WETLAND DETERMINATION DATA FORM Great Plains Region

Project/Site:		L3R								Date:	08/20/14	
Applicant:		Enbridge			0 1 1	(A 41 D 4				County:	Marshall	
Investigators		BEH/RAJ			Subregio	•	A or LRR):	MLRA 56		State:	MN	
Soil Unit:	116F				a a a l. D a li a fa		I Classification:				4574740.64	
Landform:	Talf 0 - 2%		Latitude: 48.4		ocal Relief:		04475	Datum		Sample Point:	u-157n47w16-f1	
Slope (%):		onditions on the site			Longitude:			Datum: ☑ Yes	□ No	Section:		
Are Vegetation				ly disturbed?			e normal circum			Township:		
Are Vegetation		l □, or Hydrology	□aturally p	•			e normal circuit ☑ Yes		536111:	Range:	Dir:	
SUMMARY (Hatarany p	obiematie:			E 163	- 110		range.	DII.	
Hydrophytic '			No					Hydric Soil	ls Present?	No		
Wetland Hyd	•		No		_					t Within A W	etland? No	
Remarks:				guack grass	and smooth	n brome.	The site is in the					
Remarks: The upland sample point is dominated by quack grass and smooth brome. The site is in the corner of the field near an oxbow channel.												
HYDROLOG	Υ											
		icators (Check all	that apply: I	Minimum of o	ne nrimary	or two s	econdary requi	red):				
Primary	•	icators (Check all	ιπαι αρριγ, ι	viii iii ii di ti	nie primary	OI TWO S	econdary requi	eu).	Secondary:			
<u> </u>	A1 - Surface	Water			B11 - Salt	Crust				B6 - Surface S	oil Cracks	
	A2 - High Wa				B13 - Aqua						Vegetated Concave Surfa	ace
	A3 - Saturation				C1 - Hydro					B10 - Drainage		5
	B1 - Water M B2 - Sedimer				C2 - Dry S		ater Table spheres on Living	Poots (not till	, –	C3 - Oxidized C8 - Crayfish E	Rhizospheres on Living F	Roots (tilled)
	B3 - Drift Dep	•					educed Iron	Noots (not till	, –		n Visible on Aerial Image	rv
	B4 - Algal Ma				C7 - Thin N				_	D2 - Geomorp		. ,
	B5 - Iron Dep				Other (Exp	olain)				D5 - FAC-Neu		
		on Visible on Aerial Im	agery							D7 - Frost-Hea	aved Hummocks (LRR F))
	B9 - water-S	tained Leaves										
Field Obser	vations:											
		Vaa 👨	Dan	4h.	(in)							
Surface Wat		Yes □ Yes □		th: th:	_ (in.)			Wetland H	lydrology	Present?	N	
Water Table			•	th: th:	_ (in.)						—	
					- `` :							
	·	stream gauge, moni			<u>.</u>	pections),	l , if available:					
Describe Rec Remarks:	·	stream gauge, monitor or secondary hydro			<u>.</u>	pections),	, if available:					
Remarks:	·				<u>.</u>	pections),	, if available:					
Remarks:	No primary	or secondary hydro	ological indi	cators were o	bserved.	,		adicators)				
Remarks: SOILS Profile Descri	No primary	or secondary hydro	ological indi	cators were o	bserved.	onfirm th	e absence of in					
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Remarks: SOILS Profile Descri	No primary	or secondary hydro	ological indi	cators were o	bbserved.	onfirm th	ne absence of in Pore Lining, M=Matr					
Remarks: SOILS Profile Descri (Type: C=Concer	No primary	or secondary hydro ibe to the depth ne- letion, RM=Reduced Ma	ological indi	ument the incred/Coated Sand	bbserved.	onfirm th	ne absence of in Pore Lining, M=Matr		Texture		Remarks	
Remarks: SOILS Profile Descri	No primary	or secondary hydro ibe to the depth ne- letion, RM=Reduced Ma Matrix Color (Moist)	eded to doc atrix, CS=Cove	ument the incred/Coated Sand	bbserved. dicator or co	onfirm th tion: PL=P Mottl	ne absence of in Pore Lining, M=Matr	ix)	Texture		Remarks	
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Remarks: SOILS Profile Descri (Type: C=Concer Depth (In.) 0-21	No primary iption (Description, D=Dep	or secondary hydro ibe to the depth neletion, RM=Reduced Ma Matrix Color (Moist) 2/1	eded to doc atrix, CS=Cove	ument the incored/Coated Sand	dicator or co	onfirm th tion: PL=P	ne absence of in Pore Lining, M=Matr	ix)	+		Remarks	
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Remarks: SOILS Profile Descri (Type: C=Concer Depth (In.) 0-21 NRCS Hydr	No primary iption (Description, D=Dep Hue_10YR A1- Histosol A2 - Histic Ep	or secondary hydro ibe to the depth nedetion, RM=Reduced Marix Matrix Color (Moist) 2/1 I Indicators (chappipedon	eded to doc atrix, CS=Cove	cators were comment the incomment the incomm	dicator or condicator or condi	Mottl %	e absence of in Pore Lining, M=Matr	Location	Indicators f A9 - 1 cm M A16 - Coast	luck (LRR I, J) Prairie Redox (c Soils ¹	
Remarks: SOILS Profile Descri (Type: C=Concer Depth (In.) 0-21 NRCS Hydr	No primary iption (Description, D=Dep Hue_10YR A1- Histosol A2 - Histic Ep A3 - Black Hi	or secondary hydro ibe to the depth nedetion, RM=Reduced Matrix Color (Moist) 2/1 Indicators (chapping and properties)	eded to doc atrix, CS=Cove	cators were comment the incomment the incomm	cobserved. dicator or condicator or condicator or condicator or condicator or condicator. (Moist) (Moist) not present condicator. Redox and Matrix Mucky Miner	mottl Mottl % tion: PL=P	e absence of in Pore Lining, M=Matr	Location	Indicators f A9 - 1 cm M A16 - Coast S7 - Dark S	luck (LRR I, J) Prairie Redox (urface (LRR G)	<mark>: Soils¹</mark> (LRR F, G, H)	
Remarks: SOILS Profile Descrication (Type: C=Concert) Depth (In.) 0-21 NRCS Hydr	No primary iption (Description, D=Dep Hue_10YR A1- Histosol A2 - Histic Ep A3 - Black Hi A4 - Hydroge	or secondary hydro ibe to the depth nedetion, RM=Reduced Marix Color (Moist) 2/1 I Indicators (chappedonestic en Sulfide	eded to docatrix, CS=Cove	cators were comment the incomment the incomm	mot presented Matrix Mucky Miner Gleyed Matrix	mottl Mottl % tion: PL=P	e absence of in Pore Lining, M=Matr	Location	Indicators f A9 - 1 cm M A16 - Coast S7 - Dark S6 F16 - High F	luck (LRR I, J) Prairie Redox (urface (LRR G) Plains Depressio	c Soils ¹	
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Remarks: SOILS Profile Descrication (Type: C=Concert) Depth (In.) 0-21 NRCS Hydr	Hue_10YR A1- Histosol A2 - Histic Ep A3 - Black Hi A4 - Hydroge A5 - Stratified A9 - 1 cm Mu	or secondary hydro ibe to the depth nedetion, RM=Reduced Marix Color (Moist) 2/1 I Indicators (chappedonestic en Sulfide	eded to docatrix, CS=Cove	cators were comment the incred/Coated Sand Color Color S5 - Sandy S6 - Strippe F1 - Loamy F2 - Loamy F3 - Deplete F6 - Redox	mot presented Matrix Mucky Miner Gleyed Matrix	onfirm the tion: PL=P Mottl % t):	e absence of in Pore Lining, M=Matr	Location	Indicators f A9 - 1 cm M A16 - Coast S7 - Dark Si F16 - High F F18 - Reduct TF2 - Red P	luck (LRR I, J) Prairie Redox (urface (LRR G) Plains Depressio	E Soils ¹ (LRR F, G, H) ONS (LRR H, outside MLRA 72, 73)	
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WETLAND DETERMINATION DATA FORM Great Plains Region

Project/Site:	L3R				Sample Point: u-157n47w16-f1
VEGETATION	(Species identified in all uppercase ar	e non-native	species.)		
Tree Stratum (Plot size: 30 ft. radius)				
	<u>Species Name</u>	% Cover	<u>Dominant</u>	Ind.Status	Dominance Test Worksheet
1.					
2.					Number of Dominant Species that are OBL, FACW, or FAC:(A)
3.					
4.					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. 0
	Total Cover =	0			FACW spp. 5 $X 2 = 10$
					FAC spp. 15 $x 3 = 45$
Sapling/Shrub S	Stratum (Plot size: 15 ft. radius)				FACU spp. 55 $x 4 = 220$
1.					UPL spp. 35 $x 5 = 175$
2.					
3.					Total 110 (A) 450 (B)
4.					
5.					Prevalence Index = $B/A = 4.091$
6.					
7.					
8.					Hydrophytic Vegetation Indicators:
9.					Rapid Test for Hydrophytic Vegetation
10.	i a a a a a a a a a a a a a a a a a a a				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	55	Υ	FACU	
2.	Bromus inermis	35	Y	UPL	* Indicators of hydric soil and wetland hydrology must be
3.	Solidago gigantea	10	<u>.</u> N	FAC	present, unless disturbed or problematic.
4.	Poa palustris	5	N	FACW	Definitions of Vegetation Strata:
5.	Urtica dioica	5	N	FAC	_ Definitions of Vegetation offata.
6	Ortica dioica			1710	Tree - Woody plants 2 in (7 Cam) or more in diameter at breast
7.					Tree - Woody plants 3 in. (7.6cm) or more in diameter at breast height (DBH), regardless of height.
8.					
					Sapling/Shrub - Woody plants less than 3 in. DBH, regardless of height.
9.					Sapinig/Siliub - Woody plants less than 5 m. DBH, regardless of height.
10.					
11.					I I a via All borboscous (non woody) plants, regardless of size
12.					Herb - All herbaceous (non-woody) plants, regardless of size.
13.					
14.					All and the second seco
15.					Woody Vines - All woody vines, regardless of height.
	Total Cover =	110			
Woody Vine Sti	ratum (Plot size: 30 ft. radius)				
1.					
2.					
3.					Hydrophytic Vegetation Present? N
5.					
4.					
	Total Cover =				
Remarks:	The sample site is dominated by quack gras	s and smo	oth brome		
Additional R	emarks:				