WETLAND DETERMINATION DATA FORM - North Central and Northeast Region

SPP Project/Site:	Cit	Carlton ry/County:		2015-06-27 Sampling Date:
Applicant/Owner: Enbridge			Minnesota State:	CR162f1W Sampling Point:
ACM/I Investigator(s):	LEB	Sect	tion, Township, Range: _	
	lenression			Conca 0-2 nvex, none): Slope (%):
Subregion (LRR or MLRA):		Latitude:	i.357910 Lon	-92.179244 Minnesota State gitude: Datum:
Soil Map Unit Name:				NWI Classification:
Are climatic/hydrologic conditions of	on the site typica	I for this time of year	? (if no, explain in Remar	ks): Yes
Are Vegetation No No No No No	No or Hydrology	significantly distur	bed? Are "Normal Circur	Yes mstances" present?
Are Vegetation No No No No No No No	No			
SUMMARY OF FINDINGS - Attac	h site map show	ing sampling point lo	cations, transects, impo	rtant features, etc.
Hydrophytic Vegetation Present?		/es	Is the Sampled Area	·
Hydric Soil Present?	`	⁄es	within a Wetland?	Yes
	`	es	If yes, optional Wetland	Site ID:
Wetland Hydrology Present? Remarks: (Explain alternative proce	oduras bara ar ir	a congrato report \	, , , , , , , , , , , , , , , , , , , ,	
The wetland is a hardwood swamp	o within a larger	forest. The vegetation	is dominated by aspen,	black ash, Canada bluejoint, and numerous sedge spec
HYDROLOGY				
Wetland Hydrology Indicators:				Secondary Indicators (minimum of two require
Primary Indicators (minimum of on	e is required; che	eck all that apply)		Surface Soil Cracks (B6)
Surface Water (A1)		Water-Stained Leave	es (B9)	yes Drainage Patterns (B10)
High Water Table (A2)		Aquatic Fauna (B13)		Moss Trim Lines (B16)
yes Saturation (A3)		Marl Deposits (B15)		Dry-Season Water Table (C2)
Water Marks (B1)		Hydrogen Sulfide Od	lor (C1)	Crayfish Burrows (C8)
Sediment Deposits (B2)		Oxidized Rhizospher	es on Living Roots (C3)	Saturation Visible on Aerial Imagery (C9)
Drift Deposits (B3)		Presence of Reduced	-	Stunted/Stressed Plants (D1)
Algal Mat or Crust (B4)		Recent Iron Reduction		yes Geomorphic Position (D2)
Iron Deposits (B5)		Thin Muck Surface (0	C7)	Shallow Aquitard (D3)
Inundation Visible on Aerial Image	ry (B7)	Other (Explain in Rer	marks)	Microtopographic Relief (D4)
Sparsely Vegetated Concave Surfa	ce (B8)			yes FAC-Neutral Test (D5)
Field Observations:				
Surface Water Present?	No	Depth (inches)		
Water Table Present?	Yes	Depth (inches)	14	
Saturation Present?	<u>Yes</u>	Depth (inches)	6	Wetland Hydrology Present? Yes
(includes capillary fringe)				
Describe Recorded Data (stream ga	uge, monitoring	well, aerial photos, p	revious inspections), if av	ailable:
Remarks:				
The wetland is located in a depress	sion and has soils	saturated at 6 inches	5.	

ee Stratum (Plot Size: 30 ft)	Absolute	Dominant	Indicator	Dominance Test worksheet:
<u>e Stratum</u> (Plot Size: 30 π	% Cover	Species?	Status	Number of Dominant Species
Populus tremuloides	_ 75.00	Yes	FACU	That Are OBL, FACW, or FAC: 4 (A)
	_			Total Number of Dominant
				4
	_			Species Across All Strata: (B)
	_			Percent of Dominant Species
	_			100 That Are OBL, FACW, or FAC:(A/B)
				Prevalence Index worksheet:
	_			Total % Cover of: Multiply by:
	75	= Total Cover		OBL species 30.00 x 1 30
ling/Shrub Stratum (Plot Size: 15 ft)		_		FACW species 115.00 x 2 230
raxinus nigra	50.00	Yes	FACW	FACU species 90.00 x 3 80
opulus tremuloides	5.00	No	FACU	UPL species 0.00 x 4 0
llnus incana	5.00	No	FACW	Column Totals 255 (A) 610 (B)
Acer rubrum	5.00	No No	FAC	Prevalence Index = B/A = 2.3921568
	_ <u>3.00</u>	_ 110	1710	Hydrophytic Vegetation Indicators:
			_]
		<u> </u>		1 - Rapid Test for Hydrophytic Vegetation yes 2 - Dominance Test is > 50%
	- ———— 65	= Total Cover	_	$\frac{7}{\text{Yes}} = \frac{7}{3} - \text{Prevalence Index is } \leq 3.0^{1}$
<u>b Stratum</u> (Plot Size: ⁵ ft)	<u>03</u>	_ = 10tal cover		4 - Morphological Adaptations (Provide
(alamagrostis canadensis	_ 25.00	Yes	OBL	supporting data in Remarks or on a separate sheet)
Carex brunnescens	25.00	Yes	FACW	Problematic Hydrophytic Vegetation ¹ (Explain)
Carex projecta	10.00	No	FACW	
Carex intumescens	_ 10.00	No No	FACW	1 Indicators of hydric soil and wetland hydrology must be present, unless
Naianthemum canadense	_ 10.00	No No	FACU	disturbed or problematic.
Rubus pubescens	5.00	No	FACW	Definitions of Vegetation Strata:
Carex tenera	_ 5.00	No	FAC	Tree - Woody plants 3 in. (.76 cm) or more in diameter at breast height (DBH), regardless of height. Sapling/Shrub - Woody plants less than 3 in. DBH and greater that or equal to 3.28 ft (1 m) tall.
Carex gracillima	_ 5.00	No	FACU	
Poa palustris	5.00	No	FACW	
		_ 140	- IACW	
Carex castanea	_ 5.00	<u>No</u>	FACW	-
	_ 5.00	<u>No</u>	FACU	Herb - All herbaeceous (non-woody) plants, regardless of size, an woody plants less than 3.28 ft tall.
	_ 5.00	No No	OBL	_
				Woody vines - All woody vines greater than 3.28 ft in height.
	115	= Total Cover		Troody vines 7 in woody vines greater than 3.20 fe in height.
Cicuta maculata	115	= Total Cover		woody these predect than 5.20 ft innerging
Cicuta maculata	115	= Total Cover	_	
Cicuta maculata	115	= Total Cover		Hydrophytic
Cicuta maculata	115	= Total Cover		
Rosa acicularis Cicuta maculata ody Vine Stratum (Plot Size:)	115	= Total Cover		Hydrophytic Vegetation

Sampling Point: CR162f1W SOIL Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.) **Redox Features** Type¹ Loc² (inches) Color (moist) % Color (moist) Texture Remarks 0-6 5YR 3 2 100 sic 6-12 5YR 3 2 10 Mixed matrix. sic 6-12 5YR 4 4 75 7.5YR 5 8 15 С 5YR 4 4 12-24 95 7.5YR 4 6 5 С M ¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. ²Location: PL=Pore Lining, M=Matrix. Indicators for Problematic Hydric Soil³: **Hydric Soil Indicators:** Polyvalue Below Surface (S8) (LRR R, MLRA 2 cm Muck (A10) (LRR K, L, MLRA 149B) Histosol (A1) Coast Prairie Redox (A16)(LRR K, L, R) Thin Dark Surface (S9) (LRR R, MLRA 149B) Histic Epipedon (A2) 5 cm Mucky Peat or Peat (S3) (LRR K, L, R) Loamy Mucky Mineral (F1) (LRR K, L) Black Histic (A3) Dark Surface (S7) (LRR K, M) Hydrogen Sulfide (A4) Loamy Gleyed Matrix (F2) Polyvalue Below Surface (S8) (LRR K, L) Stratified Layers (A5) Depleted Matrix (F3) Thin Dark Surface (S9) (LRR K, L) Depleted Below Dark Surface (A11) Redox Dark Surface (F6) Iron-Maganese Masses (F12) (LRR K, L, R) Thick Dark Surface (A12) Depleted Dark Surface (F7) Piedmont Floodplain Soils (F19) (MLRA 149B) Sandy Mucky Mineral (S1) Redox Depressions (F8) Sandy Gleyed Matrix (S4) Mesic Spodic (TA6) (MLRA 144A, 145, 149B) Red Parent Material (F21) Sandy Redox (S5) Very Shallow Dark Surface (TF12) Stripped Matrix (S6)

Dark Surface (S7) (LRR R, MLRA 149B)

The soils are silty clay over clay and meet hydric soil indicator F21.

Restrictive Layer (if observed):

Depth (inches):

Type:

Remarks:

Other (explain in remarks)

Hydric Soil Present? Yes