WETLAND DETERMINATION DATA FORM Great Plains Region

Project/Site:		L3R								Date:	09/17/14
Applicant: Investigators	<u>.</u> .	Enbridge NTT/BEH			Subregio		or LRR):	MLRA 56		County: State:	Pennington MN
Soil Unit:					•	Classification:					
Landform:	Talf				cal Relief: LL					u-154n44w32-g4	
Slope (%):	0 - 2%	onditions on the si	Latitude: 48.11		Longitude:			<u>Datum:</u> ☑ Yes	□ No	Ocationi	
Are Vegetation	• •	I □, or Hydrology			al ? (If no, exp		e normal circum			Section: Township:	
Are Vegetation		I □, or Hydrology	• •				✓ Yes		636111:	Range:	Dir:
SUMMARY C			, , , , , , , , , , , , , , , , , , ,							5	
Hydrophytic	•		No		_				Is Present?		
Wetland Hyd			No			telles is	de este de la com			nt Within A W	
Remarks:	The upland	point is located in	n a field planted	I with a seed	i mix. Vege	etation is	dominated by	yellow india	in grass and	d black-eyed	susan.
HYDROLOG	Ϋ́										
Wetland Hy Primary	/drology Ind <u>⁄:</u>	icators (Check al	ll that apply; Mi	nimum of or	ne primary B11 - Salt (econdary requir	ed):	Secondary:		
	□ A1 - Surface Water □ □ A2 - High Water Table □					tic Fauna			B6 - Surface S B8 - Sparsely	Vegetated Concave Surface	
	A3 - Saturatio				C1 - Hydro					B10 - Drainag	e Patterns
	B1 - Water M B2 - Sedimer				C2 - Dry Se C3 - Oxidiz		ter Table spheres on Living	Roots (not till	← □	C3 - Oxidized C8 - Crayfish	Rhizospheres on Living Roots (tilled) Burrows
	B3 - Drift Dep	osits			C4 - Prese	nce of Re	duced Iron			C9 - Saturatio	n Visible on Aerial Imagery
	B4 - Algal Ma B5 - Iron Dep				C7 - Thin M Other (Exp		ace			D2 - Geomorp D5 - FAC-Neu	
		on Visible on Aerial Ir	magery			ann					aved Hummocks (LRR F)
	B9 - Water-S	tained Leaves									
Field Obser	vations										
Surface Wat		Yes 🗆	Depth:		(in.)					_	
Water Table		Yes 🗆	Depth:		_ (in.)			Wetland H	lydrology	Present?	Ν
Saturation P	resent?	Yes 🗆	Depth:		(in.)						
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:											
Remarks: No wetland hydrology indicators are present.											
SOILS							,				
Profile Descri		ibe to the depth n									
Profile Descri		ibe to the depth ne letion, RM=Reduced M									
Profile Descri			Matrix, CS=Covered				ore Lining, M=Matri				
Profile Descri (Type: C=Concer Depth (In.)	ntration, D=Dep	etion, RM=Reduced M Matrix Color (Moist)	Matrix, CS=Covered		Grains; Locat	ion: PL=Po	ore Lining, M=Matri		Texture		Remarks
Profile Descri (Type: C=Concer Depth (In.) 0-6	htration, D=Dep	Matrix Color (Moist) 2/1	Matrix, CS=Covered % 100	I/Coated Sand	Grains; Locat	ion: PL=Po Mottle	ore Lining, M=Matri es	(x)	Texture SCL		Remarks
Profile Descri (Type: C=Concer Depth (In.)	ntration, D=Dep	Matrix Color (Moist) 2/1	Matrix, CS=Covered	I/Coated Sand	Grains; Locat	ion: PL=Po Mottle	ore Lining, M=Matri es	(x)			Remarks
Profile Descri (Type: C=Concer Depth (In.) 0-6	htration, D=Dep	Matrix Color (Moist) 2/1	Matrix, CS=Covered % 100	I/Coated Sand	Grains; Locat	ion: PL=Po Mottle	ore Lining, M=Matri es	(x)			Remarks
Profile Descri (Type: C=Concer Depth (In.) 0-6	htration, D=Dep	Matrix Color (Moist) 2/1	Matrix, CS=Covered % 100	I/Coated Sand	Grains; Locat	ion: PL=Po Mottle	ore Lining, M=Matri es	(x)			Remarks
Profile Descri (Type: C=Concer Depth (In.) 0-6	htration, D=Dep	Matrix Color (Moist) 2/1	Matrix, CS=Covered % 100	I/Coated Sand	Grains; Locat	ion: PL=Po Mottle	ore Lining, M=Matri es	(x)			Remarks
Profile Descri (Type: C=Concer Depth (In.) 0-6 6-18 NRCS Hydr	Hue_10YR Hue_10YR Hue_10YR	Matrix Color (Moist) 2/1 5/6	Matrix, CS=Covered % 100	Color (Grains; Locat Moist)	ion: PL=Po Mottle	ore Lining, M=Matri es	x)	SCL S	or Problemati	ic Soils ¹
Profile Descri (Type: C=Concer Depth (In.) 0-6 6-18	htration, D=Dep	Matrix Color (Moist) 2/1 5/6	Matrix, CS=Covered % 100 100	Coated Sand	Grains; Locat Moist) not present	ion: PL=Po Mottle	ore Lining, M=Matri es Type	x) Location	SCL S Indicators f A9 - 1 cm M	luck (LRR I, J)	ic Soils ¹
Profile Descri (Type: C=Concer Depth (In.) 0-6 6-18 NRCS Hydr	Hue_10YR Hue_10YR Hue_10YR Hue_10YR ric Soil Field A1- Histosol A2 - Histic Ep A3 - Black Hi	Matrix Color (Moist) 2/1 5/6 Indicators (c	Matrix, CS=Covered % 100 100	l/Coated Sand Color (licators are 1 S5 - Sandy F S6 - Stripped F1 - Loamy N	Grains; Locat Moist) Moist) not present Redox Matrix Mucky Minera	ion: PL=Pe Mottle %	ore Lining, M=Matri es Type	x) Location	SCL S Indicators f A9 - 1 cm M A16 - Coast S7 - Dark S	luck (LRR I, J) Prairie Redox urface (LRR G)	i <mark>c Soils¹</mark> (LRR F, G, H)
Profile Descri (Type: C=Concer Depth (In.) 0-6 6-18 NRCS Hydr	htration, D=Dep Hue_10YR Hue_10YR Hue_10YR ric Soil Field A1- Histosol A2 - Histic Ep A3 - Black Hi A4 - Hydroge	Matrix Color (Moist) 2/1 5/6 Indicators (c	Matrix, CS=Covered % 100 100 :heck here if ind	I/Coated Sand Color (Incators are 1 S5 - Sandy F S6 - Stripped F1 - Loamy N F2 - Loamy (Grains; Locat Moist) not present Redox Matrix Mucky Minera Gleyed Matrix	ion: PL=Pe Mottle %	ore Lining, M=Matri es Type	x) Location	SCL S Indicators f A9 - 1 cm M A16 - Coast S7 - Dark S F16 - High F	luck (LRR I, J) Prairie Redox urface (LRR G) Plains Depressi	i <mark>c Soils¹</mark> (LRR F, G, H)
Profile Descri (Type: C=Concer Depth (In.) 0-6 6-18 NRCS Hydr	Hue_10YR Hue_10YR Hue_10YR Hue_10YR ric Soil Field A1- Histosol A2 - Histic Ep A3 - Black Hi A4 - Hydroge A5 - Stratified	Matrix Color (Moist) 2/1 5/6 Indicators (C Dipedon stic n Sulfide Layers (LRR F)	Matrix, CS=Covered % 100 100	I/Coated Sand Color (Color (S5 - Sandy F S6 - Stripped F1 - Loamy f F2 - Loamy (F3 - Depleted	Grains; Locat Moist) Moist) not present Redox I Matrix Mucky Minera Gleyed Matrix d Matrix	ion: PL=P(Mottle %	ore Lining, M=Matri es Type	x)	SCL S Indicators f A9 - 1 cm M A16 - Coast S7 - Dark S F16 - High F F18 - Reduc	luck (LRR I, J) Prairie Redox urface (LRR G) Plains Depressi ced Vertic	i <mark>c Soils¹</mark> (LRR F, G, H)
Profile Descri (Type: C=Concer Depth (In.) 0-6 6-18 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 A11 - Deplete	etion, RM=Reduced M Matrix Color (Moist) 2/1 5/6 1 5/6 1 Indicators (c bipedon stic n Sulfide Layers (LRR F) ick (LRR FGH) ed Below Dark Surface	Matrix, CS=Covered	I/Coated Sand Color (Color (S5 - Sandy F S6 - Stripped F1 - Loamy f F2 - Loamy f F3 - Depleted F6 - Redox E F7 - Depleted	Moist) Moist) not present Redox Matrix Mucky Minera Gleyed Matrix Dark Surface d Dark Surface	ion: PL=P(Mottle %	ore Lining, M=Matri es Type	x)	SCL S Indicators f A9 - 1 cm M A16 - Coast S7 - Dark Si F16 - High F F18 - Reduc TF2 - Red F TF12 - Very	luck (LRR I, J) Prairie Redox urface (LRR G) Plains Depressi ced Vertic Parent Material Shallow Dark	i <mark>c Soils¹</mark> (LRR F, G, H)) ONS (LRR H, outside MLRA 72, 73) Surface
Profile Descri (Type: C=Concer Depth (In.) 0-6 6-18 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 A11 - Deplete A12 - Thick D	Indicators (Color (Moist) 2/1 5/6 5/6 0 Indicators (Color (Co	Matrix, CS=Covered	I/Coated Sand Color (Color (S5 - Sandy F S6 - Stripped F1 - Loamy f F2 - Loamy f F3 - Depleted F6 - Redox f F7 - Depleted F8 - Redox f	Grains; Locat Moist) Moist) not present Redox I Matrix Mucky Minera Gleyed Matrix Dark Surface d Dark Surfa Depressions	ion: PL=P(Mottle %	ore Lining, M=Matri	x)	SCL S Indicators f A9 - 1 cm M A16 - Coast S7 - Dark Si F16 - High F F18 - Reduc TF2 - Red F TF12 - Very	luck (LRR I, J) Prairie Redox urface (LRR G) Plains Depressi ced Vertic Parent Material	i <mark>c Soils¹</mark> (LRR F, G, H)) ONS (LRR H, outside MLRA 72, 73) Surface
Profile Descri (Type: C=Concer Depth (In.) 0-6 6-18 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 A11 - Deplete A12 - Thick E S1 - Sandy M S2 - 2.5 cm M	Matrix Matrix Color (Moist) 2/1 5/6 5/6 5/6 1 5/6 1 Indicators 0 0	Matrix, CS=Covered	I/Coated Sand Color (Color (S5 - Sandy F S6 - Stripped F1 - Loamy f F2 - Loamy f F3 - Depleted F6 - Redox f F7 - Depleted F8 - Redox f	Grains; Locat Moist) Moist) not present Redox I Matrix Mucky Minera Gleyed Matrix Dark Surface d Dark Surfa Depressions	ion: PL=P(Mottle %	ore Lining, M=Matri es Type	x)	SCL S Indicators f A9 - 1 cm M A16 - Coast S7 - Dark S F16 - High F F18 - Reduc TF2 - Red F TF12 - Very Other (Expla	luck (LRR I, J) Prairie Redox urface (LRR G) Plains Depressi ced Vertic Parent Material Shallow Dark S ain in Remarks)	i <mark>c Soils¹</mark> (LRR F, G, H)) ONS (LRR H, outside MLRA 72, 73) Surface
Profile Descri (Type: C=Concer Depth (In.) 0-6 6-18 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 A11 - Deplete A12 - Thick E S1 - Sandy M S2 - 2.5 cm M	Ietion, RM=Reduced M Matrix Color (Moist) 2/1 5/6 Indicators oppedon stic n Sulfide Layers (LRR F) ick (LRR FGH) ed Below Dark Surface Dark Surface Jucky Peat or Peat (LR	Matrix, CS=Covered	I/Coated Sand Color (Color (S5 - Sandy F S6 - Stripped F1 - Loamy f F2 - Loamy f F3 - Depleted F6 - Redox f F7 - Depleted F8 - Redox f	Grains; Locat Moist) Moist) not present Redox I Matrix Mucky Minera Gleyed Matrix Dark Surface d Dark Surfa Depressions	ion: PL=P(Mottle %	ore Lining, M=Matri	x)	SCL S Indicators f A9 - 1 cm M A16 - Coast S7 - Dark S F16 - High F F18 - Reduc TF2 - Red F TF12 - Very Other (Expla	luck (LRR I, J) Prairie Redox urface (LRR G) Plains Depressi ced Vertic Parent Material Shallow Dark S ain in Remarks)	i <mark>c Soils¹</mark> (LRR F, G, H)) ONS (LRR H, outside MLRA 72, 73) Surface)
Profile Descri (Type: C=Concer Depth (In.) 0-6 6-18 NRCS Hydr	htration, D=Dep Hue_10YR Hue_10YR Hue_10YR Hue_10YR A1- Histosol A2 - Histic Ep A3 - Black Hi A4 - Hydroge A5 - Stratified A9 - 1 cm Mu A11 - Deplete A12 - Thick E S1 - Sandy M S2 - 2.5 cm M S3 - 5 cm Mu S4 - Sandy G	Indicators Color 2/1 5/6 2/1 5/6 1 5/6 1 Indicators (C Color Dipedon (C	Matrix, CS=Covered	I/Coated Sand Color (Color (S5 - Sandy F S6 - Stripped F1 - Loamy f F2 - Loamy f F3 - Depleted F6 - Redox f F7 - Depleted F8 - Redox f	Grains; Locat Moist) Moist) not present Redox I Matrix Mucky Minera Gleyed Matrix Dark Surface d Dark Surface d Dark Surfa Depressions lains Depres	ion: PL=P(Mottle %	ore Lining, M=Matri	x)	SCL S Indicators f A9 - 1 cm M A16 - Coast S7 - Dark Si F16 - High F F18 - Reduc TF2 - Red F TF12 - Very Other (Expla	luck (LRR I, J) Prairie Redox urface (LRR G) Plains Depressi ced Vertic Parent Material Shallow Dark ain in Remarks)	i <mark>c Soils¹</mark> (LRR F, G, H)) ONS (LRR H, outside MLRA 72, 73) Surface)
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WETLAND DETERMINATION DATA FORM Great Plains Region

Project/Site:	: L3R				Sample Point: u-154n44w32-g4
VEGETATIO		e non-native	species.)		
Tree Stratum	(Plot size: 30 ft. radius)				Deminence Test Werkelsest
4	<u>Species Name</u>	<u>% Cover</u>	<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.					
8.					Prevalence Index Worksheet
9.					Total % Cover of: Multiply by:
10.					OBL spp. $0 x 1 = 0$
	Total Cover =	0			FACW spp. 5 $x 2 = 10$
			_		OBL spp. 0 x 1 = 0 FACW spp. 5 x 2 = 10 FAC spp. 0 x 3 = 0 FACU spp. 100 x 4 = 400
Sapling/Shrub	Stratum (Plot size: 15 ft. radius)				FACU spp. 100 x 4 = 400
1.	, , , , , , , , , , , , , , , , , , , ,				UPL spp. 0 \times 5 = 0
2.					
3.					Total 105 (A) 410 (B)
4.					
5.					Prevalence Index = B/A = 3.905
6.					
7.					
8.					Hydrophytic Vegetation Indicators:
9.					
<u> </u>	-				Rapid Test for Hydrophytic Vegetation
10.		0			Dominance Test is > 50%
	Total Cover =	0			Prevalence Index is ≤ 3.0 *
					Morphological Adaptations (Explain) *
	(Plot size: 5 ft. radius)				Problem Hydrophytic Vegetation (Explain) *
1.	Sorghastrum nutans	45	Y	FACU	
2.	Rudbeckia hirta	25	Y	FACU	* Indicators of hydric soil and wetland hydrology must be
3.	Eragrostis cilianensis	10	N	FACU	present, unless disturbed or problematic.
4.	Elymus repens	10	N	FACU	Definitions of Vegetation Strata:
5.	Helianthus maximiliani	10	Ν	FACU	
6	Agrostis gigantea	5	Ν	FACW	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.					
14.					Woody Vines - All woody vines, regardless of height.
10.	Total Cause	105			
	Total Cover =	105			
Woody Vine St	tratum (Plot size: 30 ft. radius)				
1.					
2.					
3.					Hydrophytic Vegetation Present? N
5.					
4.					
	Total Cover =	0			
Remarks:	The upland vegetation contains a diverse see	ed mixture	with the d	lominant p	plants being yellow indian grass and black-eyed susan.
Additional F	Remarks:				