## WETLAND DETERMINATION DATA FORM Great Plains Region

Project/Site:		L3R								Date:	06/26/14
Applicant:		Enbridge							County:	Marshall	
Investigators	5:	KRG/NTT			Subregior	n (MLRA	or LRR):	MLRA 56		State:	MN
Soil Unit:	I133A					•	I Classification:				
Landform:	Shoulder			Lo	cal Relief:	VL				Sample Point	: u-158n48w23-b1
Slope (%):	8 - 15%		Latitude: 48.485		Longitude:		478	Datum:			
					¥			☑ Yes	□ No	Section:	
Are climatic/hydrologic conditions on the site typical for this time of year? (If no, explain in remarks) Image: Yes No Section:   Are Vegetation Image: Soil											
•							☑ Yes			Range:	Dir:
	Are Vegetation										
			No								etland? <b>No</b>
			No	laida ditab a	nd adia aa	nt to on				nt Within A W	
Remarks:	i ne upland	point is located up	slope of a road	iside ditch a	ind adjace	nt to an	agricultural field	a. vegetatio	on is a mix c	of grasses an	a weedy forbs.
HYDROLOG	Y										
Wetland Hy	drology Ind	icators (Check all	that apply: Min	imum of on	e primary	or two se	econdary requir	ed):			
Primary	•••	(	11.27				, , ,		Secondary:	:	
	A1 - Surface	Water			B11 - Salt (	Crust				B6 - Surface S	Soil Cracks
□ A2 - High Water Table □ B13 - Aquatic Fauna □ B8 - Sparsely Vegetated Concave Surface											
	□ A3 - Saturation □ C1 - Hydrogen Sulfide Odor □ B10 - Drainage Patterns										
	B1 - Water M				C2 - Dry Se						Rhizospheres on Living Roots (tilled)
	B2 - Sedimen	•					spheres on Living I	Roots (not tille	• •	C8 - Crayfish I	
	B3 - Drift Dep				C4 - Prese						n Visible on Aerial Imagery
	B4 - Algal Ma				C7 - Thin M		ace		L L	D2 - Geomorp D5 - FAC-Neu	
	B5 - Iron Dep	on Visible on Aerial Ima			Other (Expl	iain)					aved Hummocks (LRR F)
	B9 - Water-S		agery								aved Hummocks (LKK F)
Field Obser	vations										
		× –			(:						
Surface Wat			Depth:		(in.)			Wetland H	lydrology l	Present?	Ν
Water Table		Yes 🗆	Depth:		(in.)				,		
Saturation Present? Yes Depth: (in.)											
Describe Rec	orded Data (s	stream gauge, monit	oring well, aeria	al photos, pre	evious insp	ections).	if available:				
Remarks:		rs of wetland hydro	-								
Remarks.		is of wettand hydro	logy were obse								
SOILS											
	intion (Decor	be to the depth pe	adad ta dagum	ont the indi	actor or or	opfirm th	a absonce of in	dicatore)			
		be to the depth ne									
(Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered/Coated Sand Grains; Location: PL=Pore Lining, M=Matrix)											
Natrix Natria											
		Matrix			4 - 1 - 1)	Mottle					Demost
Depth (In.)		Color (Moist)	%	Color (I	vioist)	%	Туре	Location	Texture		Remarks
		· · · · /									
0-18	Hue_10YR	· · · · /	100						C		
	Hue_10YR	· · · · /									
	Hue_10YR	· · · · /									
	Hue_10YR	· · · · /									
	Hue_10YR	· · · · /									

NPCS Hydric Soil Field Indicators (check here if indicators are not present).

NRCS Hydr	ic Soil Field Indicators (check here	e if indicators are not present):	
_			Indicators for Problematic Soils <sup>1</sup>
	A1- Histosol	S5 - Sandy Redox	A9 - 1 cm Muck (LRR I, J)
	A2 - Histic Epipedon	S6 - Stripped Matrix	A16 - Cost Prairie Redox (LRR F, G, H)
	A3 - Black Histic	F1 - Loamy Mucky Mineral	S7 - Dark Surface (LRR G)
	A4 - Hydrogen Sulfide	F2 - Loamy Gleyed Matrix	□ F16 - High Plains Depressions (LRR H, outisde MLRA 72, 73)
	A5 - Stratified Layers (LRR F)	F3 - Depleted Matrix	□ F18 - Reduced Vertic
	A9 - 1 cm Muck (LRR FGH)	F6 - Redox Dark Surface	TF2 - Red Parent Material
	A11 - Depleted Below Dark Surface	F7 - Depleted Dark Surface	TF12 - Very Shallow Dark Surface
	A12 - Thick Dark Surface	□ F8 - Redox Depressions	Other (Explain in Remarks)
	S1 - Sandy Mucky Mineral	F16 - High Plains Depressions (MI)	ILRA 72, 73 of LRR H)
	S2 - 2.5 cm Mucky Peat or Peat (LRR G, H)		
	S3 - 5 cm Mucky Peat or Peat (LRR F)		<sup>1</sup> Indicators of hydrophytic vegetation and wetland hydrology must be present,
	S4 - Sandy Gleyed Matrix		unless disturbed or problematic.
Restrictive Layer	Туре:	Depth:	Hydric Soil Present? N
Remarks:	Soil is a black clay through the entire p	profile. No hydric soil indicators obse	erved.
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Project/Site:	e: L3R				Sample Point: u-158n48w23-b1			
VEGETATIO		e non-native	species.)					
Tree Stratum	(Plot size: 30 ft. radius) Species Name	<u>% Cover</u>	Dominant	Ind.Status	Dominance Test Worksheet			
1.	Species Maine	<u>% Cover</u>	Dominant	<u>mu.status</u>				
2.	1				Number of Dominant Species that are OBL, FACW, or FAC: 0 (A)			
3.								
<u>4.</u>					Total Number of Dominant Species Across All Strata: 2 (B)			
5.								
6.					Percent of Dominant Species That Are OBL, FACW, or FAC: 0.0% (A/B)			
7.								
8.					Prevalence Index Worksheet			
9.					Total % Cover of: Multiply by:			
10.					$OBL spp. \qquad 0 \qquad x \ 1 = \qquad 0$			
	Total Cover =	0			FACW spp. 0 $x 2 = 0$			
					OBL spp. 0 x 1 = 0   FACW spp. 0 x 2 = 0   FAC spp. 15 x 3 = 45   FACU spp. 95 x 4 = 380			
Sapling/Shrub	Stratum (Plot size: 15 ft. radius)				FACU spp. 95 x 4 = $380$			
1.					UPL spp. 0 $x 5 = 0$			
2.								
3.					Total 110 (A) 425 (B)			
4.								
5.					Prevalence Index = B/A = 3.864			
6.								
7.								
8.					Hydrophytic Vegetation Indicators:			
	-							
9.					Rapid Test for Hydrophytic Vegetation			
10.	Total Cover				Dominance Test is > 50%			
	Total Cover =	0			Prevalence Index is ≤ 3.0 *			
					Morphological Adaptations (Explain) *			
Herb Stratum /	(Plot size: 5 ft. radius)				Problem Hydrophytic Vegetation (Explain) *			
1.	Elymus repens	50	Y	FACU				
2.	Taraxacum officinale	25	Y	FACU	* Indicators of hydric soil and wetland hydrology must be			
3.	Sonchus arvensis	10	Ν	FAC	present, unless disturbed or problematic.			
4.	Melilotus officinalis	10	Ν	FACU	Definitions of Vegetation Strata:			
5.	Cirsium arvense	5	Ν	FACU	1 -			
6	Rumex crispus	5	Ν	FAC	<b>Tree -</b> Woody plants 3 in. (7.6cm) or more in diameter at breast			
7.	Fallopia convolvulus	5	N	FACU	height (DBH), regardless of height.			
8.				17.00	4			
9.	1				Sapling/Shrub - Woody plants less than 3 in. DBH, regardless of height.			
	-							
10.					4			
11.								
12.					<b>Herb</b> - All herbaceous (non-woody) plants, regardless of size.			
13.								
14.								
15.					Woody Vines - All woody vines, regardless of height.			
	Total Cover =	110			1			
			-					
Woody Vine S	Stratum (Plot size: 30 ft. radius)							
1.								
2.	-							
3.					Hydrophytic Vegetation Present? N			
5.								
4.								
<u>−</u> −.	Total Cover =	0						
Bomarka			torh and					
Remarks:	Vegetation is dominated by wild rye with a mi	IX OF weeu	y torn sher	cies.				
Additional F	Remarks:							