WETLAND DETERMINATION DATA FORM - Northcentral and Northeast Region

Project/Site: Flat Cree	k Solar Projec	t	City/County:	Canajoharie, Mo	ontgomery	County		Sampling Date:	2021-Nov-19	
Applicant/Owner: S	unEast				State:	NY		Sampling Point: W	-DJB-11_UPL-1	
Investigator(s): Davi	d Bonomo, Gi	ovanni Pambiar	nchi	Sect	tion, Townsl	hip, Rang	e:N/	A		
Landform (hillslope, te	rrace, etc.):	Hillslope		Local relief	(concave, c	onvex, no	one):	Convex	Slope (%):	1 to 10
Subregion (LRR or MLF	RA): LRR	L		Lat:	42.875696	3 L	ong:	-74.5353393333	Datum: W	GS84
Soil Map Unit Name:	Darien silt lo	am, 3-8 percent	t slopes					NWI classifica	tion: None	
Are climatic/hydrologic conditions on the site typical for this time of year? Yes 🖌 No (If no, explain in Remarks.)										
Are Vegetation, Are Vegetation,	Soil, Soil,	or Hydrology or Hydrology	significant	tly disturbed? problematic?	Are "No (If need	ormal Circ ed, expla	umst in any	ances" present? / answers in Remar	Yes 🟒 No _ ˈks.)	

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes No 🟒								
Hydric Soil Present?	Yes 🟒 No	Is the Sampled Area within a Wetland?	Yes No 🟒						
Wetland Hydrology Present?	Yes No	lf yes, optional Wetland Site ID:							
Remarks: (Explain alternative procedures here or in a separate report)									
Covertype is UPL. Area is upland, not all three wetland parameters are present.									

HYDROLOGY

Wetland Hydrology Indicators:				
Primary Indicators (minimum of one	Secondary Indicators (minimum of two required)			
 Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5) Inundation Visible on Aerial Image Sparsely Vegetated Concave Surf 	Water-St Aquatic Marl Dej Hydroge Oxidizec Presence Recent li Thin Mu gery (B7) Other (E face (B8)	 Surface Soil Cracks (B6) Drainage Patterns (B10) Moss Trim Lines (B16) Dry-Season Water Table (C2) Crayfish Burrows (C8) Saturation Visible on Aerial Ima Stunted or Stressed Plants (D1) Geomorphic Position (D2) Shallow Aquitard (D3) Microtopographic Relief (D4) FAC-Neutral Test (D5) 	agery (C9))	
Field Observations: Surface Water Present? Water Table Present? Saturation Present? (includes capillary fringe)	Yes No _ ⁄ Yes No _ ⁄ Yes No _ ⁄	Depth (inches): Depth (inches): Depth (inches):	Wetland Hydrology Present?	Yes No _
Describe Recorded Data (stream gau	Jge, monitoring well, aer	rial photos, previous inspections), if	available:	
Remarks: The criterion for wetland hydrology	is not met. No positive ir	ndication of wetland hydrology was	observed.	

VEGETATION -- Use scientific names of plants.

Sampling Point: W-DJB-11_UPL-1

Tree Stratum (Plot size: 30 ft)	Absolute	Dominant	Indicator	Dominance Test works	neet:		
	% Cover	Species?	Status	Number of Dominant S	pecies That	1	(A)
1. <i>Tsuga canadensis</i>	70	Yes	FACU	Are OBL, FACW, or FAC:			
2. <u>Betula alleghaniensis</u>	10	No	FAC	Iotal Number of Domin	ant Species	5	(B)
3. <i>Pinus strobus</i>	10	No	FACU	Across All Strata:	: . .		
4					becies That	20	(A/B)
5				Brevalance Index works	-hoot:		
6				Total % Cover	of	Multiply	D.e
7					0	<u>wuuupiy</u>	<u> </u>
	90	= Total Cov	er	EACW species	15	× 2 -	20
Sapling/Shrub Stratum (Plot size: <u>15 ft</u>)		-		FACW species	10	x 2 -	30
1. Fagus grandifolia	15	Yes	FACU	FAC species	10	x 3 =	30
2. Tsuga canadensis	10	Yes	FACU	- FACU species	115	x 4 =	460
3.				- UPL species _	0	x 5 =	0
4.				- Column Totals -	140	(A)	520 (B)
5				Prevalence In	idex = B/A =	3.7	
6				Hydrophytic Vegetation	Indicators:		
7		<u> </u>		1- Rapid Test for H	lydrophytic V	egetatior/	r
/		- Total Cav	~~	2 - Dominance Test is > 50%			
Llaub Churchum (Dist size) 5 ft	25	- 10tal COV	er	3 - Prevalence Index is $≤ 3.0^1$			
Herb Stratum (Piot Size: <u>5 it</u>)	15	Vee		4 - Morphological Adaptations ¹ (Provid			supporting
1. Theypteris parustris		Yes	FACW	 data in Remarks or on a separate sheet) 			
2. Polystichum acrostichoides	10	Yes	FACU	Problematic Hydro	ophytic Vege	tation ¹ (E	xplain)
3				¹ Indicators of hydric so	il and wetlan	d hydrolo	ogy must be
4				present, unless disturb	ed or problei	matic	
5				Definitions of Vegetatio	on Strata:		
6				Tree – Woody plants 3 i	n. (7.6 cm) or	r more in	diameter at
7				breast height (DBH), reg	gardless of h	eight.	
8				Sapling/shrub - Woody	plants less t	han 3 in. I	DBH and
9				greater than or equal to	o 3.28 ft (1 m) tall.	
10				Herb – All herbaceous (non-woody)	plants, re	gardless of
11				size, and woody plants	less than 3.2	8 ft tall.	_
12.				Woody vines – All wood	ly vines great	ter than 3	1.28 ft in
	25	= Total Cov	er	height.			
<u>Woody Vine Stratum</u> (Plot size: <u>30 ft</u>)		-		Hydrophytic Vegetation	n Present?	/es I	No 🔽
1.							
2.							
3.							
4.				•			
	0	= Total Cov	er	-			
Remarks: (Include photo numbers here or on a senar	ato choot)						
No positivo indication of hydrophytic vontation	ate Sheet.)	FOM of dam	inant cost	as independence FAC and dri	or)		
No positive indication of hydrophytic vegetation was	onzei vea (≥	20% 01 001	mant specie	es muexeu as FAC- or dri	ег).		

SOIL

0 - 10 10YR 2/2 100	
0 - 18 10YR 3/2 90 10YR 5/8 10 C M Clay Loam Image: C = Concentration, D = Depletion, RM = Reduced Matrix, MS = Masked Sand Grains. *Location: PL = Pore Lining, M = Image: C = Concentration, D = Depletion, RM = Reduced Matrix, MS = Masked Sand Grains. *Location: PL = Pore Lining, M = Image: C = Concentration, D = Depletion, RM = Reduced Matrix, MS = Masked Sand Grains. *Location: PL = Pore Lining, M = Image: C = Concentration, D = Depletion, RM = Reduced Matrix, MS = Masked Sand Grains. *Location: PL = Pore Lining, M = Image: C = Concentration, D = Depletion, RM = Reduced Matrix, MS = Masked Sand Grains. *Location: PL = Pore Lining, M = Image: C = Concentration, D = Depletion, RM = Reduced Matrix, MS = Masked Sand Grains. *Location: PL = Pore Lining, M = Image: C = Concentration, D = Depletion, RM = Reduced Matrix (F2) Image: C = Concentration, D = Depletion, RM = Reduced Matrix (F2) Dark Surface (S3) (LR R, MLRA 149B) 2 cm Muck (A10) (LR K, L) Istic Epipedon (A2)	
marks: marks: marks: None	
pe: C = Concentration, D = Depletion, RM = Reduced Matrix, MS = Masked Sand Grains. ² Location: PL = Pore Lining, M = dric Soil Indicators: Indicators: Histosol (A1) Polyvalue Below Surface (S8) (LRR R, MLRA 149B) Black Histic (A3) Loamy Mucky Mineral (F1) (LRR K, L) Black Histic (A3) Loamy Mucky Mineral (F1) (LRR K, L) Stratified Layers (A5) Depleted Matrix (F2) Stratified Layers (A5) Depleted Dark Surface (F6) Thick Dark Surface (S1) Redox Dark Surface (F7) Thick Dark Surface (S1) Redox Depressions (F8) Sandy Mucky Mineral (S1)	
pe: C = Concentration, D = Depletion, RM = Reduced Matrix, MS = Masked Sand Grains. ² Location: PL = Pore Lining, M = pric Soil Indicators: Indicators for Problematic H Histosol (A1) Polyvalue Below Surface (S8) (LRR R, MLRA 149B) 2 cm Muck (A10) (LRR K, H Black Histic (A3) Loamy Mucky Mineral (F1) (LRR K, L) S com Mucky Peat or Peat Stratified Layers (A5) Depleted Matrix (F2) Dark Surface (S7) (LRR K, L) Depleted Below Dark Surface (A11) Redox Dark Surface (F6) Thin Dark Surface (S9) (LR R) Stratified Layers (A5) Depleted Matrix (F3) Polyvalue Below Surface (S7) Depleted Matrix (S4) Sandy Mucky Mineral (S1) Redox Depressions (F8) Piedmont Floodplain Soi Sandy Redox (S5) Straface (S7) Red Parent Material (F21 Very Shallow Dark Surface Strafec (S7) (LRR K, MLRA 149B) Other (Explain in Remard Other (Explain in Remard dicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic. term trictictue Layer (if observed): None Hydric Soil Present? Yes _ Type: None Hydric Soil Present? Yes _ None	
pe: C = Concentration, D = Depletion, RM = Reduced Matrix, MS = Masked Sand Grains. ² Location: PL = Pore Lining, M = dric Soil Indicators: Indicators for Problematic H Histosol (A1) Polyvalue Below Surface (S8) (LRR R, MLRA 149B) Coast Prairie Redox (A10) (LRR K, L) Black Histic (A3) Loamy Mucky Mineral (F1) (LRR K, L) Coast Prairie Redox (A16 Stratified Layers (A5) Depleted Matrix (F2) Dark Surface (S7) (LRR K, U) S m Mucky Peat or Peat Depleted Below Dark Surface (A11) Redox Dark Surface (F6) Polyvalue Below Surface (S9) (L	
pe: C = Concentration, D = Depletion, RM = Reduced Matrix, MS = Masked Sand Grains. ²Location: PL = Pore Lining, M = dric Soil Indicators: Indicators for Problematic H Histosol (A1) Polyvalue Below Surface (S8) (LRR R, MLRA 149B) 2 cm Muck (A10) (LRR K, L) Black Histic (A3) Loamy Mucky Mineral (F1) (LRR K, L) 5 cm Mucky Peat or Peat Stratified Layers (A5) Depleted Matrix (F2) Dark Surface (S7) (LRR K, Stratified Layers (A5) Depleted Matrix (F3) Sandy Mucky Mineral (S1) Redox Depressions (F8) Polyvalue Below Surface (S7)	
pe: C = Concentration, D = Depletion, RM = Reduced Matrix, MS = Masked Sand Grains. ²Location: PL = Pore Lining, M = dric Soil Indicators: Indicators for Problematic H Histosol (A1) Polyvalue Below Surface (S8) (LRR R, MLRA 149B) Coast Prairie Redox (A10) (LRR K, H Black Histic (A3) Loamy Mucky Mineral (F1) (LRR K, L) S cm Mucky Peat or Peat Hydrogen Sulfide (A4) Loamy Gleyed Matrix (F2) Dark Surface (S7) (LRR K, Stratified Layers (A5) Depleted Matrix (F3) Depleted Bow Dark Surface (A11) Redox Dark Surface (F6) Nurak Surface (S9) (L	
pe: C = Concentration, D = Depletion, RM = Reduced Matrix, MS = Masked Sand Grains. ² Location: PL = Pore Lining, M = dric Soil Indicators: Indicators for Problematic H Histosol (A1) Polyvalue Below Surface (S8) (LRR R, MLRA 149B) 2 cm Muck (A10) (LRR K, L) Black Histic (A3) Loamy Mucky Mineral (F1) (LRR K, L) 2 cm Muck (A10) (LRR K, L) Black Histic (A3) Loamy Gleyed Matrix (F2) Dark Surface (S7) (LRR K, Surface (S7) (LR K, L) Stratified Layers (A5) Depleted Matrix (F3) Dark Surface (S7) (LR K, C) Depleted Below Dark Surface (A11) // Redox Dark Surface (F6) Thin Dark Surface (S7) (LR R, MLRA 149B) Sandy Mucky Mineral (S1) Redox Depressions (F8) Ieidmont Floodplain Soi Sandy Redox (S5)	
pe: C = Concentration, D = Depletion, RM = Reduced Matrix, MS = Masked Sand Grains. ² Location: PL = Pore Lining, M = Indicators: Indicators for Problematic H Histosol (A1) Polyvalue Below Surface (S8) (LRR R, MLRA 149B) 2 cm Muck (A10) (LRR K, Histic Epipedon (A2) Histic Epipedon (A2) Thin Dark Surface (S9) (LR R, MLRA 149B) Coast Prairie Redox (A16) Black Histic (A3) Loamy Mucky Mineral (F1) (LRR K, L) S cm Mucky Peat or Peat Micky Peat or Peat Surface (S7) (LRR K, Stratified Layers (A5) Depleted Matrix (F3) Dark Surface (S7) (LR R, Surface (S7) (LR R, Surface (S7) (LR K, Surface (A12) Depleted Dark Surface (F6) Thin Dark Surface (S9) (L	
pe: C = Concentration, D = Depletion, RM = Reduced Matrix, MS = Masked Sand Grains. ² Location: PL = Pore Lining, M = Iric Soil Indicators: Indicators for Problematic H Histosol (A1) Polyvalue Below Surface (S8) (LRR R, MLRA 149B) 2 cm Muck (A10) (LRR K, Histic Epipedon (A2) Thin Dark Surface (S9) (LRR R, MLRA 149B) 2 cm Muck (A10) (LRR K, Black Histic (A3) Loamy Mucky Mineral (F1) (LRR K, L) 5 cm Mucky Peat or Peat Hydrogen Sulfide (A4) Loamy Gleyed Matrix (F2) Dark Surface (S7) (LRR K, Depleted Below Dark Surface (A11) ✓ Redox Dark Surface (F6) Thin Dark Surface (F7) Thin Dark Surface (S8) Sandy Mucky Mineral (S1) Redox Depressions (F8) Piedmont Floodplain Soi Sandy Redox (S5)	
pe: C = Concentration, D = Depletion, RM = Reduced Matrix, MS = Masked Sand Grains. 2Location: PL = Pore Lining, M = dric Soil Indicators: Indicators in Indicators: Indicators for Problematic H Histosol (A1) Polyvalue Below Surface (S8) (LRR R, MLRA 149B) 2 cm Muck (A10) (LRR K, L) Histic Epipedon (A2)	
dir Cool Indicators: Indicators for Problematic H Histosol (A1) Polyvalue Below Surface (S8) (LRR R, MLRA 149B)	Matrix.
Histosol (A1) Polyvalue Below Surface (S8) (LRR R, MLRA 149B) 2 cm Muck (A10) (LRR K, Histic Epipedon (A2) Thin Dark Surface (S9) (LRR R, MLRA 149B) Coast Prairie Redox (A16) Histic (A3) Loamy Mucky Mineral (F1) (LRR K, L) 5 cm Mucky Peat or Peat Dark Surface (A1) Redox Dark Surface (F6) Dark Surface (A12) Depleted Matrix (F3) Depleted Dark Surface (F7) Thin Dark Surface (S9) (LR R, MLRA 149B) Thin Dark Surface (S9) (L R R, Mucky Peat or Peat Dark Surface (A12) Depleted Dark Surface (F7) Thin Dark Surface (S9) (L R K, L) Redox Depressions (F8) Thin Dark Surface (S9) (L R R, MLRA 149B) Nesic Spodic (TA6) (MLR Red Parent Material (F21 Very Shallow Dark Surface (S7) (LRR R, MLRA 149B) Other (Explain in Remark Iicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic. trictive Layer (if observed): Type: None Hydric Soil Present? Yes No Yes Yes Yes No Yes No Yes No Yes No Yes Yes Yes Yes Yes Yes No Yes No Yes	lydric Soils ³ :
Histic Epipedon (A2)Thin Dark Surface (S9) (LRR R, MLRA 149B)Coast Prairie Redox (A16 Black Histic (A3)Loamy Mucky Mineral (F1) (LRR K, L)S const Verairie Redox (A16 Hydrogen Sulfide (A4)Loamy Gleyed Matrix (F2)Dark Surface (S7) (LRR K, Stratified Layers (A5)Depleted Matrix (F3)Dark Surface (S9) (L Thick Dark Surface (A11) / Redox Dark Surface (F6)Thin Dark Surface (S9) (L Thick Dark Surface (A12)Depleted Dark Surface (F7)Thin Dark Surface (S9) (L Sandy Mucky Mineral (S1)Redox Depressions (F8)Iron-Manganese Masses Sandy Gleyed Matrix (S4)Redox Depressions (F8)Red Parent Material (F21 Stripped Matrix (S6)Red Parent Material (F21 Lictors of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic. trictive Layer (if observed): Type:NoneHydric Soil Present? YesNo NoneHydric Soil Present? YesNo	L. MI RA 149B)
Black Histic (A3) Loamy Mucky Mineral (F1) (LRR K, L) 5 cm Mucky Peat or Peat Hydrogen Sulfide (A4) Loamy Gleyed Matrix (F2) Dark Surface (S7) (LRR K, Stratified Layers (A5) Depleted Matrix (F3) Dark Surface (S7) (LRR K, Depleted Below Dark Surface (A11) ✓ Redox Dark Surface (F6)	5) (LRR K, L, R)
Hydrogen Sulfide (A4) Loamy Gleyed Matrix (F2) Dark Surface (S7) (LRR K, Stratified Layers (A5) Depleted Matrix (F3) Dark Surface (S7) (LRR K, Depleted Below Dark Surface (A11)_ Redox Dark Surface (F6) Thin Dark Surface (S9) (L Thick Dark Surface (A12) Depleted Dark Surface (F7) Iron-Manganese Masses Sandy Mucky Mineral (S1) Redox Depressions (F8) Iron-Manganese Masses Sandy Gleyed Matrix (S4) Mesic Spodic (TA6) (MLR Sandy Redox (S5) Red Parent Material (F21) Stripped Matrix (S6) Red Parent Material (F21) Dark Surface (S7) (LRR R, MLRA 149B) Very Shallow Dark Surface licators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.	t (S3) (LRR K, L, R)
Depleted Matrix (F3)	, L)
Thick Dark Surface (A12)	e (S8) (LRR K, L)
Sandy Mucky Mineral (S1) Redox Depressions (F8) Iron-Manganese Masses Piedmont Floodplain Soi Piedmont Floodplain Soi Mesic Spodic (TA6) (MLR Red Parent Material (F21 Very Shallow Dark Surface (S7) (LRR R, MLRA 149B) Other (Explain in Remark Other (Explain in Remark Other (Explain in Remark Other (Explain in Remark None Hydric Soil Present? Yes No Yes No No Red Parent Attack Yes No Red Parent Attack No Red Parent Material (F21 None Other (Explain in Remark None None No Red Parent	.RR K, L)
Sandy Gleyed Matrix (S4) Piedmont Floodplain Soi Sandy Redox (S5) Mesic Spodic (TA6) (MLR Sandy Redox (S5) Red Parent Material (F21 Very Shallow Dark Surface [Dark Surface (S7) (LRR R, MLRA 149B) Other (Explain in Remark licators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic. trictive Layer (if observed): Type: None Depth (inches): Hydric Soil Present? Yes No Depth (inches): Hydric soil use observed. The criterion for bydric soil is mot	; (F12) (LRR K, L, R)
Sandy Redox (S5)	IIS (F19) (MLRA 149B)
Stripped Matrix (S6)	A 144A, 145, 149B)
Dark Surface (S7) (LRR R, MLRA 149B)	r) ce (TE12)
dicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic. trictive Layer (if observed): Type: None Hydric Soil Present? Yes ∠ No Depth (inches): Yes criterion for hydric soil is mot	ks)
strictive Layer (if observed): Type:NoneHydric Soil Present? Yes _✓_ No Depth (inches):	
Type: None Hydric Soil Present? Yes ∠ No Depth (inches): Present? Yes ∠ No	
Depth (inches): marks:)
narks:	
ositive indication of hydric soli was observed. The criterion for hydric soli is met.	

Photo of Sample Plot North



Photo of Sample Plot East Photo of Sample Plot South



Photo of Sample Plot West

WETLAND DETERMINATION DATA FORM - Northcentral and Northeast Region

Project/Site: Flat Cree	k Solar Projec	t	City/County:	Canajoharie, Mo	ontgomery Count	у	Sampling Date:	2021-Dec-06
Applicant/Owner: S	unEast				State: NY		Sampling Point: W	'-DJB-12_PEM-1
Investigator(s): Davi	d Bonomo, Al	oi Light		Sec	tion, Township, Ra	ange: N/	4	
Landform (hillslope, te	rrace, etc.):	Valley		Local relief	(concave, convex	, none):	Concave	Slope (%): 1 to 10
Subregion (LRR or MLF	RA): LRR	L		Lat:	42.8815609667	Long:	-74.5298982167	Datum: WGS84
Soil Map Unit Name:	Fl- Fluvaque	nts, loamy					NWI classifica	tion: None
Are climatic/hydrologic	conditions o	n the site typical	for this time	of year?	Yes 🟒 No 🔄	(If no	, explain in Remark	(S.)
Are Vegetation,	Soil,	or Hydrology	significan	tly disturbed?	Are "Normal	Circumst	ances" present?	Yes 🟒 No
Are Vegetation,	Soil,	or Hydrology	naturally	problematic?	(If needed, ex	plain an	y answers in Remai	rks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes 🟒 No								
Hydric Soil Present?	Yes 🟒 No	Is the Sampled Area within a Wetland?	Yes 🯒 No						
Wetland Hydrology Present?	Yes 🟒 No	If yes, optional Wetland Site ID:	W-DJB-12						
Remarks: (Explain alternative procedures here or in a separate report)									
Covertype is PEM. Area is wetland, all three wetland parameters are present.									

HYDROLOGY

Wetland Hydrology Indicators:			
Primary Indicators (minimum of one is required; check all that apply)	Secondary Indicators (minimum of two required)		
 Surface Water (A1) Water-Stained Leaves (B9) High Water Table (A2) Aquatic Fauna (B13) Saturation (A3) Marl Deposits (B15) Water Marks (B1) Hydrogen Sulfide Odor (C1) Sediment Deposits (B2) Orift Deposits (B3) Presence of Reduced Iron (C4) Algal Mat or Crust (B4) Iron Deposits (B5) Thin Muck Surface (C7) Inundation Visible on Aerial Imagery (B7) Sparsely Vegetated Concave Surface (B8) 	 Surface Soil Cracks (B6) Drainage Patterns (B10) Moss Trim Lines (B16) Dry-Season Water Table (C2) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (C9) 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 🖌 Depth (inches):	_		
Water Table Present? Yes _ ✓ No Depth (inches): 2	Wetland Hydrology Present? Yes No		
Saturation Present? Yes 🖌 No Depth (inches): 0			
(includes capillary fringe)			
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if Remarks: The criterion for wetland hydrology is met. A positive indication of wetland hydrology was obse	available: 		

VEGETATION -- Use scientific names of plants.

Sampling Point: W-DJB-12_PEM-1

Tree Stratum (Plot size: 30 ft)	Absolute	Dominant	Indicator	Dominance Test works	heet:		
1	% Cover	Species?	Status	_ Number of Dominant S Are OBL, FACW, or FAC	pecies That	1	(A)
2.				Total Number of Domin	nant Species	1	(B)
3 4				Percent of Dominant S	pecies That	100	(A/B)
5				- Provalence Index work	shoot:		
6.					of:	Multiply	D.e
7.					<u>o</u>		<u>ру.</u>
	0	= Total Cov	er	- OBE species -	0	x I =	100
Sapling/Shrub Stratum (Plot size: <u>15 ft</u>)		-		FACW species	95	x Z =	190
1.				FAC species	10	x 3 =	30
2.				– FACU species –	0	x 4 =	0
3				– UPL species –	0	x 5 =	0
<u> </u>				– Column Totals	105	(A)	220 (B)
				Prevalence Ir	ndex = B/A =	2.1	. <u> </u>
s				 Hydrophytic Vegetatior 	Indicators:		
o				1- Rapid Test for H	lydrophytic V	egetatior	า
7				2 - Dominance Te	st is >50%		
	0	= lotal Cov	er	3 - Prevalence Ind	ex is $\leq 3.0^1$		
<u>Herb Stratum</u> (Plot size: <u>5 ft</u>)				4 - Morphological	Adaptations ¹	(Provide	supporting
1. <i>Phalaris arundinacea</i>	95	Yes	FACW	- data in Remarks or on	a separate sh	ieet)	
2. <i>Solidago rugosa</i>	10	No	FAC	Problematic Hydr	ophytic Vege	tation ¹ (E	xplain)
3				¹ Indicators of hydric so	il and wetlan	d hydrold	ogy must be
4				present, unless disturb	ed or probler	matic	0,
5				Definitions of Vegetation	on Strata:		
6.				Tree – Woody plants 3	n. (7.6 cm) or	r more in	diameter at
7.				breast height (DBH), re	gardless of h	eight.	
8.				Sapling/shrub - Woody	plants less tl	han 3 in.	DBH and
9.				greater than or equal t	o 3.28 ft (1 m) tall.	
10				Herb – All herbaceous	(non-woody)	plants, re	gardless of
11				size, and woody plants	less than 3.2	8 ft tall.	
12				Woody vines - All wood	dy vines great	ter than 3	8.28 ft in
12	105	- Total Cou		height.			
Weed Wine Chrothers (Distained 20 ft)	105		ei	Hydrophytic Vegetatio	n Present?	/es 🖌 I	No
<u>woody vine Stratum</u> (Plot size: <u>30 ft</u>)						· · · · · · · · · · · · · · · · · · ·	
1				-			
2				-			
3				_			
4				_			
	0	= Total Cov	rer				
Remarks: (Include photo numbers here or on a se	narate sheet)						

Remarks: (Include photo numbers here or on a separate sheet.)

A positive indication of hydrophytic vegetation was observed (>50% of dominant species indexed as OBL, FACW, or FAC). A positive indication of hydrophytic vegetation was observed (Prevalence Index is ≤ 3.00). A positive indication of hydrophytic vegetation was observed (Rapid Test for Hydrophytic Vegetation).

SOIL

Profile Des	cription: (Describe	to the d	lepth needed to d	ocum	nent the i	indicato	r or confirm the al	osence of indicate	ors.)
Depth	Matrix		Redox	(Feat	ures				
(inches)	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²	Textu	ure	Remarks
0 - 12	10YR 3/1	100					Silty Clay	/ Loam	
12 - 18	10YR 4/1	90	10YR 5/8	10	С	М	Silty Clay	/ Loam	
		·							
		·		—					
		·		—					
		·		—			-		
		·							
		·					-		
¹ Type: C =	Concentration, D =	Depleti	on. RM = Reduced	Mat	rix. MS =	Masked	Sand Grains. ² Lo	ocation: PL = Pore	E Lining, M = Matrix.
Hydric Soil	Indicators:							Indicators for P	roblematic Hydric Soils ³ :
Histoso	l (A1)		Polyvalue Be	low S	urface (S	8) (I RR	R. MI RA 149B)	2 M	
Histic F	nipedon (A2)		Thin Dark Su	rface	(S9) (I RR	R. MIR	A 149B)		(ATU) (LRR K, L, MLRA 149B)
Black H	istic (A3)		Loamy Muck	v Min	eral (F1)	(I RR K. I)	Coast Prairi	e Redox (A16) (LRR K, L, R)
Hvdrog	en Sulfide (A4)		Loamy Gleve	d Ma	trix (F2)	(-,	5 cm Mucky	Peat or Peat (S3) (LRR K, L, R)
Stratifie	ed Lavers (A5)		Depleted Ma	trix (I	-3)			Dark Surfac	e (S7) (LRR K, L)
✓ Deplete	ed Below Dark Surf	ace (A1	1) Redox Dark	Surfa	-, ce (F6)			Polyvalue B	elow Surface (S8) (LRR K, L)
Thick D	ark Surface (A12)	\	Depleted Da	rk Su	face (F7))		Thin Dark S	urface (S9) (LRR K, L)
Sandy I	Mucky Mineral (S1)		Redox Depre	ssior	is (F8)			Iron-Manga	nese Masses (F12) (LRR K, L, R)
Sandy (Gloved Matrix (SA)		Redox B opro					Piedmont F	loodplain Soils (F19) (MLRA 149B)
Sandy I	Dodox (SE)							Mesic Spod	ic (TA6) (MLRA 144A, 145, 149B)
Sanuy i								Red Parent	Material (F21)
Strippe	d Matrix (S6)							Very Shallov	w Dark Surface (TF12)
Dark Su	urface (S7) (LRR R, N	MLRA 14	!9B)					Other (Expla	ain in Remarks)
³ Indicators	of hydrophytic veg	getation	and wetland hyd	rolog	/ must be	e preser	it, unless disturbe	d or problematic	
Restrictive	Layer (if observed)	:				Í		•	
	Type:		None			Hydric	Soil Present?		Yes 🖌 No
	Denth (inches)								····
Domarka	Depth (inches).								
Remarks:	ndication of hydric	soilwa	s observed. The c	ritoria	on for by	dric coil	is mot		
A positive i		SOILWA	s observed. The c	ntent	on tor nye		is met.		

Hydrology Photos



Soil Photos



Photo of Sample Plot North



Photo of Sample Plot East



Photo of Sample Plot South

WETLAND DETERMINATION DATA FORM - Northcentral and Northeast Region

1 to 10
iS84

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes No 🟒								
Hydric Soil Present?	Yes No 🟒	Is the Sampled Area within a Wetland?	Yes No 🟒						
Wetland Hydrology Present?	Yes No 🟒	If yes, optional Wetland Site ID:							
Remarks: (Explain alternative procedures here or in a separate report)									
Covertype is UPL. Area is upland, not all three wetland parameters are present.									

HYDROLOGY

Wetland Hydrology Indicators:				
Primary Indicators (minimum of on	Secondary Indicators (minimum of two required)			
 Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5) Inundation Visible on Aerial Ima Sparsely Vegetated Concave Sur 	 Water-Stained Leaves (B9) Aquatic Fauna (B13) Marl Deposits (B15) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres on Living Roots (C3) Presence of Reduced Iron (C4) Recent Iron Reduction in Tilled Soils (C6) Thin Muck Surface (C7) gery (B7) Other (Explain in Remarks) 	 Surface Soil Cracks (B6) Drainage Patterns (B10) Moss Trim Lines (B16) Dry-Season Water Table (C2) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (C9) Stunted or Stressed Plants (D1) Geomorphic Position (D2) Shallow Aquitard (D3) Microtopographic Relief (D4) FAC-Neutral Test (D5) 		
Field Observations: Surface Water Present? Water Table Present? Saturation Present? (includes capillary fringe)	Yes No Depth (inches): Yes No Depth (inches): Yes No Depth (inches):	_ Wetland Hydrology Present? Yes №∠ 		
Describe Recorded Data (stream ga	uge, monitoring well, aerial photos, previous inspections), i	available:		
No positive indication of wetland hy	/drology was observed. The criterion for wetland hydrology	is not met.		

VEGETATION -- Use scientific names of plants.

Sampling Point: W-DJB-12_UPL-1

Trop Stratum (Blot size: 20.ft.)	Absolute	Dominant	Indicator	Dominance Test works	heet:		
	% Cover	Species?	Status	Number of Dominant S	pecies That	0	(A)
1				Are OBL, FACW, or FAC:			
2.				Total Number of Domir	nant Species	2	(B)
3.				Across All Strata:			
4.				Percent of Dominant S	pecies That	0	(A/B)
5.				Are OBL, FACW, or FAC:			
6.				Prevalence Index works	sheet:		
7.				Total % Cover	<u>of:</u>	Multiply	<u>' By:</u>
	0	= Total Cove	r	OBL species	0	x 1 =	0
Sapling/Shrub Stratum (Plot size: 15 ft)		-		FACW species	0	x 2 =	0
1				FAC species	0	x 3 =	0
2				FACU species	90	x 4 =	360
2				UPL species	0	x 5 =	0
				Column Totals	90	(A)	360 (B)
5				Prevalence In	ndex = B/A =	4	
 к				Hydrophytic Vegetation	Indicators:		
7				1- Rapid Test for H	lydrophytic \	/egetatio	า
/·		- Total Covo	r	2 - Dominance Tes	st is > 50%		
Horb Stratum (Plot cizo: Eft.)		- 10101 COVE	1	3 - Prevalence Ind	ex is $\leq 3.0^1$		
1 Phloum protonso	60	Voc	EACU	4 - Morphological	Adaptations	¹ (Provide	supporting
2 Trifolium pratonco	20	Voc	EACU	data in Remarks or on a	a separate sh	neet)	
		165	FACU	Problematic Hydr	ophytic Vege	tation ¹ (E	xplain)
5				¹ Indicators of hydric so	il and wetlan	d hydrolo	ogy must be
4				present, unless disturb	ed or proble	matic	
5.				Definitions of Vegetation	on Strata:		
6.				Tree – Woody plants 3 i	n. (7.6 cm) oi	r more in	diameter at
/				breast height (DBH), re	gardless of h	eight.	
8				Sapling/shrub - Woody	plants less t	han 3 in.	DBH and
9				greater than or equal to	0 5.20 IL (I III) ldll. plante re	gardlace of
10				size and woody plants	loss than 3.2	giarits, re 8 ft tall	igar diess of
11				Woody vines All wood		tor than 3	2 28 ft in
12				height.	iy vines grea		.2010111
	90	= Total Cove	r			/	
Woody Vine Stratum (Plot size: <u>30 ft</u>)				Hydrophytic vegetatio	n Present?	res I	NO 🔽
1							
2							
3							
4							
	0	= Total Cove	r				
Remarks: (Include photo numbers here or on a sepa	rate sheet.)						
No positive indication of hydrophytic vegetation was	observed (≥	50% of domi	nant specie	es indexed as FAC– or dri	er).		

SOIL

Depth (inches) 0 - 10	Matrix			- Juin	ient the i	ndicator	or confirm the a	bsence of indicato	'S.)
(inches) 0 - 10	INIDUITX		Redox	Feat	ures		_		
0 - 10	Color (moist)	<u>%</u>	Color (moist)	%	Type ¹	Loc ²	Text	ure	Remarks
	10YR 3/3	100					Silt Loam		
10 - 18	10YR 3/3	95	10YR 5/8	5	C	M	Silty Cla	y Loam	
		·							
-									
-									
-									
-									
-				·					
-		·							
		· <u> </u>							
·		·		· —					
·		·		· —					
- 1Turnet C - C			. DM - Deduced				Canal Craina 21	Di - Dava	Lining M Matuix
'Type: C = C	oncentration, D =	Depletio	n, RIVI = Reduced	Mat	1x, IVIS =	Masked	Sand Grains. ² L	ocation: PL = Pore	
Hydric Soil I	ndicators:			_				Indicators for Pro	oblematic Hydric Soils ³ :
Histosol	(A1)		Polyvalue Bel	ow S	urface (S	8) (LRR F	R, MLRA 149B)	2 cm Muck (A	10) (LRR K, L, MLRA 149B)
Histic Ep	pipedon (A2)		Thin Dark Su	face	(S9) (LRR	R, MLRA	A 149B)	Coast Prairie	Redox (A16) (LRR K, L, R)
Black His	stic (A3)		Loamy Mucky	/ Min	eral (F1)	(LRR K, L	-)	5 cm Mucky I	Peat or Peat (S3) (LRR K, L, R)
Hydroge	en Sulfide (A4)		Loamy Gleye		trix (FZ)			Dark Surface	(S7) (LRR K, L)
Stratilied	u Layers (AS) d Rolow Dark Surf:	0.00 (111)	Depieted Mar	urfa	-3) -0 (E6)			Polyvalue Be	ow Surface (S8) (LRR K, L)
Depieted	u Below Dark Surra ark Surface (A12)	ace (ATT	Depleted Dark	k Su	-e (FO) face (F7)			Thin Dark Su	rface (S9) (LRR K, L)
Sandy M	lucky Mineral (S1)		Depieted Dai	ccior	18CE (17)			Iron-Mangan	ese Masses (F12) (LRR K, L, R)
Sandy G	loved Matrix (S4)			33101	13 (1 0)			Piedmont Flo	odplain Soils (F19) (MLRA 149B)
Sandy B	aday (SE)							Mesic Spodic	(TA6) (MLRA 144A, 145, 149B)
Sanuy K								Red Parent N	laterial (F21)
Suripped	i Malrix (S6)							Very Shallow	Dark Surface (TF12)
Dark Sui	rface (S7) (LRR R, N	1LRA 149	9 B)					Other (Explai	n in Remarks)
3Indicators (of hydrophytic veg	etation a	and wetland hydr	olog	/ must be	e presen	t, unless disturbe	d or problematic.	
Restrictive L	ayer (if observed):					1		· · ·	
	Type:		None			Hydric	Soil Present?		Yes No 🖌
	Depth (inches):			•		,			
Pomarks:	Deptil (menes).	-							

Soil Photos



Photo of Sample Plot North



Northcentral and Northeast Region -- Version 2.0 Adapted by TRC

Photo of Sample Plot East



WETLAND DETERMINATION DATA FORM - Northcentral and Northeast Region

Project/Site: Flat Creek Solar Project		City/County:	y/County: Canajoharie, Montgomery County			Sampling Date: 2021-Dec-06			
Applicant/Owner: S	unEast				State: NY		Sampling Point: V	V-DJB-13_PEM-1	
Investigator(s): David Bonomo, Abi Light Section, Township, Range: NA									
Landform (hillslope, terrace, etc.): Depression Local relief (concave, convex, none): Undulating Slope (%): 1 to 3									
Subregion (LRR or MLRA): LRR L Lat: 42.8817567695 Long: -74.5284132864 Datum: WGS84									
Soil Map Unit Name:	Da -Darien s	silt loam					NWI classific	ation: None	
Are climatic/hydrologi	c conditions o	n the site typical	for this time	of year?	Yes 🟒 No 🔄	(lf no,	, explain in Remar	·ks.)	
Are Vegetation,	Soil,	or Hydrology	significant	tly disturbed?	Are "Normal C	Circumsta	ances" present?	Yes 🟒 No	
Are Vegetation,	Soil,	or Hydrology	naturally	problematic?	(If needed, ex	plain any	answers in Rema	arks.)	

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes 🟒 No		
Hydric Soil Present?	Yes 🟒 No	Is the Sampled Area within a Wetland?	Yes 🧹 No
Wetland Hydrology Present?	Yes 🟒 No	lf yes, optional Wetland Site ID:	W-DJB-13
Remarks: (Explain alternative procedures he	re or in a separate report)	
Covertype is PEM. Area is wetland, all three	wetland parameters are p	resent.	

HYDROLOGY

Wetland Hydrology Indicators:			
Primary Indicators (minimum of one is required; check all that apply)	Secondary Indicators (minimum of two required) Surface Soil Cracks (B6) Drainage Patterns (B10) Moss Trim Lines (B16) Dry-Season Water Table (C2) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (C9) Stunted or Stressed Plants (D1) Geomorphic Position (D2) Shallow Aquitard (D3) Microtopographic Relief (D4) FAC-Neutral Test (D5)		
 Surface Water (A1) High Water Table (A2) Aquatic Fauna (B13) Saturation (A3) Marl Deposits (B15) Water Marks (B1) Hydrogen Sulfide Odor (C1) Sediment Deposits (B2) Oxidized Rhizospheres on Living Roots (C3) Drift Deposits (B3) Presence of Reduced Iron (C4) Algal Mat or Crust (B4) Recent Iron Reduction in Tilled Soils (C6) Iron Deposits (B5) Thin Muck Surface (C7) Inundation Visible on Aerial Imagery (B7) Sparsely Vegetated Concave Surface (B8) 			
Field Observations:			
Surface Water Present? Yes 🖌 No Depth (inches): 1			
Water Table Present? Yes No _∠ Depth (inches):	Wetland Hydrology Present? Yes No		
Saturation Present? Yes No 🟒 Depth (inches):			
(includes capillary fringe)			
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if a Remarks: The criterion for wetland bydrology is met. A positive indication of wetland bydrology was obsen	wailable:		

VEGETATION -- Use scientific names of plants.

Sampling Point: W-DJB-13_PEM-1

Tree Stratum (Distring) 20 ft)	Absolute	Dominant	Indicator	Dominance Test worksh	neet:		
	% Cover	Species?	Status	Number of Dominant S Are OBL, FACW, or FAC:	pecies That	1	(A)
2.				Total Number of Domin	ant Species	1	(B)
3				Percent of Dominant Sp	ecies That	100	(A/B)
5.				- Are OBL, FACVV, OF FAC.	haati		
6.				Tetal % Cover	ofeel.	Multiply	D. a
7.					<u>5</u>	<u>v 1 –</u>	<u>ру.</u> г
	0	= Total Cov	er	- OBL species	20	× 1 = _	160
Sapling/Shrub Stratum (Plot size: <u>15 ft</u>)		-		FACW species	80	x Z =	160
1.				FAC species	0	x 3 = -	0
2.				– FACU species –	0	x 4 =	0
3				– UPL species –	2	x 5 =	10
4	·			– Column Totals	87	(A)	175 (B)
				Prevalence In	dex = B/A =	2	
с				 Hydrophytic Vegetation 	Indicators:		
o	·			- 🖌 1- Rapid Test for H	lydrophytic V	/egetatior	ı
/				2 - Dominance Tes	st is >50%		
	0	= lotal Cov	er	3 - Prevalence Inde	ex is $\leq 3.0^1$		
<u>Herb Stratum</u> (Plot size: <u>5 ft</u>)				4 - Morphological	Adaptations	(Provide	supporting
1. <i>Phalaris arundinacea</i>	80	Yes	FACW	– data in Remarks or on a	separate sh	ieet)	
2. <i>Typha latifolia</i>	5	No	OBL	Problematic Hydro	ophytic Vege	tation ¹ (E>	(plain)
3. <i>Daucus carota</i>	2	No	UPL	¹ Indicators of hydric soi	l and wetlan	d hydrolo	gy must be
4				present, unless disturbe	ed or problei	matic	
5				Definitions of Vegetatio	n Strata:		
6.				Tree – Woody plants 3 ir	n. (7.6 cm) or	r more in	diameter at
7.				breast height (DBH), reg	gardless of h	eight.	
8.				Sapling/shrub - Woody	plants less t	han 3 in. I	OBH and
9.				greater than or equal to	o 3.28 ft (1 m) tall.	
10.				Herb – All herbaceous (i	non-woody)	plants, re	gardless of
11				size, and woody plants l	less than 3.2	8 ft tall.	
12	,,			Woody vines - All wood	y vines great	ter than 3	.28 ft in
12		- Total Cov	or	height.			
	0/	- 10tal Cov	er	Hydrophytic Vegetation	n Present?	(es 🖌 N	No
<u>woody vine Stratum</u> (Plot size: <u>30 ft</u>)							
	<u></u> .			-			
2				-			
3				_			
4				_			
	0	= Total Cov	er				
Demarks (Include abote numbers here or on a se	narata chaat)						

Remarks: (Include photo numbers here or on a separate sheet.)

A positive indication of hydrophytic vegetation was observed (>50% of dominant species indexed as OBL, FACW, or FAC). A positive indication of hydrophytic vegetation was observed (Prevalence Index is \leq 3.00). A positive indication of hydrophytic vegetation was observed (Rapid Test for Hydrophytic Vegetation).

SOIL

Profile Desc	ription: (Describe t	o the c	lepth needed to o	locur	nent the	indicator	or confirm the	absence of indicators.)
(inches)	Color (maint)	0/	Color (maint)	0/	Tuno1	¹ Loc ² Texture		a Domarka
		<u> </u>				<u></u>	Clavel or	
0-14	101R 4/1	95	7.5TK 4/0					
$\frac{1}{1}$	D = 0	<u> </u>	on PM = Reducer	- <u> </u>	riv MS =	Maskod	Sand Grains 2	location: Pl = Pore Lining M = Matrix
Hydric Soil	ndicators:	Schieti		a widi	- כועו ,אוו.	Maskeu		Indicators for Problematic Hydric Coile3
Historal	(Δ1)		Polyvalue Pr		Surface (58) (DD 		
Histic Er	inedon (A2)			IUW S		DD MID	1/10R	2 cm Muck (A10) (LRR K, L, MLRA 149B)
Black Hi	stic (A3)			w Mir	- (39) (LR I 2012) (E1)		149D)	Coast Prairie Redox (A16) (LRR K, L, R)
Hydroge	n Sulfide (A4)			d Ma	atrix (E2)		-)	5 cm Mucky Peat or Peat (S3) (LRR K, L, R)
Stratifie	d Lavers (A5)		✓ Depleted Ma	atrix (F3)			Dark Surface (S7) (LRR K, L)
Deplete	d Below Dark Surfa	ce (A1	 Bepleted III Redox Dark 	Surfa	ce (F6)			Polyvalue Below Surface (S8) (LRR K, L)
Thick Da	irk Surface (A12)		Depleted Da	rk Su	rface (F7	')		Thin Dark Surface (S9) (LRR K, L)
Sandy M	lucky Mineral (S1)		Redox Depre	essio	ns (F8)	,		Iron-Manganese Masses (F12) (LRR K, L, R)
Sandy G	leved Matrix (S4)							Piedmont Floodplain Soils (F19) (MLRA 149B)
Sandy R	edox (S5)							Mesic Spodic (TA6) (MLRA 144A, 145, 149B)
Strippor	Matrix (S6)							Red Parent Material (F21)
Suipped	rface (CZ) (LDD D M							Very Shallow Dark Surface (TF12)
			50)					Other (Explain in Remarks)
³ Indicators	of hydrophytic vege	etation	and wetland hyd	rolog	y must b	e presen	t, unless disturb	ed or problematic.
Restrictive L	ayer (if observed):							
	Туре:		None	_		Hydric	Soil Present?	Yes 🟒 No
	Depth (inches):							
Remarks:								
A positive ir	dication of hydric	soil wa	s observed. The c	riteri	on for hy	dric soil	is met.	
•	2							
l								
1								
1								
1								

Hydrology Photos



Soil Photos



Photo of Sample Plot North



Northcentral and Northeast Region -- Version 2.0 Adapted by TRC

Photo of Sample Plot South



WETLAND DETERMINATION DATA FORM - Northcentral and Northeast Region

Project/Site: Flat Creek Solar Project		t City/Cou	n ty: Canajoharie, Mo	ntgomery County	/	Sampling Date: 2021-Dec-06		
Applicant/Owner: S	unEast			State: NY	5	Sampling Point: V	/-DJB-13_UPL-1	
Investigator(s): Davi	d Bonomo, Ab	oi Light	Secti	on, Township, Ra	nge: NA			
Landform (hillslope, terrace, etc.): Hillslope Local relief (concave, convex, none): Undulating Slope (%): 1 to 1								
Subregion (LRR or MLF	RA): LRR	L	Lat:	42.8815503617	Long:	-74.5283614982	Datum: WGS84	
Soil Map Unit Name:	Darien silt lo	oam, Da				NWI classifica	ation: None	
Are climatic/hydrologic	c conditions o	n the site typical for this ti	me of year?	Yes 🟒 No 🔄	(lf no,	explain in Remar	ks.)	
Are Vegetation,	Soil,	or Hydrology signifi	cantly disturbed?	Are "Normal C	Circumsta	ances" present?	Yes 🟒 No	
Are Vegetation,	Soil,	or Hydrology natura	ally problematic?	(If needed, exp	plain any	answers in Rema	rks.)	

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes No 🟒		
Hydric Soil Present?	Yes No 🟒	Is the Sampled Area within a Wetland?	Yes No 🟒
Wetland Hydrology Present?	Yes No 🟒	If yes, optional Wetland Site ID:	
Remarks: (Explain alternative procedures her	e or in a separate report)	
Covertype is UPL. Area is upland, not all three	e wetland parameters are	e present.	

HYDROLOGY

Wetland Hydrology Indicators:				
Primary Indicators (minimum of on	Secondary Indicators (minimum of two required)			
 Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5) Inundation Visible on Aerial Ima Sparsely Vegetated Concave Sur 	 Water-Stained Leaves (B9) Aquatic Fauna (B13) Marl Deposits (B15) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres on Living Roots (C3) Presence of Reduced Iron (C4) Recent Iron Reduction in Tilled Soils (C6) Thin Muck Surface (C7) gery (B7) Other (Explain in Remarks) 	 Surface Soil Cracks (B6) Drainage Patterns (B10) Moss Trim Lines (B16) Dry-Season Water Table (C2) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (C9) Stunted or Stressed Plants (D1) Geomorphic Position (D2) Shallow Aquitard (D3) Microtopographic Relief (D4) FAC-Neutral Test (D5) 		
Field Observations: Surface Water Present? Water Table Present? Saturation Present? (includes capillary fringe)	Yes No Depth (inches): Yes No Depth (inches): Yes No Depth (inches):	_ Wetland Hydrology Present? Yes №∠ 		
Describe Recorded Data (stream ga	uge, monitoring well, aerial photos, previous inspections), i	available:		
No positive indication of wetland hy	/drology was observed. The criterion for wetland hydrology	is not met.		

VEGETATION -- Use scientific names of plants.

Sampling Point: W-DJB-13_UPL-1

Tree Stratum (Distrize: 20 ft)	Absolute	Dominant	Indicator	Dominance Test worksh	eet:		
	% Cover	Species?	Status	Number of Dominant Sp	pecies That	0	(A)
1				Are OBL, FACW, or FAC:			
2.				Total Number of Domin	ant Species	2	(B)
3.				Across All Strata:			
4.		· · · · · ·		Percent of Dominant Sp	ecies That	0	(A/B)
5.				Are OBL, FACW, or FAC:			
6.				Prevalence Index works	heet:		
7.				<u>Total % Cover c</u>	<u>of:</u>	<u>Multiply</u>	<u>By:</u>
	0	= Total Cove	r	OBL species	0	x 1 =	0
Sanling/Shruh Stratum (Plot size: 15 ft)		-		FACW species	0	x 2 =	0
1				FAC species	0	x 3 =	0
2				FACU species	90	x 4 =	360
2		<u> </u>		UPL species	0	x 5 =	0
S				Column Totals	90	(A)	360 (B)
4				Prevalence Inc	dex = B/A =	4	
6				Hydrophytic Vegetation	Indicators:		
7				1- Rapid Test for H	ydrophytic \	egetation/	า
/		- Total Cove	r	2 - Dominance Tes	t is > 50%		
Harb Stratum (Plat size) E ft)	0			3 - Prevalence Inde	ex is $\leq 3.0^1$		
<u>Herb Stratum</u> (Plot size. <u>5 It</u>)	60	Vac		4 - Morphological A	Adaptations	(Provide	supporting
Trifolium protonco	20	Vec		data in Remarks or on a	separate sh	ieet)	
	30	res	FACU	Problematic Hydro	phytic Vege	tation ¹ (E	xplain)
3				¹ Indicators of hydric soil	and wetlan	d hydrolc	gy must be
4.				present, unless disturbe	ed or proble	matic	
5		<u> </u>		Definitions of Vegetation	n Strata:		
6		<u> </u>		Tree – Woody plants 3 ir	n. (7.6 cm) oi	r more in	diameter at
7				breast height (DBH), reg	ardless of h	eight.	
8				Sapling/shrub – Woody	plants less t	han 3 in.	DBH and
9				greater than or equal to	3.28 ft (1 m) tall.	
10				Herb – All herbaceous (r	non-woody)	plants, re	gardless of
11				size, and woody plants i	ess than 3.2		20 6
12				woody vines - All wood	y vines grea	ter than 3	.28 ft in
	90	= Total Cove	r	neight.			
<u>Woody Vine Stratum</u> (Plot size: <u>30 ft</u>)				Hydrophytic Vegetation	Present?	/es I	No 🔽
1							
2.							
3.							
4.							
	0	= Total Cove	r				
Remarks: (Include photo numbers here or on a separat	e sheet)			J			
No positive indication of hydronhytic vegetation was of	served (>	50% of domi	nant snecie	s indexed as FAC – or drie	er)		
into positive indication of hydrophytic vegetation was of	550 VCG (2		iant specie				

SOIL

Depth Matrix Redox Features 0:nches Color (moist) % Color (moist) % Type! Lc2 Texture Remark 10-18 10YR 3/3 100 10YR 5/8 5 C M Silty Clay Leam	o the depth needed to docume
(inches) Color (moist) % Color (moist) % Type: Loc2 Texture Remari 10 - 18 10 VR 3/3 95 10 VR 5/8 5 C M Silty Clay Loam	Redox Featu
0-10 107R 3/3 100 Silt Learn 10-18 107R 3/3 95 107R 5/8 5 C M Silty Clay Learn Image: Silt Learn Image: Silty Clay Learn Image: Silty Clay Learn Image: Silty Clay Learn Image: Silty Clay Learn Image: Silty Clay Learn Image: Silty Clay Learn Image: Silty Clay Learn Image: Silty Clay Learn Image: Silty Clay Learn Image: Silty Clay Learn Image: Silty Clay Learn Image: Silty Clay Learn Image: Silty Clay Learn Image: Silty Clay Learn Image: Silty Clay Learn Image: Silty Clay Learn Image: Silty Clay Learn Image: Silty Clay Learn Image: Silty Clay Learn Image: Silty Clay Learn Image: Silty Clay Learn Image: Silty Clay Learn Image: Silty Clay Learn Image: Silty Clay Learn Image: Silty Clay Learn Image: Silty Clay Learn Image: Silty Clay Learn Image: Silty Clay Learn Image: Silty Clay Learn Image: Silty Clay Learn Image: Silty Clay Learn Image: Silty Clay Learn Image: Silty Clay Learn Image: Silty Clay Learn Image: Silty Clay Learn Image: Silty Clay Learn Image: Silty Clay Learn Image: Silty Clay Learn Image: Silty Clay Learn	<u>%</u> Color (moist) %
10-18 10YR 3/3 95 10YR 5/8 5 C M Silty Clay Loam Image: Comparison of the stress of	100
Type: C = Concentration, D = Depletion, RM = Reduced Matrix, MS = Masked Sand Grains. *Location: PL = Pore Lining, M = Matrix. Hydric Soli Indicators:	95 10YR 5/8 5
Type: C = Concentration, D = Depletion, RM = Reduced Matrix, MS = Masked Sand Grains. Location: PL = Pore Lining, M = Matrix. Hydric Soil Indicators: Indicators for Problematic Hydric Soils Histosol (A1) Polyvalue Below Surface (S9) (LRR R, MLRA 149B)	
Type: C = Concentration, D = Depletion, RM = Reduced Matrix, MS = Masked Sand Grains. *Location: PL = Pore Lining, M = Matrix. Hydric Soil Indicators: Indicators for Problematic Hydric Soils Histo: Epipedin (A2) Thin Dark Surface (S9) (LRR R, MLRA 149B) _2 cm Muck (A10) (LRR K, L) MLRA 149B) Black Histic (A3) Loamy Mucky Mineral (F1) (LRR K, L) _5 cm Mucky Peat or Peat (S3) (LRR R, MLRA 149B) Stratified Layers (A5) Depleted Matrix (F2)	
"Type: C = Concentration, D = Depletion, RM = Reduced Matrix, MS = Masked Sand Grains. *Location: PL = Pore Lining, M = Matrix, Mydric Soli Indicators: Histoc Soli Indicators: Indicators for Problematic Hydric Soli Histoc Soli Indicators: Indicators (A1) Histoc Soli Indicators: Indicators for Problematic Hydric Soli Black Histic (A3) Loamy Mucky Mineral (F1) (LRR K, L) Stratified Layers (A5) Depleted Matrix (F2) Depleted Below Dark Surface (A1) Redox Dark Surface (F5) Thick Dark Surface (A1) Redox Dark Surface (F5) Sandy Redox (S5) Pepleted Dark Surface (F7) Sandy Gleyed Matrix (S4) Sandy Redox (S5) Stripped Matrix (S4) Red Parent Material (F21) Dark Surface (S7) (LRR R, MLRA 149B) Other (Explain in Remarks) *Intick Dark Surface (F6) Wery Shallow Dark Surface (S7) (MLR R, MLRA 149C) Sandy Redox (S5) Perform Rookapaic (S6) (MLRA 144A, 14 Stripped Matrix (S4) Red Parent Material (F21) Dark Surface (F1) Red Narental (F21) Dark Surface (F1) Polyalue Below Dark Surface (S7) (MLRA 144A, 14 Stripped Matrix (S4) Other (Explain in Remarks) *Intipotence (F1) Polyalue Below Surface (S7) (MLR R, MLRA 149B) <t< td=""><td></td></t<>	
"Type: C = Concentration, D = Depletion, RM = Reduced Matrix, MS = Masked Sand Grains. *Location: PL = Pore Lining, M = Matrix. Hydric Soll Indicators: Indicators for Problematic Hydric Solls Histosol (A1) Polyvalue Below Surface (S9) (LRR R, MLRA 149B) 2 cm Muck (A10) (LRR K, L) Black Histic (A3) Loamy Mucky Mineral (F1) (LRR K, L) S cm Mucky Peat or Peat (S3) (LRR R, L) Stratified Layers (A5) Depleted Below Dark Surface (F3) Dark Surface (S7) (LRR K, L) Stratified Layers (A5) Depleted Dark Surface (F7) Tin Dark Surface (S1) (LRR K, L) Stratified Layers (A5) Depleted Dark Surface (F7) Tino Manganes Masses (F12) (LRR K, L) Sandy Gleeyed Matrix (S4) Redox Dark Surface (F7) Tino Manganes Masses (F12) (LRR K, L) Sandy Gleeyed Matrix (S4) Redox Dark Surface (F7) Tino Manganes Masses (F12) (LR R K, L) Stripped Matrix (S5) Piedmont Floodplain Solis (F19) (M Stripped Matrix (S6) Dark Surface (S7) (LRR R, MLRA 144PB) Dark Surface (S7) (LRR R, MLRA 149B) Other (Explain in Rmarks) *Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic. Retrictive Layer (if observed): None Type: None Depth (inches): None <	
"Type: C = Concentration, D = Depletion, RM = Reduced Matrix, MS = Masked Sand Grains. *Location: PL = Pore Lining, M = Matrix. Hydric Soil Indicators: Indicators for Problematic Hydric Soils — Histoc Epipedon (A2) — Thin Dark Surface (S9) (LRR R, MLRA 149B) _2 cm Muck (A10) (LRR K, L, MLRA 149B)	
Type: C = Concentration, D = Depletion, RM = Reduced Matrix, MS = Masked Sand Grains. ² Location: PL = Pore Lining, M = Matrix. Hydric Soll Indicators: Indicators for Problematic Hydric Solls Histosol (A1) Polyvalue Below Surface (S9) (LRR R, MLRA 149B) 2 cm Muck (A10) (LRR K, L) (LR K, L) Black Histic (A3) Loamy Mucky Menal (F1) (LRR K, L) S cm Mucky Peat or Peat (S3) (LR R, L) Bratifiet Layers (A5) Depleted Matrix (F2) Dark Surface (S7) (LRR K, L) Stratified Layers (A5) Depleted Dark Surface (F6) Thin Dark Surface (F6) Thin Dark Surface (A11) Redox Depressions (F8) Polyvalue Below Surface (F2) (LRR K, L) Sandy Mucky Mineral (S1) Redox Depressions (F8) Poleted Dark Surface (F12) (LR K, L) Sandy Mucky Mineral (S1) Redox Depressions (F8) Pietomont Floodplain Solis (F19) (M Sandy Redox (S5) Stripped Matrix (S4) Measic Spodic (CA6) (MR R A 144A, 14 Sandy Redox (S5) Pietomont Floodplain Solis (F17) (M F14A, F	
Type: C = Concentration, D = Depletion, RM = Reduced Matrix, MS = Masked Sand Grains. *Location: PL = Pore Lining, M = Matrix. Hydric Soil Indicators: Indicators for Problematic Hydric Soils Histosol (A1) Polyvalue Below Surface (S9) (LRR R, MLRA 149B) Coast Prinire Redox (A10) (LRR K, L, MLRA 149B) Black Histic (A3) Loamy Mucky Mineral (F1) (LRR K, L) S cm Mucky Peat or Peat (S3) (LRR R, MLRA 149B) Stratified Layers (A5) Depleted Matrix (F2) Dark Surface (S19) (LRR R, L) Stratified Layers (A5) Depleted Dark Surface (F6) Thin Dark Surface (S19) (LRR R, L) Sandy Bedox Surface (S1) Redox Depressions (F8) Piedmont Eloodplain Soils (F19) (M Sandy Gleyed Matrix (S4) Red Parent Material (F21) Very Shallow Dark Surface (T12) Dark Surface (S7) (LRR R, MLRA 149B) Very Shallow Dark Surface (T12) Dark Surface (S7) (LRR R, MLRA 149B) Very Shallow Dark Surface (T12) Dark Surface (S7) (LRR R, MLRA 149B) Very Shallow Dark Surface (T12) Dark Surface (S7) (LRR R, MLRA 149B) Very Shallow Dark Surface (T12) Dark Surface (S7) (LRR R, MLRA 149B) Very Shallow Dark Surface (T12) Dark Surface (S7) (LRR R, MLRA 149B) Very Shallow Dark Surface (T12) Dark Surface (S7) (LRR R, MLRA 149B) Very Shallow Dark Surface (T12) <td></td>	
"Type: C = Concentration, D = Depletion, RM = Reduced Matrix, MS = Masked Sand Grains. *Location: PL = Pore Lining, M = Matrix. "Histosol (A1) — Polyvalue Below Surface (S3) (LRR R, MLRA 149B)	
Type: C = Concentration, D = Depletion, RM = Reduced Matrix, MS = Masked Sand Grains. ?Location: PL = Pore Lining, M = Matrix. Hydric Soil Indicators: Indicators for Problematic Hydric Soils Histosol (A1) Polyvalue Below Surface (S8) (LRR R, MLRA 149B) 2 cm Muck (A10) (LRR K, L, MLRA 1 Black Histic (A3) Loamy Mucky Mineral (F1) (LRR K, L) S cm Muck (A10) (LRR K, L) Stratified Layers (A5) Depleted Matrix (F2) Dark Surface (S7) (LRR K, L) Depleted Below Dark Surface (A11) Redox Dark Surface (F7) Polyvalue Below Surface (S9) (LRR K, L) Sandy Mucky Mineral (S1) Redox Depressions (F8) Piedmont Floodplain Soils (F19) (M Sandy Gleyed Matrix (S4) Piedmont Floodplain Soils (F19) (M Mexic Spoid: (TA6) (MLR A 144A) Sandy Redox (S5) Piedmont Floodplain Soils (F19) (M Mexic Spoid: (TA6) (MLR A 144A) Strittee (S7) (LRR R, MLRA 149B) Very Shallow Dark Surface (TF12) Derk Surface (TF12) Dark Surface (S7) (LRR R, MLRA 149B) Very Shallow Dark Surface (TF12) Derk Surface (TF12) Dark Surface (S7) (LRR R, MLRA 149B) Very Shallow Dark Surface (TF12) Derk Surface (TF12) Dark Surface (S7) (LRR R, MLRA 149B) Very Shallow Dark Surface (TF12) Derk Surface (TF12) Deptht (inches): None Hydric	
Type: C = Concentration, D = Depletion, RM = Reduced Matrix, MS = Masked Sand Grains. *Location: PL = Pore Lining, M = Matrix. Hydric Soil Indicators: Indicators for Problematic Hydric Soils Histic Speedon (A2) Thin Dark Surface (S9) (LRR R, MLRA 149B)	
Hydric Soil Indicators: Indicators for Problematic Hydric Soils Histic Epipedon (A2) Thin Dark Surface (S9) (LRR R, MLRA 149B) Coast Prairie Redox (A16) (LRR K, L) Black Histic (A3) Loamy Mucky Mineral (F1) (LRR K, L) S cm Mucky Peat or Peat (S3) (LRR K, L) Stratified Layers (A5) Depleted Matrix (F2) Dark Surface (S9) (LRR K, L) Depleted Below Dark Surface (A11) Redox Dark Surface (F7) Thin Dark Surface (S9) (LRR K, L) Sandy Mucky Mineral (S1) Redox Dark Surface (F7) Iron-Maganese Masses (F2) (LRR K, L) Sandy Gleyed Matrix (S6) Below Dark Surface (S7) Iron-Maganese Masses (F2) (LRR K, L) Sandy Gleyed Matrix (S6) Breit Matrial (F21) Other (Explain in Remarks) Sindicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic. Rest_Marks Remarks: None Hydric Soil Present? Yes No Type: None Hydric Soil Present? Yes No	Pepletion, RM = Reduced Matrix
Histosol (A1) Polyvalue Below Surface (S8) (LRR R, MLRA 149B)	
Histic Epipedon (A2) Thin Dark Surface (S9) (IRR R, MLRA 1499) Cost Prairie RedX (A10) (IRR K, L) S cm Mucky Peat or Peat (S3) (IRR K, L) S cm Mucky Peat or Peat (S3) (IRR K, L) S cm Mucky Peat or Peat (S3) (IRR K, L) S cm Mucky Peat or Peat (S3) (IRR K, L) S cm Mucky Peat or Peat (S3) (IRR K, L) Depleted Matrix (F3) Depleted Matrix (F3) Depleted Dark Surface (F6) Thin Dark Surface (S9) (IRR K, L) Thin Dark Surface (S9) (IRR K, L) Polyvalue Below Surface (S9) (IRR K, L) Depleted Dark Surface (F7) Thin Dark Surface (S9) (IRR K, L) Polyvalue Below Surface (S9) (IRR K, L) Polyvalue Below Surface (S9) (IRR K, L) S andy Mucky Mineral (S1) Redox Depressions (F8) Piedmont Floodplain Solis (F19) (MLR A, 144, 14 Sandy Redox (S5) Piedmont Floodplain Solis (F19) (Meric S0) Piedmont Floodplain Solis (F19) (Meric S0) Piedmont Floodplain Solis (F19) (Marka, 144, 14	Polyvalue Below Su
Black Histic (A3) Loamy Mucky Mineral (F1) (LRR K, L) Coast Frairie Kedox (A16) (LRK K, L) S m Mucky Pater Or Peat (S3) (LRR K, L) S m Mucky Pater Or Peat (S3) (LRR K, L) Depleted Matrix (F2) Dark Surface (S7) (LRR K, L) Polyvalue Below Surface (S3) (LRR K, L) Polyvalue Below Surface (S3) (LRR K, L) Thin Dark Surface (A12) Depleted Dark Surface (F7) Thin Dark Surface (S4) (LRR K, L) Polyvalue Below Surface (S4) (LRR K, L)	Thin Dark Surface (
Hydrogen Sulfide (A4) Loamy Gleyed Matrix (F2) S thi Mutcy Peak of Peak (S3) (LRR	Loamy Mucky Mine
Stratified Layers (A5)Depleted Matrix (F3)Delvalue Below Surface (S9) (LRR K, L)Delvalue Below Surface (S9) (LRR K, L)Depleted Below Dark Surface (S9) (LRR K, L)Depleted Dark Surface (F7)Inin Dark Surface (S9) (LRR K, L)Depleted Dark Surface (F7)Inin Dark Surface (S9) (LRR K, L)Nample of the matrix (S4)Redox Depressions (F8)Redox Depressions (F8)Red Parent Material (S1)Redox (S5)Red Parent Material (F21)Nample of the matrix (S6)Nample of the matrix (S7) (LRR R, MLRA 149B)Other (Explain in Remarks) 3ndicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic. Restrictive Layer (if observed):NneHydric Soil Present? YesNoRemarks: The criterion for hydric soil is not met. No positive indication of hydric soils was observed.	Loamy Gleyed Matr
Depleted Below Dark Surface (A11) Redox Dark Surface (F6) Thin Dark Surface (A12) Depleted Dark Surface (F7) Thin Dark Surface (59) (LRR K, L) Sandy Mucky Mineral (S1) Redox Depressions (F8) Piedmont Floodplain Solis (F12) (LR Sandy Mucky Mineral (S4) Mesic Spodic (TA6) (MLRA 144A, 14 Sandy Redox (S5) Red Parent Material (F21) Dark Surface (S7) (LRR R, MLRA 149B) Very Shallow Dark Surface (TF12) Dark Surface (S7) (LRR R, MLRA 149B) Other (Explain in Remarks) alidicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic. Restrictive Layer (if observed): Type: None Hydric Soil Present? Yes No Remarks: The criterion for hydric soil is not met. No positive indication of hydric soils was observed.	Depleted Matrix (F3
	ce (A11) Redox Dark Surface
Sandy Mucky Mineral (51)Redox Depressions (F8)Piedmont Floodplain Soils (F19) (M Sandy Gleyed Matrix (S4)Mesic Spodic (TA6) (MLRA 144A, 14 Sandy Redox (S5)Very Shallow Dark Surface (TF12) Dark Surface (S7) (LRR R, MLRA 149B)Other (Explain in Remarks) ³ Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic. Restrictive Layer (if observed): Hydric Soil Present? YesNo Remarks: The criterion for hydric soil is not met. No positive indication of hydric soils was observed.	Depleted Dark Surf
Sandy Gleyed Matrix (S4)Mesic Spodic (TA6) (MLRA 144A, 14 Sandy Redox (S5)Mesic Spodic (TA6) (MLRA 144A, 14 Red Parent Material (F21) Very Shallow Dark Surface (TF12) Other (Explain in Remarks) ³ Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic. Restrictive Layer (if observed): Depth (inches): 	Redox Depressions
Sandy Redox (S5)Red Parent Material (F21)Stripped Matrix (S6)Very Shallow Dark Surface (TF12)Other (Explain in Remarks) 3ndicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic. Restrictive Layer (if observed): Type:None Depth (inches): Remarks: The criterion for hydric soil is not met. No positive indication of hydric soils was observed.	
Stripped Matrix (S6)Very Shallow Dark Surface (TF12)Other (Explain in Remarks) 	
Dark Surface (S7) (LRR R, MLRA 149B)Other (Explain in Remarks) andicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic. Restrictive Layer (if observed): Hydric Soil Present? Yes No Depth (inches): Remarks: The criterion for hydric soil is not met. No positive indication of hydric soils was observed.	
^a Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic. Restrictive Layer (if observed): Type: Depth (inches): Remarks: The criterion for hydric soil is not met. No positive indication of hydric soils was observed.	LRA 149B)
Indicators of hydrophytic vegetation and wetand hydrology must be present, Unless disturbed or problematic. Restrictive Layer (if observed):	teste a surden al le al le al a ser
Restrictive Layer (if observed): Type: None Hydric Soil Present? YesNoZ Depth (inches): Remarks: The criterion for hydric soil is not met. No positive indication of hydric soils was observed. The criterion for hydric soil is not met. No positive indication of hydric soils was observed.	tation and wetland hydrology
Iype: None Hydric Soil Present? YesNoZ Depth (inches):	
Depth (inches): Remarks: The criterion for hydric soil is not met. No positive indication of hydric soils was observed.	None
Remarks: The criterion for hydric soil is not met. No positive indication of hydric soils was observed.	
	ot met. No positive indication (

Photo of Sample Plot North



Photo of Sample Plot East

WETLAND DETERMINATION DATA FORM - Northcentral and Northeast Region

Project/Site: Flat Creek Solar Project		City/County: Canajoharie, Montgomery County			Sampling Date: 2021-Dec-06			
Applicant/Owner: SunEast				State: NY		Sampling Point: W-DJB-14_PEM-1		
Investigator(s): Davi	d Bonomo, Ab	i Light		Sec	tion, Township, R	ange: N	٩	
Landform (hillslope, te	rrace, etc.):	Swale		Local relief	(concave, conve	k, none):	Concave	Slope (%): 1 to 10
Subregion (LRR or MLF	RA): LRR	L		Lat:	42.8841078333	Long:	-74.5258976833	Datum: WGS84
Soil Map Unit Name:	LaD- Lansing	g silt loam					NWI classifica	ation: None
Are climatic/hydrologic	conditions o	n the site typical	for this time	of year?	Yes 🟒 No _	(If no	o, explain in Remar	ks.)
Are Vegetation,	Soil,	or Hydrology	significan	tly disturbed?	Are "Normal	Circumst	tances" present?	Yes 🟒 No
Are Vegetation,	Soil,	or Hydrology	naturally	problematic?	(lf needed, e	xplain an	y answers in Rema	arks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes 🟒 No		
Hydric Soil Present?	Yes 🟒 No	Is the Sampled Area within a Wetland?	Yes 🟒 No
Wetland Hydrology Present?	Yes 🟒 No	lf yes, optional Wetland Site ID:	W-DJB-14
Remarks: (Explain alternative procedures he	re or in a separate report)	
Covertype is PEM. Area is wetland, all three	wetland parameters are p	resent.	

HYDROLOGY

Wetland Hydrology Indicators:					
Primary Indicators (minimum of	one is required; che	Secondary Indicators (minimum of two required)			
 ✓ Surface Water (A1) ✓ High Water Table (A2) ✓ Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5) Inundation Visible on Aerial I Sparsely Vegetated Concave 	 magery (B7) Surface (B8)	Water-Stained Leaves (B9) Aquatic Fauna (B13) Marl Deposits (B15) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres on Living Roo Presence of Reduced Iron (C4) Recent Iron Reduction in Tilled Soils (Thin Muck Surface (C7) Other (Explain in Remarks)	ts (C3) C6)	 Surface Soil Cracks (B6) Drainage Patterns (B10) Moss Trim Lines (B16) Dry-Season Water Table (C2) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (C9) 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 🔄	Depth (inches):	2	_	
Water Table Present?	Yes 🟒 No 🔄	Depth (inches):	0	Wetland Hydrology Present? Yes No	
Saturation Present?	Yes 🟒 No _	8			
(includes capillary fringe)					
Describe Recorded Data (stream	gauge, monitoring	well, aerial photos, previous inspection	ons), if	available:	

Remarks:

The criterion for wetland hydrology is met. A positive indication of wetland hydrology was observed (primary and secondary indicators were present).

VEGETATION -- Use scientific names of plants.

Sampling Point: W-DJB-14_PEM-1

Trace Christian (District) 20 ft)	Absolute	Dominant	Indicator	Dominance Test works	heet:		
	% Cover	Species?	Status	Number of Dominant S Are OBL, FACW, or FAC:	pecies That	3	(A)
2.				Total Number of Domir	nant Species	3	(B)
3				Percent of Dominant S	pecies That	100	(A/B)
5				- Prevalence Index works	shoot.		
6				- Total % Cover	of.	Multiply	By:
7				- OBL species	35	<u>v 1 =</u>	. 2 5
	0	= Total Cov	er	EACW species	60	× 1	120
Sapling/Shrub Stratum (Plot size: <u>15 ft</u>)		_		FACW species	00		120
1. Cornus amomum	10	Yes	FACW	FAC species	0	x 3 = _	0
2.				- FACU species	0	x 4 =	0
3				- UPL species -	0	x 5 = _	0
4				- Column Totals	95	(A)	155 (B)
				Prevalence In	ndex = B/A =	1.6	
5				- Hydrophytic Vegetatior	Indicators:		
6				1- Rapid Test for H	- Hydrophytic V	egetation	1
/				2 - Dominance Tes	st is >50%	U	
	10	= Total Cov	er	✓ 3 - Prevalence Ind	ex is $\leq 3.0^1$		
Herb Stratum (Plot size: <u>5 ft</u>)				4 - Morphological	Adaptations	Provide	supporting
1. <i>Phalaris arundinacea</i>	50	Yes	FACW	- data in Remarks or on a	a separate sh	(eet)	sabberang
2. <i>Typha latifolia</i>	25	Yes	OBL	Problematic Hvdr	ophytic Vege	tation ¹ (Ex	(plain)
3. Lythrum salicaria	10	No	OBL	Indicators of hydric so	il and wetlan	d hydrolo	gy must be
4.				present, unless disturb	ed or proble	matic	89 11482 80
5.				Definitions of Vegetation	n Strata		
6				Tree Woody plants 3 i	(7.6 cm) or	r moro in i	diamotor at
7				hreast height (DBH) re	gardless of h	eight	diameter at
· · · · · · · · · · · · · · · · · · ·				- Sanling/shruh - Woody	nlante loce t	han 3 in T)BH and
8				greater than or equal to	n 3 28 ft (1 m)) tall	
9				Herh - All herhaceous (non-woody)	nlants reg	ardless of
				size and woody plants	less than 3.2	8 ft tall	Survices of
^{11.}				Woody vines - All wood	ly vines great	ter than 3	28 ft in
12				- height	ly vines great		.2010111
	85	= Total Cov	er		D (3)		
Woody Vine Stratum (Plot size: <u>30 ft</u>)				Hydrophytic Vegetatio	n Present?	res 🟒 N	10
1				_			
2.							
3.				-			
4.				-			
	0	= Total Cov	er	-			

Remarks: (Include photo numbers here or on a separate sheet.)

A positive indication of hydrophytic vegetation was observed (>50% of dominant species indexed as OBL, FACW, or FAC). A positive indication of hydrophytic vegetation was observed (Prevalence Index is \leq 3.00). A positive indication of hydrophytic vegetation was observed (Rapid Test for Hydrophytic Vegetation).

SOIL

Profile Deso	cription: (Describe t	to the o	depth needed to	docun	nent the	indicato	r or confirm the	absence of indicators.)
Depth	Matrix		Redox	<pre>< Feat</pre>	ures			
(inches)	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²	Texture	Remarks
0 - 16	10YR 3/1	90	7.5YR 5/6	10				
						<u> </u>		
				· —				
¹ Type: C = C	oncentration. D = I	Depleti	ion. RM = Reduce	d Mat	rix. MS =	Masked	Sand Grains. 2	Location: PL = Pore Lining, M = Matrix.
Hydric Soil	Indicators:		,		.,			Indicators for Problematic Hydric Soils ³ :
Histosol	(A1)		Polyvalue Be	elow S	Surface (S	58) (LRR	R, MLRA 149B)	2 cm Muck (A10) (I DD K I MI DA 140B)
Histic Er	bipedon (A2)		Thin Dark Si	urface	(S9) (LRF	R R, MLR	, A 149B)	Coast Brairia Bodoy (A16) (LBR K L B)
Black Hi	stic (A3)		Loamy Mucl	ky Mir	neral (F1)	(LRR K,	L)	E cm Mucky Post or Post (S2) (I PD K P)
Hydroge	en Sulfide (A4)		Loamy Gley	ed Ma	trix (F2)			5 CITI MUCKY Peal OF Peal (55) (LKR N, L, K)
Stratifie	d Layers (A5)		Depleted M	atrix (F3)			Dark surface (S7) (LKR K, L)
Deplete	d Below Dark Surfa	ice (A1	1) 🖌 Redox Dark	Surfa	ce (F6)			Polyvalue Below Surface (So) (LRR N, L)
Thick Da	ark Surface (A12)		Depleted Da	ark Su	rface (F7)		I nin Dark Surface (S9) (LRK K, L)
Sandy N	1ucky Mineral (S1)		Redox Depr	essior	าร (F8)			Iron-Manganese Masses (F12) (LRR K, L, R)
Sandy G	leyed Matrix (S4)							Piedmont Floodplain Soils (F19) (MLRA 149B)
Sandy R	edox (S5)							Mesic Spodic (1A6) (MLRA 144A, 145, 149B)
Stripper	Matrix (S6)							Red Parent Material (F21)
Dark Su	rface (S7) (LRR R. M	ILRA 14	49B)					Very Shallow Dark Surface (TF12)
³ Indicators	of hydrophytic veg	etatior	and wetland hyd	Irolog	y must b	e preser	nt, unless disturb	ed or problematic.
Restrictive	_ayer (if observed):							
	Туре:		None			Hydric	Soil Present?	Yes 🟒 No
	Depth (inches):							
Remarks: A positive ir	ndication of hydric	soil wa	is observed. The o	riteri	on for hy	'dric soil	is met.	

Hydrology Photos



Soil Photos



Photo of Sample Plot East



Photo of Sample Plot West



WETLAND DETERMINATION DATA FORM - Northcentral and Northeast Region

Project/Site: Flat Creek Solar Project		City/County:	Lity/County: Canajoharie, Montgomery County			Sampling Date: 2021-Dec-06		
Applicant/Owner: SunEast		_	State: NY			Sampling Point: W-DJB-14_UPL-1		
Investigator(s): Davi	id Bonomo, Al	oi Light		Sec	tion, Township, Ra	nge: N/	4	
Landform (hillslope, te	errace, etc.):	Swale		Local relief	(concave, convex,	none):	Undulating	Slope (%): 10 to 20
Subregion (LRR or MLF	RA): LRR	L		Lat:	42.8846880683	Long:	-74.5282699453	Datum: WGS84
Soil Map Unit Name:	LaD - Lansir	g silt loam					NWI classificatio	n: None
Are climatic/hydrologic	c conditions o	n the site typical	for this time	of year?	Yes 🟒 No 🔄	(If no	, explain in Remarks.)	
Are Vegetation, Are Vegetation,	Soil, Soil,	or Hydrology or Hydrology	significant naturally	tly disturbed? problematic?	Are "Normal ((If needed, ex	Circumst plain an	ances" present? y answers in Remarks	Yes 🟒 No .)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes No 🟒		
Hydric Soil Present?	Yes No 🟒	Is the Sampled Area within a Wetland?	Yes No 🟒
Wetland Hydrology Present?	Yes No 🟒	lf yes, optional Wetland Site ID:	
Remarks: (Explain alternative procedures her	e or in a separate report)	
Covertype is UPL. Area is upland, not all three	e wetland parameters are	e present.	

HYDROLOGY

Wetland Hydrology Indicators:			
	Secondary molectors (minimum or two required) Surface Soil Cracks (B6) Drainage Patterns (B10) Moss Trim Lines (B16) Dry-Season Water Table (C2) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (C9) 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 Depth (inches): Water Table Present? Yes No Depth (inches): Saturation Present? Yes No Depth (inches): Saturation Present? Yes No Depth (inches): (includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections),	Wetland Hydrology Present? Yes No		
Remarks: The criterion for wetland hydrology is not met. Only one secondary indicator observed.			

VEGETATION -- Use scientific names of plants.

Sampling Point: W-DJB-14_UPL-1

Tree Stratum (Plot size: <u>30 ft</u>)	Absolute	Dominant	Indicator	Dominance Test works	heet:		
1	% Cover	species:	Status	Are OBL FACW or FAC	·	0	(A)
1				Total Number of Domin	nant Species		
2.				Across All Strata:		2	(B)
3				Percent of Dominant S	pecies That	0	(A/D)
4	<u> </u>			Are OBL, FACW, or FAC	:	0	(A/B)
5				 Prevalence Index works 	sheet:		
7	<u> </u>			- <u>Total % Cover</u>	<u>of:</u>	<u>Multiply</u>	<u>' By:</u>
/		- Total Cov		- OBL species	0	x 1 =	0
Sanling/Shruh Stratum (Diot cizo: 15 ft)	0	_ 10tai Cov		FACW species	10	x 2 =	20
<u>Sapiing/Shrub Stratum</u> (Plot Size. <u>15 h</u>)	20	Voc	EACU	FAC species	0	x 3 =	0
	20	res	FACU	- FACU species	80	x 4 =	320
2.				– UPL species	0	x 5 =	0
3				- Column Totals	90	(A)	340 (B)
4.				Prevalence Ir	ndex = B/A =	3.8	
5				- Hydrophytic Vegetatior	n Indicators:		
6.				1- Rapid Test for H	-lydrophytic V	egetatio	า
/				2 - Dominance Te	st is > 50%	0	
	20	= Total Cov	ver	3 - Prevalence Ind	lex is $\leq 3.0^1$		
<u>Herb Stratum</u> (Plot size: <u>5 ft</u>)				4 - Morphological	Adaptations ¹	(Provide	supporting
1. <i>Solidago canadensis</i>	50	Yes	FACU	- data in Remarks or on	a separate sh	ieet)	11 0
2. <i>Phalaris arundinacea</i>	10	No	FACW	Problematic Hydr	ophytic Vege	tation¹ (E	xplain)
3. <i>Galium mollugo</i>	10	No	FACU	¹ Indicators of hydric so	il and wetlan	d hydrolo	ogy must be
4				present, unless disturb	ed or probler	matic	
5				Definitions of Vegetation	on Strata:		
6				Tree – Woody plants 3	in. (7.6 cm) or	r more in	diameter at
7				breast height (DBH), re	gardless of h	eight.	
8				Sapling/shrub - Woody	/ plants less tl	han 3 in.	DBH and
9				greater than or equal t	o 3.28 ft (1 m) tall.	
10				Herb – All herbaceous	(non-woody)	plants, re	gardless of
11				size, and woody plants	less than 3.2	8 ft tall.	
12.				Woody vines – All wood	dy vines great	ter than 3	3.28 ft in
	70	= Total Cov	ver	neight.			
<u>Woody Vine Stratum</u> (Plot size: <u>30 ft</u>)		-		Hydrophytic Vegetatio	n Present?	/es l	No 🖌
1							
2.							
3.				-			
4.				-			
	0	= Total Cov	ver	-			
Remarks: (Include photo numbers here or on a se	parate sneet.)	500/ a f ala a		in indexed on FAC and			
No positive indication of hydrophytic vegetation w	/as observed (≥	50% of dom	ninant speci	les indexed as FAC- or dri	ler).		

SOIL

Profile Des	cription: (Describe	to the de	epth needed to d	ocum	nent the i	indicator	or confirm the a	bsence of indicator	s.)	
Deptn	Matrix		Redox	Feat	ures					. .
(inches)	Color (moist)	<u>%</u>	Color (moist)	%	Туре	LOC ²	lexture			Remarks
0 - 12	10YR 3/4	100		·			Silty Cla	y Loam		
12 - 18	10YR 3/4	95	7.5YR 4/6	5	C	M	Clay L	oam		
	-									
·				· —						
1Turnet C = C	Concontration D -	<u> </u>	p DM - Doducod	Mat		Maskad	Cand Crains 21	acation: DL - Dara I	ining A	A - Matrix
rtype: C = C	$D = \frac{1}{2}$	Depletio	n, RM = Reduced	wat	1X, IVIS =	wasked	Sand Grains. ² L	ocation: PL = Pore I	_ining, N	
Hydric Soil	Indicators:				<i>c</i>			Indicators for Pro	blemat	ic Hydric Soils ³ :
Histoso	I (A1)		Polyvalue Bel	ow S	urface (S	8) (LRR I	R, MLRA 149B)	2 cm Muck (A	10) (LRF	R K, L, MLRA 149B)
Histic Ep	Dipedon (A2)		Thin Dark Sui	tace	(S9) (LRF	R, MLRA	A 149B)	Coast Prairie	Redox (A16) (LRR K, L, R)
Black Hi	istic (A3)		Loamy Mucky	/ Min	eral (F1)	(LRR K, L	.)	5 cm Mucky P	Peat or F	Peat (S3) (LRR K, L, R)
Hydroge	en Suifide (A4)		Loamy Gleye		trix (F2)			Dark Surface	(S7) (LR	R K, L)
Stratille	d Balow Dark Surf:	200 (111)	Depieted Mar	urfa	-3) -0 (E6)			Polyvalue Bel	ow Surf	ace (S8) (LRR K, L)
Depiete	ark Surface (A12)		Depleted Dark	k Su	face (FO)	1		Thin Dark Sur	face (SS	9) (LRR K, L)
Sandy M	Aucky Mineral (S1)		Beday Denre	ssior	18CC (17)	,		Iron-Mangane	ese Mas	sses (F12) (LRR K, L, R)
Sandy G	Loved Matrix (S4)			33101	13 (10)			Piedmont Flo	odplain	Soils (F19) (MLRA 149B)
Sandy C								Mesic Spodic	(TA6) (N	/ILRA 144A, 145, 149B)
Sality P	d Matrix (SC)							Red Parent M	aterial ((F21)
Surpped			N D)					Very Shallow	Dark Su	ırface (TF12)
Dark Su	riace (S7) (LKK K, N	ILKA 149	3 B)					Other (Explain	n in Ren	narks)
³ Indicators	of hydrophytic veg	etation a	and wetland hydr	olog	y must b	e presen	t, unless disturbe	d or problematic.		
Restrictive	Layer (if observed):									
	Type:		None			Hvdric	Soil Present?		Yes	No 🖌
	Depth (inches):									
Pomarks:								·		
No positive	indication of hydri	ic soils w	as observed. The	· crite	rion for	hydric so	oil is not met.			

Soil Photos



Photo of Sample Plot North



US Army Corps of Engineers
Photo of Sample Plot West



Project/Site: Flat Cree	k Solar Projec	t	City/County:	Canajoharie, Mo	ontgomery County	/	Sampling Date: 20	021-Dec-06
Applicant/Owner: S	unEast				State: NY		Sampling Point: W-D	DJB-15_PEM-1
Investigator(s): Davi	id Bonomo, A	oi Light		Sec	tion, Township, Ra	nge: N/	4	
Landform (hillslope, te	errace, etc.):	Swale		Local relief	(concave, convex,	none):	Concave	
Subregion (LRR or MLF	RA): LRR	L		Lat:	42.8867027667	Long:	-74.52749155	Datum: WGS84
Soil Map Unit Name:	DaB - Darie	n silt loam					NWI classificati	on: None
Are climatic/hydrologi	c conditions o	n the site typica	l for this time	of year?	Yes 🟒 No 🔄	(If no	, explain in Remarks.	.)
Are Vegetation,	Soil, Soil	or Hydrology _ or Hydrology	significan	tly disturbed? problematic?	Are "Normal ((If needed, exi	Circumst	ances" present? v answers in Remark	Yes 🟒 No
, « e ' egetation,				problemater	(in needed) en	piani an	, anotrers in nemani	

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes 🟒 No									
Hydric Soil Present?	Yes 🟒 No	Is the Sampled Area within a Wetland?	Yes 🯒 No							
Wetland Hydrology Present?	Yes No	If yes, optional Wetland Site ID:	W-DJB-15							
Remarks: (Explain alternative procedures h	Remarks: (Explain alternative procedures here or in a separate report)									
Covertype is PEM. Area is wetland, all three wetland parameters are present.										

HYDROLOGY

Wetland Hydrology Indicators:				
Primary Indicators (minimum of one is require	; check all that apply)	Secondary Indicators (minimum of two required)		
 Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5) Inundation Visible on Aerial Imagery (B7) Sparsely Vegetated Concave Surface (B8) 	 Surface Soil Cracks (B6) Drainage Patterns (B10) Moss Trim Lines (B16) Dry-Season Water Table (C2) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (C9) Stunted or Stressed Plants (D1) Geomorphic Position (D2) Shallow Aquitard (D3) Microtopographic Relief (D4) FAC-Neutral Test (D5) 			
Field Observations:				
Surface Water Present? Yes 🟒 N	Depth (inches): 1	_		
Water Table Present? Yes 🟒 N	Depth (inches): 0	Wetland Hydrology Present? Yes No		
Saturation Present? Yes 🟒 N	Depth (inches): 0			
(includes capillary fringe)				
Describe Recorded Data (stream gauge, monit	ring well, aerial photos, previous inspections), if	available:		

Sampling Point: W-DJB-15_PEM-1

Tree Stratum (Plot size: 30 ft)	Absolute	Dominant	Indicator	Dominance Test works	heet:		
1	% Cover	Species?	Status	_ Number of Dominant S Are OBL, FACW, or FAC	Species That :	1	(A)
2.				Total Number of Domin	nant Species	1	(B)
3				Percent of Dominant S	pecies That	100	(A/B)
5.				- Are OBL, FACW, or FAC			
6.				Prevalence Index work	sheet:		_
7.				- <u>Iotal % Cover</u>	<u>or:</u>	Multiply	<u>ву:</u>
	0	= Total Cov	/er	- OBL species -	0	X I =	0
Sapling/Shrub Stratum (Plot size: 15 ft)		-		FACW species	95	x 2 =	190
1.				FAC species	5	x 3 =	15
2				– FACU species –	0	x 4 =	0
				– UPL species –	0	x 5 =	0
				– Column Totals	100	(A)	205 (B)
4. 				Prevalence Ir	ndex = B/A =	2.1	. <u> </u>
с				 Hydrophytic Vegetation 	n Indicators:		
0		<u> </u>		1- Rapid Test for H	Hydrophytic V	egetatior/	ı
/				2 - Dominance Te	st is >50%	-	
	0	= lotal Cov	ver	3 - Prevalence Inc	lex is $\leq 3.0^1$		
<u>Herb Stratum</u> (Plot size: <u>5 ft</u>)				4 - Morphological	Adaptations ¹	(Provide	supporting
1. <i>Phalaris arundinacea</i>	95	Yes	FACW	– data in Remarks or on	a separate sh	leet)	
2. <u>Rumex crispus</u>	5	No	FAC	Problematic Hydr	ophytic Vege	tation ¹ (E	xplain)
3				¹ Indicators of hydric so	il and wetlan	d hydrold	ogy must be
4				present, unless disturb	ed or probler	matic	
5				Definitions of Vegetation	on Strata:		
6				Tree – Woody plants 3	in. (7.6 cm) or	r more in	diameter at
7.				breast height (DBH), re	gardless of h	eight.	
8.				Sapling/shrub - Woody	/ plants less tl	han 3 in.	DBH and
9.				greater than or equal t	o 3.28 ft (1 m) tall.	
10.				Herb – All herbaceous	(non-woody)	plants, re	gardless of
11.				size, and woody plants	less than 3.2	8 ft tall.	
12				Woody vines – All wood	dy vines great	ter than 3	3.28 ft in
12		- Total Cov	or	height.			
Weedy Vine Stratum (Plat size) 20 ft	100	- 10tal Cov		Hydrophytic Vegetatio	n Present?	/es 🖌 I	No
1	·			-			
2				-			
3				_			
4				_			
	0	= Total Cov	ver				
Remarks: (Include photo numbers here or on a se	narato shoot)						

Remarks: (Include photo numbers here or on a separate sheet.)

A positive indication of hydrophytic vegetation was observed (>50% of dominant species indexed as OBL, FACW, or FAC). A positive indication of hydrophytic vegetation was observed (Prevalence Index is ≤ 3.00). A positive indication of hydrophytic vegetation was observed (Rapid Test for Hydrophytic Vegetation).

Profile Des	cription: (Describe t	o the	depth needed to d	locum	nent the	indicator	or confirm the	absence of indicato	rs.)
Depth	Matrix		Redox	Feat	ures				
(inches)	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²	Texture		Remarks
0 - 12	10YR 3/1	95	7.5YR 5/8	5	С	М	Silty Cl	ay Loam	
12 - 18	10YR 3/1	90	10YR 5/8	10	С	М	Silty Cl	ay Loam	
		·							
		·							
		· —				<u> </u>			
		· —							
		·							
		· —						·	
		· —		—					
	Concontration D - I	<u> </u>	ion DM - Doducor			Mackad	Cand Crains 2	l acation: DL - Dara	Lining M - Matrix
Type. C = C		Jepier	ion, Rivi – Reduced	i wau	1X, IVIS –	waskeu		Location. PL – Pore	chlamatia Undria Caila?
Hydric Soli			Dobarduo Do		urfaca (C			indicators for Pr	oblematic Hydric Solis ³ :
Histic E	n (AT)		Thin Dark Su	now S Infaco	(50) /I P	D D MIDA	, WILKA 1498)	2 cm Muck (#	A10) (LRR K, L, MLRA 149B)
Histic E	istic (A3)			v Min	(39) (LKr eral (F1)		(149D))	Coast Prairie	Redox (A16) (LRR K, L, R)
Hvdrog	en Sulfide (A4)		Loamy Gleve	ed Ma	trix (F2)		,	5 cm Mucky	Peat or Peat (S3) (LRR K, L, R)
Stratifie	d Layers (A5)		Depleted Ma	trix (I	-3)			Dark Surface	e (S7) (LRR K, L)
Deplete	d Below Dark Surfa	ice (A1	1)_✓ Redox Dark	Surfa	ce (F6)			Polyvalue Be	
Thick Da	ark Surface (A12)		Depleted Da	rk Su	face (F7)		Inin Dark Su	
Sandy N	/lucky Mineral (S1)		Redox Depre	essior	ıs (F8)			Iron-wangan Diodmont Ele	nese Masses (FT2) (LRR K, L, K)
Sandy C	Gleyed Matrix (S4)							Fleamont Fic	(TA6) (MI DA 144A 145 149B)
Sandy F	Redox (S5)							Red Parent N	Aaterial (E21)
Strippe	d Matrix (S6)							Very Shallow	Dark Surface (TE12)
Dark Su	irface (S7) (LRR R, M	ILRA 1	49B)					Other (Explai	in in Remarks)
3Indicators	of hydrophytic year	atation	and wetland byd	rolog	/ must h	o nroson	t unless disturb	ed or problematic	,
Restrictive	l aver (if observed):	ctation		10105	y must b		t, uniess distarb	led of problematic.	
Restrictive			None			Hydric	Soil Present?	,	Ves / No
	Depth (inches):		None			inguite	Son resent:		
Domorkei	Depth (inches).								
A positivo i	adication of hydric	coilwa	a observed The s	ritoria	n for hu	dric coil i	c mot		
A positive i	nuication of hydric	SOII Wa	is observed. The c	ntent	DITIOTINY		s met.		

Hydrology Photos



Soil Photos

Photo of Sample Plot North



Photo of Sample Plot South

Project/Site: Flat Cree	k Solar Projec	t	City/County:	Canajoharie,	Montgomery (County	Sampling Date:	2021-Dec-06
Applicant/Owner: S	unEast				State:	NY	Sampling Point: V	N-DJB-15_UPL-1
Investigator(s): Davi	d Bonomo, Al	oi Light		S	ection, Townsh	nip, Range: N	IA	
Landform (hillslope, te	rrace, etc.):	Hillslope		Local reli	ef (concave, c	onvex, none):	Undulating	Slope (%): 1 to 10
Subregion (LRR or MLF	RA): LRR	L		La	t: 42.886477	7 Long:	-74.5273751833	Datum: WGS84
Soil Map Unit Name:	DaB - Darier	n silt loam					NWI classific	ation: None
Are climatic/hydrologic	c conditions o	n the site typical	for this time	of year?	Yes 🟒	No (If n	o, explain in Remar	rks.)
Are Vegetation,	Soil,	or Hydrology	significan	tly disturbed?	Are "No	rmal Circums	stances" present?	Yes 🟒 No
Are Vegetation,	Soil,	or Hydrology	naturally	problematic?	(If need	ed, explain ar	ny answers in Rema	arks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes No 🟒								
Hydric Soil Present?	Yes No 🟒	Is the Sampled Area within a Wetland?	Yes No 🟒						
Wetland Hydrology Present?	Yes No 🟒	If yes, optional Wetland Site ID:							
Remarks: (Explain alternative procedures here or in a separate report)									
Covertype is UPL. Area is upland, not all three wetland parameters are present.									

HYDROLOGY

Wetland Hydrology Indicators:			
Primary Indicators (minimum of one is required; check all that apply)	Secondary Indicators (minimum of two required)		
	 Surface Soli Cracks (B6) Drainage Patterns (B10) Moss Trim Lines (B16) Dry-Season Water Table (C2) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (C9) 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 _ Depth (inches): Water Table Present? Yes No _ Depth (inches): Saturation Present? Yes No _ Depth (inches): (includes capillary fringe)	Wetland Hydrology Present? Yes No		
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if a Remarks: No positive indication of wetland hydrology was observed. The criterion for wetland hydrology is	not met.		

Sampling Point: W-DJB-15_UPL-1

Tree Stratum (Plot size: 30 ft)	Absolute	Dominant	Indicator	Dominance Test worksh	eet:		
	% Cover	Species?	Status	Are OBL, FACW, or FAC:	pecies That	0	(A)
2				Total Number of Domin	ant Species		(D)
3.				Across All Strata:		Z	(D)
4.				Percent of Dominant Sp	ecies That	0	(A/B)
5.				Are OBL, FACW, or FAC:			
6.				Prevalence Index works	heet:		_
7.				- Iotal % Cover of	<u>of:</u>	Multiply	<u>By:</u>
	0	= Total Cov	ver	- OBL species	0	x I =	0
Sapling/Shrub Stratum (Plot size: <u>15 ft</u>)		-			0	x 2 =	0
1.				FAC species	0	x 3 =	0
2.				- FACU species	100	x 4 =	400
3.				- UPL species	0	x 5 =	0
4.				- Column lotals	100	(A)	400 (B)
5.				Prevalence Inc	dex = B/A =	4	
6.				Hydrophytic Vegetation	Indicators:		
7.				1- Rapid Test for H	ydrophytic V	egetation/	ר
···	0	= Total Cov	er	2 - Dominance Tes	t is > 50%		
Herb Stratum (Plot size: 5 ft)		-		3 - Prevalence Inde	ex is $\leq 3.0^1$		
1 Phleum pratense	60	Yes	FACU	4 - Morphological /	Adaptations	Provide	supporting
2 Trifolium pratense	30	Ves	FACU	- data in Remarks or on a	separate sh	ieet)	
3 Tarayacum officinale	10	No	FACU	Problematic Hydro	phytic Vege	tation ¹ (E	xplain)
1		110	TACO	 ¹Indicators of hydric soil 	and wetlan	d hydrolc	ogy must be
		<u> </u>		present, unless disturbe	a or problei	matic	
S		<u> </u>			n Strata:		
7		<u> </u>		broast beight (DBH) reg	1. (7.6 CIII) OI	nore in	diameter at
/				Sanling/shrub - Woody	nlants less t	han 3 in	DBH and
o				greater than or equal to	3.28 ft (1 m) tall.	DDITAIL
				Herb – All herbaceous (r	non-woody)	plants, re	gardless of
10				size, and woody plants l	ess than 3.2	8 ft tall.	Baraicos er
12		<u> </u>		Woody vines - All wood	v vines great	ter than 3	.28 ft in
12		Tabal Car		height.	, 0		
	100	= lotal Cov	/er	Hydrophytic Vegetation	Present?	(es l	
Woody Vine Stratum (Plot size: <u>30 ft</u>)							
				-			
2				-			
3				-			
4		<u> </u>		-			
	0	= Total Cov	ver				
Remarks: (Include photo numbers here or on a separate	e sheet.)						
No positive indication of hydrophytic vegetation was ob-	served (≥	50% of don	ninant speci	es indexed as FAC– or drie	er).		

Depun Maurix		Dedev	Fast	urac	indicator			5.)	
(inches) Color (moist)	04	Color (moist)	reat	Turnel	1002	Tout	1170	Do	marka
(incries) Color (moist)	90	Color (moist)	90	туре	LOC ²	Text	ure	Re	marks
0-10 10YR 3/3	100				<u> </u>	SIIL LO	jam .		
10 - 18 10YR 3/4	95	10YR 5/8	5	<u> </u>	M	Silty Cla	y Loam		
	·								
	·								
	·								
Type: C = Concentration, D = I	Depletio	n, RM = Reduced	Mati	ix, MS =	Masked S	Sand Grains. ² Lo	ocation: PL = Pore L	ining, M = Matri	х.
lvdric Soil Indicators:							Indicators for Pro	blematic Hvdric	Soils ³ :
Histosol (A1)		Polvvalue Bel	ow S	urface (S	8) (LRR R	. MLRA 149B)			DA 140D)
Histic Epipedon (A2)		Thin Dark Su	face	(S9) (LRR	R. MLRA	149B)	2 cm Muck (A	IU) (LKK K, L, ML	ка 149В)
Black Histic (A3)		Loamy Mucky	/ Min	eral (F1)	LRR K. L)	Coast Prairie	Redox (A16) (LRF	(K, L, R)
		Loamy Gleye	d Ma	trix (F2)	. , ,		5 CITI MIUCKY P	(SZ) (I DD K I)	(LRR K, L, R)
Stratified Layers (A5)		Depleted Mat	trix (F	3)			Dark Surface	(S7) (LKK K, L)	
Depleted Below Dark Surfa	ice (A11)) Redox Dark S	urfa	ce (F6)			Polyvalue Ben	ow surface (So) (
Thick Dark Surface (A12)		Depleted Dar	k Sui	face (F7)				Tace (59) (LKK K,	
Sandy Mucky Mineral (S1)		Redox Depre	ssior	is (F8)			ITOTI-IVIATIgatie	ese Masses (FTZ)	
Sandy Gleyed Matrix (S4)							Pleumont Flo	(TAG) (MI DA 144	9) (MILKA 149D)
Sandy Redox (S5)							Iviesic spould	(TAO) (IVILKA 144	A, 145, 149D)
Stripped Matrix (S6)								aleriai (FZT) Dark Surfaco (TE	12)
Dark Surface (S7) (LRR R, N	ILRA 149	9B)					Very Shallow	Dark Surface (TF	12)
								r in Kennarks)	
ndicators of hydrophytic veg	etation a	and wetland hydr	ology	/ must be	e present	, unless disturbe	d or problematic.		
estrictive Layer (if observed):									
Туре:		None			Hydric	Soil Present?		Yes No 🟒	
Depth (inches):									
emarks: he criterion for hydric soil is i	not met.	No positive indic	atior	ı of hydri	c soils wa	as observed.			

Photo of Sample Plot North



Project/Site: Flat Cree	k Solar Projec	t	City/County:	Canajoharie, Mo	ontgomery Cou	unty	Sampling Date:	2021-Dec-06
Applicant/Owner: S	unEast				State: NY		Sampling Point: \	W-DJB16/17_UPL-1
Investigator(s): Davi	d Bonomo, Ab	i Light		Sect	tion, Township	, Range: N	٩	
Landform (hillslope, te	rrace, etc.):	Hillslope		Local relief	(concave, conv	vex, none):	Undulating	Slope (%): 1 to 10
Subregion (LRR or MLR	RA): LRR	L		Lat:	42.885834966	57 Long:	-74.5251447	Datum: WGS84
Soil Map Unit Name:	Ma - Madalir	n silty clay loam					NWI classific	ation: None
Are climatic/hydrologic	conditions o	n the site typical	for this time	of year?	Yes 🟒 No	o (If no	o, explain in Remai	rks.)
Are Vegetation,	Soil,	or Hydrology	significan	tly disturbed?	Are "Norm	nal Circumst	tances" present?	Yes 🟒 No
Are Vegetation,	Soil,	or Hydrology	naturally	problematic?	(If needed,	, explain an	y answers in Rem	arks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes No 🟒								
Hydric Soil Present?	Yes No 🟒	Is the Sampled Area within a Wetland?	Yes No 🟒						
Wetland Hydrology Present?	Yes No 🟒	If yes, optional Wetland Site ID:							
Remarks: (Explain alternative procedures here or in a separate report)									
Covertype is UPL. Area is upland, not all three wetland parameters are present.									

HYDROLOGY

Wetland Hydrology Indicators:			
Primary Indicators (minimum of on	e is required; check all that apply)	Secondary Indicators (minimum of two required)	
 Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5) Inundation Visible on Aerial Ima Sparsely Vegetated Concave Sur 	 Water-Stained Leaves (B9) Aquatic Fauna (B13) Marl Deposits (B15) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres on Living Roots (C3) Presence of Reduced Iron (C4) Recent Iron Reduction in Tilled Soils (C6) Thin Muck Surface (C7) gery (B7) Other (Explain in Remarks) 	 Surface Soil Cracks (B6) Drainage Patterns (B10) Moss Trim Lines (B16) Dry-Season Water Table (C2) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (C9) Stunted or Stressed Plants (D1) Geomorphic Position (D2) Shallow Aquitard (D3) Microtopographic Relief (D4) FAC-Neutral Test (D5) 	
Field Observations: Surface Water Present? Water Table Present? Saturation Present? (includes capillary fringe)	Yes No Depth (inches): Yes No Depth (inches): Yes No Depth (inches):	_ Wetland Hydrology Present? Yes №∠ 	
Describe Recorded Data (stream ga	uge, monitoring well, aerial photos, previous inspections), i	available:	
No positive indication of wetland hy	/drology was observed. The criterion for wetland hydrology	is not met.	

Sampling Point: W-DJB16/17_UPL-1

Tree Stratum (Plot size: 30 ft)	Absolute	Dominant	Indicator	Dominance Test works	sheet:		
	% Cover	Species?	Status	Are OBL_EACW_or_EAC	Species That	0	(A)
1		<u> </u>		Total Number of Domi	 inant Species		
2.				Across All Strata:		2	(B)
3		<u> </u>		Percent of Dominant	Species That	0	(A /P)
4. 		·		Are OBL, FACW, or FAC	:	0	(A/B)
5		·		 Prevalence Index work 	ksheet:		
7		·		- <u>Total % Cover</u>	<u>r of:</u>	<u>Multiply</u>	<u>/ By:</u>
		= Total Cov	٥r	 OBL species 	0	x 1 =	0
Sanling/Shruh Stratum (Plot size: 15 ft)				FACW species	0	x 2 =	0
1				FAC species	0	x 3 =	0
2		·		- FACU species	110	x 4 =	440
2		·		- UPL species	0	x 5 =	0
3				– Column Totals	110	(A)	440 (B)
4				Prevalence I	ndex = B/A =	4	
5		·		- Hydrophytic Vegetatio	n Indicators:		
b		·		1- Rapid Test for Hydrophytic Vegetation			
7				2 - Dominance Test is > 50%			
	0	= lotal Cov	er	3 - Prevalence Index is $≤ 3.0^1$			
<u>Herb Stratum</u> (Plot size: <u>5 ft</u>)	60			4 - Morphologica	l Adaptations	¹ (Provide	e supporting
1. Phleum pratense	60	Yes	FACU	– data in Remarks or on	a separate sh	neet)	
2. <u>Trifolium pratense</u>		Yes	FACU	Problematic Hyd	rophytic Vege	tation ¹ (E	xplain)
3. <u>Taraxacum officinale</u>	10	No	FACU	¹ Indicators of hydric se	oil and wetlan	d hydrolo	ogy must be
4. <u>Glechoma hederacea</u>	10	No	FACU	present, unless distur	bed or proble	matic	
5				_ Definitions of Vegetati	on Strata:		
6				Tree – Woody plants 3	in. (7.6 cm) o	r more in	diameter at
7				breast height (DBH), re	egardless of h	eight.	
8				_ Sapling/shrub – Wood	y plants less t	han 3 in.	DBH and
9				greater than or equal	to 3.28 ft (1 m) tall.	
10				Herb – All herbaceous	(non-woody)	plants, re	egardless of
11					s less than 3.2	8 IL LAII.	2.20 ft in
12				- hoight	dy vines grea	ter than :	3.28 It in
	110	= Total Cov	er				
Woody Vine Stratum (Plot size: <u>30 ft</u>)				Hydrophytic Vegetatio	on Present?	res	No 🟒
1				_			
2				_			
3							
4							
	0	= Total Cov	er				
Remarks: (Include photo numbers here or on a se	parate sheet)						
No positive indication of hydrophytic vegetation w	as observed (>	50% of dom	inant speci	ies indexed as FAC– or di	rier).		
					/-		

Profile Des	cription: (Describe	to the d	epth needed to de	ocum	nent the i	indicato	r or confirm the at	osence of indicators.)	
Depth	Matrix		Redox	Feat	tures				
(inches)	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²	Text	ure	Remarks
0 - 10	10YR 3/3	100					Silt Lo	bam	
10 - 18	10YR 3/4	95	10YR 5/8	5			Silty Clay	y Loam	
-				_				- · · ·	
_				_				· · · · · ·	
								<u></u>	
				—					
				—				·	
-				—					
							·		
				—					
-									
-									
¹ Type: C =	Concentration, D =	Depletic	on, RM = Reduced	Mat	rix, MS =	Masked	Sand Grains. ² Lo	ocation: PL = Pore Lini	ng, M = Matrix.
Hydric Soil	Indicators:							Indicators for Proble	matic Hydric Soils ³ :
Histoso	ol (A1)		Polyvalue Bel	ow S	urface (S	8) (LRR	R, MLRA 149B)	2 cm Muck (A10)	(I RR K I MI RA 149B)
Histic E	pipedon (A2)		Thin Dark Sur	face	(S9) (LRF	R, MLR	A 149B)	Coast Prairie Red	(2100, 100, 100, 100, 100, 100, 100, 100,
Black H	listic (A3)		Loamy Mucky	/ Min	eral (F1)	(LRR K,	L)	5 cm Mucky Peat	or Peat (S3) (IRR K I R)
Hydrog	gen Sulfide (A4)		Loamy Gleye	d Ma	trix (F2)			Dark Surface (S7)	
Stratifie	ed Layers (A5)		Depleted Mat	rix (I	-3)			Polyvalue Below	Surface (S8) (I RR K. I.)
Deplete	ed Below Dark Surf	ace (A11) Redox Dark S	urfa	ce (F6)			Thin Dark Surface	e (S9) (LRR K. L)
Thick D	ark Surface (A12)		Depleted Dar	k Su	rface (F7))		Iron-Manganese	Masses (F12) (I RR K. I. R)
Sandy I	Mucky Mineral (S1)		Redox Depre	ssior	ns (F8)			Piedmont Floods	lain Soils (F19) (MLRA 149B)
Sandy	Gleyed Matrix (S4)							Mesic Spodic (TA	6) (MLRA 144A, 145, 149B)
Sandy	Redox (S5)							Red Parent Mate	rial (F21)
Strippe	ed Matrix (S6)							Very Shallow Dar	k Surface (TF12)
Dark Si	urface (S7) (LRR R, N	/LRA 14	9B)					Other (Explain in	Remarks)
3 n dicatora	of budrophytic you	ratation	and watland by dr	مامح	musth		t uplace disturba	d or problematic	······,
-indicators	or nyurophytic veg	getation	and wettand hydr	olog	y must be	e preser	it, unless disturbed	u or problematic.	
Restrictive	Layer (if observed)						C 10 10		
	Type:		None			Hydric	Soil Present?	Yes	No
	Depth (inches):								
Remarks:									
The criterio	on for hydric soil is	not met	. No positive indic	atior	n of hydri	ic soils v	vas observed.		

Photo of Sample Plot North



Project/Site: Flat Cree	k Solar Projec	t <u>C</u>	ity/County:	Canajoharie, M	ontgomery County	/	Sampling Date:	2021-Dec-06
Applicant/Owner: S	unEast				State: NY		Sampling Point: <u>W</u>	/-DJB-16_PEM-1
Investigator(s): Davi	d Bonomo, Al	oi Light		Sec	tion, Township, Ra	nge: NA	A	
Landform (hillslope, te	rrace, etc.):	Swale		Local relief	f (concave, convex,	, none):	Concave	Slope (%): 1 to 10
Subregion (LRR or MLF	RA): LRR	L		Lat:	42.88614225	Long:	-74.5257134833	Datum: WGS84
Soil Map Unit Name:	LaC - Lansin	g silt loam					NWI classifica	ation: None
Are climatic/hydrologic	c conditions o	n the site typical fo	or this time	of year?	Yes 🟒 No 🔄	(lf no	, explain in Remarl	ks.)
Are Vegetation,	Soil,	or Hydrology	_ significant	tly disturbed?	Are "Normal (Circumst	ances" present?	Yes 🟒 No
Are Vegetation,	Soil,	or Hydrology	_ naturally p	problematic?	(If needed, ex	plain any	y answers in Rema	rks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes 🟒 No										
Hydric Soil Present?	Yes 🟒 No	Is the Sampled Area within a Wetland?	Yes 🯒 No								
Wetland Hydrology Present?	Yes 🟒 No	If yes, optional Wetland Site ID:	W-DJB-16								
Remarks: (Explain alternative procedures he	Remarks: (Explain alternative procedures here or in a separate report)										
Covertype is PEM. Area is wetland, all three wetland parameters are present.											

HYDROLOGY

Primary Indicators (minimum of one is required: check all that apply) Secondary Indicators (minimum of two required)	Wetland Hydrology Indicators:			
 ✓ Surface Water (A1)Water-Stained Leaves (B9)Surface Soil Cracks (B6)Surface Soil Cracks (C1)Surface Soil Cracks (C1)Surface Soil Cracks (C1)Surface Soil Cracks (C1)Surface Soil Cracks (C1)Surf	Primary Indicators (minimum of one is required; check all that apply)	Secondary Indicators (minimum of two required) Surface Soil Cracks (B6) Crainage Patterns (B10) Moss Trim Lines (B16) Dry-Season Water Table (C2) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (C9) 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 Depth (inches): 1 Nater Table Present? Yes _ ✓ No Depth (inches): 0 Wetland Hydrology Present? Yes _ ✓ No Saturation Present? Yes _ ✓ No Depth (inches): 0 0 Wetland Hydrology Present? Yes _ ✓ No Saturation Present? Yes _ ✓ No Depth (inches): 0 0 0 includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available: 0	 Surface Water (A1) Water-Stained Leaves (B9) High Water Table (A2) Aquatic Fauna (B13) Saturation (A3) Marl Deposits (B15) Water Marks (B1) Hydrogen Sulfide Odor (C1) Sediment Deposits (B2) Oxidized Rhizospheres on Living Roots (C3) Drift Deposits (B3) Presence of Reduced Iron (C4) Algal Mat or Crust (B4) Recent Iron Reduction in Tilled Soils (C6) Iron Deposits (B5) Thin Muck Surface (C7) Inundation Visible on Aerial Imagery (B7) Sparsely Vegetated Concave Surface (B8) 			
Surface Water Present? Yes ∠ No Depth (inches): 1 Nater Table Present? Yes ∠ No Depth (inches): 0 Saturation Present? Yes ∠ No Depth (inches): 0 includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available: Describe reserves of the stream gauge in the stream g	Field Observations:			
Water Table Present? Yes _ ✓ No Depth (inches): 0 Wetland Hydrology Present? Yes _ ✓ No Saturation Present? Yes _ ✓ No Depth (inches): 0 0 includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available: 0	Surface Water Present? Yes 🖌 No Depth (inches): 1			
Saturation Present? Yes No Depth (inches): 0_ includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:	Water Table Present? Yes 🖌 No Depth (inches): 0	Wetland Hydrology Present? Yes No		
includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:	Saturation Present? Yes 🖌 No Depth (inches): 0			
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), it	available:		
Remarks:	Remarks:	ned (primary and cocondany indicators were present)		

Sampling Point: W-DJB-16_PEM-1

Tree Stratum (Plot size: <u>30 ft</u>)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test works	heet: Species That	1	
1.				Are OBL, FACW, or FAC	:		(A)
2.				Total Number of Domin Across All Strata:	nant Species	1	(B)
4.				Percent of Dominant S	pecies That	100	(A/B)
5				ATE OBL, FACW, OF FAC	chaati		
6.				Tatal & Cavar	sneet:	Maria dationale a	D
7.				OPL spacios	<u>01.</u>		<u>ру.</u>
	0	= Total Cov	er		0	x I =	0
Sapling/Shrub Stratum (Plot size: 15 ft)		_		FACW species	95	x 2 =	190
1				FAC species	5	x 3 =	15
2				FACU species	0	x 4 =	0
2		······································		UPL species	0	x 5 =	0
5		· ·		Column Totals	100	(A)	205 (B)
-				Prevalence Ir	ndex = B/A =	2.1	
5		<u> </u>		Hydrophytic Vegetation	n Indicators:		
6				1- Rapid Test for H	-lydronhytic \	/egetation	
7					50%	egetation	
	0	= Total Cov	er	2 - Dominance re	$\int \frac{1}{2} \sqrt{\frac{1}{2}} = \frac{1}{2} \sqrt{\frac{1}{2}}$		
<u>Herb Stratum</u> (Plot size: <u>5 ft</u>)				3 - Prevalence inc	Adaptations ²	1 (Drovida	cupporting
1. <i>Phalaris arundinacea</i>	95	Yes	FACW	4 - Morphological	a sonarato sh		supporting
2. Rumex crispus	5	No	FAC	Broblomatic Hydr	a separate si conhytic Vogo	tation1 (Ev	(nlain)
3. Carex sp.	5	No	NI	1Indicators of hydric co	il and wotlan		piani)
4.		·			and or proble	u Hyurolog matic	gy must be
5.				Definitions of Vegetatic	on Strata	matic	
6							
7		······································		hreast beight (DBU) re	in. (7.6 cm) of	nore in c	lameter at
7		·		Sapling (shrub Wood)	garuless of fi	eigni. ban 2 in F	Diland
9.		·		greater than or equal t	o 3.28 ft (1 m) tall.	JBH and
10.				Herb – All herbaceous	(non-woody)	plants, reg	gardless of
11.		·		size, and woody plants	less than 3.2	8 ft tall.	
12				Woody vines - All wood	dy vines grea	ter than 3.	.28 ft in
	105	- Total Cov	or	height.			
Weady Vine Stratum (Plat size) 20 ft)	105	- 10tal COV		Hydrophytic Vegetatio	n Present?	res 🖌 N	lo
<u>woody vine Stratum</u> (Plot size: <u>30 it</u>)				, , , , , , , , , , , , , , , , , , ,			
1		·					
2.		······································					
3							
4.				.			
	0	= Total Cov	er				
Remarks: (Include photo numbers here or on a separat	e sheet.)			_			

A positive indication of hydrophytic vegetation was observed (>50% of dominant species indexed as OBL, FACW, or FAC). A positive indication of hydrophytic vegetation was observed (Prevalence Index is \leq 3.00).

Profile Des	cription: (Describe	to the o	depth needed to c	locun	nent the	indicato	r or confirm the	absence of indicato	ors.)
Depth	Matrix		Redox	Feat	ures				
(inches)	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²	Тех	kture	Remarks
0 - 12	10YR 3/1	95	7.5YR 5/8	5	С	М	Silty Cl	ay Loam	
12 - 18	10YR 3/1	90	10YR 5/8	10	С	М	Silty Cl	ay Loam	
						·			
				—					
				—					
						·			
1Tupo: C = C	Concontration D -		ion DM - Doducor		riv MC -	Maskad	Sand Grains 2	location: DL - Doro	Lipipg M - Matrix
Type. C = C		Deplet	ion, Rivi – Reduced	i wat	11X, 1VIS -	waskeu	Saliu Grains.	Indicators for D	roblematic Undric Coile3
			Pohyoluo Po		urfaco (S				roblematic Hydric Solls ³ .
Histic Fr	ninedon (A2)		Thin Dark Su	irface	(S9)/I PI		A 1498)	2 cm Muck (A10) (LRR K, L, MLRA 149B)
Black H	istic (A3)			v Mir	neral (F1)	(I RR K. I	()	Coast Prairie	e Redox (A16) (LRR K, L, R)
Hvdrog	en Sulfide (A4)		Loamy Gleve	ed Ma	itrix (F2)		_,	5 cm Mucky	Peat or Peat (S3) (LRR K, L, R)
Stratifie	d Layers (A5)		Depleted Ma	trix (F3)			Dark Surface	e (S/) (LRR K, L)
Deplete	d Below Dark Surfa	ace (A1	1) 🗸 Redox Dark	Surfa	ce (F6)				urface (SO) (LRR N, L)
Thick Da	ark Surface (A12)		Depleted Da	rk Su	rface (F7)			
Sandy N	/lucky Mineral (S1)		Redox Depre	essio	าร (F8)			li Oli-ivialigai Piedmont El	oodplain Soils (F12) (LKK K, L, K)
Sandy C	Gleyed Matrix (S4)							Mesic Spodi	c (TA6) (MI BA 1/1A 1/15 1/19B)
Sandy F	Redox (S5)							Red Parent l	Material (F21)
Strippe	d Matrix (S6)							Very Shallov	v Dark Surface (TF12)
Dark Su	ırface (S7) (LRR R, N	ILRA 1	49B)					Other (Expla	ain in Remarks)
³ Indicators	of hydrophytic yeg	etation	and wetland hyd	rolog	v must h	e nreser	nt unless disturb	ed or problematic	
Restrictive	l aver (if observed):		runa wettana nya	10105	y mase s		it, unicos distant		
Reserver	Type [.]	•	None			Hydric	Soil Present?		Yes / No
	Denth (inches):		Hone			ingane	Son resent.		
Bomarke:	Depth (inches).								
A positivo i	ndication of hydric	coiluur	c obcorried The c	ritori	on for hu	dric coil	ic mot		
A positive i	nuication of hydric	SOII Wa	is observed. The c	nten	on for hy	unc son	is met.		

Photo of Sample Plot North



Photo of Sample Plot South

Project/Site: Flat Creek Solar Project		City/County:	nty: Canajoharie, Montgomery County			Sampling Date: 2021-Dec-06			
Applicant/Owner: S	unEast				State: NY Sampling Point: W-DJB-17		-DJB-17_PEM-	I	
Investigator(s): Davi	id Bonomo, Al	oi Light		S	ection, Township, R	ange: N	Α		
Landform (hillslope, te	errace, etc.):	Hillslope		Local reli	ef (concave, conve	, none):	Concave	Slope (%)	: 10 to 20
Subregion (LRR or MLF	RA): LRR	L		La	it: 42.88563765	Long:	-74.52451925	Datum: V	VGS84
Soil Map Unit Name:	LaC - Lansin	g silt loam					NWI classificat	ti on: None	
Are climatic/hydrologi	c conditions o	n the site typica	l for this time	of year?	Yes 🟒 No _	(If no	, explain in Remark	s.)	
Are Vegetation, Are Vegetation,	Soil, Soil,	or Hydrology _ or Hydrology _	significant	tly disturbed? problematic?	Are "Normal (If needed, e:	Circums kplain an	tances" present? y answers in Remar	Yes N ks.)	0 🖌

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes 🟒 No									
Hydric Soil Present?	Yes 🟒 No	Is the Sampled Area within a Wetland?	Yes 🯒 No							
Wetland Hydrology Present?	Yes 🟒 No	If yes, optional Wetland Site ID:	W-DJB-17							
Remarks: (Explain alternative procedures here or in a separate report)										
Covertype is PEM. Area is wetland, all three wetland parameters are present. Pasture.										

HYDROLOGY

Wetland Hydrology Indicators:					
Primary Indicators (minimum of one is	s required; check all that	apply)	Secondary Indicators (minimum of two required)		
 Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5) Inundation Visible on Aerial Image Sparsely Vegetated Concave Surface 	Water-Stain Aquatic Far Marl Depor Hydrogen 1 Oxidized R Presence o Recent Iror Thin Muck ry (B7) Other (Expl ce (B8)	ned Leaves (B9) una (B13) sits (B15) Sulfide Odor (C1) hizospheres on Living Roots (C3) if Reduced Iron (C4) n Reduction in Tilled Soils (C6) Surface (C7) lain in Remarks)	 Surface Soil Cracks (B6) Drainage Patterns (B10) Moss Trim Lines (B16) Dry-Season Water Table (C2) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (C9) Stunted or Stressed Plants (D1) Geomorphic Position (D2) Shallow Aquitard (D3) Microtopographic Relief (D4) FAC-Neutral Test (D5) 		
Field Observations:					
Surface Water Present? Ye	es 🟒 No	Depth (inches): 1	_		
Water Table Present? Ye	es 🟒 No	Depth (inches): 0	Wetland Hydrology Present?	Yes 🟒 No	
Saturation Present? Ye	es 🟒 No	Depth (inches): 0	_		
(includes capillary fringe)					
Describe Recorded Data (stream gaug	e, monitoring well, aerial	photos, previous inspections), if	available:		

The criterion for wetland hydrology is met. A positive indication of wetland hydrology was observed (primary and secondary indicators were present).

Sampling Point: W-DJB-17_PEM-1

Tree Stratum (Plot size: <u>30 ft</u>)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksh Number of Dominant S	n eet: pecies That	2	
1.		<u> </u>		Are OBL, FACW, or FAC:		3	(A)
2.		·		 Total Number of Domin Across All Strata: 	ant Species	3	(B)
4.		·		 Percent of Dominant Species That Are OBL, FACW, or FAC: 		100	(A/B)
5				- Prevalence Index works	heet:		
6				- <u>Total % Cover</u>	of:	Multiply	By:
7				- OBL species	90	x 1 =	90
	0	= Total Cov	er	FACW species	10	x 2 =	20
Sapling/Shrub Stratum (Plot size: <u>15 ft</u>)				FAC species	0	x 3 =	0
1. <i>Cornus amomum</i>	10	Yes	FACW	– FACU species	0	x 4 =	0
2		<u> </u>		- LIPL species	0	×5=	0
3				- Column Totals	100	×) = _	110 (P)
4.				Brovalanco In	dov = P/A =	(A) 1 1	ПО (В)
5.					uex - D/A -		
6.				Hydrophytic Vegetation	Indicators:		
7.				1- Rapid Test for H	lydrophytic V	egetatior/	ו
	10	= Total Cov	er	2 - Dominance Tes	t is >50%		
Herb Stratum (Plot size: 5 ft)		-		3 - Prevalence Ind	ex is $\leq 3.0^1$		
1. Scirpus cyperinus	50	Yes	OBL	4 - Morphological	Adaptations	(Provide	supporting
2. Lythrum salicaria	30	Yes	OBL	- data in Remarks or on a	a separate sr	ieet)	
3. Typha latifolia	10	No	OBL	- Problematic Hydro	opnytic vege	tation' (E)	xpiain)
4.				- Indicators of nydric sol	i and wetian	a nyarolo matic	igy must be
5		<u> </u>		_ present, unless disturbe		Hall	
с. с		·			n Strata:		
7	·	·		_ Iree - woody plants 3 in	n. (7.6 cm) or tardless of b	nore in	diameter at
/		<u> </u>		Sapling/shrub Woody	plants loss t	ban 3 in 1	
o		·		greater than or equal to	3 28 ft (1 m) tall	DBITAIIG
9		·		- Herb - All herbaceous (non-woody)	nlants re	gardless of
		·		size, and woody plants	less than 3.2	8 ft tall.	Bulaicos ol
11		·		- Woody vines - All wood	v vines great	ter than 3	.28 ft in
12. <u></u>		<u> </u>		height.	,		
	90	= Total Cov	er	Hydrophytic Vegetation	Drocont?	/os / N	
Woody Vine Stratum (Plot size: <u>30 ft</u>)					I Flesent?	ies <u>v</u> i	NO
1				-			
2				_			
3				_			
4				_			
	0	= Total Cov	er				

Remarks: (Include photo numbers here or on a separate sheet.)

Pasture. A positive indication of hydrophytic vegetation was observed (>50% of dominant species indexed as OBL, FACW, or FAC). A positive indication of hydrophytic vegetation was observed (Prevalence Index is \leq 3.00). A positive indication of hydrophytic vegetation was observed (Rapid Test for Hydrophytic Vegetation).

Profile Des	cription: (Describe	to the de	epth needed to do	ocun	nent the i	indicato	r or confirm the ab	sence of indicato	ors.)
Depth	Matrix		Redox	Feat	tures				
(inches)	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²	Textu	ire	Remarks
0 - 6	10YR 2/2	100					Silty Clay	Loam	
6 - 16	10YR 4/2	95	7.5YR 5/8	5	С	М	Clay Lo	bam	
				—					
<u> </u>				—					
				—					
				—				<u> </u>	
				_					
							-		
				_					
				_					
¹ Type: C = C	Concentration, D =	Depletic	n, RM = Reduced	Mat	rix, MS =	Masked	Sand Grains. ² Lo	ocation: PL = Pore	Lining, M = Matrix.
Hydric Soil	Indicators:							Indicators for Pr	roblematic Hydric Soils³:
Histoso	l (A1)		Polyvalue Bel	ow S	urface (S	8) (LRR	R, MLRA 149B)	2 cm Muck (
Histic E	oipedon (A2)		Thin Dark Sur	face	(S9) (LRF	R, MLR	A 149B)	Coast Prairie	$\operatorname{Redox}(A16)(\mathbf{IPR} \mathbf{K} \mathbf{I} \mathbf{P})$
Black H	istic (A3)		Loamy Mucky	/ Mir	eral (F1)	(LRR K, I	_)	5 cm Mucky	
Hydrog	en Sulfide (A4)		Loamy Gleyed	d Ma	trix (F2)			Dark Surface	(S7) (I RR K I)
Stratifie	d Layers (A5)		Depleted Mat	rix (l	F3)			Polyvalue Be	elow Surface (S8) (I BR K 1)
Deplete	d Below Dark Surf	ace (A11) Redox Dark S	urfa	ce (F6)			Thin Dark Su	urface (S9) (LRR K L)
Thick Da	ark Surface (A12)		Depleted Dar	k Su	rface (F7))		Iron-Mangar	nese Masses (F12) (I RR K. L. R)
Sandy N	/lucky Mineral (S1)		Redox Depre	ssior	ns (F8)			Piedmont Fl	oodplain Soils (F19) (MI RA 149B)
Sandy C	Gleyed Matrix (S4)							Mesic Spodi	c (TA6) (MI RA 144A 145 149B)
Sandy F	Redox (S5)							Red Parent I	Material (F21)
Strippe	d Matrix (S6)							Very Shallow	v Dark Surface (TE12)
Dark Su	irface (S7) (LRR R, N	/LRA 149	9B)					Other (Expla	in in Remarks)
21 12 1	CL 1 1 1								
andicators	of hydrophytic veg	etation	and wetland hydr	olog	y must b	e preser	it, unless disturbed	d or problematic.	
Restrictive	Layer (if observed)								
	Туре:		None			Hydric	Soil Present?		Yes 🟒 No
-	Depth (inches):								
Remarks:									
A positive i	ndication of hydric	soil was	observed. The cr	iterio	on for hy	dric soil	is met.		

Hydrology Photos



Soil Photos



Photo of Sample Plot North



Photo of Sample Plot South



Project/Site: Flat Cree	k Solar Projec	t	City/County:	Canajoharie, Mo	ontgomery Count	у	Sampling Date:	2021-Dec-06
Applicant/Owner: S	unEast				State: NY		Sampling Point: W	-DJB-18_PEM-1
Investigator(s): Davi	d Bonomo, Al	oi Light		Sect	ion, Township, Ra	ange: N	4	
Landform (hillslope, te	rrace, etc.):	Depression		Local relief	(concave, convex	, none):	Concave	Slope (%): 1 to 10
Subregion (LRR or MLF	RA): LRR	L		Lat:	42.8796151833	Long:	-74.53942495	Datum: WGS84
Soil Map Unit Name:	AnB - Angol	a silt loam					NWI classifica	tion: None
Are climatic/hydrologic	c conditions o	n the site typical	for this time	of year?	Yes 🟒 No _	(lf nc	, explain in Remark	(S.)
Are Vegetation,	Soil,	or Hydrology	significan	tly disturbed?	Are "Normal	Circumst	ances" present?	Yes 🟒 No
Are Vegetation,	Soil,	or Hydrology	naturally	problematic?	(If needed, e>	cplain an	y answers in Remar	rks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes 🟒 No		
Hydric Soil Present?	Yes 🟒 No	Is the Sampled Area within a Wetland?	Yes 🟒 No
Wetland Hydrology Present?	Yes 🟒 No	If yes, optional Wetland Site ID:	W-DJB-18
Remarks: (Explain alternative procedures he	re or in a separate report)	
Covertype is PEM. Area is wetland, all three	wetland parameters are p	present.	

HYDROLOGY

Wetland Hydrology Indicators:						
Primary Indicators (minimum of o	ne is required; check all f	<u>that apply)</u>		Secondary Indicators (minimum of two required)		
 Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5) Inundation Visible on Aerial Im Sparsely Vegetated Concave Summer 	Water- Aquati Marl D Hydrog Oxidizi Preser Recent Thin M tagery (B7) Other urface (B8)	-Stained Leaves (B9) ic Fauna (B13) Deposits (B15) gen Sulfide Odor (C1) ed Rhizospheres on Living nce of Reduced Iron (C4) t Iron Reduction in Tilled S fuck Surface (C7) (Explain in Remarks)	Roots (C3) oils (C6)	 Surface Soil Cracks (B6) Drainage Patterns (B10) Moss Trim Lines (B16) Dry-Season Water Table (C2) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (C9) 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	Depth (inches):	1	_		
Water Table Present?	Yes 🟒 No	Depth (inches):	0	Wetland Hydrology Present? Yes No		
Saturation Present?	Yes 🟒 No	Depth (inches):	0	_		
(includes capillary fringe)						
Describe Recorded Data (stream g	;auge, monitoring well, a	erial photos, previous insp	pections), if	available:		

Remarks:

The criterion for wetland hydrology is met. A positive indication of wetland hydrology was observed (primary and secondary indicators were present).

Sampling Point: W-DJB-18_PEM-1

Tree Stratum (Plot size: 30 ft)	Absolute	Dominant	Indicator	Dominance Test works	heet:		
1	% Cover	Species?	Status	Number of Dominant S Are OBL, FACW, or FAC	Species That :	3	(A)
2.				Total Number of Domin	nant Species	3	(B)
3.		·		Percent of Dominant S	pecies That	100	(A /P)
5.			<u> </u>	Are OBL, FACW, or FAC	:	100	(A/ B)
6.				Prevalence Index work	sheet:		
7.		<u> </u>		<u>Total % Cover</u>	<u>of:</u>	<u>Multiply</u>	<u>By:</u>
···	0	= Total Cov	er	OBL species	0	x 1 =	0
Sanling/Shrub Stratum (Plot size: 15 ft)		-		FACW species	70	x 2 =	140
1 Rhampus cathartica	10	Ves	FAC	FAC species	30	x 3 =	90
	10	103	TAC	FACU species	0	x 4 =	0
2				UPL species	0	x 5 =	0
3		<u> </u>		Column Totals	100	(A)	230 (B)
4				Prevalence Ir	ndex = B/A =	2.3	_
5				Hydrophytic Vegetation	n Indicators:		
6				1- Rapid Test for H	-lydrophytic V	/egetation	
7				2 - Dominance Te	st is >50%	6866666	
	10	= Total Cov	er	✓ 3 - Prevalence Ind	lev is $< 3.0^{1}$		
Herb Stratum (Plot size: <u>5 ft</u>)				4 - Morphological	Adaptations	1 (Provide	supporting
1. <i>Phalaris arundinacea</i>	70	Yes	FACW	data in Remarks or on	a senarate sh	(Frovide neet)	supporting
2. <i>Solidago rugosa</i>	20	Yes	FAC	Problematic Hydr	ophytic Vege	tation ¹ (Ex	(plain)
3. <i>Carex sp.</i>	5	No	NI	¹ Indicators of hydric so	il and wetlan	d hvdrolo	gy must be
4.				present, unless disturb	ed or proble	matic	
5.				Definitions of Vegetation	on Strata:		
6.				Tree – Woody plants 3	in. (7.6 cm) or	r more in o	diameter at
7.				breast height (DBH), re	gardless of h	eight.	
8.				Sapling/shrub - Woody	, plants less t	han 3 in. [OBH and
9.				greater than or equal t	o 3.28 ft (1 m) tall.	
10.				Herb – All herbaceous	(non-woody)	plants, re	gardless of
11.				size, and woody plants	less than 3.2	8 ft tall.	
12.				Woody vines – All wood	dy vines great	ter than 3	.28 ft in
	95	= Total Cov	er	height.			
Woody Vine Stratum (Plot size: 30 ft)		-		Hydrophytic Vegetatio	n Present?	res 🟒 N	lo
1.							
2	·						
2							
^{4.}	0	= Total Cov	er				
	0	- 10101 000		<u></u>			
Remarks: (Include photo numbers here or on a separate	e sheet.)	W of domin	antenacios	indexed as ODL FACW a		itivo indic	ation of

A positive indication of hydrophytic vegetation was observed (>50% of dominant species indexed as OBL, FACW, or FAC). A positive indication of hydrophytic vegetation was observed (Prevalence Index is \leq 3.00).

Profile Des	cription: (Describe	to the o	depth needed to c	locun	nent the	indicato	r or confirm the	absence of indicato	ors.)
Depth	Matrix		Redox	Feat	ures				
(inches)	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²	Tex	ture	Remarks
0 - 10	10YR 3/1	95	7.5YR 5/8	5	С	М	Silty Cl	ay Loam	
10 - 18	10YR 4/1	90	10YR 5/8	10	С	М	Clay	Loam	
								<u> </u>	
								<u>.</u>	
	-					·			
						·	-		
				—			-		
				—		·	·		
1Tupo: C = C	Concontration D -		ion DM - Roducor		riv MC -	Maskod	Sand Grains 2		Lipipg M - Matrix
Type. C = C		Deplet	ion, Rivi – Reduced	i wat	fix, IVIS –	waskeu	Sanu Grains	Location. PL - Pore	
Hydric Soli			Dobashuo Do		urfaca (indicators for Pr	roblematic Hydric Solls ³ :
HISTOSO	n (AT)		Polyvalue Be	now S	(20) (1 P	00)(LKK ססוואו סס	r, IVILKA 149B) A 1708)	2 cm Muck (A10) (LRR K, L, MLRA 149B)
Black H	istic (A3)			v Mir	eral (E1)		A 1490)	Coast Prairie	e Redox (A16) (LRR K, L, R)
Hvdrog	en Sulfide (A4)		Loamy Gleve	nd Ma	itrix (F2)		_)	5 cm Mucky	Peat or Peat (S3) (LRR K, L, R)
Stratifie	d Lavers (A5)		✓ Depleted Ma	ntrix (F3)			Dark Surface	e (S7) (LRR K, L)
Deplete	d Below Dark Surfa	ace (A1	1)_✓ Redox Dark	Surfa	ce (F6)			Polyvalue Be	elow Surface (S8) (LRR K, L)
Thick Da	ark Surface (A12)		Depleted Da	rk Su	rface (F7)		Inin Dark St	
Sandy N	/lucky Mineral (S1)		Redox Depre	essio	าร (F8)				oodplain Soils (E19) (MI BA 1498)
Sandy C	Gleyed Matrix (S4)							Pleumont Pl	c (TAG) (MI DA 144A 145 149B)
Sandy F	Redox (S5)							Niesic Spour	Material (E21)
Strippe	d Matrix (S6)							Very Shallow	v Dark Surface (TE12)
Dark Su	urface (S7) (LRR R, N	ILRA 14	49B)					Other (Expla	ain in Remarks)
³ Indicators	of hydrophytic yeg	etation	and wetland hyd	rolog	v must h	e nreser	nt unless disturb	ed or problematic	
Restrictive	l aver (if observed):	ctution		10105	ymaseb		it, unicos distarte		
Reserver	Type [.]		None			Hydric	Soil Present?		Ves / No
	Depth (inches):		None			inyune	Son resent:		
Domarka	Depth (inches).								
A positivo i	ndication of hydric	coiluur	c obcorried The c	ritori	on for hu	dric coil	ic mot		
A positive i	ndication of hydric	SOII Wa	is observed. The c	riteri	on for ny	aric soli	is met.		

Soil Photos



Photo of Sample Plot North



Photo of Sample Plot South



Project/Site: Flat Cree	k Solar Projec	:	City/County:	Canajoharie, M	ontgomery Co	unty	Sampling Date: 2	2021-Dec-07	
Applicant/Owner: S	unEast				State: NY	,	Sampling Point: W-	DJB-18_UPL-1	
Investigator(s): Davi	d Bonomo, Ab	i Light		Sec	tion, Township	, Range: NA	4		
Landform (hillslope, te	rrace, etc.):	Hillslope		Local relief	(concave, con	vex, none):	Undulating	Slope (%):	1 to 10
Subregion (LRR or MLR	RA): LRR	_		Lat:	42.87961845	Long:	-74.5398364	Datum:W	GS84
Soil Map Unit Name:	AnB - Angola	i silt loam					NWI classificat	i on: None	
Are climatic/hydrologic	conditions o	n the site typical	for this time	of year?	Yes 🟒 No	o (If no	, explain in Remarks	s.)	
Are Vegetation 🟒,	Soil 🟒,	or Hydrology	significan	tly disturbed?	Are "Norm	nal Circumst	ances" present?	Yes No	_/_
Are Vegetation,	Soil,	or Hydrology	naturally	problematic?	(If needed	, explain an	y answers in Remarl	ks.)	

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes 🟒 No		
Hydric Soil Present?	Yes No 🟒	Is the Sampled Area within a Wetland?	Yes No 🟒
Wetland Hydrology Present?	Yes No _	If yes, optional Wetland Site ID:	
Remarks: (Explain alternative procedures her	e or in a separate report)		
Covertype is UPL. Area is upland, not all three	e wetland parameters are	present. Circumstances are not normal due to agricult	tural activities.

HYDROLOGY

Wetland Hydrology Indicators:						
Primary Indicators (minimum of one	<u>e is required; check all t</u>	hat apply)	Secondary Indicators (minimum of two required)			
 Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5) Iron Deposits (B5) Inundation Visible on Aerial Imagery (B7) Sparsely Vegetated Concave Surface (B8) 			 Surface Soil Cracks (B6) Drainage Patterns (B10) Moss Trim Lines (B16) Dry-Season Water Table (C2) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (C9) 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 🟒	Depth (inches):	_			
Water Table Present?	Yes No 🟒	Depth (inches):	Wetland Hydrology Present?	Yes No 🟒		
Saturation Present?	Yes No 🟒	Depth (inches):				
(includes capillary fringe)			—			
Describe Recorded Data (stream ga	uge, monitoring well, ae	erial photos, previous inspections), i	f available:			
Remarks:						
The criterion for wetland hydrology	is met. No positive indi	cation of wetland hydrology was ob	served.			

Sampling Point: W-DJB-18_UPL-1

Tree Stratum (Plot size: <u>30 ft</u>)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test work Number of Dominant	(sheet: Species That	4	<i>(</i> 1)
1				Are OBL, FACW, or FA	.C:	1	(A)
2.				Total Number of Dom Across All Strata:	ninant Species	1	(B)
3 4				Percent of Dominant	Species That	100	(A/B)
5				Prevalence Index wor	kshoot.		
6				Total % Cove	r of	Multiply	Bvr
7				OBL species	0	v 1 =	<u>. Dy.</u> 0
	0	= Total Cove	er	EACW species		× 2 –	0
Sapling/Shrub Stratum (Plot size: <u>15 ft</u>)		-		FACW Species		x 2 -	100
1.				FAC species		x 3 =	180
2.				FACU species	0	x 4 =	0
3.				UPL species	0	x 5 =	0
4				Column Totals	60	(A)	180 (B)
т		<u> </u>		Prevalence	Index = B/A =	3	
5.				Hydrophytic Vegetati	on Indicators:		
b				1- Rapid Test for	- Hydrophytic \	/egetatio	n
7				✓ 2 - Dominance 1	est is >50%	U	
	0	= Total Cove	er	✓ 3 - Prevalence Ir	ndex is $\leq 3.0^1$		
<u>Herb Stratum</u> (Plot size: <u>5 ft</u>)				4 - Morphologic	al Adaptations	¹ (Provide	supporting
1. <i>Setaria pumila</i>	60	Yes	FAC	data in Remarks or o	n a separate sh	(eet)	sapporting
2				Problematic Hyd	drophytic Vege	tation ¹ (E	xplain)
3.				Indicators of hydric s	soil and wetlan	d hydrolc	ogy must he
4.				present, unless distu	rbed or proble	matic	bgy must be
5.				Definitions of Vegetat	tion Strata		
6.				Tree - Woody plants	3 in (7.6 cm) or	r more in	diameter at
7				hreast height (DBH)	regardless of h	eight	diameter at
8				Sanling/shruh - Woo	dy plants less t	han 3 in	DBH and
0				greater than or equal	to 3.28 ft (1 m) tall.	DBH and
10				Herb – All herbaceou	s (non-woody)	nlants re	gardless of
10				size, and woody plan	ts less than 3.2	8 ft tall.	.gui uless oi
11				Woody vines - All wo	ody vines great	ter than 3	8 28 ft in
12				height	ouy vines grea		.201011
	60	= Total Cove	er				
<u>Woody Vine Stratum</u> (Plot size: <u>30 ft</u>)				Hydrophytic Vegetat	ion Present?	res 🟒 I	No
1							
2.							
3.							
4.							
	0	= Total Cove	er				

Active agricultural field. A positive indication of hydrophytic vegetation was observed (>50% of dominant species indexed as OBL, FACW, or FAC). A positive indication of hydrophytic vegetation was observed (Prevalence Index is \leq 3.00).

(inches) Color 0 - 16 10Y 0 - 16 20Y 0 - 16 10Y 0 - 16 10Y 10Y 10Y 10Y 10Y 10Y 10Y 10Y	(moist) % (R 4/4 100 (R 4/4 100 (R 4/4 100 (R 4/4 100 (A 2) (A2) (A2) (A2) (A2) (A1) (A2) (A1) (A2) (A2) (A2) (A3) (A2) (A3) (A2) (A3) (A2) (A3) (A5) (A3) (A5) (A1) (A5) (A3) (A	Color (moist) Color (moist)	% Typ	e ¹ Loc ²	Text Silty Cla	ture ay Loam ay Loa	Remarks
0 - 16 10Y 0 - 16 10Y	(A2) (A2) (A2) (A2) (A2) (A2) (A2) (A2) (A2) (A2) (A3) Dark Surface (A1 (A12) neral (S1) atrix (S4) (S6)	ion, RM = Reduced Polyvalue Bela Thin Dark Sur Loamy Gleyee Depleted Mat 1) Redox Dark S Depleted Darl Redox Depres	Matrix, M Matrix, M Matrix, M Matrix, M interal (Matrix (F face (S9) (Matrix (F face (S9) (Matrix (F face (S9) (Surface (F6) k Surface (F8)	C 1000 <pc 1000<="" p=""> C 1000 <pc 1000<="" p=""> C 1000 <pc 1000<="" p=""> <pc< th=""><th>Sand Grains. ²L</th><th>ay Loam</th><th>ng, M = Matrix. matic Hydric Soils³: (LRR K, L, MLRA 149B) dox (A16) (LRR K, L, R) tor Peat (S3) (LRR K, L, R)) (LRR K, L) Surface (S8) (LRR K, L) e (S9) (LRR K, L) Masses (F12) (LRR K, L, R) blain Soils (F19) (MLRA 149B)</th></pc<></pc></pc></pc></pc></pc></pc></pc></pc></pc></pc></pc></pc></pc></pc></pc></pc></pc></pc></pc></pc></pc></pc></pc></pc></pc></pc></pc></pc></pc></pc></pc></pc></pc></pc></pc></pc></pc></pc></pc></pc></pc></pc></pc></pc></pc></pc></pc></pc></pc></pc></pc></pc></pc></pc></pc></pc></pc></pc></pc>	Sand Grains. ² L	ay Loam	ng, M = Matrix. matic Hydric Soils ³ : (LRR K, L, MLRA 149B) dox (A16) (LRR K, L, R) tor Peat (S3) (LRR K, L, R)) (LRR K, L) Surface (S8) (LRR K, L) e (S9) (LRR K, L) Masses (F12) (LRR K, L, R) blain Soils (F19) (MLRA 149B)
¹ Type: C = Concentra Hydric Soil Indicator Histosol (A1) Histic Epipedon (Black Histic (A3) Hydrogen Sulfid Stratified Layers Depleted Below Thick Dark Surfa Sandy Mucky Mi Sandy Gleyed M. Sandy Redox (S5 Stripped Matrix	(A2) e (A4) (A5) Dark Surface (A1 ce (A12) neral (S1) atrix (S4) i) (S6)	ion, RM = Reduced Polyvalue Belu Thin Dark Sur Loamy Mucky Loamy Gleyec Depleted Mat 1) Redox Dark S Depleted Dari Redox Depres	Matrix, M Matrix, M Matrix, M Matrix, M Matrix (F face (S9) (Mineral (d Matrix (F rrix (F3) urface (F6 k Surface ssions (F8)	S = Masked S = Mask	5and Grains. ² L , MLRA 149B) , 149B))	Location: PL = Pore Linii Indicators for Proble 2 cm Muck (A10) 2 coast Prairie Red 2 cm Mucky Peat 5 cm Mucky Peat Dark Surface (S7) Polyvalue Below Thin Dark Surface Thin Dark Surface Iron-Manganese Piedmont Floodp	ng, M = Matrix. matic Hydric Soils ³ : (LRR K, L, MLRA 149B) lox (A16) (LRR K, L, R) : or Peat (S3) (LRR K, L, R)) (LRR K, L) Surface (S8) (LRR K, L) e (S9) (LRR K, L) Masses (F12) (LRR K, L, R) blain Soils (F19) (MLRA 149B)
¹ Type: C = Concentra Hydric Soil Indicator Histosol (A1) Histic Epipedon (Black Histic (A3) Hydrogen Sulfid Stratified Layers Depleted Below Thick Dark Surfa Sandy Mucky Mi Sandy Gleyed M. Sandy Redox (S5 Stripped Matrix	(A2) e (A4) (A5) Dark Surface (A1 ce (A12) neral (S1) atrix (S4) i) (S6)	ion, RM = Reduced Polyvalue Belo Thin Dark Sur Loamy Mucky Loamy Gleyec Depleted Mat 1) Redox Dark S Depleted Dari Redox Depres	Matrix, M Matrix, M Matrix, M Matrix, M in maral (Mineral (Mineral (Mineral (Mineral (Surface (F6 k Surface (F8))	S = Masked S = Mask	Sand Grains. ² L , MLRA 149B) , 149B))	Location: PL = Pore Linii Indicators for Proble 2 cm Muck (A10) Coast Prairie Red 5 cm Mucky Peat Dark Surface (S7) Polyvalue Below Thin Dark Surface Thin Dark Surface Iron-Manganese Piedmont Floodp	ng, M = Matrix. matic Hydric Soils ³ : (LRR K, L, MLRA 149B) lox (A16) (LRR K, L, R) : or Peat (S3) (LRR K, L, R)) (LRR K, L) Surface (S8) (LRR K, L) e (S9) (LRR K, L) Masses (F12) (LRR K, L, R) blain Soils (F19) (MLRA 149B)
¹ Type: C = Concentra Hydric Soil Indicator Histosol (A1) Histic Epipedon (Black Histic (A3) Hydrogen Sulfidd Stratified Layers Depleted Below Thick Dark Surfa Sandy Mucky Mi Sandy Gleyed M. Sandy Redox (S5 Stripped Matrix	(A2) e (A4) (A5) Dark Surface (A1 ce (A12) neral (S1) atrix (S4) i) (S6)	ion, RM = Reduced Polyvalue Bela Thin Dark Sur Loamy Mucky Loamy Gleyec Depleted Mat 1) Redox Dark S Depleted Darl Redox Depres	Matrix, M Matrix, M Matrix, M in market Matrix (Fa) urface (F6 k Surface ssions (F8)	2 (S8) (LRR F 	Sand Grains. ² L , MLRA 149B) , 149B))	Location: PL = Pore Linin Indicators for Proble 2 cm Muck (A10) Coast Prairie Red 5 cm Mucky Peat Dark Surface (S7) Polyvalue Below Thin Dark Surface Iron-Manganese Piedmont Floodp	ng, M = Matrix. matic Hydric Soils ³ : (LRR K, L, MLRA 149B) lox (A16) (LRR K, L, R) : or Peat (S3) (LRR K, L, R)) (LRR K, L) Surface (S8) (LRR K, L) e (S9) (LRR K, L) Masses (F12) (LRR K, L, R) blain Soils (F19) (MLRA 149B)
1Type: C = Concentro Hydric Soil Indicator Histosol (A1) Histic Epipedon (Black Histic (A3) Hydrogen Sulfidd Stratified Layers Depleted Below Thick Dark Surfa Sandy Mucky Mi Sandy Gleyed M Sandy Redox (S5 Stripped Matrix	ation, D = Depleti s: (A2) e (A4) (A5) Dark Surface (A1 ce (A12) neral (S1) atrix (S4) i) (S6)	ion, RM = Reduced Polyvalue Bela Thin Dark Sur Loamy Mucky Loamy Gleyed Depleted Mat 1) Redox Dark S Depleted Darl Redox Depres	Matrix, M Matrix, M Matrix, M Matrix (F Mineral (Mineral (Matrix (F3) urface (F6 k Surface ssions (F8)	5 = Masked 5 = Masked (S8) (LRR F RR R, MLR/ 1) (LRR K, L 2) F7)	Sand Grains. ² L , MLRA 149B) , 149B))	Location: PL = Pore Linin Indicators for Proble 2 cm Muck (A10) Coast Prairie Red 5 cm Mucky Peat Dark Surface (S7) Polyvalue Below Thin Dark Surface Iron-Manganese Piedmont Floodp	ng, M = Matrix. matic Hydric Soils ³ : (LRR K, L, MLRA 149B) lox (A16) (LRR K, L, R) : or Peat (S3) (LRR K, L, R)) (LRR K, L) Surface (S8) (LRR K, L) e (S9) (LRR K, L) Masses (F12) (LRR K, L, R) blain Soils (F19) (MLRA 149B)
¹ Type: C = Concentra Hydric Soil Indicator Histosol (A1) Histic Epipedon (Black Histic (A3) Hydrogen Sulfid Stratified Layers Depleted Below Thick Dark Surfa Sandy Mucky Mi Sandy Gleyed M Sandy Redox (S5 Stripped Matrix	ation, D = Depleti s: (A2) (A2) Dark Surface (A1 ce (A12) neral (S1) atrix (S4) (S6)	ion, RM = Reduced Polyvalue Bela Thin Dark Sur Loamy Mucky Loamy Gleyed Depleted Mat 1) Redox Dark S Depleted Darl Redox Depres	Matrix, M Matrix, M ow Surfac face (S9) (Mineral (Mineral (Matrix (F3) urface (F6) k Surface ssions (F8)	= (S8) (LRR F = (S8) (LRR F _RR R, MLR/ =1) (LRR K, L 2) F7)	Sand Grains. ² L , MLRA 149B) , 149B))	Location: PL = Pore Linin Indicators for Proble 2 cm Muck (A10) Coast Prairie Red 5 cm Mucky Peat Dark Surface (S7) Polyvalue Below Thin Dark Surface Iron-Manganese Piedmont Floodp	ng, M = Matrix. matic Hydric Soils ³ : (LRR K, L, MLRA 149B) lox (A16) (LRR K, L, R) : or Peat (S3) (LRR K, L, R)) (LRR K, L) Surface (S8) (LRR K, L) e (S9) (LRR K, L) Masses (F12) (LRR K, L, R) blain Soils (F19) (MLRA 149B)
¹ Type: C = Concentra Hydric Soil Indicator Histosol (A1) Histic Epipedon (Black Histic (A3) Hydrogen Sulfid Stratified Layers Depleted Below Thick Dark Surfa Sandy Mucky Mi Sandy Gleyed M Sandy Redox (S5 Stripped Matrix	ation, D = Depleti s: (A2) e (A4) (A5) Dark Surface (A1 ce (A12) neral (S1) atrix (S4) i) (S6)	ion, RM = Reduced Polyvalue Bela Thin Dark Sur Loamy Mucky Loamy Gleyec Depleted Mat 1) Redox Dark S Redox Depres	Matrix, M Matrix, M ow Surfac face (S9) (/ Mineral (d Matrix (F rrix (F3) urface (F6 k Surface ssions (F8)	≤ (S8) (LRR F S = Masked (S8) (LRR F RR R, MLR/ E1) (LRR K, L 2) F7)	Sand Grains. ² L , MLRA 149B) , 149B))	Location: PL = Pore Linin Indicators for Proble 2 cm Muck (A10) Coast Prairie Red 5 cm Mucky Peat Dark Surface (S7) Polyvalue Below Thin Dark Surface Iron-Manganese Piedmont Floodp	ng, M = Matrix. matic Hydric Soils ³ : (LRR K, L, MLRA 149B) dox (A16) (LRR K, L, R) : or Peat (S3) (LRR K, L, R)) (LRR K, L) Surface (S8) (LRR K, L) e (S9) (LRR K, L) Masses (F12) (LRR K, L, R) blain Soils (F19) (MLRA 149B)
¹ Type: C = Concentr. Hydric Soil Indicator Histosol (A1) Histic Epipedon (Black Histic (A3) Hydrogen Sulfide Stratified Layers Depleted Below Thick Dark Surfa Sandy Mucky Mi Sandy Gleyed M. Sandy Redox (S5 Stripped Matrix	ation, D = Depleti s: (A2) (A5) Dark Surface (A1 ce (A12) neral (S1) atrix (S4) i) (S6)	ion, RM = Reduced Polyvalue Bela Thin Dark Sur Loamy Mucky Loamy Gleyed Depleted Mat Depleted Mat Redox Dark S Redox Depres	Matrix, M ow Surfac face (S9) (/ Mineral (d Matrix (F rrix (F3) urface (F6 k Surface ssions (F8)	S = Masked 5 = Masked (S8) (LRR F .RR R, MLRA .RR R, MLRA .1) (LRR K, L 2) F7)	Sand Grains. ² L , MLRA 149B) , 149B))	Location: PL = Pore Linit Indicators for Proble 2 cm Muck (A10) Coast Prairie Rec 5 cm Mucky Peat Dark Surface (S7) Polyvalue Below Thin Dark Surface Iron-Manganese Piedmont Floodp	ng, M = Matrix. matic Hydric Soils ³ : (LRR K, L, MLRA 149B) dox (A16) (LRR K, L, R) : or Peat (S3) (LRR K, L, R)) (LRR K, L) Surface (S8) (LRR K, L) e (S9) (LRR K, L) Masses (F12) (LRR K, L, R) blain Soils (F19) (MLRA 149B)
¹ Type: C = Concentr. Hydric Soil Indicator Histosol (A1) Histic Epipedon Black Histic (A3) Hydrogen Sulfide Stratified Layers Depleted Below Thick Dark Surfa Sandy Mucky Mi Sandy Gleyed M. Sandy Redox (S5 Stripped Matrix	ation, D = Depleti s: (A2) (A5) Dark Surface (A1 ce (A12) neral (S1) atrix (S4) (S6)	ion, RM = Reduced Polyvalue Bela Thin Dark Sur Loamy Mucky Loamy Gleyed Depleted Mat 1) Redox Dark S Depleted Darl Redox Depres	Matrix, M ow Surfac face (S9) (/ Mineral (d Matrix (F rrix (F3) urface (F6 k Surface ssions (F8)	5 = Masked 5 = Masked (LRR F LRR R, MLRA 	Sand Grains. ² L , MLRA 149B) , 149B))	Location: PL = Pore Linit Indicators for Proble 2 cm Muck (A10) Coast Prairie Rec 5 cm Mucky Peat Dark Surface (S7) Polyvalue Below Thin Dark Surface Iron-Manganese Piedmont Floodp	ng, M = Matrix. matic Hydric Soils ³ : (LRR K, L, MLRA 149B) dox (A16) (LRR K, L, R) : or Peat (S3) (LRR K, L, R)) (LRR K, L) Surface (S8) (LRR K, L) e (S9) (LRR K, L) Masses (F12) (LRR K, L, R) blain Soils (F19) (MLRA 149B)
¹ Type: C = Concentr. Hydric Soil Indicator Histosol (A1) Histic Epipedon Black Histic (A3) Hydrogen Sulfide Stratified Layers Depleted Below Thick Dark Surfa Sandy Mucky Mi Sandy Gleyed M Sandy Redox (S5 Stripped Matrix	ation, D = Depleti s: (A2) (A5) Dark Surface (A1 ce (A12) neral (S1) atrix (S4) (S6)	ion, RM = Reduced Polyvalue Bela Thin Dark Sur Loamy Mucky Loamy Gleyed Depleted Mat 1) Redox Dark S Redox Dark S Redox Depres	Matrix, M ow Surfac face (S9) (/ Mineral (d Matrix (F rix (F3) urface (F6 k Surface ssions (F8)	= (58) (LRR F S = Masked CRR R, MLRA - 1) (LRR K, L 2) (F7)	5and Grains. ² L , MLRA 149B) . 149B))	Location: PL = Pore Linin Indicators for Proble 2 cm Muck (A10) Coast Prairie Red 5 cm Mucky Peat Dark Surface (S7) Polyvalue Below Thin Dark Surface Iron-Manganese Piedmont Floodp	ng, M = Matrix. matic Hydric Soils ³ : (LRR K, L, MLRA 149B) dox (A16) (LRR K, L, R) : or Peat (S3) (LRR K, L, R)) (LRR K, L) Surface (S8) (LRR K, L) e (S9) (LRR K, L) Masses (F12) (LRR K, L, R) blain Soils (F19) (MLRA 149B)
¹ Type: C = Concentry Hydric Soil Indicator Histosol (A1) Histic Epipedon Black Histic (A3) Hydrogen Sulfide Stratified Layers Depleted Below Thick Dark Surfa Sandy Mucky Mi Sandy Gleyed M Sandy Redox (S5 Stripped Matrix	ation, D = Depleti (A2) (A2) (A5) Dark Surface (A1 ce (A12) neral (S1) atrix (S4) (S6)	ion, RM = Reduced Polyvalue Bele Thin Dark Sur Loamy Mucky Loamy Gleyee Depleted Mat 1) Redox Dark S Depleted Dar Redox Depres	Matrix, M ow Surfac face (S9) (/ Mineral (d Matrix (F rix (F3) urface (F6 k Surface ssions (F8)	5 = Masked 5 = Masked (S8) (LRR F LRR R, MLRA T1) (LRR K, L 2) F7)	5and Grains. ² L , MLRA 149B) . 149B))	Location: PL = Pore Linin Indicators for Proble 2 cm Muck (A10) Coast Prairie Red 5 cm Mucky Peat Dark Surface (S7) Polyvalue Below Thin Dark Surface Iron-Manganese Piedmont Floodp	ng, M = Matrix. matic Hydric Soils ³ : (LRR K, L, MLRA 149B) dox (A16) (LRR K, L, R) tor Peat (S3) (LRR K, L, R)) (LRR K, L) Surface (S8) (LRR K, L) e (S9) (LRR K, L) Masses (F12) (LRR K, L, R) plain Soils (F19) (MLRA 149B)
1Type: C = Concentry Hydric Soil Indicator Histosol (A1) Histic Epipedon Black Histic (A3) Hydrogen Sulfid Stratified Layers Depleted Below Thick Dark Surfa Sandy Mucky Mi Sandy Gleyed M Sandy Redox (S5 Stripped Matrix	ation, D = Depleti (A2) (A2) (A5) Dark Surface (A1 ce (A12) neral (S1) atrix (S4) (S6)	ion, RM = Reduced Polyvalue Belu Thin Dark Sur Loamy Mucky Loamy Gleyee Depleted Mat 1) Redox Dark S Depleted Dari Redox Depres	Matrix, M ow Surfac face (S9) (/ Mineral (d Matrix (F rix (F3) urface (F6 k Surface ssions (F8)	5 = Masked (S8) (LRR F LRR R, MLRA (1) (LRR K, L 2) (F7)	Sand Grains. ² L , MLRA 149B) , 149B))	Location: PL = Pore Linin Indicators for Proble 2 cm Muck (A10) Coast Prairie Red 5 cm Mucky Peat Dark Surface (S7) Polyvalue Below Thin Dark Surface Iron-Manganese Piedmont Floodp	ng, M = Matrix. matic Hydric Soils ³ : (LRR K, L, MLRA 149B) dox (A16) (LRR K, L, R) tor Peat (S3) (LRR K, L, R)) (LRR K, L) Surface (S8) (LRR K, L) e (S9) (LRR K, L) Masses (F12) (LRR K, L, R) blain Soils (F19) (MLRA 149B)
¹ Type: C = Concentr Hydric Soil Indicator Histosol (A1) Histic Epipedon Black Histic (A3) Hydrogen Sulfid Stratified Layers Depleted Below Thick Dark Surfa Sandy Mucky Mi Sandy Gleyed M Sandy Redox (S5 Stripped Matrix	ation, D = Depleti (A2) (A2) (A5) Dark Surface (A1 ce (A12) neral (S1) atrix (S4) (S6)	ion, RM = Reduced Polyvalue Belu Thin Dark Sur Loamy Mucky Loamy Gleyed Depleted Mat Pepleted Darl Depleted Darl Redox Depres	Matrix, M ow Surfac face (S9) (/ Mineral (d Matrix (F crix (F3) urface (F6 k Surface ssions (F8)	S = Masked (S8) (LRR F LRR R, MLRA F1) (LRR K, L 2) (F7)	Sand Grains. ² L , MLRA 149B) 149B))	Location: PL = Pore Linit Indicators for Proble 2 cm Muck (A10) Coast Prairie Red 5 cm Mucky Peat Dark Surface (S7) Polyvalue Below Thin Dark Surface Iron-Manganese Piedmont Floodp	ng, M = Matrix. matic Hydric Soils ³ : (LRR K, L, MLRA 149B) dox (A16) (LRR K, L, R) tor Peat (S3) (LRR K, L, R)) (LRR K, L) Surface (S8) (LRR K, L) e (S9) (LRR K, L) Masses (F12) (LRR K, L, R) blain Soils (F19) (MLRA 149B)
¹ Type: C = Concentr Hydric Soil Indicator Histosol (A1) Histic Epipedon Black Histic (A3) Hydrogen Sulfid Stratified Layers Depleted Below Thick Dark Surfa Sandy Mucky Mi Sandy Gleyed M Sandy Redox (S5 Stripped Matrix	ation, D = Depleti (A2) (A2) (A5) Dark Surface (A1 ce (A12) neral (S1) atrix (S4) (S6)	ion, RM = Reduced	Matrix, M ow Surfac (face (S9) (v Mineral (d Matrix (F crix (F3) urface (F6 k Surface ssions (F8)	S = Masked (S8) (LRR F LRR R, MLRA F1) (LRR K, L 2) (F7)	Sand Grains. ² L ;, MLRA 149B) ; 149B))	Location: PL = Pore Lini Indicators for Proble 2 cm Muck (A10) Coast Prairie Red 5 cm Mucky Peat Dark Surface (S7) Polyvalue Below Thin Dark Surface Iron-Manganese Piedmont Floodp	ng, M = Matrix. matic Hydric Soils ³ : (LRR K, L, MLRA 149B) dox (A16) (LRR K, L, R) tor Peat (S3) (LRR K, L, R)) (LRR K, L) Surface (S8) (LRR K, L) e (S9) (LRR K, L) Masses (F12) (LRR K, L, R) blain Soils (F19) (MLRA 149B)
Hydric Soil Indicator Histosol (A1) Black Histic (A3) Hydrogen Sulfid Stratified Layers Depleted Below Thick Dark Surfa Sandy Mucky Mi Sandy Gleyed M. Sandy Redox (S5 Stripped Matrix	s: (A2) (A5) Dark Surface (A1 ce (A12) neral (S1) atrix (S4) ;) (S6)	Polyvalue Belo Thin Dark Sur Loamy Mucky Loamy Gleyed Depleted Mat 1) Redox Dark S Depleted Darl Redox Depres	ow Surfac face (S9) (/ Mineral (d Matrix (F d Matrix (F3) urface (F6 k Surface ssions (F8)	e (58) (LRR F LRR R, MLRA F1) (LRR K, L 2) i (F7)	2, MLRA 149B) . 149B))	Indicators for Proble 2 cm Muck (A10) Coast Prairie Red 5 cm Mucky Peat Dark Surface (S7) Polyvalue Below Thin Dark Surface Iron-Manganese Piedmont Floodp	matic Hydric Soils ³ : (LRR K, L, MLRA 149B) lox (A16) (LRR K, L, R) : or Peat (S3) (LRR K, L, R)) (LRR K, L) Surface (S8) (LRR K, L) e (S9) (LRR K, L) Masses (F12) (LRR K, L, R) plain Soils (F19) (MLRA 149B)
Histosol (A1) Histic Epipedon Black Histic (A3) Hydrogen Sulfid Stratified Layers Depleted Below Thick Dark Surfa Sandy Mucky Mi Sandy Gleyed M. Sandy Redox (S5 Stripped Matrix	(A2) e (A4) (A5) Dark Surface (A1 ce (A12) neral (S1) atrix (S4) 5) (S6)	 Polyvalue Bela Thin Dark Sur Loamy Mucky Loamy Gleyed Depleted Mat Redox Dark S Depleted Darl Redox Depression 	ow Surfac face (S9) (/ Mineral (d Matrix (F rrix (F3) urface (F6 k Surface ssions (F8)	e (S8) (LRR F LRR R, MLR/ F1) (LRR K, L 2)) (F7)	a, MLRA 149B) a 149B))	 2 cm Muck (A10) Coast Prairie Red 5 cm Mucky Peat Dark Surface (S7) Polyvalue Below Thin Dark Surface Iron-Manganese Piedmont Floodp 	(LRR K, L, MLRA 149B) dox (A16) (LRR K, L, R) : or Peat (S3) (LRR K, L, R)) (LRR K, L) Surface (S8) (LRR K, L) e (S9) (LRR K, L) Masses (F12) (LRR K, L, R) plain Soils (F19) (MLRA 149B)
Histic Epipedon Black Histic (A3) Hydrogen Sulfid Stratified Layers Depleted Below Thick Dark Surfa Sandy Mucky Mi Sandy Gleyed M Sandy Redox (S5 Stripped Matrix	(A2) e (A4) (A5) Dark Surface (A1 ce (A12) neral (S1) atrix (S4) 5) (S6)	Thin Dark Sur Loamy Mucky Loamy Gleyed Depleted Mat 1) Redox Dark S Depleted Darl Redox Depres	face (S9) (v Mineral (d Matrix (F rix (F3) urface (F6 k Surface ssions (F8)	LRR R, MLR/ F1) (LRR K, L 2)) [F7)	∖ 149B))	Coast Prairie Red 5 cm Mucky Peat Dark Surface (S7) Polyvalue Below Thin Dark Surface Iron-Manganese	iox (A16) (LRR K, L, R) cor Peat (S3) (LRR K, L, R)) (LRR K, L) Surface (S8) (LRR K, L) e (S9) (LRR K, L) Masses (F12) (LRR K, L, R)
 Black Histic (A3) Hydrogen Sulfid. Stratified Layers Depleted Below Thick Dark Surfa Sandy Mucky Mii Sandy Gleyed M. Sandy Redox (S5 Stripped Matrix 	e (A4) (A5) Dark Surface (A1 ce (A12) neral (S1) atrix (S4) 5) (S6)	Loamy Mucky Loamy Gleyed Depleted Mat) Redox Dark S Depleted Darl Redox Depres	/ Mineral (d Matrix (F rix (F3) urface (F6 k Surface ssions (F8)	F1) (LRR K, L 2)) [F7))	5 cm Mucky Peat Dark Surface (S7) Polyvalue Below Thin Dark Surface Iron-Manganese Piedmont Floodp	c or Peat (S3) (LRR K, L, R)) (LRR K, L) Surface (S8) (LRR K, L) e (S9) (LRR K, L) Masses (F12) (LRR K, L, R) plain Soils (F19) (MLRA 149B)
 Hydrogen Sulfid Stratified Layers Depleted Below Thick Dark Surfa Sandy Mucky Mi Sandy Gleyed M Sandy Redox (S5 Stripped Matrix 	e (A4) (A5) Dark Surface (A1 ce (A12) neral (S1) atrix (S4) ;) (S6)	Loamy Gleyed Depleted Mat 1) Redox Dark S Depleted Dar Redox Depres	d Matrix (F rix (F3) urface (F6 k Surface ssions (F8)	2)) [F7]		 Dark Surface (S7) Dark Surface (S7) Polyvalue Below Thin Dark Surface Iron-Manganese Piedmont Floodp) (LRR K, L) Surface (S8) (LRR K, L) e (S9) (LRR K, L) Masses (F12) (LRR K, L, R) blain Soils (F19) (MLRA 149B)
 Stratified Layers Depleted Below Thick Dark Surfa Sandy Mucky Mi Sandy Gleyed Ma Sandy Redox (S5 Stripped Matrix 	(A5) Dark Surface (A1 ce (A12) neral (S1) atrix (S4) ;) (S6)	Depleted Mat 1) Redox Dark S Depleted Dar Redox Depres	rix (F3) urface (F6 k Surface ssions (F8)) [F7]		Polyvalue Below Thin Dark Surfac Iron-Manganese Piedmont Floodp	Surface (S8) (LRR K, L) e (S9) (LRR K, L) Masses (F12) (LRR K, L, R) plain Soils (F19) (MLRA 149B)
Depleted Below Thick Dark Surfa Sandy Mucky Mi Sandy Gleyed M Sandy Redox (S5 Stripped Matrix	Dark Surface (A1 ce (A12) neral (S1) atrix (S4) 5) (S6)	1) Redox Dark S Depleted Darl Redox Depres	urface (F6 k Surface ssions (F8) (F7)		Thin Dark Surface Iron-Manganese Piedmont Floodp	e (S9) (LRR K, L) Masses (F12) (LRR K, L, R) blain Soils (F19) (MLRA 149B)
Thick Dark Surfa Sandy Mucky Mi Sandy Gleyed M Sandy Redox (S5 Stripped Matrix	ce (A12) neral (S1) atrix (S4) 5) (S6)	Depleted Dar Redox Depres	k Surface ssions (F8	(F7)		Iron-Manganese Piedmont Floodp	Masses (F12) (LRR K, L, R) blain Soils (F19) (MLRA 149B)
Sandy Mucky Mi Sandy Gleyed M Sandy Redox (S5 Stripped Matrix	neral (S1) atrix (S4) 5) (S6)	Redox Depres	ssions (F8			Piedmont Floodp	plain Soils (F19) (MLRA 149B)
Sandy Gleyed M Sandy Redox (S5 Stripped Matrix (atrix (S4) i) (S6)					/	
Sandy Redox (S5 Stripped Matrix (5) (S6)					Mesic Spodic (TA	6) (MLRA 144A, 145, 149B)
Stripped Matrix	(S6)					Red Parent Mate	rial (F21)
	()					Very Shallow Dar	k Surface (TF12)
Dark Surface (S7) (LRR R, MLRA 14	49B)				Other (Explain in	Remarks)
3Indicators of hydro	nhytic vegetation	and wetland hydr		t ha nrasan	unless disturbe	ed or problematic	
Postrictive Laver (if	phytic vegetation		ology mus	t be presen	, uniess distance	ed of problematic.	
	Juseiveu).	None		Ludric	Coil Drocont?	Vec	
Type:		None		Hydric	son Present?	res	NO
Depth (II	nches):						
NO positive indicatio	n of flyanc solis	was observed. The	chienon		n is not met.		



Soil Photos



Photo of Sample Plot North



Photo of Sample Plot East

Project/Site: Flat Cree	ek Solar Projec	t	City/County:	Canajoharie, Mo	ontgomery County	/	Sampling Date:	2021-Dec-07
Applicant/Owner:	SunEast				State: NY		Sampling Point: <u>W</u>	/-DJB-19_PEM-1
Investigator(s): Dav	id Bonomo, Al	oi Light		Sec	tion, Township, Ra	nge: NA	٨	
Landform (hillslope, te	errace, etc.):	Foot slope		Local relief	(concave, convex,	none):	Concave	Slope (%): 1 to 10
Subregion (LRR or ML	RA): LRR	L		Lat:	42.8818113833	Long:	-74.54498275	Datum: WGS84
Soil Map Unit Name:	Lac - Lansin	g silt loam					NWI classifica	ation: None
Are climatic/hydrologi	ic conditions o	n the site typical	for this time	of year?	Yes 🟒 No 🔄	(If no	, explain in Remarl	ks.)
Are Vegetation,	Soil,	or Hydrology	significan	tly disturbed?	Are "Normal C	Circumst	ances" present?	Yes 🟒 No
Are Vegetation,	Soil,	or Hydrology	naturally	problematic?	(If needed, ex	plain any	/ answers in Rema	rks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes 🟒 No								
Hydric Soil Present?	Yes 🟒 No	Is the Sampled Area within a Wetland?	Yes 🟒 No _						
Wetland Hydrology Present?	Yes 🟒 No	If yes, optional Wetland Site ID:	W-DJB-19						
Remarks: (Explain alternative procedures he	Remarks: (Explain alternative procedures here or in a separate report)								
Covertype is PEM. Area is wetland, all three	wetland parameters are p	resent.							

HYDROLOGY

Wetland Hydrology Indicators:					
Primary Indicators (minimum of o	<u>ne is required; check all t</u>	Secondary Indicators (minimum of two required)			
 Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5) Inundation Visible on Aerial Im Sparsely Vegetated Concave Summer Sparsely Vegetated Concave Spars	Water-: Aquatio Marl Du Hydrog Oxidize Presen Recent Thin M uagery (B7) Other (urface (B8)	Stained Leaves (B9) c Fauna (B13) eposits (B15) gen Sulfide Odor (C1) ed Rhizospheres on Living ce of Reduced Iron (C4) Iron Reduction in Tilled S uck Surface (C7) Explain in Remarks)	Roots (C3) oils (C6)	 Surface Soil Cracks (B6) Drainage Patterns (B10) Moss Trim Lines (B16) Dry-Season Water Table (C2) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (C9) Stunted or Stressed Plants (D1) Geomorphic Position (D2) Shallow Aquitard (D3) Microtopographic Relief (D4) FAC-Neutral Test (D5) 	
Field Observations:	Yes No /	Depth (inches):			
Water Table Present?	Yes No	Depth (inches):	0	- Wetland Hydrology Present? Yes _∠ No	
Saturation Present?	Yes 🟒 No	Depth (inches):	6	-	
(includes capillary fringe)					
Describe Recorded Data (stream g Remarks: The criterion for wetland hydrolog	guge, monitoring well, ad	erial photos, previous ins	pections), if	available: 	
		-			

Sampling Point: W-DJB-19_PEM-1

Tree Christian (Distring) 20 ft)	Absolute	Dominant	Indicator	Dominance Test works	heet:		
<u>Tree Stratum</u> (Plot Size: <u>30 IL</u>)	% Cover	Species?	Status	Number of Dominant S	pecies That	1	(A)
2.		:		Total Number of Domir	nant Species	1	(B)
3		·		 Percent of Dominant S Are OBL EACW or EAC 	pecies That	100	(A/B)
5				- Brovalance Index works			
6					of:	Multiply	D.e
7					0	<u>v 1 –</u>	<u> </u>
	0	= Total Cov	er	- CNV species	100	×1- ×2-	200
Sapling/Shrub Stratum (Plot size: <u>15 ft</u>)		-		FACW species	100	x Z -	200
1.				FAC species	0	x 3 = .	0
2.		·		- FACU species -	0	x 4 =	0
3.				– UPL species –	0	x 5 =	0
4		·		– Column Totals –	100	(A)	200 (B)
5.	. <u> </u>	<u> </u>		Prevalence In	idex = B/A =	2	
6	·	······································		 Hydrophytic Vegetatior 	Indicators:		
7				1- Rapid Test for H	lydrophytic V	egetatior/	۱
/		- Total Cov	or	2 - Dominance Te	st is >50%		
Lloub Streture (Plat size) E ft	0			3 - Prevalence Ind	ex is $\leq 3.0^1$		
Herb Stratum (Plot size: <u>5 It</u>)	100	Vee		4 - Morphological	Adaptations ¹	(Provide	supporting
	100	res	FACW	– data in Remarks or on a	a separate sh	leet)	
2		·		Problematic Hydr	ophytic Vege	tation ¹ (E	xplain)
3				_ Indicators of hydric so	il and wetlan	d hydrolo	ogy must be
4				present, unless disturb	ed or probler	matic	
5				_ Definitions of Vegetation	on Strata:		
6				Tree – Woody plants 3 i	n. (7.6 cm) or	r more in	diameter at
7				breast height (DBH), re	gardless of h	eight.	
8.				Sapling/shrub - Woody	plants less tl	han 3 in. I	DBH and
9.				greater than or equal to	o 3.28 ft (1 m) tall.	
10.				Herb – All herbaceous ((non-woody)	plants, re	gardless of
11.				size, and woody plants	less than 3.2	8 ft tall.	
12.		·		Woody vines – All wood	dy vines great	ter than 3	.28 ft in
	100	= Total Cov	er	height.			
Woody Vine Stratum (Plot size: 30 ft)		-		Hydrophytic Vegetatio	n Present?	/es 🟒 🏻 🖌	No
1.							
2		·		-			
		·		-			
				-			
^{4.}		- Tatal Car		-			
	0		ei				

Remarks: (Include photo numbers here or on a separate sheet.)

A positive indication of hydrophytic vegetation was observed (Rapid Test for Hydrophytic Vegetation). A positive indication of hydrophytic vegetation was observed (Prevalence Index is \leq 3.00). A positive indication of hydrophytic vegetation was observed (>50% of dominant species indexed as OBL, FACW, or FAC).

Profile Des	cription: (Describe t	o the d	epth needed to d	locun	nent the	indicato	r or confirm the a	absence of indicators.)
Depth	Matrix		Redox	Feat	ures			
(inches)	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²	Texture	e Remarks
0 - 18	10YR 3/1	95	7.5YR 5/8	5	С	М	Clay Loa	am
				·				
				·				
				· —				
				·				
				· —				
				· —				
				· —				· · · · · · · · · · · · · · · · · · ·
				· —				
				. —			<u> </u>	
¹ Type: C = C	Concentration, D = [Depletio	on, RM = Reduced	l Mat	rix, MS =	Masked	Sand Grains. ² L	Location: PL = Pore Lining, M = Matrix.
Hydric Soil	Indicators:							Indicators for Problematic Hydric Soils ³ :
Histoso	I (A1)		Polyvalue Be	low S	Surface (S	58) (LRR	R, MLRA 149B)	2 cm Muck (A10) (LRR K, L, MLRA 149B)
Histic Ep	bipedon (A2)		Thin Dark Su	rface	(S9) (LRI	R R, MLR	A 149B)	Coast Prairie Redox (A16) (LRR K, L, R)
Black Hi	ISTIC (A3)		Loamy Muck	y Mir	ieral (F1)	(LRR K,	L)	5 cm Mucky Peat or Peat (S3) (LRR K, L, R)
Hyuroge Stratifio	d Lavors (A5)		Loany Gleye	triv (Dark Surface (S7) (LRR K, L)
Denlete	d Below Dark Surfa	ice (A11) Z Redox Dark	Surfa	r 5) ce (F6)			Polyvalue Below Surface (S8) (LRR K, L)
Thick Da	ark Surface (A12)		Depleted Da	rk Su	rface (F7)		Thin Dark Surface (S9) (LRR K, L)
Sandy N	lucky Mineral (S1)		Redox Depre	ession	ns (F8)	,		Iron-Manganese Masses (F12) (LRR K, L, R)
Sandy G	leved Matrix (S4)				. ,			Piedmont Floodplain Soils (F19) (MLRA 149B)
Sandy R	Redox (S5)							Mesic Spodic (TA6) (MLRA 144A, 145, 149B)
Stripped	d Matrix (S6)							Red Parent Material (F21)
Dark Su	rface (S7) (LRR R. M	ILRA 14	9B)					Very Shallow Dark Surface (TF12)
			- •					Other (Explain in Remarks)
³ Indicators	of hydrophytic vege	etation	and wetland hyd	rolog	y must b	e preser	nt, unless disturbe	ed or problematic.
Restrictive	Layer (if observed):							
	Туре:		None			Hydric	Soil Present?	Yes 🟒 No
	Depth (inches):							
Remarks:								
A positive in	ndication of hydric s	soil was	s observed. The c	riteri	on for hy	dric soil	is met.	
		<u>.</u>						
Hydrology Photos



Soil Photos



Photo of Sample Plot North



Northcentral and Northeast Region -- Version 2.0 Adapted by TRC

Photo of Sample Plot South



Project/Site: Flat Cree	ek Solar Pr	oject	City/County:	Canajoharie, Mo	ntgomery Coun	ty	Sampling Date:	2021-Dec-07
Applicant/Owner:	SunEast				State: NY		Sampling Point: <u>W</u>	/-DJB-19_PUB-2
Investigator(s): Dav	id Bonom	o, Abi Light		Secti	on, Township, R	ange: NA	A	
Landform (hillslope, te	errace, etc): Depression		Local relief (concave, conve	k, none):	Concave	Slope (%): 1 to 10
Subregion (LRR or ML	RA):	LRR L		Lat:	42.881432	Long:	-74.544475	Datum: WGS84
Soil Map Unit Name:	MmB - M	/lanheim silt loam					NWI classifica	ition: PUS
Are climatic/hydrologi	ic conditio	ns on the site typical	for this time	of year?	Yes 🟒 No _	(lf no	, explain in Remarl	<s.)< td=""></s.)<>
Are Vegetation,	Soil,	or Hydrology	significan	tly disturbed?	Are "Normal	Circumst	ances" present?	Yes 🟒 No
Are Vegetation,	Soil,	or Hydrology _	naturally	problematic?	(If needed, e	xplain any	y answers in Rema	rks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes 🟒 No									
Hydric Soil Present?	Yes 🟒 No	Is the Sampled Area within a Wetland?	Yes 🟒 No							
Wetland Hydrology Present?	Yes 🟒 No	If yes, optional Wetland Site ID:	W-DJB-19							
Remarks: (Explain alternative procedures here or in a separate report)										
Covertype is PUB. Area is wetland, all three wetland parameters are present.										

HYDROLOGY

Wetland Hydrology Indicators:							
Primary Indicators (minimum o	f one is required; check	<u>all that apply)</u>		Secondary Indicators (minimum of two required)			
 ✓ Surface Water (A1) ✓ High Water Table (A2) ✓ Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5) Inundation Visible on Aerial Sparsely Vegetated Concave 	Wat Aqu Mat Oxi Oxi Pre Rec Thir Imagery (B7) Oth e Surface (B8)	ter-Stained Leaves (B9) uatic Fauna (B13) rl Deposits (B15) Irogen Sulfide Odor (C1) dized Rhizospheres on Living sence of Reduced Iron (C4) ent Iron Reduction in Tilled S n Muck Surface (C7) er (Explain in Remarks)	g Roots (C3) Soils (C6)	 Surface Soil Cracks (B6) Drainage Patterns (B10) Moss Trim Lines (B16) Dry-Season Water Table (C2) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (C9) 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	Depth (inches):	2	_			
Water Table Present?	Yes 🖌 No	Depth (inches):	0	Wetland Hydrology Present? Yes No			
Saturation Present?	Yes 🟒 No	Depth (inches):	6				
(includes capillary fringe)							
Describe Recorded Data (strea	m gauge, monitoring wel	ll, aerial photos, previous ins	pections), if	available:			

Remarks:

The criterion for wetland hydrology is met. A positive indication of wetland hydrology was observed (primary and secondary indicators were present).

VEGETATION -- Use scientific names of plants.

Sampling Point: W-DJB-19_PUB-2

The State of the S	Absolute	Dominant	Indicator	Dominance Test works	heet:		
<u>Iree Stratum</u> (Plot size: <u>30 ft</u>)	% Cover	Species?	Status	Number of Dominant S	Species That	2	(A)
1				Are OBL, FACW, or FAC	:		
2.		· ·		- Across All Strata:	nant Species	2	(B)
3		<u> </u>		Percent of Dominant S	pecies That		
4				Are OBL, FACW, or FAC	•	100	(A/B)
s		·		 Prevalence Index work 	sheet:		
7				- <u>Total % Cover</u>	of:	<u>Multiply</u>	By:
/		- Total Cav	o.r.	 OBL species 	60	x 1 =	60
Cardina (Charden Charten (Distaire) 45 ft	0	_ 10tal Cov	er	FACW species	40	x 2 =	80
Sapling/Shrub Stratum (Plot size: <u>15 ft</u>)				FAC species	0	x 3 =	0
1				– FACU species	0	x 4 =	0
2		<u> </u>		– UPL species	0	x 5 =	0
3				– Column Totals	100	(A)	140 (B)
4.				Prevalence In	ndex = B/A =	1.4	
5.		<u> </u>		 Hydrophytic Vegetation 	n Indicators:		
6		<u> </u>		1- Rapid Test for I	Hydrophytic V	/egetation	
/				2 - Dominance Te	st is >50%	0	
	0	= lotal Cov	er	3 - Prevalence Inc	dex is $\leq 3.0^1$		
<u>Herb Stratum</u> (Plot size: <u>5 ft</u>)				4 - Morphologica	Adaptations ¹	(Provide	supporting
1. <u>Typha angustifolia</u>	50	Yes	OBL	– data in Remarks or on	a separate sh	leet)	
2. <i>Phalaris arundinacea</i>	40	Yes	FACW	Problematic Hydr	rophytic Vege	tation ¹ (Ex	(plain)
3. <i>Lythrum salicaria</i>	10	No	OBL	_ 1Indicators of hydric so	il and wetlan	d hydrolog	gy must be
4				present, unless disturb	ed or probler	matic	
5				Definitions of Vegetation	on Strata:		
6				Tree – Woody plants 3	in. (7.6 cm) or	r more in o	diameter at
7				breast height (DBH), re	gardless of h	eight.	
8				Sapling/shrub - Woody	/ plants less tl	han 3 in. D	OBH and
9.				greater than or equal t	o 3.28 ft (1 m) tall.	
10.				Herb – All herbaceous	(non-woody)	plants, reg	gardless of
11.				size, and woody plants	less than 3.2	8 ft tall.	
12.				Woody vines – All woo	dy vines great	ter than 3.	.28 ft in
	100	= Total Cov	er	height.			
<u>Woody Vine Stratum</u> (Plot size: <u>30 ft</u>)		-		Hydrophytic Vegetatio	on Present?	/es 🟒 N	lo
1.							
2.							
3.				-			
4.		·		-			
	0	= Total Cov	er	-			
Remarks: (Include photo numbers here or on a sen	arate sheet)						

Remarks: (Include photo numbers here or on a separate sheet.)

A positive indication of hydrophytic vegetation was observed (>50% of dominant species indexed as OBL, FACW, or FAC). A positive indication of hydrophytic vegetation was observed (Prevalence Index is ≤ 3.00). A positive indication of hydrophytic vegetation was observed (Rapid Test for Hydrophytic Vegetation).

SOIL

1 1011111	Profile Description: (Describe to the depth needed to document the indicator or confirm th							absence of indicators.)
(inchoc)	Color (moist)	04	Color (moist)	14 real	Tupol	1.002	Toytura	Domarka
		100		70	туре	LUC	Silt Loor	
0 - 0	101R 3/1		7 EVD 4/6				Clavel oa	m
0-10	101R 5/1	95	7.518 4/6	<u> </u>	<u> </u>	IVI		
				—	<u> </u>			
				—				
				—				
-								
-								
				_				
-								
-								
¹ Type: C = 0	Concentration, D =	Depletic	on, RM = Reduced	Mat	rix, MS =	Masked	Sand Grains. ² L	ocation: PL = Pore Lining, M = Matrix.
Hydric Soil	Indicators:							Indicators for Problematic Hydric Soils ³ :
Histoso	l (A1)		Polyvalue Bel	ow S	urface (S	58) (LRR F	R, MLRA 149B)	2 cm Muck (A10) (LRR K. L. MLRA 149B)
Histic E	pipedon (A2)		Thin Dark Su	face	(S9) (LRF	R, MLRA	A 149B)	Coast Prairie Redox (A16) (I RR K. L. R)
Black H	istic (A3)		Loamy Mucky	/ Min	eral (F1)	(LRR K, L	.)	5 cm Mucky Peat or Peat (S3) (LRR K. L. R)
Hydrog	en Sulfide (A4)		Loamy Gleye	d Ma	trix (F2)			Dark Surface (S7) (LRR K, L)
Stratifie	d Layers (A5)		Depleted Mat	trix (I	-3)			Polyvalue Below Surface (S8) (LRR K, L)
Deplete	d Below Dark Surf	ace (A11)_✓ Redox Dark S	urfa	ce (F6)			Thin Dark Surface (S9) (LRR K, L)
Thick D	ark Surface (A12)		Depleted Dar	k Sui	face (F7))		Iron-Manganese Masses (F12) (LRR K, L, R)
Sandy M	/lucky Mineral (ST)		Redox Depre	ssior	IS (F8)			Piedmont Floodplain Soils (F19) (MLRA 149B)
Sandy (Gleyed Matrix (S4)							Mesic Spodic (TA6) (MLRA 144A, 145, 149B)
Sandy F	Redox (S5)							Red Parent Material (F21)
Strippe	d Matrix (S6)							Very Shallow Dark Surface (TF12)
Dark Su	irface (S7) (LRR R, N	ILRA 149	9B)					Other (Explain in Remarks)
³ Indicators	of hydrophytic veg	getation	and wetland hydr	olog	y must b	e presen	t, unless disturbe	ed or problematic.
Restrictive	Layer (if observed)	:						
	Туре:		None			Hydric	Soil Present?	Yes 🟒 No
	Depth (inches):							
Remarks:								
A positive i	ndication of hydric	soil was	observed. The cr	iterio	on for hy	dric soil i	s met.	

Hydrology Photos



Photo of Sample Plot North



Photo of Sample Plot East

Project/Site: Flat Cree	k Solar Projec	t	City/County:	Canajoharie, Mo	ontgomery County	/	Sampling Date: 2	021-Dec-07
Applicant/Owner: S	unEast				State: NY		Sampling Point: W-	DJB-19_UPL-1
Investigator(s): Davi	d Bonomo, Al	oi Light		Sect	tion, Township, Ra	nge: NA	A	
Landform (hillslope, te	rrace, etc.):	Knoll		Local relief	(concave, convex,	none):	Convex	Slope (%): 1 to 10
Subregion (LRR or MLF	RA): LRR	L		Lat:	42.8815839809	Long:	-74.5446937833	Datum: WGS84
Soil Map Unit Name:	LaB - Lansin	g silt loam					NWI classificat	ion: None
Are climatic/hydrologic	c conditions o	n the site typical i	for this time	of year?	Yes 🟒 No 🔄	(If no	, explain in Remarks	5.)
Are Vegetation 🟒,	Soil,	or Hydrology	significan	tly disturbed?	Are "Normal (Circumst	ances" present?	Yes 🟒 No
Are Vegetation,	Soil,	or Hydrology	naturally	problematic?	(If needed, ex	plain an	y answers in Remark	<s.)< td=""></s.)<>

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes No 🟒									
Hydric Soil Present?	Yes No 🟒	Is the Sampled Area within a Wetland?	Yes No 🟒							
Wetland Hydrology Present?	Yes No 🟒	If yes, optional Wetland Site ID:								
Remarks: (Explain alternative procedures here or in a separate report)										
Covertype is UPL. Area is upland, not all three wetland parameters are present. Circumstances are not normal due to mowing of vegetation.										

HYDROLOGY

Wetland Hydrology Indicators:							
Primary Indicators (minimum of one	e is required; check all that a	pply)	Secondary Indicators (minimum of two required)				
 Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5) Inundation Visible on Aerial Ima Sparsely Vegetated Concave Sur 	Water-Stain Aquatic Fau Marl Deposi Hydrogen S Oxidized Rh Presence of Recent Iron Thin Muck S gery (B7) Other (Expla face (B8)	ed Leaves (B9) na (B13) its (B15) ulfide Odor (C1) izospheres on Living Roots (C3) Reduced Iron (C4) Reduction in Tilled Soils (C6) iurface (C7) ain in Remarks)	 Surface Soft Cracks (B6) Drainage Patterns (B10) Moss Trim Lines (B16) Dry-Season Water Table (C2) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (C9) Stunted or Stressed Plants (D1) Geomorphic Position (D2) Shallow Aquitard (D3) Microtopographic Relief (D4) FAC-Neutral Test (D5) 				
Field Observations: Surface Water Present? Water Table Present? Saturation Present? (includes capillary fringe)	Yes No _∠ [Yes No _∠ [Yes No _∠ [Depth (inches): Depth (inches): Depth (inches):	Wetland Hydrology Present?	Yes No			
Describe Recorded Data (stream ga	uge, monitoring well, aerial	photos, previous inspections), if a	available:				
Remarks:							
The criterion for wetland hydrology	is not met. No positive indic	ation of wetland hydrology was o	bbserved.				

VEGETATION -- Use scientific names of plants.

Sampling Point: W-DJB-19_UPL-1

Tree Stratum (Plot size: 30 ft)	Absolute	Dominant	Indicator	Dominance Test worksheet:		
	% Cover	Species?	Status	Number of Dominant Species That	0	(A)
1				- Total Number of Dominant Species		
2				Across All Strata:	1	(B)
3				Percent of Dominant Species That		
4				- Are OBL, FACW, or FAC:	0	(A/B)
5				 Prevalence Index worksheet: 		
6				– Total % Cover of:	Multiply	By:
7				– OBL species 0	x 1 =	0
	0	= Total Cov	er	FACW species 20	x 2 =	40
Sapling/Shrub Stratum (Plot size: <u>15 ft</u>)				FAC species 0	x 3 =	0
1				– FACU species 10	x 4 =	40
2				– UPL species 0	x 5 =	0
3				– Column Totals 30	(A) -	80 (B)
4				– Prevalence Index = B/A =	2.7	00 (D)
5		<u> </u>		- Hydrophytic Vegetation Indicators:		
6				- 1- Rapid Test for Hydrophytic	Vegetation	,
7				2 - Dominance Test is > 50%	vegetation	1
	0	= Total Cov	er	2 = 2 = 2 = 2 = 2 = 2 = 2 = 2 = 2 = 2 =		
Herb Stratum (Plot size: <u>5 ft</u>)				<u>4</u> Morphological Adaptations	1 (Provide	supporting
1. <u>Poaceae</u>	80	Yes	NI	- data in Remarks or on a separate s	neet)	supporting
2. <i>Phalaris arundinacea</i>	20	No	FACW	– Problematic Hydrophytic Vege	etation ¹ (E)	(plain)
3. <i>Taraxacum officinale</i>	10	No	FACU	 Indicators of hydric soil and wetlar 	nd hvdrolo	gy must be
4.				present, unless disturbed or proble	matic	0,
5				Definitions of Vegetation Strata:		
6				Tree – Woody plants 3 in. (7.6 cm) o	r more in <i>i</i>	diameter at
7				breast height (DBH), regardless of h	ieight.	
8				Sapling/shrub - Woody plants less	:han 3 in. [OBH and
9.				greater than or equal to 3.28 ft (1 m	ı) tall.	
10				Herb – All herbaceous (non-woody)	plants, reg	gardless of
11.				size, and woody plants less than 3.2	28 ft tall.	
12.				Woody vines – All woody vines grea	ter than 3	.28 ft in
	110	= Total Cov	er	neight.		
<u>Woody Vine Stratum</u> (Plot size: <u>30 ft</u>)		_		Hydrophytic Vegetation Present?	Yes N	No 🔽
1						
2.						
3.						
4.						
	0	= Total Cov	er			
Remarks: (Include photo numbers here or on a separate	sheet)					
Residential lawn. A positive indication of bydrophytic ver	petation v	vas observe	d (Prevaler	ace index is < 3.00		
	5-141011			ice index is <u>=</u> 5.00j.		

SOIL

Profile Desc Depth	ription: (Describe Matrix	to the de	epth needed to de Redox	ocum Feat	ient the i	ndicato	r or confirm the al	bsence of indicato	ors.)	
(inches)	Color (moist)	%	Color (moist)	%	Type ¹	L oc²	Text	ure		Remarks
0.5	10VR 3/2	100			туре		Silty Cla	vloam		Remarks
5 - 18	10VR 3/4	100					Silty Cla	y Loam		
<u>J-10</u>	1011(3/4	100		-				y Loann		
				-						
¹ Type: $C = C$	oncentration, D =	Depletic	n, RM = Reduced	Mati	rix, MS =	Masked	Sand Grains. ² Lo	ocation: PL = Pore	Lining, I	M = Matrix.
Hydric Soil	ndicators:	•						Indicators for Pr	roblemat	tic Hydric Soils ³ :
Histosol	(A1)		Polyvalue Bel	ow S	urface (S	8) (LRR	R, MLRA 149B)	2 cm Muck (A10) (I DI	
Histic Ep	oipedon (A2)		Thin Dark Su	face	(S9) (LRR	R, MLR	A 149B)	2 CITI MUCK (A	AIU) (LRI	
Black Hi	stic (A3)		Loamy Mucky	/ Min	eral (F1)	(LRR K, I	_)	Coast Prairie	Post or l	
Hydroge	en Sulfide (A4)		Loamy Gleye	d Ma	trix (F2)			5 CHI MuCKy	(S7) (I D	real (33) (LKK K, L, K)
Stratifie	d Layers (A5)		Depleted Mat	trix (F	-3)					
Deplete	d Below Dark Surfa	ace (A11) Redox Dark S	urfac	ce (F6)			Toiyvalue Be	irfaca (S	
Thick Da	ark Surface (A12)		Depleted Dar	k Sui	face (F7)			Iron-Mangar	nese Mas	
Sandy N	lucky Mineral (S1)		Redox Depre	ssior	ıs (F8)			Piedmont El	oodolain	Soils (F19) (MI RA 149R)
Sandy G	ileyed Matrix (S4)							Nesic Spodi	с (ТА6) (N	MI PA 1//A 1/5 1/98)
Sandy R	edox (S5)							Red Parent N	Material	(E21)
Stripped	d Matrix (S6)							Very Shallow	v Dark Si	(FZT)
Dark Su	rface (S7) (LRR R, N	/LRA 149	9B)					Other (Expla	in in Rer	marks)
a. I										hanksy
andicators	of hydrophytic veg	etation	and wetland hydr	ology	y must be	e preser	it, unless disturbe	d or problematic.		
Restrictive I	_ayer (if observed):									
	Туре:		None			Hydric	Soil Present?		Yes	_ No
	Depth (inches):									
No positive	indication of hydri	ic soils w	ras observed. The	· crite	rion for	hydric si	oil is not met.			

Soil Photos



Photo of Sample Plot East



US Army Corps of Engineers

Northcentral and Northeast Region -- Version 2.0 Adapted by TRC

Photo of Sample Plot West



Project/Site: Flat Creek	Solar Project		City/County:	Canajoharie, Mo	ntgomery	County		Sampling Date: 20	21-Aug-17	
Applicant/Owner: Su	ınEast				State:	New York		Sampling Point: W-E	ES-01_PEM-	1
Investigator(s): Ethar	n Snyder, Stev	e Spotts, Cory D	unning	Sect	ion, Towns	ship, Range	e: N/	4		
Landform (hillslope, ter	race, etc.):	Depression		Local relief	(concave,	convex, no	ne):	Concave	Slope (%)	: 10 to 20
Subregion (LRR or MLR/	A): LRR L	-		Lat:	42.861012	29 Lo	ong:	-74.5364211	Datum: V	VGS84
Soil Map Unit Name:	Lansing and	Mohawk silt loa	ms, very stee	p				NWI classificatio	on:	
Are climatic/hydrologic	conditions or	the site typical	for this time	of year?	Yes 🟒	_No	(lf no	, explain in Remarks.))	
Are Vegetation, Are Vegetation,	Soil , Soil,	or Hydrology or Hydrology	∠_ significant naturally	tly disturbed? problematic?	Are "N (If nee	ormal Circ ded, explai	umst in an	ances" present? y answers in Remarks	Yes N 5.)	0 🖌

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes 🟒 No									
Hydric Soil Present?	Yes 🟒 No	Is the Sampled Area within a Wetland?	Yes 🟒 No							
Wetland Hydrology Present?	Yes 🟒 No	lf yes, optional Wetland Site ID:	W-EES-01							
Remarks: (Explain alternative procedures here or in a separate report)										
Covertype is PEM. Area is wetland, all three wetland parameters are present. area historically excavated, disturbed .										

HYDROLOGY

Wetland Hydrology Indicators:			
Primary Indicators (minimum of one is required; check all that apply)	Secondary Indicators (minimum of two required)		
 ✓ Surface Water (A1) ✓ Water-Stained Leaves (B9) ✓ High Water Table (A2) △ Aquatic Fauna (B13) ✓ Saturation (A3) △ Marl Deposits (B15) △ Water Marks (B1) △ Yedrogen Sulfide Odor (C1) △ Sediment Deposits (B2) △ Oxidized Rhizospheres on Living Roots (C3) △ Drift Deposits (B3) △ Presence of Reduced Iron (C4) △ Algal Mat or Crust (B4) △ Recent Iron Reduction in Tilled Soils (C6) △ Iron Deposits (B5) △ Thin Muck Surface (C7) △ Inundation Visible on Aerial Imagery (B7) △ Sparsely Vegetated Concave Surface (B8) 	 Surface Soil Cracks (B6) Drainage Patterns (B10) Moss Trim Lines (B16) Dry-Season Water Table (C2) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (C9) 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 Depth (inches): 1	_		
Water Table Present? Yes 🖌 No Depth (inches): 0	Wetland Hydrology Present? Yes No		
Saturation Present? Yes 🖌 No Depth (inches): 0			
(includes capillary fringe)			
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if	available:		

VEGETATION -- Use scientific names of plants.

Sampling Point: W-EES-01_PEM-1

<u>Tree Stratum</u> (Plot size: <u>30 ft</u>)	Absolute % Cover	Dominant	Indicator	Dominance Test works	heet:		
1	70 COVE	opecies:	Status	Are OBL FACW or FAC	:	4	(A)
1				Total Number of Domi	nant Species	·	
2.				Across All Strata:		4	(B)
3.		•		Percent of Dominant S	pecies That	400	(4.(5))
4				Are OBL, FACW, or FAC	•	100	(A/B)
6		•		 Prevalence Index work 	sheet:		
7				- <u>Total % Cover</u>	of:	<u>Multiply</u>	<u>By:</u>
7		- Tatal Cau		OBL species	0	x 1 =	0
Cauling (Church Churchange (Distrained AF ft)	0		er	FACW species	115	x 2 =	230
<u>Sapling/Shrub Stratum</u> (Plot size: <u>15 ft</u>)	-		EA CIAL	FAC species	7	x 3 =	21
1. Ulmus americana	5	Yes	FACW	FACU species	0	x 4 =	0
2. Carpinus caroliniana	5	Yes	FAC	UPL species	0	x 5 =	0
3. <u>Dirca palustris</u>	2	No	FAC	Column Totals	122	(A)	251 (B)
4				Prevalence Ir	ndex = B/A =	2.1	
5				Hydronbytic Vegetation	n Indicators:		
6				1- Rapid Test for I	Hydronhytic V	/egetation	n
7				- 2 - Dominance Te	st is >50%	regetation	
	12	= Total Cov	er	2 Dominance ne	$\frac{1}{1000} = \frac{1}{1000} = 1$		
<u>Herb Stratum</u> (Plot size: <u>5 ft</u>)				S · Nevalence inc	Adaptations	1 (Provide	supporting
1. <i>Impatiens capensis</i>	80	Yes	FACW	- data in Remarks or on	a senarate sh	(FTOVICE neet)	Supporting
2. <i>Equisetum palustre</i>	30	Yes	FACW	Problematic Hydr	ophytic Vege	tation ¹ (E)	(nlain)
3.				Indicators of hydric so	il and wetlan	d hydrolo	gy must be
4.				present, unless disturb	ed or proble	matic	8) 11450 80
5.				Definitions of Vegetation	on Strata:		
6.				Tree – Woody plants 3	in. (7.6 cm) or	r more in	diameter at
7.				breast height (DBH), re	gardless of h	eight.	
8.				Sapling/shrub - Woody	/ plants less t	han 3 in. I	DBH and
9.				greater than or equal t	o 3.28 ft (1 m) tall.	
10.				Herb – All herbaceous	(non-woody)	plants, re	gardless of
11		<u> </u>		size, and woody plants	less than 3.2	8 ft tall.	
12				Woody vines - All wood	dy vines great	ter than 3	.28 ft in
12		= Total Cov	or	height.			
Woody Vino Stratum (Plot size: 20 ft)	110	_ 10tai C0V		Hydrophytic Vegetatio	n Present?	Yes 🖌 N	No
1							
۱				-			
2.		•		-			
3		······································		-			
4		·		-			
	0	= Total Cov	er				
Remarks: (Include photo numbers here or on a sep	arate sheet.)						

A positive indication of hydrophytic vegetation was observed (>50% of dominant species indexed as OBL, FACW, or FAC). A positive indication of hydrophytic vegetation was observed (Prevalence Index is \leq 3.00).

SOIL

(inches) Color (moist) % Type! Loc2 Texture Rem. 0 - 10 10YR 3/1 100 Mucky Silty Clay Loam Mucky Silt	arks
0 - 10 10YR 3/1 100 Mucky Silt Loam 10 - 18 10YR 2/2 100 Mucky Silty Clay Loam 10 - 18 10YR 2/2 100 Mucky Silty Clay Loam 10 - 18 10YR 2/2 100 Mucky Silty Clay Loam 10 - 18 10YR 2/2 100 Mucky Silty Clay Loam 10 - 18 10YR 2/2 100 Mucky Silty Clay Loam 10 - 18 10YR 2/2 100 Mucky Silty Clay Loam 10 - 18 10YR 2/2 100 Mucky Silty Clay Loam 10 - 18 10YR 2/2 100 Mucky Silty Clay Loam 11 - 18 10YR 2/2 100 Mucky Silty Clay Loam 11 - 18 10YR 2/2 100 Mucky Silty Clay Loam 11 - 19 10 10 10 10 11 - 10 10 10 10 10 10 11 - 10 10 10 10 10 10 10 11 - 10 10 10 10 10 10 10 10 10 12 - 10 11 10 10 10 10	
10 - 18 10YR 2/2 100 Mucky Silty Clay Loam Mucky Silty Clay Loam Image: Clay Loam Image: Clay Loam Type: C = Concentration, D = Depletion, RM = Reduced Matrix, MS = Masked Sand Grains. ² Location: PL = Pore Lining, M = Matrix. Hydric Soil Indicators: Image: Clay Loam Image: Clay Loam Histosol (A1) Polyvalue Below Surface (S8) (LRR R, MLRA 149B) 2 cm Muck (A10) (LRR K, L, MLRA 149B) Histic Epipedon (A2) Thin Dark Surface (S9) (LRR R, MLRA 149B) 2 cm Muck (A10) (LRR K, L, MLRA 149B) Black Histic (A3) ✓ Loamy Mucky Mineral (F1) (LRR K, L) S cm Mucky Peat or Peat (S3) (LRR K, L) Yhydrogen Sulfide (A4) Loamy Gleyed Matrix (F2) Dark Surface (S7) (LRR K, L)	
Type: C = Concentration, D = Depletion, RM = Reduced Matrix, MS = Masked Sand Grains. ² Location: PL = Pore Lining, M = Matrix. Hydric Soil Indicators: Indicators for Problematic Hydric Soils Histosol (A1) Polyvalue Below Surface (S8) (LRR R, MLRA 149B) Histic Epipedon (A2) Thin Dark Surface (S9) (LRR R, MLRA 149B) Black Histic (A3) ✓ Loamy Mucky Mineral (F1) (LRR K, L) Hydrogen Sulfide (A4) Loamy Gleyed Matrix (F2)	
Type: C = Concentration, D = Depletion, RM = Reduced Matrix, MS = Masked Sand Grains. ² Location: PL = Pore Lining, M = Matrix. Hydric Soil Indicators: Indicators for Problematic Hydric Soils	
Type: C = Concentration, D = Depletion, RM = Reduced Matrix, MS = Masked Sand Grains. ² Location: PL = Pore Lining, M = Matrix. Hydric Soil Indicators: Indicators for Problematic Hydric Soils	
Type: C = Concentration, D = Depletion, RM = Reduced Matrix, MS = Masked Sand Grains. ² Location: PL = Pore Lining, M = Matrix. Hydric Soil Indicators: Indicators for Problematic Hydric Soils Histosol (A1) Polyvalue Below Surface (S8) (LRR R, MLRA 149B) 2 cm Muck (A10) (LRR K, L, MLRA 149B) Histic Epipedon (A2) Thin Dark Surface (S9) (LRR R, MLRA 149B) 2 coast Prairie Redox (A16) (LRR K, L, MLRA 149B) Black Histic (A3) ✓ Loamy Mucky Mineral (F1) (LRR K, L) 5 cm Mucky Peat or Peat (S3) (LRR K, L) ✓ Hydrogen Sulfide (A4) Loamy Gleyed Matrix (F2) Dark Surface (S7) (LRR K, L)	
Type: C = Concentration, D = Depletion, RM = Reduced Matrix, MS = Masked Sand Grains. ² Location: PL = Pore Lining, M = Matrix. Hydric Soil Indicators: Indicators for Problematic Hydric Soils Histosol (A1) Polyvalue Below Surface (S8) (LRR R, MLRA 149B) 2 cm Muck (A10) (LRR K, L, MLRA 149B) Histic Epipedon (A2) Thin Dark Surface (S9) (LRR R, MLRA 149B) Coast Prairie Redox (A16) (LRR K, L, MLRA 149B) Black Histic (A3) ✓ Loamy Mucky Mineral (F1) (LRR K, L) 5 cm Mucky Peat or Peat (S3) (LRR K, L) ✓ Hydrogen Sulfide (A4) Loamy Gleyed Matrix (F2) Dark Surface (S7) (LRR K, L)	
Type: C = Concentration, D = Depletion, RM = Reduced Matrix, MS = Masked Sand Grains. ² Location: PL = Pore Lining, M = Matrix. Hydric Soil Indicators: Indicators for Problematic Hydric Soils Histosol (A1) Polyvalue Below Surface (S8) (LRR R, MLRA 149B) Histic Epipedon (A2) Thin Dark Surface (S9) (LRR R, MLRA 149B) Black Histic (A3) Loamy Mucky Mineral (F1) (LRR K, L) Hydrogen Sulfide (A4) Loamy Gleyed Matrix (F2)	
Type: C = Concentration, D = Depletion, RM = Reduced Matrix, MS = Masked Sand Grains. ² Location: PL = Pore Lining, M = Matrix. Iydric Soil Indicators: Indicators for Problematic Hydric Soils Histosol (A1) Polyvalue Below Surface (S8) (LRR R, MLRA 149B) 2 cm Muck (A10) (LRR K, L, MLRA 149B) Histic Epipedon (A2) Thin Dark Surface (S9) (LRR R, MLRA 149B) Coast Prairie Redox (A16) (LRR K, L, MLRA 149B) Black Histic (A3) Loamy Mucky Mineral (F1) (LRR K, L) 5 cm Mucky Peat or Peat (S3) (LRR K, L) Hydrogen Sulfide (A4) Loamy Gleyed Matrix (F2) Dark Surface (S7) (LRR K, L)	
Type: C = Concentration, D = Depletion, RM = Reduced Matrix, MS = Masked Sand Grains. ² Location: PL = Pore Lining, M = Matrix. Hydric Soil Indicators: Indicators for Problematic Hydric Soils Histosol (A1) Polyvalue Below Surface (S8) (LRR R, MLRA 149B) 2 cm Muck (A10) (LRR K, L, MLRA 149B) Histic Epipedon (A2) Thin Dark Surface (S9) (LRR R, MLRA 149B) 2 coast Prairie Redox (A16) (LRR K, L, MLRA 149B) Black Histic (A3) Loamy Mucky Mineral (F1) (LRR K, L) 5 cm Mucky Peat or Peat (S3) (LRR K, L) Hydrogen Sulfide (A4) Loamy Gleyed Matrix (F2) Dark Surface (S7) (LRR K, L)	
Fype: C = Concentration, D = Depletion, RM = Reduced Matrix, MS = Masked Sand Grains. ² Location: PL = Pore Lining, M = Matrix. Iydric Soil Indicators: Indicators for Problematic Hydric Soils Histosol (A1) Polyvalue Below Surface (S8) (LRR R, MLRA 149B) 2 cm Muck (A10) (LRR K, L, MLRA 149B) Histic Epipedon (A2) Thin Dark Surface (S9) (LRR R, MLRA 149B) Coast Prairie Redox (A16) (LRR K, L, MLRA 149B) Black Histic (A3) Loamy Mucky Mineral (F1) (LRR K, L) 5 cm Mucky Peat or Peat (S3) (LRR K, L) Hydrogen Sulfide (A4) Loamy Gleyed Matrix (F2) Dark Surface (S7) (LRR K, L)	
Type: C = Concentration, D = Depletion, RM = Reduced Matrix, MS = Masked Sand Grains. ² Location: PL = Pore Lining, M = Matrix. Indicators: Indicators for Problematic Hydric Soils	
Type: C = Concentration, D = Depletion, RM = Reduced Matrix, MS = Masked Sand Grains. ² Location: PL = Pore Lining, M = Matrix. ydric Soil Indicators: Indicators for Problematic Hydric Soils Histosol (A1) Polyvalue Below Surface (S8) (LRR R, MLRA 149B) 2 cm Muck (A10) (LRR K, L, MLRA 149B) Histic Epipedon (A2) Thin Dark Surface (S9) (LRR R, MLRA 149B) Coast Prairie Redox (A16) (LRR K, L, MLRA 149B) Black Histic (A3) ✓ Loamy Mucky Mineral (F1) (LRR K, L) 5 cm Mucky Peat or Peat (S3) (LRR K, L) Hydrogen Sulfide (A4) Loamy Gleyed Matrix (F2) Dark Surface (S7) (LRR K, L)	
ydric Soil Indicators: Indicators for Problematic Hydric Soils _ Histosol (A1) _ Polyvalue Below Surface (S8) (LRR R, MLRA 149B) _ 2 cm Muck (A10) (LRR K, L, MLRA 149B) _ Histic Epipedon (A2) _ Thin Dark Surface (S9) (LRR R, MLRA 149B) _ Coast Prairie Redox (A16) (LRR K, L, MLRA 149B) _ Black Histic (A3) _ Loamy Mucky Mineral (F1) (LRR K, L) _ 5 cm Mucky Peat or Peat (S3) (LRR C) _ Hydrogen Sulfide (A4) _ Loamy Gleyed Matrix (F2) Dark Surface (S7) (LRR K, L)	
	; ³ :
	49B)
Black Histic (A3) Loamy Mucky Mineral (F1) (LRR K, L) 5 cm Mucky Peat or Peat (S3) (LRR ✓ Hydrogen Sulfide (A4) Loamy Gleyed Matrix (F2) Dark Surface (S7) (LRR K, L)	, R)
Hydrogen Sulfide (A4) Loamy Gleyed Matrix (F2) Dark Surface (S7) (LRR K. L)	K, L, R)
Church Grad Lawrence (AE)	
Stratified Layers (A5) Depleted Matrix (F3) Polyvalue Below Surface (S8) (LRR	K, L)
Sandy Mucky Mineral (S1) Redox Depressions (F8) Iron-Manganese Masses (F12) (LRR	≀ K, L, R)
Sandy Gleved Matrix (S4) Piedmont Floodplain Soils (F19) (M	ILRA 149B)
Sandy Redox (S5) Mesic Spodic (TA6) (MLRA 144A, 14	5, 149B)
Stripped Matrix (S6)	
Very Shallow Dark Surface (FF2) Dark Surface (S7) (LRR R, MLRA 149B)	
Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.	
lestrictive Layer (if observed):	
Type: None Hydric Soil Present? Yes 7 No	_
Depth (inches):	

Soil Photos



Photo of Sample Plot North Photo of Sample Plot East



Photo of Sample Plot South Photo of Sample Plot West



Project/Site: Flat Creek Solar Proj	ect City/County:	Canajoharie, Montgomery County	Sampling Date: 20	21-Aug-17
Applicant/Owner: SunEast		State: New York	Sampling Point: W-E	ES-01_UPL-1
Investigator(s): Ethan Snyder, St	teve Spotts, Cory Dunning	Section, Township, Range:	NA	
Landform (hillslope, terrace, etc.):	Hillslope	Local relief (concave, convex, non	e): Undulating	Slope (%): 10 to 20
Subregion (LRR or MLRA):	R L	Lat: 42.8611984 Lor	ng:74.5365169	Datum: WGS84
Soil Map Unit Name: Lansing an	nd Mohawk silt loams, very stee	p	NWI classificatio	on:
Are climatic/hydrologic conditions	on the site typical for this time	of year? Yes 🖌 No (I	f no, explain in Remarks.)	1
Are VegetationSoilAre VegetationSoil	or Hydrology 🟒 significan or Hydrology naturally	tly disturbed? Are "Normal Circu problematic? (If needed, explain	mstances" present? any answers in Remarks	Yes No)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes No 🟒							
Hydric Soil Present?	Yes No 🟒	Is the Sampled Area within a Wetland?	Yes No 🟒					
Wetland Hydrology Present?	Yes No _	If yes, optional Wetland Site ID:						
Remarks: (Explain alternative procedures h	Remarks: (Explain alternative procedures here or in a separate report)							
Covertype is UPL. Area is upland, not all th	ee wetland parameters ar	e present. area historically excavated, disturbed .						

HYDROLOGY

Wetland Hydrology Indicators:				
Primary Indicators (minimum of or	Secondary Indicators (minimum	<u>of two required)</u>		
 Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5) Inundation Visible on Aerial Ima Sparsely Vegetated Concave Su 	Water- Aquati Marl D Hydrog Oxidize Presen Recent Thin M agery (B7) Other of rface (B8)	 Surface Soil Cracks (B6) Drainage Patterns (B10) Moss Trim Lines (B16) Dry-Season Water Table (C2) Crayfish Burrows (C8) Saturation Visible on Aerial In Stunted or Stressed Plants (D Geomorphic Position (D2) Shallow Aquitard (D3) Microtopographic Relief (D4) FAC-Neutral Test (D5) 	nagery (C9) 1)	
Field Observations: Surface Water Present? Water Table Present? Saturation Present? (includes capillary fringe)	Yes No _∠ Yes No _∠ Yes No _∠	Depth (inches): Depth (inches): Depth (inches):	 Wetland Hydrology Present? 	Yes No
Describe Recorded Data (stream g	y is not met. No positive	erial photos, previous inspections), i	f available: s observed.	

VEGETATION -- Use scientific names of plants.

Sampling Point: W-EES-01_UPL-1

Tree Stratum (Plot size: <u>30 ft</u>)	Absolute % Cover	Dominant	Indicator	Dominance Test works	neet:		
1 Acer saccharum	65	Ves	FACIL	Are OBL, FACW, or FAC:		0	(A)
2 Carva ovata	20	Yes	FACU	Total Number of Domir	nant Species	6	(D)
3			17100	Across All Strata:		0	(B)
4		<u> </u>		Percent of Dominant Sp	pecies That	0	(A/B)
5.				Are OBL, FACW, or FAC:			(/ 0 2)
6.				Prevalence Index works	sheet:		
7.				<u>Total % Cover</u>	<u>of:</u>	Multiply	<u>' By:</u>
	85	= Total Cov	er	OBL species	0	x 1 =	0
Sapling/Shrub Stratum (Plot size: 15 ft)				FACW species	0	x 2 =	0
1. Ostrva virginiana	40	Yes	FACU	FAC species	0	x 3 =	0
2 Hamamelis virginiana	10	Yes	FACU	FACU species	150	x 4 =	600
3	10	105	17100	UPL species	0	x 5 =	0
а. Д				Column Totals	150	(A)	600 (B)
т Б				Prevalence In	idex = B/A =	4	
S		·		Hydrophytic Vegetation	Indicators:		
7	. <u> </u>	<u> </u>		1- Rapid Test for H	lydrophytic V	egetatio	n
/		- Total Cav	<u></u>	2 - Dominance Tes	st is > 50%		
Used Stretcher (Distained 5.6)	50		er	3 - Prevalence Ind	ex is $\leq 3.0^1$		
Herb Stratum (Plot size: 5π)	10		FACU	4 - Morphological	Adaptations	Provide	supporting
		res	FACU	data in Remarks or on a	a separate sh	ieet)	
2. Carya ovata	5	Yes	FACU	Problematic Hydr	ophytic Vege	tation¹ (E	xplain)
3				¹ Indicators of hydric so	il and wetlan	d hydrolo	ogy must be
4				present, unless disturb	ed or problei	matic	
5				Definitions of Vegetation	on Strata:		
6				Tree – Woody plants 3 i	n. (7.6 cm) oı	r more in	diameter at
7				breast height (DBH), reg	gardless of h	eight.	
8				Sapling/shrub – Woody	plants less t	han 3 in.	DBH and
9				greater than or equal to	o 3.28 ft (1 m) tall.	
10				Herb – All herbaceous (non-woody)	plants, re	egardless of
11				size, and woody plants	less than 3.2	8 ft tall.	2006
12				woody vines - All wood	ly vines great	ter than a	3.28 ft in
	15	= Total Cov	er	neight.			
Woody Vine Stratum (Plot size: <u>30 ft</u>)				Hydrophytic Vegetation	n Present?	/es	No 🟒
1							
2.							
3.							
4.							
	0	= Total Cov	er				
		-		7			
Remarks: (Include photo numbers here or on a separat	e sneet.)						
ivo positive indication of hydrophytic vegetation was ob	served (≥	50% of dom	iniant specie	es indexed as FAC- or dri	er).		

SOIL

Profile Desc	cription: (Describe	to the de	epth needed to de	ocum	ent the i	ndicator	or confirm the ab	sence of indicators.)		
Depth	Matrix		Redox	Feat	ures		-			
(inches)	Color (moist)	<u>%</u>	Color (moist)	<u>%</u>	Туре	Loc ²		exture	Remarks	
0 - 5	10YR 4/3	100		· —			Silt Loam			
5 - 13	10YR 5/3	100					Rocky Si	lty Clay Loam		
		<u> </u>								
		<u> </u>								
¹ Type: C = C	oncentration, D =	Depletio	n, RM = Reduced	Matr	ix, MS =	Masked	Sand Grains. ² Lc	ocation: PL = Pore Lining	g, M = Matrix.	
Hydric Soil	ndicators:							Indicators for Probler	natic Hydric Soils ³ :	
Histosol	(A1)		Polyvalue Bel	ow S	urface (S	8) (LRR	R, MLRA 149B)	2 cm Muck (A10) (LRR K, L, MLRA 149B)	
Histic Ep	oipedon (A2)		Thin Dark Su	face	(S9) (LRR	R, MLR	A 149B)	Coast Prairie Redo	ox (A16) (LRR K, L. R)	
Black Hi	stic (A3)		Loamy Mucky	/ Min	eral (F1)	(LRR K, I	_)	5 cm Mucky Peat	or Peat (S3) (LRR K, L, R)	
Hydroge	en Sulfide (A4)		Loamy Gleye	d Ma	trix (F2)			Dark Surface (S7)	(LRR K, L)	
Stratifie	d Layers (A5)	(Depleted Mat	trix (F	-3)			Polyvalue Below Surface (S8) (LRR K, L)		
Deplete	d Below Dark Surf	ace (ATT)	Redox Dark S	urtac	Ce (F6) faco (E7)			Thin Dark Surface	(S9) (LRR K, L)	
Sandy M	fucky Mineral (S1)		Depieted Dai	k Sui	1ace (F7)			Iron-Manganese N	Masses (F12) (LRR K, L, R)	
Sandy W	loved Matrix (S4)		Redox Depre	55101	15 (10)			Piedmont Floodpl	ain Soils (F19) (MLRA 149B)	
Sandy B	adox (S5)							Mesic Spodic (TA6) (MLRA 144A, 145, 149B)	
Sanuy N	Matrix (SG)							Red Parent Mater	ial (F21)	
Dark Su	rfaco (S7) (I DD D N)B)					Very Shallow Dark	s Surface (TF12)	
Dark Su			,6)					Other (Explain in I	Remarks)	
³ Indicators	of hydrophytic veg	etation a	and wetland hydr	ology	/ must be	e presen	t, unless disturbed	d or problematic.		
Restrictive I	_ayer (if observed)	:								
	Туре:		None			Hydric	Soil Present?		Yes No 🟒	
	Depth (inches):									
Remarks: No positive	indication of hydr	ic soils w	as observed. The	crite	rion for l	nydric so	oil is not met. Refu	sal due to coarse fragn	nents.	

Soil Photos



Photo of Sample Plot North Photo of Sample Plot East



Photo of Sample Plot South





Project/Site: Flat Cree	k Solar Projec	city/Cou	i nty: Canajoharie, Mc	ntgomery (County	Sampling Date:	2021-Aug-17
Applicant/Owner: S	unEast			State:	New York	Sampling Point: W	-EES-02_PEM-1
Investigator(s): Ethan Snyder, Steve Spotts, Cory Dunning Section, Township, Range: NA							
Landform (hillslope, te	rrace, etc.):	Flat	Local relief	(concave, c	onvex, none):	Undulating	Slope (%): 0 to 1
Subregion (LRR or MLF	RA): LRR	L	Lat:	42.860499	2Long:	-74.5395288	Datum: WGS84
Soil Map Unit Name:	Madalin silty	clay loam, 0 to 3 percent	t slopes			NWI classifica	tion:
Are climatic/hydrologic conditions on the site typical for this time of year? Yes 🖌 No (If no, explain in Remarks.)							
Are Vegetation, Are Vegetation,	Soil, Soil,	or Hydrology signif or Hydrology natur	icantly disturbed? ally problematic?	Are "No (If need	ormal Circumst ed, explain an	ances" present? y answers in Rema	Yes 🟒 No ˈks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes 🟒 No						
Hydric Soil Present?	Yes 🟒 No	Is the Sampled Area within a Wetland?	Yes 🟒 No				
Wetland Hydrology Present?	Yes 🟒 No	lf yes, optional Wetland Site ID:	W-EES-02				
Remarks: (Explain alternative procedures here or in a separate report)							
Covertype is PEM. Area is wetland, all three	wetland parameters are p	present.					

HYDROLOGY

Primary Indicators (minimum of one is required; check all that apply)	Secondary Indicators (minimum of two required)		
Surface Water (A1) Water-Stained Leaves (B9) High Water Table (A2) Aquatic Fauna (B13) Saturation (A3) Marl Deposits (B15) Water Marks (B1) Hydrogen Sulfide Odor (C1) Sediment Deposits (B2) Oxidized Rhizospheres on Living Roots (C3) Drift Deposits (B3) Presence of Reduced Iron (C4) Algal Mat or Crust (B4) Recent Iron Reduction in Tilled Soils (C6) Iron Deposits (B5) Thin Muck Surface (C7) Inundation Visible on Aerial Imagery (B7) Other (Explain in Remarks) Sparsely Vegetated Concave Surface (B8)	 Surface Soil Cracks (B6) Drainage Patterns (B10) Moss Trim Lines (B16) Dry-Season Water Table (C2) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (C9) 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 _∠ Depth (inches):	_		
Water Table Present? Yes 🖌 No Depth (inches): 4	Wetland Hydrology Present? Yes No		
Saturation Present? Yes 🖌 No Depth (inches): 0			
(includes capillary fringe)			
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), i Remarks: The criterion for wetland hydrology is met. A positive indication of wetland hydrology was obse	f available:		

VEGETATION -- Use scientific names of plants.

Sampling Point: W-EES-02_PEM-1

Tree Stratum (Plot size: 30 ft)	Absolute	Dominant	Indicator	Dominance Test worksheet:		
1	% Cover	Species?	Status	Number of Dominant Species T Are OBL, FACW, or FAC:	^{iat} 2	(A)
2.		·		Total Number of Dominant Spec	ies 2	(B)
3		·		Percent of Dominant Species Th	at 100	(A/B)
5.				Are OBL, FACW, of FAC.		
6.					Multiply	D
7.				- OBL species 35	<u>wuupy</u>	<u>ру.</u> 25
	0	= Total Cov	er	EACW species 125		250
Sapling/Shrub Stratum (Plot size: <u>15 ft</u>)		_		FAC species 125		230
1.				FAC Species 0		0
2.				FACU Species 2	X 4 =	8
3.				- OPL species 0	X 5 =	0
4.		·			(A)	293 (B)
5.		·		- Prevalence Index = B/	<u> </u>	·
6.		·		Hydrophytic Vegetation Indicate	rs:	
7.		·		1- Rapid Test for Hydrophy	tic Vegetatior	า
	0	= Total Cov	er	2 - Dominance Test is >509)	
Herb Stratum (Plot size: 5 ft)		-		4 3 - Prevalence Index is \leq 3	01	
1. Phalaris arundinacea	70	Yes	FACW	4 - Morphological Adaptati	ons ¹ (Provide	supporting
2. Agrostis stolonifera	55	Yes	FACW	- data in Remarks or on a separa	e sneet)	(unlain)
3. <i>Carex vulpinoidea</i>	30	No	OBL	- Problematic Hydrophytic (egetation" (E)	xpiairi)
4. Lythrum salicaria	5	No	OBL	nresent unless disturbed or pro	hlematic	igy must be
5. Dipsacus fullonum	2	No	FACU	Definitions of Vegetation Strata	biematic	
6.		·		Tree - Woody plants 3 in (7.6 cr) or more in	diameter at
7.		·		breast height (DBH), regardless	of height.	diameter at
8.				Sapling/shrub – Woody plants le	ss than 3 in. I	DBH and
9.		· ·		greater than or equal to 3.28 ft	1 m) tall.	
10.				Herb – All herbaceous (non-woo	dy) plants, re	gardless of
11.		· ·		size, and woody plants less than	3.28 ft tall.	
12		· ·		Woody vines – All woody vines g	reater than 3	8.28 ft in
	162	= Total Cov	er	height.		
Woody Vine Stratum (Plot size: 30 ft)	102	-		Hydrophytic Vegetation Presen	.? Yes 🖌 N	No
1.						
2				-		
3	·	·		-		
·		<u> </u>		-		
^{¬,}		- Total Cov	or	-		

Remarks: (Include photo numbers here or on a separate sheet.)

A positive indication of hydrophytic vegetation was observed (>50% of dominant species indexed as OBL, FACW, or FAC). A positive indication of hydrophytic vegetation was observed (Prevalence Index is \leq 3.00). A positive indication of hydrophytic vegetation was observed (Rapid Test for Hydrophytic Vegetation).

SOIL

Profile Des	cription: (Describe	to the o	depth needed to d	locun	nent the i	indicator	or confirm the at	osence of indicator	rs.)
Depth	Matrix		Redox	Feat	ures				
(inches)	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²	Text	ure	Remarks
0 - 10	10YR 4/1	90	2.5YR 3/6	10	C	M	Mucky S	ilt Loam	
10 - 18	2.5Y 5/1	85	5YR 5/6	15	C	М	Silty	Clay	
						<u> </u>			
1T				1	NC -		and Crains 21		Lining M - Metuix
'Type: C = 0	concentration, D =	Deplet	ion, RIVI = Reduce	a Mat	rix, ivis =	Masked S	and Grains. ² Lo	ocation: PL = Pore	Lining, M = Matrix.
Hydric Soil	Indicators:							Indicators for Pro	oblematic Hydric Solls ³ :
Histoso	I (A1)		Polyvalue Be	elow S	urface (S	58) (LRR R,	MLRA 149B)	2 cm Muck (A	(10) (LRR K, L, MLRA 149B)
Histic E	pipedon (A2)		Thin Dark Su	irface	(S9) (LRF	R, MLRA	149B)	Coast Prairie	Redox (A16) (LRR K, L, R)
Black H	istic (A3)		Loamy Muck	y Mir	ieral (F1)	(LRR K, L)		5 cm Mucky F	Peat or Peat (S3) (LRR K, L, R)
Hydrog	en Suitide (A4)		Loamy Gleye		trix (F2)			Dark Surface	(S7) (LRR K, L)
Stratilie	d Layers (A5) d Bolow Dark Surf:	0.00 (\ 1	Depieted Ma	atrix (Surfa	F3) co (E6)			Polyvalue Bel	low Surface (S8) (LRR K, L)
Depiete	ark Surface (A12)	ace (Al	Doploted Dark	suna rk Su	rfaco (E7)	Ň		Thin Dark Su	rface (S9) (LRR K, L)
Sandy M	Aucky Mineral (S1)		Depieted Da		nace (F7))		Iron-Mangan	ese Masses (F12) (LRR K, L, R)
Sandy (Cloved Matrix (S4)			233101	13 (10)			Piedmont Flo	oodplain Soils (F19) (MLRA 149B)
Sanuy C	Dodox (SE)							Mesic Spodic	: (TA6) (MLRA 144A, 145, 149B)
Sanuy r								Red Parent N	laterial (F21)
Strippe			(0.5)					Very Shallow	Dark Surface (TF12)
Dark Su	urface (S7) (LRR R, N	ILRA 14	49B)					Other (Explai	n in Remarks)
³ Indicators	of hydrophytic veg	etatior	n and wetland hyd	rolog	y must b	e present,	unless disturbe	d or problematic.	
Restrictive	Layer (if observed):								
	Туре:		None			Hydric S	oil Present?		Yes 🟒 No
	Depth (inches):								
Remarks:									
A positive i	ndication of hydric	soil wa	is observed. The o	riterio	on for hy	dric soil is	met.		

Soil Photos



Photo of Sample Plot North Photo of Sample Plot East



Photo of Sample Plot South Photo of Sample Plot West



Project/Site: Flat Cree	k Solar Projec	t City/C	County: Cana	ijoharie, Mo	ntgomery	County		Sampling Date:	2021-Aug-17	
Applicant/Owner: S	unEast				State:	New Yor	k	Sampling Point:	W-EES-02_PUB	-1
Investigator(s): Ethan Snyder, Steve Spotts, Cory Dunning Section, Township, Range: NA										
Landform (hillslope, te	rrace, etc.):	Depression		Local relief (concave,	convex, n	ione):	Concave	Slope (%	6): 1 to 3
Subregion (LRR or MLF	RA): LRR	L		Lat:	42.863293	35	Long:	-74.5398289	Datum:	WGS84
Soil Map Unit Name:	Darien silt lo	am, 3 to 8 percent slo	pes					NWI classific	cation:	
Are climatic/hydrologic conditions on the site typical for this time of year? Yes 🖌 No (If no, explain in Remarks.)										
Are Vegetation, Are Vegetation,	Soil, Soil,	or Hydrology sig or Hydrology na	gnificantly dist aturally proble	turbed? ematic?	Are "N (If nee	ormal Cir ded, expl	rcumst ain an	ances" present? y answers in Rem	Yes I arks.)	No 🔽

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes 🟒 No		
Hydric Soil Present?	Yes 🟒 No	Is the Sampled Area within a Wetland?	Yes 🟒 No
Wetland Hydrology Present?	Yes 🟒 No	If yes, optional Wetland Site ID:	W-EES-02
Remarks: (Explain alternative procedures	s here or in a separate repo	ort)	
Covertype is PUB. Area is wetland, all thr	ee wetland parameters are	present. excavated farm pond.	

HYDROLOGY

Wetland Hydrology Indicators:				
Primary Indicators (minimum o	of one is required; check all t	Secondary Indicators (minimum of two required)		
✓ Surface Water (A1) Water-Stained Leaves (B9) ✓ High Water Table (A2) ✓ Aquatic Fauna (B13) ✓ Saturation (A3) Marl Deposits (B15) Water Marks (B1) Hydrogen Sulfide Odor (C1) Sediment Deposits (B2) Oxidized Rhizospheres on Living Roots Drift Deposits (B3) Presence of Reduced Iron (C4) Algal Mat or Crust (B4) Recent Iron Reduction in Tilled Soils (C Iron Deposits (B5) Thin Muck Surface (C7) Inundation Visible on Aerial Imagery (B7) Other (Explain in Remarks)			g Roots (C3) Soils (C6)	 Surface Soil Cracks (B6) Drainage Patterns (B10) Moss Trim Lines (B16) Dry-Season Water Table (C2) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (C9) 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	Depth (inches):	36	_
Water Table Present?	Yes 🟒 No	Depth (inches):	0	Wetland Hydrology Present? Yes No
Saturation Present?	Yes 🟒 No	Depth (inches):	0	
(includes capillary fringe)				
Describe Recorded Data (strea	m gauge, monitoring well, a	erial photos, previous ins	pections), if	available:

Remarks:

The criterion for wetland hydrology is met. A positive indication of wetland hydrology was observed (primary and secondary indicators were present).

VEGETATION -- Use scientific names of plants.

Sampling Point: W-EES-02_PUB-1

w. Cover Sectorer Status Number of Dominant Species Inat Are OBL, FACW, or FAC: 1 (A) 2.	Tree Stratum (Plot size: <u>30 ft</u>)	Absolute	Dominant	Indicator	Dominance Test works	neet:		
1 Total Number of Dominant Species 1 (B) 3. Across All Strata Percent of Dominant Species That Are OBL, FACW or FAC: 100 (A/B) 4. Are OBL, FACW or FAC: Total 46 Cover of: Multiply By: 6. Total 46 Cover of: Multiply By: OEL species 0 x 1 = 0 7. 0 = Total Cover FACW species 0 x 4 = 0 1. Corrus amonum 5 Yes FACW Species 0 x 4 = 0 3. Corrus amonum 5 Yes FACW Species 0 x 4 = 0 4.	1	% Cover	Species?	Status	Number of Dominant S Are OBL, FACW, or FAC:	pecies That	1	(A)
$3, 4$ Percent of Dominant Species That $Are OBL ; RAV(W) FAC: 100 (A/B) 5, 4 Prevalence Index worksheet: Total % Cover of: Multiply By: 7, 0 = Total Cover FAC species 0 = X = 10 7, 0 = Total Cover FAC species 0 = X = 0 1, Corrus amomum 5 - Yes FACW 2. 0 = Total Cover FAC species 0 = X = 0 1, Corrus amomum 5 - Yes FACW 2. 0 = Total Cover FAC species 0 = X = 0 4. 0 = Total Cover 10 - (B/B) 10 - (B/B) 4. 0 = Total Cover -1 - (B/Parcentricher Horder Stricher Stratum (Plot size: 5f_{-}) -1 - (B/Parcentricher Horder Stratum (Plot size: 5f_{-}) 1. -1 - (B/Parcentricher Horder Strata Strata) -1 - (B/Parcentricher Horder Strata) -1 - (B/Parcentricher Horder Strata) 2. -1 - (B/Parcentricher Horder Strata) -1 - (B/Parcentricher Horder Strata) -1 - (B/Parcentricher Horder Strata) 7. -1 - (B/Parcentricher Horder Strata) -1 - (B/Parcente Horder Strata) -1 - (B/Parcente Horder Strata) 2. -1 - (B/Parcente Horder Strata)$	2.	·	·		Total Number of Domir Across All Strata:	nant Species	1	(B)
5.	4.	·	·		Percent of Dominant S Are OBL. FACW. or FAC	pecies That	100	(A/B)
6.	5				Prevalence Index works	sheet:		
7. 0 = Total Cover OBL species 0 x1 = 0 Sapling/Shrub Stratum (Plot size: _15 ft_) 5 Yes FACW FACW species 0 x 4 = 0 2. 5 Yes FACW FACW species 0 x 4 = 0 3.	6				Total % Cover	of:	Multiply	Bv:
Saping/Shrub Stratum (Plot size: 15 ft.)0= Total CoverFACW species 5 $x 2 =$ 101.Corrus amomum5YesFACWFAC species0 $x 4 =$ 02FAC species0 $x 4 =$ 03FAC species0 $x 4 =$ 04FAC species0 $x 4 =$ 05FAC species0 $x 4 =$ 06Fac species0 $x 5 =$ 07Fac species0 $x 5 =$ 01 <td>7</td> <td></td> <td></td> <td></td> <td>OBL species</td> <td>0</td> <td>x 1 =</td> <td>0</td>	7				OBL species	0	x 1 =	0
Sapling/Shrub Stratum (Plot size: _15 ft) 5 Yes FACW 1. Corrus amonum 5 Yes FACW 2.		0	= Total Cov	er	- FACW species	5	x 2 =	10
1. Cornus amonum 5 Yes FACW FACU species 0 x 4 = 0 2.	Sapling/Shrub Stratum (Plot size: <u>15 ft</u>)				FAC species	0	x 3 =	0
2	1. <i>Cornus amomum</i>	5	Yes	FACW	FACI I species	0	× 4 =	0
3.	2		<u> </u>			0	× 5 =	0
4.	3				Column Totals		(A) -	10 (P)
5.	4.				Dravalance In	J	(A) _	10 (В)
6.	5.						Z	
7.	6				Hydrophytic Vegetation	Indicators:		
STotal Cover 4 2 2 3 2 3 2 3 2 3 2 3 2 3 3 4 3 4 3 4 <t< td=""><td>7.</td><td></td><td></td><td></td><td> 1- Rapid Test for F</td><td>lydrophytic \</td><td>/egetation</td><td>I</td></t<>	7.				1- Rapid Test for F	lydrophytic \	/egetation	I
Herb Stratum (Plot size: $_5f_$)		5	= Total Cov	er	2 - Dominance Tes	st is >50%		
1. 4 - Morphological Adaptations' (Provide supporting data in Remarks or on a separate sheet) 2.	Herb Stratum (Plot size: 5 ft)		-		3 - Prevalence Ind	ex is $\leq 3.0^{1}$		
2.	1.				4 - Morphological	Adaptations	¹ (Provide	supporting
Image: Sector of the system of the syste	2				data in Remarks or on a	a separate sr	ieet)	
	3		<u> </u>		Problematic Hydr	ophytic Vege	tation ¹ (Ex	(plain)
1.	4	·	·		¹ Indicators of hydric so	il and wetlan	d hydrolo	gy must be
3.			<u> </u>		present, unless disturb	ed or proble	matic	
0.	5	·	·		Definitions of Vegetatio	on Strata:		
7.	0		·		Iree – Woody plants 3 i	n. (7.6 cm) oi	r more in (diameter at
8.	/		<u> </u>		Conting (DBH), re	gardiess of n	eignt. han 2 in 1	
9.	8	·	·		sapling/shrub - woody	2 28 ft (1 m	nan 3 in. L Vtall	JBH and
10.	9				Horb All borbacoous		plants ro	ardlass of
11.	10				size and woody plants	loss than 3.2	g ft tall	gal uless of
12.	11	. <u> </u>			Woody vines - All wood		tor than 3	28 ft in
0 = Total Cover Horgett 1.	12		<u> </u>		height	iy villes grea		.201111
Woody Vine Stratum (Plot size:30 ft) Hydrophytic Vegetation Present? Yes No 1.		0	= Total Cov	er		- D	(()	
1.	Woody Vine Stratum (Plot size: <u>30 ft</u>)				Hydrophytic Vegetatio	n Present?	res 🟒 N	10
2	1							
3	2	<u> </u>						
4	3							
0 = Total Cover	4.							
		0	= Total Cov	er	-			

Remarks: (Include photo numbers here or on a separate sheet.)

A positive indication of hydrophytic vegetation was observed (>50% of dominant species indexed as OBL, FACW, or FAC). A positive indication of hydrophytic vegetation was observed (Prevalence Index is \leq 3.00). A positive indication of hydrophytic vegetation was observed (Rapid Test for Hydrophytic Vegetation). vegetation exists on pond edge, overhanging .

SOIL

(.
oils ³ :
A 149B)
K, L, R)
_RR K, L, R)
.RR K, L)
.) (סואססו)
LKK K, L, K)
145 149B)
, 143, 1430)
2)
,
)

Photo of Sample Plot East



Project/Site: Flat Cree	k Solar Project	City/Co	unty: Canajoharie, Mo	ontgomery C	County	Sampling Date:	2021-Aug-17
Applicant/Owner: S	unEast			State: 1	New York	Sampling Point: W	/-EES-02_UPL-1
Investigator(s): Etha	in Snyder, Stev	e Spotts, Cory Dunning	Sec	ion, Townsh	nip, Range: N	4	
Landform (hillslope, te	rrace, etc.):	Flat	Local relief	(concave, co	onvex, none):	Undulating	Slope (%): 0 to 1
Subregion (LRR or MLF	RA): LRR I		Lat:	42.8604338	S Long:	-74.5394466	Datum: WGS84
Soil Map Unit Name:	Darien silt lo	am, 3 to 8 percent slop	es			NWI classifica	ition:
Are climatic/hydrologic	c conditions or	the site typical for this	time of year?	Yes 🟒	No (If no	, explain in Remark	<s.)< td=""></s.)<>
Are Vegetation, Are Vegetation,	Soil, Soil,	or Hydrology sign or Hydrology natu	ificantly disturbed? urally problematic?	Are "No (If neede	rmal Circumst ed, explain an	ances" present? y answers in Rema	Yes No 🟒 rks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes No 🟒		
Hydric Soil Present?	Yes 🟒 No	Is the Sampled Area within a Wetland?	Yes No 🟒
Wetland Hydrology Present?	Yes No 🟒	lf yes, optional Wetland Site ID:	
Remarks: (Explain alternative procedures her	e or in a separate report)		
Covertype is UPL. Area is upland, not all three	e wetland parameters are	present. Circumstances are not normal due to mowing	g of vegetation.

HYDROLOGY

Wetland Hydrology Indicators:					
Primary Indicators (minimum of one	Secondary Indicators (minimum of two required)				
 Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5) Inundation Visible on Aerial Image Sparsely Vegetated Concave Surf 	Water-St Aquatic Marl Dej Hydroge Oxidizec Presence Recent li Thin Mu gery (B7) Other (E face (B8)	tained Leaves (B9) Fauna (B13) posits (B15) en Sulfide Odor (C1) d Rhizospheres on Living Roots (C3) e of Reduced Iron (C4) ron Reduction in Tilled Soils (C6) ck Surface (C7) xplain in Remarks)	 Surface Soft Cracks (B6) Drainage Patterns (B10) Moss Trim Lines (B16) Dry-Season Water Table (C2) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (C9) Stunted or Stressed Plants (D1) Geomorphic Position (D2) Shallow Aquitard (D3) Microtopographic Relief (D4) FAC-Neutral Test (D5) 		
Field Observations: Surface Water Present? Water Table Present? Saturation Present? (includes capillary fringe)	Yes No _ ∠ Yes No _ ∠ Yes No _ ∠	Depth (inches): Depth (inches): Depth (inches):	Wetland Hydrology Present?	Yes No _	
Describe Recorded Data (stream gau	Jge, monitoring well, aer	rial photos, previous inspections), if	available:		
Remarks: The criterion for wetland hydrology	is not met. No positive ir	ndication of wetland hydrology was	observed.		
VEGETATION -- Use scientific names of plants.

Sampling Point: W-EES-02_UPL-1

<u>Tree Stratum</u> (Plot size: <u>30 ft</u>)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test work	sheet: Species That	0	(A)
2.				Total Number of Dom	inant Species	3	(B)
3				Percent of Dominant	Species That C:	0	(A/B)
5				Prevalence Index wor	ksheet:		
6				Total % Cove	r of:	Multiply	<u> / By:</u>
7				OBL species	0	x 1 =	0
	0	= Total Cov	er	FACW species	5	x 2 =	10
Sapling/Shrub Stratum (Plot size: <u>15 ft</u>)				FAC species	0	x 3 =	0
1				FACU species	90	x 4 =	360
2				- UPL species	15	x 5 =	75
3				Column Totals	110	(A)	445 (B)
4				Prevalence	Index = B/A =	4	113 (0)
5				Lludrophytic Vogotati		<u> </u>	
6				Hydrophylic Vegetalic	on indicators:	(+-+:-	-
7						regetatio	n
	0	= Total Cov	er	2 - Dominance I	est is $> 50\%$		
<u>Herb Stratum</u> (Plot size: <u>5 ft</u>)		-		3 - Prevalence in	$10 \text{ ex } \text{ is } \leq 3.0^{\circ}$	(Dura dala	
1. Poa pratensis	50	Yes	FACU	4 - Morphologica	al Adaptations	(Provide	supporting
2. Schedonorus arundinaceus	20	Yes	FACU	Broblomatic Hyd	rophytic Vogo	tation1 (E	volain)
3. <i>Galium aparine</i>	20	Yes	FACU	1Indicators of bydric s	oil and wetlan	d hydrol	ny must be
4. Leontodon saxatilis	15	No	UPL	present, unless distur	bed or proble	matic	bgy must be
5. Heracleum maximum	5	No	FACW	Definitions of Vegetat	ion Strata:	latic	
6.				Tree - Woody plants	in (7.6 cm) or	r more in	diameter at
7.				breast height (DBH), r	egardless of h	eight.	didiffecter de
8.				Sapling/shrub - Wood	ly plants less t	han 3 in.	DBH and
9.				greater than or equal	to 3.28 ft (1 m) tall.	
10				Herb – All herbaceous	s (non-woody)	plants, re	egardless of
11				size, and woody plant	s less than 3.2	8 ft tall.	
12				Woody vines - All woo	ody vines great	ter than 3	3.28 ft in
	110	- Total Cov	or	height.			
<u>Woody Vine Stratum</u> (Plot size: <u>30 ft</u>)			ei	Hydrophytic Vegetati	on Present?	/es	No 🟒
1							
2							
3							
4.							
	0	= Total Cov	er				
Remarks: (Include photo numbers here or on a sep No positive indication of hydrophytic vegetation wa	oarate sheet.) as observed (≥	50% of dom	ninant specie	es indexed as FAC– or d	rier).		

SOIL

Depth	Matrix	to the u	Redox	Feat	ures		or commune a	
(inches)	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²	Texture	Remarks
0 - 9.5	10YR 4/1	100		<u> </u>			Silt Loam	Compacted
9.5 - 18	10YR 5/2	95	7.5YR 5/8	5	C	М	Silty Clav	
				·				
				-				
				-	·			
							-	
<u> </u>								
<u> </u>				-	<u> </u>			
<u> </u>				-	<u> </u>			
				-				
				—				
							Canal Crains 21	enting DL - Dava Lining M - Matrix
ype: C = C	oncentration, D =	Depletic	on, RIVI = Reduced	wat	1x, MS =	iviasked	Sand Grains. ² L	ocation: PL = Pore Lining, M = Matrix.
dric Soil I	Indicators:		Debugl C		f / -	0. // 55 -		indicators for Problematic Hydric Soils ³ :
_ HISTOSO	I(AI)		Polyvalue Bel	ow S	urtace (S		(, MILKA 149B)	2 cm Muck (A10) (LRR K, L, MLRA 149B)
- HISUC Ep Black Hi	Sipedon (AZ)		Inin Dark Su	nace / Min	(59) (LKF	(R, MILR# / I D D 1/ I	а 149В) \	Coast Prairie Redox (A16) (LRR K, L, R)
Hvdroge	en Sulfide (A4)		Loamy Gleve	d Ma	trix (F2)		.)	5 cm Mucky Peat or Peat (S3) (LRR K, L, R)
Stratifie	d Lavers (A5)		✓ Depleted Mai	trix (l	=3)			Dark Surface (S7) (LRR K, L)
Deplete	d Below Dark Surfa	ace (A11) Redox Dark S	urfa	ce (F6)			Polyvalue Below Surface (S8) (LRR K, L)
_ _ Thick Da	ark Surface (A12)		Depleted Dar	k Su	face (F7)			Thin Dark Surface (S9) (LRR K, L)
_ Sandy N	lucky Mineral (S1)		Redox Depre	ssior	is (F8)			Iron-Manganese Masses (F12) (LRR K, L, R)
_Sandy G	Gleyed Matrix (S4)							Piedmont Floodplain Soils (F19) (MLRA 149B)
Sandy R	Redox (S5)							Mesic Spodic (1A6) (MLRA 144A, 145, 149B)
Stripped	d Matrix (S6)							Red Parent Material (F21)
_ Dark Su	rface (S7) (LRR R, N	ILRA 14	9B)					Very Shallow Dark Surface (TFT2)
ndicators	of hydrophytic veg	etation	and wetland hydr	olog	y must be	e presen	t, unless disturbe	ed or problematic.
estrictive L	Layer (if observed): 							
	Туре:		None			Hydric	Soil Present?	Yes 🟒 No
	Depth (inches):							
emarks: positive ir	Depth (inches):	soil was	observed. The cr	iterio	on for hy	dric soil i	s met.	

Soil Photos



Photo of Sample Plot North



Photo of Sample Plot East



Photo of Sample Plot South



Photo of Sample Plot West



WETLAND DETERMINATION DATA FORM - Northcentral and Northeast Region

Project/Site: Flat Cree	k Solar Projec	t City/	/County: Canajoharie, N	Iontgomery Count	ty	Sampling Date: 2	021-Aug-17
Applicant/Owner: S	unEast			State: New	York	Sampling Point: W-	EES-03_PSS-1
Investigator(s): Etha	n Snyder, Stev	e Spotts, Cory Dunn	ing Se	ction, Township, R	ange: NA	Ą	
Landform (hillslope, te	rrace, etc.):	Swale	Local relie	ef (concave, convex	k, none):	Concave	Slope (%): 10 to 20
Subregion (LRR or MLF	RA): LRR	L	Lat	: 42.8578103	Long:	-74.5353037	Datum: WGS84
Soil Map Unit Name:	Fluvaquents	, loamy				NWI classificat	ion:
Are climatic/hydrologic	c conditions o	n the site typical for t	his time of year?	Yes 🟒 No _	(lf no	, explain in Remarks	5.)
Are Vegetation, Are Vegetation,	Soil, Soil,	or Hydrology s or Hydrology n	ignificantly disturbed? aturally problematic?	Are "Normal (If needed, e:	Circumst xplain an <u>y</u>	ances" present? y answers in Remarl	Yes 🟒 No ‹s.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes 🟒 No		
Hydric Soil Present?	Yes 🟒 No	Is the Sampled Area within a Wetland?	Yes 🟒 No
Wetland Hydrology Present?	Yes 🟒 No	lf yes, optional Wetland Site ID:	W-EES-03
Remarks: (Explain alternative procedures he	re or in a separate report)	
Covertype is PSS. Area is wetland, all three w	vetland parameters are pr	esent.	

HYDROLOGY

Wetland Hydrology Indicators:				
Primary Indicators (minimum of o	one is required; check all	<u>that apply)</u>		Secondary Indicators (minimum of two required)
 Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5) Inundation Visible on Aerial Ir Sparsely Vegetated Concave S 	Water Aquat Marl D Hydro Oxidiz Preser Recen Thin M magery (B7) Other Surface (B8)	; Roots (C3) foils (C6)	 Surface Soil Cracks (B6) Drainage Patterns (B10) Moss Trim Lines (B16) Dry-Season Water Table (C2) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (C9) 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 🟒	Depth (inches):		
Water Table Present?	Yes 🟒 No	Depth (inches):	12	– Wetland Hydrology Present? Yes _∠_ No
Saturation Present?	Yes 🟒 No	Depth (inches):	0	
(includes capillary fringe)				
Describe Recorded Data (stream Remarks: The criterion for wetland hydrolo	gauge, monitoring well, a	aerial photos, previous insponsion	pections), if	available: rved (primary and secondary indicators were presen

VEGETATION -- Use scientific names of plants.

Sampling Point: W-EES-03_PSS-1

Tree Stratum (Plat size) 20 ft	Absolute	Dominant	Indicator	Dominance Test works	sheet:		
	% Cover	Species?	Status	Number of Dominant	Species That 	6	(A)
2.				Total Number of Domi	nant Species	6	(B)
3				- Percent of Dominant 9	nocios That		
4				- Are OBL, FACW, or FAC		100	(A/B)
s				Prevalence Index work	(sheet:		
7				- <u>Total % Cover</u>	<u>r of:</u>	<u>Multiply</u>	<u>By:</u>
7		Tabal Car		- OBL species	10	x 1 =	10
	0	= lotal Cov	er	FACW species	90	x 2 =	180
Sapling/Shrub Stratum (Plot size: <u>15 ft</u>)				FAC species	38	x 3 =	114
1. Salix alba	35	Yes	FACW	- FACU species	5	x 4 =	20
2. <u>Populus deltoides</u>	25	Yes	FAC	- UPL species	0	x 5 =	0
3. <i>Salix bebbiana</i>	20	Yes	FACW	- Column Totals	143	(A)	324 (B)
4. <i>Robinia pseudoacacia</i>	5	No	FACU	- Prevalence I	ndex = B/A =	2.3	- ()
5				Hydrophytic Vegetatio	n Indicators:		
b				1- Rapid Test for	Hydrophytic V	egetation	
7				2 - Dominance Te	est is >50%	0	
	85	= Total Cov	er	✓ 3 - Prevalence In	dex is $\leq 3.0^1$		
<u>Herb Stratum</u> (Plot size: <u>5 ft</u>)				4 - Morphologica	Adaptations ¹	(Provide	supporting
1. Agrostis stolonifera	20	Yes	FACW	- data in Remarks or on	a separate sh	eet)	
2. Equisetum pratense	10	Yes	FACW	Problematic Hyd	rophytic Vege	tation ¹ (Ex	plain)
3. <i>Lythrum salicaria</i>	10	Yes	OBL	- ¹ Indicators of hydric so	oil and wetlan	d hvdrolo	gv must be
4. Euthamia graminifolia	8	No	FAC	present, unless distur	ped or problem	natic	5)
5. <i>Eupatorium perfoliatum</i>	5	No	FACW	Definitions of Vegetati	on Strata:		
6. Prunella vulgaris	5	No	FAC	Tree – Woody plants 3	in. (7.6 cm) or	more in o	diameter at
7.				breast height (DBH), re	egardless of h	eight.	
8.				Sapling/shrub - Wood	y plants less tl	han 3 in. D	OBH and
9.				greater than or equal	to 3.28 ft (1 m) tall.	
10.				Herb – All herbaceous	(non-woody)	plants, re	gardless of
11.				size, and woody plants	s less than 3.2	8 ft tall.	
12.				Woody vines – All woo	dy vines great	er than 3.	28 ft in
	58	= Total Cov	er	height.			
Woody Vine Stratum (Plot size: 30 ft)		-		Hydrophytic Vegetation	on Present?	/es 🟒 N	lo
1.							
2				-			
3				-			
з. 				-			
· · · · · · · · · · · · · · · · · · ·		- Total Car	or	-			
	<u> </u>	= 10tai Cov	er				

A positive indication of hydrophytic vegetation was observed (>50% of dominant species indexed as OBL, FACW, or FAC). A positive indication of hydrophytic vegetation was observed (Prevalence Index is \leq 3.00).

SOIL

Profile Des	cription: (Describe	to the d	lepth needed to o	locum	ient the i	ndicator	or confirm the al	osence of indicators.)	
Depth	Matrix		Redo	x Feat	ures		-		. .
(inches)	Color (moist)	<u>%</u>	Color (moist)	<u>%</u>	Type'	LOC ²		exture	Remarks
8-0	10YR 4/1	95	7.5YR 4/6	5		<u>M</u>	Fibric Sil	ty Clay Loam	
8 - 13	2.5Y 4/1	90	5YR 5/6	10	C	M	Org mat	ter Silty Clay	
13 - 16	10YR 3/1	100					G	ravelly	
				·					
								<u> </u>	
¹ Type: C = C	Concentration, $D =$	Depleti	on, RM = Reduced	d Mati	rix, MS =	Masked	Sand Grains. ² Lo	ocation: PL = Pore Linin	g, M = Matrix.
Hydric Soil	Indicators:							Indicators for Probler	natic Hydric Soils ³ :
Histoso	l (A1)		Polyvalue Be	elow S	urface (S	58) (LRR I	R, MLRA 149B)	2 cm Muck (A10) (LRR K, L, MLRA 149B)
Histic E	oipedon (A2)		Thin Dark Su	urface	(S9) (LRF	R, MLR	A 149B)	Coast Prairie Redo	ox (A16) (LRR K, L, R)
Black H	istic (A3)		Loamy Muck	y Min	eral (F1)	(LRR K, L	_)	5 cm Mucky Peat	or Peat (S3) (LRR K, L, R)
Hydroge	en Sulfide (A4)		Loamy Gleye	ed Ma	trix (F2)			Dark Surface (S7)	(LRR K, L)
Stratine	d Below Dark Surf	aco (A11	Depieted Ma	Surfa	-3) -a (E6)			Polyvalue Below S	jurface (S8) (LRR K, L)
Thick Da	ark Surface (A12)		Depleted Da	irk Su	face (F7))		Thin Dark Surface	: (S9) (LRR K, L)
Sandv N	/ucky Mineral (S1)		Redox Depre	essior	is (F8)	,		Iron-Manganese N	vlasses (F12) (LRR K, L, R)
Sandy (Gleved Matrix (S4)			200101				Piedmont Floodpl	ain Soils (F19) (MLRA 149B)
Sandy F	Redox (S5)							Mesic Spodic (TA6) (MLRA 144A, 145, 149B)
Strinner	d Matrix (S6)							Red Parent Mater	ial (F21)
Dark Su	u Matrix (30) urfaco (S7) (LPP P N		OP)					Very Shallow Dark	Surface (TF12)
Daik 50			50)					Other (Explain in l	Remarks)
³ Indicators	of hydrophytic veg	getation	and wetland hyd	rolog	/ must be	e presen	t, unless disturbe	d or problematic.	
Restrictive	Layer (if observed)	:							
	Туре:		None	-		Hydric	Soil Present?		Yes 🟒 No
	Depth (inches):								
Remarks:									
A positive i	ndication of hydric	soil wa	s observed. The c	riterio	on for hyd	dric soil i	s met.		

Soil Photos



Photo of Sample Plot North Photo of Sample Plot East



Photo of Sample Plot South





WETLAND DETERMINATION DATA FORM - Northcentral and Northeast Region

Project/Site: Flat Cree	k Solar Projec	city/Co	ounty: Canajoharie, N	Iontgomery	County	Sampling Date: 2	021-Aug-17
Applicant/Owner: S	unEast			State:	New York	Sampling Point: W-	EES-03_UPL-1
Investigator(s): Etha	n Snyder, Stev	re Spotts, Cory Dunning	s Se	ction, Towns	hip, Range: N	4	
Landform (hillslope, te	rrace, etc.):	Hilltop	Local relie	ef (concave, c	onvex, none):	Convex	Slope (%): 1 to 3
Subregion (LRR or MLF	RA): LRR	L	Lat	: 42.857782	7 Long:	-74.5354841	Datum: WGS84
Soil Map Unit Name:	Fluvaquents	, loamy				NWI classificat	ion:
Are climatic/hydrologic	c conditions o	n the site typical for this	s time of year?	Yes 🖌	No (If no	, explain in Remarks	5.)
Are Vegetation, Are Vegetation,	Soil, Soil,	or Hydrology sigr or Hydrology nat	nificantly disturbed? urally problematic?	Are "No (If need	ormal Circumst led, explain an	tances" present? y answers in Remarl	Yes 🟒 No ks.)
Are Vegetation, Are Vegetation,	Soil, Soil,	or Hydrology sigr or Hydrology nat	nificantly disturbed? urally problematic?	Are "No (If need	ormal Circumst led, explain an	tances" present? y answers in Remarl	Yes No ks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes No 🟒		
Hydric Soil Present?	Yes No 🟒	Is the Sampled Area within a Wetland?	Yes No 🟒
Wetland Hydrology Present?	Yes No 🟒	lf yes, optional Wetland Site ID:	
Remarks: (Explain alternative procedures her	e or in a separate report)	
Covertype is UPL. Area is upland, not all three	e wetland parameters are	e present.	

HYDROLOGY

Wetland Hydrology Indicators:					
Primary Indicators (minimum of on	<u>e is required; check all t</u>	hat apply)	Secondary Indicators (minimum c	of two required)	
 Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5) Inundation Visible on Aerial Ima Sparsely Vegetated Concave Su 	Water Aquations Marl Do Hydrog Oxidized Presen Recent Thin M agery (B7) Other (rface (B8)	 Drainage Patterns (B10) Moss Trim Lines (B16) Dry-Season Water Table (C2) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (C9) 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 🟒	Depth (inches):			
Water Table Present?	Yes No 🟒	Depth (inches):		Yes No 🟒	
Saturation Present?	Yes No 🟒	Depth (inches):			
(includes capillary fringe)					
Describe Recorded Data (stream ga Remarks: The criterion for wetland hydrolog)	iuge, monitoring well, a	erial photos, previous inspections), if	available:		

VEGETATION -- Use scientific names of plants.

Sampling Point: W-EES-03_UPL-1

Tree Stratum (Plot size: 30 ft)	Absolute	Dominant	Indicator	Dominance Test work	sheet:		
	% Cover	Species?	Status	Number of Dominant	t Species That	0	(A)
1. Isuga canadensis	65	Yes	FACU	Total Number of Dom	ninant Snecies		
2. Pinus strobus	45	Yes	FACU	Across All Strata:	indire opecies	4	(B)
3. Acer saccharum	10	NO	FACU	Percent of Dominant	Species That		
4.				Are OBL, FACW, or FA	.C:	0	(A/B)
5	·			Prevalence Index wo	rksheet:		
o	·			Total % Cove	<u>er of:</u>	<u>Multiply</u>	<u>/ By:</u>
7		- Total Cov		- OBL species	0	x 1 =	0
Capling/Chruh Stratum (Diat size) 15 ft)	120	_ TOLAI COV	er	FACW species	0	x 2 =	0
<u>Sapiing/Sillub Stratum</u> (Plot Size: <u>15 it</u>)	45	Voc	EACU	FAC species	20	x 3 =	60
	45	Vec	FACU	- FACU species	205	x 4 =	820
2. Carrieve corolinione			FACU	- UPL species	0	x 5 =	0
3. Carpinus caroliniana			FAC	- Column Totals	225	(A)	880 (B)
4. <u>Pinus strobus</u>	<u>5</u>		FACU	Prevalence	Index = B/A =	3.9	. <u> </u>
5. Tilla americana	5		FACU	Hydrophytic Vegetati	on Indicators:		
6. Fagus granuliolla	5	INO	FACU	1- Rapid Test for	r Hydrophytic \	/egetatio	n
7	105	- Total Cau		2 - Dominance T	Fest is > 50%		
Linch Chartering (Distributed Fifth)	105	= lotal Cov	er	3 - Prevalence Ir	ndex is $\leq 3.0^1$		
Herb Stratum (Plot size: <u>5 ft</u>)				4 - Morphologic	al Adaptations	۱ (Provide	supporting
1				- data in Remarks or o	n a separate sh	neet)	
2.				Problematic Hy	drophytic Vege	tation ¹ (E	xplain)
3.				¹ Indicators of hydric s	soil and wetlan	d hydrolo	ogy must be
4.				present, unless distu	rbed or proble	matic	
5.				Definitions of Vegeta	tion Strata:		
6.				Tree – Woody plants	3 in. (7.6 cm) oi	r more in	diameter at
7				breast height (DBH),	regardless of h	eight.	
8.				Sapling/shrub - Woo	dy plants less t	han 3 in.	DBH and
9				llorb All borbaccou	r (o o o woody)) ldll. planta ra	ardlace of
10				size and woody plan	s (non-woody) ts less than 3-2	giants, re 8 ft tall	egar diess of
11				Woody vines - All wo	ody vines great	ter than ?	2 28 ft in
12				height.	ouy vines grea		.201011
	0	= Total Cov	er	Lludraph tic Vagatat	ion Drocont?	105	
<u>Woody Vine Stratum</u> (Plot size: <u>30 ft</u>)					ion Present?	res	NO <u>/</u>
1.				-			
2				-			
3				-			
4				_			
	0	= Total Cov	er				
Remarks: (Include photo numbers here or on a se	parate sheet)			_			
No positive indication of hydrophytic vegetation v	vas observed (>	50% of dom	ninant specie	es indexed as FAC – or o	drier).		
					- ,-		

SOIL

Opport Induces Color (moist) Color (moist) Color (moist) Color (moist) Type: Lec Texture Remarks 0-3 1078.2/1 100 0<	Profile Desc	ription: (Describe t	to the de	epth needed to d	ocum Eest	ient the i	ndicato	r or confirm the a	bsence of indica	tors.)	
Undersynthesis Control (notive) Type: C = Concentration, D = Depletion, RM = Reduced Matrix, MS = Masked Sand Grains. *Location: PL = Pore Lining, M = Matrix. Type: C = Concentration, D = Depletion, RM = Reduced Matrix, MS = Masked Sand Grains. *Location: PL = Pore Lining, M = Matrix. Histosol (A1) Polyadue Below Surface (SN) (LRR R, MLRA 149B) Coast the Hydric Solls? Histosol (A1) Polyadue Below Surface (SN) (LRR R, MLRA 149B) Coast Their Redox (A16) (LRR K, L, N) Histosol (A1) Polyadue Below Surface (SN) (LRR R, MLRA 149B) Coast Their Redox (A16) (LRR K, L, R) Histosol (A1) Depleted Matrix (SI) Sond Mucky Peat or Polematic (SS) (LRR K, L, R) Depleted Matrix (SA) Loamy Micry Mineral (F1) (LRR K, L) Sond Mucky Peat or Polematic (SS) (LRR K, L, R) Sandy Mucky March (SA) Depleted Matrix (SA) Polyadue Below Surface (SI) (LRR K, L, R) Sandy Mucky March (SA) Depleted Matrix (SA) Polyadue Below Surface (SI) (LRR K, L, R) Sandy Mucky March (SA) Depleted Matrix (SA) Polyadue Below Surface (SI) (LRR K, L, R) Sandy Mucky March (SA) Depleted Matrix (SA) Polyadue Below Surface (SI) (LRR K, L) Sandy Mucky March (SA) Depleted Matrix (SA) Polyadue Below Surface (SI) (LRR K, L) Sandy Mucky March (SA) Depleted Matrix (SA)	(inches)	Color (moist)	0%	Color (moist)	%		Loc ²	Textu	re		Remarks
Type: C = Concentration, D = Depletion, RM = Redueed Matrix, MS = Masked Sand Grains. Auccation: PL = Pore Lining, M = Matrix. Type: C = Concentration, D = Depletion, RM = Redueed Matrix, MS = Masked Sand Grains. Auccation: PL = Pore Lining, M = Matrix. Hidicators Indicators for Problematic Hydric Soils? Histic Epipedon (A2) Thin Dark Surface (SI) (LRR R, MLRA 149B)	0 - 3	10YR 2/1	100		<u></u>	туре		Rocky L	oam		Remarks
Type: C = Concentration, D = Depletion, RM = Reduced Matrix, MS = Masked Sand Grains. *Location: PL = Pore Lining, M = Matrix. Hydric Soil Indicators: Indicators for Problematic Hydric Soils* Histos (A1) Polyvalue Below Surface (S5) (LRR R, MLRA 1496)											
Type: C = Concentration, D = Depletion, RM = Reduced Matrix, MS = Masked Sand Grains. *Location: PL = Pore Lining, M = Matrix. Hydric Soil Indicators: Indicators for Problematic Hydric Soils? Histo: Epipedon (A2) Thin Dark Surface (S8) (LRR R, MLRA 1499) Black Histic (A3) Loamy Mucky Mineral (F1) (LRR K, L) Black Histic (A3) Loamy Mucky Mineral (F1) Depleted Bolew Surface (F6) Polyvalue Below Surface (F7) Thin Dark Surface (T1) Red ox Depleted Matrix (F3) Depleted Bolew Surface (F6) Polyvalue Below Surface (S9) (LRR K, L) Sandy Mucky Mineral (S1) Red ox Depressions (F8) Sandy Mucky Mineral (S1) Red ox Depressions (F8) Sandy Mucky Mineral (S1) Red ox Depressions (F8) Sandy Kedox (S5) Red Parent Matrix (S6) Stripped Matrix (S6) Wardrace (T7) (LRR K, L) Dark Surface (S7) (LRR R, MLRA 1498) Wardrace (T12) Dark Surface (S7) (LRR R, MLRA 1498) Wardrace (T12) Dark Surface (S7) (LRR R, MLRA 1498) Wardrace (T12) Dark Surface (S7) (LRR R, MLRA 1498) Wardrace (T12) Dark Surface (S7) (LRR R, MLRA 1498) Wardrace (T12) Dark Surface (S7) (LRR R, MLRA 1498) Wardrace (T12) Dark Surfac			·		_						
Type: C = Concentration, D = Depletion, RM = Reduced Matrix, MS = Masked Sand Grains. *Location: PL = Pore Lining, M = Matrix. Hydric Soil Indicators: Indicators for Problematic Hydric Soils?: Histosol (A1) Polyvalue Below Surface (S9) (LRR R, MLRA 1499) 2 cm Muck (A10) (LRR K, L, R) Black Histic CA3) Loamy Undersymmetry (ILRR K, L) 5 cm Muck yPaot or Peotlematic Hydric Soils?: Yerrigen Sufface (A4) Loamy Gleyed Matrix (F2) Dark Surface (S7) (LRR K, L, R) Straffied Laystrace (A12) Depleted Matrix (F2) Dark Surface (S3) (LRR K, L, R) Sondy Mucky Mineral (S1) Redox Depressions (F8) Polyvalue Below Surface (S5) (LRR K, L) Sandy Redox (S5) Redox (S5) Mesic Spoid (CA3) (LRR K, L) Surface (A12) Depleted Dark Surface (F7) Informatic (F12) (LRR K, L) Sandy Redox (S5) Red Parent Material (F21) Dark Surface (F12) (LRR K, L) Sandy Redox (S5) Red Parent Material (F21) Dark Surface (F7) (LRR K, L) Sturbace Arry Shift (S0) West Spoid (CA3) (LRR K, L) Thom Amatrix (F12) (S12) Dark Surface (S7) (LRR K, M. RLR 149B) Uron-Manganes Masses (F12) (LRR K, L) Sturbace Masses (S5) Peletematic Redox (A11) (RA (LR 144) (S12)			·								
Type: C = Concentration, D = Depletion, RM = Reduced Matrix, MS = Masked Sand Grains. *Location: PL = Pore Lining, M = Matrix. Hydrc Soil Indicators: Indicators for Problematic Hydrc Soils? Histos (IA1) Polyvalue Below Surface (S9) (LRR R, MLRA 1499) 2 cm Muck (A10) (LRR K, L RA 1499) Histos (ICA3) Loamy Wucky Mineral (S1) (LRR K, L) 2 com Muck (A10) (LRR K, L) Stratified Layers (A3) Loamy Gleyed Matrix (F2) Dark Surface (S7) (LRR K, L) Depleted Below Dark Surface (A11) Redox Dark Surface (F6) Thin Dark Surface (S8) (LRR K, L) Stratified Layers (A2) Depleted Dark Surface (F7) Hord Matrix (F3) Sandy Mucky (S5) — Peleted Dark Surface (F7) Hord Matrix (F3) Sandy Gleyed Matrix (S4) — Redox Depressions (F8) — Piedmont Floodplain Soils (F19) (MLRA 144A, 145, 1499) Sandy Redver (S5) — Red Parent Material (F21) — Very Shallow Dark Surface (F12) — Dark Surface (S7) (LRR K, L, R) Stripped Matrix (S6) — Red Parent Material (F21) — Very Shallow Dark Surface (T12) — Red Parent Material (F21) Type: _ None Hydric Soil Present? YesNoZ Restricture Layer (of Observed): _ None Hydric Soil is not met. Refusal due to coarse fragments. No positive indication of hy			·								
Type: C = Concentration, D = Depletion, RM = Reduced Matrix, MS = Masked Sand Grains. ² Location: PL = Pore Lining, M = Matrix. Hydric Soil Indicators: Indicators for Problematic Hydric Soils? Histoc Epledon (A2) Thin Dark Surface (S0) (LRR R, MLRA 149B) 2 cm Muck (A10) (LRR K, L R) Black Histic (A3) Loamy Mucky Mineral (F1) (LRR K, L) Coast Prairie Redox (A10) (LRR K, L R) Black Histic (A3) Loamy Mucky Mineral (F1) (LRR K, L) Dark Surface (S3) (LRR K, L R) Stratified Layers (A5) Depleted Matrix (F3) Depleted Matrix (F3) Depleted Below Dark Surface (F0) Thin Dark Surface (S3) (LRR K, L R) Sandy Gleyed Matrix (F3) Depleted Dark Surface (F7) Thino Dark Surface (S3) (LRR K, L R) Sandy Gleyed Matrix (S4) Meek Surface (F12) Depleted Park Surface (F7) Sandy Redox (S5) Black K, L R) Meek Surface (F12) Sandy Gleyee Matrix (S4) Week Surface (F7) (LR K, L R) Sandy Redox (S5) Bark Surface (S7) (LR R, MLRA 149B) Meek Surface (F12) Dark Surface (S7) (LR R, MLRA 149B) Very Shallow Dark Surface (S7) (LR R K, L R) Midicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic. Restrictive Layer (If observed): None Depth (inches): <			·								
Type: C = Concentration, D = Depletion, RM = Reduced Matrix, MS = Masked Sand Grains. Location: PL = Pore Lining, M = Matrix. Hydric Soil Indicators: Indicators for Problematic Hydric Soils? Histosol(A1) Polyvalue Below Surface (S3) (LRR R, MLRA 1499) Coast Prairie Redox (A10) (LRR K, L, R) Black Histic (A2) Thin Dark Surface (S7) (LRR K, L) S cm Mucky Peat or Peat (S3) (LRR K, L, R) Black Histic (A3) Loamy Mucky Mineral (F1) (LRR K, L) S cm Mucky Peat or Peat (S3) (LRR K, L) Stratified Layers (A5) Depleted Matrix (F2) Dark Surface (S7) (LRR K, L) Sandy Mucky Mineral (S1) Redox Depressions (F8) Polyvalue Below Surface (S3) (LRR K, L) Sandy Mucky Mineral (S1) Redox Depressions (F8) Red Parent Material (F2) Sandy Redox (S5) Sirtoped Matrix (S4) Nesic Spodic (Tr6) (MLR A 149B) Sturface (S7) (LRR R, MLRA 149B) Very Shallow Dark Surface (T7) Other (Explain in Remarks) Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic. Retrictive Layer (If Observed): Type: None Hydric Soil Present? Yes			·		—						
"Type: C = Concentration, D = Depletion, RM = Reduced Matrix, MS = Masked Sand Grains. "Location: PL = Pore Lining, M = Matrix. Hydric Soil Indicators: Indicators for Problematic Hydric Soils? Histoci (A1) Polyvalue Below Surface (S5) (LRR R, MLRA 149B) _2 cm Muck (A10) (LRR K, L MLRA 149B) Histoci (A3) Loamy Mucky Mineral (F1) (LRR K, L)			·		—						
Type: C - Concentration, D = Depletion, RM = Reduced Matrix, MS = Masked Sand Grains. *Location: PL = Pore Lining, M = Matrix. Hydric Soil Indicators: Indicators for Problematic Hydric Soils? Histosol (A1) Polyvalue Below Surface (S9) (LRR R, MLRA 1499) 2 cm Muck (A10) (LRR K, L, MLRA 1499) Black Histic (A3) Loamy Mucky Mineral (F1) (LRR K, L) 5 cm Mucky Peat or Peat (S3) (LRR K, L) Stratified Layers (A5) Depleted Matrix (F2) Dark Surface (S3) (LRR K, L) Stratified Layers (A5) Depleted Matrix (F3) Polyvalue Below Surface (S3) (LRR K, L) Sandy Redvo (X2) Depleted Dark Surface (F6) Thin Dark Surface (S3) (LRR K, L) Sandy Redvo (S5) Redox Depressions (F8) Heidrastore (T40) (MLR 1449, 145, 1498) Sandy Redvo (S5) Redva Depressions (F8) Mesic Spoale (T46) (MLR 1444, 145, 1498) Stripped Matrix (S4) Red Parent Material (F1) Very Shallow Dark Surface (F12) Dark Surface (S7) (LRR R, MLRA 1498) Very Shallow Dark Surface (F12) Ref Parent Material (F21) Stripped Matrix (S4) Red Parent Material (F21) Very Shallow Dark Surface (F12) Dark Surface (S7) (LRR R, MLRA 1498) Very Shallow Dark Surface (F12) Dark Surface (S7) (LRR R, MLRA 1498) Very Shallow Dark Surface (S7) Remarkst					_						
Type: C = Concentration, D = Depletion, RM = Reduced Matrix, MS = Masked Sand Grains. ² Location: PL = Pore Lining, M = Matrix. Hydric Soil Indicators: Histosol (A1) Polyvalue Below Surface (S8) (LRR R, MLRA 149B) Histic Epipedon (A2) Thin Dark Surface (S9) (LRR K, L) ALRA 149B) Black Histic (A3) Loarny Gleyed Matrix (F2) Depleted Below Dark Surface (A11) Redox Dark Surface (F7) Thick Dark Surface (A12) Depleted Dark Surface (F7) Thick Dark Surface (A12) Depleted Dark Surface (F7) Sandy Mucky Mineral (S1) Redox Dark Surface (F7) Stripped Matrix (S4) Redox Dark Surface (F7) Iron-Manganese Masses (F12) (LRR K, L) Stripped Matrix (S4) Redox Dark Surface (F7)					_						
Type: _ Concentration, D = Depletion, RM = Reduced Matrix, MS = Masked Sand Grains. L'actacion; PL = Pore Lining, M = Matrix. Hydric Soil Indicators:											
Hydric Soil Indicators: Indicators: Indicators: Indicators: Histic Soil Indicators: Polyvalue Below Surface (S8) (LRR R, MLRA 149B) 2 cm Muck (A10) (LRR K, L MLRA 149B) Black Histic (A3) Leamy Mucky Mineral (F1) (LRR K, L) S cm Mucky Peat or Peat (S3) (LRR K, L R) Stratified Layers (A5) Depleted Matrix (F2) D and Surface (S7) (LRR K, L R) Stratified Layers (A5) Depleted Matrix (F2) Depleted Below Surface (S3) (LRR K, L R) Sandy Mucky Mineral (S1) Redox Depressions (F8) Thin Dark Surface (S7) (LRR K, L R) Sandy Gleyed Matrix (S6) Mesic Spodic (TA6) (MLRA 1449B) Very Shallow Dark Surface (F12) Dark Surface (S7) (LRR K, MLRA 149B) Wery Shallow Dark Surface (F12) Other (Explain in Remarks) Sitripped Matrix (S6) Peletomark Surface (F12) Other (Explain in Remarks) Pandicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic. Restrictive Layer (In observed): Type: None Hydric Soil Present? Yes Depth (inches): Remarks: No No positive indication of hydric soils was observed. The criterion for hydric soil is not met. Refusal due to coarse fragments. No	¹ Type: C = C	oncentration, D = I	Depletio	n, RM = Reduced	Mat	rix, MS =	Masked	Sand Grains. ² L	ocation: PL = Po	re Lini	ing, M = Matrix.
Histic Epigedon (A2) Histic Epigedon Histic Histic Epigedon Histic Epigedon Histic Histic Epigedon Histic Epigedon Histic Histic Epigedon Histic Histic Epigedon Histic Histic Histic Epigedon Histic Histi Histic Histic Histic Histic Histic Histi	Hydric Soil I	ndicators:					0.4.55		Indicators for	Proble	ematic Hydric Soils ³ :
Inite Land Joint Construction of the Cons	Histosol	(AT) inedon (A2)		Polyvalue Bel	ow S face	urtace (S	8)(LRR	K, MLKA 149B) 4 149B)	2 cm Muck	(A10)	(LRR K, L, MLRA 149B)
Hydrogen Sulfide (A4) Loamy Gleyed Matrix (F2) Dark Butrace (51) (LRR K, L)	Black His	stic (A3)		Loamy Muck	/ Min	eral (F1)	(LRR K, I	_)	Coast Prain	rie Red	dox (A16) (LRR K, L, R)
Stratified Layers (A5)	Hydroge	n Sulfide (A4)		Loamy Gleye	d Ma	trix (F2)		-	5 cm Muck	y Pea ce (S7	(IRR K I)
Lopeleted Below Dark Surface (A11) Redox Dark Surface (F5) Thick Dark Surface (S9) (LRR K, L, P) Iron-Manganese Masses (F12) (LRR K, L, R) Iron-Manganese Masses (F12) (LRR K, L, R) Iron-Manganese Masses (F12) (LRR K, L, R) Piedmont Floodplain Soils (F19) (MLRA 149B) Piedmont Floodplain Soils (F19) (MLRA 149B) Redox (S5) Redox C(S5) Redox C(S5) Redox C(S5) Redox Floodplain Soils (F12) (LR R, MLRA 149B) Very Shallow Dark Surface (TF12) Other (Explain in Remarks)	Stratified	d Layers (A5)		Depleted Ma	trix (I	3)			Polyvalue I	Below	Surface (S8) (LRR K, L)
	Depleted	d Below Dark Surfa irk Surface (A12)	ace (A11	Redox Dark S	urfa k Su	:e (F6) face (F7)			Thin Dark	Surfac	ce (S9) (LRR K, L)
	Sandy M	lucky Mineral (S1)		Redox Depre	ssior	is (F8)			Iron-Mang	anese	Masses (F12) (LRR K, L, R)
Sandy Redox (S5)Red Parent Material (F21)Red Parent Material (F21)Red Parent Material (F21)Red Parent Material (F21)	Sandy G	leyed Matrix (S4)							Piedmont	Flood	plain Soils (F19) (MLRA 149B)
Stripped Matrix (S6)Very Shallow Dark Surface (TF12)Dark Surface (S7) (LRR R, MLRA 149B)Other (Explain in Remarks) andicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic. Restrictive Layer (if observed):	Sandy R	edox (S5)							Red Parent	t Mate	erial (F21)
	Stripped	l Matrix (S6)							Very Shallo	w Da	rk Surface (TF12)
■Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic. Restrictive Layer (if observed): Type: Depth (inches): Remarks: No positive indication of hydric soils was observed. The criterion for hydric soil is not met. Refusal due to coarse fragments.	Dark Su	rface (S7) (LRR R, N	1LRA 149	9B)					Other (Exp	lain in	n Remarks)
Restrictive Layer (if observed): Type: None Depth (inches): Hydric Soil Present? YesNo Remarks: No positive indication of hydric soils was observed. The criterion for hydric soil is not met. Refusal due to coarse fragments.	³ Indicators	of hydrophytic veg	etation a	and wetland hydr	olog	y must be	e preser	ıt, unless disturbe	ed or problemati	с.	
Type: None Depth (inches):	Restrictive L	ayer (if observed):									
Remarks: No positive indication of hydric soils was observed. The criterion for hydric soil is not met. Refusal due to coarse fragments.		Type:		None			Hydric	Soil Present?	Y	′es	No⁄_
Remarks: No positive indication of hydric soils was observed. The criterion for hydric soil is not met. Refusal due to coarse fragments.		Depth (inches):									
	No positive	indication of hydri	c soils w	as observed. The	· crite	rion for	hydric si	bil is not met. Ref	usal due to coar	se frag	gments.

Soil Photos



Photo of Sample Plot North Photo of Sample Plot East



Photo of Sample Plot South

Photo of Sample Plot West



WETLAND DETERMINATION DATA FORM - Northcentral and Northeast Region

Project/Site: Flat Cree	k Solar Projec	t	City/County:	Canajoharie, M	ontgomery	County		Sampling Date: 2	2021-Aug-18
Applicant/Owner: S	unEast				State:	New York	_ !	Sampling Point: W-	EES-04_PEM-1
Investigator(s): Etha	n Snyder, Stev	e Spotts, Cory D	unning	Sec	tion, Towns	ship, Range:	NA	٨	
Landform (hillslope, te	rrace, etc.):	Depression		Local relie	(concave,	convex, nor	ne):	Concave	Slope (%): 0 to 1
Subregion (LRR or MLF	RA): LRR	L		Lat:	42.860648	<u>33 Lo</u>	ng:	-74.5403502	Datum: WGS84
Soil Map Unit Name:	Madalin silty	clay loam, 0 to 3	B percent slop	bes				NWI classificat	ion:
Are climatic/hydrologic	c conditions o	n the site typical	for this time o	of year?	Yes 🟒	_ No (I	fno	, explain in Remark	s.)
Are Vegetation, Are Vegetation,	Soil, Soil,	or Hydrology or Hydrology	significant naturally p	ly disturbed? problematic?	Are "N (If nee	ormal Circu ded, explair	ımst n any	ances" present? / answers in Remar	Yes No ks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes 🟒 No		
Hydric Soil Present?	Yes 🟒 No	Is the Sampled Area within a Wetland?	Yes 🯒 No
Wetland Hydrology Present?	Yes 🟒 No	If yes, optional Wetland Site ID:	W-EES-04
Remarks: (Explain alternative procedures he	re or in a separate report)	
Covertype is PEM. Area is wetland, all three	wetland parameters are p	resent.	

HYDROLOGY

Wetland Hydrology Indicators:	
Primary Indicators (minimum of one is required; check all that apply)	Secondary Indicators (minimum of two required)
	 Surface Soil Cracks (B6) Drainage Patterns (B10) Moss Trim Lines (B16) Dry-Season Water Table (C2) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (C9) 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∕ Depth (inches):	_
Water Table Present? Yes No Depth (inches):	Wetland Hydrology Present? Yes No
Saturation Present? Yes 🖌 No Depth (inches): 9	
(includes capillary fringe)	
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if Remarks: The criterion for wetland hydrology is met. A positive indication of wetland hydrology was obse	available:

VEGETATION -- Use scientific names of plants.

Sampling Point: W-EES-04_PEM-1

The Starting (Plataine, 20 ft.)	Absolute	Dominant	Indicator	Dominance Test worksh	neet:		
<u> Iree stratum</u> (Plot size: <u>30 tt)</u>	% Cover	Species?	Status	Number of Dominant S	pecies That	1	(A)
1				Total Number of Domin	ant Species		
2.				Across All Strata:	une opecies	1	(B)
3.				Percent of Dominant Sp	ecies That	100	(4 (D)
4				Are OBL, FACW, or FAC:		100	(A/B)
5				 Prevalence Index works 	heet:		
0				- <u>Total % Cover</u>	of:	<u>Multiply</u>	<u>By:</u>
/		Tabal Car		- OBL species	8	x 1 =	8
Carlin - Charle Charless (Distributed of the control of the contro	0	= lotal Cov	er	FACW species	105	x 2 =	210
Sapling/Shrub Stratum (Plot size:15 ft)				FAC species	0	x 3 =	0
1. 				- FACU species	2	x 4 =	8
2				– UPL species	0	x 5 =	0
3				– Column Totals	115	(A)	226 (B)
4.				Prevalence In	dex = B/A =	2	
5.				- Hvdrophytic Vegetation	Indicators:		
6				- 1- Rapid Test for H	lvdrophytic V	/egetatior	ı
7				- 🖌 2 - Dominance Tes	st is >50%	0	
	0	= Total Cov	er	3 - Prevalence Ind	ex is $\leq 3.0^1$		
Herb Stratum (Plot size: <u>5 ft</u>)				4 - Morphological	Adaptations	(Provide	supporting
1. <u>Phalaris arundinacea</u>	85	Yes	FACW	- data in Remarks or on a	separate sh	ieet)	
2. Agrostis stolonifera	20	No	FACW	Problematic Hydro	ophytic Vege	tation ¹ (E>	(plain)
3. <i>Lythrum salicaria</i>	8	No	OBL	¹ Indicators of hydric soi	l and wetlan	d hydrolo	gy must be
4. <i>Vicia americana</i>	2	No	FACU	present, unless disturbe	ed or problei	matic	
5				Definitions of Vegetatio	n Strata:		
6				Tree – Woody plants 3 i	n. (7.6 cm) oı	r more in	diameter at
7				breast height (DBH), reg	gardless of h	eight.	
8				Sapling/shrub – Woody	plants less t	han 3 in. I	OBH and
9				greater than or equal to	o 3.28 ft (1 m) tall.	
10				Herb – All herbaceous (non-woody)	plants, re	gardless of
11				size, and woody plants	less than 3.2	8 ft tall.	
12				Woody vines – All wood	y vines great	ter than 3	.28 ft in
	115	= Total Cov	er	neight.			
<u>Woody Vine Stratum</u> (Plot size: <u>30 ft</u>)		_		Hydrophytic Vegetation	n Present?	les 🟒 N	lo
1							
2.							
3.				-			
4.				-			
	0	= Total Cov	er	-			

Remarks: (Include photo numbers here or on a separate sheet.)

A positive indication of hydrophytic vegetation was observed (>50% of dominant species indexed as OBL, FACW, or FAC). A positive indication of hydrophytic vegetation was observed (Prevalence Index is \leq 3.00). A positive indication of hydrophytic vegetation was observed (Rapid Test for Hydrophytic Vegetation).

SOIL

Profile Desc Depth	ription: (Describe 1 Matrix	to the o	depth needed to (Redox	docun	nent the	indicato	r or confirm the a	absence of indicat	tors.)
(inches)	Color (moist)	06	Color (moist)	06		1 0 52	Toyt	Iro	Pomarks
				<u>70</u>	<u>Type</u>	<u></u>	Silt L		Remarks
0-9	2.51 4/1	95	51R 4/4	15		N			Composted
9-10	2.51 5/1		518 5/6						Compacted
				_					
				_				·	
				_				·	
Type: C = C	Concentration, D =	Deplet	ion, RM = Reduce	d Mat	rix, MS =	Masked	Sand Grains. ² l	_ocation: PL = Por	re Lining, M = Matrix.
- - Hydric Soil	Indicators:							Indicators for F	Problematic Hydric Soils ³ :
Histosol Histic Ep Black Hi Hydroge Stratifie Deplete Thick Da Sandy M Sandy G Sandy R Sandy R Sandy R Lange Dark Su	(A1) pipedon (A2) stic (A3) en Sulfide (A4) d Layers (A5) d Below Dark Surfa ark Surface (A12) Aucky Mineral (S1) bileyed Matrix (S4) tedox (S5) d Matrix (S6) rface (S7) (LRR R, M	ace (A1 /ILRA 1 /	Polyvalue Bo Thin Dark So Loamy Mucl Loamy Gleyo Depleted Mo 1) Redox Dark Depleted Da Redox Depr 49B)	elow S urface ky Mir ed Ma atrix (Surfa urk Su essior	urface (S (S9) (LRF heral (F1) trix (F2) F3) cc (F6) rface (F7 hs (F8)	58) (LRR R R, MLR (LRR K,	R, MLRA 149B) A 149B) L)	2 cm Muck Coast Prair Dark Surfac Polyvalue E Thin Dark S Iron-Manga Piedmont F Mesic Spoc Red Parent Very Shallo Other (Expl	(A10) (LRR K, L, MLRA 149B) ie Redox (A16) (LRR K, L, R) y Peat or Peat (S3) (LRR K, L, R) ce (S7) (LRR K, L) Below Surface (S8) (LRR K, L) Surface (S9) (LRR K, L) anese Masses (F12) (LRR K, L, R) Floodplain Soils (F19) (MLRA 149B) dic (TA6) (MLRA 144A, 145, 149B) : Material (F21) w Dark Surface (TF12) lain in Remarks)
Indicators	of hydrophytic veg	etatior	and wetland hyd	rolog	y must b	e preser	nt, unless disturb	ed or problematio	c
Restrictive l	_ayer (if observed):								
	Туре:		Heavy clay			Hydric	Soil Present?	•	Yes 🟒 No
	Depth (inches):		9						
4 positive ir	ndication of hydric	soil wa	is observed. The o	riterio	on for hy	dric soil	is met.		

Soil Photos



Photo of Sample Plot North Photo of Sample Plot East



Photo of Sample Plot South Photo of Sample Plot West



WETLAND DETERMINATION DATA FORM - Northcentral and Northeast Region

Project/Site: Flat Creek Solar Project	City/County: Canajoharie, Montgomery County	Sampling Date: 2021-Aug-18
Applicant/Owner: SunEast	State: New York	Sampling Point: W-EES-04_UPL-1
Investigator(s):Ethan Snyder, Steve Spotts, Cory	Dunning Section, Township, Range: N	IA
Landform (hillslope, terrace, etc.): Hillslope	Local relief (concave, convex, none)	Undulating Slope (%): 0 to 1
Subregion (LRR or MLRA): LRR L	Lat: 42.8605555 Long	-74.5403777 Datum: WGS84
Soil Map Unit Name: Madalin silty clay loam, 0 to	3 percent slopes	NWI classification:
Are climatic/hydrologic conditions on the site typica	I for this time of year? Yes 🟒 No (If n	o, explain in Remarks.)
Are Vegetation, Soil, or Hydrology _ Are Vegetation, Soil, or Hydrology _	significantly disturbed? Are "Normal Circum: naturally problematic? (If needed, explain a	stances" present? Yes _✔ No ny answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes No 🟒		
Hydric Soil Present?	Yes No 🟒	Is the Sampled Area within a Wetland?	Yes No 🟒
Wetland Hydrology Present?	Yes No _	If yes, optional Wetland Site ID:	
Remarks: (Explain alternative procedures	here or in a separate repo	rt)	
Covertype is UPL. Area is upland, not all t	hree wetland parameters a	re present.	

HYDROLOGY

Wetland Hydrology Indicators:						
Primary Indicators (minimum of or	<u>ie is required; check all t</u>	<u>hat apply)</u>	Secondary Indicators (minimum o	of two required)		
 Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5) Inundation Visible on Aerial Ima Sparsely Vegetated Concave Su 	Water Aquations Marl Du Hydrogs Oxidizes Present Recent Thin M agery (B7) Other (urface (B8)	Stained Leaves (B9) c Fauna (B13) eposits (B15) gen Sulfide Odor (C1) ed Rhizospheres on Living Roots (C3) ice of Reduced Iron (C4) : Iron Reduction in Tilled Soils (C6) luck Surface (C7) (Explain in Remarks)	 Surface Soil Cracks (B6) Drainage Patterns (B10) Moss Trim Lines (B16) Dry-Season Water Table (C2) Crayfish Burrows (C8) Saturation Visible on Aerial Im Stunted or Stressed Plants (D' Geomorphic Position (D2) Shallow Aquitard (D3) Microtopographic Relief (D4) FAC-Neutral Test (D5) 	nagery (C9) 1)		
Field Observations:		Depth (inches)				
			-			
Water Table Present?	Yes No 🟒	Depth (inches):	Wetland Hydrology Present?	Yes No 🟒		
Saturation Present?	Yes No 🟒	Depth (inches):	_			
(includes capillary fringe)						
Describe Recorded Data (stream g	auge, monitoring well, a	erial photos, previous inspections), if	available:			
Remarks:			- hard and a second			
The chlerion for wetland hydrolog	y is not met. No positive	indication of wetland hydrology was	observed.			

VEGETATION -- Use scientific names of plants.

Sampling Point: W-EES-04_UPL-1

1.				Are OBL, FACW, or F Total Number of Do Across All Strata: Percent of Dominan Are OBL, FACW, or F Prevalence Index wo Total % Cov	AC: minant Species it Species That AC: orksheet:	3	(B) 3 (A/B)
2	0	= Total Cov		Across All Strata: Percent of Dominar Are OBL, FACW, or F Prevalence Index wo	nt Species That AC: orksheet:	3	(B) 3 (A/B)
3		= Total Cov		 Percent of Dominan Are OBL, FACW, or F Prevalence Index we Total % Condition 	at Species That AC: orksheet:	33.3	3 (A/B)
4	0	= Total Cov		 Are OBL, FACW, or F Prevalence Index we Total % Cov 	AC: orksheet:	33.:	3 (A/B)
5 6 7 <u>Sapling/Shrub Stratum (Plot size:15 ft)</u> 1 2 3 4.	0	= Total Cov		Prevalence Index we	orksheet:		
5	0	= Total Cov		- Total % Co			
7.	0	= Total Cov			<u>ver of:</u>	<u>Multiply</u>	<u>/ By:</u>
Sapling/Shrub Stratum (Plot size:15 ft) 1.			or	- OBL species	5	x 1 =	5
2			ei	FACW species	0	x 2 =	0
2 3 4.				FAC species	35	x 3 =	105
2 3 4.				- FACU species	125	x 4 =	500
5 4.		<u> </u>		- UPL species	0	x 5 =	0
4.		<u> </u>		- Column Totals	165	(A)	610 (B)
г		<u> </u>		Prevalenc	e Index = B/A =	3.7	. <u> </u>
c.				- Hydrophytic Vegeta	tion Indicators:		
		·		1- Rapid Test fo	or Hydrophytic V	egetatio	n
7.		- Tatal Cau		2 - Dominance	Test is > 50%		
Used Structure (Distribute 5.6)	0		er	3 - Prevalence	Index is $\leq 3.0^{1}$		
Herb Stratum (Plot Size: <u>5 ft</u>)	50	Vee	FACU	4 - Morphologi	ical Adaptations ¹	Provide	supporting
1. Dipsacus iulionum		Yes	FACU	- data in Remarks or	on a separate sh	ieet)	
2. Poa pratensis		Yes	FACU	Problematic H	ydrophytic Veget	tation ¹ (E	xplain)
3. Agrostis capillaris		Yes	FAC	¹ Indicators of hydric	soil and wetland	d hydrolo	ogy must be
4. Solidago canadensis		NO	FACU	present, unless dist	urbed or probler	matic	
5. Symphyotrichum ericoides	10	NO	FACU	Definitions of Veget	ation Strata:		
6. <i>Lythrum salicaria</i>	5	NO	OBL	Tree – Woody plants	3 in. (7.6 cm) or	more in	diameter at
/				breast height (DBH)	, regardless of h	eight.	DDU
8		·		Sapling/snrub - woo	ody plants less tr	nan 3 in.	DBH and
9		·		Horb All borbacoo) lan. plante re	ardloss of
10		·		size and woody pla	nts less than 3.2	8 ft tall	gar diess of
11		<u> </u>		Woody vines - All w	oody vines great	ter than 3	3 28 ft in
12				height.	body vines great		
<u>Woody Vine Stratum</u> (Plot size: <u>30 ft</u>)	165	= Total Cov	er	Hydrophytic Vegeta	ation Present?	/es	No 🖌
1.							
2.				-			
3.				-			
4.		·		-			
	0	= Total Cov	er	-			

SOIL

inches)	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²	Texture	Remarks
) - 11.5	2.5Y 4/1	100		·		Fil	oric Silt Loam	
1.5 - 18	2.5Y 5/2	90	5YR 5/8	10	С	M	Silty Clay	
				·			<u> </u>	
						·		
		·						
		·		·			<u> </u>	
		·		·				
oe: C = Co	oncentration. D = I	Depletio	n. RM = Reduced	Matr	ix. MS = I	Masked Sand Grains	s. ² Location: PL = Pore	e Lining, M = Matrix.
Iric Soil Ir	ndicators:		.,				Indicators for Pr	roblematic Hydric Soils ³ :
Histosol	(A1)		Polyvalue Be	low S	urface (S	B) (LRR R, MLRA 149	B) 2 cm Muck ((A10) (I RR K I MI RA 149R)
Histic Epi	ipedon (A2)		Thin Dark Su	rface	(S9) (LRR	R, MLRA 149B)	Coast Prairie	e Redox (A16) (LRR K, L, R)
Black His	tic (A3)		Loamy Muck	y Min	eral (F1) (LRR K, L)	5 cm Mucky	Peat or Peat (S3) (LRR K, L, R)
Hydroge	n Sulfide (A4)		Loamy Gleye	d Mat	rix (F2)		Dark Surface	e (S7) (LRR K, L)
Stratified	i Layers (AS)			UNX (F	3) 2 (E6)		Polyvalue Be	elow Surface (S8) (LRR K, L)
Donlatari	Bolow Dark Surfa	CO (A11)	N Rodov Dark 9	111120				
Depleted Thick Dai	l Below Dark Surfa rk Surface (A12)	ice (A11)	Redox Dark 9 Depleted Da	suriac rk Sur	e (FO) face (F7)		Thin Dark Su	urface (S9) (LRR K, L)
Depleted Thick Dai Sandy Mi	l Below Dark Surfa rk Surface (A12) ucky Mineral (S1)	ice (A11)	Redox Dark S Depleted Dai Redox Depre	k Sur	e (F0) face (F7) s (F8)		Thin Dark Su Iron-Mangar	urface (S9) (LRR K, L) nese Masses (F12) (LRR K, L, R)
Depletec Thick Dai Sandy Mi Sandy Gl	l Below Dark Surfa rk Surface (A12) ucky Mineral (S1) eved Matrix (S4)	ice (A11)) Redox Dark S Depleted Dai Redox Depre	k Sur ssion	e (F0) face (F7) s (F8)		Thin Dark Su Iron-Mangar Piedmont Fl	urface (S9) (LRR K, L) nese Masses (F12) (LRR K, L, R) oodplain Soils (F19) (MLRA 149B)
Depletec Thick Dar Sandy M Sandy Gl Sandy Re	l Below Dark Surfa rk Surface (A12) ucky Mineral (S1) eyed Matrix (S4) edox (S5)	ice (A11)) Redox Dark S Depleted Dai Redox Depre	rk Sur	e (F6) face (F7) s (F8)		Thin Dark Su Iron-Mangar Piedmont Fl Mesic Spodi	urface (S9) (LRR K, L) nese Masses (F12) (LRR K, L, R) loodplain Soils (F19) (MLRA 149B) ic (TA6) (MLRA 144A, 145, 149B)
Depletec Thick Dat Sandy Mi Sandy Gl Sandy Re Stripped	l Below Dark Surfa rk Surface (A12) ucky Mineral (S1) eyed Matrix (S4) edox (S5) Matrix (S6)	ice (A11)) Redox Dark S Depleted Dai Redox Depre	surfac rk Sur ssion	e (F0) face (F7) s (F8)		Thin Dark Su Iron-Mangar Piedmont Fl Mesic Spodi Red Parent I	urface (S9) (LRR K, L) nese Masses (F12) (LRR K, L, R) oodplain Soils (F19) (MLRA 149B) ic (TA6) (MLRA 144A, 145, 149B) Material (F21) w Dade (F21)
Depletec Thick Da Sandy Mi Sandy Gl Sandy Re Stripped Dark Sur	l Below Dark Surfa rk Surface (A12) ucky Mineral (S1) eyed Matrix (S4) edox (S5) Matrix (S6) face (S7) (LRR R, M	ice (A11)) Redox Dark S Depleted Dai Redox Depre 9 B)	k Sur	e (F0) face (F7) s (F8)		Thin Dark Su Iron-Mangau Piedmont Fl Mesic Spodi Red Parent I Very Shallow	urface (S9) (LRR K, L) nese Masses (F12) (LRR K, L, R) loodplain Soils (F19) (MLRA 149B) c (TA6) (MLRA 144A, 145, 149B) Material (F21) v Dark Surface (TF12) ain in Pamarks)
Depletec Thick Dar Sandy Mi Sandy Gl Sandy Re Stripped Dark Sur	l Below Dark Surfa rk Surface (A12) ucky Mineral (S1) eyed Matrix (S4) edox (S5) Matrix (S6) face (S7) (LRR R, M	ice (A11)) Redox Dark S Depleted Dai Redox Depre 9B)	k Sur	e (F0) face (F7) s (F8)		Thin Dark Su Iron-Mangau Piedmont Fl Mesic Spodi Red Parent I Very Shallov Other (Expla	urface (S9) (LRR K, L) nese Masses (F12) (LRR K, L, R) loodplain Soils (F19) (MLRA 149B) ic (TA6) (MLRA 144A, 145, 149B) Material (F21) v Dark Surface (TF12) ain in Remarks)
Depletec Thick Dai Sandy M. Sandy Gl Sandy Re Stripped Dark Sur dicators o	I Below Dark Surfa rk Surface (A12) ucky Mineral (S1) eyed Matrix (S4) edox (S5) Matrix (S6) face (S7) (LRR R, M of hydrophytic vege	ice (A11) ILRA 149 etation a) Redox Dark S Depleted Dar Redox Depre 9 B) and wetland hydr	rk Sur ssion	r must be	present, unless dis	Thin Dark Su Iron-Mangar Piedmont Fl Mesic Spodi Red Parent I Very Shallov Other (Expla turbed or problematic.	urface (S9) (LRR K, L) nese Masses (F12) (LRR K, L, R) oodplain Soils (F19) (MLRA 149B) ic (TA6) (MLRA 144A, 145, 149B) Material (F21) v Dark Surface (TF12) ain in Remarks)
Depletec Thick Da Sandy M Sandy Gl Sandy Re Stripped Dark Sur dicators o	l Below Dark Surfa rk Surface (A12) ucky Mineral (S1) eyed Matrix (S4) edox (S5) Matrix (S6) face (S7) (LRR R, M if hydrophytic vegr ayer (if observed):	ice (A11) ILRA 149 etation a) Redox Dark S Depleted Dar Redox Depre 9 B) and wetland hydr	rk Sur ssion	r must be	present, unless dis	Thin Dark Su Iron-Mangar Piedmont Fl Mesic Spodi Red Parent I Very Shallov Other (Expla turbed or problematic.	urface (S9) (LRR K, L) nese Masses (F12) (LRR K, L, R) loodplain Soils (F19) (MLRA 149B) ic (TA6) (MLRA 144A, 145, 149B) Material (F21) v Dark Surface (TF12) ain in Remarks)
Depletec Thick Da Sandy M Sandy Gl Sandy Re Stripped Dark Sur licators o trictive La	I Below Dark Surfa rk Surface (A12) ucky Mineral (S1) eyed Matrix (S4) edox (S5) Matrix (S6) face (S7) (LRR R, M of hydrophytic vego ayer (if observed): Type:	ILRA 149) Redox Dark S Depleted Dar Redox Depre 9 B) and wetland hydr	surfac rk Sur ssion	r must be	present, unless dis	Thin Dark Su Iron-Mangau Piedmont Fl Mesic Spodi Red Parent I Very Shallov Other (Expla turbed or problematic.	urface (S9) (LRR K, L) nese Masses (F12) (LRR K, L, R) loodplain Soils (F19) (MLRA 149B) c (TA6) (MLRA 144A, 145, 149B) Material (F21) v Dark Surface (TF12) ain in Remarks)
Depletec Thick Da Sandy M Sandy Gl Sandy Re Stripped Dark Sur dicators o strictive La	l Below Dark Surfa rk Surface (A12) ucky Mineral (S1) eyed Matrix (S4) edox (S5) Matrix (S6) face (S7) (LRR R, M of hydrophytic vega ayer (if observed): Type:	ice (A11) ILRA 149 etation a) Redox Dark S Depleted Dar Redox Depre 9 B) and wetland hydr	rk Sur rk Sur rology	r must be	present, unless dis	Thin Dark Su Iron-Mangar Piedmont Fl Mesic Spodi Red Parent I Very Shallow Other (Expla turbed or problematic.	urface (S9) (LRR K, L) nese Masses (F12) (LRR K, L, F loodplain Soils (F19) (MLRA 14 c (TA6) (MLRA 144A, 145, 149 Material (F21) v Dark Surface (TF12) ain in Remarks)
Depletec Thick Dar Sandy M Sandy Gl Sandy Re Stripped Dark Sur dicators o strictive La marks: positive i	l Below Dark Surfa rk Surface (A12) ucky Mineral (S1) eyed Matrix (S4) edox (S5) Matrix (S6) face (S7) (LRR R, M of hydrophytic veg ayer (if observed): Type: Depth (inches): ndication of hydri	ILRA 149) Redox Dark S Depleted Dar Redox Depre 9 B) and wetland hydr None ras observed. The	rology	rion for h	Hydric Soil Presen	Thin Dark Su Iron-Mangar Piedmont Fl Mesic Spodi Red Parent I Very Shallow Other (Expla turbed or problematic.	urface (S9) (LRR K, L) nese Masses (F12) (LRR K, L, loodplain Soils (F19) (MLRA 1 c (TA6) (MLRA 144A, 145, 149 Material (F21) v Dark Surface (TF12) ain in Remarks) Yes No∠
Depletec Thick Dai Sandy M Sandy Gl Sandy Re Stripped Dark Sur licators o trictive La narks: positive i	l Below Dark Surfa rk Surface (A12) ucky Mineral (S1) eyed Matrix (S4) edox (S5) Matrix (S6) face (S7) (LRR R, M of hydrophytic vege ayer (if observed): Type: Depth (inches): ndication of hydri	ILRA 149) Redox Dark S Depleted Dar Redox Depre 9B) and wetland hydr None ras observed. The	rology	rion for h	Hydric Soil Presen Hydric soil is not me	Thin Dark St Iron-Mangar Piedmont Fl Mesic Spodi Red Parent I Very Shallov Other (Expla turbed or problematic.	urface (S9) (LRR K, L) nese Masses (F12) (LRR K, L, R) loodplain Soils (F19) (MLRA 149E c (TA6) (MLRA 144A, 145, 149B) Material (F21) v Dark Surface (TF12) ain in Remarks) Yes No
Depletec Thick Dar Sandy M Sandy Gl Sandy Re Stripped Dark Sur icators o trictive La narks: positive i	l Below Dark Surfa rk Surface (A12) ucky Mineral (S1) eyed Matrix (S4) edox (S5) Matrix (S6) face (S7) (LRR R, M if hydrophytic veg ayer (if observed): Type: Depth (inches): ndication of hydri	ILRA 149) Redox Dark S Depleted Dar Redox Depre 9B) and wetland hydr None ras observed. The	rology	rion for h	yresent, unless dis Hydric Soil Presen hydric soil is not me	Thin Dark St Iron-Mangar Piedmont Fl Mesic Spodi Red Parent I Very Shallov Other (Expla turbed or problematic.	urface (S9) (LRR K, L) nese Masses (F12) (LRR K, L, R) loodplain Soils (F19) (MLRA 149B c (TA6) (MLRA 144A, 145, 149B) Material (F21) v Dark Surface (TF12) ain in Remarks) Yes No

Soil Photos



Photo of Sample Plot North Photo of Sample Plot East



Photo of Sample Plot South Photo of Sample Plot West



WETLAND DETERMINATION DATA FORM - Northcentral and Northeast Region

Project/Site: Flat Cree	k Solar Projec	t	City/County:	Canajoharie, M	ontgomery	County	Sampling Date:	2021-Aug-18
Applicant/Owner: S	unEast				State:	New York	Sampling Point:	W-EES-05_PEM-1
Investigator(s): Etha	n Snyder, Stev	ve Spotts, Cory D	unning	Sec	tion, Towns	ship, Range: 1	NA	
Landform (hillslope, te	rrace, etc.):	Depression		Local relief	(concave,	convex, none)	: Concave	Slope (%): 0 to 1
Subregion (LRR or MLF	RA): LRR	L		Lat:	42.85928	3 Long	: -74.5390378	Datum: WGS84
Soil Map Unit Name:	Madalin silty	v clay loam, 0 to 3	B percent slop	bes			NWI classifi	cation:
Are climatic/hydrologic	c conditions o	n the site typical	for this time	of year?	Yes 🟒	_ No (If r	io, explain in Rema	rks.)
Are Vegetation, Are Vegetation,	Soil, Soil,	or Hydrology or Hydrology	significant naturally p	ly disturbed? problematic?	Are "N (If nee	ormal Circum ded, explain a	stances" present? ny answers in Rem	Yes 🟒 No arks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes 🟒 No		
Hydric Soil Present?	Yes 🟒 No	Is the Sampled Area within a Wetland?	Yes 🯒 No
Wetland Hydrology Present?	Yes 🟒 No	If yes, optional Wetland Site ID:	W-EES-05
Remarks: (Explain alternative procedures he	re or in a separate report)	
Covertype is PEM. Area is wetland, all three	wetland parameters are p	resent.	

HYDROLOGY

Wetland Hydrology Indicators:			
Primary Indicators (minimum of one is required; check all that apply)	Secondary Indicators (minimum of two required)		
 Surface Water (A1) Water-Stained Leaves (B9) High Water Table (A2) Aquatic Fauna (B13) Saturation (A3) Marl Deposits (B15) Water Marks (B1) Hydrogen Sulfide Odor (C1) Sediment Deposits (B2) Oxidized Rhizospheres on Living Roots (C3) Drift Deposits (B3) Presence of Reduced Iron (C4) Algal Mat or Crust (B4) Iron Deposits (B5) Inundation Visible on Aerial Imagery (B7) Sparsely Vegetated Concave Surface (B8) 	 Surface Soil Cracks (B6) Drainage Patterns (B10) Moss Trim Lines (B16) Dry-Season Water Table (C2) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (C9) 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 _∠ Depth (inches):	_		
Water Table Present? Yes 🖌 No Depth (inches): 4	Wetland Hydrology Present? Yes No		
Saturation Present? Yes 🖌 No Depth (inches): 0			
(includes capillary fringe)			
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if Remarks: The criterion for wetland hydrology is met. A positive indication of wetland hydrology was obse	available: rved (primary and secondary indicators were present).		

VEGETATION -- Use scientific names of plants.

Sampling Point: W-EES-05_PEM-1

Tree Christian (Distring) 20 ft	Absolute	Dominant	Indicator	Dominance Test works	heet:		
<u>irree stratum</u> (Piot size: <u>30 it</u>)	% Cover	Species?	Status	Number of Dominant S Are OBL, FACW, or FAC	pecies That	3	(A)
2.		·		Total Number of Domir	nant Species	3	(B)
3		·		Percent of Dominant S	pecies That	100	(A/B)
5				- Provalence Index works	shoot:		
6				Total % Cover	of.	Multiply	By:
7					<u>01.</u> 85	<u>v 1 =</u>	<u>by.</u> 85
	0	= Total Cov	er	EACW species	110	×1- ×2-	220
Sapling/Shrub Stratum (Plot size: <u>15 ft</u>)		_		EAC species	0	×2- ×2-	220
1				- EACLI species	0	× 4 -	0
2.				- FACO species	0	x 4	0
3.				- OPL species	0	x 5 =	0
4.					195	(A)	305 (B)
5.				Prevalence in	dex = B/A =	1.6	
6.				Hydrophytic Vegetation	n Indicators:		
7.		·		1- Rapid Test for H	lydrophytic V	egetatior/	ו
	0	= Total Cov	er	2 - Dominance Te	st is >50%		
Herb Stratum (Plot size: 5 ft)		-		3 - Prevalence Ind	ex is $\leq 3.0^{1}$		
1. Phalaris arundinacea	70	Yes	FACW	4 - Morphological	Adaptations	(Provide	supporting
2. Leersia oryzoides	50	Yes	OBL	- data in Remarks or on a	a separate sr	ieet)	(mlain)
3. Cyperus esculentus	40	Yes	FACW	1Indicators of hydric co	il and watlan	d budrolo	kpiairi) gu must ba
4. Typha latifolia	20	No	OBL	nresent unless disturb	ed or proble	u nyurolo matic	gy must be
5. Lycopus americanus	10	No	OBL	Definitions of Vegetatio	n Strata	nacie	
6. <i>Juncus effusus</i>	5	No	OBL	Tree - Woody plants 3 i	(7.6 cm) or	r more in	diameter at
7.				breast height (DBH), re	gardless of h	eight.	
8.				Sapling/shrub - Woody	plants less t	han 3 in. I	DBH and
9.		· ·		greater than or equal to	' o 3.28 ft (1 m) tall.	
10.		· ·		Herb – All herbaceous ((non-woody)	plants, re	gardless of
11.		· ·		size, and woody plants	less than 3.2	8 ft tall.	
12				Woody vines - All wood	dy vines great	ter than 3	.28 ft in
	195	= Total Cov	er	height.			
Woody Vine Stratum (Plot size: 30 ft)	155	-		Hydrophytic Vegetatio	n Present?	/es 🟒 N	No
1							
2				-			
2				-			
	<u> </u>	<u> </u>		-			
**		- Total Car	or	-			

Remarks: (Include photo numbers here or on a separate sheet.)

A positive indication of hydrophytic vegetation was observed (>50% of dominant species indexed as OBL, FACW, or FAC). A positive indication of hydrophytic vegetation was observed (Prevalence Index is \leq 3.00). A positive indication of hydrophytic vegetation was observed (Rapid Test for Hydrophytic Vegetation).

SOIL

(in als a a)	Matrix		Redox	<pre>K Feat</pre>	ures			
(inches)	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²	Texture	Remarks
0 - 6.5	10YR 3/1	85	2.5YR 3/6	15	С	M F	ibric Silt Loam	
6.5 - 14	10YR 4/1	90	5YR 5/8	10	С	Μ	Silt Loam	
14 - 18	2.5Y 5/1	85	5YR 5/6	15	С	Μ	Silty Clay	
			-					
Гуре: C = 0	Concentration, D =	Depleti	on, RM = Reduce	d Mat	rix, MS =	Masked Sand Grai	ns. ² Location: PL = Por	e Lining, M = Matrix.
lydric Soil	Indicators:			-			Indicators for I	Problematic Hydric Soils ³ :
- Histoso	l (A1)		Polyvalue Be	elow S	urface (S	8) (LRR R, MLRA 14	19B) 2 cm Muck	(A10) (I RR K I MI RA 149R)
Histic E	oipedon (A2)		Thin Dark Si	urface	(S9) (LRR	R, MLRA 149B)	Coast Prair	ie Redox (A16) (I RR K. I. R)
Black H	istic (A3)		Loamy Mucl	ky Mir	eral (F1)	(LRR K, L)	5 cm Muck	v Peat or Peat (S3) (LRR K. L. R)
✓ Hydrog	en Sulfide (A4)		Loamy Gley	ed Ma	trix (F2)		Dark Surfa	ce (S7) (LRR K, L)
Stratifie	d Layers (A5)		Depleted M	atrix (I	-3)		Polyvalue E	Below Surface (S8) (LRR K, L)
Deplete	d Below Dark Surfa	ace (A1	1)_✓ Redox Dark	Surfa	ce (F6)		Thin Dark S	Surface (S9) (LRR K, L)
I NICK Da	ark Surface (ATZ)		Depleted Da	ark Su	тасе (F7)		Iron-Manga	anese Masses (F12) (LRR K, L, R)
Sanuy N	Sloved Matrix (S4)		Redox Depr	essioi	IS (FO)		Piedmont I	-loodplain Soils (F19) (MLRA 149B)
Sandy C	Dedex (S5)						Mesic Spoo	lic (TA6) (MLRA 144A, 145, 149B)
Sanuy r	d Matrix (S6)						Red Parent	Material (F21)
Dark Su	urface (S7) (I PP P N	11 PA 1/	19B)				Very Shallo	w Dark Surface (TF12)
			+JDJ				Other (Exp	lain in Remarks)
ndicators	of hydrophytic veg	etation	and wetland hyc	Irolog	y must be	e present, unless o	listurbed or problematio	5
estrictive	Layer (if observed):							
	Туре:		None	_		Hydric Soil Prese	nt?	Yes 🟒 No
	Depth (inches):							
positive i	ndication of hydric	soil wa	s observed. The o	riterio	on for hyd	dric soil is met.		

Soil Photos



Photo of Sample Plot North Photo of Sample Plot East



Photo of Sample Plot South





WETLAND DETERMINATION DATA FORM - Northcentral and Northeast Region

Project/Site: Flat Creel	k Solar Project	City/Co	unty: Canajoharie, Mo	ntgomery Cou	unty	Sampling Date:	2021-Aug-18
Applicant/Owner: Su	unEast			State: Net	w York	Sampling Point: <u></u>	/-EES-05_UPL-1
Investigator(s): Etha	n Snyder, Stev	e Spotts, Cory Dunning	Sect	ion, Township,	, Range: NA	A	
Landform (hillslope, te	rrace, etc.):	Hillslope	Local relief	(concave, conv	vex, none):	Undulating	Slope (%): 1 to 3
Subregion (LRR or MLR	A): LRR L		Lat:	42.8593569	Long:	-74.5389769	Datum: WGS84
Soil Map Unit Name:	Madalin silty	clay loam, 0 to 3 perce	nt slopes			NWI classifica	ation:
Are climatic/hydrologic	conditions or	the site typical for this	time of year?	Yes 🟒 No	o (If no	, explain in Remarl	ks.)
Are Vegetation, Are Vegetation,	Soil, Soil,	or Hydrology sign or Hydrology natu	ificantly disturbed? Irally problematic?	Are "Norm (If needed,	nal Circumst , explain any	ances" present? / answers in Rema	Yes No 🟒 rks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes No 🟒						
Hydric Soil Present?	Yes 🟒 No	Is the Sampled Area within a Wetland?	Yes No 🟒				
Wetland Hydrology Present?	Yes No _	lf yes, optional Wetland Site ID:					
Remarks: (Explain alternative procedures her	e or in a separate report)						
Covertype is UPL. Area is upland, not all three wetland parameters are present. Circumstances are not normal due to mowing of vegetation.							

HYDROLOGY

Wetland Hydrology Indicators:					
Primary Indicators (minimum of on	Secondary Indicators (minimum of two required)				
			 Surface Soil Cracks (B6) Drainage Patterns (B10) Moss Trim Lines (B16) Dry-Season Water Table (C2) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (C9) Stunted or Stressed Plants (D1) Geomorphic Position (D2) Shallow Aquitard (D3) Microtopographic Relief (D4) FAC-Neutral Test (D5) 		
Field Observations: Surface Water Present? Water Table Present? Saturation Present? (includes capillary fringe)	Yes No _∠ Yes No _∠ Yes No _∠	Depth (inches): Depth (inches): Depth (inches):	– _Wetland Hydrology Present? –	Yes No	
Describe Recorded Data (stream ga	uge, monitoring well, ae	erial photos, previous inspections), if	available:		
The criterion for wetland hydrology	is not met. No positive	indication of wetland hydrology was	observed.		
Sampling Point: W-EES-05_UPL-1

<u>Tree Stratum</u> (Plot size: <u>30 ft</u>)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test work Number of Dominant	(sheet: Species That	0	(A)
1 2				Total Number of Dom	ninant Species	2	(B)
3				Percent of Dominant	Species That	0	(A/B)
5				Prevalence Index wor	ksheet:		
6				Total % Cove	er of:	Multiply	/ Bv:
7				- OBL species	0	x 1 =	 0
	0	= Total Cov	er	FACW species	0	x 2 =	0
<u>Sapling/Shrub Stratum</u> (Plot size: <u>15 ft</u>)				FAC species	0	x 3 =	0
1				- FACU species	180	x 4 =	720
2				- UPL species	0	x 5 =	0
3				Column Totals	180	(A)	720 (B)
4				Prevalence	Index = B/A =	4	
5				Hydrophytic Vegetati	on Indicators		
6				1- Ranid Test for	· Hydrophytic \	/egetatio	n
7				2 - Dominance 1	Test is $> 50\%$	egetatio	
	0	= Total Cov	er	3 - Prevalence Ir	ndex is $\leq 3.0^1$		
<u>Herb Stratum</u> (Plot size: <u>5 ft</u>)				4 - Morphologic	al Adaptations	¹ (Provide	supporting
1. <u>Poa pratensis</u>	50	Yes	FACU	data in Remarks or o	n a separate sh	neet)	0
2. Schedonorus arundinaceus	45	Yes	FACU	Problematic Hyd	drophytic Vege	tation ¹ (E	xplain)
3. <i>Galium mollugo</i>	25	No	FACU	¹ Indicators of hydric s	soil and wetlan	d hydrolo	ogy must be
4. Trifolium pratense	20	No	FACU	present, unless distu	rbed or proble	matic	
5. <i>Trifolium repens</i>	20	No	FACU	Definitions of Vegeta	tion Strata:		
6. <i>Centaurea jacea</i>	15	No	FACU	Tree – Woody plants	3 in. (7.6 cm) oi	r more in	diameter at
7. Oxalis stricta	5	No	FACU	breast height (DBH), i	regardless of h	eight.	
8				Sapling/shrub – Wood	dy plants less t	han 3 in.	DBH and
9				greater than or equal	to 3.28 ft (1 m) tall.	
10				Herb – All herbaceou	s (non-woody)	plants, re	egardless of
11					odywinos gross	o It lall.	20 ft in
12				height	ouy vines grea		5.20 It III
<u>Woody Vine Stratum</u> (Plot size: <u>30 ft</u>)	180	= Total Cov	er	Hydrophytic Vegetat	ion Present?	/es	No 🟒
1							
2				.			
3							
4							
	0	= Total Cov	er				
Remarks: (Include photo numbers here or on a se No positive indication of hydrophytic vegetation v	eparate sheet.) vas observed (≥	50% of dom	ninant speci	es indexed as FAC- or c	lrier).		

Profile Des	cription: (Describe t	o the o	depth needed to d	locum	ent the i	ndicator	or confirm the at	sence of indicators.)	
Depth	Matrix		Redox	(Feat	ures				
(inches)	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²	T	Texture	Remarks
0 - 6	10YR 4/1	95	5YR 4/4	5	С	М	Si	ilt Loam	
6 - 13	2.5Y 5/1	90	5YR 5/8	10	С	М	Gravelly	Silty Clay Loam	
13 - 18	10YR 5/3	80	5YR 5/8	20	C	M	Rock	y Silty Clay	
		· <u> </u>		·				<u> </u>	
		·		· —					
		·		·					
		·		· —					
		· —		· —					
		·		·					
		· —		· —					
		·		·					
		·		·					
¹ Type: C = 0	Concentration, D = I	Deplet	ion, RM = Reduced	d Mati	ix, MS =	Masked	Sand Grains. ² Lo	ocation: PL = Pore Lining,	M = Matrix.
Hydric Soil	Indicators:							Indicators for Problema	atic Hydric Soils ³ :
Histoso	l (A1)		Polyvalue Be	elow S	urface (S	8) (LRR F	R, MLRA 149B)	2 cm Muck (A10) (LF	RR K, L, MLRA 149B)
Histic E	pipedon (A2)		Thin Dark Su	urface	(S9) (LRR	R, MLRA	A 149B)	Coast Prairie Redox	: (A16) (LRR K, L, R)
Black H	istic (A3)		Loamy Mucl	ky Min	eral (F1)	(LRR K, L	.)	5 cm Mucky Peat or	Peat (S3) (LRR K, L, R)
Hydrog	en Sulfide (A4)		Loamy Gleye	ed Ma	trix (F2)			Dark Surface (S7) (L	RR K, L)
Stratifie	d Layers (A5)	(\ 1	Depleted Ma	atrix (I	-3)			Polyvalue Below Su	rface (S8) (LRR K, L)
Depiete	ark Surface (A12)	ice (A i	Redox Dark Depleted Dark	Suria	ce (F6) faco (E7)			Thin Dark Surface (S	59) (LRR K, L)
Thick D	Auchy Mineral (S1)		Depleted Da		1ace (F7)			Iron-Manganese Ma	asses (F12) (LRR K, L, R)
Sanuy n	Cloved Matrix (C4)		Redux Depi	855101	IS (FO)			Piedmont Floodplai	n Soils (F19) (MLRA 149B)
Sandy (Dedex (CE)							Mesic Spodic (TA6) ((MLRA 144A, 145, 149B)
Sanuy r	Redux (SS)							Red Parent Materia	l (F21)
Strippe	u Matrix (S6)		(0.0)					Very Shallow Dark S	Surface (TF12)
Dark Su	urface (S7) (LRR R, N	ILRA 14	49B)					Other (Explain in Re	emarks)
³ Indicators	of hydrophytic veg	etatior	n and wetland hyd	rology	/ must be	e present	t, unless disturbe	d or problematic.	
Restrictive	Layer (if observed):								
	Type:		None			Hydric	Soil Present?		Yes 🟒 No
	Depth (inches):								
Remarks:									
A positive i	ndication of hydric	soil wa	as observed. The c	riterio	n for hv	tric soil i	s met		
, positive i	naleadon of figure	5011 110			in for hyc		5 met.		

Soil Photos



Photo of Sample Plot North

Photo of Sample Plot East



Photo of Sample Plot South

Photo of Sample Plot West



Project/Site: Flat Creek Solar Project			ounty: Canajoharie, N	lontgomery	County	Sampling Date: 2021-Aug-19		
Applicant/Owner: S	unEast			State:	New York	Sampling Point: V	V-EES-06_PEM-1	
Investigator(s): Ethan Snyder, Steve Spotts, Cory Dunning Section, Township, Range: NA								
Landform (hillslope, te	rrace, etc.):	Flat	Local relie	f (concave, o	convex, none):	Undulating	Slope (%): 1 to 3	
Subregion (LRR or MLF	RA): LRR	-	Lat	42.856803	The second se	-74.5386356	Datum: WGS84	
Soil Map Unit Name:	Madalin silty	clay loam, 0 to 3 perce	ent slopes			NWI classifica	ation:	
Are climatic/hydrologic	c conditions o	n the site typical for thi	s time of year?	Yes 🟒	_ No (If no	o, explain in Remar	ks.)	
Are Vegetation, Are Vegetation,	Soil, Soil,	or Hydrology sigr or Hydrology nat	nificantly disturbed? urally problematic?	Are "No (If need	ormal Circums ded, explain an	tances" present? ly answers in Rema	Yes 🟒 No Irks.)	

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes 🟒 No		
Hydric Soil Present?	Yes 🟒 No	Is the Sampled Area within a Wetland?	Yes 🯒 No
Wetland Hydrology Present?	Yes No	If yes, optional Wetland Site ID:	W-EES-06
Remarks: (Explain alternative procedures h	ere or in a separate report)	
Covertype is PEM. Area is wetland, all three	wetland parameters are p	present.	

HYDROLOGY

Wetland Hydrology Indicators:							
Primary Indicators (minimum of one	e is required; check all	<u>that apply)</u>		Secondary Indicators (minimum of two required)			
✓ Surface Water (A1) Water-Stained Leaves (B9) ✓ High Water Table (A2) Aquatic Fauna (B13) ✓ Saturation (A3) Marl Deposits (B15) Water Marks (B1) Hydrogen Sulfide Odor (C1) Sediment Deposits (B2) Oxidized Rhizospheres on Living Regiment Deposits (B3) Algal Mat or Crust (B4) Presence of Reduced Iron (C4) Iron Deposits (B5) Thin Muck Surface (C7) Inundation Visible on Aerial Imagery (B7) Other (Explain in Remarks)				 Surface Soil Cracks (B6) Drainage Patterns (B10) Moss Trim Lines (B16) Dry-Season Water Table (C2) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (C9) 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	Depth (inches):	2				
Water Table Present?	Yes 🟒 No	Depth (inches):	0	Wetland Hydrology Present? Yes No			
Saturation Present?	Yes 🟒 No	Depth (inches):	0				
(includes capillary fringe)							
Describe Recorded Data (stream ga	uge, monitoring well, a	erial photos, previous inspecti	ons), if a	available:			

Remarks:

The criterion for wetland hydrology is met. A positive indication of wetland hydrology was observed (primary and secondary indicators were present).

Sampling Point: W-EES-06_PEM-1

Tree Streture (Dist size: 20 ft)	Absolute	Dominant	Indicator	Dominance Test works	heet:		
<u>iree stratum</u> (Piot size: <u>30 it</u>)	% Cover	Species?	Status	Number of Dominant S	pecies That	1	(A)
2.				Total Number of Domir	nant Species	1	(B)
3				 Percent of Dominant S 	pecies That	100	(A/B)
5.				Are OBL, FACW, or FAC			
6.				 Prevalence Index works 	sheet:		
7.				- <u>Total % Cover</u>	<u>of:</u>	Multiply	<u>By:</u>
···	0	= Total Cov	er	– OBL species –	10	x 1 =	10
Sanling/Shruh Stratum (Plot size: 15 ft)			CI	FACW species	100	x 2 =	200
				FAC species	0	x 3 =	0
1				 FACU species 	0	x 4 =	0
2.				 UPL species 	0	x 5 =	0
3				– Column Totals	110	(A)	210 (B)
4.				– Prevalence Ir	ndex = B/A =	1.9	
5.				- Hydrophytic Vegetation	n Indicators:		
6				- J 1- Rapid Test for H	Hvdrophytic V	egetation	ı
7				- 2 - Dominance Ter	st is >50%	-8	
	0	= Total Cov	er	✓ 3 - Prevalence Ind	lex is $< 3.0^1$		
Herb Stratum (Plot size: <u>5 ft</u>)				4 - Morphological	Adaptations ¹	(Provide	supporting
1. <i>Phalaris arundinacea</i>	100	Yes	FACW	- data in Remarks or on	a separate sh	(i roviac	Supporting
2. <i>Scirpus cyperinus</i>	5	No	OBL	– Problematic Hydr	ophytic Vege	tation ¹ (Ex	(plain)
3. Persicaria sagittata	5	No	OBL	 Indicators of hydric so 	il and wetlan	d hvdrolo	gy must be
4				present, unless disturb	ed or probler	matic	0,
5.				Definitions of Vegetation	on Strata:		
6.				Tree – Woody plants 3 i	in. (7.6 cm) or	more in	diameter at
7.				breast height (DBH), re	gardless of h	eight.	
8.				Sapling/shrub - Woody	o plants less tl	han 3 in. [DBH and
9.				greater than or equal to	o 3.28 ft (1 m) tall.	
10.				Herb – All herbaceous ((non-woody)	plants, re	gardless of
11				size, and woody plants	less than 3.2	8 ft tall.	
12				Woody vines – All wood	dy vines great	er than 3	.28 ft in
12		- Total Cov	or	height.			
Weedu Vine Construm (Distring 20 ft)	110		ei	Hydrophytic Vegetatio	n Present?	∕es 🖌 N	٥N
<u>woody vine Stratum</u> (Plot size: <u>30 It</u>)				J			
				-			
2				-			
3				-			
4				_			
	0	= Total Cov	er				
Pemarks: (Include photo numbers here or on a ser	arato shoot)						

Remarks: (Include photo numbers here or on a separate sheet.)

A positive indication of hydrophytic vegetation was observed (>50% of dominant species indexed as OBL, FACW, or FAC). A positive indication of hydrophytic vegetation was observed (Prevalence Index is ≤ 3.00). A positive indication of hydrophytic vegetation was observed (Rapid Test for Hydrophytic Vegetation).

nches)	Color (moist)	%	Color (moist)	%	Type ¹	Loc ² Textu	re Remarks
		· — ·					
		· ·					
		· ·		· —			
		· _ ·		· —			
		· — ·		· —			
		· ·		. —			
e: C = C	oncentration, D = D	epleti	on, RM = Reduce	d Ma	trix, MS =	Masked Sand Grains	2Location: PL = Pore Lining, M = Matrix.
ric Soli i Histosol	(A1)		Polyvalue Be	wole	Surface (S		Indicators for Problematic Hydric Solis»:
Histic Ep	oipedon (A2)		Thin Dark Su	irface	e (S9) (LRR	R, MLRA 149B)	2 cm Muck (A10) (LRR K, L, MLRA 149B) Coast Prairie Redox (A16) (LRP K L P)
3lack Hi	stic (A3)		Loamy Mucl	y Mi	neral (F1)	LRR K, L)	5 cm Mucky Peat or Peat (S3) (LRR K, L, R)
Hydroge	en Sulfide (A4)		Loamy Gley	ed Ma	atrix (F2)		Dark Surface (S7) (LRR K, L)
Stratifie	d Layers (A5)	(Depleted Ma	atrix (F3)		Polyvalue Below Surface (S8) (LRR K, L)
Jepieteo Thick Da	a Below Dark Surta ark Surface (A12)	ce (Al	 Redox Dark Depleted Dark 	Surta Irk Si	ICE (F6) Irface (E7)		Thin Dark Surface (S9) (LRR K, L)
Sandy M	lucky Mineral (S1)		Depleted Da		ns (F8)		Iron-Manganese Masses (F12) (LRR K, L, R)
Sandy G	ileved Matrix (S4)			23510	15 (10)		Piedmont Floodplain Soils (F19) (MLRA 149E
Sandy R	edox (S5)						Mesic Spodic (TA6) (MLRA 144A, 145, 149B)
Stripped	Matrix (S6)						Red Parent Material (F21)
Dark Su	rface (S7) (LRR R, M	LRA 14	19B)				 Very Shallow Dark Surface (1F12) Other (Explain in Remarks)
icators	of hydrophytic vege	tation	and wetland hyd	rolog	gy must be	e present, unless dist	urbed or problematic.
							· · · ·
trictive L	ayer (if observed):					Hydric Soil Present?	
rictive L	ayer (if observed): Type:		None			ingune som resent.	Yes 🟒 No
ctrictivo I	avor (it obconied).					Hydric Soil Present?	

Photo of Sample Plot North



Photo of Sample Plot East



Photo of Sample Plot South



Photo of Sample Plot West

Project/Site: Flat Creek Solar Project		City/County:	Canajoharie, Montgomery County				Sampling Date: 2021-Aug-26			
Applicant/Owner: Su	nEast				State:	New York	<u>k</u> S	ampling Point: \	W-EES-06_	PSS-1
Investigator(s): Ethan Snyder, Steve Spotts, Abi Light Section, Township, Range: NA										
Landform (hillslope, ter	race, etc.):	Depression		Local relief	(concave,	convex, no	one): (Concave	Slo	pe (%): 1 to 3
Subregion (LRR or MLRA	A): LRR	_		Lat:	42.85391	79 L	ong: -	-74.5350711	Dati	um: WGS84
Soil Map Unit Name:	Phelps grave	elly loam, fan						NWI classific	ation:	
Are climatic/hydrologic	conditions or	n the site typical	for this time	of year?	Yes 🟒	_ No	(lf no,	explain in Rema	rks.)	
Are Vegetation,	Soil,	or Hydrology	significant	tly disturbed?	Are "N	lormal Circ	cumsta	ances" present?	Yes _	🖌 No
Are Vegetation,	Soil,	or Hydrology	naturally	problematic?	(lf nee	ded, expla	ain any	answers in Rem	arks.)	

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes 🟒 No		
Hydric Soil Present?	Yes 🟒 No	Is the Sampled Area within a Wetland?	Yes 🟒 No _
Wetland Hydrology Present?	Yes 🟒 No	If yes, optional Wetland Site ID:	W-EES-06
Remarks: (Explain alternative procedures	here or in a separate repo	rt)	
Covertype is PSS. Area is wetland, all thre	e wetland parameters are	present.	

HYDROLOGY

Wetland Hydrology Indicators:						
Primary Indicators (minimum of or	<u>ne is required; check all t</u>	<u>:hat apply)</u>	Secondary Indicators (minimum of two required)			
 Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5) Inundation Visible on Aerial Im. Sparsely Vegetated Concave Su 	Water- Aquation Marl D Hydrog Oxidize Presen Recent Thin M agery (B7) Other (urface (B8)	 Surface Soil Cracks (B6) Drainage Patterns (B10) Moss Trim Lines (B16) Dry-Season Water Table (C2) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (C9) 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 🟒	Depth (inches):				
Water Table Present?	Yes No 🟒	Depth (inches):	Wetland Hydrology Present? Yes No			
Saturation Present?	Yes 🟒 No	Depth (inches): 0	1			
(includes capillary fringe)						
Describe Recorded Data (stream g	auge, monitoring well, a	erial photos, previous inspections), if available:			
The criterion for wetland hydrolog	y is met. A positive indica	ation of wetland hydrology was ol	oserved (primary and secondary indicators were present)			

Sampling Point: W-EES-06_PSS-1

Tree Stratum (Plot size: 30 ft)	Absolute	Dominant	Indicator	Dominance Test worksh	neet:		
	% Cover	Species?	Status	Number of Dominant S Are OBL, FACW, or FAC:	pecies That	4	(A)
2.				Total Number of Domin	ant Species	4	(B)
3 4				Percent of Dominant Sp	oecies That	100	(A/B)
5				- Prevalence Index works	heet.		
6				- Total % Cover	of.	Multiply	By:
7				- OBL species	25	<u>v 1 =</u>	25
	0	= Total Cov	er	EACW species	110	x 2 =	220
Sapling/Shrub Stratum (Plot size: <u>15 ft</u>)		_		TACW species	0	×2-	220
1. Cornus amomum	40	Yes	FACW	FAC species		x 5 -	20
2. <i>Ilex verticillata</i>	35	Yes	FACW	- FACU species	5	x 4 =	20
3. Lonicera morrowii	5	No	FACU	- UPL species -	0	x 5 =	0
4. Salix bebbiana	5	No	FACW	- Column Totals	140	(A)	265 (B)
5.				Prevalence In	dex = B/A =	1.9	
6				 Hydrophytic Vegetation 	Indicators:		
7.				1- Rapid Test for H	lydrophytic V	egetation/	า
···	85	= Total Cov	or	2 - Dominance Tes	st is >50%		
Horb Stratum (Plot size: Eft.)		- 10001 000	CI	3 - Prevalence Ind	ex is $\leq 3.0^1$		
<u>herb stratum</u> (Flot size. <u>5 h</u>)	20	Voc		4 - Morphological	Adaptations	¹ (Provide	supporting
		Vec		– data in Remarks or on a	a separate sh	neet)	
2. Leersia oryzoides		res		Problematic Hydro	ophytic Vege	tation ¹ (E	xplain)
3. Unociea sensibilis		<u>No</u>	FACW	 ¹Indicators of hydric soi 	l and wetlan	d hydrolo	ogy must be
4. Persicaria sagittata	10	No	OBL	_ present, unless disturbe	ed or problei	matic	
5				Definitions of Vegetatio	n Strata:		
6				Tree – Woody plants 3 in	n. (7.6 cm) oı	r more in	diameter at
7				_ breast height (DBH), reg	gardless of h	eight.	
8				Sapling/shrub – Woody	plants less t	han 3 in.	DBH and
9				greater than or equal to	o 3.28 ft (1 m) tall.	
10				Herb – All herbaceous (non-woody)	plants, re	gardless of
11				size, and woody plants	less than 3.2	8 ft tall.	
12.				Woody vines – All wood	ly vines great	ter than 3	8.28 ft in
	55	= Total Cov	er	height.			
Woody Vine Stratum (Plot size: <u>30 ft</u>)		-		Hydrophytic Vegetation	n Present?	res 🟒 I	No
1.							
2.				-			
3.		·		-			
4		·		-			
		= Total Cov	er	-			
		-					

Remarks: (Include photo numbers here or on a separate sheet.)

A positive indication of hydrophytic vegetation was observed (>50% of dominant species indexed as OBL, FACW, or FAC). A positive indication of hydrophytic vegetation was observed (Prevalence Index is \leq 3.00). A positive indication of hydrophytic vegetation was observed (Rapid Test for Hydrophytic Vegetation).

Operation Matrix Redox Features (nohes) Color (most) % Ypp: Sitty Clay Loan	Profile Des	cription: (Describe	to the	depth needed to	docu	ment the	indicato	r or confirm the al	bsence of indicate	ors.)
Index Color (moist) % Color (moist) % Color (moist) % Color MPL Slip/Clay Loam 0-6 1078 2/1 95 2.5YR 5/6 10 C MPL Slip/Clay Loam Compacted 6-18 2.5Yr 5/6 0 C M Clay Compacted 6-18 2.5Yr 5/6 0 C M Clay Compacted 6 0 0 7.5YR 5/6 10 C M Clay Compacted 0 0 0 0 0 0 0 0 0 0 1 0 0 0 0 0 0 0 0 0 0 1 0	Depth	Matrix		Redo	x Fea	tures				
0-6 10/R 3/1 95 2.5Y 5/1 90 7.5YR 5/6 10 C M Clay Compacted 6-18 2.5Y 5/1 90 7.5YR 5/6 10 C M Clay Compacted 1 <td>(inches)</td> <td>Color (moist)</td> <td>%</td> <td>Color (moist)</td> <td>%</td> <td>Type¹</td> <td>Loc²</td> <td>Textu</td> <td>ure</td> <td>Remarks</td>	(inches)	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²	Textu	ure	Remarks
6-18 2.5Y 5/1 90 7.5YR 5/6 10 C M Clay Compacted	0 - 6	10YR 3/1	95	2.5YR 4/4	5	C	M/PL	Silty Clay	y Loam	
Type: C = Concentration. D = Depletion. RM = Reduced Matrix, MS = Masked Sand Grains. *Location: PL = Pore Lining, M = Matrix. Hydric Soil Indicators: Indicators for Problematic Hydric Soils*. Histoso (A1) Polyvalue Below Surface (S9) (LRR R, MLRA 1498)	6 - 18	2.5Y 5/1	90	7.5YR 5/6	10	С	M	Cla	ay .	Compacted
Type: (2 = Concentration, D = Depletion, RM = Reduced Matrix, MS = Masked Sand Grains, *Location: PL = Pore Lining, M = Matrix, Hydric Soil Indicators: Indicators for Problematic Hydric Soils* Histic Epipedon (A2) Thin Dark Surface (S1) (LRR K, L) Stratified Layers (A3) Loamy Mucky Mineral (T1) (LRR K, L) Stratified Layers (A3) Copyred Matrix (F2) Stratified Layers (A3) Doardy Surface (S1) (LRR K, L) Depleted Below Dark Surface (S1) (LRR K, L) Sen Mucky Peat or Peet (S1) (LRR K, L) Depleted Dark Surface (S1) (LRR K, L) Dark Surface (S1) (LRR K, L) Depleted Dark Surface (S1) (LRR K, L) Depleted Dark Surface (S1) (LRR K, L) Sandy Gleyed Matrix (F3) Polyaulue Below Surface (S1) (LRR K, L) Sandy Gleyed Matrix (F4) Belock Depressions (F8) Plediatoms Surface (S1) (LRR K, L) Sandy Redox (S5) Redarent Material (F1) Redox Depressions (F8) Plediatoms Fioodplain Soils (F19) (MLRA 149B) Sandy Gleyer (S1) (LRR K, L) Belox Harris (F4) Belox Harris (F2) Remarks: John Surface (S1) (LRR K, L) Redox Depressions (F8) Plediatoms Fioodplain Soils (F19) (MLRA 144A, 145, 139B) Sandy Gleyer (S1) (LRR K, L) Redox C5) Remarks: Plediators of hydrophytic vegetation and wetland hydrology must be present, unless disturb									<u>,</u>	
Type: C = Concentration, D = Depletion, RM = Reduced Matrix, MS = Masked Sand Grains. *Location: PL = Pore Lining, M = Matrix. Hydric Soll Indicators: Indicators of Problematic Hydric Solls*: Histos Fipedon (A2) Thin Dark Surface (S9) (LRR R, MLRA 149B) 2 cm Muck (A10) (LRR K, L, R) Black Histic (A3) Loamy Mucky Mineral (F1) (LRR K, L) Sons Vrairie Redox (A16) (LRR K, L, R) Hydrogen Sulfde (A4) Loamy Soly Glave Matrix (F2) Dask Surface (S9) (LRR K, L) Stratified Layers (A5) Z Depleted Matrix (F3) Depleted Book Surface (F0) Stratified Layers (A11) Redox Dark Surface (F6) Thin Dark Surface (S9) (LRR K, L) Sandy Mucky Mineral (F11) Redox Depressions (F8) Pledmont Flooplain Soils (F19) (MLRA 149B) Sandy Mucky Mineral (S1) Redox Depressions (F8) Pledmont Flooplain Soils (F19) (MLRA 149B) Sandy Redox (S5) Stripped Matrix (S4) Werky Mallow Dark Surface (TF12) Dark Surface (S7) (LRR R, MLRA 149B) Very Shallow Dark Surface (TF12) Very Shallow Dark Surface (TF12) Dark Surface (S7) Hind Carts Sorf (C16) (MLRA 144, 145, 149B) Pledmont Flooplain Soils (F19) (MLRA 149B) Sandy Micky Mineral (S1) Retaxer (S7) Hind Carts (S6) Pledmont Flooplain Soils (F19) (MLRA 149B) Dark Surface (S7) (LRR R, ML					·					
Type: C = Concentration, D = Depletion, RM = Reduced Matrix, MS = Masked Sand Grains. *Location: PL = Pore Lining, M = Matrix. Hydric Soll Indicators: Indicators for Problematic Hydric Solls? Histosol (A1) Polyvalue Below Surface (S9) (LRR R, MLRA 1499) _Cost Paria Redox (A16) (LRR K, L, R) Black Histic Exploredon (A2) _Thin Dark Surface (S1) (LRR R, LD _S on Mucky Peat or Pool Stratified Layers (A5) _Depleted Matrix (F2)	·				·		<u> </u>			
Type: C = Concentration, D = Depletion, RM = Reduced Matrix, MS = Masked Sand Grains. *Location: PL = Pore Lining, M = Matrix. Hydric Soil Indicators: indicators for Problematic Hydric Soils? Histosol (A1)	<u> </u>				·					
Type: C = Concentration, D = Depletion, RM = Reduced Matrix, MS = Masked Sand Grains. *Location: PL = Pore Lining, M = Matrix. Hydric Soll Indicators: Indicators for Problematic Hydric Solls?: Histic Epipedon (A2) Thin Dark Surface (S9) (LRR R, MLRA 1498)	<u> </u>				·					
Type: C = Concentration, D = Depletion, RM = Reduced Matrix, MS = Masked Sand Grains. *Location: PL = Pore Lining, M = Matrix. Hydric Soil Indicators: Indicators for Problematic Hydric Soils?: Histosoil (A1) Polyvalue Below Surface (S9) (LRR R, MLRA 1498) _2 cm Muck (A10) (LRR K, L, MLRA 1498) Black Histic (A3) Loamy Mucky Mineral (F1) (LRR K, L) _5 cm Muck (A10) (LRR K, L, R) Hydrogen Sulfde (A4) Loamy Mucky Mineral (F1) (LRR K, L) _5 cm Mucky Peat or Peat (S3) (LRR K, L, R) Depleted below Dark Surface (A12) Depleted Dark Surface (F6) _Thio Dark Surface (F6) Thick Dark Surface (A12) Depleted Dark Surface (F7) _Thio Andaganees Masses (F12) (LRR K, L) Sandy Gleeyed Matrix (S4)	. <u> </u>									
Type: C = Concentration, D = Depletion, RM = Reduced Matrix, MS = Masked Sand Grains. ² Location: PL = Pore Lining, M = Matrix. Hydric Soil Indicators: Indicators for Problematic Hydric Soils?: Histic Epideon (A2) Thin Dark Surface (S9) (LRR R, MLRA 1498) 2 cm Muck (A10) (LRR K, LR) Black Histic (A3) Loamy Mucky Mineral (F1) (LRR K, L) 5 cm Mucky Peat or Peat (S3) (LRR K, L, R) Stratified Layers (A5) 2 Depleted Matrix (F2) Depleted Matrix (F3) Depleted Matrix (S1) Redox Dark Surface (F6) Thin Dark Surface (S2) (LRR K, L) Sandy Mucky Mineral (S1) Redox Depressions (F8) Prelmont Floodplatin Soils (F12) (LRR K, L, R) Sandy Mucky Mineral (S1) Redox Depressions (F8) Peteront Floodplatin Soils (F12) (LRR K, L, R) Sandy Macky Mineral (S1) Redox Depressions (F8) Mesic Spodic (TA6) (MLRA 144A, 145, 1498) Sandy Redox (S5) Red Parent Material (F1) Very Shallow Dark Surface (TF12) Dark Surface (S7) (LRR R, MLRA 149B) Very Shallow Dark Surface (TF12) Other (Explain in Remarks) Minicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic. Restrictive Layer (f observed): Type: Heavy clay Hydric Soil Present? Yes < No							. <u> </u>			
Type: C = Concentration, D = Depletion, RM = Reduced Matrix, MS = Masked Sand Grains. *Location: PL = Pore Lining, M = Matrix. Hydric Soil Indicators: Indicators for Problematic Hydric Soils*: Histosol (A1) Polyvalue Below Surface (S9) (LRR R, MLRA 1499) 2 cm Muck (A10) (LRr k, L, MLRA 1499) Black Histic Epipedon (A2) Thin Dark Surface (S9) (LRR R, MLRA 1499) Coast Prairie Redox (A16) (LRR k, L R) Black Histic (A3) Loamy Gleyed Matrix (F2) Dark Surface (S7) (LRR k, L) 5 cm Mucky Pietor Peet (S3) (LRR k, L) Depleted Below Dark Surface (A11) C coato Dark Surface (F3) Polyvalue Below Surface (S9) (LRR k, L) 1 Dark Surface (S9) (LRR k, L) Sandy Mucky Mineral (S1) Redox Dark Surface (F7) Thin Dark Surface (S12) (LRR k, L, R) 2 more Masses (F12) (LRR k, L, R) Sandy Mucky Mineral (S1) Redox Depressions (F8) Piedmont Floodplain Soils (F19) (MLRA 1498) 3 mode (C16) (MLR 144A, 145, 1498) Sandy Mucky Mineral (S1) Red Parent Material (F21) 3 mode (C16) (MLR 144A, 145, 1498) 3 mode (C16) (MLR 144A, 145, 1498) Sandy Mucky Mineral (S1) Red Parent Material (F21) 3 mode (C16) (MLR 144A, 145, 1498) 3 mode (C16) (MLR 144A, 145, 1498) Sandy Mucky Mineral (S1) Red Parent Matrix (S6) Meais Cpodic (T66) (MLR 144A, 145, 1498) Sandy Mucky Mineral (S1)										
Type: C = Concentration, D = Depletion, RM = Reduced Matrix, MS = Masked Sand Grains. *Location: PL = Pore Lining, M = Matrix. Hydric Soil Indicators: Indicators for Problematic Hydric Soils? Histic Splepdon (A2) Thin Dark Surface (S9) (LRR R, MLRA 149B) 2 cm Muck (A10) (LRR K, L, R) Black Histic (A3) Loamy Mucky Mineral (F1) (LRR K, L) 5 cm Muck (A10) (LRR K, L) By Stratified Layers (A5) Z Depleted Matrix (F2) Dark Surface (S3) (LRR K, L) Depleted Bark Surface (A11)_ Redox Dark Surface (F3) Polyvalue Below Surface (S3) (LRR K, L) Depleted Bark Surface (F3) Depleted Dark Surface (F7) Thin Dark Surface (S3) (LRR K, L, R) Sandy Gleyed Matrix (S4) Redox Depressions (F8) Piedmont Floodpilan Soils (F19) (MLRA 149B) Sandy Gleyed Matrix (S5) Red Parent Material (F21) Very Shallow Dark Surface (F7) Sandy Redox (S5) Red Parent Material (F21) Very Shallow Dark Surface (F7) Stripped Matrix (S6) Very Shallow Dark Surface (F7) Very Shallow Dark Surface (F7) Stripped Matrix (S6) Very Shallow Dark Surface (F7) Very Shallow Dark Surface (F7) Hydric Soil Watra (S7) Protemater Hodphals Soils (F7) Very Shallow Dark Surface (F7) Depth (inches): 6 Remarks: A positive ind										
Type: C Concentration, D = Depletion, RM = Reduced Matrix, MS = Masked Sand Grains. *Location: PL = Pore Lining, M = Matrix. Hydric Soil Indicators: Indicators for Problematic Hydric Soils? Histosol (A1) Polyvalue Below Surface (S8) (LR R, MLRA 1498) 2 cm Muck (A10) (LR K, L, MLRA 1498) Histosol (A2) Thin Dark Surface (S9) (LR R, L) S cm Muck (Pat or Peat (S1) (LR K, L, R) Hydrogen Sulfide (A4) Loamy Gleyed Matrix (F3) Dark Surface (S7) (LR K, L) Stratified Layers (A5) ✓ Depleted Matrix (F3) Dark Surface (S7) (LR K, L) Sandy Mucky Mineral (S1) Redox Depressions (F8) Pletomont Floodplain Soils (F19) (MLRA 1498) Sandy Redox (S5) Set the stratice (S1) (LR K, L, R) Pletomont Floodplain Soils (F19) (MLRA 1498) Stripped Matrix (S4) Bed Arenet Material (F21) Other K Surface (T71) Stripped Matrix (S6) Pletomont Floodplain Soils (F19) (MLRA 1498) Mesic Spoid(T64) (MLRA 1449.145, 1498) Stripped Matrix (S4) Bed Parent Material (F21) Other (Explain in Remarks) Pletomont Floodplain Soils (CT6) Hydric Soil Present? Yes 🗸 No Type: Heavy clay Hydric Soil Present? Yes 🔨 No Popth (inches): 6 No										
Type: C = Concentration, D = Depletion, RM = Reduced Matrix, MS = Masked Sand Grains. *Location: PL = Pore Lining, M = Matrix. Hydric Soil Indicators: Indicators: Indicators: Histosoil (A1) Polyvalue Below Surface (S9) (LRR R, MLRA 149B) 2 cm Muck (A10) (LRR K, L, R) Black Histic (A3) Loamy Mucky Mineral (F1) (LRR K, L) 5 cm Muck (A10) (LRR K, L, R) Hydrogen Suffide (A4) Loamy Mucky Mineral (F1) (LRR K, L) 5 cm Muck (A16) (LRR K, L, R) Stratified Layers (A5) ✓ Depleted Matrix (F2) Dark Surface (S9) (LRR K, L) Thick Dark Surface (A11) Depleted Dark Surface (F6) Thin Dark Surface (S9) (LRR K, L, R) Sandy Mucky Mineral (S1) Redox Depressions (F8) Pleidmont Floodplain Soils (F19) (MLRA 149B) Sandy Redox (S5) Mesic Spodic (TA6) (MLRA 1445, 149B) Red Parent Material (F21) Stripped Matrix (S6) Wery Shallow Dark Surface (F12) Other (Explain in Remarks) "Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic. Red Parent Material (F21) Type: Heavy clay Hydric Soil Present? Yes No									_	
Hydric Soil Indicators:	¹ Type: C =	Concentration, D =	Deple	tion, RM = Reduce	ed Ma	trix, MS =	Masked	Sand Grains. ² Lo	ocation: PL = Pore	e Lining, M = Matrix.
Histosol (A1) Polyvalue Below Surface (S8) (LRR R, MLRA 149B) 2 cm Muck (A10) (LRR k, L, MLRA 149B) Histo: Epipedon (A2) Thin Dark Surface (S9) (LRR R, MLRA 149B) Coast Prairie Redox (A16) (LRR k, L, R) Black Histic (A3) Loamy Mucky Mineral (F1) (LRR K, L) 5 cm Mucky Peet or Peat (S3) (LRR K, L, R) Stratified Layers (A4) Loamy Gleyed Matrix (F2) Dark Surface (S9) (LRR K, L) Depleted Dark Surface (A11) Depleted Matrix (F3) Polyvalue Below Surface (S9) (LRR K, L) Thick Dark Surface (A11) Depleted Matrix (F3) Polyvalue Below Surface (S9) (LRR K, L) Sandy Mucky Mineral (S1) Redox Dark Surface (F7) Thin Dark Surface (S9) (LRR K, L, R) Sandy Gleyed Matrix (S4) Poleyalue Below Dark Surface (T6) Thin Dark Surface (S9) (LR K, L, R) Sandy Medox (S5) Red Parent Material (F21) Predomont Floodplain Soils (F19) (MLRA 149B) Stripped Matrix (S6) Very Shallow Dark Surface (T7) Very Shallow Dark Surface (T12) Dark Surface (S7) (LR R, MLRA 149B) Very Shallow Dark Surface (T12) Other (Explain in Remarks) Nindicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic. Remarks: A positive indication of hydric soil was observed. The criterion for hydric soil is met. A positive indication of hydric soil wa	Hvdric Soil	Indicators:							Indicators for P	roblematic Hydric Soils ³ :
Insite Epipedon (A2)	Histoso	(A1)		Polyvalue P	elow	Surface (58) (I RR	R MI RA 149R)		
Black Histic (X3) Loamy Mucky Mineral (F1) (LRR K, L) Scatt Prairie Redox (X16) (LRR K, L, R) Hydrogen Sulfide (A4) Loamy Gleyed Matrix (F2) Dark Surface (S7) (LRR K, L, R) Stratified Layers (A5) ✓ Depleted Matrix (F3) Dark Surface (S7) (LRR K, L, R) Depleted Below Dark Surface (A11) ✓ Redox Dark Surface (F6) Think Dark Surface (S9) (LRR K, L) Sandy Mucky Mineral (S1) Depleted Dark Surface (F7) Thin Dark Surface (S9) (LRR K, L, R) Sandy Mucky Mineral (S1) Redox Depressions (F8) Piedmont Floodplain Solis (F19) (MLRA 149B) Sandy Gleyed Matrix (S4) Mesic Spodic (TA6) (MLRA 144A, 145, 149B) Mesic Spodic (TA6) (MLRA 144A, 145, 149B) Stripped Matrix (S6)	Histic F	nipedon (A2)		Thin Dark S	urfac	e (S9) (I R	R R. MIR	A 149B)		(ATU) (LRR K, L, MLRA 149B)
	Black H	listic (A3)		Loamy Mud	kv Mi	neral (F1) (LRR K. I	_)	Coast Prairi	e Redox (A16) (LRR K, L, R)
Stratified Layers (A5) Depleted Matrix (F3) Depleted Matrix (F3) Polyvalue Below Surface (S7) (LRR K, L) Polyvalue Redow Surface (S3) (LRR K, L) Polyvalue Redow Surface (S3) (LRR K, L) Thick Dark Surface (A11) Redox Depressions (F8) I'ron-Manganese Masses (F12) (LRR K, L, R) Piedmont Floodplain Soils (F19) (MLRA 149B) Piedmont Floodplain Soils (F19) (MLRA 149B) Red x (S5) Red x (S5) Red Parent Material (F21) Very Shallow Dark Surface (TF12) Other (Explain in Remarks) Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic. Restrictive Layer (If observed): Heavy clay Hydric Soil Present? Yes No No A positive indication of hydric soil was observed. The criterion for hydric soil is met.	Hvdrog	en Sulfide (A4)		Loamy Glev	ed M	atrix (F2)	, (,	-	5 cm Mucky	(CT) ((DD) ((LRR K, L, R)
Depleted Below Dark Surface (A11)	Stratifie	ed Layers (A5)		✓ Depleted M	latrix	(F3)			Dark Surfac	e (S7) (LRR K, L)
Thick Dark Surface (A12)	Deplete	ed Below Dark Surf	ace (A´	I1)_✓ Redox Dark	Surf	ace (F6)			Polyvalue B	elow Surface (S8) (LRR K, L)
Sandy Mucky Mineral (S1)Redox Depressions (F8)Piedmont Floodplain Soils (F12) (LRR K, L, K) Sandy Gleyed Matrix (S4)Piedmont Floodplain Soils (F19) (MLRA 149B) Sandy Redox (S5)Mesic Spodic (TA6) (MLRA 144B)Mesic Spodic (TA6)Mesic Spodic (TA6)	Thick D	ark Surface (A12)		Depleted D	ark Sı	urface (F7	7)		Thin Dark S	urface (S9) (LRR K, L)
Sandy Gleyed Matrix (S4) Sandy Redox (S5) Stripped Matrix (S6) Stripped Matrix (S6) Ned Parent Material (F21) Very Shallow Dark Surface (TF12) Other (Explain in Remarks) 3Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic. Restrictive Layer (If observed): 	Sandy I	Mucky Mineral (S1)		Redox Dep	ressic	ons (F8)			Iron-Manga	nese Masses (F12) (LRR K, L, R)
	Sandy	Gleved Matrix (S4)							Piedmont F	loodplain Soils (F19) (MLRA 149B)
Ked Parent Material (P21) 	Sandy I	Redox (S5)							Mesic Spod	ic (TA6) (MLRA 144A, 145, 149B)
	Strippe	d Matrix (S6)							Red Parent	Material (F21)
Other (Explain in Remarks)Other (Explain in Remarks)	Dark Si	urface (S7) (I RR R N	/I RA 1	49B)					Very Shallov	w Dark Surface (TF12)
³ Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic. Restrictive Layer (if observed): Hydric Soil Present? Yes _∠_ No Depth (inches): 6 Remarks: A positive indication of hydric soil was observed. The criterion for hydric soil is met.	Durk St			150)					Other (Expl	ain in Remarks)
Restrictive Layer (if observed): Type: Heavy clay Depth (inches): 6 Remarks: A positive indication of hydric soil was observed. The criterion for hydric soil is met.	³ Indicators	of hydrophytic veg	getatio	n and wetland hy	drolo	gy must k	be preser	it, unless disturbe	d or problematic	
Type: Heavy clay Hydric Soil Present? Yes _ ∠ _ No Depth (inches): 6 Remarks: A positive indication of hydric soil was observed. The criterion for hydric soil is met.	Restrictive	Layer (if observed)	:							
Depth (inches): 6 Remarks: A positive indication of hydric soil was observed. The criterion for hydric soil is met.		Type:		Heavy clay			Hydric S	Soil Present?		Yes 🟒 No
Remarks: A positive indication of hydric soil was observed. The criterion for hydric soil is met.		Depth (inches):		6						
A positive indication of hydric soil was observed. The criterion for hydric soil is met.	Remarks:									·
	A positive i	indication of hydric	soliw	as observed. The	criter	ion for ny	/dric soll	is met.		

Soil Photos



Photo of Sample Plot North



Northcentral and Northeast Region -- Version 2.0 Adapted by TRC

Photo of Sample Plot East



Photo of Sample Plot South Photo of Sample Plot West



Project/Site: Flat Creek Solar Project	City/County: Canajoha	rie, Montgomery County	Sampling Date: 202	21-Aug-18
Applicant/Owner: SunEast		State: New York	Sampling Point: W-EE	S-06_PUB-1
Investigator(s):Ethan Snyder, Steve S	potts, Cory Dunning	Section, Township, Range: N	IA	
Landform (hillslope, terrace, etc.):	Depression Loca	l relief (concave, convex, none)	Concave	Slope (%): 0 to 1
Subregion (LRR or MLRA): LRR L		Lat: 42.8569035 Long	-74.5393213	Datum: WGS84
Soil Map Unit Name: Madalin silty cla	y loam, 0 to 3 percent slopes		NWI classification	n:
Are climatic/hydrologic conditions on the	e site typical for this time of year?	Yes 🟒 No (If r	o, explain in Remarks.)	
Are Vegetation, Soil, or H Are Vegetation, Soil, or H	Hydrology significantly disturb Hydrology naturally problema	ed? Are "Normal Circum ic? (If needed, explain a	stances" present? ny answers in Remarks.	Yes _ 🖌 No .)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes 🟒 No		
Hydric Soil Present?	Yes 🟒 No	Is the Sampled Area within a Wetland?	Yes 🯒 No
Wetland Hydrology Present?	Yes 🟒 No	If yes, optional Wetland Site ID:	W-EES-06
Remarks: (Explain alternative procedure	es here or in a separate rep	ort)	
Covertype is PUB. Area is wetland, all th	ree wetland parameters are	e present.	

HYDROLOGY

Wetland Hydrology Indicators	:			
Primary Indicators (minimum	of one is required; check al	Secondary Indicators (minimum of two required)		
 ✓ Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5) ✓ Inundation Visible on Aeria Sparsely Vegetated Conca 	Wate Aqua Marl Hydr Oxidi Prese Rece Thin al Imagery (B7) Othe ve Surface (B8)	er-Stained Leaves (B9) itic Fauna (B13) Deposits (B15) ogen Sulfide Odor (C1) ized Rhizospheres on Living ence of Reduced Iron (C4) nt Iron Reduction in Tilled S Muck Surface (C7) r (Explain in Remarks)	g Roots (C3) Soils (C6)	 Surface Soil Cracks (B6) Drainage Patterns (B10) Moss Trim Lines (B16) Dry-Season Water Table (C2) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (C9) 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	Depth (inches):	24	_
Water Table Present?	Yes 🟒 No	Depth (inches):	0	Wetland Hydrology Present? Yes 🟒 No
Saturation Present?	Yes 🟒 No	0		

Remarks:

The criterion for wetland hydrology is met. A positive indication of wetland hydrology was observed (primary and secondary indicators were present).

Sampling Point: W-EES-06_PUB-1

Tree Stratum (Plot size: 20 ft)	Absolute	Dominant	Indicator	Dominance Test worksheet			
	% Cover	Species?	Status	Number of Dominant Speci Are OBL, FACW, or FAC:	es That	2	(A)
2.		·		Total Number of Dominant	Species	2	(B)
3		·		Percent of Dominant Specie	es That	100	(A/B)
5				- Provalence Index workshoe			
6				Total % Cover of:	л. Г	Multiply	B\r
7					1/15	v 1 =	1/15
	0	= Total Cov	er		0	× 1 = _	0
Sapling/Shrub Stratum (Plot size: <u>15 ft</u>)		_		FACW Species	0	× 2	0
1.				FAC Species	0	× 3 = _	0
2.		·		- FACU species	0	×4=	0
3.				UPL species	0	x 5 = _	0
4.		· ·		Column Totals	145	(A)	145 (B)
5				Prevalence Index	= B/A =	1	
с. с		·		 Hydrophytic Vegetation Ind 	icators:		
7		<u> </u>		- 🖌 1- Rapid Test for Hydr	ophytic Ve	getation	
/		Tabal Car		2 - Dominance Test is	>50%		
	0	_= lotal Cov	er	3 - Prevalence Index is	s ≤ 3.0 ¹		
Herb Stratum (Plot size: <u>5 ft</u>)				4 - Morphological Ada	ptations ¹ (Provide	supporting
1. Lemna minor	90	Yes	OBL	– data in Remarks or on a sep	parate she	et)	
2. Leersia oryzoides	35	Yes	OBL	Problematic Hydrophy	ytic Vegeta	ation ¹ (Ex	plain)
3. <i>Typha latifolia</i>	20	No	OBL	_ ¹ Indicators of hydric soil an	d wetland	hydrolog	gy must be
4				present, unless disturbed o	r problem	atic	
5				Definitions of Vegetation St	rata:		
6				Tree – Woody plants 3 in. (7	′.6 cm) or r	more in o	diameter at
7.				breast height (DBH), regard	lless of hei	ight.	
8.				Sapling/shrub – Woody plan	nts less tha	an 3 in. D	DBH and
9.				greater than or equal to 3.2	28 ft (1 m) f	tall.	
10.				Herb – All herbaceous (non	-woody) pl	lants, reg	gardless of
11.				size, and woody plants less	than 3.28	ft tall.	
12				Woody vines – All woody vin	nes greate	r than 3.	.28 ft in
	1/5	- Total Cov	or	height.			
Weady Vine Stratum (Plat size) 20 ft)	-145		CI	Hydrophytic Vegetation Pro	esent? Ye	s 🗸 N	lo
				, , , , , , , , , , , , , , , , , , , ,			
1		·		-			
2		·		_			
3				-			
4				_			
	0	= Total Cov	er				

Remarks: (Include photo numbers here or on a separate sheet.)

A positive indication of hydrophytic vegetation was observed (>50% of dominant species indexed as OBL, FACW, or FAC). A positive indication of hydrophytic vegetation was observed (Prevalence Index is \leq 3.00). A positive indication of hydrophytic vegetation was observed (Rapid Test for Hydrophytic Vegetation).

nches) Color (moi		incuo/	reatures			
	<u>st) %</u>	Color (moist)	% Type ¹	Loc ² Tex	ture	Remarks
			·			
			·			
			·			
			· <u> </u>			
e: C = Concentration	D = Depleti	on RM = Reduce	d Matrix MS :	Masked Sand Grai	ns ² l ocation:	PI = Pore Lining M = Matrix
ric Soil Indicators:	b bepieti	on, na · neudle			Indicat	ors for Problematic Hydric Soils ³ :
Histosol (A1) Histic Epipedon (A2) Black Histic (A3) Hydrogen Sulfide (A4) Stratified Layers (A5) Depleted Below Dark S Thick Dark Surface (A1 Sandy Mucky Mineral I Sandy Gleyed Matrix (Sandy Redox (S5) Stripped Matrix (S6) Dark Surface (S7) (LRR	Surface (A11 2) (S1) 54) R, MLRA 1 4	Polyvalue Be Thin Dark Su Loamy Mucl Loamy Gleye Depleted Ma 1) Redox Dark Depleted Da Redox Depr	elow Surface (Irface (S9) (LR A Matrix (F2) Atrix (F3) Surface (F6) Irk Surface (F6) essions (F8)	58) (LRR R, MLRA 14 R R, MLRA 149B)) (LRR K, L) 7)	198) 2 cr Coa 5 cr Dar Pol Thi Thi Pie Rec Ver Ver Oth	m Muck (A10) (LRR K, L, MLRA 149B) ast Prairie Redox (A16) (LRR K, L, R) m Mucky Peat or Peat (S3) (LRR K, L, R) k Surface (S7) (LRR K, L) yvalue Below Surface (S8) (LRR K, L) n Dark Surface (S9) (LRR K, L) n-Manganese Masses (F12) (LRR K, L, R) dmont Floodplain Soils (F19) (MLRA 149B) sic Spodic (TA6) (MLRA 144A, 145, 149B) d Parent Material (F21) y Shallow Dark Surface (TF12) her (Explain in Remarks)
icators of hydrophytic	vegetation	and wetland hyd	rology must	be present, unless c	listurbed or pro	blematic.
rictive Layer (if observ	/ed):	None		Hydric Soil Proso	ot? V	as (No
Denth (inches). 	None		riyune son riese		<u> </u>
Depth (inches marks: le to inundation a clear undation, FACW and OE): soil profile L vegetatio	was unobtainabl n species, and a d	e. Soils are as definitive wet	sumed to be hydric land boundary.	. Soils were assu	imed to be hydric due to the presence of

Photo of Sample Plot East



Photo of Sample Plot South

Project/Site: Flat Cree	k Solar Projec	t City/County	: Canajoharie, Mo	ontgomery	County	Sampling Date:	2021-Aug-26
Applicant/Owner: S	unEast			State:	New York	Sampling Point: V	V-EES-06_PUB-2
Investigator(s): Etha	n Snyder, Stev	/e Spotts, Abi Light	Sect	ion, Towns	hip, Range: N	NA	
Landform (hillslope, te	rrace, etc.):	Depression	Local relief	(concave, o	convex, none)	Concave	Slope (%): 1 to 3
Subregion (LRR or MLF	RA): LRR	L	Lat:	42.853459	6 Long	: -74.5400563	Datum: WGS84
Soil Map Unit Name:	Darien silt lo	am, 3 to 8 percent slopes				NWI classific	ation:
Are climatic/hydrologic	c conditions o	n the site typical for this time	e of year?	Yes 🖌	_ No (If r	io, explain in Remar	·ks.)
Are Vegetation, Are Vegetation,	Soil, Soil,	or Hydrology significa or Hydrology naturally	ntly disturbed? v problematic?	Are "Ne (If need	ormal Circum ded, explain a	stances" present? ny answers in Rema	Yes 🟒 No arks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes 🟒 No		
Hydric Soil Present?	Yes 🟒 No	Is the Sampled Area within a Wetland?	Yes 🯒 No
Wetland Hydrology Present?	Yes 🟒 No	If yes, optional Wetland Site ID:	W-EES-06
Remarks: (Explain alternative procedure	es here or in a separate rep	ort)	
Covertype is PUB. Area is wetland, all th	ree wetland parameters are	e present.	

HYDROLOGY

Wetland Hydrology Indicators:						
Primary Indicators (minimum o	f one is required; check all	Secondary Indicators (minimum of two required)				
✓ Surface Water (A1) Water-Stained Leaves (B9) High Water Table (A2) Aquatic Fauna (B13) Saturation (A3) Marl Deposits (B15) Water Marks (B1) Hydrogen Sulfide Odor (C1) Sediment Deposits (B2) Oxidized Rhizospheres on Living Roots Drift Deposits (B3) Presence of Reduced Iron (C4) Algal Mat or Crust (B4) Recent Iron Reduction in Tilled Soils (C6) Iron Deposits (B5) Thin Muck Surface (C7) Inundation Visible on Aerial Imagery (B7) Other (Explain in Remarks) Sparsely Vegetated Concave Surface (B8) Other (Explain in Remarks)				 Surface Soil Cracks (B6) Drainage Patterns (B10) Moss Trim Lines (B16) Dry-Season Water Table (C2) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (C9) 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	Depth (inches):	24			
Water Table Present?	Yes No 🟒	Depth (inches):		Wetland Hydrology Present? Yes No		
Saturation Present?	Yes 🟒 No	Depth (inches):	0			
(includes capillary fringe)						
Describe Recorded Data (stream	m gauge, monitoring well, a	aerial photos, previous in	spections), if	available:		

The criterion for wetland hydrology is met. A positive indication of wetland hydrology was observed (primary and secondary indicators were present).

Sampling Point: W-EES-06_PUB-2

	Absolute	Dominant	Indicator	Dominance Test works	heet:		
	% Cover	Species?	Status	Number of Dominant S Are OBL, FACW, or FAC	Species That :	1	(A)
2.				Total Number of Domi	nant Species	1	(B)
3 4		·		Percent of Dominant S	pecies That	100	(A/B)
5				- Prevalence Index work	sheet		
6				Total % Cover	of.	Multiply	Bv:
7					<u>on.</u> 00	v 1 =	<u>on</u>
	0	= Total Cov	er	EACW species		× 1	0
Sapling/Shrub Stratum (Plot size: <u>15 ft</u>)		-		FACW species	0	× 2	0
1.				FAC species	0	x 3 = _	0
2.				- FACU species	0	x 4 = _	0
3.				- UPL species	0	x 5 = _	0
4.				- Column Totals	90	(A) _	90 (B)
5				Prevalence Ir	ndex = B/A =	1	
с. 	·			Hydrophytic Vegetation	n Indicators:		
7				1- Rapid Test for I	Hydrophytic V	/egetation	ı
/		- Total Cau		2 - Dominance Te	st is >50%		
	0	= Total Cov	er	3 - Prevalence Inc	lex is $\leq 3.0^1$		
Herb Stratum (Plot size: <u>5 ft</u>)	00		0.01	4 - Morphological	Adaptations	¹ (Provide	supporting
1. Wolffia borealis	90	Yes	OBL	data in Remarks or on	a separate sh	neet)	
2				Problematic Hydr	ophytic Vege	tation ¹ (E>	(plain)
3				¹ Indicators of hydric so	il and wetlan	d hydrolo	gy must be
4				present, unless disturb	ed or proble	matic	
5				Definitions of Vegetation	on Strata:		
6				Tree – Woody plants 3	in. (7.6 cm) oı	r more in	diameter at
7.				breast height (DBH), re	gardless of h	eight.	
8.				Sapling/shrub - Woody	/ plants less t	han 3 in. [OBH and
9.				greater than or equal t	o 3.28 ft (1 m) tall.	
10.				Herb – All herbaceous	(non-woody)	plants, re	gardless of
11.				size, and woody plants	less than 3.2	8 ft tall.	
12				Woody vines – All wood	dy vines great	ter than 3	.28 ft in
	90	= Total Cov	or	height.			
Woody Vine Stratum (Blot size: 20 ft)		- 10001 000	CI	Hydrophytic Vegetatio	n Present?	res 🖌 N	lo
1				-			
Z				=			
3				-			
4							
	0	= Total Cov	er				
Remarka: (Include abote numbers berg or on a se	ware abaat)						

Remarks: (Include photo numbers here or on a separate sheet.)

A positive indication of hydrophytic vegetation was observed (>50% of dominant species indexed as OBL, FACW, or FAC). A positive indication of hydrophytic vegetation was observed (Prevalence Index is \leq 3.00). A positive indication of hydrophytic vegetation was observed (Rapid Test for Hydrophytic Vegetation).

<i></i>						- .	
(inches)	Color (moist)	<u>%</u>	Color (moist)	<u>% Type</u> 1 	Loc ²	Texture	Remarks
¹ Type: $C = C$	Concentration, D = De	pletic	on, RM = Reduced	Matrix, MS =	Masked San	d Grains. ² L	ocation: PL = Pore Lining, M = Matrix.
 Histosol Histic Eg Black Hi Stratifie Deplete Thick Da Sandy M Sandy R Sandy R Stripped Dark Su 	(A1) pipedon (A2) stic (A3) en Sulfide (A4) d Layers (A5) d Below Dark Surface ark Surface (A12) Mucky Mineral (S1) fileyed Matrix (S4) tedox (S5) d Matrix (S6) rface (S7) (LRR R, MLI	e (A11 R A 14 9	 Polyvalue Bel Thin Dark Sur Loamy Mucky Loamy Gleyer Depleted Mar Redox Dark S Depleted Dar Redox Depre 	ow Surface (S face (S9) (LRF / Mineral (F1) d Matrix (F2) :rix (F3) urface (F6) k Surface (F7) ssions (F8)	8) (LRR R, MI R, MLRA 149 (LRR K, L)	RA 149B) B)	 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) Dark Surface (S7) (LRR K, L) 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 (TF12) Other (Explain in Remarks)
³ Indicators	of hydrophytic veget	ation	and wetland hydr	ology must b	e present, ur	less disturbe	ed or problematic.
Restrictive	Type: Depth (inches):		None		Hydric Soil	Present?	Yes 🟒 No
Remarks: A positive ir assumed to wetland bo	ndication of hydric so be hydric. Soils were undary.	il was e assu	observed. The cr med to be hydric	iterion for hy due to the pr	dric soil is m	et. Due to inu Indation, FA	undation a clear soil profile was unobtainable. Soils are

Photo of Sample Plot South



Project/Site: Flat Cree	k Solar Projec	City/County:	Canajoharie, Mo	ontgomery	County	Sampling Date:	2021-Aug-30
Applicant/Owner: S	unEast			State:	New York	Sampling Point: W	V-EES-06_PUB-3
Investigator(s): Etha	n Snyder, Stev	e Spotts, Abi Light	Sect	ion, Towns	hip, Range: N	IA	
Landform (hillslope, te	rrace, etc.):	Depression	Local relief	(concave, o	convex, none):	Concave	Slope (%): 1 to 3
Subregion (LRR or MLF	RA): LRR	L	Lat:	42.850270)7 Long:	-74.5372899	Datum: WGS84
Soil Map Unit Name:	llion silt loar	n, 3 to 8 percent slopes				NWI classifica	ation:
Are climatic/hydrologic	c conditions o	n the site typical for this time	of year?	Yes 🖌	_ No (If n	o, explain in Remarl	ks.)
Are Vegetation, Are Vegetation,	Soil , Soil,	or Hydrology <u></u> significan or Hydrology <u></u> naturally	tly disturbed? problematic?	Are "No (If need	ormal Circums ded, explain ai	stances" present? ny answers in Rema	Yes No 🟒 .rks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes 🟒 No		
Hydric Soil Present?	Yes 🟒 No	Is the Sampled Area within a Wetland?	Yes 🧹 No
Wetland Hydrology Present?	Yes 🟒 No	If yes, optional Wetland Site ID:	W-EES-06
Remarks: (Explain alternative procedures he	re or in a separate report)	
Covertype is PUB. Area is wetland, all three v	vetland parameters are p	resent. excavated farm pond.	

HYDROLOGY

Wetland Hydrology Indicators:				
Primary Indicators (minimum o	of one is required; check all	<u>that apply)</u>		Secondary Indicators (minimum of two required)
✓ Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5) ✓ Inundation Visible on Aeria Sparsely Vegetated Concav	Water Aquati Marl E Hydro Oxidiz Preser Recen Thin M I Imagery (B7) Other e Surface (B8)	-Stained Leaves (B9) ic Fauna (B13) Deposits (B15) gen Sulfide Odor (C1) red Rhizospheres on Living nce of Reduced Iron (C4) t Iron Reduction in Tilled S Auck Surface (C7) (Explain in Remarks)	g Roots (C3) Soils (C6)	 Surface Soil Cracks (B6) Drainage Patterns (B10) Moss Trim Lines (B16) Dry-Season Water Table (C2) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (C9) 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	Depth (inches):	36	
Water Table Present?	Yes No 🟒	Depth (inches):		Wetland Hydrology Present? Yes No
Saturation Present?	Yes 🟒 No	Depth (inches):	0	
(includes capillary fringe)				
Describe Recorded Data (strea	m gauge, monitoring well, a	aerial photos, previous ins	pections), if	available:

Remarks:

The criterion for wetland hydrology is met. A positive indication of wetland hydrology was observed (primary and secondary indicators were present).

Sampling Point: W-EES-06_PUB-3

Iree stratum (Plot size:	nant Indicator Dominance Test worksheet:	Dominant	Absolute	True Churcham (Distring 20.6)
1.	ies? Status Number of Dominant Species That 1 (A)	Species?	% Cover	<u>iree stratum</u> (Piot size: <u>30 it</u>)
3. A. Percent of Dominant Species That 100 (// 4. Percent of Dominant Species That 100 (/ 5. Percent of Dominant Species That 100 (/ 6. Percent of Dominant Species That 100 (/ 7. 0 = Total Cover FAC Uspecies 0 x 2 = 0 8. 0 = Total Cover FAC Species 0 x 3 = 0 1. Prevalence Index worksheet: 0 x 3 = 0 C FAC Uspecies 0 x 4 = 0 2. O = Total Cover FAC Uspecies 0 x 4 = 0 C 3. O = Total Cover FAC Uspecies 0 x 5 = 0 4. O = Total Cover Image: Column Totals 15 (A) 15 9. Prevalence Index is $= 3.0^{1}$ Image: Column Totals 15 Image: Column Total S = 3.0^{1} Image: Column Colus is $= 3.0^{1}$ Image: Co	Total Number of Dominant Species 1 (B)			2.
S. Are OBL, FACW, Or FAC: 6. Total % Cover of: Multiply By: 7. 0 = Total Cover Total % Cover of: Multiply By: 9. 0 = Total Cover FACW species 0 x 2 = 0 1. 0 = Total Cover FACW species 0 x 3 = 0 2. 0 = Total Cover FACU species 0 x 4 = 0 3. 0 = Total Cover Column Totals 15 (A) 15 4. 0 = Total Cover -1 Rapid Test for Hydrophytic Vegetation -1 Rapid Test for Hydrophytic Vegetation $4.$ 0 = Total Cover -1 Rapid Test for Hydrophytic Vegetation -1 Rapid Test for Hydrophytic Vegetation $4.$ 0 = Total Cover -1 Rapid Test for Hydrophytic Vegetation -1 Rapid Test for Hydrophytic Vegetation $4.$ 0 = Total Cover -1 Rapid Test for Hydrophytic Vegetation -1 Rapid Test for Hydrophytic Vegetation $2.$ 0 = Total Cover -1 Represence Index is $\leq 3.0^1$ -4 A Morphological Adaptations' (Provide supported tata Remarks or on a separate sheet) $2.$ -1 Problematic Hydrophytic Vegetation' (Explain) -1 Indicators of hydric soil and wetland hydrology mus prese	Percent of Dominant Species That 100 (A/F			3
6. Image: Second s	Are OBL, FACW, OF FAC:			5.
T. Interference Multiply By: Sapling/Shrub Stratum (Plot size: _15 ft_) 0 = Total Cover 1. 0 = Total Cover FAC species 0 $x 2 = 0$ 3.	Prevalence Index worksheet:			6.
0 = Total Cover 15 $x l = 1$ Sapling/Shrub Stratum (Plot size: _15 ft_) 0 = Total Cover $FACW species$ 0 $x 2 = 1$ 1. 2 . $ FACU species$ 0 $x 3 = 1$ 0 2. $ FACU species$ 0 $x 4 = 1$ 0 3. $ -$ <td></td> <td></td> <td></td> <td>7.</td>				7.
Sapling/Shrub Stratum (Plot size: _15 ft_)FACW species0 $x 2 = 0$ 1	OBL species 15 x 1 = 15	= Total Cover	0	
Explored bitsterInitial formed bitst	FACW species $0 \times 2 = 0$			Sanling/Shruh Stratum (Plot size: 15 ft)
Image: Sector of the system of the syste	FAC species $0 \times 3 = 0$			1
2.	FACU species 0 x 4 =0		<u> </u>	·
3.	UPL species 0 x 5 = 0			2.
4.	Column Totals 15 (A) 15 (E			3
5.	Prevalence Index = B/A =			4
6.				5
7.				6
0 = Total Cover Herb Stratum (Plot size: _5 ft_)				7
Herb Stratum (Plot size: _5 ft_) 1. Lemna minor 15 Yes OBL 4 - Morphological Adaptations1 (Provide supported at a in Remarks or on a separate sheet) 4 - Morphological Adaptations1 (Provide supported at a in Remarks or on a separate sheet) 4.	Cover	= Total Cover	0	
1. Lemna minor 15 Yes OBL 4 - Motifiniting (cal Adaptations' (Provide supported	4 Morphological Adaptations1 (Drovido supporti			<u>Herb Stratum</u> (Plot size: <u>5 ft</u>)
2.	S OBL data in Remarks or on a separate sheet)	Yes	15	1. Lemna minor
3.	Problematic Hydronbytic Vegetation ¹ (Explain)			2.
4.	Indicators of bydric soil and wetland bydrolomy must			3.
5.				4.
6.				5.
The - woody plants 5 in. (7.6 th) of the in diameter	Definitions of vegetation Strata.			6
I breast height (UBH) regardless of height				7
Sanling/shrub - Woody plants less than 3 in DBH ar	Sanling/chrub – Woody plants less than 3 in DBH and			/
greater than or equal to 3 28 ft (1 m) tall	greater than or equal to 3 28 ft (1 m) tall			o
9 6. ceter dram of equal to one of (1.1.1) takes	Herb - All berbaceous (non-woody) plants regardless			9
size, and woody plants, regardles				
11 Woody vines – All woody vines greater than 3.28 ft in	Woody vines – All woody vines greater than 3 28 ft in			^{11.}
12	height.			12
<u>15</u> = Total Cover	Cover	= Total Cover	15	
Woody Vine Stratum (Plot size: <u>30 ft</u>)	Hydrophytic Vegetation Present? Yes _7_ No			Woody Vine Stratum (Plot size: <u>30 ft</u>)
1				1
2				2
3.				3.
4.				4.
0 = Total Cover	l Cover	= Total Cover	0	

Remarks: (Include photo numbers here or on a separate sheet.)

A positive indication of hydrophytic vegetation was observed (>50% of dominant species indexed as OBL, FACW, or FAC). A positive indication of hydrophytic vegetation was observed (Prevalence Index is \leq 3.00). A positive indication of hydrophytic vegetation was observed (Rapid Test for Hydrophytic Vegetation).

nches)	Color (moist)	%	Color (moist)	%	Type ¹	Loc ² Textu	re Remarks
		· — ·					
		· ·					
		· ·		· —			
		· _ ·		· —			
		· — ·		· —			
		· ·		. —			
e: C = C	oncentration, D = D	epleti	on, RM = Reduce	d Ma	trix, MS =	Masked Sand Grains	2Location: PL = Pore Lining, M = Matrix.
ric Soli i Histosol	(A1)		Polyvalue Be	wole'	Surface (S		Indicators for Problematic Hydric Solis»:
Histic Ep	oipedon (A2)		Thin Dark Su	irface	e (S9) (LRR	R, MLRA 149B)	2 cm Muck (A10) (LRR K, L, MLRA 149B) Coast Prairie Redox (A16) (LRP K L P)
3lack Hi	stic (A3)		Loamy Mucl	y Mi	neral (F1)	LRR K, L)	5 cm Mucky Peat or Peat (S3) (LRR K, L, R)
Hydroge	en Sulfide (A4)		Loamy Gley	ed Ma	atrix (F2)		Dark Surface (S7) (LRR K, L)
Stratifie	d Layers (A5)	(Depleted Ma	atrix (F3)		Polyvalue Below Surface (S8) (LRR K, L)
Jepieteo Thick Da	a Below Dark Surta ark Surface (A12)	ce (Al	 Redox Dark Depleted Dark 	Surta Irk Si	ICE (F6) Irface (F7)		Thin Dark Surface (S9) (LRR K, L)
Sandy M	lucky Mineral (S1)		Depleted Da		ns (F8)		Iron-Manganese Masses (F12) (LRR K, L, R)
Sandy G	ileved Matrix (S4)			23510	15 (10)		Piedmont Floodplain Soils (F19) (MLRA 149E
Sandy R	edox (S5)						Mesic Spodic (TA6) (MLRA 144A, 145, 149B)
Stripped	Matrix (S6)						Red Parent Material (F21)
Dark Su	rface (S7) (LRR R, M	LRA 14	19B)				 Very Shallow Dark Surface (1F12) Other (Explain in Remarks)
icators	of hydrophytic vege	tation	and wetland hyd	rolog	gy must be	e present, unless dist	urbed or problematic.
							· · · ·
trictive L	ayer (if observed):					Hydric Soil Present?	
rictive L	ayer (if observed): Type:		None			ingune som resent.	Yes 🟒 No
ctrictivo I	avor (it obconied).					Hydric Soil Present?	

Photo of Sample Plot West



Project/Site: Flat Creek Solar Project	City/County: Canajoharie, Montgomery County	Sampling Date: 2021-Aug-19
Applicant/Owner: SunEast	State: New York	Sampling Point: W-EES-06_PUB-4
Investigator(s): Ethan Snyder, Steve Spotts, Cory I	Ounning Section, Township, Range:	NA
Landform (hillslope, terrace, etc.): Depression	Local relief (concave, convex, non	e): Concave Slope (%): 1 to 3
Subregion (LRR or MLRA): LRR L	Lat: 42.8518583 Lor	g: -74.5454986 Datum: WGS84
Soil Map Unit Name: Madalin silty clay loam, 0 to	3 percent slopes	NWI classification:
Are climatic/hydrologic conditions on the site typica	for this time of year? Yes 🖌 No (If	no, explain in Remarks.)
Are Vegetation, Soil, or Hydrology _ Are Vegetation, Soil, or Hydrology _	significantly disturbed? Are "Normal Circui naturally problematic? (If needed, explain	nstances" present? Yes 🟒 No any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes 🟒 No		
Hydric Soil Present?	Yes 🟒 No	Is the Sampled Area within a Wetland?	Yes 🟒 No
Wetland Hydrology Present?	Yes 🟒 No	lf yes, optional Wetland Site ID:	W-EES-06
Remarks: (Explain alternative procedures he	ere or in a separate report)	
Covertype is PUB. Area is wetland, all three v	wetland parameters are p	resent.	

HYDROLOGY

Wetland Hydrology Indicators	:			
Primary Indicators (minimum	of one is required; check all	<u>that apply)</u>		Secondary Indicators (minimum of two required)
 Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5) Inundation Visible on Aeria Sparsely Vegetated Concar 	Water- Aquati Marl D Hydro, Oxidiz Preser Recent Thin M al Imagery (B7) Other ve Surface (B8)	Stained Leaves (B9) (c Fauna (B13) Deposits (B15) gen Sulfide Odor (C1) ed Rhizospheres on Living nce of Reduced Iron (C4) t Iron Reduction in Tilled S Juck Surface (C7) (Explain in Remarks)	g Roots (C3) Soils (C6)	 Surface Soil Cracks (B6) Drainage Patterns (B10) Moss Trim Lines (B16) Dry-Season Water Table (C2) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (C9) 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	Depth (inches):	36	_
Water Table Present?	Yes 🟒 No	Depth (inches):	0	Wetland Hydrology Present? Yes 🟒 No
Saturation Present?	Yes 🟒 No	Depth (inches):	0	
(includes capillary fringe)				
Describe Recorded Data (stre	am gauge, monitoring well, a	erial photos, previous ins	pections), if	available:

Remarks:

The criterion for wetland hydrology is met. A positive indication of wetland hydrology was observed (primary and secondary indicators were present).

Sampling Point: W-EES-06_PUB-4

Tree Stratum (Dist size) 20 ft)	Absolute	Dominant	Indicator	Dominance Test worksheet:	:		
	% Cover	Species?	Status	Number of Dominant Species	es That	2	(A)
2.		·		Total Number of Dominant	Species	2	(B)
3				Percent of Dominant Specie	es That	100	(A/B)
5				- Broublence Index workshop	<u> </u>		
6.					L		7 . <i>a</i>
7.					ос ,	<u>viuiupiy r</u> v 1 –	<u>ру.</u> ос
	0	= Total Cov	er		<u>55</u> 7	× 1	0
Sapling/Shrub Stratum (Plot size:15 ft)		-			<u> </u>	× Z =	0
1.				FAC species	<u> </u>	x 3 =	0
2.				– FACU species	<u> </u>	x 4 =	0
3		•		– UPL species	0 >	x 5 =	0
		·		- Column Totals	85	(A)	85 (B)
		•		Prevalence Index	= B/A =	1	
5				 Hydrophytic Vegetation Indi 	icators:		
o		·		1- Rapid Test for Hydro	ophytic Ve	getation	
/				2 - Dominance Test is >	>50%	-	
	0	= lotal Cov	er	3 - Prevalence Index is	i ≤ 3.0 ¹		
Herb Stratum (Plot size: <u>5 ft</u>)				4 - Morphological Ada	ptations ¹ (I	Provide s	supporting
1. Potamogeton natans	45	Yes	OBL	– data in Remarks or on a sep	barate shee	et)	0
2. Schoenoplectus tabernaemontani	25	Yes	OBL	Problematic Hydrophy	tic Vegeta	tion ¹ (Ex	plain)
3. <i>Leersia oryzoides</i>	15	No	OBL	- ¹ Indicators of hydric soil and	d wetland ^I	hydrolog	y must be
4				present, unless disturbed o	r problem;	atic	,,
5.				Definitions of Vegetation St	rata:		
6.				Tree – Woody plants 3 in. (7	.6 cm) or n	nore in d	liameter at
7.				breast height (DBH), regard	less of hei	ght.	
8.				Sapling/shrub – Woody plan	nts less tha	an 3 in. D	BH and
9		•		greater than or equal to 3.2	.8 ft (1 m) t	all.	
10		·		Herb – All herbaceous (non-	-woody) pl	ants, reg	ardless of
11		·		size, and woody plants less	than 3.28	ft tall.	
12		·		- Woody vines – All woody vir	nes greater	r than 3.	28 ft in
12		Tabal Car		– height.			
	85	= lotal Cov	er	Hydrophytic Vegetation Pre	esent? Ye	s.ZN	0
<u>Woody Vine Stratum</u> (Plot size: <u>30 ft</u>)						5 <u>v</u> N	o
1				_			
2		·		_			
3				_			
4				_			
	0	= Total Cov	er				
Beneral and the sheet of a second s							

Remarks: (Include photo numbers here or on a separate sheet.)

A positive indication of hydrophytic vegetation was observed (>50% of dominant species indexed as OBL, FACW, or FAC). A positive indication of hydrophytic vegetation was observed (Prevalence Index is \leq 3.00). A positive indication of hydrophytic vegetation was observed (Rapid Test for Hydrophytic Vegetation).

nches)	Color (moist)	%	Color (moist)	%	Type ¹	Loc ² Textu	re Remarks
		· — ·					
		· ·					
		· ·		· —			
		· _ ·		· —			
		· — ·		· —			
		· ·		. —			
e: C = C	oncentration, D = D	epleti	on, RM = Reduce	d Ma	trix, MS =	Masked Sand Grains	2Location: PL = Pore Lining, M = Matrix.
ric Soli i Histosol	(A1)		Polyvalue Be	wole'	Surface (S		Indicators for Problematic Hydric Solis»:
Histic Ep	oipedon (A2)		Thin Dark Su	irface	e (S9) (LRR	R, MLRA 149B)	2 cm Muck (A10) (LRR K, L, MLRA 149B) Coast Prairie Redox (A16) (LRP K L P)
3lack Hi	stic (A3)		Loamy Mucl	y Mi	neral (F1)	LRR K, L)	5 cm Mucky Peat or Peat (S3) (LRR K, L, R)
Hydroge	en Sulfide (A4)		Loamy Gley	ed Ma	atrix (F2)		Dark Surface (S7) (LRR K, L)
Stratifie	d Layers (A5)	(Depleted Ma	atrix (F3)		Polyvalue Below Surface (S8) (LRR K, L)
Jepieteo Thick Da	a Below Dark Surta ark Surface (A12)	ce (Al	 Redox Dark Depleted Dark 	Surta Irk Si	ICE (F6) Irface (F7)		Thin Dark Surface (S9) (LRR K, L)
Sandy M	lucky Mineral (S1)		Depleted Da		ns (F8)		Iron-Manganese Masses (F12) (LRR K, L, R)
Sandy G	ileved Matrix (S4)			23510	15 (10)		Piedmont Floodplain Soils (F19) (MLRA 149E
Sandy R	edox (S5)						Mesic Spodic (TA6) (MLRA 144A, 145, 149B)
Stripped	Matrix (S6)						Red Parent Material (F21)
Dark Su	rface (S7) (LRR R, M	LRA 14	19B)				 Very Shallow Dark Surface (1F12) Other (Explain in Remarks)
icators	of hydrophytic vege	tation	and wetland hyd	rolog	gy must be	e present, unless dist	urbed or problematic.
							· · · ·
trictive L	ayer (if observed):					Hydric Soil Present?	
rictive L	ayer (if observed): Type:		None			ingune som resent.	Yes 🟒 No
ctrictivo I	avor (it obconied).					Hydric Soil Present?	

Photo of Sample Plot South



Project/Site: Flat Creek Solar Project	City/County: Canajoharie, Montgomery County	Sampling Date: 2021-Aug-18
Applicant/Owner: SunEast	State: New York	Sampling Point: W-EES-06_UPL-1
Investigator(s): Ethan Snyder, Steve Spotts, Cory	Dunning Section, Township, Range: 1	JA
Landform (hillslope, terrace, etc.): Hillslope	Local relief (concave, convex, none)	: Undulating Slope (%): 1 to 3
Subregion (LRR or MLRA): LRR L	Lat: 42.8569159 Long	: -74.5393095 Datum: WGS84
Soil Map Unit Name: Madalin silty clay loam, 0 to	3 percent slopes	NWI classification: None
Are climatic/hydrologic conditions on the site typica	I for this time of year? Yes 🟒 No (If r	o, explain in Remarks.)
Are Vegetation, Soil, or Hydrology _ Are Vegetation, Soil, or Hydrology _	significantly disturbed? Are "Normal Circum naturally problematic? (If needed, explain a	stances" present? Yes _✔ No ny answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes No 🟒		
Hydric Soil Present?	Yes No 🟒	Is the Sampled Area within a Wetland?	Yes No 🟒
Wetland Hydrology Present?	Yes No 🟒	If yes, optional Wetland Site ID:	
Remarks: (Explain alternative procedures l	nere or in a separate repor	t)	
Covertype is UPL. Area is upland, not all th	ree wetland parameters ar	e present.	

HYDROLOGY

Wetland Hydrology Indicators:					
Primary Indicators (minimum of one	is required; check all th	at apply)	Secondary Indicators (minimum of	<u>f two required)</u>	
 Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5) Inundation Visible on Aerial Image Sparsely Vegetated Concave Surf 	Water-St Aquatic Marl Dej Hydroge Oxidizec Presence Recent li Thin Mu gery (B7) Other (E face (B8)	tained Leaves (B9) Fauna (B13) posits (B15) en Sulfide Odor (C1) d Rhizospheres on Living Roots (C3) e of Reduced Iron (C4) ron Reduction in Tilled Soils (C6) ck Surface (C7) xplain in Remarks)	 Surface Soil Cracks (B6) Drainage Patterns (B10) Moss Trim Lines (B16) Dry-Season Water Table (C2) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (C9) Stunted or Stressed Plants (D1) Geomorphic Position (D2) Shallow Aquitard (D3) Microtopographic Relief (D4) FAC-Neutral Test (D5) 		
Field Observations: Surface Water Present? Water Table Present? Saturation Present? (includes capillary fringe)	Yes No _ ∠ Yes No _ ∠ Yes No _ ∠	Depth (inches): Depth (inches): Depth (inches):	Wetland Hydrology Present?	Yes No _	
Describe Recorded Data (stream gau	Jge, monitoring well, aer	rial photos, previous inspections), if	available:		
Remarks: The criterion for wetland hydrology	is not met. No positive ir	ndication of wetland hydrology was	observed.		

Sampling Point: W-EES-06_UPL-1

1.	= Total Co = Total Co = Total Co Yes Yes Yes No No	ver FACU FACU FACU FACU FACU	 Total Number of Dor Across All Strata: Percent of Dominant Are OBL, FACW, or F, Prevalence Index wo OBL species FACW species FACU species FACU species Column Totals Prevalence Hydrophytic Vegetat 1- Rapid Test fo 2 - Dominance 3 - Prevalence I 4 - Morphologio data in Remarks or compresent, unless distu Indicators of hydric present, unless distu 	minant Species t Species That AC: orksheet: rer of: 0 0 120 30 150 e Index = B/A = ion Indicators: or Hydrophytic V Test is > 50% Index is $\leq 3.0^1$ cal Adaptations ¹ on a separate sh ydrophytic Vege soil and wetlan	3 Multiply x 1 = x 2 = x 3 = x 4 = x 5 = (A) 4.2 (egetation (Provide eet) tation ¹ (E d hydrolo	(B) (A/B) (A/B) 0 0 0 480 150 630 (B)
3.	= Total Co = Total Co = Total Co Yes Yes Yes No No	ver FACU UPL FACU FACU FACU	 Percent of Dominant Are OBL, FACW, or F/ Prevalence Index wo OBL species FACW species FACU species FACU species Column Totals Prevalence Hydrophytic Vegetat 1- Rapid Test fo 2 - Dominance 3 - Prevalence I 4 - Morphologio data in Remarks or co Problematic Hy 'Indicators of hydric present, unless distu 	t Species That AC: rksheet: er of: 0 120 30 150 e Index = B/A = fion Indicators: or Hydrophytic V Test is > 50% Index is $\leq 3.0^1$ cal Adaptations ¹ on a separate sh ydrophytic Vege soil and wetlan	0 Multiply x 1 = x 2 = x 3 = x 4 = (A) 4.2 (egetation (Provide eet) tation ¹ (E d hydrolo	(A/B) (A/B) 0 0 480 150 630 (B) - - - - - - - - - - - - -
5.	= Total Co = Total Co Yes Yes Yes No No	ver FACU FACU FACU FACU FACU	 Prevalence Index wo <u>Total % Cov</u> OBL species FACW species FACU species FACU species UPL species Column Totals Prevalence Hydrophytic Vegetat 1- Rapid Test for 2 - Dominance 3 - Prevalence I 4 - Morphologic data in Remarks or co Problematic Hy 'Indicators of hydric present, unless distu 	prksheet: pre of: 0 0 120 30 150 e Index = B/A = ion Indicators: or Hydrophytic V Test is > 50% Index is ≤ 3.0 ¹ cal Adaptations ¹ on a separate sh ydrophytic Vege soil and wetlan	$\begin{array}{c} \text{Multiply} \\ x \ 1 = \\ x \ 2 = \\ x \ 3 = \\ x \ 4 = \\ x \ 5 = \\ (A) \\ 4.2 \end{array}$	2 By: 0 0 480 150 630 (B) - - - - - - - - - - - - -
6.	= Total Co = Total Co = Total Co Yes Yes Yes No No	ver FACU FACU FACU FACU FACU	 Total % Cov OBL species FACW species FAC species FACU species UPL species Column Totals Prevalence Hydrophytic Vegetat 1- Rapid Test fo 2 - Dominance 3 - Prevalence I 4 - Morphologic data in Remarks or c Problematic Hy 'Indicators of hydric present, unless distu 	ver of: 0 0 120 30 150 e Index = B/A = ion Indicators: or Hydrophytic V Test is > 50% Index is $\leq 3.0^1$ cal Adaptations ¹ on a separate sh ydrophytic Vege soil and wetlan	Multiply x 1 = x 2 = x 3 = x 4 = (A) 4.2 //egetation (Provide eet) tation ¹ (E d hydrolo	2 By: 0 0 480 150 630 (B) - - - - - - - - - - - - -
7. 0 Sapling/Shrub Stratum (Plot size: _15 ft _) 1. 1.	= Total Co = Total Co Yes Yes Yes No No	ver FACU UPL FACU FACU FACU FACU	 OBL species FACW species FAC species FACU species UPL species Column Totals Prevalence Hydrophytic Vegetat 1- Rapid Test fo 2 - Dominance 3 - Prevalence I 4 - Morphologio data in Remarks or co Problematic Hy 'Indicators of hydric present, unless distu 	0 0 120 30 150 e Index = B/A = ion Indicators: or Hydrophytic V Test is > 50% Index is < 3.01 cal Adaptations1 on a separate sh ydrophytic Vege soil and wetlan	x 1 = x 2 = x 3 = x 4 = x 5 = (A) <u>4.2</u> /egetation (Provide eet) tation ¹ (E d hydrolo	0 0 480 150 630 (B)
0 Sapling/Shrub Stratum (Plot size: _15 ft _) 1. 2. 3. 4. 5. 6. 7. 0 Herb Stratum (Plot size: _5 ft _) 1. 2. 0 Herb Stratum (Plot size: _5 ft _) 1. 2. 30 3. 31. 6. 7. 0 Herb Stratum (Plot size: _5 ft _) 1. 2. Asclepias syriaca 30 3. Galium mollugo 30 3. Galium arvense 5. 6. 7. 8. 9. 10. 11. 12.	_= Total Co 	ver FACU FACU FACU FACU FACU	FACW species FAC species FAC species UPL species Column Totals Hydrophytic Vegetat 1- Rapid Test fo 2 - Dominance 3 - Prevalence I 4 - Morphologio data in Remarks or c Problematic Hy 1Indicators of hydric present, unless distu	0 0 120 30 150 e Index = B/A = ion Indicators: or Hydrophytic V Test is > 50% Index is $\leq 3.0^{1}$ cal Adaptations ¹ on a separate sh ydrophytic Vege soil and wetlan	x 2 = x 3 = x 4 = x 5 = (A) 4.2 'egetation 'egetation '(Provide eet) tation ¹ (E d hydrolo	0 480 150 630 (B)
Sapling/Shrub Stratum (Plot size: _15 ft) 1.	= Total Co Yes Yes Yes No No	FACU FACU FACU FACU FACU	FAC species FACU species UPL species Column Totals Hydrophytic Vegetat Hydrophytic Vegetat - 1- Rapid Test fo - 2 - Dominance - 3 - Prevalence I - 4 - Morphologio data in Remarks or c - Problematic Hy - 1Indicators of hydric present, unless distu	0 120 30 150 e Index = B/A = ion Indicators: or Hydrophytic V Test is > 50% Index is $\leq 3.0^{1}$ cal Adaptations ¹ on a separate sh ydrophytic Vege soil and wetlan	x 3 = x 4 = x 5 = (A) 4.2 (Provide eet) tation ¹ (E d hydrolo	0 480 150 630 (B)
1.	= Total Co Yes Yes Yes No No	FACU FACU FACU FACU FACU FACU	 FACU species UPL species Column Totals Prevalence Hydrophytic Vegetat 1- Rapid Test fo 2 - Dominance 3 - Prevalence I 4 - Morphologio data in Remarks or co Problematic Hy 'Indicators of hydric present, unless distu 	120 30 150 e Index = B/A = ion Indicators: or Hydrophytic V Test is > 50% Index is ≤ 3.0 ¹ cal Adaptations ¹ on a separate sh ydrophytic Vege ¹ soil and wetlan	x 4 = x 5 = (A) 4.2 (egetation (Provide eet) tation ¹ (E d hydrolo	480 150 630 (B) n e supporting xplain) ogy must be
2.	= Total Co Yes Yes Yes No No	FACU FACU FACU FACU FACU FACU	 UPL species Column Totals Prevalence Hydrophytic Vegetat 1- Rapid Test fo 2 - Dominance 3 - Prevalence I 4 - Morphologic data in Remarks or c Problematic Hy 'Indicators of hydric present, unless distu 	30 150 150 100 Index = B/A = 100 Indicators: or Hydrophytic V Test is > 50% Index is ≤ 3.0^1 cal Adaptations ¹ on a separate sh ydrophytic Veget soil and wetland	x 5 = (A) 4.2 (egetation (Provide leet) tation ¹ (E d hydrolo	150 630 (B) n e supporting xplain) ogy must be
3.	= Total Co Yes Yes Yes No No	FACU FACU FACU FACU FACU FACU	 Column Totals Prevalence Hydrophytic Vegetat 1- Rapid Test fo 2 - Dominance 3 - Prevalence I 4 - Morphologic data in Remarks or c Problematic Hy Indicators of hydric present, unless distu 	150 = Index = B/A = ion Indicators: or Hydrophytic V Test is > 50% Index is ≤ 3.0 ¹ cal Adaptations ¹ on a separate sh ydrophytic Vege soil and wetlan	(A) 4.2 ('egetation (Provide eet) tation ¹ (E d hydrolo	630 (B) n e supporting xplain) ogy must be
4.	= Total Co Yes Yes Yes No No	FACU UPL FACU FACU FACU	 Prevalence Hydrophytic Vegetat 1- Rapid Test fo 2 - Dominance 3 - Prevalence I 4 - Morphologic data in Remarks or c Problematic Hy 1Indicators of hydric present, unless distu 	e Index = $B/A =$ ion Indicators: or Hydrophytic V Test is > 50% Index is $\leq 3.0^1$ cal Adaptations ¹ on a separate sh ydrophytic Vege soil and wetlan	4.2 (egetation (Provide leet) tation ¹ (E d hydrolo	n e supporting xplain) ogy must be
5.	= Total Co Yes Yes Yes No No	FACU UPL FACU FACU FACU	 Hydrophytic Vegetat 1 - Rapid Test fc 2 - Dominance 3 - Prevalence I 4 - Morphologie 4 - Morphologie 4 - Problematic Hy 1ndicators of hydric present, unless distu 	tion Indicators: by Hydrophytic V Test is $> 50\%$ Index is $\le 3.0^1$ cal Adaptations ¹ by a separate sh ydrophytic Vegetions soil and wetland	'egetation (Provide leet) tation ¹ (E d hydrolo	n : supporting xplain) ›gy must be
6.	= Total Co Yes Yes Yes No No	FACU UPL FACU FACU FACU	 Hydrophydr vegetal 1 - Rapid Test fc 2 - Dominance 3 - Prevalence I 4 - Morphologic data in Remarks or c Problematic Hy Problematic for hydric present, unless distu 	or Hydrophytic V Test is > 50% Index is $\leq 3.0^1$ cal Adaptations ¹ on a separate sh ydrophytic Vege soil and wetlan	(egetation (Provide leet) tation ¹ (E d hydrolo	n supporting xplain) ogy must be
7. 0 Herb Stratum (Plot size: 5 ft_) 0 1. Poa pratensis 70 2. Asclepias syriaca 30 3. Galium mollugo 30 4. Cirsium arvense 15 5. Centaurea jacea 5 6. 7 1 7. 8 9 9. 9 10 10. 11 12 12. 11 12	= Total Co Yes Yes Yes No No	FACU UPL FACU FACU FACU	 1 - Kapid Fest fit 2 - Dominance 3 - Prevalence I 4 - Morphologie data in Remarks or c Problematic Hy 1Indicators of hydric present, unless distu 	Test is $> 50\%$ Index is $< 3.0^{1}$ cal Adaptations ¹ on a separate sh /drophytic Vege ² soil and wetlan	(Provide leet) tation ¹ (E d hydrolo	supporting xplain) ygy must be
0 Herb Stratum (Plot size: _5 ft_) 1. Poa pratensis 70 2. Asclepias syriaca 30 3. Galium mollugo 30 4. Cirsium arvense 15 5. Centaurea jacea 5 6.	= Total Co Yes Yes Yes No No	FACU UPL FACU FACU FACU	 2 - Dominance 3 - Prevalence I 4 - Morphologia data in Remarks or c Problematic Hy Indicators of hydric present, unless distu 	Index is $\leq 3.0^{\circ}$ cal Adaptations ¹ on a separate sh /drophytic Vege soil and wetland	' (Provide leet) tation ¹ (E d hydrolo	supporting xplain) vgy must be
Herb Stratum (Plot size: _5 ft) 1. Poa pratensis 70 2. Asclepias syriaca 30 3. Galium mollugo 30 4. Cirsium arvense 15 5. Centaurea jacea 5 6.	Yes Yes Yes No No	FACU UPL FACU FACU FACU	 4 - Morphologie data in Remarks or c Problematic Hy Indicators of hydric present, unless distu 	cal Adaptations ¹ on a separate sh /drophytic Vege soil and wetland	(Provide leet) tation ¹ (E d hydrolo	e supporting xplain) ogy must be
1. Poa pratensis 70 2. Asclepias syriaca 30 3. Galium mollugo 30 4. Cirsium arvense 15 5. Centaurea jacea 5 6.	Yes Yes Yes No No	FACU UPL FACU FACU FACU	 4 - Mot phologic data in Remarks or c Problematic Hy 1Indicators of hydric present, unless distu 	on a separate sh drophytic Vege soil and wetland	tation ¹ (E d hydrolo	xplain) ogy must be
2. Asclepias syriaca 30 3. Galium mollugo 30 4. Cirsium arvense 15 5. Centaurea jacea 5 6.	Yes Yes No No	UPL FACU FACU FACU	 Problematic Hy Indicators of hydric present, unless distu 	/drophytic Vege soil and wetland	tation ¹ (E d hydrolo	xplain) ogy must be
3. Galium mollugo 30 4. Cirsium arvense 15 5. Centaurea jacea 5 6.	Yes No No	FACU FACU FACU	 Indicators of hydric present, unless distu 	soil and wetlan	d hydrolo	ogy must be
4. Cirsium arvense 15 5. Centaurea jacea 5 6. - 7. - 8. - 9. - 10. - 11. - 12. -	No No	FACU FACU	_ present, unless distu			
5. Centaurea jacea 5 6.	No	FACU		urbed or probler	natic	
6.			Definitions of Vegeta	ation Strata:		
7.			Tree – Woody plants	3 in. (7.6 cm) or	more in	diameter at
8.			breast height (DBH),	regardless of h	eight.	
9			Sapling/shrub - Woo	ody plants less tl	han 3 in.	DBH and
10			greater than or equa	al to 3.28 ft (1 m) tall.	
11 12			Herb – All herbaceou	us (non-woody)	plants, re	gardless of
12			size, and woody plar	nts less than 3.2	8 ft tall.	
			Woody vines – All wo	oody vines great	er than 3	3.28 ft in
150	= Total Co	ver	height.			
Woody Vine Stratum (Plot size: 30 ft)			Hydrophytic Vegeta	tion Present?	/es	No 🟒
1						
2			-			
3			-			
A.			-			
+	- Total Co		-			
0		ver				

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 - 2	10YR 4/2	100					Fibric Sil	ty Clay Loam		
2 - 4	10YR 4/3	100					Silty Clay			
4 - 6	2.5Y 3/1	95	5YR 4/4	5		M	-	Clav		
	2.51 571		511(1) 1					cidy		
				· —						
							·			
1 Type: C =	Concentration, D =	Deplet	ion. RM = Reduced M	/atrix	. MS = N	Aasked	Sand Grains, 21 c	ocation: PL = Pore Lining	. M = Mat	rix
Hydric Soil Indicators for Problematic Hydric Soils ³										
Histosol (A1) Polyvalue Below Surface (S8) (I RR R. MI RA 149B)										
Histic F	=ninedon (A2)		Thin Dark Surf	ace ('	59) (I RR		A 149R)	2 cm Muck (A10) (LRR K, L, MLRA 149B)		
Black Histic (A3)								Coast Prairie Redo	x (A16) (L	RR K, L, R)
Hydrogen Sulfide (A4) Loamy Gleved Matrix (F2)5 cm Mucky Peat or Peat (S3										3) (LRR K, L, R)
Dark Surface									5/) (LRR K, L)	
Polyvalue Below Surface (A11) Redox Dark Surface (F6)										5) (LRR K, L)
Thick Dark Surface (A12) Depleted Dark Surface (F7)								Thin Dark Surface (S9) (LRR K, L)		
Sandy	Mucky Mineral (S1))	Redox Depres	sions	(F8)			Iron-Manganese N	lasses (F1	2) (LRR K, L, R)
Piedmont Floodplain Soils (F19) (MLRA 149B)										-19) (MLRA 149B)
Mesic Spodic (TA6) (MLRA 144A, 145, 149B)										44A, 145, 149B)
Red Parent Material (F21)										
Other (Explain in Remarks)										
³ Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.										
Restrictive	Layer (if observed)):								
	Type: Heavy compacted clay			Hydri	Hydric Soil Present?		Yes	No 🟒		
	Depth (inches): 4									
Remarks:										
No nositive indication of hydric soils was observed. Refusal due to coarse fragments, clay was solid, didn't risk shovel breaking										
No positiv	e maleadon of fiya	110 30113	was observed. Refu	Sarut		ai se ira	gillents, clay was s		neaking.	

Photo of Sample Plot North



Photo of Sample Plot East
Photo of Sample Plot South



Photo of Sample Plot West

Project/Site: Flat Creek Solar Project	City/County: Canajoharie, Montgomery County	Sampling Date: 2021-Aug-19
Applicant/Owner: SunEast	State: New Yor	Sampling Point: W-EES-06_UPL-2
Investigator(s): Ethan Snyder, Steve Spotts, Cory	Dunning Section, Township, Rang	je: NA
Landform (hillslope, terrace, etc.): Flat	Local relief (concave, convex, n	one): Undulating Slope (%): 1 to 3
Subregion (LRR or MLRA): LRR L	Lat: 42.8576482	ong: -74.5394986 Datum: WGS84
Soil Map Unit Name: Madalin silty clay loam, 0 to	3 percent slopes	NWI classification:
Are climatic/hydrologic conditions on the site typica	I for this time of year? Yes 🖌 No	(lf no, explain in Remarks.)
Are Vegetation, Soil, or Hydrology _ Are Vegetation, Soil, or Hydrology _	significantly disturbed? Are "Normal Cir naturally problematic? (If needed, expla	cumstances" present? Yes 🟒 No ain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes No 🟒								
Hydric Soil Present?	Yes 🟒 No	Is the Sampled Area within a Wetland?	Yes No 🟒						
Wetland Hydrology Present?	Yes No	If yes, optional Wetland Site ID:							
Remarks: (Explain alternative procedures here or in a separate report)									
Covertype is UPL. Area is upland, not all three wetland parameters are present.									

HYDROLOGY

Wetland Hydrology Indicators:			
Primary Indicators (minimum of	one is required; check all t	Secondary Indicators (minimum of two required)	
 Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5) Inundation Visible on Aerial In Sparsely Vegetated Concave S 	Water- Aquati Marl D Hydrog Oxidize Presen Recent Thin M magery (B7) Other (Surface (B8)	 Surface Soil Cracks (B6) Drainage Patterns (B10) Moss Trim Lines (B16) Dry-Season Water Table (C2) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (C9) 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 🟒	Depth (inches):	_
Water Table Present?	Yes No	Depth (inches):	Wetland Hydrology Present? Yes No
Saturation Present?	Yes 🟒 No	Depth (inches): 3	
(includes capillary fringe)			
Describe Recorded Data (stream	gauge, monitoring well, a	erial photos, previous inspections),	f available:

Remarks:

The criterion for wetland hydrology is met. A positive indication of wetland hydrology was observed (at least one primary indicator). saturation from 3 days of rain .

VEGETATION -- Use scientific names of plants.

Sampling Point: W-EES-06_UPL-2

Tree Stratum (Plot size: 30 ft)	Absolute	Dominant	Indicator	Dominance Test worksheet:		
1.	% Cover	Species?	Status	Are OBL, FACW, or FAC:	0	(A)
2.				Total Number of Dominant Species	2	(B)
3				Percent of Dominant Species That	0	(A/B)
5.				Are OBL, FACW, or FAC:		
6.				- Prevalence Index worksheet:	Maria la c	Dun
7.				OPL spasies		<u>ву:</u>
	0	= Total Cov	er		x I	0
Sapling/Shrub Stratum (Plot size: 15 ft)		-		FACW species 0	x 2 =	0
1.				FAC species 0	x 3 =	0
2				FACU species <u>165</u>	x 4 =	660
3				- UPL species 0	x 5 =	0
		·		- Column Totals 165	(A)	660 (B)
+		<u> </u>		Prevalence Index = B/A =	4	
S				Hydrophytic Vegetation Indicators:		
o				1- Rapid Test for Hydrophytic	√egetatior	ו
7		Tabal Car		2 - Dominance Test is > 50%		
	0		er	3 - Prevalence Index is $≤ 3.0^1$		
Herb Stratum (Plot size: <u>5 ft</u>)				4 - Morphological Adaptations	¹ (Provide	supporting
1. <u>Centaurea jacea</u>	90	Yes	FACU	data in Remarks or on a separate sl	neet)	
2. <i>Galium aparine</i>	45	Yes	FACU	Problematic Hydrophytic Vege	tation ¹ (Ex	xplain)
3. <u>Vicia americana</u>	15	No	FACU	¹ Indicators of hydric soil and wetlan	ıd hydrolo	gy must be
4. Poa pratensis	15	No	FACU	present, unless disturbed or proble	matic	
5				Definitions of Vegetation Strata:		
6				Tree – Woody plants 3 in. (7.6 cm) o	r more in	diameter at
7				breast height (DBH), regardless of h	ieight.	
8.				Sapling/shrub – Woody plants less t	han 3 in. I	DBH and
9.				greater than or equal to 3.28 ft (1 m	ı) tall.	
10.				Herb – All herbaceous (non-woody)	plants, re	gardless of
11.				size, and woody plants less than 3.2	28 ft tall.	
12.				Woody vines – All woody vines grea	ter than 3	.28 ft in
	165	= Total Cov	er	height.		
Woody Vine Stratum (Plot size: 30 ft)		-		Hydrophytic Vegetation Present?	Yes N	No 🟒
1						
2		<u> </u>		-		
2		·		-		
				-		
4		- Total Cav	or	-		
	0		er			
Remarks: (Include photo numbers here or on a sepa	rate sheet.)					
No positive indication of hydrophytic vegetation was	s observed (\geq	50% of dom	inant speci	es indexed as FAC– or drier).		

SOIL

Profile Desc	ription: (Describe	to the o	depth needed to d	locun	nent the	indicator	or confirm the al	bsence of indicat	ors.)
Depth	Matrix		Redox	(Feat	ures				
(inches)	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²	Textu	ure	Remarks
0 - 6	10YR 4/2	90	5YR 4/4	10	С	М	Fibric Sil ⁱ	t Loam	
6 - 15	10YR 6/3	90	5YR 5/6	10	С	М	Silty Clay	y Loam	
	-								
				·					
								<u> </u>	
				·				<u> </u>	
				·				<u> </u>	
				·				<u> </u>	
<u>¹Type: C = C</u>	oncentration, D =	Deplet	ion, RM = Reduce	d Mat	rix, MS =	Masked	Sand Grains. ² Lo	ocation: PL = Pore	e Lining, M = Matrix.
Hydric Soil I	ndicators:							Indicators for P	Problematic Hydric Soils ³ :
Histosol	(A1)		Polyvalue Be	elow S	urface (S	58) (LRR F	R, MLRA 149B)	2 cm Muck	(A10) (LRR K, L, MLRA 149B)
Histic Ep	ipedon (A2)		Thin Dark Su	urface	(S9) (LR F	R R, MLRA	A 149B)	Coast Prairi	ie Redox (A16) (LRR K, L, R)
Black His	stic (A3)		Loamy Muck	ky Mir	eral (F1)	(LRR K, L	.)	5 cm Mucky	y Peat or Peat (S3) (LRR K, L, R)
Hydroge	n Sulfide (A4)		Loamy Gleye	ed Ma	trix (F2)			Dark Surfac	ce (S7) (LRR K, L)
Stratified	d Layers (A5) d Bolow Dark Surf:		Depleted Ma	atrix (I	F3) co (E6)			Polyvalue B	Below Surface (S8) (LRR K, L)
Depieted	u below Dark Surra urk Surfaca (A12)	ice (Al	Doploted Dark		rfaco (E7	`		Thin Dark S	Gurface (S9) (LRR K, L)
Thick Da	lucky Mineral (S1)		Depieted Da)		Iron-Manga	anese Masses (F12) (LRR K, L, R)
Sandy C	loved Matrix (S4)		Redux Depr	255101	15 (FO)			Piedmont F	loodplain Soils (F19) (MLRA 149B)
Sanuy G								Mesic Spod	lic (TA6) (MLRA 144A, 145, 149B)
Sandy R	edox (SS)							Red Parent	Material (F21)
Stripped			(0.5)					Very Shallov	w Dark Surface (TF12)
Dark Sui	rface (S7) (LRR R, N	ILRA 14	49B)					Other (Expl	ain in Remarks)
³ Indicators of	of hydrophytic veg	etatior	and wetland hyd	rolog	y must b	e presen	t, unless disturbe	d or problematic	
Restrictive L	ayer (if observed):								
	Type:		None			Hydric	Soil Present?		Yes No
	Depth (inches):					,			
Remarks:	(1			
A positive in	dication of hydric	soil wa	s observed. The c	riterio	on for hv	dric soil i	s met.		
r posicive in		5011 110			Sirrior riy		5 met.		

Soil Photos



Photo of Sample Plot North Photo of Sample Plot East



Photo of Sample Plot South

Photo of Sample Plot West



Project/Site: Flat Cree	k Solar Projec	t i	City/County:	Canajoharie, Mo	ontgomery	County		Sampling Date:	2021-Aug-26	
Applicant/Owner: S	unEast				State:	New Yo	rk	Sampling Point: <u>V</u>	W-EES-06_UPL-3	
Investigator(s): Etha	n Snyder, Stev	ve Spotts, Abi Ligl	nt	Sect	ion, Towns	ship, Ran	ge: NA	A		
Landform (hillslope, te	rrace, etc.):	Hillslope		Local relief	(concave,	convex, i	none):	Undulating	Slope (%):	1 to 3
Subregion (LRR or MLF	RA): LRR	L		Lat:	42.85378	55	Long:	-74.534959	Datum: WG	S84
Soil Map Unit Name:	Phelps grave	elly loam, fan						NWI classific	ation:	
Are climatic/hydrologic	c conditions o	n the site typical	for this time	of year?	Yes 🟒	_ No	_ (If no	, explain in Remar	rks.)	
Are Vegetation, Are Vegetation,	Soil, Soil,	or Hydrology or Hydrology	significant naturally	tly disturbed? problematic?	Are "N (If nee	ormal Ci ded, exp	rcumst lain an <u>y</u>	ances" present? / answers in Rema	Yes 🟒 No arks.)	

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes No 🟒								
Hydric Soil Present?	Yes No 🟒	Is the Sampled Area within a Wetland?	Yes No 🟒						
Wetland Hydrology Present?	Yes No 🟒	If yes, optional Wetland Site ID:							
Remarks: (Explain alternative procedures here or in a separate report)									
Covertype is UPL. Area is upland, not all three wetland parameters are present.									

HYDROLOGY

Wetland Hydrology Indicators:							
Primary Indicators (minimum of or	<u>ne is required; check all t</u>	<u>hat apply)</u>	Secondary Indicators (minimum	Secondary Indicators (minimum of two required)			
 Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5) Inundation Visible on Aerial Im Sparsely Vegetated Concave Sume 	Water- Aquatii Marl D Hydrog Oxidize Presen Recent Thin M agery (B7) Other urface (B8)	 Surface Soil Cracks (B6) Drainage Patterns (B10) Moss Trim Lines (B16) Dry-Season Water Table (C2) Crayfish Burrows (C8) Saturation Visible on Aerial Ir Stunted or Stressed Plants (C Geomorphic Position (D2) Shallow Aquitard (D3) Microtopographic Relief (D4) FAC-Neutral Test (D5) 	nagery (C9))1)				
Field Observations: Surface Water Present? Water Table Present? Saturation Present? (includes capillary fringe) Describe Recorded Data (stream g	Yes No Yes No Yes No auge, monitoring well, a	Depth (inches): Depth (inches): Depth (inches): erial photos, previous inspections), i	 Wetland Hydrology Present? f available:	Yes No			
Remarks: The criterion for wetland hydrolog	y is not met. No positive	indication of wetland hydrology was	s observed.				

VEGETATION -- Use scientific names of plants.

Sampling Point: <u>W-EES-06_UPL-3</u>

Tree Stratum (Diet size: 20 ft.)	Absolute	Dominant	Indicator	Dominance Test worksheet:		
	% Cover	Species?	Status	Number of Dominant Species That	0	(A)
1. Tsuga canadensis	75	Yes	FACU	Are OBL, FACW, or FAC:		(~)
2. Betula alleghaniensis	5	No	FAC	Total Number of Dominant Species	2	(B)
3.				Across All Strata:		(2)
4.		. <u> </u>		Percent of Dominant Species That	0	(A/B)
5.				Are OBL, FACW, or FAC:		
6.				Prevalence Index worksheet:		
7.				<u>Total % Cover of:</u>	<u>Multiply</u>	<u>By:</u>
	80	= Total Cov	er	OBL species 0	x 1 = _	0
Sanling/Shrub Stratum (Plot size: 15 ft)		-		FACW species 0	x 2 = _	0
1 Fagus grandifolia	15	Ves	FACU	FAC species 5	x 3 = _	15
2	15		17/00	FACU species 90	x 4 =	360
2				UPL species 0	x 5 =	0
3.		·		Column Totals 95	(A)	375 (B)
4.		·		Prevalence Index = B/A =	3.9	
з		·		Hydrophytic Vegetation Indicators:		
o		·		1- Rapid Test for Hydrophytic	Vegetation	l
7				2 - Dominance Test is > 50%	-	
	15	= lotal Cov	er	3 - Prevalence Index is $\leq 3.0^1$		
<u>Herb Stratum</u> (Plot size: <u>5 ft</u>)				4 - Morphological Adaptations	¹ (Provide	supporting
1				data in Remarks or on a separate sl	neet)	
2				Problematic Hydrophytic Vege	tation ¹ (Ex	(plain)
3		<u> </u>		¹ Indicators of hydric soil and wetlar	d hydrolo	gy must be
4				present, unless disturbed or proble	matic	
5				Definitions of Vegetation Strata:		
6				Tree – Woody plants 3 in. (7.6 cm) o	r more in (diameter at
7				breast height (DBH), regardless of h	ieight.	
8.				Sapling/shrub - Woody plants less t	:han 3 in . D	OBH and
9.				greater than or equal to 3.28 ft (1 m	ı) tall.	
10.				Herb – All herbaceous (non-woody)	plants, reg	gardless of
11.				size, and woody plants less than 3.2	28 ft tall.	
12.		······································		Woody vines – All woody vines grea	ter than 3.	.28 ft in
	0	= Total Cov	er	height.		
Woody Vine Stratum (Plot size: 30 ft)				Hydrophytic Vegetation Present?	Yes N	lo 🖌
1.						
2		······································				
3		·				
		·				
···		- Total Cov	or			
	0		el			
Remarks: (Include photo numbers here or on a separate	e sheet.)					
No positive indication of hydrophytic vegetation was ob-	served (\geq	50% of dom	iinant specie	s indexed as FAC– or drier).		

SOIL

Profile Des	cription: (Describe	to the de	epth needed to d	ocun	nent the i	ndicato	r or confirm the	e absence of indicators.	.)
Depth	Matrix		Redox	Feat	tures				
(inches)	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²		Texture	Remarks
0 - 2	2.5YR 4/4	100					Org r	natter Loam	
2 - 4	10YR 3/1	100					Silt Loam		
4 - 9	10YR 4/3	75	10YR 7/1	5	D	М	Silty	r Clay Loam	
4 - 9	7.5YR 5/6	20							
9 - 13	7.5YR 5/6	100						Silty Clay	
13 - 18	10YR 6/3	95	10YR 7/1	5	D	М	9	Silty Clay	
				·				, , , , , , , , , , , , , , , , , , ,	
				· —					
				· —	·				
					·				
				· —					
				· —					
¹ Type: C = 0	concentration, D =	Depletio	n, RM = Reduced	Mat	rix, MS =	Masked	Sand Grains.	² Location: PL = Pore Li	ning, M = Matrix.
Hydric Soil	Indicators:							Indicators for Prob	enatic Hydric Soils ³ :
Histoso	l (A1)		Polyvalue Be	ow S	urface (S	8) (LRR	R, MLRA 149B)	2 cm Muck (A1	0) (LRR K, L, MLRA 149B)
Histic E	oipedon (A2)		Thin Dark Su	rface	(S9) (LRR	R, MLR	A 149B)	Coast Prairie R	edox (A16) (LRR K, L, R)
Black H	istic (A3)		Loamy Muck	/ Mir	eral (F1)	(LRR K,	L)	5 cm Mucky Pe	at or Peat (S3) (LRR K, L, R)
Hydrog	en Sulfide (A4)		Loamy Gleye		trix (F2)			Dark Surface (S	57) (LRR K, L)
Stratilie	d Layers (A5) d Bolow Dark Surf	200 (111)	Depieted Ma	urfa	-3) -2 (E6)			Polyvalue Below	w Surface (S8) (LRR K, L)
Depiete	ark Surface (A12)		Depleted Day	k Su	face (FO)			Thin Dark Surfa	ace (S9) (LRR K, L)
Sandy M	Aucky Mineral (S1)		Depicted Dai	r Ju	nace (F8)			Iron-Manganes	se Masses (F12) (LRR K, L, R)
Sandy (Loved Matrix (S4)			33101	13 (1 0)			Piedmont Floo	dplain Soils (F19) (MLRA 149B)
Sandy [Dedax (S5)							Mesic Spodic (1	ſA6) (MLRA 144A, 145, 149B)
Sanuy n	d Matrix (SC)							Red Parent Ma	terial (F21)
Suippe								Very Shallow D	ark Surface (TF12)
Dark St	ITIACE (57) (LKK K, N	ILKA 14	<i>)</i> D)					Other (Explain	in Remarks)
³ Indicators	of hydrophytic veg	getation a	and wetland hydr	olog	y must be	e preser	nt, unless distur	bed or problematic.	
Restrictive	Layer (if observed)				-			· · · · · · · · · · · · · · · · · · ·	
	Type:		None			Hydric	: Soil Present?		Yes No 🖌
	Depth (inches):			-		Ĵ			
Remarks:									
No positive	indication of hydr	ic soils w	as observed. The	e crite	erion for l	hydric s	oil is not met.		

Soil Photos



Photo of Sample Plot North Photo of Sample Plot East



Photo of Sample Plot South Photo of Sample Plot West



Project/Site: Flat Cree	k Solar Projec	t	City/County:	Canajoharie, M	lontgomery	County		Sampling Date:	2021-Aug-25	
Applicant/Owner: S	unEast				State:	New Yor	'k	Sampling Point: <u>\</u>	W-EES-6_PEM-2	
Investigator(s): Etha	n Snyder, Abi	Light		Se	ction, Town	ship, Ran	ge: N/	4		
Landform (hillslope, te	rrace, etc.):	Depression		Local relie	f (concave,	convex, n	none):	Concave	Slope (%): 1	l to 3
Subregion (LRR or MLF	RA): LRR	L		Lat	42.85297	48	Long:	-74.533804	Datum: WG	S84
Soil Map Unit Name:	Churchville	silty clay loam, 3	to 8 percent	slopes				NWI classific	ation: None	
Are climatic/hydrologic	c conditions o	n the site typical	for this time	of year?	Yes 🟒	_ No	_(lf no	, explain in Rema	rks.)	
Are Vegetation, Are Vegetation,	Soil, Soil,	or Hydrology or Hydrology	significant naturally	tly disturbed? problematic?	Are "N (If nee	ormal Cir ded, expl	rcumst ain an	ances" present? y answers in Rem	Yes 🟒 No arks.)	

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes 🟒 No								
Hydric Soil Present?	Yes 🟒 No	Is the Sampled Area within a Wetland?	Yes 🟒 No						
Wetland Hydrology Present?	Yes 🟒 No	If yes, optional Wetland Site ID:	W-EES-6						
Remarks: (Explain alternative procedures here or in a separate report)									
Covertype is PEM. Area is wetland, all three wetland parameters are present.									

HYDROLOGY

Wetland Hydrology Indicators:		
Primary Indicators (minimum of one is required; check all that apply)		Secondary Indicators (minimum of two required)
Surface Water (A1) ✓ Water-Stained Leaves (B9) High Water Table (A2) Aquatic Fauna (B13) Saturation (A3) Marl Deposits (B15) Water Marks (B1) Hydrogen Sulfide Odor (C1) Sediment Deposits (B2) Oxidized Rhizospheres on Living Rod Drift Deposits (B3) Presence of Reduced Iron (C4) Algal Mat or Crust (B4) Recent Iron Reduction in Tilled Soils Iron Deposits (B5) Thin Muck Surface (C7) Inundation Visible on Aerial Imagery (B7) Other (Explain in Remarks) Sparsely Vegetated Concave Surface (B8)		 Surface Soil Cracks (B6) Drainage Patterns (B10) Moss Trim Lines (B16) Dry-Season Water Table (C2) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (C9) 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 Depth (inches): Water Table Present? Yes No Depth (inches):		
Saturation Present? Yes 🖌 No Depth (inches):	0	_
(includes capillary fringe)		
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous insp Remarks: The criterion for wetland hydrology is met. A positive indication of wetland hydrology	pections), if	f available: erved (primary and secondary indicators were present).

VEGETATION -- Use scientific names of plants.

Sampling Point: W-EES-6_PEM-2

Tree Stratum (Plot size: <u>30 ft</u>)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet: Number of Dominant Specie	es That	2	
1. <i>Ulmus americana</i>	20	Yes	FACW	Are OBL, FACW, or FAC:	_	3	(A)
2. <i>Carya ovata</i>	2	No	FACU	Total Number of Dominant S	pecies	4	(B)
3. Acer saccharum	2	No	FACU	Across All Strata:	-		(2)
4.				 Percent of Dominant Species Are OBL, FACW, or FAC: 	s That	75	(A/B)
5				 Prevalence Index worksheet: 	:		
7				- <u>Total % Cover of:</u>		<u>Multiply</u>	<u>' By:</u>
/		- Total Cou	~~	- OBL species	5	x 1 =	5
Carling/Church Strature (Distaire) 15 ft)	24	- 10tal Cov	er	FACW species 11	10	x 2 =	220
<u>Sapling/Snrub Stratum</u> (Plot size: <u>15 ft</u>)	-		FACU	FAC species 2	0	x 3 =	60
1. Lonicera morrowii	5	Yes	FACU	- FACU species	9	x 4 =	36
2				UPL species ()	x 5 =	0
3				- Column Totals 14	14	(A)	321 (B)
4.				Prevalence Index =	= B/A =	2.2	
5				- Hydronbytic Vegetation India			·
6				1 Papid Test for Hydro	nbytic Va	agotation	`
7						getation	ļ
	5	= Total Cov	er	2 - Dominance rest is >	- 3 01		
<u>Herb Stratum</u> (Plot size: <u>5 ft</u>)				↓ Morphological Adap	$\geq 3.0^{\circ}$	(Drovida	currenting
1. Impatiens capensis	60	Yes	FACW	data in Remarks or on a sen	arato she	(Provide	supporting
2. Onoclea sensibilis	30	Yes	FACW	Problematic Hydrophyt	tic Vogot:	ation1 (E	volain)
3. Solidago rugosa	15	No	FAC	1Indicators of hydric soil and	wotland		npiani)
4. Athyrium angustum	5	No	FAC	present, unless disturbed or	problem	natic	igy must be
5. <i>Galium palustre</i>	5	No	OBL	Definitions of Vegetation Stra	ata:		
6.				Tree – Woody plants 3 in. (7.6	6 cm) or	more in	diameter at
7.				breast height (DBH), regardle	ess of he	ight.	
8.				Sapling/shrub - Woody plant	ts less th	an 3 in. I	DBH and
9.				greater than or equal to 3.28	3 ft (1 m)	tall.	
10.				Herb – All herbaceous (non-v	woody) p	lants, re	gardless of
11.				size, and woody plants less t	han 3.28	ft tall.	
12				Woody vines – All woody vine	es greate	er than 3	8.28 ft in
12	115	- Total Cov	or	height.			
Woody Vine Stratum (Plot size: <u>30 ft</u>)			CI .	Hydrophytic Vegetation Pres	sent? Ye	es 🟒 N	No
1.							
2.				-			
3.				-			
4.				-			
···	0	= Total Cov	er	-			
		-					

Remarks: (Include photo numbers here or on a separate sheet.)

A positive indication of hydrophytic vegetation was observed (>50% of dominant species indexed as OBL, FACW, or FAC). A positive indication of hydrophytic vegetation was observed (Prevalence Index is \leq 3.00). A positive indication of hydrophytic vegetation was observed (Morphological Adaptations). raised buttresses, shallow/exposed roots on trees.

SOIL

Profile Desci	ription: (Describe t	o the d	lepth needed to d	locum	ent the i	indicator	or confirm the a	absence of indicator	rs.)
Depth	Matrix		Redox	Feat	ures				
(inches)	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²	Text	ture	Remarks
0 - 5	10YR 4/1	90	5YR 5/6	10	С	М	Silty Cla	y Loam	
5 - 15.5	2.5Y 5/1	85	2.5YR 4/4	15	С	М	Silty	Clay	
15.5 - 20	2.5Y 5/1	75	2.5YR 5/4	25	С	M	Cl	ay	
					<u> </u>				
		·							
					<u> </u>				
					<u> </u>				
				·					
¹ Type: C = Co	oncentration, D = D	Depleti	on, RM = Reduced	d Matr	rix, MS =	Masked	Sand Grains. ² L	_ocation: PL = Pore	Lining, M = Matrix.
Hydric Soil Ir	ndicators:							Indicators for Pro	oblematic Hydric Soils ³ :
Histosol	(A1)		Polyvalue Be	low S	urface (S	58) (LRR F	R, MLRA 149B)	2 cm Muck (A	(10) (LRR K, L, MLRA 149B)
Histic Epi	pedon (A2)		Thin Dark Su	irface	(S9) (LRR	R, MLRA	A 149B)	Coast Prairie	Redox (A16) (LRR K, L, R)
Black His	tic (A3)		Loamy Muck	y Min	eral (F1)	(LRR K, L	.)	5 cm Mucky F	Peat or Peat (S3) (LRR K, L, R)
Hydrogel	n Suifide (A4)		Loamy Gleye	ed Ma	trix (F2)			Dark Surface	(S7) (LRR K, L)
	Below Dark Surfa	دم (1۵ء	Depieteu Ma	surfac	-5) -6 (E6)			Polyvalue Be	low Surface (S8) (LRR K, L)
Thick Da	rk Surface (A12)		Depleted Da	rk Sur	face (F7))		Thin Dark Su	rface (S9) (LRR K, L)
Sandy M	ucky Mineral (S1)		Redox Depre	ession	is (F8)	·		Iron-Mangan	ese Masses (F12) (LRR K, L, R)
Sandy Gl	eved Matrix (S4)							Piedmont Flo	oodplain Soils (F19) (MLRA 149B)
Sandy Re	edox (S5)							Mesic Spodic	(TA6) (MLRA 144A, 145, 149B)
Stripped	Matrix (S6)							Red Parent M	laterial (F21)
Dark Sur	face (S7) (I RR R M	I RA 14	19B)					Very Shallow	Dark Surface (TF12)
								Other (Explai	n in Remarks)
³ Indicators o	f hydrophytic vege	etation	and wetland hyd	rology	/ must be	e presen	t, unless disturbe	ed or problematic.	
Restrictive La	ayer (if observed):								
	Туре:		Heavy clay			Hydric	Soil Present?	Ŷ	⁄es∕ No
	Depth (inches):		15.5						
Remarks:									
A positive in	dication of hydric s	soil wa	s observed. The c	riteric	on for hyd	dric soil i	s met.		

Soil Photos



Photo of Sample Plot North Photo of Sample Plot East



Photo of Sample Plot South Photo of Sample Plot West



Project/Site: Flat Cree	k Solar Project	t	City/County:	Canajoharie, Mo	ontgomery County	/	Sampling Date:	2021-Sept-14
Applicant/Owner: S	unEast				State: NY		Sampling Point: V	V-EES-6_PEM-103
Investigator(s): Nick	DeJohn, Brian	Corrigan, Abi Li	ght	Sect	ion, Township, Ra	nge: N/	4	
Landform (hillslope, te	rrace, etc.):	Depression		Local relief	(concave, convex,	none):	Concave	Slope (%): 0 to 1
Subregion (LRR or MLF	RA): LRR I	L		Lat:	42.8467057133	Long:	-74.5253037103	Datum: WGS84
Soil Map Unit Name:	Phelps grave	elly loam					NWI classific	ation:
Are climatic/hydrologic	c conditions or	n the site typical	for this time	of year?	Yes 🟒 No 🔄	(If no	, explain in Remar	·ks.)
Are Vegetation, Are Vegetation,	Soil, Soil,	or Hydrology or Hydrology	significan naturally	tly disturbed? problematic?	Are "Normal C (If needed, ex	Circumst plain an	ances" present? y answers in Rema	Yes 🟒 No arks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes 🟒 No		
Hydric Soil Present?	Yes 🟒 No	Is the Sampled Area within a Wetland?	Yes 🟒 No _
Wetland Hydrology Present?	Yes 🟒 No	If yes, optional Wetland Site ID:	W-EES-6
Remarks: (Explain alternative procedure	es here or in a separate rep	port)	
Covertype is PEM.			

HYDROLOGY

Wetland Hydrology Indicators:					
Primary Indicators (minimum of on	Secondary Indicators (minimum of two required)				
 Surface Water (A1) High Water Table (A2) Aquatic Fauna (B13) Saturation (A3) Marl Deposits (B15) Water Marks (B1) Hydrogen Sulfide Odor (C1) Sediment Deposits (B2) Oxidized Rhizospheres on Living Roots (C3) Drift Deposits (B3) Presence of Reduced Iron (C4) Algal Mat or Crust (B4) Iron Deposits (B5) Thin Muck Surface (C7) Inundation Visible on Aerial Imagery (B7) Sparsely Vegetated Concave Surface (B8) 				 Surface Soil Cracks (B6) Drainage Patterns (B10) Moss Trim Lines (B16) Dry-Season Water Table (C2) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (C9) 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 🟒	Depth (inches):		
Water Table Present?	Yes	No 🟒	Depth (inches):	Wetland Hydrology Present? Yes _ No	
Saturation Present?	Yes	No 🟒	Depth (inches):		
(includes capillary fringe)					
Describe Recorded Data (stream ga	auge, moni	toring well, aeri	al photos, previous inspections), if	available:	
Remarks:					

VEGETATION -- Use scientific names of plants.

Sampling Point: W-EES-6_PEM-103

Tree Stratum (Plot size: 20 ft)	Absolute	Dominant	Indicator	Dominance Test workshe	eet:		
	% Cover	Species?	Status	Number of Dominant Sp	ecies That	1	(A)
1				Are OBL, FACW, or FAC:			
2.				Total Number of Domina	int Species	1	(B)
3.				Across All Strata:			
4.				Percent of Dominant Spe	ecies That	100	(A/B)
5.				Are OBL, FACW, or FAC:			
6.				Prevalence Index worksh	ieet:		
7.				<u>Total % Cover o</u>	<u>f:</u>	Multiply	<u>By:</u>
	0	= Total Cove	er	OBL species	12	x 1 =	12
Sapling/Shrub Stratum (Plot size: 15 ft)		-		FACW species	75	x 2 =	150
1				FAC species	0	x 3 =	0
2				FACU species	7	x 4 =	28
2				UPL species	0	x 5 =	0
S				Column Totals	94	(A)	190 (B)
4.				Prevalence Ind	ex = B/A =	2	
S				Hydrophytic Vegetation	ndicators:		
6				1- Rapid Test for Hy	drophytic \	egetation	1
/				2 - Dominance Test	is >50%	-	
	0	= Total Cove	er	3 - Prevalence Inde	x is ≤ 3.0 ¹		
Herb Stratum (Plot size: <u>5 ft</u>)				4 - Morphological A	daptations	(Provide	supporting
1. <i>Phalaris arundinacea</i>	75	Yes	FACW	data in Remarks or on a	separate sh	ieet)	
2. Juncus effusus	12	No	OBL	Problematic Hydro	phytic Vege	tation ¹ (E>	(plain)
3. <u>Trifolium pratense</u>	7	No	FACU	¹ Indicators of hydric soil	and wetlan	d hydrolo	gy must be
4				present, unless disturbe	d or proble	matic	
5				Definitions of Vegetation	Strata:		
6				Tree – Woody plants 3 in	. (7.6 cm) oi	r more in	diameter at
7	_			breast height (DBH), rega	ardless of h	eight.	
8				Sapling/shrub - Woody p	olants less t	han 3 in. [OBH and
9.				greater than or equal to	3.28 ft (1 m) tall.	
10.				Herb – All herbaceous (n	on-woody)	plants, re	gardless of
11.				size, and woody plants le	ess than 3.2	8 ft tall.	
12.				Woody vines – All woody	vines grea	ter than 3	.28 ft in
	94	= Total Cove	er	height.			
Woody Vine Stratum (Plot size: 30 ft)		-		Hydrophytic Vegetation	Present?	/es 🟒 N	10
1.							
2							
3							
4							
4		- Total Cove)r				
	0						
Remarks: (Include photo numbers here or on a separa	te sheet.)						

SOIL

Profile Des	cription: (Describe t	to the	depth needed to o	docum	nent the i	indicator or confirm	the absence of	f indicators.)
Depth	Matrix		Redox	Feat	ures			
(inches)	Color (moist)	%	Color (moist)	%	Type ¹	Loc ² To	exture	Remarks
0 - 20	2.5Y 3/1	90	7.5YR 4/6	10	С	M Cla	y Loam	
				—		·		
				—		<u> </u>		
				—		·		·
				—				
'Type: C = C	Concentration, D = I	Deplet	ion, RM = Reduce	d Mat	rix, MS =	Masked Sand Grair	is. ² Location: F	PL = Pore Lining, M = Matrix.
Hydric Soil	Indicators:						Indicate	ors for Problematic Hydric Soils ³ :
Histoso	l (A1)		Polyvalue Be	elow S	urface (S	8) (LRR R, MLRA 14	9 B) 2 cr	n Muck (A10) (LRR K, L, MLRA 149B)
Histic Ep	oipedon (A2)		Thin Dark Su	urface	(S9) (LRF	R, MLRA 149B)	Coa	st Prairie Redox (A16) (LRR K, L, R)
Black Hi	istic (A3)		Loamy Mucl	ky Mir	eral (F1)	(LRR K, L)	5 cr	n Mucky Peat or Peat (S3) (LRR K, L, R)
Hydroge	en Sulfide (A4)		Loamy Gleye	ed Ma	trix (F2)		Dar	k Surface (S7) (LRR K, L)
Stratifie	d Layers (A5)		Depleted Ma	atrix (I	F3)		Poly	/value Below Surface (S8) (LRR K, L)
Deplete	d Below Dark Surfa	ice (A1	1)_✓ Redox Dark	Surfa	ce (F6)		Thir	n Dark Surface (S9) (LRR K, L)
Thick Da	ark Surface (A12)		Depleted Da	irk Su	rface (F7))	Iror	-Manganese Masses (F12) (LRR K, L, R)
Sandy N	lucky Mineral (S1)		Redox Depr	essior	is (F8)		Piec	mont Floodplain Soils (F19) (MLRA 149B)
Sandy C	Gleyed Matrix (S4)						Mes	sic Spodic (TA6) (MLRA 144A, 145, 149B)
Sandy F	Redox (S5)						 Red	Parent Material (F21)
Stripped	d Matrix (S6)						Ver	y Shallow Dark Surface (TF12)
Dark Su	irface (S7) (LRR R, N	ILRA 1	49B)				Oth	er (Explain in Remarks)
³ Indicators	of hydrophytic veg	etatior	n and wetland hyd	rolog	y must b	e present, unless di	sturbed or prob	blematic.
Restrictive	Laver (if observed):		, ,	0.				
	Type:		None			Hydric Soil Presen	t?	Yes / No
	Depth (inches):		Hone			ingune son resen		
	Depth (inches).							
Remarks:								

Soil Photos



Photo of Sample Plot North



Photo of Sample Plot East



Photo of Sample Plot West

Project/Site: Flat Creek Solar Project	City/County: Canajoharie, Montgomery County	Sampling Date: 2021-Sept-14
Applicant/Owner: SunEast	State: NY	Sampling Point: W-EES-6_PSS-102
Investigator(s): Nick DeJohn, Brian Corrigan, Abi I	ight Section, Township, Range	NA
Landform (hillslope, terrace, etc.): Channel	Local relief (concave, convex, nor	be): Concave Slope (%): 0 to 1
Subregion (LRR or MLRA): LRR L	Lat: 42.8468965274 Lo	ng: -74.5259052795 Datum: WGS84
Soil Map Unit Name: Darien silt loam, 3 to 8 percent	ent slopes	NWI classification:
Are climatic/hydrologic conditions on the site typica	I for this time of year? Yes 🖌 No (f no, explain in Remarks.)
Are Vegetation, Soil, or Hydrology _ Are Vegetation, Soil, or Hydrology _	significantly disturbed? Are "Normal Circu naturally problematic? (If needed, explain	mstances" present? Yes 🟒 No n any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes 🟒 No		
Hydric Soil Present?	Yes 🟒 No	Is the Sampled Area within a Wetland?	Yes 🟒 No
Wetland Hydrology Present?	Yes 🟒 No	If yes, optional Wetland Site ID:	W-EES-6
Remarks: (Explain alternative procedures h	ere or in a separate report)	
Covertype is PSS.			

HYDROLOGY

Wetland Hydrology Indicators:				
Primary Indicators (minimum of	one is required; check a	all that apply)		Secondary Indicators (minimum of two required)
Surface Water (A1) Water-Stained Leaves (B9) High Water Table (A2) Aquatic Fauna (B13) Saturation (A3) Marl Deposits (B15) Water Marks (B1) Hydrogen Sulfide Odor (C1) Sediment Deposits (B2) Oxidized Rhizospheres on Living Roots Drift Deposits (B3) Presence of Reduced Iron (C4) Algal Mat or Crust (B4) Recent Iron Reduction in Tilled Soils (C6) Iron Deposits (B5) Thin Muck Surface (C7) Inundation Visible on Aerial Imagery (B7) Other (Explain in Remarks) Sparsely Vegetated Concave Surface (B8)				 Surface Soil Cracks (B6) Drainage Patterns (B10) Moss Trim Lines (B16) Dry-Season Water Table (C2) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (C9) 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 🟒	Depth (inches):		_
Water Table Present?	Yes 🟒 No	Depth (inches):	5	Wetland Hydrology Present? Yes _ No
Saturation Present?	Yes 🟒 No	Depth (inches):	0	
(includes capillary fringe)				
Describe Recorded Data (stream	n gauge, monitoring well	, aerial photos, previous inspe	ctions), if	available:

VEGETATION -- Use scientific names of plants.

Sampling Point: W-EES-6_PSS-102

Tree Stratum (Plot size: 30 ft)	Absolute	Dominant	Indicator	Dominance Test workshe	et:		
	% Cover	Species?	Status	Number of Dominant Spe	ecies That	2	(A)
1				Are OBL, FACW, or FAC:			
2				Total Number of Domina	nt Species	3	(B)
3.				Across All Strata:			
4.				Percent of Dominant Spe	cies That	66.7	(A/B)
5.		·		Are OBL, FACW, or FAC:			
6.				Prevalence Index worksh	eet:		
7.				Total % Cover of	<u>.</u>	<u>Multiply</u>	<u>By:</u>
···	0	= Total Cov	er	OBL species	0	x 1 =	0
Sanling/Shruh Stratum (Plot size: 15 ft)	Ū	-		FACW species	80	x 2 =	160
1 Salivalba	50	Voc	EACW	FAC species	0	x 3 =	0
	50	163	FACIN	FACU species	15	x 4 =	60
2.		<u> </u>		UPL species	0	x 5 =	0
3				Column Totals	95	(A)	220 (B)
4.				Prevalence Inde	ex = B/A =	2.3	
5				Hydrophytic Vegetation I	ndicators:		
6.				1- Rapid Test for Hy	drophytic V	egetation	
/		<u> </u>		✓ 2 - Dominance Test	is >50%	0	
	50	= Total Cov	er	✓ 3 - Prevalence Index	is $\leq 3.0^1$		
Herb Stratum (Plot size: <u>5 ft</u>)				4 - Morphological A	daptations ¹	(Provide	supporting
1. Impatiens capensis	30	Yes	FACW	data in Remarks or on a s	separate sh	eet)	
2. Solidago canadensis	15	Yes	FACU	Problematic Hydrop	, hytic Vege	tation ¹ (Ex	plain)
3				¹ Indicators of hydric soil a	and wetlan	d hydrolog	gy must be
4				present, unless disturbed	l or problei	natic	
5.				Definitions of Vegetation	Strata:		
6.				Tree – Woody plants 3 in.	(7.6 cm) or	more in o	diameter at
7.				breast height (DBH), rega	rdless of h	eight.	
8.				Sapling/shrub - Woody p	lants less tl	han 3 in. D	OBH and
9.				greater than or equal to 3	3.28 ft (1 m) tall.	
10				Herb – All herbaceous (no	on-woody)	plants, reg	gardless of
11				size, and woody plants le	ss than 3.2	8 ft tall.	
12				Woody vines - All woody	vines great	er than 3.	.28 ft in
12	1E	- Total Cov	or	height.			
Manda Vine Charter (Distained 20 ft)	45	- 10tal COV		Hydrophytic Vegetation	Present?	íes 🖌 N	lo
<u>woody vine Stratum</u> (Piot Size: <u>30 it</u>)				J			
		· ·					
2							
3		· ·					
4							
	0	= Total Cov	er				
Remarks: (Include photo numbers here or on a separate	sheet.)						

SOIL

Color (moist) % 0 - 3 10YR 3/1 100 3 - 18 10YR 3/2 95 95 95 96 95 97 95 98 95 99 95 95 95 96 95 97 95 98 95 99 95 91 95 92 95 93 95 94 95 95 95 95 95 95 95 95 95 95 95 95 95 96 96 97 95 98 96 99 96 90 97 90 96 91 97 92 98 93 97 94 96 94 <th>Color (moist) 10YR 5/8 10YR 5/8 10YR 5/8 Color (moist) 10YR 5/8 Color (moist) Color (moist) Co</th> <th></th> <th>Type1 </th> <th>Loc² M M M M M Masked Sand 8) (LRR R, MLR R, MLRA 149E (LRR K, L)</th> <th>Texture Sandy Clay L Sandy Clay L Sandy Clay L Grains. ²Locat CA 149B) 3)</th> <th>ioam ioam ion: PL = Pore dicators for P _ 2 cm Mucku _ Coast Prairi _ 5 cm Mucky _ Dark Surfac _ Polyvalue B _ Thin Dark S _ Iron-Manga _ Piedmont F</th> <th>Remarks </th>	Color (moist) 10YR 5/8 10YR 5/8 10YR 5/8 Color (moist) 10YR 5/8 Color (moist) Color (moist) Co		Type1 	Loc ² M M M M M Masked Sand 8) (LRR R, MLR R, MLRA 149E (LRR K, L)	Texture Sandy Clay L Sandy Clay L Sandy Clay L Grains. ² Locat CA 149B) 3)	ioam ioam ion: PL = Pore dicators for P _ 2 cm Mucku _ Coast Prairi _ 5 cm Mucky _ Dark Surfac _ Polyvalue B _ Thin Dark S _ Iron-Manga _ Piedmont F	Remarks
a - 3 10YR 3/1 100 3 - 18 10YR 3/2 95 3 - 18 10YR 3/2 95 a - 10YR 3/1 10YR 3/2 b - 10YR 3/1 10YR 3/2 c - 10YR 3/1 10YR 3/2 c - 10YR 3/1 10YR 3/2 c - 10YR 3/2 10YR 3	10YR 5/8 10YR			M	Grains. ² Locat	.oam .oam .oam .oam .oam .oam .oam .oam	e Lining, M = Matrix. roblematic Hydric Soils ³ : (A10) (LRR K, L, MLRA 149B) e Redox (A16) (LRR K, L, R) ' Peat or Peat (S3) (LRR K, L, R) e (S7) (LRR K, L) elow Surface (S8) (LRR K, L) urface (S9) (LRR K, L) nese Masses (F12) (LRR K, L, R) loodplain Soils (F19) (MLRA 149B)
3 - 18 10YR 3/2 95 3 - 18 10YR 3/2 95 95 95 95 96 95 95 97 95 95 98 10YR 3/2 95 99 95 95 91 95 95 92 95 95 93 95 95 94 95 95 95 95 95 94 95 95 95 95 95 95 95 95 95 95 95 95 95 95 96 96 96 97 97 95 98 98 98 99 99 95 99 99 95 99 99 95 99 99 99 99 90 90 90 90 90 90 90 90 91	10YR 5/8 10YR	5 	C C C C C C C C C C C C C C	M	Grains. ² Locat	ion: PL = Pore dicators for P _ 2 cm Mucky _ Coast Prairi _ 5 cm Mucky _ Dark Surfac _ Polyvalue B _ Thin Dark S _ Iron-Manga _ Piedmont F	e Lining, M = Matrix. roblematic Hydric Soils ³ : (A10) (LRR K, L, MLRA 149B) e Redox (A16) (LRR K, L, R) ' Peat or Peat (S3) (LRR K, L, R) e (S7) (LRR K, L) elow Surface (S8) (LRR K, L) urface (S9) (LRR K, L) nese Masses (F12) (LRR K, L, R) loodplain Soils (F19) (MLRA 149B)
2 10 10111312 25 10 10111312 25 10 10111312 25 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 12 11 11 13 11 11 14 12 12 15 11 12 14 12 13 15 11 14 14 14 14 15 11 14 16 12 14 17 12 14 16 14 14 16 14 <td>ion, RM = Reduced Polyvalue Be Thin Dark Su Loamy Gleye Depleted Ma 1) 1) Redox Dark ! Depleted Da Redox Depre</td> <td></td> <td>rix, MS = 1 urface (St (S9) (LRR weral (F1) (trix (F2) F3) cc (F6) rface (F7) is (F8)</td> <td>Masked Sand</td> <td>Grains. ²Locat Grains. ²Locat Inc VA 149B) 3) </td> <td>ion: PL = Pore dicators for P _ 2 cm Muck _ Coast Prairi _ 5 cm Mucky _ Dark Surfac _ Polyvalue B _ Thin Dark S _ Iron-Manga _ Piedmont F</td> <td>e Lining, M = Matrix. roblematic Hydric Soils³: (A10) (LRR K, L, MLRA 149B) e Redox (A16) (LRR K, L, R) ' Peat or Peat (S3) (LRR K, L, R) e (S7) (LRR K, L) elow Surface (S8) (LRR K, L) urface (S9) (LRR K, L) nese Masses (F12) (LRR K, L, R) loodplain Soils (F19) (MLRA 149B)</td>	ion, RM = Reduced Polyvalue Be Thin Dark Su Loamy Gleye Depleted Ma 1) 1) Redox Dark ! Depleted Da Redox Depre		rix, MS = 1 urface (St (S9) (LRR weral (F1) (trix (F2) F3) cc (F6) rface (F7) is (F8)	Masked Sand	Grains. ² Locat Grains. ² Locat Inc VA 149B) 3) 	ion: PL = Pore dicators for P _ 2 cm Muck _ Coast Prairi _ 5 cm Mucky _ Dark Surfac _ Polyvalue B _ Thin Dark S _ Iron-Manga _ Piedmont F	e Lining, M = Matrix. roblematic Hydric Soils ³ : (A10) (LRR K, L, MLRA 149B) e Redox (A16) (LRR K, L, R) ' Peat or Peat (S3) (LRR K, L, R) e (S7) (LRR K, L) elow Surface (S8) (LRR K, L) urface (S9) (LRR K, L) nese Masses (F12) (LRR K, L, R) loodplain Soils (F19) (MLRA 149B)
//pe: C = Concentration, D = Depletion //pe: C = Concentration, D = Depletion //pe: C = Concentration, D = Depletion //dric 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 Redox (S5) Stripped Matrix (S6) Dark Surface (S7) (LRR R, MLRA 14 dicators of hydrophytic vegetation strictive Layer (if observed): Type: Depth (inches): marks:	 -		rix, MS = urface (Si (S9) (LRR eral (F1) (trix (F2) =3) ce (F6) rface (F7) is (F8)	Masked Sand 8) (LRR R, MLR R, MLRA 149E (LRR K, L)	Grains. ² Locat Inc (A 149B) 3)	ion: PL = Pore dicators for P _ 2 cm Muck _ Coast Prairi _ 5 cm Mucky _ Dark Surfac _ Polyvalue B _ Thin Dark S _ Iron-Manga _ Piedmont F	e Lining, M = Matrix. roblematic Hydric Soils ³ : (A10) (LRR K, L, MLRA 149B) e Redox (A16) (LRR K, L, R) / Peat or Peat (S3) (LRR K, L, R) e (S7) (LRR K, L) elow Surface (S8) (LRR K, L) urface (S9) (LRR K, L) nese Masses (F12) (LRR K, L, R) loodplain Soils (F19) (MLRA 149B)
marks:	ion, RM = Reduced Thin Dark Su Loamy Muck Loamy Gleye Depleted Ma 1) Redox Dark ! Redox Depre 49B)		rix, MS = 1 urface (St (S9) (LRR ueral (F1) (trix (F2) 	Masked Sand 8) (LRR R, MLR R, MLRA 149E (LRR K, L)	Grains. ² Locat Inc tA 149B)	ion: PL = Pore dicators for P _ 2 cm Muck _ Coast Prairi _ 5 cm Mucky _ Dark Surfac _ Dark Surfac _ Polyvalue B _ Thin Dark S _ Iron-Manga _ Piedmont F	e Lining, M = Matrix. roblematic Hydric Soils ³ : (A10) (LRR K, L, MLRA 149B) e Redox (A16) (LRR K, L, R) / Peat or Peat (S3) (LRR K, L, R) e (S7) (LRR K, L) elow Surface (S8) (LRR K, L) urface (S9) (LRR K, L) nese Masses (F12) (LRR K, L, R) loodplain Soils (F19) (MLRA 149B)
rpe: C = Concentration, D = Depletic dric 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 Redox (S5) Stripped Matrix (S6) Dark Surface (S7) (LRR R, MLRA 14 dicators of hydrophytic vegetation strictive Layer (if observed): Type: Depth (inches): marks:	ion, RM = Reduced Polyvalue Be Thin Dark Su Loamy Muck Loamy Gleye Depleted Ma 1) ✓ Redox Dark ! Depleted Da Redox Depre 49B)	elow S d Mat d Mat elow S wrface strix (I Surfa atrix (I Surfa atrix Sun	urface (Si (S9) (LRR eral (F1) (trix (F2) ⁷³) ce (F6) rface (F7) is (F8)	Masked Sand 8) (LRR R, MLR R, MLRA 149E (LRR K, L)	Grains. ² Locat Ind (A 149B) 3) 	ion: PL = Pore dicators for P _ 2 cm Muck _ Coast Prairi _ 5 cm Mucky _ Dark Surfac _ Dark Surfac _ Polyvalue B _ Thin Dark S _ Iron-Manga _ Piedmont F	e Lining, M = Matrix. roblematic Hydric Soils ³ : (A10) (LRR K, L, MLRA 149B) e Redox (A16) (LRR K, L, R) ' Peat or Peat (S3) (LRR K, L, R) e (S7) (LRR K, L) elow Surface (S8) (LRR K, L) urface (S9) (LRR K, L) nese Masses (F12) (LRR K, L, R) loodplain Soils (F19) (MLRA 149B)
/pe: C = Concentration, D = Depletic dric 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) (LRR R, MLRA 14 dicators of hydrophytic vegetation strictive Layer (if observed): Type: Depth (inches): marks:	ion, RM = Reduced Polyvalue Be Thin Dark Su Loamy Muck Depleted Ma 1) Redox Dark S Depleted Da Redox Depre 49B)	d Mat d Mat d Mat urface ky Mir ad Ma atrix (I Surfac irk Surfac essior	rix, MS = 1 urface (Si (S9) (LRR eeral (F1) (trix (F2) ⁻³) ce (F6) rface (F7) ns (F8)	Masked Sand 8) (LRR R, MLR R, MLRA 149E (LRR K, L)	Grains. ² Locat Inc & 149B)	ion: PL = Pore dicators for P _ 2 cm Muck _ Coast Prairi _ 5 cm Mucky _ Dark Surfac _ Dark Surfac _ Polyvalue B _ Thin Dark S _ Iron-Manga _ Piedmont F	e Lining, M = Matrix. roblematic Hydric Soils ³ : (A10) (LRR K, L, MLRA 149B) e Redox (A16) (LRR K, L, R) / Peat or Peat (S3) (LRR K, L, R) e (S7) (LRR K, L) elow Surface (S8) (LRR K, L) urface (S9) (LRR K, L) nese Masses (F12) (LRR K, L, R) loodplain Soils (F19) (MLRA 149B)
rpe: C = Concentration, D = Depletic dric 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) (LRR R, MLRA 14 dicators of hydrophytic vegetation strictive Layer (if observed): Type: Depth (inches): marks:	ion, RM = Reduced Polyvalue Be Thin Dark Su Loamy Muck Loamy Gleye Depleted Ma 1) ✓ Redox Dark ! Depleted Da Redox Depre 49B)	d Mat d Mat urface d Mat urface d Ma atrix (I Surfac atrix Sun essior	rix, MS = 1 urface (St (S9) (LRR weral (F1) (trix (F2) = = = = = = = = = = = = = = = = = = =	Masked Sand 8) (LRR R, MLR 8) (LRR R, MLR (LRR K, L)	Grains. ² Locat Inc & 149B) 3) 	ion: PL = Pord dicators for P _ 2 cm Muck _ Coast Prairi _ 5 cm Mucky _ Dark Surfac _ Polyvalue B _ Thin Dark S _ Thin Dark S _ Iron-Manga _ Piedmont F	e Lining, M = Matrix. roblematic Hydric Soils ³ : (A10) (LRR K, L, MLRA 149B) e Redox (A16) (LRR K, L, R) r Peat or Peat (S3) (LRR K, L, R) e (S7) (LRR K, L) elow Surface (S8) (LRR K, L) urface (S9) (LRR K, L) nese Masses (F12) (LRR K, L, R) loodplain Soils (F19) (MLRA 149B)
pe: C = Concentration, D = Depletion dric 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) (LRR R, MLRA 14) dicators of hydrophytic vegetation strictive Layer (if observed): Type: Depth (inches): marks:	ion, RM = Reduced Polyvalue Be Thin Dark Su Loamy Muck Loamy Gleye Depleted Ma 1) Redox Dark S Redox Depre 49B)	d Mat elow S urface ky Mir ed Ma atrix (I Surfac irk Sur irk Sur	urface (Si (S9) (LRR eral (F1) (trix (F2) 	Masked Sand 8) (LRR R, MLR R, MLRA 149E (LRR K, L)	Grains. ² Locat Inc & 149B) 3) 	ion: PL = Pore dicators for P _ 2 cm Muck _ Coast Prairi _ 5 cm Mucky _ Dark Surfac _ Polyvalue B _ Thin Dark S _ Iron-Manga _ Piedmont F	e Lining, M = Matrix. roblematic Hydric Soils ³ : (A10) (LRR K, L, MLRA 149B) e Redox (A16) (LRR K, L, R) / Peat or Peat (S3) (LRR K, L, R) e (S7) (LRR K, L) elow Surface (S8) (LRR K, L) urface (S9) (LRR K, L) nese Masses (F12) (LRR K, L, R) loodplain Soils (F19) (MLRA 149B)
rpe: C = Concentration, D = Depletion dric 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 Gleyed Matrix (S4) Sandy Redox (S5) Stripped Matrix (S6) Dark Surface (S7) (LRR R, MLRA 14) dicators of hydrophytic vegetation strictive Layer (if observed): Type: Depth (inches): marks:	ion, RM = Reduced Polyvalue Be Thin Dark Su Loamy Muck Depleted Ma 1) Redox Dark ! Redox Depre Redox Depre 49B)	elow S urface ky Mir ed Ma atrix (I Surfac ark Sur essior	rix, MS = 1 urface (S3 (S9) (LRR eeral (F1) (trix (F2) ⁻³) ce (F6) ce (F6) cface (F7) ns (F8)	Masked Sand 8) (LRR R, MLR R, MLRA 149E (LRR K, L)	Grains. ² Locat Ind (A 149B) 3) 	ion: PL = Pore dicators for P _ 2 cm Muck _ Coast Prairi _ 5 cm Mucky _ Dark Surfac _ Polyvalue B _ Thin Dark S _ Iron-Manga _ Piedmont F	e Lining, M = Matrix. roblematic Hydric Soils ³ : (A10) (LRR K, L, MLRA 149B) e Redox (A16) (LRR K, L, R) r Peat or Peat (S3) (LRR K, L, R) e (S7) (LRR K, L) elow Surface (S8) (LRR K, L) urface (S9) (LRR K, L) nese Masses (F12) (LRR K, L, R) loodplain Soils (F19) (MLRA 149B)
dric 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) (LRR R, MLRA 14 dicators of hydrophytic vegetation strictive Layer (if observed): Type: Depth (inches): marks:	Polyvalue Be Thin Dark Su Loamy Muck Loamy Gleye Depleted Ma 1) Redox Dark 1 Depleted Da Redox Depre 49B)	elow S urface ky Mir ed Ma atrix (I Surfa ark Sur essior	urface (Si (S9) (LRR eral (F1) (trix (F2) ⁻³) ce (F6) rface (F7) is (F8)	8) (LRR R, MLR R, MLRA 1496 (LRR K, L)	In (AA 149B)	dicators for P _ 2 cm Muck _ Coast Prairi _ 5 cm Mucky _ Dark Surfac _ Polyvalue B _ Thin Dark S _ Iron-Manga _ Piedmont F	roblematic Hydric Soils ³ : (A10) (LRR K, L, MLRA 149B) e Redox (A16) (LRR K, L, R) ⁷ Peat or Peat (S3) (LRR K, L, R) e (S7) (LRR K, L) elow Surface (S8) (LRR K, L) urface (S9) (LRR K, L) nese Masses (F12) (LRR K, L, R) loodplain Soils (F19) (MLRA 149B)
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) (LRR R, MLRA 14) dicators of hydrophytic vegetation strictive Layer (if observed): Type: Depth (inches): narks:	 Polyvalue Be Thin Dark Su Loamy Muck Loamy Gleye Depleted Ma 1) Redox Dark Su Depleted Da Redox Deprese 	elow S urface ky Mir ed Ma atrix (I Surfa ark Su assior	urface (Si (S9) (LRR eral (F1) (trix (F2) ⁻ 3) ce (F6) rface (F7) ns (F8)	8) (LRR R, MLR R, MLRA 1496 (LRR K, L)	RA 149B) B) 	2 cm Muck Coast Prairi 5 cm Mucky Dark Surfac Polyvalue B Thin Dark S Iron-Manga Piedmont F	(A10) (LRR K, L, MLRA 149B) e Redox (A16) (LRR K, L, R) v Peat or Peat (S3) (LRR K, L, R) e (S7) (LRR K, L) elow Surface (S8) (LRR K, L) urface (S9) (LRR K, L) nese Masses (F12) (LRR K, L, R) loodplain Soils (F19) (MLRA 149B)
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) (LRR R, MLRA 14 dicators of hydrophytic vegetation strictive Layer (if observed): Type: Depth (inches): marks:	Thin Dark Su Loamy Muck Loamy Gleye Depleted Ma 1)_✓ Redox Dark S Depleted Da Redox Depre	urface ky Mir ed Ma atrix (I Surfa ark Su essior	(S9) (LRR heral (F1) (trix (F2) -3) ce (F6) rface (F7) hs (F8)	: R, MLRA 149E (LRR K, L)	B) — — — — — — — — — — — — —	_ _ Coast Prairi _ 5 cm Mucky _ Dark Surfac _ Polyvalue B _ Thin Dark S _ Iron-Manga _ Piedmont F	e Redox (A16) (LRR K, L, R) Peat or Peat (S3) (LRR K, L, R) e (S7) (LRR K, L) elow Surface (S8) (LRR K, L) urface (S9) (LRR K, L) nese Masses (F12) (LRR K, L, R) loodplain Soils (F19) (MLRA 149B)
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) (LRR R, MLRA 14) dicators of hydrophytic vegetation strictive Layer (if observed): Type: Depth (inches): marks:	Loamy Muck Loamy Gleye Depleted Ma 1)_✓ Redox Dark 9 Depleted Da Redox Depre	ky Mir ed Ma atrix (l Surfa ark Su essior	neral (F1) (trix (F2) F3) ce (F6) rface (F7) ns (F8)	(LRR K, L)		5 cm Mucky _ Dark Surfac _ Polyvalue B _ Thin Dark S _ Iron-Manga _ Piedmont F	Peat or Peat (S3) (LRR K, L, R) e (S7) (LRR K, L) elow Surface (S8) (LRR K, L) urface (S9) (LRR K, L) nese Masses (F12) (LRR K, L, R) loodplain Soils (F19) (MLRA 149B)
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) (LRR R, MLRA 14) dicators of hydrophytic vegetation strictive Layer (if observed): Type: Depth (inches): marks:	Loamy Gleye Depleted Ma 1)	ed Ma atrix (l Surfa ark Su essior	trix (F2) F3) ce (F6) rface (F7) ns (F8)			_ Dark Surfac _ Polyvalue B _ Thin Dark S _ Iron-Manga _ Piedmont F	e (S7) (LRR K, L) elow Surface (S8) (LRR K, L) urface (S9) (LRR K, L) nese Masses (F12) (LRR K, L, R) loodplain Soils (F19) (MLRA 149B)
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) (LRR R, MLRA 14) dicators of hydrophytic vegetation strictive Layer (if observed): Type: Depth (inches): marks:	Depleted Ma 1) _ Redox Dark : Depleted Da Redox Depre 49B)	atrix (l Surfa ark Su essior	-3) ce (F6) rface (F7) ns (F8)			_ Polyvalue B _ Thin Dark S _ Iron-Manga _ Piedmont F	elow Surface (S8) (LRR K, L) urface (S9) (LRR K, L) nese Masses (F12) (LRR K, L, R) loodplain Soils (F19) (MLRA 149B)
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) (LRR R, MLRA 14 dicators of hydrophytic vegetation strictive Layer (if observed): Type: Depth (inches): marks:	1) <u>·</u> Redox Dark : Depleted Da Redox Depre 49B)	Surfa ark Su essior	ce (F6) rface (F7) is (F8)		-	_ Thin Dark S _ Iron-Manga _ Piedmont F	urface (S9) (LRR K, L) nese Masses (F12) (LRR K, L, R) loodplain Soils (F19) (MLRA 149B)
Thick Dark Surface (A12) Sandy Mucky Mineral (S1) Sandy Gleyed Matrix (S4) Sandy Redox (S5) Stripped Matrix (S6) Dark Surface (S7) (LRR R, MLRA 14 dicators of hydrophytic vegetation strictive Layer (if observed): Type: Depth (inches): marks:	Depleted Da Redox Depre 49B)	ark Su essior	rface (F7) ns (F8)			_ Iron-Manga _ Piedmont F	nese Masses (F12) (LRR K, L, R) loodplain Soils (F19) (MLRA 149B)
Sandy Mucky Mineral (S1) Sandy Gleyed Matrix (S4) Sandy Redox (S5) Stripped Matrix (S6) Dark Surface (S7) (LRR R, MLRA 14 dicators of hydrophytic vegetation strictive Layer (if observed): Type: Depth (inches): marks:	Redox Depre 49B)	essior	ıs (F8)		-	_ Piedmont F	loodplain Soils (F19) (MLRA 149B)
Sandy Gleyed Matrix (S4) Sandy Redox (S5) Stripped Matrix (S6) Dark Surface (S7) (LRR R, MLRA 14 dicators of hydrophytic vegetation strictive Layer (if observed): Type: Depth (inches): marks:	49B)						
_Sandy Redox (S5) _Stripped Matrix (S6) _Dark Surface (S7) (LRR R, MLRA 14 <u>dicators of hydrophytic vegetation</u> strictive Layer (if observed): 	49B)						/ ^ / ` / N A ` A 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4
Stripped Matrix (S6) Dark Surface (S7) (LRR R, MLRA 14 dicators of hydrophytic vegetation strictive Layer (if observed): Type: Depth (inches): marks:	49B)						IC (1A6) (MLKA 144A, 145, 149B)
Dark Surface (S7) (LRR R, MLRA 14 dicators of hydrophytic vegetation strictive Layer (if observed): Type: Depth (inches): marks:	49B)					_ Red Parent	Material (F21)
dicators of hydrophytic vegetation strictive Layer (if observed): Type: Depth (inches): marks:						_ Very Shallov _ Other (Expla	w Dark Surface (TF12) ain in Remarks)
strictive Layer (if observed): Type: Depth (inches): marks:	າ and wetland hyd	irolog	y must be	e present, unle	ess disturbed or	problematic	
Type: Depth (inches): marks:							
Depth (inches): marks:	None			Hydric Soil P	resent?		Yes 🟒 No
marks:		-					



Soil Photos

Photo of Sample Plot East



Photo of Sample Plot West

Project/Site: Flat Cree	k Solar Projec	t	City/County:	Canajoharie, Mo	ontgomery	County		Sampling Date:	2021-Aug-25
Applicant/Owner: S	unEast				State:	New Yorl	<u>k </u>	Sampling Point: <u>V</u>	V-EES-6_UPL-4
Investigator(s): Etha	n Snyder, Abi	Light		Sect	ion, Towns	hip, Rang	ge: N/	A	
Landform (hillslope, te	rrace, etc.):	Hillslope		Local relief	(concave, c	onvex, n	one):	Undulating	Slope (%): 1 to 3
Subregion (LRR or MLF	RA): LRR	L		Lat:	42.852823	1 <u>L</u>	ong:	-74.5336964	Datum: WGS84
Soil Map Unit Name:	Churchville	silty clay loam, 3	to 8 percent s	lopes				NWI classifica	ation: None
Are climatic/hydrologic	c conditions o	n the site typical	l for this time o	of year?	Yes 🖌	No	(lf no	, explain in Remar	·ks.)
Are Vegetation, Are Vegetation,	Soil, Soil,	or Hydrology or Hydrology	significantl naturally p	ly disturbed? problematic?	Are "No (If need	ormal Ciro led, expla	cumst ain any	ances" present? / answers in Rema	Yes 🟒 No arks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes No 🟒		
Hydric Soil Present?	Yes No 🟒	Is the Sampled Area within a Wetland?	Yes No 🟒
Wetland Hydrology Present?	Yes No 🟒	lf yes, optional Wetland Site ID:	
Remarks: (Explain alternative procedures her	e or in a separate report)	
Covertype is UPL. Area is upland, not all three	e wetland parameters are	e present.	

HYDROLOGY

Wetland Hydrology Indicators:					
Primary Indicators (minimum of on	e is required; check all t	<u>hat apply)</u>	Secondary Indicators (minimum of two required)		
Surface Water (A1) Water-Stained Leaves (B9) High Water Table (A2) Aquatic Fauna (B13) Saturation (A3) Marl Deposits (B15) Water Marks (B1) Hydrogen Sulfide Odor (C1) Sediment Deposits (B2) Oxidized Rhizospheres on Livin Drift Deposits (B3) Presence of Reduced Iron (C4) Algal Mat or Crust (B4) Recent Iron Reduction in Tilled Iron Deposits (B5) Thin Muck Surface (C7) Inundation Visible on Aerial Imagery (B7) Other (Explain in Remarks) Sparsely Vegetated Concave Surface (B8)			 Surface Soil Cracks (B6) Drainage Patterns (B10) Moss Trim Lines (B16) Dry-Season Water Table (C2) Crayfish Burrows (C8) Saturation Visible on Aerial In Stunted or Stressed Plants (D Geomorphic Position (D2) Shallow Aquitard (D3) Microtopographic Relief (D4) FAC-Neutral Test (D5) 	nagery (C9) 1)	
Field Observations: Surface Water Present? Water Table Present? Saturation Present? (includes capillary fringe)	Yes No _ _/ Yes No _ _/ Yes No _ _/	Depth (inches): Depth (inches): Depth (inches):	 Wetland Hydrology Present? 	Yes No	
Describe Recorded Data (stream ga	auge, monitoring well, a	erial photos, previous inspections), i	f available:		
Remarks: The criterion for wetland hydrology	/ is not met. No positive	indication of wetland hydrology wa	s observed.		

VEGETATION -- Use scientific names of plants.

Sampling Point: W-EES-6_UPL-4

Tree Stratum (Plot size: 30 ft.)	Absolute	Dominant	Indicator	Dominance Test worksh	neet:		
	% Cover	Species?	Status	Number of Dominant S	pecies That	0	(A)
1. <i>Tsuga canadensis</i>	75	Yes	FACU	Are OBL, FACW, or FAC:			
2. <i>Ostrya virginiana</i>	5	No	FACU	Iotal Number of Domin	iant Species	3	(B)
3				- Dercent of Dominant Sr	ocios That		
4						0	(A/B)
5				- Prevalence Index works	heet.		
6				- Total % Cover	of.	Multiply	By:
7				- OBL species	0	x 1 =	0
	80	= Total Cov	er	EACW species	0	x 2 =	0
Sapling/Shrub Stratum (Plot size: <u>15 ft</u>)				EAC species	2	×3-	6
1				= EACU species	2	× 1 -	360
2.					90	×4- ×5-	300
3.				Column Totals	0	x 5 -	
4.					92 devi = D (A =	(A)	300 (B)
5.				- Prevalence in	dex = B/A =	4	
6.				Hydrophytic Vegetation	Indicators:		
7.		·		1- Rapid Test for H	lydrophytic \	egetatior/	ı
	0	= Total Cov	er	2 - Dominance Tes	st is > 50%		
Herb Stratum (Plot size: 5 ft)		-		3 - Prevalence Inde	ex is $\leq 3.0^1$		
1. Acer saccharum	5	Yes	FACU	4 - Morphological	Adaptations	(Provide	supporting
2. Ostrva virginiana	5	Yes	FACU	- data in Remarks or on a	a separate sh	ieet)	
3. Toxicodendron radicans	2	No	FAC	Problematic Hydro	ophytic Vege	tation' (E	(plain)
4				- Indicators of hydric sol	i and wetian	a nyarolo matic	gy must be
5				Definitions of Vegetatio	n Strata	Hall	
6		· ·		Tree Woody plants 3 in	n (7.6 cm) o	r moro in	diamotor at
7				breast height (DBH) reg	ardless of h	eight	ulameter at
8				Sapling/shrub - Woody	plants less t	han 3 in. I	OBH and
9				greater than or equal to	o 3.28 ft (1 m) tall.	
10				Herb – All herbaceous (non-woody)	plants, re	gardless of
11				size, and woody plants	less than 3.2	8 ft tall.	
12		·		Woody vines – All wood	ly vines grea	ter than 3	.28 ft in
12		- Total Cov	or	height.			
Woody Vine Stratum (Plat size: 20 ft)	12	_ 10tai COV	ei	Hydrophytic Vegetation	n Present?	/esl	No 🖌
1							
2		·		-			
2.		·		-			
		<u> </u>		-			
4		- Total Cov	or	-			
	0		er				
Remarks: (Include photo numbers here or on a separa	ate sheet.)						
No positive indication of hydrophytic vegetation was o	observed (≥	50% of dom	inant speci	es indexed as FAC- or drie	er).		

SOIL

Profile Desc	cription: (Describe	to the de	epth needed to d	ocum	ient the i	ndicato	r or confirm the al	bsence of indicators.)	
Depth	Matrix		Redox	Feat	ures	1 2	-		Demonster
(inches)	Color (moist)	<u> </u>	Color (moist)	<u>%</u>	Туреч	LOC ²		exture	Remarks
0-3.5	10YR 3/1	100		·				Loam	
3.5 - 9	7.5YR 5/8	100		· —			SII		
9 - 15	7.5YR 6/6	100		·			Fine Silt	ty Clay Loam	
				·					
		·		·					
Type: C = C	Concentration, D =	Depletio	n, RM = Reduced	Matr	rix, MS =	Masked	Sand Grains. ² L	ocation: PL = Pore Linii	ng, M = Matrix.
lydric Soil	Indicators:							Indicators for Proble	ematic Hydric Soils ³ :
Histosol	(A1)		Polyvalue Be	low S	urface (S	8) (LRR	R, MLRA 149B)	2 cm Muck (A10)	(LRR K, L, MLRA 149B)
Histic Ep	pipedon (A2)		Thin Dark Su	rface	(S9) (LRR	R, MLR	A 149B)	Coast Prairie Rec	Jox (A16) (LRR K, L, R)
Black Hi	stic (A3)		Loamy Muck	y Min	eral (F1)	(LRR K, I	L)	5 cm Mucky Peat	t or Peat (S3) (LRR K, L, R)
Hydroge	en Sulfide (A4)		Loamy Gleye	a ivia triv (1	trix (FZ)			Dark Surface (S7) (LRR K, L)
Denlete	d Below Dark Surf:	ace (A11)	Depleted Ma	unx (r Surfar	-5) -e (F6)			Polyvalue Below	Surface (S8) (LRR K, L)
Thick Da	ark Surface (A12)		Depleted Dark	k Su	face (F7)			Thin Dark Surfac	.e (S9) (LRR K, L)
Sandy M	lucky Mineral (S1)		Redox Depre	ssion	is (F8)			Iron-Manganese	Masses (F12) (LRR K, L, R)
Sandy G	leved Matrix (S4)				()			Piedmont Floodp	olain Soils (F19) (MLRA 149B)
Sandy R	edox (S5)							Mesic Spodic (TA	.6) (MLRA 144A, 145, 149B)
Stripper	d Matrix (S6)							Red Parent Mate	erial (F21)
Dark Su	rface (S7) (I RR R. N	/I RA 149)B)					Very Shallow Dar	rk Surface (TF12)
			-,					Other (Explain in	Remarks)
Indicators	of hydrophytic veg	getation a	and wetland hydr	ology	/ must be	e preser	it, unless disturbe	ed or problematic.	
Restrictive l	_ayer (if observed)								
	Туре:		None	-		Hydric	Soil Present?		Yes No 🟒
	Depth (inches):								
No positive	indication of hydr	ic soils w	as observed. The	e crite	rion for l	nydric so	pil is not met.		

Soil Photos



Photo of Sample Plot North Photo of Sample Plot East



Photo of Sample Plot South Photo of Sample Plot West



Project/Site: Flat Creek Solar Pl	roject City/County:	Canajoharie, Montgomery County	Sampling Date: 202	1-Sept-14
Applicant/Owner: SunEast		State: NY	Sampling Point: W-EE	5-6_UPL-102
Investigator(s): Nick DeJohn,	Brian Corrigan, Abi Light	Section, Township, Range:	NA	
Landform (hillslope, terrace, etc	:.): Flat	Local relief (concave, convex, none): Undulating	Slope (%): 0 to 1
Subregion (LRR or MLRA):	LRR L	Lat: 42.8468337469 Long	g: -74.5257926267	Datum: WGS84
Soil Map Unit Name: Darien	silt loam, 3 to 8 percent slopes		NWI classification	1:
Are climatic/hydrologic condition	ons on the site typical for this time o	of year? Yes 🖌 No (If	no, explain in Remarks.)	
Are Vegetation, Soil Are Vegetation, Soil	, or Hydrology significant , or Hydrology naturally p	ly disturbed? Are "Normal Circum problematic? (If needed, explain a	nstances" present?	/es No

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes No 🟒		
Hydric Soil Present?	Yes No 🟒	Is the Sampled Area within a Wetland?	Yes No 🟒
Wetland Hydrology Present?	Yes No 🟒	If yes, optional Wetland Site ID:	
Remarks: (Explain alternative procedure	es here or in a separate repo	rt)	
Covertype is UPL.			

HYDROLOGY

Wetland Hydrology Indicators:				
Primary Indicators (minimum of on	<u>e is required; check all t</u>	Secondary Indicators (minimum of two required)		
 Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5) Inundation Visible on Aerial Ima Sparsely Vegetated Concave Surface 	Water-1 Aquation Marl Do Hydrog Oxidize Presen Recent Thin M gery (B7) Other (fface (B8)	Stained Leaves (B9) c Fauna (B13) eposits (B15) gen Sulfide Odor (C1) ed Rhizospheres on Living Roots (C3) ce of Reduced Iron (C4) Iron Reduction in Tilled Soils (C6) uck Surface (C7) Explain in Remarks)	 Surface Soil Cracks (B6) Drainage Patterns (B10) Moss Trim Lines (B16) Dry-Season Water Table (C2) Crayfish Burrows (C8) Saturation Visible on Aerial Image Stunted or Stressed Plants (D1) Geomorphic Position (D2) Shallow Aquitard (D3) Microtopographic Relief (D4) FAC-Neutral Test (D5) 	gery (C9)
Field Observations:				
Surface Water Present?	Yes No 🟒	Depth (inches):		
Water Table Present?	Yes No 🟒	Depth (inches):	Wetland Hydrology Present?	Yes No 🟒
Saturation Present?	Yes No 🟒	Depth (inches):		
(includes capillary fringe)				
Describe Recorded Data (stream ga	auge, monitoring well, a	erial photos, previous inspections), if	available:	
Remarks:				
Sampling Point: W-EES-6_UPL-102

Tree Stratum (Plot size: <u>30 ft</u>)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksh Number of Dominant Sr	eet: becies That	_	
1 Robinia pseudoacacia	50	Ves	FACIL	Are OBL, FACW, or FAC:		0	(A)
2		105	17160	Total Number of Domina	ant Species		(D)
				Across All Strata:		4	(B)
۶				Percent of Dominant Sp	ecies That	0	(Δ/B)
				Are OBL, FACW, or FAC:			(7,0)
5				Prevalence Index works	heet:		
7				Total % Cover of	of:	<u>Multiply</u>	<u>By:</u>
		- Total Cov	or	OBL species	0	x 1 =	0
Sapling/Shruh Stratum (Diat cizo: 15 ft)		- 10tai COV	CI	FACW species	0	x 2 =	0
<u>Saping/Shild Stratum</u> (Flot Size, <u>15 ht</u>)	10	Voc	EACU	FAC species	0	x 3 =	0
	10	Tes	FACU	FACU species	102	x 4 =	408
2.				UPL species	0	x 5 =	0
3.				Column Totals	102	(A)	408 (B)
4.				Prevalence Inc	dex = B/A =	4	
5.				Hydrophytic Vegetation	Indicators:		
6				1- Rapid Test for H	ydrophytic V	/egetatior	า
7				2 - Dominance Test	t is > 50%	0	
	10	= Total Cov	er	3 - Prevalence Inde	ex is $\leq 3.0^1$		
<u>Herb Stratum</u> (Plot size: <u>5 ft</u>)				4 - Morphological A	Adaptations	¹ (Provide	supporting
1. Solidago canadensis	30	Yes	FACU	data in Remarks or on a	separate sh	neet)	
2. <u>Alliaria petiolata</u>	12	Yes	FACU	Problematic Hydro	phytic Vege	tation ¹ (E	xplain)
3				¹ Indicators of hydric soil	and wetlan	d hydrold	ogy must be
4				present, unless disturbe	d or proble	matic	
5				Definitions of Vegetation	n Strata:		
6				Tree – Woody plants 3 in	n. (7.6 cm) or	r more in	diameter at
7				breast height (DBH), reg	ardless of h	eight.	
8				Sapling/shrub – Woody	plants less t	han 3 in.	DBH and
9				greater than or equal to	3.28 ft (1 m) tall.	
10				Herb – All herbaceous (r	non-woody)	plants, re	gardless of
11				size, and woody plants l	ess than 3.2	8 ft tall.	20.6
12				Woody vines – All woody	y vines great	ter than 3	5.28 ft in
	42	= Total Cov	er				
<u>Woody Vine Stratum</u> (Plot size: <u>30 ft</u>)				Hydrophytic Vegetation	Present?	res I	No 🖌
1							
2							
3.							
4.							
	0	= Total Cov	er				
Pemarks: (Include photo numbers here or on a sen	arate cheet)	-					
remarks, (include proto numbers here or on a sepa	n die Sileet.)						

Andress Color (moist) % Silt Loam Silt Loam 16 100		Matrix		Redox	Feat	ures			
0.16 10YR 3/2 100 Silt Loam 6.20 10YR 4/3 100 Silt Loam 9 Silt Loam Silt Loam	inches)	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²	Texture	Remarks
6 - 20 10YR 4/3 100 Silt Loam Silt Loam Silt Loam Silt Silt Loam Silt Loam Silt Loam Silt Loam <td>0 - 16</td> <td>10YR 3/2</td> <td>100</td> <td></td> <td></td> <td></td> <td></td> <td>Silt Loam</td> <td></td>	0 - 16	10YR 3/2	100					Silt Loam	
ge: C = Concentration, D = Depletion, RM = Reduced Matrix, MS = Masked Sand Grains. ² Location: PL = Pore Lining, M = Matrix. indicators: Indicators for Problematic Hydric Soils*: Histos folder	16 - 20	10YR 4/3	100					Silt Loam	
rpe: C = Concentration, D = Depletion, RM = Reduced Matrix, MS = Masked Sand Grains. *Location: PL = Pore Lining, M = Matrix. indicators: Indicators for Problematic Hydric Soils*: Histosol (A1) Polyvalue Below Surface (S9) (LRR R, MLRA 149B) 2 cm Muck (A10) (LRR K, L, MLRA 149B) Black Histic (A3) Loamy Mucky Mineral (F1) (LRR K, L) 5 cm Mucky Peat or Peat (S3) (LRR K, L) Stratified Layers (A5) Depleted Matrix (F2) Dark Surface (S7) (LRR K, L) Stratified Layers (A5) Depleted Dark Surface (F6) Thin Dark Surface (S9) (LRR K, L) Thick Dark Surface (A11) Redox Depressions (F8) Polyvalue Below Surface (S9) (LRR K, L) Sandy Gleyed Matrix (S6) Depleted Dark Surface (F7) Iron-Manganese Masses (F12) (LRR K, L 45) Sandy Gleyed Matrix (S6) Redox Depressions (F8) Peiedmont Floodplain Soils (F19) (MLR K, L 45) Stripped Matrix (S6) Wear Spodic (TA6) (MLRA 144B) Other (Explain in Remarks) dicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic. Trippe: None Type: None Year Snillow Dark Surface (S7) Page Marks (S1) None Deptht (inches): marks: Year Snillow Dark Surface (S7) (LRR K, L) None									
mining							<u> </u>		
rpe: C = Concentration, D = Depletion, RM = Reduced Matrix, MS = Masked Sand Grains. ?Location: PL = Pore Lining, M = Matrix. rdric Soil Indicators: Indicators for Problematic Hydric Soils?: Histos Ol (A1) Polyvalue Below Surface (S8) (LRR R, MLRA 149B) Histic Ka3) Loamy Mucky Mineral (F1) (LRR K, L) Black Histic (A3) Loamy Gleyed Matrix (F2) Stratified Layers (A5) Depleted Matrix (F3) Depleted Boark Surface (A11) Redox Dark Surface (F5) Thin Dark Surface (A12) Depleted Matrix (F3) Sandy Gleyed Matrix (S4) Redox Depressions (F8) Sandy Gleyed Matrix (S6) Redox Depressions (F8) Stripped Matrix (S6) Red Parent Material (F12) Dark Surface (S7) (LRR R, MLRA 149B) Very Shallow Dark Surface (T5) Stripped Matrix (S6) Red Parent Material (F21) Stripped Matrix (S6) Red Parent Material (F21) Depth (inches): None Depth (inches): None Depth (inches): None					·				
pe: C = Concentration, D = Depletion, RM = Reduced Matrix, MS = Masked Sand Grains. ?Location: PL = Pore Lining, M = Matrix. dric Soil Indicators: Indicators for Problematic Hydric Soils*: Histosol (A1) Polyvalue Below Surface (S8) (LRR R, MLRA 149B) 2 cm Muck (A10) (LRR K, L, MLRA 149B) Histosol (A2) Thin Dark Surface (S9) (LRR R, MLRA 149B) 2 cm Muck (A10) (LRR K, L, R) Black Histic (A3) Loamy Mucky Mineral (F1) (LRR K, L) S cm Mucky Peat or Peat (S3) (LRR K, L) Polytalue Below Dark Surface (A11) Depleted Matrix (F2)			·		· —	<u> </u>	·		
rpe: C = Concentration, D = Depletion, RM = Reduced Matrix, MS = Masked Sand Grains. ² Location: PL = Pore Lining, M = Matrix. Indicators: Indicators for Problematic Hydric Soils*: Histosol (A1) Polyvalue Below Surface (S9) (LRR R, MLRA 149B) Coast Prairie Redox (A10) (LRR K, L, MLRA 149B) Black Histic (A3) Loamy Gleyed Matrix (F2) Dark Surface (S7) (LRR K, L) S cm Mucky Peat or Peat (S3) (LRR K, L) Stratified Layers (A5) Depleted Matrix (F3) Polyvalue Below Surface (S8) (LRR K, L) S cm Mucky Peat or Peat (S3) (LRR K, L) Stratified Layers (A5) Depleted Matrix (F2) Dark Surface (S7) (LRR K, L) S cm Mucky Mineral (F1) Stratified Layers (A5) Depleted Dark Surface (F6) Thin Dark Surface (S8) (LRR K, L) S cm Mucky Mineral (S1) Sandy Mucky Mineral (S1) Redox Depressions (F8) Piedmont Floodplain Soils (F19) (MLRA 149B) Sandy Redox (S5) Red Parent Material (F21) Other (Explain in Remarks) dicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic. Strictive Layer (if observed): Type: None Hydric Soil Present? Yes					· —				
Image: C = Concentration, D = Depletion, RM = Reduced Matrix, MS = Masked Sand Grains. ² Location: PL = Pore Lining, M = Matrix. Indicators: Indicators for Problematic Hydric Soils ² : Histosol (A1) Polyvalue Below Surface (S9) (LRR R, MLRA 149B) 2 cm Muck (A10) (LRR K, L, MLRA 149B) Histic Epipedon (A2) Thin Dark Surface (S9) (LRR R, MLRA 149B) Coast Prairie Redox (A16) (LRR K, L, R) Black Histic (A3) Loamy Mucky Mineral (F1) (LRR K, L) 5 cm Mucky Peat or Peat (S3) (LRR K, L, R) Hydrogen Sufface (A11) Redox Dark Surface (F6) Thin Dark Surface (S8) (LRR K, L) Startified Layers (A5) Depleted Matrix (F3) Polyvalue Below Surface (S8) (LRR K, L) Sandy Mucky Mineral (S1) Redox Dark Surface (F7) Thin Dark Surface (S9) (LRR K, L) Sandy Redox (S5) Red Varian (S6) Peledenot Floodplain Soils (F19) (MLRA 149B) Sandy Redox (S5) Red Parent Material (F21) Very Shallow Dark Surface (TF12) Dark Surface (S7) (LRR R, MLRA 149B) Other (Explain in Remarks) Other (Explain in Remarks) dicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic. Strictive Layer (if observed): Type: None Hydric Soil Present? YesN o Depth (inches): None <			·		-		·		
rpe: C = Concentration, D = Depletion, RM = Reduced Matrix, MS = Masked Sand Grains. ² Location: PL = Pore Lining, M = Matrix. Indicators: Indicators for Problematic Hydric Soils*: Histosol (A1) Polyvalue Below Surface (S9) (LRR R, MLRA 149B) 2 cm Muck (A10) (LRR K, L, MLRA 149B) Black Histic (A3) Loamy Mucky Mineral (F1) (LRR K, L) S cm Muck (A10) (LRR K, L, R) Hydrogen Sulfide (A4) Loamy Mucky Mineral (F1) (LRR K, L) S cm Muck (Peat or Peat (S3) (LRR K, L, R)					-		·		
rpe: C = Concentration, D = Depletion, RM = Reduced Matrix, MS = Masked Sand Grains. ² Location: PL = Pore Lining, M = Matrix. dric Soil Indicators: Histosol (A1)Polyvalue Below Surface (S8) (LRR R, MLRA 149B) Histic Epipedon (A2)Thin Dark Surface (S9) (LRR R, MLRA 149B) Black Histic (A3)Loamy Mucky Mineral (F1) (LRR K, L)S cm Mucky Peat or Peat (S3) (LRR K, L, R) Hydrogen Sulfide (A4)Loamy Gleyed Matrix (F2)Dark Surface (S9) (LRR K, L) Stratified Layers (A5)Depleted Matrix (F3)Depleted Matrix (F3)Depleted Matrix (F3)Depleted Matrix (F3)Depleted Matrix (S4)Depleted Dark Surface (F7)Thin Dark Surface (S9) (LRR K, L)Thin Dark Surface (S9) (LRR K, L, R) Sandy Mucky Mineral (S1)Redox Depressions (F8)Nesic Spodic (TA6) (MLRA 1442, 145, 149B) Sandy Redox (S5)Netrace (S7) (LRR R, MLRA 149B)Nesic Spodic (TA6) (MLRA 1444, 145, 149B)Nesic Spodic (TA6) (MLRA 1444, 145, 149B)Nesic Spodic (TA6) (MLRA 1449B)Nesic Spodic (TA6) (MLRA 1449B)Nesic Spodic (TA6) (MLRA 1444, 145, 149B)Nesic Spodic (TA6) (MLRA 1444, 145, 149B)Nesic Spodic (TA6) (MLRA 1449B)Nesic Spodic (TA6) (MLRA 1449B)Nesic Spodic (TA6) (MLRA 1447, 145, 149B)Nesic Spodic (TA6) (MLRA 1448, 145, 149B)NoneNoneNoneNoneNoneNoneNoneNone			·				·		
pe: C = Concentration, D = Depletion, RM = Reduced Matrix, MS = Masked Sand Grains. ²Location: PL = Pore Lining, M = Matrix. dric Soil Indicators: Indicators for Problematic Hydric Soils?: Histosol (A1) Polyvalue Below Surface (S8) (LRR R, MLRA 149B) 2 cm Muck (A10) (LRR K, L, MLRA 149B) Histic Epipedon (A2)			·		· —				
dric Soil Indicators: Indicators for Problematic Hydric Soils*: Histosol (A1) Polyvalue Below Surface (S8) (LRR R, MLRA 149B) Histic Epipedon (A2) Thin Dark Surface (S9) (LRR R, MLRA 149B) Black Histic (A3) Loamy Mucky Mineral (F1) (LRR K, L) Stratified Layers (A5) Depleted Matrix (F2) Depleted Below Dark Surface (A11) Redox Dark Surface (F6) Thin Dark Surface (A12) Depleted Dark Surface (F7) Thin Dark Surface (A12) Depleted Dark Surface (F7) Sandy Mucky Mineral (S1) Redox Depressions (F8) Sandy Redox (S5) Mesic Spodic (TA6) (MLRA 1449B) Striped Matrix (S6) Piedmont Floodplain Soils (F19) (MLRA 1449B) Dark Surface (S7) (LRR R, MLRA 149B) Red Parent Material (F21) Striped Matrix (S6) Other (Explain in Remarks) dicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic. strictive Layer (if observed): None Type: None Depth (inches): None	ype: C = C	Concentration, D =	Depletic	n, RM = Reduced	Mat	rix, MS =	Masked Sand Gr	ains. ² Loc	ation: PL = Pore Lining, M = Matrix.
Histosol (A1) Polyvalue Below Surface (S8) (LRR R, MLRA 149B) 2 cm Muck (A10) (LRR K, L, MLRA 149B) Histic Epipedon (A2) Thin Dark Surface (S9) (LRR R, MLRA 149B) Coast Prairie Redox (A16) (LRR K, L, R) Black Histic (A3) Loamy Mucky Mineral (F1) (LRR K, L) 5 cm Mucky Peat or Peat (S3) (LRR K, L, R) Stratified Layers (A5) Depleted Matrix (F3) Dark Surface (S7) (LRR K, L) Stratified Layers (A5) Depleted Matrix (F3) Polyvalue Below Surface (S8) (LRR K, L) Thin Dark Surface (A11) Redox Dark Surface (F6) Thin Dark Surface (S9) (LRR K, L) Sandy Mucky Mineral (S1) Redox Depressions (F8) Piedmont Floodplain Soils (F19) (MLRA 149B) Sandy Redox (S5) Spale Matrix (S4) Mesic Spodic (TA6) (MLRA 144A, 145, 149B) Stripped Matrix (S6) Wery Shallow Dark Surface (TF12) Very Shallow Dark Surface (TF12) Dark Surface (S7) (LRR R, MLRA 149B) Very Shallow Dark Surface (TF12) Other (Explain in Remarks) dicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic. Yes	dric Soil	Indicators:						I	ndicators for Problematic Hydric Soils ³ :
Histic Epipedon (A2)	_ Histosol	l (A1)		Polyvalue Bel	ow S	urface (S	8) (LRR R, MLRA	149B)	2 cm Muck (A10) (LRR K, L, MLRA 149B)
Black Histic (A3) Loamy Mucky Mineral (F1) (LRR K, L) 5 cm Mucky Peat or Peat (S3) (LRR K, L, R) Hydrogen Sulfide (A4) Loamy Gleyed Matrix (F2) Dark Surface (S7) (LRR K, L) Stratified Layers (A5) Depleted Matrix (F3) Polyvalue Below Surface (S9) (LRR K, L) Depleted Below Dark Surface (A11) Redox Dark Surface (F7) Thin Dark Surface (S9) (LRR K, L) Thick Dark Surface (A12) Depleted Dark Surface (F7) Iron-Manganese Masses (F12) (LRR K, L, R) Sandy Mucky Mineral (S1) Redox Depressions (F8) Piedmont Floodplain Soils (F19) (MLRA 149B) Sandy Redox (S5) Red Parent Material (F21) Need (T64) Sandy Redox (S5) Red Parent Material (F12) Very Shallow Dark Surface (TF12) Dark Surface (S7) (LRR R, MLRA 149B) Very Shallow Dark Surface (TF12) Dark Surface (if observed):	_ Histic Ep	pipedon (A2)		Thin Dark Su	rface	(S9) (LRR	R, MLRA 149B)	-	Coast Prairie Redox (A16) (LRR K, L, R)
Hydrogen Sunito (Hy)	_ BIACK HI	ISTIC (A3)		Loamy Mucky	y iviin d Ma	ieral (FT) triv (E2)	(LRR K, L)	-	5 cm Mucky Peat or Peat (S3) (LRR K, L, R)
Depleted Below Dark Surface (A11) Redox Dark Surface (F6) Polyvalue Below Surface (S9) (LRR K, L)	Stratifie	d Lavers (A5)		Loanty Gleye	u ivia triv (l	UTIX (FZ) E3)		-	Dark Surface (S7) (LRR K, L)
Thick Dark Surface (A12) Depleted Dark Surface (F7) Sandy Mucky Mineral (S1) Redox Depressions (F8) Sandy Gleyed Matrix (S4) Piedmont Floodplain Soils (F19) (MLRA 144B) Sandy Redox (S5) Mesic Spodic (TA6) (MLRA 144A, 145, 149B) Stripped Matrix (S6) Red Parent Material (F21) Dark Surface (S7) (LRR R, MLRA 149B) Very Shallow Dark Surface (TF12) Other (Explain in Remarks) Other (Explain in Remarks) dicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic. strictive Layer (if observed): Type: None Depth (inches): Hydric Soil Present?	_ Deplete	d Below Dark Surfa	ace (A11	Bedox Dark S	Surfa	ce (F6)		-	Polyvalue Below Surface (S8) (LRR K, L)
Sandy Mucky Mineral (S1)	Thick Da	ark Surface (A12)		Depleted Dar	'k Su	rface (F7)		-	Thin Dark Surface (S9) (LRR K, L)
Sandy Gleyed Matrix (S4) Sandy Redox (S5) Stripped Matrix (S6) Dark Surface (S7) (LRR R, MLRA 149B) dicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic. strictive Layer (if observed): Type: Depth (inches): Hydric Soil Present? YesNo Mesic Spoil (TA6) (MLRA 144B)	_ _ Sandy N	lucky Mineral (S1)		Redox Depre	ssior	ns (F8)		-	Iron-Manganese Masses (F12) (LRR K, L, R)
Sandy Redox (S5)	-	Haved Matrix (SA)						-	Piedmont Floodplain Soils (F19) (MLRA 149B)
Stripped Matrix (S6)	_ Sandy G								
Dark Surface (S7) (LRR R, MLRA 149B)	_ Sandy G _ Sandy R	Redox (S5)						-	Mesic Spould (TAG) (MILRA 144A, 145, 149B)
dicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic. strictive Layer (if observed): Type: None Depth (inches): marks:	_ Sandy G _ Sandy R _ Stripped	d Matrix (S6)						-	Red Parent Material (F21)
strictive Layer (if observed): Type: <u>None</u> Depth (inches): Marks:	_ Sandy G _ Sandy R _ Stripped _ Dark Su	Redox (S5) d Matrix (S6) Irface (S7) (LRR R, M	ILRA 149	9B)				-	Mesic Spould (1A8) (MLRA 144A, 145, 1496) Red Parent Material (F21) Very Shallow Dark Surface (TF12) Other (Explain in Remarks)
Type: <u>None</u> Depth (inches): marks:	_ Sandy G _ Sandy R _ Stripped _ Dark Su	d Matrix (S4) d Matrix (S6) Inface (S7) (LRR R, N of hydrophytic yeg	ILRA 149	9 B)	าดโดฮา	v must be	onresent unless	- - - - 	Mesic Spould (1A6) (MERA 144A, 143, 149B) Red Parent Material (F21) Very Shallow Dark Surface (TF12) Other (Explain in Remarks)
Depth (inches):	_ Sandy G _ Sandy R _ Stripped _ Dark Su _ dicators	Redox (S5) d Matrix (S6) rface (S7) (LRR R, M of hydrophytic veg Laver (if observed):	ILRA 149	9B) and wetland hydr	olog	y must be	e present, unless	- - - s disturbed (Mesic Spoole (1A6) (MERA 144A, 143, 149B) Red Parent Material (F21) Very Shallow Dark Surface (TF12) Other (Explain in Remarks) or problematic.
marks:	_ Sandy G _ Sandy R _ Stripped _ Dark Su ndicators estrictive I	Aedox (S5) d Matrix (S6) rface (S7) (LRR R, N of hydrophytic veg Layer (if observed): Type:	ILRA 14	9 B) and wetland hydr None	olog	y must be	e present, unless	- - s disturbed (sent?	Red Parent Material (F21) Very Shallow Dark Surface (TF12) Other (Explain in Remarks) or problematic.
	_ Sandy G _ Sandy R _ Stripped _ Dark Su Idicators Istrictive I	Aedox (S5) d Matrix (S6) rface (S7) (LRR R, N of hydrophytic veg Layer (if observed): Type: Depth (inches):	ILRA 149	9B) and wetland hydr None	olog	y must be	e present, unless Hydric Soil Pre	s disturbed o	Mesic Spoole (1A6) (MERA 144A, 143, 149B) Red Parent Material (F21) Very Shallow Dark Surface (TF12) Other (Explain in Remarks) or problematic. Yes No∕_
	_ Sandy G _ Sandy R _ Stripped _ Dark Su dicators strictive I 	Aedox (S5) d Matrix (S6) rface (S7) (LRR R, N of hydrophytic veg Layer (if observed): Type: Depth (inches):	1LRA 149	9 B) and wetland hydr None	olog	y must be	e present, unless Hydric Soil Pres	s disturbed (Mesic Spoole (1A6) (MERA 144A, 143, 149B) Red Parent Material (F21) Very Shallow Dark Surface (TF12) Other (Explain in Remarks) or problematic.
	_ Sandy G _ Sandy R _ Stripped _ Dark Su ndicators :strictive I	Aedox (S5) d Matrix (S6) rface (S7) (LRR R, N of hydrophytic veg Layer (if observed): Type: Depth (inches):	ILRA 149	9B) and wetland hydr None	olog	y must be	e present, unless Hydric Soil Pre:	s disturbed (Mesic Spoole (1A6) (MERA 144A, 143, 149B) Red Parent Material (F21) Very Shallow Dark Surface (TF12) Other (Explain in Remarks) or problematic. Yes No∕_
	_ Sandy G _ Sandy R _ Strippec _ Dark Su <u>Idicators</u> :strictive I :marks:	Addrix (55) d Matrix (56) rface (57) (LRR R, M of hydrophytic veg Layer (if observed): Type: Depth (inches):	ILRA 14	9 B) and wetland hydr None	<u>olog</u>	y must be	e present, unless Hydric Soil Pres	s disturbed o	Mesic Spoole (1A6) (MERA 144A, 143, 149B) Red Parent Material (F21) Very Shallow Dark Surface (TF12) Other (Explain in Remarks) or problematic. Yes No∕_
	_ Sandy G _ Sandy R _ Strippec _ Dark Su dicators strictive I marks:	Addrix (55) d Matrix (56) rface (57) (LRR R, M of hydrophytic veg Layer (if observed): Type: Depth (inches):	ILRA 14	9B) and wetland hydr None		y must be	e present, unless Hydric Soil Pre	s disturbed o	Mesic Spoole (1A6) (MERA 144A, 143, 149B) Red Parent Material (F21) Very Shallow Dark Surface (TF12) Other (Explain in Remarks) or problematic.
	_ Sandy G _ Sandy R _ Strippec _ Dark Su dicators :strictive I	Addrix (55) d Matrix (56) rface (57) (LRR R, N of hydrophytic veg Layer (if observed): Type: Depth (inches):	ILRA 14	9 B) and wetland hydr None	olog	y must be	e present, unless Hydric Soil Pre	sent?	Mesic Spoole (1A6) (MERA 144A, 143, 149B) Red Parent Material (F21) Very Shallow Dark Surface (TF12) Other (Explain in Remarks) or problematic. Yes No∕_
	_ Sandy G _ Sandy R _ Strippec _ Dark Su dicators strictive I marks:	Addrix (55) d Matrix (56) rface (57) (LRR R, N of hydrophytic veg Layer (if observed): Type: Depth (inches):	ILRA 149	9 B) and wetland hydr None	olog	y must be	e present, unless	s disturbed o	Mesic Spould (1A8) (MERA 144A, 143, 1496) Red Parent Material (F21) Very Shallow Dark Surface (TF12) Other (Explain in Remarks) or problematic. Yes No
	_ Sandy G _ Sandy R _ Strippec _ Dark Su ndicators istrictive I	Addrix (55) d Matrix (56) rface (57) (LRR R, N of hydrophytic veg Layer (if observed): Type: Depth (inches):	ILRA 149	9 B) and wetland hydr None	olog	y must be	e present, unless	s disturbed o	Mesic Spould (1A8) (MERA 144A, 143, 1496) Red Parent Material (F21) Other (Explain in Remarks) or problematic. Yes No
	_ Sandy G _ Sandy R _ Strippec _ Dark Su dicators strictive I marks:	eedox (S5) d Matrix (S6) rface (S7) (LRR R, N of hydrophytic veg Layer (if observed): Type: Depth (inches):	ILRA 149	9 B) and wetland hydr None	olog	y must be	e present, unless	s disturbed o	Mesic Spould (1A8) (MERA 144A, 143, 1496) Red Parent Material (F21) Very Shallow Dark Surface (TF12) Other (Explain in Remarks) or problematic. Yes No
	_ Sandy G _ Sandy R _ Strippec _ Dark Su ndicators estrictive I	Address (S5) d Matrix (S6) rface (S7) (LRR R, M of hydrophytic veg Layer (if observed): Type: Depth (inches):	ILRA 149	9 B) and wetland hydr None	<u>olog</u>	y must be	e present, unless	s disturbed (Mesic Spould (1A8) (MERA 144A, 143, 1496) Red Parent Material (F21) Very Shallow Dark Surface (TF12) Other (Explain in Remarks) or problematic. Yes No∠
	_ Sandy G _ Sandy R _ Strippec _ Dark Su ndicators estrictive I	Addrix (34) Addrix (56) rface (57) (LRR R, N of hydrophytic veg Layer (if observed): Type: Depth (inches):	ILRA 149	9 B) and wetland hydr None	olog	y must be	e present, unless Hydric Soil Pre	s disturbed o	Mesic Spould (TAB) (MERA 144A, 143, 1496) Red Parent Material (F21) Other (Explain in Remarks) or problematic. Yes No∠
	_ Sandy G _ Sandy R _ Strippec _ Dark Su ndicators estrictive I	Advention (1997) Andrix (1997) A Matrix (1996) Inface (1977) (LRR R, M of hydrophytic veg Layer (if observed): Type: Depth (inches):	ILRA 149	9 B) and wetland hydr None	olog	y must be	e present, unless	s disturbed (Mesic Spould (TAB) (MERA 144A, 143, 1496) Red Parent Material (F21) Other (Explain in Remarks) or problematic. Yes No⁄_
	_ Sandy G _ Sandy R _ Stripped _ Dark Su ndicators estrictive I	Advention (Jacobian (Jacob	ILRA 14	9 B) and wetland hydr None	olog	y must be	e present, unless	s disturbed (Mesic Spould (1A8) (MERA 144A, 143, 1496) Red Parent Material (F21) Very Shallow Dark Surface (TF12) Other (Explain in Remarks) or problematic. Yes No
	Sandy G Sandy R Stripped Dark Su ndicators estrictive I emarks:	Advention (1997) Advention (1997) Advent	ILRA 14	9 B) and wetland hydr None	<u>olog</u>	y must be	e present, unless	s disturbed o	Mesic Spould (TAB) (MERA 144A, 143, 149b) Red Parent Material (F21) Very Shallow Dark Surface (TF12) Other (Explain in Remarks) or problematic. Yes No
	Sandy G Sandy R Stripped Dark Su ndicators estrictive I emarks:	Advention (Jacobian (Jacobian) A Matrix (S6) Irface (S7) (LRR R, M of hydrophytic veg Layer (if observed): Type: Depth (inches):	ILRA 149	9 B) and wetland hydr None	olog	y must be	e present, unless	s disturbed of	Mesic Spould (1A8) (MERA 144A, 143, 1496) Red Parent Material (F21) Other (Explain in Remarks) or problematic. Yes No∠
	_ Sandy G _ Sandy R _ Stripped _ Dark Su ndicators estrictive I	Advention (1997) Advention (1997) Advent	ILRA 149	9 B) and wetland hydr None	olog	y must be	e present, unless Hydric Soil Pres	s disturbed of	Mesic Spould (TAB) (MERA 144A, 143, 1496) Red Parent Material (F21) Other (Explain in Remarks) or problematic. Yes No∠
	_ Sandy G _ Sandy R _ Stripped _ Dark Su hdicators estrictive I	Advention (Jacobian Matrix (Jacobian Mat	ILRA 149	9 B) and wetland hydr None		y must be	e present, unless Hydric Soil Pre	s disturbed o	Mesic Spould (TAB) (MERA 144A, 143, 1496) Red Parent Material (F21) Other (Explain in Remarks) or problematic. YesNo
	_ Sandy G _ Sandy R _ Strippec _ Dark Su ndicators estrictive I	Advention (Jacobian (Jacobian) Advention (SS) Advention (SS) (IRR R, M of hydrophytic veg Layer (if observed): Type: Depth (inches):	ILRA 149	9 B) and wetland hydr None	olog	y must be	e present, unless Hydric Soil Pre:	s disturbed of	Mesic Spould (TAB) (MERA 144A, 143, 1496) Red Parent Material (F21) Other (Explain in Remarks) or problematic. Yes No∠



Photo of Sample Plot North Photo of Sample Plot East



Photo of Sample Plot West

WETLAND DETERMINATION DATA FORM - Northcentral and Northeast Region

Project/Site: Flat Cree	k Solar Project	: City/	County: Canajoha	rie, Montgomery	/ County		Sampling Date:	2021-Sept-14
Applicant/Owner: S	unEast			State:	NY		Sampling Point: <u>\</u>	W-EES-6_UPL-103
Investigator(s): Nick	DeJohn, Brian	Corrigan, Abi Light		Section, Town	ship, Rar	nge: NA	٨	
Landform (hillslope, te	rrace, etc.):	Flat	Local	relief (concave,	convex,	none):	Undulating	Slope (%): 0 to 1
Subregion (LRR or MLF	RA): LRR I	_		Lat: 42.84677	22238	Long:	-74.5254540817	Datum: WGS84
Soil Map Unit Name:	Phelps grave	elly loam					NWI classific	ation:
Are climatic/hydrologic	c conditions or	n the site typical for t	his time of year?	Yes 🟒	_ No	(If no,	, explain in Rema	rks.)
Are Vegetation, Are Vegetation,	Soil, Soil,	or Hydrology s or Hydrology n	ignificantly disturbe aturally problemat	ed? Are "N ic? (If nee	lormal Ci ded, exp	ircumsta Main any	ances" present? / answers in Rem	Yes No _ _⁄_ arks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes No 🟒		
Hydric Soil Present?	Yes No 🟒	Is the Sampled Area within a Wetland?	Yes No 🟒
Wetland Hydrology Present?	Yes No 🟒	lf yes, optional Wetland Site ID:	
Remarks: (Explain alternative procedures he	re or in a separate report)	
Covertype is UPL. Circumstances are not nor	mal due to mowing of ve	getation.	

HYDROLOGY

Wetland Hydrology Indicators:					
Primary Indicators (minimum of one	is required; check all th	<u>iat apply)</u>	Secondary Indicators (minimum of two required)		
 Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5) Inundation Visible on Aerial Image Sparsely Vegetated Concave Surfation 	 Surface Soil Cracks (B6) Drainage Patterns (B10) Moss Trim Lines (B16) Dry-Season Water Table (C2) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (C9) 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 🟒	Depth (inches):			
Water Table Present?	Yes No 🟒	Depth (inches):	Wetland Hydrology Present? Yes No		
Saturation Present?	Yes No 🟒	Depth (inches):			
(includes capillary fringe)					
Describe Recorded Data (stream gau	ge, monitoring well, ae	rial photos, previous inspections), if	available:		
Remarks:					

Sampling Point: W-EES-6_UPL-103

<u>Tree Stratum</u> (Plot size: <u>30 ft</u>)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksh	eet: Decies That		
1 Robinia nseudoacacia	10	Voc	FACIL	Are OBL, FACW, or FAC:		1	(A)
	10	Tes	FACU	Total Number of Domin	ant Species		
2.				Across All Strata:	1	4	(B)
٥				Percent of Dominant Sp	ecies That	25	(4 (D)
۲				Are OBL, FACW, or FAC:			(A/B)
				Prevalence Index works	heet:		
7				Total % Cover of	of:	<u>Multiply</u>	By:
/		- Total Car		OBL species	0	x 1 =	0
Condition of Characterizer (Directorizer AF free)	10		rer	FACW species	40	x 2 =	80
Sapling/Shrub Stratum (Plot size: <u>15 ft</u>)	10		FACU	FAC species	0	x 3 =	0
1. Rubus allegneniensis	10	Yes	FACU	- FACU species	70	x 4 =	280
2				UPL species	0	x 5 =	0
3.				- Column Totals	110	(A)	360 (B)
4.				Prevalence Inc	dex = B/A =	3.3	
5.				Hydrophytic Vegetation	Indicators:		
6				1- Rapid Test for H	ydrophytic V	egetation	
7				2 - Dominance Tes	t is > 50%	0	
	10	= Total Cov	rer	3 - Prevalence Inde	ex is $\leq 3.0^1$		
<u>Herb Stratum</u> (Plot size: <u>5 ft</u>)				4 - Morphological /	Adaptations ¹	(Provide	supporting
1. Phalaris arundinacea	30	Yes	FACW	- data in Remarks or on a	separate sh	leet)	
2. Galium mollugo	25	Yes	FACU	Problematic Hydro	phytic Vege	tation ¹ (Ex	(plain)
3. Rubus allegheniensis	15	No	FACU	¹ Indicators of hydric soil	and wetlan	d hydrolo	gy must be
4. Heracleum maximum	10	No	FACW	present, unless disturbe	ed or probler	matic	
5. <u>Taraxacum officinale</u>	10	No	FACU	Definitions of Vegetation	n Strata:		
6				Tree – Woody plants 3 ir	n. (7.6 cm) or	r more in o	diameter at
7				breast height (DBH), reg	ardless of h	eight.	
8				Sapling/shrub - Woody	plants less tl	han 3 in. [OBH and
9				greater than or equal to	3.28 ft (1 m) tall.	
10				Herb – All herbaceous (r	100-woody)	plants, reg	gardless of
11				size, and woody plants i	ess than 3.2	8 IL LAII.	20 ft :
12				beight	y vines great	ter than 3.	.28 IUM
	90	= Total Cov	ver				
<u>Woody Vine Stratum</u> (Plot size: <u>30 ft</u>)				Hydrophytic Vegetation	Present?	res N	IO
1				_			
2				_			
3				_			
4				_			
	0	= Total Cov	ver 🛛				
Remarks: (Include photo numbers here or on a sep	oarate sheet.)			-			

ches) Color (moist)	%	Color (moist)	%	Type ¹	Loc ² Textu	ire Remarks
- 18 7.5YR 3/2	100				Silt Lo	am
			·			
			· ·			
			· — ·			
			· _ ·			
			· — ·			
			· ·			
e: C = Concentration, D =	= Depletio	n, RM = Reduced	Matri	ix, MS =	Masked Sand Grains.	² Location: PL = Pore Lining, M = Matrix.
ic Soil Indicators:						Indicators for Problematic Hydric Soils ³ :
listic Epipedon (A2) slack Histic (A3) lydrogen Sulfide (A4) itratified Layers (A5) Depleted Below Dark Sur 'hick Dark Surface (A12) Sandy Mucky Mineral (S1 Sandy Gleyed Matrix (S4) Sandy Redox (S5)	face (A11)	Thin Dark Sur Loamy Muck Loamy Gleye Depleted Mar Redox Dark S Depleted Dar Redox Depre	rface (y Mine d Mat trix (F: Surface k Surf ssions	(S9) (LRR eral (F1) (trix (F2) 3) e (F6) face (F7) s (F8)	R, MLRA 149B) (LRR K, L)	 Coast Prairie Redox (A16) (LRR K, L, R) Coast Prairie Redox (A16) (LRR K, L, R) 5 cm Mucky Peat or Peat (S3) (LRR K, L, R) Dark Surface (S7) (LRR K, L) 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) Pod Paraet Material (F21)
itripped Matrix (S6) Dark Surface (S7) (LRR R, cators of bydropbytic ye	MLRA 149	9B)	പറം	must be	onresent unless distu	Ked Falent Material (F21) Very Shallow Dark Surface (TF12) Other (Explain in Remarks)
tripped Matrix (S6) Dark Surface (S7) (LRR R, cators of hydrophytic ve rictive Laver (if observed	MLRA 149	9 B) and wetland hydr	rology	r must be	e present, unless distu	Very Shallow Dark Surface (TF12) Other (Explain in Remarks) rbed or problematic.
itripped Matrix (S6) Dark Surface (S7) (LRR R, <u>cators of hydrophytic ve</u> rictive Layer (if observed Type:	MLRA 149	9 B) and wetland hydr None	rology	r must be	e present, unless distu Hydric Soil Present?	Ked Parent Materia (F21) Very Shallow Dark Surface (TF12) Other (Explain in Remarks) rbed or problematic. Yes No ✓
Stripped Matrix (S6) Dark Surface (S7) (LRR R, icators of hydrophytic ve rictive Layer (if observed Type: Depth (inches): iarks:	MLRA 149 getation a):	9 B) and wetland hydr None	rology	' must be	e present, unless distu Hydric Soil Present?	Ked Parent Materia (F21) Very Shallow Dark Surface (TF12) Other (Explain in Remarks) rbed or problematic. Yes No _∠



Photo of Sample Plot North Photo of Sample Plot East



Photo of Sample Plot West

WETLAND DETERMINATION DATA FORM - Northcentral and Northeast Region

Project/Site: Flat Cree	k Solar Projec	t City/Count	t y: Canajoharie, Mo	ntgomery County	Sampling Date:	2021-Dec-07			
Applicant/Owner: S	unEast			State: NY	Sampling Point: \	W-EES-6-PSS-101			
Investigator(s): Davi	d Bonomo, Al	bi Light, Abi Light	Section	ion, Township, Ra	nge: NA				
Landform (hillslope, te	rrace, etc.):	Hillslope	Local relief	(concave, convex,	none): Concave	Slope (%): 1 to 10			
Subregion (LRR or MLF	RA): LRR	L	Lat:	42.8480363435	Long: -74.5294129845	Datum: WGS84			
Soil Map Unit Name:	Darien silt lo	oam			NWI classific	ation: None			
Are climatic/hydrologic conditions on the site typical for this time of year? Yes 🖌 No (If no, explain in Remarks.)									
Are Vegetation,	Soil,	or Hydrology signification	antly disturbed?	Are "Normal C	Circumstances" present?	Yes 🟒 No			
Are Vegetation,	Soil,	or Hydrology natural	ly problematic?	(If needed, ex	plain any answers in Rema	arks.)			

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes 🟒 No		
Hydric Soil Present?	Yes 🟒 No	Is the Sampled Area within a Wetland?	Yes 🟒 No
Wetland Hydrology Present?	Yes 🟒 No	If yes, optional Wetland Site ID:	W-EES-6
Remarks: (Explain alternative procedures he	re or in a separate report)	
Covertype is PSS. Area is wetland, all three w	vetland parameters are pr	resent.	

HYDROLOGY

Wetland Hydrology Indicators	:						
Primary Indicators (minimum	of one is required; check all t	that apply)		Secondary Indicators (minimum of two required)			
 Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5) Inundation Visible on Aeria Sparsely Vegetated Concav 	Water- Aquati Marl D Hydrog Oxidize Presen Recent Thin M al Imagery (B7) Other (ye Surface (B8)	 					
Field Observations: Surface Water Present? Water Table Present? Saturation Present?	Yes No _ _ Yes No Yes No _ _	Depth (inches): Depth (inches): Depth (inches):	2	_ Wetland Hydrology Present? Yes _∠_ No			
Describe Recorded Data (strea	am gauge, monitoring well, a	erial photos, previous insp	pections), if	available:			
Remarks: A positive indication of wetlan met.	d hydrology was observed (p	primary and secondary ind	licators wer	e present). The criterion for wetland hydrology is			

Sampling Point: W-EES-6-PSS-101

Tree Stratum (Plot size: 30 ft)	Absolute	Dominant	Indicator	Dominance Test works	heet:		
1.	% Cover	Species?	Status	Are OBL, FACW, or FAC	Species That ::	3	(A)
2.				Total Number of Domi	nant Species	3	(B)
3		·		Percent of Dominant S	pecies That	100	(A/B)
5.				Are OBL, FACVV, or FAC			
6.				- Prevalence Index work	sneet:	N 4 14 ² h .	D
7.				- <u>Iotal % Cover</u>	<u>oi:</u>	<u>Mulupiy</u>	<u>ву:</u>
	0	= Total Cov	er	- OBL species	0	x I =	0
Sapling/Shrub Stratum (Plot size: 15 ft)		-		FAC vv species	75	x 2 = _	150
1. Cornus amomum	50	Yes	FACW	FAC species	30	x 3 =	90
2. Rhamnus cathartica	10	No	FAC	FACU species	10	x 4 =	40
3				- UPL species	0	x 5 = _	0
A				- Column Totals	115	(A)	280 (B)
				Prevalence I	ndex = B/A =	2.4	
s				- Hydrophytic Vegetatio	n Indicators:		
o	·			1- Rapid Test for	Hydrophytic V	/egetatior	ı
7				2 - Dominance Te	st is >50%		
	60	= lotal Cov	er	3 - Prevalence Inc	dex is $\leq 3.0^1$		
<u>Herb Stratum</u> (Plot size: <u>5 ft</u>)				4 - Morphologica	Adaptations ¹	¹ (Provide	supporting
1. <u>Onoclea sensibilis</u>	25	Yes	FACW	- data in Remarks or on	a separate sh	neet)	
2. <i>Solidago rugosa</i>	20	Yes	FAC	Problematic Hydi	rophytic Vege	tation ¹ (Ex	(plain)
3. <i>Galium mollugo</i>	10	No	FACU	¹ Indicators of hydric so	il and wetlan	d hydrolo	gy must be
4. <i>Carex sp.</i>	10	No	NI	present, unless disturb	ped or probler	matic	
5				Definitions of Vegetati	on Strata:		
6.				Tree – Woody plants 3	in. (7.6 cm) or	r more in	diameter at
7.				breast height (DBH), re	gardless of h	eight.	
8.				Sapling/shrub - Wood	y plants less tl	han 3 in. I	OBH and
9.				greater than or equal t	o 3.28 ft (1 m) tall.	
10				Herb – All herbaceous	(non-woody)	plants, re	gardless of
11				size, and woody plants	less than 3.2	8 ft tall.	
12				Woody vines – All woo	dy vines great	ter than 3	.28 ft in
12	6E	- Total Cov	or	height.			
Weedy Vine Stratum (Plat size) 20 ft	05		ei	Hydrophytic Vegetatio	on Present?	res 🖌 N	٥٧
1				-			
2.				-			
3				-			
4				-			
	0	= Total Cov	er				
Remarks: (Include photo numbers here or on a se	parate sheet.)			—			

A positive indication of hydrophytic vegetation was observed (>50% of dominant species indexed as OBL, FACW, or FAC). A positive indication of hydrophytic vegetation was observed (Prevalence Index is \leq 3.00).

Profile Des	cription: (Describe t	to the o	depth needed to c	locun	nent the i	indicato	or confirm the a	absence of indicate	ors.)
Depth	Matrix		Redox	Feat	ures				
(inches)	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²	Text	ture	Remarks
0 - 12	10YR 2/1	95	7.5YR 4/6	5	С	М	Silty Cla	ay Loam	
12 - 18	10YR 4/1	90	7.5YR 4/6	10	С	М	Clay	Loam	
¹ Type: $C = C$	Concentration, D = I	Deplet	ion, RM = Reduced	d Mat	rix, MS =	Masked	Sand Grains. ² l	Location: PL = Pore	e Lining, M = Matrix.
Hydric Soil	Indicators:							Indicators for P	roblematic Hydric Soils ³ :
Histoso	l (A1)		Polyvalue Be	elow S	urface (S	58) (LRR I	R, MLRA 149B)	2 cm Muck /	
Histic Ep	pipedon (A2)		Thin Dark Su	irface	(S9) (LRF	R, MLR	A 149B)	Coast Prairie	$= \operatorname{Red}_{X} (A16) (I \mathbf{R} \mathbf{K} \mathbf{R})$
Black Hi	istic (A3)		Loamy Muck	y Mir	eral (F1)	(LRR K, I	_)	5 cm Mucky	Peat or Peat (S3) (I RR K, L, R)
Hydroge	en Sulfide (A4)		Loamy Gleye	ed Ma	trix (F2)			Dark Surfac	e (S7) (LRR K, L)
Stratifie	d Layers (A5)		Depleted Ma	atrix (F3)			Polyvalue B	elow Surface (S8) (LRR K, L)
Deplete	d Below Dark Surfa	ice (Al	1) / Redox Dark	Surfa	ce (F6) rfaco (E7)	``````````````````````````````````````		Thin Dark S	urface (S9) (LRR K, L)
Sandy N	Ark Surface (ATZ) Aucky Mineral (S1)		Depieted Da	rk Su	riace (F7))		Iron-Manga	nese Masses (F12) (LRR K, L, R)
Sandy (Cloved Matrix (S4)			235101	15 (FO)			Piedmont Fl	loodplain Soils (F19) (MLRA 149B)
Sandy F	Redax (S5)							Mesic Spodi	ic (TA6) (MLRA 144A, 145, 149B)
Strinner	d Matrix (S6)							Red Parent	Material (F21)
Dark Su	urface (S7) (I RR R M		49B)					Very Shallow	w Dark Surface (TF12)
			1907					Other (Expla	ain in Remarks)
³ Indicators	of hydrophytic veg	etatior	n and wetland hyd	rolog	y must b	e presen	t, unless disturb	ed or problematic.	
Restrictive	Layer (if observed):								
	Туре:		None			Hydric	Soil Present?		Yes 🟒 No
	Depth (inches):								
Remarks:									
A positive in	ndication of hydric	soil wa	is observed. The c	riteri	on for hy	dric soil	is met.		

Hydrology Photos





Photo of Sample Plot North

Northcentral and Northeast Region -- Version 2.0 Adapted by TRC

Photo of Sample Plot South



WETLAND DETERMINATION DATA FORM - Northcentral and Northeast Region

Project/Site: Flat Cree	k Solar Projec	t	City/County:	Canajoharie, Mo	ontgomery County	/	Sampling Date:	2021-Dec-07	
Applicant/Owner: S	unEast				State: NY		Sampling Point: <u>\</u>	W-EES-6-UPL-101	
Investigator(s): Davi	d Bonomo, Al	oi Light, Abi Light		Sect	ion, Township, Ra	nge: N	4		
Landform (hillslope, te	rrace, etc.):	Hillslope		Local relief	(concave, convex	, none):	Concave	Slope (%): 1	l to 10
Subregion (LRR or MLF	RA): LRR	L		Lat:	42.8484928986	Long:	-74.5294497874	Datum: WG	584
Soil Map Unit Name:	DaB- Darien	silt loam					NWI classific	ation: None	
Are climatic/hydrologic	c conditions o	n the site typical	for this time	of year?	Yes 🟒 No 🔄	(If no	, explain in Rema	rks.)	
Are Vegetation, Are Vegetation,	Soil, Soil,	or Hydrology or Hydrology	significan naturally	tly disturbed? problematic?	Are "Normal ((If needed, ex	Circumst plain an	ances" present? y answers in Rem	Yes 🟒 No arks.)	

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes No 🟒							
Hydric Soil Present?	Yes 🟒 No	Is the Sampled Area within a Wetland?	Yes No 🟒					
Wetland Hydrology Present?	Yes No _	lf yes, optional Wetland Site ID:						
Remarks: (Explain alternative procedures here or in a separate report)								
Covertype is UPL. Area is upland, not all three wetland parameters are present.								

HYDROLOGY

Wetland Hydrology Indicators:			
Primary Indicators (minimum of o	ne is required; check all t	<u>hat apply)</u>	Secondary Indicators (minimum of two required)
 Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5) Inundation Visible on Aerial Im Sparsely Vegetated Concave S 	Water Aquatic Marl D Hydrog Oxidize Presen Recent Thin M nagery (B7) Other (urface (B8)	 Surface Soil Cracks (B6) Drainage Patterns (B10) Moss Trim Lines (B16) Dry-Season Water Table (C2) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (C9) Stunted or Stressed Plants (D1) Geomorphic Position (D2) Shallow Aquitard (D3) Microtopographic Relief (D4) FAC-Neutral Test (D5) 	
Field Observations: Surface Water Present? Water Table Present? Saturation Present? (includes capillary fringe)	Yes No _ _/ Yes No _ _/ Yes No _ _/	Depth (inches): Depth (inches): Depth (inches):	 Wetland Hydrology Present? Yes No
Describe Recorded Data (stream a stream	gauge, monitoring well, a	erial photos, previous inspections), indication of wetland hydrology wa	s observed.

Sampling Point: W-EES-6-UPL-101

<u>Tree Stratum</u> (Plot size: <u>30 ft</u>)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test works Number of Dominant S	n eet: pecies That	1	(A)
1				Are OBL, FACW, or FAC:			
2		<u> </u>		Total Number of Domir Across All Strata:	ant Species	2	(B)
4.		·		Percent of Dominant Sp	pecies That	50	(A/B)
5				- Prevalence Index works	shoot:		
6				- Total % Cover	of.	Multiply	By
7				OBL species	0	v 1 =	
	0	= Total Cov	er	EACW species	0	× 2 -	0
Sapling/Shrub Stratum (Plot size: <u>15 ft</u>)		_		FACW species	10	x 2 -	20
1. Rhamnus cathartica	10	Yes	FAC	FAC species	10	x 3 =	30
2.		·		- FACU species	85	x 4 =	340
3.				- UPL species	0	x 5 =	0
4.		·		- Column Totals _	95	(A)	370 (B)
5		·		Prevalence In	idex = B/A =	3.9	
s		<u> </u>		Hydrophytic Vegetation	Indicators:		
ö		·		1- Rapid Test for H	lydrophytic V	/egetatior	า
7				2 - Dominance Tes	st is > 50%		
	10	= lotal Cov	er	3 - Prevalence Ind	ex is $\leq 3.0^1$		
<u>Herb Stratum</u> (Plot size: <u>5 ft</u>)				4 - Morphological	Adaptations	¹ (Provide	supporting
1. <i>Galium mollugo</i>	60	Yes	FACU	- data in Remarks or on a	a separate sh	neet)	11 0
2. Solidago canadensis	15	No	FACU	Problematic Hydro	ophytic Vege	tation ¹ (E	xplain)
3. <i>Centaurea jacea</i>	10	No	FACU	- ¹ Indicators of hydric so	il and wetlan	d hydrolo	gy must be
4. <i>Carex sp.</i>	5	No	NI	present, unless disturb	ed or problei	matic	0,
5				Definitions of Vegetatio	on Strata:		
6.				Tree – Woody plants 3 i	n. (7.6 cm) or	r more in	diameter at
7.				breast height (DBH), reg	gardless of h	eight.	
8.				Sapling/shrub - Woody	plants less t	han 3 in.	DBH and
9.				greater than or equal to	o 3.28 ft (1 m) tall.	
10.				Herb – All herbaceous (non-woody)	plants, re	gardless of
11		·		size, and woody plants	less than 3.2	8 ft tall.	
12.		· ·		Woody vines – All wood	ly vines great	ter than 3	8.28 ft in
	90	= Total Cov	er	height.			
Woody Vine Stratum (Plot size: 30 ft)		_		Hydrophytic Vegetation	n Present?	/es I	No 🟒
1.							
2		<u> </u>		-			
2		·		-			
		<u> </u>		-			
4		- Total Cav		-			
	0		ei	_ <u>_</u>			
Remarks: (Include photo numbers here or on a sepa No positive indication of hydrophytic vegetation was	rate sheet.) observed (≥	50% of dom	ninant speci	es indexed as FAC- or dri	er).		

0-8 10VR 3/3 100	
8 - 16 10YR 5/2 60 10YR 5/8 10 C M Clay Loam 8 - 16 10YR 5/3 30 Clay Loam Clay Loam Clay Loam 8 - 16 10YR 5/3 30 Clay Loam Clay Loam Clay Loam Clay Loam Clay Loam Clay Loam Clay Loam Clay Loam Clay Loam Clay Loam Clay Loam Clay Loam Clay Loam Clay Loam Clay Loam Clay Loam Clay Loam Clay Loam Clay Loam Clay Loam Clay Loam Clay Loam Clay Loam Clay Loam Clay Loam Clay Loam Clay Loam Clay Loam Clay Loam Clay Loam Clay Loam Clay Loam Clay Loam Figure C = Concentration, D = Depletion, RM = Reduced Matrix, MS = Masked Sand Grains. ² Location: PL = Pore Lining, M = Matrix. Iydric Soil Indicators: Polyvalue Below Surface (S8) (LRR R, MLRA 149B) 2 cm Muck (A10) (LRR K, L, MLRA 149B) Histosol (A1) Polyvalue Below Surface (S9) (LRR K, MLRA 149B) 2 coast Prairie Redox (A16) (LRR K, L, L) Histos (A3) Loamy Mucky Mineral (F1) (L	
8 - 16 10YR 5/3 30 Clay Loam Clay Loam Clay Loam Ype: C = Concentration, D = Depletion, RM = Reduced Matrix, MS = Masked Sand Grains. ² Location: PL = Pore Lining, M = Matrix. ydric Soil Indicators: Indicators for Problematic Hydric Soils ³ : _ Histosol (A1) Polyvalue Below Surface (S8) (LRR R, MLRA 149B) _ Histosol (A2) _ Thin Dark Surface (S9) (LRR R, MLRA 149B) _ Loamy Mucky Mineral (F1) (LRR K, L) _ S cm Mucky Peat or Peat (S3) (LRR K, L) _ Hydrogen Sulfide (A4) _ Loamy Gleyed Matrix (F2) _ Stratified Layers (A5) _ Depleted Matrix (
ype: C = Concentration, D = Depletion, RM = Reduced Matrix, MS = Masked Sand Grains. ²Location: PL = Pore Lining, M = Matrix. ydric Soil Indicators: Indicators for Problematic Hydric Soils ³² . Histosol (A1) Polyvalue Below Surface (S8) (LRR R, MLRA 149B) Histic Epipedon (A2) Thin Dark Surface (S9) (LRR R, MLRA 149B) Black Histic (A3) Loamy Mucky Mineral (F1) (LRR K, L) Hydrogen Sulfide (A4) Loamy Gleyed Matrix (F2) Y Depleted Matrix (F2) Dark Surface (S7) (LRR K, L) Polyvalue Below Surface (F6)	
ype: C = Concentration, D = Depletion, RM = Reduced Matrix, MS = Masked Sand Grains. ² Location: PL = Pore Lining, M = Matrix. ydric Soil Indicators: Indicators for Problematic Hydric Soils ³ : Histosol (A1) Polyvalue Below Surface (S8) (LRR R, MLRA 149B) 2 cm Muck (A10) (LRR K, L, MLRA 149B) Histic Epipedon (A2) Thin Dark Surface (S9) (LRR R, MLRA 149B) 2 cm Muck (A10) (LRR K, L, MLRA 149B) Black Histic (A3) Loamy Mucky Mineral (F1) (LRR K, L) 5 cm Mucky Peat or Peat (S3) (LRR K, L) Hydrogen Sulfide (A4) Loamy Gleyed Matrix (F2) Dark Surface (S7) (LRR K, L) Stratified Layers (A5) Depleted Matrix (F3) Doplyvalue Below Surface (S8) (LRR K, L)	
ype: C = Concentration, D = Depletion, RM = Reduced Matrix, MS = Masked Sand Grains. ² Location: PL = Pore Lining, M = Matrix. ydric Soil Indicators: Indicators for Problematic Hydric Soils ³ : Histosol (A1) Polyvalue Below Surface (S8) (LRR R, MLRA 149B) Histic Epipedon (A2) Thin Dark Surface (S9) (LRR R, MLRA 149B) Black Histic (A3) Loamy Mucky Mineral (F1) (LRR K, L) Hydrogen Sulfide (A4) Loamy Gleyed Matrix (F2) Stratified Layers (A5) Depleted Matrix (F3) Polyvalue Below Dark Surface (A11) Redox Dark Surface (S7) (LRR K, L)	
ype: C = Concentration, D = Depletion, RM = Reduced Matrix, MS = Masked Sand Grains. ² Location: PL = Pore Lining, M = Matrix. ydric Soil Indicators: Indicators for Problematic Hydric Soils ³ : Histosol (A1) Polyvalue Below Surface (S8) (LRR R, MLRA 149B) Histic Epipedon (A2) Thin Dark Surface (S9) (LRR R, MLRA 149B) Black Histic (A3) Loamy Mucky Mineral (F1) (LRR K, L) Hydrogen Sulfide (A4) Loamy Gleyed Matrix (F2) Stratified Layers (A5) / Depleted Matrix (F3) Polyvalue Below Dark Surface (S8) (LRR K, L) Follow Surface (S9) (LRR K, L)	
ype: C = Concentration, D = Depletion, RM = Reduced Matrix, MS = Masked Sand Grains. ² Location: PL = Pore Lining, M = Matrix. ydric Soil Indicators: Indicators for Problematic Hydric Soils ³ : _ Histosol (A1) _ Polyvalue Below Surface (S8) (LRR R, MLRA 149B) _ Histic Epipedon (A2) _ Thin Dark Surface (S9) (LRR R, MLRA 149B) _ Black Histic (A3) _ Loamy Mucky Mineral (F1) (LRR K, L) _ Hydrogen Sulfide (A4) _ Loamy Gleyed Matrix (F2) _ Stratified Layers (A5) _ / Depleted Matrix (F3) _ Depleted Below Dark Surface (S1) _ Polyvalue Below Surface (S3) (LRR K, L)	
ype: C = Concentration, D = Depletion, RM = Reduced Matrix, MS = Masked Sand Grains. ² Location: PL = Pore Lining, M = Matrix. ydric Soil Indicators: Indicators for Problematic Hydric Soils ³ _ Histosol (A1) _ Polyvalue Below Surface (S8) (LRR R, MLRA 149B) _ Histic Epipedon (A2) _ Thin Dark Surface (S9) (LRR R, MLRA 149B) _ Black Histic (A3) _ Loamy Mucky Mineral (F1) (LRR K, L) _ Hydrogen Sulfide (A4) _ Loamy Gleyed Matrix (F2) _ Stratified Layers (A5) _ Z Depleted Matrix (F3) _ Depleted Below Dark Surface (S1) _ Polyvalue Below Surface (S8) (LRR K, L)	
ype: C = Concentration, D = Depletion, RM = Reduced Matrix, MS = Masked Sand Grains. ² Location: PL = Pore Lining, M = Matrix. rdric Soil Indicators: Indicators for Problematic Hydric Soils ³ : _ Histosol (A1) _ Polyvalue Below Surface (S8) (LRR R, MLRA 149B) _ Histic Epipedon (A2) _ Thin Dark Surface (S9) (LRR R, MLRA 149B) _ Black Histic (A3) _ Loamy Mucky Mineral (F1) (LRR K, L) _ Hydrogen Sulfide (A4) _ Loamy Gleyed Matrix (F2) _ Stratified Layers (A5) _ Depleted Matrix (F3) _ Depleted Below Dark Surface (S1) _ Polyvalue Below Surface (S8) (LRR K, L)	
ype: C = Concentration, D = Depletion, RM = Reduced Matrix, MS = Masked Sand Grains. ² Location: PL = Pore Lining, M = Matrix. ydric Soil Indicators: Indicators for Problematic Hydric Soils ³ _ Histosol (A1) Polyvalue Below Surface (S8) (LRR R, MLRA 149B) 2 cm Muck (A10) (LRR K, L, MLRA 149B) Histic Epipedon (A2) Thin Dark Surface (S9) (LRR R, MLRA 149B) Coast Prairie Redox (A16) (LRR K, L, MLRA 149B) Black Histic (A3) Loamy Mucky Mineral (F1) (LRR K, L) 5 cm Mucky Peat or Peat (S3) (LRR K, L) Hydrogen Sulfide (A4) Loamy Gleyed Matrix (F3) Dark Surface (S7) (LRR K, L) Stratified Layers (A5) Depleted Matrix (F3) Polyvalue Below Surface (S8) (LRR K, L) Depleted Below Dark Surface (A11) Redox Dark Surface (F6)	
ype: C = Concentration, D = Depletion, RM = Reduced Matrix, MS = Masked Sand Grains. ² Location: PL = Pore Lining, M = Matrix. ydric Soil Indicators: Indicators for Problematic Hydric Soils ³ : _ Histosol (A1) Polyvalue Below Surface (S8) (LRR R, MLRA 149B) 2 cm Muck (A10) (LRR K, L, MLRA 149B) _ Histic Epipedon (A2) Thin Dark Surface (S9) (LRR R, MLRA 149B) Coast Prairie Redox (A16) (LRR K, L, MLRA 149B) _ Black Histic (A3) Loamy Mucky Mineral (F1) (LRR K, L) 5 cm Mucky Peat or Peat (S3) (LRR K, L) _ Hydrogen Sulfide (A4) Loamy Gleyed Matrix (F2) Dark Surface (S7) (LRR K, L) _ Stratified Layers (A5) -/ Depleted Matrix (F3) Dervleted Below Dark Surface (A10)	
ype: C = Concentration, D = Depletion, RM = Reduced Matrix, MS = Masked Sand Grains. ² Location: PL = Pore Lining, M = Matrix. ydric Soil Indicators: _ Histosol (A1) Polyvalue Below Surface (S8) (LRR R, MLRA 149B) _ Histic Epipedon (A2) Thin Dark Surface (S9) (LRR R, MLRA 149B) _ Black Histic (A3) Loamy Mucky Mineral (F1) (LRR K, L) _ Hydrogen Sulfide (A4) Loamy Gleyed Matrix (F2) _ Stratified Layers (A5) Depleted Matrix (F3) Depleted Below Dark Surface (A11) Rdox Dark Surface (F6)	
rdric Soil Indicators: Indicators: Indicators for Problematic Hydric Soils ³ : _ Histosol (A1) _ Polyvalue Below Surface (S8) (LRR R, MLRA 149B) _ 2 cm Muck (A10) (LRR K, L, MLRA 149B) _ Histic Epipedon (A2) _ Thin Dark Surface (S9) (LRR R, MLRA 149B) _ 2 cm Muck (A10) (LRR K, L, MLRA 149B) _ Black Histic (A3) _ Loamy Mucky Mineral (F1) (LRR K, L) _ 5 cm Mucky Peat or Peat (S3) (LRR K, L) _ Hydrogen Sulfide (A4) _ Loamy Gleyed Matrix (F2) _ Dark Surface (S7) (LRR K, L) _ Stratified Layers (A5) _ Depleted Matrix (F3) _ Polyvalue Below Surface (S8) (LRR K, L)	
_ Histosol (A1) Polyvalue Below Surface (S8) (LRR R, MLRA 149B) 2 cm Muck (A10) (LRR K, L, MLRA 149B) _ Histic Epipedon (A2) Thin Dark Surface (S9) (LRR R, MLRA 149B) 2 coast Prairie Redox (A16) (LRR K, L, MLRA 149B) _ Black Histic (A3) Loamy Mucky Mineral (F1) (LRR K, L) 5 cm Mucky Peat or Peat (S3) (LRR K, L) _ Hydrogen Sulfide (A4) Loamy Gleyed Matrix (F2) 0 Dark Surface (S7) (LRR K, L) _ Stratified Layers (A5) 0 Depleted Matrix (F3) 0 Dark Surface (S8) (LRR K, L) _ Depleted Below Dark Surface (A11) Redox Dark Surface (E6) 0 Dark Surface (S8) (LRR K, L)	
 Histic Epipedon (A2) Black Histic (A3) Loamy Mucky Mineral (F1) (LRR K, L) Hydrogen Sulfide (A4) Stratified Layers (A5) Depleted Matrix (F3) Depleted Below Dark Surface (A11) Redox Dark Surface (E6) 	(B)
_ Black Histic (A3) Loamy Mucky Mineral (F1) (LRR K, L) 5 cm Mucky Peat or Peat (S3) (LRR K, L) 5 cm Mucky Peat or Peat (S3) (LRR K, L) 5 cm Mucky Peat or Peat (S3) (LRR K, L) 5 cm Mucky Peat or Peat (S3) (LRR K, L) Depleted Matrix (F3) Depleted Matrix (F3) Polyvalue Below Surface (S8) (LRR K, L) Polyvalue Below Surface (S8) (LRR K, L)	2) 2)
_ Hydrogen Sulfide (A4) Loamy Gleyed Matrix (F2) Dark Surface (S7) (LRR K, L) Depleted Matrix (F3) Depleted Matrix (F3) Polyvalue Below Surface (A1) Redox Dark Surface (E6) Polyvalue Below Surface (S8) (LRR K)	. L. R)
_ Stratified Layers (A5) Depleted Matrix (F3) Polyvalue Below Surface (A11) Redox Dark Surface (F6) Polyvalue Below Surface (S8) (LRR K	, _, ,
Depleted Below Dark Surface (A11) Redox Dark Surface (F6)	, L)
_ Inick Dark Surface (ATZ) Depieted Dark Surface (F7) Iron-Manganese Masses (F12) (LRR I	<, L, R)
Sandy Mucky Mineral (S1) Redox Depressions (ro) Piedmont Floodplain Soils (F19) (ML	RA 149B)
Sandy Redox (S5) Mesic Spodic (TA6) (MLRA 144A, 145	, 149B)
Stripped Matrix (S6)	
Dark Surface (S7) (I RR R MI RA 149B)	
Other (Explain in Remarks)	
dicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.	
estrictive Layer (if observed):	
Type:None Hydric Soil Present? Yes _✓_ No	
Depth (inches):	



Photo of Sample Plot North



Photo of Sample Plot South



WETLAND DETERMINATION DATA FORM - Northcentral and Northeast Region

Project/Site: Flat Cree	k Solar Projec	t	City/County:	Canajoharie, Mo	ontgomery	County		Sampling Date:	2021-Aug-31
Applicant/Owner: S	unEast				State:	New Yo	rk	Sampling Point: <u>N</u>	/-EES-07_PEM-1
Investigator(s): Etha	n Snyder, Stev	e Spotts, Abi Lig	ht	Sect	ion, Towns	ship, Rar	nge: N/	Ą	
Landform (hillslope, te	rrace, etc.):	Depression		Local relief	(concave,	convex,	none):	Concave	Slope (%): 1 to 3
Subregion (LRR or MLF	RA): LRR	L		Lat:	42.853384	48	Long:	-74.5350585	Datum: WGS84
Soil Map Unit Name:	Phelps grave	elly loam fan						NWI classifica	ition: None
Are climatic/hydrologic	c conditions o	n the site typical	for this time	of year?	Yes 🟒	_ No	(If no	, explain in Remarl	<s.)< td=""></s.)<>
Are Vegetation,	Soil,	or Hydrology	significant	tly disturbed?	Are "N	ormal Ci	ircumst	ances" present?	Yes 🟒 No
Are Vegetation,	Soil,	or Hydrology	naturally	problematic?	(If nee	ded, exp	lain an	y answers in Rema	rks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes 🟒 No							
Hydric Soil Present?	Yes 🟒 No	Is the Sampled Area within a Wetland?	Yes 🟒 No					
Wetland Hydrology Present?	Yes 🟒 No	lf yes, optional Wetland Site ID:	W-EES-07					
Remarks: (Explain alternative procedures here or in a separate report)								
Covertype is PEM. Area is wetland, all three wetland parameters are present.								

HYDROLOGY

Wetland Hydrology Indicators:						
Primary Indicators (minimum of	one is required; check all	<u>that apply)</u>		Secondary Indicators (minimum of two required)		
 Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5) Inundation Visible on Aerial I Sparsely Vegetated Concave 	 ✓ Water Aquat Marl I Hydro Oxidiz Prese Recer Thin M magery (B7) Other 	-Stained Leaves (B9) ic Fauna (B13) Deposits (B15) gen Sulfide Odor (C1) red Rhizospheres on Living Roo nce of Reduced Iron (C4) it Iron Reduction in Tilled Soils Auck Surface (C7) (Explain in Remarks)	ots (C3) ; (C6)	 Surface Soil Cracks (B6) Drainage Patterns (B10) Moss Trim Lines (B16) Dry-Season Water Table (C2) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (C9) Stunted or Stressed Plants (D1) Geomorphic Position (D2) Shallow Aquitard (D3) Microtopographic Relief (D4) FAC-Neutral Test (D5) 		
Field Observations: Surface Water Present? Water Table Present?	Yes No Yes No	Depth (inches): 		Wetland Hydrology Present? Yes _∠_ No		
Saturation Present? (includes capillary fringe)	Yes 🟒 No	Depth (inches):	0			
Describe Recorded Data (stream Remarks: The criterion for wetland hydrolo	gauge, monitoring well, a	aerial photos, previous inspect	tions), if a	ved (primary and secondary indicators were present		

Sampling Point: W-EES-07_PEM-1

Tree Stratum (Plot size: <u>30 ft</u>)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test works	heet: Species That	_	
1. Betula alleghaniensis	5	Yes	FAC	Are OBL, FACW, or FAC	:	5	(A)
2.				Total Number of Domin	nant Species	5	(B)
3		. <u> </u>		Percent of Dominant S	pecies That		
4				Are OBL, FACW, or FAC	:	100	(A/B)
с. 		·		 Prevalence Index work 	sheet:		
7				- <u>Total % Cover</u>	of:	Multiply	<u>By:</u>
/	<u>_</u>	- Total Cou		- OBL species	25	x 1 =	25
Coulin - (Church Church and (Distriction of C ft)	5		er	FACW species	75	x 2 =	150
<u>Sapling/Shrub Stratum</u> (Plot size: <u>15 ft</u>)	-		EA CIAL	FAC species	22	x 3 =	66
1. Fraxinus pennsylvanica	5	Yes	FACW	– FACU species	0	x 4 =	0
2. Betula alleghaniensis	2	Yes	FAC	UPL species	0	x 5 =	0
3				– Column Totals	122	(A)	241 (B)
4				Prevalence Ir	ndex = B/A =		2 (3)
5				Hydrophytic Vegetation	n Indicators:		
6				1- Rapid Test for I	Hydronhytic V	/egetation	
7						egetation	
	7	= Total Cov	er	2 - Dominance re	31.13 - 50.70		
Herb Stratum (Plot size: <u>5 ft</u>)				J = Prevalence inc	Adaptations ¹	Dravida	cupporting
1. Impatiens capensis	40	Yes	FACW	data in Pomarks or on	Auaptations		supporting
2. Onoclea sensibilis	25	Yes	FACW	Problematic Hydr	onbytic Vege	tation1 (Ev	nlain)
3. <i>Glyceria striata</i>	20	No	OBL	Indicators of hydric so	il and wotland	d bydrolog	munit bo
4. Athyrium angustum	15	No	FAC	present, unless disturb	ed or probler	matic	gy must be
5. <i>Leersia oryzoides</i>	5	No	OBL	Definitions of Vegetation	on Strata:		
6. <i>Pilea pumila</i>	5	No	FACW	Tree – Woody plants 3	in. (7.6 cm) or	r more in o	diameter at
7.				breast height (DBH), re	gardless of h	eight.	
8.				Sapling/shrub - Woody	/ plants less tl	han 3 in. D	OBH and
9.				greater than or equal t	o 3.28 ft (1 m) tall.	
10.				Herb – All herbaceous	(non-woody)	plants, reg	gardless of
11.				size, and woody plants	less than 3.2	8 ft tall.	
12.				Woody vines – All wood	dy vines great	ter than 3.	.28 ft in
	110	= Total Cov	er	height.			
Woody Vine Stratum (Plot size: <u>30 ft</u>)		-		Hydrophytic Vegetatio	n Present?	/es 🟒 N	lo
1.							
2.				-			
3				-			
Δ		·		-			
···		= Total Cov	er	-			
		-					
Remarks: (Include photo numbers here or on a se	eparate sheet.)						

A positive indication of hydrophytic vegetation was observed (>50% of dominant species indexed as OBL, FACW, or FAC). A positive indication of hydrophytic vegetation was observed (Prevalence Index is \leq 3.00).

Profile Des	cription: (Describe	to the o	depth needed to	docun	nent the	indicator	or confirm the	absence of indicators	.)
Depth _	Matrix		Color (moint)	(Feat	ures	1	т		Dementer
(inches)	Color (moist)	<u>- %</u>		<u>%</u>	Type'	LOC ²		exture	Remarks
0-7	10YR 3/1	92	7.5YR 4/4	8		<u>IVI</u>		Loam	
7 - 12	2.5Y 4/1	90	7.5YR 5/6	10		<u>M</u>	Gravel	ly Silt Loam	
12 - 18	10YR 5/2	/5	5YR 5/6	25	<u> </u>	M	Silty	Clay Loam	
				· —	·				
				·					
				· —					
				·					
				·					
				·					
				·					
	Concentration D =					Mackad	Cond Craine 2		ining M = Matrix
Hydric Coll	Indicators:	Deplet	ion, Rivi – Reauce	u iviat	i i X, IVIS =	wasked	Sanu Grains, 2	Indicators for Pro-	ning, IVI – IVIdUTX.
Historo			Polyvalue P		urfaco (C	() DD I		mulcators for Prof	
Histic Fr	ninedon (A2)		Thin Dark S	irface	(S9) (I P	R MIP	149D)	2 cm Muck (A1	0) (LRR K, L, MLRA 149B)
Black Hi	istic (A3)		Loamy Muc	v Mir	eral (F1)	(LRR K. L	.)	Coast Prairie R	Redox (A16) (LRR K, L, R)
Hydroge	en Sulfide (A4)		Loamy Gley	ed Ma	trix (F2)	(- <i>y</i>	5 cm Mucky Pe	eat or Peat (S3) (LRR K, L, R)
Stratifie	d Layers (A5)		Depleted M	atrix (F3)			Dark Surface (57) (LRR K, L)
Deplete	d Below Dark Surfa	ace (A1	1) <u> ✓</u> Redox Dark	Surfa	ce (F6)			Thin Dark Surf	
Thick Da	ark Surface (A12)		Depleted Da	irk Su	rface (F7)		Iron-Mangane	se Masses (E12) (LRR K \downarrow R)
Sandy N	lucky Mineral (S1)		Redox Depr	essior	ns (F8)			Piedmont Floo	odplain Soils (F19) (MI RA 149B)
Sandy G	leyed Matrix (S4)							Mesic Spodic (TA6) (MLRA 144A, 145, 149B)
Sandy F	edox (S5)							Red Parent Ma	aterial (F21)
Stripped	d Matrix (S6)							Very Shallow D	Dark Surface (TF12)
Dark Su	rface (S7) (LRR R, N	ILRA 1	49B)					Other (Explain	in Remarks)
³ Indicators	of hydrophytic veg	etatior	n and wetland hyc	rolog	y must b	e presen	t, unless disturb	ed or problematic.	
Restrictive	Layer (if observed):								
	Туре:		None			Hydric	Soil Present?		Yes 🟒 No
	Depth (inches):			•		-			
Remarks:									
A positive i	ndication of hydric	soil wa	as observed. The o	riterio	on for hy	dric soil i	s met.		
1									



Photo of Sample Plot North Photo of Sample Plot East



Photo of Sample Plot South Photo of Sample Plot West



WETLAND DETERMINATION DATA FORM - Northcentral and Northeast Region

Project/Site: Flat Cree	k Solar Projec	City/0	County: Canajoharie, Mo	ontgomery Co	ounty	Sampling Date: 2	2021-Aug-31
Applicant/Owner: S	unEast			State: No	ew York	Sampling Point: W-	-EES-07_UPL-1
Investigator(s): Etha	n Snyder, Stev	e Spotts, Abi Light	Sec	tion, Townshij	p, Range: NA	A	
Landform (hillslope, te	rrace, etc.):	Hilltop	Local relief	(concave, cor	nvex, none):	Convex	Slope (%): 1 to 3
Subregion (LRR or MLF	RA): LRR	-	Lat:	42.853512	Long:	-74.5350752	Datum: WGS84
Soil Map Unit Name:	Phelps grave	elly loam, fan				NWI classificat	tion:
Are climatic/hydrologic	c conditions o	n the site typical for th	his time of year?	Yes 🟒 N	lo (lf no	, explain in Remark	s.)
Are Vegetation, Are Vegetation,	Soil, Soil,	or Hydrology sig or Hydrology na	gnificantly disturbed? aturally problematic?	Are "Norr (If needeo	mal Circumst d, explain any	ances" present? / answers in Remar	Yes _✔ No ks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes No 🟒							
Hydric Soil Present?	Yes No 🟒	Is the Sampled Area within a Wetland?	Yes No 🟒					
Wetland Hydrology Present?	Yes No _	lf yes, optional Wetland Site ID:						
Remarks: (Explain alternative procedures here or in a separate report)								
Covertype is UPL. Area is upland, not all three	e wetland parameters ar	e present.						

HYDROLOGY

Wetland Hydrology Indicators:							
Primary Indicators (minimum of or	<u>ne is required; check all t</u>	Secondary Indicators (minimum of two required)					
 Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5) Inundation Visible on Aerial Im Sparsely Vegetated Concave Sume 	Water- Aquatii Marl D Hydrog Oxidize Presen Recent Thin M agery (B7) Other urface (B8)	Stained Leaves (B9) c Fauna (B13) eposits (B15) gen Sulfide Odor (C1) ed Rhizospheres on Living Roots (C3) ice of Reduced Iron (C4) : Iron Reduction in Tilled Soils (C6) luck Surface (C7) (Explain in Remarks)	Surrace Soil Cracks (B6) Drainage Patterns (B10) Moss Trim Lines (B16) Dry-Season Water Table (C2) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (C9) Stunted or Stressed Plants (D1) Geomorphic Position (D2) Shallow Aquitard (D3) Microtopographic Relief (D4) FAC-Neutral Test (D5)				
Field Observations: Surface Water Present? Water Table Present? Saturation Present? (includes capillary fringe) Describe Recorded Data (stream g	Yes No Yes No Yes No auge, monitoring well, a	Depth (inches): Depth (inches): Depth (inches): erial photos, previous inspections), i	 Wetland Hydrology Present? f available:	Yes No			
Remarks: The criterion for wetland hydrolog	y is not met. No positive	indication of wetland hydrology was	s observed.				

Sampling Point: W-EES-07_UPL-1

<u>Tree Stratum</u> (Plot size: <u>30 ft</u>)	Absolute % Cover	Dominant Species?	Indicator Status	tus Dominance Test worksheet:			(A)
1. <i>Tsuga canadensis</i>	70	Yes	FACU	Are OBL, FACW, or FAC:			(/ ()
2. Betula alleghaniensis	40	Yes	FAC	Total Number of Domin Across All Strata:	5	(B)	
4		·		Percent of Dominant Species That		20	(A/B)
5				Prevalence Index works	hoot		
6	<u> </u>			Total % Cover	off.	Multiply	Byr
7				OBL species	<u>01.</u> 0	v 1 =	_ <u></u>
	110	= Total Cov	er	EACW species	0	× 2 -	0
Sapling/Shrub Stratum (Plot size: <u>15 ft</u>)		_		FACW species	10	x 2 -	120
1. Ostrya virginiana	15	Yes	FACU	FAC species	40	x 5 -	120
2.				- FACU species	92	x 4 =	368
3.				UPL species	5	x 5 =	25
4.	·	·		- Column Totals	137	(A)	513 (B)
5		·		Prevalence In	dex = B/A =	3.7	
6	·	<u> </u>		Hydrophytic Vegetation	Indicators:		
7		<u> </u>		1- Rapid Test for H	ydrophytic \	/egetatior	ו
7		Tabal Car		2 - Dominance Tes	t is > 50%		
	15	= lotal Cov	er	3 - Prevalence Index is $≤ 3.0^1$			
<u>Herb Stratum</u> (Plot size: <u>5 ft</u>)	_			4 - Morphological	Adaptations	¹ (Provide	supporting
1. Eurybia macrophylla		Yes	UPL	data in Remarks or on a	i separate sh	neet)	
2. <u>Veronica officinalis</u>	5	Yes	FACU	Problematic Hydro	ophytic Vege	tation ¹ (E	xplain)
3. Oxalis corniculata	2	No	FACU	¹ Indicators of hydric soi	l and wetlan	d hydrolo	gy must be
4				present, unless disturbe	ed or proble	matic	
5				Definitions of Vegetatio	n Strata:		
6				Tree – Woody plants 3 ir	n. (7.6 cm) oi	r more in	diameter at
7				breast height (DBH), reg	gardless of h	eight.	
8.				Sapling/shrub - Woody	plants less t	han 3 in. I	DBH and
9.				greater than or equal to	o 3.28 ft (1 m) tall.	
10.				Herb – All herbaceous (I	non-woody)	plants, re	gardless of
11.				size, and woody plants l	less than 3.2	8 ft tall.	
12.		·		Woody vines – All wood	y vines grea	ter than 3	.28 ft in
	12	= Total Cov	er	height.			
Woody Vine Stratum (Plot size: 30 ft)		-		Hydrophytic Vegetatior	n Present?	/es I	No 🔽
1							
2	·	<u> </u>		•			
2		·		•			
	·	<u> </u>					
4	0	= Total Cov	er				
	+= === +)	-					
No positive indication of hydrophytic vegetation was o	te sneet.) bserved (≥	50% of dom	inant speci	es indexed as FAC– or drie	er).		

Profile Desc	cription: (Describe	to the de	epth needed to d	ocum	nent the i	indicato	r or confirm the al	bsence of indicator	5.)		
Depth	Matrix		Redox	Feat	tures						
(inches)	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²	Texture			Re	emarks
0 - 2	10YR 4/1	100					Silt L	oam			
2 - 9	7.5YR 5/6	100					Silt Loam				
9 - 15	10YR 5/2	100					Silty Cla	y Loam			
				_							
				· —							
				-				·			
				-			. <u></u>	·			
1Turnet C = C				N. 4	W MC -	Maaliad	Canal Craina 21			A - N4atu	
Hydric Soil I	D	Depietio	on, RIVI = Reduced	Mat	TX, IVIS =	Masked	Sand Grains. ² Lo	Indicators for Pro	hlomat	vi = iviatr	IX.
Histosol			Polyvaluo Bol	~~ C	urfaco (S	(1 DD			Diema		. 50115°.
Histic Fr	ninedon (A2)		Thin Dark Su	face	(S9) (I RE		Δ 149B)	2 cm Muck (A	0) (LR	R K, L, M	LRA 149B)
Black Hi	stic (A3)		Loamy Mucky	/ Min	eral (F1)	(I RR K.		Coast Prairie I	Redox	(A16) (LR	R K, L, R)
Hvdroge	en Sulfide (A4)		Loamy Gleve	d Ma	trix (F2)	(-,	5 cm Mucky P	eat or	Peat (S3)	(LRR K, L, R)
Stratifie	d Layers (A5)		Depleted Mat	trix (I	-3)			Dark Surface	57) (LR	(R K, L)	
Deplete	d Below Dark Surfa	ace (A11) Redox Dark S	urfa	ce (F6)			Polyvalue Belo	Sur Sur	ace (58)	
Thick Da	ark Surface (A12)		Depleted Dar	k Su	rface (F7))			ace (S	9) (LKK K	, L))) (I DD I/ I D)
Sandy N	lucky Mineral (S1)		Redox Depre	ssior	ns (F8)				dolair	Soile (F12	(LKK K, L, K)
Sandy G	leyed Matrix (S4)							Fleamont Floo	тле) (13) (MERA 1430)
Sandy R	edox (S5)							Red Parent M	aterial	(F21)	, ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,
Stripped	d Matrix (S6)							Very Shallow	Dark Si	(121) Irface (Tl	F12)
Dark Su	rface (S7) (LRR R, N	ILRA 149	9B)					Other (Explain	in Rer	narks)	
3Indicators	of bydrophytic yog	otation	and wotland hydr	مامم	u must b	o procor	t uplace disturba	d or problematic			
Postrictivo	or right opright veg			ulug.	y must b	e preser	it, unless disturbe				
Restrictive		•	Nono			Ludric	Soil Procont?	,	/05	No	,
	Type.		None	•		пуштс	Soli Fresent?		es		<u> </u>
	Depth (inches):										
Remarks:	in dianting of budg			:+-		م بالانتخاص	-: :				
No positive	indication of hydr	IC SOIIS W	as observed. The	crite	erion for	nyaric s	oll is not met.				



Photo of Sample Plot North Photo of Sample Plot East



Photo of Sample Plot West

WETLAND DETERMINATION DATA FORM - Northcentral and Northeast Region

Project/Site: Flat Creek Solar Project			City/County:	Canajoharie, Montgomery County				Sampling Date: 2021-Aug-25		
Applicant/Owner: Su	unEast				State:	New York	<u>< S</u>	Sampling Point:	W-EES-08_PEM-1	
Investigator(s): Etha	n Snyder, Stev	ve Spotts, Abi Lig	ht	Sect	ion, Town	ship, Rang	e: NA			
Landform (hillslope, te	rrace, etc.):	Depression		Local relief	(concave,	convex, no	one):	Concave	Slope (%): 1 to 3	
Subregion (LRR or MLR	RA): LRR	L		Lat:	42.85400	07 L	ong:	-74.5344436	Datum: WGS84	
Soil Map Unit Name:	Fluvaquents	, loamy						NWI classifie	cation:	
Are climatic/hydrologic	c conditions o	n the site typical	for this time	of year?	Yes 🟒	_ No	(lf no,	explain in Rema	irks.)	
Are Vegetation,	Soil,	or Hydrology	significan	tly disturbed?	Are "N	ormal Circ	cumsta	ances" present?	Yes 🟒 No	
Are Vegetation,	Soil,	or Hydrology	naturally	problematic?	(If nee	ded, expla	ain any	answers in Rem	arks.)	

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes 🟒 No								
Hydric Soil Present?	Yes 🟒 No	Is the Sampled Area within a Wetland?	Yes 🟒 No						
Wetland Hydrology Present?	Yes 🟒 No	lf yes, optional Wetland Site ID:	W-EES-08						
Remarks: (Explain alternative procedures he	Remarks: (Explain alternative procedures here or in a separate report)								
Covertype is PEM. Area is wetland, all three wetland parameters are present.									

HYDROLOGY

Wetland Hydrology Indicators:						
Primary Indicators (minimum of e	one is required; check all	Secondary Indicators (minimum of two required)				
 Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5) Inundation Visible on Aerial Ir Sparsely Vegetated Concave S 	Water- Aquati Marl D Hydrog Oxidiz Preser Recem Thin M magery (B7) Other Surface (B8)	; Roots (C3) ioils (C6)	 Surface Soil Cracks (B6) Drainage Patterns (B10) Moss Trim Lines (B16) Dry-Season Water Table (C2) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (C9) Stunted or Stressed Plants (D1) Geomorphic Position (D2) Shallow Aquitard (D3) Microtopographic Relief (D4) FAC-Neutral Test (D5) 			
Field Observations:	Vac No (Dopth (inchos):				
Water Table Present?	Yes / No	Depth (inches):	15	- Wetland Hydrology Present? Yes / No		
Saturation Present?		Depth (inches):	0			
(includes capillary fringe)		Depth (menes).		-		
Describe Recorded Data (stream Remarks: The criterion for wetland hydrolo	gauge, monitoring well, a	erial photos, previous insp ation of wetland hydrolog	pections), if	available:		
			, 0000	····· (·······) -···· ···· · · · · · · · · · ·		

Sampling Point: W-EES-08_PEM-1

Tree Stratum (Plot size: 30 ft.)	Absolute	Dominant	Indicator	Dominance Test works	neet:		
	% Cover	Species?	Status	Number of Dominant Species That Are OBL, FACW, or FAC:		3	(A)
2.				Total Number of Dominant Species		3	(B)
3.				Across All Strata:			(8)
4.				Percent of Dominant S Are OBL, FACW, or FAC	pecies That	100	(A/B)
5				Prevalence Index works	sheet:		
6.				Total % Cover	<u>of:</u>	Multiply	<u>By:</u>
/				OBL species	30	x 1 =	30
	0	= lotal Cov	er	FACW species	75	x 2 =	150
Sapling/Shrub Stratum (Plot size: <u>15 ft</u>)	_			FAC species	30	x 3 =	90
1. Betula alleghaniensis	5	Yes	FAC	FACU species	0	x 4 =	0
2				UPL species	0	x 5 =	0
3				Column Totals	135	(A)	270 (B)
4				Prevalence In	idex = B/A =	2	
5				Hydrophytic Vegetation	Indicators:		
6				1- Rapid Test for F	lvdrophytic \	/egetation	
7				2 - Dominance Ter	st is $>50\%$	egetation	
	5	= Total Cov	er	. 3 - Prevalence Ind	$ex is < 3.0^{1}$		
Herb Stratum (Plot size: <u>5 ft</u>)				4 - Morphological	Adaptations	1 (Provide	sunnorting
1. <i>Impatiens capensis</i>	45	Yes	FACW	data in Remarks or on a	a separate sh	neet)	Supporting
2. Athyrium angustum	25	Yes	FAC	Problematic Hydr	ophytic Vege	tation ¹ (Ex	plain)
3. <i>Carex crinita</i>	20	No	OBL	¹ Indicators of hydric so	il and wetlan	d hvdrolo	gy must be
4. Leersia virginica	20	No	FACW	present, unless disturb	ed or proble	matic	
5. <i>Dryopteris carthusiana</i>	10	No	FACW	Definitions of Vegetation	on Strata:		
6. <i>Galium palustre</i>	10	No	OBL	Tree – Woody plants 3 i	n. (7.6 cm) oi	r more in o	diameter at
7.				breast height (DBH), re	gardless of h	eight.	
8.				Sapling/shrub - Woody	plants less t	han 3 in. D	OBH and
9.				greater than or equal to	o 3.28 ft (1 m) tall.	
10.				Herb – All herbaceous (non-woody)	plants, reg	gardless of
11.				size, and woody plants	less than 3.2	8 ft tall.	
12.				Woody vines – All wood	ly vines grea	ter than 3.	28 ft in
	130	= Total Cov	er	height.			
Woody Vine Stratum (Plot size: 30 ft)		-		Hydrophytic Vegetatio	n Present? `	Yes 🟒 N	lo
1.							
2.							
3.							
<u></u>							
	0	= Total Cov	er				
Remarks: (Include photo numbers here or on a separa	ate sheet.)						

A positive indication of hydrophytic vegetation was observed (>50% of dominant species indexed as OBL, FACW, or FAC). A positive indication of hydrophytic vegetation was observed (Prevalence Index is \leq 3.00).

Profile Des	cription: (Describe	to the	depth needed to d	docun	nent the	indicato	r or confirm the a	bsence of indicators.)
Depth	Matrix		Redox	Feat	ures			
(inches)	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²	Texture	Remarks
0 - 11	10YR 3/1	90	2.5YR 4/4	10	С	М	Loam	
11 - 18	2.5Y 3/1	85	5YR 5/8	15	С	М	Silty Clay	
				—				
				—				
				—				·
¹ Type: C = 0	Concentration, D =	Deplet	ion, RM = Reduce	d Mat	rix, MS =	Maskec	Sand Grains. ² L	ocation: PL = Pore Lining, M = Matrix.
Hydric Soil	Indicators:							Indicators for Problematic Hydric Soils ³ :
Histoso	ol (A1)		Polyvalue Be	elow S	Surface (S	58) (LRR	R, MLRA 149B)	2 cm Muck (A10) (I RR K. I. MI RA 149R)
Histic E	pipedon (A2)		Thin Dark Su	urface	(S9) (LRF	R R, MLR	A 149B)	Coast Prairie Redox (A16) (I RR K R)
Black H	istic (A3)		Loamy Mucl	ky Mir	neral (F1)	(LRR K,	L)	5 cm Mucky Peat or Peat (S3) (I RR K I R)
Hydrog	en Sulfide (A4)		Loamy Gleye	ed Ma	itrix (F2)			Dark Surface (S7) (I RR K 1)
Stratifie	ed Layers (A5)		Depleted Ma	atrix (F3)			Polyvalue Below Surface (S8) (I RR K. I.)
Deplete	ed Below Dark Surfa	ace (A1	1)_✓ Redox Dark	Surfa	ce (F6)			Thin Dark Surface (S9) (I RR K. I.)
Thick D	ark Surface (A12)		Depleted Da	irk Su	rface (F7)		Iron-Manganese Masses (F12) (I RR K. J. R)
Sandy M	Mucky Mineral (S1)		Redox Depr	essior	าร (F8)			Piedmont Floodplain Soils (F19) (MI RA 149B)
Sandy (Gleyed Matrix (S4)							Mesic Spodic (TA6) (MI RA 144A 145 149B)
Sandy F	Redox (S5)							Red Parent Material (F21)
Strippe	d Matrix (S6)							Very Shallow Dark Surface (TE12)
Dark Su	urface (S7) (LRR R, N	ILRA 1	49B)					Other (Explain in Remarks)
³ Indicators	of hydrophytic veg	etatior	n and wetland hyd	rolog	y must b	e presei	nt, unless disturbe	d or problematic.
Restrictive	Layer (if observed):							
	Туре:		None			Hydric	Soil Present?	Yes No
	Depth (inches):							
Remarks:								
A positive i	ndication of hydric	soil wa	as observed. The o	riterio	on for hy	dric soil	is met.	
·	,				,			
l								
1								
l								
l								



Photo of Sample Plot North Photo of Sample Plot East



Photo of Sample Plot South
Photo of Sample Plot West



WETLAND DETERMINATION DATA FORM - Northcentral and Northeast Region

Project/Site: Flat Cree	k Solar Projec	t City/Count	y: Canajoharie, Mo	ntgomery	County		Sampling Date:	2021-Aug-25
Applicant/Owner: S	unEast			State:	New York		Sampling Point: W	-EES-08_UPL-1
Investigator(s): Etha	n Snyder, Stev	<i>r</i> e Spotts, Abi Light	Secti	on, Towns	hip, Range	: N/	٨	
Landform (hillslope, te	rrace, etc.):	Hilltop	Local relief (concave, o	convex, no	ne):	Convex	Slope (%): 1 to 3
Subregion (LRR or MLF	RA): LRR	L	Lat:	42.854072	2 <u>5</u> Lo	ong:	-74.5343404	Datum: WGS84
Soil Map Unit Name:	Fluvaquents	, loamy					NWI classifica	tion:
Are climatic/hydrologic conditions on the site typical for this time of year? Yes 🖌 No (If no, explain in Remarks.)								
Are Vegetation,	Soil,	or Hydrology significa	antly disturbed?	Are "No	ormal Circu	umst	ances" present?	Yes 🟒 No
Are Vegetation,	Soil,	or Hydrology natural	ly problematic?	(If need	ded, explai	n any	answers in Remar	·ks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes No 🟒								
Hydric Soil Present?	Yes No 🟒	Is the Sampled Area within a Wetland? Yes No							
Wetland Hydrology Present?	Yes No _	lf yes, optional Wetland Site ID:							
Remarks: (Explain alternative procedures here or in a separate report)									
Covertype is UPL. Area is upland, not all three wetland parameters are present.									

HYDROLOGY

Wetland Hydrology Indicators:						
Primary Indicators (minimum of or	<u>ne is required; check all t</u>	<u>hat apply)</u>	Secondary Indicators (minimum of two required)			
 Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5) Inundation Visible on Aerial Image 	Water- Aquation Marl D Hydrog Oxidizen Present Thin M agery (B7) Other (urface (B8)	 				
Field Observations: Surface Water Present? Water Table Present?	Yes No 🖌 Yes No 🖌	Depth (inches):		Yes No		
Saturation Present?	Yes No _	Depth (inches):	_			
(Includes capillary fringe)						
Remarks:	auge, monitoring well, a	erial photos, previous inspections), i	f available:			
The criterion for wetland hydrolog	y is not met. No positive	indication of wetland hydrology wa	s observed.			

VEGETATION -- Use scientific names of plants.

Sampling Point: W-EES-08_UPL-1

<u>Tree Stratum</u> (Plot size: <u>30 ft</u>)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test works Number of Dominant	sheet: Species That	1	(Δ)
1. Tsuga canadensis	65	Yes	FACU	Are OBL, FACW, or FAC	2:		(//)
2. Betula alleghaniensis	10	No	FAC	Total Number of Domi Across All Strata:	inant Species	6	(B)
3 4.		<u> </u>		Percent of Dominant S	Species That	16.7	(A/B)
5.				Are OBL, FACW, OF FAC			
6.				Total & Cover	cofeet:	Multiply	D. a
7.					<u>o</u>	<u>wuupy</u>	<u>ру.</u> О
	75	= Total Cov	er	EACW species	0	× 1	0
Sapling/Shrub Stratum (Plot size: <u>15 ft</u>)		-		FACW species	15	×2- ×2-	45
1. Fagus grandifolia	10	Yes	FACU	FAC species	15	x 3 = _	45
2. Betula alleghaniensis	5	Yes	FAC	FACU species	100	× 4 = _	400
3.				UPL species	0	x 5 = _	0
4.				Column lotals	115	(A)	445 (B)
5.		·		Prevalence I	ndex = B/A =	3.9	
6				Hydrophytic Vegetatio	n Indicators:		
7		·		1- Rapid Test for	Hydrophytic V	/egetation	n
/	15	- Total Cov	or	2 - Dominance Te	est is > 50%		
Llaub Church und (Dist since Eff.)	15		ei	3 - Prevalence Inc	dex is $\leq 3.0^1$		
Herb Stratum (Plot size: <u>5 It</u>)	15	Vee	FACU	4 - Morphologica	l Adaptations	¹ (Provide	supporting
		Yes	FACU	data in Remarks or on	a separate sh	neet)	
		Yes	FACU	Problematic Hyd	rophytic Vege	tation ¹ (E>	(plain)
3. <u>Maianthemum canadense</u>	5	Yes	FACU	¹ Indicators of hydric so	oil and wetlan	d hydrolo	gy must be
4				present, unless distur	bed or proble	matic	
5		<u> </u>		Definitions of Vegetati	on Strata:		
6				Tree – Woody plants 3	in. (7.6 cm) or	r more in	diameter at
7				breast height (DBH), re	egardless of h	eight.	
8		<u> </u>		Sapling/shrub - Wood	y plants less t	han 3 in. [OBH and
9		<u> </u>		greater than or equal	to 3.28 ft (1 m) tall.	
10				Herb – All herbaceous	(non-woody)	plants, re	gardless of
11.				size, and woody plants	s less than 3.2	8 ft tall.	
12.				Woody vines – All woo	dy vines great	ter than 3	.28 ft in
	25	= Total Cov	er	height.			
Woody Vine Stratum (Plot size: 30 ft)		-		Hydrophytic Vegetation	on Present?	/es N	No 🖌
1.							
2.				-			
3.				•			
Δ		<u> </u>		•			
	0	= Total Cov	er	-			
Remarks: (Include photo numbers here or on a constat	a sheet)						
No positive indication of hydrophytic vegetation was of	convod (~	50% of dom	inant specie	os indovad as EAC- ar dr	rior)		
The positive indication of figurophytic vegetation was of		5576 01 0011	mant speck	es indexed as FAC OF U	ici <i>j</i> .		

SOIL

Profile Desc	ription: (Describe	to the de	epth needed to de	ocun	nent the i	indicato	r or confirm the a	bsence of indicators	.)	
Depth	Matrix		Redox	Feat	tures					
(inches)	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²	Tex	xture		Remarks
1 - 4	10YR 2/1	100					Org ma	tter Loam		
4 - 10	10YR 5/3	100					Silty Clay Loam			
10 - 15	10YR 5/3	95	5YR 5/4	5	С	М	Silty Clay			
				-						
				· —						
				·						
				·						
				· —						
			-							
				·						
¹ Type: C = C	oncentration, D =	Depletio	n, RM = Reduced	Mat	rix, MS =	Masked	Sand Grains. ² L	ocation: PL = Pore Li	ning, M	= Matrix.
Hydric Soil	ndicators:							Indicators for Prot	olematic	Hydric Soils ³ :
Histosol	(A1)		Polyvalue Bel	ow S	urface (S	8) (LRR I	R, MLRA 149B)	2 cm Muck (A1	0) (LRR k	(, L, MLRA 149B)
Histic Ep	oipedon (A2)		Thin Dark Su	rface	(S9) (LRF	R, MLR	A 149B)	Coast Prairie R	edox (A1	6) (LRR K, L, R)
Black Hi	stic (A3)		Loamy Mucky	/ Mir	eral (F1)	(LRR K, I	_)	5 cm Mucky Pe	at or Pe	at (S3) (LRR K, L, R)
Hydroge	en Sulfide (A4)		Loamy Gleye	d Ma	trix (F2)			Dark Surface (S	57) (LRR	K, L)
Stratifie	d Layers (A5)		Depleted Mat	trix (l	-3)			Polyvalue Belo	w Surfac	e (S8) (LRR K, L)
Deplete	d Below Dark Surf	ace (A11)) Redox Dark S	urfa	ce (F6)			Thin Dark Surf	ace (S9)	(LRR K, L)
Thick Da	ark Surface (A12)		Depleted Dar	'k Su	rface (F7))		Iron-Manganes	se Masse	es (F12) (LRR K, L, R)
Sandy N	lucky Mineral (S1)		Redox Depre	ssior	ıs (F8)			Piedmont Floo	dplain S	oils (F19) (MLRA 149B)
Sandy G	ileyed Matrix (S4)							 Mesic Spodic (TA6) (ML	RA 144A, 145, 149B)
Sandy R	edox (S5)							Red Parent Ma	terial (F2	21)
Stripped	d Matrix (S6)							Verv Shallow D	ark Surf	ace (TF12)
Dark Su	rface (S7) (LRR R, N	/LRA 149	9B)					Other (Explain	in Rema	rks)
³ Indicators	of hydronhytic yea	etation :	and wetland hydr	പറം	v must h	e nresen	it unless disturbe			
Postrictivo I	over (if observed)			0105	y mase b		it, unicos distarbe			
Restrictive		•	None			Lludric	Cail Dracant?		Vac	No. (
	Type:		None	-		Hydric	soli Present?		res	_ INO
	Depth (inches):									
Remarks:										
No positive	indication of hydr	ic soils w	as observed. The	crite	erion for	hydric so	oil is not met.			

Soil Photos



Photo of Sample Plot North Photo of Sample Plot East



Photo of Sample Plot South Photo of Sample Plot West



WETLAND DETERMINATION DATA FORM - Northcentral and Northeast Region

Project/Site: Flat Cree	k Solar Projec	t	City/County:	Canajoharie, Mo	ontgomery	County		Sampling Date: 2	2021-Aug-25
Applicant/Owner: S	unEast				State:	New Yorl	k l	Sampling Point: W-	-EES-09_PEM-1
Investigator(s): Etha	n Snyder, Ste	ve Spotts, Abi Lig	ht	Sec	tion, Town	ship, Rang	ge: NA	A	
Landform (hillslope, te	rrace, etc.):	Depression		Local relief	(concave,	convex, n	one):	Concave	Slope (%): 1 to 3
Subregion (LRR or MLF	RA): LRR	L		Lat:	42.85342	94 L	ong:	-74.5341029	Datum: WGS84
Soil Map Unit Name:	Fluvaquents	, loamy						NWI classificat	tion: R2UB, R2UBH
Are climatic/hydrologic conditions on the site typical for this time of year? Yes 🖌 No (If no, explain in Remarks.)									
Are Vegetation,	Soil,	or Hydrology	significant	tly disturbed?	Are "N	ormal Cire	cumst	ances" present?	Yes 🟒 No
Are Vegetation,	Soil,	or Hydrology	naturally	problematic?	(If nee	ded, expla	ain any	y answers in Remar	ks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes 🟒 No									
Hydric Soil Present?	Yes 🖌 No	Is the Sampled Area within a Wetland?	Yes 🯒 No							
Wetland Hydrology Present?	Yes 🟒 No	If yes, optional Wetland Site ID:	W-EES-09							
Remarks: (Explain alternative procedures here or in a separate report)										
Covertype is PEM. Area is wetland, all three wetland parameters are present.										

HYDROLOGY

Wetland Hydrology Indicators:			
Primary Indicators (minimum of one is required; check all that apply)	Secondary Indicators (minimum of two required)Surface Soil Cracks (B6)Drainage Patterns (B10)Moss Trim Lines (B16)Dry-Season Water Table (C2)Crayfish Burrows (C8)Saturation Visible on Aerial Imagery (C9)Stunted or Stressed Plants (D1)Geomorphic Position (D2)Shallow Aquitard (D3)Microtopographic Relief (D4)FAC-Neutral Test (D5)		
 Surface Water (A1) High Water Table (A2) Aquatic Fauna (B13) Saturation (A3) Marl Deposits (B15) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5) Inundation Visible on Aerial Imagery (B7) Sparsely Vegetated Concave Surface (B8) 			
Field Observations:			
Water Table Present? Yes / No Depth (inches):	Watland Hydrology Procent? Ves. (No.		
Saturation Present? Ves / No Depth (inches):			
(includes capillary fringe) $1 = \frac{1}{2} + \frac{1}{2} + \frac{1}{2} = \frac{1}{2} + $	-		
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), i Remarks: The criterion for wetland hydrology is met. A positive indication of wetland hydrology was obs	f available: erved (primary and secondary indicators were present).		

VEGETATION -- Use scientific names of plants.

Sampling Point: W-EES-09_PEM-1

Tree Stratum (Plot size: <u>30 ft</u>)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksho Number of Dominant Sp	eet: ecies That	2	
1. Ostrya virginiana	25	Yes	FACU	Are OBL, FACW, or FAC:		3	(A)
2.				 Total Number of Domina Across All Strata: 	ant Species	4	(B)
4.				 Percent of Dominant Spe Are OBL, FACW, or FAC: 	ecies That	75	(A/B)
5				Prevalence Index worksh	neet:		
6.				Total % Cover o	<u>f:</u>	Multiply	By:
7				- OBL species	0	x 1 =	0
	25	= Total Cov	er	FACW species	60	x 2 =	120
Sapling/Shrub Stratum (Plot size: <u>15 ft</u>)				FAC species	25	x 3 =	75
1				FACU species	25	x 4 =	100
2				UPL species	0	x 5 =	0
3				– Column Totals	110	(A)	295 (B)
4				Prevalence Ind	ex = B/A =	2.7	
5					ndicators:		
6				1- Rapid Test for H	drophytic \	/ogotation	,
7						egetation	1
	0	= Total Cov	er	✓ 2 - Dominance rest	v is < 3.01		
<u>Herb Stratum</u> (Plot size: <u>5 ft</u>)				J - Morphological A	dantations'	1 (Provide	supporting
1. <i>Impatiens capensis</i>	35	Yes	FACW	- data in Remarks or on a	senarate sh	reet)	supporting
2. Dryopteris carthusiana	15	Yes	FACW	Problematic Hydro	nhvtic Vege	tation ¹ (F	xolain)
3. Toxicodendron radicans	15	Yes	FAC	¹ Indicators of hydric soil	and wetlan	d hydrolc	gy must be
4. Persicaria virginiana	10	No	FAC	present, unless disturbe	d or problei	matic	8)
5. <i>Viola blanda</i>	10	No	FACW	Definitions of Vegetation	Strata:		
6.				Tree – Woody plants 3 in	. (7.6 cm) oi	r more in	diameter at
7.				breast height (DBH), rega	ardless of h	eight.	
8.				Sapling/shrub - Woody p	olants less t	han 3 in.	DBH and
9.				greater than or equal to	3.28 ft (1 m) tall.	
10.				Herb – All herbaceous (n	on-woody)	plants, re	gardless of
11.				size, and woody plants le	ess than 3.2	8 ft tall.	
12.		·		Woody vines – All woody	vines great	ter than 3	.28 ft in
	85	= Total Cov	er	height.			
<u>Woody Vine Stratum</u> (Plot size: <u>30 ft</u>)				Hydrophytic Vegetation	Present?	res 🟒 I	No
·		·		-			
2.				-			
3		·		-			
4				-			
	0	= Fotal Cov	er				

Remarks: (Include photo numbers here or on a separate sheet.)

A positive indication of hydrophytic vegetation was observed (>50% of dominant species indexed as OBL, FACW, or FAC). A positive indication of hydrophytic vegetation was observed (Prevalence Index is \leq 3.00). A positive indication of hydrophytic vegetation was observed (Morphological Adaptations). raised buttresses, shallow roots on trees.

SOIL

(inches)	Matrix		' Redo	/ Fost	ient the i	ndicator or confir	m the absence of indica	tors.)
(incrics)	Color (moist)	%	Color (moist)	%	Type ¹		Texture	Remarks
0-85	10VR 4/1	95	5VR 4/4		<u>- iype</u>		Silt Loam	Remarks
85-15	10VR 4/1	90	5YR 5/6	10			Silt Loam	
15 - 20	2 57 1/1	90	2 5VP ///	10			Silty Clay Loam	
15 20	2.31 4/1		2.511(4)4					
						·		
				·		·		
						·		
				·		<u> </u>		
						·		
						·		
<u> </u>						·		
				·		<u> </u>		
<u> </u>				. —		<u> </u>		
'Type: C = Co	oncentration, D =	Depleti	ion, RM = Reduce	d Mat	rıx, MS =	Masked Sand Gra	Ins. ² Location: PL = Po	re Lining, M = Matrix.
Hydric Soil II	ndicators:						Indicators for	Problematic Hydric Soils ³ :
Histosol	(A1)		Polyvalue Be	elow S	urface (S	8) (LRR R, MLRA 1	49B) 2 cm Muck	(A10) (LRR K, L, MLRA 149B)
Histic Ep	ipedon (A2)		Thin Dark Si	urface	(S9) (LRR	R, MLRA 149B)	Coast Prai	ie Redox (A16) (LRR K, L, R)
Black His	stic (A3)		Loamy Mucl	ky Mir	ieral (F1)	(LRR K, L)	5 cm Muck	y Peat or Peat (S3) (LRR K, L, R)
Hydroge	n Suilide (A4)		Loarny Gley	ed Ma	(FZ)		Dark Surfa	ce (S7) (LRR K, L)
Stratified	l Below Dark Surfa	ace (A1	1) Redox Dark	Surfa	-5) re (F6)		Polyvalue I	Below Surface (S8) (LRR K, L)
Depicted	rk Surface (A12)		Depleted Da	ark Su	rface (F7)		Thin Dark	Surface (S9) (LRR K, L)
Sandy M	ucky Mineral (S1)		Redox Depr	essior	nace (i 7) ns (F8)		Iron-Mang	anese Masses (F12) (LRR K, L, R)
Sandy G	eved Matrix (S4)			000101	15 (1 0)		Piedmont	Floodplain Soils (F19) (MLRA 149B)
Sandy R	dox (S5)						Mesic Spo	dic (TA6) (MLRA 144A, 145, 149B)
Strinned	Matrix (S6)						Red Paren	t Material (F21)
Suippeu			19B)				Very Shallo	ow Dark Surface (TF12)
Dark Sur	face (S7) (I RR R M						Other (Exp	lain in Remarks)
Dark Sur	face (S7) (LRR R, N		1507					,
Dark Sur ³ Indicators c	face (S7) (LRR R, M of hydrophytic veg	etation	and wetland hyc	Irolog	y must be	e present, unless	disturbed or problemati	c.
Dark Sur ³ Indicators c Restrictive L	face (S7) (LRR R, M of hydrophytic veg ayer (if observed):	etation	and wetland hyd	Irolog	y must be	e present, unless	listurbed or problemati	c.
Dark Sur ³ Indicators c Restrictive L	face (S7) (LRR R, M of hydrophytic veg ayer (if observed): Type:	etation	and wetland hyc	Irolog	y must be	e present, unless Hydric Soil Prese	listurbed or problemati nt?	c. Yes _∠_ No
Dark Sur ³ Indicators c Restrictive L	face (S7) (LRR R, M of hydrophytic veg ayer (if observed): Type: Depth (inches):	etation	and wetland hyc	Irolog -	y must be	e present, unless Hydric Soil Prese	disturbed or problemati nt?	c. Yes _ 🖌 No
Dark Sur ³ Indicators c Restrictive L	face (S7) (LRR R, N of hydrophytic veg ayer (if observed): Type: Depth (inches):	etation	and wetland hyd	Irolog	y must be	e present, unless Hydric Soil Prese	disturbed or problemati nt?	c. Yes _∠_ No
Dark Sur ³ Indicators c Restrictive L Remarks: A positive in	face (S7) (LRR R, N of hydrophytic veg ayer (if observed): Type: Depth (inches): dication of hydric	etation 	None None	Irolog	y must be	e present, unless Hydric Soil Prese dric soil is met.	disturbed or problemati nt?	с. Yes No
Dark Sur ³ Indicators of Restrictive L Remarks: A positive in	face (S7) (LRR R, N of hydrophytic veg ayer (if observed): Type: Depth (inches): dication of hydric	etation soil wa	None None	Irolog 	y must be	e present, unless Hydric Soil Prese dric soil is met.	disturbed or problemati	<u>c.</u> Yes _∠_ No
Dark Sur ³ Indicators c Restrictive L Remarks: A positive in	face (S7) (LRR R, N of hydrophytic veg ayer (if observed): Type: Depth (inches): dication of hydric	etation soil wa	None None	Irolog 	y must be	e present, unless Hydric Soil Prese dric soil is met.	disturbed or problemati	Yes No
Dark Sur ³ Indicators of Restrictive L Remarks: A positive in	face (S7) (LRR R, N of hydrophytic veg ayer (if observed): Type: Depth (inches): dication of hydric	etation soil wa	None None	lrolog	y must be	e present, unless Hydric Soil Prese dric soil is met.	disturbed or problemati	c Yes _∠_ No
Dark Sur ³ Indicators c Restrictive L Remarks: A positive in	face (S7) (LRR R, M of hydrophytic veg ayer (if observed): Type: Depth (inches): dication of hydric	etation soil wa	None None	Irolog 	y must be	e present, unless Hydric Soil Prese dric soil is met.	disturbed or problemati	c. Yes _∠_ No
Dark Sur ³ Indicators of Restrictive L Remarks: A positive in	face (S7) (LRR R, M of hydrophytic veg ayer (if observed): Type: Depth (inches): dication of hydric	etation soil wa	None None	riterio	y must be	e present, unless Hydric Soil Prese dric soil is met.	disturbed or problemati	<u>No</u>
Dark Sur ³ Indicators c Restrictive L Remarks: A positive in	face (S7) (LRR R, N of hydrophytic veg ayer (if observed): Type: Depth (inches): dication of hydric	etation soil wa	None None	Irolog 	y must be	e present, unless Hydric Soil Prese dric soil is met.	disturbed or problemati	<u>No</u>
Dark Sur ³ Indicators c Restrictive L Remarks: A positive in	face (S7) (LRR R, N of hydrophytic veg ayer (if observed): Type: Depth (inches): dication of hydric	soil wa	None None	Irolog criterio	y must be	e present, unless Hydric Soil Prese dric soil is met.	disturbed or problemati	<u>No</u>
Dark Sur ³ Indicators c Restrictive L Remarks: A positive in	face (S7) (LRR R, N of hydrophytic veg ayer (if observed): Type: <u>Depth (inches):</u> dication of hydric	soil wa	None None	riterio	y must be	e present, unless Hydric Soil Prese	disturbed or problemati	c. Yes No
Dark Sur ³ Indicators c Restrictive L Remarks: A positive in	face (S7) (LRR R, M of hydrophytic veg ayer (if observed): Type: <u>Depth (inches):</u> dication of hydric	soil wa	n and wetland hyd None	lrolog	y must be	e present, unless Hydric Soil Prese	disturbed or problemati	<u>No</u>
Dark Sur ³ Indicators c Restrictive L Remarks: A positive in	face (S7) (LRR R, N of hydrophytic veg ayer (if observed): Type: <u>Depth (inches):</u> dication of hydric	soil wa	n and wetland hyd None	Irolog	y must be	e present, unless Hydric Soil Prese	disturbed or problemati	<u>No</u>
Dark Sur ³ Indicators c Restrictive L Remarks: A positive in	face (S7) (LRR R, M of hydrophytic veg ayer (if observed): Type: Depth (inches): dication of hydric	soil wa	n and wetland hyd None	Irolog	y must be	e present, unless Hydric Soil Prese	disturbed or problemati	<u>No</u>
Dark Sur ³ Indicators of Restrictive L Remarks: A positive in	face (S7) (LRR R, M of hydrophytic veg ayer (if observed): Type: Depth (inches): dication of hydric	soil wa	n and wetland hyd None	Irolog	y must be	e present, unless Hydric Soil Prese	disturbed or problemati	<u>No</u>
Dark Sur ³ Indicators of Restrictive L Remarks: A positive in	face (S7) (LRR R, N of hydrophytic veg ayer (if observed): Type: Depth (inches): dication of hydric	soil wa	n and wetland hyd None	Irolog	y must be	e present, unless Hydric Soil Prese	disturbed or problemati	<u>No</u>
Dark Sur ³ Indicators of Restrictive L Remarks: A positive in	face (S7) (LRR R, N of hydrophytic veg ayer (if observed): Type: Depth (inches): dication of hydric	soil wa	n and wetland hyd None	riteric	y must be	e present, unless Hydric Soil Prese dric soil is met.	disturbed or problemati	<u>No</u>
Dark Sur ³ Indicators of Restrictive L Remarks: A positive in	face (S7) (LRR R, N of hydrophytic veg ayer (if observed): Type: Depth (inches): dication of hydric	soil wa	n and wetland hyd None	riteric	y must be	e present, unless Hydric Soil Prese dric soil is met.	disturbed or problemati	<u></u>
Dark Sur ³ Indicators of Restrictive L Remarks: A positive in	face (S7) (LRR R, N of hydrophytic veg ayer (if observed): Type: Depth (inches): dication of hydric	soil wa	n and wetland hyd None	Irolog	y must be	e present, unless Hydric Soil Prese dric soil is met.	disturbed or problemati	<u></u>
Dark Sur ³ Indicators of Restrictive L Remarks: A positive in	face (S7) (LRR R, N of hydrophytic veg ayer (if observed): Type: Depth (inches): dication of hydric	soil wa	n and wetland hyd None	Irolog	y must be	e present, unless Hydric Soil Prese dric soil is met.	disturbed or problemati	YesNo

Soil Photos



Photo of Sample Plot North Photo of Sample Plot East



Photo of Sample Plot South





WETLAND DETERMINATION DATA FORM - Northcentral and Northeast Region

Project/Site: Flat Creek	k Solar Projec	t City	/County: Ca	anajoharie, Mor	itgomery	County		Sampling Date:	2021-Aug-25
Applicant/Owner: Su	unEast				State:	New Yor	rk :	Sampling Point: \	N-EES-09_UPL-1
Investigator(s): Ethai	n Snyder, Stev	e Spotts, Abi Light		Sectio	on, Towns	ship, Ran	ge: NA	A	
Landform (hillslope, ter	rrace, etc.):	Hilltop		Local relief (concave,	convex, n	none):	Convex	Slope (%): 1 to 3
Subregion (LRR or MLR	A): LRR	L		Lat: 4	2.853242	24	Long:	-74.533763	Datum: WGS84
Soil Map Unit Name:	Fluvaquents	, loamy						NWI classific	ation:
Are climatic/hydrologic	conditions o	n the site typical for t	this time of	year?	Yes 🟒	_ No	_(lf no	, explain in Remai	rks.)
Are Vegetation,	Soil,	or Hydrology s	significantly	disturbed?	Are "N	ormal Cir	rcumst	ances" present?	Yes 🟒 No
Are Vegetation,	Soil,	or Hydrology r	naturally pro	oblematic?	(lf nee	ded, expl	ain any	y answers in Rema	arks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes No 🟒								
Hydric Soil Present?	Yes No 🟒	Is the Sampled Area within a Wetland? Yes No							
Wetland Hydrology Present?	Yes No _	lf yes, optional Wetland Site ID:							
Remarks: (Explain alternative procedures here or in a separate report)									
Covertype is UPL. Area is upland, not all three wetland parameters are present.									

HYDROLOGY

Wetland Hydrology Indicators:					
Primary Indicators (minimum of or	<u>ne is required; check all t</u>	<u>hat apply)</u>	Secondary Indicators (minimum	of two required)	
 Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5) Inundation Visible on Aerial Im Sparsely Vegetated Concave Sume 	Water- Aquatii Marl D Hydrog Oxidize Presen Recent Thin M agery (B7) Other urface (B8)	Stained Leaves (B9) c Fauna (B13) eposits (B15) gen Sulfide Odor (C1) ed Rhizospheres on Living Roots (C3) ice of Reduced Iron (C4) : Iron Reduction in Tilled Soils (C6) luck Surface (C7) (Explain in Remarks)	 Surface Soil Cracks (B6) Drainage Patterns (B10) Moss Trim Lines (B16) Dry-Season Water Table (C2) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (C9) Stunted or Stressed Plants (D1) Geomorphic Position (D2) Shallow Aquitard (D3) Microtopographic Relief (D4) FAC-Neutral Test (D5) 		
Field Observations: Surface Water Present? Water Table Present? Saturation Present? (includes capillary fringe) Describe Recorded Data (stream g	Yes No Yes No Yes No auge, monitoring well, a	Depth (inches): Depth (inches): Depth (inches): erial photos, previous inspections), i	 Wetland Hydrology Present? f available:	Yes No	
Remarks: The criterion for wetland hydrolog	y is not met. No positive	indication of wetland hydrology was	s observed.		

VEGETATION -- Use scientific names of plants.

Sampling Point: W-EES-09_UPL-1

	% Cover	Species?	Status	Number of Dominant S	pecies That	0	(A)	
1. Tsuga canadensis	70	Yes	FACU	Are OBL, FACW, or FAC				
2. Fagus grandifolia	5	No	FACU	Total Number of Domir Across All Strata:	nant Species	4	(B)	
4		·		Percent of Dominant Species That		0	(A/B)	
5				Prevalence Index works	choot:			
6				Total % Cover	of:	Multiph	/ Bvr	
7					0	v 1 =	<u>, by.</u> 0	
	75	= Total Cov	er	EACW species	0	× 2 –	0	
Sapling/Shrub Stratum (Plot size: <u>15 ft</u>)		-		FACW species	0	x 2 -	0	
1. Fagus grandifolia	10	Yes	FACU	FAC species	0	x 3 =	0	
2.		· ·		- FACU species	100	x 4 =	400	
3.				UPL species	0	x 5 =	0	
4		·		Column Totals	100	(A)	400 (B)	
5				Prevalence In	ndex = B/A =	4		
s		·		Hydrophytic Vegetatior	n Indicators:			
o		·		1- Rapid Test for H	- Hydrophytic V	'egetatio	n	
7				2 - Dominance Te	st is > 50%			
	10	= lotal Cov	er	$3 - Prevalence Index is \le 3.0^{1}$				
<u>Herb Stratum</u> (Plot size: <u>5 ft</u>)				4 - Morphological	Adaptations ¹	(Provide	e supporting	
1. Ostrya virginiana	10	Yes	FACU	 data in Remarks or on a separate sheet) 				
2. Acer saccharum	5	Yes	FACU	Problematic Hydr	ophytic Vege	tation ¹ (E	xplain)	
3				¹ Indicators of hydric so	il and wetlan	d hydrolo	ogy must be	
4				present, unless disturb	ed or probler	matic	0,	
5				Definitions of Vegetation	on Strata:			
6.				Tree – Woody plants 3 i	in. (7.6 cm) or	more in	diameter at	
7.				breast height (DBH), re	gardless of h	eight.		
8.		·		Sapling/shrub - Woody	o plants less tl	han 3 in.	DBH and	
9.				greater than or equal to	o 3.28 ft (1 m) tall.		
10		· ·		Herb – All herbaceous ((non-woody)	plants, re	egardless of	
11				size, and woody plants	less than 3.2	8 ft tall.	-	
12		······································		Woody vines – All wood	dy vines great	er than 3	3.28 ft in	
12	15	= Total Cov	er	height.				
Woody Vine Stratum (Plot size: 30 ft)		-		Hydrophytic Vegetatio	n Present?	/es	No 🟒	
1.								
2				•				
				•				
		·						
4	0	= Total Cov	er					
		-						
Remarks: (Include photo numbers here or on a separa	ate sheet.)							
No positive indication of hydrophytic vegetation was o	observed (≥	50% of dom	iinant speci	es indexed as FAC– or dri	er).			

SOIL

Profile De	scription: (Describe	to the d	lepth needed to c	locum	nent the i	indicato	r or confirm the at	osence of indicators	.)	
Depth	Matrix		Redo	x Feat	ures					
(inches)	Color (moist)	%	Color (moist)	<u>%</u>	Type ¹	Loc ²	Tex	ture		Remarks
0 - 3	10YR 2/1	100		·			Org mat	tter Loam		
3 - 5	2.5Y 4/2	100					Silt	Loam		
5 - 12	7.5YR 5/3	100					Silty Cl	ay Loam		
12 - 18	7.5YR 4/3	90	10YR 6/1	10	D	Μ	Silty	/ Clay		
	·									
	·									
17						N 4	Canal Crains 21			Maturia
'Type: C =	Concentration, D =	Depleti	on, RM = Reduced	d Mati	fix, MS =	Masked	Sand Grains. ² Lo	ocation: PL = Pore Li	ning, M	= Matrix.
Hydric Soi	I Indicators:				<i>c</i>			Indicators for Prot	lematic	Hydric Soils ³ :
Histos	ol (A1)		Polyvalue Be	elow S	urface (S	8) (LRR	R, MLRA 149B)	2 cm Muck (A1	0) (LRR H	K, L, MLRA 149B)
Histic I	Epipedon (A2)		Thin Dark Su	irface	(S9) (LRF	R, MLR	A 149B)	Coast Prairie R	edox (A´	16) (LRR K, L, R)
Black H	HISTIC (A3)				eral (F1)	(LRR K, I	_)	5 cm Mucky Pe	at or Pe	at (S3) (LRR K, L, R)
Hydrog	gen Sullide (A4)		Loarny Gleye	ed IVIa	LFIX (FZ)			Dark Surface (S	57) (LRR	K, L)
Stratin	ed Layers (AS) ad Balow Dark Surf		Depleted Ma	Surfa	-5) -6 (E6)			Polyvalue Belo	w Surfac	ce (S8) (LRR K, L)
Depiet	Dark Surface (A12)		Depleted Da	rk Sui	face (F7))		Thin Dark Surfa	ace (S9)	(LRR K, L)
Sandy	Mucky Mineral (S1)		Bedox Depre	ession	1000 (F8)	,		Iron-Manganes	se Masse	es (F12) (LRR K, L, R)
Sandy	Gloved Matrix (SA)			235101	13 (1 0)			Piedmont Floo	dplain S	oils (F19) (MLRA 149B)
Sandy	Reday (S5)							Mesic Spodic (ГА6) (ML	RA 144A, 145, 149B)
Strippy	neuox (55) ad Matrix (56)							Red Parent Ma	terial (F2	21)
Suippe								Very Shallow D	ark Surf	ace (TF12)
Dark S	uriace (57) (LKK K, r	VILKA 14	190)					Other (Explain	in Rema	irks)
³ Indicator	s of hydrophytic veg	getation	and wetland hyd	rolog	y must b	e preser	nt, unless disturbe	d or problematic.		
Restrictive	e Layer (if observed)	:								
	Type:		None			Hydric	Soil Present?		Yes	_ No _
	Depth (inches):			-		5				
Remarks [.]										
No positiv	e indication of hydr	ic soils v	was observed. Th	e crite	rion for	hydric s	oil is not met.			

Soil Photos



Photo of Sample Plot North

Photo of Sample Plot East



Photo of Sample Plot South Photo of Sample Plot West



WETLAND DETERMINATION DATA FORM - Northcentral and Northeast Region

Project/Site: Flat Cree	k Solar Projec	t	City/County:	Canajoharie, M	Iontgomery	County		Sampling Date:	2021-Aug-25	
Applicant/Owner: S	unEast				State:	New Yor	ſk	Sampling Point: <u>\</u>	W-EES-10_PEM-1	
Investigator(s): Etha	n Snyder, Abi	Light		Se	ction, Town	ship, Ran	ge: N/	4		
Landform (hillslope, te	rrace, etc.):	Depression		Local relie	ef (concave,	convex, r	none):	Concave	Slope (%): 1	to 3
Subregion (LRR or MLF	RA): LRR	L		Lat	42.85297	48	Long:	-74.533804	Datum: WGS	584
Soil Map Unit Name:	Churchville	silty clay loam, 3	to 8 percent	slopes				NWI classific	ation: None	
Are climatic/hydrologic	c conditions o	n the site typical	for this time	of year?	Yes 🟒	_ No	_(lf no	, explain in Rema	rks.)	
Are Vegetation, Are Vegetation,	Soil, Soil,	or Hydrology or Hydrology	significant naturally	tly disturbed? problematic?	Are "N (If nee	ormal Ciı ded, expl	rcumst ain an	ances" present? y answers in Rem	Yes 🟒 No arks.)	

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes 🟒 No									
Hydric Soil Present?	Yes 🟒 No	Is the Sampled Area within a Wetland?	Yes 🯒 No							
Wetland Hydrology Present?	Yes 🟒 No	If yes, optional Wetland Site ID:	W-EES-10							
Remarks: (Explain alternative procedures here or in a separate report)										
Covertype is PEM. Area is wetland, all three wetland parameters are present.										

HYDROLOGY

Wetland Hydrology Indicators:			
Primary Indicators (minimum of one is required; check all that apply)		Secondary Indicators (minimum of two required)	
	g Roots (C3) Soils (C6)	 Surface Soil Cracks (B6) Drainage Patterns (B10) Moss Trim Lines (B16) Dry-Season Water Table (C2) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (C9) Stunted or Stressed Plants (D1) Geomorphic Position (D2) Shallow Aquitard (D3) Kicrotopographic Relief (D4) FAC-Neutral Test (D5) 	
Field Observations: Surface Water Present? Yes No Depth (inches): Water Table Present? Yes No Depth (inches):			
Saturation Present? Yes 🖌 No Depth (inches):	0	_	
(includes capillary fringe)			
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous insp Remarks: The criterion for wetland hydrology is met. A positive indication of wetland hydrology	pections), if	f available: erved (primary and secondary indicators were present).	

VEGETATION -- Use scientific names of plants.

Sampling Point: W-EES-10_PEM-1

Trop Stratum (Plot size: 20 ft.)	Absolute	Dominant	Indicator	Dominance Test worksheet:		
	% Cover	Species?	Status	Number of Dominant Species T	hat	3 (A)
1. <i>Ulmus americana</i>	20	Yes	FACW	Are OBL, FACW, or FAC:	. —	
2. <i>Carya ovata</i>	2	No	FACU	- Across All Strata:	cies	4 (B)
3. Acer saccharum	2	No	FACU	- Percent of Dominant Species T		
4				- Are OBL, FACW, or FAC:	75 (A/B)	
6				 Prevalence Index worksheet: 		
7				- <u>Total % Cover of:</u>	<u>Multir</u>	<u>oly By:</u>
/	24	- Total Cov	or	- OBL species 5	x 1 =	5
Capling/Chruh Stratum (Diat size) 15 ft)	24	- 10tal COV	ei	FACW species 110	x 2 =	220
<u>Sapiing/Shrub Stratum</u> (Plot Size. <u>15 it</u>)	F	Vac		FAC species 20	x 3 =	60
	5	res	FACU	FACU species 9	x 4 =	36
2.				UPL species 0	x 5 =	0
3.				- Column Totals 144	(A)	321 (B)
4.				Prevalence Index = B	A =2.2	
5.				- Hydrophytic Vegetation Indicat	ors:	
b				1- Rapid Test for Hydroph	/tic Vegetat	ion
7				2 - Dominance Test is >50	6	
	5	= lotal Cov	er	$_{4}$ 3 - Prevalence Index is ≤ 3	.0 ¹	
<u>Herb Stratum</u> (Plot size: <u>5 ft</u>)				4 - Morphological Adaptat	ions¹ (Provi	de supporting
1. Impatiens capensis	60	Yes	FACW	- data in Remarks or on a separa	te sheet)	
2. <u>Onoclea sensibilis</u>	30	Yes	FACW	Problematic Hydrophytic	/egetation ¹	(Explain)
3. <u>Solidago rugosa</u>	15	No	FAC	- ¹ Indicators of hydric soil and we	etland hydro	ology must be
4. Athyrium angustum	5	No	FAC	present, unless disturbed or pr	oblematic	
5. <i>Galium palustre</i>	5	No	OBL	Definitions of Vegetation Strata	:	
6				Tree – Woody plants 3 in. (7.6 c	n) or more	in diameter at
7				_ breast height (DBH), regardless	of height.	
8				Sapling/shrub – Woody plants l	ess than 3 i	n. DBH and
9				greater than or equal to 3.28 ft	(1 m) tall.	
10				Herb – All herbaceous (non-wo	ody) plants,	regardless of
11				size, and woody plants less tha	1 3.28 ft tall	
12				Woody vines – All woody vines	greater than	n 3.28 ft in
	115	= Total Cov	er	neight.		
<u>Woody Vine Stratum</u> (Plot size: <u>30 ft</u>)		_		Hydrophytic Vegetation Preser	t?Yes 🟒	_ No
1						
2.				_		
3.				_		
4.						
	0	= Total Cov	er	-		
		-				

Remarks: (Include photo numbers here or on a separate sheet.)

A positive indication of hydrophytic vegetation was observed (>50% of dominant species indexed as OBL, FACW, or FAC). A positive indication of hydrophytic vegetation was observed (Prevalence Index is \leq 3.00). A positive indication of hydrophytic vegetation was observed (Morphological Adaptations). raised buttresses, shallow/exposed roots on trees.

SOIL

0 - 5	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²	Texture Remarks
	10YR 4/1	90	5YR 5/6	10	С	M Silt	y Clay Loam
5 - 15.5	2.5Y 5/1	85	2.5YR 4/4	15	С	M	Silty Clay
5.5 - 20	2.5Y 5/1	75	2.5YR 5/4	25	С	Μ	Clay
				. —			
/pe: C = Co	oncentration, D = D	Depleti	on, RM = Reduced	d Matr	ix, MS =	Masked Sand Grains	s. ² Location: PL = Pore Lining, M = Matrix.
dric Soil Ir	ndicators:				6 (6)		Indicators for Problematic Hydric Soils ³ :
_ Histosol ((A1)		Polyvalue Be	elow S	urface (S	8) (LRR R, MLRA 149	B) 2 cm Muck (A10) (LRR K, L, MLRA 149B)
Black His	tic (A3)			w Min	(59) (LKK eral (F1) (R, MILKA 149D)	Coast Prairie Redox (A16) (LRR K, L, R)
Hvdrogei	n Sulfide (A4)		Loamy Gleve	ad Ma	trix (F2)		5 cm Mucky Peat or Peat (S3) (LRR K, L, R)
Stratified	Layers (A5)		Depleted Ma	atrix (F	:3)		Dark Surface (S7) (LRR K, L)
_ Depleted	Below Dark Surfa	ce (A1´) Redox Dark	Surfac	e (F6)		Polyvalue Below Surface (S8) (LRR K, L)
_ Thick Da	rk Surface (A12)		Depleted Da	ırk Sur	face (F7)		Iron-Mangapese Masses (E12) (I PR K P)
_Sandy M	ucky Mineral (S1)		Redox Depr	ession	s (F8)		Piedmont Floodplain Soils (F19) (MI RA 1498
_ Sandy Gl	eyed Matrix (S4)						Mesic Spodic (TA6) (MLRA 144A, 145, 149B)
_ Sandy Re	edox (S5)						Red Parent Material (F21)
_ Stripped	Matrix (S6)						Very Shallow Dark Surface (TF12)
_ Dark Sur	face (S7) (LRR R, M	LRA 14	9B)				Other (Explain in Remarks)
dicators o	f hydrophytic vege	etation	and wetland hyd	rology	/ must be	e present, unless dis	turbed or problematic.
strictive La	ayer (if observed):						
	Туре:		Heavy clay	_		Hydric Soil Present	? Yes 🖌 No
	Depth (inches):		15.5				
	dication of hydric s	soil wa	s observed. The c	riteric	on for hyd	lric soil is met.	

Soil Photos



Photo of Sample Plot North Photo of Sample Plot East



Photo of Sample Plot South Photo of Sample Plot West



WETLAND DETERMINATION DATA FORM - Northcentral and Northeast Region

Project/Site: Flat Cree	k Solar Projec	t	City/County:	Canajoharie, M	lontgomery	County		Sampling Date:	2021-Aug-25
Applicant/Owner: S	unEast				State:	New Yor	k	Sampling Point: <u>V</u>	V-EES-10_UPL-1
Investigator(s): Etha	n Snyder, Abi	Light		Se	ction, Towns	ship, Rang	ge: N/	4	
Landform (hillslope, te	rrace, etc.):	Hillslope		Local relie	f (concave,	convex, n	one):	Undulating	Slope (%): 1 to 3
Subregion (LRR or MLF	RA): LRR	L		Lat	42.85282	31	Long:	-74.5336964	Datum: WGS84
Soil Map Unit Name:	Churchville	silty clay loam, 3	to 8 percent s	slopes				NWI classific	ation: None
Are climatic/hydrologic	c conditions o	n the site typica	l for this time o	of year?	Yes 🟒	_ No	_(If no	, explain in Remar	·ks.)
Are Vegetation, Are Vegetation,	Soil, Soil,	or Hydrology _ or Hydrology _	significant naturally p	ly disturbed? problematic?	Are "N (If nee	ormal Cir ded, expla	cumst ain an	ances" present? y answers in Rema	Yes 🟒 No arks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes No 🟒									
Hydric Soil Present?	Yes No 🟒	Is the Sampled Area within a Wetland?	Yes No 🟒							
Wetland Hydrology Present?	Yes No 🟒	If yes, optional Wetland Site ID:								
Remarks: (Explain alternative procedures her	Remarks: (Explain alternative procedures here or in a separate report)									
Covertype is UPL. Area is upland, not all three wetland parameters are present.										

HYDROLOGY

Wetland Hydrology Indicators:						
Primary Indicators (minimum of one	<u>e is required; check all t</u>	<u>nat apply)</u>	Secondary Indicators (minimum o	of two required)		
 Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5) Inundation Visible on Aerial Ima Sparsely Vegetated Concave Sur 	Water-S Aquatic Marl De Hydrog Oxidize Presend Recent Thin Mu gery (B7)Other (1) face (B8)	Stained Leaves (B9) Fauna (B13) eposits (B15) en Sulfide Odor (C1) d Rhizospheres on Living Roots (C3) ce of Reduced Iron (C4) Iron Reduction in Tilled Soils (C6) uck Surface (C7) Explain in Remarks)	 			
Field Observations: Surface Water Present? Water Table Present? Saturation Present? (includes capillary fringe)	Yes No _∠ Yes No _∠ Yes No _∠	Depth (inches): Depth (inches): Depth (inches):	– _ Wetland Hydrology Present? –	Yes No		
Describe Recorded Data (stream ga	uge, monitoring well, ae	rial photos, previous inspections), if	available:			
Remarks:						
The criterion for wetland hydrology	is not met. No positive i	indication of wetland hydrology was	observed.			

VEGETATION -- Use scientific names of plants.

Sampling Point: W-EES-10_UPL-1

<u>Tree Stratum</u> (Plot size: <u>30 ft</u>)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test works	sheet: Species That	0			
1. Tsuga canadensis	75	Yes	FACU	Are OBL, FACW, or FAC	2	0	(A)		
2. Ostrya virginiana	5	No	FACU	Total Number of Domi Across All Strata:	nant Species	3	(B)		
3 4				Percent of Dominant S	pecies That	0	(A/B)		
5				Provalence Index work	 		<u> </u>		
6				Total % Cover	of.	Multiph	/ Bvr		
7				OBL species	0	<u>v 1 =</u>	<u>. by.</u> 0		
	80	= Total Cov	er	EACW species	0	x 2 =	0		
Sapling/Shrub Stratum (Plot size: <u>15 ft</u>)				EAC species	2	×2-	6		
1.					2	x 5 -	260		
2.				FACU species	90	х4- Г-	0		
3.				Column Totala	0	x 5 =			
4.				Column locals	92	(A)	366 (B)		
5.				Prevalence I	ndex = B/A =	4			
6.				- Hydrophytic Vegetation Indicators:					
7.				1- Rapid Test for	Hydrophytic V	/egetatio	n		
	0	= Total Cov	er	2 - Dominance Test is > 50%					
Herb Stratum (Plot size: 5 ft)		-		3 - Prevalence Inc	dex is $\leq 3.0^1$				
1 Acer saccharum	5	Ves	FACIL	4 - Morphologica	l Adaptations	¹ (Provide	e supporting		
2 Ostrva virginiana	5	Vos	FACU	data in Remarks or on	a separate sh	neet)			
2. Ostrya virginiana 3. Taxicadandran radicans		No	EAC	- Problematic Hyd	rophytic Vege	tation ¹ (E	xplain)		
	Z	NO	FAC	¹ Indicators of hydric so	oil and wetlan	d hydrolo	ogy must be		
4	·			present, unless disturt	bed or problei	matic			
5.		<u> </u>		Definitions of Vegetati	on Strata:				
6				Tree – Woody plants 3	in. (7.6 cm) or	r more in	diameter at		
7.				breast height (DBH), re	egardless of h	eight.			
8.				Sapling/snrub - wood	y plants less t	nan 3 in.	DBH and		
9				greater than or equal	(2000) (1000) (2) ldll. planta ri	ardlass of		
10				Fierd – All herbaceous	(non-woody)	giants, re 8 ft tall	egardiess of		
11				Woody vines All woo	dy vines great	tor than 3	2 28 ft in		
12				height	uy villes great		5.20 It III		
	12	= Total Cov	er		D (D)	,			
<u>Woody Vine Stratum</u> (Plot size: <u>30 ft</u>)				Hydrophytic Vegetatio	on Present?	res	No 🟒		
1									
2									
3									
4.									
	0	= Total Cov	er						
		-							
Remarks: (Include photo numbers here or on a sep	arate sheet.)	5004 6 1							
No positive indication of hydrophytic vegetation wa	as observed (≥	50% of dom	linant speci	es indexed as FAC- or dr	ier).				

SOIL

Profile Descr	iption: (Describe	to the de	epth needed to d	ocum	nent the i	ndicator	or confirm the a	bsence of indicators.)	
Depth	Matrix		Redox	Feat	ures				
(inches)	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²	Texture		Remarks
0 - 3.5	10YR 3/1	100					I	Loam	
3.5 - 9	7.5YR 5/8	100					Silt Loam		
9 - 15	7.5YR 6/6	100					Fine Silty Clay Loam		
				·					
				· —					
		·		·					
		·		·					
		·		· —					
· ·				· —					
. <u> </u>				· —					
				·					
¹ Type: C = Co	ncentration, D =	Depletio	n, RM = Reduced	Mati	rix, MS =	Masked	Sand Grains. ² L	ocation: PL = Pore Lini	ng, M = Matrix.
Hydric Soil In	dicators:							Indicators for Proble	matic Hydric Soils ³ :
Histosol (A1)		Polyvalue Be	low S	urface (S	8) (LRR I	R, MLRA 149B)	2 cm Muck (A10)	(LRR K, L, MLRA 149B)
Histic Epi	pedon (A2)		Thin Dark Su	rface	(S9) (LRR	R, MLR	A 149B)	Coast Prairie Rec	dox (A16) (LRR K, L, R)
Black Hist	ic (A3)		Loamy Mucky	y Min	ieral (F1)	(LRR K, L	_)	5 cm Mucky Peat	t or Peat (S3) (LRR K, L, R)
Hydroger	Sulfide (A4)		Loamy Gleye	d Ma	trix (F2)			Dark Surface (S7) (LRR K, L)
Stratified	Layers (A5)	(^11)	Depleted Ma	trix (I	-3)			Polyvalue Below	Surface (S8) (LRR K, L)
Depieted	Below Dark Suria	ace (ATT)	Redox Dark S	ouria la cui	Ce (F6)			Thin Dark Surfac	.e (S9) (LRR K, L)
THICK Dar	K Surface (ATZ)		Depieted Dar	K SUI	(Tace (F7)			Iron-Manganese	Masses (F12) (LRR K, L, R)
Sanuy Mu	icky Mineral (ST)		Redox Depre	55101	IS (FO)			Piedmont Floodp	plain Soils (F19) (MLRA 149B)
Sandy Gie	eyed Matrix (S4)							Mesic Spodic (TA	.6) (MLRA 144A, 145, 149B)
Sandy Re	dox (55)							Red Parent Mate	rial (F21)
Stripped	Matrix (S6)							Very Shallow Dar	rk Surface (TF12)
Dark Surf	ace (S7) (LRR R, N	ALRA 149)B)					Other (Explain in	Remarks)
³ Indicators of	f hydrophytic veg	getation a	and wetland hydr	ology	y must be	e presen	t, unless disturbe	d or problematic.	
Restrictive La	yer (if observed)								
т	vpe:		None			Hvdric	Soil Present?		Yes No 🖌
Г	enth (inches)			-		,			
	cptir (incres).								
No positive in	ndication of hydr	ic soils w	as observed. The	e crite	rion for h	hydric so	bil is not met.		

Soil Photos



Photo of Sample Plot North Photo of Sample Plot East



Photo of Sample Plot South Photo of Sample Plot West



WETLAND DETERMINATION DATA FORM - Northcentral and Northeast Region

Project/Site: Flat Cree	k Solar Projec	t	City/County:	Canajoharie	, Mont	tgomery	County		Sampling Date:	2021-Sept-02	
Applicant/Owner: S	unEast					State:	New York	<	Sampling Point: <u>V</u>	W-EES-12_PEM-1	
Investigator(s): Etha	n Snyder, Abi	Light			Sectio	n, Townsl	hip, Rang	e: N/	4		
Landform (hillslope, te	rrace, etc.):	Depression		Local re	elief (co	oncave, c	onvex, no	one):	Concave	Slope (%): 1 to	o 3
Subregion (LRR or MLF	XA): LRR	L		L	Lat: 42	2.859499	7 L	.ong:	-74.5418347	Datum: WGS8	4
Soil Map Unit Name:	Madalin silty	v clay loam, 3 to	8 percent slo	pes					NWI classific	ation: None	
Are climatic/hydrologic	conditions o	n the site typical	for this time	of year?		Yes 🖌	No	(If no	, explain in Remar	rks.)	
Are Vegetation, Are Vegetation,	Soil, Soil,	or Hydrology or Hydrology	significant naturally	tly disturbed? problematic?	?	Are "No (If need	ormal Circ led, expla	cumst ain an	ances" present? y answers in Rema	Yes 🟒 No arks.)	-

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes 🟒 No									
Hydric Soil Present?	Yes 🟒 No	Is the Sampled Area within a Wetland?	Yes 🟒 No							
Wetland Hydrology Present?	Yes 🟒 No	If yes, optional Wetland Site ID:	W-EES-12							
Remarks: (Explain alternative procedures he	Remarks: (Explain alternative procedures here or in a separate report)									
Covertype is PEM. Area is wetland, all three wetland parameters are present.										

HYDROLOGY

Wetland Hydrology Indicators:					
Primary Indicators (minimum o	of one is required; check all	Secondary Indicators (minimum of two required)			
 Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5) Inundation Visible on Aeria Sparsely Vegetated Concav 	Water Aquat Marl I Hydro Oxidiz Prese Recen Thin N Other e Surface (B8)	r-Stained Leaves (B9) cic Fauna (B13) Deposits (B15) ogen Sulfide Odor (C1) zed Rhizospheres on Living Roots (Ci nce of Reduced Iron (C4) at Iron Reduction in Tilled Soils (C6) Muck Surface (C7) · (Explain in Remarks)	 Surface Soil Cracks (B6) Drainage Patterns (B10) Moss Trim Lines (B16) Dry-Season Water Table (C2) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (C9) 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 🟒	Depth (inches):	_		
Water Table Present?	Yes No 🟒	Depth (inches):	Wetland Hydrology Present? Yes No		
Saturation Present?	Yes No 🟒	Depth (inches):			
(includes capillary fringe)					
Describe Recorded Data (strea	m gauge, monitoring well, a	aerial photos, previous inspections),	if available:		
Remarks:					
The criterion for wetland hydro	ology is met. A positive indi	cation of wetland hydrology was obs	served (at least two secondary indicators).		

VEGETATION -- Use scientific names of plants.

Sampling Point: W-EES-12_PEM-1

	Absolute	Dominant	Indicator	Dominance Test works	neet:		
<u>Tree Stratum</u> (Plot size: <u>30 ft</u>)	% Cover	Species?	Status	Number of Dominant S	pecies That	1	(A)
1.		· · ·		Are OBL, FACW, or FAC:		I	(A)
2.				Total Number of Domir	Total Number of Dominant Species		(B)
3.				Across All Strata:			(-)
4.				Percent of Dominant S	pecies That	100	(A/B)
5.				Are OBL, FACW, or FAC	- b b -		
6.				Prevalence Index works	sneet:	.	D
7.				<u>Iotal % Cover</u>	<u>of:</u>	Multiply	<u>By:</u>
	0	= Total Cove	er	- OBL species -	40	x I =	40
Sapling/Shrub Stratum (Plot size: <u>15 ft</u>)		-		FACW species	115	× 2 = -	230
1.				FAC species	0	x 3 = -	0
2.				- FACU species	5	x 4 =	20
3.				- UPL species _	0	x 5 = _	0
4.				Column Totals	160	(A) _	290 (B)
5.				Prevalence Ir	dex = B/A =	1.8	<u> </u>
6.				Hydrophytic Vegetation	Indicators:		
7.				1- Rapid Test for H	lydrophytic V	egetatior/	ı
	0	= Total Cove	er	2 - Dominance Te	st is >50%		
Herb Stratum (Plot size: 5 ft)		_		3 - Prevalence Ind	ex is $\leq 3.0^1$		
1. Phalaris arundinacea	100	Yes	FACW	4 - Morphological	Adaptations	(Provide	supporting
2. Carex vulpinoidea	30	No	OBL	Droblomatic Lludr	a separate sr	ieet) tation1 (F)	(nin)
3. <i>Carex scoparia</i>	15	No	FACW	11ndicators of hydric so	il and wotlan	d bydrolo	(piairi) ay must bo
4. Scirpus atrovirens	5	No	OBL	nresent unless disturb	ed or problei	u Hyurolo matic	gy must be
5. <i>Lycopus americanus</i>	5	No	OBL	Definitions of Vegetation	n Strata	hadie	
6. <i>Vicia americana</i>	5	No	FACU	Tree – Woody plants 3 i	n. (7.6 cm) or	r more in	diameter at
7.				breast height (DBH), re	gardless of h	eight.	
8.				Sapling/shrub - Woody	plants less t	han 3 in. I	OBH and
9.		·		greater than or equal to	o 3.28 ft (1 m) tall.	
10.				Herb – All herbaceous (non-woody)	plants, re	gardless of
11.				size, and woody plants	less than 3.2	8 ft tall.	
12.				Woody vines – All wood	ly vines great	ter than 3	.28 ft in
	160	= Total Cove	er	height.			
Woody Vine Stratum (Plot size: 30 ft)		_		Hydrophytic Vegetatio	n Present?	/es 🟒 N	lo
1.							
2.				•			
3.							
4.							
	0	= Total Cove	er				

Remarks: (Include photo numbers here or on a separate sheet.)

A positive indication of hydrophytic vegetation was observed (>50% of dominant species indexed as OBL, FACW, or FAC). A positive indication of hydrophytic vegetation was observed (Prevalence Index is \leq 3.00). A positive indication of hydrophytic vegetation was observed (Rapid Test for Hydrophytic Vegetation).

SOIL

Sampling Point: W-EES-12_PEM-1

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 - 12	10YR 3/1	90	7.5YR 4/6	10	С	M/PL	Org mat	tter Silty Clay Loam		
12 - 18	2.5Y 5/1	75	5YR 5/8	25	С	М		Clay		
				·						
¹ Type: C = 0	Concentration, D =	Deplet	tion, RM = Reduce	ed Ma	trix, MS =	= Masked	Sand Grains. ² l	Location: PL = Pore Lining, M	= Matrix.	
Hydric Soil	Indicators:							Indicators for Problemati	c Hydric Soils³:	
Histoso	l (A1)		Polyvalue B	elow	Surface ((S8) (LRR	R, MLRA 149B)	2 cm Muck (A10) (I RR		
Histic E	pipedon (A2)		Thin Dark S	urfac	e (S9) (LR	R R, MLR	A 149B)	Coast Prairie Redox (A	A16) (I RR K I R)	
Black H	istic (A3)		Loamy Muo	ky Mi	neral (F1) (LRR K,	L)	5 cm Mucky Peat or P	eat (S3) (LRR K. L. R)	
Hydrog	en Sulfide (A4)		Loamy Gley	/ed M	atrix (F2)			Dark Surface (S7) (LRF	R K, L)	
Stratifie	d Layers (A5)	/ • /	Depleted N	latrix	(F3)			Polyvalue Below Surfa	ace (S8) (LRR K, L)	
Deplete	a Below Dark Surf	ace (A	II)_✓ Redox Dark	SUIT	ace (F6) urfaco (E ⁻	7)		Thin Dark Surface (S9) (LRR K, L)	
Sandy M	Aucky Mineral (S1)		Depleted D	ressio	ins (F8)	/)		ses (F12) (LRR K, L, R)		
Sandy (Sleved Matrix (S4)			103510	(10)		Piedmont Floodplain Soils (F19) (MLRA 14			
Sandy F	Redox (S5)						Mesic Spodic (TA6) (MLRA 144A, 145, 149B)			
Strippe	d Matrix (S6)						Red Parent Material (F21)			
Dark Si	urface (S7) (I RR R. N	/I RA 1	49B)					Very Shallow Dark Sur	rface (TF12)	
								Other (Explain in Rem	iarks)	
³ Indicators	of hydrophytic veg	getatio	n and wetland hy	drolog	gy must k	be preser	t, unless disturb	ed or problematic.		
Restrictive	Layer (if observed)	•								
	Туре:		None			Hydric S	Soil Present?		Yes 🟒 No	
	Depth (inches):									
Remarks:										
A positive i	ndication of hydric	soil w	as observed. The	criter	ion for hy	ydric soil	is met.			

Soil Photos



Photo of Sample Plot North Photo of Sample Plot East



Photo of Sample Plot South
Photo of Sample Plot West



WETLAND DETERMINATION DATA FORM - Northcentral and Northeast Region

Project/Site: Flat Cree	k Solar Projec	t Ci	ty/County:	Canajoharie, Mo	ontgomery	County		Sampling Date	2021-Sept-02
Applicant/Owner: S	unEast				State:	New Yo	rk	Sampling Point:	W-EES-12_PEM-101
Investigator(s): Etha	n Snyder, Stev	e Spotts, Abi Light		Sect	ion, Towns	ship, Ran	nge: NA	A	
Landform (hillslope, te	rrace, etc.):	Flat		Local relief	(concave,	convex, i	none):	Undulating	Slope (%): 1 to 3
Subregion (LRR or MLF	RA): LRR	L		Lat:	42.86235	37	Long:	-74.5471729	Datum: WGS84
Soil Map Unit Name:	Madalin silty	r clay loam 0 to 3 p	ercent slop	es				NWI classifi	cation:
Are climatic/hydrologic	c conditions o	n the site typical fo	r this time o	of year?	Yes 🟒	_ No	_ (If no	, explain in Rema	arks.)
Are Vegetation, Are Vegetation,	Soil, Soil,	or Hydrology or Hydrology	_ significant _ naturally p	ly disturbed? problematic?	Are "N (If nee	ormal Ci ded, exp	rcumst lain an <u>y</u>	ances" present? y answers in Rem	Yes 🟒 No narks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes 🟒 No									
Hydric Soil Present?	Yes 🟒 No	Is the Sampled Area within a Wetland?	Yes 🟒 No							
Wetland Hydrology Present?	Yes 🟒 No	lf yes, optional Wetland Site ID:	W-EES-12							
Remarks: (Explain alternative procedures here or in a separate report)										
Covertype is PEM. Area is wetland, all three wetland parameters are present.										

HYDROLOGY

Wetland Hydrology Indicators:			
Primary Indicators (minimum of one is required; check all that apply)	Secondary Indicators (minimum of two required)		
	 Surface Soil Cracks (B6) Drainage Patterns (B10) Moss Trim Lines (B16) Dry-Season Water Table (C2) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (C9) Stunted or Stressed Plants (D1) Geomorphic Position (D2) Shallow Aquitard (D3) Microtopographic Relief (D4) FAC-Neutral Test (D5) 		
Field Observations:			
Water Table Present? Yes No 🖌 Depth (inches):	- Wetland Hydrology Present? Yes No		
Saturation Present? Yes 🖌 No Depth (inches): 0			
(includes capillary fringe)			
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if Remarks: The criterion for wetland hydrology is met. A positive indication of wetland hydrology was observed.	available: 		

VEGETATION -- Use scientific names of plants.

Sampling Point: W-EES-12_PEM-101

	Absolute	Dominant	Indicator	Dominance Test worksh	eet:		
Tree Stratum (Plot size: <u>30 ft</u>)	% Cover	Species?	Status	Number of Dominant Sp	pecies That	-	<i></i>
1.		<u> </u>		Are OBL, FACW, or FAC:		3	(A)
2.				Total Number of Domina	ant Species	2	(P)
3.				Across All Strata:			(D)
<u> </u>				Percent of Dominant Sp	ecies That	100	(A/R)
т. 				Are OBL, FACW, or FAC:			(,,,,,,)
5				 Prevalence Index works 	heet:		
7				- <u>Total % Cover c</u>	of:	<u>Multiply</u>	<u>By:</u>
/		- Total Cov	or	- OBL species	95	x 1 =	95
Capling/Chruh Stratum (Dist size) 15 ft)	0	- 10tal COV	ei	FACW species	95	x 2 =	190
<u>Sapiing/Shirub Stratum</u> (Plot Size. <u>15 it</u>)				FAC species	15	x 3 =	45
1				FACU species	0	x 4 =	0
2.		<u> </u>		- UPL species	0	x 5 =	0
3				- Column Totals	205	(A)	330 (B)
4.				Prevalence Inc	dex = B/A =	1.6	
5.		<u> </u>		Hydrophytic Vegetation	Indicators:		
o				1- Rapid Test for H	ydrophytic V	egetation/	1
/		Tabal Ca		2 - Dominance Test	t is >50%		
	0	= lotal Cov	er	3 - Prevalence Inde	ex is $\leq 3.0^1$		
Herb Stratum (Plot size: <u>5 ft</u>)	45		EA CIAL	4 - Morphological A	Adaptations	(Provide	supporting
1. Phalaris arundinacea	45	Yes	FACW	- data in Remarks or on a	separate sh	leet)	
2. Scirpus cyperinus	40	Yes	OBL	Problematic Hydro	phytic Vege	tation¹ (Ex	(plain)
3. Symphyotrichum lanceolatum	35	Yes	FACW	- ¹ Indicators of hydric soil	and wetlan	d hydrolo	gy must be
4. <u>Carex vulpinoidea</u>	30	No	OBL	present, unless disturbe	d or proble	matic	
5. Lythrum salicaria	25	No	OBL	Definitions of Vegetation	n Strata:		
6. <u>Symphyotrichum prenanthoides</u>	15	No	FAC	Tree – Woody plants 3 in	n. (7.6 cm) or	r more in o	diameter at
7. Eupatorium perfoliatum	15	No	FACW	breast height (DBH), reg	ardless of h	eight.	
8				Sapling/shrub – Woody	plants less t	han 3 in. [OBH and
9				greater than or equal to	3.28 π (1 m) tall.	
10				Herb – All nerbaceous (r	10N-WOODY)	plants, reį 8 ft tall	gardless of
11				Woody vines All woody		on than 3	28 ft in
12				- height	y villes giea		.201111
	205	= Total Cov	er		D (D)		
<u>Woody Vine Stratum</u> (Plot size: <u>30 ft</u>)				Hydrophytic Vegetation	Present?	res 🟒 N	10
1				_			
2				_			
3				_			
4.							
	0	= Total Cov	er				

Remarks: (Include photo numbers here or on a separate sheet.)

A positive indication of hydrophytic vegetation was observed (>50% of dominant species indexed as OBL, FACW, or FAC). A positive indication of hydrophytic vegetation was observed (Prevalence Index is \leq 3.00). A positive indication of hydrophytic vegetation was observed (Rapid Test for Hydrophytic Vegetation).

SOIL

Profile Desc	cription: (Describe	to the	depth needed to o	docum	nent the i	indicato	r or confirm the al	bsence of indicato	ors.)
Depth	Matrix		Redox	Feat	ures				
(inches)	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²	Textu	ure	Remarks
0 - 12	10YR 3/2	95	5YR 4/4	5	C	M	Silty Clay	y Loam	
12 - 18	10YR 4/2	70	7.5YR 5/6	20	С	M	Silty (Clay	
12 - 18	-		10YR 5/1	10	D	M	Silty (Clav	
				· —					
				· —	<u> </u>				
				· —					
				· —	<u> </u>		-		
				·	<u> </u>				
							-		
				·					
1 Type: C = C	Concentration, D =	Deplet	ion, RM = Reduce	d Mat	rix, MS =	Masked	Sand Grains. ² Lo	ocation: PL = Pore	e Lining, M = Matrix.
Hydric Soil	Indicators:							Indicators for P	roblematic Hydric Soils ³ :
Histosol	(A1)		Polyvalue Be	elow S	urface (S	8) (LRR	R, MLRA 149B)	2 cm Muck (A10) (LRR K, L, MLRA 149B)
Histic Ep	pipedon (A2)		Thin Dark Su	urface	(S9) (LRF	R, MLR	A 149B)	Coast Prairie	e Redox (A16) (LRR K, L, R)
Black Hi	stic (A3)		Loamy Mucl	ky Min	eral (F1)	(LRR K, I	_)	5 cm Mucky	Peat or Peat (S3) (LRR K, L, R)
Hydroge	en Sulfide (A4)		Loamy Gleye	ed IVIa	trix (FZ)			Dark Surfac	e (S7) (LRR K, L)
Stratilie Deplete	d Below Dark Surfa	ace (A1	1) Z Redox Dark	Surfa	-5) -e (F6)			Polyvalue B	elow Surface (S8) (LRR K, L)
Thick Da	ark Surface (A12)		Depleted Da	rk Su	face (F7))		Thin Dark Si	urface (S9) (LRR K, L)
Sandy M	lucky Mineral (S1)		Redox Depr	essior	is (F8)			Iron-Manga	nese Masses (F12) (LRR K, L, R)
Sandy G	leved Matrix (S4)							Piedmont Fl	oodplain Soils (F19) (MLRA 149B)
Sandy R	edox (S5)							Mesic Spodi	c (TA6) (MLRA 144A, 145, 149B)
Stripped	d Matrix (S6)							Red Parent	Material (F21)
Dark Su	rface (S7) (LRR R. N	ILRA 1	49B)					Very Shallov	v Dark Surface (TF12)
			,					Other (Expla	ain in Remarks)
³ Indicators	of hydrophytic veg	etatior	n and wetland hyd	rolog	y must b	e preser	it, unless disturbe	d or problematic.	
Restrictive I	_ayer (if observed):								
	Туре:		None			Hydric	Soil Present?		Yes 🟒 No
	Depth (inches):								
Remarks:									
A positive in	ndication of hydric	soil wa	as observed. The o	riterio	on for hy	dric soil	is met.		

Soil Photos



Photo of Sample Plot North Photo of Sample Plot East



Photo of Sample Plot South Photo of Sample Plot West



WETLAND DETERMINATION DATA FORM - Northcentral and Northeast Region

Project/Site: Flat Creel	k Solar Projec	t	City/County:	Canajoharie, Mo	ontgomery	County		Sampling Date:	2021-Sept-02	
Applicant/Owner: Su	unEast				State:	New York	_ 5	ampling Point: \	W-EES-12_PSS-101	
Investigator(s): Etha	n Snyder, Abi	Light, Abi Light		Sect	ion, Town	ship, Range	: NA			
Landform (hillslope, te	rrace, etc.):	Depression		Local relief	(concave,	convex, noi	ne):	Concave	Slope (%): 1 to 3	3
Subregion (LRR or MLR	RA): LRR	L		Lat:	42.86232	3 Lo	ong:	-74.54864	Datum: WGS84	
Soil Map Unit Name:	Fonda muck	xy silty clay loam						NWI classific	cation:	
Are climatic/hydrologic	conditions o	n the site typical	for this time	of year?	Yes 🟒	_ No (lf no,	explain in Rema	rks.)	
Are Vegetation,	Soil,	or Hydrology	significan	tly disturbed?	Are "N	ormal Circu	umsta	ances" present?	Yes 🟒 No	
Are Vegetation,	Soil,	or Hydrology	naturally	problematic?	(If nee	ded, explaiı	n any	answers in Rem	arks.)	

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes 🟒 No									
Hydric Soil Present?	Yes 🟒 No	Is the Sampled Area within a Wetland?	Yes 🟒 No							
Wetland Hydrology Present?	Yes 🟒 No	lf yes, optional Wetland Site ID:	W-EES-12							
Remarks: (Explain alternative procedures here or in a separate report)										
Covertype is PSS. Area is wetland, all three wetland parameters are present.										

HYDROLOGY

Wetland Hydrology Indicators:						
Primary Indicators (minimum of or	<u>ne is required; check all t</u>	hat apply)		Secondary Indicators (minimum of two required)		
 Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5) Inundation Visible on Aerial Image Sparsely Vegetated Concave Surface 	Water-5 Aquatic Marl De Hydrog Oxidize Presend Recent Thin Mi agery (B7) Other (P	Roots (C3) pils (C6)	 Surface Soil Cracks (B6) Drainage Patterns (B10) Moss Trim Lines (B16) Dry-Season Water Table (C2) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (C9) 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 🟒	Depth (inches):		_		
Water Table Present?	Yes 🟒 No	Depth (inches):	10	Wetland Hydrology Present? Yes No		
Saturation Present?	Yes No	Depth (inches):	0			
(includes capillary fringe)						
Describe Recorded Data (stream g	auge, monitoring well, ae	erial photos, previous insp	ections), if	available:		
Remarks:		tion of wetlend by duplom				
The criterion for wetland hydrolog	y is met. A positive indica	luon oi weliand hydrolog	y was obsei	ved (primary and secondary indicators were present).		

VEGETATION -- Use scientific names of plants.

Sampling Point: W-EES-12_PSS-101

Tree Stratum (Plot size: <u>30 ft</u>)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test works	heet: Species That	_		
1				Are OBL, FACW, or FAC	:	4	(A)	
2.				Total Number of Domi	nant Species	4	(B)	
3		·		Percent of Dominant S	pecies That	100	(A/B)	
5		·		Are OBL, FACW, or FAC	:		(,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	
6		·		 Prevalence Index work 	sheet:			
7				- <u>Total % Cover</u>	of:	<u>Multiply</u>	By:	
		= Total Cov	or	- OBL species	2	x 1 =	2	
Cooling/Chrub Stratum (Diat size: 15 ft)	0	- 10001 000		FACW species	75	x 2 =	150	
<u>Saping/Shilub Stratum</u> (Plot Size, <u>15 ht</u>)	FO	Voc	EAC	FAC species	105	x 3 =	315	
1. Corrus racemosa		Yee	FAC	FACU species	25	x 4 =	100	
	40	res	FAC	- UPL species	0	x 5 =	0	
3. Lonicera canadensis	25	<u>No</u>	FACU	- Column Totals	207	(A)	567 (B)	
4. Frangula alnus	15	No	FAC	Prevalence li	ndex = B/A =	2.7		
5				Hydronbytic Vegetation	n Indicators:			
6				1- Rapid Test for	Hydrophytic V	legetation	,	
7				? - Nopinance Test is >50%				
	130	= Total Cov	er	2 - Dominance re	$\frac{1}{2} = \frac{1}{2} = \frac{1}$			
<u>Herb Stratum</u> (Plot size: <u>5 ft</u>)				3 - Prevalence inc	$100 \le 5.0^{\circ}$		supporting	
1. Onoclea sensibilis	30	Yes	FACW	data in Pomarks or on	a soparato sh	(Provide	supporting	
2. Impatiens capensis	20	Yes	FACW	Problematic Hydrophytic Vegetation1 (Explain)				
3. <i>Carex intumescens</i>	15	No	FACW	- Indicators of hydric so	il and wotland	d bydrolo	vpiani)	
4. Symphyotrichum novi-belgii	10	No	FACW	nresent unless disturb	ned or probler	natic	gy must be	
5. Epilobium coloratum	2	No	OBL	Definitions of Vegetation	on Strata:	natic		
6.		·		Tree - Woody plants 3	in (7.6 cm) or	r more in	diameter at	
7.				breast height (DBH), re	gardless of h	eight.	diameter at	
8		·		Sapling/shrub - Wood	/ plants less ti	han 3 in. I	DBH and	
9		<u> </u>		greater than or equal t	o 3.28 ft (1 m) tall.		
10		·		- Herb - All herbaceous	(non-woodv)	<i>.</i> plants. re	gardless of	
11		<u> </u>		size, and woody plants	less than 3.2	8 ft tall.	0	
12				Woody vines - All woo	dy vines great	ter than 3	.28 ft in	
12				height.	, 0			
		= lotal Cov	er	Hydronbytic Vegetatic	n Present?			
<u>Woody Vine Stratum</u> (Plot size: <u>30 ft</u>)				Tydrophytic vegetatic		ICJ <u>v</u> I	···	
1				-				
2				-				
3				_				
4				_				
	0	= Total Cov	er					
Remarks: (Include photo numbers here or on a se	parate sheet.)							

A positive indication of hydrophytic vegetation was observed (>50% of dominant species indexed as OBL, FACW, or FAC). A positive indication of hydrophytic vegetation was observed (Prevalence Index is \leq 3.00).

SOIL

	scription: (Describe	to the d	lepth needed to d	locum	nent the i	indicato	r or confirm th	e absence of indicators.)
Depth	Matrix		Redox	< ⊢eat	ures	<u> </u>		- .	
(inches)	Color (moist)	<u>%</u>	Color (moist)	<u>%</u>	Type ¹	Loc ²		Texture	Remarks
0 - 4	10YR 4/2	100					Muck	ky Clay Loam	
4 - 12	2.5Y 5/1	80	5YR 5/8	20	C	Μ		Clay	
12 - 18	2.5Y 5/1	75	5YR 5/6	20	C	Μ		Clay	
12 - 18			10YR 6/1	5	D	Μ		Clay	
								<u> </u>	
¹ Type: C =	Concentration, D =	Depleti	on, RM = Reduced	d Mat	rix, MS =	Masked	Sand Grains.	² Location: PL = Pore Lin	ning, M = Matrix.
Hydric So	il Indicators:							Indicators for Prob	lematic Hydric Soils ³ :
Histos	ol (A1)		Polyvalue Be	low S	urface (S	68) (LRR I	R, MLRA 149B)	2 cm Muck (A1))) (I RR K. I., MI RA 149R)
Histic	Epipedon (A2)		Thin Dark Su	irface	(S9) (LRF	R, MLR	A 149B)	Coast Prairie R	edox (A16) (LRR K. I. R)
Black	Histic (A3)		_✓ Loamy Muck	y Min	eral (F1)	(LRR K, I	_)	5 cm Mucky Pe	at or Peat (S3) (LRR K. L. R)
Hydro	gen Sulfide (A4)		Loamy Gleye	ed Ma	trix (F2)			Dark Surface (S	7) (LRR K. L)
Stratif	ied Layers (A5)		_✓ Depleted Ma	atrix (I	-3)			Polyvalue Belov	w Surface (S8) (LRR K, L)
Deple	ted Below Dark Surf	ace (A1	I) Redox Dark !	Surfa	ce (F6)			Thin Dark Surfa	ace (S9) (LRR K, L)
Thick	Dark Surface (A12)		Depleted Da	rk Sui	face (F7))		Iron-Manganes	e Masses (F12) (LRR K, L, R)
Sandy	Mucky Mineral (S1)		Redox Depre	essior	ıs (F8)			Piedmont Floor	dplain Soils (F19) (MLRA 149B)
Sandy	Gleyed Matrix (S4)							Mesic Spodic (T	A6) (MLRA 144A, 145, 149B)
Sandy	Redox (S5)							Red Parent Ma	terial (F21)
Stripp	ed Matrix (S6)							Very Shallow D	ark Surface (TF12)
Dark S	Surface (S7) (LRR R, N	/LRA 14	i9B)					Other (Explain	in Remarks)
³ Indicator	s of hydrophytic yeg	etation	and wetland hvd	rolog	/ must b	e presen	t. unless distu	rbed or problematic	
Restrictiv	a Laver (if observed)				,				
Restrictiv	Type [.]	•	None			Hydric	Soil Present?	,	ves / No
	Donth (inchos):		None	•		riyunc	Son resent:		les NO
Demonstra	Deptil (inches).								
A positive		3011 Wa	s observed. The e	interio	in tor thy		is net.		

Soil Photos



Photo of Sample Plot North Photo of Sample Plot East



Photo of Sample Plot South Photo of Sample Plot West



WETLAND DETERMINATION DATA FORM - Northcentral and Northeast Region

Project/Site: Flat Cree	k Solar Projec	t	City/County:	Canajoharie, M	ontgomery	County	Sampling Date:	2021-Sept-02	
Applicant/Owner: S	unEast				State:	New York	Sampling Point: \	W-EES-12_UPL-1	
Investigator(s): Etha	n Snyder, Abi	Light		Sec	tion, Towns	ship, Range: N	NA		
Landform (hillslope, te	rrace, etc.):	Hillslope		Local relie	f (concave,	convex, none)	Undulating	Slope (%): 1 to 1	0
Subregion (LRR or MLF	RA): LRR	L		Lat:	42.85951	5 Long	: -74.5422702	Datum: WGS84	
Soil Map Unit Name:	Madalin silty	v clay loam, 0 to	3 percent slop	pes			NWI classific	ation: None	
Are climatic/hydrologic	c conditions o	n the site typical	for this time	of year?	Yes 🟒	_ No (If r	io, explain in Remai	rks.)	
Are Vegetation, Are Vegetation,	Soil, Soil,	or Hydrology or Hydrology	significant naturally p	tly disturbed? problematic?	Are "N (If nee	ormal Circum ded, explain a	stances" present? ny answers in Rema	Yes 🟒 No arks.)	

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes No 🟒									
Hydric Soil Present?	Yes 🟒 No	Is the Sampled Area within a Wetland?	Yes No 🟒							
Wetland Hydrology Present?	Yes No _	lf yes, optional Wetland Site ID:								
Remarks: (Explain alternative procedures here or in a separate report)										
Covertype is UPL. Area is upland, not all three wetland parameters are present.										

HYDROLOGY

Wetland Hydrology Indicators:				
Primary Indicators (minimum of one	<u>e is required; check all t</u>	<u>nat apply)</u>	Secondary Indicators (minimum o	of two required)
 Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5) Inundation Visible on Aerial Ima Sparsely Vegetated Concave Sur 	Water-S Aquatic Marl De Hydrog Oxidize Presend Recent Thin Mu gery (B7)Other (1) face (B8)	 Surraces Soft Cracks (66) Drainage Patterns (B10) Moss Trim Lines (B16) Dry-Season Water Table (C2) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (C9) Stunted or Stressed Plants (D1) Geomorphic Position (D2) Shallow Aquitard (D3) Microtopographic Relief (D4) FAC-Neutral Test (D5) 		
Field Observations: Surface Water Present? Water Table Present? Saturation Present? (includes capillary fringe)	Yes No _∠ Yes No _∠ Yes No _∠	Depth (inches): Depth (inches): Depth (inches):	– _ Wetland Hydrology Present? –	Yes No /
Describe Recorded Data (stream ga	uge, monitoring well, ae	rial photos, previous inspections), if	available:	
Remarks:				
The criterion for wetland hydrology	is not met. No positive i	indication of wetland hydrology was	observed.	

VEGETATION -- Use scientific names of plants.

Sampling Point: W-EES-12_UPL-1

Tree Stratum (Plot size: 30 ft)	Absolute	Dominant	Indicator	Dominance Test worksho	eet:		
	% Cover	Species?	Status	Number of Dominant Sp	ecies That	1	(A)
1				Are OBL, FACW, or FAC:	ant Charles		
2		·		Across All Strata:	ant species	2	(B)
3		·		Percent of Dominant Spe	ecies That		
4.		·		Are OBL, FACW, or FAC:		50	(A/B)
5.		·		Prevalence Index worksh	neet:		
6		·		- <u>Total % Cover o</u>	<u>f:</u>	<u>Multiply</u>	<u>By:</u>
7				- OBL species	0	x 1 =	0
	0	= lotal Cov	er	FACW species	50	x 2 =	100
Sapling/Shrub Stratum (Plot size:15 ft)				FAC species	0	x 3 =	0
1		······································		- FACU species	85	x 4 =	340
2.	·			- UPL species	25	x 5 =	125
3				- Column Totals	160	(A)	565 (B)
4.	·			Prevalence Inc	lex = B/A =	3.5	
5.	·			Hydrophytic Vegetation	Indicators:		
6.				- 1- Rapid Test for Hy	/drophytic V	'egetatior	ı
7		<u> </u>		2 - Dominance Test is > 50%			
	0	= Total Cov	er	3 - Prevalence Index is $\leq 3.0^1$			
<u>Herb Stratum</u> (Plot size: <u>5 ft</u>)				4 - Morphological A	daptations	(Provide	supporting
1. Phalaris arundinacea	50	Yes	FACW	- data in Remarks or on a	separate sh	eet)	
2. Phleum pratense	45	Yes	FACU	Problematic Hydro	phytic Vege	tation ¹ (Ex	kplain)
3. <u>Arrhenatherum elatius</u>	30	No	FACU	¹ Indicators of hydric soil	and wetlan	d hydrolo	gy must be
4. <u>Asclepias syriaca</u>	25	No	UPL	present, unless disturbe	d or problei	matic	
5. <u>Taraxacum officinale</u>	10	No	FACU	Definitions of Vegetation	n Strata:		
6				Tree – Woody plants 3 in	. (7.6 cm) or	more in	diameter at
7				breast height (DBH), reg	ardless of h	eight.	
8		······································		Sapling/shrub – Woody p	plants less t	han 3 in. I	DBH and
9				greater than or equal to	3.28 ft (1 m) tall.	
10		·		Herb – All herbaceous (n	ion-woody)	plants, re « ft tall	gardless of
11		······································			wines great	o It lall.	29 ft in
12		·		- height.	villes great		.201111
	160	= Total Cov	er		Duesent2)	(a.a	
Woody Vine Stratum (Plot size: <u>30 ft</u>)				Hydrophytic vegetation	Present?	res r	NO
1		·		_			
2		······································		_			
3				_			
4				_			
	0	= Total Cov	er				
Remarks: (Include photo numbers here or on a separa	te sheet.)						
No positive indication of hydrophytic vegetation was o	bserved (≥	50% of dom	iinant speci	ies indexed as FAC- or drie	r).		
			•				

SOIL

inches) Col	or (moist)	%	Color (moist)	%	Type ¹	Loc ²	Tex	ture	Remarks
0-9 1	0YR 4/3	100					Silt L	oam	
9-15 1	0YR 5/1	80	5YR 5/8	20	C	<u>M</u>	Silty Cla	y Loam	
ne: C = Concer	otration D =	Denleti	on RM = Reducer	- <u> </u>	ix MS =	Masked S	and Grains 2	ocation: PL = Pore L	ining M = Matrix
dric Soil Indica	tors:	Pchicu		. 1910(- כועו ,או	musikeu S		Indicators for Pro	blematic Hydric Soils ³ :
Histosol (A1) Histic Epipedo Black Histic (A Hydrogen Sulf Stratified Laye Depleted Belo Thick Dark Sul Sandy Mucky Sandy Gleyed Sandy Redox (Stripped Matr Dark Surface (on (A2) (3) fide (A4) ers (A5) ow Dark Surfa rface (A12) Mineral (S1) Matrix (S4) (S5) (S5) (S7) (LRR R, N	ace (A11 JLRA 14	Polyvalue Be Thin Dark Su Loamy Muck Loamy Gleye ✓ Depleted Ma Depleted Da Depleted Da Redox Depre	irface y Min ed Ma atrix (F Surfac rk Su essior	urface (S (S9) (LRR eral (F1) trix (F2) ⁽³⁾ :e (F6) face (F7) is (F8)	8) (LRR K, MLRA (LRR K, L)	MLRA 149B) 149B)	 2 cm Muck (A Coast Prairie 5 cm Mucky P Dark Surface Polyvalue Bele Thin Dark Sur Iron-Mangane Piedmont Floi Mesic Spodic Red Parent M Very Shallow Other (Explair 	10) (LRR K, L, MLRA 149B) Redox (A16) (LRR K, L, R) eat or Peat (S3) (LRR K, L, R) (S7) (LRR K, L) ow Surface (S8) (LRR K, L) face (S9) (LRR K, L) ese Masses (F12) (LRR K, L, R) odplain Soils (F19) (MLRA 149B) (TA6) (MLRA 144A, 145, 149B) aterial (F21) Dark Surface (TF12) n in Remarks)
	Ironhytic veg	getation	and wetland hyd	rology	/ must be	e present,	unless disturb	ed or problematic.	
dicators of hyd	in opinytic veg								
dicators of hyd strictive Layer ((if observed)					Hydric S	oil Present?	V	
dicators of hyd strictive Layer (Type:	(if observed):	: 	None	-		i iyane s		T	es 🟒 No
dicators of hyd strictive Layer (Type: Depth marks:	(if observed)	: 	None	<u>.</u>					es _/_ No

Soil Photos



Photo of Sample Plot North Photo of Sample Plot East



Photo of Sample Plot South Photo of Sample Plot West



WETLAND DETERMINATION DATA FORM - Northcentral and Northeast Region

Project/Site: Flat Creek Sol	lar Project	City/County: Canaj	joharie, Mo	ntgomery	County	Sampling Date:	2021-Sept-02
Applicant/Owner: SunEa	ast			State:	New York	Sampling Point:	W-EES-12_UPL-101
Investigator(s): Ethan Sn	yder, Abi Light, Abi Light		Secti	on, Townsl	hip, Range: N	A	
Landform (hillslope, terrace	e, etc.): Hilltop	L	Local relief (concave, c	onvex, none):	Convex	Slope (%): 1 to 3
Subregion (LRR or MLRA):	LRR L		Lat:	42.862452	2 Long:	-74.5490297	Datum: WGS84
Soil Map Unit Name: Ma	adalin silty clay loam, 0 to	3 percent slopes				NWI classific	ation: None
Are climatic/hydrologic con	ditions on the site typical	for this time of yea	ır?	Yes 🖌	No (If no	o, explain in Rema	rks.)
Are Vegetation, Soil Are Vegetation, Soil	, or Hydrology , or Hydrology	significantly dist naturally proble	turbed? ematic?	Are "No (If need	ormal Circums ed, explain ar	tances" present? ly answers in Rem	Yes 🟒 No arks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes No 🟒								
Hydric Soil Present?	Yes No 🟒	Is the Sampled Area within a Wetland?	Yes No 🟒						
Wetland Hydrology Present?	Yes No 🟒	If yes, optional Wetland Site ID:							
Remarks: (Explain alternative procedures here or in a separate report)									
Covertype is UPL. Area is upland, not all three wetland parameters are present.									

HYDROLOGY

Wetland Hydrology Indicators:					
Primary Indicators (minimum of on	<u>e is required; check all t</u>	hat apply)	Secondary Indicators (minimum c	of two required)	
 Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5) Inundation Visible on Aerial Ima Sparsely Vegetated Concave Sur 	Water-5 Aquatic Marl Da Hydrog Oxidize Presend Recent Thin Mi gery (B7) Other (face (B8)	Stained Leaves (B9) Fauna (B13) eposits (B15) en Sulfide Odor (C1) d Rhizospheres on Living Roots (C3) ce of Reduced Iron (C4) Iron Reduction in Tilled Soils (C6) uck Surface (C7) Explain in Remarks)	 Surface Soil Cracks (B6) Drainage Patterns (B10) Moss Trim Lines (B16) Dry-Season Water Table (C2) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (C9) Stunted or Stressed Plants (D1) Geomorphic Position (D2) Shallow Aquitard (D3) Microtopographic Relief (D4) FAC-Neutral Test (D5) 		
Field Observations: Surface Water Present? Water Table Present? Saturation Present? (includes capillary fringe)	Yes No _∠ Yes No _∠ Yes No _∠	Depth (inches): Depth (inches): Depth (inches):	– _Wetland Hydrology Present? –	Yes No	
Describe Recorded Data (stream ga	uge, monitoring well, ae	erial photos, previous inspections), if	available:		
The criterion for wetland hydrology	is not met. No positive	indication of wetland hydrology was	observed.		

VEGETATION -- Use scientific names of plants.

Sampling Point: W-EES-12_UPL-101

<u>Tree Stratum</u> (Plot size: <u>30 ft</u>)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test work Number of Dominant	sheet: Species That		
1. Pinus strobus	70	Yes	FACU	Are OBL, FACW, or FAC	C:	2	(A)
2.				Total Number of Dom	inant Species	6	(P)
3.				Across All Strata:		0	(D)
4		<u> </u>		Percent of Dominant	Species That	33.3	(A/B)
5.		·		Are OBL, FACW, or FAC	C:		(, , , , , , , , , , , , , , , , , , ,
6.				 Prevalence Index world 	ksheet:		
7.				- <u>Total % Cove</u>	<u>r of:</u>	Multiply	<u>By:</u>
	70	= Total Cov	er	- OBL species	0	x 1 =	0
Sapling/Shrub Stratum (Plot size: 15 ft)		-		FACW species	0	x 2 =	0
1. Lonicera morrowii	50	Yes	FACU	FAC species	20	x 3 = _	60
2 Illmus rubra	15	Yes	FAC	- FACU species	145	x 4 =	580
3 Fravinus americana	5	No	FACU	- UPL species	0	x 5 =	0
4			17,00	- Column Totals	165	(A)	640 (B)
T				Prevalence l	Index = B/A =	3.9	
с		<u> </u>		 Hydrophytic Vegetation Indicators: 			
0				1- Rapid Test for Hydrophytic Vegetation			
7		- Tatal Cau		2 - Dominance Test is > 50%			
Hards Chartering (Distances - 5.66 -)	/0		er	3 - Prevalence Index is ≤ 3.0^1			
<u>Herb Stratum</u> (Plot Size: <u>5 It</u>)	10	Vee	FACU	4 - Morphologica	al Adaptations ¹	(Provide	supporting
Symphyourichum ericoides		Yes .	FACU	 data in Remarks or on a separate sheet) 			
2. Potentilia pensylvanica		Yes	FACU	— Problematic Hydrophytic Vegetation ¹ (Explain)			
3. Agrimonia parvifiora	5	Yes	FAC	- ¹ Indicators of hydric s	oil and wetlan	d hydrolo	gy must be
4.				present, unless distur	bed or probler	matic	
5		· ·		Definitions of Vegetat	ion Strata:		
6		·		Tree – Woody plants 3	in. (7.6 cm) or	r more in	diameter at
7				breast height (DBH), r	egardless of h	eight.	
8				Sapling/shrub – Wood	ly plants less t	han 3 in. I	OBH and
9				greater than or equal	to 3.28 ft (1 m) tall.	
10				Herb – All nerbaceous	(non-woody)	plants, re	gardless of
11		······································			s less than 3.2	o IL Lall.	20 ft in
12				- height	buy villes great		.201111
	25	= Total Cov	er		D (2.)		
<u>Woody Vine Stratum</u> (Plot size: <u>30 ft</u>)				Hydrophytic vegetati	on Present?	res r	NO
1				_			
2				_			
3				_			
4				_			
	0	= Total Cov	er				
Remarks: (Include photo numbers here or on a senar	ate sheet.)						
No positive indication of hydrophytic vegetation was	observed (>	50% of dom	inant choci				
		J070 01 0011	illiant speci	es indexed as FAC- or d	rier).		

SOIL

Profile Desc	ription: (Describe	to the d	epth needed to d	locum	nent the	indicato	r or confirm the	absence of indi	cators.)
Depth	Matrix		Redox	< Feat	ures				
(inches)	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²	Texture		Remarks
0 - 10.5	10YR 4/2	100					Loam		
10.5 - 16	7.5YR 4/2	75	5YR 5/8	20	С	М	Clay		
10.5 - 16			2.5Y 6/1	5	D	М	Clay		
				·					
							-		
				·					
1Turnet C = C		Damlatia			W MC -	Maaliad		21 a aatia m. DI	
Hydric Soil	ndicators:	Depletic	οπ, κινι = Reauceo	i iviati	11X, IVIS =	wasked	i Sanu Grains.	-Location: PL = H	rore Lining, W = Matrix.
			Dobashua Da		urfaca (C	(Q) /I DD		indicators fo	
	(A1)		Polyvalue Be	rface	(50) /1 PF	0) (LKK 0 D M/I D	ה, ועובוגא 149B) ג 170P)	2 cm Mu	ck (A10) (LRR K, L, MLRA 149B)
Black Hi	stic (A3)			v Min	(39) (LRF oral (E1)		A 1490)	Coast Pr	airie Redox (A16) (LRR K, L, R)
Diack Th	on Sulfide (A4)		Loamy Gleve	d Ma	trix (F2)		L)	5 cm Mu	cky Peat or Peat (S3) (LRR K, L, R)
Stratified	d Lavers (A5)		Depleted Ma	trix (F	-3)			Dark Sur	face (S7) (LRR K, L)
Depleter	d Below Dark Surfa	ace (A11) Redox Dark S	Surfac	ce (F6)			Polyvalu	e Below Surface (S8) (LRR K, L)
Thick Da	irk Surface (A12)		Depleted Da	rk Sui	face (F7))		Thin Dar	k Surface (S9) (LRR K, L)
Sandy M	lucky Mineral (S1)		Redox Depre	essior	is (F8)			Iron-Mar	nganese Masses (F12) (LRR K, L, R)
Sandy G	leved Matrix (S4)							Piedmor	nt Floodplain Soils (F19) (MLRA 149B)
Sandy R	edox (S5)							Mesic Sp	oodic (TA6) (MLRA 144A, 145, 149B)
Stripped	Matrix (S6)							Red Pare	ent Material (F21)
Dark Su	rface (S7) (I RR R M	/I RA 14	9B)					Very Sha	llow Dark Surface (TF12)
Durit Su			50)					Other (E	xplain in Remarks)
³ Indicators	of hydrophytic veg	etation	and wetland hyd	rolog	y must b	e preser	nt, unless distur	bed or problema	atic.
Restrictive L	ayer (if observed):	:							
	Туре:		None			Hydric	Soil Present?	Yes	No
	Depth (inches):								
Remarks:									
No positive	indication of hydri	ic soils v	vas observed. The	e crite	erion for	hydric s	oil is not met.		
	,					,			

Soil Photos



Photo of Sample Plot North Photo of Sample Plot East



Photo of Sample Plot South Photo of Sample Plot West



WETLAND DETERMINATION DATA FORM - Northcentral and Northeast Region

Project/Site: Flat Cree	k Solar Project	:	City/County:	Canajoharie, N	/lontgomery	County		Sampling Date:	2021-Sept-02
Applicant/Owner: S	unEast				State:	New Yor	k	Sampling Point: \	W-EES-13_PEM-1
Investigator(s): Etha	n Snyder, Abi	Light		Se	ction, Town	ship, Rang	ge: N/	Ą	
Landform (hillslope, te	rrace, etc.):	Flat		Local relie	ef (concave,	convex, n	one):	Undulating	Slope (%): 0 to 1
Subregion (LRR or MLF	RA): LRR I	-		Lat	42.86283	14	Long:	-74.5404609	Datum: WGS84
Soil Map Unit Name:	Churchville s	ilty clay loam, 0	to 3 percent	slopes				NWI classific	ation: None
Are climatic/hydrologic	c conditions or	n the site typical	for this time	of year?	Yes 🟒	_ No	_(lf no	, explain in Rema	rks.)
Are Vegetation, Are Vegetation,	Soil, Soil,	or Hydrology or Hydrology	significant naturally	tly disturbed? problematic?	Are "N (If nee	ormal Cir ded, expl	cumst ain an	ances" present? y answers in Rem	Yes 🟒 No arks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes 🟒 No									
Hydric Soil Present?	Yes 🟒 No	Is the Sampled Area within a Wetland?	Yes 🟒 No							
Wetland Hydrology Present?	Yes 🟒 No	If yes, optional Wetland Site ID:	W-EES-13							
Remarks: (Explain alternative procedures here or in a separate report)										
Covertype is PEM. Area is wetland, all three wetland parameters are present.										

HYDROLOGY

Wetland Hydrology Indicators:						
Primary Indicators (minimum o	f one is required; check all	<u>that apply)</u>	Secondary Indicators (minimum of two required)			
 Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5) Inundation Visible on Aerial Sparsely Vegetated Concave 	Water Aquat Marl I Hydro Oxidiz Prese Recen Thin M Imagery (B7) Other e Surface (B8)	r-Stained Leaves (B9) ric Fauna (B13) Deposits (B15) ogen Sulfide Odor (C1) red Rhizospheres on Living Roots (C3 nce of Reduced Iron (C4) nt Iron Reduction in Tilled Soils (C6) Muck Surface (C7) (Explain in Remarks)	 Surface Soil Cracks (B6) Drainage Patterns (B10) Moss Trim Lines (B16) Dry-Season Water Table (C2) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (C9) 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 🟒	Depth (inches):				
Water Table Present?	Yes No 🟒	Depth (inches):	Wetland Hydrology Present? Yes No			
Saturation Present?	Yes No 🟒	Depth (inches):				
(includes capillary fringe)						
Describe Recorded Data (strear	n gauge, monitoring well, a	aerial photos, previous inspections),	if available:			
Remarks:						
The criterion for wetland hydro	logy is met. A positive indi	cation of wetland hydrology was obs	erved (at least two secondary indicators).			

VEGETATION -- Use scientific names of plants.

Sampling Point: W-EES-13_PEM-1

<u>Tree Stratum</u> (Plot size: <u>30 ft</u>)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksl Number of Dominant S	neet: pecies That	2	(4)
1.				Are OBL, FACW, or FAC:		2	(A)
2.				Total Number of Domir Across All Strata:	ant Species	2	(B)
4.				Percent of Dominant Species That		100	(A/B)
5.				Are OBL, FACW, or FAC.			
6.				Tetal M Course	sneet:		D
7.				<u>Iotal % Cover</u>	<u>oi:</u>		<u>ву:</u> г
	0	= Total Cov	er		5	x I	170
Sapling/Shrub Stratum (Plot size: <u>15 ft</u>)		-		FACW species	85	x 2 = _	170
1.				FAC species	35	× 3 = _	105
2.				FACU species	0	x 4 =	0
3.				UPL species	0	x 5 = _	0
4		·		Column Totals	125	(A)	280 (B)
····				Prevalence In	dex = B/A =	2.2	
с		·		Hydrophytic Vegetation	Indicators:		
0				1- Rapid Test for H	lydrophytic V	/egetation	ı
7		Tabal Car		2 - Dominance Test is >50%			
	0	= lotal Cov	er	3 - Prevalence Ind	ex is $\leq 3.0^1$		
Herb Stratum (Plot size: <u>5 ft</u>)			54 614	4 - Morphological	Adaptations	¹ (Provide	supporting
1. Phalaris arundinacea		Yes	FACW	– data in Remarks or on a separate sheet)			
2. Euthamia graminifolia	30	Yes	FAC	Problematic Hydrophytic Vegetation ¹ (Explain)			
3. <u>Symphyotrichum novae-angliae</u>	10	No	FACW	¹ Indicators of hydric soil and wetland hydrology must be			
4. <i>Eutrochium maculatum</i>	5	No	OBL	present, unless disturb	ed or problei	matic	
5. <i>Solidago rugosa</i>	5	No	FAC	Definitions of Vegetation	n Strata:		
6				Tree – Woody plants 3 i	n. (7.6 cm) or	r more in	diameter at
7				breast height (DBH), re	gardless of h	eight.	
8.				Sapling/shrub - Woody	plants less t	han 3 in. [OBH and
9.				greater than or equal to	o 3.28 ft (1 m) tall.	
10.				Herb – All herbaceous (non-woody)	plants, reg	gardless of
11.				size, and woody plants	less than 3.2	8 ft tall.	
12.		· ·		Woody vines – All wood	ly vines great	ter than 3	.28 ft in
	125	= Total Cov	er	height.			
Woody Vine Stratum (Plot size: 30 ft)		_		Hydrophytic Vegetatio	n Present?	res 🟒 N	lo
<u> </u>							
2		•		•			
3		<u> </u>		-			
4		<u> </u>		-			
**	0	= Total Cov	er	-			
Remarks: (Include photo numbers here or on a separa	ate sheet.)			_			

A positive indication of hydrophytic vegetation was observed (>50% of dominant species indexed as OBL, FACW, or FAC). A positive indication of hydrophytic vegetation was observed (Prevalence Index is \leq 3.00).

SOIL

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)								
Depth <u>Matrix</u>			Redox Features					
(inches)	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²	Texture	Remarks
0 - 5	10YR 4/2	95	5YR 4/4	5	С	М	Clay Loan	n
5 - 13	10YR 5/2	85	5YR 5/8	15	С	М	Silty Clay	
13 - 18	10YR 4/2	90	5YR 5/6	10	С	М	Clay	
							,	
				—				
	-							
				—				
				—				
				—				
<u> </u>		- <u> </u>						
Type: C = Concentration, D = Depletion, RM = Reduced Matrix, MS = Masked Sand Grains. 4Location: PL = Pore Lining, M = Matrix.								
Hydric Soil Indicators: Indicators for Problematic Hydric Soils ³ :								
Histoso	I (A1)		Polyvalue Be	elow S	urface (S	58) (LRR R	, MLRA 149B)	2 cm Muck (A10) (LRR K, L, MLRA 149B)
Histic Epipedon (A2) Thin Dark Surface (S9) (LRR R, MLRA 149B)							149B)	Coast Prairie Redox (A16) (LRR K, L, R)
Elack Histic (A3) Loamy Mucky Mineral (F1) (LRR K, L) S cm Mucky Peat or Peat (S3) (LR								5 cm Mucky Peat or Peat (S3) (LRR K, L, R)
Hydrogen Sunide (A4) Loamy Gleyed Matrix (F2) Dark Surface (S7) (LRR K, L)								
Depleted Below Dark Surface (A11) Redox Dark Surface (F6) Polyvalue Below Surface (S8) (LRR K, L)								
Thick Dark Surface (A12) Depleted Dark Surface (F7) Thin Dark Surface (S9) (LRR K, L)								
Sandy Mucky Mineral (S1) Redox Depressions (F8) Iron-Manganese Masses (F12) (LRR K, L, R)								
Mesic Spodic (TA6) (MLRA 144A, 145, 149B)								
Red Parent Material (F21)								
Dark Surface (S7) (LRR R. MLRA 149B)							Very Shallow Dark Surface (TF12)	
Uther (Explain in Remarks)								
³ Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.								
Restrictive	Layer (if observed):							
	Type: None Hy		Hydric S	Soil Present?	Yes 🟒 No			
	Depth (inches):							
Remarks:								
A positive indication of hydric soil was observed. The criterion for hydric soil is met.								

Soil Photos



Photo of Sample Plot North Photo of Sample Plot East



Photo of Sample Plot South Photo of Sample Plot West

