



WETLAND DELINEATION REPORT

Iron Pine Solar Project Appendix B Wetland Determination Data Forms

Appendix B WETLAND DETERMINATION DATA FORMS

Project/Site: Pine County Solar	City/County: Pine Sampling Date: 09/12/2022					
Applicant/Owner: Swift Current Energy	State: Min Sampling Point: W1-1u					
Investigator(s): JF KKM AH	Section, Township, Range: T044N, R020W, S27					
	relief (concave, convex, none): Convex Slope %: 5					
Subregion (LRR or MLRA): LRR K, MLRA 90A Lat: 46.262803						
Soil Map Unit Name: Denied Access	NWI classification:					
Are climatic / hydrologic conditions on the site typical for this time of year?	Yes No X (If no, explain in Remarks.)					
Are Vegetation X , Soil X , or Hydrology X significantly dist	turbed? Are "Normal Circumstances" present? Yes NoX					
Are Vegetation , Soil , or Hydrology naturally probler	matic? (If needed, explain any answers in Remarks.)					
SUMMARY OF FINDINGS – Attach site map showing sampling p	oint locations, transects, important features, etc.					
Hydrophytic Vegetation Present? Yes No X	Is the Sampled Area					
Hydric Soil Present? Yes No X	within a Wetland? Yes No X					
Wetland Hydrology Present? Yes No X	If yes, optional Wetland Site ID: W1					
Remarks: (Explain alternative procedures here or in a separate report.) Mowed veg, disturbed road side soils, precip drier than normal						
HYDROLOGY						
Wetland Hydrology Indicators:	Secondary Indicators (minimum of two required)					
Primary Indicators (minimum of one is required; check all that apply)	Surface Soil Cracks (B6)					
Surface Water (A1) Water-Stained Leaves (B9)	Drainage Patterns (B10)					
High Water Table (A2) Aquatic Fauna (B13)	Moss Trim Lines (B16)					
Saturation (A3) Marl Deposits (B15)	Dry-Season Water Table (C2)					
Water Marks (B1) Hydrogen Sulfide Odor (C1)	Crayfish Burrows (C8)					
Sediment Deposits (B2) Oxidized Rhizospheres on L	.iving Roots (C3) Saturation Visible on Aerial Imagery (C9)					
Drift Deposits (B3) Presence of Reduced Iron (C	C4) Stunted or Stressed Plants (D1)					
Algal Mat or Crust (B4) Recent Iron Reduction in Till	Filled Soils (C6) Geomorphic Position (D2)					
Iron Deposits (B5) Thin Muck Surface (C7)	Shallow Aquitard (D3)					
Inundation Visible on Aerial Imagery (B7) Other (Explain in Remarks)	Microtopographic Relief (D4)					
Sparsely Vegetated Concave Surface (B8)	FAC-Neutral Test (D5)					
Field Observations:						
Surface Water Present Yes No X Depth (inches	s):					
Water Table Present Yes No X Depth (inches	s):					
Saturation Present Yes No X Depth (inches	S): Wetland Hydrology Present? Yes No _X					
(includes capillary fringe)						
Describe Recorded Data (stream gauge, monitoring well, aerial photos, pro	evious inspections), if available:					
Remarks:						
Remarks.						

Tree Stratum (Plot size: 30 ft)	Absolute % Cover	Dominant Species	Indicator Status	Dominance Test worksheet:
1				Number of Dominant Species That Are OBL, FACW, or FAC:(A)
3 4 5.				Total Number of Dominant Species Across All Strata:1 (B)
5				Percent of Dominant Species That Are OBL, FACW, or FAC: (A/B)
			_	Prevalence Index worksheet:
	0	_ = Total Cover		Total % Cover of: Multiply by:
Sapling/Shrub Stratum (Plot size: 15 ft)				OBL species 0 x 1 = 0
1				FACW species 10 x 2 = 20
2				FAC species 20 x 3 = 60
3				FACU species 60 x 4 = 240
4				
5				
6				Column Totals: 122 (A) 480 (B)
7				Prevalence Index = B/A = 3.93
	0			Hydrophytic Vegetation Indicators:
Herb Stratum (Plot size: 5 ft)		= Total Cover		1 - Rapid Test for Hydrophytic Vegetation
1. Poa pratensis	60	Yes	FACU	2 - Dominance Test is >50%
2. Setaria pumila	20	No	FAC	3 - Prevalence Index is ≤3.01
3. Bromus inermis	15	No	UPL	4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet)
4. Anemone canadensis	10	No	FACW	(Frovide supporting data in Normano of off a separate sheet)
5. Silene latifolia	7	No	UPL	Problematic Hydrophytic Vegetation ¹ (Explain)
6. Asclepias syriaca	5	No	UPL	¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
7. <u>Verbascum thapsus</u>			UPL	distance of problematic.
8.				Definitions of Vegetation Strata:
9.				
10.				Tree – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.
11.				diameter at breast height (DBH), regardless of height.
12.				Sapling/shrub – Woody plants less than 3 in. DBH
	122	= Total Cover		and greater than or equal to 3.28 ft (1 m) tall.
Woody Vine Stratum (Plot size: 30 ft)		= Total Cover		Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.
1				Woody vines – All woody vines greater than 3.28 ft in
2				height.
3				
4				Hydrophytic
	0			Vegetation Present? Yes No X
		= Total Cover		Tresent: resNo
Remarks: (Include photo numbers here or on a separ Roadside disturbed veg	ate sheet.)			
Todasiae distarbed veg				

Sampling Point: W1-1u

SOIL Sampling Point: W1-1u

Profile Desci	ription: (Describe to	the dept	h needed to docu	ment th	e indicat	or or co	onfirm the absence o	f indicators	s.)	
Depth	Matrix		Redox	x Featur	es					
(inches)	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²	Texture		Remark	S
0-8	10YR 3/2	100					Sandy Loam			
8-24	5YR 4/4	100					Sandy Clay	Some grave	I mixed in	
¹Type: C=Co	ncentration, D=Deple	etion, RM:	=Reduced Matrix, N	√S=Mas	ked Sand	Grains	² Location: PL=	Pore Lining,	M=Matrix.	
Hydric Soil II	ndicators:						Indicators	for Problen	natic Hydric	Soils ³ :
Histosol (A	A1)	_	Polyvalue Below	/ Surface	(S8) (LRR	R,	2 cm M	uck (A10) (LR	RR K, L, MLRA	149B)
Histic Epip	pedon (A2)		MLRA 149B)				Coast F	Prairie Redox	(A16) (LRR K ,	L, R)
Black Hist	tic (A3)	=	Thin Dark Surface) 5 cm M	ucky Peat or I	Peat (S3) (LRF	R K, L, R)
Hydrogen	Sulfide (A4)	-	High Chroma Sa	ands (S11) (LRR K,	L)	Polyval	ue Below Sur	face (S8) (LRF	₹ K , L)
	Layers (A5)	-	Loamy Mucky M			L)	' <u></u>		9) (LRR K, L)	
	Below Dark Surface (A1	1) _	Loamy Gleyed M)		' <u></u>	-	sses (F12) (LR	•
	k Surface (A12)	-	Depleted Matrix				· 		Soils (F19) (M	
	icky Mineral (S1)	-	Redox Dark Surf		- 7 \		· 		MLRA 144A, 1	145, 149B)
Sandy Gie	eyed Matrix (S4)	-	Depleted Dark S Redox Depression		.7)		· 	rent Material hallow Dark S		
	Matrix (S6)	-	Marl (F10) (LRR					Explain in Rer		
Dark Surfa		-	(1.10) (=1111	, =,				Explain in reor	narro)	
		on and we	etland hydrology mu	ıst he nr	esent un	less dist	turbed or problematic.			
	ayer (if observed):	orrana we	- Idila Hydrology Illa	301 DO P1		1000 0101	T			
Type:	ayer (ii observed).									
-	ah aa\.						Hydric Soil Pres	-m42	Yes	No X
Depth (in							nyuric 30ii Fresi	ent :		
Remarks:	urbod									
Roadside, dist	urbeu									

Project/Site: Pine County Solar	City/County: Pine Sampling Date: 09/12/2022					
Applicant/Owner: Swift Current Energy	State: Min Sampling Point: W1-1w					
Investigator(s): KKM JF AH BB MB	Section, Township, Range: T044N, R020W, S27					
	relief (concave, convex, none): Concave Slope %: 1					
Subregion (LRR or MLRA): LRR K, MLRA 90A Lat: 46.262637	Long: -92.845637 Datum: WGS84					
	NWI classification:					
Soil Map Unit Name: Denied Access						
Are climatic / hydrologic conditions on the site typical for this time of year?	Yes No _X (If no, explain in Remarks.)					
Are Vegetation X, Soil , or Hydrology significantly dist						
Are Vegetation , Soil , or Hydrology naturally problem	matic? (If needed, explain any answers in Remarks.)					
SUMMARY OF FINDINGS – Attach site map showing sampling p	point locations, transects, important features, etc.					
Lhudrashutia Variation Present?	In the Complet Area					
Hydrophytic Vegetation Present? Yes No X Hydric Soil Present? Yes X No	Is the Sampled Area within a Wetland? Yes X No					
Wetland Hydrology Present? Yes X No	If yes, optional Wetland Site ID: W1					
	ii yes, optional vvetiand site ib.					
Remarks: (Explain alternative procedures here or in a separate report.) Land was ditched and is now cropped in beans. Precip drier than normal.						
Earla was disorted and is now propped in Souris. I recip and than normal.						
HYDROLOGY						
Wetland Hydrology Indicators:	Secondary Indicators (minimum of two required)					
Primary Indicators (minimum of one is required; check all that apply)	Surface Soil Cracks (B6)					
Surface Water (A1) Water-Stained Leaves (B9)						
High Water Table (A2) Aquatic Fauna (B13)	Moss Trim Lines (B16)					
Saturation (A3) Marl Deposits (B15)	Dry-Season Water Table (C2)					
Water Marks (B1) Hydrogen Sulfide Odor (C1)						
Sediment Deposits (B2) Oxidized Rhizospheres on L	V -					
Drift Deposits (B3) Presence of Reduced Iron (
Algal Mat or Crust (B4) Recent Iron Reduction in Til						
Iron Deposits (B5) Thin Muck Surface (C7)	Shallow Aquitard (D3)					
X Inundation Visible on Aerial Imagery (B7) Other (Explain in Remarks)	X Microtopographic Relief (D4)					
Sparsely Vegetated Concave Surface (B8)	FAC-Neutral Test (D5)					
Field Observations:						
Surface Water Present Yes No _X Depth (inches	s):					
Water Table Present Yes No X Depth (inches						
Saturation Present Yes No X Depth (inches	· ———					
(includes capillary fringe)	·— — — —					
Describe Recorded Data (stream gauge, monitoring well, aerial photos, pr	revious inspections), if available:					
Remarks:						

00.6	• • • • •			
ree Stratum (Plot size: 30 ft)	Absolute % Cover	Dominant <u>Species</u>	Indicator Status	Dominance Test worksheet:
·				Number of Dominant Species
				That Are OBL, FACW, or FAC: (A)
		<u>-</u>		Total Number of Dominant
·				Species Across All Strata: 1 (B)
				(,
i		<u>.</u>		Percent of Dominant Species
·				That Are OBL, FACW, or FAC: 0 (A/B)
	0			Prevalence Index worksheet:
45.6		_ = Total Cover		Total % Cover of: Multiply by:
Sapling/Shrub Stratum (Plot size: 15 ft)				OBL species 0 x 1 = 0
•				FACW species 0 x 2 =0
				FAC species 16 x 3 = 48
·				FACU species 0 x 4 = 0
·				UPL species 75 x 5 = 375
. <u> </u>				
i				Column Totals: 91 (A) 423 (B) Prevalence Index = B/A = 4.65
· -				Hydrophytic Vegetation Indicators:
	0	= Total Cover		
lerb Stratum (Plot size: 5 ft)				- 1 - Rapid Test for Hydrophytic Vegetation
. Glycine max	75	Yes	UPL	2 - Dominance Test is >50%
Echinochloa crus-galli	15	No	FAC	3 - Prevalence Index is ≤3.0¹
Rumex crispus	1	No	FAC	4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet)
·				(Frovide Supporting data in Remarks of on a separate sneet)
i				Problematic Hydrophytic Vegetation ¹ (Explain)
				¹ Indicators of hydric soil and wetland hydrology must be present, unless
			-	disturbed or problematic.
				Definitions of Vegetation Strata:
				Definitions of Vegetation Strata.
0.				Tree – Woody plants 3 in. (7.6 cm) or more in
•				diameter at breast height (DBH), regardless of height.
1		 -		Sapling/shrub – Woody plants less than 3 in. DBH
2				and greater than or equal to 3.28 ft (1 m) tall.
	91	= Total Cover		Herb – All herbaceous (non-woody) plants, regardless
Voody Vine Stratum (Plot size: 30 ft)				of size, and woody plants less than 3.28 ft tall.
				Woody vines – All woody vines greater than 3.28 ft in
				height.
·				Hydrophytic
				Vegetation
	0	= Total Cover		Present? Yes No X

SOIL Sampling Point: W1-1w

Profile Desci	ription: (Describe to	the dept	h needed to docu	ment th	e indicat	or or co	nfirm the abser	nce of indicato	ors.)	
Depth	Matrix		Redo	x Featur	es					
(inches)	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²	Texture		Remarks	
0-31	10YR 2/1	100					Peat			
31-34	7.5YR 3/3	100					Peat			
¹Type: C=Co	oncentration, D=Depl	etion, RM:	=Reduced Matrix, N	//S=Mas	ked Sand	Grains.	² Location:	PL=Pore Linin	g, M=Matrix.	
Hydric Soil I	ndicators:						Indica	tors for Proble	ematic Hydric	Soils³:
X Histosol (-	Polyvalue Below	Surface	(S8) (LRR	R,			LRR K, L, MLRA	
	pedon (A2)		MLRA 149B)	(00) (1			_		ox (A16) (LRR K, I	•
Black Hist		-	Thin Dark Surface						or Peat (S3) (LRR	
	Sulfide (A4)	=	High Chroma Sa					-	Surface (S8) (LRR	K, L)
	Layers (A5)	-	Loamy Mucky M			L)		hin Dark Surface		K I D)
	Below Dark Surface (A1	1) _	Loamy Gleyed M		()				lasses (F12) (LRR	
	k Surface (A12)	-	Depleted Matrix						ain Soils (F19) (ML	
	icky Mineral (S1)	-	Redox Dark Surf					-	6) (MLRA 144A, 14	15, 149B)
	eyed Matrix (S4)	-	Depleted Dark S		-7)			ed Parent Materia		
Sandy Re		-	Redox Depression					ery Shallow Dark		
	Matrix (S6)	-	Marl (F10) (LRR	K, L)			0	ther (Explain in R	Remarks)	
Dark Surfa	ace (S7)									
³ Indicators of	hydrophytic vegetation	on and we	tland hydrology mu	ıst be pr	esent, un	less dist	urbed or problen	natic.		
	ayer (if observed):									
Type: _									.,	
Depth (in	ches):						Hydric Soil	Present?	YesX	No
Remarks:										

Project/Site: Pine County Solar	City/County: Pine Sampling Date: 09/12/2022					
Applicant/Owner: Swift Current Energy	State: Min Sampling Point: W1-2u					
Investigator(s): MB, KM, AH	Section, Township, Range: T044N, R020W, S26					
	relief (concave, convex, none): Linear Slope %: 3					
Subregion (LRR or MLRA): LRR K, MLRA 90A Lat: 46.262725	Long: -92.84492 Datum: WGS84					
Soil Map Unit Name: Denied Access	NWI classification: PEM1Af					
Are climatic / hydrologic conditions on the site typical for this time of year?	Yes No _X (If no, explain in Remarks.)					
Are Vegetation X, Soil , or Hydrology significantly distr	urbed? Are "Normal Circumstances" present? Yes No _X					
Are Vegetation , Soil , or Hydrology naturally problem	matic? (If needed, explain any answers in Remarks.)					
SUMMARY OF FINDINGS – Attach site map showing sampling p	oint locations, transects, important features, etc.					
Hydrophytic Vegetation Present? Yes No X	Is the Sampled Area					
Hydric Soil Present? Yes No X	within a Wetland? Yes No X					
Wetland Hydrology Present? Yes No X	If yes, optional Wetland Site ID: W1					
Precipitation drier than normal. Farmed soybean field with ditches.						
HYDROLOGY						
Wetland Hydrology Indicators:	Secondary Indicators (minimum of two required)					
Primary Indicators (minimum of one is required; check all that apply)	Surface Soil Cracks (B6)					
Surface Water (A1) Water-Stained Leaves (B9)	Drainage Patterns (B10)					
High Water Table (A2) Aquatic Fauna (B13)	Moss Trim Lines (B16)					
Saturation (A3) Marl Deposits (B15)	Dry-Season Water Table (C2)					
Water Marks (B1) Hydrogen Sulfide Odor (C1)	Crayfish Burrows (C8)					
Sediment Deposits (B2) Oxidized Rhizospheres on Li	<u> </u>					
Presence of Reduced Iron (C	· · · · · · · · · · · · · · · · · · ·					
Algal Mat or Crust (B4) Recent Iron Reduction in Till						
Iron Deposits (B5) Thin Muck Surface (C7)	Shallow Aquitard (D3)					
Inundation Visible on Aerial Imagery (B7) Other (Explain in Remarks)	Microtopographic Relief (D4)					
Sparsely Vegetated Concave Surface (B8)	FAC-Neutral Test (D5)					
Field Observations:						
Surface Water Present Yes No X Depth (inches						
Water Table Present Yes No X Depth (inches	· 					
Saturation Present Yes No X Depth (inches	S): Wetland Hydrology Present? Yes No _X					
(includes capillary fringe)						
Describe Recorded Data (stream gauge, monitoring well, aerial photos, pre	evious inspections), if available:					
Remarks:						
Remarks.						
I .						

VEGETATION – Use scientific names of p	Sampling Point: W1-2u			
Tree Stratum (Plot size: 30 ft)	Absolute <u>% Cover</u>		Indicator Status	Dominance Test worksheet:
1	_			Number of Dominant Species
2	_	-		That Are OBL, FACW, or FAC: (A)
3	_			Total Number of Dominant
4	_			Species Across All Strata: 1 (B)
56.				Percent of Dominant Species
6				That Are OBL, FACW, or FAC: 0 (A/B)
·· -		- <u> </u>		Prevalence Index worksheet:
	0	_ = Total Cover		Total % Cover of: Multiply by:
Sapling/Shrub Stratum (Plot size: 15 ft)				OBL species 0 x 1 = 0
1				FACW species10 x 2 =20
2	_			FAC species 15 x 3 = 45
3	_			FACU species 50 x 4 = 200
4		· <u> </u>		UPL species 0 x 5 = 0
5				Column Totals: 75 (A) 265 (B)
6				Prevalence Index = B/A = 3.53
·· -				Hydrophytic Vegetation Indicators:
	0	= Total Cover		- 1 - Rapid Test for Hydrophytic Vegetation
Herb Stratum (Plot size: 5 ft)				- 2 - Dominance Test is >50%
1. Lolium perenne	50	Yes	FACU	- 3 - Prevalence Index is ≤3.0¹
2. Anemone canadensis	10	No	FACW	4 - Morphological Adaptations ¹
3. Persicaria longiseta	10	No	FAC	(Provide supporting data in Remarks or on a separate sheet)
4. Echinochloa crus-galli		·		Problematic Hydrophytic Vegetation ¹ (Explain)
5				¹Indicators of hydric soil and wetland hydrology must be present, unless
6				disturbed or problematic.
7 8.				Definitions of Vegetation Strata:
8 9				Definitions of Vegetation Strata.
10.				Tree – Woody plants 3 in. (7.6 cm) or more in
11.				diameter at breast height (DBH), regardless of height.
12				Sapling/shrub – Woody plants less than 3 in. DBH
	75			and greater than or equal to 3.28 ft (1 m) tall.
Waste Visa Ottobas (Blateira 20 ft)		= Total Cover		Herb – All herbaceous (non-woody) plants, regardless
Woody Vine Stratum (Plot size: 30 ft)				of size, and woody plants less than 3.28 ft tall.
1 2.				Woody vines – All woody vines greater than 3.28 ft in
2				height.
4.				Hydrophytic
		· ·		Vegetation
	0	= Total Cover		Present? Yes NoX
Remarks: (Include photo numbers here or on a sep	arate sheet.)			

SOIL Sampling Point: W1-2u

		the depti				or or co	nfirm the absence o	f indicators.)
Depth	Matrix	<u></u> %		x Feature		Loc ²	Tourture	Damarka
(inches)	Color (moist)		Color (moist)	<u>%</u>	Type ¹	LOC	Texture	Remarks
0 to 12 1	10YR 2/1	100					Peat	
12 to 24 1	10YR 3/3	100					Peat	
								-
¹Type: C=Conc	entration, D=Deple	etion, RM=	Reduced Matrix, N	√S=Mas	ked Sand	Grains.	² Location: PL=F	ore Lining, M=Matrix.
Hydric Soil Indi	icators:						Indicators	for Problematic Hydric Soils ³ :
Histosol (A1)			Polyvalue Below	/ Surface	(S8) (LRR	R,	2 cm M	uck (A10) (LRR K, L, MLRA 149B)
Histic Epiped	on (A2)	_	MLRA 149B)				Coast F	Prairie Redox (A16) (LRR K, L, R)
Black Histic (A3)	_	Thin Dark Surfa	ce (S9) (L	RR R, ML	RA 149B)	5 cm M	ucky Peat or Peat (S3) (LRR K, L, R)
Hydrogen Su	lfide (A4)	_	High Chroma Sa	ands (S11) (LRR K,	L)	Polyvali	ue Below Surface (S8) (LRR K, L)
Stratified Lay	ers (A5)	_	Loamy Mucky M	lineral (F1) (LRR K,	L)	Thin Da	rk Surface (S9) (LRR K, L)
Depleted Belo	ow Dark Surface (A1	1) _	Loamy Gleyed N)			nganese Masses (F12) (LRR K, L, R)
Thick Dark S		_	Depleted Matrix					nt Floodplain Soils (F19) (MLRA 149B)
	/ Mineral (S1)	_	Redox Dark Sur		_,			Spodic (TA6) (MLRA 144A, 145, 149B)
Sandy Gleyer		_	Depleted Dark S		7)			rent Material (F21)
Sandy Redox		_	Redox Depressi Marl (F10) (LRR	. ,				nallow Dark Surface (F22)
Stripped Matr		_	Mail (i 10) (EKK	ι κ , ∟)			Other (i	Explain in Remarks)
		on and we	tland hydrology mu	ıst be pr	esent, un	less dist	urbed or problematic.	
-	er (if observed):							
Type:								V
Depth (inche	es):						Hydric Soil Prese	ent? Yes No X
Remarks:								

Project/Site: Pine County Solar	City/County: Pine Sampling Date: 09/12/2022					
Applicant/Owner: Swift Current Energy	State: Min Sampling Point: W1-2w					
Investigator(s): AH KKM	Section, Township, Range: T044N, R020W, S26					
	relief (concave, convex, none): Concave Slope %: 2					
Subregion (LRR or MLRA): LRR K, MLRA 90A Lat: 46.26262	Long: -92.84489 Datum: WGS84					
Soil Map Unit Name: Denied Access						
Are climatic / hydrologic conditions on the site typical for this time of year?	Yes No _X (If no, explain in Remarks.)					
Are Vegetation X, Soil , or Hydrology significantly dist						
Are Vegetation , Soil , or Hydrology naturally problem	matic? (If needed, explain any answers in Remarks.)					
SUMMARY OF FINDINGS – Attach site map showing sampling p	point locations, transects, important features, etc.					
Lhydrophytic Vegetation Present?	lo the Compled Area					
Hydrophytic Vegetation Present? Yes No X Hydric Soil Present? Yes X No	Is the Sampled Area within a Wetland? Yes X No					
Wetland Hydrology Present? Yes X No	If yes, optional Wetland Site ID: W1					
	ii yes, optional wetiand site ib.					
Remarks: (Explain alternative procedures here or in a separate report.) Soybean field with ditches, precip drier than normal						
Soybean field with ditches, precip difer than normal						
HYDROLOGY						
	Cocoodon, Indicators (minimum of two required)					
Wetland Hydrology Indicators:	Secondary Indicators (minimum of two required)					
Primary Indicators (minimum of one is required; check all that apply)	Surface Soil Cracks (B6)					
Surface Water (A1) Water-Stained Leaves (B9)	 -					
High Water Table (A2) Aquatic Fauna (B13)	Moss Trim Lines (B16)					
Saturation (A3) Marl Deposits (B15)	Dry-Season Water Table (C2)					
Water Marks (B1) Hydrogen Sulfide Odor (C1)	<u> </u>					
Sediment Deposits (B2) Oxidized Rhizospheres on L Drift Deposits (B3) Presence of Reduced Iron (6						
	Shallow Aquitard (D3)					
	Microtopographic Relief (D4)					
Inundation Visible on Aerial Imagery (B7) —— Other (Explain in Remarks) Sparsely Vegetated Concave Surface (B8)	FAC-Neutral Test (D5)					
	TAG Neutral Test (55)					
Field Observations:						
Surface Water Present Yes No X Depth (inches						
Water Table Present Yes No X Depth (inches						
Saturation Present Yes No X Depth (inches	S): Wetland Hydrology Present? Yes X No					
(includes capillary fringe)	in a partiage of a valleble.					
Describe Recorded Data (stream gauge, monitoring well, aerial photos, pr	evious inspections), il avaliable.					
Remarks:						
Nemarks.						

Tree Stratum (Plot size: 30 ft)	Absolute % Cover	Dominant Species	Indicator Status	Dominance Test worksheet:
1				Number of Dominant Species That Are OBL, FACW, or FAC:(A)
3				Total Number of Dominant Species Across All Strata:1 (B)
5				Percent of Dominant Species That Are OBL, FACW, or FAC:0 (A/B)
7				Prevalence Index worksheet:
	0	= Total Cover		Total % Cover of: Multiply by:
Sapling/Shrub Stratum (Plot size: 15 ft)				OBL species 0 x 1 = 0
1				FACW species 0 x 2 = 0
2				FAC species 14 x 3 = 42
3				FACU species 0 x 4 = 0
4				UPL species 80 x 5 = 400
5				Column Totals: 94 (A) 442 (B)
6				Prevalence Index = B/A = 4.7
7				Hydrophytic Vegetation Indicators:
	0	= Total Cover		1 - Rapid Test for Hydrophytic Vegetation
Herb Stratum (Plot size: 5 ft)				- 2 - Dominance Test is >50%
1. Glycine max	80	Yes	UPL	- 3 - Prevalence Index is ≤3.0¹
2. Echinochloa crus-galli	7	No	FAC	-
3. Panicum capillare	5	No	FAC	4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet)
4. Rumex crispus	2	<u>No</u>	FAC	V 5 11
5				X Problematic Hydrophytic Vegetation¹ (Explain)
6				¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
7				
8				Definitions of Vegetation Strata:
9				Tree – Woody plants 3 in. (7.6 cm) or more in
10				diameter at breast height (DBH), regardless of height.
11				
12				Sapling/shrub – Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.
	94	Tatal Carra		
Woody Vine Stratum (Plot size: 30 ft)		= Total Cover		Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.
1				Woody vines – All woody vines greater than 3.28 ft in
2				height.
3				
4				Hydrophytic Vegetation
	0	= Total Cover		Present? Yes No X
Remarks: (Include photo numbers here or on a separ	ate sheet \			
remarks. (moldde prote nambers here of on a separ	ate sneet.)			

Sampling Point:

W1-2w

SOIL Sampling Point: W1-2w

Profile Desci	ription: (Describe to	the dept	h needed to docu	ment th	e indicat	or or co	onfirm the absence	of indicato	rs.)	
Depth	Matrix		Redo	x Featur	es					
(inches)	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²	Texture		Remarks	_
0 to 12	10YR 2/1	100					Peat	_		
12 to 24	10YR 3/4	100					Peat	Histic		
								_		
								_		
								_		
			-1					_		
							-			
¹Type: C=Co	oncentration, D=Deple	etion, RM	=Reduced Matrix, N	лS=Mas	ked Sand	Grains.	² Location: PL	=Pore Linin	g, M=Matrix.	
Hydric Soil II	ndicators:						Indicator	s for Proble	ematic Hydric	Soils³:
X Histosol (A	A1)		Polyvalue Below	Surface	(S8) (LRR	R,	2 cm	Muck (A10) (I	LRR K, L, MLRA	149B)
	pedon (A2)		MLRA 149B)						ox (A16) (LRR K ,	· ·
Black Hist		-	Thin Dark Surface				·		or Peat (S3) (LRR	
	Sulfide (A4)	-	High Chroma Sa						urface (S8) (LRR	K, L)
·	Layers (A5)	-	Loamy Mucky M			L)	<u></u>		(S9) (LRR K, L)	NK I D)
	Below Dark Surface (A1	1)	Loamy Gleyed N Depleted Matrix		i)				lasses (F12) (LRF in Soils (F19) (ML	
	k Surface (A12) ucky Mineral (S1)	-	Redox Dark Sur						i) (MLRA 144A, 14	
	eyed Matrix (S4)	-	Depleted Dark S					Parent Materia		10, 1402)
Sandy Re		-	Redox Depression		,				Surface (F22)	
Stripped N	Matrix (S6)		Marl (F10) (LRR	K, L)				(Explain in R		
Dark Surfa	ace (S7)									
³ Indicators of	hydrophytic vegetation	on and we	tland hydrology mu	ıst be pr	esent, un	less dist	turbed or problemati	c.		
	.ayer (if observed):						1			
Type:										
Depth (in	ches):						Hydric Soil Pre	sent?	Yes X	No
Remarks:							,			

	plants.			Sampling Point: W1-3w
Tree Stratum (Plot size: 30 ft)	Absolute % Cover	Dominant Species	Indicator Status	Dominance Test worksheet:
Populus balsamifera	45	Yes	FACW	Number of Dominant Species
Populus tremuloides	20	Yes	FAC	That Are OBL, FACW, or FAC: 6 (A)
Fraxinus nigra	20	Yes	FACW	
· <u></u>				Total Number of Dominant Species Across All Strata: 8 (B)
·				(5)
·				Percent of Dominant Species
·				That Are OBL, FACW, or FAC: 75 (A/B
	85			Prevalence Index worksheet: Total % Cover of: Multiply by:
apling/Shrub Stratum (Plot size: 15 ft)		_ = Total Cover		Widitiply by.
	35	Yes	FAC	OBL species 0 x 1 = 0
Acer negundo				FACW species 130 x 2 = 260
Alnus incana	15	Yes	FACW	FAC species 67 x 3 = 201
. Betula alleghaniensis	2	No No	FAC	FACU species 40 x 4 = 160
. Aronia prunifolia	_	<u>No</u>	FACW	UPL species $0 x5 = 0$
·			-	Column Totals: 237 (A) 621 (B
				Prevalence Index = B/A = 2.62
				Hydrophytic Vegetation Indicators:
	54	= Total Cover		
erb Stratum (Plot size: 5 ft)				- 1 - Rapid Test for Hydrophytic Vegetation
Solidago gigantea	45	Yes	FACW	X 2 - Dominance Test is >50%
Parthenocissus inserta	30	Yes	FACU	X 3 - Prevalence Index is ≤3.0¹
Rhamnus cathartica	5	No	FAC	4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet)
. Schedonorus arundinaceus	5	No	FACU	(Floride supporting data in Nemanos of on a separate sheet)
Symphyotrichum lanceolatum	3	No	FACW	Problematic Hydrophytic Vegetation ¹ (Explain)
Athyrium angustum	3	No	FAC	¹Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
- Urtica dioica	2	No	FAC	distance of problematic.
				Definitions of Vegetation Strata:
0				Tree – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height
1				
2				Sapling/shrub – Woody plants less than 3 in. DBH
	93			and greater than or equal to 3.28 ft (1 m) tall.
20 (1)		= Total Cover		Herb - All herbaceous (non-woody) plants, regardles
/oody Vine Stratum (Plot size: 30 ft)				of size, and woody plants less than 3.28 ft tall.
Parthenocissus inserta	5	Yes	FACU	Woody vines – All woody vines greater than 3.28 ft i
				height.
·				
·			-	Hydrophytic Vegetation
	5	= Total Cover		Present? Yes X No
	9			

SOIL Sampling Point: W1-3w

		to the dep				tor or co	onfirm the absence of indic	ators.)			
Depth (inches)	Color (moist)	%	Color (moist)	x Featur	es Type¹	Loc ²	Texture	Remarks			
<u> </u>			Color (moist)	70	Туре	LOC		Remarks			
0-8	10YR 2/1	100					Sandy Loam				
8-18	10YR 5/1	100									
18-24	10YR 5/1	90	7.5YR 4/6	10	С	M	Sandy Loam				
	-										
		·									
¹Type: C=Cc	ncentration D=Der	oletion RM	M=Reduced Matrix, N	MS=Mas	ked San	d Grains	. ² Location: PL=Pore L	ning M=Matrix			
Hydric Soil II		,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	Terrordord Matrix, 1		nou our			oblematic Hydric Soils ³ :			
Histosol (/			Polyvalue Below	v Surface	(S8) (LRF	R.		0) (LRR K, L, MLRA 149B)			
	pedon (A2)		MLRA 149B)	. • • • • • • • • • • • • • • • • • • •	(00) (=	,		Redox (A16) (LRR K, L, R)			
Black Hist			Thin Dark Surface	ce (S9) (L	.RR R, ML	-RA 149B		5 cm Mucky Peat or Peat (S3) (LRR K, L, R)			
Hydrogen	Sulfide (A4)		High Chroma Sa	ands (S11) (LRR K,	, L)	Polyvalue Below Surface (S8) (LRR K, L)				
	Layers (A5)		Loamy Mucky M	lineral (F1) (LRR K	, L)	Thin Dark Surface (S9) (LRR K, L)				
X Depleted	Below Dark Surface (A	(11)	Loamy Gleyed N)		Iron-Manganese Masses (F12) (LRR K, L, R)				
	k Surface (A12)		Depleted Matrix				Piedmont Floodplain Soils (F19) (MLRA 149B)				
	icky Mineral (S1)		Redox Dark Sur				Mesic Spodic (TA6) (MLRA 144A, 145, 149B)				
	eyed Matrix (S4)		Depleted Dark S		7)		Red Parent Material (F21)				
Sandy Re			Redox Depressi Marl (F10) (LRR	` '			Very Shallow Dark Surface (F22)				
Dark Surfa	Matrix (S6) ace (S7)		Wall (I 10) (LKK	· K, L)			Other (Explain in Remarks)				
			etland hydrology mu	ust be pr	esent, ur	niess dis	turbed or problematic.				
Type:	.ayer (if observed):	i									
-	ohoo):						Hydric Soil Present?	Yes ^X No			
Depth (in							nyuric Soil Present?				
Remarks:											

Project/Site: Pine County Solar	City/County: Pine Sampling Date: 09/12/2022					
Applicant/Owner: Swift Current Energy	State: Min Sampling Point: W2-1u					
Investigator(s): BB/AH	Section, Township, Range: T044N, R020W, S26					
	relief (concave, convex, none): Convex Slope %: 1-2					
Subregion (LRR or MLRA): LRR K, MLRA 90A Lat: 46.264553	Long: -92.837257 Datum: WGS84					
Soil Map Unit Name: Denied Access						
Are climatic / hydrologic conditions on the site typical for this time of year?	Yes No _X (If no, explain in Remarks.)					
Are Vegetation X, Soil , or Hydrology significantly dist						
Are Vegetation , Soil , or Hydrology naturally problem	matic? (If needed, explain any answers in Remarks.)					
SUMMARY OF FINDINGS – Attach site map showing sampling p	point locations, transects, important features, etc.					
Hydrophytic Vegetation Present? Yes No X	is the Sampled Area					
Hydrophytic Vegetation Present? Yes No X Hydric Soil Present? Yes No X	Is the Sampled Area within a Wetland? Yes No X					
Wetland Hydrology Present? Yes No X	If yes, optional Wetland Site ID: W2					
Remarks: (Explain alternative procedures here or in a separate report.)	ii yoo, optional vvettana one ib.					
Antecedent precipitation analysis showed drier than normal conditions						
LIVERGLOOV						
HYDROLOGY						
Wetland Hydrology Indicators:	Secondary Indicators (minimum of two required)					
Primary Indicators (minimum of one is required; check all that apply)	Surface Soil Cracks (B6)					
Surface Water (A1) Water-Stained Leaves (B9)	Drainage Patterns (B10)					
High Water Table (A2) Aquatic Fauna (B13)	Moss Trim Lines (B16)					
Saturation (A3) Marl Deposits (B15)	Dry-Season Water Table (C2)					
Water Marks (B1) Hydrogen Sulfide Odor (C1)						
Sediment Deposits (B2) Oxidized Rhizospheres on L						
Drift Deposits (B3) Presence of Reduced Iron (i						
Algal Mat or Crust (B4) Recent Iron Reduction in Til	illed Soils (C6) Geomorphic Position (D2) Shallow Aquitard (D3)					
Iron Deposits (B5) Thin Muck Surface (C7)	Microtopographic Relief (D4)					
Inundation Visible on Aerial Imagery (B7) Other (Explain in Remarks)	FAC-Neutral Test (D5)					
Sparsely Vegetated Concave Surface (B8)	FAC-Neutral Test (D5)					
Field Observations:						
Surface Water Present Yes No X Depth (inches						
Water Table Present Yes No X Depth (inches						
Saturation Present Yes No X Depth (inches	S): Wetland Hydrology Present? Yes No _X					
(includes capillary fringe)						
Describe Recorded Data (stream gauge, monitoring well, aerial photos, pr	evious inspections), if available:					
Domostro						
Remarks:						

Tree Stratum (Plot size: 30 ft)	Absolute % Cover	Dominant Species	Indicator Status	Dominance Test worksheet:
1 2				Number of Dominant Species That Are OBL, FACW, or FAC: 0 (A)
3 4				Total Number of Dominant
5				Species Across All Strata: 1 (B) Percent of Dominant Species
6 7				That Are OBL, FACW, or FAC: (A/B)
	_	·		Prevalence Index worksheet:
	0	_ = Total Cover		Total % Cover of: Multiply by:
Sapling/Shrub Stratum (Plot size: 15 ft)				OBL species x 1 =
1				FACW species x 2 =
2.				FAC species x 3 =
3				FACU species x 4 =
4			-	UPL species x 5 =
5				Column Totals: (A) (B)
6			-	Prevalence Index = B/A =
7				Hydrophytic Vegetation Indicators:
	0	= Total Cover		
Herb Stratum (Plot size: 5 ft)				- 1 - Rapid Test for Hydrophytic Vegetation
1. Glycine max	80	Yes	UPL	2 - Dominance Test is >50%
2. Ambrosia artemisiifolia	10	No	FACU	3 - Prevalence Index is ≤3.0¹
3. Bromus arvensis	5	No	FACU	4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet)
4. Panicum capillare	5	No	FAC	(i Tovide supporting data in Nemarks of on a separate sheet)
5				Problematic Hydrophytic Vegetation¹ (Explain)
6				¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
7				astable of problemate.
8				Definitions of Vegetation Strata:
9.				
10				Tree – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.
11				diamoter at broast height (BBH), regardless of height.
12				Sapling/shrub – Woody plants less than 3 in. DBH
	100			and greater than or equal to 3.28 ft (1 m) tall.
Woody Vine Stratum (Plot size: 30 ft)		= Total Cover		Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.
1				Woody vines – All woody vines greater than 3.28 ft in
2				height.
3				
4				Hydrophytic
	0	T		Vegetation Present? Yes No X
		= Total Cover		11050Hz. 105 110
				1
Remarks: (Include photo numbers here or on a separate or	rate sneet.)			

Sampling Point:

W2-1u

SOIL Sampling Point: W2-1u

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)											
Depth	Matrix Redox Features										
(inches)	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²	Texture	Remarks			
0-24	7.5YR 4/4	100					Sandy Loam				
											
¹Type: C=Co	oncentration, D=Depl	etion, RM=F	Reduced Matrix, N	лS=Mas	ked Sand	Grains.	² Location: PL=Pore Lir	ning, M=Matrix.			
Hydric Soil II	ndicators:						Indicators for Pro	blematic Hydric Soils ³ :			
Histosol (A	A1)		Polyvalue Below	Surface	(S8) (LRR	R,	2 cm Muck (A10) (LRR K, L, MLRA 149B)			
Histic Epip	pedon (A2)		MLRA 149B)					edox (A16) (LRR K, L, R)			
Black Hist	tic (A3)		Thin Dark Surface	ce (S9) (L	RR R, ML	RA 149B) 5 cm Mucky Pea	5 cm Mucky Peat or Peat (S3) (LRR K, L, R)			
Hydrogen	Sulfide (A4)		High Chroma Sa	ands (S11) (LRR K,	L)	Polyvalue Below Surface (S8) (LRR K, L)				
Stratified I	Layers (A5)		Loamy Mucky M	lineral (F1) (LRR K,	L)	Thin Dark Surface (S9) (LRR K, L)				
Depleted	Below Dark Surface (A1	1)	Loamy Gleyed N	/latrix (F2)		Iron-Manganese Masses (F12) (LRR K, L, R)				
Thick Darl	k Surface (A12)		Depleted Matrix	(F3)			Piedmont Flood	plain Soils (F19) (MLRA 149B)			
Sandy Mu	ıcky Mineral (S1)	_	Redox Dark Sur	face (F6)			Mesic Spodic (T	(A6) (MLRA 144A, 145, 149B)			
Sandy Gle	eyed Matrix (S4)	_	Depleted Dark S	Surface (F	7)		Red Parent Mat	erial (F21)			
Sandy Re	dox (S5)	_	Redox Depressi	ons (F8)			Very Shallow Dark Surface (F22)				
Stripped N	Matrix (S6)		Marl (F10) (LRR	K, L)			Other (Explain in Remarks)				
Dark Surfa	ace (S7)										
³ Indicators of	hydrophytic vegetation	on and wetla	and hydrology mu	ıst be pr	esent, un	less dist	urbed or problematic.				
Restrictive L	ayer (if observed):										
Type: _											
Depth (in	ches):						Hydric Soil Present?	Yes NoX			
Remarks:											

Project/Site: Pine County Solar	City/County: Pine Sampling Date: 09/12/2022					
Applicant/Owner: Swift Current Energy	State: Min Sampling Point: W2-1w					
Investigator(s): BB/AH	Section, Township, Range: T044N, R020W, S26					
-	relief (concave, convex, none): Concave Slope %: 0-1					
Subregion (LRR or MLRA): LRR K, MLRA 90A Lat: 46.264606	Long: -92.837739 Datum: WGS84					
Soil Map Unit Name: Denied Access						
Are climatic / hydrologic conditions on the site typical for this time of year?	Yes No X (If no, explain in Remarks.)					
Are Vegetation X, Soil , or Hydrology significantly dist						
Are Vegetation , Soil , or Hydrology naturally problem	matic? (If needed, explain any answers in Remarks.)					
SUMMARY OF FINDINGS – Attach site map showing sampling p	oint locations, transects, important features, etc.					
Lhudrashutia Variatian Present?	la the Complet Area					
Hydrophytic Vegetation Present? Yes No X Hydric Soil Present? Yes X No	Is the Sampled Area within a Wetland? Yes X No					
Wetland Hydrology Present? Yes X No	If yes, optional Wetland Site ID: W2					
	ii yes, optioriai wetiand Site ID					
Remarks: (Explain alternative procedures here or in a separate report.) Antecedent precipitation analysis shows drier than normal conditions.						
Antecedent precipitation analysis shows their than normal conditions.						
HYDROLOGY						
Wetland Hydrology Indicators:	Secondary Indicators (minimum of two required)					
Primary Indicators (minimum of one is required; check all that apply)	Surface Soil Cracks (B6)					
	Drainage Patterns (B10)					
Surface Water (A1) Water-Stained Leaves (B9) High Water Table (A2) Aquatic Fauna (B13)	Moss Trim Lines (B16)					
<u> </u>	Dry-Season Water Table (C2)					
Saturation (A3) Marl Deposits (B15) Water Marks (B1) Hydrogen Sulfide Odor (C1)						
Sediment Deposits (B2) Oxidized Rhizospheres on L	<u></u>					
Oxidized Nitrosophics of E						
X Algal Mat or Crust (B4) Recent Iron Reduction in Till	· · · · · · · · · · · · · · · · · · ·					
Iron Deposits (B5) Thin Muck Surface (C7)	Shallow Aquitard (D3)					
Inundation Visible on Aerial Imagery (B7) Other (Explain in Remarks)	Minutes and the Bullet (BA)					
Sparsely Vegetated Concave Surface (B8)	FAC-Neutral Test (D5)					
Field Observations:						
	5).					
	· · · · · · · · · · · · · · · · · · ·					
Water Table Present Yes No X Depth (inches Saturation Present Yes No X Depth (inches						
(includes capillary fringe)	Welland Hydrology Frederic.					
Describe Recorded Data (stream gauge, monitoring well, aerial photos, pro	revious inspections) if available:					
gaago, monitoring non, asnar photos, ph	onodo mopositorio), il divando e					
Remarks:						

Tree Stratum (Plot size: 30 ft)	Absolute % Cover	Dominant Species	Indicator 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: 1 (B)
5.6.				Percent of Dominant Species
7				That Are OBL, FACW, or FAC: 0 (A/B)
	0	_ = Total Cover		Prevalence Index worksheet: Total % Cover of: Multiply by:
Sapling/Shrub Stratum (Plot size: 15 ft)				OBL species x 1 =
1				FACW species x 2 =
2				
3				· — —
4				FACU species x 4 =
5				UPL species x 5 =
6.				Column Totals: (A) (B)
7.				Prevalence Index = B/A =
		·		Hydrophytic Vegetation Indicators:
Herb Stratum (Plot size: 5 ft)	0	= Total Cover		1 - Rapid Test for Hydrophytic Vegetation
1. Glycine max	75	Yes	UPL	2 - Dominance Test is >50%
Panicum capillare	10	No	FAC	3 - Prevalence Index is ≤3.0¹
3. Cyperus esculentus	10	No	FACW	4 - Morphological Adaptations ¹
Echinochloa crus-galli	_	<u> </u>	FAC	(Provide supporting data in Remarks or on a separate sheet)
Populus balsamifera			FACW	Problematic Hydrophytic Vegetation ¹ (Explain)
				¹Indicators of hydric soil and wetland hydrology must be present, unless
-				disturbed or problematic.
· ·				Definitions of Variation Charles
•				Definitions of Vegetation Strata:
9.				Tree – Woody plants 3 in. (7.6 cm) or more in
10				diameter at breast height (DBH), regardless of height.
11.				Sapling/shrub – Woody plants less than 3 in. DBH
12				and greater than or equal to 3.28 ft (1 m) tall.
20.6	108	= Total Cover		Herb – All herbaceous (non-woody) plants, regardless
Woody Vine Stratum (Plot size: 30 ft)				of size, and woody plants less than 3.28 ft tall.
1		·		Woody vines – All woody vines greater than 3.28 ft in
2				height.
3	-	 -		
4				Hydrophytic
	0	= Total Cover		Vegetation Present? Yes
Remarks: (Include photo numbers here or on a sepa	rate sheet.)			1
` '	,			

Sampling Point:

W2-1w

SOIL Sampling Point: W2-1w

Profile Desci	ription: (Describe to	the dept	h needed to docu	ment th	e indicat	or or co	nfirm the absence of	indicators.)			
Depth	Matrix		Redox Features								
(inches)	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²	Texture		Remarks		
0-13	10YR 2/1	100					Peat				
13-24	10YR 3/2	100					Peat				
¹Type: C=Co	oncentration, D=Depl	etion, RM:	=Reduced Matrix, N	лS=Mas	ked Sand	Grains.	² Location: PL=F	ore Lining, M=N	/latrix.		
Hydric Soil II	ndicators:						Indicators f	or Problematic	Hydric So	oils³:	
X Histosol (A	A1)	=	Polyvalue Below	/ Surface	(S8) (LRR	R,	2 cm Mu	ıck (A10) (LRR K,	L, MLRA 14	19B)	
Histic Epip	pedon (A2)		MLRA 149B)				Coast P	rairie Redox (A16)	(LRR K, L,	R)	
Black Hist	tic (A3)	-	Thin Dark Surface	ce (S9) (I	RR R, ML	.RA 149B	5 cm Mucky Peat or Peat (S3) (LRR K, L, R)				
Hydrogen	Sulfide (A4)	_	High Chroma Sa	ands (S11) (LRR K,	L)	Polyvalue Below Surface (S8) (LRR K, L)				
Stratified I	Layers (A5)	_	Loamy Mucky M	lineral (F	1) (LRR K ,	L)	Thin Dark Surface (S9) (LRR K, L)				
Depleted	Below Dark Surface (A1	1)	Loamy Gleyed N	Лatrix (F2)		Iron-Manganese Masses (F12) (LRR K, L, R)				
Thick Darl	k Surface (A12)	_	Depleted Matrix	(F3)			Piedmont Floodplain Soils (F19) (MLRA 149B)				
	ucky Mineral (S1)	_	Redox Dark Sur				Mesic Spodic (TA6) (MLRA 144A, 145, 149B)				
	eyed Matrix (S4)	-	Depleted Dark S				Red Parent Material (F21)				
Sandy Re		-	Redox Depressi		- /		Very Shallow Dark Surface (F22)				
		-	Marl (F10) (LRR								
	Matrix (S6)	-	Wall (I 10) (LKK	K, L)			Other (Explain in Remarks)				
Dark Surfa											
	hydrophytic vegetation	on and we	tland hydrology mu	ıst be pr	esent, un	less dist	urbed or problematic.				
Type:	.ayer (if observed):										
Depth (in	ches):						Hydric Soil Prese	nt? Yes	, X	No	
Remarks:							11,4			<u> </u>	

Project/Site: Pine County Solar	City/County: Pine Sampling Date: 09/12/2022					
Applicant/Owner: Swift Current Energy	State: Min Sampling Point: W3-1u					
Investigator(s): KKM	Section, Township, Range: T044N, R020W, S26					
-	relief (concave, convex, none): Linear Slope %: 2					
Subregion (LRR or MLRA): LRR K, MLRA 90A Lat: 46.262998	Long: -92.84237 Datum: WGS84					
Soil Map Unit Name: Denied Access						
Are climatic / hydrologic conditions on the site typical for this time of year?	Yes No X (If no, explain in Remarks.)					
Are Vegetation X, Soil , or Hydrology significantly dist						
Are Vegetation , Soil , or Hydrology naturally problem	matic? (If needed, explain any answers in Remarks.)					
SUMMARY OF FINDINGS – Attach site map showing sampling p	oint locations, transects, important features, etc.					
Hydrophytic Vegetation Present? Yes No X	Is the Sampled Area					
Hydric Soil Present? Hydric Soil Present? Yes No X Yes X No	within a Wetland? Yes No X					
Wetland Hydrology Present? Yes No X	If yes, optional Wetland Site ID: W3					
Remarks: (Explain alternative procedures here or in a separate report.)	ii yoo, optional violand one ib.					
Soybean field with ditches, precip drier than normal						
HYDROLOGY						
Wetland Hydrology Indicators:	Secondary Indicators (minimum of two required)					
Primary Indicators (minimum of one is required; check all that apply)	Surface Soil Cracks (B6)					
Surface Water (A1) Water-Stained Leaves (B9)	Drainage Patterns (B10)					
High Water Table (A2) Aquatic Fauna (B13)	Moss Trim Lines (B16)					
Saturation (A3) Marl Deposits (B15)	Dry-Season Water Table (C2)					
Water Marks (B1) Hydrogen Sulfide Odor (C1)						
Sediment Deposits (B2) Oxidized Rhizospheres on L						
Drift Deposits (B3) Presence of Reduced Iron (0	· · · · · · · · · · · · · · · · · · ·					
Algal Mat or Crust (B4) Recent Iron Reduction in Till	· · · · · · · · · · · · · · · · · · ·					
Iron Deposits (B5) — Thin Muck Surface (C7)	Shallow Aquitard (D3)					
Inundation Visible on Aerial Imagery (B7) Other (Explain in Remarks)	Microtopographic Relief (D4)					
Sparsely Vegetated Concave Surface (B8)	FAC-Neutral Test (D5)					
Field Observations:						
Surface Water Present Yes No X Depth (inches	s):					
Water Table Present Yes No X Depth (inches						
Saturation Present Yes No X Depth (inches	s): Wetland Hydrology Present? Yes No _X					
(includes capillary fringe)						
Describe Recorded Data (stream gauge, monitoring well, aerial photos, pr	revious inspections), if available:					
Remarks:						
I and the second						

<u>Tree Stratum</u> (Plot size: <u>30 ft</u>)	Absolute % Cover	Dominant Species	Indicator Status	Dominance Test worksheet:
1 2				Number of Dominant Species That Are OBL, FACW, or FAC:0(A)
3				Total Number of Dominant Species Across All Strata:1 (B)
567				Percent of Dominant Species That Are OBL, FACW, or FAC: (A/B)
·-				Prevalence Index worksheet:
	0	= Total Cover		Total % Cover of: Multiply by:
Sapling/Shrub Stratum (Plot size: 15 ft)	'	_		OBL species 0 x 1 = 0
1				FACW species 0 x 2 = 0
2				
3				
4				FACU species 15 x 4 = 60
5				UPL species 85 x 5 = 425
6				Column Totals: 100 (A) 485 (B)
7				Prevalence Index = B/A = 4.85
				Hydrophytic Vegetation Indicators:
- 0	0	= Total Cover		- 1 - Rapid Test for Hydrophytic Vegetation
Herb Stratum (Plot size: 5 ft)				- 2 - Dominance Test is >50%
1. Glycine max	85	Yes	UPL	- 3 - Prevalence Index is ≤3.0¹
2. Poa pratensis	15	No	FACU	
3				4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet)
4				\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \
5				X Problematic Hydrophytic Vegetation¹ (Explain)
6				¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
7				
8				Definitions of Vegetation Strata:
9				Tree – Woody plants 3 in. (7.6 cm) or more in
10				diameter at breast height (DBH), regardless of height.
11				
12				Sapling/shrub – Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.
	100			and greater than or equal to 3.20 it (1 iii) tall.
Woody Vine Stratum (Plot size: 30 ft)		= Total Cover		Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.
1		·		Woody vines – All woody vines greater than 3.28 ft in
2		·		height.
3		·		
4				Hydrophytic
	0	= Total Cover		Vegetation Present? Yes NoX
Remarks: (Include photo numbers here or on a separa	ate sheet.)			

Sampling Point:

W3-1u

SOIL Sampling Point: W3-1u

Profile Desci	ription: (Describe to	the dept	h needed to docu	ment th	e indicat	or or co	nfirm the absen	ce of indicato	ors.)			
Depth	Matrix		Redox Features									
(inches)	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²	Texture		Remarks			
0-9	10YR 2/1	100					Peat					
9-24	10YR 2/2	100					Peat					
							-					
¹Type: C=Co	oncentration, D=Depl	etion, RM:	=Reduced Matrix, N	//S=Mas	ked Sand	Grains.	² Location:	PL=Pore Linin	g, M=Matrix.			
Hydric Soil I	ndicators:						Indica	tors for Probl	ematic Hydric	Soils ³ :		
X Histosol (A	A1)	_	Polyvalue Below	Surface	(S8) (LRR	R,	2	cm Muck (A10) (LRR K, L, MLRA	149B)		
Histic Epip	pedon (A2)		MLRA 149B)				Co	oast Prairie Redo	ox (A16) (LRR K, l	L, R)		
Black Hist	tic (A3)	-	Thin Dark Surface	ce (S9) (L	RR R, ML	RA 149B	5 cm Mucky Peat or Peat (S3) (LRR K, L, R)					
Hydrogen	Sulfide (A4)	-	High Chroma Sa	ands (S11) (LRR K,	L)	Polyvalue Below Surface (S8) (LRR K, L)					
Stratified	Layers (A5)	-	Loamy Mucky M	lineral (F	1) (LRR K ,	L)	Thin Dark Surface (S9) (LRR K, L)					
Depleted	Below Dark Surface (A1	1)	Loamy Gleyed M	/latrix (F2)		Iron-Manganese Masses (F12) (LRR K, L, R)					
Thick Dar	k Surface (A12)	-	Depleted Matrix	(F3)			Piedmont Floodplain Soils (F19) (MLRA 149B)					
Sandy Mu	ıcky Mineral (S1)	-	Redox Dark Surf	face (F6)			Mesic Spodic (TA6) (MLRA 144A, 145, 149B)					
Sandy Gle	eyed Matrix (S4)	_	Depleted Dark S	Surface (F	7)		Red Parent Material (F21)					
Sandy Re	dox (S5)	_	Redox Depression	ons (F8)			Very Shallow Dark Surface (F22)					
Stripped N	Matrix (S6)	_	Marl (F10) (LRR	K, L)			Other (Explain in Remarks)					
Dark Surfa	ace (S7)											
³ Indicators of	hydrophytic vegetation	on and we	tland hydrology mu	ıst be pr	esent, un	less dist	urbed or problem	natic.				
	ayer (if observed):											
Type: _												
Depth (in	ches):						Hydric Soil F	Present?	Yes X	No		
Remarks:												

Project/Site: Pine County Solar	City/County: Pine Sampling Date: 09/12/2022
Applicant/Owner: Swift Current Energy	State: Min Sampling Point: W3-1w
Investigator(s): KKM	Section, Township, Range: T044N, R020W, S26
	relief (concave, convex, none): Concave Slope %: 2
· · · · · · · · · · · · · · · · · · ·	· ———
Subregion (LRR or MLRA): LRR K, MLRA 90A Lat: 46.263152	Long: -92.842665 Datum: WGS84
Soil Map Unit Name: Denied Access	NWI classification: PEM1Af
Are climatic / hydrologic conditions on the site typical for this time of year?	Yes No X (If no, explain in Remarks.)
Are Vegetation X , Soil , or Hydrology significantly distu	urbed? Are "Normal Circumstances" present? Yes No X
Are Vegetation, Soil, or Hydrology naturally problem	natic? (If needed, explain any answers in Remarks.)
SUMMARY OF FINDINGS – Attach site map showing sampling po	oint locations, transects, important features, etc.
Hydrophytic Vegetation Present? Yes No X	Is the Sampled Area
Hydric Soil Present? Yes X No	within a Wetland? Yes X No
Wetland Hydrology Present? Yes X No	If yes, optional Wetland Site ID: W3
Remarks: (Explain alternative procedures here or in a separate report.) Soybean field with ditches. Precip drier than normal. Note this is the wetlar mislabeled as W3-1W	nd sample point - the other data sheet for the upland sample point was
HYDROLOGY	
Wetland Hydrology Indicators:	Secondary Indicators (minimum of two required)
Primary Indicators (minimum of one is required; check all that apply)	Surface Soil Cracks (B6)
Surface Water (A1) Water-Stained Leaves (B9)	Drainage Patterns (B10)
High Water Table (A2) Aquatic Fauna (B13)	Moss Trim Lines (B16)
Saturation (A3) Marl Deposits (B15)	Dry-Season Water Table (C2)
Water Marks (B1) Hydrogen Sulfide Odor (C1)	Crayfish Burrows (C8)
Sediment Deposits (B2) Oxidized Rhizospheres on Li	iving Roots (C3) X Saturation Visible on Aerial Imagery (C9)
Drift Deposits (B3) Presence of Reduced Iron (C	Stunted or Stressed Plants (D1)
Algal Mat or Crust (B4) Recent Iron Reduction in Tille	ed Soils (C6) Geomorphic Position (D2)
Iron Deposits (B5) Thin Muck Surface (C7)	Shallow Aquitard (D3)
Inundation Visible on Aerial Imagery (B7) Other (Explain in Remarks)	X Microtopographic Relief (D4)
Sparsely Vegetated Concave Surface (B8)	FAC-Neutral Test (D5)
Field Observations:	
Surface Water Present Yes No X Depth (inches)):
Water Table Present Yes No _X Depth (inches)):
Saturation Present Yes X No Depth (inches): 19 Wetland Hydrology Present? Yes X No
(includes capillary fringe)	
Describe Recorded Data (stream gauge, monitoring well, aerial photos, pre	evious inspections), if available:
Remarks:	

Abcoluto	Dominant	Indicator	
Absolute <u>% Cover</u>	Dominant <u>Species</u>	<u>Status</u>	Dominance Test worksheet:
			Number of Dominant Species
			That Are OBL, FACW, or FAC: 0 (A)
			Total Number of Dominant Species Across All Strata: 1 (B)
			Openies Across Air Strata.
		_	Percent of Dominant Species
			That Are OBL, FACW, or FAC: 0 (A/E
			Prevalence Index worksheet:
0	_ = Total Cover		Total % Cover of: Multiply by:
			OBL species $0 x 1 = 0$
			FACW species 0 x 2 = 0
			FAC species 3 x 3 = 9
			FACU species 0 x 4 = 0
			UPL species 70 x 5 = 350
			Column Totals: 73 (A) 359 (B
			Prevalence Index = B/A = 4.92
			Hydrophytic Vegetation Indicators:
0	= Total Cover		
	_ 10tal 00101		1 - Rapid Test for Hydrophytic Vegetation
70	Yes	UPL	2 - Dominance Test is >50%
3	No.	FAC	3 - Prevalence Index is ≤3.0¹
		17.0	4 - Morphological Adaptations ¹
			(Provide supporting data in Remarks or on a separate sheet)
			Problematic Hydrophytic Vegetation ¹ (Explain)
	-		¹Indicators of hydric soil and wetland hydrology must be present, unless
			disturbed or problematic.
	 		
			Definitions of Vegetation Strata:
			Tree – Woody plants 3 in. (7.6 cm) or more in
			diameter at breast height (DBH), regardless of height
	·		
			Sapling/shrub – Woody plants less than 3 in. DBH
72			and greater than or equal to 3.28 ft (1 m) tall.
	= Total Cover		Herb - All herbaceous (non-woody) plants, regardles
			of size, and woody plants less than 3.28 ft tall.
			Woody vines – All woody vines greater than 3.28 ft i
			height.
			Hydrophytic
			Vegetation
0	= Total Cover		
		0 = Total Cover 0 = Total Cover 70 Yes 3 No 73 = Total Cover	

SOIL Sampling Point: W3-1w

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)								
Depth	Matrix		Redo	x Featur	es			
(inches)	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²	Texture	Remarks
0-20	10YR 2/1	100					Peat	
20-24	10YR 2/2	100					Sand	
								_
¹Type: C=Co	oncentration, D=Deple	etion, RM=	Reduced Matrix, N	//S=Mas	ked Sand	Grains.	² Location: PL=Poi	re Lining, M=Matrix.
Hydric Soil II	ndicators:						Indicators for	r Problematic Hydric Soils³:
X Histosol (A	A1)	_	Polyvalue Below	Surface	(S8) (LRR	R,	2 cm Muck	(A10) (LRR K, L, MLRA 149B)
Histic Epip	pedon (A2)		MLRA 149B)				Coast Prai	irie Redox (A16) (LRR K, L, R)
Black Hist	tic (A3)	_	Thin Dark Surface	ce (S9) (L	RR R, ML	RA 149B) 5 cm Muck	ky Peat or Peat (S3) (LRR K, L, R)
Hydrogen	Sulfide (A4)	_	High Chroma Sa	ands (S11) (LRR K,	L)	Polyvalue	Below Surface (S8) (LRR K, L)
Stratified I	Layers (A5)	_	Loamy Mucky M	lineral (F	1) (LRR K ,	L)	Thin Dark	Surface (S9) (LRR K, L)
Depleted	Below Dark Surface (A1	1) _	Loamy Gleyed M	/latrix (F2)		Iron-Manga	anese Masses (F12) (LRR K, L, R)
Thick Darl	k Surface (A12)	_	Depleted Matrix	(F3)			Piedmont I	Floodplain Soils (F19) (MLRA 149B)
Sandy Mu	icky Mineral (S1)	_	Redox Dark Surf	face (F6)			Mesic Spo	odic (TA6) (MLRA 144A, 145, 149B)
Sandy Gle	eyed Matrix (S4)	_	Depleted Dark S	Surface (F	7)		Red Paren	nt Material (F21)
Sandy Re	dox (S5)	_	Redox Depression	ons (F8)			Very Shall	ow Dark Surface (F22)
Stripped N	Matrix (S6)	_	Marl (F10) (LRR	K, L)			Other (Exp	olain in Remarks)
Dark Surfa	ace (S7)							
³ Indicators of	hydrophytic vegetation	on and we	tland hydrology mu	ıst be pr	esent, un	less dist	urbed or problematic.	
Restrictive L	ayer (if observed):							
Type:								
Depth (in	ches):						Hydric Soil Present	? Yes X No
Remarks:								

Project/Site: Pine County Solar	City/County: Pine Sampling Date: 09/13/2022					
Applicant/Owner: Swift Current Energy	State: Min Sampling Point: W4-1u					
Investigator(s): AH, BB	Section, Township, Range: T044N, R020W, S23					
	relief (concave, convex, none): Linear Slope %: 5					
Subregion (LRR or MLRA): LRR K, MLRA 90A Lat: 46.274138	Long: -92.833387 Datum: WGS84					
Soil Map Unit Name: Denied Access	NWI classification: PEM1Af					
Are climatic / hydrologic conditions on the site typical for this time of year?	Yes No X (If no, explain in Remarks.)					
Are Vegetation X , Soil , or Hydrology significantly disturbed in Significantly disturbed in Significantly X	urbed? Are "Normal Circumstances" present? Yes No X					
Are Vegetation , Soil , or Hydrology naturally problem	natic? (If needed, explain any answers in Remarks.)					
SUMMARY OF FINDINGS – Attach site map showing sampling po	oint locations, transects, important features, etc.					
Hydrophytic Vegetation Present? Yes No X	Is the Sampled Area					
Hydric Soil Present? Yes X No	within a Wetland? Yes No X					
Wetland Hydrology Present? Yes No X	If yes, optional Wetland Site ID: W4					
Drier than normal, ditched/tiled ag field						
HYDROLOGY						
Wetland Hydrology Indicators:	Secondary Indicators (minimum of two required)					
Primary Indicators (minimum of one is required; check all that apply)	Surface Soil Cracks (B6)					
Surface Water (A1) Water-Stained Leaves (B9)	Drainage Patterns (B10)					
High Water Table (A2) Aquatic Fauna (B13)	Moss Trim Lines (B16)					
Saturation (A3) Marl Deposits (B15)	Dry-Season Water Table (C2)					
Water Marks (B1) Hydrogen Sulfide Odor (C1)	Crayfish Burrows (C8)					
Sediment Deposits (B2) Oxidized Rhizospheres on Li	ving Roots (C3) Saturation Visible on Aerial Imagery (C9)					
Presence of Reduced Iron (C	4) Stunted or Stressed Plants (D1)					
Algal Mat or Crust (B4) Recent Iron Reduction in Tille						
Iron Deposits (B5) — Thin Muck Surface (C7)	Shallow Aquitard (D3)					
Inundation Visible on Aerial Imagery (B7) Other (Explain in Remarks)	Microtopographic Relief (D4)					
Sparsely Vegetated Concave Surface (B8)	FAC-Neutral Test (D5)					
Field Observations:						
Surface Water Present Yes No X Depth (inches)):					
Water Table Present Yes No X Depth (inches)						
Saturation Present Yes No X Depth (inches): Wetland Hydrology Present? Yes No _X					
(includes capillary fringe)						
Describe Recorded Data (stream gauge, monitoring well, aerial photos, pre	evious inspections), if available:					
Remarks: No algal mats at this location. No wet signature on any years in aerial revie	»W					

VEGETATION – Use scientific names of	i plants.			Sampling P	oint: W4-1u
<u>Tree Stratum</u> (Plot size: <u>30 ft</u>)	Absolute % Cover	Dominant <u>Species</u>	Indicator Status	Dominance Test worksheet:	
1				Number of Dominant Species	
2.				That Are OBL, FACW, or FAC	: 0 (A)
3					(/
4.				Total Number of Dominant	
				Species Across All Strata:	1 (B)
•				Percent of Dominant Species	
6				That Are OBL, FACW, or FAC	: 0 (A/B)
7				Prevalence Index worksheet	·
	0	T / 10		Total % Cover of:	
Coolings/Charle Charles (Diet sine) 15 ft)		_ = Total Cover			Multiply by:
Sapling/Shrub Stratum (Plot size: 15 ft)				OBL species	x 1 =
1				FACW species	x 2 =
2				FAC species	x 3 =
3				· -	
4				FACU species	x 4 =
5				UPL species	x 5 =
•				Column Totals:	(A)(B)
				Prevalence Index = B/A	
7				Hydrophytic Vegetation Indi	cators:
	0	= Total Cover			
Herb Stratum (Plot size:5 ft)	·	_ 10tal 00vcl		1 - Rapid Test for Hydroph	nytic Vegetation
1. Glycine max	60	Yes	UPL	_ 2 - Dominance Test is >50)%
		165	UFL	- 3 - Prevalence Index is ≤3	3.0 ¹
2				4 - Morphological Adaptat	
3				(Provide supporting data in Remar	
4					
5				Problematic Hydrophytic \	Vegetation¹ (Explain)
6				¹ Indicators of hydric soil and wetland hyd disturbed or problematic.	rology must be present, unless
7.				disturbed of problematic.	
0				Definitions of Vegetation St.	rotor
•				Definitions of Vegetation Str	ala.
9.				Tree – Woody plants 3 in. (7.6	cm) or more in
10				diameter at breast height (DBI	H), regardless of height.
11					
12				Sapling/shrub – Woody plant and greater than or equal to 3.	
	60			and greater than or equal to 3.	.20 it (1 iii) taii.
		= Total Cover		Herb – All herbaceous (non-w	
Woody Vine Stratum (Plot size: 30 ft)				of size, and woody plants less	than 3.28 ft tall.
1				Weeds since All woods since	an areator than 2.20 ft in
2				Woody vines – All woody vine height.	es greater than 3.26 it in
3.					
4.				Hydrophytic	
				Vegetation	
	0	= Total Cover		Present? Yes	No X
Remarks: (Include photo numbers here or on a se	eparate sheet.)				

SOIL Sampling Point: W4-1u

Profile Desci	ription: (Describe to	the dept	h needed to docu	ment th	e indicat	or or co	onfirm the absence of inc	licators.)
Depth	Matrix		Redo	x Featur	es			
(inches)	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²	Texture	Remarks
0-12	10YR 2/1	100					Peat	
12-24	10YR 3/1	100					Peat	
¹Type: C=Co	oncentration, D=Depl	etion, RM:	=Reduced Matrix, N	лS=Mas	ked Sand	Grains.	² Location: PL=Pore	Lining, M=Matrix.
Hydric Soil I	ndicators:						Indicators for F	Problematic Hydric Soils ³ :
X Histosol (A	A1)	=	Polyvalue Below	/ Surface	(S8) (LRR	R,	2 cm Muck (A10) (LRR K, L, MLRA 149B)
Histic Epip	pedon (A2)		MLRA 149B)				Coast Prairie	e Redox (A16) (LRR K, L, R)
Black Hist	tic (A3)	-	Thin Dark Surface	ce (S9) (L	RR R, ML	RA 149B) 5 cm Mucky	Peat or Peat (S3) (LRR K, L, R)
Hydrogen	Sulfide (A4)	_	High Chroma Sa	ands (S11) (LRR K,	L)	Polyvalue Be	elow Surface (S8) (LRR K, L)
Stratified I	Layers (A5)	_	Loamy Mucky M	lineral (F	1) (LRR K,	L)	Thin Dark Su	urface (S9) (LRR K, L)
Depleted	Below Dark Surface (A1	1)	Loamy Gleyed N	Лatrix (F2)		Iron-Mangar	nese Masses (F12) (LRR K, L, R)
Thick Dar	k Surface (A12)	_	Depleted Matrix	(F3)			Piedmont Flo	oodplain Soils (F19) (MLRA 149B)
Sandy Mu	ucky Mineral (S1)	_	Redox Dark Sur	face (F6)			Mesic Spodi	c (TA6) (MLRA 144A, 145, 149B)
Sandy Gle	eyed Matrix (S4)	_	Depleted Dark S	Surface (F	7)		Red Parent I	Material (F21)
Sandy Re		_	Redox Depressi				Very Shallov	v Dark Surface (F22)
	Matrix (S6)	_	Marl (F10) (LRR					ain in Remarks)
Dark Surfa		-		, ,			<u> </u>	,
		on and we	tland hydrology mu	ıst he nr	esent un	less dist	turbed or problematic.	
	.ayer (if observed):						The state of problems and	
Type:								
Depth (in	ches):						Hydric Soil Present?	Yes No
Remarks:							•	

Project/Site: Pine County Solar	City/County: Pine Sampling Date: 09/13/2022				
Applicant/Owner: Swift Current Energy	State: Min Sampling Point: W4-1w				
Investigator(s): AH, BB	Section, Township, Range: T044N, R020W, S23				
	relief (concave, convex, none): Linear Slope %: 3				
Subregion (LRR or MLRA): LRR K, MLRA 90A Lat: 46.273985	Long: -92.833205 Datum: WGS84				
Soil Map Unit Name: Denied Access					
Are climatic / hydrologic conditions on the site typical for this time of year?	Yes No _X (If no, explain in Remarks.)				
Are Vegetation X, Soil , or Hydrology significantly dist					
Are Vegetation , Soil , or Hydrology naturally problem	matic? (If needed, explain any answers in Remarks.)				
SUMMARY OF FINDINGS – Attach site map showing sampling p	oint locations, transects, important features, etc.				
Lhudrashutia Variation Process 2	le the Complet Area				
Hydrophytic Vegetation Present? Yes No X Hydric Soil Present? Yes X No	Is the Sampled Area within a Wetland? Yes X No				
Wetland Hydrology Present? Yes X No	If yes, optional Wetland Site ID: W4				
	ii yes, optional wetianu Site ib				
Remarks: (Explain alternative procedures here or in a separate report.) Drier than normal conditions, ditched/tiled ag field					
Ener than normal containons, alterious agricia					
HYDROLOGY					
Wetland Hydrology Indicators:	Secondary Indicators (minimum of two required)				
Primary Indicators (minimum of one is required; check all that apply)	Surface Soil Cracks (B6)				
Surface Water (A1) Water-Stained Leaves (B9)	Drainage Patterns (B10)				
High Water Table (A2) Aquatic Fauna (B13)	Moss Trim Lines (B16)				
Saturation (A3) Marl Deposits (B15)	Dry-Season Water Table (C2)				
Water Marks (B1) Hydrogen Sulfide Odor (C1)	Crayfish Burrows (C8)				
Sediment Deposits (B2) Oxidized Rhizospheres on L	Living Roots (C3) X Saturation Visible on Aerial Imagery (C9)				
Drift Deposits (B3) Presence of Reduced Iron (0	C4) Stunted or Stressed Plants (D1)				
X Algal Mat or Crust (B4) Recent Iron Reduction in Till	lled Soils (C6) Geomorphic Position (D2)				
Iron Deposits (B5) Thin Muck Surface (C7)	Shallow Aquitard (D3)				
Inundation Visible on Aerial Imagery (B7) Other (Explain in Remarks)	Microtopographic Relief (D4)				
Sparsely Vegetated Concave Surface (B8)	FAC-Neutral Test (D5)				
Field Observations:					
Surface Water Present Yes No _X Depth (inches	s):				
Water Table Present Yes No X Depth (inches	s):				
Saturation Present Yes No X Depth (inches	S): Wetland Hydrology Present? Yes X No				
(includes capillary fringe)					
Describe Recorded Data (stream gauge, monitoring well, aerial photos, pr	evious inspections), if available:				
Remarks:					

Tree Stratum (Plot size: 30 ft)	Absolute <u>% Cover</u>	Dominant Species	Indicator Status	Dominance Test worksheet:
1 2				Number of Dominant Species That Are OBL, FACW, or FAC: 0 (A)
3				Total Number of Dominant Species Across All Strata: 1 (B)
56				Percent of Dominant Species That Are OBL, FACW, or FAC: 0 (A/B)
7				
	0	_ = Total Cover		Prevalence Index worksheet: Total % Cover of: Multiply by:
Sapling/Shrub Stratum (Plot size: 15 ft)				OBL species x 1 =
1				FACW species x 2 =
2				
3.				FAC species x 3 =
4.				FACU species x 4 =
5.				UPL species x 5 =
				Column Totals: (A)(B)
				Prevalence Index = B/A =
7				Hydrophytic Vegetation Indicators:
5.4	0	= Total Cover		1 - Rapid Test for Hydrophytic Vegetation
Herb Stratum (Plot size: 5 ft)				- 2 - Dominance Test is >50%
1. Glycine max	30	Yes	UPL	- 3 - Prevalence Index is ≤3.0¹
Echinochloa crus-galli	10	No	FAC	
3. Panicum capillare	10	No	FAC	4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet)
4		<u> </u>		
5				Problematic Hydrophytic Vegetation ¹ (Explain)
6				¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
7.				disturbed of problematic.
8.				Definitions of Vegetation Strata:
				Definitions of Vegetation Strata.
				Tree – Woody plants 3 in. (7.6 cm) or more in
10				diameter at breast height (DBH), regardless of height.
11				Sapling/shrub – Woody plants less than 3 in. DBH
12				and greater than or equal to 3.28 ft (1 m) tall.
	50	= Total Cover		
Woody Vine Stratum (Plot size: 30 ft)		= Total Cover		Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.
1				Manakardana Allumakardan manakardan 0.00 % in
2				Woody vines – All woody vines greater than 3.28 ft in height.
3				noight.
4.				Hydrophytic
				Vegetation
	0	= Total Cover		Present? Yes No X
Remarks: (Include photo numbers here or on a separ	ate sheet.)			1
	,			

Sampling Point:

W4-1w

SOIL Sampling Point: W4-1w

Profile Desci	ription: (Describe to	the dept	h needed to docu	ment th	e indicat	or or co	nfirm the absence of	indicators.)		
Depth	Matrix		Redo	x Featur	es					
(inches)	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²	Texture		Remarks	
0-13	10YR 2/1	100					Peat			
13-24	10YR 3/2	100					Peat			
¹Type: C=Co	oncentration, D=Depl	etion, RM:	=Reduced Matrix, N	лS=Mas	ked Sand	Grains.	² Location: PL=F	ore Lining, M=N	/latrix.	
Hydric Soil II	ndicators:						Indicators f	or Problematic	Hydric So	oils³:
X Histosol (A	A1)	=	Polyvalue Below	/ Surface	(S8) (LRR	R,	2 cm Mu	ıck (A10) (LRR K,	L, MLRA 14	19B)
Histic Epip	pedon (A2)		MLRA 149B)				Coast P	rairie Redox (A16)	(LRR K, L,	R)
Black Hist	tic (A3)	-	Thin Dark Surface	ce (S9) (I	RR R, ML	.RA 149B	5 cm Mu	icky Peat or Peat ((S3) (LRR K	, L, R)
Hydrogen	Sulfide (A4)	_	High Chroma Sa	ands (S11) (LRR K,	L)	Polyvalu	ie Below Surface (S8) (LRR K	, L)
Stratified I	Layers (A5)	_	Loamy Mucky M	lineral (F	1) (LRR K ,	L)	Thin Da	rk Surface (S9) (Li	RR K, L)	
Depleted	Below Dark Surface (A1	1)	Loamy Gleyed N	Лatrix (F2)		Iron-Ma	nganese Masses (F12) (LRR F	(, L, R)
Thick Darl	k Surface (A12)	_	Depleted Matrix	(F3)			Piedmoi	nt Floodplain Soils	(F19) (MLR	A 149B)
	ucky Mineral (S1)	_	Redox Dark Sur					podic (TA6) (MLR		
	eyed Matrix (S4)	-	Depleted Dark S					ent Material (F21)		, - ,
Sandy Re		-	Redox Depressi		- /			allow Dark Surface		
		-	Marl (F10) (LRR					xplain in Remarks		
	Matrix (S6)	-	Wall (I 10) (LKK	K, L)			Other (E	xpiairi iri Kerilarks)	
Dark Surfa										
	hydrophytic vegetation	on and we	tland hydrology mu	ıst be pr	esent, un	less dist	urbed or problematic.			
Type:	.ayer (if observed):									
Depth (in	ches):						Hydric Soil Prese	nt? Yes	, X	No
Remarks:							11,4			<u> </u>

Project/Site: Pine County Solar	City/County: Pine Sampling Date: 09/12/2022					
Applicant/Owner: Swift Current Energy	State: Min Sampling Point: W5-1u					
Investigator(s): KM, MB	Section, Township, Range: T044N, R020W, S26					
	relief (concave, convex, none): Linear Slope %: 2					
Subregion (LRR or MLRA): LRR K, MLRA 90A Lat: 46.273302	Long: -92.845146 Datum: WGS84					
Soil Map Unit Name: Denied Access						
Are climatic / hydrologic conditions on the site typical for this time of year?						
Are Vegetation X, Soil , or Hydrology significantly dist						
Are Vegetation , Soil , or Hydrology naturally problem	ematic? (If needed, explain any answers in Remarks.)					
SUMMARY OF FINDINGS – Attach site map showing sampling p	point locations, transects, important features, etc.					
Hydrophytic Vegetation Present? Yes No X	Is the Sampled Area					
Hydric Soil Present? Yes No X Hydric Soil Present? Yes X No	within a Wetland? Yes No X					
Wetland Hydrology Present? Yes No X	If yes, optional Wetland Site ID: W5					
Remarks: (Explain alternative procedures here or in a separate report.)	ii yee, epitonai Wettana eite 15.					
Farmed soybean field with ditches. Precip drier than normal.						
HYDROLOGY						
Wetland Hydrology Indicators:	Secondary Indicators (minimum of two required)					
Primary Indicators (minimum of one is required; check all that apply)	Surface Soil Cracks (B6)					
Surface Water (A1) Water-Stained Leaves (B9)	Drainage Patterns (B10)					
High Water Table (A2) Aquatic Fauna (B13)	Moss Trim Lines (B16)					
Saturation (A3) Marl Deposits (B15)	Dry-Season Water Table (C2)					
Water Marks (B1) Hydrogen Sulfide Odor (C1)	Crayfish Burrows (C8)					
Sediment Deposits (B2) Oxidized Rhizospheres on L	Living Roots (C3) Saturation Visible on Aerial Imagery (C9)					
Drift Deposits (B3) Presence of Reduced Iron ((C4) Stunted or Stressed Plants (D1)					
Algal Mat or Crust (B4) Recent Iron Reduction in Til	illed Soils (C6) Geomorphic Position (D2)					
Iron Deposits (B5) Thin Muck Surface (C7)	Shallow Aquitard (D3)					
Inundation Visible on Aerial Imagery (B7) Other (Explain in Remarks)	Microtopographic Relief (D4)					
Sparsely Vegetated Concave Surface (B8)	FAC-Neutral Test (D5)					
Field Observations:						
Surface Water Present Yes No X Depth (inches	s):					
Water Table Present Yes No X Depth (inches						
Saturation Present Yes No X Depth (inches						
(includes capillary fringe)						
Describe Recorded Data (stream gauge, monitoring well, aerial photos, pr	revious inspections), if available:					
Remarks:						
Up a slight rise						

Tree Stratum (Plot size:30 ft)	Absolute % Cover	Dominant Species	Indicator Status	Dominance Test worksheet:
1 2				Number of Dominant Species That Are OBL, FACW, or FAC:(A)
3				Total Number of Dominant Species Across All Strata: 1 (B)
5				Percent of Dominant Species That Are OBL, FACW, or FAC:0 (A/B)
, · · · · · · · · · · · · · · · · · · ·				Prevalence Index worksheet:
	0	= Total Cover		Total % Cover of: Multiply by:
Sapling/Shrub Stratum (Plot size: 15 ft)		_		OBL species 0 $x 1 = 0$
1				FACW species 0 x 2 = 0
2				FAC species 0 x 3 = 0
3				FACU species 0 x 4 = 0
4				UPL species 100 x 5 = 500
5				Column Totals: 100 (A) 500 (B)
6				Prevalence Index = B/A = 5
7				Hydrophytic Vegetation Indicators:
	0	= Total Cover		
Herb Stratum (Plot size:5 ft)				1 - Rapid Test for Hydrophytic Vegetation
1. Glycine max	100	Yes	UPL	2 - Dominance Test is >50%
2				3 - Prevalence Index is ≤3.0¹
3				4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet)
4				(rende depposing data in nomaine di dira departue di dell
5				X Problematic Hydrophytic Vegetation ¹ (Explain)
6				¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
7				·
8				Definitions of Vegetation Strata:
9				Tree Weedy plants 3 in (7.6 cm) or more in
10				Tree – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.
11				
12				Sapling/shrub – Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.
	100	Tatal Oassa		
Woody Vine Stratum (Plot size: 30 ft)		= Total Cover		Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.
1				Woody vines – All woody vines greater than 3.28 ft in
2.				height.
3				Livelno mby stip
4				Hydrophytic Vegetation
	0	= Total Cover		Present? Yes No _X
Remarks: (Include photo numbers here or on a separ	ate sheet.)			
Soybeans are taller with some yellowing/drying.	ato 61100t.)			

Sampling Point:

W5-1u

SOIL Sampling Point: W5-1u

Profile Desci	ription: (Describe to	the dept	h needed to docu	ment th	e indicat	or or co	onfirm the absence	of indicato	ors.)	
Depth	Matrix		Redo	x Featur	es					
(inches)	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²	Texture		Remarks	3
0 to 15	10YR 2/1	100					Peat	_		
15 to 24	10YR 3/3	100					Peat	Fibrous		
								_		
								_		
								_		
¹Type: C=Co	oncentration, D=Deple	etion, RM:	=Reduced Matrix, N	лS=Mas	ked Sand	Grains.	² Location: PL	=Pore Linin	g, M=Matrix.	
Hydric Soil II	ndicators:						Indicator	s for Proble	ematic Hydric	Soils ³ :
X Histosol (A	A1)	_	Polyvalue Below	Surface	(S8) (LRR	R,	2 cm	Muck (A10) (LRR K, L, MLRA	149B)
	pedon (A2)		MLRA 149B)						ox (A16) (LRR K ,	•
Black Hist		-	Thin Dark Surface				·		or Peat (S3) (LRR	
	Sulfide (A4)	-	High Chroma Sa						Surface (S8) (LRR	K, L)
·	Layers (A5)	<u>-</u>	Loamy Mucky M			L)			(S9) (LRR K, L)	DK I D)
	Below Dark Surface (A1	1) _	Loamy Gleyed N Depleted Matrix		i)			_	lasses (F12) (LRI ain Soils (F19) (M I	· · · · ·
	k Surface (A12) ucky Mineral (S1)	-	Redox Dark Sur						6) (MLRA 144A, 1	
	eyed Matrix (S4)	-	Depleted Dark S					Parent Materia		40, 1400)
Sandy Re		_	Redox Depression		,				Surface (F22)	
Stripped N	Matrix (S6)	_	Marl (F10) (LRR					(Explain in R		
Dark Surfa	ace (S7)									
³ Indicators of	hydrophytic vegetation	on and we	tland hydrology mu	ıst be pr	esent, un	less dist	turbed or problemati	c.		
	.ayer (if observed):									
Type:										
Depth (in	ches):						Hydric Soil Pre	sent?	Yes X	No
Remarks:							,			

Applicant/Owner: Swift Curront Energy State Min Sampling Print Westud Investigator(s) JF, KXM, MB Section, Township, Range To44H, R020W, S26 Investigator(s) JF, KXM, MB Since	Project/Site: Pine County Solar	City/County: Pine Sampling Date: 09/12/2022					
Investigator(s): JF, KKM, MB Section, Township, Range: T044N, R020W, S26 Landform (hillside, terrace, etc.): Depression	Applicant/Owner: Swift Current Energy	State: Min Sampling Point: W5-1w					
Landform (hillside, terrace, etc.): Depression							
Subregion (LRR or MLRA): LRR K, MLRA 90A Lat: 46.273095 Long: -92.845139 Datum: WGS84 Soil Map Unit Name: Denied Access Are climatic / hydrologic conditions on the site typical for this time of year? Are Vegetation X, Soil , or Hydrology significantly disturbed? Are Vegetation X, Soil , or Hydrology naturally problematic? Are Vegetation X, Soil , or Hydrology naturally problematic? Wiff needed, explain any answers in Remarks.) SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc. Hydrophytic Vegetation Present? Yes X No If yes X No If yes, optional Wetland? Hydrology Present? Yes X No If yes, optional Wetland? Wetland Hydrology Present? Yes X No If yes, optional Wetland? Wetland Hydrology Present? Wetland Hydrology Indicators: Primary Indicators (minimum of one is required: check all that apply) Surface Water (A1) Water-Stained Leaves (99) High Water Table (A2) Aqualice Fauna (813) Water Makis (81) High Water Table (A2) Section Character (A3) Metal Present (C2) Wetland Pydrology (C3) Section Contact (B3) Presence of Reduced from (C4) Section Character (C3) Aqual for Character (C4) Section Character (C4) Section Character (C4) Section Character (C4) Section Character (C5) Section Character (C6) FACN-Neural Test (05) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:							
Soil Map Unit Name: Denied Access Are climatic / hydrologic conditions on the site typical for this time of year? Are Vegetation X, Soil , or Hydrology significantly disturbed? Are "Normal Circumstances" present? Yes No X (If no, explain in Remarks.) Are Vegetation X, Soil , or Hydrology anaturally problematic? (If needed, explain any answers in Remarks.) SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc. Hydrophylic Vegetation Present? Yes X No within a Wetland? Yes X No If yes, optional Wetland? Yes X No If yes, optional Wetland? Yes X No If yes, optional Wetland Site ID: WS Remarks: (Explain alternative procedures here or in a separate report.) Farmed soybean field with ditches. Precip drier than normal. HYDROLOGY Wetland Hydrology Indicators: Surface Water (A1) Water Staned Leaves (B9) Dinange Patients (B10) Surface Water (A1) Water (B10) Most Time Lines (B16) Surface Water (A1) Dinange Patients (B10) Most Time Lines (B16) Substantian (B10) Most Time Lines (B16) Setiment Deposits (B2) Oxidated Rizosphersson Living Roots (C3) Saturation (Visible on Aerial Imagery (C9) Drift Deposits (B2) Thin Muck Surface (C3) Saturation (Visible on Aerial Imagery (C9) Spansely Vegetated Conceve Surface (B8) Field Observations: Wetland Hydrology Present? Yes No Depth (Inches): Wetla	·						
Are climatic / hydrologic conditions on the site typical for this time of year? Are Vegetation X , Soil , or Hydrology significantly disturbed? Are "Normal Circumstances" present? Yes No X (If needed, explain any answers in Remarks.) SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc. Hydrophytic Vegetation Present? Yes No X Is the Sampled Area within a Westand? Yes X No Westand Hydrology Present? Yes X No If yes, optional Westand Site ID: W5 Remarks: (Explain alternative procedures here or in a separate report.) Farmed soybean field with ditches, Precip drier than normal. HYDROLOGY Wetland Hydrology Indicators: Primary Indicators (minimum of one is required; check all that apply) Surface Soil Cracks (6) Surface Water (A1) Water Stained Leaves (89) Drainage Patterns (810) High water Table (A2) Aquatic Fauna (813) Moss Trm Lines (816) Substitution (A3) Mart Deposits (815) Dry-Sesson Water Table (C2) Water Marks (81) Hydrology Sulfide Odor (C1) Sediment Deposits (82) Ocidered Ritzospheres on Living Roots (C3) Moss Trm Lines (810) Sulface Water (A1) Reduced from (C4) Sulfide Odor (C1) Sediment Deposits (82) Ocidered Ritzospheres on Living Roots (C3) Mart Reduced from (C4) Sulfide Odor (C7) Shallow Or Crust (84) Research trans Reduced from (C4) Sulfide Odor (C7) Spaniely Vegetated Conceve Surface (88) Thin Muck Surface (C7) Shallow Aquitatel (C2) FAC-Neutral Test (D5) Field Observations: Sulface Water Present Yes No Z Depth (inches): Wetland Hydrology Present? Yes Z No Depth (inches): Saturation Present Yes No Z Depth (inches): Saturation Present Yes No De							
Are Vegetation X , Soil , or Hydrology							
Are Vegetation , soil , or Hydrology naturally problematic? (If needed, explain any answers in Remarks.) SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc. Hydrophytic Vegetation Present? Yes X No Is the Sampled Area within a Wetland? Yes X No If yes, optional Wetland? Ye	• •						
SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc. Hydrophytic Vegetation Present? Yes No Within a Wetland Hydrology Present? Yes X No Wetland Hydrology Present? Yes X No Within a Wetland? Yes X No If yes, optional Wetland Site ID: W5 Remarks: (Explain alternative procedures here or in a separate report.) Farmed soybean field with ditches. Precip drier than normal. HYDROLOGY Wetland Hydrology Indicators: Primary Indicators (minimum of one is required; check all that apply) Surface Water (A1) Surface Water (B8) High Water Table (A2) Aquatic Fauna (B13) Moss Trim Lines (B16) Saturation (A3) Man Deposits (B15) Dorpheson Water Table (C2) Water Marks (B1) Hydrogen Sulfide Oder (C1) Saturation (A3) Hydrogen Sulfide Oder (C1) Saturation (A3) Hydrogen Sulfide Oder (C1) Saturation Visible on Aerial Imagery (C8) Dorft Deposits (B3) Presence of Reduced Iron (C4) Surrated or Stressed Plants (D1) A Agal Mat or Crus (B4) Recent Iron Reduction in Tilled Soils (C6) Ton Deposits (B3) Thin Muck Surface (C7) Shallow Aquater (D3) Introduction Visible on Aerial Imagery (B7) Other (Explain in Remarks) Sparsely Vegetated Concave Surface (B8) FAC-Neutral Test (D5) Field Observations: Surface Water Present Yes No X Depth (inches): Water Table Present Yes No X Depth (inches): Saturation Present Yes No Depth (inches): Surface Water Present Yes No Depth (inches): Weter Table Present? Yes No Depth (inches): Butter Adam Byterial Previous Inspections), if available:		· · · · · · · · · · · · · · · · · · ·					
Hydrophytic Vegetation Present? Hydric Soil Present? Wetland Hydrology Indicators: Farmed soybean field with ditches. Precip drier than normal. HYDROLOGY Wetland Hydrology Indicators: Primary Indicators (minimum of one is required; check all that apply) Surface Water (A1) High Water Table (A2) Saturation (A3) Mard Deposits (B3) Mard Deposits (B3) Drissnage Patterns (B2) Oxidized Rhizospheres on Living Roots (C3) X algulation Crust (B4) Recent from Reduction in Tilled Soils (C6) In Tilled Soils (C6) Field Observations: Surface Water Present Yes No Wetland Hydrology Indicators (minimum of two required) If yes, optional Wetland? Yes X No If yes, optional Wetland? Yes X No Wetland Hydrology Indicators (minimum of two required) Primary Indicators (minimum of two required) Surface Soil Cracks (B6) Drisnage Patterns (B10) Moss Trim Lines (B16) Dry-Season Water Table (C2) Crayfish Burrows (C8) Sediment Deposits (B2) Oxidized Rhizospheres on Living Roots (C3) X saturation Visible on Aerial Imagery (C9) Shallow Aquitard (D3) X Agal Mater Orust (B4) In Muck Surface (C7) Sparsely Vegetated Concave Surface (B8) Field Observations: Surface Water Present Yes No X Depth (inches): Wetland Hydrology Present? Yes X No Includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:	Are Vegetation, Soil, or Hydrology naturally problem	matic? (If needed, explain any answers in Remarks.)					
Hydric Soil Present? Wetland Hydrology Present? Wetland Hydrology Indicators: Farmed soybean field with ditches. Precip drier than normal. Wetland Hydrology Indicators: Farmed Soybean field with ditches. Precip drier than normal. Wetland Hydrology Indicators: Secondary Indicators (minimum of two required) Primary Indicators (minimum of one is required: check all that apply) Surface Water (A1) High Water Table (A2) Saturation (A3) Moss Trim Lines (B16) Sediment Deposits (B1) Water Mairs (B1) Hydrogen Sulfide Odor (C1) Sediment Deposits (B2) Drift Deposits (B2) Drift Deposits (B3) A qualic Again Again Carde (Reduced Iron (C4) Trin Deposits (B5) Presence of Reduced Iron (C4) Iron Deposits (B5) Iron Deposits (B7) Sparsely Vegetated Concave Surface (B8) FAC-Neutral Test (D5) Field Observations: Surface Water Present Yes No X Depth (inches): Water Table Present Yes No X Depth (inches): Saturation Present Yes No X Depth (inches): Surface Water Present Yes No X Depth (inches): Surface Water Present Yes No Depth (inches): Surface Water Again Water Again Again Hydrology Present? Yes X No (includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:	SUMMARY OF FINDINGS – Attach site map showing sampling p	point locations, transects, important features, etc.					
Hydric Soil Present? Wetland Hydrology Present? Wetland Hydrology Indicators: Farmed soybean field with ditches. Precip drier than normal. Wetland Hydrology Indicators: Farmed Soybean field with ditches. Precip drier than normal. Wetland Hydrology Indicators: Primary Indicators (minimum of two required) Primary Indicators (minimum of one is required; check all that apply) Surface Water (A1) High Water Table (A2) Saturation (A3) Martl Deposits (B15) Water Marks (B1) Hydrogen Sulfide Odor (C1) Sedement Deposits (B2) Drift Deposits (B2) Drift Deposits (B3) Presence of Reduced Iron (C4) Iton Deposits (B5) Iton Deposits (B7) Sparsely Vegetated Concave Surface (B8) FAC-Neutral Test (D5) Field Observations: Surface Water Present Yes No X Depth (inches): Water Table Present Yes No X Depth (inches): Water Table Present Yes No X Depth (inches): Saturation Present Yes No Depth (inches): Water Table Present Yes No Depth (inches): Surface Water Present Yes No Depth (inches): Saturation Present Yes No Depth (inches): Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:	Lhudrashutia Variation Process 2	In the Complet Area					
Wetland Hydrology Present? Yes X No							
Remarks: (Explain alternative procedures here or in a separate report.) Farmed soybean field with ditches. Precip drier than normal. Wetland Hydrology Indicators: Primary Indicators (minimum of one is required: check all that apply) Surface Water (A1) Surface Water (A1) High Water Table (A2) Aquatic Fauna (B13) Saturation (A3) Marl Deposits (B15) Saturation (A3) Marl Deposits (B15) Dory-Season Water Table (C2) Water Marks (B11) Sediment Deposits (B2) Dorift Deposits (B3) Presence of Reduced Iron (C4) Iron Deposits (B3) Agal Mat or Crust (B4) Iron Deposits (B5)	<u> </u>						
### HYDROLOGY Wetland Hydrology Indicators:		ii yes, optional vetiand site ib.					
HYDROLOGY Wetland Hydrology Indicators: Primary Indicators (minimum of one is required; check all that apply) Surface Soil Cracks (B6) Surface Water (A1) High Water Table (A2) Aquatic Fauna (B13) Moss Trim Lines (B16) Saturation (A3) Water Marks (B1) Hydrogen Sulfide Odor (C1) Sediment Deposits (B2) Drianage Patterns (B10) Moss Trim Lines (B16) Dry-Season Water Table (C2) Craylish Burrows (C8) Sediment Deposits (B2) Drianage Patterns (B10) Moss Trim Lines (B16) Sediment Deposits (B2) Dry-Season Water Table (C2) Craylish Burrows (C8) Sediment Deposits (B3) Presence of Reduced Iron (C4) Sutnited or Stressed Plants (D1) X Algal Mat or Crust (B4) Iron Deposits (B5) Thin Muck Surface (C7) Shallow Aquitard (D3) Inundation Visible on Aerial Imagery (B7) Other (Explain in Remarks) X Microtopographic Relief (D4) Sparsely Vegetated Concave Surface (B8) Field Observations: Surface Water Present Yes No Depth (inches): Saturation Present? Yes X No Depth (inches): Saturation Present? Yes X No Depth (inches): Secondary Indicators (minimum of two required) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:							
Wetland Hydrology Indicators: Primary Indicators (minimum of one is required; check all that apply) Surface Soil Cracks (B6)	Farmed soybean field with ditches. Precip drief than normal.						
Wetland Hydrology Indicators: Primary Indicators (minimum of one is required; check all that apply) Surface Water (A1) Water-Stained Leaves (B9) Drainage Patterns (B10)							
Wetland Hydrology Indicators: Primary Indicators (minimum of one is required; check all that apply) Surface Water (A1) Water-Stained Leaves (B9) Drainage Patterns (B10)							
Wetland Hydrology Indicators: Primary Indicators (minimum of one is required; check all that apply) Surface Water (A1) Water-Stained Leaves (B9) Drainage Patterns (B10)							
Wetland Hydrology Indicators: Primary Indicators (minimum of one is required; check all that apply) Surface Soil Cracks (B6)							
Wetland Hydrology Indicators: Primary Indicators (minimum of one is required; check all that apply) Surface Soil Cracks (B6)	HADBOLOCA	_					
Primary Indicators (minimum of one is required; check all that apply) Surface Water (A1) Water-Stained Leaves (B9) Prainage Patterns (B10) Moss Trim Lines (B16) Day-Season Water Table (A2) Water Marks (B1) Seturation (A3) Marl Deposits (B15) Day-Season Water Table (C2) Crayfish Burrows (C8) Sediment Deposits (B2) Drift Deposits (B3) Presence of Reduced Iron (C4) Moss Trim Lines (B16) Dry-Season Water Table (C2) Crayfish Burrows (C8) X Saturation Visible on Aerial Imagery (C9) Stunted or Stressed Plants (D1) X Algal Mat or Crust (B4) Iron Deposits (B5) Inundation Visible on Aerial Imagery (B7) Sparsely Vegetated Concave Surface (B8) Field Observations: Surface Water Present Yes No X Depth (inches): Saturation Present Yes No Depth (inches): Saturation Present Yes X No Depth (inches): Saturation Present Yes X No Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:							
Surface Water (A1)							
High Water Table (A2) Saturation (A3) Marl Deposits (B15) Dry-Season Water Table (C2) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Presence of Reduced Iron (C4) Stunted or Stressed Plants (D1) X Algal Mat or Crust (B4) Iron Deposits (B5) Inundation Visible on Aerial Imagery (B7) Sparsely Vegetated Concave Surface (B8) Field Observations: Surface Water Present Yes No X Depth (inches): Saturation (B13) Marl Deposits (B15) Dry-Season Water Table (C2) Crayfish Burrows (C8) X Saturation Visible on Aerial Imagery (C9) Stunted or Stressed Plants (D1) Stunted or Stressed Plants (D1) Geomorphic Position (D2) Shallow Aquitard (D3) Microtopographic Relief (D4) FAC-Neutral Test (D5) Field Observations: Surface Water Present Yes No X Depth (inches): Saturation Present Yes No Depth (inches): Saturation Present Yes No Depth (inches): Saturation Present Yes No Depth (inches): Saturation Present Yes An One Depth (inches): Saturation Present Yes An One Depth (inches): It wetland Hydrology Present? Yes X No Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:	1						
Saturation (A3)	1 						
Water Marks (B1)							
Sediment Deposits (B2)	-						
Drift Deposits (B3)	<u> </u>	<u> </u>					
X Algal Mat or Crust (B4)							
Iron Deposits (B5) Thin Muck Surface (C7) Shallow Aquitard (D3) Inundation Visible on Aerial Imagery (B7) Other (Explain in Remarks) X Microtopographic Relief (D4) FAC-Neutral Test (D5)							
Inundation Visible on Aerial Imagery (B7) Other (Explain in Remarks) X Microtopographic Relief (D4) Sparsely Vegetated Concave Surface (B8) FAC-Neutral Test (D5) Surface Water Present	<u> </u>						
Sparsely Vegetated Concave Surface (B8) Field Observations: Surface Water Present Yes No X Depth (inches): Water Table Present Yes No Depth (inches): Saturation Present Yes X No Depth (inches): (includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:							
Field Observations: Surface Water Present Yes No X Depth (inches): Water Table Present Yes No Depth (inches): Saturation Present Yes X No Depth (inches): (includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:							
Surface Water Present Yes No X Depth (inches): Water Table Present Yes No X Depth (inches): Saturation Present Yes X No Depth (inches): (includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:		FAC-Neutral Test (D5)					
Water Table Present Yes No X Depth (inches): Saturation Present Yes X No Depth (inches): 18 Wetland Hydrology Present? Yes X No (includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:							
Saturation Present Yes X No Depth (inches): 18 Wetland Hydrology Present? Yes X No Depth (includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:							
(includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:		· ———					
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:		s): 18 Wetland Hydrology Present? Yes X No					
Remarks:	Describe Recorded Data (stream gauge, monitoring well, aerial photos, pr	'evious inspections), if available:					
Remarks:							
Remarks:							
	Remarks:						

olants.			Sampling Point: W5-1w
Absolute <u>% Cover</u>	Dominant Species	Indicator Status	Dominance Test worksheet:
_			Number of Dominant Species
			That Are OBL, FACW, or FAC: 0 (A)
			Total Number of Dominant
			Species Across All Strata: 1 (B)
			Percent of Dominant Species
			That Are OBL, FACW, or FAC: 0 (A/B)
_			Prevalence Index worksheet:
0			Total 0/ Course of
	_ = Total Cover		Multiply by:
			OBL species 0 x 1 = 0
_			FACW species 0 x 2 = 0
_			FAC species 9 x 3 = 27
			<u> </u>
			FACU species 0 x 4 = 0
			UPL species 75 x 5 = 375
			Column Totals: 84 (A) 402 (B)
			Prevalence Index = B/A = 4.79
			Hydrophytic Vegetation Indicators:
0	= Total Cover		- 1 - Rapid Test for Hydrophytic Vegetation
			1
75	Yes	UPL	2 - Dominance Test is >50%
5	No	FAC	3 - Prevalence Index is ≤3.01
			4 - Morphological Adaptations ¹
			(Provide supporting data in Remarks or on a separate sheet)
2	No	FAC	X Problematic Hydrophytic Vegetation ¹ (Explain)
			
			¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
_	- <u></u>		
_			Definitions of Vegetation Strata:
			Tree – Woody plants 3 in. (7.6 cm) or more in
	<u> </u>		diameter at breast height (DBH), regardless of height.
			Sapling/shrub – Woody plants less than 3 in. DBH
			and greater than or equal to 3.28 ft (1 m) tall.
84	T-1-1 0		
·	= Total Cover		Herb – All herbaceous (non-woody) plants, regardless
			of size, and woody plants less than 3.28 ft tall.
			I Woody vines – All woody vines greater than 3 28 ft in
			Woody vines – All woody vines greater than 3.28 ft in height.
			Hydrophytic Vegetation
	= Total Cover		height. Hydrophytic
	0 75 5 2 2 2 84	% Cover Species 0 = Total Cover 0 = Total Cover 75 Yes 5 No 2 No No No	% Cover Species Status 0 = Total Cover 75 Yes UPL 5 No FAC 2 No FAC 2 No FAC

SOIL Sampling Point: W5-1w

Profile Desci	ription: (Describe to	the dept	h needed to docur	ment th	e indicat	or or co	nfirm th	he absence o	f indicators	s.)	
Depth	Matrix		Redox	x Featur	es						
(inches)	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²	T	Texture		Remark	S
0 to 8	10YR 2/1	100					Peat				
10 to 20	5YR 3/4	100					Peat		Dry fibric pe	at	
20 to 24	10YR 2/1	100					Peat				
·									-		
¹Type: C=Co	oncentration, D=Deple	etion, RM	=Reduced Matrix, N	/IS=Mas	ked Sand	Grains	2	Location: PL=F	ore Lining,	M=Matrix.	
Hydric Soil II	ndicators:							Indicators	for Probler	natic Hydric	Soils ³ :
X Histosol (A	A1)	-	Polyvalue Below	Surface	(S8) (LRR	R,		2 cm M	uck (A10) (LF	RR K, L, MLRA	149B)
	pedon (A2)		MLRA 149B)							(A16) (LRR K ,	
Black Hist	•	-	Thin Dark Surface)			Peat (S3) (LRF	
	Sulfide (A4)	-	High Chroma Sa							face (S8) (LRR	R K, L)
	Layers (A5)	<u>-</u>	Loamy Mucky Mi	-		L)			•	(59) (LRR K, L)	DK L D)
	Below Dark Surface (A1	1)	Loamy Gleyed M Depleted Matrix)				_	sses (F12) (LR Soils (F19) (M	
	k Surface (A12) ucky Mineral (S1)	-	Redox Dark Surf							(MLRA 144A, 1	
	eyed Matrix (S4)	-	Depleted Dark S		7)				rent Material		140, 1402)
Sandy Re		_	Redox Depression		.,				nallow Dark S		
	Matrix (S6)	_	Marl (F10) (LRR						Explain in Rei		
Dark Surfa	ace (S7)										
³ Indicators of	hydrophytic vegetation	on and we	tland hydrology mu	ıst be pr	esent, un	less dist	urbed o	r problematic.			
	ayer (if observed):										
Type:											
Depth (in	ches):						Hyd	Iric Soil Prese	ent?	Yes X	No
Remarks:							•				

Project/Site: Pine County Solar	City/County: Pine Sampling Date: 09/13/2022
Applicant/Owner: Swift Current Energy	State: Min Sampling Point: W6-1u
Investigator(s): AH, BB	Section, Township, Range: T044N, R020W, S23
	relief (concave, convex, none): Linear Slope %: 4
Subregion (LRR or MLRA): LRR K, MLRA 90A Lat: 46.27416	Long: -92.834199 Datum: WGS84
Soil Map Unit Name: Denied Access	
Are climatic / hydrologic conditions on the site typical for this time of year?	Yes No _X (If no, explain in Remarks.)
Are Vegetation X, Soil , or Hydrology significantly dist	
Are Vegetation , Soil , or Hydrology naturally problem	matic? (If needed, explain any answers in Remarks.)
SUMMARY OF FINDINGS – Attach site map showing sampling p	oint locations, transects, important features, etc.
Hydrophytic Vegetation Present? Yes No X	Is the Sampled Area
Hydric Soil Present? Hydric Soil Present? Yes No X Yes X No	within a Wetland? Yes No X
Wetland Hydrology Present? Yes No X	If yes, optional Wetland Site ID: W6
Remarks: (Explain alternative procedures here or in a separate report.)	ii yoo, opiionai vvoitaina oite ib.
Drier than normal conditions, ditched/tiled ag field	
2 not than nothing containents, allowed and agreed agreed	
HYDROLOGY	
Wetland Hydrology Indicators:	Secondary Indicators (minimum of two required)
Primary Indicators (minimum of one is required; check all that apply)	Surface Soil Cracks (B6)
Surface Water (A1) Water-Stained Leaves (B9)	Drainage Patterns (B10)
High Water Table (A2) Aquatic Fauna (B13)	Moss Trim Lines (B16)
Saturation (A3) Marl Deposits (B15)	Dry-Season Water Table (C2)
Water Marks (B1) Hydrogen Sulfide Odor (C1)	Crayfish Burrows (C8)
Sediment Deposits (B2) Oxidized Rhizospheres on L	
Drift Deposits (B3) Presence of Reduced Iron (C	
Algal Mat or Crust (B4) Recent Iron Reduction in Till	
Iron Deposits (B5) Thin Muck Surface (C7)	Shallow Aquitard (D3)
Inundation Visible on Aerial Imagery (B7) Other (Explain in Remarks)	Microtopographic Relief (D4)
Sparsely Vegetated Concave Surface (B8)	FAC-Neutral Test (D5)
Field Observations:	
Surface Water Present Yes No X Depth (inches	s)·
Water Table Present Yes No X Depth (inches	
Saturation Present Yes No X Depth (inches	·
(includes capillary fringe)	
Describe Recorded Data (stream gauge, monitoring well, aerial photos, pro	evious inspections), if available:
	,
Remarks:	
1	

Absolute	Dominant	Indicator	
% Cover	<u>Species</u>	Status	Dominance Test worksheet:
			Number of Dominant Species
			That Are OBL, FACW, or FAC: 0(A)
			Total Number of Deminerat
			Total Number of Dominant Species Across All Strata: 1 (B)
			Percent of Dominant Species That Are OBL, FACW, or FAC: 0 (A/l)
			Prevalence Index worksheet:
0	T / 10		Total 0/ Course of
	_ = Total Cover		Multiply by.
			OBL species x 1 =
			FACW species x 2 =
			FAC species x 3 =
			FACU species x 4 =
			UPL species x 5 =
			Column Totals: (A)(
			Prevalence Index = B/A =
			Hydrophytic Vegetation Indicators:
	= Total Cover		- 1 - Rapid Test for Hydrophytic Vegetation
			2 - Dominance Test is >50%
45	Yes	UPL	- 3 - Prevalence Index is ≤3.0¹
			I—
			4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet)
			Dashlamatic Underschittis Vanatation 1 (Fundain)
			Problematic Hydrophytic Vegetation¹ (Explain) ¹Indicators of hydric soil and wetland hydrology must be present, unles
			disturbed or problematic.
			Definitions of Vegetation Strata:
			Tree – Woody plants 3 in. (7.6 cm) or more in
			diameter at breast height (DBH), regardless of heigh
			Sapling/shrub – Woody plants less than 3 in. DBH
			and greater than or equal to 3.28 ft (1 m) tall.
45	= Total Cover		Herb – All herbaceous (non-woody) plants, regardle
			of size, and woody plants less than 3.28 ft tall.
	. <u></u>		
			Woody vines – All woody vines greater than 3.28 ft height.
			Tioight.
			Hydrophytic
	= Total Cover		
		0 = Total Cover 0 = Total Cover 45 Yes 45 = Total Cover	0 = Total Cover 0 = Total Cover 45 Yes UPL 45 = Total Cover

SOIL Sampling Point: W6-1u

Profile Desci	ription: (Describe to	the dept	h needed to docu	ment th	e indicat	or or co	onfirm the absence	of indicator	·s.)	
Depth	Matrix		Redo	x Featur	es					
(inches)	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²	Texture		Remarks	
0-12	10YR 2/1	100					Peat			
12-24	10YR 3/2	100					Peat			
	·						-			
								-		
¹Type: C=Co	oncentration, D=Deple	etion, RM:	=Reduced Matrix, N	√S=Mas	ked Sand	Grains.	. ² Location: PL=	Pore Lining	ı, M=Matrix.	
Hydric Soil II	ndicators:						Indicators	for Proble	matic Hydric S	Soils³:
X Histosol (A	A1)		Polyvalue Below	/ Surface	(S8) (LRR	R,	2 cm M	Лuck (А10) (L	RR K, L, MLRA	149B)
	pedon (A2)		MLRA 149B)						k (A16) (LRR K, I	•
Black Hist		-	Thin Dark Surface						Peat (S3) (LRR	
	Sulfide (A4)	-	High Chroma Sa						ırface (S8) (LRR	K, L)
·	Layers (A5)	4)	Loamy Mucky M			L)			S9) (LRR K, L)	K I D)
	Below Dark Surface (A1	1) _	Loamy Gleyed N Depleted Matrix		i)		·		asses (F12) (LRR n Soils (F19) (ML	
	k Surface (A12) ucky Mineral (S1)	-	Redox Dark Sur						(MLRA 144A, 14	
	eyed Matrix (S4)	-	Depleted Dark S					arent Material	•	, 1402)
Sandy Re		_	Redox Depressi		,		·	Shallow Dark S	· ·	
	Matrix (S6)		Marl (F10) (LRR					(Explain in Re		
Dark Surfa	ace (S7)									
³ Indicators of	hydrophytic vegetation	on and we	tland hydrology mu	ıst be pr	esent, un	less dist	turbed or problemation	; .		
	ayer (if observed):			•	· ·		<u> </u>			
Type:										
Depth (in	ches):						Hydric Soil Pres	ent?	Yes X	No
Remarks:							•			

Project/Site: Pine County Solar	City/County: Pine Sampling Date: 09/13/2022
Applicant/Owner: Swift Current Energy	State: Min Sampling Point: W6-1w
Investigator(s): AH, BB	Section, Township, Range: T044N, R020W, S23
	relief (concave, convex, none): Linear Slope %: 2
Subregion (LRR or MLRA): LRR K, MLRA 90A Lat: 46.2741	Long: -92.834678 Datum: WGS84
Soil Map Unit Name: Denied Access	
Are climatic / hydrologic conditions on the site typical for this time of year?	Yes No X (If no, explain in Remarks.)
Are Vegetation X, Soil , or Hydrology significantly dist	
Are Vegetation , Soil , or Hydrology naturally problem	matic? (If needed, explain any answers in Remarks.)
SUMMARY OF FINDINGS – Attach site map showing sampling p	point locations, transects, important features, etc.
Hadrada fa Vandafaa Baara (2)	In the Committed Area
Hydrophytic Vegetation Present? Yes X No Yes X No	Is the Sampled Area within a Wetland? Yes X No
Wetland Hydrology Present? Yes X No	If yes, optional Wetland Site ID: W6
Remarks: (Explain alternative procedures here or in a separate report.)	ii yoo, optional violand one ib.
Drier than normal conditions, ditched/tiled ag field	
2 not than normal contained by another the agreement	
HYDROLOGY	
Wetland Hydrology Indicators:	Secondary Indicators (minimum of two required)
Primary Indicators (minimum of one is required; check all that apply)	Surface Soil Cracks (B6)
Surface Water (A1) Water-Stained Leaves (B9)	
High Water Table (A2) Aquatic Fauna (B13)	Moss Trim Lines (B16)
Saturation (A3) Marl Deposits (B15)	Dry-Season Water Table (C2)
Water Marks (B1) Hydrogen Sulfide Odor (C1)	Crayfish Burrows (C8)
Sediment Deposits (B2) Oxidized Rhizospheres on L	<u></u>
Drift Deposits (B3) Presence of Reduced Iron (
X Algal Mat or Crust (B4) Recent Iron Reduction in Til	lled Soils (C6) Geomorphic Position (D2)
Iron Deposits (B5) Thin Muck Surface (C7)	Shallow Aquitard (D3)
Inundation Visible on Aerial Imagery (B7) Other (Explain in Remarks)	Microtopographic Relief (D4)
Sparsely Vegetated Concave Surface (B8)	X FAC-Neutral Test (D5)
Field Observations:	
Surface Water Present Yes No _X Depth (inches	s)·
Water Table Present Yes No X Depth (inches	
Saturation Present Yes No X Depth (inches	
(includes capillary fringe)	<u> </u>
Describe Recorded Data (stream gauge, monitoring well, aerial photos, pr	revious inspections), if available:
	•
Remarks:	
I and the second	

Trop Ctrotum (Diot size 30 ft)	Absolute	Dominant	Indicator	Deminance Test
ree Stratum (Plot size: 30 ft)	% Cover	<u>Species</u>	<u>Status</u>	Dominance Test worksheet:
				Number of Dominant Species
				That Are OBL, FACW, or FAC:1 (A)
				Total Number of Dominant
				Species Across All Strata: 1 (B)
				Percent of Dominant Species
·				That Are OBL, FACW, or FAC:(A/B
				Prevalence Index worksheet:
	0	_ = Total Cover		Total % Cover of: Multiply by:
apling/Shrub Stratum (Plot size: 15 ft)				OBL species x 1 =
				FACW species x 2 =
				FAC species x 3 =
				FACU species x 4 =
				UPL species x 5 =
				Column Totals: (A) (B
				Prevalence Index = B/A =
	_			Hydrophytic Vegetation Indicators:
	0	= Total Cover		X 1 - Rapid Test for Hydrophytic Vegetation
erb Stratum (Plot size: 5 ft)				X 2 - Dominance Test is >50%
Cyperus esculentus	35	Yes	FACW	- 3 - Prevalence Index is ≤3.0¹
Glycine max	20	No	UPL	4 - Morphological Adaptations ¹
Persicaria maculosa	5	No	FAC	(Provide supporting data in Remarks or on a separate sheet)
				Problematic Hydrophytic Vegetation ¹ (Explain)
				¹Indicators of hydric soil and wetland hydrology must be present, unless
				disturbed or problematic.
				Definitions of Vegetation Strata:
				Definitions of Vegetation Strata.
D				Tree – Woody plants 3 in. (7.6 cm) or more in
1				diameter at breast height (DBH), regardless of height
2.				Sapling/shrub – Woody plants less than 3 in. DBH
	60			and greater than or equal to 3.28 ft (1 m) tall.
(seeds) (in a Chrotism (District) 20 ft)		= Total Cover		Herb – All herbaceous (non-woody) plants, regardles
/oody Vine Stratum (Plot size: 30 ft)				of size, and woody plants less than 3.28 ft tall.
				Woody vines – All woody vines greater than 3.28 ft i
				height.
				Hydrophytic
				Vegetation
	0	= Total Cover		Present? Yes X No No
	0	= Total Cover		

SOIL Sampling Point: W6-1w

Profile Desci	ription: (Describe to	the dept	h needed to docu	ment th	e indicat	or or co	onfirm the absence	of indicator	rs.)	
Depth	Matrix		Redo	x Featur	es					
(inches)	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²	Texture	_	Remarks	
0-11	10YR 2/1	100					Peat	_		
11-24	10YR 3/2	100					Peat			
-										
								-		
								_		
-										
								_		
¹Type: C=Co	oncentration, D=Depl	etion, RM:	=Reduced Matrix, N	лS=Mas	ked Sand	Grains.	. ² Location: PL	=Pore Lining	g, M=Matrix.	
Hydric Soil II	ndicators:						Indicator	s for Proble	matic Hydric	Soils ³ :
X Histosol (A	A1)	-	Polyvalue Below	Surface	(S8) (LRR	R,	2 cm	Muck (A10) (L	RR K, L, MLRA	149B)
Histic Epip	pedon (A2)		MLRA 149B)				Coast	Prairie Redox	x (A16) (LRR K, I	., R)
Black Hist	tic (A3)	-	Thin Dark Surface				5 cm	Mucky Peat or	r Peat (S3) (LRR	K, L, R)
Hydrogen	Sulfide (A4)	-	High Chroma Sa	ands (S11	1) (LRR K ,	L)	Polyv	alue Below Su	urface (S8) (LRR	K, L)
·	Layers (A5)	-	Loamy Mucky M			L)			S9) (LRR K, L)	
	Below Dark Surface (A1	1) _	Loamy Gleyed N		!)				asses (F12) (LRR	
	k Surface (A12)	-	Depleted Matrix						n Soils (F19) (ML	
	ucky Mineral (S1)	-	Redox Dark Surf						(MLRA 144A, 14	15, 149B)
	eyed Matrix (S4)	-	Depleted Dark S		-7)			Parent Materia		
Sandy Re		-	Redox Depression					Shallow Dark S		
	Matrix (S6)	-	Marl (F10) (LRR	K, L)			Other	(Explain in Re	emarks)	
Dark Surfa	ace (S7)									
	hydrophytic vegetation	on and we	tland hydrology mu	ıst be pr	esent, un	less dist	turbed or problemati	с.		
	.ayer (if observed):									
Type: _									V	
Depth (in	ches):						Hydric Soil Pre	sent?	Yes X	No
Remarks:										

Project/Site: Pine County Solar	City/County: Pine Sampling Date: 09/13/2022						
Applicant/Owner: Swift Current Energy	State: Min Sampling Point: W7-1u						
Investigator(s): KKM, MB	Section, Township, Range: T044N, R020W, S23						
	relief (concave, convex, none): Linear Slope %: 1						
Subregion (LRR or MLRA): LRR K, MLRA 90A Lat: 46.274265	Long: -92.82836 Datum: WGS84						
Soil Map Unit Name: Denied Access							
Are climatic / hydrologic conditions on the site typical for this time of year?							
Are Vegetation X, Soil , or Hydrology significantly dis							
Are Vegetation , Soil , or Hydrology naturally proble	ematic? (If needed, explain any answers in Remarks.)						
SUMMARY OF FINDINGS – Attach site map showing sampling p	point locations, transects, important features, etc.						
Hydrophytic Vegetation Present? Yes No X	Is the Sampled Area						
Hydrophytic Vegetation Present? Yes No X Hydric Soil Present? Yes X No	Is the Sampled Area within a Wetland? Yes No X						
Wetland Hydrology Present? Yes No X	If yes, optional Wetland Site ID: W7						
, s,	,,,,						
Remarks: (Explain alternative procedures here or in a separate report.) Farmed soybean field with ditches. Precip. Drier than normal.							
HYDROLOGY							
Wetland Hydrology Indicators:	Secondary Indicators (minimum of two required)						
Primary Indicators (minimum of one is required; check all that apply)	Surface Soil Cracks (B6)						
Surface Water (A1) Water-Stained Leaves (B9)	Drainage Patterns (B10)						
High Water Table (A2) Aquatic Fauna (B13)	Moss Trim Lines (B16)						
Saturation (A3) Marl Deposits (B15)	Dry-Season Water Table (C2)						
Water Marks (B1) Hydrogen Sulfide Odor (C1)	Crayfish Burrows (C8)						
Sediment Deposits (B2) Oxidized Rhizospheres on I	Living Roots (C3) X Saturation Visible on Aerial Imagery (C9)						
Drift Deposits (B3) Presence of Reduced Iron (
Algal Mat or Crust (B4) Recent Iron Reduction in Ti	· · · · · · · · · · · · · · · · · · ·						
Iron Deposits (B5) Thin Muck Surface (C7)	Shallow Aquitard (D3)						
Inundation Visible on Aerial Imagery (B7) Other (Explain in Remarks)	Microtopographic Relief (D4)						
Sparsely Vegetated Concave Surface (B8)	FAC-Neutral Test (D5)						
Field Observations:							
Surface Water Present Yes No _X Depth (inches	s):						
Water Table Present Yes No X Depth (inches							
Saturation Present Yes No X Depth (inche							
(includes capillary fringe)							
Describe Recorded Data (stream gauge, monitoring well, aerial photos, processes and processes are processes as a second processes are processed as a second processes are processes as a second processes are processed as a second processes are processes as a second processes are proc	revious inspections), if available:						
Remarks:							

Tree Stratum (Plot size: 30 ft)	Absolute % Cover	Dominant Species	Indicator Status	Dominance Test worksheet:
1				Number of Dominant Species That Are OBL, FACW, or FAC:(A)
3 4 5.				Total Number of Dominant Species Across All Strata:1 (B)
5				Percent of Dominant Species That Are OBL, FACW, or FAC: (A/B)
				Prevalence Index worksheet:
	0	_ = Total Cover		Total % Cover of: Multiply by:
Sapling/Shrub Stratum (Plot size: 15 ft)				OBL species 0 x 1 = 0
1				FACW species 0 x 2 = 0
2				FAC species 0 x 3 = 0
3				FACU species 40 x 4 = 160
4				UPL species 65 x 5 = 325
5				<u> </u>
6				Column Totals: 105 (A) 485 (B)
7				Trevalence index = B/A =
	0	T / 10		Hydrophytic Vegetation Indicators:
Herb Stratum (Plot size: 5 ft)		= Total Cover		1 - Rapid Test for Hydrophytic Vegetation
	65	Yes	UPL	2 - Dominance Test is >50%
	20	No	FACU	3 - Prevalence Index is ≤3.0¹
2. Amaranthus retroflexus				4 - Morphological Adaptations ¹
3. Chenopodium album	10	No No	FACU	(Provide supporting data in Remarks or on a separate sheet)
4. Cerastium arvense	10	No	FACU	Problematic Hydrophytic Vegetation ¹ (Explain)
5				¹Indicators of hydric soil and wetland hydrology must be present, unless
6				disturbed or problematic.
7				
8				Definitions of Vegetation Strata:
9				Tree – Woody plants 3 in. (7.6 cm) or more in
10				diameter at breast height (DBH), regardless of height.
11		- <u> </u>		Sapling/shrub – Woody plants less than 3 in. DBH
12				and greater than or equal to 3.28 ft (1 m) tall.
	105	= Total Cover		
Woody Vine Stratum (Plot size:30 ft)		- rotar cover		Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.
1				of size, and weedy plante less than 8.26 it tail.
2.				Woody vines – All woody vines greater than 3.28 ft in
3.				height.
4				Hydrophytic
···				Vegetation
	0	= Total Cover		Present? Yes No _X
Remarks: (Include photo numbers here or on a separa	ate sheet.)			
Soybeans are yellowed and not as healthy. More weeds in				

W7-1u

Sampling Point:

SOIL Sampling Point: W7-1u

Profile Desci	ription: (Describe to	the depth	needed to docu	ment th	e indicat	or or co	nfirm the absence of ind	icators.)
Depth	Matrix		Redo	x Featur	es			
(inches)	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²	Texture	Remarks
0 to 24	10YR 2/1	100					Peat	
								_
¹Type: C=Co	oncentration, D=Depl	etion, RM=F	Reduced Matrix, N	//S=Mas	ked Sand	Grains.	² Location: PL=Pore	Lining, M=Matrix.
Hydric Soil I	ndicators:						Indicators for P	roblematic Hydric Soils ³ :
X Histosol (A	A1)	_	Polyvalue Below	Surface	(S8) (LRR	R,	2 cm Muck (A	(10) (LRR K, L, MLRA 149B)
Histic Epip	pedon (A2)		MLRA 149B)				Coast Prairie	Redox (A16) (LRR K, L, R)
Black Hist	tic (A3)	_	Thin Dark Surface	ce (S9) (L	RR R, ML	RA 149B)	5 cm Mucky F	Peat or Peat (S3) (LRR K, L, R)
Hydrogen	Sulfide (A4)	_	High Chroma Sa	inds (S11) (LRR K,	L)	Polyvalue Be	low Surface (S8) (LRR K, L)
Stratified I	Layers (A5)	_	Loamy Mucky M	ineral (F1	1) (LRR K,	L)	Thin Dark Su	rface (S9) (LRR K, L)
Depleted	Below Dark Surface (A1	1)	Loamy Gleyed M	latrix (F2)		Iron-Mangane	ese Masses (F12) (LRR K, L, R)
Thick Dar	k Surface (A12)	_	Depleted Matrix	(F3)			Piedmont Flo	odplain Soils (F19) (MLRA 149B)
Sandy Mu	ıcky Mineral (S1)	_	Redox Dark Surf	face (F6)			Mesic Spodio	(TA6) (MLRA 144A, 145, 149B)
Sandy Gle	eyed Matrix (S4)	_	Depleted Dark S	Surface (F	7)		Red Parent M	
Sandy Re	dox (S5)	_	Redox Depression					Dark Surface (F22)
* *	Matrix (S6)	_	Marl (F10) (LRR	K , L)			Other (Explai	n in Remarks)
Dark Surfa	ace (S7)							
³ Indicators of	hydrophytic vegetation	on and wetl	and hydrology mu	ıst be pr	esent, un	less dist	urbed or problematic.	
Restrictive L	ayer (if observed):							
Type: _								
Depth (in	ches):						Hydric Soil Present?	Yes X No
Remarks:								

Project/Site: Pine County Solar	City/County: Pine Sampling Date: 09/13/2022						
Applicant/Owner: Swift Current Energy	State: Min Sampling Point: W7-1w						
Investigator(s): KKM, MB	Section, Township, Range: T044N, R020W, S23						
	relief (concave, convex, none): Linear Slope %: 1						
Subregion (LRR or MLRA): LRR K, MLRA 90A Lat: 46.274488	Long: -92.828384 Datum: WGS84						
Soil Map Unit Name: Denied Access							
Are climatic / hydrologic conditions on the site typical for this time of year?	Yes No _X (If no, explain in Remarks.)						
Are Vegetation X, Soil , or Hydrology significantly dist							
Are Vegetation , Soil , or Hydrology naturally problem	matic? (If needed, explain any answers in Remarks.)						
SUMMARY OF FINDINGS – Attach site map showing sampling p	point locations, transects, important features, etc.						
Hydrophytic Vegetation Present? Yes No X	Is the Sampled Area						
Hydrophytic Vegetation Present? Yes No X Hydric Soil Present? Yes X No	Is the Sampled Area within a Wetland? Yes X No						
Wetland Hydrology Present? Yes X No	If yes, optional Wetland Site ID: W7						
Remarks: (Explain alternative procedures here or in a separate report.)	ii yee, optional wettand one ib.						
Farmed soybean field with ditches. Precip. Drier than normal.							
HYDROLOGY							
Wetland Hydrology Indicators:	Secondary Indicators (minimum of two required)						
Primary Indicators (minimum of one is required; check all that apply)	Surface Soil Cracks (B6)						
Surface Water (A1) Water-Stained Leaves (B9)	Drainage Patterns (B10)						
High Water Table (A2) Aquatic Fauna (B13)	Moss Trim Lines (B16)						
Saturation (A3) Marl Deposits (B15)	Dry-Season Water Table (C2)						
Water Marks (B1) Hydrogen Sulfide Odor (C1)	Crayfish Burrows (C8)						
Sediment Deposits (B2) Oxidized Rhizospheres on L	Living Roots (C3) X Saturation Visible on Aerial Imagery (C9)						
Drift Deposits (B3) Presence of Reduced Iron (C4) Stunted or Stressed Plants (D1)						
Algal Mat or Crust (B4) Recent Iron Reduction in Til	illed Soils (C6) Geomorphic Position (D2)						
Iron Deposits (B5) Thin Muck Surface (C7)	Shallow Aquitard (D3)						
Inundation Visible on Aerial Imagery (B7) Other (Explain in Remarks)	X Microtopographic Relief (D4)						
Sparsely Vegetated Concave Surface (B8)	FAC-Neutral Test (D5)						
Field Observations:							
Surface Water Present Yes No X Depth (inches	s):						
Water Table Present Yes No X Depth (inches	s):						
Saturation Present Yes No X Depth (inches	S): Wetland Hydrology Present? Yes X No						
(includes capillary fringe)							
Describe Recorded Data (stream gauge, monitoring well, aerial photos, pr	evious inspections), if available:						
Remarks:							
Soybeans are greener and lusher in wetland area.							

e Dominant r Species		Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: 0 (A) Total Number of Dominant Species Across All Strata: 1 (B) Percent of Dominant Species That Are OBL, FACW, or FAC: 0 (A/E) Prevalence Index worksheet: Total % Cover of: Multiply by:
= Total Cover		That Are OBL, FACW, or FAC: 0 (A) Total Number of Dominant Species Across All Strata: 1 (B) Percent of Dominant Species That Are OBL, FACW, or FAC: 0 (A/E) Prevalence Index worksheet:
= Total Cover		That Are OBL, FACW, or FAC: 0 (A) Total Number of Dominant Species Across All Strata: 1 (B) Percent of Dominant Species That Are OBL, FACW, or FAC: 0 (A/E) Prevalence Index worksheet:
= Total Cover		Total Number of Dominant Species Across All Strata: 1 (B) Percent of Dominant Species That Are OBL, FACW, or FAC: 0 (A/E) Prevalence Index worksheet:
= Total Cover		Species Across All Strata: 1 (B) Percent of Dominant Species That Are OBL, FACW, or FAC: 0 (A/E) Prevalence Index worksheet:
= Total Cover		Percent of Dominant Species That Are OBL, FACW, or FAC: 0 (A/E Prevalence Index worksheet:
= Total Cover		That Are OBL, FACW, or FAC: 0 (A/E) Prevalence Index worksheet:
= Total Cover		Prevalence Index worksheet:
		T . 10/ 0 /
		Multiply by:
		OBL species 0 x 1 = 0
		FACW species 0 x 2 = 0
		FAC species 0 x 3 = 0
		FACU species 0 x 4 = 0
		UPL species 95 x 5 = 475
		Column Totals: 95 (A) 475 (B
		Prevalence Index = B/A = 5
		Hydrophytic Vegetation Indicators:
_ = Total Cover		- 1 - Rapid Test for Hydrophytic Vegetation
		1
Yes	UPL	2 - Dominance Test is >50%
		3 - Prevalence Index is ≤3.0¹
		4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet)
	_	(1. remain supporting data in remains of on a superior direct)
		X Problematic Hydrophytic Vegetation ¹ (Explain)
		¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
		,
		Definitions of Vegetation Strata:
		Tree Meady plants 2 in (7.5 cm) or more in
		Tree – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height
		Sapling/shrub – Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.
T / 10		and greater than or equal to 0.20 it (1 m) tail.
_ = Total Cover		Herb – All herbaceous (non-woody) plants, regardles
		of size, and woody plants less than 3.28 ft tall.
		Woody vines – All woody vines greater than 3.28 ft i
		height.
		Hydrophytic
		Vegetation
	_ = Total Cover	_ = Total Cover Yes UPL

SOIL Sampling Point: W7-1w

Profile Desci	ription: (Describe to	the depth	needed to docu	ment th	e indicat	or or co	nfirm the absence of ind	icators.)
Depth	Matrix		Redo	x Featur	es			
(inches)	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²	Texture	Remarks
0 to 24	10YR 2/1	100					Peat	
								_
¹Type: C=Co	oncentration, D=Depl	etion, RM=F	Reduced Matrix, N	//S=Mas	ked Sand	Grains.	² Location: PL=Pore	Lining, M=Matrix.
Hydric Soil I	ndicators:						Indicators for P	roblematic Hydric Soils ³ :
X Histosol (A	A1)	_	Polyvalue Below	Surface	(S8) (LRR	R,	2 cm Muck (A	(10) (LRR K, L, MLRA 149B)
Histic Epip	pedon (A2)		MLRA 149B)				Coast Prairie	Redox (A16) (LRR K, L, R)
Black Hist	tic (A3)	_	Thin Dark Surface	ce (S9) (L	RR R, ML	RA 149B)	5 cm Mucky F	Peat or Peat (S3) (LRR K, L, R)
Hydrogen	Sulfide (A4)	_	High Chroma Sa	inds (S11) (LRR K,	L)	Polyvalue Be	low Surface (S8) (LRR K, L)
Stratified I	Layers (A5)	_	Loamy Mucky M	ineral (F1	1) (LRR K,	L)	Thin Dark Su	rface (S9) (LRR K, L)
Depleted	Below Dark Surface (A1	1)	Loamy Gleyed M	latrix (F2)		Iron-Mangane	ese Masses (F12) (LRR K, L, R)
Thick Dar	k Surface (A12)	_	Depleted Matrix	(F3)			Piedmont Flo	odplain Soils (F19) (MLRA 149B)
Sandy Mu	ıcky Mineral (S1)	_	Redox Dark Surf	face (F6)			Mesic Spodio	(TA6) (MLRA 144A, 145, 149B)
Sandy Gle	eyed Matrix (S4)	_	Depleted Dark S	Surface (F	7)		Red Parent M	
Sandy Re	dox (S5)	_	Redox Depression					Dark Surface (F22)
* *	Matrix (S6)	_	Marl (F10) (LRR	K , L)			Other (Explai	n in Remarks)
Dark Surfa	ace (S7)							
³ Indicators of	hydrophytic vegetation	on and wetl	and hydrology mu	ıst be pr	esent, un	less dist	urbed or problematic.	
Restrictive L	ayer (if observed):							
Type: _								
Depth (in	ches):						Hydric Soil Present?	Yes X No
Remarks:								

Project/Site: Pine County Solar	City/County: Pine Sampling Date: 09/13/2022						
Applicant/Owner: Swift Current Energy	State: Min Sampling Point: W8-1u						
Investigator(s): BB, AH, KKM, MB	Section, Township, Range: T044N, R020W, S23						
	relief (concave, convex, none): Linear Slope %: 3						
Subregion (LRR or MLRA): LRR K, MLRA 90A Lat: 46.277181	Long: -92.845025 Datum: WGS84						
Soil Map Unit Name: Denied Access	NWI classification:						
Are climatic / hydrologic conditions on the site typical for this time of year?	Yes No _X (If no, explain in Remarks.)						
Are Vegetation X, Soil , or Hydrology significantly dist							
Are Vegetation , Soil , or Hydrology naturally problem	matic? (If needed, explain any answers in Remarks.)						
SUMMARY OF FINDINGS – Attach site map showing sampling p	point locations, transects, important features, etc.						
Hydrophytic Vegetation Present? Yes No X	Is the Sampled Area						
Hydric Soil Present? Hydric Soil Present? Yes No X Yes X No	within a Wetland? Yes No X						
Wetland Hydrology Present? Yes No X	If yes, optional Wetland Site ID: W8						
Remarks: (Explain alternative procedures here or in a separate report.)							
Farmed soybean field with ditches. Precip. Drier than normal.							
HYDROLOGY							
Wetland Hydrology Indicators:	Secondary Indicators (minimum of two required)						
Primary Indicators (minimum of one is required; check all that apply)	Surface Soil Cracks (B6)						
Surface Water (A1) Water-Stained Leaves (B9)	Drainage Patterns (B10)						
High Water Table (A2) Aquatic Fauna (B13)	Moss Trim Lines (B16)						
Saturation (A3) Marl Deposits (B15)	Dry-Season Water Table (C2)						
Water Marks (B1) Hydrogen Sulfide Odor (C1)	Crayfish Burrows (C8)						
Sediment Deposits (B2) Oxidized Rhizospheres on L	Living Roots (C3) X Saturation Visible on Aerial Imagery (C9)						
Drift Deposits (B3) Presence of Reduced Iron (C4) Stunted or Stressed Plants (D1)						
Algal Mat or Crust (B4) Recent Iron Reduction in Til	illed Soils (C6) Geomorphic Position (D2)						
Iron Deposits (B5) Thin Muck Surface (C7)	Shallow Aquitard (D3)						
Inundation Visible on Aerial Imagery (B7) Other (Explain in Remarks)	Microtopographic Relief (D4)						
Sparsely Vegetated Concave Surface (B8)	FAC-Neutral Test (D5)						
Field Observations:							
Surface Water Present Yes No X Depth (inches	s):						
Water Table Present Yes No X Depth (inches	s):						
Saturation Present Yes No X Depth (inches	s): Wetland Hydrology Present? Yes No _X_						
(includes capillary fringe)							
Describe Recorded Data (stream gauge, monitoring well, aerial photos, pr	evious inspections), if available:						
Remarks:							

	Abaaluta	Dominant	Indicator	
ree Stratum (Plot size: 30 ft)	Absolute <u>% Cover</u>	Dominant Species	Indicator Status	Dominance Test worksheet:
				Number of Dominant Species
				That Are OBL, FACW, or FAC: 0 (A)
				Total Number of Dominant
				Species Across All Strata: 1 (B)
				Percent of Dominant Species
				That Are OBL, FACW, or FAC: 0 (A/B
· -				
	0			Prevalence Index worksheet:
		_ = Total Cover		Total % Cover of: Multiply by:
apling/Shrub Stratum (Plot size: 15 ft)				OBL species $0 \times 1 = 0$
·	_			FACW species 0 x 2 = 0
				FAC species 0 x 3 = 0
				FACU species 5 x 4 = 20
				UPL species 65 x 5 = 325
		 -		Column Totals: 70 (A) 345 (B
·				4.00
·				Prevalence Index = B/A = 4.93
	0			Hydrophytic Vegetation Indicators:
		= Total Cover		- 1 - Rapid Test for Hydrophytic Vegetation
lerb Stratum (Plot size: 5 ft)				1
Glycine max	65	Yes	UPL	2 - Dominance Test is >50%
Trifolium repens	5	No	FACU	3 - Prevalence Index is ≤3.01
·				4 - Morphological Adaptations ¹
		 -		(Provide supporting data in Remarks or on a separate sheet)
·				Problematic Hydrophytic Vegetation ¹ (Explain)
i				
i				¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
·				
i				Definitions of Vegetation Strata:
				Tree – Woody plants 3 in. (7.6 cm) or more in
		 -		diameter at breast height (DBH), regardless of height.
1				Sapling/shrub – Woody plants less than 3 in. DBH
2				and greater than or equal to 3.28 ft (1 m) tall.
	70	T		
(5)		= Total Cover		Herb – All herbaceous (non-woody) plants, regardless
Voody Vine Stratum (Plot size: 30 ft)				of size, and woody plants less than 3.28 ft tall.
·				Woody vines – All woody vines greater than 3.28 ft in
				height.
·				
	_		_	Hydrophytic
				Vegetation
	0	= Total Cover		Present? Yes No X
	0	= Total Cover		1 - ·

SOIL Sampling Point: W8-1u

Profile Description: (Describe to	the depth	needed to docui	ment th	e indicat	or or co	onfirm the absence	of indicator	's.)	
Depth Matrix		Redox	x Featur	es					
(inches) Color (moist)	%	Color (moist)	%	Type ¹	Loc ²	Texture		Remarks	
0 to 12 10YR 2/1	100					Peat	_		
12 to 24 10YR 3/3	100					Peat	Fibric mate	erial	
						·			
							<u> </u>		
	— -								
	— -								
¹ Type: C=Concentration, D=Deple	tion, RM=	Reduced Matrix, N	/IS=Mas	ked Sand	Grains.	. ² Location: PL	=Pore Lining	, M=Matrix.	
Hydric Soil Indicators:						Indicator	s for Proble	matic Hydric	Soils³:
X Histosol (A1)	_	Polyvalue Below	Surface	(S8) (LRR	R,	2 cm	Muck (A10) (L	RR K, L, MLRA	149B)
Histic Epipedon (A2)		MLRA 149B)						k (A16) (LRR K, I	· ·
Black Histic (A3)	_	Thin Dark Surface						Peat (S3) (LRR	
Hydrogen Sulfide (A4)	_	High Chroma Sa						ırface (S8) (LRR	K, L)
Stratified Layers (A5)	_	Loamy Mucky M	-		L)	·		S9) (LRR K, L)	NK I D)
Depleted Below Dark Surface (A11)		Loamy Gleyed M Depleted Matrix)			-	asses (F12) (LRF n Soils (F19) (ML	•
Thick Dark Surface (A12) Sandy Mucky Mineral (S1)	_	Redox Dark Surf						(MLRA 144A, 14	
Sandy Gleyed Matrix (S4)	_	Depleted Dark S		7)			Parent Materia	-	10, 1400)
Sandy Redox (S5)	_	Redox Depression		,			Shallow Dark		
Stripped Matrix (S6)	_	Marl (F10) (LRR					(Explain in Re		
Dark Surface (S7)									
³ Indicators of hydrophytic vegetatio	n and wet	land hydrology mu	ıst be pr	esent, un	less dist	turbed or problemati	C.		
Restrictive Layer (if observed):		, ,				· .			
Type:									
Depth (inches):						Hydric Soil Pre	sent?	Yes X	No
Remarks:						1			

Project/Site: Pine County Solar	City/County: Pine Sampling Date: 09/13/2022						
Applicant/Owner: Swift Current Energy	State: Min Sampling Point: W8-1w						
Investigator(s): BB, AH, KKM, MB	Section, Township, Range: T044N, R020W, S23						
	relief (concave, convex, none): Concave Slope %: 2						
Subregion (LRR or MLRA): LRR K, MLRA 90A Lat: 46.276962	Long: -92.844645 Datum: WGS84						
Soil Map Unit Name: Denied Access	NWI classification:						
Are climatic / hydrologic conditions on the site typical for this time of year?	Yes No _X (If no, explain in Remarks.)						
Are Vegetation X, Soil , or Hydrology significantly dist							
Are Vegetation , Soil , or Hydrology naturally problem	matic? (If needed, explain any answers in Remarks.)						
SUMMARY OF FINDINGS – Attach site map showing sampling p	oint locations, transects, important features, etc.						
Lhudrashutia Variatian Present?	In the Commind Area						
Hydrophytic Vegetation Present? Yes No X Hydric Soil Present? Yes X No	Is the Sampled Area within a Wetland? Yes X No						
Wetland Hydrology Present? Yes X No	If yes, optional Wetland Site ID: W8						
	ii yes, optioriai wetiand Site ID						
Remarks: (Explain alternative procedures here or in a separate report.) Farmed soybean field with ditches. Precip. Drier than normal.							
Farmed Soybean field with ditches. Fredip. Drief than normal.							
HYDROLOGY							
	Occasional Indicators (minimum of two arms in al)						
Wetland Hydrology Indicators: Primary Indicators (minimum of one is required; check all that apply)	Secondary Indicators (minimum of two required)						
	Surface Soil Cracks (B6)						
Surface Water (A1) Water-Stained Leaves (B9)	Drainage Patterns (B10)						
High Water Table (A2) Aquatic Fauna (B13) Soturation (A2) Mad Departs (B45)	Moss Trim Lines (B16)						
Saturation (A3) Marl Deposits (B15) Wester Marke (B4)	Dry-Season Water Table (C2) Crayfish Burrows (C8)						
Water Marks (B1) Hydrogen Sulfide Odor (C1)							
Sediment Deposits (B2) Oxidized Rhizospheres on L Drift Deposits (B3) Presence of Reduced Iron (C	<u> </u>						
Algal Mat or Crust (B4) Recent Iron Reduction in Till Iron Deposits (B5) Thin Muck Surface (C7)	Shallow Aquitard (D3)						
	V Missacker associated Delicate (DA)						
Inundation Visible on Aerial Imagery (B7) —— Other (Explain in Remarks) Sparsely Vegetated Concave Surface (B8)	FAC-Neutral Test (D5)						
Field Observations:							
	· · · · · · · · · · · · · · · · · · ·						
Saturation Present Yes X No Depth (inches (includes capillary fringe)	S): 22 Wetland Hydrology Present? Yes X No						
Describe Recorded Data (stream gauge, monitoring well, aerial photos, pro	revious inspections) if available:						
Describe Necorata Bata (stream gauge, monitoring well, acrial photos, ph	evidus inspessions), il avallable.						
Remarks:							
Rutting present							
3,							

olants.			Sampling Point: W8-1w
Absolute % Cover	Dominant Species	Indicator Status	Dominance Test worksheet:
			Number of Deminent Charles
			Number of Dominant Species That Are OBL, FACW, or FAC: 1 (A)
			That Ale OBE, I AOW, OF AO.
			Total Number of Dominant
			Species Across All Strata: 2 (B)
_			
			Percent of Dominant Species
			That Are OBL, FACW, or FAC: (A/B)
			Prevalence Index worksheet:
0	= Total Cover		Total % Cover of: Multiply by:
	10101 00101		
			OBL species 0 x 1 = 0
<u> </u>			FACW species 25 x 2 = 50
			FAC species 0 x 3 = 0
			FACU species 2 x 4 = 8
			UPL species 45 x 5 = 225
			Column Totals: 72 (A) 283 (B)
			Prevalence Index = B/A = 3.93
			Hydrophytic Vegetation Indicators:
:	= Total Cover		- 1 - Rapid Test for Hydrophytic Vegetation
	.,		2 - Dominance Test is >50%
45			- 3 - Prevalence Index is ≤3.0¹
25	Yes	FACW	
2	No	FACU	4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet)
_			Deckleration Under the Variation 1 (Fundain)
			Problematic Hydrophytic Vegetation ¹ (Explain)
			¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
			distance of propositions
			Definitions of Vegetation Strates
			Definitions of Vegetation Strata:
			Tree – Woody plants 3 in. (7.6 cm) or more in
			diameter at breast height (DBH), regardless of height.
			Sapling/shrub – Woody plants less than 3 in. DBH
70			and greater than or equal to 3.28 ft (1 m) tall.
;	= Total Cover		Herb – All herbaceous (non-woody) plants, regardless
			of size, and woody plants less than 3.28 ft tall.
			of size, and woody plants less than 3.28 ft fall.
			Woody vines – All woody vines greater than 3.28 ft in
			Woody vines – All woody vines greater than 3.28 ft in height.
			Woody vines – All woody vines greater than 3.28 ft in height. Hydrophytic
			Woody vines – All woody vines greater than 3.28 ft in height. Hydrophytic Vegetation
			Woody vines – All woody vines greater than 3.28 ft in height. Hydrophytic
	Absolute % Cover	Absolute	Absolute % Cover Species Indicator Status O = Total Cover O = Total Cover 45

SOIL Sampling Point: W8-1w

Profile Desci	ription: (Describe to	the dept	h needed to docu	ment th	e indicat	or or co	onfirm the absence	of indicato	ors.)	
Depth	Matrix			x Featur	es					
(inches)	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²	Texture	_	Remarks	
0 to 13	10YR 2/1	100					Peat			
13 to 24	10YR 3/3	100					Peat			
								_		
		—								
								_		
								_		
					·					
								_		
¹Type: C=C	oncentration, D=Depl	etion, RM	=Reduced Matrix, N	√S=Mas	ked Sand	Grains.	. ² Location: Pl	L=Pore Linin	g, M=Matrix.	
Hydric Soil I	ndicators:						Indicato	rs for Proble	ematic Hydric	Soils³:
X Histosol (A	A1)	-	Polyvalue Below	/ Surface	(S8) (LRR	R,	2 cm	Muck (A10) (LRR K, L, MLRA	149B)
Histic Epip	pedon (A2)		MLRA 149B)				Coa	st Prairie Redo	ox (A16) (LRR K, l	L, R)
Black Hist	tic (A3)	-	Thin Dark Surface	ce (S9) (L	RR R, ML	RA 149B	5 cm	Mucky Peat o	or Peat (S3) (LRR	K, L, R)
Hydrogen	Sulfide (A4)	-	High Chroma Sa	ands (S11	I) (LRR K,	L)	Poly	value Below S	urface (S8) (LRR	K , L)
	Layers (A5)	-	Loamy Mucky M			L)			(S9) (LRR K, L)	
	Below Dark Surface (A1	1) _	Loamy Gleyed N		()				lasses (F12) (LRF	
	k Surface (A12)	-	Depleted Matrix						in Soils (F19) (ML	
	ucky Mineral (S1)	-	Redox Dark Sur						6) (MLRA 144A, 14 - L (504)	45, 149B)
	eyed Matrix (S4)	-	Depleted Dark S		-7)			Parent Materia		
Sandy Re	Matrix (S6)	-	Redox Depression Marl (F10) (LRR					er (Explain in R	Surface (F22)	
Dark Surfa		-	Wall (F10) (ERR	· · · · · · ·			Our	a (Explain in N	temarks)	
	hydrophytic vegetation	on and we	atland hydrology mu	ist ha nr	esant un	lace diet	turhed or problemat	tic		
	.ayer (if observed):	on and we	- Trydrology Inc	ist be pi	CSCIII, UII	iicoo diot				
Type:	.ayer (ii observeu).									
Depth (in	ohoo):						Hydric Soil Pro	ncont?	Yes X	No
							Hydric 30ii Pic	esent?		
Remarks:										

Project/Site: Pine County Solar	City/County: Pine Sampling Date: 09/13/2022					
Applicant/Owner: Swift Current Energy	State: Min Sampling Point: W9-1u					
Investigator(s): KKM, MB	Section, Township, Range: T044N, R020W, S23					
	relief (concave, convex, none): Convex Slope %: 3					
· · · · · · · · · · · · · · · · · · ·	· · · · · · · · · · · · · · · · · · ·					
Subregion (LRR or MLRA): LRR K, MLRA 90A Lat: 46.276164						
Soil Map Unit Name: Denied Access	NWI classification: PEM1Af					
Are climatic / hydrologic conditions on the site typical for this time of year?	Yes No X (If no, explain in Remarks.)					
Are Vegetation X , Soil , or Hydrology significantly distr	urbed? Are "Normal Circumstances" present? Yes NoX					
Are Vegetation , Soil , or Hydrology naturally problem	matic? (If needed, explain any answers in Remarks.)					
SUMMARY OF FINDINGS – Attach site map showing sampling po	oint locations, transects, important features, etc.					
Hydrophytic Vegetation Present? Yes No X	Is the Sampled Area					
Hydric Soil Present? Yes X No	within a Wetland? Yes No X					
Wetland Hydrology Present? Yes No X	If yes, optional Wetland Site ID: W9					
Farmed soybean field with ditches. Precip. Drier than normal.						
HYDROLOGY						
Wetland Hydrology Indicators:	Secondary Indicators (minimum of two required)					
Primary Indicators (minimum of one is required; check all that apply)	Surface Soil Cracks (B6)					
Surface Water (A1) Water-Stained Leaves (B9)	Drainage Patterns (B10)					
High Water Table (A2) Aquatic Fauna (B13)	Moss Trim Lines (B16)					
Saturation (A3) Marl Deposits (B15)	Dry-Season Water Table (C2)					
Water Marks (B1) Hydrogen Sulfide Odor (C1)	Crayfish Burrows (C8)					
Sediment Deposits (B2) Oxidized Rhizospheres on Li	iving Roots (C3) Saturation Visible on Aerial Imagery (C9)					
Presence of Reduced Iron (C	C4) Stunted or Stressed Plants (D1)					
Algal Mat or Crust (B4) Recent Iron Reduction in Tille	led Soils (C6) Geomorphic Position (D2)					
Iron Deposits (B5) Thin Muck Surface (C7)	Shallow Aquitard (D3)					
Inundation Visible on Aerial Imagery (B7) Other (Explain in Remarks)	Microtopographic Relief (D4)					
Sparsely Vegetated Concave Surface (B8)	FAC-Neutral Test (D5)					
Field Observations:						
Surface Water Present Yes No X Depth (inches	s):					
Water Table Present Yes No X Depth (inches	s):					
Saturation Present Yes No X Depth (inches	S): Wetland Hydrology Present? Yes No _X_					
(includes capillary fringe)						
Describe Recorded Data (stream gauge, monitoring well, aerial photos, pre	evious inspections), if available:					
Remarks:						

Tree Stratum (Plot size: 30 ft)	Absolute % Cover	Dominant Species	Indicator Status	Dominance Test worksheet:
1 2				Number of Dominant Species That Are OBL, FACW, or FAC:(A)
3				Total Number of Dominant Species Across All Strata: (B)
5				Percent of Dominant Species That Are OBL, FACW, or FAC:0 (A/B)
7				Prevalence Index worksheet:
	0	= Total Cover		Total % Cover of: Multiply by:
Sapling/Shrub Stratum (Plot size:15 ft)		_ = 10141 00701		OBL species 0 $x = 0$
1				FACW species $0 \times 2 = 0$
2.				
3.				FAC species 0 x 3 = 0
4.				FACU species40 x 4 =160
5.				UPL species 55 x 5 = 275
6.				Column Totals: 95 (A) 435 (B)
7.				Prevalence Index = B/A = 4.58
				Hydrophytic Vegetation Indicators:
Herb Stratum (Plot size: 5 ft)	0	= Total Cover		1 - Rapid Test for Hydrophytic Vegetation
1. Silene latifolia	45	Yes	UPL	2 - Dominance Test is >50%
2. Ambrosia artemisiifolia	25	Yes	FACU	3 - Prevalence Index is ≤3.0¹
Cerastium arvense	15	No	FACU	4 - Morphological Adaptations ¹
4. Asclepias syriaca	10	No	UPL	(Provide supporting data in Remarks or on a separate sheet)
5				Problematic Hydrophytic Vegetation ¹ (Explain)
6.				¹ Indicators of hydric soil and wetland hydrology must be present, unless
7				disturbed or problematic.
8.				Definitions of Vegetation Strata:
				Definitions of Vegetation offata.
10				Tree – Woody plants 3 in. (7.6 cm) or more in
11.				diameter at breast height (DBH), regardless of height.
12		·		Sapling/shrub – Woody plants less than 3 in. DBH
12.				and greater than or equal to 3.28 ft (1 m) tall.
Woody Vine Stratum (Plot size: 30 ft)	95	= Total Cover		Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.
1				
2.				Woody vines – All woody vines greater than 3.28 ft in
3.				height.
				Hydrophytic
4				Vegetation
	0	= Total Cover		Present? Yes No X
Remarks: (Include photo numbers here or on a separa	ate sheet.)			

Sampling Point:

W9-1u

SOIL Sampling Point: W9-1u

	ription: (Describe to	the depth		ment the x Feature		or or co	nfirm the absence o	of indicators.)	
Depth (inches)	Matrix Color (moist)	<u></u>	Color (moist)	% realur	Type ¹	Loc ²	Texture		Remarks
(IIICIICS)			Color (moist)	70	Туре		Texture		Remarks
0 to 24	10YR 2/1	100					Peat		
	 .				. —		2:		
'Type: C=Co	oncentration, D=Deple	∍tion, RM=R	leduced Matrix, N	∕/S=Mas	ked Sand	d Grains.	² Location: PL=	Pore Lining, M=N	/latrix.
Hydric Soil I	ndicators:						Indicators	for Problematic	: Hydric Soils³:
X Histosol (A1)	_	Polyvalue Below	/ Surface	(S8) (LRR	R,	2 cm N	luck (A10) (LRR K,	L, MLRA 149B)
Histic Epi	pedon (A2)		MLRA 149B)				Coast	Prairie Redox (A16)	(LRR K, L, R)
Black His	tic (A3)	_	Thin Dark Surface	ce (S9) (L	RR R, ML	RA 149B)	5 cm M	lucky Peat or Peat	(S3) (LRR K, L, R)
Hydrogen	Sulfide (A4)	_	High Chroma Sa	ands (S11) (LRR K,	L)	Polyva	lue Below Surface ((S8) (LRR K, L)
Stratified	Layers (A5)	_	Loamy Mucky M	lineral (F1) (LRR K,	L)	Thin D	ark Surface (S9) (L	RR K, L)
Depleted	Below Dark Surface (A1	1)	Loamy Gleyed N	/latrix (F2))		Iron-Ma	anganese Masses ((F12) (LRR K, L, R)
Thick Dar	k Surface (A12)	_	Depleted Matrix	(F3)			Piedmo	ont Floodplain Soils	(F19) (MLRA 149B)
Sandy Mu	ucky Mineral (S1)	_	Redox Dark Sur	face (F6)			Mesic	Spodic (TA6) (MLR	A 144A, 145, 149B)
Sandy Gl	eyed Matrix (S4)	_	Depleted Dark S	Surface (F	7)		Red Pa	arent Material (F21)	ı
Sandy Re	edox (S5)	_	Redox Depressi	ons (F8)			Very S	hallow Dark Surface	e (F22)
Stripped I	Matrix (S6)	_	Marl (F10) (LRR	K, L)			Other (Explain in Remarks	s)
Dark Surf	ace (S7)								
31	hdua.u.latiaa.a.atati			4		المحمد المحمد			
	hydrophytic vegetation	on and wetta	ina nyarology mu	ist be pre	esent, un	iess disti	rbed or problematic	•	
	.ayer (if observed):								
Type:									
Depth (in	nches):						Hydric Soil Pres	ent? Yes	sX_ No
Remarks:									

Project/Site: Pine County Solar	City/County: Pine Sampling Date: 09/13/2022
Applicant/Owner: Swift Current Energy	State: Min Sampling Point: W9-1w
Investigator(s): KKM, MB	Section, Township, Range: T044N, R020W, S23
	relief (concave, convex, none): Concave Slope %: 1
Subregion (LRR or MLRA): LRR K, MLRA 90A Lat: 46.276309	· · · · · · · · · · · · · · · · · · ·
Soil Map Unit Name: Denied Access	NWI classification: PEM1Af
Are climatic / hydrologic conditions on the site typical for this time of year?	Yes No X (If no, explain in Remarks.)
Are Vegetation X , Soil , or Hydrology significantly distr	urbed? Are "Normal Circumstances" present? Yes No_X
Are Vegetation , Soil , or Hydrology naturally problem	matic? (If needed, explain any answers in Remarks.)
SUMMARY OF FINDINGS – Attach site map showing sampling p	oint locations, transects, important features, etc.
Hydrophytic Vegetation Present? Yes No X	Is the Sampled Area
Hydric Soil Present? Yes X No	within a Wetland? Yes X No
Wetland Hydrology Present? Yes X No	If yes, optional Wetland Site ID: W9
Farmed soybean field with ditches. Precip. Drier than normal.	
HYDROLOGY	
Wetland Hydrology Indicators:	Secondary Indicators (minimum of two required)
Primary Indicators (minimum of one is required; check all that apply)	Surface Soil Cracks (B6)
Surface Water (A1) Water-Stained Leaves (B9)	Drainage Patterns (B10)
High Water Table (A2) Aquatic Fauna (B13)	Moss Trim Lines (B16)
Saturation (A3) Marl Deposits (B15)	Dry-Season Water Table (C2)
Water Marks (B1) Hydrogen Sulfide Odor (C1)	Crayfish Burrows (C8)
Sediment Deposits (B2) Oxidized Rhizospheres on Li	iving Roots (C3) X Saturation Visible on Aerial Imagery (C9)
Drift Deposits (B3) Presence of Reduced Iron (C	C4) Stunted or Stressed Plants (D1)
Algal Mat or Crust (B4) Recent Iron Reduction in Till	ed Soils (C6) Geomorphic Position (D2)
Iron Deposits (B5) Thin Muck Surface (C7)	Shallow Aquitard (D3)
Inundation Visible on Aerial Imagery (B7) Other (Explain in Remarks)	X Microtopographic Relief (D4)
Sparsely Vegetated Concave Surface (B8)	FAC-Neutral Test (D5)
Field Observations:	
Surface Water Present Yes No X Depth (inches	s):
Water Table Present Yes No X Depth (inches	s):
Saturation Present Yes No X Depth (inches	S): Wetland Hydrology Present? Yes X No
(includes capillary fringe)	
Describe Recorded Data (stream gauge, monitoring well, aerial photos, pre	evious inspections), if available:
Remarks:	

lants.			
Absolute <u>% Cover</u>	Dominant Species	Indicator Status	Dominance Test worksheet:
<u> </u>			Number of Dominant Species
			That Are OBL, FACW, or FAC: 0 (A)
			()
			Total Number of Dominant
			Species Across All Strata: 1 (B)
<u> </u>			
			Percent of Dominant Species That Are OBL FACW or FAC:
			That Are OBL, FACW, or FAC: 0 (A/B)
			Prevalence Index worksheet:
0	_ = Total Cover		Total % Cover of: Multiply by:
			OBL species 0 x 1 = 0
			FACW species 0 x 2 = 0
			FAC species $0 \times 3 = 0$
			FACU species 0 x 4 = 0
	 .		
			UPL species 100 x 5 = 500
			Column Totals: 100 (A) 500 (B)
			Prevalence Index = B/A = 5
0	Total Cover		Hydrophytic Vegetation Indicators:
	= Total Cover		1 - Rapid Test for Hydrophytic Vegetation
			- 2 - Dominance Test is >50%
100	Yes	UPL	- 2 Provolence Index is <2.01
			3 - Prevalence Index is ≤3.0¹
			4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet)
			(Provide supporting data in Remarks of on a separate sneet)
	· · · · · · · · · · · · · · · · · · ·		Problematic Hydrophytic Vegetation ¹ (Explain)
<u> </u>	-		¹Indicators of hydric soil and wetland hydrology must be present, unless
			disturbed or problematic.
			Definitions of Vegetation Strata:
			Tree – Woody plants 3 in. (7.6 cm) or more in
			diameter at breast height (DBH), regardless of height.
			Continuate with Weath plants less than 2 in DDI
			Sapling/shrub – Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.
100			and greater than or equal to 5.20 it (1 iii) tail.
	= Total Cover		Herb - All herbaceous (non-woody) plants, regardless
			of size, and woody plants less than 3.28 ft tall.
			1 ' ' ' ' ' ' ' ' ' ' ' ' ' ' ' ' ' ' '
			Woody vines – All woody vines greater than 3.28 ft in
	·		
			Woody vines – All woody vines greater than 3.28 ft in height.
			Woody vines – All woody vines greater than 3.28 ft in height. Hydrophytic
			Woody vines – All woody vines greater than 3.28 ft in height.
	0 100	% Cover Species O = Total Cover O = Total Cover Yes	% Cover Species Status 0 = Total Cover 0 = Total Cover 100 Yes UPL

SOIL Sampling Point: W9-1w

Profile Desci	ription: (Describe to	the depth	needed to docu	ment th	e indicat	or or co	nfirm the absence of ind	icators.)
Depth	Matrix		Redo	x Featur	es			
(inches)	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²	Texture	Remarks
0 to 24	10YR 2/1	100					Peat	
								_
¹Type: C=Co	oncentration, D=Depl	etion, RM=F	Reduced Matrix, N	//S=Mas	ked Sand	Grains.	² Location: PL=Pore	Lining, M=Matrix.
Hydric Soil I	ndicators:						Indicators for P	roblematic Hydric Soils ³ :
X Histosol (A	A1)	_	Polyvalue Below	Surface	(S8) (LRR	R,	2 cm Muck (A	(10) (LRR K, L, MLRA 149B)
Histic Epip	pedon (A2)		MLRA 149B)				Coast Prairie	Redox (A16) (LRR K, L, R)
Black Hist	tic (A3)	_	Thin Dark Surface	ce (S9) (L	RR R, ML	RA 149B)	5 cm Mucky F	Peat or Peat (S3) (LRR K, L, R)
Hydrogen	Sulfide (A4)	_	High Chroma Sa	inds (S11) (LRR K,	L)	Polyvalue Be	low Surface (S8) (LRR K, L)
Stratified I	Layers (A5)	_	Loamy Mucky M	ineral (F1	1) (LRR K,	L)	Thin Dark Su	rface (S9) (LRR K, L)
Depleted	Below Dark Surface (A1	1)	Loamy Gleyed M	latrix (F2)		Iron-Mangane	ese Masses (F12) (LRR K, L, R)
Thick Dar	k Surface (A12)	_	Depleted Matrix	(F3)			Piedmont Flo	odplain Soils (F19) (MLRA 149B)
Sandy Mu	ıcky Mineral (S1)	_	Redox Dark Surf	face (F6)			Mesic Spodio	(TA6) (MLRA 144A, 145, 149B)
Sandy Gle	eyed Matrix (S4)	_	Depleted Dark S	Surface (F	7)		Red Parent M	
Sandy Re	dox (S5)	_	Redox Depression					Dark Surface (F22)
* *	Matrix (S6)	_	Marl (F10) (LRR	K , L)			Other (Explai	n in Remarks)
Dark Surfa	ace (S7)							
³ Indicators of	hydrophytic vegetation	on and wetl	and hydrology mu	ıst be pr	esent, un	less dist	urbed or problematic.	
Restrictive L	ayer (if observed):							
Type: _								
Depth (in	ches):						Hydric Soil Present?	Yes X No
Remarks:								

Project/Site: Pine County Solar	City/County: Pine Sampling Date: 09/14/2022						
Applicant/Owner: Swift Current Energy	State: Min Sampling Point: W10-1u						
Investigator(s): AH, BB	Section, Township, Range: T044N, R020W, S23						
- 11	relief (concave, convex, none): Linear Slope %: 3						
Subregion (LRR or MLRA): LRR K, MLRA 90A Lat: 46.288164	Long: -92.835231 Datum: WGS84						
Soil Map Unit Name: Denied Access	NWI classification:						
Are climatic / hydrologic conditions on the site typical for this time of year?	Yes No _X (If no, explain in Remarks.)						
Are Vegetation X, Soil , or Hydrology significantly distr							
Are Vegetation , Soil , or Hydrology naturally problem	natic? (If needed, explain any answers in Remarks.)						
SUMMARY OF FINDINGS – Attach site map showing sampling po	oint locations, transects, important features, etc.						
Lhudrashutia Variatian Presenta	In the Complet Area						
Hydrophytic Vegetation Present? Yes No X Hydric Soil Present? Yes X No	Is the Sampled Area within a Wetland? Yes No X						
Wetland Hydrology Present? Yes No X	If yes, optional Wetland Site ID: W10						
	ii yes, optional wetiand Site ib						
Remarks: (Explain alternative procedures here or in a separate report.) Drier than normal conditions, ditched/tiled at field							
Silor than normal containers, alteriographic at nois							
HYDROLOGY							
Wetland Hydrology Indicators:	Secondary Indicators (minimum of two required)						
Primary Indicators (minimum of one is required; check all that apply)	Surface Soil Cracks (B6)						
Surface Water (A1) Water-Stained Leaves (B9)	Drainage Patterns (B10)						
High Water Table (A2) Aquatic Fauna (B13)	Moss Trim Lines (B16)						
Saturation (A3) Marl Deposits (B15)	Dry-Season Water Table (C2)						
Water Marks (B1) Hydrogen Sulfide Odor (C1)	Crayfish Burrows (C8)						
Sediment Deposits (B2) Oxidized Rhizospheres on Li	— · · · · · · · · · · · · · · · · ·						
Drift Deposits (B3) Presence of Reduced Iron (C							
Algal Mat or Crust (B4) Recent Iron Reduction in Tille							
Iron Deposits (B5) Thin Muck Surface (C7)	Shallow Aquitard (D3)						
Inundation Visible on Aerial Imagery (B7) Other (Explain in Remarks)	Microtopographic Relief (D4)						
Sparsely Vegetated Concave Surface (B8)	FAC-Neutral Test (D5)						
Field Observations:							
Surface Water Present Yes No _X Depth (inches):						
Water Table Present Yes No X Depth (inches							
Saturation Present Yes No X Depth (inches							
(includes capillary fringe)	´——						
Describe Recorded Data (stream gauge, monitoring well, aerial photos, pre	evious inspections), if available:						
Remarks:							

Tree Stratum (Plot size: 30 ft)	Absolute % Cover	Dominant Species	Indicator Status	Dominance Test worksheet:
1				Number of Dominant Species That Are OBL, FACW, or FAC:(A)
3				Total Number of Dominant Species Across All Strata:1 (B)
5				Percent of Dominant Species That Are OBL, FACW, or FAC:0 (A/B)
				Prevalence Index worksheet:
	0	_ = Total Cover		Total % Cover of: Multiply by:
Sapling/Shrub Stratum (Plot size: 15 ft)				OBL species x 1 =
1				FACW species x 2 =
2				
3				
4				FACU species x 4 =
5				UPL species x 5 =
6.			_	Column Totals: (A)(B)
7.				Prevalence Index = B/A =
				Hydrophytic Vegetation Indicators:
_,	0	= Total Cover		- 1 - Rapid Test for Hydrophytic Vegetation
Herb Stratum (Plot size: 5 ft)				- 2 - Dominance Test is >50%
1. Glycine max	80	Yes	UPL	I
2				3 - Prevalence Index is ≤3.0¹
3.				4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet)
4	<u> </u>			
5				Problematic Hydrophytic Vegetation ¹ (Explain)
6				¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
7				asta see of problemate.
8.				Definitions of Vegetation Strata:
9.				
10.				Tree – Woody plants 3 in. (7.6 cm) or more in
11.				diameter at breast height (DBH), regardless of height.
12.				Sapling/shrub – Woody plants less than 3 in. DBH
12.	· 			and greater than or equal to 3.28 ft (1 m) tall.
Woody Vine Stratum (Plot size: 30 ft)	80	= Total Cover		Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.
1				Woody vines – All woody vines greater than 3.28 ft in
2				height.
3				
4				Hydrophytic
	0			Vegetation
	0	= Total Cover		Present? Yes No X
Remarks: (Include photo numbers here or on a sepa	arate sheet.)			

W10-1u

Sampling Point:

SOIL Sampling Point: W10-1u

Profile Desc Depth	ription: (Describe to Matrix	the dep		ment the x Feature		or or co	onfirm the absence of indicators.)
(inches)	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²	Texture Remarks
0-13	10YR 2/1	100					Peat
12.24	10VP 2/4	100	_				Post
13-24	10YR 3/4	100					Peat
-							
¹ Type: C=Co	oncentration, D=Depl	etion, RM	=Reduced Matrix, N	/IS=Mas	ked Sand	d Grains.	s. ² Location: PL=Pore Lining, M=Matrix.
Hydric Soil I	Indicators:						Indicators for Problematic Hydric Soils ³ :
X Histosol ((A1)		Polyvalue Below	Surface	(S8) (LRR	R,	2 cm Muck (A10) (LRR K, L, MLRA 149B)
	ipedon (A2)		MLRA 149B)				Coast Prairie Redox (A16) (LRR K, L, R)
Black His			Thin Dark Surface				
	n Sulfide (A4)		High Chroma Sa				Polyvalue Below Surface (S8) (LRR K, L)
	Layers (A5)	44	Loamy Mucky M			L)	Thin Dark Surface (S9) (LRR K, L)
	Below Dark Surface (A1	11)	Loamy Gleyed M)		Iron-Manganese Masses (F12) (LRR K, L, R)
	rk Surface (A12) ucky Mineral (S1)		Depleted Matrix Redox Dark Surl				Piedmont Floodplain Soils (F19) (MLRA 149B)Mesic Spodic (TA6) (MLRA 144A, 145, 149B)
	leyed Matrix (S4)		Depleted Dark S		7)		Red Parent Material (F21)
Sandy Re			Redox Depression	,	.,		Very Shallow Dark Surface (F22)
	Matrix (S6)		Marl (F10) (LRR	. ,			Other (Explain in Remarks)
Dark Surf							
3Indicators of	hvdrophytic vegetati	on and we	etland hydrology mu	ıst be pr	esent. un	less dist	sturbed or problematic.
	_ayer (if observed):		onana nyarotogy mo				T
Type:	Layer (ii observeu).						
Depth (ir	ochoc):						Hydric Soil Present? Yes X No
							nyuric Soil Fresent? Tes No
Remarks:							

Project/Site: Pine County Solar	City/County: Pine Sampling Date: 09/14/2022					
Applicant/Owner: Swift Current Energy	State: Min Sampling Point: W10-1w					
Investigator(s): AH, BB	Section, Township, Range: T044N, R020W, S23					
	relief (concave, convex, none): Concave Slope %: 2					
Subregion (LRR or MLRA): LRR K, MLRA 90A Lat: 46.28814	Long: -92.834963 Datum: WGS84					
Soil Map Unit Name: Denied Access	NWI classification:					
Are climatic / hydrologic conditions on the site typical for this time of year?						
Are Vegetation X, Soil , or Hydrology significantly dist						
Are Vegetation , Soil , or Hydrology naturally proble	ematic? (If needed, explain any answers in Remarks.)					
SUMMARY OF FINDINGS – Attach site map showing sampling p	point locations, transects, important features, etc.					
Lhudrashutia Variation Present?	In the Complet Area					
Hydrophytic Vegetation Present? Yes No X Hydric Soil Present? Yes X No	Is the Sampled Area within a Wetland? Yes X No					
Wetland Hydrology Present? Yes X No	If yes, optional Wetland Site ID: W10					
	ii yes, optional wetland Site ID					
Remarks: (Explain alternative procedures here or in a separate report.) Drier than normal conditions, ditched/tiled ag field						
Die than normal containens, anonea, mea ag neid						
HYDROLOGY						
Wetland Hydrology Indicators:	Secondary Indicators (minimum of two required)					
Primary Indicators (minimum of one is required; check all that apply)	Surface Soil Cracks (B6)					
Surface Water (A1) Water-Stained Leaves (B9)	Drainage Patterns (B10)					
High Water Table (A2) Aquatic Fauna (B13)	Moss Trim Lines (B16)					
Saturation (A3) Marl Deposits (B15)	Dry-Season Water Table (C2)					
Water Marks (B1) Hydrogen Sulfide Odor (C1)	Crayfish Burrows (C8)					
Sediment Deposits (B2) Oxidized Rhizospheres on L	Living Roots (C3) X Saturation Visible on Aerial Imagery (C9)					
Drift Deposits (B3) Presence of Reduced Iron ((C4) Stunted or Stressed Plants (D1)					
X Algal Mat or Crust (B4) Recent Iron Reduction in Til	illed Soils (C6) Geomorphic Position (D2)					
Iron Deposits (B5) Thin Muck Surface (C7)	Shallow Aquitard (D3)					
Inundation Visible on Aerial Imagery (B7) Other (Explain in Remarks)	Microtopographic Relief (D4)					
Sparsely Vegetated Concave Surface (B8)	FAC-Neutral Test (D5)					
Field Observations:						
Surface Water Present Yes No _X Depth (inches	s):					
Water Table Present Yes No X Depth (inches	s):					
Saturation Present Yes No X Depth (inches	S): Wetland Hydrology Present? Yes X No					
(includes capillary fringe)						
Describe Recorded Data (stream gauge, monitoring well, aerial photos, pr	revious inspections), if available:					
Remarks:						

	Absolute	Dominant	Indicator	
ree Stratum (Plot size: 30 ft)	% Cover	<u>Species</u>	Status	Dominance Test worksheet:
		·		Number of Deminant Species
·				Number of Dominant Species That Are OBL, FACW, or FAC: 0 (A)
				Total Number of Dominant Species Across All Strata: 1 (B)
				opedes Across All Strata.
				Percent of Dominant Species
·				That Are OBL, FACW, or FAC: 0 (A/B)
				Prevalence Index worksheet:
45.60	0	_ = Total Cover		Total % Cover of: Multiply by:
apling/Shrub Stratum (Plot size: 15 ft)				OBL species x 1 =
·				FACW species x 2 =
				FAC species x 3 =
·				FACU species x 4 =
				UPL species x 5 =
·				Column Totals: (A) (B)
	<u> </u>			Prevalence Index = B/A =
·				
	0	= Total Cover		Hydrophytic Vegetation Indicators:
erb Stratum (Plot size:5 ft)		- Total Cover		1 - Rapid Test for Hydrophytic Vegetation
Glycine max	30	Yes	UPL	2 - Dominance Test is >50%
				3 - Prevalence Index is ≤3.0¹
				4 - Morphological Adaptations ¹
				(Provide supporting data in Remarks or on a separate sheet)
·				Problematic Hydrophytic Vegetation ¹ (Explain)
				¹ Indicators of hydric soil and wetland hydrology must be present, unless
				disturbed or problematic.
				Definitions of Vegetation Strata:
				Definitions of Vegetation Strata.
·				Tree – Woody plants 3 in. (7.6 cm) or more in
1.				diameter at breast height (DBH), regardless of height.
2.				Sapling/shrub - Woody plants less than 3 in. DBH
<u> </u>				and greater than or equal to 3.28 ft (1 m) tall.
	30	= Total Cover		Herb – All herbaceous (non-woody) plants, regardless
Voody Vine Stratum (Plot size: 30 ft)				of size, and woody plants less than 3.28 ft tall.
·				Woody vines – All woody vines greater than 3.28 ft in
				height.
·				
				Hydrophytic
·		= Total Cover		Vegetation Present? Yes No X
	0			

SOIL Sampling Point: W10-1w

	ription: (Describe to	the dept		ment the x Featur		or or co	nfirm the abso	ence of indicat	tors.)	
Depth (inches)	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²	Texture		Remarks	
0-12	10YR 2/1	100	Color (molet)		1,700		Peat		rtomano	
-		100					Peat			
12-24	10YR 3/2	100					Peat			
							'			
							-			
	-									
1Tyrnay C. Ca	anapatrotion D. Donl	otion DM	Doduced Metrix I	MC Mas	lead Cone	Croine	21 apption	n. Dl. Doro Lini	ing M Matrix	
	oncentration, D=Depl	etion, Rivi	=Reduced Matrix, i	VIS=IVIAS	ked Sand	d Grains.		n: PL=Pore Lini		
Hydric Soil II									olematic Hydric S	
X Histosol (A		•	Polyvalue Below	v Surface	(S8) (LRR	R,			(LRR K, L, MLRA	•
	pedon (A2)		MLRA 149B)	(00) (1	DD D 141	D 4 4 40 D			dox (A16) (LRR K, L	
Black Hist		,	Thin Dark Surfa						t or Peat (S3) (LRR	
	Sulfide (A4) Layers (A5)		High Chroma Sa Loamy Mucky M					-	Surface (S8) (LRR te (S9) (LRR K, L)	K, L)
	Layers (A5) Below Dark Surface (A1		Loamy Gleyed N			L)			Masses (F12) (LRR	KIR)
	k Surface (A12)		Depleted Matrix		,		·		olain Soils (F19) (ML	
	ucky Mineral (S1)	•	Redox Dark Sur						A6) (MLRA 144A, 14	
	eyed Matrix (S4)	•	Depleted Dark S		7)			Red Parent Mate		. ,
Sandy Re	edox (S5)	,	Redox Depressi	ions (F8)				Very Shallow Da	rk Surface (F22)	
Stripped N	Matrix (S6)		Marl (F10) (LRR	₹ K, L)				Other (Explain in	Remarks)	
Dark Surfa	ace (S7)									
³ Indicators of	hydrophytic vegetati	on and we	etland hydrology mu	ust be pr	esent, un	less dist	urbed or proble	ematic.		
	ayer (if observed):			· ·	•		· ·			
Type:	, (0.000. 100.).									
Depth (in	iches).						Hydric Soi	I Present?	Yes X	No
							1 Tryuno doi			
Remarks:										

Project/Site: Pine County Solar	City/County: Pine Sampling Date: 09/14/2022						
Applicant/Owner: Swift Current Energy	State: Min Sampling Point: W11-1u						
Investigator(s): KKM MB	Section, Township, Range: T044N, R020W, S23						
	relief (concave, convex, none): Linear Slope %: 1						
Subregion (LRR or MLRA): LRR K, MLRA 90A Lat: 46.282857	Long: -92.843577 Datum: WGS84						
Soil Map Unit Name: Denied Access	NWI classification:						
•							
Are climatic / hydrologic conditions on the site typical for this time of year?	Yes No X (If no, explain in Remarks.)						
Are Vegetation X, Soil , or Hydrology significantly dist							
Are Vegetation , Soil , or Hydrology naturally proble	matic? (If needed, explain any answers in Remarks.)						
SUMMARY OF FINDINGS – Attach site map showing sampling p	point locations, transects, important features, etc.						
Hydrophytic Vegetation Present? Yes No X	Is the Sampled Area						
Hydric Soil Present? Yes No X	within a Wetland? Yes No X						
Wetland Hydrology Present? Yes No X	If yes, optional Wetland Site ID: W11						
Remarks: (Explain alternative procedures here or in a separate report.)							
Farmed soybean field with ditches. Precip. Drier than normal.							
LIVERGLOOV							
HYDROLOGY							
Wetland Hydrology Indicators:	Secondary Indicators (minimum of two required)						
Primary Indicators (minimum of one is required; check all that apply)	Surface Soil Cracks (B6)						
Surface Water (A1) Water-Stained Leaves (B9)							
High Water Table (A2) Aquatic Fauna (B13)	Moss Trim Lines (B16)						
Saturation (A3) Marl Deposits (B15)	Dry-Season Water Table (C2)						
Water Marks (B1) Hydrogen Sulfide Odor (C1)							
Sediment Deposits (B2) Oxidized Rhizospheres on L							
Presence of Reduced Iron (
Algal Mat or Crust (B4) Recent Iron Reduction in Til							
Iron Deposits (B5) — Thin Muck Surface (C7)	Shallow Aquitard (D3)						
Inundation Visible on Aerial Imagery (B7) Other (Explain in Remarks)	Microtopographic Relief (D4)						
Sparsely Vegetated Concave Surface (B8)	FAC-Neutral Test (D5)						
Field Observations:							
Surface Water Present Yes No X Depth (inches	s):						
Water Table Present Yes No X Depth (inches							
Saturation Present Yes No X Depth (inches	S): Wetland Hydrology Present? Yes No _X						
(includes capillary fringe)							
Describe Recorded Data (stream gauge, monitoring well, aerial photos, pr	revious inspections), if available:						
Remarks:							

Tree Stratum (Plot size: 30 ft)	Absolute % Cover	Dominant Species	Indicator Status	Dominance Test worksheet:
1				Number of Dominant Species That Are OBL, FACW, or FAC:(A)
3 4 5.				Total Number of Dominant Species Across All Strata:(B)
6				Percent of Dominant Species That Are OBL, FACW, or FAC: (A/B)
				Prevalence Index worksheet:
	0	_ = Total Cover		Total % Cover of: Multiply by:
Sapling/Shrub Stratum (Plot size: 15 ft)				OBL species 0 x 1 = 0
1				FACW species 0 x 2 = 0
2				FAC species 2 x 3 = 6
3				FACU species 30 x 4 = 120
4				UPL species 50 x 5 = 250
5				
6				Column Totals: 82 (A) 376 (B)
7				T Tevalence Index = D/A =
	0	T		Hydrophytic Vegetation Indicators:
Harly Christian (District 5 ft)		= Total Cover		1 - Rapid Test for Hydrophytic Vegetation
Herb Stratum (Plot size: 5 ft)	FO	Yes	UPL	2 - Dominance Test is >50%
1. Glycine max	50			3 - Prevalence Index is ≤3.0¹
2. Fallopia convolvulus	15	No No	FACU	4 - Morphological Adaptations ¹
3. Ambrosia artemisiifolia			FACU	(Provide supporting data in Remarks or on a separate sheet)
4. Taraxacum officinale	5		,	Problematic Hydrophytic Vegetation ¹ (Explain)
5. Panicum capillare	2	No	FAC	Indicators of hydric soil and wetland hydrology must be present, unless
6.				disturbed or problematic.
7				
8				Definitions of Vegetation Strata:
9				Tree – Woody plants 3 in. (7.6 cm) or more in
10				diameter at breast height (DBH), regardless of height.
11				Sanling/abrub Woody plants loss than 2 in DPH
12				Sapling/shrub – Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.
	82	= Total Cover		
Woody Vine Stratum (Plot size: 30 ft)		= Total Cover		Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.
1				of size, and woody plants less than 3.20 it tail.
			_	Woody vines – All woody vines greater than 3.28 ft in
3			_	height.
				Hydrophytic
4				Vegetation
	0	= Total Cover		Present?
Remarks: (Include photo numbers here or on a separ	ate sheet)			1
Stunted, very short, yellowing soybeans. Poor cover and it		ntermixed.		

Sampling Point:

W11-1u

SOIL Sampling Point: W11-1u

Profile Desc Depth	ription: ([Describe to Matrix	the dep		ment the		or or co	confirm the absence of indicators.)				
(inches)	Color	(moist)	%	Color (moist)	%	Type ¹	Loc ²	Texture Remarks				
0 to 4		2/1	100					Peat				
4 to 20	10YR	4/2	100					Sand				
20 to 24	7.5YR	3/4	100					Sand				
20 10 24	7.51K	3/4	100					Saliu				
								<u></u>				
								· 				
								· 				
						. —		2				
'Type: C=Co	oncentration	on, D=Depl	etion, RN	=Reduced Matrix, N	1S=Mas	ked Sand	Grains.	s. ² Location: PL=Pore Lining, M=Matrix.				
Hydric Soil I	Indicators	3 :						Indicators for Problematic Hydric Soils ³ :				
Histosol (Polyvalue Below	Surface	(S8) (LRR	R,	2 cm Muck (A10) (LRR K, L, MLRA 149B)				
Black His	ipedon (A2)			MLRA 149B) Thin Dark Surface	o (SO) (I	DDD MI	D A 1/0B	Coast Prairie Redox (A16) (LRR K, L, R) B) 5 cm Mucky Peat or Peat (S3) (LRR K, L, R)				
	n Sulfide (A	4)		High Chroma Sa				Polyvalue Below Surface (S8) (LRR K, L)				
	Layers (A5)	•		Loamy Mucky M								
		· < Surface (A1	l1)	Loamy Gleyed N			•	Iron-Manganese Masses (F12) (LRR K, L, R)				
Thick Dar	rk Surface (A12)		Depleted Matrix	(F3)			Piedmont Floodplain Soils (F19) (MLRA 149B)				
	ucky Minera			Redox Dark Surf	ace (F6)			Mesic Spodic (TA6) (MLRA 144A, 145, 149B)				
	leyed Matrix	(S4)		Depleted Dark S		7)		Red Parent Material (F21)				
	edox (S5)			Redox Depression	, ,			<pre> Very Shallow Dark Surface (F22) Other (Explain in Remarks)</pre>				
Suipped i	Matrix (S6)			Marl (F10) (LRR	K, L)			Other (Explain in Remarks)				
			on and w	etland hydrology mu	st be pr	esent, un	less dist	sturbed or problematic.				
Restrictive L	Layer (if o	bserved):										
Type:								\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \				
Depth (ir	nches): _							Hydric Soil Present? Yes No _X				
Remarks:												

Project/Site: Pine County Solar	City/County: Pine Sampling Date: 09/14/2022						
Applicant/Owner: Swift Current Energy	State: Min Sampling Point: W11-1w						
Investigator(s): KKM, MB	Section, Township, Range: T044N, R020W, S23						
	relief (concave, convex, none): Concave Slope %: 1						
Subregion (LRR or MLRA): LRR K, MLRA 90A Lat: 46.282833	Long: -92.843862 Datum: WGS84						
	NWI classification:						
Soil Map Unit Name: Denied Access							
Are climatic / hydrologic conditions on the site typical for this time of year?	Yes No _X (If no, explain in Remarks.)						
Are Vegetation X, Soil , or Hydrology significantly dist							
Are Vegetation , Soil , or Hydrology naturally problem	matic? (If needed, explain any answers in Remarks.)						
SUMMARY OF FINDINGS – Attach site map showing sampling p	oint locations, transects, important features, etc.						
Hydrophytic Vegetation Present? Yes No X	Is the Sampled Area						
Hydric Soil Present? Hydric Soil Present? Yes No X Yes X No	within a Wetland? Yes X No						
Wetland Hydrology Present? Yes X No	If yes, optional Wetland Site ID: W11						
Remarks: (Explain alternative procedures here or in a separate report.)	ii yoo, optional vvoitand one ib.						
Farmed soybean field with ditches. Precip. Drier than normal.							
HYDROLOGY							
Wetland Hydrology Indicators:	Secondary Indicators (minimum of two required)						
Primary Indicators (minimum of one is required; check all that apply)	Surface Soil Cracks (B6)						
Surface Water (A1) Water-Stained Leaves (B9)	Drainage Patterns (B10)						
High Water Table (A2) Aquatic Fauna (B13)	Moss Trim Lines (B16)						
Saturation (A3) Marl Deposits (B15)	Dry-Season Water Table (C2)						
Water Marks (B1) Hydrogen Sulfide Odor (C1)	Crayfish Burrows (C8)						
Sediment Deposits (B2) Oxidized Rhizospheres on L	iving Roots (C3) X Saturation Visible on Aerial Imagery (C9)						
Drift Deposits (B3) Presence of Reduced Iron (C	C4) Stunted or Stressed Plants (D1)						
Algal Mat or Crust (B4) Recent Iron Reduction in Till							
Iron Deposits (B5) Thin Muck Surface (C7)	Shallow Aquitard (D3)						
Inundation Visible on Aerial Imagery (B7) Other (Explain in Remarks)	X Microtopographic Relief (D4)						
Sparsely Vegetated Concave Surface (B8)	FAC-Neutral Test (D5)						
Field Observations:							
Surface Water Present Yes No X Depth (inches	s):						
Water Table Present Yes No X Depth (inches							
Saturation Present Yes No X Depth (inches							
(includes capillary fringe)							
Describe Recorded Data (stream gauge, monitoring well, aerial photos, pr	evious inspections), if available:						
Remarks:							

<u>Tree Stratum</u> (Plot size: <u>30 ft</u>)	Absolute % Cover	Dominant Species	Indicator Status	Dominance Test worksheet:
1 2				Number of Dominant Species That Are OBL, FACW, or FAC:0(A)
3				Total Number of Dominant Species Across All Strata:1 (B)
5				Percent of Dominant Species That Are OBL, FACW, or FAC:0(A/B)
7				Prevalence Index worksheet:
	0	= Total Cover		Total % Cover of: Multiply by:
Sapling/Shrub Stratum (Plot size: 15 ft)				OBL species 0 x 1 = 0
1				FACW species 0 x 2 = 0
2				FAC species 0 x 3 = 0
3				FACU species 0 x 4 = 0
4				UPL species 95 x 5 = 475
5				
6				`````
7				Frevalence index = B/A =
	0	= Total Cover		Hydrophytic Vegetation Indicators:
Herb Stratum (Plot size:5 ft)		- 10tal 00vci		_ 1 - Rapid Test for Hydrophytic Vegetation
1. Glycine max	95	Yes	UPL	2 - Dominance Test is >50%
2.				3 - Prevalence Index is ≤3.0¹
3.				4 - Morphological Adaptations ¹
4.				(Provide supporting data in Remarks or on a separate sheet)
5				X Problematic Hydrophytic Vegetation ¹ (Explain)
6.				¹Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
7.				distance of problematic.
8.				Definitions of Vegetation Strata:
9.				
10.				Tree – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.
11				diameter at breast neight (DDH), regardless of height.
12				Sapling/shrub – Woody plants less than 3 in. DBH
	95			and greater than or equal to 3.28 ft (1 m) tall.
Woody Vine Stratum (Plot size: 30 ft)		= Total Cover		Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.
1				Woody vines – All woody vines greater than 3.28 ft in
2				height.
3				
4				Hydrophytic
	0	= Total Cover		Vegetation Present? Yes NoX
				1
Remarks: (Include photo numbers here or on a sepa	rate sheet.)			

Sampling Point:

W11-1w

SOIL Sampling Point: W11-1w

	ription: ([the dep	th needed to docu			or or co	nfirm th	e absence o	f indicator	s.)		
Depth (inches)	Color	Matrix (moist)	%	Color (moist)	x Featur	es Type¹	Loc ²	т.	exture		Remarks		
				Color (moist)		Туре			exture		Remark	·	
0 to 4		2/1	100					Peat					
4 to 12	7.5YR	2.5/2	100					Peat		Fibrous			
12 to 24	10YR	2/2	100					Peat					
				_									
¹Type: C=Co	oncentratio	on, D=Deple	etion, RM	=Reduced Matrix, N	MS=Mas	ked Sand	Grains	² L	ocation: PL=F	ore Lining	, M=Matrix.		
Hydric Soil I	ndicators	:							Indicators	for Proble	matic Hydric	Soils ³ :	
X Histosol (A	A1)			Polyvalue Below	v Surface	(S8) (LRR	R,		2 cm M	uck (A10) (L	RR K, L, MLRA	149B)	
	pedon (A2)			MLRA 149B)					Coast F	rairie Redox	(A16) (LRR K ,	L, R)	
Black Hist					_ Thin Dark Surface (S9) (LRR R, MLRA 149B)								
	Sulfide (A4	-			ma Sands (S11) (LRR K, L) Polyvalue Below Surface (S8) (LRR K, I						! K , L)		
	Layers (A5)		4)	Loamy Mucky M			L)			•	S9) (LRR K, L)	DK L D)	
	веюw Dark k Surface (/	Surface (A1	1)	Loamy Gleyed Moderix			Iron-Manganese Masses (F12) (LRR K, L, R) Piedmont Floodplain Soils (F19) (MLRA 149B)						
	ıcky Minera	•		Redox Dark Sur							(MLRA 144A, 1		
	eyed Matrix			Depleted Dark S		7)				rent Material		40, 1402)	
Sandy Re	-	(- /		Redox Depressi		,					Surface (F22)		
Stripped N	Matrix (S6)			Marl (F10) (LRR	R K, L)				Other (I	Explain in Re	emarks)		
Dark Surfa	ace (S7)												
³ Indicators of	hydrophy	tic vegetation	on and we	etland hydrology mu	ust be pr	esent, un	less dis	turbed or	problematic.				
Restrictive L				, 0,	· ·	<u> </u>			<u>·</u>				
Type:		•											
Depth (in	ches):							Hydr	ric Soil Prese	ent?	Yes X	No	
Remarks:				-				<u> </u>					

Project/Site: Pine County Solar	City/County: Pine Sampling Date: 09/15/2022						
Applicant/Owner: Swift Current Energy	State: Min Sampling Point: W12-1u						
Investigator(s): Jwf	Section, Township, Range: T044N, R020W, S14						
	relief (concave, convex, none): Convex Slope %: 1						
Subregion (LRR or MLRA): LRR K, MLRA 90A Lat: 46.299694	Long: -92.841226 Datum: WGS84						
Soil Map Unit Name: Denied Access	NWI classification: NA						
Are climatic / hydrologic conditions on the site typical for this time of year?	Yes No _X (If no, explain in Remarks.)						
Are Vegetation X, Soil , or Hydrology significantly dist							
Are Vegetation , Soil , or Hydrology naturally problem	matic? (If needed, explain any answers in Remarks.)						
SUMMARY OF FINDINGS – Attach site map showing sampling p	oint locations, transects, important features, etc.						
Hydrophytic Vegetation Present? Yes No X	In the Compled Area						
Hydrophytic Vegetation Present? Yes No X Hydric Soil Present? Yes X No	Is the Sampled Area within a Wetland? Yes No X						
Wetland Hydrology Present? Yes No X	If yes, optional Wetland Site ID: W12						
Remarks: (Explain alternative procedures here or in a separate report.)	il you, optional violatid one ib.						
Drier than normal conditions							
2.10. 11.0.1.10.10.10.10.10							
HYDROLOGY							
Wetland Hydrology Indicators:	Secondary Indicators (minimum of two required)						
Primary Indicators (minimum of one is required; check all that apply)	Surface Soil Cracks (B6)						
Surface Water (A1) Water-Stained Leaves (B9)	Drainage Patterns (B10)						
High Water Table (A2) Aquatic Fauna (B13)	Moss Trim Lines (B16)						
Saturation (A3) Marl Deposits (B15)	Dry-Season Water Table (C2)						
Water Marks (B1) Hydrogen Sulfide Odor (C1)							
Sediment Deposits (B2) Oxidized Rhizospheres on L							
Drift Deposits (B3) Presence of Reduced Iron (C							
Algal Mat or Crust (B4) Recent Iron Reduction in Till							
Iron Deposits (B5) Thin Muck Surface (C7)	Shallow Aquitard (D3)						
Inundation Visible on Aerial Imagery (B7) Other (Explain in Remarks)	Microtopographic Relief (D4)						
Sparsely Vegetated Concave Surface (B8)	FAC-Neutral Test (D5)						
Field Observations:							
Surface Water Present Yes No X Depth (inches	s):						
Water Table Present Yes No X Depth (inches							
Saturation Present Yes No X Depth (inches							
(includes capillary fringe)	, <u> </u>						
Describe Recorded Data (stream gauge, monitoring well, aerial photos, pro	evious inspections), if available:						
Remarks:							
Soils dry throughout							

Tree Stratum (Plot size: 30 ft)	Absolute <u>% Cover</u>	Dominant Species	Indicator 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: 1 (B)
5				Percent of Dominant Species That Are OBL, FACW, or FAC: 0 (A/B)
7				Prevalence Index worksheet:
	0	_ = Total Cover		Total % Cover of: Multiply by:
Sapling/Shrub Stratum (Plot size: 15 ft)				OBL species x 1 =
1				FACW species x 2 =
2				
3				FAC species x 3 =
4.				FACU species x 4 =
5.				UPL species x 5 =
				Column Totals: (A) (B)
				Prevalence Index = B/A =
7		·		Hydrophytic Vegetation Indicators:
	0	= Total Cover		- 1 - Rapid Test for Hydrophytic Vegetation
Herb Stratum (Plot size:5 ft)				- 2 - Dominance Test is >50%
1. Glycine max	80	Yes	UPL	
2		·		3 - Prevalence Index is ≤3.0¹
3.				4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet)
4				(Flovide supporting data in Remarks of on a separate sheet)
5.				Problematic Hydrophytic Vegetation ¹ (Explain)
				¹Indicators of hydric soil and wetland hydrology must be present, unless
-				disturbed or problematic.
7				
8		 -		Definitions of Vegetation Strata:
9				Tree – Woody plants 3 in. (7.6 cm) or more in
10				diameter at breast height (DBH), regardless of height.
11				.
12				Sapling/shrub – Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.
	80			and greater than or equal to 3.20 ft (1 m) tall.
Woody Vine Stratum (Plot size: 30 ft)		= Total Cover		Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.
1				W • • • • • • • • • • • • • • • • • • •
2				Woody vines – All woody vines greater than 3.28 ft in height.
3.			_	noight.
4.				Hydrophytic
				Vegetation
	0	= Total Cover		Present? Yes No X
Remarks: (Include photo numbers here or on a sepa	rate sheet.)			

Sampling Point:

W12-1u

SOIL Sampling Point: W12-1u

Depth	Matrix			x Feature			_		
inches)	Color (moist)	<u>%</u>	Color (moist)	%	Type ¹ Lo	C ²	Texture	Remarks	
0-26	7.5R 3/3	100					Peaty Muck	Solid dry throughout	
						—			
Гуре: С=С	oncentration, D=Depl	etion, RM=	Reduced Matrix, N	/IS=Mas	ked Sand Gra	ains.	² Location: PL=F	Pore Lining, M=Matrix.	
ydric Soil I	ndicators:						Indicators	for Problematic Hydric Soi	ils³:
X Histosol (A1)	_	Polyvalue Below	Surface	(S8) (LRR R ,		2 cm M	luck (A10) (LRR K, L, MLRA 149	9B)
	pedon (A2)		MLRA 149B)					Prairie Redox (A16) (LRR K, L, R	
Black Hist	tic (A3)	_	Thin Dark Surface	ce (S9) (L	RR R, MLRA 1	49B)	5 cm M	ucky Peat or Peat (S3) (LRR K,	L, R)
Hydrogen	Sulfide (A4)	_	High Chroma Sa	ınds (S11) (LRR K, L)		Polyval	ue Below Surface (S8) (LRR K,	L)
Stratified	Layers (A5)	_	Loamy Mucky M	ineral (F1) (LRR K, L)		Thin Da	ark Surface (S9) (LRR K, L)	
Depleted	Below Dark Surface (A1	l1) <u> </u>	Loamy Gleyed M	/latrix (F2))		Iron-Ma	anganese Masses (F12) (LRR K ,	L, R)
Thick Dar	k Surface (A12)	_	Depleted Matrix	(F3)			Piedmo	ont Floodplain Soils (F19) (MLRA	149B
Sandy Mu	ucky Mineral (S1)	_	Redox Dark Surf	iace (F6)			Mesic S	Spodic (TA6) (MLRA 144A, 145,	149B)
Sandy Gle	eyed Matrix (S4)	_	Depleted Dark S	urface (F	7)		Red Pa	rent Material (F21)	
Sandy Re	edox (S5)	_	Redox Depression	ons (F8)			Very Sh	nallow Dark Surface (F22)	
Stripped N	Matrix (S6)	_	Marl (F10) (LRR	K, L)			Other (I	Explain in Remarks)	
Dark Surf	ace (S7)								
ndicators of	hydrophytic vegetati	on and wet	tland hydrology mu	ıst be pro	esent, unless	distu	urbed or problematic.		
estrictive L	ayer (if observed):								
Type:									
Depth (in	iches):						Hydric Soil Prese	ent? Yes ^X N	lo

Project/Site: Pine County Solar	City/County: Pine Sampling Date: 09/15/2022						
Applicant/Owner: Swift Current Energy	State: Min Sampling Point: W12-1w						
Investigator(s): Jwf	Section, Township, Range: T044N, R020W, S14						
Landform (hillside, terrace, etc.): Terrace Local re	relief (concave, convex, none): Linear Slope %: 1						
Subregion (LRR or MLRA): LRR K, MLRA 90A Lat: 46.299857	Long: -92.841403 Datum: WGS84						
Soil Map Unit Name: Denied Access	NWI classification: PM1B						
Are climatic / hydrologic conditions on the site typical for this time of year?	Yes No X (If no, explain in Remarks.)						
Are Vegetation X , Soil , or Hydrology significantly distu							
Are Vegetation, Soil, or Hydrology naturally problem	· · · · · · · · · · · · · · · · · · ·						
SUMMARY OF FINDINGS – Attach site map showing sampling po							
	·						
Hydrophytic Vegetation Present? Yes No X	Is the Sampled Area						
Hydric Soil Present? Yes X No	within a Wetland? Yes No X						
Wetland Hydrology Present? Yes X No	If yes, optional Wetland Site ID: W12						
Remarks: (Explain alternative procedures here or in a separate report.) Drier than normal condtions							
HYDROLOGY							
Wetland Hydrology Indicators:	Secondary Indicators (minimum of two required)						
Primary Indicators (minimum of one is required; check all that apply)	Surface Soil Cracks (B6)						
Surface Water (A1) Water-Stained Leaves (B9)	Drainage Patterns (B10)						
High Water Table (A2) Aquatic Fauna (B13)	Moss Trim Lines (B16)						
Saturation (A3) Marl Deposits (B15)	Dry-Season Water Table (C2)						
Water Marks (B1) Hydrogen Sulfide Odor (C1)	Crayfish Burrows (C8)						
Sediment Deposits (B2) Oxidized Rhizospheres on Liv	ving Roots (C3) X Saturation Visible on Aerial Imagery (C9)						
Drift Deposits (B3) Presence of Reduced Iron (C	Stunted or Stressed Plants (D1)						
X Algal Mat or Crust (B4) Recent Iron Reduction in Tille	ed Soils (C6) Geomorphic Position (D2)						
Iron Deposits (B5) Thin Muck Surface (C7)	Shallow Aquitard (D3)						
Inundation Visible on Aerial Imagery (B7) Other (Explain in Remarks)	Microtopographic Relief (D4)						
Sparsely Vegetated Concave Surface (B8)	FAC-Neutral Test (D5)						
Field Observations:							
Surface Water Present Yes No X Depth (inches)):						
Water Table Present Yes X No Depth (inches)): <u>36</u>						
Saturation Present Yes X No Depth (inches)): 25 Wetland Hydrology Present? Yes X No						
(includes capillary fringe)							
Describe Recorded Data (stream gauge, monitoring well, aerial photos, pre	evious inspections), if available:						
Remarks:							

Abcoluto	Dominant	Indicator		
Absolute % Cover	Dominant <u>Species</u>	Indicator Status	Dominance Test worksheet:	
			Number of Dominant Species That Are OBL FACW or FAC	: 0 (A)
			111017110 052, 171011, 011710	(//
			Total Number of Dominant	1 (D)
			Species Across Ali Strata.	1 (B)
			Percent of Dominant Species That Are OBL, FACW, or FAC	: 0 (A/E
0	= Total Cover		Total % Cover of:	Multiply by:
	_ = 10101 00101		OBL species	x 1 =
				x 2 =
			1	
				x 3 =
				x 4 =
				x 5 =
				(A)(E
			Prevalence Index = B/A	<u> </u>
0	-		Hydrophytic Vegetation Indi	cators:
-	= Total Cover		1 - Rapid Test for Hydroph	nytic Vegetation
75	Yes	UPL	2 - Dominance Test is >50	0%
			3 - Prevalence Index is ≤3	.0 ¹
			4 - Morphological Adaptat	ions ¹
			(Provide supporting data in Remar	ks or on a separate sheet)
		ODL	Problematic Hydrophytic \	/egetation1 (Explain)
				rology must be present, unles
			disturbed or problematic.	
			Definitions of Vegetation Str	ata:
			1	
86	= Total Cover		Harb All barbassaus (non un	and a planta regardles
				es greater than 3.28 ft
			g.m.	
			Hydrophytic	
0	= Total Cover		Vegetation Present? Yes	No X
	% Cover	% Cover Species 0 = Total Cover 75 Yes 5 No 4 No 2 No 86 = Total Cover	% Cover Species Status 0 = Total Cover 75 Yes UPL 5 No FAC 4 No OBL 2 No OBL 86 = Total Cover	Month Dominance Test worksheet:

SOIL Sampling Point: W12-1w

			ment the x Featur		or or co	onfirm the absence of indic	ators.)	
Depth (inches) Color (Matrix moist) %	Color (moist)	% realui	Type ¹	Loc ²	Texture	Remarks	
0-25 7.5YR 2		Color (molet)		1,700		Peaty Muck	romano	
	2.5/1 100					Peat		
								
¹Type: C=Concentration	n, D=Depletion, R	M=Reduced Matrix, I	MS=Mas	ked Sand	Grains.	² Location: PL=Pore Li	ining, M=Matrix.	
Hydric Soil Indicators:						Indicators for Pro	oblematic Hydric Soils³:	
X Histosol (A1)		Polyvalue Belov	v Surface	(S8) (LRR	R,	2 cm Muck (A1	0) (LRR K, L, MLRA 149B)	
Histic Epipedon (A2)		MLRA 149B)				Coast Prairie R	Redox (A16) (LRR K, L, R)	
Black Histic (A3)		Thin Dark Surfa				·	eat or Peat (S3) (LRR K, L, R)	
Hydrogen Sulfide (A4)			igh Chroma Sands (S11) (LRR K, L) Polyvalue Below Surface (S8) (L					
Stratified Layers (A5)		Loamy Mucky N			L)	Thin Dark Surface (S9) (LRR K, L)		
Depleted Below Dark		Loamy Gleyed N)		Iron-Manganese Masses (F12) (LRR K, L, R) Piedmont Floodplain Soils (F19) (MLRA 149B)		
Thick Dark Surface (A Sandy Mucky Mineral	•	Depleted Matrix Redox Dark Sur						
Sandy Mucky Milleral Sandy Gleyed Matrix (Depleted Dark S		7)		Red Parent Ma	TA6) (MLRA 144A, 145, 149B)	
Sandy Redox (S5)	(0.1)	Redox Depressi		.,		·	Dark Surface (F22)	
Stripped Matrix (S6)		Marl (F10) (LRF	. ,			Other (Explain		
Dark Surface (S7)								
³ Indicators of hydrophyti	c vegetation and	wetland hydrology mi	ust be pr	esent, un	less dist	turbed or problematic.		
Restrictive Layer (if ob		, , , , , , , , , , , , , , , , , , , ,						
Туре:	,							
Depth (inches):						Hydric Soil Present?	Yes X No	
Remarks:		<u> </u>						

Project/Site: Pine County Solar	City/County: Pine Sampling Date: 09/14/2022					
Applicant/Owner: Swift Current Energy	State: Min Sampling Point: W13-1u					
Investigator(s): KKM, MB	Section, Township, Range: T044N, R020W, S15					
	al relief (concave, convex, none): Convex Slope %: 2					
Subregion (LRR or MLRA): LRR K, MLRA 90A Lat: 46.297325	Long: -92.846405 Datum: WGS84					
Soil Map Unit Name: Denied Access	NWI classification:					
·						
Are climatic / hydrologic conditions on the site typical for this time of year?						
Are Vegetation X , Soil , or Hydrology significantly dis						
Are Vegetation, Soil, or Hydrology naturally proble	ematic? (If needed, explain any answers in Remarks.)					
SUMMARY OF FINDINGS – Attach site map showing sampling	point locations, transects, important features, etc.					
Hydrophytic Vegetation Present? Yes No X	Is the Sampled Area					
Hydric Soil Present? Yes No X	within a Wetland? Yes No X					
Wetland Hydrology Present? Yes No X	If yes, optional Wetland Site ID: W13					
Remarks: (Explain alternative procedures here or in a separate report.)						
Farmed soybean field with ditches. Precip. Drier than normal.						
HYDROLOGY						
Wetland Hydrology Indicators:	Secondary Indicators (minimum of two required)					
Primary Indicators (minimum of one is required; check all that apply)	Surface Soil Cracks (B6)					
Surface Water (A1) Water-Stained Leaves (B9)	Drainage Patterns (B10)					
High Water Table (A2) Aquatic Fauna (B13)	Moss Trim Lines (B16)					
Saturation (A3) Marl Deposits (B15)	Dry-Season Water Table (C2)					
Water Marks (B1) Hydrogen Sulfide Odor (C1	Crayfish Burrows (C8)					
Sediment Deposits (B2) Oxidized Rhizospheres on	iving Roots (C3) X Saturation Visible on Aerial Imagery (C9)					
Drift Deposits (B3) Presence of Reduced Iron	(C4) Stunted or Stressed Plants (D1)					
Algal Mat or Crust (B4) Recent Iron Reduction in T	illed Soils (C6) Geomorphic Position (D2)					
Iron Deposits (B5) Thin Muck Surface (C7)	Shallow Aquitard (D3)					
Inundation Visible on Aerial Imagery (B7) Other (Explain in Remarks)	Microtopographic Relief (D4)					
Sparsely Vegetated Concave Surface (B8)	FAC-Neutral Test (D5)					
Field Observations:						
Surface Water Present Yes No _X Depth (inche	es):					
Water Table Present Yes No _X Depth (inche	es):					
Saturation Present Yes No _X Depth (inche	es): Wetland Hydrology Present? Yes No _X_					
(includes capillary fringe)						
Describe Recorded Data (stream gauge, monitoring well, aerial photos, p	previous inspections), if available:					
Remarks:						

Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: Total Number of Dominant Species Across All Strata: 2 (B)
That Are OBL, FACW, or FAC: 0 (A) Total Number of Dominant
That Are OBL, FACW, or FAC: 0 (A) Total Number of Dominant
Total Number of Dominant
I .
Species Across All Strata: 2 (D)
Openes Anios Ali Silaia 2(D)
Percent of Dominant Species
That Are OBL, FACW, or FAC: 0 (A/B
Prevalence Index worksheet:
Total % Cover of: Multiply by:
OBL species 0 x 1 = 0
FACW species 0 x 2 = 0
FAC species 5 x 3 = 15
FACU species 48 x 4 = 192
UPL species 50 x 5 = 250
. '
Column Totals: 103 (A) 457 (B
Prevalence Index = B/A = 4.44
Hydrophytic Vegetation Indicators:
- 1 - Rapid Test for Hydrophytic Vegetation

2 - Dominance Test is >50%
3 - Prevalence Index is ≤3.0¹
- 4 - Morphological Adaptations ¹
(Provide supporting data in Remarks or on a separate sheet)
-
Problematic Hydrophytic Vegetation ¹ (Explain)
 ¹Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
dictal sea or problemation
Definitions of Vegetation Strata:
Definitions of Vegetation Strata:
Tree – Woody plants 3 in. (7.6 cm) or more in
 diameter at breast height (DBH), regardless of height
<u>. </u>
Sapling/shrub – Woody plants less than 3 in. DBH
and greater than or equal to 3.28 ft (1 m) tall.
Herb – All herbaceous (non-woody) plants, regardles
of size, and woody plants less than 3.28 ft tall.
Woody vines – All woody vines greater than 3.28 ft i
height.
Hydrophytic
Vegetation Present? Yes No X
Tresent: resNo

SOIL Sampling Point: W13-1u

		the dep				or or co	nfirm the absence of indi	cators.)	
Depth (inches)	Matrix	%	Color (moist)	x Feature %	es Type ¹	Loc ²	Texture	Remarks	
(inches) 0 to 2	Color (moist) 10YR 2/1	100	Color (moist)	70	Туре	LOC	Peat	Remarks	
2 to 4	10YR 3/2	100					Sand		
4 to 10	10YR 2/1	100					Peat		
10 to 12	10YR 4/3	100					Sand		
12 to 15	10YR 3/2	100					Sand		
			40VP 5/0	45					
15 to 24	10YR 4/4	85	10YR 5/6	15	<u>C</u>	M	Sand		
ı 									
	oncentration, D=Depl	etion, RN	M=Reduced Matrix, N	/IS=Mas	ked Sand	d Grains.			
Hydric Soil I			Debaselise Deles	. 0	(CO) / DD			roblematic Hydric Soils ³ :	
Histosol (,A1) ipedon (A2)		Polyvalue Below MLRA 149B)	Surrace	(S8) (LRR	к,		110) (LRR K, L, MLRA 149B)	
Black His			Thin Dark Surfa	ce (S9) (L	.RR R. ML	RA 149B	Coast Prairie Redox (A16) (LRR K, L, R) 5 cm Mucky Peat or Peat (S3) (LRR K, L, R)		
	n Sulfide (A4)		High Chroma Sa				Polyvalue Below Surface (S8) (LRR K, L)		
	Layers (A5)		Loamy Mucky M				Thin Dark Surface (S9) (LRR K, L)		
Depleted	Below Dark Surface (A1	1)	Loamy Gleyed N	/latrix (F2))		Iron-Manganese Masses (F12) (LRR K, L, R)		
Thick Dar	rk Surface (A12)		Depleted Matrix	(F3)			Piedmont Floodplain Soils (F19) (MLRA 149B)		
	ucky Mineral (S1)		Redox Dark Sur	face (F6)			Mesic Spodic (TA6) (MLRA 144A, 145, 149B)		
	leyed Matrix (S4)		Depleted Dark S	,	7)		Red Parent Material (F21)		
Sandy Re			Redox Depressi	, ,			Very Shallow Dark Surface (F22) Other (Explain in Remarks)		
Stripped i	Matrix (S6)		Marl (F10) (LRR	. K , L)			Other (Explain	in Remarks)	
	, ,								
	ayer (if observed):	on and w	etiand nydrology mu	ıst be pre	esent, ur	iless dist	urbed or problematic.		
Type:	Layer (II observed).								
-	nches):						Hydric Soil Present?	Yes NoX	
Remarks:							1		
ı									
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l									
								·	

Project/Site: Pine County Solar	City/County: Pine Sampling Date: 09/14/2022					
Applicant/Owner: Swift Current Energy	State: Min Sampling Point: W13-1w					
Investigator(s): KKM, MB	Section, Township, Range: T044N, R020W, S15					
	relief (concave, convex, none): Concave Slope %: 1					
Subregion (LRR or MLRA): LRR K, MLRA 90A Lat: 46.297477	Long: -92.84573 Datum: WGS84					
Soil Map Unit Name: Denied Access	NWI classification:					
						
Are climatic / hydrologic conditions on the site typical for this time of year?	Yes No _X (If no, explain in Remarks.)					
Are Vegetation X, Soil , or Hydrology significantly dist						
Are Vegetation , Soil , or Hydrology naturally problem	matic? (If needed, explain any answers in Remarks.)					
SUMMARY OF FINDINGS – Attach site map showing sampling p	oint locations, transects, important features, etc.					
Hydrophytic Vegetation Present? Yes No X	Is the Sampled Area					
Hydric Soil Present? Yes X No	within a Wetland? Yes X No					
Wetland Hydrology Present? Yes X No	If yes, optional Wetland Site ID: W13					
Remarks: (Explain alternative procedures here or in a separate report.)						
Farmed soybean field with ditches. Precip. Drier than normal.						
HYDROLOGY						
Wetland Hydrology Indicators:	Secondary Indicators (minimum of two required)					
Primary Indicators (minimum of one is required; check all that apply)	Surface Soil Cracks (B6)					
Surface Water (A1) Water-Stained Leaves (B9)	Drainage Patterns (B10)					
High Water Table (A2) Aquatic Fauna (B13)	Moss Trim Lines (B16)					
Saturation (A3) Marl Deposits (B15)	Dry-Season Water Table (C2)					
Water Marks (B1) Hydrogen Sulfide Odor (C1)	Crayfish Burrows (C8)					
Sediment Deposits (B2) Oxidized Rhizospheres on L	Living Roots (C3) X Saturation Visible on Aerial Imagery (C9)					
Presence of Reduced Iron (C	C4) Stunted or Stressed Plants (D1)					
Algal Mat or Crust (B4) Recent Iron Reduction in Till	illed Soils (C6) Geomorphic Position (D2)					
Iron Deposits (B5) Thin Muck Surface (C7)	Shallow Aquitard (D3)					
Inundation Visible on Aerial Imagery (B7) Other (Explain in Remarks)	X Microtopographic Relief (D4)					
Sparsely Vegetated Concave Surface (B8)	FAC-Neutral Test (D5)					
Field Observations:						
Surface Water Present Yes No X Depth (inches	s):					
Water Table Present Yes No _X Depth (inches						
Saturation Present Yes X No Depth (inches	S): 14 Wetland Hydrology Present? Yes X No					
(includes capillary fringe)						
Describe Recorded Data (stream gauge, monitoring well, aerial photos, pro	evious inspections), if available:					
Remarks:						

Tree Stratum (Plot size: 30 ft)	Absolute % Cover	Dominant Species	Indicator Status	Dominance Test worksheet:
1				Number of Dominant Species That Are OBL, FACW, or FAC:1(A)
3 4 5.				Total Number of Dominant Species Across All Strata: 2 (B)
6				Percent of Dominant Species That Are OBL, FACW, or FAC: (A/B)
	_	· · · · · · · · · · · · · · · · · · ·		Prevalence Index worksheet:
	0	_ = Total Cover		Total % Cover of: Multiply by:
Sapling/Shrub Stratum (Plot size:15 ft)				OBL species 60 x 1 = 60
1				FACW species 0 x 2 = 0
2				FAC species 0 x 3 = 0
3				FACU species 0 x 4 = 0
4		<u> </u>		· — —
5		<u> </u>		UPL species 80 x 5 = 400
6		· · ·		Column Totals: 140 (A) 460 (B)
7		. <u></u>		Prevalence Index = B/A = 3.29
	0			Hydrophytic Vegetation Indicators:
Herb Stratum (Plot size: 5 ft)		= Total Cover		1 - Rapid Test for Hydrophytic Vegetation
1. Glycine max	80	Yes	UPL	2 - Dominance Test is >50%
2. Eleocharis acicularis	60	Yes	OBL	3 - Prevalence Index is ≤3.0¹
3.				4 - Morphological Adaptations ¹
4.				(Provide supporting data in Remarks or on a separate sheet)
5.				_X_ Problematic Hydrophytic Vegetation¹ (Explain)
6.				¹ Indicators of hydric soil and wetland hydrology must be present, unless
-				disturbed or problematic.
8.		 -		Definitions of Vegetation Strata:
•				Definitions of Vegetation Strata.
10.				Tree – Woody plants 3 in. (7.6 cm) or more in
				diameter at breast height (DBH), regardless of height.
11 12				Sapling/shrub – Woody plants less than 3 in. DBH
12.				and greater than or equal to 3.28 ft (1 m) tall.
Woody Vine Stratum (Plot size:30 ft)	140	= Total Cover		Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.
1				
2.		·		Woody vines – All woody vines greater than 3.28 ft in
3.		·		height.
4.				Hydrophytic
7				Vegetation
	0	= Total Cover		Present? Yes No X
Remarks: (Include photo numbers here or on a separ	ate sheet.)			

Sampling Point:

W13-1w

SOIL Sampling Point: W13-1w

Profile Desc Depth	ription: (Describe to Matrix	the depth				or or co	onfirm the absence of indicators.)				
•			Color (moist)	Redox Features r (moist) % Type¹ Loc²			Texture Remarks				
		<u>%</u>	Color (illoiot)		.) 0						
0 to 27	10YR 2/1	100					Peat Some fibric peat mixed in				
					· <u> </u>						
¹Type: C=C	oncentration, D=Depl	etion, RM=	Reduced Matrix, N	√S=Mas	ked Sand	Grains.	s. ² Location: PL=Pore Lining, M=Matrix.				
Hydric Soil I	ndicators:						Indicators for Problematic Hydric Soils ³ :				
X Histosol ((A1)		Polyvalue Below	/ Surface	(S8) (LRR	R,	2 cm Muck (A10) (LRR K, L, MLRA 149B)				
	pedon (A2)		MLRA 149B)		(/(,	Coast Prairie Redox (A16) (LRR K, L, R)				
Black His			Thin Dark Surface	ce (S9) (L	.RR R, ML	RA 149B					
	Sulfide (A4)			Chroma Sands (S11) (LRR K, L) Polyvalue Below Surface (S8) (I							
	Layers (A5)		Loamy Mucky M				Thin Dark Surface (S9) (LRR K, L)				
	Below Dark Surface (A1	1)	Loamy Gleyed N								
	rk Surface (A12)	<i>'</i>	Depleted Matrix				Piedmont Floodplain Soils (F19) (MLRA 149B)				
	ucky Mineral (S1)	_	Redox Dark Sur				Mesic Spodic (TA6) (MLRA 144A, 145, 149B)				
	eyed Matrix (S4)		Depleted Dark S		7)		Red Parent Material (F21)				
Sandy Re	edox (S5)		Redox Depression		•		Very Shallow Dark Surface (F22)				
Stripped I	Matrix (S6)		Marl (F10) (LRR	K, L)			Other (Explain in Remarks)				
Dark Surf											
		on and wet	land hydrology mu	iet ha nr	ecent un	lece diet	sturbed or problematic.				
	_ayer (if observed):	Jii and wet	and flydrology file	ist be pr	esent, un	icos uisi	I problematic.				
	-ayer (ir observed):										
Type: _											
Depth (ir	nches):						Hydric Soil Present? Yes X No				
Remarks:											

Project/Site: Pine County Solar	City/County: Pine Sampling Date: 09/15/2022					
Applicant/Owner: Swift Current Energy	State: Min Sampling Point: W14-1u					
Investigator(s): Jwf	Section, Township, Range: T044N, R020W, S15					
	relief (concave, convex, none): Convex Slope %: 4					
Subregion (LRR or MLRA): LRR K, MLRA 90A Lat: 46.295515	Long: -92.847712 Datum: WGS84					
Soil Map Unit Name: Denied Access	NWI classification: NA					
Are climatic / hydrologic conditions on the site typical for this time of year?	Yes No X (If no, explain in Remarks.)					
Are Vegetation , Soil , or Hydrology significantly distr	rurbed? Are "Normal Circumstances" present? Yes X No					
Are Vegetation , Soil , or Hydrology naturally probler	matic? (If needed, explain any answers in Remarks.)					
SUMMARY OF FINDINGS – Attach site map showing sampling p	oint locations, transects, important features, etc.					
Hydrophytic Vegetation Present? Yes No X	Is the Sampled Area					
Hydric Soil Present? Yes No X	within a Wetland? Yes No X					
Wetland Hydrology Present? Yes No X	If yes, optional Wetland Site ID: W14					
Drier than normal conditions						
HYDROLOGY						
Wetland Hydrology Indicators:	Secondary Indicators (minimum of two required)					
Primary Indicators (minimum of one is required; check all that apply)	Surface Soil Cracks (B6)					
Surface Water (A1) Water-Stained Leaves (B9)	Drainage Patterns (B10)					
High Water Table (A2) Aquatic Fauna (B13)	Moss Trim Lines (B16)					
Saturation (A3) Marl Deposits (B15)	Dry-Season Water Table (C2)					
Water Marks (B1) Hydrogen Sulfide Odor (C1)	Crayfish Burrows (C8)					
Sediment Deposits (B2) Oxidized Rhizospheres on Li	iving Roots (C3) Saturation Visible on Aerial Imagery (C9)					
Presence of Reduced Iron (C	C4) Stunted or Stressed Plants (D1)					
Algal Mat or Crust (B4) Recent Iron Reduction in Till	illed Soils (C6) Geomorphic Position (D2)					
Iron Deposits (B5) — Thin Muck Surface (C7)	Shallow Aquitard (D3)					
Inundation Visible on Aerial Imagery (B7) Other (Explain in Remarks)	Microtopographic Relief (D4)					
Sparsely Vegetated Concave Surface (B8)	FAC-Neutral Test (D5)					
Field Observations:						
Surface Water Present Yes No X Depth (inches	s):					
Water Table Present Yes No _X Depth (inches						
Saturation Present Yes No X Depth (inches	s): Wetland Hydrology Present? Yes No _X					
(includes capillary fringe)						
Describe Recorded Data (stream gauge, monitoring well, aerial photos, pre	evious inspections), if available:					
Remarks:						

Tree Stratum (Plot size: 30 ft)	Absolute % Cover		Indicator Status	Dominance Test worksheet:
1. Pinus resinosa	60	Yes	FACU	l
2. Abies balsamea	25	No	FAC	Number of Dominant Species That Are OBL, FACW, or FAC: 0 (A)
3. Acer rubrum		· .	FAC	
4. Quercus rubra			FACU	Total Number of Dominant Species Across All Strata: 1 (B)
5				Opedies Across Air Strata.
6				Percent of Dominant Species
7				That Are OBL, FACW, or FAC: 0 (A/B)
	105	= Total Cover		Prevalence Index worksheet: Total % Cover of: Multiply by:
Sapling/Shrub Stratum (Plot size: 15 ft)				OBL species x 1 =
1. Quercus rubra	5	No	FACU	FACW species x 2 =
2. Betula papyrifera	5	No	FACU	FAC species x 3 =
3. Abies balsamea	5	No	FAC	FACU species x 4 =
4				
5				UPL species x 5 =
6				Column Totals: (A) (B)
7				Prevalence Index = B/A =
	15	T O		Hydrophytic Vegetation Indicators:
Herb Stratum (Plot size:5 ft)	-	= Total Cover		1 - Rapid Test for Hydrophytic Vegetation
4 Rubus idaeus	25	No	FAC	2 - Dominance Test is >50%
Carex pensylvanica	25	No	UPL	3 - Prevalence Index is ≤3.0¹
Pteridium aquilinum	15	No	FACU	4 - Morphological Adaptations ¹
Parthenocissus inserta	10	·	FACU	(Provide supporting data in Remarks or on a separate sheet)
Maianthemum canadense			FACU	Problematic Hydrophytic Vegetation ¹ (Explain)
6				¹Indicators of hydric soil and wetland hydrology must be present, unless
7				disturbed or problematic.
8.			_	Definitions of Vegetation Strata:
9.				_
10.				Tree – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.
11.				diameter at breast neight (DBH), regardless of height.
12.				Sapling/shrub – Woody plants less than 3 in. DBH
	85			and greater than or equal to 3.28 ft (1 m) tall.
		= Total Cover		Herb – All herbaceous (non-woody) plants, regardless
Woody Vine Stratum (Plot size: 30 ft)				of size, and woody plants less than 3.28 ft tall.
1		·		Woody vines – All woody vines greater than 3.28 ft in
2		·		height.
3		·		
4		·		Hydrophytic Vegetation
	0	= Total Cover		Present? Yes No X
	•			
Remarks: (Include photo numbers here or on a sepa	rate sheet.)			1
(

Sampling Point:

W14-1u

SOIL Sampling Point: W14-1u

Profile Descriptio Depth	n: (Describe to Matrix	o the dep		ment th x Feature		or or co	nfirm the absence of indicators.)				
	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²	Texture R	emarks			
0-8 7.5	YR 3/3	100					Loamy Sand				
8-26 5Y	R 4/6	100					Sandy Loam				
<u> </u>	17 4/0	100					Carry Loan				
			_								
		· ·	_								
		· ·	_								
¹Type: C=Concen	tration D-Den	letion RM	=Reduced Matrix, N	1S-Mas	ked Sand	Grains	² Location: PL=Pore Lining, M=Ma	atrix			
			-reduced Wath, h	//O=IVIGO	nou ounc	oranio.					
Hydric Soil Indica	itors:		Daharahia Balair	Curtosa	(C0) (LDD	.	Indicators for Problematic	•			
Histosol (A1) Histic Epipedon	(42)		Polyvalue Below MLRA 149B)	Surrace	(S8) (LRR	к,	2 cm Muck (A10) (LRR K, L Coast Prairie Redox (A16) (·			
Black Histic (A3			Thin Dark Surface	ce (S9) (L	RR R. ML	RA 149B					
Hydrogen Sulfid			High Chroma Sa				Polyvalue Below Surface (S8) (LRR K, L)				
Stratified Layers			Loamy Mucky M				Thin Dark Surface (S9) (LRR K, L)				
	Dark Surface (A	11)	Loamy Gleyed N				Iron-Manganese Masses (F12) (LRR K, L, R)				
Thick Dark Surf	ace (A12)		Depleted Matrix	(F3)			Piedmont Floodplain Soils (F19) (MLRA 149B)				
Sandy Mucky M	lineral (S1)		Redox Dark Surf	face (F6)			Mesic Spodic (TA6) (MLRA	144A, 145, 149B)			
Sandy Gleyed N	Matrix (S4)		Depleted Dark S	Surface (F	7)		Red Parent Material (F21)				
Sandy Redox (S	•		Redox Depression	, ,			Very Shallow Dark Surface (F22)				
Stripped Matrix			Marl (F10) (LRR	K , L)			Other (Explain in Remarks)				
Dark Surface (S	57)										
³ Indicators of hydro	ophytic vegetati	ion and we	etland hydrology mu	ist be pro	esent, un	less dist	urbed or problematic.				
Restrictive Layer	(if observed):										
Туре:											
Depth (inches)):						Hydric Soil Present? Yes	No X			
Remarks:	<u> </u>										

Project/Site: Pine County Solar	City/County: Pine Sampling Date: 09/15/2022							
Applicant/Owner: Swift Current Energy	State: Min Sampling Point: W14-1w							
Investigator(s): Jwf	Section, Township, Range: T044N, R020W, S15							
	relief (concave, convex, none): Concave Slope %: 1							
Subregion (LRR or MLRA): LRR K, MLRA 90A Lat: 46.295606	Long: -92.847324 Datum: WGS84							
Soil Map Unit Name: Denied Access	NWI classification: PEM1C							
Are climatic / hydrologic conditions on the site typical for this time of year?	_							
Are Vegetation, Soil, or Hydrology significantly dist								
Are Vegetation , Soil , or Hydrology naturally problem	matic? (Il needed, explain any answers in Nemarks.)							
SUMMARY OF FINDINGS – Attach site map showing sampling p	point locations, transects, important features, etc.							
Hydrophytic Vegetation Present? Yes X No	le the Sampled Area							
Hydric Soil Present? Yes X No Yes X No	Is the Sampled Area within a Wetland? Yes X No							
Wetland Hydrology Present? Yes X No	If yes, optional Wetland Site ID: W14							
Remarks: (Explain alternative procedures here or in a separate report.)								
Drier than normal conditions								
HYDROLOGY								
Wetland Hydrology Indicators:	Secondary Indicators (minimum of two required)							
Primary Indicators (minimum of one is required; check all that apply)	Surface Soil Cracks (B6)							
Surface Water (A1) Water-Stained Leaves (B9)	Drainage Patterns (B10)							
High Water Table (A2) Aquatic Fauna (B13)	Moss Trim Lines (B16)							
Saturation (A3) Marl Deposits (B15)	Dry-Season Water Table (C2)							
Water Marks (B1) Hydrogen Sulfide Odor (C1)	Crayfish Burrows (C8)							
Sediment Deposits (B2) Oxidized Rhizospheres on L	iving Roots (C3) Saturation Visible on Aerial Imagery (C9)							
Drift Deposits (B3) Presence of Reduced Iron (0	Stunted or Stressed Plants (D1)							
Algal Mat or Crust (B4) Recent Iron Reduction in Till	ed Soils (C6) X Geomorphic Position (D2)							
Iron Deposits (B5) Thin Muck Surface (C7)	Shallow Aquitard (D3)							
Inundation Visible on Aerial Imagery (B7) Other (Explain in Remarks)	Microtopographic Relief (D4)							
Sparsely Vegetated Concave Surface (B8)	X FAC-Neutral Test (D5)							
Field Observations:								
Surface Water Present Yes No _X Depth (inches	s):							
Water Table Present Yes No X Depth (inches	· · · · · · · · · · · · · · · · · · ·							
Saturation Present Yes No X Depth (inches								
(includes capillary fringe)								
Describe Recorded Data (stream gauge, monitoring well, aerial photos, pr	revious inspections), if available:							
Remarks:								

^ haaliita	Dominant	Indiantar			
Absolute <u>% Cover</u>	Dominant Species	Indicator Status	Dominance Test worksheet:		
			Number of Dominant Species		
	·			: 2 (A)	
			Total Number of Dominant		
			Species Across All Strata:	2 (B)	
			Percent of Dominant Species		
				: 100 (A/	
				,	
0				-	
	_ = Total Cover			Multiply by:	
			OBL species	x 1 =	
10	No	FACW	FACW species	x 2 =	
_			l	·	
				x 3 =	
			FACU species	x 4 =	
			UPL species	x 5 =	
	 -		Column Totals:	(A)(
		-		<u> </u>	
10	T-1-1 0		Hydrophytic Vegetation Indi	cators:	
	= Total Cover		_ 1 - Rapid Test for Hydrop	hytic Vegetation	
	.,	540W	X 2 - Dominance Test is >5	0%	
		FACW	- 3 - Prevalence Index is <3	R ∩1	
15	Yes	FAC	I —		
			(verse supplies and verse suppl		
			Problematic Hydrophytic	Vegetation ¹ (Explain)	
				Irology must be present, unles	
			disturbed or problematic.		
			Definitions of Vegetation St	rata:	
			Tree Weeds plants 2 in 776	`am\ar mara in	
			diameter at broast height (BB)	i), regardless of fielgr	
			Sapling/shrub – Woody plant	ts less than 3 in. DBH	
			and greater than or equal to 3	.28 ft (1 m) tall.	
80	= Total Cover		Horb All borboscous (non w	roody) planta rogardla	
			Herb – All herbaceous (non-woody) plants, regardles of size, and woody plants less than 3.28 ft tall.		
			or size, and woody plants loss	than 5.20 it tail.	
			Woody vines – All woody vine	es greater than 3.28 ft	
			1		
			height.		
			height.		
			Hydrophytic		
				No	
		Mathematical Species Mathematical Species	% Cover Species Status	Species Status Dominance Test worksheet:	

SOIL Sampling Point: W14-1w

		the dep				tor or co	onfirm the absence of indica	itors.)	
Depth (inches)	Matrix Color (moist)	%	Color (moist)	x Featur %	Type ¹	Loc ²	Texture	Remarks	
0-8	10YR 2/2	100	Color (moist)	76	Туре	Loc	Loamy Sand	Remarks	
8-11	10YR 3/1	100					Loamy Sand		
11-24	10YR 5/1	90	7.5YR 5/4	10	С	M	Loamy Sand		
		-							
¹Type: C=C	oncentration, D=Depl	etion, RN	/I=Reduced Matrix, №	√S=Mas	ked San	d Grains	. ² Location: PL=Pore Lir	ning, M=Matrix.	
Hydric Soil II	ndicators:						Indicators for Pro	blematic Hydric Soils ³ :	
Histosol (/	A1)		Polyvalue Below	V Surface	(S8) (LRR	RR,	2 cm Muck (A10) (LRR K, L, MLRA 149B)	
Histic Epip	pedon (A2)		MLRA 149B)				Coast Prairie Re	edox (A16) (LRR K, L, R)	
Black Hist	tic (A3)		Thin Dark Surface				3) 5 cm Mucky Pea	at or Peat (S3) (LRR K, L, R)	
Hydrogen	Sulfide (A4)		High Chroma Sa				Polyvalue Below Surface (S8) (LRR K, L)		
	Layers (A5)		Loamy Mucky M			, L)	Thin Dark Surface (S9) (LRR K, L)		
	Below Dark Surface (A1	11)	Loamy Gleyed N)		Iron-Manganese Masses (F12) (LRR K, L, R)		
	k Surface (A12)		Depleted Matrix					plain Soils (F19) (MLRA 149B)	
	ucky Mineral (S1) eyed Matrix (S4)		Redox Dark Sur Depleted Dark S		7\		Mesic Spodic (I	(A6) (MLRA 144A, 145, 149B)	
X Sandy Re			Redox Depressi		7)			enai (F21) ark Surface (F22)	
candy no	Matrix (S6)		Marl (F10) (LRR				Other (Explain in		
Dark Surfa	* *			,,			<u> </u>		
		on and w	votland bydrology my	iet ho pr	ocont ur	aloce die	turbed or problematic.		
	ayer (if observed):	on and w	- eliana fiyarology file	ist be pr	esent, ui	iless uis	Toblemanc.		
Type:	ayer (ii observed).								
-	ahaa).						Hydric Soil Present?	Yes ^X No	
Depth (in	cnes):						Hydric Soil Present?	Yes No	
Remarks:									

Project/Site: Pine County Solar	City/County: Pine Sampling Date: 09/15/2022							
Applicant/Owner: Swift Current Energy	State: Min Sampling Point: W15-1u							
Investigator(s): KKM AH	Section, Township, Range: T044N, R020W, S27							
	Il relief (concave, convex, none): Linear Slope %: 7							
Subregion (LRR or MLRA): LRR K, MLRA 90A Lat: 46.271027								
Soil Map Unit Name: Denied Access	NWI classification:							
Are climatic / hydrologic conditions on the site typical for this time of year?								
Are Vegetation , Soil , or Hydrology significantly dis								
Are Vegetation , Soil , or Hydrology naturally proble	ematic? (If needed, explain any answers in Remarks.)							
SUMMARY OF FINDINGS – Attach site map showing sampling I	point locations, transects, important features, etc.							
Hydrophytic Vegetation Present? Yes No X	Is the Sampled Area							
Hydric Soil Present? Yes No X	within a Wetland? Yes No X							
Wetland Hydrology Present? Yes No X	If yes, optional Wetland Site ID: W15							
Remarks: (Explain alternative procedures here or in a separate report.) Red pine plantation, precip drier than normal								
HYDROLOGY								
Wetland Hydrology Indicators:	Secondary Indicators (minimum of two required)							
Primary Indicators (minimum of one is required; check all that apply)	Surface Soil Cracks (B6)							
Surface Water (A1) Water-Stained Leaves (B9)	Drainage Patterns (B10)							
High Water Table (A2) Aquatic Fauna (B13)	Moss Trim Lines (B16)							
Saturation (A3) Marl Deposits (B15)	Dry-Season Water Table (C2)							
Water Marks (B1) Hydrogen Sulfide Odor (C1	Crayfish Burrows (C8)							
Sediment Deposits (B2) Oxidized Rhizospheres on	Living Roots (C3) Saturation Visible on Aerial Imagery (C9)							
Drift Deposits (B3) Presence of Reduced Iron	(C4) Stunted or Stressed Plants (D1)							
Algal Mat or Crust (B4) Recent Iron Reduction in Ti	illed Soils (C6) Geomorphic Position (D2)							
Iron Deposits (B5) Thin Muck Surface (C7)	Shallow Aquitard (D3)							
Inundation Visible on Aerial Imagery (B7) Other (Explain in Remarks)	Microtopographic Relief (D4)							
Sparsely Vegetated Concave Surface (B8)	FAC-Neutral Test (D5)							
Field Observations:								
Surface Water Present Yes No _X Depth (inche	es):							
Water Table Present Yes No X Depth (inche	es):							
Saturation Present Yes No X Depth (inche	es): Wetland Hydrology Present? Yes No X							
(includes capillary fringe)								
Describe Recorded Data (stream gauge, monitoring well, aerial photos, p	previous inspections), if available:							
Remarks:								

Tree Stratum (Plot size: 30 ft)	Absolute % Cover	Dominant Species	Indicator Status	Dominance Test worksheet:
1. Pinus resinosa	80	Yes	FACU	Number of Dominant Species
2. Quercus macrocarpa	5	No	FACU	That Are OBL, FACW, or FAC:1 (A)
3		·		Total Number of Dominant
4		·		Species Across All Strata: 4 (B)
5				Bound of Dominant Consider
6	-			Percent of Dominant Species That Are OBL, FACW, or FAC: 25 (A/B)
7		<u> </u>		Prevalence Index worksheet:
	85	= Total Cover	,	Total % Cover of: Multiply by:
Sapling/Shrub Stratum (Plot size: 15 ft)				OBL species $0 \times 1 = 0$
1. Corylus americana	25	Yes	FACU	FACW species 0 x 2 = 0
2. Prunus serotina	5	No	FACU	
3				
4	-	· - <u></u>		FACU species 120 x 4 = 480
5				UPL species 20 x 5 = 100
6	-	· - <u></u>		Column Totals: 148 (A) 604 (B)
7		. <u></u>		Prevalence Index = B/A = 4.08
	30			Hydrophytic Vegetation Indicators:
5 ft)		= Total Cover		1 - Rapid Test for Hydrophytic Vegetation
Herb Stratum (Plot size: 5 ft)	20	Vos	LIDI	2 - Dominance Test is >50%
1. Eurybia macrophylla	20	Yes	UPL	- 3 - Prevalence Index is ≤3.0¹
2. Rubus idaeus	8	Yes	FAC	4 - Morphological Adaptations ¹
3. Pteridium aquilinum		No	FACU	(Provide supporting data in Remarks or on a separate sheet)
4				Problematic Hydrophytic Vegetation ¹ (Explain)
5				¹Indicators of hydric soil and wetland hydrology must be present, unless
6				disturbed or problematic.
7. 8.				Definitions of Vanatation Chartes
				Definitions of Vegetation Strata:
9 10				Tree – Woody plants 3 in. (7.6 cm) or more in
11				diameter at breast height (DBH), regardless of height.
12.				Sapling/shrub - Woody plants less than 3 in. DBH
12.				and greater than or equal to 3.28 ft (1 m) tall.
	33	= Total Cover		Herb – All herbaceous (non-woody) plants, regardless
Woody Vine Stratum (Plot size: 30 ft)				of size, and woody plants less than 3.28 ft tall.
1		·		Woody vines – All woody vines greater than 3.28 ft in
2		·		height.
3		·		
4				Hydrophytic Vegetation
	0	= Total Cover		Present? Yes No X
	-	_ = 10101 00101		
Remarks: (Include photo numbers here or on a separa	ate sheet)			<u></u>
remaine. (mende priete nambere nere er en a copar	ato 01100ti.)			

Sampling Point: W15-1u

SOIL Sampling Point: W15-1u

		the depth		ment the x Feature		or or co	nfirm the absence of in	dicators.)
Depth (inches)	Matrix Color (moist)	<u></u>	Color (moist)	% realure	Type ¹	Loc ²	Texture	Remarks
(ITICITES)	Color (moist)		Color (moist)		Туре	LUC	Texture	Remarks
0-24	10YR 4/6	100					Sand	
¹Type: C=C	oncentration, D=Deple	etion, RM=R	Reduced Matrix, N	MS=Mas	ked Sand	Grains.	² Location: PL=Pore	e Lining, M=Matrix.
Hydric Soil	Indicators:						Indicators for	Problematic Hydric Soils ³ :
Histosol (Polyvalue Below	w Surface	(S8) (LRR	R.		(A10) (LRR K, L, MLRA 149B)
	ipedon (A2)		MLRA 149B)	· Gariago	(00) (=1111	,		ie Redox (A16) (LRR K, L, R)
Black His			Thin Dark Surface	ce (S9) (L	RR R, ML	RA 149B	· 	y Peat or Peat (S3) (LRR K, L, R)
	n Sulfide (A4)		High Chroma Sa				<u> </u>	Below Surface (S8) (LRR K, L)
	Layers (A5)		Coamy Mucky M				 -	Surface (S9) (LRR K, L)
	Below Dark Surface (A1	1)	Loamy Gleyed N			,		nese Masses (F12) (LRR K, L, R)
	rk Surface (A12)	,	Depleted Matrix					Floodplain Soils (F19) (MLRA 149B)
	ucky Mineral (S1)		 Redox Dark Sur					dic (TA6) (MLRA 144A, 145, 149B)
	leyed Matrix (S4)		Depleted Dark S		7)			: Material (F21)
Sandy Re	edox (S5)		Redox Depressi		•		Very Shallo	ow Dark Surface (F22)
Stripped	Matrix (S6)		Marl (F10) (LRR	R K, L)				ain in Remarks)
Dark Sur								,
				4 1		المحادة المحادة		
	f hydrophytic vegetation	n and wella	and nydrology me	ust be pre	eseni, un	iess dist	T	
	Layer (if observed):							
Type:								V
Depth (ir	nches):						Hydric Soil Present	? Yes No _X
Remarks:								

Project/Site: Pine County Solar	City/County: Pine Sampling Date: 09/15/2022					
Applicant/Owner: Swift Current Energy	State: Min Sampling Point: W15-1w					
Investigator(s): KKM AH	Section, Township, Range: T044N, R020W, S27					
	relief (concave, convex, none): Concave Slope %: 1					
Subregion (LRR or MLRA): LRR K, MLRA 90A Lat: 46.271541	Long: -92.847926 Datum: WGS84					
	NWI classification: PSS1Dd					
Soil Map Unit Name: Denied Access						
Are climatic / hydrologic conditions on the site typical for this time of year?	Yes No _X (If no, explain in Remarks.)					
Are Vegetation , Soil , or Hydrology significantly distr						
Are Vegetation, Soil, or Hydrology naturally problem	matic? (If needed, explain any answers in Remarks.)					
SUMMARY OF FINDINGS – Attach site map showing sampling po	oint locations, transects, important features, etc.					
Lhudrashutia Variatian Presenta	In the Complet Area					
Hydrophytic Vegetation Present? Yes X No Hydric Soil Present? Yes X No	Is the Sampled Area within a Wetland? Yes X No					
Wetland Hydrology Present? Yes X No	If yes, optional Wetland Site ID: W15					
	ii yes, opiionai vveitaria dite ib					
Remarks: (Explain alternative procedures here or in a separate report.) Precip drier than normal						
Troop and than normal						
HYDROLOGY						
Wetland Hydrology Indicators:	Secondary Indicators (minimum of two required)					
Primary Indicators (minimum of one is required; check all that apply)	Surface Soil Cracks (B6)					
Surface Water (A1) Water-Stained Leaves (B9)	Drainage Patterns (B10)					
High Water Table (A2) Aquatic Fauna (B13)	Moss Trim Lines (B16)					
Saturation (A3) Marl Deposits (B15)	Dry-Season Water Table (C2)					
Water Marks (B1) Hydrogen Sulfide Odor (C1)	Crayfish Burrows (C8)					
Sediment Deposits (B2) Oxidized Rhizospheres on Li						
Drift Deposits (B3) Presence of Reduced Iron (C						
Algal Mat or Crust (B4) Recent Iron Reduction in Tilli	led Soils (C6) X Geomorphic Position (D2)					
Iron Deposits (B5) Thin Muck Surface (C7)	Shallow Aquitard (D3)					
Inundation Visible on Aerial Imagery (B7) Other (Explain in Remarks)	Microtopographic Relief (D4)					
Sparsely Vegetated Concave Surface (B8)	X FAC-Neutral Test (D5)					
Field Observations:						
Surface Water Present Yes No _X Depth (inches	s):					
Water Table Present Yes No X Depth (inches						
Saturation Present Yes X No Depth (inches	•					
(includes capillary fringe)						
Describe Recorded Data (stream gauge, monitoring well, aerial photos, pre	evious inspections), if available:					
Remarks:						

Tree Stratum (Plot size: 30 ft)	Absolute % Cover	Dominant Species	Indicator Status	Dominance Test worksheet:
1				Number of Dominant Species That Are OBL, FACW, or FAC:4 (A)
3.				Total Number of Dominant Species Across All Strata: 4 (B)
6				Percent of Dominant Species That Are OBL, FACW, or FAC:(A/B)
	0			Prevalence Index worksheet:
0 11 (0) 1 0 1 (0) 1 (0)		_ = Total Cover		Total % Cover of: Multiply by:
Sapling/Shrub Stratum (Plot size: 15 ft)	0.5	V.	0.01	OBL species 85 x 1 = 85
1. Salix nigra	35	Yes	OBL	FACW species 47 x 2 = 94
2. Betula pumila	20	Yes	OBL	FAC species13 x 3 =39
3		-		FACU species10 x 4 =40
4		-		UPL species 0 x 5 = 0
5		-		Column Totals: 155 (A) 258 (B)
6		-		Prevalence Index = B/A = 1.66
7		-		Hydrophytic Vegetation Indicators:
	55	= Total Cover		
Herb Stratum (Plot size: 5 ft)				X 1 - Rapid Test for Hydrophytic Vegetation
1. Eutrochium maculatum	25	Yes	OBL	X 2 - Dominance Test is >50%
2. Spartina pectinata	25	Yes	FACW	X 3 - Prevalence Index is ≤3.0¹
3. Phalaris arundinacea	15	No	FACW	4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet)
4. Solidago canadensis	10	No	FACU	(Frovide supporting data in Normanos of off a separate sheet)
5. Rubus idaeus	10	No	FAC	Problematic Hydrophytic Vegetation ¹ (Explain)
6. <u>Solidago gigantea</u>	5	No	FACW	¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
7. <u>Scirpus cyperinus</u>	5	No	OBL	and social or problemation
8. <u>Bromus kalmii</u>	3	No	FAC	Definitions of Vegetation Strata:
9Symphyotrichum lanceolatum	2	No	FACW	Tree Woody plants 3 in (7.6 cm) or more in
10				Tree – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.
11				
12	400			Sapling/shrub – Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.
	100	= Total Cover		Herb – All herbaceous (non-woody) plants, regardless
Woody Vine Stratum (Plot size: 30 ft)				of size, and woody plants less than 3.28 ft tall.
1		-		Woody vines – All woody vines greater than 3.28 ft in
2			-	height.
3			-	
4			-	Hydrophytic Vegetation
	0	= Total Cover		Present? Yes X No No
Remarks: (Include photo numbers here or on a separ	ate sheet.)			

Sampling Point:

W15-1w

SOIL Sampling Point: W15-1w

Profile Description: (Descri	_		iment the ox Featur		or or co	onfirm the absence of indic	ators.)	
Depth Mate (inches) Color (moist		Color (moist)	% realui	Type ¹	Loc ²	Texture	Remarks	
0-11 10YR 2/2	100	Color (molet)		Турс		Peat	Romano	
11-24 10YR 3/3	100					Mucky Peat		
11124 10111 3/3	100					wacky i cat		
		_						
		-						
		_						
¹ Type: C=Concentration, D=	Depletion, RM	=Reduced Matrix, I	MS=Mas	ked Sand	d Grains	. ² Location: PL=Pore Li	ning, M=Matrix.	
Hydric Soil Indicators:						Indicators for Pro	oblematic Hydric Soils³:	
X Histosol (A1)		Polyvalue Belov	w Surface	(S8) (LRR	R,	2 cm Muck (A1	0) (LRR K, L, MLRA 149B)	
Histic Epipedon (A2)		MLRA 149B)					Redox (A16) (LRR K, L, R)	
Black Histic (A3)		Thin Dark Surfa				·	eat or Peat (S3) (LRR K, L, R)	
Hydrogen Sulfide (A4)		High Chroma Sa Loamy Mucky N				 -	w Surface (S8) (LRR K, L)	
Stratified Layers (A5) Depleted Below Dark Surface	re (Δ11)	Loamy Gleyed I			L)	' <u></u>	ace (S9) (LRR K, L) se Masses (F12) (LRR K, L, R)	
Thick Dark Surface (A12)	c (ATT)	Depleted Matrix		,		Piedmont Floodplain Soils (F19) (MLRA 149B)		
Sandy Mucky Mineral (S1)		Redox Dark Sui					TA6) (MLRA 144A, 145, 149B)	
Sandy Gleyed Matrix (S4)		Depleted Dark S		7)		Red Parent Ma		
Sandy Redox (S5)		Redox Depress	ions (F8)			Very Shallow D	Park Surface (F22)	
Stripped Matrix (S6)		Marl (F10) (LRF	R K, L)			Other (Explain	in Remarks)	
Dark Surface (S7)								
³ Indicators of hydrophytic veg	etation and we	etland hydrology m	ust be pr	esent, un	less dis	turbed or problematic.		
Restrictive Layer (if observ						· .		
Type:	,							
Depth (inches):						Hydric Soil Present?	Yes ^X No	
Remarks:								
. tomanto								

Project/Site: Pine County Solar	City/County: Pine Sampling Date: 09/15/2022						
Applicant/Owner: Swift Current Energy	State: Min Sampling Point: W16-1u						
Investigator(s): Jlk drj	Section, Township, Range: T044N, R020W, S25						
	relief (concave, convex, none): Convex Slope %: 2-5						
· · · · / ————							
Subregion (LRR or MLRA): LRR K, MLRA 90A Lat: 46.265717	Long: -92.803925 Datum: WGS84						
Soil Map Unit Name: No Digital Data Available	NWI classification: None						
Are climatic / hydrologic conditions on the site typical for this time of year?	Yes No X (If no, explain in Remarks.)						
Are Vegetation , Soil , or Hydrology significantly distr	urbed? Are "Normal Circumstances" present? Yes X No						
Are Vegetation , Soil , or Hydrology naturally probler	matic? (If needed, explain any answers in Remarks.)						
SUMMARY OF FINDINGS – Attach site map showing sampling po	oint locations, transects, important features, etc.						
Hydrophytic Vegetation Present? Yes No X	Is the Sampled Area						
Hydric Soil Present? Yes No X	within a Wetland? Yes No X						
Wetland Hydrology Present? Yes No X	If yes, optional Wetland Site ID: W16						
Remarks: (Explain alternative procedures here or in a separate report.) Drier than normal conditions							
HYDROLOGY							
Wetland Hydrology Indicators:	Secondary Indicators (minimum of two required)						
Primary Indicators (minimum of one is required; check all that apply)	Surface Soil Cracks (B6)						
Surface Water (A1) Water-Stained Leaves (B9)	Drainage Patterns (B10)						
High Water Table (A2) Aquatic Fauna (B13)	Moss Trim Lines (B16)						
Saturation (A3) Marl Deposits (B15)	Dry-Season Water Table (C2)						
Water Marks (B1) Hydrogen Sulfide Odor (C1)	Crayfish Burrows (C8)						
Sediment Deposits (B2) Oxidized Rhizospheres on Li	Living Roots (C3) Saturation Visible on Aerial Imagery (C9)						
Drift Deposits (B3) Presence of Reduced Iron (C	C4) Stunted or Stressed Plants (D1)						
Algal Mat or Crust (B4) Recent Iron Reduction in Till	illed Soils (C6) Geomorphic Position (D2)						
Iron Deposits (B5) Thin Muck Surface (C7)	Shallow Aquitard (D3)						
Inundation Visible on Aerial Imagery (B7) Other (Explain in Remarks)							
Sparsely Vegetated Concave Surface (B8)	FAC-Neutral Test (D5)						
Field Observations:							
Surface Water Present Yes No X Depth (inches	s):						
Water Table Present Yes No X Depth (inches	· 						
Saturation Present Yes No X Depth (inches	s): Wetland Hydrology Present? Yes No _X						
(includes capillary fringe)							
Describe Recorded Data (stream gauge, monitoring well, aerial photos, pre	evious inspections), if available:						
Remarks:							

Tree Stratum (Plot size: 30 ft)	Absolute % Cover		Indicator Status	Dominance Test worksheet:
1. Pinus sylvestris	40	Yes	UPL	Number of Dominant Species
Picea pungens 3.			FACU	That Are OBL, FACW, or FAC:0 (A)
				Total Number of Dominant
4.				Species Across All Strata: 3 (B)
6.				Percent of Dominant Species
7.				That Are OBL, FACW, or FAC:0 (A/B)
	45			Prevalence Index worksheet:
0 1: (0) 1 0: (0) 15 (1)	45	_ = Total Cover	•	Total % Cover of: Multiply by:
Sapling/Shrub Stratum (Plot size: 15 ft)	2	No	EAC\A/	OBL species x 1 =
1. Salix petiolaris			FACW	FACW species x 2 =
3.				FAC species x 3 =
				FACU species x 4 =
4. 5.				UPL species x 5 =
6				Column Totals: (A)(B)
7.				Prevalence Index = B/A =
				Hydrophytic Vegetation Indicators:
Hart Clarker (Plateire 5 ft)	3	_ = Total Cover		1 - Rapid Test for Hydrophytic Vegetation
Herb Stratum (Plot size: 5 ft) 1. Poa pratensis	90	Yes	FACU	2 - Dominance Test is >50%
o Solidago canadonsis	45	Yes	FACU	3 - Prevalence Index is ≤3.0¹
Medicago sativa	10	No	UPL	4 - Morphological Adaptations ¹
4. Achillea millefolium	5			(Provide supporting data in Remarks or on a separate sheet)
5. Fragaria virginiana			FACU	Problematic Hydrophytic Vegetation¹ (Explain)
6. Hieracium aurantiacum				Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
7.				distance of problematic.
8				Definitions of Vegetation Strata:
9				Trace Manches plants 2 in (7.6 and) as many in
10	-	<u> </u>		Tree – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.
11	-	<u> </u>		
12				Sapling/shrub – Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.
	155	= Total Cover		
Woody Vine Stratum (Plot size: 30 ft)		_= rotal Cover		Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.
1				
2.				Woody vines – All woody vines greater than 3.28 ft in
3.				height.
4				Hydrophytic
				Vegetation
	0	= Total Cover		Present? Yes NoX
Remarks: (Include photo numbers here or on a separ	ate sheet.)			

Sampling Point:

W16-1u

SOIL Sampling Point: W16-1u

		the depth				or or co	onfirm the absence of indi	cators.)
Depth (inches)	Matrix Color (moist)	 -	Color (moist)	x Featur %	Type ¹	Loc ²	Texture	Remarks
(IIICIICS)			Color (moist)	70	Туре	LUC	Texture	IVEIIIdINS
0-8	10YR 5/3	100					Silt Loam	
	-							
¹Type: C=C	oncentration, D=Deple	etion, RM=	Reduced Matrix, N	MS=Mas	ked Sand	Grains.	² Location: PL=Pore L	ining, M=Matrix.
Hydric Soil I	Indicators:						Indicators for Pr	oblematic Hydric Soils ³ :
Histosol ((A1)	_	Polyvalue Below	v Surface	(S8) (LRR	R,	2 cm Muck (A	10) (LRR K, L, MLRA 149B)
Histic Epi	ipedon (A2)	_	MLRA 149B)				Coast Prairie	Redox (A16) (LRR K, L, R)
Black His		_	Thin Dark Surfa	ce (S9) (L	.RR R, ML	RA 149B) 5 cm Mucky P	eat or Peat (S3) (LRR K, L, R)
Hydroger	n Sulfide (A4)	_	High Chroma Sa	ands (S11) (LRR K,	L)	Polyvalue Belo	ow Surface (S8) (LRR K, L)
Stratified	Layers (A5)	_	Loamy Mucky M	lineral (F1	I) (LRR K,	L)	Thin Dark Sur	face (S9) (LRR K, L)
Depleted	Below Dark Surface (A1	1) _	Loamy Gleyed N	Matrix (F2)		Iron-Mangane	se Masses (F12) (LRR K, L, R)
Thick Da	rk Surface (A12)	_	Depleted Matrix	(F3)			Piedmont Floo	odplain Soils (F19) (MLRA 149B)
Sandy Mi	ucky Mineral (S1)	_	Redox Dark Sur	face (F6)			Mesic Spodic	(TA6) (MLRA 144A, 145, 149B)
Sandy GI	leyed Matrix (S4)	_	Depleted Dark S	Surface (F	7)		Red Parent M	aterial (F21)
Sandy Re	edox (S5)	_	Redox Depressi	ions (F8)			Very Shallow	Dark Surface (F22)
Stripped	Matrix (S6)	_	Marl (F10) (LRR	R K, L)			Other (Explain	n in Remarks)
Dark Surf	face (S7)							
³ Indicators of	f hydrophytic vegetation	on and wet	tland hydrology mu	ust be pr	esent. un	less dist	turbed or problematic.	
	Layer (if observed):							
Type:								
Depth (ir	nches).						Hydric Soil Present?	Yes No X
							Tryunc con riesent:	
Remarks: Refusal on ro	ak at 9 inahaa							
Kelusai oli io	CK at 6 IIICHES							

Project/Site: Pine County Solar	City/County: Pine Sampling Date: 09/15/2022						
Applicant/Owner: Swift Current Energy	State: Min Sampling Point: W16-2u						
Investigator(s): Jlk drj	Section, Township, Range: T044N, R020W, S25						
	relief (concave, convex, none): Convex Slope %: 2-3						
Subregion (LRR or MLRA): LRR K, MLRA 90A Lat: 46.266034	Long: -92.804689 Datum: WGS84						
Soil Map Unit Name: No Digital Data Available	NWI classification: None						
Are climatic / hydrologic conditions on the site typical for this time of year?	Yes No X (If no, explain in Remarks.)						
, , ,	_						
<u> </u>	(Kanadada amilaisa ayan ayan in Banada)						
Are Vegetation, Soil, or Hydrology naturally problem	maio:						
SUMMARY OF FINDINGS – Attach site map showing sampling p	oint locations, transects, important features, etc.						
Hydrophytic Vegetation Present? Yes No X	Is the Sampled Area						
Hydric Soil Present? Yes No X	within a Wetland? Yes No X						
Wetland Hydrology Present? Yes No X	If yes, optional Wetland Site ID: W16						
Remarks: (Explain alternative procedures here or in a separate report.)	yoo, opatona rootana oto isi						
Drier than normal conditions							
HYDROLOGY							
Wetland Hydrology Indicators:	Secondary Indicators (minimum of two required)						
Primary Indicators (minimum of one is required; check all that apply)	Surface Soil Cracks (B6)						
Surface Water (A1) Water-Stained Leaves (B9)	Drainage Patterns (B10)						
High Water Table (A2) Aquatic Fauna (B13)	Moss Trim Lines (B16)						
Saturation (A3) Marl Deposits (B15)	Dry-Season Water Table (C2)						
Water Marks (B1) Hydrogen Sulfide Odor (C1)	Crayfish Burrows (C8)						
Sediment Deposits (B2) Oxidized Rhizospheres on L	.iving Roots (C3) Saturation Visible on Aerial Imagery (C9)						
Drift Deposits (B3) Presence of Reduced Iron (0	C4) Stunted or Stressed Plants (D1)						
Algal Mat or Crust (B4) Recent Iron Reduction in Till	lled Soils (C6) Geomorphic Position (D2)						
Iron Deposits (B5) Thin Muck Surface (C7)	Shallow Aquitard (D3)						
Inundation Visible on Aerial Imagery (B7) Other (Explain in Remarks)	Microtopographic Relief (D4)						
Sparsely Vegetated Concave Surface (B8)	FAC-Neutral Test (D5)						
Field Observations:							
Surface Water Present Yes No X Depth (inches	s):						
Water Table Present Yes No _X Depth (inches							
Saturation Present Yes No X Depth (inches	S): Wetland Hydrology Present? Yes No _X_						
(includes capillary fringe)							
Describe Recorded Data (stream gauge, monitoring well, aerial photos, pro	evious inspections), if available:						
Demodrat							
Remarks:							

Tree Stratum (Plot size: 30 ft)	Absolute % Cover	Dominant <u>Species</u>	Indicator Status	Dominance Test worksheet:
Betula papyrifera 2.	5	No No	FACU	Number of Dominant Species That Are OBL, FACW, or FAC:(A)
3				Total Number of Dominant Species Across All Strata:1 (B)
5				Percent of Dominant Species That Are OBL, FACW, or FAC:0 (A/B)
7		· <u></u> ·		Prevalence Index worksheet:
	5	_ = Total Cover		Total % Cover of: Multiply by:
Sapling/Shrub Stratum (Plot size: 15 ft)				OBL species x 1 =
1. Cornus racemosa	5	No	FAC	FACW species x 2 =
2. Salix petiolaris	3	No	FACW	1
3. Picea pungens	2	No	FACU	
4				FACU species x 4 =
5				UPL species x 5 =
6.				Column Totals: (A)(B)
7.				Prevalence Index = B/A =
		· · ·		Hydrophytic Vegetation Indicators:
Herb Stratum (Plot size: 5 ft)	10	_ = Total Cover		1 - Rapid Test for Hydrophytic Vegetation
1. Poa pratensis	90	Yes	FACU	2 - Dominance Test is >50%
2. Solidago canadensis	15	No	FACU	3 - Prevalence Index is ≤3.0¹
3. Symphyotrichum lanceolatum	10	No	FACW	4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet)
4. Medicago sativa		No	UPL	(Provide supporting data in Remarks of on a separate sneet)
5.				Problematic Hydrophytic Vegetation ¹ (Explain)
6.				¹ Indicators of hydric soil and wetland hydrology must be present, unless
				disturbed or problematic.
				Definitions of Variatelian Charter
				Definitions of Vegetation Strata:
9				Tree – Woody plants 3 in. (7.6 cm) or more in
10				diameter at breast height (DBH), regardless of height.
11.	-	· -		Sapling/shrub – Woody plants less than 3 in. DBH
12				and greater than or equal to 3.28 ft (1 m) tall.
	120	= Total Cover		
Woody Vine Stratum (Plot size: 30 ft)				Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.
1		<u> </u>		Woody vines – All woody vines greater than 3.28 ft in
2		· ———		height.
3				l
4		·		Hydrophytic Vegetation
	0	= Total Cover		Present? Yes No X
Remarks: (Include photo numbers here or on a separa	ate sheet.)			

Sampling Point:

W16-2u

SOIL Sampling Point: W16-2u

	Matrix			x Feature						
nches)	Color (moist)	%	Color (moist)	%	Type ¹ L	.oc²	Texture		Remarl	ks
0-12	10YR 4/3	100					Silt Loam	Refusal or	rock at 12 inch	nes
	oncentration, D=Deple	tion DM-	- Paduaad Matrix N	1 <u>S_Moo</u>	kod Sond C	roine	² Location: PL=I	Doro Lining	a M-Motrix	
-					Neu Sanu G	iaiiis.				- 0 - 11 - 3
	ndicators:								ematic Hydri	
Histosol (A	•	_	Polyvalue Below	Surface	(S8) (LRR R ,				LRR K, L, MLR	
	pedon (A2)		MLRA 149B)						x (A16) (LRR K	•
Black Hist		_	Thin Dark Surface			(149B)			r Peat (S3) (LR	
	Sulfide (A4)	_	High Chroma Sa				 -		urface (S8) (LR	•
	Layers (A5)	_	Loamy Mucky M						(S9) (LRR K, L	
	Below Dark Surface (A1	1) _	Loamy Gleyed N)		· · · · · · · · · · · · · · · · · · ·		asses (F12) (Ll	
	k Surface (A12)	_	Depleted Matrix						in Soils (F19) (I	
	ıcky Mineral (S1)	_	Redox Dark Surf) (MLRA 144A,	145, 149B)
	eyed Matrix (S4)	_	Depleted Dark S		7)		· · · · · · · · · · · · · · · · · · ·	rent Materia		
_ Sandy Re		_	Redox Depression	` '					Surface (F22)	
	Matrix (S6)	_	Marl (F10) (LRR	K, L)			Other (I	Explain in R	emarks)	
_ Dark Surfa	ace (S7)									
dicators of	hydrophytic vegetation	on and wet	tland hydrology mu	ist be pro	esent, unles	s dist	urbed or problematic.			
strictive L	ayer (if observed):									
Туре:										
Depth (in	oboo).						Hydric Soil Prese	ent?	Yes	No X
Debin (iii	iches).									

Project/Site: Pine County Solar	City/County: Pine Sampling Date: 09/15/2022							
Applicant/Owner: Swift Current Energy	State: Min Sampling Point: W16-2w							
Investigator(s): Jlk drj	Section, Township, Range: T044N, R020W, S25							
• ()	relief (concave, convex, none): Concave Slope %: 2-5							
Subregion (LRR or MLRA): LRR K, MLRA 90A Lat: 46.266084	Long: -92.804609 Datum: WGS84							
	NWI classification: None							
Soil Map Unit Name: No Digital Data Available								
Are climatic / hydrologic conditions on the site typical for this time of year?	Yes No _X (If no, explain in Remarks.)							
Are Vegetation , Soil , or Hydrology significantly dist								
Are Vegetation, Soil, or Hydrology naturally problem	matic? (If needed, explain any answers in Remarks.)							
SUMMARY OF FINDINGS – Attach site map showing sampling p	oint locations, transects, important features, etc.							
Hydrophytic Vegetation Present? Yes X No Yes X No	Is the Sampled Area							
1	within a Wetland? Yes X No							
	If yes, optional Wetland Site ID: W16							
Remarks: (Explain alternative procedures here or in a separate report.) Drier than normal conditions								
Distribution of takens								
HYDROLOGY								
Wetland Hydrology Indicators:	Secondary Indicators (minimum of two required)							
Primary Indicators (minimum of one is required; check all that apply)	Surface Soil Cracks (B6)							
Surface Water (A1)X Water-Stained Leaves (B9)	Drainage Patterns (B10)							
High Water Table (A2) Aquatic Fauna (B13)	Moss Trim Lines (B16)							
Saturation (A3) Marl Deposits (B15)	Dry-Season Water Table (C2)							
Water Marks (B1) Hydrogen Sulfide Odor (C1)	Crayfish Burrows (C8)							
Sediment Deposits (B2) Oxidized Rhizospheres on L								
Drift Deposits (B3) Presence of Reduced Iron (0	C4) Stunted or Stressed Plants (D1)							
Algal Mat or Crust (B4) Recent Iron Reduction in Till	led Soils (C6) X Geomorphic Position (D2)							
Iron Deposits (B5) Thin Muck Surface (C7)	Shallow Aquitard (D3)							
Inundation Visible on Aerial Imagery (B7) Other (Explain in Remarks)	Microtopographic Relief (D4)							
Sparsely Vegetated Concave Surface (B8)	X FAC-Neutral Test (D5)							
Field Observations:								
Surface Water Present Yes No Depth (inches	s):							
Water Table Present Yes No Depth (inches	s):							
Saturation Present Yes No Depth (inches								
(includes capillary fringe)								
Describe Recorded Data (stream gauge, monitoring well, aerial photos, pr	evious inspections), if available:							
Remarks:								

Tree Stratum (Plot size:ft_)	Absolute % Cover	Dominant Species	Indicator Status	Dominance Test worksheet:
Betula papyrifera 2.	5	No	FACU	Number of Dominant Species That Are OBL, FACW, or FAC: 1 (A)
3 4				Total Number of Dominant Species Across All Strata: 1 (B)
5.6.				Percent of Dominant Species
7				That Are OBL, FACW, or FAC: 100 (A/B)
	5	_ = Total Cover		Prevalence Index worksheet: Total % Cover of: Multiply by:
Sapling/Shrub Stratum (Plot size: 15 ft)				OBL species x 1 =
1. Alnus incana	45	No	FACW	FACW species x 2 =
2. Salix petiolaris	15	No	FACW	FAC species x 3 =
3. Picea mariana	5	No	FACW	
4. Rhamnus cathartica	3	No	FAC	FACU species x 4 =
5. Cornus racemosa	3	No	FAC	UPL species x 5 =
6.				Column Totals: (A)(B)
7				Prevalence Index = B/A =
	71	= Total Cover		Hydrophytic Vegetation Indicators:
Herb Stratum (Plot size: 5 ft)		= Total Cover		- 1 - Rapid Test for Hydrophytic Vegetation
1. Onoclea sensibilis	15	No	FACW	X 2 - Dominance Test is >50%
Symphyotrichum lanceolatum	10	No	FACW	3 - Prevalence Index is ≤3.0¹
3. Carex sprengelii	5	Yes	FAC	4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet)
4. Athyrium asplenioides	3	No	FAC	(Flovide supporting data in Nemarks of on a separate sneet)
5. Solidago gigantea		·	FACW	Problematic Hydrophytic Vegetation¹ (Explain)
6				¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
7				
8				Definitions of Vegetation Strata:
9				Tree – Woody plants 3 in. (7.6 cm) or more in
10				diameter at breast height (DBH), regardless of height.
11				Sapling/shrub – Woody plants less than 3 in. DBH
12				and greater than or equal to 3.28 ft (1 m) tall.
	35	= Total Cover		Herb – All herbaceous (non-woody) plants, regardless
Woody Vine Stratum (Plot size: 30 ft)				of size, and woody plants less than 3.28 ft tall.
1				Woody vines – All woody vines greater than 3.28 ft in
2				height.
3				
4				Hydrophytic
	0	= Total Cover		Vegetation Present? Yes X No
_				
Remarks: (Include photo numbers here or on a separ	ate sheet.)			

Sampling Point:

W16-2w

SOIL Sampling Point: W16-2w

Depth (inches) C 0-8 10Y	Matrix olor (moist) % (R 4/1 95	Color (moist) 10YR 5/4	5	Type¹ Loc² C M	Texture Silt Loam	Remarks Refusal on rock at 8 inches
<u> </u>						
0-8 10Y	R 4/1 95	10YR 5/4	5 -		Sit Loam	Refusal on rock at 8 inches
			· · · ·			
			· — ·		- — — — — — — — — — — — — — — — — — — —	
			· — ·			
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		. <u></u>			-	
			. —— -			
Type: C=Concen	tration, D=Depletion, R	M=Reduced Matrix,	MS=Maske	d Sand Grain	s. ² Location: PL=P	Pore Lining, M=Matrix.
ydric Soil Indica	tors:				Indicators f	for Problematic Hydric Soils³:
Histosol (A1)		Polyvalue Belov	w Surface (S	8) (LRR R,	2 cm Mı	uck (A10) (LRR K, L, MLRA 149B)
Histic Epipedon	(A2)	MLRA 149B)			Coast P	rairie Redox (A16) (LRR K, L, R)
Black Histic (A3)		Thin Dark Surfa		R R, MLRA 149		ucky Peat or Peat (S3) (LRR K, L, R)
Hydrogen Sulfid		High Chroma S			· —	ue Below Surface (S8) (LRR K, L)
Stratified Layers		Loamy Mucky N				rk Surface (S9) (LRR K, L)
	Dark Surface (A11)	Loamy Gleyed		, ,	<u></u>	nganese Masses (F12) (LRR K, L, R)
Thick Dark Surfa		Depleted Matrix				nt Floodplain Soils (F19) (MLRA 149B)
Sandy Mucky M		Redox Dark Su				podic (TA6) (MLRA 144A, 145, 149B)
Sandy Gleyed M		Depleted Dark				rent Material (F21)
Sandy Redox (S		X Redox Depress				allow Dark Surface (F22)
Stripped Matrix		Marl (F10) (LRF				Explain in Remarks)
Dark Surface (S		Man (1 10) (21t)	· · · · · · · · · · · · · · · · · · ·		Outer (E	Apidin in Normano)
Dank Gunace (G	,,					
ndicators of hydro	phytic vegetation and	wetland hydrology m	ust be pres	ent, unless di	sturbed or problematic.	
estrictive Layer	(if observed):					
Туре:						
Depth (inches)	:				Hydric Soil Prese	ent? Yes ^X No
emarks:						

Project/Site: Pine County Solar	City/County: Pine Sampling Date: 09/16/2022					
Applicant/Owner: Swift Current Energy	State: Min Sampling Point: W17-1u					
Investigator(s): BB	Section, Township, Range: T044N, R020W, S25					
	relief (concave, convex, none): Convex Slope %: 2					
Subregion (LRR or MLRA): LRR K, MLRA 90A Lat: 46.264227	Long: -92.823799 Datum: WGS84					
Soil Map Unit Name: No Digital Data Available	NWI classification: PSS1A					
Are climatic / hydrologic conditions on the site typical for this time of year?	Yes X No (If no, explain in Remarks.)					
Are Vegetation, Soil, or Hydrology significantly dist						
Are Vegetation, Soil, or Hydrology naturally problem	·					
 -	maio:					
SUMMARY OF FINDINGS – Attach site map showing sampling p	oint locations, transects, important reatures, etc.					
Hydrophytic Vegetation Present? Yes NoX	Is the Sampled Area					
Hydric Soil Present? Yes NoX	within a Wetland? Yes No X					
Wetland Hydrology Present? Yes No _X	If yes, optional Wetland Site ID: W17					
Remarks: (Explain alternative procedures here or in a separate report.)						
HYDROLOGY						
Wetland Hydrology Indicators:	Secondary Indicators (minimum of two required)					
Primary Indicators (minimum of one is required; check all that apply)	Surface Soil Cracks (B6)					
Surface Water (A1) Water-Stained Leaves (B9)	Drainage Patterns (B10)					
High Water Table (A2) Aquatic Fauna (B13)	Moss Trim Lines (B16)					
Saturation (A3) Marl Deposits (B15)	Dry-Season Water Table (C2)					
Water Marks (B1) Hydrogen Sulfide Odor (C1)	Crayfish Burrows (C8)					
Sediment Deposits (B2) Oxidized Rhizospheres on L	.iving Roots (C3) Saturation Visible on Aerial Imagery (C9)					
Drift Deposits (B3) Presence of Reduced Iron (0	C4) Stunted or Stressed Plants (D1)					
Algal Mat or Crust (B4) Recent Iron Reduction in Till	led Soils (C6) Geomorphic Position (D2)					
Iron Deposits (B5) Thin Muck Surface (C7)	Shallow Aquitard (D3)					
Inundation Visible on Aerial Imagery (B7) Other (Explain in Remarks)	Microtopographic Relief (D4)					
Sparsely Vegetated Concave Surface (B8)	FAC-Neutral Test (D5)					
Field Observations:						
Surface Water Present Yes No _X Depth (inches	s):					
Water Table Present Yes No _X Depth (inches	s):					
Saturation Present Yes No X Depth (inches	S): Wetland Hydrology Present? Yes No _X					
(includes capillary fringe)						
Describe Recorded Data (stream gauge, monitoring well, aerial photos, pr	evious inspections), if available:					
Remarks:						

<u>Tree Stratum</u> (Plot size: <u>30 ft</u>)	Absolute % Cover	Dominant Species	Indicator Status	Dominance Test worksheet:
Populus tremuloides Acer rubrum	<u>45</u> 20	Yes Yes	FAC FAC	Number of Dominant Species That Are OBL, FACW, or FAC: 2 (A)
3 4				Total Number of Dominant Species Across All Strata: 4 (B)
5				Percent of Dominant Species That Are OBL, FACW, or FAC:50(A/B)
7				Prevalence Index worksheet:
	65	_ = Total Cover		Total % Cover of: Multiply by:
Sapling/Shrub Stratum (Plot size:15 ft)				OBL species x 1 =
1. Corylus cornuta	35	Yes	FACU	FACW species x 2 =
2				FAC species x 3 =
3				FACU species x 4 =
4				
5				UPL species x 5 =
6				Column Totals: (A)(B)
7				Prevalence Index = B/A =
	35			Hydrophytic Vegetation Indicators:
Herb Stratum (Plot size:5 ft)		= Total Cover		1 - Rapid Test for Hydrophytic Vegetation - 2 - Dominance Test is >50%
1. Eurybia macrophylla	75	Yes	UPL	I—
2. Pteridium aquilinum	15	No	FACU	3 - Prevalence Index is ≤3.0¹
3. Cornus canadensis	15	No	FAC	4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet)
4				(
5				Problematic Hydrophytic Vegetation¹ (Explain)
6				¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
7.				disturbed of problematic.
8.				Definitions of Vegetation Strata:
9.				_
10.				Tree – Woody plants 3 in. (7.6 cm) or more in
11.				diameter at breast height (DBH), regardless of height.
12.				Sapling/shrub – Woody plants less than 3 in. DBH
				and greater than or equal to 3.28 ft (1 m) tall.
Woody Vine Stratum (Plot size:30 ft)	105	= Total Cover		Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.
1				Woody vines – All woody vines greater than 3.28 ft in
2				height.
3				-
4				Hydrophytic
	0	= Total Cover		Vegetation Present? Yes NoX
Remarks: (Include photo numbers here or on a separ	ate sheet.)			

Sampling Point:

W17-1u

SOIL Sampling Point: W17-1u

Profile Desc Depth	cription: (Describe to Matrix	the dep		ment the x Featur		or or co	onfirm the absence of indicators.)
(inches)	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²	Texture Remarks
0-7	10YR 3/2	100			<u> </u>		
7-19	10YR 5/6	100					Sand
	•						
19-24	10YR 6/4	100					Sand
							- <u></u> -
¹Type: C=C	oncentration, D=Depl	etion, RM	=Reduced Matrix, N	∕/S=Mas	ked Sand	Grains.	² Location: PL=Pore Lining, M=Matrix.
Hydric Soil	Indicators:						Indicators for Problematic Hydric Soils ³ :
Histosol	(A1)		Polyvalue Below	Surface	(S8) (LRR	R,	2 cm Muck (A10) (LRR K, L, MLRA 149B)
	ipedon (A2)		MLRA 149B)				Coast Prairie Redox (A16) (LRR K, L, R)
Black His			Thin Dark Surface				
	n Sulfide (A4) Layers (A5)		High Chroma Sa				Polyvalue Below Surface (S8) (LRR K, L)
	Below Dark Surface (A1	11)	Loamy Mucky M Loamy Gleyed M			L)	Thin Dark Surface (S9) (LRR K, L) Iron-Manganese Masses (F12) (LRR K, L, R)
	rk Surface (A12)	1)	Depleted Matrix		'		Piedmont Floodplain Soils (F19) (MLRA 149B)
	ucky Mineral (S1)		Redox Dark Surf				Mesic Spodic (TA6) (MLRA 144A, 145, 149B)
Sandy G	leyed Matrix (S4)		Depleted Dark S	Surface (F	7)		Red Parent Material (F21)
Sandy Re	edox (S5)		Redox Depression	ons (F8)			Very Shallow Dark Surface (F22)
7.7	Matrix (S6)		Marl (F10) (LRR	K , L)			Other (Explain in Remarks)
Dark Sur	face (S7)						
³ Indicators of	f hydrophytic vegetati	on and w	etland hydrology mu	ist be pr	esent, un	less dist	sturbed or problematic.
Restrictive I	Layer (if observed):						
Type:							
Depth (ir	nches):						Hydric Soil Present? Yes No _X
Remarks:							

Project/Site: Pine County Solar	City/County: Pine Sampling Date: 09/16/2022				
Applicant/Owner: Swift Current Energy	State: Min Sampling Point: W17-1w				
Investigator(s): BB	Section, Township, Range: T044N, R020W, S25				
Landform (hillside, terrace, etc.): Depression Local r	relief (concave, convex, none): Concave Slope %: 0-1				
Subregion (LRR or MLRA): LRR K, MLRA 90A Lat: 46.264213	Long: -92.823622 Datum: WGS84				
Soil Map Unit Name: No Digital Data Available	NWI classification: PSS1A				
Are climatic / hydrologic conditions on the site typical for this time of year?	Yes X No (If no, explain in Remarks.)				
Are Vegetation , Soil , or Hydrology significantly distu	urbed? Are "Normal Circumstances" present? Yes X No				
Are Vegetation , Soil , or Hydrology naturally problem					
SUMMARY OF FINDINGS – Attach site map showing sampling po	oint locations, transects, important features, etc.				
Hydrophytic Vegetation Present? Yes X No	Is the Sampled Area				
Hydric Soil Present? Yes X No	within a Wetland? Yes X No				
Wetland Hydrology Present? Yes X No No	If yes, optional Wetland Site ID: W17				
Remarks: (Explain alternative procedures here or in a separate report.)					
HYDROLOGY					
Wetland Hydrology Indicators:	Secondary Indicators (minimum of two required)				
Primary Indicators (minimum of one is required; check all that apply)	Surface Soil Cracks (B6)				
Surface Water (A1) Water-Stained Leaves (B9)	Drainage Patterns (B10)				
X High Water Table (A2) Aquatic Fauna (B13)	Moss Trim Lines (B16)				
X Saturation (A3) Marl Deposits (B15)	Dry-Season Water Table (C2)				
Water Marks (B1) Hydrogen Sulfide Odor (C1)	Crayfish Burrows (C8)				
Sediment Deposits (B2) Oxidized Rhizospheres on Li	iving Roots (C3) Saturation Visible on Aerial Imagery (C9)				
Drift Deposits (B3) Presence of Reduced Iron (C	(24) Stunted or Stressed Plants (D1)				
Algal Mat or Crust (B4) Recent Iron Reduction in Tille	ed Soils (C6) X Geomorphic Position (D2)				
Iron Deposits (B5) Thin Muck Surface (C7)	Shallow Aquitard (D3)				
Inundation Visible on Aerial Imagery (B7) Other (Explain in Remarks)	Microtopographic Relief (D4)				
Sparsely Vegetated Concave Surface (B8)	X FAC-Neutral Test (D5)				
Field Observations:					
Surface Water Present Yes No _X Depth (inches):				
Water Table Present Yes X No Depth (inches): 5				
Saturation Present Yes X No Depth (inches					
(includes capillary fringe)					
Describe Recorded Data (stream gauge, monitoring well, aerial photos, pre	evious inspections), if available:				
Remarks:					

VEGETATION – Use scientific names of	plants.			Sampling F	Point: W17-1w
Tree Stratum (Plot size: 30 ft)	Absolute % Cover	Dominant Species	Indicator Status	Dominance Test worksheet:	
1	<u> </u>			Number of Dominant Species	
2				That Are OBL, FACW, or FAC	
3.				111.00 000 171.00	
				Total Number of Dominant	
4.			-	Species Across All Strata:	5 (B)
5			-	Percent of Dominant Species	
6				That Are OBL, FACW, or FAC	: 100 (A/B)
7		<u> </u>			` ′
	0			Prevalence Index worksheet	ii
		_ = Total Cover	•	Total % Cover of:	Multiply by:
Sapling/Shrub Stratum (Plot size: 15 ft)				OBL species	x 1 =
1. Alnus incana	40	Yes	FACW	FACW species	x 2 =
2. Ilex verticillata	40	Yes	FACW	1	
Betula alleghaniensis			FAC	FAC species	x 3 =
À				FACU species	x 4 =
4				UPL species	x 5 =
5				Column Totals:	(A) (B)
6					
7				Prevalence Index = B/A	<u> </u>
	90			Hydrophytic Vegetation Indi	cators:
- 4		= Total Cover		X 1 - Rapid Test for Hydrop	hytic Vegetation
Herb Stratum (Plot size: 5 ft)				X 2 - Dominance Test is >50	
1. Rubus pubescens	20	Yes	FACW	I —	
2. Equisetum sylvaticum	20	Yes	FACW	3 - Prevalence Index is ≤3	3.0 ¹
Onoclea sensibilis	15	Yes	FACW	4 - Morphological Adaptat	
Schoenoplectus fluviatilis				(Provide supporting data in Rema	ks or on a separate sheet)
				Problematic Hydrophytic	Vegetation1 (Explain)
5				¹Indicators of hydric soil and wetland hydric	
6				disturbed or problematic.	nology must be present, unless
7					
8				Definitions of Vegetation St	rata:
9					
10.				Tree – Woody plants 3 in. (7.6	
44				diameter at breast height (DBI	a), regardless of neight.
11.				Sapling/shrub – Woody plant	ts less than 3 in. DBH
12				and greater than or equal to 3	
	65	= Total Cover			
Woody Vine Stratum (Plot size: 30 ft)		= Total Cover		Herb – All herbaceous (non-w	
• • • • • • • • • • • • • • • • • • • •				of size, and woody plants less	than 3.28 it tall.
1			-	Woody vines – All woody vine	es greater than 3.28 ft in
2				height.	
3		<u> </u>			
4				Hydrophytic	
	_			Vegetation	
	0	= Total Cover		Present? Yes X	No
Remarks: (Include photo numbers here or on a se	narata shoot)				
include photo numbers here of our a se	parate sneet.)				

SOIL Sampling Point: W17-1w

		the dep	th need				tor or co	onfirm the absence of indi	cators.)
Depth (inches)	Matrix Color (moist)	%	Colo	or (moist)	x Feature %	Type ¹	Loc ²	Texture	Remarks
0-6	10YR 2/1	100	Cold	T (ITIOIST)	70	Туре	Loc	Sandy Loam	Remarks
6-20	10YR 4/1	95	10YR	3/6	5	С		Loamy Sand	
20-25	10YR 5/1	95	10YR	4/6	5	<u>C</u>	M	Loamy Sand	
¹Type: C=Co	oncentration, D=Deple	etion, RN	∕l=Redu	ced Matrix, I	MS=Masl	ked San	d Grains	. ² Location: PL=Pore	Lining, M=Matrix.
Hydric Soil II	ndicators:							Indicators for P	roblematic Hydric Soils ³ :
Histosol (A	•		Po	olyvalue Belov	w Surface	(S8) (LRF	RR,	2 cm Muck (A	110) (LRR K, L, MLRA 149B)
	pedon (A2)			MLRA 149B)				<u> </u>	Redox (A16) (LRR K, L, R)
Black Hist				in Dark Surfa				· —	Peat or Peat (S3) (LRR K, L, R)
	Sulfide (A4)			gh Chroma Sa				 -	low Surface (S8) (LRR K, L)
	Layers (A5)	4)		amy Mucky M	-		, L)		rface (S9) (LRR K, L)
	Below Dark Surface (A1	1)		amy Gleyed Nepleted Matrix					ese Masses (F12) (LRR K, L, R)
	k Surface (A12) ucky Mineral (S1)			edox Dark Sur					odplain Soils (F19) (MLRA 149B) (TA6) (MLRA 144A, 145, 149B)
	eyed Matrix (S4)			epleted Dark S		7)		Red Parent M	
X Sandy Re				edox Depressi		.,			Dark Surface (F22)
	Matrix (S6)			arl (F10) (LRF					n in Remarks)
Dark Surfa	ace (S7)								
³ Indicators of	hydrophytic vegetation	on and w	etland h	ydrology m	ust be pre	esent, ur	nless dis	turbed or problematic.	
	.ayer (if observed):							<u> </u>	
Type:									
Depth (in	ches):			_				Hydric Soil Present?	Yes No
Remarks:								L	

Project/Site: Pine County Solar	City/County: Pine Sampling Date: 09/15/2022						
Applicant/Owner: Swift Current Energy	State: Min Sampling Point: W18-1u						
Investigator(s): DRJ, JK	Section, Township, Range:						
	relief (concave, convex, none): Convex Slope %: 1-2						
Subregion (LRR or MLRA): Lat: 46.264361	Long: -92.80391 Datum: WGS84						
Soil Map Unit Name:	NWI classification:						
Are climatic / hydrologic conditions on the site typical for this time of year?	Yes No X (If no, explain in Remarks.)						
Are Vegetation, Soil, or Hydrology significantly dist							
Are Vegetation , Soil , or Hydrology naturally proble	matic? (If needed, explain any answers in Remarks.)						
SUMMARY OF FINDINGS – Attach site map showing sampling p	point locations, transects, important features, etc.						
Hadrada fa Vandafa a Processo	In the Commission Area						
Hydrophytic Vegetation Present? Yes No X Hydric Soil Present? Yes No X	Is the Sampled Area within a Wetland? Yes No X						
Wetland Hydrology Present? Yes No X	If yes, optional Wetland Site ID: W18						
	ii yes, optional vvetiand site ib.						
Remarks: (Explain alternative procedures here or in a separate report.) Drier than normal							
Bill than normal							
HYDROLOGY							
Wetland Hydrology Indicators:	Secondary Indicators (minimum of two required)						
Primary Indicators (minimum of one is required; check all that apply)	Secondary Indicators (minimum of two required) Surface Soil Cracks (B6)						
Surface Water (A1) Water-Stained Leaves (B9) High Water Table (A2) Aquatic Fauna (B13)	Moss Trim Lines (B16)						
Saturation (A3) Aduatic Faulia (B13) Marl Deposits (B15)	Dry-Season Water Table (C2)						
Water Marks (B1) Water Marks (B1) Hydrogen Sulfide Odor (C1)	-						
Sediment Deposits (B2) Oxidized Rhizospheres on L							
Drift Deposits (B3) Presence of Reduced Iron (
Algal Mat or Crust (B4) Recent Iron Reduction in Til							
Iron Deposits (B5) Thin Muck Surface (C7)	Shallow Aquitard (D3)						
Inundation Visible on Aerial Imagery (B7) Other (Explain in Remarks)	Missestan assemblie Bullet (DA)						
Sparsely Vegetated Concave Surface (B8)	FAC-Neutral Test (D5)						
Field Observations:	_						
Surface Water Present Yes No _X Depth (inches	e)·						
Water Table Present Yes No X Depth (inches							
Saturation Present Yes No X Depth (inches							
(includes capillary fringe)	3)						
Describe Recorded Data (stream gauge, monitoring well, aerial photos, pr	revious inspections), if available:						
33.,	, , , , , , , , , , , , ,						
Remarks:							
I .							

Free Stratum (Plot size: 30 ft)	Absolute % Cover	Dominant Species	Indicator Status	Dominance Test worksheet:
Pinus banksiana	15	Yes	FACU	
				Number of Dominant Species That Are OBL, FACW, or FAC: 1 (A)
				That Are OBE, I AGW, OF AG(A)
				Total Number of Dominant
				Species Across All Strata: 2 (B)
			-	Percent of Dominant Species
				That Are OBL, FACW, or FAC: (A/B)
		· · · · · ·		Prevalence Index worksheet:
	15	= Total Cover		Total % Cover of: Multiply by:
apling/Shrub Stratum (Plot size: 15 ft)		_		OBL species x 1 =
Salix petiolaris	5	Yes	FACW	FACW species x 2 =
Pinus banksiana		No	FACU	
			<u> </u>	FAC species x 3 =
				FACU species x 4 =
				UPL species x 5 =
				Column Totals: (A) (B)
				Prevalence Index = B/A =
				Hydrophytic Vegetation Indicators:
	8	= Total Cover		- 1 - Rapid Test for Hydrophytic Vegetation
lerb Stratum (Plot size: 5 ft)				I— ' ' ' ' '
Poa pratensis	20	No	FACU	_ 2 - Dominance Test is >50%
Pinus banksiana	10	No	FACU	3 - Prevalence Index is ≤3.0¹
Cornus racemosa	10	No	FAC	4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet)
. Solidago canadensis	10	No	FACU	(Frovide supporting data in Nemarks of on a separate sneet)
Hieracium aurantiacum	10	No	UPL	Problematic Hydrophytic Vegetation ¹ (Explain)
Fragaria virginiana		No	FACU	¹Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
- Symphyotrichum lateriflorum				disturbed of problematic.
Phleum pratense				Definitions of Vegetation Strata:
· Lotus corniculatus				Dominiono di Vogotation Cirata.
Hypericum perforatum	-			Tree – Woody plants 3 in. (7.6 cm) or more in
		NO	UPL	diameter at breast height (DBH), regardless of height.
1 2				Sapling/shrub – Woody plants less than 3 in. DBH
<u> </u>				and greater than or equal to 3.28 ft (1 m) tall.
	92	= Total Cover		Herb – All herbaceous (non-woody) plants, regardless
Voody Vine Stratum (Plot size: 30 ft)				of size, and woody plants less than 3.28 ft tall.
				Mandanian Allumada in a mada da da a 0.00 fi i
				Woody vines – All woody vines greater than 3.28 ft in height.
				Tio.gra.
				Hydrophytic
				Vegetation
				Present? Yes No X
	0	= Total Cover		

SOIL Sampling Point: W18-1u

		the depth		ment the x Feature		or or co	confirm the absence of indicators.)
Depth (inches)	Matrix Color (moist)	<u></u> %	Color (moist)	% realul	Type ¹	Loc ²	Texture Remarks
· · · · ·			Color (moist)		Турс		·
0-24	7.5YR 4/6	100					Sand Can't get soil to stay in augar to remove
							<u> </u>
							
							-
							-
							<u> </u>
¹Type: C=Co	oncentration, D=Deple	etion, RM=F	Reduced Matrix, N	MS=Mas	ked Sand	d Grains	ns. ² Location: PL=Pore Lining, M=Matrix.
Hydric Soil I	ndicators:						Indicators for Problematic Hydric Soils ³ :
Histosol ((A1)		Polyvalue Below	V Surface	(S8) (LRR	R,	2 cm Muck (A10) (LRR K, L, MLRA 149B)
Histic Epi	pedon (A2)		MLRA 149B)				Coast Prairie Redox (A16) (LRR K, L, R)
Black His	tic (A3)		Thin Dark Surfa	ce (S9) (L	RR R, ML	RA 149B	9B) 5 cm Mucky Peat or Peat (S3) (LRR K, L, R)
Hydroger	Sulfide (A4)		High Chroma Sa	ands (S11) (LRR K,	L)	Polyvalue Below Surface (S8) (LRR K, L)
Stratified	Layers (A5)		Loamy Mucky M	lineral (F1) (LRR K,	L)	Thin Dark Surface (S9) (LRR K, L)
Depleted	Below Dark Surface (A1	1)	Loamy Gleyed N	Matrix (F2))		Iron-Manganese Masses (F12) (LRR K, L, R)
Thick Dar	rk Surface (A12)		Depleted Matrix				Piedmont Floodplain Soils (F19) (MLRA 149B)
Sandy Mu	ucky Mineral (S1)		Redox Dark Sur				Mesic Spodic (TA6) (MLRA 144A, 145, 149B)
Sandy GI	eyed Matrix (S4)		Depleted Dark S	Surface (F	7)		Red Parent Material (F21)
Sandy Re	edox (S5)		Redox Depressi	ons (F8)			Very Shallow Dark Surface (F22)
Stripped I	Matrix (S6)		Marl (F10) (LRR	k K, L)			Other (Explain in Remarks)
Dark Surf							
³ Indicators of	hydrophytic vegetation	on and wetl	and hydrology mu	ust be pr	esent, un	less dis	isturbed or problematic.
Restrictive L	ayer (if observed):						
Type:							
Depth (ir	nches):						Hydric Soil Present? Yes No X
Remarks:							
Sand, highly o	compacted						
Cana, mgm,	opaotoa						

Project/Site: Pine County Solar	Cit	ty/County: Pine		Sampling Date:	09/15/2022			
Applicant/Owner: Swift Current Energy	_		State: Min	Sampling Point:	W18-1w			
Investigator(s): DRJ, JK		Section, Townshi	ip. Range:	-				
Landform (hillside, terrace, etc.): Depression	L ocal relief	(concave, convex, non		Slon	e %: 0-1			
· · · · · · · · · · · · · · · · · · ·		•		•				
Subregion (LRR or MLRA):	Lat: 46.264371	Long: <u>-92.</u>		Datum:	WGS84			
Soil Map Unit Name:		N	WI classification:					
Are climatic / hydrologic conditions on the site typi	cal for this time of year?	Yes	No X (If no, e	explain in Remark	s.)			
Are Vegetation , Soil , or Hydrolog	y significantly disturbed	d? Are "Normal Cir	rcumstances" prese	ent? Yes X	No			
Are Vegetation , Soil , or Hydrolog	y naturally problemation	? (If needed, expl	ain any answers in	Remarks.)				
SUMMARY OF FINDINGS – Attach site m	ap showing sampling point	locations, transects, i	mportant features	s, etc.				
Hydrophytic Vegetation Present? Ye	s X No I	Is the Sampled Area						
Hydric Soil Present? Ye		within a Wetland?	Yes X	No				
Wetland Hydrology Present? Ye		If yes, optional Wetland						
Remarks: (Explain alternative procedures here o Drier than normal	r in a separate report.)							
HYDROLOGY								
Wetland Hydrology Indicators:		Seco	ondary Indicators (min	imum of two required	<u>(k</u>			
Primary Indicators (minimum of one is required; of	heck all that apply)		Surface Soil Cracks (E	36)				
Surface Water (A1)	Water-Stained Leaves (B9)		Drainage Patterns (B1	10)				
High Water Table (A2)	Aquatic Fauna (B13)	Moss Trim Lines (B16)						
Saturation (A3)	Marl Deposits (B15)	Dry-Season Water Table (C2)						
Water Marks (B1)	_ Hydrogen Sulfide Odor (C1)	Crayfish Burrows (C8)						
Sediment Deposits (B2)	Oxidized Rhizospheres on Living F	Living Roots (C3) Saturation Visible on Aerial Imagery (C9)						
Drift Deposits (B3)	Presence of Reduced Iron (C4)	C4) Stunted or Stressed Plants (D1)						
Algal Mat or Crust (B4)	Recent Iron Reduction in Tilled So	illed Soils (C6) X Geomorphic Position (D2)						
Iron Deposits (B5)	_ Thin Muck Surface (C7)	Shallow Aquitard (D3)						
Inundation Visible on Aerial Imagery (B7)	Other (Explain in Remarks)							
Sparsely Vegetated Concave Surface (B8)		<u>X</u>	FAC-Neutral Test (D5)				
Field Observations:								
Surface Water Present Yes No	X Depth (inches):							
Water Table Present Yes No	X Depth (inches):							
Saturation Present Yes No	Depth (inches):	Wetland Hy	drology Present?	Yes X	_ No			
(includes capillary fringe)								
Describe Recorded Data (stream gauge, monitor	ing well, aerial photos, previou	us inspections), if availa	ıble:					
Remarks:								

<u>Tree Stratum</u> (Plot size: <u>30 ft</u>)	Absolute % Cover	Dominant <u>Species</u>	Indicator Status	Dominance Test worksheet:
1 2				Number of Dominant Species That Are OBL, FACW, or FAC:1(A)
3 4				Total Number of Dominant Species Across All Strata: 1 (B)
5				Percent of Dominant Species That Are OBL, FACW, or FAC: 100 (A/B)
7				Prevalence Index worksheet:
	0	_ = Total Cover		Total % Cover of: Multiply by:
Sapling/Shrub Stratum (Plot size: 15 ft)				OBL species x 1 =
1				FACW species x 2 =
2				FAC species x 3 =
3				
4				FACU species x 4 =
5				UPL species x 5 =
6.				Column Totals: (A) (B)
7.				Prevalence Index = B/A =
				Hydrophytic Vegetation Indicators:
Herb Stratum (Plot size: 5 ft)	0	= Total Cover		X 1 - Rapid Test for Hydrophytic Vegetation
Carex lacustris	50	Yes	OBL	X 2 - Dominance Test is >50%
Solidago canadensis	15	No	FACU	3 - Prevalence Index is ≤3.0¹
3. Poa pratensis	10	No	FACU	4 - Morphological Adaptations ¹
	_			(Provide supporting data in Remarks or on a separate sheet)
4. Phalaris arundinacea			FACW	Problematic Hydrophytic Vegetation ¹ (Explain)
 Fragaria virginiana 			FACU	¹Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
7				
8				Definitions of Vegetation Strata:
9.				-
10				Tree – Woody plants 3 in. (7.6 cm) or more in
11.				diameter at breast height (DBH), regardless of height.
12.		·		Sapling/shrub – Woody plants less than 3 in. DBH
12.				and greater than or equal to 3.28 ft (1 m) tall.
20.4	85	= Total Cover		Herb – All herbaceous (non-woody) plants, regardless
Woody Vine Stratum (Plot size: 30 ft)				of size, and woody plants less than 3.28 ft tall.
1				Woody vines – All woody vines greater than 3.28 ft in
2				height.
3				
4				Hydrophytic
	0	= Total Cover		Vegetation Present? YesX No
Demandar (Include abote graphers bore as as a consu	-414\			
Remarks: (Include photo numbers here or on a separa	ate sneet.)			

Sampling Point:

W18-1w

SOIL Sampling Point: W18-1w

Profile Desci	ription: (Describe to	the dept	h needed to docu	ment th	e indicat	or or co	onfirm the absence of	f indicators.)	
Depth	Matrix		Redo	x Featur	es				
(inches)	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²	Texture	Remarks	
0-6	7.5YR 3/3	100					Sandy Clay Loam		
6-24	5YR 4/6	100					Sandy Clay Loam	Very compacted	
¹Type: C=Co	oncentration, D=Deple	etion, RM=	=Reduced Matrix, N	√S=Mas	ked Sand	Grains.	. ² Location: PL=	Pore Lining, M=Matrix.	
Hydric Soil I	ndicators:						Indicators	for Problematic Hydric Soils	³:
Histosol (A	A1)	_	Polyvalue Below	/ Surface	(S8) (LRR	R,	2 cm N	luck (A10) (LRR K, L, MLRA 149B)	
Histic Epip	pedon (A2)		MLRA 149B)				Coast	Prairie Redox (A16) (LRR K, L, R)	
Black Hist	•	_	Thin Dark Surface				5 cm N	lucky Peat or Peat (S3) (LRR K, L,	R)
	Sulfide (A4)	-	High Chroma Sa					lue Below Surface (S8) (LRR K, L)	
	Layers (A5)	_	Loamy Mucky M			L)	<u> </u>	ark Surface (S9) (LRR K, L)	_,
	Below Dark Surface (A1	1) _	Loamy Gleyed M		·)			anganese Masses (F12) (LRR K, L,	•
	k Surface (A12)	-	Depleted Matrix					ont Floodplain Soils (F19) (MLRA 14	
	ucky Mineral (S1)	_	Redox Dark Surf					Spodic (TA6) (MLRA 144A, 145, 14	9B)
Sandy Gie	eyed Matrix (S4)	_	Depleted Dark S Redox Depression		-7)		\(\care{c}\)	arent Material (F21) hallow Dark Surface (F22)	
	Matrix (S6)	-	Marl (F10) (LRR					Explain in Remarks)	
Dark Surfa		-	(. 10) (=1111	, =,				Explain in Romano,	
		on and we	tland hydrology mu	ıst be pr	esent un	less dist	turbed or problematic		
	ayer (if observed):						T		
Type:	ayor (ii oboorvou).								
Depth (in	ches).						Hydric Soil Pres	ent? Yes ^X No	
							Trydric con ries		
Remarks: Unsure if this i	s hydric								
Official tribat	3 Hydrio								

Project/Site: Pine County Solar	City/County: Pine Sampling Date: 09/16/2022						
Applicant/Owner: Swift Current Energy	State: Min Sampling Point: W19-1u						
Investigator(s): BB/KKM	Section, Township, Range: T044N, R020W, S25						
	relief (concave, convex, none): Convex Slope %: 3-5						
Subregion (LRR or MLRA): LRR K, MLRA 90A Lat: 46.263623							
Soil Map Unit Name: No Digital Data Available	NWI classification:						
Are climatic / hydrologic conditions on the site typical for this time of year?	Yes No _X (If no, explain in Remarks.)						
Are Vegetation , Soil , or Hydrology significantly dist	turbed? Are "Normal Circumstances" present? Yes X No						
Are Vegetation , Soil , or Hydrology naturally problem	matic? (If needed, explain any answers in Remarks.)						
SUMMARY OF FINDINGS – Attach site map showing sampling p	oint locations, transects, important features, etc.						
Hydrophytic Vegetation Present? Yes No X	Is the Sampled Area						
Hydric Soil Present? Yes No X	within a Wetland? Yes No X						
Wetland Hydrology Present? Yes No X	If yes, optional Wetland Site ID: W19						
Remarks: (Explain alternative procedures here or in a separate report.) Antecedent precipitation analysis showed drier than normal conditions							
HYDROLOGY							
Wetland Hydrology Indicators:	Secondary Indicators (minimum of two required)						
Primary Indicators (minimum of one is required; check all that apply)	Surface Soil Cracks (B6)						
Surface Water (A1) Water-Stained Leaves (B9)	Drainage Patterns (B10)						
High Water Table (A2) Aquatic Fauna (B13)	Moss Trim Lines (B16)						
Saturation (A3) Marl Deposits (B15)	Dry-Season Water Table (C2)						
Water Marks (B1) Hydrogen Sulfide Odor (C1)	Crayfish Burrows (C8)						
Sediment Deposits (B2) Oxidized Rhizospheres on L	Living Roots (C3) Saturation Visible on Aerial Imagery (C9)						
Drift Deposits (B3) Presence of Reduced Iron (C	(C4) Stunted or Stressed Plants (D1)						
Algal Mat or Crust (B4) Recent Iron Reduction in Till	illed Soils (C6) Geomorphic Position (D2)						
Iron Deposits (B5) Thin Muck Surface (C7)	Shallow Aquitard (D3)						
Inundation Visible on Aerial Imagery (B7) Other (Explain in Remarks)	Microtopographic Relief (D4)						
Sparsely Vegetated Concave Surface (B8)	FAC-Neutral Test (D5)						
Field Observations:							
Surface Water Present Yes No X Depth (inches	s):						
Water Table Present Yes No X Depth (inches	s):						
Saturation Present Yes No X Depth (inches	S): Wetland Hydrology Present? Yes No _X						
(includes capillary fringe)							
Describe Recorded Data (stream gauge, monitoring well, aerial photos, pro	revious inspections), if available:						
Remarks:							
Remarks:							

Tree Stratum (Plot size: 30 ft)	Absolute <u>% Cover</u>	Dominant Species	Indicator Status	Dominance Test worksheet:
1. Populus tremuloides	70	Yes	FAC	Number of Dominant Species
Quercus rubra 3.	30	Yes	FACU	That Are OBL, FACW, or FAC:(A)
4.				Total Number of Dominant Species Across All Strata: 7 (B)
5				Percent of Dominant Species That Are OBL, FACW, or FAC: 28.99999999 (A/B)
7				Prevalence Index worksheet:
	100	_ = Total Cover		Total % Cover of: Multiply by:
Sapling/Shrub Stratum (Plot size: 15 ft)				OBL species 0 x 1 = 0
1. Corylus cornuta	15	Yes	FACU	FACW species 10 x 2 = 20
2. Ilex verticillata	10	Yes	FACW	FAC species 88 x 3 = 264
3. Prunus serotina	8	Yes	FACU	FACU species 108 x 4 = 432
4. Acer rubrum	5	No	FAC	<u> </u>
5	_			UPL species 35 x 5 = 175
6				Column Totals: 241 (A) 891 (B)
7	_			Trevalence macx = B/A =
	38	- Total Cover		Hydrophytic Vegetation Indicators:
Herb Stratum (Plot size: 5 ft)		= Total Cover		1 - Rapid Test for Hydrophytic Vegetation
Pteridium aquilinum	50	Yes	FACU	2 - Dominance Test is >50%
Carex pensylvanica	30	Yes	UPL	3 - Prevalence Index is ≤3.0¹
Cornus canadensis	10	No	FAC	4 - Morphological Adaptations ¹
Vaccinium angustifolium	5	No	FACU	(Provide supporting data in Remarks or on a separate sheet)
Eurybia macrophylla	-	No	UPL	Problematic Hydrophytic Vegetation ¹ (Explain)
6. Acer rubrum			FAC	Indicators of hydric soil and wetland hydrology must be present, unless
7.			.,,,	disturbed or problematic.
8.				Definitions of Vegetation Strata:
9.			_	_
10				Tree – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.
11.				Sapling/shrub – Woody plants less than 3 in. DBH
12				and greater than or equal to 3.28 ft (1 m) tall.
	103	= Total Cover		Herb – All herbaceous (non-woody) plants, regardless
Woody Vine Stratum (Plot size:30 ft)				of size, and woody plants less than 3.28 ft tall.
1	_			Woody vines – All woody vines greater than 3.28 ft in
2	_			height.
3	_			
4	_			Hydrophytic
	0	= Total Cover		Vegetation Present? Yes No X
Remarks: (Include photo numbers here or on a sep	arate sheet.)			

Sampling Point:

W19-1u

SOIL Sampling Point: W19-1u

Profile Desc Depth	ription: (Describe to Matrix	the dep		nent the c Feature		or or co	confirm the absence of indicators.)				
(inches)	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²	- Texture Remarks				
0-11	10YR 3/3	100	(11)		71 -		Sand				
11-15	10YR 3/3	65					Sand				
11-15	10YR 3/6	35					Sand				
15-24	10YR 4/6	100					Sand With gravel intermixed				
13-24	10110 4/0	100					Sanu with graver intermixed				
¹Type: C=C	oncentration, D=Deple	tion, RM	=Reduced Matrix, M	1S=Mas	ked Sand	d Grains.	s. ² Location: PL=Pore Lining, M=Matrix.				
Hydric Soil I	Indicators:						Indicators for Problematic Hydric Soils ³ :				
Histosol (•		Polyvalue Below	Surface	(S8) (LRR	R,	2 cm Muck (A10) (LRR K, L, MLRA 149B)				
	ipedon (A2)		MLRA 149B)	(- -) (1			Coast Prairie Redox (A16) (LRR K, L, R)				
Black His			Thin Dark Surfac								
	n Sulfide (A4) Layers (A5)		High Chroma Sa				Polyvalue Below Surface (S8) (LRR K, L)				
	Below Dark Surface (A1	1)	Loamy Mucky Mi Loamy Gleyed M			L)	Thin Dark Surface (S9) (LRR K, L) Iron-Manganese Masses (F12) (LRR K, L, R)				
	rk Surface (A12)	')	Depleted Matrix		,		Piedmont Floodplain Soils (F19) (MLRA 149B)				
	ucky Mineral (S1)		Redox Dark Surf				Mesic Spodic (TA6) (MLRA 144A, 145, 149B)				
	leyed Matrix (S4)		Depleted Dark S		7)		Red Parent Material (F21)				
Sandy Re			Redox Depression	ons (F8)			Very Shallow Dark Surface (F22)				
Stripped I	Matrix (S6)		Marl (F10) (LRR	K, L)			Other (Explain in Remarks)				
Dark Surf	face (S7)										
³ Indicators of	hydrophytic vegetation	n and we	etland hydrology mu	st be pro	esent, ur	less dist	sturbed or problematic.				
	_ayer (if observed):										
Type: _											
Depth (in	nches):						Hydric Soil Present? Yes No _X				
Remarks:											

Project/Site: Pine County Solar	City/County: Pine Sampling Date: 09/16/2022					
Applicant/Owner: Swift Current Energy	State: Min Sampling Point: W19-1w					
Investigator(s): BB/KKM	Section, Township, Range: T044N, R020W, S25					
-	relief (concave, convex, none): Concave Slope %: 0-1					
Subregion (LRR or MLRA): LRR K, MLRA 90A Lat: 46.263564	Long: -92.824054 Datum: WGS84					
Soil Map Unit Name: No Digital Data Available	NWI classification: PSS1C					
Are climatic / hydrologic conditions on the site typical for this time of year?	Yes X No (If no, explain in Remarks.)					
Are Vegetation , Soil , or Hydrology significantly distr	urbed? Are "Normal Circumstances" present? Yes X No					
Are Vegetation , Soil , or Hydrology naturally problem	matic? (If needed, explain any answers in Remarks.)					
SUMMARY OF FINDINGS – Attach site map showing sampling po	oint locations, transects, important features, etc.					
Hydrophytic Vegetation Present? Yes X No	Is the Sampled Area					
Hydric Soil Present? Yes X No	within a Wetland? Yes X No					
Wetland Hydrology Present? Yes X No	If yes, optional Wetland Site ID: W19					
Remarks: (Explain alternative procedures here or in a separate report.)						
HYDROLOGY						
Wetland Hydrology Indicators:	Secondary Indicators (minimum of two required)					
Primary Indicators (minimum of one is required; check all that apply)	Surface Soil Cracks (B6)					
Surface Water (A1) X Water-Stained Leaves (B9)	Drainage Patterns (B10)					
High Water Table (A2) Aquatic Fauna (B13)	Moss Trim Lines (B16)					
Saturation (A3) Marl Deposits (B15)	Dry-Season Water Table (C2)					
Water Marks (B1) Hydrogen Sulfide Odor (C1)						
Sediment Deposits (B2) Oxidized Rhizospheres on Li						
Oxidated transcoprising of the property						
Algal Mat or Crust (B4) Recent Iron Reduction in Tilli						
Iron Deposits (B5) Thin Muck Surface (C7)	Shallow Aquitard (D3)					
Inundation Visible on Aerial Imagery (B7) Other (Explain in Remarks)	Microtopographic Relief (D4)					
Sparsely Vegetated Concave Surface (B8)	X FAC-Neutral Test (D5)					
Field Observations:						
Surface Water Present Yes No X Depth (inches	,).					
<u> </u>						
Water Table Present Yes No X Depth (inches Saturation Present Yes No X Depth (inches	· 					
(includes capillary fringe)	Tes Noticinal Hydrology Present:					
Describe Recorded Data (stream gauge, monitoring well, aerial photos, pre	evious inspections), if available:					
gaage, memoring near, across pro-	3.1040 misposio.10), ii a tanazio.					
Remarks:						

VEGETATION – Use scientific names of	plants.			Sampling P	oint: W19-1w
Tree Stratum (Plot size: 30 ft)	Absolute <u>% Cover</u>	Dominant Species	Indicator Status	Dominance Test worksheet:	
1. Acer rubrum	35	Yes	FAC	1	
2.				Number of Dominant Species That Are OBL, FACW, or FAC	: 4 (A)
				That Are OBL, PACW, or PAC	4 (A)
				Total Number of Dominant	
4				Species Across All Strata:	4 (B)
5				Percent of Dominant Species	
6		<u> </u>		That Are OBL, FACW, or FAC	: 100 (A/B)
7				Prevalence Index worksheet	` ` '
	35			Total % Cover of:	
0 11 (0) 1 0 1 (0) 1 (1) 45 (4)		_ = Total Cover	•	Total % cover of:	Multiply by:
Sapling/Shrub Stratum (Plot size: 15 ft)				OBL species	x 1 =
1. Alnus incana	60	Yes	FACW	FACW species	x 2 =
2. Ilex verticillata	30	Yes	FACW	FAC species	x 3 =
3					
4				FACU species	x 4 =
5.				UPL species	x 5 =
•				Column Totals:	(A)(B)
				Prevalence Index = B/A	
7		·		Hydrophytic Vegetation Indi	cators:
	90	= Total Cover			
Herb Stratum (Plot size: 5 ft)		- Total Cover		1 - Rapid Test for Hydropl	nytic Vegetation
	60	Yes	FACW	X 2 - Dominance Test is >50)%
				- 3 - Prevalence Index is ≤3	5.0 ¹
2. Alnus incana	15	No	FACW	4 - Morphological Adaptat	ione ¹
3. Spiraea alba	10	No	FACW	(Provide supporting data in Remar	
4. Rubus pubescens	10	No	FACW		
5. Acer rubrum	3	No	FAC	Problematic Hydrophytic \	/egetation¹ (Explain)
6				¹ Indicators of hydric soil and wetland hyd disturbed or problematic.	rology must be present, unless
7					
8.				Definitions of Vegetation Str	ata:
•					atu:
				Tree – Woody plants 3 in. (7.6	
10				diameter at breast height (DBI	H), regardless of height.
11				Sapling/shrub – Woody plant	s less than 3 in DRH
12	<u> </u>			and greater than or equal to 3.	
	98	Tatal Cause			
Woody Vine Stratum (Plot size: 30 ft)	•	= Total Cover		Herb – All herbaceous (non-w	
,				of size, and woody plants less	than 3.28 ft tall.
1				Woody vines – All woody vine	es greater than 3.28 ft in
2				height.	
3					
4				Hydrophytic	
	0			Vegetation	
	0	= Total Cover		Present? Yes X	No
Remarks: (Include photo numbers here or on a se	eparate sheet.)				
Tromainer (morade prote manuscrements or em a se	, parate erreeti,				

SOIL Sampling Point: W19-1w

		the dep	th neede				tor or co	onfirm the absence of inc	licators.)	
Depth (inches)	Matrix Color (moist)	%	Color	(moist)	x Feature %	es Type¹	Loc ²	Toyturo	Remarks	
0-10	10YR 2/1	95	10YR	3/6	5	С	M	Texture Loamy Sand	Remarks	
10-18	10YR 5/2	90	10YR	4/6	10	<u>с</u>	M			
10-16	101K 5/2	90		4/0			IVI	Loamy Sand		
18-27	10YR 5/2	80	10YR	4/6	20	С	M	Loamy Sand		
			-							
			-							
¹Type: C=Co	oncentration, D=Deple	etion, RN	/=Reduce	ed Matrix, N	MS=Mas	ked San	d Grains	² Location: PL=Pore	Lining, M=Matrix.	
Hydric Soil I	ndicators:							Indicators for F	Problematic Hydric Soils ³ :	
Histosol (A	A1)		Pol	value Belov	v Surface	(S8) (LRF	RR,	2 cm Muck (A10) (LRR K, L, MLRA 149B)	
	pedon (A2)			LRA 149B)					e Redox (A16) (LRR K, L, R)	
Black Hist			Thin Dark Surface (S9) (LRR R, MLRA 149B)					·	Peat or Peat (S3) (LRR K, L, R)	
	Sulfide (A4)		High Chroma Sands (S11) (LRR K, L)						elow Surface (S8) (LRR K, L)	
	Layers (A5) Below Dark Surface (A1	1)	Loamy Mucky Mineral (F1) (LRR K, L) Loamy Gleyed Matrix (F2)					' <u></u>	urface (S9) (LRR K, L)	
	k Surface (A12)	1)	Loamy Gleyed Matrix (F2) Depleted Matrix (F3)					Iron-Manganese Masses (F12) (LRR K, L, R) Piedmont Floodplain Soils (F19) (MLRA 149B)		
	ucky Mineral (S1)			lox Dark Sur					c (TA6) (MLRA 144A, 145, 149B)	
	eyed Matrix (S4)			leted Dark S		7)			Material (F21)	
X Sandy Re	edox (S5)		Red	lox Depressi	ons (F8)			Very Shallov	v Dark Surface (F22)	
Stripped N	Matrix (S6)		Mai	1 (F10) (LRR	R K, L)			Other (Expla	ain in Remarks)	
Dark Surfa	ace (S7)									
³ Indicators of	hydrophytic vegetation	on and w	etland hy	drology mu	ust be pro	esent, ur	nless dis	turbed or problematic.		
Restrictive L	ayer (if observed):									
Type:				-						
Depth (in	ches):			_				Hydric Soil Present?	Yes X No	
Remarks:	<u> </u>									

Project/Site: Pine County Solar	City/County: Pine Sampling Date: 09/15/2022						
Applicant/Owner: Swift Current Energy	State: Min Sampling Point: W20-1u						
Investigator(s): Jwf	Section, Township, Range: T044N, R020W, S27						
	relief (concave, convex, none): Linear Slope %: 8						
Subregion (LRR or MLRA): LRR K, MLRA 90A Lat: 46.273371							
· · · · · · · · · · · · · · · · · · ·							
Soil Map Unit Name: Grayling sand, 2 to 17 percent slopes	NWI classification:						
Are climatic / hydrologic conditions on the site typical for this time of year?	Yes No _X (If no, explain in Remarks.)						
Are Vegetation, Soil, or Hydrology significantly dist							
Are Vegetation , Soil , or Hydrology naturally problem	matic? (If needed, explain any answers in Remarks.)						
SUMMARY OF FINDINGS – Attach site map showing sampling p	point locations, transects, important features, etc.						
Hydrophytic Vegetation Present? Yes No X	Is the Sampled Area						
Hydric Soil Present? Yes No X	within a Wetland? Yes No X						
Wetland Hydrology Present? Yes No X	If yes, optional Wetland Site ID: W20						
	ii yee, optional violatid one ib.						
Remarks: (Explain alternative procedures here or in a separate report.) Drier than normal conditions							
Diet than normal conditions							
HYDROLOGY							
Wetland Hydrology Indicators:	Secondary Indicators (minimum of two required)						
Primary Indicators (minimum of one is required; check all that apply)	Surface Soil Cracks (B6)						
1							
Surface Water (A1) Water-Stained Leaves (B9)	Moss Trim Lines (B16)						
High Water Table (A2) Saturation (A3) Aquatic Fauna (B13) Marl Deposits (B15)	Dry-Season Water Table (C2)						
							
Water Marks (B1) Hydrogen Sulfide Odor (C1) Sediment Deposits (B2) Oxidized Rhizospheres on L	<u> </u>						
Drift Deposits (B3) Presence of Reduced Iron (i	<u> </u>						
Algal Mat or Crust (B4) Recent Iron Reduction in Til							
Iron Deposits (B5) Thin Muck Surface (C7)	Shallow Aquitard (D3)						
<u> </u>	Missats a small is Bullet (DA)						
Inundation Visible on Aerial Imagery (B7) —— Other (Explain in Remarks) Sparsely Vegetated Concave Surface (B8)	FAC-Neutral Test (D5)						
Field Observations:	-1						
Surface Water Present Yes No X Depth (inches) Water Table Present Yes No X Depth (inches)							
	· ———						
Saturation Present Yes No X Depth (inches (includes capillary fringe)	s): Wetland Hydrology Present? Yes No _X						
Describe Recorded Data (stream gauge, monitoring well, aerial photos, pr							
Describe Recorded Data (stream gauge, monitoring well, aerial photos, pr	evious inspections), ii available.						
Remarks:							
Remarks.							

Tree Stratum (Plot size: 30 ft)	Absolute % Cover		Indicator Status	Dominance Test worksheet:
1. Pinus resinosa	25	No	FACU	Number of Dominant Species
2. Populus tremuloides	20	No	FAC	That Are OBL, FACW, or FAC: 1 (A)
3. Betula papyrifera	15	No	FACU	
4		. <u></u>		Total Number of Dominant Species Across All Strata: 2 (B)
5				`` /
6				Percent of Dominant Species That Are OBL, FACW, or FAC: 50 (A/B)
7	<u> </u>			Prevalence Index worksheet:
	60	= Total Cover		Total % Cover of: Multiply by:
Sapling/Shrub Stratum (Plot size: 15 ft)		= 10tai 00vci		OBL species x 1 =
Ilex verticillata	15	Yes	FACW	
Lonicera canadensis	15	Yes	FACU	FACW species x 2 =
3. Populus tremuloides	10	No	FAC	FAC species x 3 =
4. Quercus rubra	10	No	FACU	FACU species x 4 =
5	. <u></u>			UPL species x 5 =
6				Column Totals: (A)(B)
7				Prevalence Index = B/A =
	50	- 0		Hydrophytic Vegetation Indicators:
Herb Stratum (Plot size: 5 ft)		= Total Cover		1 - Rapid Test for Hydrophytic Vegetation
A Caray paneulyanica	20	No	UPL	2 - Dominance Test is >50%
Carex woodii	15	No	FACU	_ 3 - Prevalence Index is ≤3.0¹
Pteridium aquilinum	15	No	FACU	4 - Morphological Adaptations ¹
4. Rubus idaeus		·	FAC	(Provide supporting data in Remarks or on a separate sheet)
5. Corylus cornuta			FACU	Problematic Hydrophytic Vegetation ¹ (Explain)
6. Maianthemum canadense			FACU	
7. Quercus rubra			<u> </u>	distarbed of problematic.
8.				Definitions of Vegetation Strata:
9				
10		<u></u> .		Tree – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.
11		<u> </u>		
12	<u> </u>			Sapling/shrub – Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.
	75	Tatal Cause		
Woody Vine Stratum (Plot size: 30 ft)		= Total Cover		Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.
1				
2.				Woody vines – All woody vines greater than 3.28 ft in
3.				height.
4.		· <u></u>		Hydrophytic
	0			Vegetation
	0	= Total Cover		Present? Yes No X
Remarks: (Include photo numbers here or on a sepa	arate sheet.)			

Sampling Point:

W20-1u

SOIL Sampling Point: W20-1u

Profile Desc Depth	ription: (Describe to Matrix	the dep		ment the x Feature		or or co	onfirm the absence of indicators.)			
(inches)	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²	Texture Remarks			
0-8	7.5YR 3/2	100					Sandy Loam			
8-12	7.5YR 3/4	100					Loamy Sand			
12-24	7.5YR 4/6	100					Loamy Sand			
12-24	7.51K 4/0	100					Loaniy Sanu			
	•									
							· 			
		 .			. —					
	oncentration, D=Depl	etion, RM	1=Reduced Matrix, N	/IS=Mas	ked Sand	d Grains.	s. ² Location: PL=Pore Lining, M=Matrix.			
Hydric Soil	Indicators:						Indicators for Problematic Hydric Soils ³ :			
Histosol			Polyvalue Below	Surface	(S8) (LRR	R,	2 cm Muck (A10) (LRR K, L, MLRA 149B)			
Histic Ep Black His	ipedon (A2)		MLRA 149B) Thin Dark Surface	co (S0) (I	DDD MI	DA 1/0B	Coast Prairie Redox (A16) (LRR K, L, R)			
	n Sulfide (A4)		Thin Dark Surface High Chroma Sa				B) 5 cm Mucky Peat or Peat (S3) (LRR K, L, R) Polyvalue Below Surface (S8) (LRR K, L)			
	Layers (A5)		Loamy Mucky M							
	Below Dark Surface (A1	1)	Loamy Gleyed M			,	Iron-Manganese Masses (F12) (LRR K, L, R)			
Thick Da	rk Surface (A12)		Depleted Matrix				Piedmont Floodplain Soils (F19) (MLRA 149B)			
	ucky Mineral (S1)		Redox Dark Surf	face (F6)			Mesic Spodic (TA6) (MLRA 144A, 145, 149B)			
	leyed Matrix (S4)		Depleted Dark S	•	7)		Red Parent Material (F21)			
	edox (S5)		Redox Depression	. ,			Very Shallow Dark Surface (F22)			
Stripped Dark Sur	Matrix (S6)		Marl (F10) (LRR	K, L)			Other (Explain in Remarks)			
Dark Sur	iace (37)									
³ Indicators of	f hydrophytic vegetati	on and w	etland hydrology mu	ıst be pr	esent, ur	less dist	sturbed or problematic.			
Restrictive I	Layer (if observed):									
Type:										
Depth (ir	nches):						Hydric Soil Present? Yes No _X			
Remarks:							•			

Project/Site: Pine County Solar	City/County: Pine Sampling Date: 09/15/2022								
Applicant/Owner: Swift Current Energy	State: Min Sampling Point: W20-1w								
Investigator(s): Jwf	Section, Township, Range: T044N, R020W, S27								
Landform (hillside, terrace, etc.): Depression Local r	relief (concave, convex, none): Concave Slope %: 1								
Subregion (LRR or MLRA): LRR K, MLRA 90A Lat: 46.273484	Long: -92.857832 Datum: WGS84								
Soil Map Unit Name: Grayling sand, 2 to 17 percent slopes	NWI classification: PSS1C								
Are climatic / hydrologic conditions on the site typical for this time of year?	Yes No X (If no, explain in Remarks.)								
Are Vegetation , Soil , or Hydrology significantly distu	urbed? Are "Normal Circumstances" present? Yes X No								
Are Vegetation , Soil , or Hydrology naturally problem									
SUMMARY OF FINDINGS – Attach site map showing sampling po	oint locations, transects, important features, etc.								
Hydrophytic Vegetation Present? Yes X No	Is the Sampled Area								
Hydric Soil Present? Yes X No	within a Wetland? Yes X No								
Wetland Hydrology Present? Yes X No	If yes, optional Wetland Site ID: W20								
Remarks: (Explain alternative procedures here or in a separate report.) Drier than normal conditions									
HYDROLOGY									
Wetland Hydrology Indicators:	Secondary Indicators (minimum of two required)								
Primary Indicators (minimum of one is required; check all that apply)	Surface Soil Cracks (B6)								
Surface Water (A1) Water-Stained Leaves (B9)	Drainage Patterns (B10)								
X High Water Table (A2) Aquatic Fauna (B13)	Moss Trim Lines (B16)								
X Saturation (A3) Marl Deposits (B15)	X Dry-Season Water Table (C2)								
Water Marks (B1) Hydrogen Sulfide Odor (C1)	Crayfish Burrows (C8)								
Sediment Deposits (B2) Oxidized Rhizospheres on Liv	ving Roots (C3) Saturation Visible on Aerial Imagery (C9)								
Presence of Reduced Iron (C	(24) Stunted or Stressed Plants (D1)								
Algal Mat or Crust (B4) Recent Iron Reduction in Tille	ed Soils (C6) Geomorphic Position (D2)								
Iron Deposits (B5) Thin Muck Surface (C7)	Shallow Aquitard (D3)								
Inundation Visible on Aerial Imagery (B7) Other (Explain in Remarks)	Microtopographic Relief (D4)								
Sparsely Vegetated Concave Surface (B8)	X FAC-Neutral Test (D5)								
Field Observations:									
Surface Water Present Yes No _X Depth (inches)):								
Water Table Present Yes X No Depth (inches)):8								
Saturation Present Yes X No Depth (inches)): 2 Wetland Hydrology Present? Yes X No								
(includes capillary fringe)									
Describe Recorded Data (stream gauge, monitoring well, aerial photos, pre	evious inspections), if available:								
Remarks:									
1									

= Total Cover No No		Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC Total Number of Dominant Species Across All Strata: Percent of Dominant Species That Are OBL, FACW, or FAC Prevalence Index worksheet Total % Cover of: OBL species FACW species	1 (A) 1 (B) 1 (A/B)
= Total Cover No No No	FACW FACW	That Are OBL, FACW, or FAC Total Number of Dominant Species Across All Strata: Percent of Dominant Species That Are OBL, FACW, or FAC Prevalence Index worksheet Total % Cover of: OBL species FACW species	1 (B) : 100 (A/B) : Multiply by:
= Total Cover No No No	FACW FACW	That Are OBL, FACW, or FAC Total Number of Dominant Species Across All Strata: Percent of Dominant Species That Are OBL, FACW, or FAC Prevalence Index worksheet Total % Cover of: OBL species FACW species	1 (B) : 100 (A/B) : Multiply by:
= Total Cover No No No	FACW FACW	Total Number of Dominant Species Across All Strata: Percent of Dominant Species That Are OBL, FACW, or FAC Prevalence Index worksheet Total % Cover of: OBL species FACW species	1 (B) : 100 (A/B) : Multiply by:
= Total Cover No No No	FACW FACW	Species Across All Strata: Percent of Dominant Species That Are OBL, FACW, or FAC Prevalence Index worksheet Total % Cover of: OBL species FACW species	: 100 (A/B : Multiply by:
= Total Cover No No No	FACW FACW	Species Across All Strata: Percent of Dominant Species That Are OBL, FACW, or FAC Prevalence Index worksheet Total % Cover of: OBL species FACW species	: 100 (A/B : Multiply by:
= Total Cover No No No	FACW FACW	Percent of Dominant Species That Are OBL, FACW, or FAC Prevalence Index worksheet Total % Cover of: OBL species FACW species	: 100 (A/B
= Total Cover No No No	FACW FACW	That Are OBL, FACW, or FAC Prevalence Index worksheet Total % Cover of: OBL species FACW species	: Multiply by:
= Total Cover No No No	FACW FACW	Prevalence Index worksheet Total % Cover of: OBL species FACW species	: Multiply by:
= Total Cover No No No	FACW	Total % Cover of: OBL species FACW species	Multiply by:
No No No	FACW	Total % Cover of: OBL species FACW species	Multiply by:
No No No	FACW	OBL species FACW species	
No No	FACW	FACW species	x 1 =
No No	FACW	FACW species	
No No	FACW		•
No			x 2 =
	FAC	FAC species	x 3 =
		· —	
		FACU species	x 4 =
		UPL species	x 5 =
		Column Totals:	(A) (B
		Prevalence Index = B/A	·=
		Hydrophytic Vegetation Indi	cators:
Total Cover		X 1 - Rapid Test for Hydroph	ovtic Vegetation
		I—	
No	OBL		
Yes	FACW	_ 3 - Prevalence Index is ≤3	.01
		4 - Morphological Adaptati	ions ¹
		(Provide supporting data in Remark	ks or on a separate sheet)
		1 5	1 /=
		— Problematic Hydrophytic \	/egetation ¹ (Explain)
			rology must be present, unless
		disturbed or problematic.	
 -			
		Definitions of Vegetation Str	ata:
	<u>.</u>		
		diameter at breast height (DBF	1), regardless of height
		Continue (alternation) Managing and a selection	a land the or O'r DDII
		and greater than or equal to 3.	28 ft (1 m) tall.
Total Cover		Herb - All berbaceous (non-w	oody) plante regardles
		or size, and woody plants less	triari 3.20 it taii.
		Woody vines - All woody vine	es greater than 3 28 ft i
			75 greater than 6.20 ft
		g	
		1	
			NI -
Total Cover		Present? Yes	No
	No Yes	No OBL Yes FACW Total Cover	No OBL Yes FACW

SOIL Sampling Point: W20-1w

Depth Matrix Redox Features Color (moist) % Color (moist) % Type Loc2 Texture Remarks			the dept				or or co	onfirm the absence of indic	cators.)
Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.			 -				Loc2	Texture	Remarks
Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. Thidric Soli Indicators for Problematic Hydric Solis*: X Histosol (A1)	<u> </u>			Color (moist)		Турс			Romano
Hydric Soil Indicators: Indicators for Problematic Hydric Soils3: X									
Hydric Soil Indicators: Indicators for Problematic Hydric Soils3: X									
Hydric Soil Indicators: Indicators for Problematic Hydric Soils3: X									
Hydric Soil Indicators: Indicators for Problematic Hydric Soils3: X									
Hydric Soil Indicators: Indicators for Problematic Hydric Soils3: X									
Hydric Soil Indicators: Indicators for Problematic Hydric Soils3: X			— .						
Hydric Soil Indicators: Indicators for Problematic Hydric Soils3: X									
Hydric Soil Indicators: Indicators for Problematic Hydric Soils3: X									
Hydric Soil Indicators: Indicators for Problematic Hydric Soils3: X									
Hydric Soil Indicators: Indicators for Problematic Hydric Soils3: X									
Hydric Soil Indicators: Indicators for Problematic Hydric Soils3: X									
Hydric Soil Indicators: Indicators for Problematic Hydric Soils3: X									
X Histosol (A1)	¹Type: C=Co	oncentration, D=Depl	etion, RM	=Reduced Matrix, N	√S=Mas	ked Sand	d Grains	. ² Location: PL=Pore L	ining, M=Matrix.
Histic Epipedon (A2) MLRA 149B) Coast Prairie Redox (A16) (LRR K, L, R) Black Histic (A3) Thin Dark Surface (S9) (LRR R, MLRA 149B) 5 cm Mucky Peat or Peat (S3) (LRR K, L, R) Hydrogen Sulfide (A4) High Chroma Sands (S11) (LRR K, L) Stratified Layers (A5) Loamy Mucky Mineral (F1) (LRR K, L) Thick Dark Surface (A12) Sandy Mucky Mineral (S1) Redox Dark Surface (F6) Sandy Gleyed Matrix (S4) Depleted Dark Surface (F7) Red Parent Material (F21) Sandy Redox (S5) Stripped Matrix (S6) Marl (F10) (LRR K, L) Other (Explain in Remarks) Trype: Depth (inches): Hydric Soil Present? Yes X No	Hydric Soil In	ndicators:						Indicators for Pr	oblematic Hydric Soils ³ :
Black Histic (A3)	X Histosol (A	A1)	-	Polyvalue Below	V Surface	(S8) (LRR	R,	2 cm Muck (A	10) (LRR K, L, MLRA 149B)
Hydrogen Sulfide (A4)				MLRA 149B)				Coast Prairie F	Redox (A16) (LRR K, L, R)
Stratified Layers (A5)	Black Hist	tic (A3)						5 cm Mucky P	eat or Peat (S3) (LRR K, L, R)
Depleted Below Dark Surface (A11) Loamy Gleyed Matrix (F2) Iron-Manganese Masses (F12) (LRR K, L, R) Thick Dark Surface (A12) Depleted Matrix (F3) Piedmont Floodplain Soils (F19) (MLRA 149B) Sandy Mucky Mineral (S1) Redox Dark Surface (F6) Mesic Spodic (TA6) (MLRA 144A, 145, 149B) Sandy Gleyed Matrix (S4) Depleted Dark Surface (F7) Red Parent Material (F21) Sandy Redox (S5) Redox Depressions (F8) Very Shallow Dark Surface (F22) Stripped Matrix (S6) Marl (F10) (LRR K, L) Other (Explain in Remarks) Dark Surface (S7) **Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.** **Restrictive Layer (if observed): Type: Depth (inches): Hydric Soil Present? Yes X No	Hydrogen	Sulfide (A4)						Polyvalue Belo	ow Surface (S8) (LRR K, L)
Thick Dark Surface (A12) Depleted Matrix (F3) Sandy Mucky Mineral (S1) Redox Dark Surface (F6) Mesic Spodic (TA6) (MLRA 144A, 145, 149B) Sandy Gleyed Matrix (S4) Depleted Dark Surface (F7) Red Parent Material (F21) Sandy Redox (S5) Redox Depressions (F8) Very Shallow Dark Surface (F22) Stripped Matrix (S6) Marl (F10) (LRR K, L) Other (Explain in Remarks) Joark Surface (S7) Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic. Restrictive Layer (if observed): Type: Depth (inches): Hydric Soil Present? Yes X No							L)		
Sandy Mucky Mineral (S1)		·	1))			
Sandy Gleyed Matrix (S4)									
Sandy Redox (S5) Redox Depressions (F8) Very Shallow Dark Surface (F22) Stripped Matrix (S6) Marl (F10) (LRR K, L) Other (Explain in Remarks) Dark Surface (S7) 3Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic. Restrictive Layer (if observed): Type: Depth (inches): Hydric Soil Present? YesX No									
Stripped Matrix (S6) Marl (F10) (LRR K, L) Other (Explain in Remarks) Dark Surface (S7) 3Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic. Restrictive Layer (if observed):			-			7)			
Dark Surface (S7) 3Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic. Restrictive Layer (if observed): Type: Depth (inches): Hydric Soil Present? Yes X No			-		, ,				
³ Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic. Restrictive Layer (if observed): Type: Depth (inches): Hydric Soil Present? Yes X No			-	Marl (F10) (LRR	(K, L)			Other (Explain	in Remarks)
Restrictive Layer (if observed): Type:	Dark Surfa	ace (S7)							
Type:			on and we	tland hydrology mu	ıst be pr	esent, un	less dis	turbed or problematic.	
Depth (inches): Hydric Soil Present? Yes X No No		ayer (if observed):							
<u> </u>	-								v Y N
Remarks:		cnes):						Hydric Soil Present?	Yes No
	Remarks:								

Project/Site: Pine County Solar City/County: Pine Sampling Date: 09/16/202	22
Applicant/Owner: Swift Current Energy State: Min Sampling Point: W21-	111
Investigator(s): AH, CD Section, Township, Range: T044N, R020W, S25	<u>. u</u>
Landform (hillside, terrace, etc.): Backslope Local relief (concave, convex, none): Linear Slope %: 4	_
Subregion (LRR or MLRA): LRR K, MLRA 90A Lat: 46.263664 Long: -92.821078 Datum: WGS84	
Soil Map Unit Name: No Digital Data Available NWI classification:	
Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No (If no, explain in Remarks.)	
Are Vegetation, Soil, or Hydrology significantly disturbed? Are "Normal Circumstances" present? Yes X No	_
Are Vegetation, Soil, or Hydrology naturally problematic? (If needed, explain any answers in Remarks.)	
SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.	
Lhudrachutia Variatian Procest?	_
Hydrophytic Vegetation Present? Yes No _X	
Wetland Hydrology Present? Yes No X If yes, optional Wetland Site ID: W21	
	=
Remarks: (Explain alternative procedures here or in a separate report.)	
HYDROLOGY	_
HYDROLOGY	_
Wetland Hydrology Indicators: Secondary Indicators (minimum of two required)	
Primary Indicators (minimum of one is required; check all that apply) Surface Soil Cracks (B6)	
Surface Water (A1) Water-Stained Leaves (B9) Drainage Patterns (B10)	
High Water Table (A2) Aquatic Fauna (B13) Moss Trim Lines (B16)	
Saturation (A3) Marl Deposits (B15) Dry-Season Water Table (C2)	
Water Marks (B1) Hydrogen Sulfide Odor (C1) Crayfish Burrows (C8)	
Sediment Deposits (B2) Oxidized Rhizospheres on Living Roots (C3) Saturation Visible on Aerial Imagery (C9) Structure of Structure (R1)	
Drift Deposits (B3) Presence of Reduced Iron (C4) Stunted or Stressed Plants (D1)	
Algal Mat or Crust (B4) — Recent Iron Reduction in Tilled Soils (C6) — Geomorphic Position (D2) Shallow Assistant (D2)	
Iron Deposits (B5) Thin Muck Surface (C7) Shallow Aquitard (D3) Microtopersophic Relief (D4)	
Inundation Visible on Aerial Imagery (B7) Other (Explain in Remarks) Microtopographic Relief (D4)	
Sparsely Vegetated Concave Surface (B8) FAC-Neutral Test (D5)	_
Field Observations:	
Surface Water Present Yes No _X Depth (inches):	
Water Table Present Yes No X Depth (inches):	
Saturation Present Yes No X Depth (inches): Wetland Hydrology Present? Yes No X	_
(includes capillary fringe)	_
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:	
	_
Remarks:	

Tree Stratum (Plot size: 30 ft)	Absolute % Cover	Dominant Species	Indicator Status	Dominance Test worksheet:
2.				Number of Dominant Species That Are OBL, FACW, or FAC: (A)
3 4 5.				Total Number of Dominant Species Across All Strata: 2 (B)
5				Percent of Dominant Species That Are OBL, FACW, or FAC: (A/B)
				Prevalence Index worksheet:
	0	_ = Total Cover		Total % Cover of: Multiply by:
Sapling/Shrub Stratum (Plot size: 15 ft)				OBL species x 1 =
1				FACW species x 2 =
2				
3				
4.				FACU species x 4 =
5				UPL species x 5 =
6.				Column Totals: (A)(B)
7				Prevalence Index = B/A =
		·		Hydrophytic Vegetation Indicators:
Herb Stratum (Plot size: 5 ft)	0	= Total Cover		1 - Rapid Test for Hydrophytic Vegetation
1. Poa pratensis	25	Yes	FACU	2 - Dominance Test is >50%
2. Bromus inermis	25	Yes	UPL	3 - Prevalence Index is ≤3.0¹
3Trifolium pratense	15	No	FACU	4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet)
4. Lotus corniculatus	15	No	FACU	(Flovide supporting data in Nemarks of on a separate sneet)
5. Erigeron strigosus		No	FACU	Problematic Hydrophytic Vegetation ¹ (Explain)
Achillea millefolium				¹Indicators of hydric soil and wetland hydrology must be present, unless
7.				disturbed or problematic.
8.				Definitions of Vegetation Strata:
				benintions of Vegetation Strata.
9				Tree – Woody plants 3 in. (7.6 cm) or more in
				diameter at breast height (DBH), regardless of height.
11	<u> </u>			Sapling/shrub – Woody plants less than 3 in. DBH
12	·			and greater than or equal to 3.28 ft (1 m) tall.
Woody Vine Stratum (Plot size:30 ft)	100	= Total Cover		Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.
1				
2.				Woody vines – All woody vines greater than 3.28 ft in height.
3.				noight.
4.				Hydrophytic
				Vegetation
	0	= Total Cover		Present? Yes No X
Remarks: (Include photo numbers here or on a sepa	arate sheet.)			
·	,			

Sampling Point:

W21-1u

SOIL Sampling Point: W21-1u

		the dep				or or co	onfirm the absence of indicate	ors.)			
Depth (inches)	Matrix Color (moint)	%	Color (moist)	x Feature %	es Type ¹	Loc ²	Texture	Remarks			
(inches) 0-6	Color (moist) 10YR 3/2	100	Color (moist)		Туре	LUC	Sandy Loam	Remarks			
6-10	10YR 4/3	100					Loamy Sand				
10-14	7.5R 4/4	100					Sand				
14-24	7.5R 4/6	100					Sand				
l											
¹Type: C=Co	oncentration, D=Deple	etion, RN	M=Reduced Matrix, N	/IS=Mas	ked Sand	Grains.	. ² Location: PL=Pore Linir	ng, M=Matrix.			
Hydric Soil I								lematic Hydric Soils ³ :			
Histosol (,		Polyvalue Below	Surface	(S8) (LRR	R,	2 cm Muck (A10) (LRR K, L, MLRA 149B)				
	ipedon (A2)		MLRA 149B) Thin Dark Surface	co (S0) (I	DD D MI	D A 1/0B	Coast Prairie Redox (A16) (LRR K, L, R) 5 cm Mucky Peat or Peat (S3) (LRR K, L, R)				
Black His	n Sulfide (A4)		High Chroma Sa				·	Surface (S8) (LRR K, L)			
	Layers (A5)		Loamy Mucky M				Thin Dark Surface (S9) (LRR K, L)				
	Below Dark Surface (A1	1)	Loamy Gleyed N			-/	Iron-Manganese Masses (F12) (LRR K, L, R)				
	rk Surface (A12)	,	Depleted Matrix		,		Piedmont Floodplain Soils (F19) (MLRA 149B)				
Sandy Mu	ucky Mineral (S1)		Redox Dark Sur	face (F6)			Mesic Spodic (TA	6) (MLRA 144A, 145, 149B)			
Sandy GI	leyed Matrix (S4)		Depleted Dark S	Surface (F	7)		Red Parent Mater	ial (F21)			
Sandy Re	edox (S5)		Redox Depressi	ons (F8)			Very Shallow Dark	k Surface (F22)			
Stripped I	Matrix (S6)		Marl (F10) (LRR	. K , L)			Other (Explain in	Remarks)			
Dark Surf	face (S7)										
³ Indicators of	f hydrophytic vegetation	on and w	retland hydrology mu	ıst be pr	esent, ur	less dist	turbed or problematic.				
	Layer (if observed):										
Type:	I \						Hardela Oall Burnanio	Yes No ^X			
Deptn (ir Remarks:	nches):						Hydric Soil Present?	Yes No _X			
Remarks:											

Project/Site: Pine County Solar	City/County: Pine Sampling Date: 09/16/2022
Applicant/Owner: Swift Current Energy	State: Min Sampling Point: W21-1w
Investigator(s): AH, CD	Section, Township, Range: T044N, R020W, S25
	elief (concave, convex, none): Concave Slope %: 2
Subregion (LRR or MLRA): LRR K, MLRA 90A Lat: 46.26376	Long: -92.820987 Datum: WGS84
Soil Map Unit Name: No Digital Data Available	NWI classification: PEM1Ad
Are climatic / hydrologic conditions on the site typical for this time of year?	Yes X No (If no, explain in Remarks.)
Are Vegetation , Soil , or Hydrology significantly distu	rbed? Are "Normal Circumstances" present? Yes X No
Are Vegetation , Soil , or Hydrology naturally problem	natic? (If needed, explain any answers in Remarks.)
SUMMARY OF FINDINGS – Attach site map showing sampling po	int locations, transects, important features, etc.
Hydrophytic Vegetation Present? Yes X No	Is the Sampled Area
Hydric Soil Present? Yes X No	within a Wetland? Yes X No
Wetland Hydrology Present? Yes X No	If yes, optional Wetland Site ID: W17
Remarks: (Explain alternative procedures here or in a separate report.)	
HYDROLOGY	
Wetland Hydrology Indicators:	Secondary Indicators (minimum of two required)
Primary Indicators (minimum of one is required; check all that apply)	Surface Soil Cracks (B6)
Surface Water (A1) Water-Stained Leaves (B9)	Drainage Patterns (B10)
High Water Table (A2) Aquatic Fauna (B13)	Moss Trim Lines (B16)
Saturation (A3) Marl Deposits (B15)	Dry-Season Water Table (C2)
Water Marks (B1) Hydrogen Sulfide Odor (C1)	Crayfish Burrows (C8)
Sediment Deposits (B2) Oxidized Rhizospheres on Liv	
Drift Deposits (B3) Presence of Reduced Iron (C4	<u></u>
Algal Mat or Crust (B4) Recent Iron Reduction in Tille	
Iron Deposits (B5) Thin Muck Surface (C7)	Shallow Aquitard (D3)
Inundation Visible on Aerial Imagery (B7) Other (Explain in Remarks)	Microtopographic Relief (D4)
Sparsely Vegetated Concave Surface (B8)	X FAC-Neutral Test (D5)
Field Observations:	
Surface Water Present Yes No _X Depth (inches)	:
Water Table Present Yes NoX Depth (inches)	
Saturation Present Yes No X Depth (inches)	: Wetland Hydrology Present? Yes X No
(includes capillary fringe)	
Describe Recorded Data (stream gauge, monitoring well, aerial photos, pre	vious inspections), if available:
Remarks:	

	·		Number of Dominant Species That Are OBL, FACW, or FAC: 2 (A) Total Number of Dominant
	· ·		That Are OBL, FACW, or FAC: 2 (A) Total Number of Dominant
			Total Number of Dominant
			Species Across All Strata: 2 (B)
	·		Percent of Dominant Species
	·		That Are OBL, FACW, or FAC: 100 (A/B
			Prevalence Index worksheet:
0	- Total Cover		Total % Cover of: Multiply by:
	_ = Total Cover		
E	Voc	EACW	OBL species x 1 =
	163	TACV	FACW species x 2 =
			FAC species x 3 =
	· -		FACU species x 4 =
			UPL species x 5 =
	. <u> </u>		
	. <u> </u>		Column Totals: (A) (B)
	. <u></u> .		Prevalence Index = B/A =
Б			Hydrophytic Vegetation Indicators:
	= Total Cover		X 1 - Rapid Test for Hydrophytic Vegetation
			X 2 - Dominance Test is >50%
80	Yes	FACW	
5	No	OBL	3 - Prevalence Index is ≤3.0¹
5	No	FACW	4 - Morphological Adaptations ¹
			(Provide supporting data in Remarks or on a separate sheet)
			Problematic Hydrophytic Vegetation ¹ (Explain)
			¹ Indicators of hydric soil and wetland hydrology must be present, unless
			disturbed or problematic.
			Definitions of Vegetation Strata:
	· -		Tree – Woody plants 3 in. (7.6 cm) or more in
			diameter at breast height (DBH), regardless of height
	. <u> </u>		
			Sapling/shrub – Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.
90			and greater than or equal to 3.20 it (1 iii) tail.
	= Total Cover		Herb – All herbaceous (non-woody) plants, regardles
			of size, and woody plants less than 3.28 ft tall.
	. 		Woody vines – All woody vines greater than 3.28 ft i
	. <u> </u>		height.
	<u> </u>		
			Hydrophytic
			Vegetation
	= Total Cover		Present? Yes X No No
	5 80 5 5	5 Yes 5 Yes 5 Yes 5 No 5 No 6 No 90 = Total Cover	5

SOIL Sampling Point: W21-1w

Profile Desci Depth	ription: (Describe to Matrix	the dep	th needed	to document t Redox Featu		tor or co	onfirm the absence of indi	cators.)
(inches)	Color (moist)	%	Color (m		Type ¹	Loc ²	Texture	Remarks
0-13	10YR 2/1	100	(70	.,,,,		Peat	romano
13-24	10YR 3/3	90	10YR 5/1	1 10		M	Mucky Peat	
¹Type: C=Co	oncentration, D=Depl	etion, RN	/=Reduced	Matrix, MS=Ma	asked San	d Grains	. ² Location: PL=Pore	Lining, M=Matrix.
Hydric Soil II	ndicators:						Indicators for P	roblematic Hydric Soils ³ :
X Histosol (A	A1)		Polyva	lue Below Surfac	e (S8) (LRF	RR,	2 cm Muck (A	10) (LRR K, L, MLRA 149B)
Histic Epip	pedon (A2)		MLR	A 149B)			Coast Prairie	Redox (A16) (LRR K, L, R)
Black Hist	tic (A3)			ark Surface (S9)	-		3) 5 cm Mucky F	Peat or Peat (S3) (LRR K, L, R)
Hydrogen	Sulfide (A4)		High C	hroma Sands (S	11) (LRR K	, L)	Polyvalue Be	low Surface (S8) (LRR K, L)
Stratified I	Layers (A5)			Mucky Mineral (I		, L)	Thin Dark Su	rface (S9) (LRR K, L)
	Below Dark Surface (A1	1)		Gleyed Matrix (F	⁻ 2)			ese Masses (F12) (LRR K, L, R)
	k Surface (A12)			ed Matrix (F3)				odplain Soils (F19) (MLRA 149B)
	ucky Mineral (S1)			Dark Surface (F6				(TA6) (MLRA 144A, 145, 149B)
	eyed Matrix (S4)			ed Dark Surface			Red Parent M	
Sandy Re				Depressions (F8)			Dark Surface (F22)
7.7	Matrix (S6)		Mari (F	(10) (LRR K, L)			Other (Explain	n in Remarks)
Dark Surfa								
		on and w	etland hydro	ology must be p	oresent, ui	nless dis	turbed or problematic.	
Type:	.ayer (if observed):							
Depth (in	school:						Hydric Soil Present?	Yes ^X No
							nyunc son Present?	
Remarks:								

Project/Site: Pine County Solar	City/County: Pine Sampling Date:09/15/2022					
Applicant/Owner: Swift Current Energy	State: Min Sampling Point: W22-1u					
Investigator(s): Jwf	Section, Township, Range: T044N, R020W, S27					
	relief (concave, convex, none): Convex Slope %: 5					
Subregion (LRR or MLRA): LRR K, MLRA 90A Lat: 46.272586						
Soil Map Unit Name: Grayling sand, 0 to 7 percent slopes	NWI classification:					
Are climatic / hydrologic conditions on the site typical for this time of year?	Yes No _X (If no, explain in Remarks.)					
Are Vegetation , Soil , or Hydrology significantly dist						
Are Vegetation , Soil , or Hydrology naturally problem	matic? (If needed, explain any answers in Remarks.)					
SUMMARY OF FINDINGS – Attach site map showing sampling p	point locations, transects, important features, etc.					
Hydrophytic Vegetation Present? Yes No X	la the Compled Area					
Hydrophytic Vegetation Present? Yes No X Hydric Soil Present? Yes No X	Is the Sampled Area within a Wetland? Yes No X					
Wetland Hydrology Present? Yes No X	If yes, optional Wetland Site ID: W22					
	ii yoo, optional violand one ib.					
Remarks: (Explain alternative procedures here or in a separate report.) Drier than normal conditions						
Bill than normal conditions						
HYDROLOGY						
Wetland Hydrology Indicators:	Secondary Indicators (minimum of two required)					
Primary Indicators (minimum of one is required; check all that apply)	Surface Soil Cracks (B6)					
Surface Water (A1) Water-Stained Leaves (B9)						
High Water Table (A2) Aquatic Fauna (B13)	Moss Trim Lines (B16)					
Saturation (A3) Marl Deposits (B15)	Dry-Season Water Table (C2)					
Water Marks (B1) Hydrogen Sulfide Odor (C1)						
Sediment Deposits (B2) Oxidized Rhizospheres on L						
Drift Deposits (B3) Presence of Reduced Iron (0						
Algal Mat or Crust (B4) Recent Iron Reduction in Till	· · · · · · · · · · · · · · · · · · ·					
Iron Deposits (B5) Thin Muck Surface (C7)	Shallow Aquitard (D3)					
Inundation Visible on Aerial Imagery (B7) Other (Explain in Remarks)	Microtopographic Relief (D4)					
Sparsely Vegetated Concave Surface (B8)	FAC-Neutral Test (D5)					
Field Observations:	_					
Surface Water Present Yes No _X Depth (inches	s)·					
Water Table Present Yes No X Depth (inches						
Saturation Present Yes No X Depth (inches	· 					
(includes capillary fringe)	<u> </u>					
Describe Recorded Data (stream gauge, monitoring well, aerial photos, pr	revious inspections), if available:					
	•					
Remarks:						

VEGETATION – Use scientific names of	plants.			Sampling Point: W22-1u
Tree Stratum (Plot size: 30 ft)	Absolute <u>% Cover</u>	Dominant Species	Indicator Status	Dominance Test worksheet:
1. Pinus resinosa	60	Yes	FACU	N 1 12 1 12 1
2. Populus tremuloides	15	Yes	FAC	Number of Dominant Species That Are OBL, FACW, or FAC: 2 (A)
3. Quercus rubra	15	Yes	FACU	
4				Total Number of Dominant Species Across All Strata: 8 (B)
5				Operics Across Air Ottata.
6				Percent of Dominant Species
7				That Are OBL, FACW, or FAC: 25 (A/B)
	90			Prevalence Index worksheet: Total % Cover of: Multiply by:
0 11 (0) 1 0 1 (D) 1 (D) 1 (E) 45 (b)		_ = Total Cove	r	Multiply by:
Sapling/Shrub Stratum (Plot size: 15 ft)				OBL species x 1 =
1. Corylus cornuta		Yes	FACU	FACW species x 2 =
Populus tremuloides	10	Yes	<u>FAC</u>	FAC species x 3 =
3				FACU species x 4 =
4				UPL species x 5 =
5.				Column Totals: (A) (B)
6.				Prevalence Index = B/A =
7				
	25	= Total Cover		Hydrophytic Vegetation Indicators:
Herb Stratum (Plot size: 5 ft)	·	- Total Cover		1 - Rapid Test for Hydrophytic Vegetation
1. Carex pensylvanica	15	Yes	UPL	2 - Dominance Test is >50%
Pteridium aquilinum	10	Yes	FACU	3 - Prevalence Index is ≤3.0¹
		Yes	FACU	4 - Morphological Adaptations ¹
Carex woodii Maianthemum canadense				(Provide supporting data in Remarks or on a separate sheet)
F				Problematic Hydrophytic Vegetation ¹ (Explain)
				¹ Indicators of hydric soil and wetland hydrology must be present, unless
				disturbed or problematic.
•				Definitions of Vegetation Strata:
				Definitions of Vegetation Strata.
				Tree – Woody plants 3 in. (7.6 cm) or more in
				diameter at breast height (DBH), regardless of height.
11				Sapling/shrub – Woody plants less than 3 in. DBH
12				and greater than or equal to 3.28 ft (1 m) tall.
	35	= Total Cover		Herb – All herbaceous (non-woody) plants, regardless
Woody Vine Stratum (Plot size: 30 ft)				of size, and woody plants less than 3.28 ft tall.
1				
2				Woody vines – All woody vines greater than 3.28 ft in height.
3				
4.				Hydrophytic
	0			Vegetation
		= Total Cover		Present? Yes No X
Remarks: (Include photo numbers here or on a se	parate sheet.)			

SOIL Sampling Point: W22-1u

Profile Desc Depth	cription: (Describe to Matrix	the dep		ment the x Feature		or or co	onfirm the absence o	of indicators	.)		
(inches)	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²	Texture		Remarks	3	
0-10	7.5YR 3/1	100					Loamy Sand				
10-20	10YR 3/3	100					Sandy Loam				
20-24	7.5YR 4/4	100					Loamy Sand	Soils dry thro	oughout		
¹Type: C=C	oncentration, D=Depl	etion, RM	=Reduced Matrix, N	лS=Mas	ked Sand	d Grains	² Location: PL=	Pore Lining,	M=Matrix.		
Hydric Soil	Indicators:						Indicators	for Problem	natic Hydric	Soils ³ :	
Histosol	(A1)		Polyvalue Below	Surface	(S8) (LRR	R,	2 cm N	luck (A10) (LR	R K, L, MLRA	149B)	
	ipedon (A2)		MLRA 149B)				Coast Prairie Redox (A16) (LRR K, L, R)				
Black His			Thin Dark Surface						Peat (S3) (LRR		
	n Sulfide (A4)		High Chroma Sa				Polyvalue Below Surface (S8) (LRR K, L)				
	Layers (A5) Below Dark Surface (A1)	11)	Loamy Mucky M Loamy Gleyed M			L)	Thin Dark Surface (S9) (LRR K, L) Iron-Manganese Masses (F12) (LRR K, L, R)				
	rk Surface (A12)	11)	Depleted Matrix		'		Piedmont Floodplain Soils (F19) (MLRA 149B)				
	ucky Mineral (S1)		Redox Dark Surf				Mesic Spodic (TA6) (MLRA 144A, 145, 149B)				
	leyed Matrix (S4)		Depleted Dark S		7)		Red Parent Material (F21)				
Sandy Re	edox (S5)		Redox Depression	ons (F8)			Very Shallow Dark Surface (F22)				
Stripped	Matrix (S6)		Marl (F10) (LRR	. K , L)			Other (Explain in Remarks)				
Dark Sur	face (S7)										
³ Indicators of	f hydrophytic vegetati	on and w	etland hydrology mu	ıst be pr	esent, ur	nless dist	turbed or problematic				
Restrictive I	Layer (if observed):										
Type:											
Depth (ir	nches):						Hydric Soil Pres	ent?	Yes	No X	
Remarks:											

Project/Site: Pine County Solar	City/County: Pine Sampling Date: 09/15/2022					
Applicant/Owner: Swift Current Energy	State: Min Sampling Point: W22-1w					
Investigator(s): Jwf	Section, Township, Range: T044N, R020W, S27					
- ' '	relief (concave, convex, none): Concave Slope %: 1					
Subregion (LRR or MLRA): LRR K, MLRA 90A Lat: 46.272351	Long: -92.858314 Datum: WGS84					
Soil Map Unit Name: Grayling sand, 0 to 7 percent slopes	NWI classification: PEM1D					
Are climatic / hydrologic conditions on the site typical for this time of year?	Yes No X (If no, explain in Remarks.)					
Are Vegetation , Soil , or Hydrology significantly distr	urbed? Are "Normal Circumstances" present? Yes X No					
Are Vegetation , Soil , or Hydrology naturally probler						
SUMMARY OF FINDINGS – Attach site map showing sampling p	oint locations, transects, important features, etc.					
Hydrophytic Vegetation Present? Yes X No	Is the Sampled Area					
Hydric Soil Present? Yes X No	within a Wetland? Yes X No					
Wetland Hydrology Present? Yes X No No	If yes, optional Wetland Site ID: W22					
Remarks: (Explain alternative procedures here or in a separate report.) Drier than normal conditions						
HYDROLOGY						
Wetland Hydrology Indicators:	Secondary Indicators (minimum of two required)					
Primary Indicators (minimum of one is required; check all that apply)	Surface Soil Cracks (B6)					
Surface Water (A1) Water-Stained Leaves (B9)	Drainage Patterns (B10)					
X High Water Table (A2) Aquatic Fauna (B13)	Moss Trim Lines (B16)					
X Saturation (A3) Marl Deposits (B15)	X Dry-Season Water Table (C2)					
Water Marks (B1) Hydrogen Sulfide Odor (C1)	Crayfish Burrows (C8)					
Sediment Deposits (B2) Oxidized Rhizospheres on Li	iving Roots (C3) Saturation Visible on Aerial Imagery (C9)					
Drift Deposits (B3) Presence of Reduced Iron (C	C4) Stunted or Stressed Plants (D1)					
Algal Mat or Crust (B4) Recent Iron Reduction in Till	illed Soils (C6) X Geomorphic Position (D2)					
Iron Deposits (B5) Thin Muck Surface (C7)	Shallow Aquitard (D3)					
Inundation Visible on Aerial Imagery (B7) Other (Explain in Remarks)	Microtopographic Relief (D4)					
Sparsely Vegetated Concave Surface (B8)	X FAC-Neutral Test (D5)					
Field Observations:						
Surface Water Present Yes No _X Depth (inches	s):					
Water Table Present Yes X No Depth (inches						
Saturation Present Yes X No Depth (inches						
(includes capillary fringe)	· —					
Describe Recorded Data (stream gauge, monitoring well, aerial photos, pre	evious inspections), if available:					
Remarks:						
1						

Tree Stratum (Plot size: 30 ft)	Absolute % Cover	Dominant Species	Indicator Status	Dominance Test worksheet:
2.				Number of Dominant Species That Are OBL, FACW, or FAC:(A)
3				Total Number of Dominant Species Across All Strata: (B)
6				Percent of Dominant Species That Are OBL, FACW, or FAC:(A/B)
				Prevalence Index worksheet:
0 11 10 1 0 1 1 1 1 1 1 1 1 1 1 1 1 1 1	0	_ = Total Cover	•	Total % Cover of: Multiply by:
Sapling/Shrub Stratum (Plot size: 15 ft)	_			OBL species x 1 =
1. Salix discolor	5	Yes	FACW	FACW species x 2 =
2.				FAC species x 3 =
3.				FACU species x 4 =
4				UPL species x 5 =
5				Column Totales (A)
6				Prevalence Index = B/A =
7				
	5	= Total Cover		Hydrophytic Vegetation Indicators:
Herb Stratum (Plot size: 5 ft)		- Total Cover		1 - Rapid Test for Hydrophytic Vegetation
1 Carex lacustris	50	Yes	OBL	X 2 - Dominance Test is >50%
Vaccinium macrocarpon	20	No	OBL	_ 3 - Prevalence Index is ≤3.0¹
3. Potentilla simplex	15	Yes	FACU	4 - Morphological Adaptations ¹
Scirpus cyperinus				(Provide supporting data in Remarks or on a separate sheet)
_			OBL	Problematic Hydrophytic Vegetation ¹ (Explain)
				¹Indicators of hydric soil and wetland hydrology must be present, unless
				disturbed or problematic.
				Definitions of Variation Strate.
				Definitions of Vegetation Strata:
				Tree – Woody plants 3 in. (7.6 cm) or more in
10				diameter at breast height (DBH), regardless of height.
11				Sapling/shrub – Woody plants less than 3 in. DBH
12				and greater than or equal to 3.28 ft (1 m) tall.
	100	= Total Cover		Herb – All herbaceous (non-woody) plants, regardless
Woody Vine Stratum (Plot size: 30 ft)				of size, and woody plants less than 3.28 ft tall.
1				W
2				Woody vines – All woody vines greater than 3.28 ft in height.
3.				- 10.g-11
4				Hydrophytic
	0			Vegetation
	0	= Total Cover		Present? Yes X No No
Remarks: (Include photo numbers here or on a separ	ate sheet.)			

Sampling Point:

W22-1w

SOIL Sampling Point: W22-1w

Profile Desci	ription: (Describe to	the depth	needed to docu	ment th	e indicat	or or co	nfirm the absence of inc	licators.)
Depth Matrix		Redo	x Featur	es				
(inches)	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²	Texture	Remarks
0-26	7.5YR 4/4	100					Peat	
								_
¹Type: C=Cc	oncentration, D=Deple	etion, RM=R	Reduced Matrix, N	//S=Mas	ked Sand	Grains.	² Location: PL=Pore	Lining, M=Matrix.
Hydric Soil II	ndicators:						Indicators for I	Problematic Hydric Soils ³ :
X Histosol (A	A1)		Polyvalue Below	Surface	(S8) (LRR	R,	2 cm Muck (A10) (LRR K, L, MLRA 149B)
Histic Epip	pedon (A2)		MLRA 149B)				Coast Prairie	e Redox (A16) (LRR K, L, R)
Black Hist	tic (A3)		Thin Dark Surface	ce (S9) (L	RR R, ML	RA 149B)	5 cm Mucky	Peat or Peat (S3) (LRR K, L, R)
Hydrogen	Sulfide (A4)		High Chroma Sa	nds (S11) (LRR K,	L)	Polyvalue Be	elow Surface (S8) (LRR K, L)
Stratified I	Layers (A5)		Loamy Mucky M	ineral (F1) (LRR K,	L)	Thin Dark So	urface (S9) (LRR K, L)
Depleted	Below Dark Surface (A1	1)	Loamy Gleyed M	Matrix (F2))		Iron-Mangar	nese Masses (F12) (LRR K, L, R)
Thick Darl	k Surface (A12)		Depleted Matrix	(F3)			Piedmont Flo	oodplain Soils (F19) (MLRA 149B)
Sandy Mu	ıcky Mineral (S1)		Redox Dark Surf	face (F6)			Mesic Spodi	c (TA6) (MLRA 144A, 145, 149B)
Sandy Gle	eyed Matrix (S4)		Depleted Dark S	Surface (F	7)		Red Parent I	Material (F21)
Sandy Re	dox (S5)		Redox Depression	ons (F8)			Very Shallov	v Dark Surface (F22)
Stripped N	Matrix (S6)		Marl (F10) (LRR	K , L)			Other (Expla	in in Remarks)
Dark Surfa	ace (S7)							
³ Indicators of	hydrophytic vegetation	on and wetla	and hydrology mu	ıst be pr	esent, un	less dist	urbed or problematic.	
Restrictive L	ayer (if observed):							
Type: _								
Depth (in	ches):						Hydric Soil Present?	Yes X No
Remarks:							•	

Project/Site: Pine County Solar	City/County: Pine Sampling Date: 09/16/2022					
Applicant/Owner: Swift Current Energy	State: Min Sampling Point: W23-1u					
Investigator(s): KKM BB	Section, Township, Range: T044N, R020W, S25					
	relief (concave, convex, none): Linear Slope %: 3					
Subregion (LRR or MLRA): LRR K, MLRA 90A Lat: 46.26142	Long: -92.823689 Datum: WGS84					
Soil Map Unit Name: No Digital Data Available	NWI classification:					
Are climatic / hydrologic conditions on the site typical for this time of year?						
, ,						
Are Vegetation, Soil, or Hydrology significantly dist						
Are Vegetation, Soil, or Hydrology naturally proble	ematic? (Il fleeded, explain any answers in Kemaiks.)					
SUMMARY OF FINDINGS – Attach site map showing sampling p	point locations, transects, important features, etc.					
Hydrophytic Vegetation Present? Yes No X	Is the Sampled Area					
Hydric Soil Present? Yes No X Hydric Soil Present? Yes No X	within a Wetland? Yes No X					
Wetland Hydrology Present? Yes No X	If yes, optional Wetland Site ID: W23					
Remarks: (Explain alternative procedures here or in a separate report.)						
Mowed field, possibly hay field						
HYDROLOGY						
Wetland Hydrology Indicators:	Secondary Indicators (minimum of two required)					
Primary Indicators (minimum of one is required; check all that apply)	Surface Soil Cracks (B6)					
Surface Water (A1) Water-Stained Leaves (B9)	Drainage Patterns (B10)					
High Water Table (A2) Aquatic Fauna (B13)	Moss Trim Lines (B16)					
Saturation (A3) Marl Deposits (B15)	Dry-Season Water Table (C2)					
Water Marks (B1) Hydrogen Sulfide Odor (C1)	Crayfish Burrows (C8)					
Sediment Deposits (B2) Oxidized Rhizospheres on L	Living Roots (C3) Saturation Visible on Aerial Imagery (C9)					
Drift Deposits (B3) Presence of Reduced Iron (C4) Stunted or Stressed Plants (D1)					
Algal Mat or Crust (B4) Recent Iron Reduction in Til	lled Soils (C6) Geomorphic Position (D2)					
Iron Deposits (B5) Thin Muck Surface (C7)	Shallow Aquitard (D3)					
Inundation Visible on Aerial Imagery (B7) Other (Explain in Remarks)	Microtopographic Relief (D4)					
Sparsely Vegetated Concave Surface (B8)	FAC-Neutral Test (D5)					
Field Observations:						
Surface Water Present Yes No X Depth (inches	s):					
Water Table Present Yes No _X Depth (inches	s):					
Saturation Present Yes No X Depth (inches	s): Wetland Hydrology Present? Yes No _X					
(includes capillary fringe)						
Describe Recorded Data (stream gauge, monitoring well, aerial photos, pr	revious inspections), if available:					
Remarks:						

Tree Stratum (Plot size: 30 ft)	Absolute % Cover	Dominant Species	Indicator Status	Dominance Test worksheet:
1 2				Number of Dominant Species That Are OBL, FACW, or FAC:(A)
3. 4.				Total Number of Dominant Species Across All Strata:1 (B)
5				Percent of Dominant Species That Are OBL, FACW, or FAC: 0(A/B)
7	<u> </u>			Prevalence Index worksheet:
	0	= Total Cover		Total % Cover of: Multiply by:
Sapling/Shrub Stratum (Plot size: 15 ft)		_ = 10101 00001		OBL species 0 $x = 0$
1				FACW species $0 \times 2 = 0$
2				FAC species $0 \times 3 = 0$
3				
4				FACU species <u>88</u> x 4 = <u>352</u>
5				UPL species18 x 5 =90
6				Column Totals: 106 (A) 442 (B)
7				Prevalence Index = B/A = 4.17
	0			Hydrophytic Vegetation Indicators:
Herb Stratum (Plot size: 5 ft)		= Total Cover		1 - Rapid Test for Hydrophytic Vegetation
1. Poa pratensis	75	Yes	FACU	2 - Dominance Test is >50%
2. Medicago sativa	15	No	UPL	3 - Prevalence Index is ≤3.0¹
3. Trifolium pratense	10	No	FACU	4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet)
4. Achillea millefolium	3	No	FACU	(Total dapporting and in Total and of Ora departure street,
5. <u>Hieracium aurantiacum</u>	3	No	UPL	Problematic Hydrophytic Vegetation ¹ (Explain)
6				¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
7				
8.				Definitions of Vegetation Strata:
9				
10	<u> </u>			Tree – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.
11				diameter at breast neight (BBH), regardless of neight.
12.				Sapling/shrub – Woody plants less than 3 in. DBH
	106			and greater than or equal to 3.28 ft (1 m) tall.
Woody Vine Stratum (Plot size: 30 ft)		= Total Cover		Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.
1				Woody vines – All woody vines greater than 3.28 ft in
2				height.
3				
4				Hydrophytic
	0	= Total Cover		Vegetation Present? Yes NoX
Remarks: (Include photo numbers here or on a se	parate sheet.)			•

Sampling Point:

W23-1u

SOIL Sampling Point: W23-1u

Profile Desc Depth	ription: (Describe to Matrix	the dep		ment the x Feature		or or co	nfirm the absence o	f indicators.)	
(inches)	Color (moist)	%	Color (moist)	% realur	Type ¹	Loc ²	Texture	Remarks	
0-9	7.5YR 2.5/2	100			71 -		Loamy Sand		
			7.5D 4/0					Destinative level at 0011 and it is a relative	
9-20	10YR 3/3	80	7.5R 4/6		<u>C</u>	M	Loamy Sand	Restirctive layer at 20", possibly sandston	
		<u> </u>		<u> </u>		<u> </u>			
1Type: C-C	oncentration, D=Depl	otion PM	4-Paduand Matrix	MS_Moo	kod Son	Croins	21 continue DL -	Pore Lining, M=Matrix.	
		ellon, Riv	/i=Reduced Mairix, r	vi5=ivias	keu Sand	d Grains.			
Hydric Soil Indicators: Histosol (A1) Histic Epipedon (A2) Black Histic (A3) Hydrogen Sulfide (A4) Stratified Layers (A5) Depleted Below Dark Surface (A11) Thick Dark Surface (A12) Sandy Mucky Mineral (S1) Sandy Gleyed Matrix (S4) Sandy Redox (S5) Stripped Matrix (S6) Dark Surface (S7) **Indicators of hydrophytic vegetation and wetlar Restrictive Layer (if observed):			Polyvalue Below MLRA 149B) Thin Dark Surfa High Chroma Sa Loamy Mucky M Loamy Gleyed M Depleted Matrix Redox Dark Sur Depleted Dark Sur Depleted Dark Sur Marl (F10) (LRR	ce (S9) (L ands (S11 flineral (F1 Matrix (F2) (F3) fface (F6) Surface (F ions (F8) & K, L)	LRR R, ML) (LRR K, I) (LRR K,)	RA 149B L) L)	Indicators for Problematic Hydric Soils ³ : 2 cm Muck (A10) (LRR K, L, MLRA 149B) Coast Prairie Redox (A16) (LRR K, L, R) 5 cm Mucky Peat or Peat (S3) (LRR K, L, R) Polyvalue Below Surface (S8) (LRR K, L) Thin Dark Surface (S9) (LRR K, L) Iron-Manganese Masses (F12) (LRR K, L, R) Piedmont Floodplain Soils (F19) (MLRA 149B) Mesic Spodic (TA6) (MLRA 144A, 145, 149B) Red Parent Material (F21) Very Shallow Dark Surface (F22) Other (Explain in Remarks)		
Type: _ Depth (ir	nches):						Hydric Soil Prese	ent? Yes NoX	
Remarks:									

Project/Site: Pine County Solar	City/County: Pine Sampling Date: 09/16/2022
Applicant/Owner: Swift Current Energy	State: Min Sampling Point: W23-1w
Investigator(s): KKM	Section, Township, Range: T044N, R020W, S25
	relief (concave, convex, none): Concave Slope %: 2
Subregion (LRR or MLRA): LRR K, MLRA 90A Lat: 46.261536	Long: -92.823759 Datum: WGS84
	NWI classification: PSS1C
Soil Map Unit Name: No Digital Data Available	
Are climatic / hydrologic conditions on the site typical for this time of year?	Yes X No (If no, explain in Remarks.)
Are Vegetation, Soil, or Hydrology significantly distu	
Are Vegetation , Soil , or Hydrology naturally problem	matic? (If needed, explain any answers in Remarks.)
SUMMARY OF FINDINGS – Attach site map showing sampling po	oint locations, transects, important features, etc.
Hydrophytic Vegetation Present? Yes X No	Is the Sampled Area
Hydric Soil Present? Yes X No	within a Wetland? Yes X No
Wetland Hydrology Present? Yes X No	If yes, optional Wetland Site ID: W23
Remarks: (Explain alternative procedures here or in a separate report.)	
HYDROLOGY	
Wetland Hydrology Indicators:	Secondary Indicators (minimum of two required)
Primary Indicators (minimum of one is required; check all that apply)	Surface Soil Cracks (B6)
Surface Water (A1) Water-Stained Leaves (B9)	Drainage Patterns (B10) Moss Trim Lines (B16)
High Water Table (A2) Aquatic Fauna (B13) Saturation (A3) Mad Descrite (B45)	Dry-Season Water Table (C2)
Saturation (A3) Marl Deposits (B15) Water Marks (B1) Hydrogen Sulfide Odor (C1)	
	_
Sediment Deposits (B2) Drift Deposits (B3) Oxidized Rhizospheres on Li Presence of Reduced Iron (C	
Algal Mat or Crust (B4) Recent Iron Reduction in Tille	
Iron Deposits (B5) Thin Muck Surface (C7)	Shallow Aquitard (D3)
Inundation Visible on Aerial Imagery (B7) Other (Explain in Remarks)	Microtopographic Relief (D4)
Sparsely Vegetated Concave Surface (B8)	X FAC-Neutral Test (D5)
Field Observations:	
	a).
Saturation Present Yes No X Depth (inches (includes capillary fringe)	S): Wetland Hydrology Present? Yes X No
Describe Recorded Data (stream gauge, monitoring well, aerial photos, pre	evious inspections) if available:
Describe Necorded Data (Stream gauge, monitoring well, aerial priotos, pre	evious inspections), ii available.
1	
Remarks:	

<u>Tree Stratum</u> (Plot size: <u>30 ft</u>)	Absolute % Cover	Dominant Species	Indicator Status	Dominance Test worksheet:
Populus tremuloides 2.			FAC	Number of Dominant Species That Are OBL, FACW, or FAC:3(A)
3				Total Number of Dominant Species Across All Strata: (B)
5				Percent of Dominant Species That Are OBL, FACW, or FAC:(A/B)
				Prevalence Index worksheet:
45.6	10	_ = Total Cover		Total % Cover of: Multiply by:
Sapling/Shrub Stratum (Plot size: 15 ft)	50	V	EAC)4/	OBL species0 x 1 =0
1. Salix bebbiana	50	Yes	FACW	FACW species 127 x 2 = 254
2. Alnus incana	25	Yes	FACW	FAC species 35 x 3 = 105
3. Salix interior		<u> </u>	FACW	FACU species15 x 4 =60
4				UPL species 0 x 5 = 0
5.				Column Totals: 177 (A) 419 (B)
6				Prevalence Index = B/A = 2.37
7		-		Hydrophytic Vegetation Indicators:
	90	= Total Cover		X 1 - Rapid Test for Hydrophytic Vegetation
Herb Stratum (Plot size: 5 ft)				X 2 - Dominance Test is >50%
1. Solidago gigantea	25	Yes	FACW	
2. Poa pratensis	15	No	FACU	X 3 - Prevalence Index is ≤3.0¹
3. Rubus idaeus	12	No	FAC	4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet)
4. Symphyotrichum lanceolatum	12	No	FACW	
5. Acer rubrum	8	No	FAC	Problematic Hydrophytic Vegetation ¹ (Explain)
6. Rhamnus cathartica	5	No	FAC	¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
7				
8				Definitions of Vegetation Strata:
9				Tree – Woody plants 3 in. (7.6 cm) or more in
10				diameter at breast height (DBH), regardless of height.
11				Sapling/shrub – Woody plants less than 3 in. DBH
12				and greater than or equal to 3.28 ft (1 m) tall.
	77	= Total Cover		
Woody Vine Stratum (Plot size: 30 ft)				Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.
1		-	_	Woody vines – All woody vines greater than 3.28 ft in
2		-	_	height.
3.				Hydrombystic
4				Hydrophytic Vegetation
		= Total Cover		Present? Yes X No No
Remarks: (Include photo numbers here or on a separ	ate sheet.)			

Sampling Point:

W23-1w

SOIL Sampling Point: W23-1w

		the dep	oth need				tor or co	onfirm the absence of indic	cators.)	
Depth (inches)	Matrix Color (moist)	%	Colo	or (moist)	x Feature %	es Type¹	Loc ²	Texture	Remarks	
0-4	10YR 2/2	100	Cold	ii (iiioist)		Туре	LUC	Loamy Sand	Remains	
4-12	10YR 2/2	65	10YR	4/6	35			Loamy Sand		
12-24	10YR 5/6	80	2.5YR	4/8	20	<u>C</u>	M	Sand		
					· ——					
¹Type: C=Co	oncentration, D=Deple	etion, R	л=Redu	ced Matrix,	MS=Mas	ked San	d Grains	² Location: PL=Pore L	ining, M=Matrix.	
Hydric Soil In	ndicators:							Indicators for Pr	oblematic Hydric Soils ³ :	
Histosol (A	A1)		Po	olyvalue Belov	w Surface	(S8) (LRF	RR,	2 cm Muck (A1	10) (LRR K, L, MLRA 149B)	
	pedon (A2)			MLRA 149B)				Coast Prairie Redox (A16) (LRR K, L, R)		
Black Hist				in Dark Surfa				· —	eat or Peat (S3) (LRR K, L, R)	
	Sulfide (A4)			gh Chroma S				 -	ow Surface (S8) (LRR K, L)	
	Layers (A5)	4)		amy Mucky N			, L)		face (S9) (LRR K, L)	
	Below Dark Surface (A1 k Surface (A12)	1)		amy Gleyed lepleted Matrix)		Iron-Manganese Masses (F12) (LRR K, L, R) Piedmont Floodplain Soils (F19) (MLRA 149B)		
	icky Mineral (S1)			edox Dark Su					(TA6) (MLRA 144A, 145, 149B)	
	eyed Matrix (S4)			epleted Dark		7)		Red Parent Ma		
X Sandy Re				edox Depress		,			Dark Surface (F22)	
Stripped N	Matrix (S6)		Ma	arl (F10) (LRF	R K, L)			Other (Explain	in Remarks)	
Dark Surfa	ace (S7)									
³ Indicators of	hydrophytic vegetation	on and w	vetland h	ydrology m	ust be pre	esent, ur	nless dis	turbed or problematic.		
Restrictive L	ayer (if observed):									
Type:				_						
Depth (in	ches):			<u> </u>				Hydric Soil Present?	Yes X No	
Remarks:								I		

Project/Site: Pine County Solar	City/County: Pine Sampling Date: 09/16/2022					
Applicant/Owner: Swift Current Energy	State: Min Sampling Point: W24-1u					
Investigator(s): KKM	Section, Township, Range: T044N, R020W, S25					
	relief (concave, convex, none): Linear Slope %: 5					
Subregion (LRR or MLRA): LRR K, MLRA 90A Lat: 46.265878	Long: -92.805763 Datum: WGS84					
Soil Map Unit Name: No Digital Data Available	NWI classification:					
Are climatic / hydrologic conditions on the site typical for this time of year?						
, ,	Yes X No (If no, explain in Remarks.) turbed? Are "Normal Circumstances" present? Yes X No					
Are Vegetation, Soil, or Hydrology significantly dist	(Kanadada ambaia amana in Banada)					
Are Vegetation, Soil, or Hydrology naturally problem	maio:					
SUMMARY OF FINDINGS – Attach site map showing sampling p	point locations, transects, important features, etc.					
Hydrophytic Vegetation Present? Yes No X	Is the Sampled Area					
Hydric Soil Present? Yes No X	within a Wetland? Yes No X					
Wetland Hydrology Present? Yes No X	If yes, optional Wetland Site ID: W24					
Remarks: (Explain alternative procedures here or in a separate report.)	ii yoo, opiionai wotana oto ib.					
Hayfield - mowed.						
HYDROLOGY						
Wetland Hydrology Indicators:	Secondary Indicators (minimum of two required)					
Primary Indicators (minimum of one is required; check all that apply)	Surface Soil Cracks (B6)					
Surface Water (A1) Water-Stained Leaves (B9)	Drainage Patterns (B10)					
1 	Moss Trim Lines (B16)					
1 	Dry-Season Water Table (C2)					
						
Water Marks (B1) Hydrogen Sulfide Odor (C1) Sediment Deposits (B2) Oxidized Rhizospheres on L						
Drift Deposits (B3) Presence of Reduced Iron (0						
Algal Mat or Crust (B4) Recent Iron Reduction in Till	,					
Iron Deposits (B5) Thin Muck Surface (C7)	Shallow Aquitard (D3)					
	Missackers are all in Dellis ((D.4)					
Inundation Visible on Aerial Imagery (B7) —— Other (Explain in Remarks) Sparsely Vegetated Concave Surface (B8)	FAC-Neutral Test (D5)					
Field Observations:						
Saturation Present Yes No X Depth (inches (includes capillary fringe)	3): Wetland Hydrology Fresent: Tes No					
Describe Recorded Data (stream gauge, monitoring well, aerial photos, pr						
besome recorded bata (stream gauge, monitoring well, actial priotes, pr	evious inspections), ii available.					
Remarks:						
Tromano.						

Tree Stratum (Plot size: 30 ft)	Absolute % Cover	Dominant Species	Indicator Status	Dominance Test worksheet:
1				Number of Dominant Species That Are OBL, FACW, or FAC:(A)
3 4 5.				Total Number of Dominant Species Across All Strata:3(B)
5				Percent of Dominant Species That Are OBL, FACW, or FAC: (A/B)
				Prevalence Index worksheet:
	0	_ = Total Cover		Total % Cover of: Multiply by:
Sapling/Shrub Stratum (Plot size: 15 ft)				OBL species 0 x 1 = 0
1				FACW species 0 x 2 = 0
2				FAC species 0 x 3 = 0
3				FACU species 100 x 4 = 400
4				
5				UPL species $0 \times 5 = 0$
6				Column Totals: 100 (A) 400 (B)
7				Prevalence Index = B/A = 4
	0			Hydrophytic Vegetation Indicators:
Herb Stratum (Plot size: 5 ft)		= Total Cover		1 - Rapid Test for Hydrophytic Vegetation
1 Lotus corniculatus	35	Yes	FACU	2 - Dominance Test is >50%
2. Phleum pratense	30	Yes	FACU	3 - Prevalence Index is ≤3.01
Trifolium pratense	20	Yes	FACU	4 - Morphological Adaptations ¹
				(Provide supporting data in Remarks or on a separate sheet)
	15	NO	FACU	Problematic Hydrophytic Vegetation ¹ (Explain)
				¹Indicators of hydric soil and wetland hydrology must be present, unless
6				disturbed or problematic.
7				
8				Definitions of Vegetation Strata:
9				Tree – Woody plants 3 in. (7.6 cm) or more in
10				diameter at breast height (DBH), regardless of height.
11	-			Sapling/shrub – Woody plants less than 3 in. DBH
12				and greater than or equal to 3.28 ft (1 m) tall.
	100	= Total Cover		Herb – All herbaceous (non-woody) plants, regardless
Woody Vine Stratum (Plot size: 30 ft)				of size, and woody plants less than 3.28 ft tall.
1				
2.				Woody vines – All woody vines greater than 3.28 ft in height.
3.				noight.
4.				Hydrophytic
·				Vegetation
	0	= Total Cover		Present? Yes No X
Remarks: (Include photo numbers here or on a separa	ate sheet.)			

Sampling Point: W24-1u

SOIL Sampling Point: W24-1u

Profile Desc Depth	ription: (Describe to Matrix	the dep	oth needed to	document th Redox Featur		tor or co	onfirm the absence of indicators.)		
(inches)	Color (moist)	%	Color (mo		Type ¹	Loc ²	Texture Remarks		
0-14	7.5YR 4/3	90	7.5YR 4/6	10	С	М	Sandy Clay		
14-24	10YR 5/4	100					Loamy Sand		
14-24	10110 3/4	100					Loaniy Gand		
				— —					
¹Type: C=Co	oncentration, D=Depl	etion, RN	/=Reduced M	atrix, MS=Mas	ked San	d Grains	s. ² Location: PL=Pore Lining, M=Matrix.		
Hydric Soil I	Indicators:						Indicators for Problematic Hydric Soils	s³:	
Histosol ((A1)		Polyvalu	e Below Surface	(S8) (LRF	R,	2 cm Muck (A10) (LRR K, L, MLRA 149E	3)	
Histic Epi	ipedon (A2)		MLRA	149B)			Coast Prairie Redox (A16) (LRR K, L, R)		
Black His	etic (A3)		Thin Dar	k Surface (S9) (L	RR R, ML	RA 149B	5 cm Mucky Peat or Peat (S3) (LRR K, L	, R)	
	n Sulfide (A4)		·	oma Sands (S11			Polyvalue Below Surface (S8) (LRR K, L))	
	Layers (A5)			lucky Mineral (F1		, L)	Thin Dark Surface (S9) (LRR K, L)		
	Below Dark Surface (A1	11)		Sleyed Matrix (F2)		Iron-Manganese Masses (F12) (LRR K, L, R)		
	rk Surface (A12)			Matrix (F3)			Piedmont Floodplain Soils (F19) (MLRA 1		
	ucky Mineral (S1) leyed Matrix (S4)			ark Surface (F6) I Dark Surface (F			Mesic Spodic (TA6) (MLRA 144A, 145, 14 Red Parent Material (F21)	49B)	
Sandy Re				epressions (F8)	1)		Very Shallow Dark Surface (F22)		
	Matrix (S6)			0) (LRR K, L)			Other (Explain in Remarks)		
Dark Surf				, , , ,					
³ Indicators of	hvdrophytic vegetati	on and w	etland hydrol	oav must be pr	esent. ur	nless dist	sturbed or problematic.		
	_ayer (if observed):								
Type:	,								
Depth (in	nches):						Hydric Soil Present? Yes No	<u> </u>	
Remarks:									

Project/Site: Pine County Solar	City/County: Pine Sampling Date: 09/16/2022							
Applicant/Owner: Swift Current Energy	State: Min Sampling Point: W24-1w							
Investigator(s): KKM CD	Section, Township, Range: T044N, R020W, S25							
	relief (concave, convex, none): Concave Slope %: 2							
Subregion (LRR or MLRA): LRR K, MLRA 90A Lat: 46.26595	Long: -92.805765 Datum: WGS84							
	NWI classification:							
Soil Map Unit Name: No Digital Data Available								
Are climatic / hydrologic conditions on the site typical for this time of year?	Yes No X (If no, explain in Remarks.)							
Are Vegetation , Soil , or Hydrology significantly dist								
Are Vegetation , Soil , or Hydrology naturally problem	matic? (If needed, explain any answers in Remarks.)							
SUMMARY OF FINDINGS – Attach site map showing sampling p	point locations, transects, important features, etc.							
Lhudrashutia Varatetiaa Dusaarta	le the Complet Area							
Hydrophytic Vegetation Present? Yes X No Yes X No	Is the Sampled Area							
Wetland Hydrology Present? Yes X No	within a Wetland? Yes X No If yes, optional Wetland Site ID: W24							
	ii yoo, optional violand one ib.							
Remarks: (Explain alternative procedures here or in a separate report.) Precip drier than normal								
Troop and than normal								
HYDROLOGY								
Wetland Hydrology Indicators:	Secondary Indicators (minimum of two required)							
Primary Indicators (minimum of one is required; check all that apply)	Surface Soil Cracks (B6)							
Surface Water (A1) Water-Stained Leaves (B9)	Drainage Patterns (B10)							
High Water Table (A2) Aquatic Fauna (B13)	Moss Trim Lines (B16)							
Saturation (A3) Marl Deposits (B15)	Dry-Season Water Table (C2)							
Water Marks (B1) Hydrogen Sulfide Odor (C1)	Crayfish Burrows (C8)							
Sediment Deposits (B2) Oxidized Rhizospheres on L	iving Roots (C3) Saturation Visible on Aerial Imagery (C9)							
Drift Deposits (B3) Presence of Reduced Iron (0	Stunted or Stressed Plants (D1)							
Algal Mat or Crust (B4) Recent Iron Reduction in Till	led Soils (C6) X Geomorphic Position (D2)							
Iron Deposits (B5) Thin Muck Surface (C7)	Shallow Aquitard (D3)							
Inundation Visible on Aerial Imagery (B7) Other (Explain in Remarks)	Microtopographic Relief (D4)							
Sparsely Vegetated Concave Surface (B8)	X FAC-Neutral Test (D5)							
Field Observations:								
Surface Water Present Yes No X Depth (inches	s):							
Water Table Present Yes No X Depth (inches	s):							
Saturation Present Yes No X Depth (inches	S): Wetland Hydrology Present? Yes X No							
(includes capillary fringe)								
Describe Recorded Data (stream gauge, monitoring well, aerial photos, pr	revious inspections), if available:							
Remarks:								
1								

Tree Stratum (Plot size: 30 ft)	Absolute % Cover	Dominant Species	Indicator Status	Dominance Test worksheet:
1				Number of Dominant Species That Are OBL, FACW, or FAC:(A)
3.		. 		Total Number of Dominant Species Across All Strata:(B)
6				Percent of Dominant Species That Are OBL, FACW, or FAC:(A/B)
	0			Prevalence Index worksheet: Total % Cover of: Multiply by:
Sapling/Shrub Stratum (Plot size: 15 ft)		_ = Total Cover	•	ividitiply by:
1. Salix bebbiana	60	Yes	FACW	OBL species 0 x 1 = 0
2. Cornus racemosa	30	Yes	FAC	FACW species112 x 2 =224
3. Alnus incana				FAC species 30 x 3 = 90
4. Salix interior				FACU species 10 x 4 = 40
5		·		UPL species0 x 5 =0
6.				Column Totals: (A) (B)
7.				Prevalence Index = B/A = 2.33
				Hydrophytic Vegetation Indicators:
	114	= Total Cover		- 1 - Rapid Test for Hydrophytic Vegetation
Herb Stratum (Plot size: 5 ft)				X 2 - Dominance Test is >50%
1. Solidago gigantea	10	No No	FACW	X 3 - Prevalence Index is ≤3.0¹
2. Solidago canadensis	10	No	FACU	
3. Onoclea sensibilis	10	No	FACW	4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet)
4. Symphyotrichum lanceolatum	8	<u>No</u>	FACW	5
5		·		Problematic Hydrophytic Vegetation¹ (Explain)
6				¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
7		·		
8		·		Definitions of Vegetation Strata:
9				Tree – Woody plants 3 in. (7.6 cm) or more in
10		·		diameter at breast height (DBH), regardless of height.
11				.
12				Sapling/shrub – Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.
	38	T-1-1 O		
Woody Vine Stratum (Plot size: 30 ft)		= Total Cover		Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.
				of size, and woody plants less than 3.20 it tall.
1		<u> </u>		Woody vines – All woody vines greater than 3.28 ft in
3		· ——		height.
		<u> </u>		Hydrophytic
4		<u> </u>		Vegetation
	0	= Total Cover		Present? Yes X No No
Remarks: (Include photo numbers here or on a separ	ate sheet.)			•
` '	,			

Sampling Point:

W24-1w

SOIL Sampling Point: W24-1w

Profile Descr Depth	ription: (Describe Matrix	to the dep		i <mark>ment th</mark> x Featur		tor or co	onfirm the absence o	f indicators.)
(inches)	Color (moist)	%	Color (moist)	% r eatur	Type ¹	Loc ²	Texture	Remarks
0-4	10YR 3/3	100			17/2		Sandy Loam	
4-15	10YR 3/4	90	10YR 4/6	10	С	M	Loamy Sand	Hit restrictive layer
¹Type: C=Co	ncentration, D=De	pletion, RN	N=Reduced Matrix, I	MS=Mas	ked San	d Grains	. ² Location: PL=	Pore Lining, M=Matrix.
Hydric Soil In	ndicators:						Indicators	for Problematic Hydric Soils ³ :
Histosol (A	A1)		Polyvalue Belov	v Surface	(S8) (LRF	RR,	2 cm M	luck (A10) (LRR K, L, MLRA 149B)
	pedon (A2)		MLRA 149B)				· 	Prairie Redox (A16) (LRR K, L, R)
Black Hist			Thin Dark Surfa					lucky Peat or Peat (S3) (LRR K, L, R)
	Sulfide (A4)		High Chroma S				· -	lue Below Surface (S8) (LRR K, L)
	Layers (A5)		Loamy Mucky N			, L)	' <u></u>	ark Surface (S9) (LRR K, L)
	Below Dark Surface (A11)	Loamy Gleyed I		2)		· · · · · · · · · · · · · · · · · · ·	anganese Masses (F12) (LRR K, L, R)
	k Surface (A12)		Depleted Matrix					ont Floodplain Soils (F19) (MLRA 149B)
	icky Mineral (S1)		Redox Dark Sui					Spodic (TA6) (MLRA 144A, 145, 149B)
X Sandy Re	eyed Matrix (S4)		Depleted Dark S		-7)			arent Material (F21) hallow Dark Surface (F22)
candy no	Matrix (S6)		Marl (F10) (LRF					Explain in Remarks)
Dark Surfa			() (, =/				Explain in Remaine)
		ation and w	estland bydrology m	ust ho ni	ocont ur	aloce die	turbed or problematic.	
	ayer (if observed)		eliana nyarology mi	ust be pi	esent, ui	iicss uis		
Type:	ayer (ii observed)	,-						
Depth (in	ches):						Hydric Soil Prese	ent? Yes ^X No
Remarks:							1,	
Remarks.								

Project/Site: Pine County Solar City	/County: Pine Sampling Date: 09/19/2022					
Applicant/Owner: Swift Current Energy	State: Min Sampling Point: W25-1u					
Investigator(s): BB/CD	Section, Township, Range: T044N, R020W, S25					
	concave, convex, none): Convex Slope %: 2-3					
Subregion (LRR or MLRA): LRR K, MLRA 90A Lat: 46.259498	Long: -92.820816 Datum: WGS84					
Soil Map Unit Name: No Digital Data Available	NWI classification:					
Are climatic / hydrologic conditions on the site typical for this time of year?	Yes X No (If no, explain in Remarks.)					
Are Vegetation , Soil , or Hydrology significantly disturbed	Are "Normal Circumstances" present? Yes X No					
Are Vegetation , Soil , or Hydrology naturally problematic?	(If needed, explain any answers in Remarks.)					
SUMMARY OF FINDINGS – Attach site map showing sampling point to	ocations, transects, important features, etc.					
Hydrophytic Vegetation Present? Yes X No Is	the Sampled Area					
	ithin a Wetland? Yes No X					
	yes, optional Wetland Site ID: W25					
Remarks: (Explain alternative procedures here or in a separate report.)	, se, epilenai (veliana ene 12)					
HYDROLOGY						
Wetland Hydrology Indicators:	Secondary Indicators (minimum of two required)					
Primary Indicators (minimum of one is required; check all that apply)	Surface Soil Cracks (B6)					
Surface Water (A1) Water-Stained Leaves (B9)	Drainage Patterns (B10)					
High Water Table (A2) Aquatic Fauna (B13)	Moss Trim Lines (B16)					
Saturation (A3) Marl Deposits (B15)	Dry-Season Water Table (C2)					
Water Marks (B1) Hydrogen Sulfide Odor (C1)	Crayfish Burrows (C8)					
Sediment Deposits (B2) Oxidized Rhizospheres on Living Ro	oots (C3) Saturation Visible on Aerial Imagery (C9)					
Drift Deposits (B3) Presence of Reduced Iron (C4)	Stunted or Stressed Plants (D1)					
Algal Mat or Crust (B4) Recent Iron Reduction in Tilled Soils	Geomorphic Position (D2)					
Iron Deposits (B5) Thin Muck Surface (C7)	Shallow Aquitard (D3)					
Inundation Visible on Aerial Imagery (B7) Other (Explain in Remarks)	Microtopographic Relief (D4)					
Sparsely Vegetated Concave Surface (B8)	FAC-Neutral Test (D5)					
Field Observations:						
Surface Water Present Yes No X Depth (inches):						
Water Table Present Yes No X Depth (inches):						
Saturation Present Yes No X Depth (inches):						
(includes capillary fringe)						
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous	inspections), if available:					
Remarks:						
T.						

Tree Stratum (Plot size: 30 ft)	Absolute % Cover	Dominant Species	Indicator Status	Dominance Test worksheet:
1				Number of Dominant Species That Are OBL, FACW, or FAC:(A)
3				Total Number of Dominant Species Across All Strata:(B)
5				Percent of Dominant Species That Are OBL, FACW, or FAC: 50 (A/B)
··				Prevalence Index worksheet:
	0	_ = Total Cover		Total % Cover of: Multiply by:
Sapling/Shrub Stratum (Plot size: 15 ft)				OBL species0 x 1 =0
1. Prunus virginiana	15	Yes	FACU	FACW species 90 x 2 = 180
2				FAC species 5 x 3 = 15
3				FACU species 15 x 4 = 60
4				UPL species 10 x 5 = 50
5				
6				Column Totals: 120 (A) 305 (B) Prevalence Index – B/A – 2.54
7				Trevalence mack = B//(=
	15	Total Cover		Hydrophytic Vegetation Indicators:
Herb Stratum (Plot size: 5 ft)		= Total Cover		1 - Rapid Test for Hydrophytic Vegetation
1 Phalaris arundinacea	90	Yes	FACW	2 - Dominance Test is >50%
2. Bromus inermis	10	No	UPL	X 3 - Prevalence Index is ≤3.01
O Cotorio accesilo		No	FAC	4 - Morphological Adaptations ¹
			TAC	(Provide supporting data in Remarks or on a separate sheet)
· ·				Problematic Hydrophytic Vegetation ¹ (Explain)
5				¹Indicators of hydric soil and wetland hydrology must be present, unless
6.				disturbed or problematic.
7				
8				Definitions of Vegetation Strata:
9				Tree – Woody plants 3 in. (7.6 cm) or more in
10				diameter at breast height (DBH), regardless of height.
11				Sapling/shrub – Woody plants less than 3 in. DBH
12				and greater than or equal to 3.28 ft (1 m) tall.
	105	= Total Cover		Herb – All herbaceous (non-woody) plants, regardless
Woody Vine Stratum (Plot size: 30 ft)				of size, and woody plants less than 3.28 ft tall.
1.				
2.				Woody vines – All woody vines greater than 3.28 ft in height.
3.				nogn.
4.				Hydrophytic
				Vegetation
	0	= Total Cover		Present? Yes X No
Remarks: (Include photo numbers here or on a separa	ate sheet.)			

Sampling Point:

W25-1u

SOIL Sampling Point: W25-1u

Profile Desc Depth	ription: (Describe to Matrix	the dep	th need		ment the x Feature		tor or co	onfirm the absence of indicators.)		
(inches)	Color (moist)	%	Colo	r (moist)	%	Type ¹	Loc ²	Texture Remarks		
0-12	10YR 3/3	100				<u> </u>		Loamy Sand		
12-24	7.5YR 4/4	95	5YR	4/6	5	С	М	Sand		
12-24	7.511 4/4	95	311	4/0			IVI	Sanu		
1T C. C.	turties D Deal	ation DA	1 Dadus		4C Maa	lead Can	d Oneine	21 continue DL Donn Linium M. Matrix		
	oncentration, D=Depl	etion, Riv	/I=Reduc	ed Matrix, i	vi5=ivias	ked San	d Grains.	<u> </u>		
Hydric Soil I	Indicators:							Indicators for Problematic Hydric Soils ³ :		
Histosol (•			lyvalue Below	V Surface	(S8) (LRF	R,	2 cm Muck (A10) (LRR K, L, MLRA 149B)		
	ipedon (A2)			MLRA 149B)	(00) (1	DD D MI	DA 440D	Coast Prairie Redox (A16) (LRR K, L, R)		
Black His	n Sulfide (A4)			in Dark Surfa gh Chroma Sa				5 cm Mucky Peat or Peat (S3) (LRR K, L, R) Polyvalue Below Surface (S8) (LRR K, L)		
	Layers (A5)			amy Mucky M				Polyvalue Below Surface (S6) (LRR K, L) Thin Dark Surface (S9) (LRR K, L)		
	Below Dark Surface (A1	1)		amy Gleyed N			, - /	Iron-Manganese Masses (F12) (LRR K, L, R)		
	rk Surface (A12)	,		pleted Matrix		,		Piedmont Floodplain Soils (F19) (MLRA 149B)		
	ucky Mineral (S1)			dox Dark Sur				Mesic Spodic (TA6) (MLRA 144A, 145, 149B)		
	leyed Matrix (S4)		De	pleted Dark S	Surface (F	7)		Red Parent Material (F21)		
Sandy Re	edox (S5)		Re	dox Depressi	ons (F8)			Very Shallow Dark Surface (F22)		
Stripped I	Matrix (S6)		Ma	arl (F10) (LRR	R K, L)			Other (Explain in Remarks)		
Dark Surf	face (S7)									
³ Indicators of	hydrophytic vegetati	on and w	etland h	ydrology mu	ust be pr	esent, ur	nless dist	sturbed or problematic.		
Restrictive L	_ayer (if observed):									
Type:	,									
- Depth (ir	nches):			_				Hydric Soil Present? Yes No X		
Remarks:	<u> </u>			_						
rtemarks.										

Project/Site: Pine County Solar	City/County: Pine Sampling Date: 09/19/2022
Applicant/Owner: Swift Current Energy	State: Min Sampling Point: W25-1w
Investigator(s): BB/CD	Section, Township, Range: T044N, R020W, S25
	relief (concave, convex, none): Concave Slope %: 1-2
Subregion (LRR or MLRA): LRR K, MLRA 90A Lat: 46.259468	Long: -92.820651 Datum: WGS84
Soil Map Unit Name: No Digital Data Available	NWI classification:
Are climatic / hydrologic conditions on the site typical for this time of year?	Yes X No (If no, explain in Remarks.)
Are Vegetation , Soil , or Hydrology significantly distu	urbed? Are "Normal Circumstances" present? Yes X No
Are Vegetation , Soil , or Hydrology naturally problem	matic? (If needed, explain any answers in Remarks.)
SUMMARY OF FINDINGS – Attach site map showing sampling po	oint locations, transects, important features, etc.
Hydrophytic Vegetation Present? Yes X No	Is the Sampled Area
Hydric Soil Present? Yes X No	within a Wetland? Yes X No
Wetland Hydrology Present? Yes X No	If yes, optional Wetland Site ID: W25
Remarks: (Explain alternative procedures here or in a separate report.)	<u> </u>
HYDROLOGY	
Wetland Hydrology Indicators:	Secondary Indicators (minimum of two required)
Primary Indicators (minimum of one is required; check all that apply)	Surface Soil Cracks (B6)
Surface Water (A1) Water-Stained Leaves (B9)	Drainage Patterns (B10)
High Water Table (A2) Aquatic Fauna (B13)	Moss Trim Lines (B16)
Saturation (A3) Marl Deposits (B15)	Dry-Season Water Table (C2)
Water Marks (B1) Hydrogen Sulfide Odor (C1)	Crayfish Burrows (C8)
Sediment Deposits (B2) Oxidized Rhizospheres on Li	
Drift Deposits (B3) Presence of Reduced Iron (C	
Algal Mat or Crust (B4) Recent Iron Reduction in Tille	
Iron Deposits (B5) Thin Muck Surface (C7)	Shallow Aquitard (D3)
Inundation Visible on Aerial Imagery (B7) Other (Explain in Remarks)	Microtopographic Relief (D4)
Sparsely Vegetated Concave Surface (B8)	X FAC-Neutral Test (D5)
Field Observations:	
Surface Water Present Yes No X Depth (inches	s).
<u> </u>	
	·
Saturation Present Yes No X Depth (inches (includes capillary fringe)	S): Wetland Hydrology Present? Yes X No
Describe Recorded Data (stream gauge, monitoring well, aerial photos, pre	evious inspections) if available:
Describe Necorded Data (Stream gauge, monitoring well, aeriai priotos, pre	evious inspections), ii available.
Remarks:	
Tromano.	

ree Stratum (Plot size: 30 ft)	Absolute <u>% Cover</u>	Dominant Species	Indicator Status	Dominance Test worksheet:
·				Number of Dominant Species
				That Are OBL, FACW, or FAC: 2 (A)
				(,
				Total Number of Dominant
				Species Across All Strata: 2 (B)
				Percent of Dominant Species
				That Are OBL, FACW, or FAC:(A/B
	<u> </u>	<u> </u>		Prevalence Index worksheet:
	0	= Total Cover	•	Total % Cover of: Multiply by:
apling/Shrub Stratum (Plot size: 15 ft)		_		OBL species x 1 =
Alnus incana	50	Yes	FACW	
				FACW species x 2 =
				FAC species x 3 =
· <u></u>				FACU species x 4 =
-				UPL species x 5 =
				Column Totals: (A) (B)
				Prevalence Index = B/A =
				Hydrophytic Vegetation Indicators:
	50	= Total Cover		X 1 - Rapid Test for Hydrophytic Vegetation
lerb Stratum (Plot size:5)				
Carex lacustris	85	Yes	OBL	X 2 - Dominance Test is >50%
Lycopus europaeus	10	No	OBL	3 - Prevalence Index is ≤3.0¹
Persicaria sagittata	10	No	OBL	4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet)
. Symphyotrichum lanceolatum	 5	No	FACW	(Flovide supporting data in Remarks of on a separate sheet)
				Problematic Hydrophytic Vegetation¹ (Explain)
				¹ Indicators of hydric soil and wetland hydrology must be present, unless
			-	disturbed or problematic.
				Definitions of Vegetation Strata:
				Definitions of Vegetation Strata.
				Tree – Woody plants 3 in. (7.6 cm) or more in
0				diameter at breast height (DBH), regardless of height.
1				Sapling/shrub – Woody plants less than 3 in. DBH
2	-			and greater than or equal to 3.28 ft (1 m) tall.
	110	= Total Cover		Hart All back a constant of the state of the
Voody Vine Stratum (Plot size: 30 ft)		_ 10tai 00v0i		Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.
				or orze, and woody planto loss than orze it tall.
				Woody vines – All woody vines greater than 3.28 ft in
				height.
				Undrambutia
· -	-			Hydrophytic Vegetation
	0	= Total Cover		Present? Yes X No
		- Total Gover		

SOIL Sampling Point: W25-1w

		the dep	th needed				tor or co	onfirm the absence of ind	licators.)	
Depth (inches)	Matrix Color (moist)	%	Color (r		Feature %		Loc ²	Toyturo	Remarks	
(inches) 0-6	Color (moist) 10YR 3/2	95	Color (r	/6	5	Type ¹ C	PL	Texture Sandy Loam	Remarks	
6-13	10YR 5/3	80		/6	20	<u>с</u>	M	Loamy Sand		
0-13				70			IVI	Loanly Sand		
13-24	5YR 4/6	95	10YR 5	/1	5	<u>D</u>	M	Loamy Sand		
¹Type: C=C	oncentration, D=Depl	etion, RN	/=Reduced	l Matrix, M	1S=Mas	ked San	d Grains	² Location: PL=Pore	Lining, M=Matrix.	
Hydric Soil I	Indicators:							Indicators for F	Problematic Hydric Soils ³ :	
Histosol ((A1)		Polyva	alue Below	Surface	(S8) (LRF	R,	2 cm Muck (A10) (LRR K, L, MLRA 149B)		
·	ipedon (A2)		MLF	RA 149B)				Coast Prairie	e Redox (A16) (LRR K, L, R)	
Black His				Dark Surfac				· —	Peat or Peat (S3) (LRR K, L, R)	
	n Sulfide (A4)			Chroma Sai				 ·	elow Surface (S8) (LRR K, L)	
	Layers (A5)	1\		y Mucky Mi			, L)		urface (S9) (LRR K, L)	
	Below Dark Surface (A1 rk Surface (A12)	1)		y Gleyed M eted Matrix ()			ese Masses (F12) (LRR K, L, R) podplain Soils (F19) (MLRA 149B)	
	ucky Mineral (S1)			x Dark Surfa					c (TA6) (MLRA 144A, 145, 149B)	
	leyed Matrix (S4)			eted Dark Si		7)			Material (F21)	
Sandy Re	edox (S5)		Redox Depressions (F8)					Very Shallow	Dark Surface (F22)	
Stripped	Matrix (S6)		Marl (F10) (LRR	K, L)			Other (Explain	in in Remarks)	
Dark Surf	face (S7)									
³ Indicators of	f hydrophytic vegetation	on and w	etland hyd	rology mu	st be pr	esent, ur	nless dist	turbed or problematic.		
	Layer (if observed):									
Type:										
Depth (ir	nches):							Hydric Soil Present?	Yes X No	
Remarks:										

Project/Site: Pine County Solar	City/County: Pine Sampling Date: 09/19/2022						
Applicant/Owner: Swift Current Energy	State: Min Sampling Point: W26-1u						
Investigator(s): BB/CD	Section, Township, Range: T044N, R020W, S25						
	relief (concave, convex, none): Convex Slope %: 2-3						
Subregion (LRR or MLRA): LRR K, MLRA 90A Lat: 46.261497	Long: -92.820156 Datum: WGS84						
Soil Map Unit Name: No Digital Data Available	NWI classification:						
Are climatic / hydrologic conditions on the site typical for this time of year?	Yes X No (If no, explain in Remarks.)						
Are Vegetation, Soil, or Hydrology significantly dist							
	· · · · · · · · · · · · · · · · · · ·						
Are Vegetation, Soil, or Hydrology naturally probler	made:						
SUMMARY OF FINDINGS – Attach site map showing sampling p	oint locations, transects, important features, etc.						
Hydrophytic Vegetation Present? Yes No X	Is the Sampled Area						
Hydric Soil Present? Yes No X	within a Wetland? Yes No X						
Wetland Hydrology Present? Yes No X	If yes, optional Wetland Site ID: W26						
Remarks: (Explain alternative procedures here or in a separate report.)	you, op.ional trouble one is:						
Remarks. (Explain alternative procedures here of in a separate report.)							
HYDROLOGY							
Wetland Hydrology Indicators:	Secondary Indicators (minimum of two required)						
Primary Indicators (minimum of one is required; check all that apply)	Surface Soil Cracks (B6)						
Surface Water (A1) Water-Stained Leaves (B9)	Drainage Patterns (B10)						
High Water Table (A2) Aquatic Fauna (B13)	Moss Trim Lines (B16)						
Saturation (A3) Marl Deposits (B15)	Dry-Season Water Table (C2)						
Water Marks (B1) Hydrogen Sulfide Odor (C1)	Crayfish Burrows (C8)						
Sediment Deposits (B2) Oxidized Rhizospheres on L							
Drift Deposits (B3) Presence of Reduced Iron (C	<u> </u>						
Algal Mat or Crust (B4) Recent Iron Reduction in Till							
Iron Deposits (B5) Thin Muck Surface (C7)	Shallow Aquitard (D3)						
	Microtopographic Relief (D4)						
Inundation Visible on Aerial Imagery (B7) —— Other (Explain in Remarks) Sparsely Vegetated Concave Surface (B8)	FAC-Neutral Test (D5)						
	TAO Neuliai rest (BS)						
Field Observations:							
Surface Water Present Yes No X Depth (inches							
Water Table Present Yes No X Depth (inches							
Saturation Present Yes No X Depth (inches	s): Wetland Hydrology Present? Yes No _X						
(includes capillary fringe)							
Describe Recorded Data (stream gauge, monitoring well, aerial photos, pro	evious inspections), if available:						
Remarks:							

Tree Stratum (Plot size: 30 ft)	Absolute % Cover	Dominant Species	Indicator Status	Dominance Test worksheet:
2.				Number of Dominant Species That Are OBL, FACW, or FAC:(A)
345				Total Number of Dominant Species Across All Strata: (B)
6				Percent of Dominant Species That Are OBL, FACW, or FAC:33(A/B)
	0	_ = Total Cover	r	Prevalence Index worksheet: Total % Cover of: Multiply by:
Sapling/Shrub Stratum (Plot size: 15 ft)				OBL species x 1 =
1. Salix interior	20	Yes	FACW	FACW species x 2 =
2. Corylus cornuta	15	Yes	FACU	
3				
4.				FACU species x 4 =
5				UPL species x 5 =
6				Column Totals: (A)(B)
7.				Prevalence Index = B/A =
	35			Hydrophytic Vegetation Indicators:
Herb Stratum (Plot size: 5 ft)		= Total Cover		1 - Rapid Test for Hydrophytic Vegetation
1 Poa pratensis	80	Yes	FACU	_ 2 - Dominance Test is >50%
2. Solidago canadensis	15	No	FACU	3 - Prevalence Index is ≤3.0¹
Fragaria virginiana	10	No	FACU	4 - Morphological Adaptations ¹
			UPL	(Provide supporting data in Remarks or on a separate sheet)
		INO	UPL	Problematic Hydrophytic Vegetation ¹ (Explain)
5				¹Indicators of hydric soil and wetland hydrology must be present, unless
6.				disturbed or problematic.
7.				
8				Definitions of Vegetation Strata:
9				Tree – Woody plants 3 in. (7.6 cm) or more in
10				diameter at breast height (DBH), regardless of height.
11				Sapling/shrub – Woody plants less than 3 in. DBH
12				and greater than or equal to 3.28 ft (1 m) tall.
	115	Total Cayar		
Woody Vine Stratum (Plot size: 30 ft)		= Total Cover		Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.
1				Woody vines – All woody vines greater than 3.28 ft in
2.				height.
3				
4				Hydrophytic
	0	= Total Cover		Vegetation Present? Yes No _X
Domontos (Ingluido e bata mumbasa basa	roto cha-1)			
Remarks: (Include photo numbers here or on a separate or	rate sheet.)			

Sampling Point:

W26-1u

SOIL Sampling Point: W26-1u

Profile Desc Depth	ription: ((Describe to Matrix	the dep	th need		ment the x Feature		tor or co	onfirm the absence of indicators.)		
(inches)	Colo	r (moist)	%	Cold	or (moist)	%	Type ¹	Loc ²	Texture Remarks		
0-12	10YR	3/3	100						Loamy Sand		
12-16	5YR	4/4	95	5YR	4/6	5	С	М	Sand		
16-25	5YR	5/4	95	5YR	4/6	5	С	М	Sand		
					.,,,	<u> </u>	<u> </u>		Cana		
											
¹Type: C=C	oncentrat	ion, D=Depl	etion, RM	1=Redu	ced Matrix, N	√S=Masl	ked San	d Grains.	s. ² Location: PL=Pore Lining, M=Matrix.		
Hydric Soil I	Indicator	s:							Indicators for Problematic Hydric Soils ³ :		
Histosol ((A1)			Po	olyvalue Below	Surface	(S8) (LRF	RR,	2 cm Muck (A10) (LRR K, L, MLRA 149B)		
	ipedon (A2	2)		ļ	MLRA 149B)				Coast Prairie Redox (A16) (LRR K, L, R)		
Black His					nin Dark Surfa						
	n Sulfide (A	-			gh Chroma Sa				Polyvalue Below Surface (S8) (LRR K, L)		
	Layers (A	o) rk Surface (A1	11)		amy Mucky M amy Gleyed N			, L)	Thin Dark Surface (S9) (LRR K, L) Iron-Manganese Masses (F12) (LRR K, L, R)		
	rk Surface	•	11)		epleted Matrix				Piedmont Floodplain Soils (F19) (MLRA 149B)		
	ucky Miner				edox Dark Sur				Mesic Spodic (TA6) (MLRA 144A, 145, 149B)		
	eyed Matri				epleted Dark S		7)		Red Parent Material (F21)		
Sandy Re	edox (S5)			Re	edox Depressi	ons (F8)			Very Shallow Dark Surface (F22)		
	Matrix (S6))		Ma	arl (F10) (LRR	K, L)			Other (Explain in Remarks)		
Dark Surf	face (S7)										
³ Indicators of	hydroph	ytic vegetati	on and w	etland h	nydrology mu	ust be pre	esent, ur	nless dist	sturbed or problematic.		
Restrictive L	_ayer (if	observed):									
Type:					_						
Depth (ir	nches): _				_				Hydric Soil Present? Yes NoX		
Remarks:											

Project/Site: Pine County Solar	City/County: Pine Sampling Date: 09/19/2022					
Applicant/Owner: Swift Current Energy	State: Min Sampling Point: W26-1w					
Investigator(s): BB/CD	Section, Township, Range: T044N, R020W, S25					
Landform (hillside, terrace, etc.): Depression Local	relief (concave, convex, none): Convex Slope %: 1-2					
Subregion (LRR or MLRA): LRR K, MLRA 90A Lat: 46.261602	Long: -92.82018 Datum: WGS84					
Soil Map Unit Name: No Digital Data Available	NWI classification:					
Are climatic / hydrologic conditions on the site typical for this time of year?	Yes X No (If no, explain in Remarks.)					
Are Vegetation, Soil, or Hydrology significantly dis						
Are Vegetation , Soil , or Hydrology naturally proble	(Kanadada ambia ana anama in Banada)					
SUMMARY OF FINDINGS – Attach site map showing sampling p						
Hydrophytic Vegetation Present? Yes X No	Is the Sampled Area					
Hydric Soil Present? Yes X No	within a Wetland? Yes X No No					
Wetland Hydrology Present? Yes X No Remarks: (Explain alternative procedures here or in a separate report.)	If yes, optional Wetland Site ID: W26					
HYDROLOGY						
Wetland Hydrology Indicators:	Secondary Indicators (minimum of two required)					
Primary Indicators (minimum of one is required; check all that apply)	Surface Soil Cracks (B6)					
Surface Water (A1) Water-Stained Leaves (B9)	Drainage Patterns (B10)					
High Water Table (A2) Aquatic Fauna (B13)	Moss Trim Lines (B16)					
Saturation (A3) Marl Deposits (B15)	Dry-Season Water Table (C2)					
Water Marks (B1) Hydrogen Sulfide Odor (C1)	Crayfish Burrows (C8)					
Sediment Deposits (B2) Oxidized Rhizospheres on L	<u> </u>					
Drift Deposits (B3) Presence of Reduced Iron (<u> </u>					
Algal Mat or Crust (B4) Recent Iron Reduction in Til						
Iron Deposits (B5) Thin Muck Surface (C7)	Shallow Aquitard (D3)					
Inundation Visible on Aerial Imagery (B7) Other (Explain in Remarks)	Microtopographic Relief (D4)					
Sparsely Vegetated Concave Surface (B8)	X FAC-Neutral Test (D5)					
Field Observations:						
Surface Water Present Yes No X Depth (inches	s):					
Water Table Present Yes No X Depth (inches	s):					
Saturation Present Yes No X Depth (inches	S): Wetland Hydrology Present? Yes X No					
(includes capillary fringe)						
Describe Recorded Data (stream gauge, monitoring well, aerial photos, pr	revious inspections), if available:					
Remarks:						

<u>Tree Stratum</u> (Plot size: <u>30 ft</u>)	Absolute % Cover	Dominant Species	Indicator Status	Dominance Test worksheet:
1				Number of Dominant Species That Are OBL, FACW, or FAC:6(A)
3	_			Total Number of Dominant Species Across All Strata:6(B)
6				Percent of Dominant Species That Are OBL, FACW, or FAC:(A/B)
	0	= Total Cover		Prevalence Index worksheet: Total % Cover of: Multiply by:
Sapling/Shrub Stratum (Plot size:15 ft)		_ = Total Cover		OBL species
1. Cornus racemosa	15	Yes	FAC	FACW species x 2 =
2. Ilex verticillata	15	Yes	FACW	
3. Alnus incana	10	Yes	FACW	<u> </u>
4. Salix interior	10	Yes	FACW	FACU species x 4 =
5	_			UPL species x 5 =
6	_			Column Totals: (A)(B)
7				Prevalence Index = B/A =
	50			Hydrophytic Vegetation Indicators:
5 ft)		= Total Cover		1 - Rapid Test for Hydrophytic Vegetation
Herb Stratum (Plot size: 5 ft)	50	V.	0.01	X 2 - Dominance Test is >50%
1. Carex lacustris	50	Yes	OBL	- 3 - Prevalence Index is ≤3.01
2. Solidago gigantea	35	Yes	FACW	4 - Morphological Adaptations ¹
3. Cornus racemosa	15	No	FAC	(Provide supporting data in Remarks or on a separate sheet)
4. Fragaria virginiana	_ 5	No	FACU	Problematic Hydrophytic Vegetation ¹ (Explain)
5	_			¹Indicators of hydric soil and wetland hydrology must be present, unless
6	_			disturbed or problematic.
7				
8	_			Definitions of Vegetation Strata:
9				Tree – Woody plants 3 in. (7.6 cm) or more in
10				diameter at breast height (DBH), regardless of height.
11				Sapling/shrub – Woody plants less than 3 in. DBH
12	_			and greater than or equal to 3.28 ft (1 m) tall.
	105	= Total Cover		
Woody Vine Stratum (Plot size: 30 ft)		- Total Gover		Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.
1				or oleo, and woody plante loop than oleo trian.
2.			_	Woody vines – All woody vines greater than 3.28 ft in
3.			_	height.
4.			_	Hydrophytic
	0	= Total Cover		Vegetation Present? Yes X No No
Remarks: (Include photo numbers here or on a sep	arate sheet.)			

Sampling Point:

W26-1w

SOIL Sampling Point: W26-1w

		the dep	th need				tor or co	onfirm the absence of indi-	cators.)
Depth (inches)	Matrix Color (moist)	%	Colc	or (moist)	ox Featur	es Type¹	Loc ²	Toyturo	Remarks
(inches) 0-8	10YR 3/2	95	5YR	4/6	5	С	M	Texture Loamy Sand	Remarks
8-14	10YR 5/3	90	5YR	4/6	10	C		Loamy Sand	
14-24	10YR 6/4	95	5YR	4/6	5	С	M	Sand	
	·								
¹Type: C=Co	oncentration, D=Depl	etion, RN	/I=Reduc	ced Matrix,	MS=Mas	ked San	d Grains	. ² Location: PL=Pore L	_ining, M=Matrix.
Hydric Soil I	ndicators:							Indicators for P	roblematic Hydric Soils ³ :
Histosol (A	A1)		Po	olyvalue Belov	w Surface	(S8) (LRF	RR,	2 cm Muck (A	10) (LRR K, L, MLRA 149B)
	pedon (A2)			MLRA 149B)					Redox (A16) (LRR K, L, R)
Black Hist				nin Dark Surfa				·	Peat or Peat (S3) (LRR K, L, R)
	Sulfide (A4)			gh Chroma S				 -	ow Surface (S8) (LRR K, L)
	Layers (A5)	4)		amy Mucky N			, L)	<u> </u>	face (S9) (LRR K, L)
	Below Dark Surface (A1 k Surface (A12)	1)	Loamy Gleyed Matrix (F2) Depleted Matrix (F3)						ese Masses (F12) (LRR K, L, R) odplain Soils (F19) (MLRA 149B)
	ucky Mineral (S1)			•					(TA6) (MLRA 144A, 145, 149B)
	eyed Matrix (S4)		Redox Dark Surface (F6) Depleted Dark Surface (F7)					Red Parent M	
X Sandy Re	•		Redox Depressions (F8)						Dark Surface (F22)
Stripped N	Matrix (S6)		Marl (F10) (LRR K, L)					Other (Explain	n in Remarks)
Dark Surfa	ace (S7)								
³ Indicators of	hydrophytic vegetation	on and w	etland r	nydrology m	ust be pr	esent, ur	nless dis	turbed or problematic.	
	.ayer (if observed):								
Type:									
Depth (in	ches):			_				Hydric Soil Present?	Yes X No
Remarks:									

Project/Site: Pine County Solar	City/County: Pine Sampling Date: 09/19/2022						
Applicant/Owner: Swift Current Energy	State: Min Sampling Point: W27-1u						
Investigator(s): BB/CD	Section, Township, Range: T044N, R020W, S25						
	relief (concave, convex, none): Convex Slope %: 2-3						
	· ———						
Subregion (LRR or MLRA): LRR K, MLRA 90A Lat: 46.259901	Long: <u>-92.822734</u> Datum: <u>WGS84</u>						
Soil Map Unit Name: No Digital Data Available	NWI classification:						
Are climatic / hydrologic conditions on the site typical for this time of year?	Yes X No (If no, explain in Remarks.)						
Are Vegetation, Soil, or Hydrology significantly dist	turbed? Are "Normal Circumstances" present? Yes X No						
Are Vegetation , Soil , or Hydrology naturally probler	matic? (If needed, explain any answers in Remarks.)						
SUMMARY OF FINDINGS – Attach site map showing sampling p	point locations, transects, important features, etc.						
Hydrophytic Vegetation Present? Yes No X	Is the Sampled Area						
Hydric Soil Present? Yes No X	within a Wetland? Yes No X						
Wetland Hydrology Present? Yes No X	If yes, optional Wetland Site ID: W27						
Remarks: (Explain alternative procedures here or in a separate report.)							
HYDROLOGY							
Wetland Hydrology Indicators:	Secondary Indicators (minimum of two required)						
Primary Indicators (minimum of one is required; check all that apply)	Surface Soil Cracks (B6)						
Surface Water (A1) Water-Stained Leaves (B9)	Drainage Patterns (B10)						
High Water Table (A2) Aquatic Fauna (B13)	Moss Trim Lines (B16)						
Saturation (A3) Marl Deposits (B15)	Dry-Season Water Table (C2)						
Water Marks (B1) Hydrogen Sulfide Odor (C1)	Crayfish Burrows (C8)						
Sediment Deposits (B2) Oxidized Rhizospheres on L	iving Roots (C3) Saturation Visible on Aerial Imagery (C9)						
Presence of Reduced Iron (0	C4) Stunted or Stressed Plants (D1)						
Algal Mat or Crust (B4) Recent Iron Reduction in Till	lled Soils (C6) Geomorphic Position (D2)						
Iron Deposits (B5) Thin Muck Surface (C7)	Shallow Aquitard (D3)						
Inundation Visible on Aerial Imagery (B7) Other (Explain in Remarks)	Microtopographic Relief (D4)						
Sparsely Vegetated Concave Surface (B8)	FAC-Neutral Test (D5)						
Field Observations:							
Surface Water Present Yes No _X Depth (inches	s):						
Water Table Present Yes No X Depth (inches	s):						
Saturation Present Yes No X Depth (inches	s): Wetland Hydrology Present? Yes No _X_						
(includes capillary fringe)							
Describe Recorded Data (stream gauge, monitoring well, aerial photos, pro	evious inspections), if available:						
Remarks:							
Remarks:							

Tree Stratum (Plot size: 30 ft)	Absolute <u>% Cover</u>	Dominant Species	Indicator 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				Percent of Dominant Species That Are OBL, FACW, or FAC: 0 (A/B)
7				Prevalence Index worksheet:
	0	_ = Total Cover		Total % Cover of: Multiply by:
Sapling/Shrub Stratum (Plot size: 15 ft)				OBL species x 1 =
1				FACW species x 2 =
2.				
3				FAC species x 3 =
4.				FACU species x 4 =
5.			-	UPL species x 5 =
				Column Totals: (A)(B)
				Prevalence Index = B/A =
7				Hydrophytic Vegetation Indicators:
	0	= Total Cover		- 1 - Rapid Test for Hydrophytic Vegetation
Herb Stratum (Plot size: 5 ft)	40	.,	54011	- 2 - Dominance Test is >50%
1. Elymus repens	40	Yes	FACU	- 3 - Prevalence Index is ≤3.0¹
2. Poa pratensis	30	Yes	FACU	4 - Morphological Adaptations ¹
Trifolium pratense	20	No	FACU	(Provide supporting data in Remarks or on a separate sheet)
4. Medicago sativa	15	No	UPL	Problematic Hydrophytic Vegetation ¹ (Explain)
5		 -		¹Indicators of hydric soil and wetland hydrology must be present, unless
6				disturbed or problematic.
7				
8				Definitions of Vegetation Strata:
9				Tree – Woody plants 3 in. (7.6 cm) or more in
10				diameter at breast height (DBH), regardless of height.
11				
12				Sapling/shrub – Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.
	105			and greater than or equal to 3.20 it (1 iii) tall.
Woody Vine Stratum (Plot size: 30 ft)		= Total Cover		Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.
1				
2				Woody vines – All woody vines greater than 3.28 ft in height.
3				noight.
4.				Hydrophytic
				Vegetation
	0	= Total Cover		Present? Yes NoX
Remarks: (Include photo numbers here or on a sepa	rate sheet.)			

Sampling Point:

W27-1u

SOIL Sampling Point: W27-1u

		the dep				or or co	onfirm the absence of in	ndicators.)
Depth (inches)	Matrix	%	Color (moist)	x Featur %	es Type¹	Loc ²	Toyturo	Remarks
(inches) 0-15	Color (moist) 10YR 3/4	100	Color (moist)		туре	LUC	Texture	Remarks
15-24	10YR 5/4	100					Sand	
15-24	10 FK - 5/4	100					Saliu	
1= -					. ——			
'Type: C=Co	oncentration, D=Depl	etion, RM	1=Reduced Matrix, N	√S=Mas	ked Sand	d Grains.	. ² Location: PL=Por	e Lining, M=Matrix.
Hydric Soil I	Indicators:						Indicators for	Problematic Hydric Soils ³ :
Histosol (•		Polyvalue Below	/ Surface	(S8) (LRR	! R ,	2 cm Muck	(A10) (LRR K, L, MLRA 149B)
	ipedon (A2)		MLRA 149B)					rie Redox (A16) (LRR K, L, R)
Black His			Thin Dark Surface					ty Peat or Peat (S3) (LRR K, L, R)
	Sulfide (A4)		High Chroma Sa				 ·	Below Surface (S8) (LRR K, L)
	Layers (A5)	14\	Loamy Mucky M			L)		Surface (S9) (LRR K, L)
	Below Dark Surface (A1 rk Surface (A12)	11)	Loamy Gleyed N Depleted Matrix		,			anese Masses (F12) (LRR K, L, R) Floodplain Soils (F19) (MLRA 149B)
	ucky Mineral (S1)		Redox Dark Sur					dic (TA6) (MLRA 144A, 145, 149B)
	leyed Matrix (S4)		Depleted Dark S		7)			t Material (F21)
Sandy Re			Redox Depressi	ons (F8)	•			ow Dark Surface (F22)
Stripped I	Matrix (S6)		Marl (F10) (LRR	K, L)			Other (Exp	lain in Remarks)
Dark Surf	face (S7)							
³ Indicators of	hydrophytic vegetati	on and w	etland hydrology mu	ıst be pr	esent, un	ıless dist	turbed or problematic.	
Restrictive L	_ayer (if observed):							
Type:								
Depth (ir	nches):						Hydric Soil Present	? Yes No _X
Remarks:								

Project/Site: Pine County Solar	City/County: Pine Sampling Date: 09/19/2022							
Applicant/Owner: Swift Current Energy	State: Min Sampling Point: W27-1w							
Investigator(s): BB/CD	Section, Township, Range: T044N, R020W, S25							
Landform (hillside, terrace, etc.): Depression Local r	relief (concave, convex, none): Concave Slope %: 0-1							
Subregion (LRR or MLRA): LRR K, MLRA 90A Lat: 46.260028	Long: -92.82272 Datum: WGS84							
Soil Map Unit Name: No Digital Data Available	NWI classification:							
Are climatic / hydrologic conditions on the site typical for this time of year?	Yes X No (If no, explain in Remarks.)							
Are Vegetation, Soil, or Hydrology significantly distu								
Are Vegetation , Soil , or Hydrology naturally problem	(Wassadad ambigasus sassas is Bassada)							
SUMMARY OF FINDINGS – Attach site map showing sampling po								
Hydrophytic Vegetation Present? Yes X No	Is the Sampled Area							
Hydric Soil Present? Yes X No	within a Wetland? Yes X No							
Wetland Hydrology Present? Yes X No Remarks: (Explain alternative procedures here or in a separate report.)	If yes, optional Wetland Site ID: W27							
HYDROLOGY								
Wetland Hydrology Indicators:	Secondary Indicators (minimum of two required)							
Primary Indicators (minimum of one is required; check all that apply)	Surface Soil Cracks (B6)							
Surface Water (A1) Water-Stained Leaves (B9)	Drainage Patterns (B10)							
High Water Table (A2) Aquatic Fauna (B13)	Moss Trim Lines (B16)							
Saturation (A3) Marl Deposits (B15)	Dry-Season Water Table (C2)							
Water Marks (B1) Hydrogen Sulfide Odor (C1)	Crayfish Burrows (C8)							
Sediment Deposits (B2) Oxidized Rhizospheres on Liverage Control Cont	<u> </u>							
Drift Deposits (B3) Presence of Reduced Iron (C								
Algal Mat or Crust (B4) Recent Iron Reduction in Tille								
Iron Deposits (B5) Thin Muck Surface (C7)	Shallow Aquitard (D3)							
Inundation Visible on Aerial Imagery (B7) Other (Explain in Remarks)	Microtopographic Relief (D4)							
Sparsely Vegetated Concave Surface (B8)	X FAC-Neutral Test (D5)							
Field Observations:								
Surface Water Present Yes No X Depth (inches)):							
Water Table Present Yes No X Depth (inches)):							
Saturation Present Yes No X Depth (inches)): Wetland Hydrology Present? Yes X No							
(includes capillary fringe)								
Describe Recorded Data (stream gauge, monitoring well, aerial photos, pre	evious inspections), if available:							
Remarks:								

<u>Tree Stratum</u> (Plot size: <u>30 ft</u>)	Absolute % Cover	Dominant Species	Indicator Status	Dominance Test worksheet:
1 2				Number of Dominant Species That Are OBL, FACW, or FAC: 2 (A)
3				Total Number of Dominant
5				Species Across All Strata: 2 (B) Percent of Dominant Species
6 7				That Are OBL, FACW, or FAC:(A/B)
				Prevalence Index worksheet:
	0	_ = Total Cover		Total % Cover of: Multiply by:
Sapling/Shrub Stratum (Plot size: 15 ft)				OBL species x 1 =
1				FACW species x 2 =
2.				FAC species x 3 =
3.				FACU species x 4 =
4			.	UPL species x 5 =
5.		<u> </u>		Column Totals: (A) (B)
6			.	Prevalence Index = B/A =
7				Hydrophytic Vegetation Indicators:
	0	= Total Cover		
Herb Stratum (Plot size: 5 ft)				X 1 - Rapid Test for Hydrophytic Vegetation
1. Carex lacustris	80	Yes	OBL	2 - Dominance Test is >50%
2. Phalaris arundinacea	20	Yes	FACW	3 - Prevalence Index is ≤3.0¹
3.				4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet)
4.				(Provide supporting data in Remarks of on a separate sheet)
5				Problematic Hydrophytic Vegetation¹ (Explain)
6.				Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
7				disturbed of problematic.
8.				Definitions of Vegetation Strata:
9.				_
10				Tree – Woody plants 3 in. (7.6 cm) or more in
11.				diameter at breast height (DBH), regardless of height.
12.				Sapling/shrub – Woody plants less than 3 in. DBH
	400			and greater than or equal to 3.28 ft (1 m) tall.
Woody Vine Stratum (Plot size: 30 ft)	100	= Total Cover		Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.
1				
2	-			Woody vines – All woody vines greater than 3.28 ft in height.
3	-			
4	-			Hydrophytic
	0			Vegetation
	0	= Total Cover		Present? Yes X No No
Remarks: (Include photo numbers here or on a separa	ate sheet.)			

Sampling Point:

W27-1w

SOIL Sampling Point: W27-1w

Profile Descr Depth	ription: (Describe to Matrix	the dep		ment the x Featur		tor or co	onfirm the absence of indica	ators.)
(inches)	Color (moist)	%	Color (moist)	% realui	Type ¹	Loc ²	Texture	Remarks
0-24	10YR 2/1	100			- 7 -		Sandy Loam	
24-32	10YR 6/1	80	7.5YR 4/6	20	С	M	Sandy Clay Loam	
	-							
	-							
	•							
¹Type: C=Co	oncentration, D=Depl	etion, RN	/=Reduced Matrix, N	MS=Mas	ked San	d Grains	. ² Location: PL=Pore Lir	ning, M=Matrix.
Hydric Soil Ir	ndicators:						Indicators for Pro	blematic Hydric Soils ³ :
Histosol (A	A1)		Polyvalue Below	v Surface	(S8) (LRF	RR,	2 cm Muck (A10)) (LRR K, L, MLRA 149B)
	pedon (A2)		MLRA 149B)				Coast Prairie Ro	edox (A16) (LRR K, L, R)
Black Hist			Thin Dark Surfa				· —	at or Peat (S3) (LRR K, L, R)
Hydrogen	Sulfide (A4)		High Chroma Sa				Polyvalue Belov	v Surface (S8) (LRR K, L)
	Layers (A5)		Loamy Mucky M			, L)		ce (S9) (LRR K, L)
 ·	Below Dark Surface (A1	1)	Loamy Gleyed N		()			e Masses (F12) (LRR K, L, R)
	k Surface (A12)		Depleted Matrix					plain Soils (F19) (MLRA 149B)
	icky Mineral (S1)		Redox Dark Sur					TA6) (MLRA 144A, 145, 149B)
Sandy Gie	eyed Matrix (S4)		Depleted Dark S		-7)		Red Parent Mat	eriai (F21) ark Surface (F22)
Stripped N			Redox Depressi Marl (F10) (LRR				Other (Explain i	
Dark Surfa			Wall (1 10) (ERR)	· · · · · · ·			Other (Explain)	ii Neiliaiko)
		on and w	retland hydrology mi	ust he nr	esent ur	nless dis	turbed or problematic.	
	ayer (if observed):		oliana nyarology me				The state of problematic.	
Type:	.,							
Depth (in	ches):						Hydric Soil Present?	Yes X No
Remarks:								

Project/Site: Pine County Solar	City/County: Pine Sampling Date: 09/19/2022						
Applicant/Owner: Swift Current Energy	State: Min Sampling Point: W28-1u						
Investigator(s): BB/CD	Section, Township, Range: T044N, R020W, S25						
	relief (concave, convex, none): Convex Slope %: 3-4						
Subregion (LRR or MLRA): LRR K, MLRA 90A Lat: 46.260369	Long: -92.821429 Datum: WGS84						
Soil Map Unit Name: No Digital Data Available	NWI classification:						
Are climatic / hydrologic conditions on the site typical for this time of year?	Yes X No (If no, explain in Remarks.)						
Are Vegetation, Soil, or Hydrology significantly dist							
	· · · · · · · · · · · · · · · · · · ·						
Are Vegetation, Soil, or Hydrology naturally problem	maio:						
SUMMARY OF FINDINGS – Attach site map showing sampling p	point locations, transects, important features, etc.						
Hydrophytic Vegetation Present? Yes No X	Is the Sampled Area						
Hydric Soil Present? Yes No X	within a Wetland? Yes No X						
Wetland Hydrology Present? Yes No X	If yes, optional Wetland Site ID: W28						
Remarks: (Explain alternative procedures here or in a separate report.)							
Remarks. (Explain alternative procedures here of in a separate report.)							
HYDROLOGY							
Wetland Hydrology Indicators:	Secondary Indicators (minimum of two required)						
Primary Indicators (minimum of one is required; check all that apply)	Surface Soil Cracks (B6)						
Surface Water (A1) Water-Stained Leaves (B9)	Drainage Patterns (B10)						
High Water Table (A2) Aquatic Fauna (B13)	Moss Trim Lines (B16)						
Saturation (A3) Marl Deposits (B15)	Dry-Season Water Table (C2)						
Water Marks (B1) Hydrogen Sulfide Odor (C1)	Crayfish Burrows (C8)						
Sediment Deposits (B2) Oxidized Rhizospheres on L	iving Roots (C3) Saturation Visible on Aerial Imagery (C9)						
Drift Deposits (B3) Presence of Reduced Iron (C	C4) Stunted or Stressed Plants (D1)						
Algal Mat or Crust (B4) Recent Iron Reduction in Till	ed Soils (C6) Geomorphic Position (D2)						
Iron Deposits (B5) Thin Muck Surface (C7)	Shallow Aquitard (D3)						
Inundation Visible on Aerial Imagery (B7) Other (Explain in Remarks)	Microtopographic Relief (D4)						
Sparsely Vegetated Concave Surface (B8)	FAC-Neutral Test (D5)						
Field Observations:							
Surface Water Present Yes No _X Depth (inches	s):						
Water Table Present Yes No X Depth (inches	· · · · · · · · · · · · · · · · · · ·						
Saturation Present Yes No X Depth (inches							
(includes capillary fringe)							
Describe Recorded Data (stream gauge, monitoring well, aerial photos, pro	revious inspections), if available:						
Remarks:							

Tree Stratum (Plot size: 30 ft)	Absolute <u>% Cover</u>	Dominant Species	Indicator 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: 1 (B)
5 6				Percent of Dominant Species That Are OBL, FACW, or FAC: 0 (A/B)
7				Prevalence Index worksheet:
	0	_ = Total Cover		Total % Cover of: Multiply by:
Sapling/Shrub Stratum (Plot size: 15 ft)				OBL species x 1 =
1				FACW species x 2 =
2				
3				<u> </u>
4.				FACU species x 4 =
5.				UPL species x 5 =
6.				Column Totals: (A)(B)
7.				Prevalence Index = B/A =
				Hydrophytic Vegetation Indicators:
Hart Charles (District 5 ft)	0	= Total Cover		1 - Rapid Test for Hydrophytic Vegetation
Herb Stratum (Plot size: 5 ft) Bromus inermis	85	Yes	UPL	_ 2 - Dominance Test is >50%
··				3 - Prevalence Index is ≤3.0¹
2. Poa pratensis	25	No No	FACU	4 - Morphological Adaptations ¹
3. Cirsium discolor	5	No	UPL	(Provide supporting data in Remarks or on a separate sheet)
4				Problematic Hydrophytic Vegetation ¹ (Explain)
5				I
6				¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
7				
8				Definitions of Vegetation Strata:
9				Tana Manda planta 2 in /7 C and an man in
10				Tree – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.
11				alamotor at prodot noight (ppn), regardless of noight.
12.				Sapling/shrub – Woody plants less than 3 in. DBH
	115			and greater than or equal to 3.28 ft (1 m) tall.
Woody Vine Stratum (Plot size: 30 ft)	115	= Total Cover		Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.
1				W
2				Woody vines – All woody vines greater than 3.28 ft in height.
3				noight.
4.				Hydrophytic
				Vegetation
	0	= Total Cover		Present?
Remarks: (Include photo numbers here or on a sepa	rate sheet.)			
				I

Sampling Point:

W28-1u

SOIL Sampling Point: W28-1u

Profile Desc Depth	ription: (Describe to Matrix	the dep		ment the x Featur		or or co	onfirm the absence of indicators.)				
(inches)	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²	Texture Remarks				
0-2	10YR 3/4	100			<u> </u>		Sand				
2-24	7.5YR 4/4	100					Sand				
			_								
¹Type: C=Co	oncentration, D=Depl	etion, RM	=Reduced Matrix, N	/IS=Mas	ked Sand	Grains.	² Location: PL=Pore Lining, M=Matrix.				
Hydric Soil I	Indicators:						Indicators for Problematic Hydric Soils ³ :				
Histosol ((A1)		Polyvalue Below	Surface	(S8) (LRR	R,	2 cm Muck (A10) (LRR K, L, MLRA 149B)				
Histic Epi	ipedon (A2)		MLRA 149B)				Coast Prairie Redox (A16) (LRR K, L, R)				
Black His	etic (A3)		Thin Dark Surface	ce (S9) (L	RR R, ML	RA 149B	5 cm Mucky Peat or Peat (S3) (LRR K, L, R)				
	n Sulfide (A4)		High Chroma Sa				Polyvalue Below Surface (S8) (LRR K, L)				
	Layers (A5)		Loamy Mucky M			L)	Thin Dark Surface (S9) (LRR K, L)				
	Below Dark Surface (A1	11)	Loamy Gleyed N)		Iron-Manganese Masses (F12) (LRR K, L, R)				
	rk Surface (A12)		Depleted Matrix				Piedmont Floodplain Soils (F19) (MLRA 149B)				
	ucky Mineral (S1) leyed Matrix (S4)		Redox Dark Surf Depleted Dark S		7\		Mesic Spodic (TA6) (MLRA 144A, 145, 149B)				
Sandy Re			Redox Depression	,	,,		Red Parent Material (F21) Very Shallow Dark Surface (F22)				
	Matrix (S6)		Marl (F10) (LRR	. ,			Other (Explain in Remarks)				
Dark Surf				,,							
		on and we	etland hydrology mu	ist be pr	esent, un	iless dist	sturbed or problematic.				
	Layer (if observed):										
Type: _											
Depth (in	nches):						Hydric Soil Present? Yes No _X				
Remarks:											

Project/Site: Pine County Solar	City/County: Pine Sampling Date: 09/19/2022
Applicant/Owner: Swift Current Energy	State: Min Sampling Point: W28-1w
Investigator(s): BB/CD	Section, Township, Range: T044N, R020W, S25
Landform (hillside, terrace, etc.): Depression Local	relief (concave, convex, none): Concave Slope %: 1-2
Subregion (LRR or MLRA): LRR K, MLRA 90A Lat: 46.260385	Long: -92.821525 Datum: WGS84
Soil Map Unit Name: No Digital Data Available	NWI classification:
Are climatic / hydrologic conditions on the site typical for this time of year?	Yes X No (If no, explain in Remarks.)
Are Vegetation, Soil, or Hydrology significantly dist	
Are Vegetation, Soil, or Hydrology naturally probler	maio:
SUMMARY OF FINDINGS – Attach site map showing sampling p	oint locations, transects, important features, etc.
Hydrophytic Vegetation Present? Yes X No	Is the Sampled Area
Hydric Soil Present? Yes X No	within a Wetland? Yes X No
Wetland Hydrology Present? Yes X No	If yes, optional Wetland Site ID: W28
Remarks: (Explain alternative procedures here or in a separate report.)	
The market (Explain anomalies procedures inside at the desparate reporting	
HYDROLOGY	
	Occasional Indicators (minimum of two arraying)
Wetland Hydrology Indicators:	Secondary Indicators (minimum of two required)
Primary Indicators (minimum of one is required; check all that apply)	Surface Soil Cracks (B6)
Surface Water (A1) Water-Stained Leaves (B9)	Drainage Patterns (B10)
High Water Table (A2) Aquatic Fauna (B13)	Moss Trim Lines (B16)
Saturation (A3) Marl Deposits (B15)	Dry-Season Water Table (C2)
Water Marks (B1) Hydrogen Sulfide Odor (C1)	
Sediment Deposits (B2) Oxidized Rhizospheres on Li	<u> </u>
Presence of Reduced Iron (C	
Algal Mat or Crust (B4) Recent Iron Reduction in Till	
Iron Deposits (B5) Thin Muck Surface (C7)	Shallow Aquitard (D3)
Inundation Visible on Aerial Imagery (B7) Other (Explain in Remarks)	Microtopographic Relief (D4)
Sparsely Vegetated Concave Surface (B8)	X FAC-Neutral Test (D5)
Field Observations:	
Surface Water Present Yes No X Depth (inches	3):
Water Table Present Yes No X Depth (inches	3):
Saturation Present Yes No X Depth (inches	S): Wetland Hydrology Present? Yes X No
(includes capillary fringe)	
Describe Recorded Data (stream gauge, monitoring well, aerial photos, pro	evious inspections), if available:
Remarks:	

Absolute	Dominant	Indicator	
% Cover	<u>Species</u>	Status	Dominance Test worksheet:
			Number of Dominant Species
			That Are OBL, FACW, or FAC: 1 (A
			Total Number of Dennisers
			Total Number of Dominant Species Across All Strata: 1 (B
			Percent of Dominant Species
			That Are OBL, FACW, or FAC: 100 (A
0			Prevalence Index worksheet: Total % Cover of: Multiply by:
	_ = Total Cover		Multiply by.
			OBL species x 1 =
			FACW species x 2 =
			FAC species x 3 =
			FACU species x 4 =
			UPL species x 5 =
			Column Totals: (A)
			Prevalence Index = B/A =
			Hydrophytic Vegetation Indicators:
0	= Total Cover		X 1 - Rapid Test for Hydrophytic Vegetation
			1
95	Yes	FACW	2 - Dominance Test is >50%
5	No	FAC	3 - Prevalence Index is ≤3.0¹
			4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet)
			(Frovide Supporting data in Remains of on a separate sneet)
			Problematic Hydrophytic Vegetation ¹ (Explain)
			¹Indicators of hydric soil and wetland hydrology must be present, unle disturbed or problematic.
			distance of problematic.
			Definitions of Vegetation Strata:
			Tree – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height (DBH), regardless of height (DBH).
			diameter at breast neight (BBH), regardless of neigh
			Sapling/shrub – Woody plants less than 3 in. DBH
100			and greater than or equal to 3.28 ft (1 m) tall.
	= Total Cover		Herb – All herbaceous (non-woody) plants, regardle
			of size, and woody plants less than 3.28 ft tall.
			Woody vines – All woody vines greater than 3.28 f
			Woody vines – All woody vines greater than 3.28 f height.
			height.
			height. Hydrophytic
	= Total Cover		height.
		% Cover Species 0 = Total Cover 0 = Total Cover 95 Yes 5 No	% Cover Species Status 0 = Total Cover 0 = Total Cover 95 Yes FACW 5 No FAC

SOIL Sampling Point: W28-1w

Depth Matrix Redox Features (Inches) % Color (moist) % Type Loc Texture Remarks	Profile Descr Depth	ription: (Describe to Matrix	o the dep				tor or co	onfirm the absence of indi	cators.)		
Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.			<u>%</u>				L oc²	Texture	Remarks		
Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. **Location: PL=Pore Lining, M=Matrix.				COIOI (MOISE	70	Турс			romano		
Hydric Soil Indicators: Histosol (A1)				5YR 4/6	5	С	M				
Hydric Soil Indicators: Histosol (A1)											
Hydric Soil Indicators: Histosol (A1)											
Hydric Soil Indicators: Histosol (A1)											
Hydric Soil Indicators: Histosol (A1)											
Hydric Soil Indicators: Histosol (A1)											
Hydric Soil Indicators: Histosol (A1)					— —						
Hydric Soil Indicators: Histosol (A1)											
Hydric Soil Indicators: Histosol (A1)											
Hydric Soil Indicators: Histosol (A1)											
Hydric Soil Indicators: Histosol (A1)											
Hydric Soil Indicators: Histosol (A1)											
Histosol (A1)	¹Type: C=Co	oncentration, D=Dep	letion, RN	/=Reduced Mat	rix, MS=Mas	sked San	d Grains	. ² Location: PL=Pore I	Lining, M=Matrix.		
Histic Epipedon (A2) MLRA 149B) Coast Prairie Redox (A16) (LRR K, L, R) Black Histic (A3) Thin Dark Surface (S9) (LRR R, MLRA 149B) 5 cm Mucky Peat or Peat (S3) (LRR K, L, R) Hydrogen Sulfide (A4) High Chroma Sands (S11) (LRR K, L) Stratified Layers (A5) Loamy Mucky Mineral (F1) (LRR K, L) Thin Dark Surface (S9) (LRR K, L) Depleted Below Dark Surface (A11) Loamy Gleyed Matrix (F2) Thick Dark Surface (A12) Depleted Matrix (F3) Sandy Mucky Mineral (S1) Redox Dark Surface (F6) Sandy Gleyed Matrix (S4) Depleted Dark Surface (F7) Red Parent Material (F21) X Sandy Redox (S5) Redox Depressions (F8) Dark Surface (S7) 3Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic. Restrictive Layer (if observed): Type: Depth (inches): Hydric Soil Present? Yes X No	Hydric Soil In	ndicators:						Indicators for P	roblematic Hydric Soils ³ :		
Black Histic (A3)		•		Polyvalue E	Below Surface	(S8) (LRF	RR,	2 cm Muck (A	10) (LRR K, L, MLRA 149B)		
Hydrogen Sulfide (A4)				MLRA 14	9B)			Coast Prairie	Redox (A16) (LRR K, L, R)		
Stratified Layers (A5)	Black Hist	tic (A3)						5 cm Mucky F	Peat or Peat (S3) (LRR K, L, R)		
Depleted Below Dark Surface (A11)	Hydrogen	Sulfide (A4)		High Chrom	na Sands (S11	1) (LRR K	, L)	Polyvalue Bel	ow Surface (S8) (LRR K, L)		
Thick Dark Surface (A12) Depleted Matrix (F3) Sandy Mucky Mineral (S1) Redox Dark Surface (F6) Mesic Spodic (TA6) (MLRA 144A, 145, 149B) Sandy Gleyed Matrix (S4) Depleted Dark Surface (F7) Red Parent Material (F21) X Sandy Redox (S5) Redox Depressions (F8) Very Shallow Dark Surface (F22) Stripped Matrix (S6) Marl (F10) (LRR K, L) Other (Explain in Remarks) Jundicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic. Restrictive Layer (if observed): Type: Depth (inches): Hydric Soil Present? Yes X No					-		, L)	Thin Dark Sui	rface (S9) (LRR K, L)		
Sandy Mucky Mineral (S1)		· ·	11)			2)					
Sandy Gleyed Matrix (S4)											
X Sandy Redox (S5) Redox Depressions (F8) Very Shallow Dark Surface (F22) Stripped Matrix (S6) Marl (F10) (LRR K, L) Other (Explain in Remarks) Dark Surface (S7) 3Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic. Restrictive Layer (if observed): Type: Depth (inches): Hydric Soil Present? YesX No				· · · · · · · · · · · · · · · · · · ·							
Stripped Matrix (S6) Marl (F10) (LRR K, L) Other (Explain in Remarks) Stripped Matrix (S6) Marl (F10) (LRR K, L) Other (Explain in Remarks) 3Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic. Restrictive Layer (if observed): Type: Depth (inches): Hydric Soil Present? YesX No	- 1					- 7)					
Dark Surface (S7) 3 Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic. Restrictive Layer (if observed): Type: Depth (inches): Hydric Soil Present? Yes X No	candy no										
³ Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic. Restrictive Layer (if observed): Type: Depth (inches): Hydric Soil Present? Yes X No				Mari (F10) ((LRR K, L)			Other (Explain	n in Remarks)		
Restrictive Layer (if observed): Type:	Dark Surfa	ace (S7)									
Type:				etland hydrolog	y must be pr	resent, ur	nless dis	turbed or problematic.			
Depth (inches): Hydric Soil Present? Yes X No No		ayer (if observed):									
<u> </u>	-								v Y v		
Remarks:		ches):						Hydric Soil Present?	Yes _ ^ No		
	Remarks:										

Project/Site: Pine County Solar	City/County: Pine Sampling Date: 09/19/2022				
Applicant/Owner: Swift Current Energy	State: Min Sampling Point: W29-1u				
Investigator(s): BB/CD	Section, Township, Range: T044N, R020W, S25				
Landform (hillside, terrace, etc.): Backslope Local reli	ref (concave, convex, none): Convex Slope %: 3-4				
Subregion (LRR or MLRA): LRR K, MLRA 90A Lat: 46.263447	Long: -92.819563 Datum: WGS84				
Soil Map Unit Name: No Digital Data Available	NWI classification:				
Are climatic / hydrologic conditions on the site typical for this time of year?	Yes X No (If no, explain in Remarks.)				
Are Vegetation, Soil, or Hydrology significantly disturb					
Are Vegetation, Soil, or Hydrology naturally problemate	· · · · · · · · · · · · · · · · · · ·				
SUMMARY OF FINDINGS – Attach site map showing sampling point					
Hydrophytic Vegetation Present? Yes X No	In the Compled Area				
Hydrophytic Vegetation Present? Yes X No Yes No X	Is the Sampled Area within a Wetland? Yes No X				
Wetland Hydrology Present? Yes No X	If yes, optional Wetland Site ID: W29				
Remarks: (Explain alternative procedures here or in a separate report.)	ii yos, optional victiana one ib.				
HYDROLOGY					
Wetland Hydrology Indicators:	Secondary Indicators (minimum of two required)				
Primary Indicators (minimum of one is required; check all that apply)	Surface Soil Cracks (B6)				
Surface Water (A1) Water-Stained Leaves (B9)	Drainage Patterns (B10)				
High Water Table (A2) Aquatic Fauna (B13)	Moss Trim Lines (B16)				
Saturation (A3) Marl Deposits (B15)	Dry-Season Water Table (C2)				
Water Marks (B1) Hydrogen Sulfide Odor (C1)	Crayfish Burrows (C8)				
Sediment Deposits (B2) Oxidized Rhizospheres on Living	g Roots (C3) Saturation Visible on Aerial Imagery (C9)				
Drift Deposits (B3) Presence of Reduced Iron (C4)	4) Stunted or Stressed Plants (D1)				
Algal Mat or Crust (B4) Recent Iron Reduction in Tilled S	Soils (C6) Geomorphic Position (D2)				
Iron Deposits (B5) Thin Muck Surface (C7)	Shallow Aquitard (D3)				
Inundation Visible on Aerial Imagery (B7) Other (Explain in Remarks)	Microtopographic Relief (D4)				
Sparsely Vegetated Concave Surface (B8)	FAC-Neutral Test (D5)				
Field Observations:					
Surface Water Present Yes No _X Depth (inches):_					
Water Table Present Yes No X Depth (inches):_					
Saturation Present Yes No X Depth (inches):					
(includes capillary fringe)					
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous	ous inspections), if available:				
Remarks:					

Tree Stratum (Plot size: 30 ft)	Absolute <u>% Cover</u>	Dominant Species	Indicator Status	Dominance Test worksheet:
Populus tremuloides	50	Yes	FAC	
Prunus serotina	10	No	FACU	Number of Dominant Species That Are OBL, FACW, or FAC: 3 (A)
				(Y)
				Total Number of Dominant
				Species Across All Strata: 5 (B)
			-	Percent of Dominant Species
				That Are OBL, FACW, or FAC:60(A/B
				Prevalence Index worksheet:
	60	_ = Total Cover		Total % Cover of: Multiply by:
apling/Shrub Stratum (Plot size: 15 ft)				OBL species x 1 =
Rhamnus cathartica	30	Yes	FAC	FACW species x 2 =
Corylus cornuta	30	Yes	FACU	FAC species x 3 =
Prunus serotina	10	No	FACU	
· <u></u>				FACU species x 4 =
				UPL species x 5 =
				Column Totals: (A) (B)
· -				Prevalence Index = B/A =
	70			Hydrophytic Vegetation Indicators:
		= Total Cover		- 1 - Rapid Test for Hydrophytic Vegetation
erb Stratum (Plot size: 5 ft)				X 2 - Dominance Test is >50%
Rhamnus cathartica	30	Yes	FAC	- 3 - Prevalence Index is ≤3.0¹
Carex pensylvanica	20	Yes	UPL	I
Maianthemum canadense	5	No	FACU	4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet)
Rubus occidentalis	5	No	UPL	
<u> </u>				Problematic Hydrophytic Vegetation ¹ (Explain)
<u> </u>				¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
•				
				Definitions of Vegetation Strata:
				Tree Meady plants 2 in /7 6 am) or mars in
0				Tree – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.
1				
2				Sapling/shrub – Woody plants less than 3 in. DBH
	60			and greater than or equal to 3.28 ft (1 m) tall.
		= Total Cover		Herb – All herbaceous (non-woody) plants, regardless
Voody Vine Stratum (Plot size: 30 ft)				of size, and woody plants less than 3.28 ft tall.
•	_			Woody vines – All woody vines greater than 3.28 ft in
·	_			height.
				Hydrophytic
·	•	= Total Cover		Vegetation Present? Yes X No
	0			

SOIL Sampling Point: W29-1u

Profile Desc Depth	cription: (Describe to Matrix	the dep		nent th		tor or co	onfirm the absence of indicators.)				
(inches)	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²	Texture Remarks				
0-10	10YR 3/2	100					Loamy Sand				
10-15	7.5YR 3/4	100					Sand				
15-24	7.5YR 4/4	90	7.5YR 4/6	10	С	M	Sand				
15-24	7.51K 4/4	90	7.51K 4/0			IVI	Saliu				
¹Type: C=C	oncentration, D=Depl	etion, RN	M=Reduced Matrix, M	1S=Mas	ked San	d Grains.	s. ² Location: PL=Pore Lining, M=Matrix.				
Hydric Soil	Indicators:						Indicators for Problematic Hydric Soils ³ :				
Histosol	(A1)		Polyvalue Below	Surface	(S8) (LRF	RR,	2 cm Muck (A10) (LRR K, L, MLRA 149B)				
Histic Ep	ipedon (A2)		MLRA 149B)				Coast Prairie Redox (A16) (LRR K, L, R)				
Black His			Thin Dark Surface								
	n Sulfide (A4)		High Chroma Sa				Polyvalue Below Surface (S8) (LRR K, L)				
	Layers (A5)	14)	Loamy Mucky Mi			, L)	Thin Dark Surface (S9) (LRR K, L) Iron-Manganese Masses (F12) (LRR K, L, R)				
	Below Dark Surface (A1 rk Surface (A1)	11)	Loamy Gleyed M Depleted Matrix)		Piedmont Floodplain Soils (F19) (MLRA 149B)				
	ucky Mineral (S1)		Redox Dark Surf				Mesic Spodic (TA6) (MLRA 144A, 145, 149B)				
	leyed Matrix (S4)		Depleted Dark S		7)		Red Parent Material (F21)				
	edox (S5)		Redox Depression	ons (F8)			Very Shallow Dark Surface (F22)				
Stripped	Matrix (S6)		Marl (F10) (LRR	K, L)			Other (Explain in Remarks)				
Dark Sur	face (S7)										
³ Indicators of	f hydrophytic vegetati	on and w	etland hydrology mu	st be pr	esent, ur	nless dist	sturbed or problematic.				
Restrictive I	Layer (if observed):										
Type:											
Depth (ir	nches):						Hydric Soil Present? Yes No _X				
Remarks:											

Project/Site: Pine County Solar	City/County: Pine Sampling Date: 09/19/2022
Applicant/Owner: Swift Current Energy	State: Min Sampling Point: W29-1w
Investigator(s): BB/CD	Section, Township, Range: T044N, R020W, S25
Landform (hillside, terrace, etc.): Depression Local	I relief (concave, convex, none): Concave Slope %: 1-2
Subregion (LRR or MLRA): LRR K, MLRA 90A Lat: 46.26339	Long: -92.819511 Datum: WGS84
Soil Map Unit Name: No Digital Data Available	NWI classification: PSS1C
Are climatic / hydrologic conditions on the site typical for this time of year?	
Are Vegetation, Soil, or Hydrology significantly dis	
Are Vegetation , Soil , or Hydrology naturally proble	
	induc:
SUMMARY OF FINDINGS – Attach site map showing sampling	point locations, transects, important features, etc.
Hydrophytic Vegetation Present? Yes X No	Is the Sampled Area
Hydric Soil Present? Yes X No	within a Wetland? Yes X No
Wetland Hydrology Present? Yes X No	If yes, optional Wetland Site ID: W29
Remarks: (Explain alternative procedures here or in a separate report.)	
HYDROLOGY	
Wetland Hydrology Indicators:	Secondary Indicators (minimum of two required)
Primary Indicators (minimum of one is required; check all that apply)	Surface Soil Cracks (B6)
Surface Water (A1) Water-Stained Leaves (B9)	Drainage Patterns (B10)
High Water Table (A2) Aquatic Fauna (B13)	Moss Trim Lines (B16)
Saturation (A3) Marl Deposits (B15)	Dry-Season Water Table (C2)
Water Marks (B1) Hydrogen Sulfide Odor (C1	Crayfish Burrows (C8)
Sediment Deposits (B2) Oxidized Rhizospheres on	Living Roots (C3) Saturation Visible on Aerial Imagery (C9)
Drift Deposits (B3) Presence of Reduced Iron	(C4) Stunted or Stressed Plants (D1)
Algal Mat or Crust (B4) Recent Iron Reduction in Ti	illed Soils (C6) X Geomorphic Position (D2)
Iron Deposits (B5) Thin Muck Surface (C7)	Shallow Aquitard (D3)
Inundation Visible on Aerial Imagery (B7) Other (Explain in Remarks)	Microtopographic Relief (D4)
Sparsely Vegetated Concave Surface (B8)	X FAC-Neutral Test (D5)
Field Observations:	
Surface Water Present Yes No _X Depth (inche	es):
Water Table Present Yes No X Depth (inche	es):
Saturation Present Yes No X Depth (inche	Wetland Hydrology Present? Yes X No
(includes capillary fringe)	
Describe Recorded Data (stream gauge, monitoring well, aerial photos, p	revious inspections), if available:
Remarks:	
ī.	

Free Stratum (Plot size: 30 ft)	Absolute % Cover	Dominant Species	Indicator Status	Dominance Test worksheet:
Populus tremuloides	60	Yes	FAC	
				Number of Dominant Species That Are OBL, FACW, or FAC: 5 (A)
				That Ale OBE, I AOW, OI I AO.
				Total Number of Dominant
				Species Across All Strata: 5 (B)
·				Percent of Dominant Species
				That Are OBL, FACW, or FAC:(A/B)
				Prevalence Index worksheet:
	60	_ = Total Cover		Total % Cover of: Multiply by:
apling/Shrub Stratum (Plot size: 15 ft)				OBL species x 1 =
Cornus racemosa	10	Yes	FAC	FACW species x 2 =
llex verticillata	10	Yes	FACW	FAC species x 3 =
				<u> </u>
·				UPL species x 5 =
		·		Column Totals: (A)(B)
		·		Prevalence Index = B/A =
	20			Hydrophytic Vegetation Indicators:
		= Total Cover		1 - Rapid Test for Hydrophytic Vegetation
Herb Stratum (Plot size: 5 ft)		.,		X 2 - Dominance Test is >50%
Carex lacustris	60	Yes	OBL	- 3 - Prevalence Index is ≤3.0¹
Phalaris arundinacea	20	Yes	FACW	4 - Morphological Adaptations ¹
Onoclea sensibilis	5	No	FACW	(Provide supporting data in Remarks or on a separate sheet)
i				Buchland Call Index the Call Canada Call (Funda)
j				Problematic Hydrophytic Vegetation¹ (Explain)
5				¹Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
·				
B				Definitions of Vegetation Strata:
)				Tree – Woody plants 3 in. (7.6 cm) or more in
0	_	 -		diameter at breast height (DBH), regardless of height.
1				
2				Sapling/shrub – Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.
	85			and greater than or equal to 6.25 it (1 m) tail.
Voody Vine Stratum (Plot size: 30 ft)		= Total Cover		Herb – All herbaceous (non-woody) plants, regardless
				of size, and woody plants less than 3.28 ft tall.
				Woody vines – All woody vines greater than 3.28 ft in
				height.
				l.,
i				
3.				Hydrophytic Vegetation
		= Total Cover		Hydrophytic Vegetation Present? Yes X No

SOIL Sampling Point: W29-1w

		the dep	oth need				tor or co	onfirm the absence of	of indicators	s.)		
Depth (inches)	Matrix Color (moist)	%	Colo	or (moist)	ox Feature %	Type ¹	Loc ²	Texture		Remarks		
0-10	10YR 2/1	100	- 0010	T (ITIOIOL)		Турс		Loamy Sand		rtemano		
10-20	10YR 5/2	90	10YR	4/6	10	С	M	Sand				
20-24	10YR 5/2	80	10YR	4/6	20	С	M	Sand				
					- —							
					- —							
					- —							
¹Type: C=Co	oncentration, D=Depl	etion, RN	∕l=Redu	ced Matrix,	MS=Mas	ked San	d Grains	. ² Location: PL=	Pore Lining,	M=Matrix.	,	
Hydric Soil I	ndicators:							Indicators	for Problen	natic Hydric	Soils ³ :	
Histosol (•		Po	olyvalue Belov	w Surface	(S8) (LRR	R,	2 cm N	luck (A10) (LR	R K, L, MLRA	149B)	
	pedon (A2)			MLRA 149B)				Coast Prairie Redox (A16) (LRR K, L, R)				
Black Hist				in Dark Surfa				· —		Peat (S3) (LRR		
	Sulfide (A4)			gh Chroma S				Polyvalue Below Surface (S8) (LRR K, L)			K, L)	
	Layers (A5) Below Dark Surface (A1)	11)		amy Mucky N amy Gleyed			, L)	Thin Dark Surface (S9) (LRR K, L) Iron-Manganese Masses (F12) (LRR K, L, R)			KI P\	
	k Surface (A12)	11)		epleted Matrix					Piedmont Floodplain Soils (F19) (MLRA 149B)			
	ucky Mineral (S1)			edox Dark Su								
	eyed Matrix (S4)			epleted Dark		7)		Mesic Spodic (TA6) (MLRA 144A, 145, 149B) Red Parent Material (F21)				
Sandy Re	•		Redox Depressions (F8)						Very Shallow Dark Surface (F22)			
Stripped N	Matrix (S6)		Marl (F10) (LRR K, L)					Other (Explain in Rer	marks)		
Dark Surfa	ace (S7)											
³ Indicators of	hydrophytic vegetati	on and w	etland h	ydrology m	ust be pro	esent, ur	nless dis	turbed or problematic				
Restrictive L	ayer (if observed):											
Type:				_								
Depth (in	nches):			_				Hydric Soil Pres	ent?	Yes X	No	
Remarks:												

Project/Site: Pine County Solar	City/County: Pine Sampling Date: 09/19/2022					
Applicant/Owner: Swift Current Energy	State: Min Sampling Point: W30-1u					
Investigator(s): BB/CD	Section, Township, Range: T044N, R020W, S25					
	relief (concave, convex, none): Convex Slope %: 2-3					
Subregion (LRR or MLRA): LRR K, MLRA 90A Lat: 46.266129	Long: -92.807933 Datum: WGS84					
Soil Map Unit Name: No Digital Data Available	NWI classification:					
Are climatic / hydrologic conditions on the site typical for this time of year?	Yes X No (If no, explain in Remarks.)					
Are Vegetation , Soil , or Hydrology significantly distu	urbed? Are "Normal Circumstances" present? Yes X No					
Are Vegetation , Soil , or Hydrology naturally problem	natic? (If needed, explain any answers in Remarks.)					
SUMMARY OF FINDINGS – Attach site map showing sampling po	oint locations, transects, important features, etc.					
Hydrophytic Vegetation Present? Yes No X	Is the Sampled Area					
Hydric Soil Present? Yes No X	within a Wetland? Yes No X					
Wetland Hydrology Present? Yes No X	If yes, optional Wetland Site ID: W30					
Remarks: (Explain alternative procedures here or in a separate report.)						
HYDROLOGY						
Wetland Hydrology Indicators:	Secondary Indicators (minimum of two required)					
Primary Indicators (minimum of one is required; check all that apply)	Surface Soil Cracks (B6)					
Surface Water (A1) Water-Stained Leaves (B9)	Drainage Patterns (B10)					
High Water Table (A2) Aquatic Fauna (B13)	Moss Trim Lines (B16)					
Saturation (A3) Marl Deposits (B15)	Dry-Season Water Table (C2)					
Water Marks (B1) Hydrogen Sulfide Odor (C1)	Crayfish Burrows (C8)					
Sediment Deposits (B2) Oxidized Rhizospheres on Lir	iving Roots (C3) Saturation Visible on Aerial Imagery (C9)					
Drift Deposits (B3) Presence of Reduced Iron (C	C4) Stunted or Stressed Plants (D1)					
Algal Mat or Crust (B4) Recent Iron Reduction in Tille						
Iron Deposits (B5) Thin Muck Surface (C7)	Shallow Aquitard (D3)					
Inundation Visible on Aerial Imagery (B7) Other (Explain in Remarks)	Microtopographic Relief (D4)					
Sparsely Vegetated Concave Surface (B8)	FAC-Neutral Test (D5)					
Field Observations:						
Surface Water Present Yes No X Depth (inches):					
Water Table Present Yes No X Depth (inches)						
Saturation Present Yes No X Depth (inches	S): Wetland Hydrology Present? Yes No X					
(includes capillary fringe)						
Describe Recorded Data (stream gauge, monitoring well, aerial photos, pre	evious inspections), if available:					
Remarks:						

Tree Stratum (Plot size: 30 ft)	Absolute % Cover	Dominant Species	Indicator Status	Dominance Test worksheet:
1. Picea abies	30	Yes	UPL	Number of Dominant Species
2. Prunus serotina	20	Yes	FACU	That Are OBL, FACW, or FAC:1 (A)
3. Betula papyrifera	20	Yes	FACU	Total Number of Dominant
4	-	·		Species Across All Strata: 7 (B)
5				Percent of Dominant Species
6		·		That Are OBL, FACW, or FAC: 14.00000000 (A/B)
7				Prevalence Index worksheet:
	70	= Total Cover		Total % Cover of: Multiply by:
Sapling/Shrub Stratum (Plot size:15 ft)				OBL species x 1 =
1. Alnus incana	40	Yes	FACW	FACW species x 2 =
2. Prunus serotina	20	Yes	FACU	
3	-			
4				FACU species x 4 =
5				UPL species x 5 =
6				Column Totals: (A)(B)
7				Prevalence Index = B/A =
	60			Hydrophytic Vegetation Indicators:
Harb Christian (Diet sine) 5 ft)		= Total Cover		1 - Rapid Test for Hydrophytic Vegetation
Herb Stratum (Plot size: 5 ft) 1 Pteridium aquilinum	50	Yes	FACU	2 - Dominance Test is >50%
··· -	30	Yes	UPL	3 - Prevalence Index is ≤3.0¹
	10	No No	UPL	4 - Morphological Adaptations ¹
Fragaria vesca 4.	-			(Provide supporting data in Remarks or on a separate sheet)
				Problematic Hydrophytic Vegetation ¹ (Explain)
				Indicators of hydric soil and wetland hydrology must be present, unless
				disturbed or problematic.
7 8.				Definitions of Vagetation Strates
				Definitions of Vegetation Strata:
9. 10.				Tree – Woody plants 3 in. (7.6 cm) or more in
11.				diameter at breast height (DBH), regardless of height.
12.	-			Sapling/shrub – Woody plants less than 3 in. DBH
				and greater than or equal to 3.28 ft (1 m) tall.
	90	= Total Cover		Herb – All herbaceous (non-woody) plants, regardless
Woody Vine Stratum (Plot size: 30 ft)				of size, and woody plants less than 3.28 ft tall.
1				Woody vines – All woody vines greater than 3.28 ft in
2		·		height.
3		·		
4		·		Hydrophytic
	0	= Total Cover		Vegetation Present?
		= Total Cover		
Remarks: (Include photo numbers here or on a separa	ata shaot)			1
Remarks. (include prioto numbers here or on a separ-	ate Sileet.)			

Sampling Point: W30-1u

SOIL Sampling Point: W30-1u

Profile Desc Depth	ription: (Describe Matrix	to the dep	th need		ument the ox Feature		tor or co	onfirm the absence of indicators.)		
(inches)	Color (moist)	%	Colo	r (moist)	%	Type ¹	Loc ²	Texture Remarks		
0-8	10YR 3/3	100						Loamy Sand		
8-15	10YR 4/2	95	10YR	4/6	5	С	М	Sand		
15-24	10YR 5/1	90	10YR	4/6	10	С	М	Sand		
	10111 0/1			1// 0		<u> </u>		- Cana		
					. —					
	-									
		_								
					. ——					
										
					. —					
¹Type: C=C	oncentration, D=De	epletion, RM	1=Reduc	ed Matrix,	MS=Masl	ked San	d Grains.	s. ² Location: PL=Pore Lining, M=Matrix.		
Hydric Soil	Indicators:							Indicators for Problematic Hydric Soils ³ :		
Histosol ((A1)		Po	lyvalue Belov	w Surface	(S8) (LRF	RR,	2 cm Muck (A10) (LRR K, L, MLRA 149B)		
	ipedon (A2)		ľ	MLRA 149B)				Coast Prairie Redox (A16) (LRR K, L, R)		
Black His				in Dark Surfa						
	n Sulfide (A4)			gh Chroma S				Polyvalue Below Surface (S8) (LRR K, L) This Dark Surface (S0) (LRR K, L)		
	Layers (A5) Below Dark Surface	(Δ11)		amy Mucky N amy Gleyed I			, L)	Thin Dark Surface (S9) (LRR K, L) Iron-Manganese Masses (F12) (LRR K, L, R)		
	rk Surface (A12)	(A11)		epleted Matrix)		Piedmont Floodplain Soils (F19) (MLRA 149B)		
	ucky Mineral (S1)			dox Dark Su				Mesic Spodic (TA6) (MLRA 144A, 145, 149B)		
	leyed Matrix (S4)			pleted Dark		7)		Red Parent Material (F21)		
	edox (S5)		Re	dox Depress	ions (F8)			Very Shallow Dark Surface (F22)		
Stripped	Matrix (S6)		Ма	arl (F10) (LRF	R K, L)			Other (Explain in Remarks)		
Dark Sur	face (S7)									
³ Indicators of	f hydrophytic veget	ation and w	etland h	ydrology m	ust be pre	esent, ur	nless dist	sturbed or problematic.		
Restrictive I	Layer (if observed	l):								
Type:				_						
Depth (ir	nches):			_				Hydric Soil Present? Yes NoX		
Remarks:										

Project/Site: Pine County Solar	City/County: Pine Sampling Date: 09/19/2022
Applicant/Owner: Swift Current Energy	State: Min Sampling Point: W30-1w
Investigator(s): BB/CD	Section, Township, Range: T044N, R020W, S25
Landform (hillside, terrace, etc.): Depression Local re	relief (concave, convex, none): Concave Slope %: 1-2
Subregion (LRR or MLRA): LRR K, MLRA 90A Lat: 46.266227	Long: -92.807944 Datum: WGS84
Soil Map Unit Name: No Digital Data Available	NWI classification:
Are climatic / hydrologic conditions on the site typical for this time of year?	Yes X No (If no, explain in Remarks.)
Are Vegetation, Soil, or Hydrology significantly distu	
Are Vegetation , Soil , or Hydrology naturally problem	(Kanadada umlais assassania Basada)
SUMMARY OF FINDINGS – Attach site map showing sampling po	
Auton site map showing sampling pe	The residence of the re
Hydrophytic Vegetation Present? Yes X No	Is the Sampled Area
Hydric Soil Present? Yes X No	within a Wetland? Yes X No
Wetland Hydrology Present? Yes X No	If yes, optional Wetland Site ID: W30
HYDROLOGY	
Wetland Hydrology Indicators:	Secondary Indicators (minimum of two required)
Primary Indicators (minimum of one is required; check all that apply)	Surface Soil Cracks (B6)
Surface Water (A1) Water-Stained Leaves (B9)	Drainage Patterns (B10)
High Water Table (A2) Aquatic Fauna (B13)	Moss Trim Lines (B16)
Saturation (A3) Marl Deposits (B15)	Dry-Season Water Table (C2)
Water Marks (B1) Hydrogen Sulfide Odor (C1)	Crayfish Burrows (C8)
Sediment Deposits (B2) Oxidized Rhizospheres on Liv	<u> </u>
Drift Deposits (B3) Presence of Reduced Iron (C-	<u> </u>
Algal Mat or Crust (B4) Recent Iron Reduction in Tille	
Iron Deposits (B5) — Thin Muck Surface (C7)	Shallow Aquitard (D3)
Inundation Visible on Aerial Imagery (B7) Other (Explain in Remarks)	Microtopographic Relief (D4)
Sparsely Vegetated Concave Surface (B8)	X FAC-Neutral Test (D5)
Field Observations:	
Surface Water Present Yes No X Depth (inches)):
Water Table Present Yes No X Depth (inches)):
Saturation Present Yes No X Depth (inches)): Wetland Hydrology Present? Yes X No
(includes capillary fringe)	
Describe Recorded Data (stream gauge, monitoring well, aerial photos, pre	evious inspections), if available:
Remarks:	

<u>Tree Stratum</u> (Plot size: <u>30 ft</u>)	Absolute % Cover	Dominant <u>Species</u>	Indicator Status	Dominance Test worksheet:
1 2				Number of Dominant Species That Are OBL, FACW, or FAC: 2 (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: 100 (A/B)
7				
	0	_ = Total Cover		Prevalence Index worksheet: Total % Cover of: Multiply by:
Sapling/Shrub Stratum (Plot size: 15 ft)				OBL species x 1 =
1	_	·		FACW species x 2 =
2				
3				· — —
4.				FACU species x 4 =
5.				UPL species x 5 =
6.		<u> </u>		Column Totals: (A)(B)
				Prevalence Index = B/A =
7		·		Hydrophytic Vegetation Indicators:
Herb Stratum (Plot size: 5 ft)	0	= Total Cover		X 1 - Rapid Test for Hydrophytic Vegetation
1 Carex lacustris	40	Yes	OBL	X 2 - Dominance Test is >50%
''	40		FACW	3 - Prevalence Index is ≤3.0¹
2. Alnus incana		Yes		4 - Morphological Adaptations ¹
3. Solidago gigantea	10	No	FACW	(Provide supporting data in Remarks or on a separate sheet)
4. Symphyotrichum lanceolatum	10	No	FACW	Problematic Hydrophytic Variation (Evaluis)
 Persicaria amphibia 			OBL	Problematic Hydrophytic Vegetation¹ (Explain) ¹Indicators of hydric soil and wetland hydrology must be present, unless
7				disturbed or problematic.
				Definition of Wometallow Office
8.				Definitions of Vegetation Strata:
9.				Tree – Woody plants 3 in. (7.6 cm) or more in
10				diameter at breast height (DBH), regardless of height.
11				Sanling/ahruh Waady planta loos than 2 in DBH
12	-			Sapling/shrub – Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.
	105	= Total Cover		Herb – All herbaceous (non-woody) plants, regardless
Woody Vine Stratum (Plot size: 30 ft)				of size, and woody plants less than 3.28 ft tall.
1		<u> </u>		Woody vines – All woody vines greater than 3.28 ft in
2	-			height.
3				
4				Hydrophytic
		·		Vegetation
	0	= Total Cover		Present? Yes X No No
Remarks: (Include photo numbers here or on a separ	ate sheet.)			•

Sampling Point:

W30-1w

SOIL Sampling Point: W30-1w

		the dep	th need				tor or co	onfirm the absence of indica	itors.)	
Depth (inches)	Matrix Color (moist)	%	Colc	or (moist)	x Feature %	es Type¹	Loc ²	Texture	Remarks	
0-5	10YR 2/1	100	0010	T (ITIOIST)	70	Турс		Sandy Loam	Remarks	
5-18	10YR 5/1	80	10YR	4/6	20			Sandy Clay Loam		
18-24	10YR 5/1	70	10YR	4/6	30	С	M	Sandy Clay Loam		
			1							
¹Type: C=Co	oncentration, D=Deple	etion, RN	л=Redu	ced Matrix,	MS=Mas	ked San	d Grains	. ² Location: PL=Pore Lir	ning, M=Matrix.	
Hydric Soil I	ndicators:							Indicators for Pro	blematic Hydric Soils ³ :	
Histosol (A	A1)		Pc	olyvalue Belov	w Surface	(S8) (LRF	R,)) (LRR K, L, MLRA 149B)	
Histic Epip	pedon (A2)			MLRA 149B)				Coast Prairie Redox (A16) (LRR K, L, R)		
Black Hist	tic (A3)			nin Dark Surfa				3) 5 cm Mucky Pea	at or Peat (S3) (LRR K, L, R)	
	Sulfide (A4)			gh Chroma S				Polyvalue Below	v Surface (S8) (LRR K, L)	
	Layers (A5)			amy Mucky N	-		, L)	Thin Dark Surface (S9) (LRR K, L)		
	Below Dark Surface (A1	1)		amy Gleyed I)		Iron-Manganese Masses (F12) (LRR K, L, R) Piedmont Floodplain Soils (F19) (MLRA 149B)		
	k Surface (A12) ucky Mineral (S1)			epleted Matrix edox Dark Su					Piain Soils (F19) (MLRA 149B) (A6) (MLRA 144A, 145, 149B)	
	eyed Matrix (S4)			epleted Dark Su		7)		Red Parent Mat		
Sandy Re				edox Depress	-	• /			ark Surface (F22)	
-	Matrix (S6)			arl (F10) (LRF				Other (Explain in		
Dark Surfa	ace (S7)									
³ Indicators of	hydrophytic vegetation	on and w	etland h	ydrology m	ust be pre	esent, ur	nless dis	turbed or problematic.		
	ayer (if observed):									
Type:				_						
Depth (in	ches):			_				Hydric Soil Present?	Yes X No	
Remarks:										

Project/Site: Pine County Solar	City/County: Pine Sampling Date: 09/20/2022					
Applicant/Owner: Swift Current Energy	State: Min Sampling Point: W31-					
Investigator(s): BB/CD	Section, Township, Range: T044N, R020W, S25					
	relief (concave, convex, none): Convex Slope %: 2-3					
Subregion (LRR or MLRA): LRR K, MLRA 90A Lat: 46.264684	Long: -92.811767 Datum: WGS84					
Soil Map Unit Name: No Digital Data Available	NWI classification:					
Are climatic / hydrologic conditions on the site typical for this time of year?	Yes X No (If no, explain in Remarks.)					
Are Vegetation, Soil, or Hydrology significantly dist						
	·					
Are Vegetation, Soil, or Hydrology naturally problem	made:					
SUMMARY OF FINDINGS – Attach site map showing sampling p	oint locations, transects, important features, etc.					
Hydrophytic Vegetation Present? Yes No X	Is the Sampled Area					
Hydric Soil Present? Yes No X	within a Wetland? Yes No X					
Wetland Hydrology Present? Yes No X	If yes, optional Wetland Site ID: W31/W32					
Remarks: (Explain alternative procedures here or in a separate report.)						
The market (27, plant and market procedures note of in a coparate report)						
HYDROLOGY						
Wetland Hydrology Indicators:	Secondary Indicators (minimum of two required)					
Primary Indicators (minimum of one is required; check all that apply)	Surface Soil Cracks (B6)					
Surface Water (A1) Water-Stained Leaves (B9)	Drainage Patterns (B10)					
High Water Table (A2) Aquatic Fauna (B13)	Moss Trim Lines (B16)					
Saturation (A3) Marl Deposits (B15)	Dry-Season Water Table (C2)					
Water Marks (B1) Hydrogen Sulfide Odor (C1)						
Sediment Deposits (B2) Oxidized Rhizospheres on L						
Drift Deposits (B3) Presence of Reduced Iron (0	<u> </u>					
Algal Mat or Crust (B4) Recent Iron Reduction in Till						
Iron Deposits (B5) Thin Muck Surface (C7)	Shallow Aquitard (D3)					
Inundation Visible on Aerial Imagery (B7) Other (Explain in Remarks)	Microtopographic Relief (D4)					
Sparsely Vegetated Concave Surface (B8)	FAC-Neutral Test (D5)					
Field Observations:						
	·)·					
Water Table Present Yes No X Depth (inches Saturation Present Yes No X Depth (inches	· 					
(includes capillary fringe)	Tes Noticinal Hydrology Present:					
Describe Recorded Data (stream gauge, monitoring well, aerial photos, pro	evious inspections), if available:					
Jacobina Harani gaaga, mamaini gaana pirata, pirata	3.1040 moposito.10), ii a tanasito.					
Remarks:						

yes al Cover Yes Yes Yes Yes Yes Yes Yes Yes	FACU	Number of Dominant Species That Are OBL, FACW, or FAC:
al Cover Yes Yes Yes Yes Yes Yes	FACU	That Are OBL, FACW, or FAC: 1 (A) Total Number of Dominant Species Across All Strata: 7 (B) Percent of Dominant Species That Are OBL, FACW, or FAC: 14.00000000 (A/B Prevalence Index worksheet: Total % Cover of: Multiply by: OBL species x 1 = FACW species x 2 = FACW species x 2 = FACW species x 3 = FACU species x 4 = UPL species x 5 = Column Totals: (A) (B) Prevalence Index = B/A = Hydrophytic Vegetation 1 - Rapid Test for Hydrophytic Vegetation 1 - 2 - Dominance Test is >50% 3 - Prevalence Index is ≤3.0¹ 4 - Morphological Adaptations¹
al Cover Yes Yes Yes Yes Yes Yes	FACU	Total Number of Dominant Species Across All Strata: 7 (B) Percent of Dominant Species That Are OBL, FACW, or FAC: 14.00000000 (A/B) Prevalence Index worksheet: Total % Cover of: Multiply by: OBL species x 1 = FACW species x 2 = FAC species x 3 = FACU species x 4 = UPL species x 5 = Column Totals: (A) (B) Prevalence Index = B/A = Hydrophytic Vegetation Indicators: - 1 - Rapid Test for Hydrophytic Vegetation - 2 - Dominance Test is >50% - 3 - Prevalence Index is ≤3.0¹ 4 - Morphological Adaptations¹
al Cover Yes Yes Yes Yes Yes Yes	FACU	Species Across All Strata: 7 (B) Percent of Dominant Species That Are OBL, FACW, or FAC: 14.00000000 (A/B) Prevalence Index worksheet: Total % Cover of: Multiply by: OBL species x 1 = FACW species x 2 = FAC species x 3 = FACU species x 4 = UPL species x 5 = Column Totals: (A) (B) Prevalence Index = B/A = Hydrophytic Vegetation Indicators: 1 - Rapid Test for Hydrophytic Vegetation 2 - Dominance Test is >50% 3 - Prevalence Index is ≤3.0¹ 4 - Morphological Adaptations¹
yes Yes Yes Yes Yes Yes	UPL	Percent of Dominant Species That Are OBL, FACW, or FAC: 14.00000000 (A/B) Prevalence Index worksheet: Total % Cover of: Multiply by: OBL species x 1 = FACW species x 2 = FAC species x 3 = FACU species x 4 = UPL species x 5 = Column Totals: (A) (B) Prevalence Index = B/A = Hydrophytic Vegetation Indicators: 1 - Rapid Test for Hydrophytic Vegetation 2 - Dominance Test is >50% 3 - Prevalence Index is ≤3.0¹ 4 - Morphological Adaptations¹
al Cover Yes Yes Yes Yes Yes Yes Yes	UPL	That Are OBL, FACW, or FAC:14.00000000 (A/B) Prevalence Index worksheet:
al Cover Yes Yes Yes Yes Yes Yes Yes	UPL	That Are OBL, FACW, or FAC:14.00000000 (A/B) Prevalence Index worksheet:
Yes	UPL	Prevalence Index worksheet: Total % Cover of: Multiply by: OBL species x 1 = FACW species x 2 = FAC species x 3 = FACU species x 4 = UPL species x 5 = Column Totals: (A) (B) Prevalence Index = B/A = Hydrophytic Vegetation Indicators: 1 - Rapid Test for Hydrophytic Vegetation 2 - Dominance Test is >50% 3 - Prevalence Index is ≤3.0¹ 4 - Morphological Adaptations¹
Yes	UPL	Total % Cover of: Multiply by: OBL species
Yes	UPL	OBL species
al Cover Yes Yes Yes Yes	UPL	FACW species x 2 = FAC species x 3 = FACU species x 4 = UPL species x 5 = Column Totals: (A) (B) Prevalence Index = B/A = Hydrophytic Vegetation Indicators: - 1 - Rapid Test for Hydrophytic Vegetation - 2 - Dominance Test is >50% - 3 - Prevalence Index is ≤3.0¹ 4 - Morphological Adaptations¹
al Cover Yes Yes Yes Yes	UPL	FAC species
Yes Yes Yes Yes	UPL UPL	FACU species x 4 =
Yes Yes Yes Yes Yes	UPL UPL	FACU species x 4 =
Yes Yes Yes Yes Yes	UPL UPL	UPL species x 5 =
Yes Yes Yes Yes	UPL UPL	Column Totals:
Yes Yes Yes Yes	UPL	Prevalence Index = B/A = Hydrophytic Vegetation Indicators: 1 - Rapid Test for Hydrophytic Vegetation 2 - Dominance Test is >50% 3 - Prevalence Index is ≤3.0¹ 4 - Morphological Adaptations¹
Yes Yes Yes Yes	UPL	Hydrophytic Vegetation Indicators: 1 - Rapid Test for Hydrophytic Vegetation 2 - Dominance Test is >50% 3 - Prevalence Index is ≤3.0¹ 4 - Morphological Adaptations¹
Yes Yes Yes Yes	UPL	- 1 - Rapid Test for Hydrophytic Vegetation - 2 - Dominance Test is >50% - 3 - Prevalence Index is ≤3.0¹ - 4 - Morphological Adaptations¹
Yes Yes Yes Yes	UPL	2 - Dominance Test is >50%3 - Prevalence Index is ≤3.0¹4 - Morphological Adaptations¹
Yes Yes Yes	UPL	2 - Dominance Test is >50%3 - Prevalence Index is ≤3.0¹4 - Morphological Adaptations¹
Yes Yes Yes	UPL	3 - Prevalence Index is ≤3.0¹ 4 - Morphological Adaptations¹
Yes Yes		4 - Morphological Adaptations ¹
Yes	UPL	
Yes		
	FACU	(Provide supporting data in Remarks or on a separate sheet)
res		Problematic Hydrophytic Vegetation ¹ (Explain)
	UPL	¹Indicators of hydric soil and wetland hydrology must be present, unless
No	FACU	disturbed or problematic.
		Definitions of Vegetation Strata:
		Tree – Woody plants 3 in. (7.6 cm) or more in
		diameter at breast height (DBH), regardless of height.
		Sapling/shrub – Woody plants less than 3 in. DBH
		and greater than or equal to 3.28 ft (1 m) tall.
al Cover		Herb – All herbaceous (non-woody) plants, regardless
		of size, and woody plants less than 3.28 ft tall.
		Mandy vines All woods vines greater than 2.29 ft in
		Woody vines – All woody vines greater than 3.28 ft in height.
		noight.
		Hydrophytic
		Vegetation
al Cover		Present? Yes No X
a	I Cover	l Cover

SOIL Sampling Point: W31-1u/W32-

	Matrix		Redox	x Feature	es				
nches)	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²	Texture	Remark	S
0-11	10YR 3/4	100					Loamy Sand		
11-24	7.5YR 4/4	100					Loamy Sand		
			_			<u> </u>			
					. .		2		
	ncentration, D=Deple	etion, RM=	=Reduced Matrix, N	/IS=Masi	ked Sand	Grains.	² Location: PL=Pore Lin	ing, M=Matrix.	
dric Soil In	dicators:						Indicators for Prol	blematic Hydric	Soils ³ :
_ Histosol (A	•	-	Polyvalue Below	Surface	(S8) (LRR	R,) (LRR K, L, MLRA	
_ Histic Epip			MLRA 149B)	(00) (1	DD D MI F	NA 440D		dox (A16) (LRR K,	•
Black Histi		_	Thin Dark Surface					t or Peat (S3) (LRF	
_ Hydrogen s _ Stratified L	Sulfide (A4)	-	High Chroma SaLoamy Mucky M				 ·	Surface (S8) (LRR ce (S9) (LRR K, L)	(K , L)
_	Below Dark Surface (A1	1)	Loamy Gleyed M			-)		Masses (F12) (LR	R K. L. R)
	Surface (A12)	'' -	Depleted Matrix		'		Piedmont Floodplain Soils (F19) (MLRA 149B)		
	cky Mineral (S1)	_	Redox Dark Surf					A6) (MLRA 144A, 1	
	yed Matrix (S4)	_	Depleted Dark S		7)		Red Parent Mate		,
_ Sandy Rec	dox (S5)	_	Redox Depression	ons (F8)			Very Shallow Da	rk Surface (F22)	
_ Stripped M	latrix (S6)	_	Marl (F10) (LRR	K, L)			Other (Explain in	Remarks)	
_ Dark Surfa	ice (S7)								
dicators of I	hydrophytic vegetation	on and we	tland hydrology mu	ıst be pr	esent, unl	ess dist	urbed or problematic.		
	ayer (if observed):								
Type:	,								
Depth (inc	ches):						Hydric Soil Present?	Yes	No X

Project/Site: Pine County Solar	City/County: Pine Sampling Date: 09/20/2022					
Applicant/Owner: Swift Current Energy	State: Min Sampling Point: W31-1w					
Investigator(s): BB/CD	Section, Township, Range: T044N, R020W, S25					
Landform (hillside, terrace, etc.): Depression Local	relief (concave, convex, none): Concave Slope %: 0-1					
Subregion (LRR or MLRA): LRR K, MLRA 90A Lat: 46.26495	Long: -92.811921 Datum: WGS84					
Soil Map Unit Name: No Digital Data Available	NWI classification: PSS1D					
Are climatic / hydrologic conditions on the site typical for this time of year?	Yes X No (If no, explain in Remarks.)					
Are Vegetation, Soil, or Hydrology significantly dist						
Are Vegetation, Soil, or Hydrology naturally probler	·					
SUMMARY OF FINDINGS – Attach site map showing sampling p						
The state of the s	oint locations, transects, important reatures, etc.					
Hydrophytic Vegetation Present? Yes X No	Is the Sampled Area					
Hydric Soil Present? Yes X No	within a Wetland? Yes X No					
Wetland Hydrology Present? Yes X No	If yes, optional Wetland Site ID: W31					
Remarks: (Explain alternative procedures here or in a separate report.)						
HYDROLOGY						
Wetland Hydrology Indicators:	Secondary Indicators (minimum of two required)					
Primary Indicators (minimum of one is required; check all that apply)	Surface Soil Cracks (B6)					
Surface Water (A1) Water-Stained Leaves (B9)	Drainage Patterns (B10)					
High Water Table (A2) Aquatic Fauna (B13)	Moss Trim Lines (B16)					
Saturation (A3) Marl Deposits (B15)	X Dry-Season Water Table (C2)					
Water Marks (B1) Hydrogen Sulfide Odor (C1)	Crayfish Burrows (C8)					
Sediment Deposits (B2) Oxidized Rhizospheres on L						
Drift Deposits (B3) Presence of Reduced Iron (C						
Algal Mat or Crust (B4) Recent Iron Reduction in Till	V					
Iron Deposits (B5) Thin Muck Surface (C7)	Shallow Aquitard (D3)					
Inundation Visible on Aerial Imagery (B7) Other (Explain in Remarks)	Microtopographic Relief (D4)					
Sparsely Vegetated Concave Surface (B8)	X FAC-Neutral Test (D5)					
Field Observations:						
Surface Water Present Yes No _X Depth (inches	·)·					
<u> </u>	7					
Saturation Present Yes X No Depth (inches (includes capillary fringe)	Netialia Hydrology Heseliti 163 X No					
Describe Recorded Data (stream gauge, monitoring well, aerial photos, pro	evious inspections) if available:					
besome recorded bata (stream gauge, monitoring well, acrial photos, ph	evious inspections), ii available.					
Remarks:						
Nomano.						

Tree Stratum (Plot size: 30 ft)	Absolute % Cover	Dominant Species	Indicator Status	Dominance Test worksheet:
Populus tremuloides 2.				Number of Dominant Species That Are OBL, FACW, or FAC:3(A)
345				Total Number of Dominant Species Across All Strata: (B)
6				Percent of Dominant Species That Are OBL, FACW, or FAC:(A/B)
	50	= Total Cover		Prevalence Index worksheet: Total % Cover of: Multiply by:
Sapling/Shrub Stratum (Plot size: 15 ft)		_ = 10(a) 00061		OBL species x 1 =
1. Alnus incana	85	Yes	FACW	FACW species x 2 =
2				FAC species x 3 =
3				EAGIL and all a
4				
5				Column Totales (A)
6				Column Totals: (A) (B)
7				Prevalence Index = B/A =
	85	= Total Cover		Hydrophytic Vegetation Indicators:
Herb Stratum (Plot size:5 ft)		- Total Cover		- 1 - Rapid Test for Hydrophytic Vegetation
1. Carex lacustris	70	Yes	OBL	2 - Dominance Test is >50%
2. Rubus pubescens	15	No	FACW	_ 3 - Prevalence Index is ≤3.0¹
3. Alnus incana	15	No	FACW	4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet)
4. Equisetum sylvaticum	10	No	FACW	(To had supporting data in Administration of the dissipation of the support of t
5				Problematic Hydrophytic Vegetation¹ (Explain)
6				¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
7				
8				Definitions of Vegetation Strata:
9				Tree – Woody plants 3 in. (7.6 cm) or more in
10				diameter at breast height (DBH), regardless of height.
11				
12				Sapling/shrub – Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.
	110			and greater than or equal to 3.20 it (1 iii) tall.
Woody Vine Stratum (Plot size: 30 ft)		= Total Cover		Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.
1.				Woody vines – All woody vines greater than 3.28 ft in
2.				height.
3.				Hydrophytic
4				Hydrophytic Vegetation
	0	= Total Cover		Present? Yes X No No
Remarks: (Include photo numbers here or on a sepa	rate sheet.)			

Sampling Point:

W31-1w

SOIL Sampling Point: W31-1w

		the dep	th need				tor or co	onfirm the absence of indica	itors.)	
Depth (inches)	Matrix Color (moist)	%	Colo	r (moist)	x Feature %	es Type¹	Loc ²	Texture	Remarks	
0-12	10YR 2/1	100		i (ilioist)		Туре	LUC	Sandy Loam	Remarks	
12-19	10YR 6/1	80	7.5YR	4/6	20			Sandy Loam		
19-24	10YR 6/1	80	7.5YR	4/6	20	<u>C</u>	M	Sandy Clay Loam		
¹Type: C=Co	oncentration, D=Deple	etion, RN	/=Reduc	ced Matrix, I	MS=Mas	ked San	d Grains	. ² Location: PL=Pore Lin	ning, M=Matrix.	
Hydric Soil II	ndicators:							Indicators for Pro	blematic Hydric Soils ³ :	
Histosol (/	A1)		Po	lyvalue Belov	w Surface	(S8) (LRR	R,	2 cm Muck (A10) (LRR K, L, MLRA 149B)	
Histic Epip	pedon (A2)			MLRA 149B)				Coast Prairie Redox (A16) (LRR K, L, R)		
Black Histic (A3)			Th	in Dark Surfa	ice (S9) (L	.RR R, ML	RA 149B	3) 5 cm Mucky Pea	at or Peat (S3) (LRR K, L, R)	
Hydrogen	Sulfide (A4)			gh Chroma S				Polyvalue Below Surface (S8) (LRR K, L)		
Stratified Layers (A5)				amy Mucky N			, L)		ce (S9) (LRR K, L)	
	Below Dark Surface (A1	1)		amy Gleyed I)		Iron-Manganese Masses (F12) (LRR K, L, R)		
	k Surface (A12)			pleted Matrix				Piedmont Floodplain Soils (F19) (MLRA 149B) Mesic Spodic (TA6) (MLRA 144A, 145, 149B)		
	ucky Mineral (S1) eyed Matrix (S4)			dox Dark Sui		7)		Red Parent Material (F21)		
Sandy Re				dox Depress		')		Very Shallow Dark Surface (F22)		
	Matrix (S6)		Marl (F10) (LRR K, L)					Other (Explain in		
Dark Surfa				, , ,	, ,				,	
³ Indicators of	hvdrophytic vegetation	on and w	etland h	vdrologv mi	ust be pr	esent. ur	nless dis	turbed or problematic.		
	ayer (if observed):			, 0,	<u> </u>			<u> </u>		
Type:	.,									
Depth (in	iches):			- -				Hydric Soil Present?	Yes X No	
Remarks:										

Project/Site: Pine County Solar	City/County: Pine Sampling Date: 09/21/2022
Applicant/Owner: Swift Current Energy	State: Min Sampling Point: W31-2w
Investigator(s): BB/CD	Section, Township, Range: T044N, R020W, S25
	relief (concave, convex, none): Concave Slope %: 0-1
Subregion (LRR or MLRA): LRR K, MLRA 90A Lat: 46.269489	Long: -92.816038 Datum: WGS84
Soil Map Unit Name: No Digital Data Available	NWI classification: PEM1A
Are climatic / hydrologic conditions on the site typical for this time of year?	Yes X No (If no, explain in Remarks.)
Are Vegetation , Soil , or Hydrology significantly distu	urbed? Are "Normal Circumstances" present? Yes X No
Are Vegetation , Soil , or Hydrology naturally problem	matic? (If needed, explain any answers in Remarks.)
SUMMARY OF FINDINGS – Attach site map showing sampling po	oint locations, transects, important features, etc.
Hydrophytic Vegetation Present? Yes X No	Is the Sampled Area
Hydric Soil Present? Yes X No	within a Wetland? Yes X No
Wetland Hydrology Present? Yes X No	If yes, optional Wetland Site ID: W31
Remarks: (Explain alternative procedures here or in a separate report.)	
HYDROLOGY	
Wetland Hydrology Indicators:	Secondary Indicators (minimum of two required)
Primary Indicators (minimum of one is required; check all that apply)	Surface Soil Cracks (B6)
Surface Water (A1) Water-Stained Leaves (B9)	Drainage Patterns (B10)
High Water Table (A2) Aquatic Fauna (B13)	Moss Trim Lines (B16)
Saturation (A3) Marl Deposits (B15)	Dry-Season Water Table (C2)
Water Marks (B1) Hydrogen Sulfide Odor (C1)	Crayfish Burrows (C8)
Sediment Deposits (B2) Oxidized Rhizospheres on Li	iving Roots (C3) Saturation Visible on Aerial Imagery (C9)
Drift Deposits (B3) Presence of Reduced Iron (C	The state of the s
Algal Mat or Crust (B4) Recent Iron Reduction in Tille	
Iron Deposits (B5) — Thin Muck Surface (C7)	Shallow Aquitard (D3)
Inundation Visible on Aerial Imagery (B7) Other (Explain in Remarks)	Microtopographic Relief (D4)
Sparsely Vegetated Concave Surface (B8)	X FAC-Neutral Test (D5)
Field Observations:	
Surface Water Present Yes No X Depth (inches	3):
Water Table Present Yes No _X Depth (inches	s):
Saturation Present Yes No X Depth (inches	S): Wetland Hydrology Present? Yes X No
(includes capillary fringe)	
Describe Recorded Data (stream gauge, monitoring well, aerial photos, pre	evious inspections), if available:
Remarks:	
I and the second	

Tree Stratum (Plot size: 30 ft)	Absolute % Cover	<u>Species</u>	Indicator Status	Dominance Test worksheet:
1				Number of Dominant Species That Are OBL, FACW, or FAC:3(A)
3 4 5.		· 		Total Number of Dominant Species Across All Strata: (B)
5				Percent of Dominant Species That Are OBL, FACW, or FAC:(A/B)
				Prevalence Index worksheet:
6 11 (O) 1 O 1 (D) 1 (E)	0	_ = Total Cover	•	Total % Cover of: Multiply by:
Sapling/Shrub Stratum (Plot size: 15 ft)	20	Van	EACW	OBL species x 1 =
1. Alnus incana			FACW	FACW species x 2 =
2				FAC species x 3 =
3				FACU species x 4 =
4 5.				UPL species x 5 =
				Column Totals: (A) (B)
				Prevalence Index = B/A =
7		·		Hydrophytic Vegetation Indicators:
	20	= Total Cover		X 1 - Rapid Test for Hydrophytic Vegetation
Herb Stratum (Plot size: 5 ft)				X 2 - Dominance Test is >50%
1. Carex lacustris	65	Yes	OBL	I
2. Calamagrostis canadensis	30	Yes	OBL	3 - Prevalence Index is ≤3.0¹
3. Rubus pubescens	15	No	FACW	4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet)
4. Eupatorium perfoliatum	10	No	FACW	5
5. Symphyotrichum lanceolatum	10	No	FACW	Problematic Hydrophytic Vegetation¹ (Explain)
6. Alnus incana	10	<u>No</u>	FACW	¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
7. Salix interior	5	No	FACW	
8		<u> </u>		Definitions of Vegetation Strata:
9				Tree – Woody plants 3 in. (7.6 cm) or more in
10				diameter at breast height (DBH), regardless of height.
11		<u> </u>		Sapling/shrub – Woody plants less than 3 in. DBH
12				and greater than or equal to 3.28 ft (1 m) tall.
	145	= Total Cover		Harb All back and a constant of the state of
Woody Vine Stratum (Plot size: 30 ft)		_		Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.
1				
2				Woody vines – All woody vines greater than 3.28 ft in height.
3				To grid
4				Hydrophytic
	0	_ = Total Cover		Vegetation Present? Yes X No
Remarks: (Include photo numbers here or on a separ	ate sheet.)			

Sampling Point:

W31-2w

SOIL Sampling Point: W31-2w

Depth Matrix Redox Features Color (moist) % Type Loc2 Texture Remarks	Profile Descri	iption: (Describe to Matrix	the dep				tor or co	onfirm the absence of indic	eators.)
Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.			%				L oc²	Texture	Remarks
Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. Calcation: PL=Pore Lining, M=Matrix.				Color (mololy	70	.,,,,,			
Hydric Soil Indicators: Histosol (A1)	5-27	7.5YR 5/2	90	7.5YR 4/6	10	С	M		
Hydric Soil Indicators: Histosol (A1)									
Hydric Soil Indicators: Histosol (A1)									
Hydric Soil Indicators: Histosol (A1)									
Hydric Soil Indicators: Histosol (A1)									
Hydric Soil Indicators: Histosol (A1)									
Hydric Soil Indicators: Histosol (A1)									
Hydric Soil Indicators: Histosol (A1)									
Hydric Soil Indicators: Histosol (A1)									
Hydric Soil Indicators: Histosol (A1)									
Hydric Soil Indicators: Histosol (A1)									
Hydric Soil Indicators: Histosol (A1)									
Hydric Soil Indicators: Histosol (A1)	¹Type: C=Co	ncentration, D=Depl	etion. RN	/=Reduced Matrix. I	MS=Mas	ked San	d Grains	² Location: PL=Pore L	ining M=Matrix
Histosol (A1)									
Histic Epipedon (A2) MLRA 149B) Coast Prairie Redox (A16) (LRR K, L, R) Black Histic (A3) Thin Dark Surface (S9) (LRR R, MLRA 149B) Hydrogen Sulfide (A4) High Chroma Sands (S11) (LRR K, L) Stratified Layers (A5) Loamy Mucky Mineral (F1) (LRR K, L) Thin Dark Surface (S9) (LRR K, L) Polyvalue Below Surface (S9) (LRR K, L) Thin Dark Surface (S9) (LRR K, L) Thin Dark Surface (S9) (LRR K, L) Polyvalue Below Surface (S9) (LRR K, L) Thin Dark Surface (S9) (LRR K, L) Thin Dark Surface (S9) (LRR K, L) Polyvalue Below Surface (S9) (LRR K, L) Thin Dark Surface (S9) (LRR K, L) Thin Dark Surface (S9) (LRR K, L) Polyvalue Below Surface (S9) (LRR K, L) Thin Dark Surface (S9) (LRR K, L) Thin Dark Surface (S9) (LRR K, L) Polyvalue Below Surface (S9) (LRR K, L) Thin Dark	-			Polyvalue Belov	v Surface	(S8) (LRR	R,		
Hydrogen Sulfide (A4)		•		· 		, , ,	·		
Stratified Layers (A5)				Thin Dark Surfa	ce (S9) (L	RR R, ML	RA 149B	5 cm Mucky Pe	eat or Peat (S3) (LRR K, L, R)
Depleted Below Dark Surface (A11)	Hydrogen Sulfide (A4)			High Chroma S	ands (S11) (LRR K,	L)	Polyvalue Belo	w Surface (S8) (LRR K, L)
Thick Dark Surface (A12) Depleted Matrix (F3) Sandy Mucky Mineral (S1) Sandy Gleyed Matrix (S4) Depleted Dark Surface (F7) Red Parent Material (F21) X Sandy Redox (S5) Redox Depressions (F8) Other (Explain in Remarks) Dark Surface (S7) **Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.* **Restrictive Layer (if observed): Type: Depth (inches): Hydric Soil Present? Yes X No	Stratified L	ayers (A5)		Loamy Mucky M	/lineral (F	1) (LRR K ,	, L)	Thin Dark Surf	ace (S9) (LRR K, L)
Sandy Mucky Mineral (S1)	X Depleted E	Below Dark Surface (A1	1)	Loamy Gleyed I	Matrix (F2)		Iron-Manganes	se Masses (F12) (LRR K, L, R)
Sandy Gleyed Matrix (S4)	Thick Dark	Surface (A12)		Depleted Matrix	(F3)			Piedmont Floo	dplain Soils (F19) (MLRA 149B)
X Sandy Redox (S5) Redox Depressions (F8) Very Shallow Dark Surface (F22) Stripped Matrix (S6) Marl (F10) (LRR K, L) Other (Explain in Remarks) Dark Surface (S7) 3Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic. Restrictive Layer (if observed): Type: Depth (inches): Hydric Soil Present? Yes X No	Sandy Mud	cky Mineral (S1)		Redox Dark Sur	rface (F6)			Mesic Spodic (TA6) (MLRA 144A, 145, 149B)
Stripped Matrix (S6) Marl (F10) (LRR K, L) Other (Explain in Remarks) Stripped Matrix (S6) Marl (F10) (LRR K, L) Other (Explain in Remarks) 3Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic. Restrictive Layer (if observed): Type: Depth (inches): Hydric Soil Present? YesX No				Depleted Dark S	Surface (F	7)		Red Parent Ma	aterial (F21)
Dark Surface (S7) 3 Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic. Restrictive Layer (if observed): Type: Depth (inches): Hydric Soil Present? Yes X No	X Sandy Rec	dox (S5)		Redox Depress	ions (F8)			Very Shallow [Dark Surface (F22)
3Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic. Restrictive Layer (if observed): Type: Depth (inches): Hydric Soil Present? Yes X No	Stripped M	latrix (S6)		Marl (F10) (LRF	R K, L)			Other (Explain	in Remarks)
Restrictive Layer (if observed): Type:	Dark Surfa	ice (S7)							
Type:	³ Indicators of I	nydrophytic vegetation	on and w	etland hydrology m	ust be pr	esent, ur	nless dis	turbed or problematic.	
Depth (inches): Hydric Soil Present? Yes X No	Restrictive La	ayer (if observed):							
<u> </u>	Type: _								
Remarks:	Depth (inc	ches):						Hydric Soil Present?	Yes No
	Remarks:								

Project/Site: Pine County Solar	City/County: Pine Sampling Date: 09/21/2022
Applicant/Owner: Swift Current Energy	State: Min Sampling Point: W31-3w
Investigator(s): BB/CD	Section, Township, Range: T044N, R020W, S25
	relief (concave, convex, none): Concave Slope %: 1-2
Subregion (LRR or MLRA): LRR K, MLRA 90A Lat: 46.267278	
Soil Map Unit Name: No Digital Data Available	NWI classification: PFO1/SS1A
Are climatic / hydrologic conditions on the site typical for this time of year?	Yes X No (If no, explain in Remarks.)
Are Vegetation , Soil , or Hydrology significantly distu	urbed? Are "Normal Circumstances" present? Yes X No
Are Vegetation , Soil , or Hydrology naturally problem	matic? (If needed, explain any answers in Remarks.)
SUMMARY OF FINDINGS – Attach site map showing sampling po	oint locations, transects, important features, etc.
Hydrophytic Vegetation Present? Yes X No	Is the Sampled Area
Hydric Soil Present? Yes X No	within a Wetland? Yes X No
Wetland Hydrology Present? Yes X No	If yes, optional Wetland Site ID: W31
Remarks: (Explain alternative procedures here or in a separate report.)	
HYDROLOGY	
Wetland Hydrology Indicators:	Secondary Indicators (minimum of two required)
Primary Indicators (minimum of one is required; check all that apply)	Surface Soil Cracks (B6)
Surface Water (A1) Water-Stained Leaves (B9)	Drainage Patterns (B10)
High Water Table (A2) Aquatic Fauna (B13)	Moss Trim Lines (B16)
Saturation (A3) Marl Deposits (B15)	Dry-Season Water Table (C2)
Water Marks (B1) Hydrogen Sulfide Odor (C1)	Crayfish Burrows (C8)
Sediment Deposits (B2) Oxidized Rhizospheres on Li	iving Roots (C3) Saturation Visible on Aerial Imagery (C9)
Drift Deposits (B3) Presence of Reduced Iron (C	(24) Stunted or Stressed Plants (D1)
Algal Mat or Crust (B4) Recent Iron Reduction in Tille	ed Soils (C6) X Geomorphic Position (D2)
Iron Deposits (B5) Thin Muck Surface (C7)	Shallow Aquitard (D3)
Inundation Visible on Aerial Imagery (B7) Other (Explain in Remarks)	Microtopographic Relief (D4)
Sparsely Vegetated Concave Surface (B8)	X FAC-Neutral Test (D5)
Field Observations:	
Surface Water Present Yes No X Depth (inches	s):
Water Table Present Yes No _X Depth (inches	s):
Saturation Present Yes No X Depth (inches	s): Wetland Hydrology Present? Yes X No
(includes capillary fringe)	
Describe Recorded Data (stream gauge, monitoring well, aerial photos, pre	evious inspections), if available:
Remarks:	

<u>Tree Stratum</u> (Plot size: <u>30 ft</u>)	Absolute % Cover	Dominant Species	Indicator Status	Dominance Test worksheet:
Populus tremuloides 2.	75	Yes	FAC	Number of Dominant Species That Are OBL, FACW, or FAC:7(A)
3				Total Number of Dominant Species Across All Strata: 7 (B)
5	_			Percent of Dominant Species That Are OBL, FACW, or FAC:(A/B)
<i>1.</i>	75	= Total Cover		Prevalence Index worksheet: Total % Cover of: Multiply by:
Sapling/Shrub Stratum (Plot size:15 ft)		= 10101 00101		OBL species x 1 =
1. Alnus incana	20	Yes	FACW	
2. Ilex verticillata	20	Yes	FACW	FACW species x 2 =
Populus tremuloides		Yes	FAC	FAC species x 3 =
4		· · · · · · · · · · · · · · · · · · ·		FACU species x 4 =
5.				UPL species x 5 =
6.				Column Totals: (A)(B)
7.				Prevalence Index = B/A =
				Hydrophytic Vegetation Indicators:
	50	= Total Cover		- 1 - Rapid Test for Hydrophytic Vegetation
Herb Stratum (Plot size: 5 ft)				X 2 - Dominance Test is >50%
1. Calamagrostis canadensis	30	Yes	OBL	- 3 - Prevalence Index is ≤3.0¹
2. Carex lacustris	30	Yes	OBL	
3. Onoclea sensibilis	25	Yes	FACW	4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet)
4. Symphyotrichum lanceolatum	10	No	FACW	
5. Rubus pubescens	5	No	FACW	Problematic Hydrophytic Vegetation ¹ (Explain)
6. Populus tremuloides	5	No	FAC	¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
7. <u>Solidago gigantea</u>	5	No	FACW	·
8				Definitions of Vegetation Strata:
9	_			Tana Manda da da (7 Cara) ar mara in
10		·		Tree – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.
11				
12				Sapling/shrub – Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.
	110			and greater than or equal to 3.20 it (1 iii) tail.
Woody Vine Stratum (Plot size: 30 ft)		= Total Cover		Herb – All herbaceous (non-woody) plants, regardless
				of size, and woody plants less than 3.28 ft tall.
1.		<u> </u>		Woody vines – All woody vines greater than 3.28 ft in
2.		·		height.
3.		·		Historia
4		· -		Hydrophytic Vegetation
	0	= Total Cover		Present? Yes X No No
Pamarka: (Indiada photo numbero baro er en a con	arata abaat \			
Remarks: (Include photo numbers here or on a sep	arate sneet.)			

Sampling Point:

W31-3w

SOIL Sampling Point: W31-3w

Profile Desci Depth	ription: (Describe to Matrix	the dep	oth need		ument the ox Feature		tor or co	onfirm the absence of indicat	tors.)
(inches)	Color (moist)	%	Colo	or (moist)	%	Type ¹	Loc ²	Texture	Remarks
0-4	10YR 3/1	100		()		-7/		Loamy Sand	
4-13	10YR 4/2	90	10YR	4/6	10	С	M	Loamy Sand	
13-24	7.5YR 4/2	80	7.5YR	4/6	20	С	M	Loamy Sand	
10-24	7.511(4/2		7.5110	4/0			IVI	Loany Gand	
					. ——				
					. —				
¹Type: C=Cc	oncentration, D=Deple	etion, RN	√=Redu	ced Matrix,	MS=Mas	ked San	d Grains	. ² Location: PL=Pore Lini	ng, M=Matrix.
Hydric Soil II	ndicators:							Indicators for Prob	plematic Hydric Soils ³ :
Histosol (A1)			Po	olyvalue Belov	w Surface	(S8) (LRF	RR,	2 cm Muck (A10)	(LRR K, L, MLRA 149B)
Histic Epipedon (A2)			I	MLRA 149B)				Coast Prairie Red	dox (A16) (LRR K, L, R)
Black Hist				in Dark Surfa				· —	t or Peat (S3) (LRR K, L, R)
Hydrogen Sulfide (A4)				gh Chroma S					Surface (S8) (LRR K, L)
Stratified Layers (A5)				amy Mucky N			, L)		e (S9) (LRR K, L)
	Below Dark Surface (A1	1)		amy Gleyed)		· 	Masses (F12) (LRR K, L, R)
	k Surface (A12) ucky Mineral (S1)			epleted Matrix edox Dark Su					lain Soils (F19) (MLRA 149B) A6) (MLRA 144A, 145, 149B)
	eyed Matrix (S4)			epleted Dark		7)		Red Parent Mate	
X Sandy Re				edox Depress		',		Very Shallow Da	
	Matrix (S6)			arl (F10) (LRF				Other (Explain in	
Dark Surfa									,
³ Indicators of	hydrophytic vegetation	on and w	etland h	vdrology m	ust be pre	esent. ur	nless dis	turbed or problematic.	
	ayer (if observed):			,				T	
Type:	, , , , , , , , , , , , , , , , , , , ,								
Depth (in	ches):			_				Hydric Soil Present?	Yes X No
Remarks:				_					

Project/Site: Pine County Solar	City/County: Pine Sampling Date: 09/20/2022
Applicant/Owner: Swift Current Energy	State: Min Sampling Point: W32-1w
Investigator(s): BB/CD	Section, Township, Range: T044N, R020W, S25
Landform (hillside, terrace, etc.): Depression Local r	relief (concave, convex, none): Concave Slope %: 0-1
Subregion (LRR or MLRA): LRR K, MLRA 90A Lat: 46.264577	Long: -92.811281 Datum: WGS84
Soil Map Unit Name: No Digital Data Available	NWI classification: PSS1C
Are climatic / hydrologic conditions on the site typical for this time of year?	Yes X No (If no, explain in Remarks.)
Are Vegetation, Soil, or Hydrology significantly distu	
Are Vegetation, Soil, or Hydrology naturally problem	· · · · · · · · · · · · · · · · · · ·
SUMMARY OF FINDINGS – Attach site map showing sampling po	
Lhudrashutia Varatetian Present?	In the Complet Area
Hydrophytic Vegetation Present? Yes X No Yes X No	Is the Sampled Area within a Wetland? Yes X No
Wetland Hydrology Present? Yes X No	If yes, optional Wetland Site ID: W32
Remarks: (Explain alternative procedures here or in a separate report.)	
Antecedent precipitation analysis showed drier than normal conditions	
HYDROLOGY	
Wetland Hydrology Indicators:	Secondary Indicators (minimum of two required)
Primary Indicators (minimum of one is required; check all that apply)	Surface Soil Cracks (B6)
Surface Water (A1) Water-Stained Leaves (B9)	Drainage Patterns (B10)
High Water Table (A2) Aquatic Fauna (B13)	Moss Trim Lines (B16)
Saturation (A3) Marl Deposits (B15)	Dry-Season Water Table (C2)
Water Marks (B1) Hydrogen Sulfide Odor (C1)	Crayfish Burrows (C8)
Sediment Deposits (B2) Oxidized Rhizospheres on Li	iving Roots (C3) Saturation Visible on Aerial Imagery (C9)
Presence of Reduced Iron (C	(24) Stunted or Stressed Plants (D1)
Algal Mat or Crust (B4) Recent Iron Reduction in Tille	ed Soils (C6) X Geomorphic Position (D2)
Iron Deposits (B5) Thin Muck Surface (C7)	Shallow Aquitard (D3)
Inundation Visible on Aerial Imagery (B7) Other (Explain in Remarks)	Microtopographic Relief (D4)
Sparsely Vegetated Concave Surface (B8)	X FAC-Neutral Test (D5)
Field Observations:	
Surface Water Present Yes No _X Depth (inches):
Water Table Present Yes No X Depth (inches)):
Saturation Present Yes No X Depth (inches): Wetland Hydrology Present? Yes X No
(includes capillary fringe)	
Describe Recorded Data (stream gauge, monitoring well, aerial photos, pre	evious inspections), if available:
Remarks:	

Tree Stratum (Plot size: 30 ft)	Absolute % Cover		Indicator Status	Dominance Test worksheet:
1. Populus deltoides	30	Yes	FAC	Number of Dominant Species
Populus tremuloides		Yes	FAC	That Are OBL, FACW, or FAC:5 (A)
3. Acer rubrum 4.				Total Number of Dominant Species Across All Strata:5(B)
5				Percent of Dominant Species That Are OBL, FACW, or FAC:(A/B)
· -		·		Prevalence Index worksheet:
	80	_ = Total Cover		Total % Cover of: Multiply by:
Sapling/Shrub Stratum (Plot size: 15 ft)				OBL species x 1 =
1. Alnus incana	65	Yes	FACW	FACW species x 2 =
2		<u> </u>		FAC species x 3 =
3	-	·		FACU species x 4 =
4	-			UPL species x 5 =
5				Column Totals: (A) (B)
6				Prevalence Index = B/A =
7				Hydrophytic Vegetation Indicators:
	65	= Total Cover		
Herb Stratum (Plot size: 5 ft)		-		- 1 - Rapid Test for Hydrophytic Vegetation
1. Carex lacustris	40	Yes	OBL	X 2 - Dominance Test is >50%
2. Rubus pubescens	15	No	FACW	3 - Prevalence Index is ≤3.0¹
Equisetum sylvaticum 4.			FACW	4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet)
5				Problematic Hydrophytic Vegetation ¹ (Explain)
				¹ Indicators of hydric soil and wetland hydrology must be present, unless
6. 7.				disturbed or problematic.
8.		<u> </u>		Definitions of Vegetation Strata:
9.				
10		-		Tree – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.
11.	-	·		Sapling/shrub – Woody plants less than 3 in. DBH
12				and greater than or equal to 3.28 ft (1 m) tall.
	65	= Total Cover		Herb – All herbaceous (non-woody) plants, regardless
Woody Vine Stratum (Plot size: 30 ft)				of size, and woody plants less than 3.28 ft tall.
1				Woody vines – All woody vines greater than 3.28 ft in
2		. <u></u>		height.
3		· <u></u>		
4		·		Hydrophytic
	0	= Total Cover		Vegetation Present? Yes X No No
Describe (feelede abete e	-11			1
Remarks: (Include photo numbers here or on a separ 35 percent bare ground in herb stratum	ate sheet.)			

Sampling Point:

W32-1w

SOIL Sampling Point: W32-1w

		the dep	th need				tor or co	onfirm the absence o	f indicators.)
Depth (inches)	Matrix Color (moist)	%	Colo	r (moist)	x Feature %	es Type¹	Loc ²	Texture	Remarks
(inches) 0-11	10YR 2/1	98	10YR	3/6	2	C	M	Sandy Loam	Remains
11-27	10YR 6/1	80	7.5YR	4/6	20		M	Sandy Clay Loam	With sand seams
					_ _ _		<u></u>		
					_				
¹Type: C=C	oncentration, D=Depl	etion, RN	1=Reduc	ed Matrix, N	∕/S=Mas	ked Sand	Grains.	² Location: PL=I	Pore Lining, M=Matrix.
Hydric Soil Indicators: Histosol (A1) Histic Epipedon (A2) Black Histic (A3) Hydrogen Sulfide (A4) Stratified Layers (A5) X Depleted Below Dark Surface (A11) Thick Dark Surface (A12) Sandy Mucky Mineral (S1) Sandy Gleyed Matrix (S4) Sandy Redox (S5) Stripped Matrix (S6) Dark Surface (S7) **Indicators of hydrophytic vegetation and we Restrictive Layer (if observed):			Polyvalue Below Surface (S8) (LRR R, MLRA 149B) Thin Dark Surface (S9) (LRR R, MLRA 149B) High Chroma Sands (S11) (LRR K, L) Loamy Mucky Mineral (F1) (LRR K, L) Loamy Gleyed Matrix (F2) Depleted Matrix (F3) Redox Dark Surface (F6) Depleted Dark Surface (F7) Redox Depressions (F8) Marl (F10) (LRR K, L) wetland hydrology must be present, unless distu					2 cm M Coast F Polyval Thin Da Iron-Ma Piedmo Mesic S Red Pa Very Sh Other (I	for Problematic Hydric Soils ³ : uck (A10) (LRR K, L, MLRA 149B) Prairie Redox (A16) (LRR K, L, R) ucky Peat or Peat (S3) (LRR K, L, R) ue Below Surface (S8) (LRR K, L) ark Surface (S9) (LRR K, L) anganese Masses (F12) (LRR K, L, R) ont Floodplain Soils (F19) (MLRA 149B) Spodic (TA6) (MLRA 144A, 145, 149B) arent Material (F21) nallow Dark Surface (F22) Explain in Remarks)
Type: Depth (ir	nches):			- -				Hydric Soil Prese	ent? Yes X No
Remarks:									

Project/Site: Pine County Solar	City/County: Pine Sampling Date: 09/21/2022
Applicant/Owner: Swift Current Energy	State: Min Sampling Point: W33-1u
Investigator(s): BB/CD	Section, Township, Range: T044N, R020W, S25
-	relief (concave, convex, none): Convex Slope %: 2
Subregion (LRR or MLRA): LRR K, MLRA 90A Lat: 46.268301	Long: -92.81227 Datum: WGS84
	NWI classification:
Soil Map Unit Name: No Digital Data Available	
Are climatic / hydrologic conditions on the site typical for this time of year?	Yes No _X (If no, explain in Remarks.)
Are Vegetation , Soil , or Hydrology significantly dist	
Are Vegetation, Soil, or Hydrology naturally problem	matic? (If needed, explain any answers in Remarks.)
SUMMARY OF FINDINGS – Attach site map showing sampling p	oint locations, transects, important features, etc.
Hydrophytic Vegetation Present? Yes No X	Is the Sampled Area
Hydric Soil Present? Hydric Soil Present? Yes No X Yes No X	within a Wetland? Yes No X
Wetland Hydrology Present? Yes No X	If yes, optional Wetland Site ID: W33
Remarks: (Explain alternative procedures here or in a separate report.)	
Antecedent precipitation analysis showed drier than normal conditions	
HYDROLOGY	
Wetland Hydrology Indicators:	Secondary Indicators (minimum of two required)
Primary Indicators (minimum of one is required; check all that apply)	Surface Soil Cracks (B6)
Surface Water (A1) Water-Stained Leaves (B9)	Drainage Patterns (B10)
High Water Table (A2) Aquatic Fauna (B13)	Moss Trim Lines (B16)
Saturation (A3) Marl Deposits (B15)	Dry-Season Water Table (C2)
Water Marks (B1) Hydrogen Sulfide Odor (C1)	Crayfish Burrows (C8)
Sediment Deposits (B2) Oxidized Rhizospheres on L	Living Roots (C3) Saturation Visible on Aerial Imagery (C9)
Drift Deposits (B3) Presence of Reduced Iron (0	C4) Stunted or Stressed Plants (D1)
Algal Mat or Crust (B4) Recent Iron Reduction in Till	lled Soils (C6) Geomorphic Position (D2)
Iron Deposits (B5) Thin Muck Surface (C7)	Shallow Aquitard (D3)
Inundation Visible on Aerial Imagery (B7) Other (Explain in Remarks)	Microtopographic Relief (D4)
Sparsely Vegetated Concave Surface (B8)	FAC-Neutral Test (D5)
Field Observations:	
Surface Water Present Yes No _X Depth (inches	s):
Water Table Present Yes No X Depth (inches	s):
Saturation Present Yes No X Depth (inches	S): Wetland Hydrology Present? Yes No _X
(includes capillary fringe)	
Describe Recorded Data (stream gauge, monitoring well, aerial photos, pr	evious inspections), if available:
Remarks:	

<u> Free Stratum</u> (Plot size: <u>30 ft</u>)	Absolute % Cover	Dominant Species	Indicator Status	Dominance Test worksheet:
Populus tremuloides	45	Yes	FAC	
Acer rubrum	25	Yes	FAC	Number of Dominant Species That Are OBL, FACW, or FAC: 3 (A)
				That Ale OBE, I AOW, OI I AO.
· <u> </u>				Total Number of Dominant
			-	Species Across All Strata: 6 (B)
			-	Percent of Dominant Species
			-	That Are OBL, FACW, or FAC: 50 (A/B)
				Prevalence Index worksheet:
	70	_ = Total Cover		Total % Cover of: Multiply by:
apling/Shrub Stratum (Plot size: 15 ft)				OBL species x 1 =
Corylus cornuta	35	Yes	FACU	FACW species x 2 =
Acer rubrum	20	Yes	FAC	FAC species x 3 =
. Quercus rubra	10	No	FACU	<u> </u>
·				FACU species x 4 =
·				UPL species x 5 =
				Column Totals: (A)(B)
				Prevalence Index = B/A =
	65			Hydrophytic Vegetation Indicators:
5.4		= Total Cover		1 - Rapid Test for Hydrophytic Vegetation
lerb Stratum (Plot size: 5 ft)		.,		⁻ 2 - Dominance Test is >50%
Eurybia macrophylla	45	Yes	UPL	- 3 - Prevalence Index is ≤3.0¹
Pteridium aquilinum	25	Yes	FACU	4 - Morphological Adaptations ¹
Cornus canadensis	20	No	FAC	(Provide supporting data in Remarks or on a separate sheet)
Rubus occidentalis	10	<u>No</u>	UPL	5 11 5 11 1 1 5 1 1 1 1 1 1 1 1 1 1 1 1
. Quercus rubra	5	<u>No</u>	FACU	Problematic Hydrophytic Vegetation ¹ (Explain)
. Corylus cornuta	5	<u>No</u>	FACU	¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
·				Definitions of Vegetation Strata:
				Tree – Woody plants 3 in. (7.6 cm) or more in
0				diameter at breast height (DBH), regardless of height.
1				
2				Sapling/shrub – Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.
	110			and greater than or equal to 3.20 ft (1 fil) tall.
Variable Visco Otratura (Planeira 20 ft)		= Total Cover		Herb – All herbaceous (non-woody) plants, regardless
Voody Vine Stratum (Plot size: 30 ft)				of size, and woody plants less than 3.28 ft tall.
·				Woody vines – All woody vines greater than 3.28 ft in
			-	height.
·				
· .				Hydrophytic Vegetation
	0	= Total Cover		Present? Yes No X
		= Total Cover		

SOIL Sampling Point: W33-1u

Profile Desc Depth	ription: (Descrit Matri	_		document the Redox Featur		tor or co	onfirm the absence of indicators.)	
(inches)	Color (moist)		Color (mois		Type ¹	Loc ²	Texture Rem	narks
0-7	10YR 3/3	100					Loamy Sand	
7-15	10YR 4/4	95	7.5YR 4/6	5	С	М	Sand	
15-24	7.5YR 5/4	95	7.5YR 4/6	5	С	М	Sand	
	-10111 0/1			<u> </u>	<u> </u>			
				<u> </u>				
¹ Type: C=C	oncentration, D=I	Depletion, RN	√=Reduced Ma	trix, MS=Mas	ked San	d Grains.	s. ² Location: PL=Pore Lining, M=Matri	x.
Hydric Soil	Indicators:						Indicators for Problematic Hye	dric Soils³:
Histosol (Below Surface	(S8) (LRF	RR,	2 cm Muck (A10) (LRR K, L, M	•
Histic Epipedon (A2) Black Histic (A3)			MLRA 1	49В) Surface (S9) (L	DD D MI	DA 1/0R	Coast Prairie Redox (A16) (LR 5 cm Mucky Peat or Peat (S3)	
	n Sulfide (A4)			ma Sands (S11			Polyvalue Below Surface (S8) (
Stratified Layers (A5)			·	ıcky Mineral (F1			Thin Dark Surface (S9) (LRR K	
				eyed Matrix (F2)		, –,	Iron-Manganese Masses (F12)	
	rk Surface (A12)	- ()	Depleted I		•		Piedmont Floodplain Soils (F19	
Sandy M	ucky Mineral (S1)		Redox Da	rk Surface (F6)			Mesic Spodic (TA6) (MLRA 14	4A, 145, 149B)
Sandy Gl	leyed Matrix (S4)		Depleted [Dark Surface (F	7)		Red Parent Material (F21)	
Sandy Re	edox (S5)		Redox De	pressions (F8)			Very Shallow Dark Surface (F2	2)
	Matrix (S6)		Marl (F10)	(LRR K, L)			Other (Explain in Remarks)	
Dark Sur	face (S7)							
³ Indicators of	f hydrophytic veg	etation and w	etland hydrolog	gy must be pr	esent, ur	nless dist	sturbed or problematic.	
Restrictive I	Layer (if observe	ed):						
Type:								
Depth (ir	nches):						Hydric Soil Present? Yes	NoX
Remarks:								

Project/Site: Pine County Solar	City/County: Pine Sampling Date: 09/21/2022
Applicant/Owner: Swift Current Energy	State: Min Sampling Point: W33-1w
Investigator(s): BB/CD	Section, Township, Range: T044N, R020W, S25
Landform (hillside, terrace, etc.): Depression Local	relief (concave, convex, none): Concave Slope %: 0-1
Subregion (LRR or MLRA): LRR K, MLRA 90A Lat: 46.268307	Long: -92.812137 Datum: WGS84
Soil Map Unit Name: No Digital Data Available	NWI classification:
Are climatic / hydrologic conditions on the site typical for this time of year?	Yes X No (If no, explain in Remarks.)
Are Vegetation, Soil, or Hydrology significantly dist	
Are Vegetation , Soil , or Hydrology naturally problem	(Kanadada ambaisa ayan sa Basada)
SUMMARY OF FINDINGS – Attach site map showing sampling p	
Attach site map showing sampling p	John rocations, transcots, important reatures, etc.
Hydrophytic Vegetation Present? Yes X No	Is the Sampled Area
Hydric Soil Present? Yes X No	within a Wetland? Yes X No
Wetland Hydrology Present? Yes X No	If yes, optional Wetland Site ID: W33
Remarks: (Explain alternative procedures here or in a separate report.)	
HADBOLOCA	
HYDROLOGY	
Wetland Hydrology Indicators:	Secondary Indicators (minimum of two required)
Primary Indicators (minimum of one is required; check all that apply)	Surface Soil Cracks (B6)
Surface Water (A1) X Water-Stained Leaves (B9)	
High Water Table (A2) Aquatic Fauna (B13)	Moss Trim Lines (B16)
Saturation (A3) Marl Deposits (B15)	Dry-Season Water Table (C2)
Water Marks (B1) Hydrogen Sulfide Odor (C1)	
Sediment Deposits (B2) Oxidized Rhizospheres on L	
Drift Deposits (B3) Presence of Reduced Iron (VX Algal Mat or Crust (B4) Recent Iron Reduction in Till	<u></u>
Iron Deposits (B5) Thin Muck Surface (C7)	Shallow Aquitard (D3)
Inundation Visible on Aerial Imagery (B7) Other (Explain in Remarks)	Microtopographic Relief (D4)
Sparsely Vegetated Concave Surface (B8)	X FAC-Neutral Test (D5)
Field Observations:	
Surface Water Present Yes No X Depth (inches	
Water Table Present Yes No X Depth (inches	
Saturation Present Yes No X Depth (inches	S): Wetland Hydrology Present? Yes X No
(includes capillary fringe)	
Describe Recorded Data (stream gauge, monitoring well, aerial photos, pr	revious inspections), if available:
Remarks:	

Tree Stratum (Plot size: 30 ft)	Absolute % Cover	Dominant Species	Indicator Status	Dominance Test worksheet:
1. Populus tremuloides	15	Yes	FAC	Number of Dominant Species
Acer rubrum 3.	15		FAC	That Are OBL, FACW, or FAC:5 (A)
				Total Number of Dominant
4.				Species Across All Strata: 5 (B)
6.				Percent of Dominant Species
7.				That Are OBL, FACW, or FAC:(A/B)
	30			Prevalence Index worksheet:
0 1: (0) 1 0: (0) 15 (15)		_ = Total Cove	•	Total % Cover of: Multiply by:
Sapling/Shrub Stratum (Plot size: 15 ft)	50	V	EA (C) A /	OBL species x 1 =
1. Alnus incana	50	Yes	FACW	FACW species x 2 =
2. Ilex verticillata		· <u></u>		FAC species x 3 =
3				FACU species x 4 =
4				UPL species x 5 =
5 6.				Column Totals: (A) (B)
6				Prevalence Index = B/A =
· -		·		Hydrophytic Vegetation Indicators:
	90	= Total Cover		- 1 - Rapid Test for Hydrophytic Vegetation
Herb Stratum (Plot size: 5 ft)				X 2 - Dominance Test is >50%
1. Carex lacustris	60	Yes	OBL	- 3 - Prevalence Index is ≤3.0¹
2. Lycopus uniflorus	15	No	OBL	
3. Ilex verticillata	10	No	FACW	4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet)
4. Alnus incana	10	No	FACW	Deph. and the deph. tip Vanatation 1 (Fundain)
5		· -		Problematic Hydrophytic Vegetation¹ (Explain)
6				¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
7		·		
8.				Definitions of Vegetation Strata:
9.				Tree – Woody plants 3 in. (7.6 cm) or more in
10				diameter at breast height (DBH), regardless of height.
11				Sapling/shrub – Woody plants less than 3 in. DBH
12		-		and greater than or equal to 3.28 ft (1 m) tall.
	95	= Total Cover		Herb – All herbaceous (non-woody) plants, regardless
Woody Vine Stratum (Plot size: 30 ft)				of size, and woody plants less than 3.28 ft tall.
1		· - <u></u>		Was designed. All was designed as a constant to a confidence of the confidence of th
2				Woody vines – All woody vines greater than 3.28 ft in height.
3				
4				Hydrophytic
	0			Vegetation Present? Yes X No
		= Total Cover		resem: res No
Describe (legislate shorter contract to a co	-111			
Remarks: (Include photo numbers here or on a separ Some bare ground in herb layer	ate sneet.)			

Sampling Point: W33-1w

SOIL Sampling Point: W33-1w

		the dep	th need				tor or co	onfirm the absence of indica	ators.)	
Depth (inches)	Matrix Color (moist)	%	Colo	or (moist)	x Feature %	es Type¹	Loc ²	Texture	Remarks	
0-5	10YR 2/1	100		1 (1110131)	70	Турс		Sandy Loam	Remarks	
5-18	10YR 5/2	90	10YR	4/6	10			Loamy Sand		
18-26	7.5YR 5/2	70	7.5YR	4/6	30	<u>C</u>	M	Sandy Clay Loam		
¹Type: C=Co	oncentration, D=Depl	etion, RN	/I=Reduc	ced Matrix,	MS=Masl	ked San	d Grains	. ² Location: PL=Pore Lir	 ning, M=Matrix.	
Hydric Soil Ir	ndicators:							Indicators for Pro	oblematic Hydric Soils ³ :	
Histosol (A	A1)		Po	olyvalue Belov	w Surface	(S8) (LRF	R,		D) (LRR K, L, MLRA 149B)	
Histic Epip	pedon (A2)			MLRA 149B)				Coast Prairie Re	edox (A16) (LRR K, L, R)	
Black Hist	tic (A3)			nin Dark Surfa				5 cm Mucky Pe	at or Peat (S3) (LRR K, L, R)	
	Sulfide (A4)			gh Chroma S				Polyvalue Belov	v Surface (S8) (LRR K, L)	
	Layers (A5)			amy Mucky N			, L)	Thin Dark Surface (S9) (LRR K, L)		
	Below Dark Surface (A1	1)		amy Gleyed I)		Iron-Manganese Masses (F12) (LRR K, L, R)		
	k Surface (A12)			epleted Matrix					Iplain Soils (F19) (MLRA 149B)	
	ucky Mineral (S1) eyed Matrix (S4)			edox Dark Sur epleted Dark \$		7)		Red Parent Mat	TA6) (MLRA 144A, 145, 149B)	
X Sandy Re				edox Depress		")			ark Surface (F22)	
	Matrix (S6)			arl (F10) (LRF				Other (Explain i		
Dark Surfa	` '			-7(, ,			<u> </u>	······································	
³ Indicators of	hydrophytic vegetation	on and w	etland h	ıvdroloav m	ust be pre	esent. ur	nless dis	turbed or problematic.		
	ayer (if observed):			7 37				T		
Type:	,									
Depth (in	ches):			_				Hydric Soil Present?	Yes X No	
Remarks:	<u> </u>									

Project/Site: Pine County Solar	City/County: Pine Sampling Date: 09/21/2022						
Applicant/Owner: Swift Current Energy	State: Min Sampling Point: W34-1u						
Investigator(s): BB CD	Section, Township, Range: T044N, R020W, S25						
	relief (concave, convex, none): Convex Slope %: 2-5						
Subregion (LRR or MLRA): LRR K, MLRA 90A Lat: 46.262816	Long: -92.822843 Datum: WGS84						
Soil Map Unit Name: No Digital Data Available	NWI classification: None						
Are climatic / hydrologic conditions on the site typical for this time of year?	Yes No X (If no, explain in Remarks.)						
Are Vegetation, Soil, or Hydrology significantly dist	_						
	(Kanadada ambaisa ayan sa Basada)						
	mano:						
SUMMARY OF FINDINGS – Attach site map showing sampling p	oint locations, transects, important features, etc.						
Hydrophytic Vegetation Present? Yes No X	Is the Sampled Area						
Hydric Soil Present? Yes No X	within a Wetland? Yes No X						
Wetland Hydrology Present? Yes No X	If yes, optional Wetland Site ID: W34						
Remarks: (Explain alternative procedures here or in a separate report.) Drier than normal							
HYDROLOGY							
Wetland Hydrology Indicators:	Secondary Indicators (minimum of two required)						
Primary Indicators (minimum of one is required; check all that apply)	Surface Soil Cracks (B6)						
Surface Water (A1) Water-Stained Leaves (B9)							
High Water Table (A2) Aquatic Fauna (B13)	Moss Trim Lines (B16)						
Saturation (A3) Marl Deposits (B15)	Dry-Season Water Table (C2)						
Water Marks (B1) Hydrogen Sulfide Odor (C1)	Crayfish Burrows (C8)						
Sediment Deposits (B2) Oxidized Rhizospheres on L							
Drift Deposits (B3) Presence of Reduced Iron (
Algal Mat or Crust (B4) Recent Iron Reduction in Til	· · · · · · · · · · · · · · · · · · ·						
Iron Deposits (B5) Thin Muck Surface (C7)	Shallow Aquitard (D3)						
Inundation Visible on Aerial Imagery (B7) Other (Explain in Remarks)	Microtopographic Relief (D4)						
Sparsely Vegetated Concave Surface (B8)	FAC-Neutral Test (D5)						
Field Observations:							
Surface Water Present Yes No _X Depth (inches	s):						
Water Table Present Yes No X Depth (inches							
Saturation Present Yes No X Depth (inches	· 						
(includes capillary fringe)	·— — —						
Describe Recorded Data (stream gauge, monitoring well, aerial photos, pr	revious inspections), if available:						
Remarks:							

Total Christian (Diet sine) 30 ft)	Absolute	Dominant	Indicator	Daminana Tastuuska satu
Tree Stratum (Plot size: 30 ft)	% Cover	<u>Species</u>	<u>Status</u>	Dominance Test worksheet:
Populus tremuloides	75	Yes	FAC	Number of Dominant Species
2. Acer rubrum	25			That Are OBL, FACW, or FAC:1 (A)
3.				Total Number of Dominant
4				Species Across All Strata: 2 (B)
5 6.				Percent of Dominant Species
				That Are OBL, FACW, or FAC:(A/B)
7		-		Prevalence Index worksheet:
	100	_ = Total Cover		Total % Cover of: Multiply by:
Sapling/Shrub Stratum (Plot size:15 ft)				OBL species x 1 =
1				FACW species x 2 =
2				FAC species x 3 =
3.				FACU species x 4 =
4				UPL species x 5 =
5				
6				
7				Prevalence Index = B/A =
	0	= Total Cover		Hydrophytic Vegetation Indicators:
Herb Stratum (Plot size: 5 ft)		- Total Cover		1 - Rapid Test for Hydrophytic Vegetation
1. Eurybia macrophylla	25	Yes	UPL	2 - Dominance Test is >50%
Pteridium aquilinum	5	No	FACU	3 - Prevalence Index is ≤3.0¹
3. Trientalis borealis	3	No	FAC	4 - Morphological Adaptations ¹
4. Vaccinium angustifolium	2	No	FACU	(Provide supporting data in Remarks or on a separate sheet)
5.				Problematic Hydrophytic Vegetation ¹ (Explain)
6.				Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
7.				distribed of problematic.
8				Definitions of Vegetation Strata:
9				-
10				Tree – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.
11				
12				Sapling/shrub – Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.
	35	T / 10		and greater than or equal to 3.20 ft (1 m) tail.
Woody Vine Stratum (Plot size: 30 ft)		= Total Cover		Herb – All herbaceous (non-woody) plants, regardless
				of size, and woody plants less than 3.28 ft tall.
1 2.		·		Woody vines – All woody vines greater than 3.28 ft in
3	·			height.
4.				Hydrophytic
T				Vegetation
	0	= Total Cover		Present? Yes No X
Remarks: (Include photo numbers here or on a separa	ate sheet.)			

Sampling Point:

W34-1u

SOIL Sampling Point: W34-1u

		the dep				or or co	onfirm the absence of indica	itors.)	
Depth (inches)	Matrix	%		x Featur		Loc ²	Toyturo	Domorko	
(inches)	Color (moist) 10YR 3/2		Color (moist)	<u>%</u>	Type ¹	LOC	Texture	Remarks	
0-6		100					Sandy Loam		
6-20	5YR 6/6	100					Loamy Sand		
20-24	7.5YR 5/6	100					Loamy Sand		
¹Type: C=C	oncentration, D=Depl	etion, RN	/=Reduced Matrix, N	√S=Mas	ked Sand	d Grains	. ² Location: PL=Pore Lir	ning, M=Matrix.	
Hydric Soil I	Indicators:						Indicators for Pro	blematic Hydric Soils ³ :	
Histosol ((A1)		Polyvalue Below	/ Surface	(S8) (LRR	R,	2 cm Muck (A10)) (LRR K, L, MLRA 149B)	
Histic Epi	ipedon (A2)		MLRA 149B)				Coast Prairie Re	edox (A16) (LRR K, L, R)	
Black His			Thin Dark Surface						
	n Sulfide (A4)		High Chroma Sa				Polyvalue Below Surface (S8) (LRR K, L)		
	Layers (A5)	43	Loamy Mucky M			L)		ce (S9) (LRR K, L)	
	Below Dark Surface (A1	1)	Loamy Gleyed N)		Iron-Manganese Masses (F12) (LRR K, L, R) Piedmont Floodplain Soils (F19) (MLRA 149B)		
	rk Surface (A12) ucky Mineral (S1)		Depleted Matrix Redox Dark Surf					A6) (MLRA 144A, 145, 149B)	
	leyed Matrix (S4)		Depleted Dark S		7)		Red Parent Mat		
Sandy Re	* '		Redox Depression		• /			ark Surface (F22)	
	Matrix (S6)		Marl (F10) (LRR				Other (Explain in		
Dark Surf	face (S7)								
³ Indicators of	hydrophytic vegetati	on and w	etland hydrology mu	ust be pr	esent, ur	less dist	turbed or problematic.		
Restrictive L	_ayer (if observed):								
Type:									
Depth (ir	nches):						Hydric Soil Present?	Yes NoX	
Remarks:									

Project/Site: Pine County Solar	City/County: Pine Sampling Date:09/21/2022					
Applicant/Owner: Swift Current Energy	State: Min Sampling Point: W34-1w					
Investigator(s): BB CD	Section, Township, Range: T044N, R020W, S25					
	cal relief (concave, convex, none): Concave Slope %: 1-3					
Subregion (LRR or MLRA): LRR K, MLRA 90A Lat: 46.262889	Long: -92.82264 Datum: WGS84					
Soil Map Unit Name: No Digital Data Available	NWI classification: None					
Are climatic / hydrologic conditions on the site typical for this time of year	` ` ` ` ` ` `					
Are Vegetation, Soil, or Hydrology significantly of						
Are Vegetation, Soil, or Hydrology naturally prof	blematic? (If needed, explain any answers in Remarks.)					
SUMMARY OF FINDINGS – Attach site map showing samplin	g point locations, transects, important features, etc.					
Lhudrashutia Variation Present?	In the Complet Area					
Hydrophytic Vegetation Present? Yes X No Yes X No	Is the Sampled Area within a Wetland? Yes X No					
Wetland Hydrology Present? Yes X No	If yes, optional Wetland Site ID: W34					
Remarks: (Explain alternative procedures here or in a separate report.) Drier than normal.)					
Billion than Holling.						
HYDROLOGY						
	Occasional and the state of the					
Wetland Hydrology Indicators: Primary Indicators (minimum of one is required; check all that apply)	Secondary Indicators (minimum of two required)					
1	Surface Soil Cracks (B6) Drainage Patterns (B10)					
Surface Water (A1) Water-Stained Leaves (I	Moss Trim Lines (B16)					
High Water Table (A2) Aquatic Fauna (B13) Seturation (A3)	Dry-Season Water Table (C2)					
Saturation (A3) Marl Deposits (B15)						
Water Marks (B1) Hydrogen Sulfide Odor (Sediment Deposits (B2) Oxidized Rhizospheres of						
	<u> </u>					
	<u></u>					
						
	Missackers are a bis Dallief (DA)					
Inundation Visible on Aerial Imagery (B7) —— Other (Explain in Remar Sparsely Vegetated Concave Surface (B8)	X FAC-Neutral Test (D5)					
	A TACHOURA TOST (DO)					
Field Observations:						
Surface Water Present Yes No Depth (inc						
	hes):					
Saturation Present Yes No Depth (inc	thes): Wetland Hydrology Present? Yes X No					
(includes capillary fringe)	if ovaliable.					
Describe Recorded Data (stream gauge, monitoring well, aerial photos	, previous inspections), if available:					
Damarka						
Remarks:						

VEGETATION – Use scientific names of	plants.			Sampling P	oint: W34-1w
Tree Stratum (Plot size: 30 ft)	Absolute <u>% Cover</u>	Dominant Species	Indicator Status	Dominance Test worksheet:	
1. Populus tremula	30	Yes	FAC	1	
2.				Number of Dominant Species That Are OBL, FACW, or FAC	: 3 (A)
3					. ,
4.				Total Number of Dominant	2 (D)
5.				Species Across All Strata:	3 (B)
6.				Percent of Dominant Species	
7				That Are OBL, FACW, or FAC	` ′
				Prevalence Index worksheet	:
	30	_ = Total Cover	•	Total % Cover of:	Multiply by:
Sapling/Shrub Stratum (Plot size: 15 ft)				OBL species	x 1 =
1. Alnus incana	80	Yes	FACW	FACW species	x 2 =
2. Salix discolor	10	No	FACW	FAC species	x 3 =
3				FACU species	x 4 =
4				UPL species	x 5 =
5				Column Totals:	(A) (B)
6					
7				Prevalence Index = B/A	
	90	Total Cover		Hydrophytic Vegetation Indi	
Herb Stratum (Plot size: 5 ft)		= Total Cover		1 - Rapid Test for Hydroph	nytic Vegetation
Onoclea sensibilis	75	Yes	FACW	X 2 - Dominance Test is >50)%
Symphyotrichum lanceolatum	15	No	FACW	3 - Prevalence Index is ≤3	.0 ¹
		No	FACW	4 - Morphological Adaptati	
				(Provide supporting data in Remark	ks or on a separate sheet)
		<u>No</u>	<u> </u>	Problematic Hydrophytic \	/egetation1 (Explain)
				¹Indicators of hydric soil and wetland hyd	
6				disturbed or problematic.	
7 8.				Definitions of Managerian On	
				Definitions of Vegetation Str	ata:
				Tree – Woody plants 3 in. (7.6	
10				diameter at breast height (DBI	H), regardless of height.
11				Sapling/shrub – Woody plant	s less than 3 in. DBH
12				and greater than or equal to 3.	
	103	= Total Cover		Herb – All herbaceous (non-w	oody) plants regardless
Woody Vine Stratum (Plot size: 30 ft)				of size, and woody plants less	
1					
2.				Woody vines – All woody vine height.	s greater than 3.28 ft in
3.				noight.	
4.				Hydrophytic	
				Vegetation	
	0	= Total Cover		Present? Yes X	No
Remarks: (Include photo numbers here or on a se	eparate sheet.)				

SOIL Sampling Point: W34-1w

Profile Descripe	ription: (Describe to Matrix	the dep	th need		ument the ox Feature		tor or co	onfirm the absence of indic	ators.)	
(inches)	Color (moist)	%	Colo	r (moist)	%	Type ¹	Loc ²	Texture	Remarks	
0-6	7.5YR 2.5/2	100		(********)		-7/		Sandy Loam		
6-14	7.5YR 4/3	80	7.5YR	4/6	20	С	M	Loamy Sand		
14-25	7.5YR 4/3	75	5YR	4/6	25	С	M	Loamy Sand		
14-23	7.5110 4/5	-73	3110	4/0			101	Loany Sand		
					. ——					
					. —					
					. ——					
¹Type: C=Co	oncentration, D=Depl	etion, RN	/=Reduc	ed Matrix,	MS=Mas	ked San	d Grains	. ² Location: PL=Pore Li	ning, M=Matrix.	
Hydric Soil I	ndicators:							Indicators for Pro	oblematic Hydric Soils ³ :	
Histosol (A	A1)		Po	lyvalue Belov	w Surface	(S8) (LRF	RR,	2 cm Muck (A1	0) (LRR K, L, MLRA 149B)	
Histic Epi	pedon (A2)		N	/ILRA 149B)				Coast Prairie R	Redox (A16) (LRR K, L, R)	
Black Hist	tic (A3)		Thi	in Dark Surfa	ace (S9) (L	RR R, ML	-RA 149B	5 cm Mucky Pe	eat or Peat (S3) (LRR K, L, R)	
Hydrogen	Sulfide (A4)			gh Chroma S				Polyvalue Belo	w Surface (S8) (LRR K, L)	
<u> </u>	Layers (A5)			amy Mucky N			, L)	<u> </u>	ace (S9) (LRR K, L)	
	Below Dark Surface (A1	1)		amy Gleyed I)		Iron-Manganese Masses (F12) (LRR K, L, R)		
	k Surface (A12)		Depleted Matrix (F3) Redox Dark Surface (F6)						dplain Soils (F19) (MLRA 149B)	
	ucky Mineral (S1)					7 \			TA6) (MLRA 144A, 145, 149B)	
X Sandy Re	eyed Matrix (S4)			pleted Dark S dox Depress		7)		Red Parent Ma	nteriai (F21) Park Surface (F22)	
candy no	Matrix (S6)			arl (F10) (LRF				Other (Explain		
Dark Surf	* *			(1 10) (211	, _,			Other (Explain	in Romano)	
		on and w	otland h	vdrology m	uct bo pr	ocont ur	aloce die	turbed or problematic.		
	ayer (if observed):	on and w	Cliana II	ydrology ilii	ust be pit	esent, ui	iless dis			
Type:	ayer (ii observeu).									
Depth (in	iches).			_				Hydric Soil Present?	Yes ^X No	
Remarks:								Tryuno con Troconci		
Remarks:										

Project/Site: Pine County Solar	City/County: Pine Sampling Date: 09/15/2022						
Applicant/Owner: Swift Current Energy	State: Min Sampling Point: W35-1u						
Investigator(s): Jlk drj	Section, Township, Range: T044N, R020W, S25						
	relief (concave, convex, none): Convex Slope %: 2-5						
Subregion (LRR or MLRA): LRR K, MLRA 90A Lat: 46.265753	Long: -92.804622 Datum: WGS84						
Soil Map Unit Name: No Digital Data Available	NWI classification: None						
Are climatic / hydrologic conditions on the site typical for this time of year?	Yes No X (If no, explain in Remarks.)						
Are Vegetation , SoilX , or Hydrology significantly dist	turbed? Are "Normal Circumstances" present? Yes X No						
Are Vegetation , Soil , or Hydrology naturally problem	matic? (If needed, explain any answers in Remarks.)						
SUMMARY OF FINDINGS – Attach site map showing sampling p							
Hydrophytic Vegetation Present? Yes No X	Is the Sampled Area						
Hydric Soil Present? Yes No X	within a Wetland? Yes No X						
Wetland Hydrology Present? Yes No X	If yes, optional Wetland Site ID: W35						
Drier than normal. Soil disturbed at upland point, road fill.							
HYDROLOGY							
Wetland Hydrology Indicators:	Secondary Indicators (minimum of two required)						
Primary Indicators (minimum of one is required; check all that apply)	Surface Soil Cracks (B6)						
Surface Water (A1) Water-Stained Leaves (B9)	Drainage Patterns (B10)						
High Water Table (A2) Aquatic Fauna (B13)	Moss Trim Lines (B16)						
Saturation (A3) Marl Deposits (B15)	Dry-Season Water Table (C2)						
Water Marks (B1) Hydrogen Sulfide Odor (C1)	Crayfish Burrows (C8)						
Sediment Deposits (B2) Oxidized Rhizospheres on L	<u> </u>						
Presence of Reduced Iron (0							
Algal Mat or Crust (B4) Recent Iron Reduction in Till	· ·						
Iron Deposits (B5) — Thin Muck Surface (C7)	Shallow Aquitard (D3)						
Inundation Visible on Aerial Imagery (B7) Other (Explain in Remarks)							
Sparsely Vegetated Concave Surface (B8)	FAC-Neutral Test (D5)						
Field Observations:							
Surface Water Present Yes No X Depth (inches							
Water Table Present Yes No X Depth (inches	· 						
Saturation Present Yes No X Depth (inches	S): Wetland Hydrology Present? Yes No _X						
(includes capillary fringe)							
Describe Recorded Data (stream gauge, monitoring well, aerial photos, pr	evious inspections), if available:						
Donale							
Remarks:							

Tree Stratum (Plot size: 30 ft)	Absolute % Cover	Dominant Species	Indicator Status	Dominance Test worksheet:
1				Number of Dominant Species
2.				That Are OBL, FACW, or FAC:(A)
3				Total Number of Dominant Species Across All Strata: (B)
5				Percent of Dominant Species That Are OBL, FACW, or FAC: 0 (A/B)
7		-		Prevalence Index worksheet:
	0	_ = Total Cover		Total % Cover of: Multiply by:
Sapling/Shrub Stratum (Plot size:15 ft)				OBL species x 1 =
1.				FACW species x 2 =
2				FAC species x 3 =
3				FACU species x 4 =
4				UPL species x 5 =
5				Column Totals: (A) (B)
6.				Prevalence Index = B/A =
7		-		Hydrophytic Vegetation Indicators:
	0	= Total Cover		- 1 - Rapid Test for Hydrophytic Vegetation
Herb Stratum (Plot size: 5 ft)				- 2 - Dominance Test is >50%
1. Linaria vulgaris	45	Yes	UPL	- 3 - Prevalence Index is ≤3.0¹
2. Bromus inermis	35	Yes	UPL	4 - Morphological Adaptations ¹
3. Poa pratensis	15	No	FACU	(Provide supporting data in Remarks or on a separate sheet)
4. Solidago canadensis			FACU	Problematic Hydrophytic Vegetation ¹ (Explain)
5. <u>Hieracium aurantiacum</u>	2	<u>No</u>	UPL	¹Indicators of hydric soil and wetland hydrology must be present, unless
6.				disturbed or problematic.
7.				Definitions of Manufaction Courts
9.				Definitions of Vegetation Strata:
10				Tree – Woody plants 3 in. (7.6 cm) or more in
11				diameter at breast height (DBH), regardless of height.
12.		·		Sapling/shrub – Woody plants less than 3 in. DBH
	102			and greater than or equal to 3.28 ft (1 m) tall.
West-Mark (District 20 ft)	102	= Total Cover		Herb – All herbaceous (non-woody) plants, regardless
Woody Vine Stratum (Plot size: 30 ft)				of size, and woody plants less than 3.28 ft tall.
1		-		Woody vines – All woody vines greater than 3.28 ft in
2 3.	·	-		height.
3 4				Hydrophytic
7				Vegetation
	0	= Total Cover		Present?
Remarks: (Include photo numbers here or on a separ	rate sheet.)			

Sampling Point:

W35-1u

SOIL Sampling Point: W35-1u

Depth (inches)	Matrix		Pedo	x Feature	00					
	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²	Texture		Remar	ks
<u> </u>			Color (molet)		1,700					
0-5	10YR 4/3	100					Silt Loam	Refusal or	n road fill at 5 in	iches
Type: C=Co	ncentration, D=Deple	etion, RM=	Reduced Matrix, N	MS=Mas	ked Sand	Grains.	² Location: PL=	ore Linin	g, M=Matrix.	
Hydric Soil Ir	ndicators:						Indicators	for Proble	ematic Hydri	c Soils ³ :
Histosol (A	\1)	_	Polyvalue Below	v Surface	(S8) (LRR	R,	2 cm M	uck (A10) (I	LRR K, L, MLR	A 149B)
Histic Epip	pedon (A2)	_	MLRA 149B)				Coast F	Prairie Redo	x (A16) (LRR	(, L, R)
Black Histi		_	Thin Dark Surface	ce (S9) (L	RR R, ML	RA 149B) 5 cm M	ucky Peat c	or Peat (S3) (LF	RR K, L, R)
Hydrogen	Sulfide (A4)	_	High Chroma Sa	ands (S11) (LRR K,	L)	Polyval	ue Below S	urface (S8) (LR	R K, L)
Stratified L	ayers (A5)	_	Loamy Mucky M	1ineral (F1) (LRR K,	L)	Thin Da	ark Surface	(S9) (LRR K, L	.)
Depleted E	Below Dark Surface (A1	1) _	Loamy Gleyed N	Matrix (F2))		Iron-Ma	inganese M	asses (F12) (L	RR K, L, R)
Thick Dark	Surface (A12)	_	Depleted Matrix	(F3)			Piedmo	nt Floodpla	in Soils (F19) (I	MLRA 149B)
Sandy Mu	cky Mineral (S1)	_	Redox Dark Sur	face (F6)			Mesic S	Spodic (TA6) (MLRA 144A,	145, 149B)
Sandy Gle	eyed Matrix (S4)	_	Depleted Dark S	Surface (F	7)		Red Pa	rent Materia	al (F21)	
Sandy Red	dox (S5)	_	Redox Depressi	ions (F8)			Very Sh	nallow Dark	Surface (F22)	
Stripped M	Matrix (S6)	_	Marl (F10) (LRR	R K, L)			Other (Explain in R	temarks)	
Dark Surfa	ace (S7)									
Indicators of	hvdrophytic vegetatio	on and we	tland hydrology mu	ust be pro	esent. un	less dist	urbed or problematic.			
	ayer (if observed):		- Identify arology me	301 DO P11			T Transfer of problematic.			
Type:	ayer (ii observed).									
-	-h).						Hydric Soil Prese	40	Vaa	No X
	ches):							nt?	Yes	NO ^

Project/Site: Pine County Solar	City/County: Pine Sampling Date: 09/15/2022						
Applicant/Owner: Swift Current Energy	State: Min Sampling Point: W35-1w						
Investigator(s): Jlk drj	Section, Township, Range: T044N, R020W, S25						
•	relief (concave, convex, none): Concave Slope %: 2-3						
·							
Subregion (LRR or MLRA): LRR K, MLRA 90A Lat: 46.265748	Long: -92.804634 Datum: WGS84						
Soil Map Unit Name: No Digital Data Available	NWI classification: None						
Are climatic / hydrologic conditions on the site typical for this time of year?	Yes No X (If no, explain in Remarks.)						
Are Vegetation , Soil , or Hydrology significantly distr	turbed? Are "Normal Circumstances" present? Yes X No						
Are Vegetation , Soil , or Hydrology naturally probler	matic? (If needed, explain any answers in Remarks.)						
SUMMARY OF FINDINGS – Attach site map showing sampling p							
Hydrophytic Vegetation Present? Yes X No	Is the Sampled Area						
Hydric Soil Present? Yes X No	within a Wetland? Yes X No						
Wetland Hydrology Present?	If yes, optional Wetland Site ID: W35						
Remarks: (Explain alternative procedures here or in a separate report.) Drier than normal conditions							
HYDROLOGY							
Wetland Hydrology Indicators:	Secondary Indicators (minimum of two required)						
Primary Indicators (minimum of one is required; check all that apply)	Surface Soil Cracks (B6)						
Surface Water (A1) Water-Stained Leaves (B9)	Drainage Patterns (B10)						
High Water Table (A2) Aquatic Fauna (B13)	Moss Trim Lines (B16)						
Saturation (A3) Marl Deposits (B15)	Dry-Season Water Table (C2)						
Water Marks (B1) Hydrogen Sulfide Odor (C1)	Crayfish Burrows (C8)						
Sediment Deposits (B2) Oxidized Rhizospheres on L	<u> </u>						
Drift Deposits (B3) Presence of Reduced Iron (C							
Algal Mat or Crust (B4) Recent Iron Reduction in Till	· /						
Iron Deposits (B5) Thin Muck Surface (C7)	Shallow Aquitard (D3)						
Inundation Visible on Aerial Imagery (B7) Other (Explain in Remarks)	Microtopographic Relief (D4) X FAC-Neutral Test (D5)						
Sparsely Vegetated Concave Surface (B8)	A FAC-Neutral Lest (D5)						
Field Observations:							
Surface Water Present Yes No X Depth (inches							
Water Table Present Yes No X Depth (inches Saturation Present Yes No X Depth (inches	, 						
Saturation Present Yes No X Depth (inches includes capillary fringe)	S): Wetland Hydrology Present? Yes X No						
Describe Recorded Data (stream gauge, monitoring well, aerial photos, pro	revious inspections) if available:						
Doorling Noorland Data (officially gauge),	evious inspections, in available.						
Remarks:							

Tree Stratum (Plot size: 30 ft)	Absolute % Cover	Dominant Species	Indicator Status	Dominance Test worksheet:
1				Number of Dominant Species That Are OBL, FACW, or FAC:4 (A)
3 4 5.				Total Number of Dominant Species Across All Strata:4(B)
5				Percent of Dominant Species That Are OBL, FACW, or FAC:(A/B)
	0			Prevalence Index worksheet:
Sapling/Shrub Stratum (Plot size: 15 ft)		_ = Total Cover	•	Total % Cover of: Multiply by:
1 Salix discolor	40	Yes	FACW	OBL species x 1 =
0. 41			FACW	FACW species x 2 =
2. Alnus incana 3.			_	FAC species x 3 =
4.				FACU species x 4 =
5.				UPL species x 5 =
6.				Column Totals: (A)(B)
7.				Prevalence Index = B/A =
				Hydrophytic Vegetation Indicators:
	45	= Total Cover		X 1 - Rapid Test for Hydrophytic Vegetation
Herb Stratum (Plot size: 5 ft)				X 2 - Dominance Test is >50%
1. Salix discolor	45	Yes	FACW	- 3 - Prevalence Index is ≤3.0¹
2. Poa palustris	15	No	FACW	
3. Scirpus cyperinus	15	Yes	OBL	4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet)
4. Carex vulpinoidea	12	Yes	OBL	Dueble media 1 hadron badia Vanatatia n1 (Fambia)
5. <u>Scirpus atrovirens</u>	5	No	OBL	Problematic Hydrophytic Vegetation¹ (Explain)
6. <u>Eutrochium maculatum</u>	5	No	OBL	¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
7. <u>Symphyotrichum lanceolatum</u>	3	No	FACW	
8. <u>Doellingeria umbellata</u>	3	No	FACW	Definitions of Vegetation Strata:
9.				Tree – Woody plants 3 in. (7.6 cm) or more in
10				diameter at breast height (DBH), regardless of height.
11 12				Sapling/shrub – Woody plants less than 3 in. DBH
12.				and greater than or equal to 3.28 ft (1 m) tall.
	103	= Total Cover		Herb – All herbaceous (non-woody) plants, regardless
Woody Vine Stratum (Plot size: 30 ft)				of size, and woody plants less than 3.28 ft tall.
1				Woody vines – All woody vines greater than 3.28 ft in
2				height.
3				
4				Hydrophytic
	0	= Total Cover		Vegetation Present? YesX
Remarks: (Include photo numbers here or on a separ	rato choot)			
Remarks. (include prioto numbers here or on a separ	ale Sileel.)			

Sampling Point:

W35-1w

SOIL Sampling Point: W35-1w

				or or co	nfirm the absence of	f indicators.)
				1002	Toyturo	Remarks
moist) %	Color (moist)	70	Type	LOC-	rexture	Remarks
/2 95	10YR 5/6	5	С	M	Silt Loam	Refusal on rock at 8 inches
n, D=Depletion, RI	M=Reduced Matrix, N	√S=Mas	ked Sand	Grains.	² Location: PL=F	Pore Lining, M=Matrix.
					Indicators	for Problematic Hydric Soils ³ :
	Polyvalue Below	/ Surface	(S8) (LRR	R,	2 cm Mu	uck (A10) (LRR K, L, MLRA 149B)
	MLRA 149B)				·	Prairie Redox (A16) (LRR K, L, R)
	Thin Dark Surface	ce (S9) (L	RR R, ML	RA 149B) 5 cm Mi	ucky Peat or Peat (S3) (LRR K, L, R)
	High Chroma Sa	ands (S11) (LRR K,	L)	Polyvalu	ue Below Surface (S8) (LRR K, L)
	Loamy Mucky M	lineral (F1	I) (LRR K,	L)	Thin Da	rk Surface (S9) (LRR K, L)
Surface (A11)	Loamy Gleyed N	∕latrix (F2)		Iron-Ma	nganese Masses (F12) (LRR K, L, R)
12)	Depleted Matrix	(F3)			Piedmo	nt Floodplain Soils (F19) (MLRA 149B)
(S1)	Redox Dark Sur	face (F6)			Mesic S	Spodic (TA6) (MLRA 144A, 145, 149B)
S4)	Depleted Dark S	Surface (F	7)		Red Pa	rent Material (F21)
	X Redox Depressi	ons (F8)			Very Sh	nallow Dark Surface (F22)
	Marl (F10) (LRR	K, L)			Other (E	Explain in Remarks)
c vegetation and v	vetland hydrology mu	ıst be pr	esent, un	less dist	urbed or problematic.	
served):	, ,,	<u> </u>	· ·		· ·	
					Hydric Soil Prese	ent? Yes X No
					1	
	Matrix moist) % /2 95 n, D=Depletion, RI Surface (A11) 12) (S1) S4) c vegetation and vegetati	Matrix Redo moist) % Color (moist) /2 95 10YR 5/6	Matrix Redox Feature Moist) % Color (moist) % /2 95 10YR 5/6 5 n, D=Depletion, RM=Reduced Matrix, MS=Mas — Polyvalue Below Surface MLRA 149B) — Thin Dark Surface (S9) (L — High Chroma Sands (S11 — Loamy Mucky Mineral (F1) Loamy Mucky Mineral (F2) Surface (A11) — Depleted Matrix (F3) — Redox Dark Surface (F6) X Redox Depressions (F8) — Marl (F10) (LRR K, L) c vegetation and wetland hydrology must be preserved):	Matrix Redox Features moist) % Color (moist) % Type¹ /2 95 10YR 5/6 5 C n, D=Depletion, RM=Reduced Matrix, MS=Masked Sand — Polyvalue Below Surface (S8) (LRR MLRA 149B) — Thin Dark Surface (S9) (LRR R, ML High Chroma Sands (S11) (LRR K, Loamy Mucky Mineral (F1) (LRR K, Loamy Mucky Mineral (F1) (LRR K, Loamy Gleyed Matrix (F2) 12) Depleted Matrix (F3) (S1) Redox Dark Surface (F6) S4) Depleted Dark Surface (F8) — Marl (F10) (LRR K, L) c vegetation and wetland hydrology must be present, universerved):	Matrix Redox Features Redox Features	Color (moist)

Project/Site: Pine County Solar	City/County: Pine Sampling Date: 09/15/2022
Applicant/Owner: Swift Current Energy	State: Min Sampling Point: W36-1u
Investigator(s): Jlk drj	Section, Township, Range: T044N, R020W, S25
• • •	relief (concave, convex, none): Convex Slope %: 2-3
Subregion (LRR or MLRA): LRR K, MLRA 90A Lat: 46.264213	· · · · · · · · · · · · · · · · · · ·
<u> </u>	
Soil Map Unit Name: No Digital Data Available	NWI classification: None
Are climatic / hydrologic conditions on the site typical for this time of year?	Yes No X (If no, explain in Remarks.)
Are Vegetation , Soil , or Hydrology significantly distr	urbed? Are "Normal Circumstances" present? Yes X No
Are Vegetation , Soil , or Hydrology naturally problem	matic? (If needed, explain any answers in Remarks.)
SUMMARY OF FINDINGS – Attach site map showing sampling po	oint locations, transects, important features, etc.
Hydrophytic Vegetation Present? Yes No X	Is the Sampled Area
Hydric Soil Present? Yes No X	within a Wetland? Yes No X
Wetland Hydrology Present? Yes No X	If yes, optional Wetland Site ID: W36
Drier than normal	
HYDROLOGY	
Wetland Hydrology Indicators:	Secondary Indicators (minimum of two required)
Primary Indicators (minimum of one is required; check all that apply)	Surface Soil Cracks (B6)
Surface Water (A1) Water-Stained Leaves (B9)	Drainage Patterns (B10)
High Water Table (A2) Aquatic Fauna (B13)	Moss Trim Lines (B16)
Saturation (A3) Marl Deposits (B15)	Dry-Season Water Table (C2)
Water Marks (B1) Hydrogen Sulfide Odor (C1)	Crayfish Burrows (C8)
Sediment Deposits (B2) Oxidized Rhizospheres on Li	<u> </u>
Presence of Reduced Iron (C	
Algal Mat or Crust (B4) Recent Iron Reduction in Tille	
Iron Deposits (B5) Thin Muck Surface (C7)	Shallow Aquitard (D3)
Inundation Visible on Aerial Imagery (B7) Other (Explain in Remarks)	Microtopographic Relief (D4)
Sparsely Vegetated Concave Surface (B8)	FAC-Neutral Test (D5)
Field Observations:	
Surface Water Present Yes No X Depth (inches	
Water Table Present Yes No X Depth (inches	·
Saturation Present Yes No X Depth (inches	S): Wetland Hydrology Present? Yes No _X
(includes capillary fringe)	
Describe Recorded Data (stream gauge, monitoring well, aerial photos, pre	evious inspections), if available:
Remarks:	
Remarks.	

<u>Tree Stratum</u> (Plot size: <u>30 ft</u>)	Absolute % Cover	Dominant Species	Indicator 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)
6.				Percent of Dominant Species That Are OBL, FACW, or FAC: 0 (A/B)
7	-			Prevalence Index worksheet:
	0	= Total Cover		Total % Cover of: Multiply by:
Sapling/Shrub Stratum (Plot size:15 ft)		_ = 10101 00101		OBL species x 1 =
1				FACW species x 2 =
2				
3				FAC species x 3 =
4				FACU species x 4 =
5				UPL species x 5 =
6				Column Totals: (A)(B)
7				Prevalence Index = B/A =
	0			Hydrophytic Vegetation Indicators:
Herb Stratum (Plot size: 5 ft)		= Total Cover		1 - Rapid Test for Hydrophytic Vegetation
1. Poa pratensis	55	Yes	FACU	_ 2 - Dominance Test is >50%
2. Setaria pumila	20	No	FAC	_ 3 - Prevalence Index is ≤3.0¹
3. Phleum pratense	20	Yes	FACU	4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet)
4Trifolium pratense	3	No	FACU	(1 Tovide Supporting data in Normano of Off a Separate Sireet)
5. Taraxacum officinale	3	No	FACU	Problematic Hydrophytic Vegetation¹ (Explain)
6				¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
7.				distribed of problematic.
8				Definitions of Vegetation Strata:
9				
10				Tree – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.
11				diameter at breast neight (DBH), regardless of height.
12				Sapling/shrub – Woody plants less than 3 in. DBH
	101			and greater than or equal to 3.28 ft (1 m) tall.
Woody Vine Stratum (Plot size: 30 ft)		= Total Cover		Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.
1.				
2.				Woody vines – All woody vines greater than 3.28 ft in height.
3.				noight.
4				Hydrophytic
				Vegetation
	0	= Total Cover		Present? Yes NoX
Remarks: (Include photo numbers here or on a separa	ate sheet.)			

Sampling Point:

W36-1u

SOIL Sampling Point: W36-1u

Profile Desc Depth	ription: (Describ Matrix			ment th x Featur		tor or co	onfirm the absence of indicators.)		
(inches)	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²	Texture Remarks		
0-7	2.5YR 4/2	100	, , ,				Sandy Clay Loam		
7-14	5YR 4/2	95	5YR 4/4	5	С	М	Sandy Clay Loam		
	0111 1/2				<u> </u>		Curicy Citaly Estatis		
	-								
	-						-		
							·		
							·		
¹Type: C=Co	oncentration, D=D	Depletion, RN	/=Reduced Matrix, N	√S=Mas	ked San	d Grains.	s. ² Location: PL=Pore Lining, M=Matrix.		
Hydric Soil I	Indicators:						Indicators for Problematic Hydric Soils ³ :		
Histosol ((A1)		Polyvalue Below	/ Surface	(S8) (LRF	R,	2 cm Muck (A10) (LRR K, L, MLRA 149B)		
Histic Epi	ipedon (A2)		MLRA 149B)				Coast Prairie Redox (A16) (LRR K, L, R)		
Black His	stic (A3)		Thin Dark Surfa	ce (S9) (L	RR R, ML	RA 149B	5 cm Mucky Peat or Peat (S3) (LRR K, L, R)		
	n Sulfide (A4)		High Chroma Sa				Polyvalue Below Surface (S8) (LRR K, L)		
	Layers (A5)		Loamy Mucky M			, L)	Thin Dark Surface (S9) (LRR K, L)		
	Below Dark Surface	e (A11)	Loamy Gleyed N)		Iron-Manganese Masses (F12) (LRR K, L, R)		
	rk Surface (A12)		Depleted Matrix				Piedmont Floodplain Soils (F19) (MLRA 149B)		
	ucky Mineral (S1) leyed Matrix (S4)		Redox Dark Sur Depleted Dark S		. 7)		Mesic Spodic (TA6) (MLRA 144A, 145, 149B) Red Parent Material (F21)		
Sandy Re			Redox Depressi	•	')		Very Shallow Dark Surface (F22)		
	Matrix (S6)		Marl (F10) (LRR	. ,			Other (Explain in Remarks)		
Dark Surf	` '			. ,					
³ Indicators of	f hydrophytic yeae	etation and w	retland hydrology mu	ıst be pr	esent. ur	nless dist	sturbed or problematic.		
	Layer (if observe		, , , , , , ,		,-		T		
Type:	.,	,							
Depth (ir	nches):						Hydric Soil Present? Yes No	Χ	
Remarks:									

Project/Site: Pine County Solar	City/County: Pine Sampling Date: 09/15/2022
Applicant/Owner: Swift Current Energy	State: Min Sampling Point: W36-1w
Investigator(s): JLK, DRJ	Section, Township, Range: T044N, R020W, S25
	relief (concave, convex, none): Concave Slope %: 1-3
Subregion (LRR or MLRA): LRR K, MLRA 90A Lat: 46.26403	Long: -92.807134 Datum: WGS84
	NWI classification: PSS1D
Soil Map Unit Name: No Digital Data Available	
Are climatic / hydrologic conditions on the site typical for this time of year?	Yes No _X (If no, explain in Remarks.)
Are Vegetation , Soil , or Hydrology significantly dist	
Are Vegetation, Soil, or Hydrology naturally problem	matic? (If needed, explain any answers in Remarks.)
SUMMARY OF FINDINGS – Attach site map showing sampling p	oint locations, transects, important features, etc.
Lhudrashutia Varatetiaa Prasanta	le the Commission Area
Hydrophytic Vegetation Present? Yes X No Yes X No Yes X No	Is the Sampled Area within a Wetland? Yes X No
Wetland Hydrology Present? Yes X No	If yes, optional Wetland Site ID: W36
	ii yoo, optional violana olee ib.
Remarks: (Explain alternative procedures here or in a separate report.) Drier than normal	
Biller than normal	
HYDROLOGY	
	Occasional Indicators (minimum of two arms in al)
Wetland Hydrology Indicators:	Secondary Indicators (minimum of two required)
Primary Indicators (minimum of one is required; check all that apply)	Surface Soil Cracks (B6)
Surface Water (A1) X Water-Stained Leaves (B9)	Drainage Patterns (B10)
High Water Table (A2) Aquatic Fauna (B13)	Moss Trim Lines (B16)
Saturation (A3) Marl Deposits (B15)	Dry-Season Water Table (C2)
Water Marks (B1) Hydrogen Sulfide Odor (C1)	
Sediment Deposits (B2) Oxidized Rhizospheres on L	
Drift Deposits (B3) Presence of Reduced Iron (C	<u></u>
Algal Mat or Crust (B4) Recent Iron Reduction in Till Iron Respective (B5)	Shallow Aquitard (D3)
Iron Deposits (B5) Thin Muck Surface (C7)	Microtopographic Relief (D4)
Inundation Visible on Aerial Imagery (B7) Other (Explain in Remarks)	X FAC-Neutral Test (D5)
Sparsely Vegetated Concave Surface (B8)	
Field Observations:	
Surface Water Present Yes No X Depth (inches	
Water Table Present Yes No X Depth (inches	
Saturation Present Yes No X Depth (inches	S): Wetland Hydrology Present? Yes X No
(includes capillary fringe)	
Describe Recorded Data (stream gauge, monitoring well, aerial photos, pro	evious inspections), if available:
Remarks:	

Tree Stratum (Plot size: 30 ft)	Absolute % Cover		Indicator Status	Dominance Test worksheet:
1. Populus tremuloides	15	Yes	FAC	
Betula papyrifera	2		FACU	Number of Dominant Species That Are OBL, FACW, or FAC:6 (A)
3 4				Total Number of Dominant Species Across All Strata:6(B)
5				Percent of Dominant Species That Are OBL, FACW, or FAC: 100 (A/B)
7				
	17	_ = Total Cover		Prevalence Index worksheet: Total % Cover of: Multiply by:
Sapling/Shrub Stratum (Plot size: 15 ft)				OBL species x 1 =
1. Alnus incana	25	Yes	FACW	FACW species x 2 =
2. Salix discolor	20	Yes	FACW	FAC species x 3 =
3. Rubus idaeus	5	Yes	FAC	
4. <u>Ilex verticillata</u>	3	<u>No</u>	FACW	·
5. Rhamnus cathartica	2	No	FAC	<u> </u>
6				Column Totals: (A) (B)
7				Prevalence Index = B/A =
	55			Hydrophytic Vegetation Indicators:
5 ft)		= Total Cover		1 - Rapid Test for Hydrophytic Vegetation
Herb Stratum (Plot size: 5 ft)	05	V.	E4014/	X 2 - Dominance Test is >50%
1. Rubus pubescens	25	Yes	FACW	- 3 - Prevalence Index is ≤3.0¹
Calamagrostis canadensis	25	Yes	OBL	4 - Morphological Adaptations ¹
Onoclea sensibilis	10	No	FACW	(Provide supporting data in Remarks or on a separate sheet)
Solidago gigantea	5	No	FACW	Problematic Hydrophytic Vegetation ¹ (Explain)
5. <u>Carex intumescens</u>	5	No	FACW	¹Indicators of hydric soil and wetland hydrology must be present, unless
6. <u>Phalaris arundinacea</u>	5	No	FACW	disturbed or problematic.
7. <u>Carex lacustris</u>	5	No	OBL	
8. <u>Cicuta maculata</u>	2	No	OBI	Definitions of Vegetation Strata:
9				Tree – Woody plants 3 in. (7.6 cm) or more in
10				diameter at breast height (DBH), regardless of height.
11 12		· ·		Sapling/shrub – Woody plants less than 3 in. DBH
·	82	= Total Cover		and greater than or equal to 3.28 ft (1 m) tall.
Woody Vine Stratum (Plot size: 30 ft)		= Total Cover		Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.
1				of size, and woody plants less than 3.20 it tall.
				Woody vines – All woody vines greater than 3.28 ft in
_				height.
		·		Hydrophysia
4	0	= Total Cover		Hydrophytic Vegetation Present? Yes X No
		= TOTAL COVER		
Remarks: (Include photo numbers here or on a separa	ate sheet.)			

Sampling Point:

W36-1w

SOIL Sampling Point: W36-1w

Profile Descr Depth	ription: (Describe to Matrix	the de		ı <mark>ment th</mark> ox Featur		tor or co	onfirm the absence of indic	ators.)	
(inches)	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²	Texture	Remarks	
0-4	10YR 3/1	100	Color (molot)		Турс		TOXIGIO	Romano	
4-12	10YR 3/1	85	5YR 4/4	15	С		Silt Loam		
	10111 3/1		31K 4/4	10		141	OII LOUITI		
			-						
				· ——					
			-						
			-						
¹ Type: C=Co	oncentration, D=Depl	etion, RI	M=Reduced Matrix,	MS=Mas	ked San	d Grains			
Hydric Soil Ir								blematic Hydric Soils ³ :	
Histosol (A	,		Polyvalue Belov	w Surface	(S8) (LRF	₹R,		0) (LRR K, L, MLRA 149B)	
Black Hist	pedon (A2)		MLRA 149B) Thin Dark Surfa	nce (S9) (I	RRR MI	R	<u> </u>	edox (A16) (LRR K, L, R) at or Peat (S3) (LRR K, L, R)	
	Sulfide (A4)		High Chroma S				·	w Surface (S8) (LRR K, L)	
	Layers (A5)		Loamy Mucky N				 -	ace (S9) (LRR K, L)	
	Below Dark Surface (A1	1)	Loamy Gleyed	-		, =/		e Masses (F12) (LRR K, L, R)	
	k Surface (A12)	,	Depleted Matrix		,		Piedmont Floodplain Soils (F19) (MLRA 149B)		
	icky Mineral (S1)		X Redox Dark Su					ΓΑ6) (MLRA 144A, 145, 149B)	
Sandy Gle	eyed Matrix (S4)		Depleted Dark		7)		Red Parent Ma		
Sandy Red	dox (S5)		Redox Depress	ions (F8)			Very Shallow D	ark Surface (F22)	
Stripped M	Matrix (S6)		Marl (F10) (LRF	R K, L)			Other (Explain	n Remarks)	
Dark Surfa	ace (S7)								
³ Indicators of	hydrophytic vegetation	on and v	vetland hydrology m	ust be pr	esent, ur	nless dis	turbed or problematic.		
Restrictive L	ayer (if observed):								
Type:									
Depth (in	ches):						Hydric Soil Present?	Yes <u>X</u> No	
Remarks:							•		

Project/Site: Pine County Solar	City/County: Pine Sampling Date: 09/15/2022				
Applicant/Owner: Swift Current Energy	State: Min Sampling Point: W37-1u				
Investigator(s): Jlk drj	Section, Township, Range: T044N, R020W, S25				
	relief (concave, convex, none): Concave Slope %: 2-5				
Subregion (LRR or MLRA): LRR K, MLRA 90A Lat: 46.265919	Long: -92.8092 Datum: WGS84				
Soil Map Unit Name: No Digital Data Available	NWI classification: None				
Are climatic / hydrologic conditions on the site typical for this time of year?	Yes No X (If no, explain in Remarks.)				
, ,	_				
Are Vegetation, Soil, or Hydrology significantly dist	(If a so dead, sometimes are some in December)				
Are Vegetation, Soil, or Hydrology naturally problem	matic? (Il needed, explain any answers in Nemarks.)				
SUMMARY OF FINDINGS – Attach site map showing sampling p	point locations, transects, important features, etc.				
Hydrophytic Vegetation Present? Yes No X	Is the Sampled Area				
Hydric Soil Present? Hydric Soil Present? Yes No X Yes No X	within a Wetland? Yes No X				
Wetland Hydrology Present? Yes No X	If yes, optional Wetland Site ID: W37				
Remarks: (Explain alternative procedures here or in a separate report.)					
Drier than normal.					
HYDROLOGY					
Wetland Hydrology Indicators:	Secondary Indicators (minimum of two required)				
Primary Indicators (minimum of one is required; check all that apply)	Surface Soil Cracks (B6)				
Surface Water (A1) Water-Stained Leaves (B9)	Drainage Patterns (B10)				
High Water Table (A2) Aquatic Fauna (B13)	Moss Trim Lines (B16)				
Saturation (A3) Marl Deposits (B15)	Dry-Season Water Table (C2)				
Water Marks (B1) Hydrogen Sulfide Odor (C1)					
Sediment Deposits (B2) Oxidized Rhizospheres on L	Living Roots (C3) Saturation Visible on Aerial Imagery (C9)				
Drift Deposits (B3) Presence of Reduced Iron (0					
Algal Mat or Crust (B4) Recent Iron Reduction in Till	• •				
Iron Deposits (B5) Thin Muck Surface (C7)	Shallow Aquitard (D3)				
Inundation Visible on Aerial Imagery (B7) Other (Explain in Remarks)	Microtopographic Relief (D4)				
Sparsely Vegetated Concave Surface (B8)	FAC-Neutral Test (D5)				
Field Observations:					
Surface Water Present Yes No X Depth (inches	3):				
Water Table Present Yes No _X Depth (inches					
Saturation Present Yes No X Depth (inches	S): Wetland Hydrology Present? Yes No _X_				
(includes capillary fringe)					
Describe Recorded Data (stream gauge, monitoring well, aerial photos, pr	evious inspections), if available:				
Percela					
Remarks:					

Tree Stratum (Plot size: 30 ft)	Absolute % Cover	Dominant Species	Indicator Status	Dominance Test worksheet:
Populus tremuloides 2.	45	No No	FAC	Number of Dominant Species That Are OBL, FACW, or FAC:(A)
3		·		Total Number of Dominant Species Across All Strata: 3 (B)
5				Percent of Dominant Species That Are OBL, FACW, or FAC:33(A/B)
7				Prevalence Index worksheet:
	45	_ = Total Cover		Total % Cover of: Multiply by:
Sapling/Shrub Stratum (Plot size: 15 ft)				OBL species x 1 =
1. Cornus racemosa	10	No	FAC	FACW species x 2 =
2. Rhamnus cathartica	5	Yes	FAC	FAC species x 3 =
3. Alnus incana	2	No	FACW	
4. <u>Ilex verticillata</u>			FACW	FACU species x 4 =
5				UPL species x 5 =
6.			_	Column Totals: (A)(B)
7.				Prevalence Index = B/A =
				Hydrophytic Vegetation Indicators:
Herb Stratum (Plot size: 5 ft)	19	= Total Cover		1 - Rapid Test for Hydrophytic Vegetation
1. Eurybia macrophylla	40	Yes	UPL	2 - Dominance Test is >50%
2. Pteridium aquilinum	10	Yes	FACU	3 - Prevalence Index is ≤3.0¹
3. Fragaria virginiana	5	No	FACU	4 - Morphological Adaptations ¹
4. Sanicula marilandica	5	No	FACU	(Provide supporting data in Remarks or on a separate sheet)
			17.00	Problematic Hydrophytic Vegetation ¹ (Explain)
				¹Indicators of hydric soil and wetland hydrology must be present, unless
				disturbed or problematic.
7.				
8.				Definitions of Vegetation Strata:
9.				Tree – Woody plants 3 in. (7.6 cm) or more in
10				diameter at breast height (DBH), regardless of height.
11		-		Sapling/shrub – Woody plants less than 3 in. DBH
12				and greater than or equal to 3.28 ft (1 m) tall.
	60	Total Cover		
Woody Vine Stratum (Plot size: 30 ft)		= Total Cover		Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.
1		 ·		Woody vines – All woody vines greater than 3.28 ft in
2				height.
3				
4				Hydrophytic
	0	= Total Cover		Vegetation Present? Yes No _X
Remarks: (Include photo numbers here or on a separa	ate sheet.)			

Sampling Point:

W37-1u

SOIL Sampling Point: W37-1u

		the depth				or or co	onfirm the absence of indi	cators.)
Depth (inches)	Matrix Color (moist)	<u></u> %	Color (moist)	x Featur %	Type ¹	Loc ²	Texture	Remarks
(ITICITES)			Color (moist)	70	Туре	LUC	Texture	Remarks
0-14	10YR 3/2	100					Silt Loam	
¹Type: C=C	oncentration, D=Deple	etion, RM=I	Reduced Matrix, I	√S=Mas	ked Sand	Grains.	² Location: PL=Pore	Lining, M=Matrix.
Hydric Soil	Indicators:						Indicators for P	roblematic Hydric Soils ³ :
Histosol	(A1)	_	Polyvalue Below	V Surface	(S8) (LRR	R,	2 cm Muck (A	10) (LRR K, L, MLRA 149B)
Histic Ep	ipedon (A2)		MLRA 149B)					Redox (A16) (LRR K, L, R)
Black His		_	Thin Dark Surfa	ce (S9) (L	.RR R, ML	RA 149B) 5 cm Mucky F	Peat or Peat (S3) (LRR K, L, R)
Hydroger	n Sulfide (A4)	_	High Chroma Sa	ands (S11) (LRR K,	L)	Polyvalue Bel	low Surface (S8) (LRR K, L)
Stratified	Layers (A5)	_	Loamy Mucky M	lineral (F1	I) (LRR K,	L)	Thin Dark Su	rface (S9) (LRR K, L)
Depleted	Below Dark Surface (A1	1)	Loamy Gleyed N	Matrix (F2))		Iron-Mangane	ese Masses (F12) (LRR K, L, R)
Thick Da	rk Surface (A12)	_	Depleted Matrix	(F3)			Piedmont Flo	odplain Soils (F19) (MLRA 149B)
Sandy M	ucky Mineral (S1)	_	Redox Dark Sur	face (F6)			Mesic Spodic	(TA6) (MLRA 144A, 145, 149B)
Sandy G	leyed Matrix (S4)	_	Depleted Dark S	Surface (F	7)		Red Parent M	laterial (F21)
Sandy Re	edox (S5)	_	Redox Depressi	ons (F8)			Very Shallow	Dark Surface (F22)
Stripped	Matrix (S6)	_	Marl (F10) (LRR	k K, L)			Other (Explain	n in Remarks)
Dark Sur	face (S7)							
³ Indicators of	f hydrophytic vegetation	on and wetl	land hydrology mi	ust be pr	esent. un	less dist	turbed or problematic.	
	Layer (if observed):			<u> </u>				
Type:	, ,							
•	nches):						Hydric Soil Present?	Yes No X
Remarks:	· <u> </u>							
Nemaiks.								

Project/Site: Pine County Solar	City/County: Pine Sampling Date: 09/15/2022
Applicant/Owner: Swift Current Energy	State: Min Sampling Point: W37-1w
Investigator(s): Jlk drj	Section, Township, Range: T044N, R020W, S25
· · · · · · · · · · · · · · · · · · ·	relief (concave, convex, none): Concave Slope %: 1-3
Subregion (LRR or MLRA): LRR K, MLRA 90A Lat: 46.265963	Long: -92.809098 Datum: WGS84
	NWI classification: PFO1A
Soil Map Unit Name: No Digital Data Available	
Are climatic / hydrologic conditions on the site typical for this time of year?	Yes No _X (If no, explain in Remarks.)
Are Vegetation , Soil , or Hydrology significantly dist	
Are Vegetation, Soil, or Hydrology naturally problem	matic? (If needed, explain any answers in Remarks.)
SUMMARY OF FINDINGS – Attach site map showing sampling p	oint locations, transects, important features, etc.
Hadrada fa Vandafaa Baraada	Latte Committed Area
Hydrophytic Vegetation Present? Yes X No Yes X No Yes X No	Is the Sampled Area within a Wetland? Yes X No
Wetland Hydrology Present? Yes X No	If yes, optional Wetland Site ID: W37
	ii yoo, optional violana olee ib.
Remarks: (Explain alternative procedures here or in a separate report.) Drier than normal	
Billi than normal	
HYDROLOGY	
Wetland Hydrology Indicators:	Secondary Indicators (minimum of two required)
Primary Indicators (minimum of one is required; check all that apply)	Secondary Indicators (minimum of two required) Surface Soil Cracks (B6)
Surface Water (A1) X Water-Stained Leaves (B9)	Drainage Patterns (B10)
	Moss Trim Lines (B16)
<u> </u>	Dry-Season Water Table (C2)
	
Water Marks (B1) Hydrogen Sulfide Odor (C1) Sediment Deposits (B2) Oxidized Rhizospheres on L	
Drift Deposits (B3) — Oxidized Milizospheres of E	
Algal Mat or Crust (B4) Recent Iron Reduction in Till	,
Iron Deposits (B5) Thin Muck Surface (C7)	Shallow Aquitard (D3)
Inundation Visible on Aerial Imagery (B7) Other (Explain in Remarks)	Microtopographic Relief (D4)
Sparsely Vegetated Concave Surface (B8)	X FAC-Neutral Test (D5)
Field Observations:	
<u> </u>	
Saturation Present Yes No X Depth (inches (includes capillary fringe)	S): Wetland Hydrology Present? Yes X No
Describe Recorded Data (stream gauge, monitoring well, aerial photos, pro	avious inspections) if available:
Describe Necorded Data (stream gauge, monitoring well, aerial photos, ph	evious inspections), ii available.
Remarks:	
Nomano.	

1. Populus tremuloides 5 Yes FAC 2. Acer rubrum 3 Yes FAC 3. Seed to be a construction of the population of the p	
2. Acer rubrum 3 Yes FAC That Are OBL, FACW, or FAC: 6 3	
	(A)
4 Total Number of Dominant Species Across All Strata: 6	(B)
5	, (-)
6. Percent of Dominant Species That Are OBL, FACW, or FAC: 100	(A/B)
7. That Are OBL, FACW, or FAC: 100 Prevalence Index worksheet:	(A/B)
8 Total W. Course of	
= Total cover	-
ODE SPECIES ATT	_
1. Ainus incana 25 Yes FACW FACW species x 2 = 2. Salix discolor 15 Yes FACW TAC	_
3. <u>Ilex verticillata</u> 5 No FACW FACULAR SIGNAL STATES AND FACULAR SIGNAL SIGNA	-
4 FACU species x 4 =	_
5 UPL species x 5 =	_
6 Column Totals: (A)	(B)
7 Prevalence Index = B/A =	_
Hydrophytic Vegetation Indicators:	
45 = Total Cover 1 - Rapid Test for Hydrophytic Vegetation	
Herb Stratum (Plot size: 5 ft) X 2 - Dominance Test is >50%	
1. Calamagrostis canadensis 55 Yes OBL 3 - Prevalence Index is ≤3.0¹	
2. Equisetum palustre 25 Yes FACW 4 - Morphological Adaptations ¹	
3. Attrifficition aspire includes — 5 No PAC (Provide supporting data in Remarks or on a separate she	∍t)
4. Onoclea sensibilis 5 No FACW 5 Eutrophium magulatum 5 No OBL Problematic Hydrophytic Vegetation¹ (Expla	in)
J. LutioCritism Maculatum J. No. ODL.	
6. Scirpus cyperinus 2 No OBL disturbed or problematic.	4111000
7	
8 Definitions of Vegetation Strata:	
9 Tree – Woody plants 3 in. (7.6 cm) or more in	
10 diameter at breast height (DBH), regardless of h	eight.
11 Sapling/shrub – Woody plants less than 3 in. D	вн
and greater than or equal to 3.28 ft (1 m) tall.	
= Total Cover Herb – All herbaceous (non-woody) plants, rega	rdless
Woody Vine Stratum (Plot size: 30 ft) of size, and woody plants less than 3.28 ft tall.	
1	00 ft in
2 Woody vines – All woody vines greater than 3.2 height.	.0 11 111
3	
4 Hydrophytic	
Vegetation 0 - Total Cover Present? Yes X No	
0 = Total Cover Present? Yes X No	
Remarks: (Include photo numbers here or on a separate sheet.)	

Sampling Point:

W37-1w

SOIL Sampling Point: W37-1w

Depth Matrix Redox Features	Profile Desc Depth	ription: (Describe to matrix	the dep				tor or co	onfirm the absence of indi	cators.)
Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. This concentration, D=Depletion, RM=Reduced Sand Grains. This concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. This concentration, D=Depletion, RM=Reduced Sand Grains. This concentration, D=Depletion, RM=Reduced Sand Grains. This concentration, D=Depletion RM=Reduced Sand Grains. This concentration, D=Depletion RM=Reduced Sand Grains. T			%				Loc ²	Texture	Remarks
Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. **Public Soil Indicators:** Historsol (A1)									
Hydric Soil Indicators: Histosol (A1)	0-14	101R 3/1	95	101R 4/6			IVI	Silt Loam	
Hydric Soil Indicators: Histosol (A1) Polyvalue Below Surface (S8) (LRR R, 2 cm Muck (A10) (LRR K, L, MLRA 149B) Histic Epipedon (A2) MLRA 149B) Black Histic (A3) Thin Dark Surface (S9) (LRR R, MLRA 149B) Stratified Layers (A5) Loamy Mucky Mineral (F1) (LRR K, L) Thick Dark Surface (A11) Loamy Gleyed Matrix (F2) Sandy Mucky Mineral (S1) Sandy Mucky Mineral (S1) Sandy Gleyed Matrix (S4) Depleted Dark Surface (F6) Sandy Redox (S5) Redox Dark Surface (F7) Red Parent Material (F21) Sandy Redox (S5) Marl (F10) (LRR K, L) Other (Explain in Remarks) Type: Type:				-					
Hydric Soil Indicators: Histosol (A1) Polyvalue Below Surface (S8) (LRR R, 2 cm Muck (A10) (LRR K, L, MLRA 149B) Histic Epipedon (A2) MLRA 149B) Black Histic (A3) Thin Dark Surface (S9) (LRR R, MLRA 149B) Stratified Layers (A5) Loamy Mucky Mineral (F1) (LRR K, L) Thick Dark Surface (A11) Loamy Gleyed Matrix (F2) Sandy Mucky Mineral (S1) Sandy Mucky Mineral (S1) Sandy Gleyed Matrix (S4) Depleted Dark Surface (F6) Sandy Redox (S5) Redox Dark Surface (F7) Red Parent Material (F21) Sandy Redox (S5) Marl (F10) (LRR K, L) Other (Explain in Remarks) Type: Type:									
Hydric Soil Indicators: Histosol (A1) Polyvalue Below Surface (S8) (LRR R, Listic Epipedon (A2) MLRA 149B) Black Histic (A3) High Chroma Sands (S11) (LRR K, L) Stratified Layers (A5) Depleted Below Dark Surface (A11) Thic Dark Surface (A11) Depleted Matrix (F3) Sandy Mucky Mineral (S1) Sandy Mucky Mineral (S1) Sandy Gleyed Matrix (S4) Depleted Dark Surface (F6) Sandy Redox (S5) Redox Depressions (F8) Marl (F10) (LRR K, L) Depleted Dark Surface (S7) Marl (F10) (LRR K, L) Depleted Dark Surface (S7) Marl (F10) (LRR K, L) Depleted Dark Surface (S7) Thick Dark Surface (S7) Mesic Spodic (TA6) (MLRA 144A, 145, 149B) Sandy Redox (S5) Redox Depressions (F8) Very Shallow Dark Surface (F22) Other (Explain in Remarks) Type: Type:									
Hydric Soil Indicators: Histosol (A1) Polyvalue Below Surface (S8) (LRR R, Listic Epipedon (A2) MLRA 149B) Black Histic (A3) High Chroma Sands (S11) (LRR K, L) Stratified Layers (A5) Depleted Below Dark Surface (A11) Thic Dark Surface (A11) Depleted Matrix (F3) Sandy Mucky Mineral (S1) Sandy Mucky Mineral (S1) Sandy Gleyed Matrix (S4) Depleted Dark Surface (F6) Sandy Redox (S5) Redox Depressions (F8) Marl (F10) (LRR K, L) Depleted Dark Surface (S7) Marl (F10) (LRR K, L) Depleted Dark Surface (S7) Marl (F10) (LRR K, L) Depleted Dark Surface (S7) Thick Dark Surface (S7) Mesic Spodic (TA6) (MLRA 144A, 145, 149B) Sandy Redox (S5) Redox Depressions (F8) Very Shallow Dark Surface (F22) Other (Explain in Remarks) Type: Type:									
Hydric Soil Indicators: Histosol (A1) Polyvalue Below Surface (S8) (LRR R, Listic Epipedon (A2) MLRA 149B) Black Histic (A3) High Chroma Sands (S11) (LRR K, L) Stratified Layers (A5) Depleted Below Dark Surface (A11) Thic Dark Surface (A11) Depleted Matrix (F3) Sandy Mucky Mineral (S1) Sandy Mucky Mineral (S1) Sandy Gleyed Matrix (S4) Depleted Dark Surface (F6) Sandy Redox (S5) Redox Depressions (F8) Marl (F10) (LRR K, L) Depleted Dark Surface (S7) Marl (F10) (LRR K, L) Depleted Dark Surface (S7) Marl (F10) (LRR K, L) Depleted Dark Surface (S7) Thick Dark Surface (S7) Mesic Spodic (TA6) (MLRA 144A, 145, 149B) Sandy Redox (S5) Redox Depressions (F8) Very Shallow Dark Surface (F22) Other (Explain in Remarks) Type: Type:									
Hydric Soil Indicators: Histosol (A1) Polyvalue Below Surface (S8) (LRR R, Listic Epipedon (A2) MLRA 149B) Black Histic (A3) High Chroma Sands (S11) (LRR K, L) Stratified Layers (A5) Depleted Below Dark Surface (A11) Thic Dark Surface (A11) Depleted Matrix (F3) Sandy Mucky Mineral (S1) Sandy Mucky Mineral (S1) Sandy Gleyed Matrix (S4) Depleted Dark Surface (F6) Sandy Redox (S5) Redox Depressions (F8) Marl (F10) (LRR K, L) Depleted Dark Surface (S7) Marl (F10) (LRR K, L) Depleted Dark Surface (S7) Marl (F10) (LRR K, L) Depleted Dark Surface (S7) Thick Dark Surface (S7) Mesic Spodic (TA6) (MLRA 144A, 145, 149B) Sandy Redox (S5) Redox Depressions (F8) Very Shallow Dark Surface (F22) Other (Explain in Remarks) Type: Type:									
Hydric Soil Indicators: Histosol (A1) Polyvalue Below Surface (S8) (LRR R, Listic Epipedon (A2) MLRA 149B) Black Histic (A3) High Chroma Sands (S11) (LRR K, L) Stratified Layers (A5) Depleted Below Dark Surface (A11) Thic Dark Surface (A11) Depleted Matrix (F3) Sandy Mucky Mineral (S1) Sandy Mucky Mineral (S1) Sandy Gleyed Matrix (S4) Depleted Dark Surface (F6) Sandy Redox (S5) Redox Depressions (F8) Marl (F10) (LRR K, L) Depleted Dark Surface (S7) Marl (F10) (LRR K, L) Depleted Dark Surface (S7) Marl (F10) (LRR K, L) Depleted Dark Surface (S7) Thick Dark Surface (S7) Mesic Spodic (TA6) (MLRA 144A, 145, 149B) Sandy Redox (S5) Redox Depressions (F8) Very Shallow Dark Surface (F22) Other (Explain in Remarks) Type: Type:									
Hydric Soil Indicators: Histosol (A1) Polyvalue Below Surface (S8) (LRR R, Listic Epipedon (A2) MLRA 149B) Black Histic (A3) Hydrogen Sulfide (A4) Stratified Layers (A5) Depleted Below Dark Surface (A11) Sandy Mucky Mineral (F1) Sandy Mucky Mineral (S1) Sandy Mucky Mineral (S1) Sandy Gleyed Matrix (S4) Depleted Dark Surface (F6) Sandy Redox (S5) Redox Depressions (F8) Marl (F10) (LRR K, L) Depleted Dark Surface (S7) Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic. Indicators for Problematic Hydric Soils³: a muck (A10) (LRR K, L, MLRA 149B) Coast Prairie Redox (A16) (LRR K, L, R) Coast Prairie Redox (A16) (LRR K, L, R) Coast Prairie Redox (A16) (LRR K, L, R) Foundary Peat or Peat (S3) (LRR K, L, R) Polyvalue Below Surface (S3) (LRR K, L) Polyvalue Below Surface (S3) (LRR K, L) Polyvalue Below Surface (S3) (LRR K, L) Inon-Manganese Masses (F12) (LRR K, L) Iron-Manganese Masses (F12) (LRR K, L, R) Piedmont Floodplain Soils (F19) (MLRA 149B) Sandy Mucky Mineral (S1) X Redox Dark Surface (F6) Mesic Spodic (TA6) (MLRA 144A, 145, 149B) Sandy Redox (S5) Redox Depressions (F8) Very Shallow Dark Surface (F22) Stripped Matrix (S6) Marl (F10) (LRR K, L) Other (Explain in Remarks) Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic. Restrictive Layer (if observed): Type:									
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Hydric Soil Indicators: Histosol (A1) Polyvalue Below Surface (S8) (LRR R, Coast Prairie Redox (A16) (LRR K, L, MLRA 149B) Black Histic (A3) Thin Dark Surface (S9) (LRR R, MLRA 149B) Startlifed Layers (A5) Depleted Below Dark Surface (A11) Sandy Mucky Mineral (F1) Sandy Mucky Mineral (S1) Sandy Mucky Mineral (S1) Sandy Gleyed Matrix (S4) Depleted Dark Surface (F6) Sandy Redox (S5) Redox Depressions (F8) Marl (F10) (LRR K, L) Dark Surface (S7) Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic. Indicators for Problematic Hydric Soils³: a muck (A10) (LRR K, L, MLRA 149B) Coast Prairie Redox (A16) (LRR K, L, R) Coast Prairie Redox (A16) (LRR K, L, R) Coast Prairie Redox (A16) (LRR K, L, R) Doubly Peat or Peat (S3) (LRR K, L, R) Polyvalue Below Surface (S3) (LRR K, L) Thin Dark Surface (S9) (LRR K, L) Inon-Manganese Masses (F12) (LRR K, L, R) Piedmont Floodplain Soils (F19) (MLRA 149B) Sandy Mucky Mineral (S1) X Redox Dark Surface (F6) Mesic Spodic (TA6) (MLRA 144A, 145, 149B) Sandy Redox (S5) Redox Depressions (F8) Very Shallow Dark Surface (F22) Stripped Matrix (S6) Marl (F10) (LRR K, L) Other (Explain in Remarks) Plandicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic. Restrictive Layer (if observed): Type:									
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Hydric Soil Indicators: Histosol (A1) Polyvalue Below Surface (S8) (LRR R, Coast Prairie Redox (A16) (LRR K, L, MLRA 149B) Black Histic Epipedon (A2) MLRA 149B) Thin Dark Surface (S9) (LRR R, MLRA 149B) Startlifed Layers (A5) Depleted Below Dark Surface (A11) Thick Dark Surface (A12) Sandy Mucky Mineral (S1) Sandy Mucky Mineral (S1) Sandy Gleyed Matrix (S4) Depleted Dark Surface (F6) Sandy Redox (S5) Redox Depressions (F8) Marl (F10) (LRR K, L) Derleted Below Dark Surface (F22) Stripped Matrix (S6) Marl (F10) (LRR K, L) Other (Explain in Remarks) Problematic Hydric Soils³: 1 midicators for Problematic Hydric Soils³: 2 cm Muck (A10) (LRR K, L, MLRA 149B) Coast Prairie Redox (A16) (LRR K, L, R) Coast Prairie Redox (A16) (LRR K, L, R) Foundative Peat (S3) (LRR K, L, R) Polyvalue Below Surface (S3) (LRR K, L) Thin Dark Surface (S3) (LRR K, L) Inn-Manganese Masses (F12) (LRR K, L, R) Piedmont Floodplain Soils (F19) (MLRA 149B) Sandy Mucky Mineral (S1) X Redox Dark Surface (F6) Mesic Spodic (TA6) (MLRA 144A, 145, 149B) Sandy Redox (S5) Redox Depressions (F8) Very Shallow Dark Surface (F22) Stripped Matrix (S6) Marl (F10) (LRR K, L) Other (Explain in Remarks) Plandicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic. Restrictive Layer (if observed): Type:									
Hydric Soil Indicators: Histosol (A1) Polyvalue Below Surface (S8) (LRR R, Coast Prairie Redox (A16) (LRR K, L, MLRA 149B) Black Histic Epipedon (A2) MLRA 149B) Thin Dark Surface (S9) (LRR R, MLRA 149B) Startlifed Layers (A5) Depleted Below Dark Surface (A11) Thick Dark Surface (A12) Sandy Mucky Mineral (S1) Sandy Mucky Mineral (S1) Sandy Gleyed Matrix (S4) Depleted Dark Surface (F6) Sandy Redox (S5) Redox Depressions (F8) Marl (F10) (LRR K, L) Derleted Below Dark Surface (F22) Stripped Matrix (S6) Marl (F10) (LRR K, L) Other (Explain in Remarks) Problematic Hydric Soils³: 1 midicators for Problematic Hydric Soils³: 2 cm Muck (A10) (LRR K, L, MLRA 149B) Coast Prairie Redox (A16) (LRR K, L, R) Coast Prairie Redox (A16) (LRR K, L, R) Foundative Peat (S3) (LRR K, L, R) Polyvalue Below Surface (S3) (LRR K, L) Thin Dark Surface (S3) (LRR K, L) Inn-Manganese Masses (F12) (LRR K, L, R) Piedmont Floodplain Soils (F19) (MLRA 149B) Sandy Mucky Mineral (S1) X Redox Dark Surface (F6) Mesic Spodic (TA6) (MLRA 144A, 145, 149B) Sandy Redox (S5) Redox Depressions (F8) Very Shallow Dark Surface (F22) Stripped Matrix (S6) Marl (F10) (LRR K, L) Other (Explain in Remarks) Plandicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic. Restrictive Layer (if observed): Type:									
Histosol (A1) Polyvalue Below Surface (S8) (LRR R, 2 cm Muck (A10) (LRR K, L, MLRA 149B) Histic Epipedon (A2) MLRA 149B) Coast Prairie Redox (A16) (LRR K, L, R) Black Histic (A3) Thin Dark Surface (S9) (LRR R, MLRA 149B) 5 cm Mucky Peat or Peat (S3) (LRR K, L, R) Hydrogen Sulfide (A4) High Chroma Sands (S11) (LRR K, L) Polyvalue Below Surface (S8) (LRR K, L) Stratified Layers (A5) Loamy Mucky Mineral (F1) (LRR K, L) Iron-Manganese Masses (F12) (LRR K, L, R) Thick Dark Surface (A12) Depleted Matrix (F2) Iron-Manganese Masses (F12) (MLRA 149B) Sandy Mucky Mineral (S1) X Redox Dark Surface (F6) Mesic Spodic (TA6) (MLRA 144A, 145, 149B) Sandy Gleyed Matrix (S4) Depleted Dark Surface (F7) Red Parent Material (F21) Sandy Redox (S5) Redox Depressions (F8) Very Shallow Dark Surface (F22) Stripped Matrix (S6) Marl (F10) (LRR K, L) Other (Explain in Remarks) Plandicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic. Restrictive Layer (if observed): Type:	¹ Type: C=C	oncentration, D=Deple	tion, RM	√=Reduced Matrix	, MS=Mas	ked San	d Grains	. ² Location: PL=Pore L	Lining, M=Matrix.
Histic Epipedon (A2) MLRA 149B) Coast Prairie Redox (A16) (LRR K, L, R) Hydrogen Sulfide (A4) High Chroma Sands (S11) (LRR K, L) Stratified Layers (A5) Loamy Mucky Mineral (F1) (LRR K, L) Thin Dark Surface (S9) (LRR R, MLRA 149B) Stratified Layers (A5) Loamy Mucky Mineral (F1) (LRR K, L) Thin Dark Surface (S9) (LRR K, L) Depleted Below Dark Surface (A11) Loamy Gleyed Matrix (F2) Thick Dark Surface (A12) Depleted Matrix (F3) Sandy Mucky Mineral (S1) Sandy Gleyed Matrix (S4) Depleted Dark Surface (F6) Sandy Redox (S5) Redox Depressions (F8) Stripped Matrix (S6) Dark Surface (S7) Marl (F10) (LRR K, L) Other (Explain in Remarks) Polyvalue Below (A16) (LRR K, L, R) Polyvalue Below (S3) (LRR K, L, R) Polyvalue Below Surface (S9) (LRR K, L, R) Polyvalue Below (S9) (LRR K, L) Iron-Manganese Masses (F12) (LRR K, L, R) Polyvalue Below (S9) (LRR K, L) Polyvalue Below Surface (S9) (LRR K, L) Polyvalue (S9) (LRR K	Hydric Soil I	Indicators:						Indicators for Pr	oblematic Hydric Soils ³ :
Histic Epipedon (A2) MIRA 149B) Coast Prairie Redox (A16) (LRR K, L, R) Hydrogen Sulfide (A4) High Chroma Sands (S11) (LRR K, L) Stratified Layers (A5) Loamy Mucky Mineral (F1) (LRR K, L) Thin Dark Surface (S9) (LRR R, MLRA 149B) Stratified Layers (A5) Loamy Mucky Mineral (F1) (LRR K, L) Thin Dark Surface (S9) (LRR K, L) Thin Dark Surface (S9) (LRR K, L) Iron-Manganese Masses (F12) (LRR K, L, R) Piedmont Floodplain Soils (F19) (MLRA 149B) Sandy Mucky Mineral (S1) Sandy Gleyed Matrix (S4) Depleted Dark Surface (F6) Sandy Redox (S5) Redox Depressions (F8) Stripped Matrix (S6) Dark Surface (S7) Pindicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic. Restrictive Layer (if observed): Type:	Histosol ((A1)		Polyvalue Bel	ow Surface	(S8) (LRR	R,	2 cm Muck (A	10) (LRR K, L, MLRA 149B)
Black Histic (A3)	Histic Epi	ipedon (A2)		· · · · · · · · · · · · · · · · · · ·				Coast Prairie	Redox (A16) (LRR K, L, R)
Stratified Layers (A5)				Thin Dark Sur	rface (S9) (L	.RR R, ML	RA 149B	5 cm Mucky P	eat or Peat (S3) (LRR K, L, R)
Depleted Below Dark Surface (A11) Thick Dark Surface (A12) Sandy Mucky Mineral (S1) Sandy Gleyed Matrix (F3) Depleted Dark Surface (F6) Sandy Redox (S5) Stripped Matrix (S6) Dark Surface (S7) Marl (F10) (LRR K, L) Mesic Spodic (TA6) (MLRA 144B) Mesic Spodic (TA6) (MLRA 144B) Mesic Spodic (TA6) (MLRA 144B, 145, 149B) Mesic Spodic (TA6) (MLRA 144A, 145, 149B) Mesic Spodic (TA6) (MLRA 144A, 145, 149B) Mesic Spodic (TA6) (MLRA 144B, 145, 149B) Mesic Spodic (TA6) (MLRA 149	Hydroger	n Sulfide (A4)		High Chroma	Sands (S11) (LRR K,	L)	Polyvalue Belo	ow Surface (S8) (LRR K, L)
Thick Dark Surface (A12) Depleted Matrix (F3) Sandy Mucky Mineral (S1) Sandy Gleyed Matrix (S4) Depleted Dark Surface (F6) Sandy Redox (S5) Stripped Matrix (S6) Dark Surface (S7) Marl (F10) (LRR K, L) Piedmont Floodplain Soils (F19) (MLRA 149B) Mesic Spodic (TA6) (MLRA 144A, 145, 149B) Mesic Spodic (TA6) (MLRA 144A, 145, 149B) Mesic Spodic (TA6) (MLRA 144A, 145, 149B) Mesic Spodic (TA6) (MLRA 149B	Stratified	Layers (A5)						Thin Dark Sur	face (S9) (LRR K, L)
Sandy Mucky Mineral (S1) Sandy Gleyed Matrix (S4) Depleted Dark Surface (F6) Red Parent Material (F21) Sandy Redox (S5) Stripped Matrix (S6) Dark Surface (S7) Marl (F10) (LRR K, L) Dark Surface (S7) Restrictive Layer (if observed): Type: Mesic Spodic (TA6) (MLRA 144A, 145, 149B) New Jerus Material (F21) New Jerus Material (F21)	Depleted	Below Dark Surface (A11)	Loamy Gleye	d Matrix (F2)		Iron-Mangane	se Masses (F12) (LRR K, L, R)
Sandy Gleyed Matrix (S4) Depleted Dark Surface (F7) Red Parent Material (F21) Sandy Redox (S5) Redox Depressions (F8) Very Shallow Dark Surface (F22) Stripped Matrix (S6) Marl (F10) (LRR K, L) Other (Explain in Remarks) Dark Surface (S7) Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic. Restrictive Layer (if observed): Type:	Thick Da	rk Surface (A12)		Depleted Mate	rix (F3)			Piedmont Floo	odplain Soils (F19) (MLRA 149B)
Sandy Redox (S5) Redox Depressions (F8) Very Shallow Dark Surface (F22) Stripped Matrix (S6) Marl (F10) (LRR K, L) Other (Explain in Remarks) Dark Surface (S7) 3Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic. Restrictive Layer (if observed): Type:	Sandy Mi	ucky Mineral (S1)		X Redox Dark S	Surface (F6)			Mesic Spodic	(TA6) (MLRA 144A, 145, 149B)
Stripped Matrix (S6) Marl (F10) (LRR K, L) Other (Explain in Remarks) Dark Surface (S7) Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic. Restrictive Layer (if observed): Type:	Sandy GI	leyed Matrix (S4)		Depleted Dark	k Surface (F	7)		Red Parent M	aterial (F21)
Dark Surface (S7) Black S	Sandy Re	edox (S5)		Redox Depres	ssions (F8)			Very Shallow	Dark Surface (F22)
Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic. Restrictive Layer (if observed): Type:	Stripped	Matrix (S6)		Marl (F10) (Li	RR K, L)			Other (Explain	n in Remarks)
Restrictive Layer (if observed): Type:	Dark Surf	face (S7)							
Restrictive Layer (if observed): Type:	Indicators of	hydronhytic vegetatio	n and w	vetland hydrology i	must ha nr	asant ur	nlace die	turbed or problematic	
Type:			Tanu w		nust be pi	eserit, ui	iiess uis	T	
		_ayer (if observed):							
Depth (inches): Hydric Soil Present? Yes X No	-								V
	Depth (ir	nches):						Hydric Soil Present?	YesX No

Project/Site: Pine County Solar	City/County: Pine Sampling Date: 09/15/2022
Applicant/Owner: Swift Current Energy	State: Min Sampling Point: W38-1u
Investigator(s): Jlk drj	Section, Township, Range: T044N, R020W, S25
• ()	relief (concave, convex, none): Convex Slope %: 2-4
Subregion (LRR or MLRA): LRR K, MLRA 90A Lat: 46.269325	
<u> </u>	
Soil Map Unit Name: No Digital Data Available	NWI classification:
Are climatic / hydrologic conditions on the site typical for this time of year?	Yes No X (If no, explain in Remarks.)
Are Vegetation , Soil , or Hydrology significantly distr	urbed? Are "Normal Circumstances" present? Yes X No
Are Vegetation , Soil , or Hydrology naturally problem	matic? (If needed, explain any answers in Remarks.)
SUMMARY OF FINDINGS – Attach site map showing sampling po	oint locations, transects, important features, etc.
Hydrophytic Vegetation Present? Yes No X	Is the Sampled Area
Hydric Soil Present? Yes X No	within a Wetland? Yes No X
Wetland Hydrology Present? Yes No X	If yes, optional Wetland Site ID: W38
Drier than normal	
HYDROLOGY	
Wetland Hydrology Indicators:	Secondary Indicators (minimum of two required)
Primary Indicators (minimum of one is required; check all that apply)	Surface Soil Cracks (B6)
Surface Water (A1) Water-Stained Leaves (B9)	Drainage Patterns (B10)
High Water Table (A2) Aquatic Fauna (B13)	Moss Trim Lines (B16)
Saturation (A3) Marl Deposits (B15)	Dry-Season Water Table (C2)
Water Marks (B1) Hydrogen Sulfide Odor (C1)	Crayfish Burrows (C8)
Sediment Deposits (B2) Oxidized Rhizospheres on Li	iving Roots (C3) Saturation Visible on Aerial Imagery (C9)
Drift Deposits (B3) Presence of Reduced Iron (C	Stunted or Stressed Plants (D1)
Algal Mat or Crust (B4) Recent Iron Reduction in Tille	
Iron Deposits (B5) — Thin Muck Surface (C7)	Shallow Aquitard (D3)
Inundation Visible on Aerial Imagery (B7) Other (Explain in Remarks)	Microtopographic Relief (D4)
Sparsely Vegetated Concave Surface (B8)	FAC-Neutral Test (D5)
Field Observations:	
Surface Water Present Yes No X Depth (inches	s):
Water Table Present Yes No X Depth (inches	s):
Saturation Present Yes No X Depth (inches	S): Wetland Hydrology Present? Yes No _X_
(includes capillary fringe)	
Describe Recorded Data (stream gauge, monitoring well, aerial photos, pre	evious inspections), if available:
Remarks:	
Normalito.	

Free Stratum (Plot size: 30 ft)	Absolute % Cover	Dominant Species	Indicator Status	Dominance Test worksheet:
Betula papyrifera	65	Yes	FACU	
Acer rubrum	_	No	FAC	Number of Dominant Species That Are OBL, FACW, or FAC: (A)
				Total Number of Dominant Species Across All Strata: 2 (B)
				Percent of Dominant Species
				That Are OBL, FACW, or FAC: (A/B)
	68	= Total Cover		Prevalence Index worksheet: Total % Cover of: Multiply by:
apling/Shrub Stratum (Plot size:15 ft)		_ = Total Cover		
Cardua amariaana	45	Yes	FACU	OBL species x 1 =
Populus tremuloides			FAC	FACW species x 2 =
<u> </u>				FAC species x 3 =
				FACU species x 4 =
				UPL species x 5 =
				Column Totals: (A) (B)
				Prevalence Index = B/A =
				Hydrophytic Vegetation Indicators:
- 4	50	= Total Cover		- 1 - Rapid Test for Hydrophytic Vegetation
erb Stratum (Plot size: 5 ft)				- 2 - Dominance Test is >50%
Eurybia macrophylla	75	No	UPL	- 3 - Prevalence Index is ≤3.0¹
Trientalis borealis	5	No	FAC	4 - Morphological Adaptations ¹
Cornus canadensis		No	FAC	(Provide supporting data in Remarks or on a separate sheet)
Maianthemum canadense	5	<u>No</u>	FACU	Problematic Hydrophytic Vegetation (Evaluin)
. Symphyotrichum oolantangiense	5	<u>No</u>	UPL	Problematic Hydrophytic Vegetation ¹ (Explain) Indicators of hydric soil and wetland hydrology must be present, unless
				disturbed or problematic.
·				
·				Definitions of Vegetation Strata:
				Tree – Woody plants 3 in. (7.6 cm) or more in
0 1				diameter at breast height (DBH), regardless of height.
1 2				Sapling/shrub – Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.
	95	= Total Cover		Herb – All herbaceous (non-woody) plants, regardless
/oody Vine Stratum (Plot size: 30 ft)				of size, and woody plants less than 3.28 ft tall.
				Woody vines – All woody vines greater than 3.28 ft in
· .				height.
·				
·				Hydrophytic
	0	= Total Cover		Vegetation Present? Yes NoX
Remarks: (Include photo numbers here or on a sep		= Total Cover		Present? Yes No X

SOIL Sampling Point: W38-1u

Profile Description: (Describe to the de Depth Matrix		ment the		or or co	onfirm the absence of indicators.)
(inches) Color (moist) %	Color (moist)	%	Type ¹	Loc ²	Texture Remarks
0-5 10YR 3/1 100					Silt Loam
5-16 2.5Y 6/1 100					Sand
3-10 2.31 0/1 100					- Cario
	·				
	. ——				
	·				
¹Type: C=Concentration, D=Depletion, R	RM=Reduced Matrix, N	1S=Masl	ked Sand	Grains.	² Location: PL=Pore Lining, M=Matrix.
Hydric Soil Indicators:					Indicators for Problematic Hydric Soils ³ :
Histosol (A1)	Polyvalue Below	Surface	(S8) (LRR	R,	2 cm Muck (A10) (LRR K, L, MLRA 149B)
Histic Epipedon (A2)	MLRA 149B)				Coast Prairie Redox (A16) (LRR K, L, R)
Black Histic (A3)	Thin Dark Surface	e (S9) (L	RR R, ML	RA 149B	5 cm Mucky Peat or Peat (S3) (LRR K, L, R)
Hydrogen Sulfide (A4)	High Chroma Sa	nds (S11) (LRR K,	L)	Polyvalue Below Surface (S8) (LRR K, L)
Stratified Layers (A5)	Loamy Mucky M			L)	Thin Dark Surface (S9) (LRR K, L)
Depleted Below Dark Surface (A11)	Loamy Gleyed M)		Iron-Manganese Masses (F12) (LRR K, L, R)
Thick Dark Surface (A12)	Depleted Matrix				Piedmont Floodplain Soils (F19) (MLRA 149B)
Sandy Mucky Mineral (S1) Sandy Gleyed Matrix (S4)	Redox Dark Surf X Depleted Dark S		7)		Mesic Spodic (TA6) (MLRA 144A, 145, 149B) Red Parent Material (F21)
Sandy Redox (S5)	Redox Depression		,,		Very Shallow Dark Surface (F22)
Stripped Matrix (S6)	Marl (F10) (LRR				Other (Explain in Remarks)
Dark Surface (S7)		. ,			
³ Indicators of hydrophytic vegetation and	wetland hydrology mu	st be pre	esent. un	less dist	turbed or problematic.
Restrictive Layer (if observed):					
Type:					
Depth (inches):					Hydric Soil Present? Yes X No
Remarks:					
romano.					

Project/Site: Pine County Solar	City/County: Pine Sampling Date: 09/15/2022
Applicant/Owner: Swift Current Energy	State: Min Sampling Point: W38-1w
Investigator(s): Jlk drj	Section, Township, Range: T044N, R020W, S25
• .,	al relief (concave, convex, none): Concave Slope %: 1-3
Subregion (LRR or MLRA): LRR K, MLRA 90A Lat: 46.269388	Long: -92.809635 Datum: WGS84
Soil Map Unit Name: No Digital Data Available	
Are climatic / hydrologic conditions on the site typical for this time of year?	
Are Vegetation, Soil, or Hydrology significantly dis	
Are Vegetation , Soil , or Hydrology naturally problem	ematic? (If needed, explain any answers in Remarks.)
SUMMARY OF FINDINGS – Attach site map showing sampling	point locations, transects, important features, etc.
Lhudrashudia Vanatatian Brasanta Van	In the Commission Association
Hydrophytic Vegetation Present? Yes X No Hydric Soil Present? Yes X No	Is the Sampled Area within a Wetland? Yes No X
Wetland Hydrology Present? Yes X No	If yes, optional Wetland Site ID: W38
	ii yoo, opiionai weliana olio ib.
Remarks: (Explain alternative procedures here or in a separate report.) Drier than normal	
Bilet than normal	
HYDROLOGY	
	Connection (Indicators (minimum of two required)
Wetland Hydrology Indicators: Primary Indicators (minimum of one is required; check all that apply)	Secondary Indicators (minimum of two required)
1	Surface Soil Cracks (B6) Drainage Patterns (R10)
Surface Water (A1) Water-Stained Leaves (B9	·
High Water Table (A2) Aquatic Fauna (B13) Augustia (A2)	Moss Trim Lines (B16)
Saturation (A3) Marl Deposits (B15) Water Marker (P4)	Dry-Season Water Table (C2) Crayfish Burrows (C8)
Water Marks (B1) Hydrogen Sulfide Odor (C' Sediment Deposits (B2) Oxidized Rhizospheres on	
	
	<u> </u>
	Shallow Aquitard (D3)
	Missates and in Delicat (DA)
Inundation Visible on Aerial Imagery (B7) —— Other (Explain in Remarks Sparsely Vegetated Concave Surface (B8)	X FAC-Neutral Test (D5)
	7 (Bb)
Field Observations:	
Surface Water Present Yes No X Depth (inche	
	es):
Saturation Present Yes No X Depth (inche	es): Wetland Hydrology Present? Yes X No
(includes capillary fringe)	and in a particular of a callable.
Describe Recorded Data (stream gauge, monitoring well, aerial photos, p	previous inspections), ir available:
Demodes	
Remarks:	
1	

<u>Tree Stratum</u> (Plot size: <u>30 ft</u>)	Absolute % Cover	Dominant Species	Indicator Status	Dominance Test worksheet:
1				Number of Dominant Species
2.				That Are OBL, FACW, or FAC:(A)
3				Total Number of Dominant Species Across All Strata:1 (B)
5				Percent of Dominant Species That Are OBL, FACW, or FAC: 100 (A/B)
7		-	-	Prevalence Index worksheet:
	0	= Total Cover		Total % Cover of: Multiply by:
Sapling/Shrub Stratum (Plot size: 15 ft)				OBL species x 1 =
1				FACW species x 2 =
2				FAC species x 3 =
3				FACU species x 4 =
4				UPL species x 5 =
5				
6				Column Totals: (A) (B)
7				Prevalence Index = B/A =
	0	Tatal Causan		Hydrophytic Vegetation Indicators:
Herb Stratum (Plot size: 5 ft)	-	= Total Cover		X 1 - Rapid Test for Hydrophytic Vegetation
1. Calamagrostis canadensis	75	Yes	OBL	2 - Dominance Test is >50%
Athyrium asplenioides	10	No	FAC	3 - Prevalence Index is ≤3.0¹
3. Carex intumescens	5	No	FACW	4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet)
Doellingeria umbellata	3	No	FACW	(Provide supporting data in Remarks of on a separate sneet)
5. Carex gracillima		No	FACU	Problematic Hydrophytic Vegetation¹ (Explain)
6. Bromus ciliatus	·		FACW	¹Indicators of hydric soil and wetland hydrology must be present, unless
7. Eutrochium maculatum				disturbed or problematic.
8. Mentha arvensis				Definitions of Vegetation Strata:
9.				John Marie Co. Cogotamon Co. atau
10				Tree – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.
11.				diameter at breast neight (DBH), regardless of height.
12		· -		Sapling/shrub – Woody plants less than 3 in. DBH
	104	·		and greater than or equal to 3.28 ft (1 m) tall.
Woody Vine Stratum (Plot size: 30 ft)	104	= Total Cover		Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.
1				
2.				Woody vines – All woody vines greater than 3.28 ft in height.
3.		·		Height.
4.				Hydrophytic
				Vegetation
	0	= Total Cover		Present? Yes X No No
Remarks: (Include photo numbers here or on a separa	ate sheet.)			

Sampling Point:

W38-1w

SOIL Sampling Point: W38-1w

Depth Matrix Redox Features Golor (moist) % Type Loc2 Texture Remarks	Profile Desci Depth	ription: (Describe to Matrix	the de				tor or co	onfirm the absence of indica	ators.)
Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.			%				Loc ²	Texture	Remarks
Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. ### Hydric Soil Indicators: Histosol (A1)	0-4	10YR 3/1				<u> </u>		Sandy Loam	
Hydric Soil Indicators: Histosol (A1)	4-16	10YR 3/1	10	2.5Y 7/1	90	D	М	Loamy Sand	
Hydric Soil Indicators: Histosol (A1)									
Hydric Soil Indicators: Histosol (A1)									
Hydric Soil Indicators: Histosol (A1)									
Hydric Soil Indicators: Histosol (A1)									
Hydric Soil Indicators: Histosol (A1)									
Hydric Soil Indicators: Histosol (A1)									
Hydric Soil Indicators: Histosol (A1)									
Hydric Soil Indicators: Histosol (A1)									
Hydric Soil Indicators: Histosol (A1)									
Hydric Soil Indicators: Histosol (A1)									
Hydric Soil Indicators: Histosol (A1)									
Histosol (A1)			etion, RI	M=Reduced Matrix, I	MS=Mas	ked San	d Grains.		
Histic Epipedon (A2) Black Histic (A3) Thin Dark Surface (S9) (LRR R, MLRA 149B) 5 cm Mucky Peat or Peat (S3) (LRR K, L, R) Hydrogen Sulfide (A4) High Chroma Sands (S11) (LRR K, L) Stratified Layers (A5) Depleted Below Dark Surface (A11) Thick Dark Surface (A12) Sandy Mucky Mineral (S1) Sandy Mucky Mineral (S1) Sandy Gleyed Matrix (S4) Sandy Redox (S5) Redox Depressions (F8) Stripped Matrix (S6) Marl (F10) (LRR K, L) Thick Dark Surface (A12) Depleted Dark Surface (F7) Red Parent Material (F21) Sandy Redox (S5) Are Polyvalue Below Surface (S9) (LRR K, L) Thin Dark Surface (S9) (LRR K, L) Iron-Manganese Masses (F12) (LRR K, L, R) Piedmont Floodplain Soils (F19) (MLRA 149B) Sandy Mucky Mineral (S1) Redox Dark Surface (F6) Mesic Spodic (TA6) (MLRA 144A, 145, 149B) Sandy Redox (S5) Redox Depressions (F8) Very Shallow Dark Surface (F22) Stripped Matrix (S6) Marl (F10) (LRR K, L) Other (Explain in Remarks) Pledomont Floodplain Soils (F19) (MLRA 149B) Mesic Spodic (TA6)	-			5 5.		(00) (1.50)	_		-
Black Histic (A3)		•		· ·	v Surface	(S8) (LRF	RR,		
Hydrogen Sulfide (A4)				·	re (S9) (I	RRR MI	RΔ 149R		
Stratified Layers (A5)								· -	
Depleted Below Dark Surface (A11) Loamy Gleyed Matrix (F2) Iron-Manganese Masses (F12) (LRR K, L, R) Thick Dark Surface (A12) Depleted Matrix (F3) Piedmont Floodplain Soils (F19) (MLRA 149B) Sandy Mucky Mineral (S1) Redox Dark Surface (F6) Mesic Spodic (TA6) (MLRA 144A, 145, 149B) Sandy Gleyed Matrix (S4) X Depleted Dark Surface (F7) Red Parent Material (F21) Sandy Redox (S5) Redox Depressions (F8) Very Shallow Dark Surface (F22) Stripped Matrix (S6) Marl (F10) (LRR K, L) Other (Explain in Remarks) Dark Surface (S7) 3Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic. Restrictive Layer (if observed): Type: Depth (inches): Hydric Soil Present? Yes X No									
Thick Dark Surface (A12) Depleted Matrix (F3) Sandy Mucky Mineral (S1) Sandy Mucky Mineral (S1) Sandy Gleyed Matrix (S4) Sandy Redox (S5) Redox Depressions (F8) Stripped Matrix (S6) Marl (F10) (LRR K, L) Other (Explain in Remarks) Jork Surface (S7) Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic. Restrictive Layer (if observed): Type: Depth (inches): Hydric Soil Present? Yes X No			11)				, =,		
Sandy Mucky Mineral (S1) Redox Dark Surface (F6) Mesic Spodic (TA6) (MLRA 144A, 145, 149B) Sandy Gleyed Matrix (S4) Nedox Depressions (F8) Very Shallow Dark Surface (F22) Stripped Matrix (S6) Marl (F10) (LRR K, L) Other (Explain in Remarks) Dark Surface (S7) 3Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic. Restrictive Layer (if observed): Type: Depth (inches): Hydric Soil Present? YesX No		•	,			.,			
Sandy Gleyed Matrix (S4) X Depleted Dark Surface (F7) Red Parent Material (F21) Sandy Redox (S5) Redox Depressions (F8) Very Shallow Dark Surface (F22) Stripped Matrix (S6) Marl (F10) (LRR K, L) Other (Explain in Remarks) Dark Surface (S7) 3Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic. Restrictive Layer (if observed):									
Sandy Redox (S5) Redox Depressions (F8) Very Shallow Dark Surface (F22) Stripped Matrix (S6) Marl (F10) (LRR K, L) Other (Explain in Remarks) Dark Surface (S7) 3Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic. Restrictive Layer (if observed): Type: Depth (inches): Hydric Soil Present? YesX No									
Dark Surface (S7) 3Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic. Restrictive Layer (if observed): Type: Depth (inches): Hydric Soil Present? Yes X No	Sandy Re	edox (S5)		Redox Depress	ions (F8)				
³ Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic. Restrictive Layer (if observed): Type: Depth (inches): Hydric Soil Present? Yes X No	Stripped N	Matrix (S6)		Marl (F10) (LRF	R K, L)			Other (Explain i	n Remarks)
Restrictive Layer (if observed): Type:	Dark Surf	ace (S7)							
Type:	³ Indicators of	hydrophytic vegetati	on and v	vetland hydrology m	ust be pr	esent, ur	nless dist	turbed or problematic.	
Depth (inches): Hydric Soil Present? Yes X No No	Restrictive L	ayer (if observed):							
<u> </u>	Type:								
Remarks:	Depth (in	nches):						Hydric Soil Present?	Yes No
	Remarks:								

Project/Site: Pine County Solar		City/County:	Pine	Sampling Date:	10/31/2022				
Applicant/Owner: Swift Current Energy			State: Mi	n Sampling Point:	W39-1u				
Investigator(s): KKM BB		Secti	on, Township, Range: T	044N. R020W. S26					
Landform (hillside, terrace, etc.): Backslope	l ocal re		convex, none): Linear		e %: 5				
·		mer (ourroave,	· ·		_				
Subregion (LRR or MLRA): LRR K, MLRA 90	A Lat: 40.200472		Long: -92.828352		WGS84				
Soil Map Unit Name: Denied Access			NWI classification	-					
Are climatic / hydrologic conditions on the site ty	pical for this time of year?	Yes	S No <u>X</u> (If r	no, explain in Remarks	s.)				
Are Vegetation , Soil , or Hydrold	ogy significantly distur	rbed? Are	"Normal Circumstances" p	resent? Yes X	No				
Are Vegetation , Soil , or Hydrold	ogy naturally problemate	atic? (If n	eeded, explain any answer	s in Remarks.)					
SUMMARY OF FINDINGS – Attach site	map showing sampling po	int locations,	transects, important featu	ıres, etc.					
Hydrophytic Vegetation Present? Y	es No X	Is the Sam	pled Area						
' ' '	es No X	within a W		No X					
l	es No X	If yes, optio		etland 39					
Remarks: (Explain alternative procedures here Antecedent precipitation analysis showed drier									
HYDROLOGY									
Wetland Hydrology Indicators:			Secondary Indicators	(minimum of two required	<u></u>				
Primary Indicators (minimum of one is required	; check all that apply)		Surface Soil Crac	ks (B6)					
Surface Water (A1)	Water-Stained Leaves (B9)		Drainage Patterns	s (B10)					
High Water Table (A2)	Aquatic Fauna (B13)		Moss Trim Lines	(B16)					
Saturation (A3)	Marl Deposits (B15)		Dry-Season Water	r Table (C2)					
Water Marks (B1) Hydrogen Sulfide Odor (C1) Crayfish Burrows (C8)									
Sediment Deposits (B2) Oxidized Rhizospheres on Living Roots (C3) Saturation Visible on Aerial Imagery (C9)									
Drift Deposits (B3)	Presence of Reduced Iron (C4	1)	Stunted or Stress	ed Plants (D1)					
Algal Mat or Crust (B4)	Recent Iron Reduction in Tilled	d Soils (C6)	Geomorphic Posi	tion (D2)					
Iron Deposits (B5)	Thin Muck Surface (C7)		Shallow Aquitard	(D3)					
Inundation Visible on Aerial Imagery (B7)	Other (Explain in Remarks)		Microtopographic	Relief (D4)					
Sparsely Vegetated Concave Surface (B8)			FAC-Neutral Test	. (D5)					
Field Observations:									
	No X Depth (inches):	:							
Water Table Present Yes !	No X Depth (inches):	:							
	No X Depth (inches):	: '	Wetland Hydrology Prese	nt? Yes	_ No _ X				
(includes capillary fringe)									
Describe Recorded Data (stream gauge, monit	oring well, aerial photos, prev	vious inspectio	ns), if available:						
Remarks:									

Tree Stratum (Plot size: 30 ft)	Absolute <u>% Cover</u>	Dominant Species	Indicator Status	Dominance Test worksheet:
1. Quercus macrocarpa	55	Yes	FACU	Number of Dominant Species
Populus tremuloides	5	No	FAC	That Are OBL, FACW, or FAC:(A)
4.				Total Number of Dominant Species Across All Strata:5(B)
5				Percent of Dominant Species
6.				That Are OBL, FACW, or FAC: 40 (A/B)
7				Prevalence Index worksheet:
	60	= Total Cover		Total % Cover of: Multiply by:
Sapling/Shrub Stratum (Plot size: 15 ft)	_			OBL species 0 x 1 = 0
1. Corylus americana	35	Yes	FACU	
2.				·
3.				FAC species 25 x 3 = 75
4.				FACU species120 x 4 =480
5.				UPL species 5 x 5 = 25
6.				Column Totals: 165 (A) 610 (B)
7.				Prevalence Index = B/A = 3.7
	35			Hydrophytic Vegetation Indicators:
Herb Stratum (Plot size: 5 ft)		= Total Cover		1 - Rapid Test for Hydrophytic Vegetation
1 Solidago canadensis	25	Yes	FACU	2 - Dominance Test is >50%
2. Rubus idaeus	20	Yes	FAC	3 - Prevalence Index is ≤3.0¹
Phalaris arundinacea	15	Yes	FACW	4 - Morphological Adaptations ¹
Hackelia virginiana			FACU	(Provide supporting data in Remarks or on a separate sheet)
Eurybia macrophylla		No	UPL	Problematic Hydrophytic Vegetation ¹ (Explain)
6		110	01.2	¹Indicators of hydric soil and wetland hydrology must be present, unless
7.				disturbed or problematic.
8.			_	Definitions of Vegetation Strata:
9.				John Marie Co. 1 Cigotanico Co. Marie
10			-	Tree – Woody plants 3 in. (7.6 cm) or more in
11.				diameter at breast height (DBH), regardless of height.
12.				Sapling/shrub – Woody plants less than 3 in. DBH
	70			and greater than or equal to 3.28 ft (1 m) tall.
Woody Vine Stratum (Plot size: 30 ft)	70	= Total Cover		Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.
1				
2.				Woody vines – All woody vines greater than 3.28 ft in height.
3.				Height.
4.				Hydrophytic
				Vegetation
	0	= Total Cover		Present?
Remarks: (Include photo numbers here or on a separa	ate sheet.)			

Sampling Point:

W39-1u

SOIL Sampling Point: W39-1u

Profile Desc Depth	ription: (l	Describe to Matrix	the dep	th neede		ment the x Feature		tor or co	onfirm the absence of indicators.)
(inches)	Color	(moist)	%	Color	(moist)	%	Type ¹	Loc ²	Texture Remarks
0-14		2.5/2	100						Loamy Sand
14-18	7.5YR	4/2	98	7.5YR	4/6	2	С	М	Sand
18-24	7.5YR	4/6	100						Sand
	-								·
	-								
	-								
¹Type: C=C	oncentrati	on, D=Depl	etion, RN	/I=Reduce	ed Matrix, N	иS=Masl	ked San	d Grains.	s. ² Location: PL=Pore Lining, M=Matrix.
Hydric Soil I	Indicators	s:							Indicators for Problematic Hydric Soils ³ :
Histosol ((A1)			Pol	value Below	V Surface	(S8) (LRR	R,	2 cm Muck (A10) (LRR K, L, MLRA 149B)
	ipedon (A2)				LRA 149B)	(Coast Prairie Redox (A16) (LRR K, L, R)
Black His	stic (A3) n Sulfide (A	4)			n Dark Surfac h Chroma Sa				B) 5 cm Mucky Peat or Peat (S3) (LRR K, L, R) Polyvalue Below Surface (S8) (LRR K, L)
	Layers (A5	•			my Mucky M				Thin Dark Surface (S9) (LRR K, L)
		, k Surface (A1	1)		my Gleyed N			-/	Iron-Manganese Masses (F12) (LRR K, L, R)
Thick Da	rk Surface (A12)			leted Matrix				Piedmont Floodplain Soils (F19) (MLRA 149B)
Sandy Mi	ucky Minera	al (S1)		Red	lox Dark Sur	face (F6)			Mesic Spodic (TA6) (MLRA 144A, 145, 149B)
	leyed Matrix	(S4)			leted Dark S	,	7)		Red Parent Material (F21)
	edox (S5)				lox Depressi	. ,			Very Shallow Dark Surface (F22)
Stripped	Matrix (S6)			iviai	i (F10) (LRR	. K, L)			Other (Explain in Remarks)
			on and w	etland hy	drology mu	ıst be pre	esent, ur	less dist	sturbed or problematic.
Restrictive I	Layer (if o	bserved):							
Type:	>				-				Hydric Soil Present? Yes No X
Depth (ir	ncnes): _				•				Hydric Soil Present? Yes No _X
Remarks:									

Project/Site: Pine County Solar City/County: Pine Sampling Date: 10/31/2022
Applicant/Owner: Swift Current Energy State: Min Sampling Point: W39-1w
Investigator(s): KKM BB Section, Township, Range: T044N, R020W, S26
Landform (hillside, terrace, etc.): Depression Local relief (concave, convex, none): Concave Slope %: 2
Subregion (LRR or MLRA): LRR K, MLRA 90A Lat: 46.266377 Long: -92.82837 Datum: WGS84
Soil Map Unit Name: Denied Access NWI classification: PSS1A
Are climatic / hydrologic conditions on the site typical for this time of year? Yes No _X (If no, explain in Remarks.)
Are Vegetation, Soil, or Hydrology significantly disturbed? Are "Normal Circumstances" present? Yes X No
Are Vegetation, Soil, or Hydrology naturally problematic? (If needed, explain any answers in Remarks.)
SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.
Hydrophytic Vegetation Present? Yes X No Is the Sampled Area
Hydric Soil Present? Yes X No within a Wetland? Yes X No
Wetland Hydrology Present? Yes X No If yes, optional Wetland Site ID: Wetland 39
Antecedent precipitation analysis showed drier than normal conditions
HYDROLOGY
Wetland Hydrology Indicators: Secondary Indicators (minimum of two required)
Primary Indicators (minimum of one is required; check all that apply) Surface Soil Cracks (B6)
Surface Water (A1) Water-Stained Leaves (B9) Drainage Patterns (B10)
High Water Table (A2) Aquatic Fauna (B13) Moss Trim Lines (B16)
Saturation (A3) Marl Deposits (B15) Dry-Season Water Table (C2)
Water Marks (B1) Hydrogen Sulfide Odor (C1) Crayfish Burrows (C8)
Sediment Deposits (B2) Oxidized Rhizospheres on Living Roots (C3) Saturation Visible on Aerial Imagery (C9)
Drift Deposits (B3) Presence of Reduced Iron (C4) Stunted or Stressed Plants (D1)
Algal Mat or Crust (B4) Recent Iron Reduction in Tilled Soils (C6) X Geomorphic Position (D2)
Iron Deposits (B5) Thin Muck Surface (C7) Shallow Aquitard (D3)
Inundation Visible on Aerial Imagery (B7) Other (Explain in Remarks) Microtopographic Relief (D4)
Sparsely Vegetated Concave Surface (B8) X FAC-Neutral Test (D5)
Field Observations:
Surface Water Present Yes No X Depth (inches):
Water Table Present Yes No X Depth (inches):
Saturation Present Yes No X Depth (inches): Wetland Hydrology Present? Yes X No
(includes capillary fringe)
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:
Remarks:

VEGETATION – Use scientific names of	f plants.			Sa	ampling Point:	W39-1w	
Tree Stratum (Plot size: 30 ft)	Absolute <u>% Cover</u>	Dominant Species	Indicator Status	Dominance Test wo	orksheet:		
1				Number of Dominant	Species		
2		. <u> </u>		That Are OBL, FACW	•	5	(A)
3				Total Number of Dam			_
4		. <u></u>		Total Number of Dom Species Across All S		5	(B)
5		. <u></u> .					_ (=)
6				Percent of Dominant That Are OBL, FACW	•	100	_(A/B)
··		· ·		Prevalence Index w	orksheet:		
	0	_ = Total Cover		Total % Cover	of: N	fultiply by:	
Sapling/Shrub Stratum (Plot size: 15 ft)				OBL species	55 x 1 =	55	
1. Alnus incana	35	Yes	FACW	_ ·	85 x 2 =		
2. Salix interior	15	Yes	FACW				
3.					10 x 3 =		_
4.				FACU species	0 x 4 =	0	
5.				UPL species	0 x 5 =	0	
6.				Column Totals:	150 (A)	255	(B)
7.			_	Prevalence Inc	dex = B/A =	1.7	
		· -		Hydrophytic Vegeta	tion Indicators	:	
	50	= Total Cover		X 1 - Rapid Test fo			
Herb Stratum (Plot size: 5 ft)				X 2 - Dominance T			
1. Calamagrostis canadensis	35	Yes	OBL	1 			
2. Carex lacustris	20	Yes	OBL	X 3 - Prevalence Ir			
3. Phalaris arundinacea	20	Yes	FACW	4 - Morphologica (Provide supporting da		a separate she	eet)
4. Solidago gigantea	15	No	FACW			·	,
5. Urtica dioica	10	No	FAC	Problematic Hyd	rophytic Vegetat	tion¹ (Expla	ain)
6		·		¹ Indicators of hydric soil and disturbed or problematic.	wetland hydrology mu	ust be present	, unless
7		·					
8				Definitions of Veget	tation Strata:		
9							
10				Tree – Woody plants diameter at breast he			ooiaht
11.				diameter at breast ne	ight (DBH), rega	aruless or r	ieigiii.
12.				Sapling/shrub – Wo			ВH
	<u>.</u>	· · · · · · · · · · · · · · · · · · ·		and greater than or e	qual to 3.28 ft (1	l m) tall.	
	100	= Total Cover		Herb – All herbaceou	us (non-woody) រ	olants, rega	ardless
Woody Vine Stratum (Plot size: 30 ft)				of size, and woody pl			
1		<u> </u>		Woody vines – All w	roody vinos aroa	tor than 3	20 ft in
2		. <u></u> .		height.	oody viries grea	ilei iliali 3.	20 11 111
3		. <u></u> .		<u> </u>			
4		. <u></u> .	_	Hydrophytic			
	0			Vegetation	٧		
	0	= Total Cover		Present? Ye	s X No	·—	
Remarks: (Include photo numbers here or on a se	eparate sheet.)						

SOIL Sampling Point: W39-1w

Profile Desci Depth	ription: (Describe to Matrix	the dep	oth need		ument the ox Feature		tor or co	onfirm the absence of indic	ators.)
(inches)	Color (moist)	%	Colo	or (moist)	%	Type ¹	Loc ²	Texture	Remarks
0-4	10YR 2/2	100		()		-71-5		Sandy Loam	
4-18	7.5YR 5/2	95	7.5YR	4/6	5	С	M	Loamy Sand	
18-24	5YR 5/3	90	2.5YR	4/8	10	С	M	Loamy Sand	
	<u> </u>		2.01.1						
					· —				
					. —				
			1						
					. —				
					. —				
	·								
¹Type: C=Co	oncentration, D=Depl	etion, R	√=Reduc	ed Matrix,	MS=Mas	ked San	d Grains	. ² Location: PL=Pore Li	ning, M=Matrix.
Hydric Soil II	ndicators:							Indicators for Pro	oblematic Hydric Soils ³ :
Histosol (A	· ·		Po	lyvalue Belov	w Surface	(S8) (LRF	RR,	2 cm Muck (A1	0) (LRR K, L, MLRA 149B)
	pedon (A2)			VILRA 149B)					Redox (A16) (LRR K, L, R)
Black Hist				in Dark Surfa				·	eat or Peat (S3) (LRR K, L, R)
	Sulfide (A4)			gh Chroma S amy Mucky N				 -	w Surface (S8) (LRR K, L)
	Layers (A5) Below Dark Surface (A1	1)		amy Gleyed			, L)	' <u></u>	ace (S9) (LRR K, L) se Masses (F12) (LRR K, L, R)
	k Surface (A12)	1)		epleted Matrix					dplain Soils (F19) (MLRA 149B)
	ucky Mineral (S1)			edox Dark Su					TA6) (MLRA 144A, 145, 149B)
	eyed Matrix (S4)			epleted Dark		7)		Red Parent Ma	
X Sandy Re	edox (S5)		Re	edox Depress	ions (F8)			Very Shallow D	Oark Surface (F22)
Stripped N	Matrix (S6)		Ma	arl (F10) (LRF	R K, L)			Other (Explain	in Remarks)
Dark Surfa	ace (S7)								
³ Indicators of	hydrophytic vegetation	on and w	etland h	ydrology m	ust be pro	esent, ur	nless dis	turbed or problematic.	
Restrictive L	ayer (if observed):								
Type:				_					
Depth (in	ches):			_				Hydric Soil Present?	Yes X No
Remarks:								I	

Project/Site: Pine County Solar	City/County: Pine Sampling Date: 10/31/2022						
Applicant/Owner: Swift Current Energy	State: Min Sampling Point: W39-2u						
Investigator(s): BB KKM	Section, Township, Range: T044N, R020W, S26						
-	cal relief (concave, convex, none): Linear Slope %: 3						
·							
Subregion (LRR or MLRA): LRR K, MLRA 90A Lat: 46.264614	Long: -92.828198 Datum: WGS84						
Soil Map Unit Name: No Digital Data Available	NWI classification: None						
Are climatic / hydrologic conditions on the site typical for this time of year	r? Yes No X (If no, explain in Remarks.)						
Are Vegetation , Soil , or Hydrology significantly d	disturbed? Are "Normal Circumstances" present? Yes X No						
Are Vegetation , Soil , or Hydrology naturally prob	olematic? (If needed, explain any answers in Remarks.)						
SUMMARY OF FINDINGS – Attach site map showing sampling	g point locations, transects, important features, etc.						
Hydrophytic Vegetation Present? Yes No X	Is the Sampled Area						
Hydrophytic Vegetation Present? Hydric Soil Present? Yes No X Yes No X	within a Wetland? Yes No X						
Wetland Hydrology Present?	If yes, optional Wetland Site ID: Wetland 39						
Remarks: (Explain alternative procedures here or in a separate report.) Antecedent precipitation analysis showed drier than normal conditions							
7 the country is of phase of a hard and that Horman conditions							
HYDROLOGY							
Wetland Hydrology Indicators:	Secondary Indicators (minimum of two required)						
Primary Indicators (minimum of one is required; check all that apply)	Surface Soil Cracks (B6)						
Surface Water (A1) Water-Stained Leaves (B	· · · · · · · · · · · · · · · · · · ·						
High Water Table (A2) Aquatic Fauna (B13)	Moss Trim Lines (B16)						
Saturation (A3) Marl Deposits (B15)	Dry-Season Water Table (C2)						
Water Marks (B1) Hydrogen Sulfide Odor (C							
Sediment Deposits (B2) Oxidized Rhizospheres or							
Drift Deposits (B3) Presence of Reduced Iron							
Algal Mat or Crust (B4) Recent Iron Reduction in							
Iron Deposits (B5) Thin Muck Surface (C7)	Shallow Aquitard (D3) Migratopographic Police (D4)						
Inundation Visible on Aerial Imagery (B7) Other (Explain in Remark							
Sparsely Vegetated Concave Surface (B8)	FAC-Neutral Test (D5)						
Field Observations:							
Surface Water Present Yes No X Depth (inch	hes):						
	hes):						
	hes): Wetland Hydrology Present? Yes No _X						
(includes capillary fringe)							
Describe Recorded Data (stream gauge, monitoring well, aerial photos,	previous inspections), if available:						
Remarks:							

Tree Stratum (Plot size: 30 ft)	Absolute % Cover	Dominant <u>Species</u>	Indicator Status	Dominance Test worksheet:
1. Populus tremuloides	80	Yes	FAC	Number of Dominant Species
2. Acer rubrum	10	No	FAC	That Are OBL, FACW, or FAC: 1 (A)
3. Quercus macrocarpa	10	No	FACU	
4				Total Number of Dominant Species Across All Strata: 4 (B)
5		-		Percent of Dominant Species
6				That Are OBL, FACW, or FAC:(A/B)
7				Prevalence Index worksheet:
	100	= Total Cover		Total % Cover of: Multiply by:
Sapling/Shrub Stratum (Plot size: 15 ft)		_		OBL species $0 \times 1 = 0$
1. Corylus cornuta	20	Yes	FACU	FACW species 0 x 2 = 0
2.				
3.				
4				FACU species 60 x 4 = 240
5				UPL species60 x 5 =300
6.				Column Totals: 210 (A) 810 (B)
7				Prevalence Index = B/A = 3.86
	20			Hydrophytic Vegetation Indicators:
Herb Stratum (Plot size: 5 ft)		= Total Cover		1 - Rapid Test for Hydrophytic Vegetation
1 Eurybia macrophylla	60	Yes	UPL	_ 2 - Dominance Test is >50%
Pteridium aquilinum	30	Yes	FACU	_ 3 - Prevalence Index is ≤3.0¹
		103	17100	4 - Morphological Adaptations ¹
4				(Provide supporting data in Remarks or on a separate sheet)
				Problematic Hydrophytic Vegetation ¹ (Explain)
				¹Indicators of hydric soil and wetland hydrology must be present, unless
				disturbed or problematic.
				Definitions of Variation Strate.
				Definitions of Vegetation Strata:
9 10				Tree – Woody plants 3 in. (7.6 cm) or more in
11.				diameter at breast height (DBH), regardless of height.
				Sapling/shrub – Woody plants less than 3 in. DBH
12				and greater than or equal to 3.28 ft (1 m) tall.
	90	= Total Cover		Herb – All herbaceous (non-woody) plants, regardless
Woody Vine Stratum (Plot size: 30 ft)				of size, and woody plants less than 3.28 ft tall.
1				Woody vines – All woody vines greater than 3.28 ft in
2				height.
3				
4				Hydrophytic
	0			Vegetation Present? Yes No X
		= Total Cover		Tresent: res No
Remarks: (Include photo numbers here or on a separation of the sep	rate sheet.)			

Sampling Point:

W39-2u

SOIL Sampling Point: W39-2u

Profile Desc Depth	cription: (Describe to Matrix	o the dep		ment the x Feature		or or co	onfirm the absence of indicators.)
(inches)	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²	Texture Remarks
0-9	10YR 3/2	100					Loamy Sand
9-15	7.5YR 4/6	100					Sand
15-24	7.5YR 5/6	100					Sand
	7.511 3/0	100					Sanu
			-				
							·
			•				
¹ Type: C=C	oncentration, D=Dep	letion, RN	/I=Reduced Matrix, N	1S=Mas	ked Sand	d Grains.	s. ² Location: PL=Pore Lining, M=Matrix.
Hydric Soil	Indicators:						Indicators for Problematic Hydric Soils ³ :
Histosol (Polyvalue Below	Surface	(S8) (LRR	R,	2 cm Muck (A10) (LRR K, L, MLRA 149B)
	ipedon (A2)		MLRA 149B)	oo (CO) (I	DD D MI	DA 440D	Coast Prairie Redox (A16) (LRR K, L, R)
Black His	n Sulfide (A4)		Thin Dark Surface High Chroma Sa				5 cm Mucky Peat or Peat (S3) (LRR K, L, R) Polyvalue Below Surface (S8) (LRR K, L)
	Layers (A5)		Loamy Mucky M				Thin Dark Surface (S9) (LRR K, L)
	Below Dark Surface (A	11)	Loamy Gleyed M			-/	Iron-Manganese Masses (F12) (LRR K, L, R)
Thick Da	rk Surface (A12)		Depleted Matrix				Piedmont Floodplain Soils (F19) (MLRA 149B)
Sandy M	ucky Mineral (S1)		Redox Dark Surf	ace (F6)			Mesic Spodic (TA6) (MLRA 144A, 145, 149B)
	leyed Matrix (S4)		Depleted Dark S	•	7)		Red Parent Material (F21)
	edox (S5)		Redox Depression	, ,			Very Shallow Dark Surface (F22)
7.7	Matrix (S6)		Marl (F10) (LRR	K, L)			Other (Explain in Remarks)
Dark Sur	race (S7)						
³ Indicators of	f hydrophytic vegetat	ion and w	etland hydrology mu	st be pr	esent, ur	less dist	sturbed or problematic.
Restrictive I	Layer (if observed):						
Type:							
Depth (ir	nches):						Hydric Soil Present? Yes NoX
Remarks:							•

Project/Site: Pine County Solar	City/County: Pine Sampling Date: 10/31/2022					
Applicant/Owner: Swift Current Energy	State: Min Sampling Point: W39-2w					
Investigator(s): BB KKM	Section, Township, Range: T044N, R020W, S26					
	relief (concave, convex, none): Concave Slope %: 1					
Subregion (LRR or MLRA): LRR K, MLRA 90A Lat: 46.264566	Long: -92.82796 Datum: WGS84					
Soil Map Unit Name: No Digital Data Available	NWI classification: PFO1A					
Are climatic / hydrologic conditions on the site typical for this time of year?	Yes No X (If no, explain in Remarks.)					
Are Vegetation, Soil, or Hydrology significantly dist						
Are Vegetation, Soil, or Hydrology naturally problem	· · · · · · · · · · · · · · · · · · ·					
SUMMARY OF FINDINGS – Attach site map showing sampling p	mano:					
	<u> </u>					
Hydrophytic Vegetation Present? Yes X No	Is the Sampled Area					
Hydric Soil Present? Yes X No	within a Wetland? Yes X No Wetland 20					
Wetland Hydrology Present? Yes X No Remarks: (Explain alternative procedures here or in a separate report.)	If yes, optional Wetland Site ID: Wetland 39					
HYDROLOGY						
Wetland Hydrology Indicators:	Secondary Indicators (minimum of two required)					
Primary Indicators (minimum of one is required; check all that apply)	Surface Soil Cracks (B6)					
Surface Water (A1) Water-Stained Leaves (B9)	Drainage Patterns (B10)					
High Water Table (A2) Aquatic Fauna (B13)	Moss Trim Lines (B16)					
Saturation (A3) Marl Deposits (B15)	Dry-Season Water Table (C2)					
Water Marks (B1) Hydrogen Sulfide Odor (C1)	Crayfish Burrows (C8)					
Sediment Deposits (B2) Oxidized Rhizospheres on L	Living Roots (C3) Saturation Visible on Aerial Imagery (C9)					
Presence of Reduced Iron (C4) Stunted or Stressed Plants (D1)					
Algal Mat or Crust (B4) Recent Iron Reduction in Til	lled Soils (C6) X Geomorphic Position (D2)					
Iron Deposits (B5) Thin Muck Surface (C7)	Shallow Aquitard (D3)					
Inundation Visible on Aerial Imagery (B7) Other (Explain in Remarks)	Microtopographic Relief (D4)					
Sparsely Vegetated Concave Surface (B8)	X FAC-Neutral Test (D5)					
Field Observations:						
Surface Water Present Yes No _X Depth (inches	s):					
Water Table Present Yes No X Depth (inches	s):					
Saturation Present Yes No X Depth (inches	S): Wetland Hydrology Present? Yes X No					
(includes capillary fringe)						
Describe Recorded Data (stream gauge, monitoring well, aerial photos, pr	revious inspections), if available:					
Remarks:						

VEGETATION – Use scientific names of	plants.			Sampling Point: W39-2w
Tree Stratum (Plot size: 30 ft)	Absolute % Cover	Dominant Species	Indicator Status	Dominance Test worksheet:
1. Populus tremuloides	65	Yes	FAC	
				Number of Dominant Species
	_			That Are OBL, FACW, or FAC:4 (A)
3				Total Number of Dominant
4				Species Across All Strata: 4 (B)
5				
6				Percent of Dominant Species
7				That Are OBL, FACW, or FAC:(A/B)
				Prevalence Index worksheet:
	65	= Total Cover	•	Total % Cover of: Multiply by:
Sapling/Shrub Stratum (Plot size: 15 ft)		-		
1. Alnus incana	40	Yes	FACW	· — —
				FACW species 75 x 2 = 150
Ilex verticillata	15	Yes	FACW	FAC species 65 x 3 = 195
Corylus cornuta	5	No	FACU	FACU species 5 x 4 = 20
4				<u> </u>
5				UPL species 0 x 5 = 0
6.				Column Totals: 210 (A) 430 (B)
				Prevalence Index = B/A = 2.05
7				Hydrophytic Vegetation Indicators:
	60	= Total Cover		
Herb Stratum (Plot size: 5 ft)		= Total Gover		1 - Rapid Test for Hydrophytic Vegetation
	60	Yes	OBL	X 2 - Dominance Test is >50%
"				X 3 - Prevalence Index is ≤3.01
2. Spiraea alba	10	No	FACW	
3. Alnus incana	10	No	FACW	4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet)
4. Carex lacustris	5	No	OBL	(
5.				Problematic Hydrophytic Vegetation ¹ (Explain)
				¹Indicators of hydric soil and wetland hydrology must be present, unless
				disturbed or problematic.
7				
8				Definitions of Vegetation Strata:
9				Trace Manches India (7.0 and an area in
10				Tree – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.
11.				diameter at breast height (DBH), regardless of height.
12.				Sapling/shrub – Woody plants less than 3 in. DBH
12.	-			and greater than or equal to 3.28 ft (1 m) tall.
	85	= Total Cover		
Woody Vine Stratum (Plot size: 30 ft)		- 10101 00101		Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.
				of size, and woody plants less than 3.28 it tall.
1				Woody vines – All woody vines greater than 3.28 ft in
2				height.
3				
4				Hydrophytic
				Vegetation
	0	= Total Cover		Present? Yes X No No
5				
Remarks: (Include photo numbers here or on a se	eparate sheet.)			

SOIL Sampling Point: W39-2w

		the dep	th need				or or co	onfirm the absence of indica	ators.)
Depth (inches)	Matrix	%	Colo		x Feature		Loc ²	Toytura	Domorko
(inches) 0-2	Color (moist)		<u> </u>	r (moist)	<u>%</u>	Type ¹	LOC	Texture	Remarks
-	10YR 2/2	100	· · ·	1/0				Loamy Sand	
2-9	7.5YR 4/2	95	7.5YR	4/6	5	С	M	Loamy Sand	
9-24	7.5YR 5/2	70	7.5YR	4/6	30	С	M	Loamy Sand	
			•						
			-						
¹Type: C=C	oncentration, D=Deple	etion RN	1-Reduc	ad Matrix N	1 <u></u>	ked Sand	d Grains	. ² Location: PL=Pore Lir	ning M-Matrix
			/i=i\cauc		/IO=IVIASI	ncu Oari	J Oranis.		
Hydric Soil I Histosol (Po	lyvalue Below	Surface	(S8) (I D D	D		oblematic Hydric Soils ³ : D) (LRR K, L, MLRA 149B)
	ipedon (A2)			луvалие велоw ИLRA 149В)	Surface	(36) (LKK	к,		edox (A16) (LRR K, L, R)
Black His				in Dark Surfac	ce (S9) (L	RR R, ML	.RA 149B		at or Peat (S3) (LRR K, L, R)
	n Sulfide (A4)			gh Chroma Sa				· —	v Surface (S8) (LRR K, L)
Stratified	Layers (A5)		Lo	amy Mucky M	ineral (F1) (LRR K,	L)	Thin Dark Surfa	ice (S9) (LRR K, L)
Depleted	Below Dark Surface (A1	1)	Lo	amy Gleyed M	fatrix (F2)			Iron-Manganese	e Masses (F12) (LRR K, L, R)
Thick Dar	rk Surface (A12)			pleted Matrix				Piedmont Flood	Iplain Soils (F19) (MLRA 149B)
	ucky Mineral (S1)			dox Dark Surf					TA6) (MLRA 144A, 145, 149B)
	leyed Matrix (S4)			pleted Dark S	•	7)		Red Parent Mat	,
				dox Depression					ark Surface (F22)
Stripped i	Matrix (S6)		IVI	arl (F10) (LRR	K, L)			Other (Explain i	n Remarks)
		on and w	etland h	ydrology mu	ist be pre	esent, ur	iless dist	turbed or problematic.	
Type:	_ayer (if observed):								
•	nches):			_				Hydric Soil Present?	Yes ^X No
Remarks:				_				Tryunc 30ii i lesent:	
Remarks:									

Project/Site: Pine County Solar	City/County: Pine Sampling Date: 10/31/2022						
Applicant/Owner: Swift Current Energy	State: Min Sampling Point: W40-1u						
Investigator(s): BB KKM	Section, Township, Range: T044N, R020W, S26						
	relief (concave, convex, none): Linear Slope %: 3						
Subregion (LRR or MLRA): LRR K, MLRA 90A Lat: 46.262214	Long: -92.827859 Datum: WGS84						
Soil Map Unit Name: Denied Access	NWI classification: None						
•							
Are climatic / hydrologic conditions on the site typical for this time of year?	Yes No _X (If no, explain in Remarks.)						
Are Vegetation, Soil, or Hydrology significantly distributed as a significant signif							
Are Vegetation , Soil , or Hydrology naturally problem	matic? (If needed, explain any answers in Remarks.)						
SUMMARY OF FINDINGS – Attach site map showing sampling p	oint locations, transects, important features, etc.						
Hydrophytic Vegetation Present? Yes No X	Is the Sampled Area						
Hydric Soil Present? Yes No X	within a Wetland? Yes No X						
Wetland Hydrology Present? Yes No X	If yes, optional Wetland Site ID: Wetland 40						
Remarks: (Explain alternative procedures here or in a separate report.) Antecedent precipitation analysis showed drier than normal conditions							
HYDROLOGY							
Wetland Hydrology Indicators:	Secondary Indicators (minimum of two required)						
Primary Indicators (minimum of one is required; check all that apply)	Surface Soil Cracks (B6)						
Surface Water (A1) Water-Stained Leaves (B9)	Drainage Patterns (B10)						
High Water Table (A2) Aquatic Fauna (B13)	Moss Trim Lines (B16)						
Saturation (A3) Marl Deposits (B15)	Dry-Season Water Table (C2)						
Water Marks (B1) Hydrogen Sulfide Odor (C1)	Crayfish Burrows (C8)						
Sediment Deposits (B2) Oxidized Rhizospheres on Li	iving Roots (C3) Saturation Visible on Aerial Imagery (C9)						
Drift Deposits (B3) Presence of Reduced Iron (C	C4) Stunted or Stressed Plants (D1)						
Algal Mat or Crust (B4) Recent Iron Reduction in Till	led Soils (C6) Geomorphic Position (D2)						
Iron Deposits (B5) Thin Muck Surface (C7)	Shallow Aquitard (D3)						
Inundation Visible on Aerial Imagery (B7) Other (Explain in Remarks)	Microtopographic Relief (D4)						
Sparsely Vegetated Concave Surface (B8)	FAC-Neutral Test (D5)						
Field Observations:							
Surface Water Present Yes No X Depth (inches	s):						
Water Table Present Yes No X Depth (inches	s):						
Saturation Present Yes No X Depth (inches	S): Wetland Hydrology Present? Yes No _X						
(includes capillary fringe)							
Describe Recorded Data (stream gauge, monitoring well, aerial photos, pre	evious inspections), if available:						
Remarks:							

<u>Tree Stratum</u> (Plot size: <u>30 ft</u>)	Absolute % Cover		Indicator Status	Dominance Test worksheet:
Populus tremuloides 2.	70	Yes	FAC	Number of Dominant Species That Are OBL, FACW, or FAC:(A)
3		- <u></u>		Total Number of Dominant Species Across All Strata:3(B)
5				Percent of Dominant Species That Are OBL, FACW, or FAC:33(A/B)
7			_	Prevalence Index worksheet:
	70	_ = Total Cove		Total % Cover of: Multiply by:
Sapling/Shrub Stratum (Plot size: 15 ft)		_		OBL species 10 x 1 = 10
1. Corylus cornuta	60	Yes	FACU	FACW species 0 x 2 = 0
2.				
3.				FAC species x 3 =210
4.				FACU species120 x 4 =480
5.			_	UPL species 10 x 5 = 50
			-	Column Totals: 210 (A) 750 (B)
7				Prevalence Index = B/A = 3.57
· -	-			Hydrophytic Vegetation Indicators:
	60	= Total Cover		1 - Rapid Test for Hydrophytic Vegetation
Herb Stratum (Plot size: 5 ft)				- 2 - Dominance Test is >50%
1. Pteridium aquilinum	50	Yes	FACU	
2. Eurybia macrophylla	10	No	UPL	3 - Prevalence Index is ≤3.0¹
3. Solidago canadensis	10	No	FACU	4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet)
4. Calamagrostis canadensis	10	No	OBL	(Fronds supporting data in Normanio of on a separate sheet)
5				Problematic Hydrophytic Vegetation ¹ (Explain)
6.				¹Indicators of hydric soil and wetland hydrology must be present, unless
7.				disturbed or problematic.
8.				Definitions of Vegetation Strata:
9.				Dominions of Vegetation Strata.
10.				Tree – Woody plants 3 in. (7.6 cm) or more in
		· · · · · · · · · · · · · · · · · · ·		diameter at breast height (DBH), regardless of height.
11.		· · · · · · · · · · · · · · · · · · ·		Sapling/shrub – Woody plants less than 3 in. DBH
12		·		and greater than or equal to 3.28 ft (1 m) tall.
	80	= Total Cover		Herb – All herbaceous (non-woody) plants, regardless
Woody Vine Stratum (Plot size:30 ft)		-		of size, and woody plants less than 3.28 ft tall.
1				
2.				Woody vines – All woody vines greater than 3.28 ft in height.
3.				neight.
4				Hydrophytic
				Vegetation
	0	= Total Cover		Present? Yes No X
Remarks: (Include photo numbers here or on a separ	ate sheet.)			

Sampling Point: W40-1u

SOIL Sampling Point: W40-1u

		the dep				or or co	onfirm the absence of in	dicators.)
Depth	Matrix	0/		x Featur		12	Tautura	Develop
(inches) 0-10	Color (moist)	100	Color (moist)	<u>%</u>	Type ¹	Loc ²	Texture	Remarks
	10YR 2/2	100					Loamy Sand	
10-24	7.5YR 4/4	100					Loamy Sand	
	1							
	-							
¹ Type: C=Co	oncentration, D=Depl	etion, RM	1=Reduced Matrix, N	√S=Mas	ked Sand	d Grains.	² Location: PL=Por	e Lining, M=Matrix.
Hydric Soil I	Indicators:						Indicators for	Problematic Hydric Soils ³ :
Histosol ((A1)		Polyvalue Below	/ Surface	(S8) (LRR	R,	2 cm Muck	(A10) (LRR K, L, MLRA 149B)
Histic Epi	ipedon (A2)		MLRA 149B)				Coast Prair	ie Redox (A16) (LRR K, L, R)
Black His	etic (A3)		Thin Dark Surface	ce (S9) (L	RR R, ML	RA 149B) 5 cm Muck	y Peat or Peat (S3) (LRR K, L, R)
Hydroger	n Sulfide (A4)		High Chroma Sa				Polyvalue E	Below Surface (S8) (LRR K, L)
	Layers (A5)		Loamy Mucky M			L)		Surface (S9) (LRR K, L)
	Below Dark Surface (A1	11)	Loamy Gleyed N)			anese Masses (F12) (LRR K, L, R)
	rk Surface (A12)		Depleted Matrix					Floodplain Soils (F19) (MLRA 149B)
	ucky Mineral (S1) leyed Matrix (S4)		Redox Dark Sur Depleted Dark S		7\			dic (TA6) (MLRA 144A, 145, 149B) t Material (F21)
Sandy Re			Redox Depressi	•	,,			ow Dark Surface (F22)
	Matrix (S6)		Marl (F10) (LRR	. ,				lain in Remarks)
Dark Surf				, ,				,
		on and w	etland hydrology mi	ist ha nr	asant un	lace diet	turbed or problematic.	
	_ayer (if observed):	on and w	Charle Hydrology Inc	ist be pr	Cociii, uii	iicoo dioi	Т	
Type:	Layer (ii observeu).							
•	ach ac).						Hydric Soil Present	? Yes No ^X
	nches):						Hydric Soil Present	? Yes No X
Remarks:								

Project/Site: Pine County Solar	City/County: Pine Sampling Date: 10/31/2022					
Applicant/Owner: Swift Current Energy	State: Min Sampling Point: W40-1w					
Investigator(s): BB KKM	Section, Township, Range: T044N, R020W, S26					
	relief (concave, convex, none): Concave Slope %: 1					
Subregion (LRR or MLRA): LRR K, MLRA 90A Lat: 46.262381	Long: -92.827931 Datum: WGS84					
Soil Map Unit Name: Denied Access	NWI classification: PSS1Dd					
•						
Are climatic / hydrologic conditions on the site typical for this time of year?	<u> </u>					
Are Vegetation, Soil, or Hydrology significantly distr						
Are Vegetation, Soil, or Hydrology naturally probler	matic? (Il fleeded, explain any answers in Nemarks.)					
SUMMARY OF FINDINGS – Attach site map showing sampling p	oint locations, transects, important features, etc.					
Hydrophytic Vegetation Present? Yes X No	Is the Sampled Area					
Hydric Soil Present? Yes X No Yes X No	within a Wetland? Yes X No					
Wetland Hydrology Present? Yes X No	If yes, optional Wetland Site ID: Wetland 40					
Remarks: (Explain alternative procedures here or in a separate report.)						
Antecedent precipitation analysis showed drier than normal conditions						
HYDROLOGY						
Wetland Hydrology Indicators:	Secondary Indicators (minimum of two required)					
Primary Indicators (minimum of one is required; check all that apply)	Surface Soil Cracks (B6)					
Surface Water (A1) Water-Stained Leaves (B9)	Drainage Patterns (B10)					
High Water Table (A2) Aquatic Fauna (B13)	Moss Trim Lines (B16)					
Saturation (A3) Marl Deposits (B15)	X Dry-Season Water Table (C2)					
Water Marks (B1) Water Marks (B1) Hydrogen Sulfide Odor (C1)	-					
Sediment Deposits (B2) Oxidized Rhizospheres on Li						
Drift Deposits (B3) Presence of Reduced Iron (C						
Algal Mat or Crust (B4) Recent Iron Reduction in Till	<u> </u>					
Iron Deposits (B5) Thin Muck Surface (C7)	Shallow Aquitard (D3)					
Inundation Visible on Aerial Imagery (B7) Other (Explain in Remarks)	Missackers are all in Delia (/D.4)					
Sparsely Vegetated Concave Surface (B8)	X FAC-Neutral Test (D5)					
Field Observations:						
Surface Water Present Yes No X Depth (inches	3)-					
Water Table Present Yes X No Depth (inches						
Saturation Present Yes X No Depth (inches	/					
(includes capillary fringe))					
Describe Recorded Data (stream gauge, monitoring well, aerial photos, pre	evious inspections), if available:					
3,	,,					
Remarks:						
1						

Absolute <u>% Cover</u>	Dominant Species	Indicator Status	Dominance Test worksheet:
50	Yes	FAC	
			Number of Dominant Species That Are OBL, FACW, or FAC: 3 (A)
			That Are OBL, FACW, or FAC:3 (A)
	 -		Total Number of Dominant
			Species Across All Strata: 3 (B)
			Percent of Dominant Species
			That Are OBL, FACW, or FAC: 100 (A/B)
			Prevalence Index worksheet:
50	_ = Total Cover		Total % Cover of: Multiply by:
	_		OBL species 55 x 1 = 55
60	Yes	FACW	
	No.	FACU	FACW species 70 x 2 = 140
			FAC species 50 x 3 = 150
			FACU species 25 x 4 = 100
			UPL species 0 x 5 = 0
			Column Totals: 200 (A) 445 (B)
			Prevalence Index = B/A = 2.23
70			Hydrophytic Vegetation Indicators:
	= Total Cover		- 1 - Rapid Test for Hydrophytic Vegetation
			X 2 - Dominance Test is >50%
55	Yes	OBL	X 3 - Prevalence Index is ≤3.0¹
15	No	FACU	
5	No	FACW	4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet)
5	No	FACW	
	<u> </u>		Problematic Hydrophytic Vegetation ¹ (Explain)
			¹Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
			·
			Definitions of Vegetation Strata:
			Tree – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.
			diameter at breast neight (DDH), regardless of neight.
			Sapling/shrub – Woody plants less than 3 in. DBH
80			and greater than or equal to 3.28 ft (1 m) tall.
	= Total Cover		Herb – All herbaceous (non-woody) plants, regardless
			of size, and woody plants less than 3.28 ft tall.
			Woody vines – All woody vines greater than 3.28 ft in
			height.
			Hydrophytic
0	= Total Cover		Vegetation Present? Yes X No
	% Cover 50 50 60 10 55 15 5 5 80	% Cover Species 50 Yes 60 Yes 10 No 55 Yes 15 No 5 No 5 No 5 No 5 Total Cover	% Cover Species Status 50 Yes FAC

SOIL Sampling Point: W40-1w

		the dep	th need				tor or co	onfirm the absence of ir	ndicators.)
Depth (inches)	Matrix Color (moist)	%	Colo	r (moist)	x Featur %	es Type¹	Loc ²	Texture	Remarks
0-16	10YR 3/1	85	10YR	4/6	15	С	M	Sandy Clay Loam	Remains
16-24	10YR 4/1	80	10YR	4/6	20	С	<u>M</u>	Sandy Clay Loam	
									_
¹Type: C=C	oncentration, D=Deple	etion, RN	/=Reduc	ced Matrix, N	л S=M as	ked San	d Grains	² Location: PL=Por	re Lining, M=Matrix.
Hydric Soil	Indicators:							Indicators for	r Problematic Hydric Soils³:
Histosol (Po	lyvalue Below	/ Surface	(S8) (LRR	R,		(A10) (LRR K, L, MLRA 149B)
Histic Epi	ipedon (A2)			MLRA 149B)				·	irie Redox (A16) (LRR K, L, R)
Black His	stic (A3)		Thin Dark Surface (S9) (LRR R, MLRA 149B)) 5 cm Muck	xy Peat or Peat (S3) (LRR K, L, R)
Hydroger	n Sulfide (A4)		High Chroma Sands (S11) (LRR K, L)					Polyvalue	Below Surface (S8) (LRR K, L)
	Layers (A5)		Loamy Mucky Mineral (F1) (LRR K, L)						Surface (S9) (LRR K, L)
	Below Dark Surface (A1	1)	Loamy Gleyed Matrix (F2)						anese Masses (F12) (LRR K, L, R)
	rk Surface (A12)		Depleted Matrix (F3) X Redox Dark Surface (F6)					<u> </u>	Floodplain Soils (F19) (MLRA 149B)
	ucky Mineral (S1) leyed Matrix (S4)			edox Dark Sur epleted Dark S		7)			dic (TA6) (MLRA 144A, 145, 149B) nt Material (F21)
	edox (S5)			edox Depressi		1)			ow Dark Surface (F22)
	Matrix (S6)			arl (F10) (LRR	, ,				plain in Remarks)
Dark Sur				, , ,	. ,			、 .	,
³ Indicators of	f hydrophytic vegetatio	on and w	etland h	ydrology mu	ıst be pr	esent, ur	nless dist	turbed or problematic.	
	Layer (if observed):			,	<u> </u>			<u>.</u>	
Type:	, , , , , , , , , , , , , , , , , , , ,								
Depth (ir	nches):			_				Hydric Soil Present	? Yes X No
Remarks:									

Project/Site: Pine County Solar	City/County: Pine Sampling Date: 10/31/2022						
Applicant/Owner: Swift Current Energy	State: Min Sampling Point: W41-1u						
Investigator(s): KKM BB	Section, Township, Range: T044N, R020W, S26						
	relief (concave, convex, none): Linear Slope %: 3						
Subregion (LRR or MLRA): LRR K, MLRA 90A Lat: 46.260466							
Soil Map Unit Name: Denied Access	NWI classification: None						
Are climatic / hydrologic conditions on the site typical for this time of year?	Yes No X (If no, explain in Remarks.)						
Are Vegetation , Soil , or Hydrology significantly distr	rurbed? Are "Normal Circumstances" present? Yes X No						
Are Vegetation , Soil , or Hydrology naturally problem	matic? (If needed, explain any answers in Remarks.)						
SUMMARY OF FINDINGS – Attach site map showing sampling p	oint locations, transects, important features, etc.						
Hydrophytic Vegetation Present? Yes No X	Is the Sampled Area						
Hydric Soil Present? Yes No X	within a Wetland? Yes No X						
Wetland Hydrology Present? Yes No X	If yes, optional Wetland Site ID: Wetland 41						
Antecedent precipitation analysis showed drier than normal conditions							
HYDROLOGY							
Wetland Hydrology Indicators:	Secondary Indicators (minimum of two required)						
Primary Indicators (minimum of one is required; check all that apply)	Surface Soil Cracks (B6)						
Surface Water (A1) Water-Stained Leaves (B9)	Drainage Patterns (B10)						
High Water Table (A2) Aquatic Fauna (B13)	Moss Trim Lines (B16)						
Saturation (A3) Marl Deposits (B15)	Dry-Season Water Table (C2)						
Water Marks (B1) Hydrogen Sulfide Odor (C1)							
Sediment Deposits (B2) Oxidized Rhizospheres on Li	iving Roots (C3) Saturation Visible on Aerial Imagery (C9)						
Drift Deposits (B3) Presence of Reduced Iron (C	C4) Stunted or Stressed Plants (D1)						
Algal Mat or Crust (B4) Recent Iron Reduction in Tilli							
Iron Deposits (B5) — Thin Muck Surface (C7)	Shallow Aquitard (D3)						
Inundation Visible on Aerial Imagery (B7) Other (Explain in Remarks)	Microtopographic Relief (D4)						
Sparsely Vegetated Concave Surface (B8)	FAC-Neutral Test (D5)						
Field Observations:							
Surface Water Present Yes No X Depth (inches	s):						
Water Table Present Yes No X Depth (inches							
Saturation Present Yes No X Depth (inches	s): Wetland Hydrology Present? Yes No _X_						
(includes capillary fringe)							
Describe Recorded Data (stream gauge, monitoring well, aerial photos, pre	evious inspections), if available:						
Remarks:							

VEGETATION – Use scientific names of	plants.			Sampling Point: W41-1u
Tree Stratum (Plot size: 30 ft)	Absolute <u>% Cover</u>	Dominant Species	Indicator Status	Dominance Test worksheet:
1. Acer rubrum	20	Yes	FAC	
Quercus macrocarpa	10	Yes	FACU	Number of Dominant Species That Are OBL, FACW, or FAC:(A)
3				Total Number of Dominant
4				Species Across All Strata: 5 (B)
5				
6				Percent of Dominant Species That Are OBL, FACW, or FAC: 20 (A/B)
7.				Prevalence Index worksheet:
	30	= Total Cover		Total % Cover of: Multiply by:
Sapling/Shrub Stratum (Plot size:15 ft)		_= 10181 00701		
	25	Yes	FACU	OBL species 0 x 1 = 0
		163	TACO	FACW species 10 x 2 = 20
2				FAC species 35 x 3 = 105
3				FACU species 80 x 4 = 320
4				UPL species 20 x 5 = 100
5				Column Totals: 145 (A) 545 (B)
6.				Prevalence Index = B/A = 3.76
7				Hydrophytic Vegetation Indicators:
	25	= Total Cover		- 1 - Rapid Test for Hydrophytic Vegetation
Herb Stratum (Plot size: 5 ft)				- 2 - Dominance Test is >50%
1. Poa pratensis	25	Yes	FACU	-
2. Solidago canadensis	20	Yes	FACU	3 - Prevalence Index is ≤3.0¹
3. Rubus idaeus	15	No	FAC	4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet)
4. Solidago gigantea	10	No	FACW	
5. Bromus inermis	10	No	UPL	Problematic Hydrophytic Vegetation ¹ (Explain)
6. <u>Descurainia sophia</u>	10	No	UPL	¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
7				
8				Definitions of Vegetation Strata:
9				- W
10				Tree – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.
11				
12				Sapling/shrub – Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.
	90	T		
Woody Vine Stratum (Plot size: 30 ft)		= Total Cover		Herb – All herbaceous (non-woody) plants, regardless
				of size, and woody plants less than 3.28 ft tall.
1.				Woody vines – All woody vines greater than 3.28 ft in
2.				height.
3		<u> </u>		
4				Hydrophytic Vegetation
	0	= Total Cover		Present? Yes No X
		- Total Cover		
Describe. (Include whate words are horse or as a				
Remarks: (Include photo numbers here or on a se	eparate sneet.)			

SOIL Sampling Point: W41-1u

Profile Desc Depth	ription: (Describe to Matrix	the dep	th need		ment the x Feature		tor or co	onfirm the absence of indicators.)		
(inches)	Colo	r (moist)	%	Colo	or (moist)	%	Type ¹	Loc ²	Texture Remarks		
0-8	5YR	2.5/2	100						Loamy Sand		
8-16	5YR	4/4	95	5YR	4/6	5	С	М	Loamy Sand		
16-24	2.5YR	4/6	100						Loamy Sand		
		,									
		,									
		-									
¹Type: C=Co			etion, RN	/I=Reduc	ed Matrix, N	MS=Mas	ked San	d Grains.	s. ² Location: PL=Pore Lining, M=Matrix.		
Hydric Soil I		s:							Indicators for Problematic Hydric Soils ³ :		
Histosol (`			olyvalue Below	V Surface	(S8) (LRF	R,	2 cm Muck (A10) (LRR K, L, MLRA 149B)		
Black His	ipedon (A2 stic (A3))			VILRA 149B) iin Dark Surfa	ce (S9) (L	.RR R. ML	RA 149B	Coast Prairie Redox (A16) (LRR K, L, R) 5 cm Mucky Peat or Peat (S3) (LRR K, L, R)		
	n Sulfide (A	4)			gh Chroma Sa				Polyvalue Below Surface (S8) (LRR K, L)		
	Layers (A5	•			amy Mucky M				Thin Dark Surface (S9) (LRR K, L)		
Depleted	Below Dar	k Surface (A1	11)	Lo	amy Gleyed N	Matrix (F2))		Iron-Manganese Masses (F12) (LRR K, L, R)		
Thick Dar	rk Surface	(A12)		De	epleted Matrix	(F3)			Piedmont Floodplain Soils (F19) (MLRA 149B)		
	ucky Miner				edox Dark Sur				Mesic Spodic (TA6) (MLRA 144A, 145, 149B)		
	leyed Matri	x (S4)			epleted Dark S	•	7)		Red Parent Material (F21)		
Sandy Re					edox Depressi	, ,			Very Shallow Dark Surface (F22) Other (Explain in Remarks)		
Suipped i	Matrix (S6) face (S7)	l		IVIC	arl (F10) (LRR	ι κ , ι)			Other (Explain in Remarks)		
		utio vogototi	an and	ط لمحملات	drolo a mo.	iat ha ne		ulaaa diad	stude od ov problemetic		
Restrictive L		-	on and w	etiand n	yarology mu	ust be pro	esent, ur	ness alsi	sturbed or problematic.		
Type:	Layer (II C	observeu).									
Depth (ir	nches):				_				Hydric Soil Present? Yes No X		
Remarks:									injune com receiled		
Remarks.											

Project/Site: Pine County Solar	City/County: Pine Sampling Date: 10/31/2022						
Applicant/Owner: Swift Current Energy	State: Min Sampling Point: W41-1w						
Investigator(s): BB KKM	Section, Township, Range: T044N, R020W, S26						
	relief (concave, convex, none): Concave Slope %: 1						
Subregion (LRR or MLRA): LRR K, MLRA 90A Lat: 46.260487	Long: -92.828386 Datum: WGS84						
	NWI classification: None						
Soil Map Unit Name: Denied Access							
Are climatic / hydrologic conditions on the site typical for this time of year?	Yes No _X (If no, explain in Remarks.)						
Are Vegetation , Soil , or Hydrology significantly distr							
Are Vegetation, Soil, or Hydrology naturally problem	matic? (If needed, explain any answers in Remarks.)						
SUMMARY OF FINDINGS – Attach site map showing sampling po	oint locations, transects, important features, etc.						
Lhudrashutia Variatian Presenta	In the Complet Area						
Hydrophytic Vegetation Present? Yes X No Yes X No Yes X No	Is the Sampled Area within a Wetland? Yes X No						
Wetland Hydrology Present? Yes X No	If yes, optional Wetland Site ID: Wetland 41						
	ii yes, optional wetiand Site ID						
Remarks: (Explain alternative procedures here or in a separate report.) Antecedent precipitation analysis showed drier than normal conditions							
The control of the co							
HYDROLOGY							
Wetland Hydrology Indicators:	Secondary Indicators (minimum of two required)						
Primary Indicators (minimum of one is required; check all that apply)	Surface Soil Cracks (B6)						
Surface Water (A1) Water-Stained Leaves (B9)	Drainage Patterns (B10)						
High Water Table (A2) Aquatic Fauna (B13)	Moss Trim Lines (B16)						
Saturation (A3) Marl Deposits (B15)	X Dry-Season Water Table (C2)						
Water Marks (B1) Hydrogen Sulfide Odor (C1)	- i i i i						
Sediment Deposits (B2) Oxidized Rhizospheres on Li							
Drift Deposits (B3) Presence of Reduced Iron (C	<u> </u>						
Algal Mat or Crust (B4) Recent Iron Reduction in Till	<u> </u>						
Iron Deposits (B5) Thin Muck Surface (C7)	Shallow Aquitard (D3)						
Inundation Visible on Aerial Imagery (B7) Other (Explain in Remarks)	Microtopographic Relief (D4)						
Sparsely Vegetated Concave Surface (B8)	X FAC-Neutral Test (D5)						
Field Observations:							
Surface Water Present Yes No X Depth (inches	3)-						
Water Table Present Yes X No Depth (inches							
Saturation Present Yes X No Depth (inches	/						
(includes capillary fringe))						
Describe Recorded Data (stream gauge, monitoring well, aerial photos, pre	evious inspections), if available:						
]							
Remarks:							
1							

Tree Stratum (Plot size: 30 ft)	Absolute % Cover	Dominant Species	Indicator Status	Dominance Test worksheet:
1				Number of Dominant Species That Are OBL, FACW, or FAC:3(A)
3 4 5.				Total Number of Dominant Species Across All Strata: 4 (B)
6				Percent of Dominant Species That Are OBL, FACW, or FAC:(A/B)
				Prevalence Index worksheet:
45.60	0	_ = Total Cover		Total % Cover of: Multiply by:
Sapling/Shrub Stratum (Plot size: 15 ft)				OBL species 25 x 1 = 25
1. Salix interior	40	Yes	FACW	FACW species 87 x 2 = 174
2. Corylus cornuta	15	Yes	FACU	FAC species10 x 3 =30
3				FACU species 20 x 4 = 80
4				UPL species 0 x 5 = 0
5				Column Totals: 142 (A) 309 (B)
6				Prevalence Index = B/A = 2.18
7				Trevalence index = B/A =
	55	= Total Cover		Hydrophytic Vegetation Indicators:
Herb Stratum (Plot size: 5 ft)		= Total Cover		1 - Rapid Test for Hydrophytic Vegetation
1. Phalaris arundinacea	40	Yes	FACW	X 2 - Dominance Test is >50%
Calamagrostis canadensis	20	Yes	OBL	X 3 - Prevalence Index is ≤3.01
O. Dubus idease	40	No	FAC	4 - Morphological Adaptations ¹
				(Provide supporting data in Remarks or on a separate sheet)
4. Symphyotrichum lanceolatum	7		FACU	Problematic Hydrophytic Vegetation ¹ (Explain)
5. <u>Solidago canadensis</u>			FACU	¹Indicators of hydric soil and wetland hydrology must be present, unless
6. <u>Scirpus cyperinus</u>			OBL	disturbed or problematic.
7				
8				Definitions of Vegetation Strata:
9				Tree – Woody plants 3 in. (7.6 cm) or more in
10				diameter at breast height (DBH), regardless of height.
11				Sapling/shrub – Woody plants less than 3 in. DBH
12		<u> </u>		and greater than or equal to 3.28 ft (1 m) tall.
	87	= Total Cover		Harb All barbassas (assumed a state assumbles
Woody Vine Stratum (Plot size: 30 ft)		,		Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.
1				
2.				Woody vines – All woody vines greater than 3.28 ft in height.
3.				neight.
4.				Hydrophytic
				Vegetation
	0	= Total Cover		Present? Yes X No No
Remarks: (Include photo numbers here or on a separ	ate sheet.)			•

Sampling Point:

W41-1w

SOIL Sampling Point: W41-1w

		the dep	th need				tor or co	onfirm the absence of indic	cators.)	
Depth (inches)	Matrix Color (moist)	%	Colo		x Featur %		Loc ²	Texture	Remarks	
(inches) 0-10	Color (moist) 5YR 2.5/1	95	5YR	or (moist) 4/6	5	Type ¹ C	M	Sandy Loam	Remarks	
10-18	5YR 4/1	95	5YR	4/6	5	c	M	Loamy Sand		
18-24	5YR 4/4	90	5YR	4/6	10	<u>C</u>	M	Loamy Sand		
			-							
			-							
¹Type: C=C	oncentration, D=Deple	etion, RN	/=Reduc	ced Matrix, N	√S=Mas	ked San	d Grains	Location: PL=Pore L	ining, M=Matrix.	
Hydric Soil	Indicators:							Indicators for Pr	oblematic Hydric Soils ³ :	
Histosol ((A1)		Po	olyvalue Below	/ Surface	(S8) (LRF	RR,	2 cm Muck (A	10) (LRR K, L, MLRA 149B)	
	ipedon (A2)		ı	MLRA 149B)				Coast Prairie F	Redox (A16) (LRR K, L, R)	
Black His			Thin Dark Surface (S9) (LRR R, MLRA 149B)					•	eat or Peat (S3) (LRR K, L, R)	
	n Sulfide (A4)		High Chroma Sands (S11) (LRR K, L)					 _	ow Surface (S8) (LRR K, L)	
	Layers (A5)	1\	Loamy Mucky Mineral (F1) (LRR K, L) Loamy Gleyed Matrix (F2)						face (S9) (LRR K, L)	
	Below Dark Surface (A1 rk Surface (A12)	1)		epleted Matrix)		Iron-Manganese Masses (F12) (LRR K, L, R) Piedmont Floodplain Soils (F19) (MLRA 149B)		
	ucky Mineral (S1)			edox Dark Sur					(TA6) (MLRA 144A, 145, 149B)	
	leyed Matrix (S4)			epleted Dark S		7)		Red Parent Ma		
Sandy Re	edox (S5)		Re	edox Depressi	ons (F8)			Very Shallow I	Dark Surface (F22)	
Stripped	Matrix (S6)		Ma	arl (F10) (LRR	K, L)			Other (Explain	in Remarks)	
Dark Sur	face (S7)									
³ Indicators of	hydrophytic vegetation	on and w	etland h	nydrology mu	ust be pr	esent, ur	nless dist	turbed or problematic.		
Restrictive I	_ayer (if observed):									
Type:				_						
Depth (ir	nches):			_				Hydric Soil Present?	Yes No	
Remarks:										
									ļ	
									ļ	
									ļ	
									· ·	

Project/Site: Pine County Solar		City/County:	Pine	Sampling Date:	10/31/2022			
Applicant/Owner: Swift Current Energy	_		State: N	Min Sampling Point:	W42-1u			
Investigator(s): KKM BB		Secti	on, Township, Range:	T044N. R020W. S26				
Landform (hillside, terrace, etc.): Backslope	Local re		convex, none): Linea		e %: 3			
·		mer (correave,		•				
Subregion (LRR or MLRA): LRR K, MLRA 90	A Lat: 40.259451		Long: -92.827677		WGS84			
Soil Map Unit Name: Denied Access			NWI classificati	-				
Are climatic / hydrologic conditions on the site type	pical for this time of year?	Yes	S No _X (I	f no, explain in Remarks	s.)			
Are Vegetation , Soil , or Hydrolo	gy significantly distu	rbed? Are	"Normal Circumstances"	present? Yes X	No			
Are Vegetation , Soil , or Hydrolo	gy naturally problem	atic? (If n	eeded, explain any answe	ers in Remarks.)				
SUMMARY OF FINDINGS – Attach site	map showing sampling po	int locations,	transects, important fea	tures, etc.				
Hydrophytic Vegetation Present? Y	es No X	Is the Sam	pled Area					
' ' '	es No X	within a W	•	No X				
l	es No X	If yes, option	_	Wetland 42				
Remarks: (Explain alternative procedures here Antecedent precipitation analysis showed drier								
HYDROLOGY								
Wetland Hydrology Indicators:			Secondary Indicator	s (minimum of two required	<u></u>			
Primary Indicators (minimum of one is required;	check all that apply)		Surface Soil Cr	acks (B6)				
Surface Water (A1)	Water-Stained Leaves (B9)		Drainage Patte	rns (B10)				
High Water Table (A2)	Aquatic Fauna (B13)	Moss Trim Lines (B16)						
Saturation (A3)	Marl Deposits (B15)	Dry-Season Water Table (C2)						
Water Marks (B1)	Hydrogen Sulfide Odor (C1)	Crayfish Burrows (C8)						
Sediment Deposits (B2)	Oxidized Rhizospheres on Liv	iving Roots (C3) Saturation Visible on Aerial Imagery (C9)						
Drift Deposits (B3)	Presence of Reduced Iron (C4	1)	Stunted or Stre	ssed Plants (D1)				
Algal Mat or Crust (B4)	Recent Iron Reduction in Tilled	d Soils (C6)	Geomorphic Po	sition (D2)				
Iron Deposits (B5)	Thin Muck Surface (C7)		Shallow Aquitai	rd (D3)				
Inundation Visible on Aerial Imagery (B7)	Other (Explain in Remarks)		Microtopograph	ic Relief (D4)				
Sparsely Vegetated Concave Surface (B8)			FAC-Neutral Te	est (D5)				
Field Observations:								
	No X Depth (inches):	:						
Water Table Present Yes N	lo X Depth (inches):	:						
	No X Depth (inches):	: '	Wetland Hydrology Pres	sent? Yes	_ NoX			
(includes capillary fringe)								
Describe Recorded Data (stream gauge, monito	oring well, aerial photos, pre	vious inspectio	ns), if available:					
Remarks:								
remarks.								

ee Stratum (Plot size: 30 ft)	Absolute % Cover	Dominant Species	Indicator Status	Dominance Test worksheet:
Acer rubrum	50	Yes	FAC	
Quercus rubra	10	No	FACU	Number of Dominant Species That Are OBL, FACW, or FAC: 1 (A)
Betula papyrifera	7	No	FACU	
Populus tremuloides	5	No	FAC	Total Number of Dominant Species Across All Strata: 3 (B)
				Percent of Dominant Species That Are OBL, FACW, or FAC: 33 (A/E
				Prevalence Index worksheet:
	72	_ = Total Cover		Total % Cover of: Multiply by:
apling/Shrub Stratum (Plot size: 15 ft)				OBL species 0 $x 1 = 0$
				FACW species 0 x 2 = 0
				FAC species 55 x 3 = 165
				FACU species 47 x 4 = 188
				$\begin{array}{c ccccccccccccccccccccccccccccccccccc$
				Column Totals: 152 (A) 603 (E
				Prevalence Index = B/A = 3.97
				Hydrophytic Vegetation Indicators:
	0	= Total Cover		- 1 - Rapid Test for Hydrophytic Vegetation
erb Stratum (Plot size: 5 ft)				2 - Dominance Test is >50%
Eurybia macrophylla	50	Yes	UPL	- 3 - Prevalence Index is ≤3.0 ¹
Solidago canadensis	30	Yes	FACU	4 - Morphological Adaptations ¹
				(Provide supporting data in Remarks or on a separate sheet)
				Problematic Hydrophytic Vegetation ¹ (Explain)
-				**Indicators of hydric soil and wetland hydrology must be present, unless
				disturbed or problematic.
-				
				Definitions of Vegetation Strata:
				Tree – Woody plants 3 in. (7.6 cm) or more in
				diameter at breast height (DBH), regardless of height
				Sapling/shrub – Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.
	80	= Total Cover		Herb – All herbaceous (non-woody) plants, regardles
oody Vine Stratum (Plot size: 30 ft)				of size, and woody plants less than 3.28 ft tall.
				Woody vines – All woody vines greater than 3.28 ft i
				height.
				Hydrophytic
	0	= Total Cover		Vegetation Present? Yes No _X
emarks: (Include photo numbers here or on a sep		= Total Cover		Tresent: resNO

SOIL Sampling Point: W42-1u

		the depth				or or cor	nfirm the absence of indicat	ors.)
Depth (inches)	Matrix Color (moist)	<u></u> %	Color (moist)	x Feature %	es Type¹	Loc ²	Texture	Remarks
(IIICIICS)	Color (moist)		Color (moist)	/0	Турс	LUC	TEXILITE	Remarks
	-							
Type: C=C	oncentration, D=Deple	etion, RM=	Reduced Matrix, I	MS=Mas	ked Sand	Grains.	² Location: PL=Pore Lini	ng, M=Matrix.
Hydric Soil	Indicators:						Indicators for Prob	olematic Hydric Soils ³ :
Histosol	(A1)		Polyvalue Below	w Surface	(S8) (LRR	R,	2 cm Muck (A10)	(LRR K, L, MLRA 149B)
	ipedon (A2)	_	MLRA 149B)		() (,		dox (A16) (LRR K, L, R)
Black His			Thin Dark Surfa	ice (S9) (L	RR R. MLF	RA 149B)		t or Peat (S3) (LRR K, L, R)
	n Sulfide (A4)	_	High Chroma Sa					Surface (S8) (LRR K, L)
	Layers (A5)	_	Loamy Mucky M					e (S9) (LRR K, L)
	Below Dark Surface (A1	1)	Loamy Gleyed N			-)		Masses (F12) (LRR K, L, R)
	rk Surface (A12)	'' _	Depleted Matrix		,			lain Soils (F19) (MLRA 149B)
		_	Redox Dark Sur					
	ucky Mineral (S1) leyed Matrix (S4)	_			·7\		Red Parent Mate	A6) (MLRA 144A, 145, 149B)
	•	_	Depleted Dark S	-	7)			, ,
	edox (S5)	_	Redox Depressi				Very Shallow Dai	
	Matrix (S6)	_	Marl (F10) (LRR	(K, L)			Other (Explain in	Remarks)
Dark Sur	face (S7)							
Indicators o	f hydrophytic vegetation	on and wet	tland hydrology mu	ust be pr	esent, unl	ess distu	urbed or problematic.	
Restrictive	Layer (if observed):							
Type:								
Depth (i	nches):						Hydric Soil Present?	Yes No X
Remarks:								<u> </u>
	n due to proximity to roa	adside ditch	and the potential f	for under	around utili	ties.		
			, and and positions		J 			

Project/Site: Pine County Solar	City/County: Pine Sampling Date: 10/31/2022						
Applicant/Owner: Swift Current Energy	State: Min Sampling Point: W42-1w						
Investigator(s): KKM BB	Section, Township, Range: T044N, R020W, S26						
	relief (concave, convex, none): Concave Slope %: 1						
· — ·	· ———						
Subregion (LRR or MLRA): LRR K, MLRA 90A Lat: 46.259376	Long: -92.827629 Datum: WGS84						
Soil Map Unit Name: Denied Access	NWI classification: None						
Are climatic / hydrologic conditions on the site typical for this time of year?	Yes No X (If no, explain in Remarks.)						
Are Vegetation , Soil , or Hydrology significantly distu	urbed? Are "Normal Circumstances" present? Yes X No						
Are Vegetation , Soil , or Hydrology naturally problem	natic? (If needed, explain any answers in Remarks.)						
SUMMARY OF FINDINGS – Attach site map showing sampling po	oint locations, transects, important features, etc.						
Hydrophytic Vegetation Present? Yes X No	Is the Sampled Area						
Hydric Soil Present? Yes X No	within a Wetland? Yes X No						
Wetland Hydrology Present? Yes X No	If yes, optional Wetland Site ID: Wetland 42						
Remarks: (Explain alternative procedures here or in a separate report.)							
HYDROLOGY							
Wetland Hydrology Indicators:	Secondary Indicators (minimum of two required)						
Primary Indicators (minimum of one is required; check all that apply)	Surface Soil Cracks (B6)						
Surface Water (A1) Water-Stained Leaves (B9)	Drainage Patterns (B10)						
High Water Table (A2) Aquatic Fauna (B13)	Moss Trim Lines (B16)						
Saturation (A3) Marl Deposits (B15)	Dry-Season Water Table (C2)						
Water Marks (B1) Hydrogen Sulfide Odor (C1)	Crayfish Burrows (C8)						
Sediment Deposits (B2) Oxidized Rhizospheres on Li	iving Roots (C3) Saturation Visible on Aerial Imagery (C9)						
Drift Deposits (B3) Presence of Reduced Iron (C	Stunted or Stressed Plants (D1)						
Algal Mat or Crust (B4) Recent Iron Reduction in Tille	ed Soils (C6) X Geomorphic Position (D2)						
Iron Deposits (B5) Thin Muck Surface (C7)	Shallow Aquitard (D3)						
Inundation Visible on Aerial Imagery (B7) Other (Explain in Remarks)	Microtopographic Relief (D4)						
Sparsely Vegetated Concave Surface (B8)	X FAC-Neutral Test (D5)						
Field Observations:							
Surface Water Present Yes No X Depth (inches)):						
Water Table Present Yes No X Depth (inches)):						
Saturation Present Yes No X Depth (inches): Wetland Hydrology Present? Yes X No						
(includes capillary fringe)							
Describe Recorded Data (stream gauge, monitoring well, aerial photos, pre	evious inspections), if available:						
Remarks:							

	Absolute	Dominant	Indicator	
ree Stratum (Plot size: 30 ft)	% Cover	Species Species	<u>Status</u>	Dominance Test worksheet:
·				Number of Dominant Species
				That Are OBL, FACW, or FAC: 2 (A)
				<u> </u>
				Total Number of Dominant Species Across All Strata: 2 (B)
				(b)
				Percent of Dominant Species
·				That Are OBL, FACW, or FAC: 100 (A/B
	0			Prevalence Index worksheet: Total % Cover of: Multiply by:
and the Motor of the Control of the		_ = Total Cover		Multiply by:
apling/Shrub Stratum (Plot size: 15 ft)				OBL species 40 x 1 = 40
· -	<u> </u>			FACW species 60 x 2 = 120
· <u>-</u>				FAC species 0 x 3 = 0
•				FACU species 0 x 4 = 0
				UPL species 0 x 5 = 0
				Column Totals: 100 (A) 160 (B
				Prevalence Index = B/A = 1.6
				Hydrophytic Vegetation Indicators:
	0	= Total Cover		X 1 - Rapid Test for Hydrophytic Vegetation
lerb Stratum (Plot size: 5 ft)				
Phalaris arundinacea	60	Yes	FACW	× 2 - Dominance Test is >50%
Calamagrostis canadensis	40	Yes	OBL	X 3 - Prevalence Index is ≤3.0¹
i				4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet)
i				(, , , , , , , , , , , , , , , , , , ,
i				Problematic Hydrophytic Vegetation ¹ (Explain)
i				¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
				Definitions of Vegetation Strata:
				Tree Weeds plants 2 in (7.6 cm) or more in
0				Tree – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height
1				
2				Sapling/shrub – Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.
	100	T 0		and greater than or equal to 0.25 it (1 iii) tail.
Voody Vine Stratum (Plot size: 30 ft)		= Total Cover		Herb – All herbaceous (non-woody) plants, regardles
				of size, and woody plants less than 3.28 ft tall.
				Woody vines – All woody vines greater than 3.28 ft in
				height.
				Hydrophytic
				Vegetation
	0	= Total Cover		Present? Yes X No No

SOIL Sampling Point: W42-1w

Profile Desc	ription: (Describe to	the depth	needed to docu	ment th	e indicat	or or con	nfirm the absence of indicators.)	
Depth	Matrix		Redo	x Featur	res			
(inches)	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²	Texture Remarks	
¹Type: C=Co	oncentration, D=Depl	etion, RM=F	Reduced Matrix, N	MS=Mas	sked Sand	Grains.	² Location: PL=Pore Lining, M=Matrix.	
Hydric Soil I	ndicators:						Indicators for Problematic Hydric Soils ³ :	
Histosol (A	A1)	_	Polyvalue Below	v Surface	(S8) (LRR	R,	2 cm Muck (A10) (LRR K, L, MLRA 149B)	
Histic Epi	pedon (A2)		MLRA 149B)				Coast Prairie Redox (A16) (LRR K, L, R)	
Black Hist	tic (A3)		Thin Dark Surfa	ce (S9) (I	LRR R, ML	RA 149B)	5 cm Mucky Peat or Peat (S3) (LRR K, L, R)	
Hydrogen	Sulfide (A4)		High Chroma Sa	ands (S11	1) (LRR K,	L)	Polyvalue Below Surface (S8) (LRR K, L)	
Stratified	Layers (A5)		Loamy Mucky M	lineral (F	1) (LRR K,	L)	Thin Dark Surface (S9) (LRR K, L)	
Depleted	Below Dark Surface (A1	1)	Loamy Gleyed N	Matrix (F2	2)		Iron-Manganese Masses (F12) (LRR K, L, R)	
Thick Dar	k Surface (A12)		Depleted Matrix	(F3)			Piedmont Floodplain Soils (F19) (MLRA 149B))
Sandy Mu	icky Mineral (S1)		Redox Dark Sur	face (F6)			Mesic Spodic (TA6) (MLRA 144A, 145, 149B)	
Sandy Gle	eyed Matrix (S4)		Depleted Dark S	Surface (F	- 7)		Red Parent Material (F21)	
Sandy Re	dox (S5)	_	Redox Depressi	ions (F8)			Very Shallow Dark Surface (F22)	
Stripped N	Matrix (S6)		Marl (F10) (LRR	R K, L)			X Other (Explain in Remarks)	
Dark Surf	ace (S7)							
3Indicators of	hydrophytic vegetation	on and wetl	and hydrology mi	ust be pr	resent, un	less distu	urbed or problematic.	
	ayer (if observed):							
Type:								
Depth (in							Hydric Soil Present? Yes X No	
Remarks:							L	
Assumed hydr	ric based on veg and la	andscape po	sition, no soils tak	en due to	o possible	undergrou	und utilities in roadside ditch	

Project/Site: Pine County Solar	City/County: Pine Sampling Date: 09/12/2022					
Applicant/Owner: Swift Current Energy	State: Min Sampling Point: SP1					
Investigator(s): Jwf	Section, Township, Range: T044N, R020W, S26					
	ocal relief (concave, convex, none): Linear Slope %: 3					
· · · · · · · · · · · · · · · · · · ·						
Subregion (LRR or MLRA): LRR K, MLRA 90A Lat: 46.262768	Long: -92.83528 Datum: WGS84					
Soil Map Unit Name: Denied Access	NWI classification: None					
Are climatic / hydrologic conditions on the site typical for this time of ye	ear? Yes No X (If no, explain in Remarks.)					
Are Vegetation \underline{X} , Soil $\underline{\hspace{1cm}}$, or Hydrology $\underline{\hspace{1cm}}$ significantly	y disturbed? Are "Normal Circumstances" present? Yes No _X					
Are Vegetation, Soil, or Hydrology naturally per	roblematic? (If needed, explain any answers in Remarks.)					
SUMMARY OF FINDINGS – Attach site map showing sample	ing point locations, transects, important features, etc.					
Hydrophytic Vegetation Present? Yes No X	Is the Sampled Area					
Hydric Soil Present? Yes No X	within a Wetland? Yes No X					
Wetland Hydrology Present? Yes No X	If yes, optional Wetland Site ID: Up					
Remarks: (Explain alternative procedures here or in a separate repor Antecedent precipitation analysis showed drier than normal condition	,					
HYDROLOGY						
Wetland Hydrology Indicators:	Secondary Indicators (minimum of two required)					
Primary Indicators (minimum of one is required; check all that apply)	Surface Soil Cracks (B6)					
Surface Water (A1) Water-Stained Leaves	S (B9) Drainage Patterns (B10)					
High Water Table (A2) Aquatic Fauna (B13)	Moss Trim Lines (B16)					
Saturation (A3) Marl Deposits (B15)	Dry-Season Water Table (C2)					
Water Marks (B1) Hydrogen Sulfide Odd	or (C1) Crayfish Burrows (C8)					
Sediment Deposits (B2) Oxidized Rhizosphere	s on Living Roots (C3) Saturation Visible on Aerial Imagery (C9)					
Drift Deposits (B3) Presence of Reduced	Iron (C4) Stunted or Stressed Plants (D1)					
Algal Mat or Crust (B4) Recent Iron Reduction	Filled Soils (C6) Geomorphic Position (D2)					
Iron Deposits (B5) Thin Muck Surface (C	7) Shallow Aquitard (D3)					
Inundation Visible on Aerial Imagery (B7) Other (Explain in Rem						
Sparsely Vegetated Concave Surface (B8)	FAC-Neutral Test (D5)					
Field Observations:						
	nches):					
	nches):					
<u> </u>	nches): Wetland Hydrology Present? Yes No _X					
(includes capillary fringe)						
Describe Recorded Data (stream gauge, monitoring well, aerial photo	s, previous inspections), if available:					
Remarks:						
Tomano.						

	Absolute	Dominant	Indicator		
ree Stratum (Plot size: 30 ft)	% Cover	Dominant <u>Species</u>	Status	Dominance Test worksheet:	
				Number of Dominant Species	
				That Are OBL, FACW, or FAC:	1 (A)
				Total Number of Dominant Species Across All Strata:	3 (B)
					<u> </u>
				Percent of Dominant Species	
				That Are OBL, FACW, or FAC:	33 (A/E
				Prevalence Index worksheet:	
	0	_ = Total Cover		Total % Cover of: Muli	tiply by:
apling/Shrub Stratum (Plot size: 15 ft)				OBL species x 1 =	
				FACW species x 2 =	
				l .	
				FACU species x 4 =	
				UPL species x 5 =	
				Column Totals: (A)	(E
				Prevalence Index = B/A =	
	_			Hydrophytic Vegetation Indicators:	
	0	= Total Cover			atation
erb Stratum (Plot size: 5 ft)				1 - Rapid Test for Hydrophytic Vege	Hallon
Glycine max	30	Yes	UPL	2 - Dominance Test is >50%	
Poa pratensis	20	Yes	FACU	3 - Prevalence Index is ≤3.0¹	
5	15	Yes	FAC	4 - Morphological Adaptations ¹	
Panicum capillare Rumex crispus	_		FAC	(Provide supporting data in Remarks or on a se	eparate sheet)
				Problematic Hydrophytic Vegetation	n¹ (Explain)
Ambrosia artemisiifolia			FACU	¹Indicators of hydric soil and wetland hydrology must	
Fragaria virginiana	5	No	FACU	disturbed or problematic.	,
Trifolium repens	5	No	FACU		
Taraxacum officinale		No	FACU	Definitions of Vegetation Strata:	
				Tree – Woody plants 3 in. (7.6 cm) or m	ore in
)				diameter at breast height (DBH), regard	
i					
2.				Sapling/shrub – Woody plants less that and greater than or equal to 3.28 ft (1 m	
	87			and greater than or equal to 3.26 it (1 ii	ı) talı.
22.6		= Total Cover		Herb - All herbaceous (non-woody) pla	
oody Vine Stratum (Plot size: 30 ft)				of size, and woody plants less than 3.28	3 ft tall.
				Woody vines – All woody vines greater	than 3.28 ft
				height.	11011 0.20 10
				Hydrophytic	
	0			Vegetation	Y
	0	= Total Cover		Present? Yes No _	
emarks: (Include photo numbers here or on a se	eparate sheet.)				· · · · · · · · · · · · · · · · · · ·

SOIL Sampling Point: SP1

Profile Desc Depth	cription: (Describe to Matrix	the dep		ment the x Feature		or or co	onfirm the absence o	f indicators.))	
(inches)	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²	Texture		Remarks	
0-14	10YR 3/2	100					Sandy Loam			
14-22	7.5YR 3/3	100					Sandy Loam	with gravel		
22-24	7.5YR 4/3	100					Sandy Loam	with gravel	,	
	7.511 4/5	100					Sandy Loann	with graver		
										
¹ Type: C=C	oncentration, D=Depl	etion, RM	I=Reduced Matrix, N	1S=Mas	ked Sand	d Grains.	² Location: PL=	Pore Lining, N	Л=Matrix.	
Hydric Soil	Indicators:						Indicators	for Problema	atic Hydric S	Soils ³ :
Histosol (Polyvalue Below	Surface	(S8) (LRR	R,		uck (A10) (LRR		
	ipedon (A2)		MLRA 149B)	(00) (1		D 4 4 40 D		Prairie Redox (A		
Black His	stic (A3) n Sulfide (A4)		Thin Dark Surface High Chroma Sa					ucky Peat or Pe ue Below Surfa		
	Layers (A5)		Loamy Mucky M					ark Surface (S9)		K, L)
	Below Dark Surface (A1	1)	Loamy Gleyed M			-/		anganese Mass		R K, L, R)
	rk Surface (A12)	,	Depleted Matrix				<u></u>	ont Floodplain S		
Sandy M	ucky Mineral (S1)		Redox Dark Surf	ace (F6)			Mesic S	Spodic (TA6) (N	ILRA 144A, 14	45, 149B)
Sandy G	leyed Matrix (S4)		Depleted Dark S		7)		Red Pa	rent Material (F	⁻ 21)	
	edox (S5)		Redox Depression	, ,				nallow Dark Sur		
	Matrix (S6)		Marl (F10) (LRR	K, L)			Other (Explain in Rema	arks)	
Dark Sur	face (S7)									
³ Indicators of	f hydrophytic vegetation	on and w	etland hydrology mu	st be pro	esent, un	less dist	urbed or problematic.			
Restrictive I	Layer (if observed):									
Type:										
Depth (ir	nches):						Hydric Soil Prese	ent?	Yes	No X
Remarks:							1			

Project/Site: Pine County Solar	City/County: Pine Sampling Date: 09/12/2022
Applicant/Owner: Swift Current Energy	State: Min Sampling Point: SP2
Investigator(s): Jwf	Section, Township, Range: T044N, R020W, S26
Landform (hillside, terrace, etc.): Rise Local	relief (concave, convex, none): Linear Slope %: 3
Subregion (LRR or MLRA): LRR K, MLRA 90A Lat: 46.262903	Long: -92.82768 Datum: WGS84
Soil Map Unit Name: Denied access	NWI classification: None
Are climatic / hydrologic conditions on the site typical for this time of year?	
	
Are Vegetation X , Soil , or Hydrology significantly dis	· · · · · · · · · · · · · · · · · · ·
Are Vegetation , Soil , or Hydrology naturally proble	ematic? (If fleeded, explain any answers in Normanis.)
SUMMARY OF FINDINGS – Attach site map showing sampling p	point locations, transects, important features, etc.
Hydrophytic Vegetation Present? Yes No X	Is the Sampled Area
Hydric Soil Present? Yes No X	within a Wetland? Yes No X
Wetland Hydrology Present? Yes No X	If yes, optional Wetland Site ID: Up
Remarks: (Explain alternative procedures here or in a separate report.)	7-7-7-1
Antecedent precipitation analysis showed drier than normal conditions	
HYDROLOGY	
Wetland Hydrology Indicators:	Secondary Indicators (minimum of two required)
Primary Indicators (minimum of one is required; check all that apply)	Surface Soil Cracks (B6)
Surface Water (A1) Water-Stained Leaves (B9)	Drainage Patterns (B10)
High Water Table (A2) Aquatic Fauna (B13)	Moss Trim Lines (B16)
Saturation (A3) Marl Deposits (B15)	Dry-Season Water Table (C2)
Water Marks (B1) Hydrogen Sulfide Odor (C1)	Crayfish Burrows (C8)
Sediment Deposits (B2) Oxidized Rhizospheres on L	Living Roots (C3) Saturation Visible on Aerial Imagery (C9)
Drift Deposits (B3) Presence of Reduced Iron ((C4) Stunted or Stressed Plants (D1)
Algal Mat or Crust (B4) Recent Iron Reduction in Til	illed Soils (C6) Geomorphic Position (D2)
Iron Deposits (B5) Thin Muck Surface (C7)	Shallow Aquitard (D3)
Inundation Visible on Aerial Imagery (B7) Other (Explain in Remarks)	Microtopographic Relief (D4)
Sparsely Vegetated Concave Surface (B8)	FAC-Neutral Test (D5)
Field Observations:	
Surface Water Present Yes No X Depth (inches	s):
Water Table Present Yes No _X Depth (inches	s):
Saturation Present Yes No X Depth (inches	s): Wetland Hydrology Present? Yes No X
(includes capillary fringe)	
Describe Recorded Data (stream gauge, monitoring well, aerial photos, pr	revious inspections), if available:
Remarks:	
1	

EGETATION – Use scientific names of	<u> </u>	<u> </u>	1 11 1	Sampling F		
Tree Stratum (Plot size: 30 ft)	Absolute <u>% Cover</u>	Dominant Species	Indicator Status	Dominance Test worksheet:		
i				Number of Dominant Species		
2.				That Are OBL, FACW, or FAC		(A)
3				, , , , ,	-	— ` ′
				Total Number of Dominant		
				Species Across All Strata:	4	(B)
i				Develop of Deminant Charles		
5				Percent of Dominant Species That Are OBL, FACW, or FAC	c: 25	(A/B
7						_ (^,
	0			Prevalence Index workshee	:	
	0	_ = Total Cover		Total % Cover of:	Multiply by	:
apling/Shrub Stratum (Plot size: 15 ft)				OBL species	x 1 =	
				FACW species	x 2 =	
				FAC species	x 3 =	
·				FACU species	x 4 =	
·				UPL species	x 5 =	
·				Column Totals:	(A)	—— (B
				Prevalence Index = B/A	\ =	
				Hydrophytic Vegetation Indi	cators:	
	0	= Total Cover		- 1 - Rapid Test for Hydrop	hytic Vegetation	
erb Stratum (Plot size: 5 ft)				1 	-	
Glycine may	25	Yes	UPL	2 - Dominance Test is >5	0%	
·	25	Yes	FACU	3 - Prevalence Index is ≤	3.0 ¹	
Poa pratensis				4 - Morphological Adapta	tions ¹	
Panicum capillare	20	Yes	FAC	(Provide supporting data in Rema		heet)
. Ambrosia artemisiifolia	20	Yes	FACU			
. Verbascum thapsis	10	No	FACU	Problematic Hydrophytic	Vegetation¹ (Exp	lain)
i				¹ Indicators of hydric soil and wetland hyd disturbed or problematic.	Irology must be preser	nt, unless
,				disturbed of problematic.		
				5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5		
• -				Definitions of Vegetation St	rata:	
				Tree – Woody plants 3 in. (7.6	6 cm) or more in	
0				diameter at breast height (DB		height
1					, .	•
2.				Sapling/shrub – Woody plan		DBH
				and greater than or equal to 3	.28 ft (1 m) tall.	
	100	= Total Cover		Herb – All herbaceous (non-w	roody) plants rev	nardlac
/oody Vine Stratum (Plot size: 30 ft)				of size, and woody plants less		
				or orze, and modely plante root		
·	-			Woody vines – All woody vin	es greater than 3	3.28 ft i
·				height.		
·				Hydrophytic		
	•			Vegetation	🗸	
	0	= Total Cover		Present? Yes	No X	
Remarks: (Include photo numbers here or on a se	oparato shoot)					
ternants. (include prioto flumbers fiere of off a se	sparate sneet.)					

SOIL Sampling Point: SP2

Depth Matrix Redox Features Color (moist) % Color (moist) % Type Loc Texture Remarks			the dep				or or co	onfirm the absence of indic	ators.)
Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.	Depth (inches)	Matrix Color (moist)	0/_				L oc²	Texture	Pamarke
Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. Thype: C=Concentration, D=Depletion, RM=Reduced Matrix. Thype: C=Concentration, D=Depletion, RM=Reduced Matrix. Thype: C=Concentration, D=Depletion, RM=Reduced Matrix. Thidicators of Mucky Mineral (R1), L, MLRA 149B) Thick Dark Surface (A1) Thin Dark Surface (A2) Thin Dark Surface (A3) Thin Dark Surface (A1) Thin Dark Surfac	· · · ·			Odior (moist)		Турс			Remarks
Hydric Soil Indicators: Histosol (A1)									
Hydric Soil Indicators: Histosol (A1)									
Hydric Soil Indicators: Histosol (A1)									
Hydric Soil Indicators: Histosol (A1)									
Hydric Soil Indicators: Histosol (A1)		-							
Hydric Soil Indicators: Histosol (A1)									
Hydric Soil Indicators: Histosol (A1)									
Hydric Soil Indicators: Histosol (A1)									
Hydric Soil Indicators: Histosol (A1)									
Hydric Soil Indicators: Histosol (A1)									
Hydric Soil Indicators: Histosol (A1)									
Hydric Soil Indicators: Histosol (A1)									
Hydric Soil Indicators: Histosol (A1)	¹Type: C=Co	oncentration, D=Depl	etion. RM	=Reduced Matrix.1	MS=Mas	ked Sand	Grains	² Location: PL=Pore Li	ning M=Matrix
Histosol (A1)			0.0011, 1.111		vio-ivido	nou curic	- Craine		
Histic Epipedon (A2) Black Histic (A3) Thin Dark Surface (S9) (LRR R, MLRA 149B) 5 cm Mucky Peat or Peat (S3) (LRR K, L, R) Hydrogen Sulfide (A4) High Chroma Sands (S11) (LRR K, L) Stratified Layers (A5) Depleted Below Dark Surface (A11) Thick Dark Surface (A12) Sandy Mucky Mineral (S1) Sandy Mucky Mineral (S1) Sandy Gleyed Matrix (S4) Depleted Dark Surface (F6) Sandy Redox (S5) Redox Depressions (F8) Stripped Matrix (S6) Marl (F10) (LRR K, L) Thick Dark Surface (A12) Depleted Dark Surface (F7) Red Parent Material (F21) Sandy Redox (S5) Are dox Depressions (F8) Dark Surface (S7) Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic. Restrictive Layer (if observed): Type: Depth (inches): Hydric Soil Present? Yes No X	-			Polyvalue Belov	v Surface	(S8) (LRR	R.		-
Black Histic (A3)		· ·				() (,		
Stratified Layers (A5)				Thin Dark Surfa	ce (S9) (L	.RR R, ML	RA 149B		
Depleted Below Dark Surface (A11)	Hydrogen	Sulfide (A4)		High Chroma Sa	ands (S11) (LRR K,	L)	Polyvalue Belo	w Surface (S8) (LRR K, L)
Thick Dark Surface (A12)	Stratified I	Layers (A5)		Loamy Mucky M	lineral (F1) (LRR K,	L)	Thin Dark Surfa	ace (S9) (LRR K, L)
Sandy Mucky Mineral (S1)	Depleted	Below Dark Surface (A1	11)	Loamy Gleyed N	Matrix (F2))		Iron-Manganes	e Masses (F12) (LRR K, L, R)
Sandy Gleyed Matrix (S4)	Thick Dar	k Surface (A12)		Depleted Matrix	(F3)			Piedmont Floo	dplain Soils (F19) (MLRA 149B)
Sandy Redox (S5) Redox Depressions (F8) Very Shallow Dark Surface (F22) Stripped Matrix (S6) Marl (F10) (LRR K, L) Other (Explain in Remarks) Dark Surface (S7) 3Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic. Restrictive Layer (if observed): Type:	Sandy Mu	ucky Mineral (S1)		Redox Dark Sur	face (F6)			Mesic Spodic (TA6) (MLRA 144A, 145, 149B)
Stripped Matrix (S6) Marl (F10) (LRR K, L) Other (Explain in Remarks) Dark Surface (S7) 3Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic. Restrictive Layer (if observed):	Sandy Gle	eyed Matrix (S4)		Depleted Dark S	Surface (F	7)		Red Parent Ma	iterial (F21)
Dark Surface (S7) 3Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic. Restrictive Layer (if observed): Type: Depth (inches): Hydric Soil Present? Yes No X	Sandy Re	edox (S5)		Redox Depressi	ons (F8)			Very Shallow D	Park Surface (F22)
³ Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic. Restrictive Layer (if observed): Type: Depth (inches): Hydric Soil Present? Yes No X	Stripped N	Matrix (S6)		Marl (F10) (LRR	R K, L)			Other (Explain	in Remarks)
Restrictive Layer (if observed): Type:	Dark Surfa	ace (S7)							
Type:	³ Indicators of	hydrophytic vegetati	on and we	etland hydrology mu	ust be pr	esent, un	less dis	turbed or problematic.	
Depth (inches): Hydric Soil Present? Yes No X		ayer (if observed):							
	Type: _								
Remarks:	Depth (in	iches):						Hydric Soil Present?	Yes NoX
	Remarks:								

Project/Site: Pine County Solar	City/County: Pine Sampling Date: 09/12/2022
Applicant/Owner: Swift Current Energy	State: Min Sampling Point: SP3
Investigator(s): Jwf	Section, Township, Range: T044N, R020W, S26
Landform (hillside, terrace, etc.): Foot Slope Local	relief (concave, convex, none): Concave Slope %: 3
Subregion (LRR or MLRA): LRR K, MLRA 90A Lat: 46.262753	Long: -92.82851 Datum: WGS84
Soil Map Unit Name: Denied access	NWI classification: PEM1Af
Are climatic / hydrologic conditions on the site typical for this time of year?	Yes No X (If no, explain in Remarks.)
Are Vegetation X , Soil , or Hydrology significantly distr	
Are Vegetation, Soil, or Hydrology naturally probler	·
SUMMARY OF FINDINGS – Attach site map showing sampling property	
/maon one map enorming campung p	
Hydrophytic Vegetation Present? Yes NoX	Is the Sampled Area
Hydric Soil Present? Yes No X	within a Wetland? Yes No X
Wetland Hydrology Present? Yes No _X	If yes, optional Wetland Site ID: Up
Drier than normal , located in upland at field . Soy was drying out, no stresditch.	
HYDROLOGY	
Wetland Hydrology Indicators:	Secondary Indicators (minimum of two required)
Primary Indicators (minimum of one is required; check all that apply)	Surface Soil Cracks (B6)
Surface Water (A1) Water-Stained Leaves (B9)	Drainage Patterns (B10)
High Water Table (A2) Aquatic Fauna (B13)	Moss Trim Lines (B16)
Saturation (A3) Marl Deposits (B15)	Dry-Season Water Table (C2)
Water Marks (B1) Hydrogen Sulfide Odor (C1)	Crayfish Burrows (C8)
Sediment Deposits (B2) Oxidized Rhizospheres on Li	iving Roots (C3) Saturation Visible on Aerial Imagery (C9)
Drift Deposits (B3) Presence of Reduced Iron (C	C4) Stunted or Stressed Plants (D1)
Algal Mat or Crust (B4) Recent Iron Reduction in Till	led Soils (C6) Geomorphic Position (D2)
Iron Deposits (B5) Thin Muck Surface (C7)	Shallow Aquitard (D3)
Inundation Visible on Aerial Imagery (B7) Other (Explain in Remarks)	Microtopographic Relief (D4)
Sparsely Vegetated Concave Surface (B8)	FAC-Neutral Test (D5)
Field Observations:	
Surface Water Present Yes No _X Depth (inches	s):
Water Table Present Yes No X Depth (inches	s):
Saturation Present Yes No X Depth (inches	S): Wetland Hydrology Present? Yes No _X
(includes capillary fringe)	
Describe Recorded Data (stream gauge, monitoring well, aerial photos, pre	evious inspections), if available:
Remarks:	

Tree Stratum (Plot size: 30 ft)	Absolute % Cover	Dominant Species	Indicator Status	Dominance Test worksheet:
1		·		Number of Dominant Species That Are OBL, FACW, or FAC:(A)
3 4 5.		· -		Total Number of Dominant Species Across All Strata:(B)
5				Percent of Dominant Species That Are OBL, FACW, or FAC: (A/B)
		·		Prevalence Index worksheet:
One the office of Original (Districts 15 ft)	0	_ = Total Cover		Total % Cover of: Multiply by:
Sapling/Shrub Stratum (Plot size: 15 ft)				OBL species x 1 =
1				FACW species x 2 =
2.				FAC species x 3 =
3				FACU species x 4 =
4				UPL species x 5 =
5 6.				Column Totals: (A) (B)
				Prevalence Index = B/A =
7				Hydrophytic Vegetation Indicators:
E #4	0	= Total Cover		1 - Rapid Test for Hydrophytic Vegetation
Herb Stratum (Plot size: 5 ft) Glycine max	60	Yes	UPL	2 - Dominance Test is >50%
o Pop pratoncie	20	Yes	FACU	_ 3 - Prevalence Index is ≤3.0¹
Poa pratensis Panicum capillare	5	Yes	FAC	4 - Morphological Adaptations ¹
				(Provide supporting data in Remarks or on a separate sheet)
				Problematic Hydrophytic Vegetation ¹ (Explain)
5. <u>Silene latifolia</u> 6		· ·		¹Indicators of hydric soil and wetland hydrology must be present, unless
7.				disturbed or problematic.
8.				Definitions of Vegetation Strata:
9.				
10				Tree – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.
11	-			diameter at predet neight (2211), regardiese et neight.
12				Sapling/shrub – Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.
	95			and greater than or equal to 5.26 it (1 iii) tall.
Woody Vine Stratum (Plot size: 30 ft)		= Total Cover		Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.
1				Woody vines – All woody vines greater than 3.28 ft in
2		·		height.
3		·		Hydrophytic
4		·		Vegetation
	0	= Total Cover		Present? Yes NoX
Remarks: (Include photo numbers here or on a separa	ate sheet.)			

Sampling Point: SP3

SOIL Sampling Point: SP3

Color (moist) % 10YR 3/2 100	Calar (es			
	Color (moist)	%	Type ¹	Loc ²	Texture Remarks	
7.EVD 4/2 00					Sandy Loam	
7.5YR 4/3 90	10YR 4/4	10	С	М	Sandy Loam	
5YR 4/2 85	5 YR 4/4	15	С	M	Sandy Loam	
	-					
	- ———					
	_					
	-					
	-					
	-					
	_					
ncentration, D=Depletion,	RM=Reduced Matrix, M	1S=Mask	ed San	Grains.	² Location: PL=Pore Lining, M=Matrix.	
dicators:					Indicators for Problematic Hydric Soi	ls³:
1)	Polyvalue Below	Surface (S8) (LRR	R,	2 cm Muck (A10) (LRR K, L, MLRA 149	B)
edon (A2)	MLRA 149B)				Coast Prairie Redox (A16) (LRR K, L, R	.)
: (A3)	Thin Dark Surfac	e (S9) (L l	RR R, ML	RA 149B	5 cm Mucky Peat or Peat (S3) (LRR K,	L, R)
Sulfide (A4)	High Chroma Sai	nds (S11)	(LRR K,	L)	Polyvalue Below Surface (S8) (LRR K, I	_)
ayers (A5)	Loamy Mucky Mi		(LRR K,	L)	Thin Dark Surface (S9) (LRR K, L)	
elow Dark Surface (A11)	Loamy Gleyed M				Iron-Manganese Masses (F12) (LRR K,	
Surface (A12)	Depleted Matrix (Piedmont Floodplain Soils (F19) (MLRA	
ky Mineral (S1)	Redox Dark Surfa				Mesic Spodic (TA6) (MLRA 144A, 145,	149B)
red Matrix (S4)	Depleted Dark St		7)		Red Parent Material (F21)	
ox (S5)	Redox Depressio	, ,			Very Shallow Dark Surface (F22)	
atrix (S6) ce (S7)	Marl (F10) (LRR	K , L)			Other (Explain in Remarks)	
· · · · · · · · · · · · · · · · · · ·	wetland hydrology mu	st be pre	esent, ur	less dist	urbed or problematic.	
yer (if observed):						
hes):					Hydric Soil Present? Yes N	o <u>X</u>
ydrophytic vegetation a yer (if observed): hes):	nd	nd wetland hydrology mu	nd wetland hydrology must be pre	nd wetland hydrology must be present, ur	nd wetland hydrology must be present, unless dist	nd wetland hydrology must be present, unless disturbed or problematic. Hydric Soil Present? Yes N

Project/Site: Pine County Solar	City/County: Pine Sampling Date: 09/12/2022
Applicant/Owner: Swift Current Energy	State: Min Sampling Point: SP4
Investigator(s): KM, BB, MB	Section, Township, Range: T044N, R020W, S26
	cal relief (concave, convex, none): Linear Slope %: 1
	· · · · · · · · · · · · · · · · · · ·
Subregion (LRR or MLRA): LRR K, MLRA 90A Lat: 46.272883	Long: -92.833562 Datum: WGS84
Soil Map Unit Name: Denied Access	NWI classification: PEM1Af
Are climatic / hydrologic conditions on the site typical for this time of year	? Yes No X (If no, explain in Remarks.)
Are Vegetation X, Soil , or Hydrology significantly d	listurbed? Are "Normal Circumstances" present? Yes NoX
Are Vegetation , Soil , or Hydrology naturally prob	olematic? (If needed, explain any answers in Remarks.)
SUMMARY OF FINDINGS – Attach site map showing sampling	point locations, transects, important features, etc.
Hydrophytic Vegetation Present? Yes No X	Is the Sampled Area
Hydric Soil Present? Yes X No	within a Wetland? Yes No X
Wetland Hydrology Present? Yes No X	If yes, optional Wetland Site ID: Other
Remarks: (Explain alternative procedures here or in a separate report.)	7-17-11-11-11-11-11-11-11-11-11-11-11-11
Farmed soybean field with ditches. Precip. Drier than normal.	
The state of the s	
HYDROLOGY	
Wetland Hydrology Indicators:	Secondary Indicators (minimum of two required)
Primary Indicators (minimum of one is required; check all that apply)	Surface Soil Cracks (B6)
Surface Water (A1) Water-Stained Leaves (B)	
High Water Table (A2) Aquatic Fauna (B13)	Moss Trim Lines (B16)
<u> </u>	Dry-Season Water Table (C2)
	
Water Marks (B1) Hydrogen Sulfide Odor (C Sediment Deposits (B2) Oxidized Rhizospheres or	<u> </u>
Drift Deposits (B3) — Oxidized Krizospireres of Presence of Reduced Iron	
Algal Mat or Crust (B4) Recent Iron Reduction in	
Iron Deposits (B5) Thin Muck Surface (C7)	Shallow Aquitard (D3)
Inundation Visible on Aerial Imagery (B7) — Other (Explain in Remark: Sparsely Vegetated Concave Surface (B8)	FAC-Neutral Test (D5)
Field Observations:	
Surface Water Present Yes No X Depth (inch	nes):
	nes): Westend Underland Present?
Saturation Present Yes No X Depth (inch (includes capillary fringe)	nes): Wetland Hydrology Present? Yes No _X
Describe Recorded Data (stream gauge, monitoring well, aerial photos,	provious inspections), if available:
Describe Recorded Data (Stream gauge, monitoring well, aerial priotos,	previous inspections), ii available.
Remarks:	
Nemarks.	

Tree Stratum (Plot size: 30 ft)	Absolute <u>% Cover</u>	Dominant Species	Indicator Status	Dominance Test worksheet:
1				Number of Dominant Species That Are OBL, FACW, or FAC:(A)
3				Total Number of Dominant Species Across All Strata: 2 (B)
5				Percent of Dominant Species That Are OBL, FACW, or FAC: (A/B)
·· -	-			Prevalence Index worksheet:
	0	= Total Cover		Total % Cover of: Multiply by:
Sapling/Shrub Stratum (Plot size:15 ft)		_		OBL species 0 x 1 = 0
1				FACW species 0 x 2 = 0
2	· ·			FAC species 7 x 3 = 21
3				FACU species 72 x 4 = 288
4	·			UPL species 65 x 5 = 325
5				Column Totals: 144 (A) 634 (B)
6				Prevalence Index = B/A = 4.4
7				Hydrophytic Vegetation Indicators:
_	0	= Total Cover		- 1 - Rapid Test for Hydrophytic Vegetation
Herb Stratum (Plot size: 5 ft)				- 2 - Dominance Test is >50%
1. Glycine max	60	Yes	UPL	- 3 - Prevalence Index is ≤3.0 ¹
2. Stellaria media	50	Yes	FACU	4 - Morphological Adaptations ¹
Amaranthus retroflexus	15	<u>No</u>	FACU	(Provide supporting data in Remarks or on a separate sheet)
Ambrosia artemisiifolia	7	<u>No</u>	FACU	Problematic Hydrophytic Vegetation ¹ (Explain)
5. Panicum capillare	7		FAC	Indicators of hydric soil and wetland hydrology must be present, unless
6. Thlaspi arvense	5	No	UPL	disturbed or problematic.
7				
8				Definitions of Vegetation Strata:
9				Tree – Woody plants 3 in. (7.6 cm) or more in
10.				diameter at breast height (DBH), regardless of height.
11.	· ·			Sapling/shrub – Woody plants less than 3 in. DBH
12	· .			and greater than or equal to 3.28 ft (1 m) tall.
Woody Vine Stratum (Plot size: 30 ft)	144	= Total Cover		Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.
1				Woody vines – All woody vines greater than 3.28 ft in
2.		-		height.
3				
4				Hydrophytic Vegetation
	0	= Total Cover		Present? Yes No X
Remarks: (Include photo numbers here or on a sepa	arate sheet \			1
Soybeans stunted and short	arate sricet.)			

Sampling Point: SP4

				ument the ox Featur		or or co	nfirm the absence	of indicat	ors.)		
Depth (inches)	Matrix Color (moist)	<u></u> %	Color (moist)	% realur	Type ¹	Loc ²	Texture		Remarks		
(IIICIICS)	Color (moist)		Color (moist)		Турс		Texture		Remarks		
0 to 28	10YR 2/1	100					Peat	_			
					·	·					
								_			
17		- Indian BM	Dadward Matrice 1		10	1 0	21 (D)		NA NA-12		
	oncentration, D=De	epietion, Rivi	=Reduced Matrix, I	MS=Mas	ked Sand	Grains.			ng, M=Matrix.		
Hydric Soil I									lematic Hydric S		
X Histosol (-	Polyvalue Below	w Surface	(S8) (LRR	R,	2 cm	Muck (A10)	(LRR K, L, MLRA	149B)	
	pedon (A2)		MLRA 149B)				Coas	st Prairie Red	dox (A16) (LRR K, L	., R)	
Black His	tic (A3)	-	Thin Dark Surfa				5 cm	Mucky Peat	or Peat (S3) (LRR	K, L, R)	
Hydrogen	Sulfide (A4)	-	High Chroma Sa	ands (S11) (LRR K,	L)	Poly	value Below	Surface (S8) (LRR	K, L)	
Stratified	Layers (A5)	-	Loamy Mucky M			L)	Thin Dark Surface (S9) (LRR K, L)				
Depleted	Below Dark Surface	(A11) _	Loamy Gleyed N	Matrix (F2))		Iron-Manganese Masses (F12) (LRR K, L, R)				
Thick Dar	k Surface (A12)	-	Depleted Matrix	epleted Matrix (F3)				Piedmont Floodplain Soils (F19) (MLRA 149B)			
	ucky Mineral (S1)	-		Redox Dark Surface (F6)					6) (MLRA 144A, 14	5, 149B)	
Sandy Gl	eyed Matrix (S4)	-	Depleted Dark S	Surface (F	7)		Red Parent Material (F21)				
Sandy Re	edox (S5)	-	Redox Depressi	Redox Depressions (F8)				Very Shallow Dark Surface (F22)			
Stripped I	Matrix (S6)	-	Marl (F10) (LRR	₹ K, L)			Othe	r (Explain in	Remarks)		
Dark Surf	ace (S7)										
3Indicators of	hydrophytic veget	ation and we	tland hydrology mi	ust be pr	esent, un	less dist	urbed or problemat	ic.			
	ayer (if observed				•		i i				
Type:	, (,									
-	nches):						Hydric Soil Pre	sent?	Yes X	No	
							Tryunc don't it				
Remarks:											

Project/Site: Pine County Solar	City/County: Pine Sampling Date: 09/13/2022						
Applicant/Owner: Swift Current Energy	State: Min Sampling Point: SP5						
Investigator(s): AH, BB	Section, Township, Range: T044N, R020W, S23						
Landform (hillside, terrace, etc.): Dip Local	relief (concave, convex, none): Concave Slope %: 1						
Subregion (LRR or MLRA): LRR K, MLRA 90A Lat: 46.278599	Long: -92.836996 Datum: WGS84						
Soil Map Unit Name: Denied Access	NWI classification: PEM1Af						
•							
Are climatic / hydrologic conditions on the site typical for this time of year?							
Are Vegetation X, Soil , or Hydrology significantly dist							
Are Vegetation , Soil , or Hydrology naturally problem	matic? (If needed, explain any answers in Remarks.)						
SUMMARY OF FINDINGS – Attach site map showing sampling p	point locations, transects, important features, etc.						
Hydrophytic Vegetation Present? Yes No X	Is the Sampled Area						
Hydric Soil Present? Yes X No	within a Wetland? Yes No X						
Wetland Hydrology Present? Yes No X	If yes, optional Wetland Site ID: N/A						
Remarks: (Explain alternative procedures here or in a separate report.)							
Drier than normal conditions, ditched/tiled ag field							
LIVERSIAN							
HYDROLOGY							
Wetland Hydrology Indicators:	Secondary Indicators (minimum of two required)						
Primary Indicators (minimum of one is required; check all that apply)	Surface Soil Cracks (B6)						
Surface Water (A1) Water-Stained Leaves (B9)	Drainage Patterns (B10)						
High Water Table (A2) Aquatic Fauna (B13)	Moss Trim Lines (B16)						
Saturation (A3) — Marl Deposits (B15)	Dry-Season Water Table (C2)						
Water Marks (B1) Hydrogen Sulfide Odor (C1)							
Sediment Deposits (B2) Oxidized Rhizospheres on L							
Drift Deposits (B3) Presence of Reduced Iron (0	· · · · · · · · · · · · · · · · · · ·						
Algal Mat or Crust (B4) Recent Iron Reduction in Till	· · ·						
Iron Deposits (B5) Thin Muck Surface (C7)	Shallow Aquitard (D3) Migratopagraphic Relief (D4)						
Inundation Visible on Aerial Imagery (B7) Other (Explain in Remarks)	Microtopographic Relief (D4)						
Sparsely Vegetated Concave Surface (B8)	FAC-Neutral Test (D5)						
Field Observations:							
Surface Water Present Yes No X Depth (inches							
Water Table Present Yes No X Depth (inches							
Saturation Present Yes No X Depth (inches	S): Wetland Hydrology Present? Yes No _X						
(includes capillary fringe)							
Describe Recorded Data (stream gauge, monitoring well, aerial photos, pro	evious inspections), if available:						
Remarks:							
Remarks.							

Absolute % Cover			Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC Total Number of Dominant	: <u> </u>
			That Are OBL, FACW, or FAC Total Number of Dominant	: <u> </u>
			That Are OBL, FACW, or FAC Total Number of Dominant	: <u> </u>
			1	
			1	
			C!	4 (5
			Species Across All Strata:	1(B
			Percent of Dominant Species	
			That Are OBL, FACW, or FAC	: <u> </u>
0			Prevalence Index worksheet	:
	= Total Cover		Total % Cover of:	Multiply by:
'-	_		OBI species	x 1 =
				·
				x 2 =
			FAC species	x 3 =
			FACU species	x 4 =
			UPL species	x 5 =
			Column Totals:	(A)
			Prevalence Index = B/A	
0	- Total Cover			
·	= 10tal 00vcl		1 - Rapid Test for Hydropl	nytic Vegetation
65	Yes	FACU	2 - Dominance Test is >50)%
			3 - Prevalence Index is ≤3	3.0 ¹
			4 - Morphological Adaptat	ions ¹
5	No	FAC	Problematic Hydrophytic \	/ogotation1 (Evoluin)
			I —	
			disturbed or problematic.	rology must be present, unit
			Definitions of Vegetation Str	ata:
			- W	
			diameter at breast neight (bbi	i), regardless of fleig
	·		and greater than or equal to 3	28 ft (1 m) tall.
100	= Total Cover		Herb – All herbaceous (non-w	oody) plants, regardl
			l	
				es greater than 3.28 t
			neight.	
			Hydrophytic	
			Vegetation	
0	= Total Cover		Present? Yes	No X
<u></u> -				
eparate sneet.)				
	0 65 20 10 5			DBL species FACW species FACU species FACU species UPL species UPL species UPL species Column Totals: Prevalence Index = B/A Hydrophytic Vegetation Indi 1 - 1 - Rapid Test for Hydroph 2 - 2 - Dominance Test is >50 3 - Prevalence Index is ≤3 4 - Morphological Adaptat (Provide supporting data in Remar Problematic Hydrophytic N Indicators of hydric soil and wetland hyd disturbed or problematic. Definitions of Vegetation Str Tree — Woody plants 3 in. (7.6 diameter at breast height (DBH Sapling/shrub — Woody plant and greater than or equal to 3. Herb — All herbaceous (non-w of size, and woody plants less Woody vines — All woody vine height. Hydrophytic Vegetation Present? Yes

0-14				x Feature					
	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²	Texture	Remarks	
14.04	10YR 2/1	100					Peat		
14-24	10YR 3/2	100					Peat		
	_								
Type: C=Con	centration, D=Deple	etion, RM=	Reduced Matrix, N	∕IS=Masi	ked Sand	Grains.	² Location: PL=Pore	Lining, M=Matrix.	
ydric Soil Inc	dicators:						Indicators for P	roblematic Hydric Soils ³ :	
X Histosol (A1	1)	_	Polyvalue Below	Surface	(S8) (LRR I	₹,	2 cm Muck (A	A10) (LRR K, L, MLRA 149B)	
Histic Epipe	edon (A2)		MLRA 149B)				Coast Prairie	Redox (A16) (LRR K, L, R)	
Black Histic	(A3)	_	Thin Dark Surface	e (S9) (L	RR R, MLF	A 149B)	5 cm Mucky I	Peat or Peat (S3) (LRR K, L, R)	
Hydrogen S	Sulfide (A4)	-	High Chroma Sands (S11) (LRR K, L)				Polyvalue Below Surface (S8) (LRR K, L)		
Stratified La		_	Loamy Mucky M			_)	Thin Dark Surface (S9) (LRR K, L)		
	elow Dark Surface (A1	1) _	Loamy Gleyed N				Iron-Manganese Masses (F12) (LRR K, L, R)		
	Surface (A12)	_	Depleted Matrix (F3)				Piedmont Floodplain Soils (F19) (MLRA 149B)		
	ky Mineral (S1)	_	Redox Dark Surface (F6) Depleted Dark Surface (F7)				Mesic Spodic (TA6) (MLRA 144A, 145, 149B) Red Parent Material (F21)		
Sandy Gleyt	red Matrix (S4)	_	Redox Depression	•	")		·	Dark Surface (F22)	
Stripped Ma		_	Marl (F10) (LRR	, ,				n in Remarks)	
Dark Surfac		_		. ,				,	
ndiaatara of by	udranhutia va gatatia	n and wa	tland budralagu m			ana diatr	urbad ar prablamatia		
	yer (if observed):	n and we	liand nydrology mu	st be pre	esent, unit	ess alsa	urbed or problematic.		
Type:	yer (ii observed).								
Depth (inch	hoo):						Hydric Soil Present?	Yes ^X No	
emarks:							Hydric 30ii Fresent?		

Project/Site: Pine County Solar	City/County: Pine Sampling Date: 09/13/2022						
Applicant/Owner: Swift Current Energy	State: Min Sampling Point: SP6						
Investigator(s): BB/AH	Section, Township, Range: T044N, R020W, S23						
	relief (concave, convex, none): Concave Slope %: 1						
` ' ' <u> </u>							
Subregion (LRR or MLRA): LRR K, MLRA 90A Lat: 46.278861	Long: -92.837536 Datum: WGS84						
Soil Map Unit Name: Denied Access	NWI classification: PEM1Af						
Are climatic / hydrologic conditions on the site typical for this time of year?	Yes No X (If no, explain in Remarks.)						
Are Vegetation X , Soil , or Hydrology significantly distr	urbed? Are "Normal Circumstances" present? Yes No X						
Are Vegetation , Soil , or Hydrology naturally problem	matic? (If needed, explain any answers in Remarks.)						
SUMMARY OF FINDINGS – Attach site map showing sampling po							
Hydrophytic Vegetation Present? Yes No X	Is the Sampled Area						
Hydric Soil Present? Yes X No	within a Wetland? Yes No X						
Wetland Hydrology Present? Yes No X	If yes, optional Wetland Site ID: N/A						
Remarks: (Explain alternative procedures here or in a separate report.)							
throughout soybeans.							
HYDROLOGY							
Wetland Hydrology Indicators:	Secondary Indicators (minimum of two required)						
Primary Indicators (minimum of one is required; check all that apply)	Surface Soil Cracks (B6)						
Surface Water (A1) Water-Stained Leaves (B9)	Drainage Patterns (B10)						
High Water Table (A2) Aquatic Fauna (B13)	Moss Trim Lines (B16)						
Saturation (A3) Marl Deposits (B15)	Dry-Season Water Table (C2)						
Water Marks (B1) Hydrogen Sulfide Odor (C1)	Crayfish Burrows (C8)						
Sediment Deposits (B2) Oxidized Rhizospheres on Li	iving Roots (C3) X Saturation Visible on Aerial Imagery (C9)						
Drift Deposits (B3) Presence of Reduced Iron (C	(C4) Stunted or Stressed Plants (D1)						
Algal Mat or Crust (B4) Recent Iron Reduction in Tille	Filled Soils (C6) Geomorphic Position (D2)						
Iron Deposits (B5) Thin Muck Surface (C7)	Shallow Aquitard (D3)						
Inundation Visible on Aerial Imagery (B7) Other (Explain in Remarks)							
Sparsely Vegetated Concave Surface (B8)	FAC-Neutral Test (D5)						
Field Observations:							
Surface Water Present Yes No X Depth (inches	s):						
Water Table Present Yes No X Depth (inches	s):						
Saturation Present Yes No X Depth (inches	s): Wetland Hydrology Present? Yes No _X						
(includes capillary fringe)							
Describe Recorded Data (stream gauge, monitoring well, aerial photos, pre	evious inspections), if available:						
Remarks:							

Tree Stratum (Plot size:30 ft_)	Absolute % Cover	Dominant Species	Indicator Status	Dominance Test worksheet:
1				Number of Dominant Species That Are OBL, FACW, or FAC:(A)
3. 4.				Total Number of Dominant Species Across All Strata: 1 (B)
5				Percent of Dominant Species That Are OBL, FACW, or FAC:0 (A/B)
			_	Prevalence Index worksheet:
	0	_ = Total Cover		Total % Cover of: Multiply by:
Sapling/Shrub Stratum (Plot size: 15 ft)				OBL species x 1 =
1				FACW species x 2 =
2				
3				· ———
4				FACU species x 4 =
5				UPL species x 5 =
6.			_	Column Totals: (A)(B)
7.				Prevalence Index = B/A =
				Hydrophytic Vegetation Indicators:
- 0		= Total Cover		1 - Rapid Test for Hydrophytic Vegetation
Herb Stratum (Plot size: 5 ft)				- 2 - Dominance Test is >50%
1. Glycine max	80	Yes	UPL	- 3 - Prevalence Index is ≤3.0¹
Hypericum punctatum		No	FAC	
3. Trifolium repens	5	No	FACU	4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet)
4				
5				Problematic Hydrophytic Vegetation ¹ (Explain)
6				¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
7				·
8				Definitions of Vegetation Strata:
9				
10				Tree – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.
11				diameter at breast height (DDH), regardless of height.
12				Sapling/shrub – Woody plants less than 3 in. DBH
				and greater than or equal to 3.28 ft (1 m) tall.
Woody Vine Stratum (Plot size: 30 ft)	95	= Total Cover		Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.
1				Woody vines – All woody vines greater than 3.28 ft in
2				height.
3				
4				Hydrophytic
	0	T-1-1 0		Vegetation Present? Yes No X
		= Total Cover		Tessin: Tes No
Remarks: (Include photo numbers here or on a separa	ate sheet.)			

Sampling Point: SP6

	ription: (Describe to	the dep		ment the x Featur		or or co	nfirm the abse	ence of indica	tors.)		
Depth (inches)	Matrix Color (moist)	%	Color (moist)	%	Type ¹	Loc ²	Texture		Remarks		
0-14	10YR 2/2	100	Color (molet)		Турс		Peat		Romano		
14-24	10YR 3/3	100					Peat				
17 27	10111 3/0	100					1 Cut				
							-				
							-				
¹Type: C=C	oncentration, D=Depl	etion, RM	=Reduced Matrix, N	√S=Mas	ked Sand	Grains.	² Location	n: PL=Pore Lin	ing, M=Matrix.		
Hydric Soil II	ndicators:						Indic	ators for Prol	olematic Hydric Sc	oils³:	
X Histosol (A	A1)		Polyvalue Below	v Surface	(S8) (LRR	R,		2 cm Muck (A10)) (LRR K, L, MLRA 14	·9B)	
	pedon (A2)		MLRA 149B)					Coast Prairie Re	dox (A16) (LRR K, L,	R)	
Black Hist				Thin Dark Surface (S9) (LRR R, MLRA 149B)					t or Peat (S3) (LRR K		
	Sulfide (A4)			_ High Chroma Sands (S11) (LRR K, L)				-	Surface (S8) (LRR K,	L)	
	Layers (A5)	14)		Loamy Mucky Mineral (F1) (LRR K, L)				Thin Dark Surface (S9) (LRR K, L)			
	Below Dark Surface (A1	11)		Loamy Gleyed Matrix (F2)				Iron-Manganese Masses (F12) (LRR K, L, R)			
	k Surface (A12) ucky Mineral (S1)			Depleted Matrix (F3)				Piedmont Floodplain Soils (F19) (MLRA 149B) Masic Spedic (TA6) (MLRA 144A 145 149B)			
	eyed Matrix (S4)			Redox Dark Surface (F6) Depleted Dark Surface (F7)				Mesic Spodic (TA6) (MLRA 144A, 145, 149B) Red Parent Material (F21)			
Sandy Re	-			Redox Depressions (F8)				Very Shallow Dark Surface (F22)			
	Matrix (S6)		Marl (F10) (LRF	Mari (F10) (LRR K, L)				Other (Explain in Remarks)			
Dark Surfa	ace (S7)										
³ Indicators of	hydrophytic vegetati	on and we	etland hydrology mu	ust be pr	esent. un	less dist	urbed or proble	ematic.			
	.ayer (if observed):		, , , , , , , ,								
Type:	, (
Depth (in	iches):						Hydric Soil	I Present?	Yes X	No	
Remarks:							, , , , , ,				
Nemaiks.											

Project/Site: Pine County Solar	City/County: Pine Sampling Date: 09/13/2022						
Applicant/Owner: Swift Current Energy	State: Min Sampling Point: SP7						
Investigator(s): BB, KKM, AH, MB	Section, Township, Range: T044N, R020W, S22						
	relief (concave, convex, none): Linear Slope %: 1						
Subregion (LRR or MLRA): LRR K, MLRA 90A Lat: 46.274106	Long: -92.845817 Datum: WGS84						
Soil Map Unit Name: Denied Access	NWI classification:						
Are climatic / hydrologic conditions on the site typical for this time of year?							
, ,							
Are Vegetation X, Soil , or Hydrology significantly distu							
Are Vegetation , Soil , or Hydrology naturally problem	natic? (If needed, explain any answers in Remarks.)						
SUMMARY OF FINDINGS – Attach site map showing sampling po	oint locations, transects, important features, etc.						
Hydrophytic Vegetation Present? Yes No X	Is the Sampled Area						
Hydric Soil Present? Yes X No	within a Wetland? Yes No X						
Wetland Hydrology Present? Yes X No	If yes, optional Wetland Site ID: N/A						
Remarks: (Explain alternative procedures here or in a separate report.)	1.700, optional rotalita one i.2.						
Farmed soybean field with ditches. Precip. Drier than normal.							
HYDROLOGY							
Wetland Hydrology Indicators:	Secondary Indicators (minimum of two required)						
Primary Indicators (minimum of one is required; check all that apply)	Surface Soil Cracks (B6)						
Surface Water (A1) Water-Stained Leaves (B9)	Drainage Patterns (B10)						
High Water Table (A2) Aquatic Fauna (B13)	Moss Trim Lines (B16)						
Saturation (A3) Marl Deposits (B15)	Dry-Season Water Table (C2)						
Water Marks (B1) X Hydrogen Sulfide Odor (C1)	Crayfish Burrows (C8)						
Sediment Deposits (B2) Oxidized Rhizospheres on Li	· · · · · · · · · · · · · · · · · · ·						
Drift Deposits (B3) Presence of Reduced Iron (C							
Algal Mat or Crust (B4) Recent Iron Reduction in Tille	Filled Soils (C6) Geomorphic Position (D2)						
Iron Deposits (B5) Thin Muck Surface (C7)	Shallow Aquitard (D3)						
Inundation Visible on Aerial Imagery (B7) Other (Explain in Remarks)	Microtopographic Relief (D4)						
Sparsely Vegetated Concave Surface (B8)	FAC-Neutral Test (D5)						
Field Observations:							
Surface Water Present Yes No X Depth (inches):						
Water Table Present Yes No X Depth (inches							
Saturation Present Yes No X Depth (inches							
(includes capillary fringe)	´——						
Describe Recorded Data (stream gauge, monitoring well, aerial photos, pre	evious inspections), if available:						
Remarks:							

Tree Stratum (Plot size: 30 ft)	Absolute % Cover	Dominant Species	Indicator Status	Dominance Test worksheet:
1				Number of Dominant Species That Are OBL, FACW, or FAC: 0 (A)
3. 4. 5.		·		Total Number of Dominant Species Across All Strata:(B)
6				Percent of Dominant Species That Are OBL, FACW, or FAC: (A/B)
	0			Prevalence Index worksheet: Total % Cover of: Multiply by:
Sapling/Shrub Stratum (Plot size: 15 ft)		_ = Total Cover		
				OBL species 0 x 1 = 0
1 2				FACW species 0 x 2 = 0
3.				FAC species13 x 3 =39
4.				FACU species 22 x 4 = 88
5.				UPL species 85 x 5 = 425
6.				Column Totals: 120 (A) 552 (B)
7.				Prevalence Index = B/A = 4.6
				Hydrophytic Vegetation Indicators:
	0	= Total Cover		- 1 - Rapid Test for Hydrophytic Vegetation
Herb Stratum (Plot size: 5 ft)				- 2 - Dominance Test is >50%
1. Glycine max	85	Yes	UPL	- 3 - Prevalence Index is ≤3.0¹
Chenopodium album	15	No	FACU	4 - Morphological Adaptations ¹
3. Panicum capillare	5	No	FAC	(Provide supporting data in Remarks or on a separate sheet)
Amaranthus retroflexus	5	No	FACU	Problematic Hydrophytic Vegetation (Evaluin)
5. Echinochloa crus-galli	5	No	FAC	Problematic Hydrophytic Vegetation¹ (Explain) ¹Indicators of hydric soil and wetland hydrology must be present, unless
6. <u>Urtica dioica</u>	2	<u>No</u>	FAC	disturbed or problematic.
7. <u>Trifolium pratense</u>	2	<u>No</u>	FACU	
8. Persicaria maculosa	1	No	FAC	Definitions of Vegetation Strata:
9				Tree – Woody plants 3 in. (7.6 cm) or more in
10		·		diameter at breast height (DBH), regardless of height.
11.		<u> </u>		Sapling/shrub – Woody plants less than 3 in. DBH
12	-	·		and greater than or equal to 3.28 ft (1 m) tall.
	120	= Total Cover		Herb – All herbaceous (non-woody) plants, regardless
Woody Vine Stratum (Plot size: 30 ft) 1.				of size, and woody plants less than 3.28 ft tall.
2.			_	Woody vines – All woody vines greater than 3.28 ft in height.
3.		· <u></u> -		neight.
4.		<u> </u>		Hydrophytic
				Vegetation
	0	= Total Cover		Present?
Remarks: (Include photo numbers here or on a separa				
Farmed soybean field with a fair amount of weeds. Soybea	ans relatively	healthy, starting	to yellow.	

SP7

Sampling Point:

	ription: (Describe to	the dep				or or co	onfirm the absence	of indicato	rs.)		
Depth (inches)	Matrix Color (moist)	%	Color (moist)	x Featur %	es Type¹	Loc ²	Toyturo		Remarks		
(inches)			Color (moist)	70	туре	LOC	Texture	_	Remarks		
0 to 11	10YR 2/1	100					Peat				
11 to 24	10YR 4/3	100					Peat	Very fibric	material		
								_			
							-				
							-	_			
							-				
								_			
¹Type: C=Co	oncentration, D=Deple	etion, RM	=Reduced Matrix, N	MS=Mas	ked Sand	Grains.	. ² Location: PL	=Pore Linin	g, M=Matrix.		
Hydric Soil In	ndicators:						Indicator	s for Proble	ematic Hydric	Soils ³ :	
X Histosol (A	A1)		Polyvalue Below	v Surface	(S8) (LRR	R,	2 cm	Muck (A10) (I	LRR K, L, MLRA	149B)	
Histic Epip	pedon (A2)		MLRA 149B)				Coast Prairie Redox (A16) (LRR K, L, R)				
Black Hist	tic (A3)		Thin Dark Surface	ce (S9) (L	RR R, ML	.RA 149B	5 cm	Mucky Peat o	or Peat (S3) (LRR	K, L, R)	
X Hydrogen	Sulfide (A4)	•	High Chroma Sa	ands (S11) (LRR K,	L)	Polyv	Polyvalue Below Surface (S8) (LRR K, L)			
	Layers (A5)		Loamy Mucky M			L)		Thin Dark Surface (S9) (LRR K, L)			
	Below Dark Surface (A1	1)	Loamy Gleyed N								
	k Surface (A12)	•	Depleted Matrix				Piedmont Floodplain Soils (F19) (MLRA 149B)				
	icky Mineral (S1) eyed Matrix (S4)		Redox Dark Sur Depleted Dark S		7)		Mesic Spodic (TA6) (MLRA 144A, 145, 149B)				
Sandy Re		•	Redox Depressi		7)		Red Parent Material (F21) Very Shallow Dark Surface (F22)				
	Matrix (S6)	•	Marl (F10) (LRR	 -				(Explain in Remarks)			
Dark Surfa		•	(: :0) (=::::	· · · · , - /				(Explain in re	omarno)		
			ette e dibiodeste en con			Lana d'ar	took and an amakilana d	_			
	hydrophytic vegetational ayer (if observed):	on and we	tiand nydrology mu	ust be pr	esent, un	iless dist	turbed or problemati	C.			
Type:	.ayer (if observed):										
									., Y		
Depth (in	ches):						Hydric Soil Pre	sent?	Yes X	No	
Remarks:	dtttf1	la a alaa a									
Sullur smell iro	om deepest part of soil	boring.									

Project/Site: Pine County Solar	City/County: Pine Sampling Date: 09/14/2022					
Applicant/Owner: Swift Current Energy	State: Min Sampling Point: SP8					
Investigator(s): BB/AH	Section, Township, Range: T044N, R020W, S23					
	relief (concave, convex, none): Linear Slope %: 1					
· · · · · · · · · · · · · · · · · · ·	· · · · · · · · · · · · · · · · · · ·					
Subregion (LRR or MLRA): LRR K, MLRA 90A Lat: 46.287564						
Soil Map Unit Name: Denied Access	NWI classification:					
Are climatic / hydrologic conditions on the site typical for this time of year?	Yes No X (If no, explain in Remarks.)					
Are Vegetation X , Soil , or Hydrology significantly distr	urbed? Are "Normal Circumstances" present? Yes NoX					
Are Vegetation , Soil , or Hydrology naturally problem	matic? (If needed, explain any answers in Remarks.)					
SUMMARY OF FINDINGS – Attach site map showing sampling po	oint locations, transects, important features, etc.					
Hydrophytic Vegetation Present? Yes No X	Is the Sampled Area					
Hydric Soil Present? Yes X No	within a Wetland? Yes No X					
Wetland Hydrology Present? Yes No X	If yes, optional Wetland Site ID: N/A					
Antecedent precipitation analysis showed drier than normal conditions.						
HYDROLOGY						
Wetland Hydrology Indicators:	Secondary Indicators (minimum of two required)					
Primary Indicators (minimum of one is required; check all that apply)	Surface Soil Cracks (B6)					
Surface Water (A1) Water-Stained Leaves (B9)	Drainage Patterns (B10)					
High Water Table (A2) Aquatic Fauna (B13)	Moss Trim Lines (B16)					
Saturation (A3) Marl Deposits (B15)	Dry-Season Water Table (C2)					
Water Marks (B1) Hydrogen Sulfide Odor (C1)	Crayfish Burrows (C8)					
Sediment Deposits (B2) Oxidized Rhizospheres on Li	iving Roots (C3) X Saturation Visible on Aerial Imagery (C9)					
Drift Deposits (B3) Presence of Reduced Iron (C	C4) Stunted or Stressed Plants (D1)					
Algal Mat or Crust (B4) Recent Iron Reduction in Tille	led Soils (C6) Geomorphic Position (D2)					
Iron Deposits (B5) — Thin Muck Surface (C7)	Shallow Aquitard (D3)					
Inundation Visible on Aerial Imagery (B7) Other (Explain in Remarks)	Microtopographic Relief (D4)					
Sparsely Vegetated Concave Surface (B8)	FAC-Neutral Test (D5)					
Field Observations:						
Surface Water Present Yes No X Depth (inches	s):					
Water Table Present Yes No X Depth (inches						
Saturation Present Yes No X Depth (inches	s): Wetland Hydrology Present? Yes No _X_					
(includes capillary fringe)						
Describe Recorded Data (stream gauge, monitoring well, aerial photos, pre	evious inspections), if available:					
Remarks:						

Tree Stratum (Plot size: 30 ft)	Absolute % Cover	Dominant <u>Species</u>	Indicator Status	Dominance Test worksheet:	
1				Number of Dominant Species That Are OBL, FACW, or FAC:	0 (A)
3				Total Number of Dominant Species Across All Strata:	(B)
5				Percent of Dominant Species That Are OBL, FACW, or FAC:	0 (A/B)
7				Prevalence Index worksheet:	
	0	_ = Total Cover		Total % Cover of:	Multiply by:
Sapling/Shrub Stratum (Plot size:15 ft)				OBL species	(1 =
1				FACW species	(2=
2					(3=
3				FACU species	· 4 =
4					5 =
5					(A) (B)
6 7.				Prevalence Index = B/A =	
7				Hydrophytic Vegetation Indica	itors:
	0	= Total Cover		- 1 - Rapid Test for Hydrophy	tic Vegetation
Herb Stratum (Plot size: 5 ft)				2 - Dominance Test is >50%	
1. Glycine max	60	Yes	UPL	- 3 - Prevalence Index is ≤3.0	
2. Thlaspi arvense	40	Yes	UPL	4 - Morphological Adaptatio	
3. Chenopodium album			FACU	(Provide supporting data in Remarks	
4. Silphium perfoliatum		<u>No</u>	FACW	Problematic Hydrophytic Ve	getation1 (Evoluin)
5				Indicators of hydric soil and wetland hydrol	
6				disturbed or problematic.	ogy must be present, unioss
7					
8				Definitions of Vegetation Stra	a:
9				Tree – Woody plants 3 in. (7.6 c	
10			_	diameter at breast height (DBH)	, regardless of height.
11 12.				Sapling/shrub – Woody plants	
	404			and greater than or equal to 3.2	3 ft (1 m) tall.
Woody Vine Stratum (Plot size: 30 ft)	104	= Total Cover		Herb – All herbaceous (non-wood of size, and woody plants less the	
1				Woody vines – All woody vines	greater than 3.28 ft in
2				height.	g. cate. ta 0.20 .t
3					
4				Hydrophytic	
	0	= Total Cover		Vegetation Present? Yes	No X
Remarks: (Include photo numbers here or on a separa Some soybean stress but not much and no clear boundary volunteer veg in this area all FACU to UPL.		osite side of the c	litch where th	I nere was a more clear topography ch	ange. Majority of

SP8

Sampling Point:

Profile Desc Depth	ription: (Describe to Matrix	the dep		ment the x Feature		or or co	onfirm the absence of indicators.)		
(inches)	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²	Texture Remarks		
0-13	10YR 2/1	100					Peat		
12.24	10VP 3/3	100					Poet		
13-24	10YR 3/3	100					Peat		
-									
							·		
¹ Type: C=Co	oncentration, D=Depl	etion, RM	I=Reduced Matrix, N	/IS=Mas	ked Sand	d Grains.	s. ² Location: PL=Pore Lining, M=Matrix.		
Hydric Soil I							Indicators for Problematic Hydric Soils ³ :		
X Histosol ((A1)		Polyvalue Below	Surface	(S8) (LRR	R,	2 cm Muck (A10) (LRR K, L, MLRA 149B)		
	ipedon (A2)		MLRA 149B)				Coast Prairie Redox (A16) (LRR K, L, R)		
Black His			Thin Dark Surface						
	Sulfide (A4)		High Chroma Sa				Polyvalue Below Surface (S8) (LRR K, L)		
	Layers (A5)	14)	Loamy Mucky M			L)	Thin Dark Surface (S9) (LRR K, L)		
	Below Dark Surface (A1 rk Surface (A12)	11)	Loamy Gleyed M Depleted Matrix)		Iron-Manganese Masses (F12) (LRR K, L, R) Piedmont Floodplain Soils (F19) (MLRA 149B)		
	ucky Mineral (S1)		Redox Dark Surf				Mesic Spodic (TA6) (MLRA 144A, 145, 149B)		
	leyed Matrix (S4)		Depleted Dark S		7)		Red Parent Material (F21)		
Sandy Re			Redox Depression	,	,		Very Shallow Dark Surface (F22)		
Stripped I	Matrix (S6)		Marl (F10) (LRR	K, L)			Other (Explain in Remarks)		
Dark Surf	face (S7)								
³ Indicators of	hydrophytic vegetati	on and w	etland hydrology mu	st be pr	esent, un	less dist	sturbed or problematic.		
	_ayer (if observed):		, ,,	•			<u> </u>		
Type:									
Depth (ir	nches):						Hydric Soil Present? Yes X No		
Remarks:									
Remarks.									

Project/Site: Pine County Solar	City/County: Pine Sampling Date: 09/15/2022					
Applicant/Owner: Swift Current Energy	State: Min Sampling Point: SP9					
Investigator(s): Jwf	Section, Township, Range: T044N, R020W, S22					
-	relief (concave, convex, none): Concave Slope %: 2					
Subregion (LRR or MLRA): LRR K, MLRA 90A Lat: 46.276538	Long: -92.854836 Datum: WGS84					
Soil Map Unit Name: Denied Access						
Are climatic / hydrologic conditions on the site typical for this time of year?	Yes No _X (If no, explain in Remarks.)					
Are Vegetation X, Soil , or Hydrology significantly distr						
Are Vegetation , Soil , or Hydrology naturally problem	matic? (If needed, explain any answers in Remarks.)					
SUMMARY OF FINDINGS – Attach site map showing sampling p	oint locations, transects, important features, etc.					
Hadrahafa Vandafaa Paraado	Late Occupied Access					
Hydrophytic Vegetation Present? Yes No X Hydric Soil Present? Yes No X	Is the Sampled Area within a Wetland? Yes No X					
<u> </u>						
	If yes, optional Wetland Site ID: N/A					
Remarks: (Explain alternative procedures here or in a separate report.) Drier than normal conditions						
End than normal conditions						
HYDROLOGY						
Wetland Hydrology Indicators:	Secondary Indicators (minimum of two required)					
Primary Indicators (minimum of one is required; check all that apply)	Surface Soil Cracks (B6)					
Surface Water (A1) Water-Stained Leaves (B9)	Drainage Patterns (B10)					
High Water Table (A2) Aquatic Fauna (B13)	Moss Trim Lines (B16)					
Saturation (A3) Marl Deposits (B15)	Dry-Season Water Table (C2)					
Water Marks (B1) Hydrogen Sulfide Odor (C1)	Crayfish Burrows (C8)					
Sediment Deposits (B2) Oxidized Rhizospheres on Li	iving Roots (C3) Saturation Visible on Aerial Imagery (C9)					
Drift Deposits (B3) Presence of Reduced Iron (C	C4) Stunted or Stressed Plants (D1)					
Algal Mat or Crust (B4) Recent Iron Reduction in Till	led Soils (C6) Geomorphic Position (D2)					
Iron Deposits (B5) Thin Muck Surface (C7)	Shallow Aquitard (D3)					
Inundation Visible on Aerial Imagery (B7) Other (Explain in Remarks)	Microtopographic Relief (D4)					
Sparsely Vegetated Concave Surface (B8)	FAC-Neutral Test (D5)					
Field Observations:						
Surface Water Present Yes No _X Depth (inches	s):					
Water Table Present Yes No X Depth (inches						
Saturation Present Yes No X Depth (inches	· 					
(includes capillary fringe)						
Describe Recorded Data (stream gauge, monitoring well, aerial photos, pre	evious inspections), if available:					
Remarks:						

The a Chinations (Distrate 20.4)	Absolute	Dominant	Indicator	Daminana Tastanala kasi
ree Stratum (Plot size: 30 ft)	% Cover	<u>Species</u>	<u>Status</u>	Dominance Test worksheet:
				Number of Dominant Species
				That Are OBL, FACW, or FAC:0 (A)
				Total Number of Dominant
				Species Across All Strata: 1 (B)
				Percent of Dominant Species
·				That Are OBL, FACW, or FAC: 0 (A/B
				Prevalence Index worksheet:
	0	_ = Total Cover		Total % Cover of: Multiply by:
apling/Shrub Stratum (Plot size: 15 ft)				OBL species x 1 =
				FACW species x 2 =
				FAC species x 3 =
				FACU species x 4 =
				UPL species x 5 =
				Column Totals: (A) (B)
·				Prevalence Index = B/A =
	_			Hydrophytic Vegetation Indicators:
	0	= Total Cover		- 1 - Rapid Test for Hydrophytic Vegetation
lerb Stratum (Plot size: 5 ft)				2 - Dominance Test is >50%
Glycine max	60	Yes	UPL	- 3 - Prevalence Index is ≤3.0¹
Panicum capillare	15	No	FAC	4 - Morphological Adaptations ¹
Silene latifolia		<u>No</u>	UPL	(Provide supporting data in Remarks or on a separate sheet)
. Rumex crispus	5	No	FAC	Problematic Hydrophytic Vegetation ¹ (Explain)
				¹Indicators of hydric soil and wetland hydrology must be present, unless
·				disturbed or problematic.
				Definitions of Vegetation Strata:
				Definitions of Vegetation Strata.
0				Tree – Woody plants 3 in. (7.6 cm) or more in
1			,	diameter at breast height (DBH), regardless of height.
2.	,			Sapling/shrub – Woody plants less than 3 in. DBH
	85			and greater than or equal to 3.28 ft (1 m) tall.
(20.4)		= Total Cover		Herb – All herbaceous (non-woody) plants, regardless
Voody Vine Stratum (Plot size: 30 ft)				of size, and woody plants less than 3.28 ft tall.
				Woody vines – All woody vines greater than 3.28 ft in
				height.
				Hydrophytic
		 -		Vegetation
	0	= Total Cover		Present? Yes NoX
	0	= Total Cover		1

inches)	Matrix		Redox	x Feature						
	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²	Texture F	Remarks		
0-17	10YR 3/2	100					Loamy Sand			
17-22	7.5YR 3/3	100					Loamy Sand			
22-26	7.5YR 4/6	100					Loamy Sand			
ype: C=Cor	ncentration, D=Deple	etion, RM:	=Reduced Matrix, N	/IS=Mas	ked Sand	Grains.	² Location: PL=Pore Lining, M=N	latrix.		
ydric Soil In	dicators:						Indicators for Problematic	Hydric Soils ³ :		
Histosol (A	1)	_	Polyvalue Below	Surface	(S8) (LRR	₹,	2 cm Muck (A10) (LRR K,	L, MLRA 149B)		
Histic Epipe	edon (A2)		MLRA 149B)				Coast Prairie Redox (A16) (LRR K, L, R)			
_ Black Histic	c (A3)	_	Thin Dark Surface	ce (S9) (L	RR R, MLF	A 149B	9B) 5 cm Mucky Peat or Peat (S3) (LRR K			
Hydrogen S	Sulfide (A4)	-	High Chroma Sa	ınds (S11) (LRR K, L	.)	Polyvalue Below Surface (S8) (LRR K,			
Stratified L	ayers (A5)	-	Loamy Mucky M	ineral (F1) (LRR K, I	_)	Thin Dark Surface (S9) (LF	RR K, L)		
	Below Dark Surface (A1	1) _	Loamy Gleyed M)		Iron-Manganese Masses (F12) (LRR K, L, R)			
Thick Dark	Surface (A12)	-	Depleted Matrix	(F3)			Piedmont Floodplain Soils (F19) (MLRA 149B)			
	cky Mineral (S1)	-	Redox Dark Surf				Mesic Spodic (TA6) (MLRA 144A, 145, 149B)			
	yed Matrix (S4)	-	Depleted Dark S		7)		Red Parent Material (F21)			
Sandy Red		-	Redox Depression				Very Shallow Dark Surface			
Stripped M		-	Marl (F10) (LRR	K, L)			Other (Explain in Remarks))		
Dark Surfa	ice (S7)									
		n and we	tland hydrology mu	ist be pre	esent, unl	ess dist	urbed or problematic.			
estrictive La Type:	ayer (if observed):									
-	.l\						Hartin Call Barranto	No X		
Depth (inc	cnes):						Hydric Soil Present? Yes	No ^X		

Project/Site: Pine County Solar	City/County: Pine Sampling Date: 09/15/2022					
Applicant/Owner: Swift Current Energy	State: Min Sampling Point: SP10					
Investigator(s): Jwf	Section, Township, Range: T044N, R020W, S22					
	relief (concave, convex, none): Concave Slope %: 2					
Subregion (LRR or MLRA): LRR K, MLRA 90A Lat: 46.274371	Long: -92.846955 Datum: WGS84					
Soil Map Unit Name: Denied Access						
Are climatic / hydrologic conditions on the site typical for this time of year?	Yes No X (If no, explain in Remarks.)					
Are Vegetation X, Soil , or Hydrology significantly dist						
Are Vegetation , Soil , or Hydrology naturally problem	matic? (If needed, explain any answers in Remarks.)					
SUMMARY OF FINDINGS – Attach site map showing sampling p	point locations, transects, important features, etc.					
Hadrah C. V. and C. Parra 10	In the Committee of Arrest					
Hydrophytic Vegetation Present? Yes No X Hydric Soil Present? Yes No X	Is the Sampled Area					
<u> </u>	within a Wetland? Yes No X If yes, optional Wetland Site ID: N/A					
	If yes, optional Wetland Site ID: N/A					
Remarks: (Explain alternative procedures here or in a separate report.) Drier than normal conditions						
Dier than normal conditions						
HYDROLOGY						
	Cocoodon, Indicators (minimum of two required)					
Wetland Hydrology Indicators:	Secondary Indicators (minimum of two required)					
Primary Indicators (minimum of one is required; check all that apply)	Surface Soil Cracks (B6)					
Surface Water (A1) Water-Stained Leaves (B9)	Drainage Patterns (B10)					
High Water Table (A2) Aquatic Fauna (B13)	Moss Trim Lines (B16)					
Saturation (A3) Marl Deposits (B15)	Dry-Season Water Table (C2)					
Water Marks (B1) Hydrogen Sulfide Odor (C1)						
Sediment Deposits (B2) Oxidized Rhizospheres on L	<u> </u>					
Drift Deposits (B3) Presence of Reduced Iron (i						
Algal Mat or Crust (B4) Recent Iron Reduction in Til Iron Respective (B5)	lled Soils (C6) Geomorphic Position (D2) Shallow Aquitard (D3)					
Iron Deposits (B5) Thin Muck Surface (C7)	Microtopographic Relief (D4)					
Inundation Visible on Aerial Imagery (B7) Other (Explain in Remarks)	FAC-Neutral Test (D5)					
Sparsely Vegetated Concave Surface (B8)	FAC-Neutral Test (DS)					
Field Observations:						
Surface Water Present Yes No X Depth (inches						
Water Table Present Yes No X Depth (inches						
Saturation Present Yes No X Depth (inches	S): Wetland Hydrology Present? Yes No _X					
(includes capillary fringe)						
Describe Recorded Data (stream gauge, monitoring well, aerial photos, pr	evious inspections), if available:					
Domostro						
Remarks:						
1						

Absolute	Dominant	Indicator	
% Cover	Species Species	Status	Dominance Test worksheet:
			Number of Dominant Species
			That Are OBL, FACW, or FAC: 0 (A)
			Total Number of Dominant
			Species Across All Strata: 1 (B)
			Percent of Dominant Species
			That Are OBL, FACW, or FAC: (A/E
			Prevalence Index worksheet:
0	= Total Cover		Total % Cover of: Multiply by:
	_		OBL species x 1 =
			FACW species x 2 =
			FAC species x 3 =
			FACU species x 4 =
			UPL species x 5 =
			Column Totals: (A) (E
· · ·			Prevalence Index = B/A =
			Hydrophytic Vegetation Indicators:
0	= Total Cover		- 1 - Rapid Test for Hydrophytic Vegetation
			- 2 - Dominance Test is >50%
65	Yes	UPL	1
15	No	FAC	3 - Prevalence Index is ≤3.0¹
5	No	UPL	4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet)
3	No	FACU	(* ************************************
3	No	FACU	Problematic Hydrophytic Vegetation ¹ (Explain)
			¹Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
			disturbed of problematic.
			Definitions of Vegetation Strata:
			Definitions of Vegetation offata.
			Tree – Woody plants 3 in. (7.6 cm) or more in
			diameter at breast height (DBH), regardless of height
-			Sapling/shrub – Woody plants less than 3 in. DBH
-			and greater than or equal to 3.28 ft (1 m) tall.
91	= Total Cover		Harb All harbassays (non yeardy) plants, regardless
			Herb – All herbaceous (non-woody) plants, regardles of size, and woody plants less than 3.28 ft tall.
			Woody vines – All woody vines greater than 3.28 ft height.
			height.
			height. Hydrophytic
	= Total Cover		height.
	0 65 15 5 3 3 3	% Cover Species 0 = Total Cover 0 = Total Cover 65 Yes 15 No 5 No 3 No 3 No	% Cover Species Status 0 = Total Cover 65 Yes UPL 15 No FAC 5 No UPL 3 No FACU 3 No FACU

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)									
Depth	Matrix		Redo	x Featur	es				
(inches)	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²	Texture Remarks		
0-6	5YR 3/2	100					Loamy Sand		
6-20	7.5YR 4/3	100					Loamy Sand		
20-24	5YR 4/4	100					Loamy Sand		
					<u></u>				
							· 		
							·		
							·		
¹Type: C=C	oncentration, D=Depl	etion PM	1-Reduced Matrix N	 1S_Nas	kad Sand		s. ² Location: PL=Pore Lining, M=Matrix.		
	· ·	etion, itiv	i=i\educed iviatiix, iv	/IO-IVIAS	sked Sand	J Grains			
Hydric Soil			5 5.		(00) (1.55	_	Indicators for Problematic Hydric Soils ³ :		
Histosol	(A1) ipedon (A2)		Polyvalue Below MLRA 149B)	Surrace	(S8) (LRR	к,	2 cm Muck (A10) (LRR K, L, MLRA 149B) Coast Prairie Redox (A16) (LRR K, L, R)		
Black His			Thin Dark Surface	e (S9) (L	RR R. ML	RA 149B)	
	n Sulfide (A4)		High Chroma Sa				Polyvalue Below Surface (S8) (LRR K, L)		
	Layers (A5)		Loamy Mucky M				Thin Dark Surface (S9) (LRR K, L)		
Depleted	Below Dark Surface (A1	l1)	Loamy Gleyed N	1atrix (F2)		Iron-Manganese Masses (F12) (LRR K, L, R)		
Thick Da	rk Surface (A12)		Depleted Matrix	(F3)			Piedmont Floodplain Soils (F19) (MLRA 149B)		
Sandy M	ucky Mineral (S1)		Redox Dark Sur	ace (F6)			Mesic Spodic (TA6) (MLRA 144A, 145, 149	B)	
	leyed Matrix (S4)		Depleted Dark S		7)		Red Parent Material (F21)		
	edox (S5)		Redox Depression				Very Shallow Dark Surface (F22)		
	Matrix (S6)		Marl (F10) (LRR	K, L)			Other (Explain in Remarks)		
Dark Sur	face (S7)								
		on and w	etland hydrology mu	st be pr	esent, un	less dis	sturbed or problematic.		
	Layer (if observed):								
Type:									
Depth (ii	nches):						Hydric Soil Present? Yes No _	<u>×</u>	
Remarks:									

Project/Site: Pine County Solar City/County: Pine Sampling Date: 09/14/2022
Applicant/Owner: Swift Current Energy State: Min Sampling Point: SP11
Investigator(s): BB/AH Section, Township, Range: T044N, R020W, S14
Landform (hillside, terrace, etc.): Terrace Local relief (concave, convex, none): Linear Slope %: 1
· · · · · · · · · · · · · · · · · · ·
· · · · · · · · · · · · · · · · · · ·
Soil Map Unit Name: Denied Access NWI classification:
Are climatic / hydrologic conditions on the site typical for this time of year? Yes No _X (If no, explain in Remarks.)
Are Vegetation X, Soil , or Hydrology significantly disturbed? Are "Normal Circumstances" present? Yes No X
Are Vegetation, Soil, or Hydrology naturally problematic? (If needed, explain any answers in Remarks.)
SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.
Hydrophytic Vegetation Present? Yes No X Is the Sampled Area
Hydric Soil Present? Yes X No within a Wetland? Yes No X
Wetland Hydrology Present? Yes No X If yes, optional Wetland Site ID: N/A
Antecedent precipitation analysis showed drier than normal conditions.
HYDROLOGY
Wetland Hydrology Indicators: Secondary Indicators (minimum of two required)
Primary Indicators (minimum of one is required; check all that apply) Surface Soil Cracks (B6)
Surface Water (A1) Water-Stained Leaves (B9) Drainage Patterns (B10)
High Water Table (A2) Aquatic Fauna (B13) Moss Trim Lines (B16)
Saturation (A3) Marl Deposits (B15) Dry-Season Water Table (C2)
Water Marks (B1) Hydrogen Sulfide Odor (C1) Crayfish Burrows (C8)
Sediment Deposits (B2) Oxidized Rhizospheres on Living Roots (C3) X Saturation Visible on Aerial Imagery (C9)
Drift Deposits (B3) Presence of Reduced Iron (C4) Stunted or Stressed Plants (D1)
Algal Mat or Crust (B4) Recent Iron Reduction in Tilled Soils (C6) Geomorphic Position (D2)
Iron Deposits (B5) Thin Muck Surface (C7) Shallow Aquitard (D3)
Inundation Visible on Aerial Imagery (B7) Other (Explain in Remarks) Microtopographic Relief (D4)
Sparsely Vegetated Concave Surface (B8) FAC-Neutral Test (D5)
Field Observations:
Surface Water Present Yes No _X Depth (inches):
Water Table Present Yes No _X Depth (inches):
Saturation Present Yes No X Depth (inches): Wetland Hydrology Present? Yes No X
(includes capillary fringe)
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:
Remarks:

Tree Stratum (Plot size: 30 ft)	Absolute % Cover	Dominant Species	Indicator Status	Dominance Test worksheet:
1 2				Number of Dominant Species That Are OBL, FACW, or FAC: 0 (A)
3				Total Number of Dominant Species Across All Strata: 2 (B)
5 6				Percent of Dominant Species That Are OBL, FACW, or FAC: 0 (A/B)
7				
	0	_ = Total Cover		Prevalence Index worksheet: Total % Cover of: Multiply by:
Sapling/Shrub Stratum (Plot size: 15 ft)				OBL species x 1 =
1				FACW species x 2 =
2				
3				· — —
4				FACU species x 4 =
5.				UPL species x 5 =
6.				Column Totals: (A)(B)
				Prevalence Index = B/A =
7				Hydrophytic Vegetation Indicators:
Herb Stratum (Plot size: 5 ft)	0	= Total Cover		1 - Rapid Test for Hydrophytic Vegetation
01. 1	45	Yes	UPL	_ 2 - Dominance Test is >50%
				- 3 - Prevalence Index is ≤3.0¹
Ambrosia artemisiifolia	35	Yes	FACU	4 - Morphological Adaptations¹
3. Cyperus esculentus	5	No	FACW	(Provide supporting data in Remarks or on a separate sheet)
4				Buch la se of a Hardman had a Manastation 1 (Familia)
5				Problematic Hydrophytic Vegetation ¹ (Explain)
6				¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
7		<u> </u>		
8				Definitions of Vegetation Strata:
9				_
10				Tree – Woody plants 3 in. (7.6 cm) or more in
11.				diameter at breast height (DBH), regardless of height.
12.				Sapling/shrub – Woody plants less than 3 in. DBH
12.		 -		and greater than or equal to 3.28 ft (1 m) tall.
	85	= Total Cover		Herb – All herbaceous (non-woody) plants, regardless
Woody Vine Stratum (Plot size: 30 ft)				of size, and woody plants less than 3.28 ft tall.
1				
				Woody vines – All woody vines greater than 3.28 ft in
_		 -		height.
		-		Hudro whysis
4				Hydrophytic Vegetation
	0	= Total Cover		Present? Yes No X
		_ 10tal 00101		
Remarks: (Include photo numbers here or on a separa	ate sneet.)			

SP11

Sampling Point:

Profile Description:		the dept		ment the x Feature		or or co	nfirm the abs	ence of indica	tors.)	
Depth (inches) Col	Matrix or (moist)	%	Color (moist)	% realul	Type ¹	Loc ²	Texture	<u> </u>	Remarks	
0-13 10YR		100	Color (moist)		Турс		Peat	<u> </u>	rtomano	
13-24 10YR		100					Peat			
10 24	3/3	100					T Cut			
			_							
¹ Type: C=Concentra	ation, D=Deple	etion, RM=	Reduced Matrix, N	MS=Mas	ked Sand	d Grains.	² Locatio	n: PL=Pore Lin	ing, M=Matrix.	
Hydric Soil Indicato	ors:						Indi	cators for Prob	olematic Hydric	Soils³:
X Histosol (A1)		_	Polyvalue Below	V Surface	(S8) (LRR	R,	_	2 cm Muck (A10)	(LRR K, L, MLRA	149B)
Histic Epipedon (A	12)		MLRA 149B)				_		dox (A16) (LRR K, I	
Black Histic (A3)	(A A)	_	Thin Dark Surfa						t or Peat (S3) (LRR	
Hydrogen Sulfide (_	High Chroma Sa					-	Surface (S8) (LRR	K, L)
Stratified Layers (A	•	1)	Loamy Mucky M Loamy Gleyed M			L)	_		ce (S9) (LRR K, L)	KID)
Thick Dark Surface	-	'' -	Depleted Matrix		,		Iron-Manganese Masses (F12) (LRR K, L, R) Piedmont Floodplain Soils (F19) (MLRA 149B)			
Sandy Mucky Mine		_	Redox Dark Sur						A6) (MLRA 144A, 14	
Sandy Gleyed Mat		_	Depleted Dark S		7)			Red Parent Mate		-, - ,
Sandy Redox (S5))	_	Redox Depressi	ons (F8)				Very Shallow Da	rk Surface (F22)	
Stripped Matrix (Se	6)	_	Marl (F10) (LRR	R K, L)				Other (Explain in	Remarks)	
Dark Surface (S7)										
³ Indicators of hydrop	hytic vegetation	on and we	tland hydrology mu	ust be pr	esent, un	less dist	urbed or probl	ematic.		
Restrictive Layer (if										
Type:	·									
Depth (inches):							Hydric So	il Present?	Yes X	No
Remarks:							1			
rtomanto.										

Project/Site: Pine County Solar	City/County: Pine Sampling Date: 09/14/2022					
Applicant/Owner: Swift Current Energy	State: Min Sampling Point: SP12					
Investigator(s): BB/AH	Section, Township, Range: T044N, R020W, S14					
	relief (concave, convex, none): Concave Slope %: 1					
` ' ' <u> </u>						
Subregion (LRR or MLRA): LRR K, MLRA 90A Lat: 46.290436	Long: -92.8293 Datum: WGS84					
Soil Map Unit Name: Denied Access	NWI classification:					
Are climatic / hydrologic conditions on the site typical for this time of year?	Yes No X (If no, explain in Remarks.)					
Are Vegetation X , Soil , or Hydrology significantly dist	turbed? Are "Normal Circumstances" present? Yes NoX					
Are Vegetation , Soil , or Hydrology naturally probler	matic? (If needed, explain any answers in Remarks.)					
SUMMARY OF FINDINGS – Attach site map showing sampling p	oint locations, transects, important features, etc.					
Hydrophytic Vegetation Present? Yes No X	Is the Sampled Area					
Hydric Soil Present? Yes X No	within a Wetland? Yes No X					
Wetland Hydrology Present? Yes No X	If yes, optional Wetland Site ID: N/A					
Remarks: (Explain alternative procedures here or in a separate report.) Antecedent precipitation analysis showed drier than normal precipitation						
HYDROLOGY						
Wetland Hydrology Indicators:	Secondary Indicators (minimum of two required)					
Primary Indicators (minimum of one is required; check all that apply)	Surface Soil Cracks (B6)					
Surface Water (A1) Water-Stained Leaves (B9)	Drainage Patterns (B10)					
High Water Table (A2) Aquatic Fauna (B13)	Moss Trim Lines (B16)					
Saturation (A3) Marl Deposits (B15)	Dry-Season Water Table (C2)					
Water Marks (B1) Hydrogen Sulfide Odor (C1)	Crayfish Burrows (C8)					
Sediment Deposits (B2) Oxidized Rhizospheres on L	iving Roots (C3) X Saturation Visible on Aerial Imagery (C9)					
Drift Deposits (B3) Presence of Reduced Iron (0	C4) Stunted or Stressed Plants (D1)					
Algal Mat or Crust (B4) Recent Iron Reduction in Till	lled Soils (C6) Geomorphic Position (D2)					
Iron Deposits (B5) Thin Muck Surface (C7)	Shallow Aquitard (D3)					
Inundation Visible on Aerial Imagery (B7) Other (Explain in Remarks)	Microtopographic Relief (D4)					
Sparsely Vegetated Concave Surface (B8)	FAC-Neutral Test (D5)					
Field Observations:						
Surface Water Present Yes No _X Depth (inches	3):					
Water Table Present Yes No X Depth (inches	s):					
Saturation Present Yes No X Depth (inches	S): Wetland Hydrology Present? Yes No _X					
(includes capillary fringe)						
Describe Recorded Data (stream gauge, monitoring well, aerial photos, pr	evious inspections), if available:					
Remarks:						

<u>Tree Stratum</u> (Plot size: <u>30 ft</u>)	Absolute % Cover	Dominant Species	Indicator 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: 1 (B)
5 6				Percent of Dominant Species That Are OBL, FACW, or FAC: 0 (A/B)
7				
	0	_ = Total Cover		Prevalence Index worksheet: Total % Cover of: Multiply by:
Sapling/Shrub Stratum (Plot size: 15 ft)				OBL species x 1 =
1				FACW species x 2 =
2				
3.				FAC species x 3 =
4.				FACU species x 4 =
5.			-	UPL species x 5 =
	<u> </u>			Column Totals: (A)(B)
				Prevalence Index = B/A =
7		-		Hydrophytic Vegetation Indicators:
5 th	0	= Total Cover		1 - Rapid Test for Hydrophytic Vegetation
Herb Stratum (Plot size: 5 ft) 1 Glycine max	65	Yes	UPL	_ 2 - Dominance Test is >50%
"				3 - Prevalence Index is ≤3.0¹
2. Panicum capillare	10		FACU	4 - Morphological Adaptations ¹
3. Amaranthus retroflexus				(Provide supporting data in Remarks or on a separate sheet)
4. Ambrosia artemisiifolia			FACU	Problematic Hydrophytic Vegetation ¹ (Explain)
5				¹Indicators of hydric soil and wetland hydrology must be present, unless
6				disturbed or problematic.
7				
8				Definitions of Vegetation Strata:
9				Tree – Woody plants 3 in. (7.6 cm) or more in
10				diameter at breast height (DBH), regardless of height.
11				
12.				Sapling/shrub – Woody plants less than 3 in. DBH
		· ·		and greater than or equal to 3.28 ft (1 m) tall.
Woody Vine Stratum (Plot size:30 ft)	82	= Total Cover		Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.
1.				
2.			-	Woody vines – All woody vines greater than 3.28 ft in
		·		height.
	<u> </u>	· · · · · · · · ·		Hydrophytic
4		·		Hydrophytic Vegetation
	0	= Total Cover		Present? Yes No _X
Remarks: (Include photo numbers here or on a separ	ate sheet.)			

SP12

Sampling Point:

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)								
Depth	Matrix		Redo	x Featur	es			
(inches)	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²	Texture	Remarks
0-12	10YR 2/2	100					Peat	
12-24	10YR 3/4	100					Peat	
				,				
¹Type: C=C	oncentration, D=Dep	letion, RM	=Reduced Matrix, N	∕/S=Mas	ked San	Grains.	² Location: PL=F	Pore Lining, M=Matrix.
Hydric Soil	Indicators:						Indicators f	or Problematic Hydric Soils ³ :
X Histosol	(A1)		Polyvalue Below	Surface	(S8) (LRR	R,	2 cm Mu	uck (A10) (LRR K, L, MLRA 149B)
Histic Ep	ipedon (A2)		MLRA 149B)				Coast P	rairie Redox (A16) (LRR K, L, R)
Black His	stic (A3)		Thin Dark Surface) 5 cm Mu	ucky Peat or Peat (S3) (LRR K, L, R)
	n Sulfide (A4)		High Chroma Sa					e Below Surface (S8) (LRR K, L)
·	Layers (A5)		Loamy Mucky M			L)	\ <u></u>	rk Surface (S9) (LRR K, L)
	Below Dark Surface (A	11)	Loamy Gleyed N		!)			nganese Masses (F12) (LRR K, L, R)
	rk Surface (A12)		Depleted Matrix				· 	nt Floodplain Soils (F19) (MLRA 149B)
	ucky Mineral (S1) leyed Matrix (S4)		Redox Dark Sur Depleted Dark S					podic (TA6) (MLRA 144A, 145, 149B) rent Material (F21)
	edox (S5)		Redox Depressi		')			allow Dark Surface (F22)
	Matrix (S6)		Marl (F10) (LRR					explain in Remarks)
	face (S7)							
³ Indicators o	f hydrophytic vegetati	ion and w	etland hydrology mu	ıst be pr	esent, un	less dist	curbed or problematic.	
	Layer (if observed):		,					
Type:	, ,							
Depth (ii	nches):						Hydric Soil Prese	nt? Yes X No
Remarks:								

Project/Site: Pine County Solar	City/County: Pine Sampling Date: 09/14/2022					
Applicant/Owner: Swift Current Energy	State: Min Sampling Point: SP13					
Investigator(s): BB/AH	Section, Township, Range: T044N, R020W, S14					
	al relief (concave, convex, none): Linear Slope %: 1					
Subregion (LRR or MLRA): LRR K, MLRA 90A Lat: 46.295114	Long: -92.828502 Datum: WGS84					
Soil Map Unit Name: Denied Access						
Are climatic / hydrologic conditions on the site typical for this time of year?						
Are Vegetation X, Soil , or Hydrology significantly dis						
Are Vegetation , Soil , or Hydrology naturally probl	ematic? (If needed, explain any answers in Remarks.)					
SUMMARY OF FINDINGS – Attach site map showing sampling	point locations, transects, important features, etc.					
Hydrophytic Vegetation Present? Yes No X	Is the Sampled Area					
Hydrophytic Vegetation Present? Hydric Soil Present? Yes No X No No	Is the Sampled Area within a Wetland? Yes No X					
Wetland Hydrology Present? Yes No X	If yes, optional Wetland Site ID: N/A					
Remarks: (Explain alternative procedures here or in a separate report.)	11 you, optional violatio office 12.					
Antecedent precipitation analysis showed drier than normal conditions						
HYDROLOGY						
Wetland Hydrology Indicators:	Secondary Indicators (minimum of two required)					
Primary Indicators (minimum of one is required; check all that apply)	Surface Soil Cracks (B6)					
Surface Water (A1) Water-Stained Leaves (B9	Drainage Patterns (B10)					
High Water Table (A2) Aquatic Fauna (B13)	Moss Trim Lines (B16)					
Saturation (A3) Marl Deposits (B15)	Dry-Season Water Table (C2)					
Water Marks (B1) Hydrogen Sulfide Odor (C	1) Crayfish Burrows (C8)					
Sediment Deposits (B2) Oxidized Rhizospheres on	Living Roots (C3) X Saturation Visible on Aerial Imagery (C9)					
Drift Deposits (B3) Presence of Reduced Iron	(C4) Stunted or Stressed Plants (D1)					
Algal Mat or Crust (B4) Recent Iron Reduction in T	illed Soils (C6) Geomorphic Position (D2)					
Iron Deposits (B5) Thin Muck Surface (C7)	Shallow Aquitard (D3)					
Inundation Visible on Aerial Imagery (B7) Other (Explain in Remarks	Microtopographic Relief (D4)					
Sparsely Vegetated Concave Surface (B8)	FAC-Neutral Test (D5)					
Field Observations:						
Surface Water Present Yes No _X Depth (inche	es):					
	es):					
Saturation Present Yes No X Depth (inche						
(includes capillary fringe)						
Describe Recorded Data (stream gauge, monitoring well, aerial photos, p	previous inspections), if available:					
Remarks:						

<u>Tree Stratum</u> (Plot size: <u>30 ft</u>)	Absolute % Cover	Dominant Species	Indicator 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: 1 (B)
5.				Percent of Dominant Species
7.				That Are OBL, FACW, or FAC:0 (A/B)
	0	= Total Cover		Prevalence Index worksheet: Total % Cover of: Multiply by:
Sapling/Shrub Stratum (Plot size: 15 ft)				OBL species x 1 =
1				FACW species x 2 =
2				
3.				FAC species x 3 =
4.				FACU species x 4 =
5.				UPL species x 5 =
6.				Column Totals: (A)(B)
				Prevalence Index = B/A =
7				Hydrophytic Vegetation Indicators:
Herb Stratum (Plot size: 5 ft)	0	= Total Cover		1 - Rapid Test for Hydrophytic Vegetation
4 Glycine may	60	Yes	UPL	_ 2 - Dominance Test is >50%
	10	No	FACU	3 - Prevalence Index is ≤3.0¹
C. Parisum carillars	40			4 - Morphological Adaptations ¹
3. Panicum capillare			FAC	(Provide supporting data in Remarks or on a separate sheet)
4. Silene latifolia	5	No	UPL	Problematic Hydrophytic Vegetation ¹ (Explain)
5		· · · · · · · · · · · · · · · · · · ·		¹Indicators of hydric soil and wetland hydrology must be present, unless
6				disturbed or problematic.
7				
8		·		Definitions of Vegetation Strata:
9				Tree – Woody plants 3 in. (7.6 cm) or more in
10				diameter at breast height (DBH), regardless of height.
11				
12.				Sapling/shrub – Woody plants less than 3 in. DBH
	85			and greater than or equal to 3.28 ft (1 m) tall.
Woody Vine Stratum (Plot size:30 ft)		= Total Cover		Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.
1				
2				Woody vines – All woody vines greater than 3.28 ft in height.
3.				rieignt.
4.				Hydrophytic
				Vegetation
	0	= Total Cover		Present? Yes No X
Remarks: (Include photo numbers here or on a separ	ate sheet.)			

SP13

Sampling Point:

	ription: (Describe to	the dep				or or co	onfirm the absence of	of indicators.)			
Depth (inches)	Matrix	0/		x Featur		1002	Toyetura	Domostro			
(inches)	Color (moist)	<u>%</u>	Color (moist)	%	Type ¹	Loc ²	Texture	Remarks			
0-16	10YR 2/1	100					Peat				
16-20	10YR 4/1	100					Sand				
20-24	5YR 4/6	100					Sand				
¹Type: C=C	oncentration, D=Depl	etion, RN	=Reduced Matrix, N	лS=Mas	ked Sand	Grains.	² Location: PL=	Pore Lining, M=Matrix.			
Hydric Soil I	Indicators:						Indicators	for Problematic Hydric Soils ³ :			
X Histosol ((A1)		Polyvalue Below	Surface	(S8) (LRR	R,	2 cm N	luck (A10) (LRR K, L, MLRA 149B)			
	ipedon (A2)		MLRA 149B)				 -	Prairie Redox (A16) (LRR K, L, R)			
Black His			Thin Dark Surface								
	Sulfide (A4)		High Chroma Sa				Polyvalue Below Surface (S8) (LRR K, L)				
	Layers (A5) Below Dark Surface (A1	11)	Loamy Mucky M Loamy Gleyed N			L)		ark Surface (S9) (LRR K, L) anganese Masses (F12) (LRR K, L, R)			
	rk Surface (A12)	11)	Depleted Matrix		,			ont Floodplain Soils (F19) (MLRA 149B)			
	ucky Mineral (S1)		Redox Dark Sur				·	Spodic (TA6) (MLRA 144A, 145, 149B)			
	leyed Matrix (S4)		Depleted Dark S		7)			arent Material (F21)			
Sandy Re	edox (S5)		Redox Depressi	ons (F8)			Very S	hallow Dark Surface (F22)			
Stripped	Matrix (S6)		Marl (F10) (LRR	K, L)			Other (Explain in Remarks)			
Dark Surf	face (S7)										
³ Indicators of	hydrophytic vegetati	on and w	etland hydrology mu	ıst be pr	esent, un	less dist	turbed or problematic				
Restrictive L	_ayer (if observed):										
Type:											
Depth (ir	nches):						Hydric Soil Pres	ent? Yes X No			
Remarks:											

Project/Site: Pine County Solar	City/County: Pine Sampling Date: 09/14/2022								
Applicant/Owner: Swift Current Energy	State: Min Sampling Point: SP14								
Investigator(s): BB/AH	Section, Township, Range: T044N, R020W, S14								
	relief (concave, convex, none): Concave Slope %: 1								
<u> </u>									
Subregion (LRR or MLRA): LRR K, MLRA 90A Lat: 46.297016	Long: -92.829729 Datum: WGS84								
Soil Map Unit Name: Denied Access	NWI classification: PEM1Af								
Are climatic / hydrologic conditions on the site typical for this time of year?	Yes No X (If no, explain in Remarks.)								
Are Vegetation X , Soil , or Hydrology significantly distr	curbed? Are "Normal Circumstances" present? Yes NoX								
Are Vegetation , Soil , or Hydrology naturally probler	matic? (If needed, explain any answers in Remarks.)								
SUMMARY OF FINDINGS – Attach site map showing sampling p	oint locations, transects, important features, etc.								
Hydrophytic Vegetation Present? Yes No X	Is the Sampled Area								
Hydric Soil Present? Yes No X	within a Wetland? Yes No X								
Wetland Hydrology Present? Yes No X	If yes, optional Wetland Site ID: N/A								
Remarks: (Explain alternative procedures here or in a separate report.) Antecedent precipitation analysis showed drier than normal conditions. Taken within edge of NWI and aerial signature which was lowest spot in this area. Soybeans were greener in this area compared to the rest of this field. This field seems to be a couple feet higher than the fields to the south.									
HYDROLOGY									
Wetland Hydrology Indicators:	Secondary Indicators (minimum of two required)								
Primary Indicators (minimum of one is required; check all that apply)	Surface Soil Cracks (B6)								
Surface Water (A1) Water-Stained Leaves (B9)	Drainage Patterns (B10)								
High Water Table (A2) Aquatic Fauna (B13)	Moss Trim Lines (B16)								
Saturation (A3) Marl Deposits (B15)	Dry-Season Water Table (C2)								
Water Marks (B1) Hydrogen Sulfide Odor (C1)									
Sediment Deposits (B2) Oxidized Rhizospheres on Li	Living Roots (C3) X Saturation Visible on Aerial Imagery (C9)								
Drift Deposits (B3) Presence of Reduced Iron (C	C4) Stunted or Stressed Plants (D1)								
Algal Mat or Crust (B4) Recent Iron Reduction in Till	lled Soils (C6) Geomorphic Position (D2)								
Iron Deposits (B5) Thin Muck Surface (C7)	Shallow Aquitard (D3)								
Inundation Visible on Aerial Imagery (B7) Other (Explain in Remarks)									
Sparsely Vegetated Concave Surface (B8)	FAC-Neutral Test (D5)								
Field Observations:									
Surface Water Present Yes No X Depth (inches	s):								
Water Table Present Yes No X Depth (inches	· 								
Saturation Present Yes No X Depth (inches	S): Wetland Hydrology Present? Yes No _X								
(includes capillary fringe)									
Describe Recorded Data (stream gauge, monitoring well, aerial photos, pre	evious inspections), if available:								
Remarks:									
Remarks:									

Tree Stratum (Plot size: 30 ft)	Absolute % Cover	Dominant Species	Indicator Status	Dominance Test worksheet:
1 2				Number of Dominant Species That Are OBL, FACW, or FAC:(A)
3				Total Number of Dominant Species Across All Strata:1 (B)
5				Percent of Dominant Species That Are OBL, FACW, or FAC:0(A/B)
	_			Prevalence Index worksheet:
45.6	0	_ = Total Cover		Total % Cover of: Multiply by:
Sapling/Shrub Stratum (Plot size: 15 ft)				OBL species x 1 =
1				FACW species x 2 =
2.				FAC species x 3 =
3				FACU species x 4 =
4				UPL species x 5 =
56.				Column Totals: (A) (B)
				Prevalence Index = B/A =
7				Hydrophytic Vegetation Indicators:
Herb Stratum (Plot size: 5 ft)	0	= Total Cover		1 - Rapid Test for Hydrophytic Vegetation
1. Glycine max	60	Yes	UPL	2 - Dominance Test is >50%
Equisetum hyemale	10	No	FAC	3 - Prevalence Index is ≤3.0¹
Ambrosia artemisiifolia	8	No	FACU	4 - Morphological Adaptations ¹
4. Trifolium pratense	5	No	FACU	(Provide supporting data in Remarks or on a separate sheet)
5. Panicum capillare		No	FAC	Problematic Hydrophytic Vegetation ¹ (Explain)
6. Echinochloa crus-galli				¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
7				distribed of problematic.
8.				Definitions of Vegetation Strata:
9				
10.				Tree – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.
11				diameter at breast neight (DDH), regardless of neight.
12	_			Sapling/shrub – Woody plants less than 3 in. DBH
	91			and greater than or equal to 3.28 ft (1 m) tall.
Woody Vine Stratum (Plot size: 30 ft)		= Total Cover		Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.
1	_			Woody vines – All woody vines greater than 3.28 ft in
2	_			height.
3	_			
4	_			Hydrophytic
	0	= Total Cover		Vegetation Present? Yes NoX
_				
Remarks: (Include photo numbers here or on a sepa	arate sheet.)			

SP14

Sampling Point:

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)									
Depth	Matrix		Redox	(Featur	es		_		
(inches)	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²	Texture Remarks		
0-8	10YR 3/2	100					Loamy Sand		
8-14	10YR 2/2	90	10YR 5/1	10	D	М	Loamy Sand		
14-27	10YR 4/3	100					Loamy Sand		
									
-							·		
¹Type: C=Co	oncentration, D=Deple	etion, RN	/=Reduced Matrix, №	1S=Mas	ked Sand	d Grains	s. ² Location: PL=Pore Lining, M=Matrix.		
Hydric Soil II	ndicators:						Indicators for Problematic Hydric Soils ³ :		
Histosol (A			Polyvalue Below	Surface	(S8) (LRR	: R.	2 cm Muck (A10) (LRR K, L, MLRA 149B)		
	pedon (A2)		MLRA 149B)		()(,	Coast Prairie Redox (A16) (LRR K, L, R)		
Black Hist	tic (A3)		Thin Dark Surfac	e (S9) (L	RR R, ML	.RA 149B	B) 5 cm Mucky Peat or Peat (S3) (LRR K, L, R)		
Hydrogen	Sulfide (A4)		High Chroma Sa	nds (S11) (LRR K,	L)	Polyvalue Below Surface (S8) (LRR K, L)		
Stratified I	Layers (A5)		Loamy Mucky Mi	ineral (F1	1) (LRR K ,	L)	Thin Dark Surface (S9) (LRR K, L)		
Depleted	Below Dark Surface (A1	1)	Loamy Gleyed M	latrix (F2)		Iron-Manganese Masses (F12) (LRR K, L, R)		
Thick Darl	k Surface (A12)		Depleted Matrix ((F3)			Piedmont Floodplain Soils (F19) (MLRA 149B)		
	icky Mineral (S1)		Redox Dark Surf				Mesic Spodic (TA6) (MLRA 144A, 145, 149B)		
	eyed Matrix (S4)		Depleted Dark S		·7)		Red Parent Material (F21)		
Sandy Re			Redox Depression				Very Shallow Dark Surface (F22) Other (Explain in Remarks)		
Simpped in	Matrix (S6)		Marl (F10) (LRR	K, L)			Other (Explain in Remarks)		
		on and w	votland bydralagy my	at ha ar	occupt un	logo dio	oturbod or problematic		
		JII allu W	etiana nyarology ma	at be pi	eserit, ui	iless uis	sturbed or problematic.		
Type:	ayer (if observed):								
_	ahaa).						Hydric Soil Present? Yes No	X	
Depth (in	cnes):						Hydric Soil Present? Yes No	<u> </u>	
Remarks:									

Project/Site: Pine County Solar	City/County: Pine Sampling Date: 09/14/2022					
Applicant/Owner: Swift Current Energy	State: Min Sampling Point: SP15					
Investigator(s): BB/AH	Section, Township, Range: T044N, R020W, S14					
Landform (hillside, terrace, etc.): Terrace Local r	relief (concave, convex, none): Linear Slope %: 1					
Subregion (LRR or MLRA): LRR K, MLRA 90A Lat: 46.294322	Long: -92.833134 Datum: WGS84					
Soil Map Unit Name: Denied Access	NWI classification:					
Are climatic / hydrologic conditions on the site typical for this time of year?	Yes No X (If no, explain in Remarks.)					
Are Vegetation X , Soil , or Hydrology significantly distu						
Are Vegetation , Soil , or Hydrology naturally problem	natic? (Il fleeded, explain any answers in Kernaiks.)					
SUMMARY OF FINDINGS – Attach site map showing sampling po	oint locations, transects, important features, etc.					
Hydrophytic Vegetation Present? Yes No X	Is the Sampled Area					
Hydric Soil Present? Yes X No	within a Wetland? Yes No X					
Wetland Hydrology Present? Yes No X	If yes, optional Wetland Site ID: N/A					
Remarks: (Explain alternative procedures here or in a separate report.)	ii yes, opiionai wetiana oite ib.					
	ry dry field. Soybeans likely stressed due to dry conditions. Annual ragweed					
,						
HYDROLOGY						
Wetland Hydrology Indicators:	Secondary Indicators (minimum of two required)					
Primary Indicators (minimum of one is required; check all that apply)	Surface Soil Cracks (B6)					
Surface Water (A1) Water-Stained Leaves (B9)	Drainage Patterns (B10)					
High Water Table (A2) Aquatic Fauna (B13)	Moss Trim Lines (B16)					
Saturation (A3) Marl Deposits (B15)	Dry-Season Water Table (C2)					
Water Marks (B1) Hydrogen Sulfide Odor (C1)	Crayfish Burrows (C8)					
Sediment Deposits (B2) Oxidized Rhizospheres on Li	iving Roots (C3) X Saturation Visible on Aerial Imagery (C9)					
Drift Deposits (B3) Presence of Reduced Iron (C	C4) Stunted or Stressed Plants (D1)					
Algal Mat or Crust (B4) Recent Iron Reduction in Tille	illed Soils (C6) Geomorphic Position (D2)					
Iron Deposits (B5) Thin Muck Surface (C7)	Shallow Aquitard (D3)					
Inundation Visible on Aerial Imagery (B7) Other (Explain in Remarks)	Microtopographic Relief (D4)					
Sparsely Vegetated Concave Surface (B8)	FAC-Neutral Test (D5)					
Field Observations:						
Surface Water Present Yes No _X Depth (inches	s):					
Water Table Present Yes No X Depth (inches						
Saturation Present Yes No X Depth (inches	· 					
(includes capillary fringe)	·—					
Describe Recorded Data (stream gauge, monitoring well, aerial photos, pre	evious inspections), if available:					
Remarks:						

	Absolute	Dominant	Indicator	
ree Stratum (Plot size: 30 ft)	% Cover	<u>Species</u>	<u>Status</u>	Dominance Test worksheet:
				Number of Dominant Species
				That Are OBL, FACW, or FAC: (A)
	_			
				Total Number of Dominant Species Across All Strata: 2 (B)
				Operics Across Air Strata.
				Percent of Dominant Species
				That Are OBL, FACW, or FAC: (A/E
				Prevalence Index worksheet:
	0	_ = Total Cover		Total % Cover of: Multiply by:
apling/Shrub Stratum (Plot size: 15 ft)				OBL species x 1 =
				FACW species x 2 =
				FAC species x 3 =
				FACU species x 4 =
				UPL species x 5 =
				Column Totals: (A)(E
				Prevalence Index = B/A =
				Hydrophytic Vegetation Indicators:
	0	= Total Cover		- 1 - Rapid Test for Hydrophytic Vegetation
erb Stratum (Plot size: 5 ft)				2 - Dominance Test is >50%
Glycine max	60	Yes	UPL	- 3 - Prevalence Index is ≤3.0¹
Ambrosia artemisiifolia	30	Yes	FACU	
				4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet)
				Drahlamatic Hydrophytic Vacatation 1 (Evaluis)
•	_		_	Problematic Hydrophytic Vegetation¹ (Explain)
·				¹Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
				Definitions of Vegetation Strata:
		<u> </u>		Trace Manchinelanta 2 in (7.0 cm) or manchine
O				Tree – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height
1				
2				Sapling/shrub – Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.
	90	T		
(and w) (in a Construer (Diet sine) 20 ft)		= Total Cover		Herb – All herbaceous (non-woody) plants, regardles
oody Vine Stratum (Plot size: 30 ft)				of size, and woody plants less than 3.28 ft tall.
				Woody vines – All woody vines greater than 3.28 ft
				height.
				neight.
				neight.
				Hydrophytic
		= Total Cover		

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)								
Depth	Matrix		Redo	x Featur	es			
(inches)	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²	Texture	Remarks
0-19	10YR 2/1	100					Peat	
19-24	10YR 5/1	100					Sand	
	<u> </u>							
¹Type: C=C	oncentration, D=Dep	letion, RM	I=Reduced Matrix, N	/IS=Mas	ked Sand	Grains.	² Location: PL=F	Pore Lining, M=Matrix.
Hydric Soil	Indicators:						Indicators t	for Problematic Hydric Soils ³ :
X Histosol	(A1)		Polyvalue Below	Surface	(S8) (LRR	R,	2 cm Mu	uck (A10) (LRR K, L, MLRA 149B)
Histic Ep	ipedon (A2)		MLRA 149B)				Coast P	rairie Redox (A16) (LRR K, L, R)
Black His	stic (A3)		Thin Dark Surface	ce (S9) (L	RR R, ML	RA 149B) 5 cm Mu	ucky Peat or Peat (S3) (LRR K, L, R)
Hydroge	n Sulfide (A4)		High Chroma Sa	inds (S11) (LRR K,	L)	Polyvalu	ue Below Surface (S8) (LRR K, L)
Stratified	Layers (A5)		Loamy Mucky M	ineral (F	1) (LRR K ,	L)	Thin Da	rk Surface (S9) (LRR K, L)
X Depleted	Below Dark Surface (A	11)	Loamy Gleyed N	Aatrix (F2)		Iron-Ma	nganese Masses (F12) (LRR K, L, R)
Thick Da	rk Surface (A12)		Depleted Matrix	(F3)			Piedmoi	nt Floodplain Soils (F19) (MLRA 149B)
Sandy M	ucky Mineral (S1)		Redox Dark Sur	face (F6)			Mesic S	podic (TA6) (MLRA 144A, 145, 149B)
Sandy G	leyed Matrix (S4)		Depleted Dark S	Surface (F	7)		Red Par	rent Material (F21)
Sandy R	edox (S5)		Redox Depressi	ons (F8)			Very Sh	allow Dark Surface (F22)
Stripped	Matrix (S6)		Marl (F10) (LRR	K, L)			Other (E	Explain in Remarks)
Dark Sur	face (S7)							
³ Indicators o	f hydrophytic vegetati	ion and w	etland hydrology mu	ıst be pr	esent, un	less dist	urbed or problematic.	
	Layer (if observed):							
Type:								
Depth (ii	nches):						Hydric Soil Prese	ent? Yes X No
Remarks:								

Project/Site: Pine County Solar	City/County: Pine Sampling Date: 09/15/2022						
Applicant/Owner: Swift Current Energy	State: Min Sampling Point: SP16						
Investigator(s): Jwf	Section, Township, Range: T044N, R020W, S14						
	relief (concave, convex, none): Convex Slope %: 1						
· · · · · · · · · · · · · · · · · · ·	· · · · · · · —						
Subregion (LRR or MLRA): LRR K, MLRA 90A Lat: 46.300592	Long: -92.837501 Datum: WGS84						
Soil Map Unit Name: Denied Access	NWI classification:						
Are climatic / hydrologic conditions on the site typical for this time of year?	Yes No X (If no, explain in Remarks.)						
Are Vegetation $\begin{tabular}{ c c c c c c c c c c c c c c c c c c c$	turbed? Are "Normal Circumstances" present? Yes No X						
Are Vegetation , Soil , or Hydrology naturally problem	matic? (If needed, explain any answers in Remarks.)						
SUMMARY OF FINDINGS – Attach site map showing sampling p	point locations, transects, important features, etc.						
Hydrophytic Vegetation Present? Yes No X	Is the Sampled Area						
Hydric Soil Present? Yes No X	within a Wetland? Yes No X						
Wetland Hydrology Present? Yes No X	If yes, optional Wetland Site ID: NA						
Remarks: (Explain alternative procedures here or in a separate report.) Drier than normal conditions							
HYDROLOGY							
Wetland Hydrology Indicators:	Secondary Indicators (minimum of two required)						
Primary Indicators (minimum of one is required; check all that apply)	Surface Soil Cracks (B6)						
Surface Water (A1) Water-Stained Leaves (B9)	Drainage Patterns (B10)						
High Water Table (A2) Aquatic Fauna (B13)	Moss Trim Lines (B16)						
Saturation (A3) Marl Deposits (B15)	Dry-Season Water Table (C2)						
Water Marks (B1) Hydrogen Sulfide Odor (C1)	Crayfish Burrows (C8)						
Sediment Deposits (B2) Oxidized Rhizospheres on L	Living Roots (C3) Saturation Visible on Aerial Imagery (C9)						
Drift Deposits (B3) Presence of Reduced Iron (C4) Stunted or Stressed Plants (D1)						
Algal Mat or Crust (B4) Recent Iron Reduction in Til	illed Soils (C6) Geomorphic Position (D2)						
Iron Deposits (B5) Thin Muck Surface (C7)	Shallow Aquitard (D3)						
Inundation Visible on Aerial Imagery (B7) Other (Explain in Remarks)	Microtopographic Relief (D4)						
Sparsely Vegetated Concave Surface (B8)	FAC-Neutral Test (D5)						
Field Observations:							
Surface Water Present Yes No _X Depth (inches	s):						
Water Table Present Yes No X Depth (inches	s):						
Saturation Present Yes No X Depth (inches	s): Wetland Hydrology Present? Yes No _X_						
(includes capillary fringe)							
Describe Recorded Data (stream gauge, monitoring well, aerial photos, pr	revious inspections), if available:						
Remarks:							

Tree Stratum (Plot size: 30 ft)	Absolute % Cover	Dominant Species	Indicator Status	Dominance Test worksheet:
1				Number of Dominant Species That Are OBL, FACW, or FAC:(A)
3 4 5.				Total Number of Dominant Species Across All Strata:1 (B)
5				Percent of Dominant Species That Are OBL, FACW, or FAC: (A/B)
				Prevalence Index worksheet:
	0	_ = Total Cover		Total % Cover of: Multiply by:
Sapling/Shrub Stratum (Plot size: 15 ft)				OBL species x 1 =
1				FACW species x 2 =
2.				FAC species x 3 =
3				FACU species x 4 =
4				
5				UPL species x 5 =
6				Column Totals: (A)(B)
7				Prevalence Index = B/A =
	0			Hydrophytic Vegetation Indicators:
		= Total Cover		1 - Rapid Test for Hydrophytic Vegetation
Herb Stratum (Plot size: 5 ft)				- 2 - Dominance Test is >50%
1. Glycine max		Yes	UPL	- 3 - Prevalence Index is ≤3.0¹
Ambrosia artemisiifolia	5	No	FACU	4 - Morphological Adaptations ¹
3				(Provide supporting data in Remarks or on a separate sheet)
4				Duck long stip 1 hodge about a 1/2 materia a 1/2 materia
5				Problematic Hydrophytic Vegetation¹ (Explain)
6				¹Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
7				
8				Definitions of Vegetation Strata:
9				Tree Moody plants 2 in 77.6 cm) or more in
10				Tree – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.
11				
12				Sapling/shrub – Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.
	80			and greater than or equal to 3.26 it (1 m) tall.
Woody Vine Stratum (Plot size: 30 ft)		= Total Cover		Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.
1				Woody vines – All woody vines greater than 3.28 ft in
2				height.
3				
4				Hydrophytic Vegetation
	0	= Total Cover		Present? Yes No X
	-	= Total Cover		
Description (Include about a complete and a complet	-111\			
Remarks: (Include photo numbers here or on a separa	ate sheet.)			

Sampling Point: SP16

SOIL Sampling Point: SP16

		the dep				or or co	onfirm the absence of indica	itors.)		
Depth (inches)	Matrix Color (moist)	%	Color (moist)	x Featur %	es Type¹	Loc ²	Texture	Remarks		
0-6	10YR 3/2	100	Color (moist)	70	Туре	Loc	Sandy Loam	Remarks		
6-16	7.5YR 4/3	100					Sandy Loam			
	7.511 4/5	100					Sandy Loani			
16-26	10YR 2/2	100					Peaty Muck			
¹Type: C=Co	oncentration, D=Deple	etion, RM	=Reduced Matrix, N	√S=Mas	ked Sand	d Grains	. ² Location: PL=Pore Lir	ning, M=Matrix.		
Hydric Soil I	ndicators:						Indicators for Pro	blematic Hydric Soils ³ :		
Histosol (A	A1)		Polyvalue Below	V Surface	(S8) (LRR	R,	2 cm Muck (A10) (LRR K, L, MLRA 149B)		
Histic Epi	pedon (A2)		MLRA 149B)				Coast Prairie Re	Coast Prairie Redox (A16) (LRR K, L, R)		
Black Hist	tic (A3)		Thin Dark Surface	ce (S9) (L	.RR R, ML	.RA 149B	3) 5 cm Mucky Pea	at or Peat (S3) (LRR K, L, R)		
	Sulfide (A4)		High Chroma Sa				Polyvalue Below Surface (S8) (LRR K, L)			
<u> </u>	Layers (A5)		Loamy Mucky M			L)	Thin Dark Surface (S9) (LRR K, L)			
	Below Dark Surface (A1	1)	Loamy Gleyed N)			Masses (F12) (LRR K, L, R)		
	k Surface (A12)		Depleted Matrix				Piedmont Floodplain Soils (F19) (MLRA 14 Mesic Spodic (TA6) (MLRA 144A, 145, 14			
	ucky Mineral (S1) eyed Matrix (S4)		Redox Dark Surf Depleted Dark S		7)		Red Parent Mat			
Sandy Re	•		Redox Depressions (F8)				Very Shallow Dark Surface (F22)			
-	Matrix (S6)		Marl (F10) (LRR	, ,			Other (Explain in			
Dark Surf							, .	,		
³ Indicators of	hydrophytic vegetation	on and we	etland hydrology mu	ust be pr	esent, ur	ıless dis	turbed or problematic.			
	ayer (if observed):		, ,,	<u> </u>	<u> </u>		<u> </u>			
Type:	, ,									
Depth (in	nches):						Hydric Soil Present?	Yes No _X		
Remarks:							•			
Soil dry through	ghout									

WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region

Project/Site: Pine County Solar	City/County: Pine Sampling Date: 09/15/2022				
Applicant/Owner: Swift Current Energy	State: Min Sampling Point: SP17				
Investigator(s): Jwf	Section, Township, Range: T044N, R020W, S22				
	I relief (concave, convex, none): Concave Slope %: 1				
Subregion (LRR or MLRA): LRR K, MLRA 90A Lat: 46.279378	Long: -92.845685 Datum: WGS84				
Soil Map Unit Name: Denied Access	NWI classification:				
Are climatic / hydrologic conditions on the site typical for this time of year?					
Are Vegetation X, Soil , or Hydrology significantly dis					
Are Vegetation , Soil , or Hydrology naturally proble	ematic? (If needed, explain any answers in Remarks.)				
SUMMARY OF FINDINGS – Attach site map showing sampling	point locations, transects, important features, etc.				
Hadrahati Vandria Barrato	In the Committee of America				
Hydrophytic Vegetation Present? Hydric Soil Present? Yes No X No X	Is the Sampled Area				
<u> </u>	within a Wetland? Yes No X				
Wetland Hydrology Present? Yes No X	If yes, optional Wetland Site ID: N/A				
Remarks: (Explain alternative procedures here or in a separate report.) Drier than normal conditions					
Diei than normal conditions					
HYDROLOGY					
	Cocondany Indicators (minimum of two required)				
Wetland Hydrology Indicators:	Secondary Indicators (minimum of two required)				
Primary Indicators (minimum of one is required; check all that apply)	Surface Soil Cracks (B6)				
Surface Water (A1) Water-Stained Leaves (B9)					
High Water Table (A2) Aquatic Fauna (B13)	Moss Trim Lines (B16) Dry-Season Water Table (C2)				
Saturation (A3) Marl Deposits (B15)	Crayfish Burrows (C8)				
Water Marks (B1) Hydrogen Sulfide Odor (C1					
Sediment Deposits (B2) Oxidized Rhizospheres on Diff Deposits (B2)					
Drift Deposits (B3) Presence of Reduced Iron					
Algal Mat or Crust (B4) — Recent Iron Reduction in T Iron Deposits (B5) Thin Muck Surface (C7)	Shallow Aquitard (D3)				
	Missats a secretic Ballat (DA)				
Inundation Visible on Aerial Imagery (B7) — Other (Explain in Remarks) Sparsely Vegetated Concave Surface (B8)	FAC-Neutral Test (D5)				
	TAG Notice (55)				
Field Observations:					
Surface Water Present Yes No Depth (inche					
Water Table Present Yes No Depth (inche	· 				
Saturation Present Yes No Depth (inche	SS: Wetland Hydrology Present? Yes No _X				
(includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, p	rovious inspections) if available:				
Describe Recorded Data (stream gauge, monitoring well, aerial priotos, p	revious irispections), ii avaliable.				
Remarks:					
indiano.					

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 30 ft)	Absolute % Cover	Dominant Species	Indicator Status	Dominance Test worksheet:
1				Number of Dominant Species That Are OBL, FACW, or FAC:(A)
3 4 5.				Total Number of Dominant Species Across All Strata: 0 (B)
5				Percent of Dominant Species That Are OBL, FACW, or FAC:NaN(A/B)
				Prevalence Index worksheet:
	0	_ = Total Cover		Total % Cover of: Multiply by:
Sapling/Shrub Stratum (Plot size: 15 ft)				OBL species x 1 =
1				FACW species x 2 =
2.				FAC species x 3 =
3				FACU species x 4 =
4				
5				UPL species x 5 =
6		· 		Column Totals: (A)(B)
7				Prevalence Index = B/A =
	0			Hydrophytic Vegetation Indicators:
Herb Stratum (Plot size: 5 ft)		= Total Cover		1 - Rapid Test for Hydrophytic Vegetation
. Chaine may	5	No	UPL	2 - Dominance Test is >50%
Devisers conflicts			FAC	3 - Prevalence Index is ≤3.0¹
				4 - Morphological Adaptations ¹
3				(Provide supporting data in Remarks or on a separate sheet)
4				Problematic Hydrophytic Vegetation ¹ (Explain)
5				¹Indicators of hydric soil and wetland hydrology must be present, unless
6				disturbed or problematic.
7				
8				Definitions of Vegetation Strata:
9				Tree – Woody plants 3 in. (7.6 cm) or more in
10				diameter at breast height (DBH), regardless of height.
11				Sapling/shrub – Woody plants less than 3 in. DBH
12				and greater than or equal to 3.28 ft (1 m) tall.
	7	= Total Cover		
Woody Vine Stratum (Plot size: 30 ft)				Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.
1				Woody vines – All woody vines greater than 3.28 ft in
2				height.
3				
4				Hydrophytic Vegetation
	0	= Total Cover		Present? Yes No X
Remarks: (Include photo numbers here or on a separa	ate sheet.)			

Sampling Point: SP17

SOIL Sampling Point: SP17

		the dept				or or co	onfirm the absence of indic	ators.)		
Depth (inches)	Matrix Color (moist)	%	Color (moist)	x Featur	Type ¹	Loc ²	Texture	Remarks		
0-25	5YR 4/6	100	Color (molocy		1,700		Sand	rtomante		
	7.5YR 4/3	100					Loamy Sand			
¹Type: C=Co	ncentration, D=Deple	etion, RM	=Reduced Matrix, I	MS=Mas	ked Sand	Grains	. ² Location: PL=Pore Li	ning, M=Matrix.		
Hydric Soil In	ndicators:						Indicators for Pro	oblematic Hydric Soils³:		
Histosol (A	A1)	-	Polyvalue Below	v Surface	(S8) (LRR	R,	2 cm Muck (A1	0) (LRR K, L, MLRA 149B)		
	pedon (A2)		MLRA 149B)				Coast Prairie Redox (A16) (LRR K, L, R)			
Black Histi		-	Thin Dark Surfa							
	Sulfide (A4)	-	High Chroma Sa				Polyvalue Below Surface (S8) (LRR K, L)			
	_ayers (A5)	-	Loamy Mucky N			L)	Thin Dark Surface (S9) (LRR K, L)			
			Loamy Gleyed N)			Iron-Manganese Masses (F12) (LRR K, L, R)		
			Depleted Matrix				Piedmont Floodplain Soils (F19) (MLRA 1			
			Redox Dark Surface (F6)				Mesic Spodic (TA6) (MLRA 144A, 145, 149B) Red Parent Material (F21)			
	eyed Matrix (S4)	-	Depleted Dark Surface (F7)							
Sandy Red		-		Redox Depressions (F8) Marl (F10) (LRR K, L)			Very Shallow Dark Surface (F22) Other (Explain in Remarks)			
Stripped M		=	Mari (F10) (LRR	(K, L)			Other (Explain	in Remarks)		
Dark Surfa										
		on and we	tland hydrology mu	ust be pr	esent, un	iless dis	turbed or problematic.			
Type:	ayer (if observed):									
Depth (inc	ches):						Hydric Soil Present?	Yes No X		
Remarks:	·									
rtomanto.										

WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region

Project/Site: Pine County Solar	City/County: Pine Sampling Date: 09/15/2022				
Applicant/Owner: Swift Current Energy	State: Min Sampling Point: SP18				
Investigator(s): Jwf	Section, Township, Range: T044N, R020W, S22				
	relief (concave, convex, none): Concave Slope %: 3				
Subregion (LRR or MLRA): LRR K, MLRA 90A Lat: 46.279316	Long: -92.846122 Datum: WGS84				
Soil Map Unit Name: Denied Access	NWI classification: PEM1Af				
Are climatic / hydrologic conditions on the site typical for this time of year?	Yes No X (If no, explain in Remarks.)				
Are Vegetation X , Soil , or Hydrology significantly dist	curbed? Are "Normal Circumstances" present? Yes NoX				
Are Vegetation , Soil , or Hydrology naturally probler	matic? (If needed, explain any answers in Remarks.)				
SUMMARY OF FINDINGS – Attach site map showing sampling p					
Hydrophytic Vegetation Present? Yes No X	Is the Sampled Area				
Hydric Soil Present? Yes No X	within a Wetland? Yes No X				
Wetland Hydrology Present? Yes No X	If yes, optional Wetland Site ID: N/A				
Remarks: (Explain alternative procedures here or in a separate report.) Drier than normal conditions					
HYDROLOGY					
Wetland Hydrology Indicators:	Secondary Indicators (minimum of two required)				
Primary Indicators (minimum of one is required; check all that apply)	Surface Soil Cracks (B6)				
Surface Water (A1) Water-Stained Leaves (B9)	Drainage Patterns (B10)				
High Water Table (A2) Aquatic Fauna (B13)	Moss Trim Lines (B16)				
Saturation (A3) Marl Deposits (B15)	Dry-Season Water Table (C2)				
Water Marks (B1) Hydrogen Sulfide Odor (C1)	Crayfish Burrows (C8)				
Sediment Deposits (B2) Oxidized Rhizospheres on L	ving Roots (C3) X Saturation Visible on Aerial Imagery (C9)				
Drift Deposits (B3) Presence of Reduced Iron (0	C4) Stunted or Stressed Plants (D1)				
Algal Mat or Crust (B4) Recent Iron Reduction in Till	lled Soils (C6) Geomorphic Position (D2)				
Iron Deposits (B5) Thin Muck Surface (C7)	Shallow Aquitard (D3)				
Inundation Visible on Aerial Imagery (B7) Other (Explain in Remarks)	Microtopographic Relief (D4)				
Sparsely Vegetated Concave Surface (B8)	FAC-Neutral Test (D5)				
Field Observations:					
Surface Water Present Yes No X Depth (inches	s):				
Water Table Present Yes No X Depth (inches					
Saturation Present Yes No X Depth (inches	S): Wetland Hydrology Present? Yes No _X				
(includes capillary fringe)					
Describe Recorded Data (stream gauge, monitoring well, aerial photos, pro	evious inspections), if available:				
Demodra					
Remarks:					

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 30 ft)	Absolute % Cover	Dominant Species	Indicator Status	Dominance Test worksheet:
1				Number of Dominant Species That Are OBL, FACW, or FAC: (A)
3				Total Number of Dominant Species Across All Strata:(B)
6				Percent of Dominant Species That Are OBL, FACW, or FAC: (A/B)
		·		Prevalence Index worksheet:
45.6	0	_ = Total Cover		Total % Cover of: Multiply by:
Sapling/Shrub Stratum (Plot size: 15 ft)				OBL species 0 x 1 = 0
1				FACW species 0 x 2 = 0
2		 -		FAC species 20 x 3 = 60
3				FACU species 10 x 4 = 40
4				UPL species 80 x 5 = 400
5				Column Totals: 110 (A) 500 (B)
6				Prevalence Index = B/A = 4.55
7				Hydrophytic Vegetation Indicators:
Herb Stratum (Plot size:5 ft)	0	= Total Cover		1 - Rapid Test for Hydrophytic Vegetation
1. Glycine max	75	Yes	UPL	2 - Dominance Test is >50%
Echinochloa crus-galli	10	No	FAC	3 - Prevalence Index is ≤3.0¹
3. Panicum capillare	10	No	FAC	4 - Morphological Adaptations ¹
Persicaria posumbu		 -	FACU	(Provide supporting data in Remarks or on a separate sheet)
Ambrosia artemisiifolia	_	No	FACU	Problematic Hydrophytic Vegetation ¹ (Explain)
6. Silene latifolia				¹ Indicators of hydric soil and wetland hydrology must be present, unless
7			OI L	disturbed or problematic.
8.				Definitions of Vegetation Strata:
9.				Definitions of Vegetation Strata.
10.				Tree – Woody plants 3 in. (7.6 cm) or more in
11.			-	diameter at breast height (DBH), regardless of height.
12.				Sapling/shrub – Woody plants less than 3 in. DBH
12.				and greater than or equal to 3.28 ft (1 m) tall.
Woody Vine Stratum (Plot size: 30 ft)	110	= Total Cover		Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.
1				Woody vines – All woody vines greater than 3.28 ft in
2				height.
3				
4				Hydrophytic
	0	= Total Cover		Vegetation Present? Yes NoX
December (Included Later	-11			
Remarks: (Include photo numbers here or on a separate or	rate sheet.)			

SP18

Sampling Point:

SOIL Sampling Point: SP18

Profile Desci	ription: (Describe to	the dept	h needed to docu	ment th	e indicat	or or co	onfirm the absence of indicato	rs.)		
Depth			Redox Features							
(inches)	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²	Texture	Remarks		
0-13	7.5YR 3/1	100					Sandy Loam			
13-26	7.5YR 3/4	100					Peat			
¹Type: C=Co	oncentration, D=Depl	etion, RM	=Reduced Matrix, N	лS=Mas	ked Sand	Grains.	. ² Location: PL=Pore Lining	g, M=Matrix.		
Hydric Soil II	ndicators:						Indicators for Proble	ematic Hydric Soils ³ :		
Histosol (A			Polyvalue Below	/ Surface	(S8) (LRR	R,		LRR K, L, MLRA 149B)		
	pedon (A2)	•	MLRA 149B)				Coast Prairie Redox (A16) (LRR K, L, R)			
Black Hist	tic (A3)		Thin Dark Surface	ce (S9) (L	RR R, ML	RA 149B	5 cm Mucky Peat c	cm Mucky Peat or Peat (S3) (LRR K, L, R)		
Hydrogen	Sulfide (A4)		High Chroma Sa	ands (S11) (LRR K,	L)	Polyvalue Below Surface (S8) (LRR K, L)			
Stratified I	Layers (A5)		Loamy Mucky M	lineral (F	1) (LRR K,	L)	Thin Dark Surface (S9) (LRR K, L)			
Depleted	Below Dark Surface (A1	1)	Loamy Gleyed N	∕latrix (F2)		Iron-Manganese Masses (F12) (LRR K, L, R)			
Thick Darl	k Surface (A12)		Depleted Matrix	(F3)			Piedmont Floodplain Soils (F19) (MLRA 149B)			
Sandy Mu	ucky Mineral (S1)		Redox Dark Sur	face (F6)			Mesic Spodic (TA6) (MLRA 144A, 145, 149B)		
Sandy Gle	eyed Matrix (S4)		Depleted Dark S	Surface (F	7)		Red Parent Materia	al (F21)		
Sandy Re	edox (S5)		Redox Depressi	ons (F8)			Very Shallow Dark	Surface (F22)		
Stripped N	Matrix (S6)		Marl (F10) (LRR	K, L)			Other (Explain in R	emarks)		
Dark Surfa	ace (S7)									
³ Indicators of	hydrophytic vegetation	on and we	etland hydrology mu	ıst be pr	esent, un	less dist	turbed or problematic.			
Restrictive L	ayer (if observed):									
Type:										
Depth (in	ches):						Hydric Soil Present?	Yes NoX		
Remarks:										

WETLAND DELINEATION REPORT

Iron Pine Solar Project Appendix C Site Photographs

Appendix C SITE PHOTOGRAPHS



Swift Current Energy Iron Pine Solar Project Number: Client: 193708962

Project: Location: Pine County, Minnesota



Photo 1: W13 - View North, September 14, 2022



Photo 2: W14-1w - View East, September 15, 2022



Project Number: Client: 193708962



Photo 3: W14-1u - View North, September 15, 2022



Photo 4: W14 - View East, September 15, 2022



Swift Current Energy Iron Pine Solar Client:

Project Number: 193708962 Project: Location: Pine County, Minnesota



Photo 5: W12 - View Northeast, September 15, 2022



Photo 6: W10-1w - View South, September 14, 2022



Swift Current Energy Iron Pine Solar Project Number: Client:

193708962 Project: Location: Pine County, Minnesota



Photo 7: W10-1u - View West, September 14, 2022



Photo 8: W10 - View West, September 14, 2022



Client:

Swift Current Energy Iron Pine Solar Project Number: 193708962 Project: Location: Pine County, Minnesota



Photo 9: W11 - View Northeast, September 14, 2022



Photo 10: W8-1w - View West, September 13, 2022



Project Number: Client: 193708962



Photo 11: W6-1w - View Southwest, September 13, 2022



Photo 12: W6-1u - View North, September 13, 2022



Project Number: Client: 193708962



Photo 13: W6 - View Southwest, September 13, 2022



Photo 14: W4-1w - View East, September 13, 2022



Swift Current Energy Iron Pine Solar Project Number: Client: 193708962

Project: Location: Pine County, Minnesota



Photo 15: W4-1u - View North, September 13, 2022



Photo 16: W4 – View Southeast, September 13, 2022



Swift Current Energy Iron Pine Solar Client:

Project:

Project Number: 193708962

Location: Pine County, Minnesota



Photo 17: W9 - View Northeast, September 13, 2022



Photo 18: W9 - View South, September 13, 2022



Project Number: Client: 193708962



Photo 19: W7 - View North, September 13, 2022



Photo 20: W20-1w - View Northeast, September 15, 2022



Project Number: Client: 193708962



Photo 21: W20-1u - View South, September 15, 2022



Photo 22: W22-1w - View South, September 15, 2022



Project Number: Client: 193708962



Photo 23: W22-1u - View South, September 15, 2022



Photo 24: W15-1w – View Northeast, September 15, 2022



Swift Current Energy Iron Pine Solar Project Number: Client: 193708962

Project: Location: Pine County, Minnesota



Photo 25: W15-1u - View Southwest, September 15, 2022



Photo 26: W5 - View East, September 12, 2022



Swift Current Energy Iron Pine Solar Project Number: Client: 193708962

Project: Location: Pine County, Minnesota



Photo 27: W15 - View East, September 15, 2022



Photo 28: W1 – View Southwest, September 12, 2022



Project Number: Client: 193708962



Photo 29: W1-2w - View Southeast, September 12, 2022

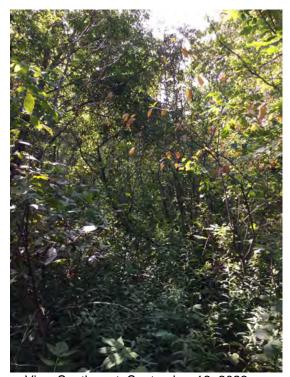


Photo 30: W1-3w - View Southwest, September 12, 2022



Project Number: Client: 193708962



Photo 31: W3-1w - View North, September 12, 2022





Project Number: Client: 193708962



Photo 33: W2-1u - View North, September 12, 2022



Photo 34: W2 - View South, September 12, 2022



Project Number: Client: 193708962



Photo 35: W39-1w - View West, October 31, 2022





Swift Current Energy Iron Pine Solar Client:

Project Number: 193708962 Project: Location: Pine County, Minnesota



Photo 37: W39 - View East, October 31, 2022



Photo 38: W39 - View South, October 31, 2022



Swift Current Energy Iron Pine Solar Project Number: Client: 193708962

Project: Location: Pine County, Minnesota



Photo 39: W39-2w - View East, October 31, 2022





Project Number: Client: 193708962



Photo 41: W40-1w - View North, October 31, 2022



Photo 42: W40-1u - View East, October 31, 2022

Stantec

Wetland and Waterbody Delineation Report

Swift Current Energy Iron Pine Solar Project Number: Client: 193708962

Project: Location: Pine County, Minnesota





Photo 44: W40 - View West, October 31, 2022



Project Number: Client: 193708962



Photo 45: W41-1w - View West, October 31, 2022



Photo 46: W41-1u - View Northeast, October 31, 2022



Swift Current Energy Iron Pine Solar Project Number: Client: 193708962

Project: Location: Pine County, Minnesota



Photo 47: W42 - View East, October 31, 2022



Photo 47: W42 - View West, October 31, 2022



Client: Swift Current Energy Project Number: 193708962

Project: Iron Pine Solar Location: Pine County, Minnesota



Photo 48: W27-1w/W27-1u - View South, September 19, 2022



Photo 48: W27-1w/W27-1u - View North, September 19, 2022



Client: Swift Current Energy Project: Iron Pine Solar Project Number: 193708962

Location: Pine County, Minnesota



Photo 49: W28-1w/W28-1u - View East, September 19, 2022



Photo 49: W28-1w/W28-1u - View South, September 19, 2022



Project Number: Client: 193708962



Photo 50: W25-1w - View South, September 19, 2022



Photo 51: W25-1u – View West, September 19, 2022



Project Number: Client: 193708962



Photo 52: W25 - View West, September 19, 2022



Photo 53: W26-1w - View North, September 19, 2022



Project Number: Client: 193708962



Photo 54: W26-1u - View West, September 19, 2022



Photo 55: W23-1u – View Northwest, September 16, 2022



Project Number: Client: 193708962





Photo 57: W34-1w - View North, September 21, 2022



Project Number: Client: 193708962



Photo 58: W34-1u - View South, September 21, 2022



Photo 59: W19-1w/W19-1u - View South, September 16, 2022



Project Number: Client: 193708962



Photo 59: W19-1w/W19-1u - View North, September 16, 2022



Photo 60: W17-1w - View Northeast, September 16, 2022



Project Number: Client: 193708962



Photo 61: W17-1u - View South, September 16, 2022



Photo 62: W17 – View West, September 15, 2022



Client: Swift Current Energy Project Number: 193708962

Project: Iron Pine Solar Location: Pine County, Minnesota



Photo 63: W21-1w - View North, September 16, 2022



Photo 64: W21-1u - View East, September 16, 2022