimum of one is required; check all that apply	Surface Soil Clacks (bb)				
Surface Water (A1) Water-Stained Le					
☐ High Water Table (A2) ☐ Aquatic Fauna (B					
Saturation (A3) Marl Deposits (B1	·				
Water Marks (B1) Hydrogen Sulfide					
	oheres on Living Roots (C3) Saturation Visible on Aerial Imagery (C9)				
Drift Deposits (B3)					
• , ,	uction in Tilled Soils (C6) Geomorphic Position (D2)				
Iron Deposits (B5)					
☐ Inundation Visible on Aerial Imagery (B7) ☐ Other (Explain in	Remarks)				
Sparsely Vegetated Concave Surface (B8)	FAC-Neutral Test (D5)				
Field Observations:					
Surface Water Present? Yes V No Depth (inches):					
Water Table Present? ☐ Yes ✓ No Depth (inches):					
Saturation Present? ☐ Yes ✓ No Depth (inches): (includes capillary fringe)	Wetland Hydrology Present? ✓ Yes No				
Describe Recorded Data (stream gauge, monitoring well, aerial pho	otos, previous inspections), if available:				
Remarks:					

ber of Dominant Species Are OBL, FACW, or FAC:3 (A)		
l Number of Dominant cies Across All Strata: 4 (B)		
ent of Dominant Species		
Are OBL, FACW, or FAC: (A/B)		
valence Index worksheet:		
al % Cover of: Multiply by:		
species x 1 =		
W species x 2 =		
species x 3 =		
U species x 4 =		
species x 5 =		
mn Totals: (A) (B)		
evalence Index = B/A =		
rophytic Vegetation Indicators:		
apid Test for Hydrophytic Vegetation		
ominance Test is > 50%		
revalence Index is ≤ 3.0¹		
lorphological Adaptations ¹ (Provide supporting		
ata in Remarks or on a separate sheet.)		
roblematic Hydrophytic Vegetation¹ (Explain.)		
Indicators of hydric soil and wetland hydrology		
t be present, unless disturbed or problematic.		
nitions of Vegetation Strata:		
W 1 1 2 2 7 6 3 2 3 1 1 1		
- Woody plants 3 in. (7.6 cm) or more in diameter reast height (DBH), regardless of height.		
ing/shrub - Woody plants less than 3 in. DBH,		
greater than 3.28 ft. (1 m) tall.		
- All herbaceous (non-woody) plants, regardless		
ze, and woody plants less than 3.28 ft. tall.		
dy Vines - All woody vines greater than 3.28 ft. in ht.		
ophytic		
etation 🗹 Yes 🗌 No ent?		
anti		

Sampling Point: A14W

SOIL Sampling Point: A14W

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators. Redox Features							
Depth (inches)	Matrix Color (moist) %				1002	Tastura	Damarka
0 - 7.5	Color (moist) %		%	Type ¹	Loc. ²	Texture loam	Remarks
7.5 - 15	10YR4/1 99		<u> </u>			clay loam	
7.5 - 10	1UYn4/1 3	<u> </u>		<u> </u>	IVI	Clay Ioani —	
					_		
	·						
		<u> </u>					
¹Type: C=Co	oncentration, D=Depletion,	RM=Reduced Matrix, M	1S=Maskec	d Sand Gr	ains.	² Location: PL=	Pore Lining, M=Matrix.
Hydric Soil 1	Indicators:					Indicators for Problem	natic Hydric Soils³:
Histosol (A	A1)		Polyvalue Below Surface (S8) (LRR R,			☐ 2 cm Muck (A10) (LRR K, L, MLRA 149B)	
☐ Histic Epip	pedon (A2)	MLRA 149B)	MLRA 149B)			Coast Prairie Redox ((A16) (LRR K, L, R)
☐ Black Histi	ic (A3)	☐ Thin Dark Surfac	☐ Thin Dark Surface (S9) (LRR R, MLRA 149B)			5 cm Mucky Peat or	Peat (S3) (LRR K, L, R)
Hydrogen	Sulfide (A4)	Loamy Mucky M	☐ Loamy Mucky Mineral (F1) (LRR K, L)			☐ Dark Surface (S7) (L	.RR K, L)
Stratified I	Layers (A5)	Loamy Gleyed M	☐ Loamy Gleyed Matrix (F2)			Polyvalue Below Surf	face (S8) (LRR K, L)
Depleted F	Below Dark Surface (A11)	✓ Depleted Matrix	✓ Depleted Matrix (F3)			☐ Thin Dark Surface (S	9) (LRR K, L)
☐ Thick Dark	k Surface (A12)	Redox Dark Surf	Redox Dark Surface (F6)			☐ Iron-Manganese Mas	sses (F12) (LRR K, L, R)
Sandy Muc	cky Mineral (S1)	☐ Depleted Dark S	Depleted Dark Surface (F7)			☐ Piedmont Floodplain	Soils (F19) (MLRA 149B)
Sandy Gle	eyed Matrix (S4)	Redox Depression	Redox Depressions (F8)			☐ Mesic Spodic (TA6) ((MLRA 144A, 145, 149B)
Sandy Red	dox (S5)					Red Parent Material	(F21)
Stripped M	1atrix (S6)					☐ Very Shallow Dark Surface (TF12)	
Dark Surfa	ace (S7) (LRR R, MLRA 14	9B)				Other (Explain in Re	marks.)
³ Indicators of	hydrophytic vegetation ar	nd wetland hydrology mu	ıst be prese	ent, unles	s disturbe	ed or problematic.	
Restrictive	Layer (if observed):						
Type:							
Depth (inches						Hydric Soil Presen	nt? Yes No
Remarks: (Ir	nclude photo numbers her	e or on a separate sheet	t.)				
•	•	•	,				

Project/Site: USH 151/CTH T Overpass		City/County Town of Empire	City/County Town of Empire / Fond du Lac Sampling Date			
Applicant/Owner: WisDOT		State	State: WI Sampling Point:			
Investigator(s): Don Brittnacher		Section, Township, Range:	Sec. 18, T 1	5 N, R 18 E		
Landform (hillslope, terrace, etc.): shallow s	swale	Local relief (concave, conve	x, none): concav	re Slope (%):		
Subregion (LRR or MLRA): K / 95A	Lat: 43.768	852 Long: -88.398026		Datum: WGS 1984		
Soil Map Unit Name: Kewaunee silty clay lo	am, 2 to 6 percent slo	opes, e	NWI Cla	ssification:		
Are climatic / hydrologic conditions on the sit	te typical for this time	e of year? 🗹 Yes 🗌 No	(If no, explain	in Remarks.)		
Are Vegetation: $lackim Q$, Soil \Box , or Hydrology	\square significantly distu	rbed? Are "Normal Circumstan	ices" present? 🗸	Yes No		
Are Vegetation: \square , Soil \square , or Hydrology	naturally problem	natic? (If needed, explain any	answers in Rema	rks.)		
<i>,</i> , , , , , , , , , , , , , , , , , ,	, ,	, , ,		,		
SUMMARY OF FINDINGS - Attach site	e map showing sa	ampling point locations, transec	ts, important fe	eatures, etc.		
Hydrophytic Vegetation Present?	Yes 🗌 No	Is the Sampled Area	✓ Yes	□ No		
Hydric Soil Present?	Yes 🗌 No	Within a Wetland?				
Wetland Hydrology Present?	Yes 🗌 No	If yes, optional Wetland Site ID:				
Remarks: (Explain alternative procedures	here or in a separate	report.)				
Location is in a former pasture.	·	,				
Location is in a former pasture.						
HYDROLOGY						
Wetland Hydrology Indicators:		Second	darv Indicators (m	ninimum of two required)		
Primary Indicators (minimum of one is requ	uired: check all that a	- Admin				
Surface Water (A1)			Surface Soil Crack Drainage Patterns			
✓ High Water Table (A2)	Aquatic Faun	<u> </u>	Moss Trim Lines (` '		
✓ Saturation (A3)	☐ Marl Deposits	<u> </u>	Dry-Season Water			
☐ Water Marks (B1)	Hydrogen Su	Ifide Odor (C1)	Crayfish Burrows	(C8)		
Sediment Deposits (B2)	Oxidized Rhiz			on Aerial Imagery (C9)		
☐ Drift Deposits (B3)	_	` '	Stunted or Stress	` ,		
Algal Mat or Crust (B4)	_		Geomorphic Posit			
☐ Iron Deposits (B5) ☐ Inundation Visible on Aerial Imagery (B	☐ Thin Muck Su		Shallow Aquitard Microtopographic			
Sparsely Vegetated Concave Surface (B			FAC-Neutral Test			
				(20)		
Field Observations:						
	No Depth (inche	· -				
Water Table Present? ✓ Yes	No Depth (inche	· -				
Saturation Present? ✓ Yes	No Depth (inche	es): 0 Wetland Hyd	Irology Present	? ✓ Yes No		
(includes capillary fringe)						
Describe Recorded Data (stream gauge, m	nonitoring well, aerial	photos, previous inspections), if availa	ble:			
Remarks:						

	Sampling	Point: A15	L		
Dominance Test worksheet:					
Number of Dominant Sports That Are OBL, FACW, o		1	(A)		
Total Number of Domina	nt				

Tree Stratum Plot Size:	% Cover	Species? Status	Dominance rest worksheet:
1			 Number of Dominant Species That Are OBL, FACW, or FAC: 1 (A)
2.			Total Number of Dominant Species Across All Strata: 2 (B)
3.			Percent of Dominant Species
4			That Are OBL, FACW, or FAC: 50% (A/B)
5			Prevalence Index worksheet:
6.			Total % Cover of: Multiply by:
7			OBL species 0 $x 1 = 60$
Canling/Chy. h Ctratum Diet Cine.	0	= Total Cover	FACW species 60 x 2 = 120
<u>Sapling/Shrub Stratum</u> Plot Size:			FAC species $0 \times 3 = 0$
1.			FACU species 40 x 4 = 160
2.			UPL species 0 x 5 = 0
3.			<u> </u>
4			Column Totals: 100 (A) 280 (B)
5			Prevalence Index = B/A = 2.8
6.			Hydrophytic Vegetation Indicators:
7			Rapid Test for Hydrophytic Vegetation
	0	= Total Cover	☐ Dominance Test is > 50%
Herb Stratum Plot Size:			✓ Prevalence Index is $\leq 3.0^{1}$
phalaris arundinacea	60	X FACW	Morphological Adaptations¹ (Provide supporting
2. poa pratensis	40	X FACU	data in Remarks or on a separate sheet.)
3			☐ Problematic Hydrophytic Vegetation¹ (Explain.)
4.			¹Indicators of hydric soil and wetland hydrology
5.			must be present, unless disturbed or problematic.
6.			Definitions of Vegetation Strata:
7.			Tree - Woody plants 3 in. (7.6 cm) or more in diameter
8.			at breast height (DBH), regardless of height.
9.			Sapling/shrub - Woody plants less than 3 in. DBH,
10.			and greater than 3.28 ft. (1 m) tall.
11.			Herb - All herbaceous (non-woody) plants, regardless
12.			of size, and woody plants less than 3.28 ft. tall.
	100	= Total Cover	Woody Vines - All woody vines greater than 3.28 ft. in
Woody Vine Stratum Plot Size:			height.
1			_
2.			- Usedwands die
3.			- Hydrophytic - Vegetation
			Present?
4.			

Absolute Dominant Indicator

SOIL Sampling Point: A15L

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators. Redox Features								
Depth (inches)	Color (moist)	%	Color (moist)	%	Type ¹	Loc. ²	Texture	Remarks
0 - 6	10YR3/1	100	- Color (moist)	70	Турс		loam	Homans
6 - 11.5	10YR3/1	98	10YR4/6	2	С	M	loam	
11.5 - 18.5	7.5YR4/4	100					clay	
11.5 - 18.5	7.5184/4						Ciay	
¹Type: C=Co	<u> </u>	letion, RI	M=Reduced Matrix, M	S=Maske	ed Sand Gr	ains.	² Location: PL	.=Pore Lining, M=Matrix.
☐ Histosol (A	(1)		Polyvalue Below	Surface (S8) (LRR F	2	2 cm Muck (A10) (I	LRR K, L, MLRA 149B)
☐ Histic Epip			☐ Polyvalue Below Surface (S8) (LRR R, MLRA 149B)			'	Coast Prairie Redox (A16) (LRR K, L, R)	
☐ Black Histic			☐ Thin Dark Surface (S9) (LRR R, MLRA 149B)			Δ 149R)	5 cm Mucky Peat or Peat (S3) (LRR K, L, R)	
	Sulfide (A4)		Loamy Mucky Mineral (F1) (LRR K, L)				☐ Dark Surface (S7) (
	ayers (A5)		Loamy Gleyed Matrix (F2)				Polyvalue Below Surface (S8) (LRR K, L)	
	Below Dark Surface	(Δ11)	Depleted Matrix (F3)				☐ Thin Dark Surface (
	Surface (A12)	(//11)	✓ Redox Dark Surface (F6)					asses (F12) (LRR K, L, R)
	cky Mineral (S1)		Depleted Dark Surface (F7)					n Soils (F19) (MLRA 149B)
	yed Matrix (S4)		Redox Depressions (F8)					(MLRA 144A, 145, 149B)
Sandy Red	, ,		Redox Depressio	113 (10)			Red Parent Materia	
Stripped M	• •						☐ Very Shallow Dark Surface (TF12)	
	ice (S7) (LRR R, ML	DA 140D					Other (Explain in Remarks.)	
			, wetland hydrology mu	et he pro	cont unloc	c dicturbo		eriidiks.)
			welland flydrology ffid	or be piec	Jone, unico	3 distarbe	d of problematic.	
	Layer (if observed	I):						
Type:			<u> </u>					Gv Gv
Depth (inches	s):		_				Hydric Soil Prese	ent? ✓ Yes No
Remarks: (In	clude photo numbe	rs here o	r on a separate sheet	.)				

Project/Site: USH 151/CTH T Overpass	City/County Town of Empire / Fond du Lac Sampling Dat 6/27/2014						
Applicant/Owner: WisDOT	State: WI Sampling Point: A15U						
Investigator(s): Don Brittnacher	Section, Township, Range: Sec. 18, T 15 N, R 18 E						
Landform (hillslope, terrace, etc.): hillslope	Local relief (concave, convex, none): concave Slope (%):						
Subregion (LRR or MLRA): K / 95A Lat: 43.768824	Long: -88.397956 Datum: WGS 1984						
Soil Map Unit Name: Kewaunee silty clay loam, 2 to 6 percent slopes,	e NWI Classification:						
Are climatic / hydrologic conditions on the site typical for this time of ye	ear? 🗹 Yes 🗌 No (If no, explain in Remarks.)						
Are Vegetation: ${f V}$, Soil ${f \Box}$, or Hydrology ${f \Box}$ significantly disturbed?	? Are "Normal Circumstances" present? ✓ Yes ☐ No						
Are Vegetation: \Box , Soil \Box , or Hydrology \Box naturally problematic?	(If needed, explain any answers in Remarks.)						
SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.							
Na/ia	he Sampled Area ☐ Yes ✓ No						
Hydric Soil Present? Yes V No	iiii a wedalid:						
Wetland Hydrology Present? ☐ Yes ✓ No If yo	es, optional Wetland Site ID:						
Remarks: (Explain alternative procedures here or in a separate report	rt.)						
Location is in a former pasture.							
HADBOLOGA							
HYDROLOGY							
Wetland Hydrology Indicators:	Secondary Indicators (minimum of two required)						
Primary Indicators (minimum of one is required; check all that apply)	Surface Soil Cracks (Bb)						
Surface Water (A1) Water-Stained Lea	` '						
High Water Table (A2) Aquatic Fauna (B1							
☐ Saturation (A3) ☐ Marl Deposits (B15) ☐ Water Marks (B1) ☐ Hydrogen Sulfide (<u> </u>						
	Odor (C1)						
☐ Drift Deposits (B3) ☐ Presence of Reduc							
	tion in Tilled Soils (C6) Geomorphic Position (D2)						
☐ Iron Deposits (B5) ☐ Thin Muck Surface							
☐ Inundation Visible on Aerial Imagery (B7) ☐ Other (Explain in F	<u> </u>						
Sparsely Vegetated Concave Surface (B8)	FAC-Neutral Test (D5)						
Field Observations:							
Surface Water Present? Yes V No Depth (inches):							
Water Table Present? Yes No Depth (inches):	17						
Saturation Present?							
Describe Recorded Data (stream gauge, monitoring well, aerial photo	os, previous inspections), if available:						
Remarks:							

Tree Stratum Plot Size:	Absolute % Cover		dicator Status	Dominance Test worksheet:
	70 00101			Number of Dominant Species That Are OBL, FACW, or FAC: 0 (A)
1.				Total Number of Dominant
2.				Species Across All Strata: 1 (B)
3. 4				Percent of Dominant Species That Are OBL, FACW, or FAC: 0% (A/B)
5.				That Are OBL, FACW, or FAC: (A/B)
				Prevalence Index worksheet:
7				Total % Cover of: Multiply by:
7.	0	= Total Cove	ar .	OBL species x 1 =
Sapling/Shrub Stratum Plot Size:		= 10tal 00VC	,	FACW species x 2 =
1.				FAC species x 3 =
2.				FACU species x 4 =
3.				UPL species x 5 =
				Column Totals: (A) (B)
5.				Prevalence Index = B/A =
6.				Hydrophytic Vegetation Indicators:
7.				Rapid Test for Hydrophytic Vegetation
	0	= Total Cover	_	Dominance Test is > 50%
<u>Herb Stratum</u> Plot Size:				☐ Prevalence Index is ≤ 3.0¹
1. poa pratensis	90	XF/	ACU	Morphological Adaptations¹ (Provide supporting
2				data in Remarks or on a separate sheet.)
3				Problematic Hydrophytic Vegetation¹ (Explain.)
4.				¹ Indicators of hydric soil and wetland hydrology
5				must be present, unless disturbed or problematic.
6.				Definitions of Vegetation Strata:
7				
8.				Tree - Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.
9.	_			Sapling/shrub - Woody plants less than 3 in. DBH,
10.				and greater than 3.28 ft. (1 m) tall.
11				Horb All harbaconus (non woody) plants, regardless
12				Herb - All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft. tall.
	90	= Total Cove	er	Woody Vines - All woody vines greater than 3.28 ft. in
Woody Vine Stratum Plot Size:				height.
1				
2				Hadaaahada
3				Hydrophytic Vegetation Yes V No
4.				Present?
	0	= Total Cove	er	
Remarks: (Include photo numbers here or on a se	eparate shee	t.)		

Sampling Point: A15U

SOIL Sampling Point: A15U

Profile Description: (Describe Depth Matrix	to the	_	l ocumen dox Featu		cator or o	confirm the absence of	f indicators.	
(inches) Color (moist)	%	Color (moist)	%	Type ¹	Loc. ²	Texture	Remarks	
0 - 8.5 10YR3/1	100			. , , , ,		loam		
8.5 - 14.5 7.5YR4/4	100					clay		
		-		· ·				
			-					
		<u> </u>	-					
			-					
		<u>-</u>	-					
		-	-					
¹ Type: C=Concentration, D=Deplet	tion, RN	/I=Reduced Matrix, M	S=Maske	d Sand Gra	ains.	² Location: PL	=Pore Lining, M=Matrix.	
Hydric Soil Indicators:						Indicators for Proble	matic Hydric Soils ³ :	
Histosol (A1)		Polyvalue Below	Surface (S8) (LRR R	λ,	2 cm Muck (A10) (L	RR K, L, MLRA 149B)	
☐ Histic Epipedon (A2)		MLRA 149B)				Coast Prairie Redox	(A16) (LRR K, L, R)	
☐ Black Histic (A3)		☐ Thin Dark Surfac	e (S9) (Ll	RR R, MLR	A 149B)	5 cm Mucky Peat or	Peat (S3) (LRR K, L, R)	
☐ Hydrogen Sulfide (A4)		Loamy Mucky Mi	ineral (F1)) (LRR K, L)	☐ Dark Surface (S7) (LRR K, L)	
Stratified Layers (A5)		Loamy Gleyed M	atrix (F2)				rface (S8) (LRR K, L)	
Depleted Below Dark Surface (A:	11)	Depleted Matrix				Thin Dark Surface (
Thick Dark Surface (A12)		Redox Dark Surface (F6)				☐ Iron-Manganese Masses (F12) (LRR K, L, R)		
Sandy Mucky Mineral (S1)		☐ Depleted Dark Surface (F7) ☐ Redox Depressions (F8)					1 Soils (F19) (MLRA 149B)	
Sandy Gleyed Matrix (S4)		Redox Depression	ons (F8)				(MLRA 144A, 145, 149B)	
Sandy Redox (S5) Stripped Matrix (S6)						Red Parent Material	• •	
☐ Dark Surface (S7) (LRR R, MLRA	\ 140R\					☐ Very Shallow Dark Surface (TF12)☐ Other (Explain in Remarks.)		
Dark Surface (57) (LIKEK, PILICA	1 1 7 9 0)					Other (Explain in Re	ernarks.)	
³ Indicators of hydrophytic vegetation	n and v	vetland hydrology mu	st be pres	sent, unless	s disturbe	d or problematic.		
Restrictive Layer (if observed):								
Type:		_						
Depth (inches):		_				Hydric Soil Prese	nt? ☐ Yes 🗸 No	
Remarks: (Include photo numbers	here o	on a separate sheet	.)			•		

Project/Site: USH 151/CTH T Overpass	s	City/County Town of Empire / Fond du Lac Sampling Dat 5/30/201						
Applicant/Owner: WisDOT		State: WI Sampling Point: A15W						
Investigator(s): Don Brittnacher		Section, Township, Range: Sec. 18, T 15 N, R 18 E						
Landform (hillslope, terrace, etc.): sha	allow swale	Local relief (concave, convex, none): concave Slope (%):						
Subregion (LRR or MLRA): K / 95A	Lat: 43.768	8936 Long: -88.398093 Datum: WGS 1984						
Soil Map Unit Name: Kewaunee silty of	lay loam, 2 to 6 percent s	slopes, e NWI Classification:						
Are climatic / hydrologic conditions on								
Are Vegetation: $lacksquare$, Soil $lacksquare$, or Hydro	ology \square significantly dist	urbed? Are "Normal Circumstances" present? ✓ Yes ☐ No						
Are Vegetation: \square , Soil \square , or Hydro	ology \square naturally problem	matic? (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	If yes, optional Wetland Site ID:						
Remarks: (Explain alternative proced	lures here or in a separate	e report.)						
Location is in a former pasture. Fill p	present.							
HYDROLOGY								
Wetland Hydrology Indicators:		Secondary Indicators (minimum of two required)						
Primary Indicators (minimum of one i	s required; check all that a	apply) Surface Soil Cracks (B6)						
Surface Water (A1)	_	ed Leaves (B9)						
☐ High Water Table (A2)	Aquatic Faur	<u> </u>						
Saturation (A3)	Marl Deposit	<u> </u>						
Water Marks (B1)		ulfide Odor (C1) Crayfish Burrows (C8)						
Sediment Deposits (B2)		izospheres on Living Roots (C3) Saturation Visible on Aerial Imagery (C9)						
Drift Deposits (B3)		Reduced Iron (C4) Stunted or Stressed Plants (D1)						
Algal Mat or Crust (B4)		Reduction in Tilled Soils (C6) Geomorphic Position (D2)						
☐ Iron Deposits (B5)	Thin Muck S							
Inundation Visible on Aerial Image		in in Remarks) Microtopographic Relief (D4)						
Sparsely Vegetated Concave Surfa	ice (B8)	FAC-Neutral Test (D5)						
Field Observations:								
Surface Water Present?	_ · ·	· · · · · · · · · · · · · · · · · · ·						
Water Table Present? Yes	_ , ,							
Saturation Present? Yes	S No Depth (inch	nes): 6 Wetland Hydrology Present? Ves No						
(includes capillary fringe)								
Describe Recorded Data (stream gau	uge, monitoring well, aerial	Il photos, previous inspections), if available:						
Remarks:								

Tree Stratum Plot Size:	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet:
	70 00101	-		Number of Dominant Species That Are OBL, FACW, or FAC: 2 (A)
1.				Total Number of Dominant
2.				Species Across All Strata: 3 (B)
3.				Percent of Dominant Species
4				That Are OBL, FACW, or FAC: 67% (A/B)
5. 6.				Prevalence Index worksheet:
7				
7.		= Total C		OBL species x 1 =
Sapling/Shrub Stratum Plot Size:		= 101810	over	FACW species x 2 =
				FAC species x 3 =
2				FACU species x 4 =
				UPL species x 5 =
				Column Totals: (A) (B)
5				Prevalence Index = B/A =
6.				Hydrophytic Vegetation Indicators:
7.				Rapid Test for Hydrophytic Vegetation
	0	= Total Co	ver	✓ Dominance Test is > 50%
Herb Stratum Plot Size:				Prevalence Index is $\leq 3.0^{\circ}$
1. phalaris arundinacea	50	X	FACW	Morphological Adaptations¹ (Provide supporting
2. poa pratensis	20	X	FACU	data in Remarks or on a separate sheet.)
3. carex (sedge), unknown	20	X	FACW	☐ Problematic Hydrophytic Vegetation¹ (Explain.)
4				¹Indicators of hydric soil and wetland hydrology
5.				must be present, unless disturbed or problematic.
6.				Definitions of Vegetation Strata:
7				Definitions of Vegetation Strata.
8.				Tree - Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.
9.	_			
10.				Sapling/shrub - Woody plants less than 3 in. DBH, and greater than 3.28 ft. (1 m) tall.
11.				, ,
12.				Herb - All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft. tall.
	90	= Total C	over	Woody Vines - All woody vines greater than 3.28 ft. in
Woody Vine Stratum Plot Size:				height.
1.				
2.				
3.				Hydrophytic Vegetation ✓ Yes No
4				Present?
	0	= Total C	over	
Remarks: (Include photo numbers here or on a s	eparate shee	t.)		

Sampling Point: A15W

SOIL Sampling Point: A15W

Profile Des	-	e to the	e depth needed to d			cator or o	confirm the absen	ce of indicators.	
Depth (inches)	Matrix			dox Featu			- .		
0 - 0.5	Color (moist) 10YR3/2	% 100	Color (moist)	<u>%</u>	Type ¹	Loc. ²	Texture	Remarks	
0.5 - 4.5	7.5YR4/4	100					clay	fill	
4.5 - 10	10YR4/1	100	_) (
			_				clay loam	_	
10 - 14	10YR4/1	95	10YR4/6	5	D	M	clay loam		
14 - 17	10YR5/1	90	10YR4/6	10	D	M	clay loam		
		0.0		0.0					
				11					
				0.0					
			_	0.0				_	
			_						
¹Type: C=Co	oncentration, D=Depl	etion, RI	M=Reduced Matrix, M	S=Maske	d Sand Gr	ains.	² Location:	PL=Pore Lining, M=Matrix.	
Hydric Soil	Indicators:						Indicators for Pro	oblematic Hydric Soils³:	
Histosol (A1)		Polyvalue Below	Surface (S8) (LRR F	۲,	2 cm Muck (A1	0) (LRR K, L, MLRA 149B)	
Histic Epi	pedon (A2)		MLRA 149B)				Coast Prairie Re	edox (A16) (LRR K, L, R)	
☐ Black Hist	ic (A3)	☐ Thin Dark Surface (S9) (LRR R, MLRA 149B)				A 149B)	5 cm Mucky Pe	at or Peat (S3) (LRR K, L, R)	
Hydrogen	Sulfide (A4)		Loamy Mucky Mi	neral (F1) (LRR K, L	_)	Dark Surface (S7) (LRR K, L)		
	Layers (A5)		Loamy Gleyed M)		Polyvalue Below Surface (S8) (LRR K, L)		
	Below Dark Surface ((A11)	✓ Depleted Matrix				☐ Thin Dark Surface (S9) (LRR K, L)		
☐ Thick Dar	k Surface (A12)		Redox Dark Surfa	ace (F6)			☐ Iron-Manganese Masses (F12) (LRR K, L, R)		
Sandy Mu	cky Mineral (S1)		Depleted Dark Su	urface (F	7)		☐ Piedmont Flood	Iplain Soils (F19) (MLRA 149B)	
	eyed Matrix (S4)		Redox Depressio	ns (F8)				ΓΑ6) (MLRA 144A, 145, 149B)	
Sandy Re							Red Parent Mat		
	Matrix (S6)						☐ Very Shallow Dark Surface (TF12)		
Dark Surf	ace (S7) (LRR R, MLF	RA 149B))				Other (Explain	in Remarks.)	
³ Indicators o	hydrophytic vegetat	ion and	wetland hydrology mus	st be pres	sent, unles	s disturbe	d or problematic.		
Restrictive	Layer (if observed):							
Type:									
Depth (inche			- -				Hydric Soil Pi	resent? ✓ Yes No	
Remarks: (I	nclude photo number	s here o	r on a separate sheet.	.)					
(,			,					

Project/Site: USH 151/CTH T Overpass	City/County Town of Empire / Fond du Lac Sampling Dat 5/30/2014
Applicant/Owner: WisDOT	State: WI Sampling Point: A16L
Investigator(s): Don Brittnacher	Section, Township, Range: Sec. 18, T 15 N, R 18 E
Landform (hillslope, terrace, etc.): stream terrace	Local relief (concave, convex, none): concave Slope (%):
Subregion (LRR or MLRA): K / 95A Lat: 43.768	3738 Long: -88.39833 Datum: WGS 1984
Soil Map Unit Name: Poygan silty clay loam	NWI Classification:
Are climatic / hydrologic conditions on the site typical for this time	e of year? 🗹 Yes 🗌 No (If no, explain in Remarks.)
Are Vegetation: $lacktriangledown$, Soil \Box , or Hydrology \Box significantly distu	urbed? Are "Normal Circumstances" present? ✓ Yes ☐ No
Are Vegetation: \square , Soil \square , or Hydrology \square naturally problem	natic? (If needed, explain any answers in Remarks.)
, , , ,	. , , , , , , , , , , , , , , , , , , ,
SUMMARY OF FINDINGS - Attach site map showing s	ampling point locations, transects, important features, etc.
Hydrophytic Vegetation Present? Yes No	Is the Sampled Area ✓ Yes No
Hydric Soil Present? ✓ Yes ☐ No	Within a Wetland?
Wetland Hydrology Present? ✓ Yes ☐ No	If yes, optional Wetland Site ID:
Remarks: (Explain alternative procedures here or in a separate	report.)
Location is in a former pasture.	
HYDROLOGY	
Wetland Hydrology Indicators:	Secondary Indicators (minimum of two required)
Primary Indicators (minimum of one is required; check all that a	Surface Soil Cracks (B6)
Surface Water (A1) Water-Staine	ed Leaves (B9)
High Water Table (A2)	, ,
☐ Saturation (A3) ☐ Marl Deposits	s (B15) Dry-Season Water Table (C2)
☐ Water Marks (B1) ☐ Hydrogen Su	llfide Odor (C1) Crayfish Burrows (C8)
☐ Sediment Deposits (B2) ☐ Oxidized Rhiz	zospheres on Living Roots (C3) Saturation Visible on Aerial Imagery (C9)
	Reduced Iron (C4) Stunted or Stressed Plants (D1)
` ,	Reduction in Tilled Soils (C6)
☐ Iron Deposits (B5) ☐ Thin Muck St	
	in in Remarks)
Sparsely Vegetated Concave Surface (B8)	FAC-Neutral Test (D5)
Field Observations:	
Surface Water Present? ☐ Yes ✓ No Depth (inch	es):
Water Table Present? ☐ Yes ✓ No Depth (inch	es):
Saturation Present? ☐ Yes ✓ No Depth (inch	es): Wetland Hydrology Present? 🗸 Yes 🗌 No
(includes capillary fringe)	
Describe Recorded Data (stream gauge, monitoring well, aerial	photos, previous inspections), if available:
,	
Remarks:	

Sampling I	Point:	A16L
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Tree Stratum Plot Size:	Absolute % Cover	Dominant Indicato Species? Status	i Dominance rest worksneet:
1		Opecies: Otatus	Number of Dominant Species That Are OBL, FACW, or FAC:1 (A)
2.			Total Number of Dominant Species Across All Strata: 2 (B)
3.			Percent of Dominant Species That Are OBL, FACW, or FAC: 50% (A/B)
5.			Prevalence Index worksheet:
6.			
7.			Total % Cover of: Multiply by: OBL species 0 x 1 = 80
	0	= Total Cover	FACW species 80 x 2 = 160
Sapling/Shrub Stratum Plot Size:	00	V	FAC species $0 x3 = 0$
•		X FACW	FACU species 90 x 4 = 360
2.			UPL species 0 x 5 = 0
3.			Column Totals: 170 (A) 520 (B)
4			_
5.			
6.			Hydrophytic Vegetation Indicators:
7		Total Caver	Rapid Test for Hydrophytic Vegetation
Herb Stratum Plot Size:	80	= Total Cover	Dominance Test is > 50%
4	90	X FACU	Prevalence Index is ≤ 3.0¹
2			 Morphological Adaptations¹ (Provide supporting data in Remarks or on a separate sheet.)
2			=
1			□ Problematic Hydrophytic Vegetation¹ (Explain.) □ Indicators of hydric soil and wetland hydrology
5.			must be present, unless disturbed or problematic.
6.			_
7.			Definitions of Vegetation Strata:
8.			Tree - Woody plants 3 in. (7.6 cm) or more in diameter
9.			at breast height (DBH), regardless of height.
10.			Sapling/shrub - Woody plants less than 3 in. DBH, and greater than 3.28 ft. (1 m) tall.
11.			
12.			Herb - All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft. tall.
	90	= Total Cover	Woody Vines - All woody vines greater than 3.28 ft. in
Woody Vine Stratum Plot Size:			height.
1.			
			_
2.			─ Hydrophytic _ Vegetation
3.			
			Present?

SOIL Sampling Point: A16L

Profile Des	scription: (Describ Matrix	e to the	_	l ocumen dox Featu		cator or o	confirm the absence o	of indicators.	
(inches)	Color (moist)	%	Color (moist)	%	Type ¹	Loc. ²	Texture	Remarks	
0 - 6.5	10YR3/2	100	- Color (moist)		1 4 5 5		loam	Homano	
6.5 - 11.5	10YR3/1	95	10YR4/6	5	С	M	loam		
11.5 - 16	7.5YR4/4	70					clay loam		
	10YR4/1	30	_						
	-			-					
			_						
			_						
			_						
			-						
		•	_	-					
				-					
¹Type: C=Co	oncentration, D=Depl	letion, R	M=Reduced Matrix, M	S=Maske	d Sand Gr	ains.	² Location: Pl	_=Pore Lining, M=Matrix.	
Hydric Soil	Indicators:						Indicators for Proble	ematic Hydric Soils³:	
Histosol (A1)		Polyvalue Below	Surface (S8) (LRR F	₹,	2 cm Muck (A10) (LRR K, L, MLRA 149B)	
☐ Histic Epip	pedon (A2)		MLRA 149B)				Coast Prairie Redox	x (A16) (LRR K, L, R)	
☐ Black Hist	ic (A3)		☐ Thin Dark Surfac	e (S9) (L	RR R, MLR	A 149B)	\square 5 cm Mucky Peat or Peat (S3) (LRR K, L, R)		
Hydrogen	Sulfide (A4)		Loamy Mucky M	neral (F1) (LRR K, L	-)	☐ Dark Surface (S7) (LRR K, L)		
Stratified	Layers (A5)		Loamy Gleyed M	atrix (F2)			Polyvalue Below Surface (S8) (LRR K, L)		
Depleted	Below Dark Surface ((A11)	Depleted Matrix	(F3)			☐ Thin Dark Surface (S9) (LRR K, L)		
☐ Thick Dar	k Surface (A12)		✓ Redox Dark Surf	ace (F6)			☐ Iron-Manganese M	asses (F12) (LRR K, L, R)	
☐ Sandy Mu	cky Mineral (S1)		☐ Depleted Dark S	urface (F	7)		☐ Piedmont Floodplai	in Soils (F19) (MLRA 149B)	
Sandy Gle	eyed Matrix (S4)		Redox Depression	ns (F8)			☐ Mesic Spodic (TA6)) (MLRA 144A, 145, 149B)	
Sandy Re	dox (S5)						Red Parent Materia	al (F21)	
Stripped N	Matrix (S6)						☐ Very Shallow Dark Surface (TF12)		
☐ Dark Surfa	ace (S7) (LRR R, MLF	RA 149B)				Other (Explain in R	temarks.)	
³ Indicators of	hydrophytic vegetat	ion and	wetland hydrology mu	st be pres	sent, unles	s disturbe	d or problematic.		
Restrictive	Layer (if observed):							
Type:									
Depth (inche			_				Hydric Soil Prese	ent? ✓ Yes 🗌 No	
Romarks: (li	aclude photo number	re hara o	r on a separate sheet	١					
nemarks. (ii	iciade prioto ridiribei	is field 0	i on a separate sneet	•)					

Project/Site: USH 151/CTH T Overpass	City/County Town of Empire / Fond du Lac Sampling Dat 5/30/2014				
Applicant/Owner: WisDOT	State: WI Sampling Point: A16U				
Investigator(s): Don Brittnacher	Section, Township, Range: Sec. 18, T 15 N, R 18 E				
Landform (hillslope, terrace, etc.): stream terrace	Local relief (concave, convex, none): concave Slope (%):				
Subregion (LRR or MLRA): K / 95A Lat: 43.768742	2 Long: -88.398244 Datum: WGS 1984				
Soil Map Unit Name: Poygan silty clay loam	NWI Classification:				
Are climatic / hydrologic conditions on the site typical for this time of	year? 🗸 Yes 🗌 No (If no, explain in Remarks.)				
Are Vegetation: $oldsymbol{arVert}$, Soil \Box , or Hydrology \Box significantly disturbed	d? Are "Normal Circumstances" present? 🗹 Yes 🗌 No				
Are Vegetation: \square , Soil \square , or Hydrology \square naturally problematic					
SUMMARY OF FINDINGS - Attach site map showing samp	pling point locations, transects, important features, etc.				
	s the Sampled Area				
Hydric Soil Present? ☐ Yes ✓ No W	/ithin a Wetland?				
Wetland Hydrology Present? ☐ Yes ✔ No If	yes, optional Wetland Site ID:				
Remarks: (Explain alternative procedures here or in a separate rep	oort.)				
Location is in a former pasture.					
HYDROLOGY					
Wetland Hydrology Indicators:	Secondary Indicators (minimum of two required)				
Primary Indicators (minimum of one is required; check all that apply					
☐ Surface Water (A1) ☐ Water-Stained Le	Surface Soil Cracks (bb)				
☐ High Water Table (A2) ☐ Aquatic Fauna (B					
Saturation (A3) Marl Deposits (B	<u> </u>				
☐ Water Marks (B1) ☐ Hydrogen Sulfide	<u> </u>				
	oheres on Living Roots (C3) Saturation Visible on Aerial Imagery (C9)				
☐ Drift Deposits (B3) ☐ Presence of Redu	_				
	uction in Tilled Soils (C6) Geomorphic Position (D2)				
☐ Iron Deposits (B5) ☐ Thin Muck Surface	, ,				
Inundation Visible on Aerial Imagery (B7) Other (Explain in					
☐ Sparsely Vegetated Concave Surface (B8)	FAC-Neutral Test (D5)				
Field Observations:					
Surface Water Present? ☐ Yes ✓ No Depth (inches):	:				
Water Table Present? ☐ Yes ✓ No Depth (inches):	:				
Saturation Present? ☐ Yes ✓ No Depth (inches): (includes capillary fringe)	Wetland Hydrology Present? Yes V No				
Describe Recorded Data (stream gauge, monitoring well, aerial pho	otos, previous inspections), if available:				
Remarks:					

Torre Otrestano Blat O'rea	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet:	
Tree Stratum Plot Size: 1	70 00001			Number of Dominant Species That Are OBL, FACW, or FAC: 1	(A)
2.				Total Number of Dominant Species Across All Strata: 2	(B)
3. 4				Percent of Dominant Species That Are OBL, FACW, or FAC: 50%	(A/B)
5				Prevalence Index worksheet:	
6				Total % Cover of: Multiply by:	
7.				OBL species 0 $x 1 = 10$	
Cardina (Chrush Chratisma Blat Cinas		= Total C	over	FACW species 10 $x = 20$	
Sapling/Shrub Stratum Plot Size:	10	V	E4014/	FAC species $0 \times 3 = 0$	
1. salix exigua (interior)		<u> </u>	FACW	FACU species 80 x 4 = 320	
2.				UPL species 5 $x = 5$	
3.				Column Totals: 95 (A) 365	(B)
4					
5.				Prevalence Index = B/A = 3.	8
6.				Hydrophytic Vegetation Indicators:	
7		T-t-LO		Rapid Test for Hydrophytic Vegetation	
Herb Stratum Plot Size:	10	= Total Co	ver	☐ Dominance Test is > 50%	
1. poa pratensis	80	Х	FACU	☐ Prevalence Index is $\leq 3.0^{1}$	
2. bromus inermis			UPL	 Morphological Adaptations¹ (Provide sup data in Remarks or on a separate sheet.) 	
3.	<u> </u>		01 L		
4.				Problematic Hydrophytic Vegetation¹ (Ex	
5.				¹Indicators of hydric soil and wetland hydrol must be present, unless disturbed or proble	
6.				Definitions of Vegetation Strata:	
7. 8.				Tree - Woody plants 3 in. (7.6 cm) or more at breast height (DBH), regardless of height	
9					
10.				Sapling/shrub - Woody plants less than 3 in. and greater than 3.28 ft. (1 m) tall.	DBH,
11 12.				Herb - All herbaceous (non-woody) plants, r of size, and woody plants less than 3.28 ft.	
	85	= Total C	over	Woody Vines - All woody vines greater than	
Manada Mana Otratana Blat O'ana				height.	
Woody Vine Stratum Plot Size:					
1.					
1				Hydrophytic	
1.				Hydrophytic Vegetation	
1. 2.		= Total C	<u> </u>		

SOIL Sampling Point: A16U

Depth (inches) Color (moist) % 0 - 4 10YR3/2 100 4 - 15.5 7.5YR4/4 100 Type: C=Concentration, D=Depletion, RM=R Hydric Soil Indicators: Histosol (A1) Histic Epipedon (A2) Black Histic (A3) Hydrogen Sulfide (A4) Stratified Layers (A5) Depleted Below Dark Surface (A11) Thick Dark Surface (A12) Sandy Mucky Mineral (S1)	Polyvalue Below Surface (S8) (L	nd Grains.	Texture Remarks loam clay 2Location: PL=Pore Lining, M=Matrix. Indicators for Problematic Hydric Soils3:
1 100	Reduced Matrix, MS=Masked San Polyvalue Below Surface (S8) (L	nd Grains.	clay 2Location: PL=Pore Lining, M=Matrix.
¹Type: C=Concentration, D=Depletion, RM=R Hydric Soil Indicators: Histosol (A1) Histic Epipedon (A2) Black Histic (A3) Hydrogen Sulfide (A4) Stratified Layers (A5) Depleted Below Dark Surface (A11) Thick Dark Surface (A12)	Polyvalue Below Surface (S8) (L		²Location: PL=Pore Lining, M=Matrix.
¹Type: C=Concentration, D=Depletion, RM=R Hydric Soil Indicators: Histosol (A1) Histic Epipedon (A2) Black Histic (A3) Hydrogen Sulfide (A4) Stratified Layers (A5) Depleted Below Dark Surface (A11) Thick Dark Surface (A12)	Polyvalue Below Surface (S8) (L		²Location: PL=Pore Lining, M=Matrix.
Hydric Soil Indicators: Histosol (A1) Histic Epipedon (A2) Black Histic (A3) Hydrogen Sulfide (A4) Stratified Layers (A5) Depleted Below Dark Surface (A11) Thick Dark Surface (A12)	Polyvalue Below Surface (S8) (L		
Hydric Soil Indicators: Histosol (A1) Histic Epipedon (A2) Black Histic (A3) Hydrogen Sulfide (A4) Stratified Layers (A5) Depleted Below Dark Surface (A11) Thick Dark Surface (A12)	Polyvalue Below Surface (S8) (L		
Hydric Soil Indicators: Histosol (A1) Histic Epipedon (A2) Black Histic (A3) Hydrogen Sulfide (A4) Stratified Layers (A5) Depleted Below Dark Surface (A11) Thick Dark Surface (A12)	Polyvalue Below Surface (S8) (L		
Hydric Soil Indicators: Histosol (A1) Histic Epipedon (A2) Black Histic (A3) Hydrogen Sulfide (A4) Stratified Layers (A5) Depleted Below Dark Surface (A11) Thick Dark Surface (A12)	Polyvalue Below Surface (S8) (L		
Hydric Soil Indicators: Histosol (A1) Histic Epipedon (A2) Black Histic (A3) Hydrogen Sulfide (A4) Stratified Layers (A5) Depleted Below Dark Surface (A11) Thick Dark Surface (A12)	Polyvalue Below Surface (S8) (L		
Hydric Soil Indicators: Histosol (A1) Histic Epipedon (A2) Black Histic (A3) Hydrogen Sulfide (A4) Stratified Layers (A5) Depleted Below Dark Surface (A11) Thick Dark Surface (A12)	Polyvalue Below Surface (S8) (L		
Hydric Soil Indicators: Histosol (A1) Histic Epipedon (A2) Black Histic (A3) Hydrogen Sulfide (A4) Stratified Layers (A5) Depleted Below Dark Surface (A11) Thick Dark Surface (A12)	Polyvalue Below Surface (S8) (L		
Hydric Soil Indicators: Histosol (A1) Histic Epipedon (A2) Black Histic (A3) Hydrogen Sulfide (A4) Stratified Layers (A5) Depleted Below Dark Surface (A11) Thick Dark Surface (A12)	Polyvalue Below Surface (S8) (L		
Hydric Soil Indicators: Histosol (A1) Histic Epipedon (A2) Black Histic (A3) Hydrogen Sulfide (A4) Stratified Layers (A5) Depleted Below Dark Surface (A11) Thick Dark Surface (A12)	Polyvalue Below Surface (S8) (L		
Hydric Soil Indicators: Histosol (A1) Histic Epipedon (A2) Black Histic (A3) Hydrogen Sulfide (A4) Stratified Layers (A5) Depleted Below Dark Surface (A11) Thick Dark Surface (A12)	Polyvalue Below Surface (S8) (L		
Hydric Soil Indicators: Histosol (A1) Histic Epipedon (A2) Black Histic (A3) Hydrogen Sulfide (A4) Stratified Layers (A5) Depleted Below Dark Surface (A11) Thick Dark Surface (A12)	Polyvalue Below Surface (S8) (L		
Hydric Soil Indicators: Histosol (A1) Histic Epipedon (A2) Black Histic (A3) Hydrogen Sulfide (A4) Stratified Layers (A5) Depleted Below Dark Surface (A11) Thick Dark Surface (A12)	Polyvalue Below Surface (S8) (L		
Histosol (A1) Histic Epipedon (A2) Black Histic (A3) Hydrogen Sulfide (A4) Stratified Layers (A5) Depleted Below Dark Surface (A11) Thick Dark Surface (A12)			Indicators for Problematic Hydric Soils ³ :
Histic Epipedon (A2) Black Histic (A3) Hydrogen Sulfide (A4) Stratified Layers (A5) Depleted Below Dark Surface (A11) Thick Dark Surface (A12)			•
Black Histic (A3) Hydrogen Sulfide (A4) Stratified Layers (A5) Depleted Below Dark Surface (A11) Thick Dark Surface (A12)		₋RR R,	☐ 2 cm Muck (A10) (LRR K, L, MLRA 149B)
Hydrogen Sulfide (A4) Stratified Layers (A5) Depleted Below Dark Surface (A11) Thick Dark Surface (A12)	MLRA 149B)		☐ Coast Prairie Redox (A16) (LRR K, L, R)
Stratified Layers (A5) Depleted Below Dark Surface (A11) Thick Dark Surface (A12)	Thin Dark Surface (S9) (LRR R,	MLRA 149B)	\square 5 cm Mucky Peat or Peat (S3) (LRR K, L, R)
☐ Depleted Below Dark Surface (A11) ☐ Thick Dark Surface (A12)	Loamy Mucky Mineral (F1) (LRR	≀ K, L)	☐ Dark Surface (S7) (LRR K, L)
☐ Thick Dark Surface (A12)	Loamy Gleyed Matrix (F2)		☐ Polyvalue Below Surface (S8) (LRR K, L)
	Depleted Matrix (F3)		☐ Thin Dark Surface (S9) (LRR K, L)
Sandy Mucky Mineral (S1)	Redox Dark Surface (F6)		☐ Iron-Manganese Masses (F12) (LRR K, L, R)
, , ,	Depleted Dark Surface (F7)		Piedmont Floodplain Soils (F19) (MLRA 1498
Sandy Gleyed Matrix (S4)	Redox Depressions (F8)		Mesic Spodic (TA6) (MLRA 144A, 145, 149B
Sandy Redox (S5)			Red Parent Material (F21)
Stripped Matrix (S6)			☐ Very Shallow Dark Surface (TF12)
☐ Dark Surface (S7) (LRR R, MLRA 149B)			Other (Explain in Remarks.)
³ Indicators of hydrophytic vegetation and wetla	and hydrology must be present, u	ınless disturbed	or problematic.
Restrictive Layer (if observed):			
Type:			
Depth (inches):			Hydric Soil Present? ☐ Yes ✓ No
Remarks: (Include photo numbers here or on	a separate sheet.)		•
•	, ,		

Project/Site: USH 151/CTH T Overpass		City/County Town of Empire / Fond du Lac Sampling Dat 5/30/20
Applicant/Owner: WisDOT		State: WI Sampling Point: A16W
Investigator(s): Don Brittnacher		Section, Township, Range: Sec. 18, T 15 N, R 18 E
Landform (hillslope, terrace, etc.): strea	am terrace	Local relief (concave, convex, none): concave Slope (%):
Subregion (LRR or MLRA): K / 95A	Lat: 43.768	B728 Long: -88.398412 Datum: WGS 1984
Soil Map Unit Name: Poygan silty clay I	oam	NWI Classification:
Are climatic / hydrologic conditions on the		· · · · · · · · · · · · · · · · · · ·
Are Vegetation: $lackim Q$, Soil $lackim$, or Hydrol	logy \square significantly distu	urbed? Are "Normal Circumstances" present? ✓ Yes ☐ No
Are Vegetation: \square , Soil \square , or Hydrol	logy \square naturally problen	natic? (If needed, explain any answers in Remarks.)
SUMMARY OF FINDINGS - Attach	ı site map showing s	ampling point locations, transects, important features, etc.
	✓ Yes □ No ✓ Yes □ No	Is the Sampled Area Within a Wetland? ✓ Yes No
,	✓ Yes	If yes, optional Wetland Site ID:
Remarks: (Explain alternative procedu	ures here or in a separate	report.)
Location is in a former pasture.		
HYDROLOGY		
Wetland Hydrology Indicators:		Secondary Indicators (minimum of two required)
Primary Indicators (minimum of one is	_	Surface Soil Cracks (Do)
Surface Water (A1)		ed Leaves (B9)
☐ High Water Table (A2)☐ Saturation (A3)	☐ Aquatic Faun☐ Marl Deposits	
Water Marks (B1)		ulfide Odor (C1) Crayfish Burrows (C8)
Sediment Deposits (B2)		zospheres on Living Roots (C3) Saturation Visible on Aerial Imagery (C9)
Drift Deposits (B3)		Reduced Iron (C4) Stunted or Stressed Plants (D1)
Algal Mat or Crust (B4)		Reduction in Tilled Soils (C6) Geomorphic Position (D2)
Iron Deposits (B5)	Thin Muck Su	
Inundation Visible on Aerial Imager		in in Remarks)
☐ Sparsely Vegetated Concave Surfac		FAC-Neutral Test (D5)
Field Observations:		
Surface Water Present? Yes	✓ No Depth (inch	nes):
Water Table Present? Yes	✓ No Depth (inch	nes):
Saturation Present?	✓ No Depth (inch	nes): Wetland Hydrology Present? Ves No
(includes capillary fringe)		
Describe Recorded Data (stream gaug	ge, monitoring well, aerial	I photos, previous inspections), if available:
Remarks:		

Tree Stratum Plot Size:

Sapling/Shrub Stratum Plot Size:

1. salix exigua (interior)

Herb Stratum Plot Size:

1. poa pratensis

2. brassica rapa

3. rhamnus cathartica

Woody Vine Stratum Plot Size:

3.

6.

2.

6.

5. 6.

		Sampling Point: A16W
Absolute	Dominant Indicator	Dominance Test worksheet:
% Cover	Species? Status	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 0 x 1 = 100
0	= Total Cover	FACW species 100 x 2 = 200
100	X FACW	FAC species 5 x 3 = 15
100	A IAOW	FACU species 25 x 4 = 100
		UPL species 5 x 5 = 25
		Column Totals: 135 (A) 340 (B)
		Prevalence Index = B/A = 2.5
		Hydrophytic Vegetation Indicators:
		Rapid Test for Hydrophytic Vegetation
100	= Total Cover	☐ Dominance Test is > 50%
		✓ Prevalence Index is ≤ 3.0¹
<u>25</u> 5	X FACU UPL	Morphological Adaptations¹ (Provide supporting data in Remarks or on a separate sheet.)
5	FAC	Problematic Hydrophytic Vegetation¹ (Explain.)
		¹Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
		Definitions of Vegetation Strata:
		Tree - Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.
		Sapling/shrub - Woody plants less than 3 in. DBH, and greater than 3.28 ft. (1 m) tall.
		Herb - All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft. tall.
35	= Total Cover	Woody Vines - All woody vines greater than 3.28 ft. in height.
		Hydrophytic Vegetation Ves Present?
0	= Total Cover	

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

SOIL Sampling Point: A16W

	cription: (Describ	e to the	_	locumen dox Featu		cator or o	confirm the absence of	indicators.	
Depth (inches)	Color (moist)	%	Color (moist)	%		Loc. ²	Texture	Remarks	
0 - 5	10YR3/2	100	Color (moist)		Type ¹		loam	nemarks	
5 - 11.5	10YR3/1	98	10YR4/6	2	С	M	loam		
11.5 - 15	7.5YR4/4	90		-			clay loam		
	10YR6/1	10							
				-					
				-					
				-					
				-					
¹Type: C=Co	oncentration, D=Depl	etion, RI	M=Reduced Matrix, M	S=Maske	d Sand Gr	ains.	² Location: PL=	Pore Lining, M=Matrix.	
Hydric Soil	Indicators:						Indicators for Problem	matic Hydric Soils³:	
☐ Histosol (A	A1)		Polyvalue Below	Surface (S8) (LRR F	₹,	2 cm Muck (A10) (L	RR K, L, MLRA 149B)	
Histic Epip	pedon (A2)		MLRA 149B)				☐ Coast Prairie Redox (A16) (LRR K, L, R)		
☐ Black Hist	ic (A3)		☐ Thin Dark Surfac	ce (S9) (Ll	RR R, MLR	A 149B)	\square 5 cm Mucky Peat or Peat (S3) (LRR K, L, R)		
Hydrogen	Sulfide (A4)		Loamy Mucky Mi	ineral (F1)) (LRR K, L	_)	☐ Dark Surface (S7) (LRR K, L)		
_	Layers (A5)		Loamy Gleyed M				Polyvalue Below Sur		
	Below Dark Surface (A11)	Depleted Matrix				Thin Dark Surface (S		
_	k Surface (A12)					☐ Iron-Manganese Masses (F12) (LRR K, L, R			
	cky Mineral (S1)		☐ Depleted Dark S		')		☐ Piedmont Floodplain Soils (F19) (MLRA 149☐ Mesic Spodic (TA6) (MLRA 144A, 145, 149E		
Sandy Gle	yed Matrix (S4)		Redox Depression	ns (F8)			Red Parent Material		
	Matrix (S6)						☐ Very Shallow Dark S		
	ace (S7) (LRR R, MLF	RA 149B`					Other (Explain in Re		
								,	
			vetland hydrology mu	st be pres	sent, unles	s disturbe	d or problematic.		
Type:	Layer (if observed								
Depth (inches	s):		_				Hydric Soil Prese	nt? ✓ Yes 🗌 No	
			_				- I yant Jon I reser		
Remarks: (Ir	nclude photo number	s here o	r on a separate sheet	.)					

Project/Site: USH 151/CTH T Overpass		City/County Town of Empire	e / Fond du Lac	Sampling Dat 5/30/2014
Applicant/Owner: WisDOT		State	e: WI	Sampling Point: A17L
Investigator(s): Don Brittnacher		Section, Township, Range:	Sec. 18, T 1	5 N, R 18 E
Landform (hillslope, terrace, etc.): stream	n terrace	Local relief (concave, conve	x, none): concav	re Slope (%):
Subregion (LRR or MLRA): K / 95A	Lat: 43.768	Long: -88.398495	•	Datum: WGS 1984
Soil Map Unit Name: Poygan silty clay loa	am	-	NWI Cla	ssification:
Are climatic / hydrologic conditions on the	site typical for this time	e of year? 🗹 Yes 🗌 No	(If no, explain	ı in Remarks.)
Are Vegetation: $lackim Q$, Soil \Box , or Hydrolog	gy \square significantly distu	rbed? Are "Normal Circumstar	nces" present? 🗸	Yes No
Are Vegetation: \square , Soil \square , or Hydrolog	gy naturally problem	natic? (If needed, explain any	answers in Rema	rks.)
- , , ,	,,	, , , ,		,
SUMMARY OF FINDINGS - Attach s	site map showing sa	ampling point locations, transec	ts, important fo	eatures, etc.
Hydrophytic Vegetation Present?	✓ Yes □ No	Is the Sampled Area	✓ Yes	□ No
Hydric Soil Present?	Yes No	Within a Wetland?	<u>.</u>	
Wetland Hydrology Present?	✓ Yes □ No	If yes, optional Wetland Site ID:		
Remarks: (Explain alternative procedure	es here or in a separate	report.)		
Location is in a former pasture.				
·				
HYDROLOGY				
Wetland Hydrology Indicators:		<u>Second</u>	dary Indicators (m	ninimum of two required)
Primary Indicators (minimum of one is re	equired; check all that a	apply)	Surface Soil Crack	(s (B6)
Surface Water (A1)	☐ Water-Staine		Drainage Patterns	
High Water Table (A2)	Aquatic Faun		Moss Trim Lines (` '
☐ Saturation (A3)	☐ Marl Deposits	s (B15)	Dry-Season Wate	r Table (C2)
☐ Water Marks (B1)	Hydrogen Su	Ifide Odor (C1)	Crayfish Burrows	(C8)
☐ Sediment Deposits (B2)	Oxidized Rhiz	zospheres on Living Roots (C3)	Saturation Visible	on Aerial Imagery (C9)
Drift Deposits (B3)	Presence of F	· · ·	Stunted or Stress	` '
Algal Mat or Crust (B4)		_	Geomorphic Posit	
Iron Deposits (B5)	Thin Muck Su		Shallow Aquitard	
Inundation Visible on Aerial Imagery			Microtopographic	
Sparsely Vegetated Concave Surface	(68)		FAC-Neutral Test	(D5)
Field Observations:	_			
	✓ No Depth (inch	es):		
Water Table Present?	✓ No Depth (inch	es):		
Saturation Present?	✓ No Depth (inch	es): Wetland Hyd	drology Present	? ✓ Yes 🗌 No
(includes capillary fringe)				
Describe Recorded Data (stream gauge	, monitoring well, aerial	photos, previous inspections), if availa	ıble:	
Remarks:				

Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test work	sheet:
	· - '		Number of Dominant Sports That Are OBL, FACW, or	
20	X	OBL		
				ecies
			Prevalence Index wor	
			-	Multiply by:
40	= Total C	over		x 1 =
			· ——	x 2 =
25	X	FACW	· -	x 3 =
20	X	FACW		x 4 =
			-	x 5 =
			Column Totals:	(A) (B)
			Prevalence Index = B/A	\ =
			Hydrophytic Vegetation	on Indicators:
45	= Total Co	ver		
· <u> </u>			L	
50	Х	FACW		
10		FACU		
			☐ Problematic Hydrophy	tic Vegetation¹ (Explain.)
			must be present, unless	disturbed or problematic.
			Definitions of Vegetat	ion Strata:
			Tree - Woody plants 3 in	. (7.6 cm) or more in diameter
<u> </u>				
				on-woody) plants, regardless
60	= Total C	over		
			height.	g
			Hydrophytic	
			Vegetation 🗸 Ye	
			Present?	es U No
	40 25 20 45 50 10	20 X 40 = Total Co 25 X 20 X 45 = Total Co 50 X 10 = Total Co	20 X OBL 40 = Total Cover 25 X FACW 20 X FACW 45 = Total Cover 50 X FACU 10 FACU 60 = Total Cover	That Are OBL, FACW, of Total Number of Dominan Species Across All Strate Percent of Dominant Species FacW, or Total % Cover of: 40

SOIL Sampling Point: A17L

	scription: (Describ Matrix	e to the	_	l ocumen dox Featu		cator or	confirm the absence o	f indicators.	
Depth (inches)	Color (moist)	%	Color (moist)	%	Type ¹	Loc. ²	Texture	Remarks	
0 - 5	10YR3/2	100	Color (Illoist)		Type	LUC	loam	nemarks	
5 - 11	10YR4/1	98	10YR4/6	2			loam	_	
11 - 16	10YR3/1	100	_				loam		
11 - 16	10YR3/1	100					loam		
¹Type: C=Cd	<u> </u>	letion, RI	M=Reduced Matrix, M	S=Maske	ed Sand Gr	ains.	² Location: PL	=Pore Lining, M=Matrix.	
Histosol (Δ1)		☐ Polyvalue Below	Surface (S8) (LRR F	2	2 cm Muck (A10) (I	LRR K, L, MLRA 149B)	
	pedon (A2)		MLRA 149B)	Surruce (JO) (LIKIT	Y	Coast Prairie Redox (A16) (LRR K, L, R)		
☐ Black Hist			☐ Thin Dark Surfac	e (S9) (I	RR R MIR	Δ 149R)	5 cm Mucky Peat or Peat (S3) (LRR K, L, R)		
_	Sulfide (A4)		Loamy Mucky M				Dark Surface (S7) (LRR K, L)		
	Layers (A5)		Loamy Gleyed M			-)	Polyvalue Below Surface (S8) (LRR K, L)		
	Below Dark Surface ((Δ11)	✓ Depleted Matrix						
	k Surface (A12)	(//11)	Redox Dark Surf				☐ Thin Dark Surface (S9) (LRR K, L) ☐ Iron-Manganese Masses (F12) (LRR K, L, R)		
	cky Mineral (S1)		☐ Depleted Dark S		7)				
	eyed Matrix (S4)		Redox Depression		,)		☐ Piedmont Floodplain Soils (F19) (MLRA 149B) ☐ Mesic Spodic (TA6) (MLRA 144A, 145, 149B)		
Sandy Re			Redox Depressio	113 (10)			Red Parent Materia		
	Matrix (S6)						☐ Very Shallow Dark S	• •	
	ace (S7) (LRR R, MLI	DA 140D	,				Other (Explain in Re	, ,	
			, wetland hydrology mu	ot ha proc	ant unloc	o diaturbo		ciliai ks. j	
			wonana nyulology mu	or pe bies	Joint, uilles	o distuible	a or problematic.		
	Layer (if observed	l):							
Type:			_						
Depth (inche	s):		_				Hydric Soil Prese	ent? ✓ Yes 🗌 No	
Remarks: (II	nclude photo numbei	rs here o	r on a separate sheet	.)					

Project/Site: USH 151/CTH T Overpass	3	City/County Town of Empire / Fond du Lac Sampling Dat 5/30/20
Applicant/Owner: WisDOT		State: WI Sampling Point: A17U
Investigator(s): Don Brittnacher		Section, Township, Range: Sec. 18, T 15 N, R 18 E
Landform (hillslope, terrace, etc.): stre	eam terrace	Local relief (concave, convex, none): concave Slope (%):
Subregion (LRR or MLRA): K / 95A	Lat: 43.768	2454 Long: -88.398466 Datum: WGS 1984
Soil Map Unit Name: Poygan silty clay	loam	NWI Classification:
Are climatic / hydrologic conditions on		
Are Vegetation: $lackim J$, Soil $lackim J$, or Hydro	ology \square significantly distu	urbed? Are "Normal Circumstances" present? ✓ Yes ☐ No
Are Vegetation: \square , Soil \square , or Hydro	ology \square naturally problen	natic? (If needed, explain any answers in Remarks.)
SUMMARY OF FINDINGS - Attac	h site map showing s	ampling point locations, transects, important features, etc.
Hydrophytic Vegetation Present?	✓ Yes □ No	Is the Sampled Area
Hydric Soil Present?	☐ Yes ✔ No ☐ Yes ✔ No	
Wetland Hydrology Present?	☐ Yes 🗸 No	If yes, optional Wetland Site ID:
Remarks: (Explain alternative proced	lures here or in a separate	e report.)
Location is in a former pasture.		
HYDROLOGY		
Wetland Hydrology Indicators:		Secondary Indicators (minimum of two required)
Primary Indicators (minimum of one	s required; check all that a	apply) Surface Soil Cracks (B6)
Surface Water (A1)	☐ Water-Staine	ed Leaves (B9) Drainage Patterns (B10)
High Water Table (A2)	Aquatic Faun	_ ` '
Saturation (A3)	Marl Deposit	
Water Marks (B1)		ulfide Odor (C1) Crayfish Burrows (C8)
Sediment Deposits (B2)		zospheres on Living Roots (C3) Saturation Visible on Aerial Imagery (C9)
Drift Deposits (B3)		Reduced Iron (C4) Stunted or Stressed Plants (D1)
☐ Algal Mat or Crust (B4)☐ Iron Deposits (B5)		Reduction in Tilled Soils (C6) Geomorphic Position (D2) urface (C7) Shallow Aquitard (D3)
Inundation Visible on Aerial Image	Thin Muck Su	in in Remarks)
Sparsely Vegetated Concave Surfa		FAC-Neutral Test (D5)
		TAC Neutral Test (D3)
Field Observations:		
Surface Water Present? Yes		· ———
Water Table Present? Yes		· · · ———
Saturation Present?	No Depth (inch	nes): Wetland Hydrology Present?
Describe Recorded Data (stream gau	ige, monitoring well, aerial	I photos, previous inspections), if available:
Remarks:		

	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksho	eet:	
ree Stratum Plot Size: . acer negundo	5 5	X	FAC	Number of Dominant Specie That Are OBL, FACW, or FA		(A)
. acei negunuo			170	Total Number of Dominant Species Across All Strata:	3	(B)
				Percent of Dominant Specie		. (b)
				That Are OBL, FACW, or FA		(A/B)
				Prevalence Index works	heet:	
				Total % Cover of:	Multiply by:	
· ,	5	= Total C	Over	OBL species	x 1 =	
apling/Shrub Stratum Plot Size:		= 10tai 0	ovci	FACW species	x 2 =	
cornus stolonifera	5	Χ	FACW	FAC species	x 3 =	
				FACU species	x 4 =	
				UPL species	x 5 =	
				Column Totals:	(A)	(B)
				Prevalence Index = B/A =		
				Hydrophytic Vegetation	Indicators:	
				Rapid Test for Hydrophyt	ic Vegetation	
owh Ctratum Diet Circu	5	= Total Co	ver	✓ Dominance Test is > 50%	6	
erb Stratum Plot Size:	60	V	FACIL	☐ Prevalence Index is ≤ 3.0)¹	
poa pratensis carex (sedge), unknown	10	<u> </u>	FACU FACW	Morphological Adaptation		orting
			ACW	data in Remarks or on a		
_				Problematic Hydrophytic		
				¹ Indicators of hydric soil and must be present, unless dis		
				Definitions of Vegetation	Strata:	
				Tree - Woody plants 3 in. (7		n diamete
				at breast height (DBH), rega	ū	
0.				Sapling/shrub - Woody plant and greater than 3.28 ft. (1		OBH,
1 2.				Herb - All herbaceous (non- of size, and woody plants le	,,,	_
	70	= Total C	over	Woody Vines - All woody vin		
Voody Vine Stratum Plot Size:				height.		
·				Hydrophytic		
·				Vegetation ✓ Yes	☐ No	
·				Present?		
	0	= Total C	over			

SOIL Sampling Point: A17U

	cription: (Describe to the	_	ocumen dox Featu		cator or o	confirm the absence of	indicators.	
Depth _ (inches)	Color (moist) %	Color (moist)	%	Type ¹	Loc. ²	Texture	Remarks	
0 - 10.5	10YR3/2			1,700		loam	Homano	
10.5 - 17.5	10YR3/1	10YR4/6	2	С	M	loam		
		_						
						<u> </u>		
¹Type: C=Con	ncentration, D=Depletion, F	IM=Reduced Matrix, MS	S=Maske	d Sand Gr	ains.	² Location: PL=	=Pore Lining, M=Matrix.	
Hydric Soil I	ndicators:					Indicators for Problem	matic Hydric Soils³:	
☐ Histosol (A	1)	Polyvalue Below	Surface (S8) (LRR F	₹,	2 cm Muck (A10) (L	RR K, L, MLRA 149B)	
☐ Histic Epipe	edon (A2)	MLRA 149B)				☐ Coast Prairie Redox (A16) (LRR K, L, R)		
Black Histic		Thin Dark Surface				☐ 5 cm Mucky Peat or Peat (S3) (LRR K, L, R)		
Hydrogen S		Loamy Mucky Mir			.)	Dark Surface (S7) (LRR K, L)		
Stratified La		Loamy Gleyed Ma				Polyvalue Below Surface (S8) (LRR K, L)		
	elow Dark Surface (A11)	Depleted Matrix (☐ Thin Dark Surface (S9) (LRR K, L)		
	Surface (A12)	Redox Dark Surfa				☐ Iron-Manganese Masses (F12) (LRR K, L, R)		
	ky Mineral (S1)	Depleted Dark Su		7)			Soils (F19) (MLRA 149B)	
	red Matrix (S4)	Redox Depression	ns (۲४)				(MLRA 144A, 145, 149B)	
☐ Sandy Redo☐ Stripped Ma						☐ Red Parent Material (F21)☐ Very Shallow Dark Surface (TF12)		
	au ix (36) ce (S7) (LRR R, MLRA 1491	5)				Other (Explain in Re		
Dark Surface	ce (37) (LICK IC, PILICA 149)	"				Other (Explain in ite	marks.)	
³ Indicators of h	hydrophytic vegetation and	wetland hydrology mus	st be pres	ent, unles	s disturbe	d or problematic.		
Restrictive L	ayer (if observed):							
Туре:		_						
Depth (inches)):	<u> </u>				Hydric Soil Preser	nt? Yes 🗸 No	
Remarks: (Inc	clude photo numbers here	or on a separate sheet.)			•		

Project/Site: USH 151/CTH T Overpass	City/County Town of Empire / Fond du Lac Sampling Dat 5/30/2014				
Applicant/Owner: WisDOT	State: WI Sampling Point: A17W				
Investigator(s): Don Brittnacher	Section, Township, Range: Sec. 18, T 15 N, R 18 E				
Landform (hillslope, terrace, etc.): stream terrace	Local relief (concave, convex, none): concave Slope (%):				
Subregion (LRR or MLRA): K / 95A Lat: 43.768485	5 Long: -88.398534 Datum: WGS 1984				
Soil Map Unit Name: Poygan silty clay loam	NWI Classification:				
Are climatic / hydrologic conditions on the site typical for this time of	year? 🗹 Yes 🗌 No (If no, explain in Remarks.)				
Are Vegetation: $lackim Q$, Soil \Box , or Hydrology \Box significantly disturbed	ed? Are "Normal Circumstances" present? 🗹 Yes 🗌 No				
Are Vegetation: \square , Soil \square , or Hydrology \square naturally problematic	c? (If needed, explain any answers in Remarks.)				
SUMMARY OF FINDINGS - Attach site map showing samp	pling point locations, transects, important features, etc.				
Hydrophytic Vegetation Present? ✓ Yes ☐ No Is	s the Sampled Area				
Hydric Soil Present? ✓ Yes ☐ No	/ithin a Wetland?				
Wetland Hydrology Present? ✓ Yes ☐ No If	yes, optional Wetland Site ID:				
Remarks: (Explain alternative procedures here or in a separate rep	port.)				
Location is in a former pasture.					
HYDROLOGY					
Wetland Hydrology Indicators:	Secondary Indicators (minimum of two required)				
Primary Indicators (minimum of one is required; check all that apply	Surface Soil Clacks (bb)				
Surface Water (A1) Water-Stained Le	eaves (B9)				
High Water Table (A2)	<u> </u>				
Saturation (A3) Marl Deposits (B.	_ '				
Water Marks (B1) Hydrogen Sulfide					
	oheres on Living Roots (C3) Saturation Visible on Aerial Imagery (C9)				
☐ Drift Deposits (B3) ☐ Presence of Redu					
· ·	uction in Tilled Soils (C6)				
☐ Iron Deposits (B5) ☐ Thin Muck Surface					
Inundation Visible on Aerial Imagery (B7) Other (Explain in					
Sparsely Vegetated Concave Surface (B8)	✓ FAC-Neutral Test (D5)				
Field Observations:					
Surface Water Present? Yes No Depth (inches):	:				
Water Table Present? ☐ Yes ✓ No Depth (inches):	:				
Saturation Present? ☐ Yes ✓ No Depth (inches): (includes capillary fringe)	Wetland Hydrology Present? Yes No				
Describe Recorded Data (stream gauge, monitoring well, aerial pho					
	"				
Remarks:					

Γree Stratum Plot Size:	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test work		
. acer negundo	20	X	FAC	Number of Dominant Sp That Are OBL, FACW, o		
2. salix nigra	20	X	OBL	Total Number of Domina Species Across All Strat	ant	
3.				Percent of Dominant Sp	` '	
				That Are OBL, FACW, o		
j				Prevalence Index wo	rksheet:	
i.				Total % Cover of:	Multiply by:	
'	40	= Total C	`ovor	OBL species	x 1 =	
Sapling/Shrub Stratum Plot Size:		= 10(a) C	over	FACW species	x 2 =	
. rhamnus cathartica	25	Х	FAC	FAC species	x 3 =	
cornus stolonifera	20	X	FACW	FACU species	x 4 =	
				UPL species	x 5 =	
				Column Totals:	(A) (I	
5.				Prevalence Index = B/	A =	
j				Hydrophytic Vegetati	on Indicators:	
·				Rapid Test for Hydro	phytic Vegetation	
	45	= Total Co	ver	✓ Dominance Test is > 50%		
Herb Stratum Plot Size:				Prevalence Index is ≤ 3.0¹		
. carex (sedge), unknown	10	X	FACW	☐ Morphological Adaptations¹ (Provide supporting		
2.				data in Remarks or o	n a separate sheet.)	
3.				Problematic Hydroph	ytic Vegetation¹ (Explain.)	
4				 Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic. 		
5. 6.			-		•	
7				Definitions of Vegeta	tion Strata:	
3.				Tree - Woody plants 3 in at breast height (DBH),	n. (7.6 cm) or more in diamet	
9						
10.				and greater than 3.28 ft	plants less than 3 in. DBH, . (1 m) tall.	
11					` ,	
12				Herb - All herbaceous (not of size, and woody plant	ion-woody) plants, regardless is less than 3.28 ft. tall.	
	10	= Total C	Cover	1 ' ' '	vines greater than 3.28 ft. i	
Woody Vine Stratum Plot Size:				height.	J	
1						
2.						
3.				Hydrophytic Vegetation	□	
4.				Present?	es	
	0	= Total C	Cover			
Remarks: (Include photo numbers here or o				1		

SOIL Sampling Point: A17W

Depth Matrix Padox Features Color (molet) % Color (molet) % Type' Loc.* Texture Remarks	Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.									
0-1 10 YR3/1 100	•	Matrix								
1-5		· 		Color (moist)	%	Type ¹	Loc. ²		Remarks	
Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.				10YR4/6	2	С				
Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. *Location: PL=Pore Lining, M=Matrix. Hydric Soil Indicators: Histosol (A1)		·		-						
'Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. *Location: PL=Pore Lining, M=Matrix. *Hydric Soil Indicators: Histosol (A1)				_						
Hydric Soil Indicators: Histosol (A1)	13 - 16	10YR5/1	90	10YR4/6 	10	D	<u>M</u>	clay loam		
Hydric Soil Indicators: Histosol (A1)				_						
Hydric Soil Indicators: Histosol (A1)				<u>.</u>						
Hydric Soil Indicators: Histosol (A1)				-	•				_	
Hydric Soil Indicators: Histosol (A1)				-					_	
Hydric Soil Indicators: Histosol (A1)				-						
Hydric Soil Indicators: Histosol (A1)				_						
Hydric Soil Indicators: Histosol (A1)				_	- ——					
Hydric Soil Indicators: Histosol (A1)										
Hydric Soil Indicators: Histosol (A1)										
Histosol (A1) Polyvalue Below Surface (S8) (LRR R, Castrictive Layer (if observed): Histosol (A1) Polyvalue Below Surface (S8) (LRR R, Castrictive Layer (if observed): Histosol (A1) Polyvalue Below Surface (S8) (LRR R, Castrictive Layer (if observed): Type: Depth (inches):	¹Type: C=C	oncentration, D=Deplet	tion, RN	И=Reduced Matrix, М	S=Maske	d Sand Gr	ains.	² Location: PL=	Pore Lining, M=Matrix.	
Histic Epipedon (A2) MLRA 149B) Coast Prairie Redox (A16) (LRR K, L, R) Black Histic (A3) Thin Dark Surface (S9) (LRR R, MLRA 149B) 5 cm Mucky Peat or Peat (S3) (LRR K, L, R) Hydrogen Sulfide (A4) Loamy Mucky Mineral (F1) (LRR K, L) Dark Surface (S7) (LRR K, L) Stratified Layers (A5) Loamy Gleyed Matrix (F2) Polyvalue Below Surface (S8) (LRR K, L) Depleted Below Dark Surface (A11) Depleted Matrix (F3) Thin Dark Surface (S9) (LRR K, L) Thick Dark Surface (A12) Redox Dark Surface (F6) Iron-Manganese Masses (F12) (LRR K, L, R) Sandy Mucky Mineral (S1) Depleted Dark Surface (F7) Piedmont Floodplain Soils (F19) (MLRA 149B) Sandy Redox (S5) Red Parent Material (F21) Mesic Spodic (TA6) (MLRA 144A, 145, 149B) Stripped Matrix (S6) Very Shallow Dark Surface (TF12) Very Shallow Dark Surface (TF12) Dark Surface (S7) (LRR R, MLRA 149B) Other (Explain in Remarks.) **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	Hydric Soil	Indicators:						Indicators for Problem	matic Hydric Soils³:	
Histic Epipedon (AZ)	Histosol ((A1)			Surface (S8) (LRR F	₹,	2 cm Muck (A10) (L	RR K, L, MLRA 149B)	
Hydrogen Sulfide (A4)	Histic Epi	ipedon (A2)		MLRA 149B)				Coast Prairie Redox	(A16) (LRR K, L, R)	
Stratified Layers (A5)	☐ Black Hist	tic (A3)		☐ Thin Dark Surfac	:e (S9) (Ll	RR R, MLR	A 149B)	☐ 5 cm Mucky Peat or Peat (S3) (LRR K, L, R)		
□ Depleted Below Dark Surface (A11) □ Depleted Matrix (F3) □ Thin Dark Surface (S9) (LRR K, L) □ Thick Dark Surface (A12) ☑ Redox Dark Surface (F6) □ Iron-Manganese Masses (F12) (LRR K, L, R) □ Sandy Mucky Mineral (S1) □ Depleted Dark Surface (F7) □ Piedmont Floodplain Soils (F19) (MLRA 149B) □ Sandy Gleyed Matrix (S4) □ Redox Depressions (F8) □ Mesic Spodic (TA6) (MLRA 144A, 145, 149B) □ Sandy Redox (S5) □ Red Parent Material (F21) □ Stripped Matrix (S6) □ Very Shallow Dark Surface (TF12) □ Dark Surface (S7) (LRR R, MLRA 149B) □ Other (Explain in Remarks.) **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	Hydrogen	n Sulfide (A4)		Loamy Mucky Mi	neral (F1)) (LRR K, L	.)			
Thick Dark Surface (A12)										
Sandy Mucky Mineral (S1)			.11)							
Sandy Gleyed Matrix (S4)					. ,	_		_		
Sandy Redox (S5)										
Stripped Matrix (S6)					ns (F8)					
□ Dark Surface (S7) (LRR R, MLRA 149B) □ Other (Explain in Remarks.) 3Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic. Restrictive Layer (if observed): Type: □ Depth (inches): □ Hydric Soil Present? ✓ Yes □ No										
³Indicators 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		` '	140R)							
Restrictive Layer (if observed): Type: Depth (inches): Hydric Soil Present? Ves No	Dark Juri	idce (3/) (Lixix ix, maix-	1 1790)					U Other (Explain in No	ilidiks.)	
Type: Depth (inches):	³ Indicators o	of hydrophytic vegetatio	n and v	vetland hydrology mu	st be pres	ent, unles	s disturbe	d or problematic.		
Depth (inches): Hydric Soil Present? Ves No	Restrictive	Layer (if observed):	:							
	Туре:			_						
Remarks: (Include photo numbers here or on a separate sheet.)	Depth (inche	es):						Hydric Soil Preser	nt? ✓ Yes 🗌 No	
	Remarks: (I	Include photo numbers	here o	r on a separate sheet.	.)					

Project/Site: USH 151/CTH T Overpass	City/County Town of Empire / Fond du Lac Sampling Dat 6/27/2014				
Applicant/Owner: WisDOT	State: WI Sampling Point: A18L				
Investigator(s): Don Brittnacher	Section, Township, Range: Sec. 18, T 15 N, R 18 E				
Landform (hillslope, terrace, etc.): shallow swale	Local relief (concave, convex, none): concave Slope (%):				
Subregion (LRR or MLRA): K / 95A Lat: 43.768906	6 Long: -88.397725 Datum: WGS 1984				
Soil Map Unit Name: Kewaunee silty clay loam, 2 to 6 percent slope	es, e NWI Classification:				
Are climatic / hydrologic conditions on the site typical for this time of	f year? 🗹 Yes 🗌 No (If no, explain in Remarks.)				
Are Vegetation: $oldsymbol{arVert}$, Soil \Box , or Hydrology \Box significantly disturbed	ed? Are "Normal Circumstances" present? ✓ Yes ☐ No				
Are Vegetation: \square , Soil \square , or Hydrology \square naturally problemation	ic? (If needed, explain any answers in Remarks.)				
SUMMARY OF FINDINGS - Attach site map showing sam	pling point locations, transects, important features, etc.				
	s the Sampled Area				
Hydric Soil Present? ✓ Yes ☐ No	Vithin a Wetland?				
Wetland Hydrology Present? ✓ Yes ☐ No If	f yes, optional Wetland Site ID:				
Remarks: (Explain alternative procedures here or in a separate rep	port.)				
Location is in a former pasture.					
LIVERGLOGY					
HYDROLOGY					
Wetland Hydrology Indicators:	Secondary Indicators (minimum of two required)				
Primary Indicators (minimum of one is required; check all that appl	Surface Soil Cracks (bb)				
Surface Water (A1) Water-Stained L					
✓ High Water Table (A2)					
Saturation (A3)					
Water Marks (B1) Hydrogen Sulfide					
	pheres on Living Roots (C3) Saturation Visible on Aerial Imagery (C9)				
☐ Drift Deposits (B3) ☐ Presence of Red	` '				
	duction in Tilled Soils (C6)				
☐ Iron Deposits (B5) ☐ Thin Muck Surfa					
☐ Inundation Visible on Aerial Imagery (B7) ☐ Other (Explain in					
Sparsely Vegetated Concave Surface (B8)	FAC-Neutral Test (D5)				
Field Observations:					
Surface Water Present?	:				
Water Table Present? ✓ Yes ☐ No Depth (inches):	: 12				
Saturation Present?	:6				
Describe Recorded Data (stream gauge, monitoring well, aerial pho	otos, previous inspections), if available:				
Remarks:					

Tree Stratum Plot Size:

Sapling/Shrub Stratum Plot Size:

Herb Stratum Plot Size: 1. phalaris arundinacea

Woody Vine Stratum Plot Size:

2. poa pratensis

3.

6.

6.

3.

0 = Total Cover

Present?

				Sam	npling P	oint: A1	8L
Absolute	Dominant	Indicator	Dominance Tes	t workshee	et:		
% Cover	Species?	Status	Number of Domin That Are OBL, FA			1	(A)
			Total Number of I Species Across A			2	(B)
			Percent of Domin That Are OBL, FA			50%	(A/B)
			Prevalence Inde	ex workshe	eet:		•
			Total % Cover of	f:	Multi	ply by:	
0	= Total C	0.404	OBL species	0	x 1 =	60	
	= 101810	ovei	FACW species	60	x 2 =	120	
			FAC species	0	x 3 =	0	
			FACU species	40	x 4 =	160	
			UPL species	0	x 5 =	0	
			Column Totals:	100	(A)	280	(B)
			Prevalence Inde	ex = B/A =		2.8	_
			Hydrophytic Ve	getation In	ndicato	rs:	
			Rapid Test for	Hydrophytic	Vegeta	ition	
0	= Total Cov	/er	☐ Dominance Te	st is > 50%			
			✓ Prevalence Inc	$\text{dex is} \leq 3.0^{1}$	L		
40		FACU FACU	Morphological data in Remarl				orting
			☐ Problematic Hy	ydrophytic V	egetatio	n¹ (Exp	lain.)
			¹ Indicators of hyd				
			must be present,	unless distu	rbed or	problem	atic.
			Definitions of V	egetation S	Strata:		
			Tree - Woody pla at breast height (n diameter
			Sapling/shrub - W and greater than			an 3 in. I	OBH,
			Herb - All herbace of size, and wood	•			-
100	= Total C	over	Woody Vines - All height.				
			Hydrophytic Vegetation	✓ Yes	□ No		

D	(Include photo	، ما حدد ما ممد، ، مد			-11
Bemarks.	HINCHING DRIOTO	numbers na	are or or	i a senaraje	SUPPL 1

SOIL Sampling Point: A18L

Depth Matrix	o the depth needed to R	edox Featu	ires					
(inches) Color (moist)	% Color (moist)					Remarks		
	100	_	71		Texture silt loam			
3 - 9 10YR4/1	98 10YR4/6	2	D	М	silt loam			
9 - 12.5 10YR3/1	100				silt loam			
12.5 - 16.5 10YR4/1	98 10YR4/6	2	D	М	silt loam			
		_						
¹ Type: C=Concentration, D=Depletion	n, RM=Reduced Matrix, I	ИS=Maske	d Sand Gr	ains.	² Location: PL	=Pore Lining, M=Matrix.		
Hydric Soil Indicators:					Indicators for Proble	ematic Hydric Soils³:		
Histosol (A1)	Polyvalue Belov	v Surface (S8) (LRR F	₹,	☐ 2 cm Muck (A10) (I	_RR K, L, MLRA 149B)		
☐ Histic Epipedon (A2)	MLRA 149B)	MLRA 149B)				☐ Coast Prairie Redox (A16) (LRR K, L, R)		
☐ Black Histic (A3)	☐ Thin Dark Surfa	☐ Thin Dark Surface (S9) (LRR R, MLRA 149B)			\square 5 cm Mucky Peat or Peat (S3) (LRR K, L, R)			
☐ Hydrogen Sulfide (A4)	Loamy Mucky N	lineral (F1) (LRR K, L	.)	☐ Dark Surface (S7) (LRR K, L)		
☐ Stratified Layers (A5)	Loamy Gleyed	Matrix (F2)			☐ Polyvalue Below Surface (S8) (LRR K, L)			
☐ Depleted Below Dark Surface (A11	.) V Depleted Matrix	(F3)			☐ Thin Dark Surface (S9) (LRR K, L)			
☐ Thick Dark Surface (A12)	Redox Dark Su	rface (F6)			☐ Iron-Manganese Masses (F12) (LRR K, L, R)			
Sandy Mucky Mineral (S1)		Depleted Dark Surface (F7)			Piedmont Floodplain Soils (F19) (MLRA 149B)			
Sandy Gleyed Matrix (S4)	Redox Depress	ions (F8)				(MLRA 144A, 145, 149B)		
Sandy Redox (S5)					Red Parent Material (F21)			
Stripped Matrix (S6)	100)				☐ Very Shallow Dark Surface (TF12)			
☐ Dark Surface (S7) (LRR R, MLRA	.498)				Other (Explain in Re	emarks.)		
³ Indicators of hydrophytic vegetation	and wetland hydrology m	ust be pres	sent, unles	s disturbe	d or problematic.			
Restrictive Layer (if observed):								
Type:								
Depth (inches):					Hydric Soil Prese	nt? 🗸 Yes 🗌 No		
Remarks: (Include photo numbers h	ere or on a separate shee	et.)						

Project/Site: USH 151/CTH T Overpass	City/County Town of Empire / Fond du Lac Sampling Dat 6/27/2014				
Applicant/Owner: WisDOT	State: WI Sampling Point: A18U				
Investigator(s): Don Brittnacher	Section, Township, Range: Sec. 18, T 15 N, R 18 E				
Landform (hillslope, terrace, etc.): hillslope	Local relief (concave, convex, none): concave Slope (%):				
Subregion (LRR or MLRA): K / 95A Lat: 43.768861	1 Long: -88.397726 Datum: WGS 1984				
Soil Map Unit Name: Kewaunee silty clay loam, 2 to 6 percent slope	es, e NWI Classification:				
Are climatic / hydrologic conditions on the site typical for this time of	year? 🗹 Yes 🗌 No (If no, explain in Remarks.)				
Are Vegetation: $oldsymbol{arVert}$, Soil \Box , or Hydrology \Box significantly disturbe	ed? Are "Normal Circumstances" present? 🗹 Yes 🗌 No				
Are Vegetation: \square , Soil \square , or Hydrology \square naturally problemation	c? (If needed, explain any answers in Remarks.)				
SUMMARY OF FINDINGS - Attach site map showing sam	pling point locations, transects, important features, etc.				
Hydrophytic Vegetation Present? ☐ Yes ✓ No Is	s the Sampled Area				
Hydric Soil Present? ☐ Yes ✓ No	/ithin a Wetland?				
Wetland Hydrology Present? ☐ Yes ✓ No If	yes, optional Wetland Site ID:				
Remarks: (Explain alternative procedures here or in a separate rep	port.)				
Location is in a former pasture.					
HYDROLOGY					
Wetland Hydrology Indicators:	Secondary Indicators (minimum of two required)				
Primary Indicators (minimum of one is required; check all that appl	□ Surface Soil Cracks (B6)				
Surface Water (A1) Water-Stained Le	eaves (B9) Drainage Patterns (B10)				
High Water Table (A2)	<u> </u>				
Saturation (A3) Marl Deposits (B	_ '				
Water Marks (B1) Hydrogen Sulfide					
	pheres on Living Roots (C3) Saturation Visible on Aerial Imagery (C9)				
☐ Drift Deposits (B3) ☐ Presence of Red					
· ·	luction in Tilled Soils (C6) Geomorphic Position (D2)				
☐ Iron Deposits (B5) ☐ Thin Muck Surface					
Inundation Visible on Aerial Imagery (B7) Other (Explain in	<u> </u>				
Sparsely Vegetated Concave Surface (B8)	FAC-Neutral Test (D5)				
Field Observations:					
Surface Water Present? ☐ Yes ✓ No Depth (inches):	:				
Water Table Present? ✓ Yes ☐ No Depth (inches):					
Saturation Present?	: Wetland Hydrology Present?				
Describe Recorded Data (stream gauge, monitoring well, aerial pho	otos, previous inspections), if available:				
Remarks:					

VEGETATION Use scientific names of plants				Sampling Point: A18U
To Observe Blad Circu	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet:
<u>Tree Stratum</u> Plot Size: 1.	70 00001	Ореспесь.		Number of Dominant Species That Are OBL, FACW, or FAC: 0 (A)
2.				Total Number of Dominant Species Across All Strata: 1 (B)
3.				Percent of Dominant Species
5.				
6.				Prevalence Index worksheet:
7.				Total % Cover of: Multiply by:
	0	= Total C	over	OBL species x 1 =
Sapling/Shrub Stratum Plot Size:				FACW species x 2 =
1.				FAC species x 3 =
2.				FACU species x 4 =
3.				UPL species x 5 =
4.				Column Totals: (A) (B)
5.				Prevalence Index = B/A =
6				Hydrophytic Vegetation Indicators:
7				Rapid Test for Hydrophytic Vegetation
	0	= Total Cov	ver	☐ Dominance Test is > 50%
<u>Herb Stratum</u> Plot Size:		.,		\square Prevalence Index is $\leq 3.0^{1}$
1. poa pratensis	80	X	FACU	☐ Morphological Adaptations¹ (Provide supporting
2. cirsium discolor	10		UPL	data in Remarks or on a separate sheet.)
3. solidago altissima	10		FACU	Problematic Hydrophytic Vegetation¹ (Explain.)
4				¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
5				must be present, unless disturbed of problematic.
6.				Definitions of Vegetation Strata:
7				To a Wash alast 2 is (7.6 as) as as as is discrete.
8.				Tree - Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.
9.				Sapling/shrub - Woody plants less than 3 in. DBH,
10				and greater than 3.28 ft. (1 m) tall.
11				Herb - All herbaceous (non-woody) plants, regardless
12				of size, and woody plants less than 3.28 ft. tall.
	100	= Total C	over	Woody Vines - All woody vines greater than 3.28 ft. in
Woody Vine Stratum Plot Size:				height.
1.				
2.				Hydrophytic
3				Vegetation ☐ Yes ✓ No
4.				Present?
	0	= Total C	over	
Remarks: (Include photo numbers here or on a sep	arate sheet	i.)		

SOIL Sampling Point: A18U

Depth Matrix	Profile Description: (Describe to the depth needed to document the indicator or or Depth Matrix Redox Features			
(inches) Color (moist) %	Color (moist) % Type¹ Loc.²	Texture Remarks		
0 - 17 10YR3/2 100		loam		
		-		
		-		
¹ Type: C=Concentration, D=Depletion, F	RM=Reduced Matrix, MS=Masked Sand Grains.	² Location: PL=Pore Lining, M=Matrix.		
Hydric Soil Indicators:		Indicators for Problematic Hydric Soils ³ :		
Histosol (A1)	Polyvalue Below Surface (S8) (LRR R,	2 cm Muck (A10) (LRR K, L, MLRA 149B)		
☐ Histic Epipedon (A2)	MLRA 149B)	☐ Coast Prairie Redox (A16) (LRR K, L, R)		
☐ Black Histic (A3)	☐ Thin Dark Surface (S9) (LRR R, MLRA 149B)	☐ 5 cm Mucky Peat or Peat (S3) (LRR K, L, R)		
☐ Hydrogen Sulfide (A4)	Loamy Mucky Mineral (F1) (LRR K, L)	☐ Dark Surface (S7) (LRR K, L)		
☐ Stratified Layers (A5)	Loamy Gleyed Matrix (F2)	Polyvalue Below Surface (S8) (LRR K, L)		
☐ Depleted Below Dark Surface (A11)	Depleted Matrix (F3)	☐ Thin Dark Surface (S9) (LRR K, L)		
☐ Thick Dark Surface (A12)	Redox Dark Surface (F6)	☐ Iron-Manganese Masses (F12) (LRR K, L, R)		
☐ Sandy Mucky Mineral (S1) ☐ Depleted Dark Surface (F7)		☐ Piedmont Floodplain Soils (F19) (MLRA 149B)		
☐ Sandy Gleyed Matrix (S4)	Redox Depressions (F8)	Mesic Spodic (TA6) (MLRA 144A, 145, 149B)		
Sandy Redox (S5)		Red Parent Material (F21)		
Stripped Matrix (S6)		☐ Very Shallow Dark Surface (TF12)		
☐ Dark Surface (S7) (LRR R, MLRA 1498	3)	Other (Explain in Remarks.)		
	,			
³ Indicators of hydrophytic vegetation and	wetland hydrology must be present, unless disturbe	ed or problematic.		
Restrictive Layer (if observed):				
Type:	_			
Depth (inches):	<u> </u>	Hydric Soil Present? ☐ Yes ✓ No		
Remarks: (Include photo numbers here	or on a separate sheet.)			

Project/Site: USH 151/CTH T Overpass	City/County Town of Empire / Fond du Lac Sampling Dat 6/27/2014				
Applicant/Owner: WisDOT	State: WI Sampling Point: A19L				
Investigator(s): Don Brittnacher	Section, Township, Range: Sec. 18, T 15 N, R 18 E				
Landform (hillslope, terrace, etc.): shallow swale	Local relief (concave, convex, none): concave Slope (%):				
Subregion (LRR or MLRA): K / 95A Lat: 43.768911	Long: -88.397465 Datum: WGS 1984				
Soil Map Unit Name: Kewaunee silty clay loam, 2 to 6 percent slopes	s, eNWI Classification:				
Are climatic / hydrologic conditions on the site typical for this time of	year? 🗹 Yes 🗌 No (If no, explain in Remarks.)				
Are Vegetation: ${f ec V}$, Soil ${f ec V}$, or Hydrology ${f \Box}$ significantly disturbed	d? Are "Normal Circumstances" present? ✓ Yes ☐ No				
Are Vegetation: \square , Soil \square , or Hydrology \square naturally problematic	?? (If needed, explain any answers in Remarks.)				
SUMMARY OF FINDINGS - Attach site map showing samp	oling point locations, transects, important features, etc.				
l w:	the Sampled Area Yes No				
Hydric Soil Present?					
Wetland Hydrology Present? ✓ Yes ☐ No If	yes, optional Wetland Site ID:				
Remarks: (Explain alternative procedures here or in a separate repo	ort.)				
Location is in a former pasture. Debris from road shoulder is presen	nt.				
HYDROLOGY					
Wetland Hydrology Indicators:	Secondary Indicators (minimum of two required)				
Primary Indicators (minimum of one is required; check all that apply	∑ Surface Soil Cracks (B6)				
Surface Water (A1) Water-Stained Le	$\dot{}$				
✓ High Water Table (A2) ☐ Aquatic Fauna (B					
✓ Saturation (A3)	·				
Water Marks (B1) Hydrogen Sulfide					
l <u> </u>	heres on Living Roots (C3) Saturation Visible on Aerial Imagery (C9)				
☐ Drift Deposits (B3) ☐ Presence of Redu ☐ Algal Mateur Crust (B4) ☐ Recent Iron Redu	uced Iron (C4)				
☐ Algal Mat or Crust (B4) ☐ Recent Iron Redu☐ Iron Deposits (B5) ☐ Thin Muck Surfac	` '				
☐ Inundation Visible on Aerial Imagery (B7) ☐ Other (Explain in					
Sparsely Vegetated Concave Surface (B8)	FAC-Neutral Test (D5)				
Field Observations:					
Surface Water Present?					
Saturation Present?					
Describe Recorded Data (stream gauge, monitoring well, aerial pho	ntos, previous inspections), if available:				
Remarks:					

% Cover	Species?	Status	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
			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:
0	= Total C	over	OBL species x 1 = FACW species x 2 =
10	X	FAC	FAC species x 3 = FACU species x 4 =
			UPL species x 5 =
			(,
			Prevalence Index = B/A =
			Hydrophytic Vegetation Indicators:
			Rapid Test for Hydrophytic Vegetation
10	= Total Co	ver	✓ Dominance Test is > 50%
70	¥	FΔCW	☐ Prevalence Index is $\leq 3.0^{1}$
			☐ Morphological Adaptations¹ (Provide supporting data in Remarks or on a separate sheet.)
		1 400	Problematic Hydrophytic Vegetation¹ (Explain.)
			¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
			·
			Definitions of Vegetation Strata:
			Tree - Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.
			Sapling/shrub - Woody plants less than 3 in. DBH, and greater than 3.28 ft. (1 m) tall.
			, ,
			Herb - All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft. tall.
100	= Total C	over	Woody Vines - All woody vines greater than 3.28 ft. in height.
			_
			Hydrophytic
			Vegetation ✓ Yes □ No Present?
	= Total C	over	
	10 10 70 15 15	0 = Total Co	0 = Total Cover 10 X FAC 10 = Total Cover 70 X FACW 15 FACU 15 FACU 100 = Total Cover

SOIL Sampling Point: A19L

	scription: (Describe Matrix	e to the	e depth needed to d Re	l ocumen dox Featu		cator or	confirm the abser	nce of indicators.
Depth (inches)	Color (moist)	%	Color (moist)	%	Type ¹	Loc. ²	Texture	Remarks
0 - 6	10YR3/2	50	- Color (moist)	70	Турс		loam	with white pebbles from road
6 - 8.5	10YR3/1	98	10YR4/6	2	С		loam	abouldor
8.5 - 16	7.5YR4/4	85	10YR4/6	5	С	М	clay	_
	10YR6/1	10						
			_	-			-	
			_	-				_
				-				
				-			-	
			_		. ——			_
			_					
				-				
¹Type: C=C	oncentration, D=Deple	etion, R	- M=Reduced Matrix, M	S=Maske	d Sand Gr	ains.	² Location	n: PL=Pore Lining, M=Matrix.
Hydric Soil	Indicators:						Indicators for P	roblematic Hydric Soils³:
Histosol (A1)		☐ Polyvalue Below	Surface (S8) (LRR F	₹,	2 cm Muck (A	10) (LRR K, L, MLRA 149B)
	pedon (A2)		MLRA 149B)	`	, (,		Redox (A16) (LRR K, L, R)
☐ Black His	tic (A3)		☐ Thin Dark Surface (S9) (LRR R, MLRA 149B)			A 149B)	5 cm Mucky P	eat or Peat (S3) (LRR K, L, R)
Hydroger	Sulfide (A4)		Loamy Mucky Mi	ineral (F1)) (LRR K, L	.)	Dark Surface ((S7) (LRR K, L)
☐ Stratified	Layers (A5)		Loamy Gleyed Matrix (F2)				Polyvalue Belo	w Surface (S8) (LRR K, L)
Depleted	Below Dark Surface (A	A11)	☐ Depleted Matrix (F3)				☐ Thin Dark Sur	face (S9) (LRR K, L)
☐ Thick Dar	k Surface (A12)		Redox Dark Surface (F6)				☐ Iron-Mangane	se Masses (F12) (LRR K, L, R)
	ıcky Mineral (S1)		☐ Depleted Dark Surface (F7)					dplain Soils (F19) (MLRA 149B)
	eyed Matrix (S4)		Redox Depressions (F8)					(TA6) (MLRA 144A, 145, 149B)
Sandy Re							✓ Red Parent Ma	• •
	Matrix (S6)							Dark Surface (TF12)
☐ Dark Surf	ace (S7) (LRR R, MLR	A 149B)				Other (Explain	in Remarks.)
³ Indicators o	f hydrophytic vegetation	on and	wetland hydrology mu	st be pres	ent, unles	s disturbe	d or problematic.	
Restrictive	Layer (if observed)):						
Type:			<u> </u>					
Depth (inche	es):		_				Hydric Soil F	Present? ✓ Yes No
Remarks: (I	nclude photo numbers	s here c	or on a separate sheet	.)			· ·	
	·		·					

Project/Site: USH 151/CTH T Overpass	City/County Town of Empire	City/County Town of Empire / Fond du Lac Sampling Dat 6/27/2				
Applicant/Owner: WisDOT	State	State: WI Sampling Point: A19				
Investigator(s): Don Brittnacher	Section, Township, Range:	Sec. 18, T 1	5 N, R 18 E			
Landform (hillslope, terrace, etc.): hillsl	ope	Local relief (concave, conve	x, none): concav	ve Slope (%):		
Subregion (LRR or MLRA): K / 95A	Lat: 43.768	Long: -88.397461		Datum: WGS 1984		
Soil Map Unit Name: Kewaunee silty cla	ay loam, 2 to 6 percent s	lopes, e	NWI Cla	ssification:		
Are climatic / hydrologic conditions on the	ne site typical for this tim	e of year? 🗹 Yes 🗌 No	(If no, explain	in Remarks.)		
Are Vegetation: $lackim J$, Soil \Box , or Hydrol	logy 🗆 significantly disti	urbed? Are "Normal Circumstar	nces" present? 🗸	Yes No		
Are Vegetation: \square , Soil \square , or Hydrol	logy naturally probler	natic? (If needed, explain any	answers in Rema	rks)		
	ogy — Hatarany problem	indie: (If fielded, explain an,	anowers in rema	1101)		
SUMMARY OF FINDINGS - Attach	site map showing s	ampling point locations, transec	ts, important f	eatures, etc.		
Hydrophytic Vegetation Present?	☐ Yes ☑ No	Is the Sampled Area	Yes	✓ No		
Hydric Soil Present?	☐ Yes 🗸 No	Within a Wetland?	165	▼ NO		
Wetland Hydrology Present?	Yes V No	If yes, optional Wetland Site ID:				
Remarks: (Explain alternative procedu	ıres here or in a separate	report.)				
Location is in a former pasture.						
·						
HYDROLOGY						
Wetland Hydrology Indicators:		Secon	dary Indicators (m	ninimum of two required)		
Primary Indicators (minimum of one is	required; check all that	apply)	Surface Soil Crack	(s (B6)		
Surface Water (A1)		ed Leaves (B9)	Drainage Patterns			
☐ High Water Table (A2)	Aquatic Faur	` '	Moss Trim Lines (` '		
Saturation (A3)	☐ Marl Deposit		Dry-Season Wate			
☐ Water Marks (B1)	Hydrogen Su	ılfide Odor (C1)	Crayfish Burrows	(C8)		
☐ Sediment Deposits (B2)	Oxidized Rhi	zospheres on Living Roots (C3)	Saturation Visible	on Aerial Imagery (C9)		
☐ Drift Deposits (B3)	Presence of	Reduced Iron (C4)	Stunted or Stress	ed Plants (D1)		
Algal Mat or Crust (B4)		Reduction in Tilled Soils (C6)	Geomorphic Posit			
Iron Deposits (B5)	Thin Muck S		Shallow Aquitard			
Inundation Visible on Aerial Imager		in in Remarks)	Microtopographic			
Sparsely Vegetated Concave Surfac	e (B8)		FAC-Neutral Test	(D5)		
Field Observations:						
Surface Water Present?	✓ No Depth (inch	es):				
Water Table Present?	✓ No Depth (inch	es):				
Saturation Present? Yes	✓ No Depth (inch	es): Wetland Hy	drology Present	? ☐ Yes 🗸 No		
(includes capillary fringe)		·				
Describe Recorded Data (stream gaug	ne monitoring well serie	photos, previous inspections), if availa	phle:			
Describe Necorded Data (Stream gaug	je, monitoring wen, aena	i priotos, previous irispections), ii availa	ible.			
Remarks:						

Trans Christian Dist Cine.	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet:
<u>Tree Stratum</u> Plot Size:				Number of Dominant Species That Are OBL, FACW, or FAC: 0 (A)
1.				Total Number of Dominant
2. 3.				Species Across All Strata: 2 (B)
4	· ——			Percent of Dominant Species That Are OBL, FACW, or FAC: 0% (A/B)
5				```
	-			Prevalence Index worksheet:
7.				Total % Cover of: Multiply by:
	0	= Total C	over	OBL species x 1 =
Sapling/Shrub Stratum Plot Size:				FACW species x 2 =
1.				FAC species x 3 =
2.				FACU species x 4 =
3.				UPL species x 5 =
4.				Column Totals: (A) (B)
5.				Prevalence Index = B/A =
6.				Hydrophytic Vegetation Indicators:
7				Rapid Test for Hydrophytic Vegetation
	0	= Total Cov	/er	☐ Dominance Test is > 50%
<u>Herb Stratum</u> Plot Size:				☐ Prevalence Index is ≤ 3.0¹
1. poa pratensis	75	X	FACU	☐ Morphological Adaptations¹ (Provide supporting
solidago canadensis	25	X	FACU	data in Remarks or on a separate sheet.)
3				☐ Problematic Hydrophytic Vegetation¹ (Explain.)
4				¹Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
5				must be present, unless disturbed or problematic.
6.	· ——			Definitions of Vegetation Strata:
7.				Tree - Woody plants 3 in. (7.6 cm) or more in diameter
8.				at breast height (DBH), regardless of height.
9.	-			Sapling/shrub - Woody plants less than 3 in. DBH,
10	· ——			and greater than 3.28 ft. (1 m) tall.
11.	- ——			Herb - All herbaceous (non-woody) plants, regardless
12	100	= Total C		of size, and woody plants less than 3.28 ft. tall.
Mandy Vina Stratum Plat Siza	100	= Total C	over	Woody Vines - All woody vines greater than 3.28 ft. in height.
Woody Vine Stratum Plot Size:				neight.
1. 2.				
2	- · · <u>- · · · · · · · · · · · · · · · ·</u>			Hydrophytic
				Vegetation ☐ Yes ✓ No Present?
4	0	= Total C	over	Fresent:
Pomarke: (Include photo numbers here or on a co	parato choo	+ \		<u> </u>
Remarks: (Include photo numbers here or on a se	eparate snee	l.)		

Sampling Point: A19U

SOIL Sampling Point: A19U

Redox Features			
	Texture Remarks		
)	loam		
	clay		
	·		
RM=Reduced Matrix, MS=Masked Sand Grains.	² Location: PL=Pore Lining, M=Matrix.		
	Indicators for Problematic Hydric Soils ³ :		
☐ Polyvalue Below Surface (S8) (LRR R,	☐ 2 cm Muck (A10) (LRR K, L, MLRA 149B)		
MLRA 149B)	Coast Prairie Redox (A16) (LRR K, L, R)		
☐ Thin Dark Surface (S9) (LRR R, MLRA 149B)	5 cm Mucky Peat or Peat (S3) (LRR K, L, R)		
Loamy Mucky Mineral (F1) (LRR K, L)	☐ Dark Surface (S7) (LRR K, L)		
☐ Loamy Gleyed Matrix (F2)	Polyvalue Below Surface (S8) (LRR K, L)		
Depleted Matrix (F3)	☐ Thin Dark Surface (S9) (LRR K, L)		
Redox Dark Surface (F6)	☐ Iron-Manganese Masses (F12) (LRR K, L, R)		
	☐ Piedmont Floodplain Soils (F19) (MLRA 149B☐ Mesic Spodic (TA6) (MLRA 144A, 145, 149B)		
_ , , ,	Red Parent Material (F21)		
	☐ Very Shallow Dark Surface (TF12)		
B)	Other (Explain in Remarks.)		
,			
d wetland hydrology must be present, unless disturbe	ed or problematic.		
<u> </u>			
<u> </u>	Hydric Soil Present? ☐ Yes ✓ No		
or on a separate sheet.)			
,			
	Color (moist) % Type¹ Loc.² RM=Reduced Matrix, MS=Masked Sand Grains. Polyvalue Below Surface (S8) (LRR R, MLRA 149B) Thin Dark Surface (S9) (LRR R, MLRA 149B) Loamy Mucky Mineral (F1) (LRR K, L) Loamy Gleyed Matrix (F2) Depleted Matrix (F3) Redox Dark Surface (F6) Depleted Dark Surface (F7) Redox Depressions (F8)		

Project/Site: USH 151/CTH T Overpass	City/County Town of Empire / Fond du Lac Sampling Dat 6/27/2014				
Applicant/Owner: WisDOT	State: WI Sampling Point: A20L				
Investigator(s): Don Brittnacher	Section, Township, Range: Sec. 18, T 15 N, R 18 E				
Landform (hillslope, terrace, etc.): shallow swale	Local relief (concave, convex, none): concave Slope (%):				
Subregion (LRR or MLRA): K / 95A Lat: 43.768894	Long: -88.397266 Datum: WGS 1984				
Soil Map Unit Name: Kewaunee silty clay loam, 2 to 6 percent slopes	s, e NWI Classification:				
Are climatic / hydrologic conditions on the site typical for this time of y	year? 🗹 Yes 🗌 No (If no, explain in Remarks.)				
Are Vegetation: $lackim Q$, Soil $lackim$, or Hydrology $lackim$ significantly disturbed	l? Are "Normal Circumstances" present? ✓ Yes ☐ No				
Are Vegetation: \square , Soil \square , or Hydrology \square naturally problematic?	? (If needed, explain any answers in Remarks.)				
SUMMARY OF FINDINGS - Attach site map showing samp	ling point locations, transects, important features, etc.				
	the Sampled Area				
Hydric Soil Present? ✓ Yes ☐ No Wit	thin a Wetland?				
Wetland Hydrology Present? ✓ Yes ☐ No If y	yes, optional Wetland Site ID:				
Remarks: (Explain alternative procedures here or in a separate repo	ort.)				
Location is in a former pasture.					
HYDROLOGY					
	Consordery Indicators (asining use of two vaccined)				
Wetland Hydrology Indicators:	Secondary Indicators (minimum of two required)				
Primary Indicators (minimum of one is required; check all that apply	Surface Soil Cracks (Bb)				
Surface Water (A1) Water-Stained Lea					
☐ High Water Table (A2) ☐ Aquatic Fauna (B1					
Saturation (A3) Marl Deposits (B1	<u> </u>				
Water Marks (B1)					
	heres on Living Roots (C3) Saturation Visible on Aerial Imagery (C9)				
□ Drift Deposits (B3) □ Presence of Redu					
☐ Algal Mat or Crust (B4) ☐ Recent Iron Redu ☐ Iron Deposits (B5) ☐ Thin Muck Surface	iction in Tilled Soils (C6)				
☐ Inundation Visible on Aerial Imagery (B7) ☐ Other (Explain in					
Sparsely Vegetated Concave Surface (B8)	✓ FAC-Neutral Test (D5)				
	• TAC Neutral Test (D3)				
Field Observations:					
Surface Water Present?					
Water Table Present?					
Saturation Present? Yes V No Depth (inches): (includes capillary fringe)	Wetland Hydrology Present? ✓ Yes No				
Describe Recorded Data (stream gauge, monitoring well, aerial phot	tos, previous inspections), if available:				
Remarks:					

T 0	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet:		
Tree Stratum Plot Size: 1	<u></u>	<u> </u>	Otatus	Number of Dominant Species That Are OBL, FACW, or FAC: 2 (A)		
2.				Total Number of Dominant Species Across All Strata: 3 (B)		
3. 4				Percent of Dominant Species That Are OBL, FACW, or FAC: 67% (A/B)		
5.				Prevalence Index worksheet:		
6.						
7.				Total % Cover of: Multiply by: OBL species x 1 =		
	0	= Total C	Cover	OBL species x 1 = FACW species x 2 =		
Sapling/Shrub Stratum Plot Size:		.,				
salix exigua (interior)	10	X	FACW	FAC species		
2				· 		
3.				. · 		
4.				Column Totals: (A) (B)		
5				Prevalence Index = B/A =		
6				Hydrophytic Vegetation Indicators:		
7.				Rapid Test for Hydrophytic Vegetation		
	10	= Total Co	ver	✓ Dominance Test is > 50%		
Herb Stratum Plot Size:				☐ Prevalence Index is $\leq 3.0^{1}$		
phalaris arundinacea	50	<u>X</u>	FACW	☐ Morphological Adaptations¹ (Provide supporting		
2. poa pratensis		<u> </u>	FACU	data in Remarks or on a separate sheet.)		
3. solidago gigantea	10		FACW	Problematic Hydrophytic Vegetation¹ (Explain.)		
4. typha latifolia	10		OBL	 Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic. 		
5.				must be present, unless disturbed or problematic.		
6.				Definitions of Vegetation Strata:		
7.						
8.				Tree - Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.		
9	<u></u>			Sapling/shrub - Woody plants less than 3 in. DBH,		
10				and greater than 3.28 ft. (1 m) tall.		
11				Herb - All herbaceous (non-woody) plants, regardless		
12				of size, and woody plants less than 3.28 ft. tall.		
	90	= Total C	Cover	Woody Vines - All woody vines greater than 3.28 ft. in		
Woody Vine Stratum Plot Size:				height.		
1						
2				l		
3.				Hydrophytic Vegetation V _{Yes} No		
4				Present?		
4		= Total C	:over			

SOIL Sampling Point: A20L

Depth	Matrix			dox Featu					
(inches) 0 - 4	Color (moist) 10YR3/2	100	Color (moist)	%	Type ¹	Loc. ²	Texture Remarks		
4 - 8	10YR3/2	95	10YR4/6	 5					
							loam		
8 - 14	7.5YR4/4	85	10YR4/6	5	C	M	clay		
	10YR6/1	10	_	-			clay		
14 - 17	7.5YR4/4	100	_						
						_			
		-	_	. ———					
				. ———					
Type: C=Co	ncentration, D=Depl	etion, R	M=Reduced Matrix, M	S=Maske	d Sand Gr	ains.	² Location: PL=	Pore Lining, M=Matrix.	
lydric Soil	Indicators:						Indicators for Problem	matic Hydric Soils³:	
Histosol (A	\1)		Polyvalue Below	Surface (S8) (LRR F	₹,	2 cm Muck (A10) (L	RR K, L, MLRA 149B)	
Histic Epip	edon (A2)		MLRA 149B)				Coast Prairie Redox	(A16) (LRR K, L, R)	
Black Histi		☐ Thin Dark Surface (S9) (LRR R, MLRA 149B)				Peat (S3) (LRR K, L, R)			
_	Sulfide (A4)	Loamy Mucky Mineral (F1) (LRR K, L)			Dark Surface (S7) (L				
_	Layers (A5)		Loamy Gleyed M				Polyvalue Below Sur		
_	Below Dark Surface (A11)	Depleted Matrix				☐ Thin Dark Surface (S	, , , ,	
	Surface (A12)		Redox Dark Surf		7)			sses (F12) (LRR K, L, R)	
•	cky Mineral (S1)		☐ Depleted Dark S		/)			Soils (F19) (MLRA 149B)	
Sandy Gle	yed Matrix (S4)		Redox Depression	nis (ro)			✓ Red Parent Material	(MLRA 144A, 145, 149B)	
Stripped N							□ Very Shallow Dark Surface (TF12)		
	ace (S7) (LRR R, MLF	RA 149B)				Other (Explain in Remarks.)		
	() (,		,					,	
Indicators of	hydrophytic vegetati	ion and	wetland hydrology mu	st be pres	sent, unles	s disturbe	d or problematic.		
Restrictive	Layer (if observed):							
ype:			_						
epth (inche	s):		_				Hydric Soil Preser	nt? 🗸 Yes 🗌 No	
Remarks: (Ir	nclude photo number	s here c	or on a separate sheet	.)					
	iolado prioto rialillos.	0 1.0.0	on a soparate onest	•,					

T 0: 1 D: 10:	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet:		
Tree Stratum Plot Size: 1		Ореспес :	Otatas	Number of Dominant Species That Are OBL, FACW, or FAC:	1 (A)	
2.				Total Number of Dominant Species Across All Strata:	2 (B)	
4				Percent of Dominant Species That Are OBL, FACW, or FAC: 50%	(A/B)	
5				Prevalence Index worksheet:		
6				Total % Cover of: Multiply	hv:	
7				OBL species 0 $x = 75$		
Sapling/Shrub Stratum Plot Size:	0	= Total C	over	FACW species 75 x 2 = 15		
				FAC species 0 x 3 = 0		
				FACU species 25 x 4 = 10	00	
				UPL species 0 x 5 = 0		
1				Column Totals: 100 (A) 25	50 (B)	
5.				Prevalence Index = B/A =	2.5	
5.				Hydrophytic Vegetation Indicators:		
7				Rapid Test for Hydrophytic Vegetation	1	
	0	= Total Co	ver	Dominance Test is > 50%		
Herb Stratum Plot Size:				✓ Prevalence Index is ≤ 3.0¹		
1. phalaris arundinacea	75	X	FACW	→ Morphological Adaptations¹ (Provide supporting		
2. solidago canadensis	25	X	FACU	data in Remarks or on a separate sheet.)		
3.				Problematic Hydrophytic Vegetation¹ (Explain.)		
4				¹Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.		
5.				must be present, amos distarbed or pre	oicinatio.	
5. 7.				Definitions of Vegetation Strata:		
3.				Tree - Woody plants 3 in. (7.6 cm) or mo at breast height (DBH), regardless of hei		
9. 10.				Sapling/shrub - Woody plants less than 3 and greater than 3.28 ft. (1 m) tall.	in. DBH,	
11.						
2.				Herb - All herbaceous (non-woody) plant of size, and woody plants less than 3.28		
	100	= Total C	over	Woody Vines - All woody vines greater th		
Woody Vine Stratum Plot Size:				height.		
ı						
2				Huduanhudia		
3.				Hydrophytic Vegetation ✓ Yes No		
4.				Present?		
·	0	= Total C	over			

SOIL Sampling Point: A20U

Profile Description: (Describe to Depth Matrix	confirm the absence of	of indicators.			
(inches) Color (moist) %	Color (moist) %	Type¹ Loc.²	Texture	Remarks	
0 - 8 10YR3/2 10		71-	loam		
8 - 18 7.5YR4/4 10	00		clay		
	 -				
					
					
¹ Type: C=Concentration, D=Depletion	, RM=Reduced Matrix, MS=Masked	Sand Grains.	² Location: PL=	Pore Lining, M=Matrix.	
Hydric Soil Indicators:			Indicators for Problem	natic Hydric Soils³:	
Histosol (A1)	Polyvalue Below Surface (S	8) (LRR R,	☐ 2 cm Muck (A10) (LF	RR K, L, MLRA 149B)	
☐ Histic Epipedon (A2)	MLRA 149B)		Coast Prairie Redox ((A16) (LRR K, L, R)	
☐ Black Histic (A3)	☐ Thin Dark Surface (S9) (LR	R R, MLRA 149B)	5 cm Mucky Peat or	Peat (S3) (LRR K, L, R)	
☐ Hydrogen Sulfide (A4)	Loamy Mucky Mineral (F1)	(LRR K, L)	☐ Dark Surface (S7) (L	RR K, L)	
Stratified Layers (A5)	Loamy Gleyed Matrix (F2)		Polyvalue Below Surf	face (S8) (LRR K, L)	
☐ Depleted Below Dark Surface (A11)	Depleted Matrix (F3)		☐ Thin Dark Surface (S	9) (LRR K, L)	
☐ Thick Dark Surface (A12)	Redox Dark Surface (F6)		☐ Iron-Manganese Mas	sses (F12) (LRR K, L, R)	
☐ Sandy Mucky Mineral (S1)	☐ Depleted Dark Surface (F7))	☐ Piedmont Floodplain	Soils (F19) (MLRA 149B)	
Sandy Gleyed Matrix (S4)	Redox Depressions (F8)		☐ Mesic Spodic (TA6) (MLRA 144A, 145, 149B)	
Sandy Redox (S5)			Red Parent Material	(F21)	
Stripped Matrix (S6)			☐ Very Shallow Dark Surface (TF12)		
☐ Dark Surface (S7) (LRR R, MLRA 14	9B)		Other (Explain in Re	marks.)	
³ Indicators of hydrophytic vegetation a	nd wetland hydrology must be prese	ent, unless disturbe	d or problematic.		
Restrictive Layer (if observed):					
Type:					
Depth (inches):			Hydric Soil Presen	t? Yes 🗸 No	
Remarks: (Include photo numbers her	o or on a concrete about \				
nemarks. (include photo numbers her	e or on a separate sneet.)				