WETLAND DETERMINATION DATA FORM Great Plains Region

Project/Site:		L3R								Date:	09/25/14	
Applicant:						~ /N/I D /	or LDD).	MIDAEC		County:	Pennington	
Investigators Soil Unit:	I16F	MRNOIG			_Subregio	•	Nor LRR): I Classification:	MLRA 56		State:	MN	
Landform:	Shoulder			Lo		_ Sample Point:	u-153n43w29-k1					
Slope (%):	8 - 15%	Latitud	de: 48.03				7486667	Datum:	·	1		
Are climatic/hydrologic conditions on the site typical for this time of year? (If no, explain in remarks) ☑ Yes ☐ No Section:												
Are Vegetation			disturbed?		Are	e normal circun	-	esent?	Township:			
Are Vegetation			rally prob	olematic?				□ No		Range:	Dir:	
SUMMARY C			No					Hydria Cai	le Present?	. No		
Hydrophytic Vegetation Present? Wetland Hydrology Present? No						Hydric Soils Present? No Is This Sampling Point Within A Wetland? No						
Remarks:		sample point is located		m, upslope f	rom a har	dwood s	wamp.	13 11113 041	mpling r on	ic vvicinii / C vv	cuana: 110	
HYDROLOG	Υ											
Wetland Hydrology Indicators (Check all that apply; Minimum of one primary or two secondary required):												
Primary:		Motor			B11 - Salt	Cruct			Secondary:	B6 - Surface S	oil Crooks	
						crusi atic Fauna					Vegetated Concave Surface	
	A3 - Saturatio	n			C1 - Hydro	gen Sulfic	le Odor			B10 - Drainage	e Patterns	
	B1 - Water Mar B2 - Sedimen				C2 - Dry S		iter Table spheres on Living	Poots (not till		C3 - Oxidized I C8 - Crayfish E	Rhizospheres on Living Roots (tilled)	
	B3 - Drift Dep	•					duced Iron	110013 (1101 1111		•	n Visible on Aerial Imagery	
	B4 - Algal Ma	t or Crust			C7 - Thin N		ace			D2 - Geomorpl	hic Position	
	B5 - Iron Dep	osits n Visible on Aerial Imagery			Other (Exp	olain)				D5 - FAC-Neut	tral Test aved Hummocks (LRR F)	
	B9 - Water-St								_	D1 - 1 103t-11ce	aved Fidininoeks (ERRY)	
Field Observ												
Surface Wate		Yes	Depth:		_ (in.)			Wetland F	- Hydrology	Present?	N	
Water Table		Yes □ Yes □	Depth:		- (in.) - (in.)						—	
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:												
Damarka	<u>`</u>					ections),	if available:					
Remarks:	<u>`</u>	or secondary hydrologic				ections),	if available:					
Remarks:	<u>`</u>					pections),	if available:					
SOILS Profile Descri	No primary	or secondary hydrologic	al indicat	tors were ob	eserved.	onfirm th	e absence of ir					
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SOILS Profile Descri	No primary	or secondary hydrologic be to the depth needed etion, RM=Reduced Matrix, CS	al indicat	tors were ob	eserved.	onfirm th	e absence of ir ore Lining, M=Matr					
SOILS Profile Descri (Type: C=Concer	No primary	or secondary hydrologic be to the depth needed etion, RM=Reduced Matrix, CS	to docum	nent the indi	cator or co	onfirm th tion: PL=P Mottl	e absence of ir ore Lining, M=Matr	ix)	Texture		Remarks	
SOILS Profile Descri (Type: C=Concer	No primary iption (Descri	or secondary hydrologic be to the depth needed etion, RM=Reduced Matrix, CS Matrix Color (Moist)	to docum S=Covered	tors were ob	cator or co	onfirm th	e absence of ir ore Lining, M=Matr		Texture		Remarks	
SOILS Profile Descri (Type: C=Concer Depth (In.) 0-12	No primary iption (Descri	or secondary hydrologic be to the depth needed etion, RM=Reduced Matrix, CS	to docum	nent the indi	cator or co	onfirm th tion: PL=P Mottl	e absence of ir ore Lining, M=Matr	ix)	Texture CL		Remarks	
SOILS Profile Descri (Type: C=Concer	No primary iption (Descri	be to the depth needed etion, RM=Reduced Matrix Matrix Color (Moist) 2/1	to docum S=Covered % 100	nent the indi	cator or co	onfirm th tion: PL=P Mottl	e absence of ir ore Lining, M=Matr	ix)	Texture CL C		Remarks	
SOILS Profile Descri (Type: C=Concer Depth (In.) 0-12 12-16	No primary iption (Descrintration, D=Deplementation, D=Deplementation) Hue_10YR Hue_5Y	be to the depth needed etion, RM=Reduced Matrix. Matrix Color (Moist) 2/1 4/2	to docum S=Covered % 100 100	nent the indi	cator or co	onfirm th tion: PL=P Mottl	e absence of ir ore Lining, M=Matr	ix)	Texture CL C		Remarks	
SOILS Profile Descri (Type: C=Concer Depth (In.) 0-12 12-16	No primary iption (Descrintration, D=Deplementation, D=Deplementation) Hue_10YR Hue_5Y	be to the depth needed etion, RM=Reduced Matrix. Matrix Color (Moist) 2/1 4/2	to docum S=Covered % 100 100	nent the indi	cator or co	onfirm th tion: PL=P Mottl	e absence of ir ore Lining, M=Matr	ix)	Texture CL C		Remarks	
SOILS Profile Descri (Type: C=Concer Depth (In.) 0-12 12-16 16-20	No primary iption (Descriptration, D=Deplementation, D=Deplementation) Hue_10YR Hue_5Y Hue_5Y	be to the depth needed etion, RM=Reduced Matrix Matrix Color (Moist) 2/1 4/2 5/2	to docum S=Covered % 100 100	nent the indi	cator or co	onfirm th tion: PL=P Mottl	e absence of ir ore Lining, M=Matr es Type	ix)	Texture CL C		Remarks	
SOILS Profile Descri (Type: C=Concer Depth (In.) 0-12 12-16 16-20	No primary iption (Descrintration, D=Deplementation, D=Deplementation) Hue_10YR Hue_5Y	be to the depth needed etion, RM=Reduced Matrix Color (Moist) 2/1 4/2 5/2	to docum S=Covered 100 100	nent the indi	cator or co	onfirm th	e absence of ir ore Lining, M=Matr	ix)	CL C			
SOILS Profile Descri (Type: C=Concer Depth (In.) 0-12 12-16 16-20 NRCS Hydr	No primary iption (Descrintration, D=Deplementation, D=Deplementation) Hue_10YR Hue_5Y Hue_5Y	be to the depth needed etion, RM=Reduced Matrix Color (Moist) 2/1 4/2 5/2	to docum S=Covered 100 100 100 ere if ind	nent the indicators were obtained the indicators are received to the indicators are received	cator or co Grains; Loca Moist)	onfirm th	e absence of ir ore Lining, M=Matr es Type	Location	CL C C	for Problematic		
SOILS Profile Descri (Type: C=Concer Depth (In.) 0-12 12-16 16-20 NRCS Hydr	No primary iption (Descrintration, D=Deplementation, D=Deplementation) Hue_10YR Hue_5Y Hue_5Y Hue_5Y A1- Histosol	be to the depth needed etion, RM=Reduced Matrix. Color (Moist) 2/1 4/2 5/2 Indicators (check h	to docum S=Covered % 100 100 100 ere if ind	cors were obtained the individual of the individ	cator or cograins; Loca Moist) not presented or cograins; Loca	onfirm th	e absence of ir ore Lining, M=Matr es Type	Location	CL C C Indicators 1	luck (LRR I, J)	c Soils ¹	
SOILS Profile Descri (Type: C=Concer Depth (In.) 0-12 12-16 16-20 NRCS Hydr	No primary iption (Descrintration, D=Deplementation, D=Deplementation) Hue_10YR Hue_5Y Hue_5Y	be to the depth needed etion, RM=Reduced Matrix, CS Matrix Color (Moist) 2/1 4/2 5/2 Indicators (check h	to docum S=Covered % 100 100 100 ere if ind	nent the indicators were obtained the indicators are received to the indicators are received	cator or co Grains; Loca Moist) not presen edox Matrix	Mottl %	e absence of ir ore Lining, M=Matr es Type	Location	CL C C Indicators f A9 - 1 cm M A16 - Coast S7 - Dark S	luck (LRR I, J) : Prairie Redox (urface (LRR G)	Soils ¹ LRR F, G, H)	
Depth (In.) 0-12 12-16 16-20 NRCS Hydr	Hue_10YR Hue_5Y Hue_5Y Hue_5Y A1- Histosol A2 - Histic Ep A3 - Black His A4 - Hydroge	be to the depth needed etion, RM=Reduced Matrix, CS Matrix Color (Moist) 2/1 4/2 5/2 Indicators (check heigh of Sulfide)	to docum S=Covered % 100 100 100 ere if ind	cors were obtained the individual of the individ	cator or co Grains; Loca Moist) Moist) not presen edox Matrix Mucky Miner Gleyed Matri	mottl Mottl w tion: PL=P	e absence of ir ore Lining, M=Matr es Type	Location	CL C C Indicators 1 A9 - 1 cm M A16 - Coast S7 - Dark S F16 - High F	luck (LRR I, J) : Prairie Redox (urface (LRR G) Plains Depressio	c Soils ¹	
Depth (In.) 0-12 12-16 16-20 NRCS Hydr	Hue_10YR Hue_5Y Hue_5Y Hue_5Y A1- Histosol A2 - Histic Ep A3 - Black His A4 - Hydrogel A5 - Stratified	be to the depth needed etion, RM=Reduced Matrix. Color (Moist) 2/1 4/2 5/2 Indicators (check height in Sulfide Layers (LRR F)	to docum S=Covered % 100 100 100 ere if ind	Color (I S5 - Sandy R S6 - Stripped F1 - Loamy N F2 - Loamy G F3 - Depleted	cator or co Grains; Loca Moist) Moist) not presen edox Matrix Mucky Miner Gleyed Matri	mottl Mottl % tion: PL=P	e absence of ir ore Lining, M=Matr es Type	Location	CL C C C Indicators 1 A9 - 1 cm M A16 - Coast S7 - Dark S F16 - High F F18 - Reduce	fluck (LRR I, J) : Prairie Redox (urface (LRR G) Plains Depression ced Vertic	Soils ¹ LRR F, G, H)	
Depth (In.) 0-12 12-16 16-20 NRCS Hydr	Hue_10YR Hue_5Y Hue_5Y Hue_5Y A1- Histosol A2 - Histic Ep A3 - Black His A4 - Hydrogel A5 - Stratified A9 - 1 cm Mu	be to the depth needed etion, RM=Reduced Matrix, CS Matrix Color (Moist) 2/1 4/2 5/2 Indicators (check heigh of Sulfide)	to docum S=Covered % 100 100 100 ere if ind	cors were obtained the individual of the individ	cator or co Grains; Loca Moist) Moist) not presen edox Matrix Mucky Miner Gleyed Matrix Matrix Jark Surface	mottl Mottl // // // // // // // // // // // // /	e absence of ir ore Lining, M=Matr es Type	Location	CL C C Indicators 1 A9 - 1 cm M A16 - Coast S7 - Dark S F16 - High F F18 - Reduc TF2 - Red F	luck (LRR I, J) : Prairie Redox (urface (LRR G) Plains Depressio	Soils ¹ (LRR F, G, H) ONS (LRR H, outside MLRA 72, 73)	
Depth (In.) 0-12 12-16 16-20 NRCS Hydr	Hue_10YR Hue_5Y Hue_5Y Hue_5Y A1- Histosol A2 - Histic Ep A3 - Black His A4 - Hydroger A5 - Stratified A9 - 1 cm Mu A11 - Deplete A12 - Thick D	be to the depth needed etion, RM=Reduced Matrix. Color (Moist) 2/1 4/2 5/2 Indicators (check heigh of the stice of Sulfide Layers (LRR F) ck (LRR FGH) depth needed details. Surface ark Surface ark Surface	to docum S=Covered % 100 100 100 ere if ind	cors were obtained the individual of the individ	cator or co Grains; Loca Moist) Moist) not presen edox Matrix Mucky Miner Gleyed Matri Matrix eark Surface d Dark Surface epressions	mottl Mottl // // // // // // // // // // // // /	e absence of ir ore Lining, M=Matr es Type	Location	CL C C C A9 - 1 cm M A16 - Coast S7 - Dark S F16 - High F F18 - Reduc TF2 - Red F TF12 - Very	fluck (LRR I, J) Prairie Redox (urface (LRR G) Idains Depression Ced Vertic Parent Material	Soils ¹ (LRR F, G, H) ONS (LRR H, outside MLRA 72, 73)	
Depth (In.) 0-12 12-16 16-20 NRCS Hydr	Hue_10YR Hue_5Y Hue_5Y Hue_5Y A1- Histosol A2 - Histic Ep A3 - Black His A4 - Hydrogel A5 - Stratified A9 - 1 cm Mu A11 - Deplete A12 - Thick D S1 - Sandy M	be to the depth needed etion, RM=Reduced Matrix. Matrix Color (Moist) 2/1 4/2 5/2 Indicators (check heigh of the stice of Sulfide Layers (LRR F) ck (LRR FGH) d Below Dark Surface ark Surface ark Surface ucky Mineral	to docum S=Covered % 100 100 100 ere if ind	cors were obtained the individual of the individ	cator or co Grains; Loca Moist) Moist) not presen edox Matrix Mucky Miner Gleyed Matri Matrix eark Surface d Dark Surface epressions	mottl Mottl // // // // // // // // // // // // /	e absence of ir ore Lining, M=Matr es Type	Location	CL C C C A9 - 1 cm M A16 - Coast S7 - Dark S F16 - High F F18 - Reduc TF2 - Red F TF12 - Very	fluck (LRR I, J) Prairie Redox (urface (LRR G) Plains Depression Ced Vertic Parent Material Shallow Dark S	Soils ¹ (LRR F, G, H) ONS (LRR H, outside MLRA 72, 73)	
Depth (In.) 0-12 12-16 16-20 NRCS Hydr	Hue_10YR Hue_5Y Hue_5Y Hue_5Y A1- Histosol A2 - Histic Ep A3 - Black His A4 - Hydroger A5 - Stratified A9 - 1 cm Mu A11 - Deplete A12 - Thick D S1 - Sandy M S2 - 2.5 cm M	be to the depth needed etion, RM=Reduced Matrix. Color (Moist) 2/1 4/2 5/2 Indicators (check heigh of the stice of Sulfide Layers (LRR F) ck (LRR FGH) depth needed details. Surface ark Surface ark Surface	to docum S=Covered % 100 100 100 ere if ind	cors were obtained the individual of the individ	cator or co Grains; Loca Moist) Moist) not presen edox Matrix Mucky Miner Gleyed Matri Matrix eark Surface d Dark Surface epressions	mottl Mottl // // // // // // // // // // // // /	e absence of ir ore Lining, M=Matr es Type	Location	CL C C C A9 - 1 cm M A16 - Coast S7 - Dark S F16 - High F F18 - Reduc TF2 - Red F TF12 - Very Other (Expla	fluck (LRR I, J) Prairie Redox (urface (LRR G) Plains Depression Ced Vertic Parent Material Shallow Dark S ain in Remarks)	Soils ¹ (LRR F, G, H) ONS (LRR H, outside MLRA 72, 73)	
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Depth (In.) 0-12 12-16 16-20 NRCS Hydr	Hue_10YR Hue_5Y Hue_5Y Hue_5Y A1- Histosol A2 - Histic Ep A3 - Black His A4 - Hydroger A5 - Stratified A9 - 1 cm Mu A11 - Deplete A12 - Thick D S1 - Sandy M S2 - 2.5 cm M S3 - 5 cm Mu	be to the depth needed etion, RM=Reduced Matrix. Color (Moist) 2/1 4/2 5/2 Indicators (check head ipedon etic in Sulfide Layers (LRR F) ck (LRR FGH) de Below Dark Surface ark Surface ark Surface ucky Mineral lucky Peat or Peat (LRR G, cky Peat or Peat (LRR F)	to docum S=Covered % 100 100 100 ere if ind	cors were obtained the individual of the individ	cator or co Grains; Loca Moist) Moist) not presen edox Matrix Mucky Miner Gleyed Matri Matrix eark Surface d Dark Surface epressions	mottl Mottl // // // // // // // // // // // // /	e absence of ir ore Lining, M=Matr es Type	Location	CL C C C A9 - 1 cm M A16 - Coast S7 - Dark S F16 - High F F18 - Reduc TF2 - Red F TF12 - Very Other (Expla	Muck (LRR I, J) Prairie Redox (urface (LRR G) Plains Depression Ced Vertic Parent Material Shallow Dark S Ain in Remarks)	ESoils ¹ ELRR 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-153n43w29-k1			
VEGETATIO	` '	re non-native	species.)					
Tree Stratum	(Plot size: 30 ft. radius) Species Name	% Cover	Dominant	Ind.Status	Dominance Test Worksheet			
1.	Tilia americana	<u> </u>	Y	FACU	Dominance rest Worksheet			
2.	Populus tremuloides	30	Y	FAC	Number of Dominant Species that are OBL, FACW, or FAC: 1 (A)			
3.	Fraxinus pennsylvanica	10	 N	FAC	(7t)			
4.	Traxinas perinsylvanica			1710	Total Number of Dominant Species Across All Strata: 4 (B)			
5.					· · · · · · · · · · · · · · · · · · ·			
6.					Percent of Dominant Species That Are OBL, FACW, or FAC: 25.0% (A/B)			
7.					<u></u>			
8.					Prevalence Index Worksheet			
9.					Total % Cover of: Multiply by:			
10.					OBL spp. $0 x 1 = 0$			
	Total Cover =	80			FACW spp. $0 x 2 = 0$			
			_		FACW spp. $\begin{array}{cccccccccccccccccccccccccccccccccccc$			
Sapling/Shrub	Stratum (Plot size: 15 ft. radius)				FACU spp115 $\times 4 =460$			
1.	Rhamnus cathartica	75	Υ	FACU	UPL spp. 20 $x = 5$ $5 = 100$			
2.	Zanthoxylum americanum	15	N	UPL				
3.					Total <u>175</u> (A) <u>680</u> (B)			
4.								
5.					Prevalence Index = B/A = 3.886			
6.								
7.								
8.					Hydrophytic Vegetation Indicators:			
9.					Rapid Test for Hydrophytic Vegetation			
10.					Dominance Test is > 50%			
	Total Cover =	90			Prevalence Index is ≤ 3.0 *			
					Morphological Adaptations (Explain) *			
	Plot size: 5 ft. radius)		V	N.II	Problem Hydrophytic Vegetation (Explain) *			
1.	Carex pensylvanica	5	Y	NI	* Indicators of hydric call and wattened hydrology, revet be			
2.					 * Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic. 			
3.					·			
4. 5.					Definitions of Vegetation Strata:			
5. 6					Tree - Weed and and a Cine (7 Com) and are a discussed as the cont			
7.					Tree - Woody plants 3 in. (7.6cm) or more in diameter at breast height (DBH), regardless of height.			
8.								
9.					Sapling/Shrub - Woody plants less than 3 in. DBH, regardless of height.			
10.					Capinig/Cinab			
11.								
12.					Herb - All herbaceous (non-woody) plants, regardless of size.			
13.								
14.								
15.					Woody Vines - All woody vines, regardless of height.			
	Total Cover =	5						
	, 5.5 5.5		_					
Woody Vine St	ratum (Plot size: 30 ft. radius)							
1.								
2.								
3.					Hydrophytic Vegetation Present? N			
5.								
4.								
	Total Cover =							
Remarks: The upland sample point canopy is dominated by basswood and quaking aspen. The shrub layer is predominantly European buckthorn. The ground layer is dominated by Pennsylvania sedge.								
Additional Remarks:								
4								