WETLAND DETERMINATION DATA FORM Great Plains Region

Project/Site:		L3R								Date:	09/25/14	
Applicant:				Cubragian (MLDA			and DD). MIDA 50			County:	Pennington	
Investigators		BJC/RAJ			Subregion	•	or LRR):	MLRA 56		State:	MN	
Soil Unit: Landform:	I69A Talf			_	aal Daliafu		I Classification	:		Camarala Bairat	154544424	
Slope (%):	0 - 2%		Latitude: 48.1		cal Relief: Longitude:		088	Datum		Sample Point	u-154n44w34-f1	
		nditions on the site						✓ Yes	□ No	Section:		
Are Vegetation	·	☑, or Hydrology			x1 1 (11 110; 0X)		e normal circun			Township:		
Are Vegetation		□, or Hydrology	□aturally pr	-		/	✓ Yes		0001111	Range:	Dir:	
SUMMARY C			Therear all y				. 33			i tai igoi	5	
Hydrophytic \			No					Hydric Soi	Is Present?	Yes		
Wetland Hyd	•		No		_					nt Within A W	etland? No	
Remarks:			cated in a wh	eat field that I	nas been d	cut and d	lisked. The soi				getation is disturbed	due to
	•	oplication and tillag										
HYDROLOG	Υ											
		icators (Check all	that apply: M	linimum of on	e nrimary	or two se	econdary requi	red)·				
Primary:	•	icators (Oneon air	triat apply, iv		e primary	OI WO 30	econdary requi	rea).	Secondary:	:		
<u> </u>	A1 - Surface	Water			B11 - Salt (Crust				B6 - Surface S	Soil Cracks	
	A2 - High Wa				B13 - Aqua						Vegetated Concave Sur	face
	A3 - Saturation				C1 - Hydro					B10 - Drainage		Dooto (tillod)
	B1 - Water M B2 - Sedimer				C2 - Dry Se		spheres on Living	Roots (not till	⊔ lŧ □	C8 - Crayfish I	Rhizospheres on Living	Roots (tilled)
	B3 - Drift Dep	•					duced Iron	rtooto (riot tiii	`		n Visible on Aerial Image	ery
	B4 - Algal Ma				C7 - Thin N		ace			D2 - Geomorp		-
	B5 - Iron Dep		a a a a a a		Other (Exp	lain)				D5 - FAC-Neu		_,
		on Visible on Aerial Im tained Leaves	lagery							D7 - Frost-nea	aved Hummocks (LRR F	-)
	Do Water O	diffica Ecaves										
Field Observ	vations:											
Surface Water		Yes	Dent	h:	(in.)							
Water Table		Yes		h:	(in.)			Wetland F	Hydrology	Present?	N	
Saturation Pr		Yes □	Dept		(in.)							
			•		- ` '							
Doccribo Doc	ordod Data (d	stroom gauge moni	itoring wall ac	rial photos pr	ovious insp	octions)	if available:					
	`	stream gauge, moni			evious insp	ections),	if available:					
Remarks:	`	stream gauge, monins of wetland hydro			evious insp	ections),	if available:					
Remarks:	`				evious insp	ections),	if available:					
Remarks:	No indicato	rs of wetland hydro	ology were ob	served.	·			ndicators.)				
Remarks: SOILS Profile Descri	No indicato		ology were objected to docu	oserved.	cator or co	onfirm the	e absence of ir					
Remarks: SOILS Profile Descri	No indicato	rs of wetland hydro be to the depth ne etion, RM=Reduced Ma	ology were objected to docu	oserved.	cator or co	onfirm the	e absence of ir ore Lining, M=Mati					
Remarks: SOILS Profile Descri (Type: C=Concer	No indicato	rs of wetland hydro be to the depth ne etion, RM=Reduced Ma Matrix	eeded to docu	iment the indi	cator or co	onfirm the	e absence of ir ore Lining, M=Mati	rix)				
Remarks: SOILS Profile Descri	No indicato	rs of wetland hydroupers of wetland hydroupers of the depth ne etion, RM=Reduced Matrix Color (Moist)	ology were objected to docu	oserved.	cator or co	onfirm the	e absence of ir ore Lining, M=Mati		Texture		Remarks	
Remarks: SOILS Profile Descri (Type: C=Concer	No indicato	rs of wetland hydroupers of wetland hydroupers of the depth ne etion, RM=Reduced Matrix Color (Moist)	eeded to docu	iment the indicated/Coated Sand	cator or co	onfirm the	e absence of ir ore Lining, M=Mati	rix)	Texture CL		Remarks	
Remarks: SOILS Profile Descri (Type: C=Concer	No indicato	rs of wetland hydroupers of wetland hydroupers of the depth ne etion, RM=Reduced Matrix Color (Moist)	eeded to docu	iment the indicad/Coated Sand (cator or co	onfirm the	e absence of ir ore Lining, M=Mati	rix)	Texture CL FS		Remarks	
Remarks: SOILS Profile Descri (Type: C=Concer Depth (In.) 0-12	No indicato ption (Descriptration, D=Depl	be to the depth ne etion, RM=Reduced Ma Matrix Color (Moist)	eeded to docu atrix, CS=Covered	iment the indicad/Coated Sand	cator or co Grains; Locat Moist)	onfirm the tion: PL=Po Mottle	e absence of ir ore Lining, M=Mati es Type	Location	CL		Remarks	
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Remarks: SOILS Profile Descri (Type: C=Concer Depth (In.) 0-12	No indicato ption (Descriptration, D=Depl Hue_10YR Hue_2.5Y	Matrix Color (Moist) 2/1 7/1	eeded to docu atrix, CS=Covered % 100 85	iment the indicad/Coated Sand	Cator or co Grains; Locat Moist)	Mottle	e absence of ir ore Lining, M=Mati es Type	Location	CL		Remarks	
Remarks: SOILS Profile Descri (Type: C=Concer Depth (In.) 0-12 12-18	No indicato ption (Descriptration, D=Depl Hue_10YR Hue_2.5Y	Matrix Color (Moist) 2/1 7/1	eeded to docu atrix, CS=Covered % 100 85	Color (Cator or co Grains; Locat Moist)	Mottle	e absence of ir ore Lining, M=Mati es Type C	Location	CL FS	for Problemati		
Remarks: SOILS Profile Descri (Type: C=Concer Depth (In.) 0-12 12-18 NRCS Hydr	No indicato ption (Description, D=Depl Hue_10YR Hue_2.5Y ric Soil Field A1- Histosol	matrix Color (Moist) 2/1 7/1 Indicators (ch	eeded to docu atrix, CS=Covered % 100 85	Color (Hue_2.5Y dicators are r	cator or co Grains; Local Moist) 6/8 not presented	Mottle	e absence of ir ore Lining, M=Mati es Type C	Location	CL FS Indicators 1 A9 - 1 cm M	luck (LRR I, J)	c Soils ¹	
Remarks: SOILS Profile Descri (Type: C=Concer Depth (In.) 0-12 12-18 NRCS Hydr	No indicato Iption (Description, D=Depl Hue_10YR Hue_2.5Y Fic Soil Field A1- Histosol A2 - Histic Ep	matrix Color (Moist) 2/1 7/1 Indicators (ch	eeded to docu atrix, CS=Covered % 100 85	Color (Hue_2.5Y Adicators are respectively seed - Stripped	cator or co Grains; Local Moist) 6/8 not present	Mottle % 15	e absence of ir ore Lining, M=Mati es Type C	Location	Indicators 1 A9 - 1 cm M A16 - Coast	Muck (LRR I, J) t Prairie Redox	c Soils ¹ (LRR F, G, H)	
Remarks: SOILS Profile Descri (Type: C=Concer Depth (In.) 0-12 12-18 NRCS Hydr	Hue_10YR Hue_2.5Y A1- Histosol A2 - Histic Ep A3 - Black His	matrix Color (Moist) 2/1 7/1 Indicators (ch	eeded to docu atrix, CS=Covered % 100 85	Color (Hue_2.5Y S5 - Sandy R S6 - Stripped F1 - Loamy N	cator or co Grains; Local Moist) 6/8 not presentedox Matrix Mucky Minera	Mottle % 15 tion: PL=Po	e absence of ir ore Lining, M=Mati es Type C	Location	Indicators 1 A9 - 1 cm M A16 - Coast S7 - Dark S	Muck (LRR I, J) t Prairie Redox surface (LRR G)	c Soils ¹ (LRR F, G, H)	
Remarks: SOILS Profile Descri (Type: C=Concer Depth (In.) 0-12 12-18 NRCS Hydr	Hue_10YR Hue_2.5Y A1- Histosol A2 - Histic Ep A3 - Black His A4 - Hydroge	matrix Color (Moist) Indicators (ch	eeded to docu atrix, CS=Covered % 100 85	Color (Hue_2.5Y Adicators are respectively seed to the seed to	Cator or co Grains; Local Moist) 6/8 not presented ox Matrix Mucky Minera	Mottle % 15 tion: PL=Po	e absence of ir ore Lining, M=Mati es Type C	Location	Indicators 1 A9 - 1 cm M A16 - Coast S7 - Dark S F16 - High F	Muck (LRR I, J) t Prairie Redox turface (LRR G) Plains Depression	c Soils ¹ (LRR F, G, H)	
Remarks: SOILS Profile Descri (Type: C=Concer Depth (In.) 0-12 12-18 NRCS Hydr	Hue_10YR Hue_2.5Y A1- Histosol A2 - Histic Ep A3 - Black His A4 - Hydroge A5 - Stratified	matrix Color (Moist) Indicators (chair) Indicators (chair) Indicators (chair)	eeded to docu atrix, CS=Covered % 100 85	Color (Hue_2.5Y S5 - Sandy R S6 - Stripped F1 - Loamy N F2 - Loamy O F3 - Depleted	cator or co Grains; Local Moist) 6/8 oot presented ox Matrix Mucky Mineral Gleyed Matrix I Matrix	Mottle Mottle 15 t):	e absence of ir ore Lining, M=Mati es Type C	Location	Indicators 1 A9 - 1 cm M A16 - Coast S7 - Dark S F16 - High F F18 - Reduce	Muck (LRR I, J) t Prairie Redox turface (LRR G) Plains Depression	c Soils ¹ (LRR F, G, H)	
Remarks: SOILS Profile Descri (Type: C=Concer Depth (In.) 0-12 12-18 NRCS Hydr	Hue_10YR Hue_2.5Y A1- Histosol A2 - Histic Ep A3 - Black His A4 - Hydroge A5 - Stratified A9 - 1 cm Mu A11 - Deplete	matrix Color (Moist) Indicators (chair)	eeded to docu atrix, CS=Covered % 100 85	Color (Hue_2.5Y Hue_2.5Y Served. Color (C	Cator or co Grains; Local Moist) 6/8 not present edox Matrix Mucky Minera Gleyed Matrix I Matrix ark Surface	Mottle % 15 t):	e absence of ir ore Lining, M=Mati es Type C	Location	Indicators 1 A9 - 1 cm M A16 - Coast S7 - Dark S F16 - High F F18 - Reduc TF2 - Red F TF12 - Very	Muck (LRR I, J) t Prairie Redox turface (LRR G) Plains Depressiced Vertic Parent Material to Shallow Dark S	c Soils ¹ (LRR F, G, H) Ons (LRR H, outside MLRA 72, 73)	
Remarks: SOILS Profile Descri (Type: C=Concer Depth (In.) 0-12 12-18 NRCS Hydr	Hue_10YR Hue_2.5Y Tic Soil Field A1- Histosol A2 - Histic Ep A3 - Black His A4 - Hydroge A5 - Stratified A9 - 1 cm Mu A11 - Deplete A12 - Thick D	matrix Color (Moist) Indicators (chair)	eeded to docu atrix, CS=Covered % 100 85 neck here if ir	Color (Hue_2.5Y Adicators are respectively selected and selected selecte	Cator or co Grains; Local Moist) 6/8 not present edox Matrix Mucky Minera Gleyed Matrix ark Surface I Dark Surface epressions	Mottle % 15 t):	e absence of ir ore Lining, M=Mati es Type	Location	Indicators 1 A9 - 1 cm M A16 - Coast S7 - Dark S F16 - High F F18 - Reduc TF2 - Red F TF12 - Very	Muck (LRR I, J) t Prairie Redox turface (LRR G) Plains Depressioned Vertic Parent Material	c Soils ¹ (LRR F, G, H) Ons (LRR H, outside MLRA 72, 73)	
Remarks: SOILS Profile Descri (Type: C=Concer Depth (In.) 0-12 12-18 NRCS Hydr	Hue_10YR Hue_2.5Y Fic Soil Field A1- Histosol A2 - Histic Ep A3 - Black His A4 - Hydroge A5 - Stratified A9 - 1 cm Mu A11 - Deplete A12 - Thick D S1 - Sandy M	Indicators (chapted in Sulfide Layers (LRR FGH) and Below Dark Surface ucky Mineral	eeded to docu atrix, CS=Covered % 100 85 neck here if ir	Color (Hue_2.5Y Adicators are respectively selected and selected selecte	Cator or co Grains; Local Moist) 6/8 not present edox Matrix Mucky Minera Gleyed Matrix ark Surface I Dark Surface epressions	Mottle % 15 t):	e absence of ir ore Lining, M=Mati es Type C	Location	Indicators 1 A9 - 1 cm M A16 - Coast S7 - Dark S F16 - High F F18 - Reduc TF2 - Red F TF12 - Very	Muck (LRR I, J) t Prairie Redox turface (LRR G) Plains Depressiced Vertic Parent Material to Shallow Dark S	c Soils ¹ (LRR F, G, H) Ons (LRR H, outside MLRA 72, 73)	
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Remarks: SOILS Profile Descri (Type: C=Concer Depth (In.) 0-12 12-18 NRCS Hydr	Hue_10YR Hue_2.5Y A1- Histosol A2 - Histic Ep A3 - Black His A4 - Hydroge A5 - Stratified A9 - 1 cm Mu A11 - Deplete A12 - Thick D S1 - Sandy M S2 - 2.5 cm N	matrix Color (Moist) Indicators (characters) Indicators (characters)	eeded to docu atrix, CS=Covered % 100 85 neck here if in	Color (Hue_2.5Y Adicators are respectively selected and selected selecte	Cator or co Grains; Local Moist) 6/8 not present edox Matrix Mucky Minera Gleyed Matrix ark Surface I Dark Surface epressions	Mottle % 15 t):	e absence of ir ore Lining, M=Mati es Type	Location	Indicators of PS Indicators o	Muck (LRR I, J) t Prairie Redox turface (LRR G) Plains Depression ced Vertic Parent Material or Shallow Dark S ain in Remarks)	c Soils ¹ (LRR F, G, H) Ons (LRR H, outside MLRA 72, 73)	
Remarks: SOILS Profile Descri (Type: C=Concer Depth (In.) 0-12 12-18 NRCS Hydr	Hue_10YR Hue_2.5Y Hue_2.5Y Fic Soil Field A1- Histosol A2 - Histic Ep A3 - Black His A4 - Hydroge A5 - Stratified A1- Deplete A12 - Thick D S1 - Sandy M S2 - 2.5 cm M S3 - 5 cm Mu	matrix Color (Moist) Indicators (characters) Indicators (characters)	eeded to docu atrix, CS=Covered % 100 85 neck here if in	Color (Hue_2.5Y Adicators are respectively selected and selected selecte	Cator or co Grains; Local Moist) 6/8 not present edox Matrix Mucky Minera Gleyed Matrix ark Surface I Dark Surface epressions	Mottle % 15 t):	e absence of ir ore Lining, M=Mati es Type	Location	Indicators of PS Indicators o	Muck (LRR I, J) t Prairie Redox furface (LRR G) Plains Depression ced Vertic Parent Material or Shallow Dark S ain in Remarks)	c Soils ¹ (LRR F, G, H) Ons (LRR H, outside MLRA 72, 73) Surface	
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Remarks: SOILS Profile Descri (Type: C=Concer Depth (In.) 0-12 12-18 NRCS Hydr	Hue_10YR Hue_2.5Y Hue_2.5Y Fic Soil Field A1- Histosol A2 - Histic Ep A3 - Black His 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 Type:	Ibe to the depth neetion, RM=Reduced Marix Color (Moist) 2/1 7/1 Indicators (characters) In	eeded to docu atrix, CS=Covered % 100 85 neck here if in	Color (Color	Cator or co Grains; Local Moist) 6/8 not present edox Matrix Mucky Minera Gleyed Matrix I Matrix eark Surface I Dark Surface	Mottle Mottle	e absence of irrore Lining, M=Matrices Type C RA 72, 73 of LRF	Location M Calculation M Calculation M Calculation M Calculation Calculati	Indicators of A9 - 1 cm MA16 - Coast S7 - Dark SF16 - High FF18 - Reduct TF2 - Red FTF12 - Very Other (Explain Indicators of Funless disturbed) Y	Muck (LRR I, J) t Prairie Redox furface (LRR G) Plains Depression ced Vertic Parent Material of Shallow Dark Stain in Remarks) hydrophytic vegeta ed or problematic.	c Soils ¹ (LRR F, G, H) Ons (LRR H, outside MLRA 72, 73) Surface	nust be present,

WETLAND DETERMINATION DATA FORM Great Plains Region

Project/Site	: L3R	_			Sample Point: u-154n44w34-f1
VEGETATIO	(Species identified in all uppercase are	e non-native	species.)		
Tree Stratum	(Plot size: 30 ft. radius)				
	Species Name	% Cover	<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 Deminent Species Agrees All Strates (P)
					Total Number of Dominant Species Across All Strata:1 (B)
5.					
6.					Percent of Dominant Species That Are OBL, FACW, or FAC: (A/B)
7.					
8.					Prevalence Index Worksheet
9.					Total % Cover of: Multiply by:
10.					$\frac{1}{\text{ORL spp}} \frac{1}{\text{X 1}} = 0$
10.		0			FACW spp.
	Total Gover =				ΓΑCW spp. 0
0 11 /01 1					OBL spp. 0
	Stratum (Plot size: 15 ft. radius)				
1.					UPL spp15
2.					
3.					Total 15 (A) 75 (B)
4.					<u> </u>
5.					Prevalence Index = B/A = 5.000
6.	_				Trevalence maex = B/A = 3.000
7.					
8.					Hydrophytic Vegetation Indicators:
9.					Rapid Test for Hydrophytic Vegetation
10.					Dominance Test is > 50%
	Total Cover =	0			Prevalence Index is ≤ 3.0 *
	•				Morphological Adaptations (Explain) *
Llanda Otrastana	(Distriction of the markets)				
	(Plot size: 5 ft. radius)			N.II	Problem Hydrophytic Vegetation (Explain) *
1.	Triticum aestivum	15	Y	NI	
2.					* Indicators of hydric soil and wetland hydrology must be
3.					present, unless disturbed or problematic.
4.					Definitions of Vegetation Strata:
5.					1
6					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.					1
14.	1				-
					Monday Vince All woody vince regardless of height
15.					Woody Vines - All woody vines, regardless of height.
	Total Cover =	15			
Woody Vine S	stratum (Plot size: 30 ft. radius)				
1.					
2.					
3.					Hydrophytic Vogototion Brocent2
					Hydrophytic Vegetation Present?N
5.					
4.					
	Total Cover =				
Remarks:	The upland has recently been disked, but a f	ew wheat r	olants are	within the	e sample plot. There are also many old wheat stalks present at the sample point.
		•			
A 1 11	5				
Additional I	Remarks:				