WETLAND DETERMINATION DATA FORM Great Plains Region

Project/Site:		L3R								Date: <u>08/21/14</u>								
Applicant:		Enbridge								County: <u>Marshall</u>								
Investigators:		BEH/RAJ			_Subregion	•	•	MLRA 56		State: MN								
Soil Unit:	124A				15 " ()		Classification:			450.40.04.14								
Landform:	Crest		- (to all - 40 (cal Relief: \		E4046E	Datum		Sample Point: u-156n46w21-d1								
Slope (%):	3 - 7%	ـــــــــــــــــــــــــــــــــــــ	Latitude: 48.3		Longitude: -			Datum:	□ No	Continu								
					ai (if no, expla					Section:								
Are Vegetation Are Vegetation		□, or Hydrology □, or Hydrology	•	•		Ale	normal circum ☑ Yes	Biances pre □ No	esent?	Township: Range: Dir:								
SUMMARY O			Haturally pi	oblematic:			<u> </u>	□ 140		Range: Dir:								
Hydrophytic \			No					Hydric Soi	ls Present?	2 No								
Wetland Hyd	_		No No		_					nt Within A Wetland? No								
Remarks:				smooth brome	e and Kentuc	cky blue	egrass located			en a roadside ditch wetland and a separate								
- Komano.	•	ne west. The hill ma	•			•		•		ara readered anon wenteria and a coparate								
HYDROLOGY		TO WOOL THO THE THE	ay nave bec	on ordated by	artori opolio	or laria	owner aneraner	"										
		leetere (Chook all t	bot opply N	Ainimum of on		r tuo 00		o d\.										
Primary:	•	cators (Check all t	nat apply; i	viinimum of or	ne primary o	r two se	econdary requir	ea):	Socondary									
		Nater		П	B11 - Salt Cr	rust			Secondary	<u>·</u> B6 - Surface Soil Cracks								
	A2 - High Wat				B13 - Aquation					B8 - Sparsely Vegetated Concave Surface								
	A3 - Saturatio				C1 - Hydroge				B10 - Drainage Patterns									
	B1 - Water Ma				C2 - Dry Sea			Dooto (not till		C3 - Oxidized Rhizospheres on Living Roots (tilled)								
	B2 - Sedimen B3 - Drift Dep	•			C3 - Oxidized		pheres on Living	Roots (not till		C8 - Crayfish Burrows C9 - Saturation Visible on Aerial Imagery								
	B4 - Algal Mat				C7 - Thin Mu				_	D2 - Geomorphic Position								
	B5 - Iron Dep	osits			Other (Expla	iin)				D5 - FAC-Neutral Test								
		n Visible on Aerial Ima	igery							D7 - Frost-Heaved Hummocks (LRR F)								
	B9 - Water-St	ained Leaves																
Field Observ	vations:																	
Surface Water		Voc. □	Don	th	(in)													
Water Table		Yes □ Yes □	Dep Dep		_ (in.) _ (in.)			Wetland F	lydrology	Present? N								
Saturation Pr		Yes	Dep Dep		- (in.) (in.)													
			<u> </u>															
	•				<u>.</u>	ctions),	Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:											
Remarks: No primary or secondary hydrological indicators were observed.																		
SOILS	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	or secondary riyuro	nogical indic	cators were or	oserved.													
SOILS Profile Descri	, ,					nfirm the	e absence of in	dicators.)										
Profile Descri	ption (Descri	be to the depth nee	eded to doc	ument the indi	cator or con													
Profile Descri	ption (Descri	be to the depth nee	eded to doc	ument the indi	cator or con													
Profile Descri	ption (Descri	be to the depth nee	eded to doc	ument the indi	cator or con		ore Lining, M=Matri											
Profile Descri	ption (Descri	be to the depth nee etion, RM=Reduced Mat	eded to doc	ument the indi red/Coated Sand	cator or con Grains; Locatio	on: PL=Po	ore Lining, M=Matri		Texture	Remarks								
Profile Descri (Type: C=Concen	ption (Descri	be to the depth nee etion, RM=Reduced Mat Matrix Color (Moist)	eded to doc rix, CS=Cover	ument the indired/Coated Sand	cator or con Grains; Locatio	on: PL=Po	ore Lining, M=Matri	(x)	Texture L	Remarks								
Profile Descrip (Type: C=Concent Depth (In.)	ption (Descri	be to the depth nee etion, RM=Reduced Mat Matrix Color (Moist)	eded to doc crix, CS=Cover	ument the indired/Coated Sand Color (cator or con Grains; Locatio	on: PL=Po	ore Lining, M=Matri	(x)	Texture L COS	Remarks Minor gravel fragments								
Profile Descrip (Type: C=Concent Depth (In.)	ption (Descri tration, D=Deple Hue_10YR	be to the depth nee etion, RM=Reduced Mat Matrix Color (Moist) 2/1	eded to docurix, CS=Cover	ument the indired/Coated Sand Color (cator or con Grains; Locatio	on: PL=Po	ore Lining, M=Matri	(x)	L									
Profile Descrip (Type: C=Concent Depth (In.)	ption (Descri tration, D=Deple Hue_10YR	be to the depth nee etion, RM=Reduced Mat Matrix Color (Moist) 2/1	eded to docurix, CS=Cover	ument the indired/Coated Sand Color (cator or con Grains; Locatio	on: PL=Po	ore Lining, M=Matri	(x)	L									
Profile Descrip (Type: C=Concent Depth (In.)	ption (Descri tration, D=Deple Hue_10YR	be to the depth nee etion, RM=Reduced Mat Matrix Color (Moist) 2/1	eded to docurix, CS=Cover	ument the indired/Coated Sand Color (cator or con Grains; Locatio	on: PL=Po	ore Lining, M=Matri	(x)	L									
Profile Descrip (Type: C=Concent Depth (In.)	ption (Descri tration, D=Deple Hue_10YR	be to the depth nee etion, RM=Reduced Mat Matrix Color (Moist) 2/1	eded to docurix, CS=Cover	ument the indired/Coated Sand Color (cator or con Grains; Locatio	on: PL=Po	ore Lining, M=Matri	(x)	L									
Profile Descrip (Type: C=Concent Depth (In.)	ption (Descrintration, D=Depleter) Hue_10YR Hue_2.5Y	be to the depth nee etion, RM=Reduced Mat Matrix Color (Moist) 2/1 5/4	eded to doc rix, CS=Cover	ument the indired/Coated Sand Color (cator or con Grains; Locatio	Mottle	ore Lining, M=Matri	(x)	L									
Profile Descrip (Type: C=Concentry) Depth (In.) 0-7 7-21	ption (Descrintration, D=Depleter) Hue_10YR Hue_2.5Y	be to the depth nee etion, RM=Reduced Mat Matrix Color (Moist) 2/1 5/4	eded to doc rix, CS=Cover	color (cator or con Grains; Locatio	Mottle	es Type	(x)	COS									
Profile Descrip (Type: C=Concentry) Depth (In.) 0-7 7-21	ption (Descriptration, D=Depletration, D=Deple	be to the depth nee etion, RM=Reduced Mat Matrix Color (Moist) 2/1 5/4 Indicators (che	eded to doc rix, CS=Cover	Color (O O Color (O O Color (O O Color (Col	Cator or con Grains; Location Moist) not present)	Mottle	es Type	Location	L COS Indicators	Minor gravel fragments for Problematic Soils Muck (LRR I, J)								
Profile Descrip (Type: C=Concent Depth (In.) 0-7 7-21 NRCS Hydri	htration, D=Depleteration, D=Depleterati	be to the depth nee etion, RM=Reduced Mat Matrix Color (Moist) 2/1 5/4 Indicators (che	eded to doc rix, CS=Cover	Color (O Color (O S5 - Sandy R S6 - Stripped	Cator or con Grains; Location Moist) not present) Redox I Matrix	Mottle %	es Type	Location	Indicators A9 - 1 cm N A16 - Coast	Minor gravel fragments for Problematic Soils¹ Muck (LRR I, J) t Prairie Redox (LRR F, G, H)								
Profile Descrip (Type: C=Concent Depth (In.) 0-7 7-21 NRCS Hydri	htration, D=Depleteration, D=Depleterati	Matrix Color (Moist) 2/1 5/4 Indicators (che	eded to doc rix, CS=Cover	Color (Color	Cator or con Grains; Location Moist) Moist) not present) Redox I Matrix Mucky Mineral	Mottle %	es Type	Location	Indicators A9 - 1 cm M A16 - Coast S7 - Dark S	Minor gravel fragments for Problematic Soils¹ Muck (LRR I, J) t Prairie Redox (LRR F, G, H) Surface (LRR G)								
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Profile Descrip (Type: C=Concent Depth (In.) 0-7 7-21 NRCS Hydri	htration, D=Depleteration, D=Depleterati	be to the depth nee etion, RM=Reduced Mat Matrix Color (Moist) 2/1 5/4 Indicators (che	eded to doc rix, CS=Cover	Color (Color	Cator or con Grains; Location Moist) Moist) not present) Redox I Matrix Mucky Mineral Gleyed Matrix d Matrix	Mottle %	es Type	Location	Indicators: A9 - 1 cm M A16 - Coast S7 - Dark S F16 - High I F18 - Reduc	Minor gravel fragments for Problematic Soils Muck (LRR I, J) t Prairie Redox (LRR F, G, H) Surface (LRR G) Plains Depressions (LRR H, outside MLRA 72, 73) ced Vertic								
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WETLAND DETERMINATION DATA FORM

Great Plains Region

Project/Site:	L3R				Sample Point: u-156n46w21-d1				
					•				
VEGETATIO	N (Species identified in all uppercase are	non-native	species.)						
Tree Stratum ((Plot size: 30 ft. radius)								
	Species Name	% Cover	<u>Dominant</u>	Ind.Status	Dominance Test Worksheet				
1.									
2.					Number of Dominant Species that are OBL, FACW, or FAC: 0 (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.					(742)				
8.					Prevalence Index Worksheet				
9.									
10.					Total % Cover of: Multiply by:				
10.	Total Cover	0			OBL spp. $0 x 1 = 0$ FACW spp. $0 x 2 = 0$				
	Total Cover = _	0	<u> </u>		FACW Spp. $\frac{0}{\sqrt{2}}$ \times $2 = \frac{0}{\sqrt{2}}$				
0 11 /01 1	0 (5)				FAC spp. $\frac{10}{10}$ $\times 3 = \frac{30}{10}$				
	Stratum (Plot size: 15 ft. radius)				FACU spp. 30				
1.					UPL spp. $_{65}$ $_{x}$ 5 = $_{325}$				
2.									
3.					Total 105 (A) 475 (B)				
4.									
5.					Prevalence Index = B/A = 4.524				
6.									
7.									
8.					Hydrophytic Vegetation Indicators:				
9.					Rapid Test for Hydrophytic Vegetation				
10.					Dominance Test is > 50%				
	Total Cover =	0			Prevalence Index is ≤ 3.0 *				
	10.01								
Lloub Ctroture /	Diet einer Eft medice)				Morphological Adaptations (Explain) *				
Herb Stratum (Plot size: 5 ft. radius)	0.5	Y	LIDI	Problem Hydrophytic Vegetation (Explain) *				
1.	Bromus inermis	65	<u>'</u>	UPL	* In dispetate of budging a sile and weatland budget and provent by				
2.	Poa pratensis	25	Y	FACU	 * Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic. 				
3.	Calystegia sepium	10	N	FAC					
4.	Cirsium arvense	5	N	FACU	Definitions of Vegetation Strata:				
5.									
6					Tree - Woody plants 3 in. (7.6cm) or more in diameter at breast				
7.					height (DBH), regardless of height.				
8.									
9.					Sapling/Shrub - Woody plants less than 3 in. DBH, regardless of height.				
10.									
11.									
12.					Herb - All herbaceous (non-woody) plants, regardless of size.				
13.									
14.									
15.					Woody Vines - All woody vines, regardless of height.				
13.	Total Cavar	10E			Troday Villos - v.m. 1995, 1996, 199				
	Total Cover = _	105							
14/ 1 1 7	(D) (C) (C) (C) (C) (C) (C) (C) (C) (C) (C								
Woody Vine St	ratum (Plot size: 30 ft. radius)								
1.									
2.									
3.					Hydrophytic Vegetation Present?N				
5.									
4.									
	Total Cover =	0							
Remarks:	The sample point is dominated by smooth bro								
			,	J					
Additional Remarks:									
Additional Remarks:									