WETLAND DETERMINATION DATA FORM Great Plains Region

Project/Site:		L3R									Date:	06/24/14	
Applicant:		Enbridge					(1 d) D (County:	Marshall	
Investigators		KRG/NTT				_Subregio	•	A or LRR):	MLRA 56		State:	MN	
Soil Unit:	115A				1 -	D - 1' (I Classification:	·			4504004 b.4	
Landform:	Talf 0 - 2%		Latitude: 48	207		cal Relief:)660	Deture		Sample Point:	u-156n46w34-b1	
Slope (%):		onditions on the site					: -96.560		Datum:	□ No	Section:		
Are Vegetation		□, or Hydrology				ai: (II IIO, ex	1	e normal circun			Township:		
Are Vegetation		□, or Hydrology	•	-				e normai circuii ☑ Yes		536Ht:	Range:	Dir:	
SUMMARY C			Hattirally	ргов	icinatio:			E 163	<u> </u>		range.	DII.	
Hydrophytic '			No	1					Hydric Soil	s Present?	No		
Wetland Hyd	•		No			_					t Within A W	etland? No	
Remarks:		point is located in			d planted i	n wheat.			io i i iio Gai	npinig r on		onaria. IIO	
					- p								
HYDROLOG	Υ												
		icators (Check all	that annly:	· Mini	imum of or	o primary	or two s	econdary requi	rod):				
Primary		icators (Crieck all	ι ιπαι αρριγ,	, 1711111	illiulli Ol Ol	ie primary	or two s	econdary requi	ieu).	Secondary:			
<u> </u>	A1 - Surface	Water				B11 - Salt	Crust				B6 - Surface S	Soil Cracks	
	A2 - High Wa					B13 - Aqua						Vegetated Concave Surf	ace
	A3 - Saturation					C1 - Hydro					B10 - Drainage		.
	B1 - Water M B2 - Sedimer					C2 - Dry S		ater Table spheres on Living	Poots (not till	, –	C3 - Oxidized C8 - Crayfish E	Rhizospheres on Living	Roots (tilled)
	B3 - Drift Dep	•						educed Iron	Noots (not till	, –		n Visible on Aerial Image	erv
	B4 - Algal Ma					C7 - Thin !				_	D2 - Geomorp		,
	B5 - Iron Dep					Other (Exp	olain)				D5 - FAC-Neu		
		on Visible on Aerial Im	nagery								D7 - Frost-Hea	aved Hummocks (LRR F	·)
	B9 - water-S	tained Leaves											
Field Observ	vations:												
		Vac = □	Do	4		(in)							
Surface Wat		Yes □ Yes □				_ (in.)			Wetland H	lydrology l	Present?	N	
Water Table Saturation P		Yes □ Yes □		epth: _ epth:		– (in.) (in.)						—	
Saturation	1696111;	162	D-0	50UI.									
						<u> </u>							
	`	stream gauge, moni	itoring well,	aeria	ıl photos, pr	<u> </u>	pections),	, if available:					
Describe Rec	`	stream gauge, moni	itoring well,	aeria	ıl photos, pr	<u> </u>	pections),	, if available:					
Remarks:	`		itoring well,	aeria	ıl photos, pr	<u> </u>	pections),	, if available:					
Remarks:	No indicato	rs of wetland hydro	itoring well, a cology were	aeria obse	al photos, prerved.	evious insp	,		adicators \				
Remarks: SOILS Profile Descri	No indicato	rs of wetland hydro	itoring well, a cology were deeded to do	aeria obse	al photos, prerved.	evious insplicator or co	onfirm th	e absence of ir					
Remarks: SOILS Profile Descri	No indicato	rs of wetland hydro	itoring well, a cology were deeded to do	aeria obse	al photos, prerved.	evious insplicator or co	onfirm th	e absence of ir					
Remarks: SOILS Profile Descri	No indicato	rs of wetland hydro	itoring well, a cology were deeded to do	aeria obse	al photos, prerved.	evious insplicator or co	onfirm th	e absence of in ore Lining, M=Matr					
Remarks: SOILS Profile Descri (Type: C=Concer	No indicato	rs of wetland hydro ibe to the depth ne etion, RM=Reduced Ma Matrix	ology were eeded to do atrix, CS=Cov	aeria obse	erved. ent the indicated Sand	evious inspired icator or congrains; Loca	onfirm th	e absence of in ore Lining, M=Matr		Texture		Remarks	
Remarks: SOILS Profile Descri (Type: C=Concer	No indicato	rs of wetland hydrouse to the depth ne etion, RM=Reduced Ma Matrix Color (Moist)	ology were eeded to do atrix, CS=Cov	aeria obse	al photos, prerved.	evious inspired icator or congrains; Loca	onfirm th tion: PL=P Mottl	e absence of in ore Lining, M=Matr	ix)			Remarks	
Remarks: SOILS Profile Descri (Type: C=Concer Depth (In.) 0-14	No indicato iption (Description, D=Dep	ibe to the depth ne etion, RM=Reduced Ma Matrix Color (Moist)	eeded to do atrix, CS=Cov	aeria obse	erved. ent the indicated Sand	evious inspired icator or congrains; Loca	onfirm th tion: PL=P Mottl	e absence of in ore Lining, M=Matr	ix)	Texture FS FS		Remarks	
Remarks: SOILS Profile Descri (Type: C=Concer	No indicato	ibe to the depth ne etion, RM=Reduced Ma Matrix Color (Moist)	eeded to do atrix, CS=Cov	aeria obse	erved. ent the indicated Sand	evious inspired icator or congrains; Loca	onfirm th tion: PL=P Mottl	e absence of in ore Lining, M=Matr	ix)	FS		Remarks	
Remarks: SOILS Profile Descri (Type: C=Concer Depth (In.) 0-14	No indicato iption (Description, D=Dep	ibe to the depth ne etion, RM=Reduced Ma Matrix Color (Moist)	eeded to do atrix, CS=Cov	aeria obse	erved. ent the indicated Sand	evious inspired icator or congrains; Loca	onfirm th tion: PL=P Mottl	e absence of in ore Lining, M=Matr	ix)	FS		Remarks	
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Remarks: SOILS Profile Descri (Type: C=Concer Depth (In.) 0-14	No indicato iption (Description, D=Dep	ibe to the depth ne etion, RM=Reduced Ma Matrix Color (Moist)	eeded to do atrix, CS=Cov	aeria obse	erved. ent the indicated Sand	evious inspired icator or congrains; Loca	onfirm th tion: PL=P Mottl	e absence of in ore Lining, M=Matr	ix)	FS		Remarks	
Remarks: SOILS Profile Descri (Type: C=Concer Depth (In.) 0-14 14-18	No indicato iption (Description, D=Deplementation, D=Deplementation) Hue_10YR Hue_10YR	Matrix Color (Moist) 2/1 3/3	eeded to do atrix, CS=Cov	aeria obse ocum vered/0 00 00	erved. ent the indicoated Sand Color (evious inspectator or configurations; Local	onfirm th	e absence of in ore Lining, M=Matr	ix)	FS		Remarks	
Remarks: SOILS Profile Descri (Type: C=Concer Depth (In.) 0-14 14-18	No indicato iption (Description, D=Dep	Matrix Color (Moist) 2/1 3/3	eeded to do atrix, CS=Cov	aeria obse ocum vered/0 00 00	erved. ent the indicoated Sand Color (evious inspectator or configurations; Local	onfirm th	e absence of in Pore Lining, M=Matr es Type	ix)	FS FS	or Problematic	·	
Remarks: SOILS Profile Descri (Type: C=Concer Depth (In.) 0-14 14-18 NRCS Hydr	No indicato iption (Description, D=Deplementation, D=Deplementation) Hue_10YR Hue_10YR	Matrix Color (Moist) 2/1 3/3	eeded to do atrix, CS=Cov	aeria obse ocum vered/0 00 00 f indic	ent the indicoated Sand Color (cator or configurations; Local	onfirm th	e absence of in Pore Lining, M=Matr es Type	Location	FS FS Indicators f	or Problematic	·	
Remarks: SOILS Profile Descri (Type: C=Concer Depth (In.) 0-14 14-18	No indicato iption (Description, D=Deplementation, D=Deplementation) Hue_10YR Hue_10YR ric Soil Field	Matrix Color (Moist) 2/1 3/3 Indicators (ch	eeded to do atrix, CS=Cov	aeria obse ocum vered/0 % 00 00 f indic	erved. ent the indicoated Sand Color (cator or configuration of preservations in special configuration of the second configu	onfirm th	e absence of in Pore Lining, M=Matr es Type	Location	FS FS Indicators f A9 - 1 cm M	or Problematic	c Soils ¹	
Remarks: SOILS Profile Descri (Type: C=Concer Depth (In.) 0-14 14-18 NRCS Hydr	Hue_10YR Hue_10YR Hue_10YR A1- Histosol A2 - Histic Ep A3 - Black Histosol	matrix Color (Moist) 2/1 3/3 Indicators (ch	eeded to do atrix, CS=Cov	aeria obse ocum vered/0 00 f indic	ent the indicated Sand Color (cators are S5 - Sandy F S6 - Stripped F1 - Loamy F	icator or configurations; Locations; Locatio	onfirm thation: PL=P Mottl % at):	e absence of in Pore Lining, M=Matr es Type	Location	Indicators f A9 - 1 cm M A16 - Cost F S7 - Dark Si	luck (LRR I, J) Prairie Redox (L urface (LRR G)	c Soils ¹ .RR F, G, H)	
Remarks: SOILS Profile Descri (Type: C=Concer Depth (In.) 0-14 14-18 NRCS Hydr	iption (Description, D=Depintration, D=Depintr	matrix Color (Moist) 2/1 3/3 Indicators (ch	eeded to do atrix, CS=Cov	aeria obse ocum vered/0 % 00 f indic	cators are	mot preser Redox Mucky Miner Gleyed Matrix	onfirm thation: PL=P Mottl % at):	e absence of in Pore Lining, M=Matr es Type	Location	Indicators f A9 - 1 cm M A16 - Cost F S7 - Dark S6 F16 - High F	luck (LRR I, J) Prairie Redox (L urface (LRR G) Plains Depressio	c Soils ¹	
Remarks: SOILS Profile Descri (Type: C=Concer Depth (In.) 0-14 14-18 NRCS Hydr	iption (Descrintration, D=Depintration, D=Depi	matrix Color (Moist) 2/1 3/3 Indicators (chair) Indicators (chair)	eeded to do atrix, CS=Cov	aeria obse ocum vered/v f indic	ent the indicated Sand Color (S5 - Sandy F S6 - Stripped F1 - Loamy N F2 - Loamy N F3 - Depleted	mot preservices Matrix Mucky Miner Gleyed Matrix d Matrix	monfirm the stion: PL=P Mottl % at):	e absence of in Pore Lining, M=Matr es Type	Location	Indicators f A9 - 1 cm M A16 - Cost F S7 - Dark St F16 - High F F18 - Reduct	luck (LRR I, J) Prairie Redox (L urface (LRR G) Plains Depression eed Vertic	c Soils ¹ .RR F, G, H)	
Remarks: SOILS Profile Descri (Type: C=Concer Depth (In.) 0-14 14-18 NRCS Hydr	Hue_10YR Hue_10YR Hue_10YR Hue_10YR A1- Histosol A2 - Histic Ep A3 - Black Hi A4 - Hydroge A5 - Stratified A9 - 1 cm Mu	matrix Color (Moist) Indicators (chapted in Sulfide I Layers (LRR F) ck (LRR FGH)	eeded to do atrix, CS=Cov	aeria obse ocum vered/0 % 00 f indic	cators are	mot preservices Matrix Mucky Miner Gleyed Matrix Dark Surface	onfirm the tion: PL=P Mottl % at):	e absence of in Pore Lining, M=Matr es Type	Location	Indicators f A9 - 1 cm M A16 - Cost F S7 - Dark Si F16 - High F F18 - Reduct TF2 - Red P	luck (LRR I, J) Prairie Redox (L urface (LRR G) Plains Depression red Vertic Parent Material	e Soils ¹ RR F, G, H) ONS (LRR H, outisde MLRA 72, 73)	
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WETLAND DETERMINATION DATA FORM Great Plains Region

Project/Site:	L3R				Sample Point:	u-156n46w34-b1		
-					•			
VEGETATION	` ` '	e non-native	species.)					
Tree Stratum (Plot size: 30 ft. radius) Species Name	% Cover	<u>Dominant</u>	Ind.Status	Dominance Test Worksheet			
1.	<u> </u>	70 COVEL	Dominant	<u>ina.otatus</u>	Dominarios rest Worksheet			
2.					Number of Dominant Species that are OBL, FACW, or	FAC: 0 (A)		
3.					•	(,		
4.					Total Number of Dominant Species Across All S	Strata: 1 (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. $0 x 2 = 0$			
					FAC spp. $0 \times 3 = 0$			
	Stratum (Plot size: 15 ft. radius)				FACU spp. $0 \times 4 = 0$			
1.					UPL spp. <u>80</u> X 5 = <u>400</u>			
2.					T-1-1 00 (A) 100	(D)		
3.					Total 80 (A) 400	(B)		
4. 5.					Describer de la desc. D/A			
6.					Prevalence Index = B/A = 5.000	'		
7.								
8.					Hydrophytic Vegetation Indicators:			
9.					Rapid Test for Hydroph	ovtic Vegetation		
10.					Dominance Test is > 50			
	Total Cover =	0			Prevalence Index is ≤ 3			
			_		Morphological Adaptation			
Herb Stratum (I	Plot size: 5 ft. radius)				Problem Hydrophytic V			
1.	Triticum aestivum	80	Υ	NI		(=-4		
2.					* Indicators of hydric soil and wetla	and hydrology must be		
3.					present, unless disturbed	or problematic.		
4.					Definitions of Vegetation Strata:			
5.								
6					Tree - Woody plants 3 in. (7.6cm) of			
7.					height (DBH), regardless of	height.		
8.								
9.					Sapling/Shrub - Woody plants less than 3 in.	DBH, regardless of height.		
10.								
11.					Mark. All borbassous (non woods)	I planta regardless of size		
12.					Herb - All herbaceous (non-woody)	plants, regardless of size.		
13. 14.				_				
15.					Woody Vines - All woody vines, regardless	s of height		
13.	Total Cover =	80			vvoody villes - / iii weedy villes, regardiese	or noight.		
	Total Cover =	00	_					
Woody Vine St	ratum (Plot size: 30 ft. radius)							
1.	atum (Flot size: 50 ft. radius)							
2.								
3.					Hydrophytic Vegetation Pres	ent? N		
5.					, , , , , , , , , , , , , , , , , , , ,			
4.								
	Total Cover =	0						
Remarks:	The upland vegetation consists of young whe	eat seedling	gs.					
Additto								
Additional R	semarks:							