## WETLAND DETERMINATION DATA FORM Great Plains Region

| Project/Site:  |  | L3R  |                                |  |   |  |  |                         |  | Date:   | 08/29/14  |            |
|--|--|--|--------------------------------|--|---|--|--|-------------------------|--|---|---|------------|
| Applicant:   |  | Enbridge   |                                |  | 0 1 .   | /N 41 D A  | 1.00)  | 141 5 4 50              |  | County:   | Marshall  |            |
| Investigators  |  | RAJ/BEH  |                                |  | _Subregio   | n (MLRA  | •  | MLRA 56                 |  | State:  | MN  |            |
| Soil Unit:   | I16F   |  |                                |  | saal Daliafu  |  | Classification   | PEMF                    |  |   | w 457547w46 i4  |            |
| Landform:<br>Slope (%):  | Floodplain 0 - 2%  |  | Latitude: 48.4                 |  | cal Relief:   | -96.7205   | :0 <u>0</u>  | Datum:                  |  | Sample Point:   | w-157n47w16-j1  |            |
| . , ,  |  | onditions on the site  |                                |  |   |  |  | ✓ Vatum.                | □ No   | Pr0tected002  |   |            |
| Are Vegetation   |  | I □, or Hydrology  |                                |  | <b>αι:</b> (π πο, exμ   | 1  | normal circur  |                         |  | Township:   |   |            |
| Are Vegetation   | •  | , ,  | •                              | •  |   | AIG  | ✓ Yes  | □ No                    | CSCIII:  | Range:  | Dir:  |            |
| SUMMARY C  |  |  | Hatarany p                     | robicinatio:   |   |  | E 163  | <u> </u>                |  | Range.  | DII.  |            |
| Hydrophytic \  |  |  | Yes                            |  |   |  |  | Hydric Soi              | Is Present?  | Yes   |   |            |
| Wetland Hyd  | •  |  | Yes                            |  | _   |  |  |                         |  | nt Within A W   | etland? Yes   |            |
| Remarks:   |  |  |                                |  | chow in the   | floodplai  | n of the Tama  |                         |  |   | oodplain, the soils are na  | uturally   |
|  |  | and fit problemati   | •                              |  |   |  |  |                         |  | •   | •   | turuny     |
| HYDROLOG'  | •  |  |                                |  |   | . regionis   |  | , in panding            |  |   |   |            |
|  |  | licatoro (Chask all  | l that apply !                 | Minimum of o   |   | or two oo  |  | rod).                   |  |   |   |            |
| Primary:   |  | licators (Check all  | i that apply; i                | viinimum of oi   | ne primary  | or two se  | condary requi  | rea):                   | Secondary  |   |   |            |
|  | <u>.</u><br>A1 - Surface   | Water  |                                |  | B11 - Salt (  | Crust  |  |                         | Secondary  | <u>.</u><br>B6 - Surface S  | oil Cracks  |            |
|  | A2 - High Wa   |  |                                | ✓  | B13 - Aqua  |  |  |                         |  |   | Vegetated Concave Surface   |            |
|  | A3 - Saturation  |  |                                |  | C1 - Hydro  |  |  |                         |  | B10 - Drainage  | Patterns  |            |
|  | B1 - Water M   |  |                                |  | C2 - Dry Se   |  |  | D = = 1 = /= = 1 +:!!   |  |   | Rhizospheres on Living Root   | s (tilled) |
|  | B2 - Sedimer<br>B3 - Drift Der   | •  |                                |  | C3 - Oxidiz<br>C4 - Prese   |  | oheres on Living   | Roots (not till         |  | C8 - Crayfish E   | Burrows  No Visible on Aerial Imagery                                 |            |
|  | B4 - Algal Ma  |  |                                |  | C7 - Thin N   |  |  |                         | □  | D2 - Geomorp  |   |            |
|  | B5 - Iron Dep  | osits  |                                | _  | Other (Exp  |  |  |                         | ✓  | D5 - FAC-Neu  |   |            |
|  |  | on Visible on Aerial Im  | nagery                         |  |   |  |  |                         |  | D7 - Frost-Hea  | ved Hummocks (LRR F)  |            |
|  | B9 - Water-S   | tained Leaves  |                                |  |   |  |  |                         |  |   |   |            |
| First Of the second  | - 4 2  |  |                                |  |   |  |  |                         |  |   |   |            |
| Field Observ   |  |  | _                              |  | <i>(</i> ' )  |  |  |                         |  |   |   |            |
| Surface Water  |  |  | Dep                            |  | _ (in.)   |  |  | Wetland F               | Hydrology  | Present?  | Υ   |            |
| Water Table  |  | Yes  | •                              | oth:   | _ (in.)   |  |  |                         | ,  |   | _   |            |
| Saturation Pr  | resent?  | Yes  | Dep                            | oth:   | (in.)   |  |  |                         |  |   |   |            |
|  |  |  |                                |  |   |  |  |                         |  |   |   |            |
| Describe Reco  | orded Data (   | stream gauge, moni   | itoring well, a                | erial photos, p  | revious insp  | ections), i  | if available:  |                         |  |   |   |            |
| Describe Reco  | ·  | stream gauge, moni<br>abundant aquatic s   |                                |  | <u>_</u>  |  |  | sent.                   |  |   |   |            |
| Remarks:   | ·  |  |                                |  | <u>_</u>  |  |  | sent.                   |  |   |   |            |
| Remarks:   | There are a  | abundant aquatic s   | nail shells pı                 | resent. Indica   | tors of wet   | land hydro   | ology are pres   |                         |  |   |   |            |
| Remarks:  SOILS Profile Descri   | There are a  | abundant aquatic solution ibe to the depth ne  | eeded to doc                   | resent. Indica   | tors of wet   | land hydro   | ology are pres   | ndicators.)             |  |   |   |            |
| Remarks:  SOILS Profile Descri   | There are a  | abundant aquatic s   | eeded to doc                   | resent. Indica   | tors of wet   | land hydro   | ology are pres   | ndicators.)             |  |   |   |            |
| Remarks:  SOILS Profile Descri   | There are a  | ibe to the depth ne  | eeded to doc                   | resent. Indica   | tors of wet   | land hydro   | ology are preseabsence of in re Lining, M=Mat  | ndicators.)             |  |   |   |            |
| Remarks:  SOILS Profile Descri (Type: C=Concer   | There are a  | ibe to the depth neletion, RM=Reduced Ma   | eeded to doc<br>atrix, CS=Cove | resent. Indicate ument the indired/Coated Sand   | tors of wet   | onfirm the   | ology are present absence of in re Lining, M=Maters  | ndicators.)             | Teyture  |   | Remarks   |            |
| Remarks:  SOILS Profile Descri (Type: C=Concer   | There are a  | ibe to the depth neletion, RM=Reduced Marix Color (Moist)  | eeded to doc<br>atrix, CS=Cove | resent. Indicate ument the indicated Coated Sand   | tors of wet   | land hydro   | ology are preseabsence of in re Lining, M=Mat  | ndicators.)             | Texture  |   | Remarks   |            |
| Remarks:  SOILS Profile Descri (Type: C=Concer  Depth (In.) 0-2  | There are a siption (Description, D=Dep  | ibe to the depth ne letion, RM=Reduced Ma  Matrix  Color (Moist)   | eeded to doc<br>atrix, CS=Cove | resent. Indicated sument the indired/Coated Sand   | tors of wet   | onfirm the   | ology are present absence of in re Lining, M=Maters  | ndicators.)             | M  | thin oltomating h   |   |            |
| Remarks:  SOILS Profile Descri (Type: C=Concer  Depth (In.) 0-2 2-21   | There are a siption (Description, D=Dep  | ibe to the depth neletion, RM=Reduced Matrix Color (Moist)  2/1 2/1  | eeded to doc<br>atrix, CS=Cove | resent. Indicate tument the indired/Coated Sand Color  | tors of wet   | onfirm the   | ology are present absence of in re Lining, M=Maters  | ndicators.)             | M<br>SIC   | thin, alternating ba  |   |            |
| Remarks:  SOILS Profile Descri (Type: C=Concer  Depth (In.) 0-2  | There are a siption (Description, D=Dep  | ibe to the depth neletion, RM=Reduced Matrix Color (Moist)  2/1 2/1  | eeded to doc<br>atrix, CS=Cove | resent. Indicate tument the indired/Coated Sand Color  | tors of wet   | onfirm the   | ology are present absence of in re Lining, M=Maters  | ndicators.)             | M  | thin, alternating ba  |   |            |
| Remarks:  SOILS Profile Descri (Type: C=Concer  Depth (In.) 0-2 2-21   | There are a siption (Description, D=Dep  | ibe to the depth neletion, RM=Reduced Matrix Color (Moist)  2/1 2/1  | eeded to doc<br>atrix, CS=Cove | resent. Indicate tument the indired/Coated Sand Color  | tors of wet   | onfirm the   | ology are present absence of in re Lining, M=Maters  | ndicators.)             | M<br>SIC   | thin, alternating ba  |   |            |
| Remarks:  SOILS Profile Descri (Type: C=Concer  Depth (In.) 0-2 2-21   | There are a siption (Description, D=Dep  | ibe to the depth neletion, RM=Reduced Matrix Color (Moist)  2/1 2/1  | eeded to doc<br>atrix, CS=Cove | resent. Indicate tument the indired/Coated Sand Color  | tors of wet   | onfirm the   | ology are present absence of in re Lining, M=Maters  | ndicators.)             | M<br>SIC   | thin, alternating ba  |   |            |
| Remarks:  SOILS Profile Descri (Type: C=Concer  Depth (In.) 0-2 2-21 2-21  | There are a siption (Description, D=Deportmentation, D=Deportmentation | ibe to the depth neletion, RM=Reduced Matrix  Color (Moist)  2/1 2/1 3/1   | eeded to doc<br>atrix, CS=Cove | resent. Indicate tument the indired/Coated Sand Color  | icator or co  | Iand hydronic in the tion: PL=Por  | e absence of in<br>re Lining, M=Mati<br>s<br>Type  | ndicators.)             | M<br>SIC   | thin, alternating be  |   |            |
| Remarks:  SOILS Profile Descri (Type: C=Concer  Depth (In.) 0-2 2-21   | There are a siption (Description, D=Deportmentation, D=Deportmentation | ibe to the depth neletion, RM=Reduced Matrix  Color (Moist)  2/1 2/1 3/1   | eeded to doc<br>atrix, CS=Cove | resent. Indicate tument the indired/Coated Sand Color  | icator or co  | Iand hydronic in the tion: PL=Por  | ology are present absence of in re Lining, M=Maters  | ndicators.)             | M<br>SIC<br>SIC  |   | ands  |            |
| Remarks:  SOILS Profile Descri (Type: C=Concer  Depth (In.) 0-2 2-21 2-21 NRCS Hydr  | There are a siption (Description (Description, D=Deportmentation, D=De | ibe to the depth neletion, RM=Reduced Matrix  Color (Moist)  2/1 2/1 3/1   | eeded to doc<br>atrix, CS=Cove | cument the indired/Coated Sand Color | icator or co<br>Grains; Locat<br>(Moist)  | Iand hydronic in the tion: PL=Por  | e absence of in<br>re Lining, M=Mati<br>s<br>Type  | Location                | M<br>SIC<br>SIC  | for Problematic   | ands  |            |
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| Remarks:  SOILS Profile Descri (Type: C=Concer  Depth (In.) 0-2 2-21 2-21  NRCS Hydr   | There are a specific formula iption (Description (Description), D=Depoint and Depoint and  | ibe to the depth neletion, RM=Reduced Matrix  Color (Moist)  2/1 2/1 3/1  I Indicators (chapping a part of the depth neletion, RM=Reduced Matrix  Color (Moist)  (chapping a part of the depth neletion, RM=Reduced Matrix  (chapping a part of the depth neletion, RM=Reduced Matrix  (chapping a part of the depth neletion, RM=Reduced Matrix  (chapping a part of the depth neletion, RM=Reduced Matrix  (chapping a part of the depth neletion, RM=Reduced Matrix  (chapping a part of the depth neletion, RM=Reduced Matrix  (chapping a part of the depth neletion, RM=Reduced Matrix  (chapping a part of the depth neletion, RM=Reduced Matrix  (chapping a part of the depth neletion, RM=Reduced Matrix  (chapping a part of the depth neletion, RM=Reduced Matrix  (chapping a part of the depth neletion, RM=Reduced Matrix  (chapping a part of the depth neletion, RM=Reduced Matrix  (chapping a part of the depth neletion)   | eeded to doc<br>atrix, CS=Cove | cument the indired/Coated Sand  Color  Color | icator or co<br>Grains; Local   | Iand hydronic portion: PL=Portion: Mottle:    Mottle:  | e absence of in<br>re Lining, M=Mati<br>s<br>Type  | Location                | M<br>SIC<br>SIC<br>SIC<br>A9 - 1 cm N<br>A16 - Coast   | for Problemation  Muck (LRR I, J)  t Prairie Redox (  | ands<br>Soils <sup>1</sup>  |            |
| Remarks:  SOILS Profile Descri (Type: C=Concer  Depth (In.) 0-2 2-21 2-21  NRCS Hydr   | There are a siption (Description (Description, D=Deportration, | ibe to the depth neletion, RM=Reduced Marix  Color (Moist)  2/1  2/1  3/1  I Indicators (characters)   | eeded to doc<br>atrix, CS=Cove | resent. Indications are  Solution Solutions are  Solution So | icator or co<br>Grains; Locat<br>(Moist)<br>not present   | mottle:   Work   | e absence of in<br>re Lining, M=Mati<br>s<br>Type  | Location                | M<br>SIC<br>SIC<br>SIC<br>A9 - 1 cm M<br>A16 - Coast<br>S7 - Dark S  | for Problemation  Muck (LRR I, J)  t Prairie Redox ( Surface (LRR G)  | ends  Soils <sup>1</sup> LRR F, G, H)                                 |            |
| Remarks:  SOILS Profile Descri (Type: C=Concer  Depth (In.) 0-2 2-21 2-21  NRCS Hydr   | There are a siption (Description (Description, D=Depointration, D=Depointr | ibe to the depth neletion, RM=Reduced Matrix  Color (Moist)  2/1 2/1 3/1  I Indicators (characters and Sulfide   | eeded to doc<br>atrix, CS=Cove | cument the indired/Coated Sand  Color  Color | icator or co<br>Grains; Local<br>(Moist)<br>(Moist)<br>not present  | mottle:   Work   | e absence of in<br>re Lining, M=Mati<br>s<br>Type  | Location                | M<br>SIC<br>SIC<br>SIC<br>A9 - 1 cm M<br>A16 - Coast<br>S7 - Dark S  | for Problemation  Muck (LRR I, J)  t Prairie Redox ( Surface (LRR G)  Plains Depression   | ands<br>Soils <sup>1</sup>  |            |
| Remarks:  SOILS Profile Descri (Type: C=Concer  Depth (In.) 0-2 2-21 2-21  NRCS Hydr   | There are a siption (Description (Description, D=Deportration, | ibe to the depth ne letion, RM=Reduced Marix  Color (Moist)  2/1 2/1 3/1  I Indicators (characters (characters (LRR F) ack (LRR FGH)   | eeded to doc<br>atrix, CS=Cove | resent. Indications are  Solution Solut | icator or congrains; Locate  (Moist)  (Moist)  not present Matrix Mucky Mineral Matrix Dark Surface   | mottle:  t):   | e absence of in<br>re Lining, M=Mati<br>s<br>Type  | Location                | M<br>SIC<br>SIC<br>SIC<br>A9 - 1 cm M<br>A16 - Coast<br>S7 - Dark S<br>F16 - High I<br>F18 - Reduc<br>TF2 - Red F                                      | for Problemation  Muck (LRR I, J)  t Prairie Redox ( Gurface (LRR G)  Plains Depression  Ced Vertic  Parent Material  | e Soils <sup>1</sup> LRR F, G, H)  ONS (LRR H, outside MLRA 72, 73)   |            |
| Remarks:  SOILS Profile Descri (Type: C=Concer  Depth (In.) 0-2 2-21 2-21  NRCS Hydr   | There are a siption (Description (Description), D=Dep Hue_10YR Hue | ibe to the depth neletion, RM=Reduced Marix  Color (Moist)  2/1 2/1 3/1  I Indicators (characters (LRR F) ack (LRR FGH) ed Below Dark Surface  | eeded to doc<br>atrix, CS=Cove | resent. Indications are  Solution of the indicators are ind | icator or congrains; Locate  (Moist)  Redox d Matrix Mucky Minera Gleyed Matrix Dark Surface d Dark Surface   | mottle:  t):   | e absence of in<br>re Lining, M=Mati<br>s<br>Type  | Location                | M<br>SIC<br>SIC<br>SIC<br>A9 - 1 cm M<br>A16 - Coast<br>S7 - Dark S<br>F16 - High I<br>F18 - Reduc<br>TF2 - Red F<br>TF12 - Very                       | for Problemation  Muck (LRR I, J)  It Prairie Redox (Surface (LRR G)  Plains Depression  Ced Vertic  Parent Material  It Shallow Dark S   | e Soils <sup>1</sup> LRR F, G, H)  ONS (LRR H, outside MLRA 72, 73)   |            |
| Remarks:  SOILS Profile Descri (Type: C=Concer  Depth (In.) 0-2 2-21 2-21  Profile Descri  | There are a siption (Description, D=Depoint and Depoint and Depoin | ibe to the depth ne letion, RM=Reduced Marix  Color (Moist)  2/1  2/1  3/1  Indicators (characters (LRR F) ack (LRR FGH) ed Below Dark Surface Dark Surface  | eeded to doc<br>atrix, CS=Cove | resent. Indications are  Solution Color of Color | icator or configurations; Locations; Locations; Locations; Locations (Moist)  (Moist)  not present Redox and Matrix Mucky Mineral Mucky Mineral Matrix Dark Surface and Dark Surface and Dark Surface do Dark | Iand hydronal confirm the tion: PL=Poi   | e absence of ir<br>re Lining, M=Mati<br>s<br>Type  | Location                | M<br>SIC<br>SIC<br>SIC<br>A9 - 1 cm M<br>A16 - Coast<br>S7 - Dark S<br>F16 - High I<br>F18 - Reduc<br>TF2 - Red F<br>TF12 - Very                       | for Problemation  Muck (LRR I, J)  t Prairie Redox ( Gurface (LRR G)  Plains Depression  Ced Vertic  Parent Material  | e Soils <sup>1</sup> LRR F, G, H)  ONS (LRR H, outside MLRA 72, 73)   |            |
| Remarks:  SOILS Profile Descri (Type: C=Concer  Depth (In.) 0-2 2-21 2-21  Profile Descri (Type: C=Concer  | There are a siption (Description (Description, D=Depoint of Depoint of Depoin | ibe to the depth ne letion, RM=Reduced Marix  Matrix  Color (Moist)  2/1  2/1  3/1  Indicators (characters)  Sipedon stic en Sulfide d Layers (LRR F)  Jack (LRR FGH)  Jack (LRR FGH)  Jack Surface ducky Mineral  | eeded to doc<br>atrix, CS=Cove | resent. Indications are  Solution Color of Color | icator or configurations; Locations; Locations; Locations; Locations (Moist)  (Moist)  not present Redox and Matrix Mucky Mineral Mucky Mineral Matrix Dark Surface and Dark Surface and Dark Surface do Dark | Iand hydronal confirm the tion: PL=Poi   | e absence of in<br>re Lining, M=Mati<br>s<br>Type  | Location                | M<br>SIC<br>SIC<br>SIC<br>A9 - 1 cm M<br>A16 - Coast<br>S7 - Dark S<br>F16 - High I<br>F18 - Reduc<br>TF2 - Red F<br>TF12 - Very                       | for Problemation  Muck (LRR I, J)  It Prairie Redox (Surface (LRR G)  Plains Depression  Ced Vertic  Parent Material  It Shallow Dark S   | e Soils <sup>1</sup> LRR F, G, H)  ONS (LRR H, outside MLRA 72, 73)   |            |
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| Remarks:  SOILS Profile Descri (Type: C=Concer  Depth (In.) 0-2 2-21 2-21  PRESCRIPTION OF THE PROFILE OF THE P | There are a siption (Description (Description), D=Depoint Depoint Depo | ibe to the depth ne letion, RM=Reduced Marix  Color (Moist)  2/1  2/1  3/1  Indicators (characters (LRR F))  ack (LRR FGH)  add Below Dark Surface (LRR Surface)  Jucky Mineral Mucky Peat or Peat (LR)  Jucky Peat or Peat (LR)   | eeded to doc<br>atrix, CS=Cove | resent. Indications are  Solution Color of Color | icator or congrains; Locate (Moist)  (Moist)  Redox d Matrix Mucky Mineral d Matrix Dark Surface d Dark Surface Depressions   | Iand hydronal confirm the tion: PL=Poi   | e absence of ir<br>re Lining, M=Mati<br>s<br>Type  | Location                | M<br>SIC<br>SIC<br>SIC<br>A9 - 1 cm M<br>A16 - Coast<br>S7 - Dark S<br>F16 - High I<br>F18 - Reduc<br>TF2 - Red F<br>TF12 - Very<br>Other (Explana     | for Problemation  Muck (LRR I, J)  It Prairie Redox (Surface (LRR G)  Plains Depression  Ced Vertic  Parent Material  If Shallow Dark Stain in Remarks)                                 | e Soils <sup>1</sup> LRR F, G, H)  ONS (LRR H, outside MLRA 72, 73)   | ⇒ present, |
| Remarks:  SOILS Profile Descri (Type: C=Concer  Depth (In.) 0-2 2-21 2-21  | There are a siption (Description, D=Depoint and Depoint and Depoin | ibe to the depth ne letion, RM=Reduced Marix  Color (Moist)  2/1  2/1  3/1  Indicators (characters (LRR F))  ack (LRR FGH)  add Below Dark Surface (LRR Surface)  Jucky Mineral Mucky Peat or Peat (LR)  Jucky Peat or Peat (LR)   | eeded to doc<br>atrix, CS=Cove | resent. Indications are  Solution Color of Color | icator or congrains; Locate (Moist)  (Moist)  Redox d Matrix Mucky Mineral d Matrix Dark Surface d Dark Surface Depressions   | Iand hydronal confirm the tion: PL=Poi   | e absence of ir<br>re Lining, M=Mati<br>s<br>Type  | Location                | M<br>SIC<br>SIC<br>SIC<br>A9 - 1 cm M<br>A16 - Coast<br>S7 - Dark S<br>F16 - High I<br>F18 - Reduc<br>TF2 - Red F<br>TF12 - Very<br>Other (Explana     | for Problemation  Muck (LRR I, J)  t Prairie Redox (Courface (LRR G)  Plains Depression  ced Vertic  Parent Material  of Shallow Dark Stain in Remarks)                                 | ends  Soils¹  LRR F, G, H)  Ons (LRR H, outside MLRA 72, 73)  Surface | ⇒ present, |
| Remarks:  SOILS Profile Descri (Type: C=Concer  Depth (In.) 0-2 2-21 2-21  | There are a siption (Description (Description), D=Depoint attention, D=D | ibe to the depth negletion, RM=Reduced Matrix  Color (Moist)  2/1 2/1 3/1  Indicators (characters (LRR F) ack (LRR FGH) add Below Dark Surface flucky Mineral Mucky Peat or Peat (LRI sleyed Matrix  | eeded to doc<br>atrix, CS=Cove | resent. Indicate and red/Coated Sand  Color of C | icator or congrains; Locate (Moist)  (Moist)  not present Addrix Mucky Mineral Gleyed Matrix Dark Surface of Dark Surface of Dark Surface of Dark Surface of Depressions Plains Depressions   | Iand hydronal confirm the tion: PL=Poi   | e absence of ir re Lining, M=Mating Type   | Location                | M<br>SIC<br>SIC<br>SIC<br>A9 - 1 cm M<br>A16 - Coast<br>S7 - Dark S<br>F16 - High I<br>F18 - Reduc<br>TF2 - Red I<br>TF12 - Very<br>Other (Explanation | for Problemation  Muck (LRR I, J)  t Prairie Redox (Courface (LRR G)  Plains Depression  ced Vertic  Parent Material  of Shallow Dark Stain in Remarks)                                 | ends  Soils¹  LRR F, G, H)  Ons (LRR H, outside MLRA 72, 73)  Surface | e present, |
| Remarks:  SOILS Profile Descri (Type: C=Concer  Depth (In.) 0-2 2-21 2-21  | There are a siption (Description (Description), D=Depoint at a siption | ibe to the depth negletion, RM=Reduced Matrix  Color (Moist)  2/1  2/1  3/1  Indicators (characters)  Sipedon Stic (Characters)  Color (LRR FGH)  Color (Moist)  Color (Mo | eeded to doc<br>atrix, CS=Cove | resent. Indications are  Color of the color  | icator or congrains; Locate  (Moist)  (Moist)  not present Redox d Matrix Mucky Minera d Matrix Dark Surface d | mottle:    Mottle:   Williams   Williams   Mottle:   Williams   Williams   Mottle:   Williams   Williams   Mottle:   Williams   Williams   Williams   Williams   Williams     Williams   Williams   Williams   Williams     Williams   Williams   Williams   Williams     Williams   Williams   Williams   Williams     Williams   Williams   Williams     Williams   Williams   Williams     Williams   Williams   W | e absence of ingress transported in the second seco | Location  Hill Present? | M<br>SIC<br>SIC<br>SIC<br>A9 - 1 cm M<br>A16 - Coast<br>S7 - Dark S<br>F16 - High I<br>F18 - Reduct<br>TF2 - Red F<br>TF12 - Very<br>Other (Explain    | for Problematic fuck (LRR I, J) t Prairie Redox ( curface (LRR G) Plains Depression ced Vertic Parent Material of Shallow Dark Stain in Remarks) hydrophytic vegetat ed or problematic. | ends  Soils¹  LRR F, G, H)  Ons (LRR H, outside MLRA 72, 73)  Surface |            |

## WETLAND DETERMINATION DATA FORM Great Plains Region

| Project/Site:  | L3R                                    |                |                      |              | Sample Point: w-157n47w16-j1   |
|----------------|--|----------------|----------------------|--------------|--|
|                |  |                |                      |              | -  |
| VEGETATIO      |  | are non-native | e species.)          |              |  |
| Tree Stratum ( | (Plot size: 30 ft. radius)             |                |                      |              |  |
|                | Species Name                           | % Cover        | <u>Dominant</u>      | Ind.Status   | Dominance Test Worksheet   |
| 1.             |  | 1              |                      |              |  |
| 2.             |  |                |                      |              | Number of Dominant Species that are OBL, FACW, or FAC:3(A)               |
| 3.             |  |                |                      |              |  |
| 4.             |  |                |                      |              | Total Number of Dominant Species Across All Strata:3(B)                  |
| 5.             |  |                |                      |              |  |
| 6.             |  |                |                      |              | Percent of Dominant Species That Are OBL, FACW, or FAC: 100.0% (A/B)     |
| 7.             |  |                |                      |              |  |
| 8.             |  |                |                      |              | Prevalence Index Worksheet   |
| 9.             |  |                |                      |              | Total % Cover of: Multiply by:   |
| 10.            |  | 1              |                      |              | OBL spp. 80 $x = 1 = 1 = 1 = 1 = 1 = 1 = 1 = 1 = 1 = $                   |
|                | Total Cover :                          | = 0            |                      |              | FACW spp. $10$ $\times 2 = 20$   |
|                |  |                | FAC spp. 20 x 3 = 60 |              |  |
| Sapling/Shrub  | Stratum (Plot size: 15 ft. radius)     |                |                      |              | FAC spp. $\begin{array}{cccccccccccccccccccccccccccccccccccc$            |
| 1.             | Fraxinus pennsylvanica                 | 20             | Υ                    | FAC          | UPL spp. $0 	 x 	 5 = 0$   |
| 2.             |  | er er          |                      |              | ··· <del></del>  |
| 3.             |  | 1              |                      |              | Total 110 (A) 160 (B)  |
| 4.             |  |                |                      |              | (=)  |
| 5.             |  | -              |                      |              | Prevalence Index = B/A = 1.455   |
| 6.             |  |                |                      |              | 1 Tovalorise index = 2/7 = 1770  |
| 7.             |  | 1              |                      |              |  |
| 8.             |  |                |                      |              | Hydrophytic Vegetation Indicators:                                       |
| 9.             |  |                |                      |              | Rapid Test for Hydrophytic Vegetation                                    |
| 10.            |  |                |                      |              |  |
| 10.            | Total Cover -                          | 20             |                      |              | <del></del>  |
|                | Total Cover =                          | = 20           |                      |              | X Prevalence Index is ≤ 3.0 *  |
|                |  |                |                      |              | Morphological Adaptations (Explain) *                                    |
| Herb Stratum ( | Plot size: 5 ft. radius)               |                |                      | 0.01         | Problem Hydrophytic Vegetation (Explain) *                               |
| 1.             | Schoenoplectus fluviatilis             | 40             | Y                    | OBL          |  |
| 2.             | Persicaria amphibia                    | 30             | Υ                    | OBL          | * Indicators of hydric soil and wetland hydrology must be                |
| 3.             | Phalaris arundinacea                   | 10             | N                    | FACW         | present, unless disturbed or problematic.                                |
| 4.             | Sparganium eurycarpum                  | 10             | N                    | OBL          | Definitions of Vegetation Strata:  |
| 5.             |  | 1              |                      |              |  |
| 6              |  | 1              |                      |              | Tree - Woody plants 3 in. (7.6cm) or more in diameter at breast          |
| 7.             |  | 1              |                      |              | height (DBH), regardless of height.                                      |
| 8.             |  |                |                      |              |  |
| 9.             |  |                |                      |              | Sapling/Shrub - Woody plants less than 3 in. DBH, regardless of height.  |
| 10.            |  |                |                      |              |  |
| 11.            |  |                |                      |              |  |
| 12.            |  |                |                      |              | <b>Herb</b> - All herbaceous (non-woody) plants, regardless of size.     |
| 13.            |  |                |                      |              |  |
| 14.            |  |                |                      |              |  |
| 15.            |  |                |                      |              | Woody Vines - All woody vines, regardless of height.                     |
| . 3.           | Total Cover :                          | = 90           |                      |              |  |
|                | Total Gover -                          |                |                      |              |  |
| Woody Vine St  | ratum (Plot size: 30 ft. radius)       |                |                      |              |  |
| 1              | Tatam (1 lot 0120. 00 lt. laulus)      |                |                      |              |  |
| 2.             | 1                                      | 1              |                      |              |  |
| 3.             |  |                |                      |              | Hydrophytic Vegetation Present? Y  |
|                |  | 1              |                      |              | nyurophytic vegetation Fresent?  |
| 5.             | 1                                      | 1              |                      |              |  |
| 4.             | Total Cover :                          | = 0            |                      |              |  |
| Damarka        |  |                | امام میم منا ما      | avda avv lia | the fleedalein of the Townson Diver. I hydrophytic vegetation is proceed |
| Remarks:       | A snallow marsh community dominated by | river buirusi  | n in an oid          | OXDOW IN     | the floodplain of the Tamarac River. Hydrophytic vegetation is present.  |
|                |  |                |                      |              |  |
|                |  |                |                      |              |  |
| Additional R   | Remarks:                               |                |                      |              |  |
|                |  |                |                      |              |  |
|                |  |                |                      |              |  |
|                |  |                |                      |              |  |
|                |  |                |                      |              |  |