CIDER SOLAR FARM WETLAND AND STREAM DELINEATION REPORT AND FUNCTION AND VALUE ASSESSMENT

Appendix E Corps Wetland Determination Data Forms

Appendix E CORPS WETLAND DETERMINATION DATA FORMS



Project/Site: Cider Solar Project	City/County: Oakfield/Ger	nessee Sampling Date: 7/6/2020
Applicant/Owner: Hecate		State: NY Sampling Point:
Investigator(s): Andrew Sorci	Section, Township, Range:	1_20200706_WL01_W1
Landform (hillslope, terrace,etc.): Dip	Local relief (concave, convex, i	none): Concave Slope (%) 1 - 3
Subregion (LRR or MLRA): LRR L	Lat: 43.109889 Long: -7	78.257162 Datum: NAD83
Soil Map Unit Name: Ma		NWI Classification: PEM
Are climatic / hyrologic conditions on the site	cypical for this time of year? Yes X No	(if no, explain in Remarks.)
Are Vegetation X , Soil X , or Hydrology	significantly disturbed? Are "Normal	Circumstances" present? Yes X No
Are Vegetation, Soil, or Hydrology	naturally problematic? (if needed, exp	lain any answers in Remarks.)
SUMMARY OF FINDINGS - Attach site ma	n showing sampling point locations tran	sects important features etc
Hydrophytic Vegetation Present? Yes	No X Is the Sampled Area within a Wetland?	
Hydric Soil Present? Yes X	NO	Yes X No
Wetland Hydrology Present? Yes X	No if yes, optional Wet	land Site ID: WL01
Remarks: (Explain alternative procedures here or in a se		
edge of active corn field; vegetation pro	plemmatic (planted crop)	
HYDROLOGY		
Wetland Hydrology Indicators:		Secondary Indicators (minimum of two required)
Primary Indicators (minimum of one is required: c	heck all that apply)	Surface Soil Cracks (B6)
Surface Water (A1)	Water-Stained Leaves (B9)	Drainage Patterns (B10)
High Water Table (A2)	Aquatic Fauna (B13)	Moss Trim Lines (B16)
Saturation (A3)	Marl Deposits (B15)	Dry-Season Water Table (C2)
Water Marks (B1)	Hydrogen Sulfide Odor (C1)	Crayfish Burrows (C8)
Sediment Deposits (B2)	X Oxidized Rhizospheres on Living Roots (C3)	Saturation Visible in Aerial Imagery (C9)
Drift Deposits (B3)	Presence of Reduced Iron (C4)	Stunted or Stressed Plants (D1)
Algal Mat or Crust (B4)	Recent Iron Reduction in Tilled Soils (C6)	X Geomorphic Position (D2)
Iron Deposits (B5)	Thin Muck Surface (C7)	Shallow Aquitard (D3)
	Other (Explain in Remarks)	Microtopographic Relief (D4)
Inundation Visible on Aerial Imagery (B7)	Other (Explain in Kemarks)	
Sparsley Vegetated Concave Surface (B8)	1	FAC-Neutral Test (D5)
Surface Water Present? Yes NoX	Depth (inches)	
Water Table Present? Yes NoX	Depth (inches) Wetland H	Hydrology Present? Yes X No
Saturation Present? Yes NoX	Depth (inches)	
Describe Recorded Data (stream gauge, moni	toring well aerial photos, previous inspection	ns) if available:
	,	
Remarks:		
I.		

VEGETATION - USE SCIEN	unc names	oi piants				Sampii	ng Pont	. 1_2020	0706_WL0	1_W1
	(=1	201 1:)		Dominant		Dominance Test V	Vorkshee	t:		
Tree Stratum	(Plot Size: _	30'radius)	% Cover	Species?	Status	Number of Domi That Are OBL, FA	•		0	(A)
				= Total Cov	ver .	Total Numbe Species Ac			1	_ (B)
						Percent of Don That Are OBL,	•		0%	(A/B)
						Prevalence Index \	Norkshee	et:		
			Ahsolute	Dominant	Indicator	OBL species	0	x 1	0	
Shrub Stratum	(Plot Size:	15'radius)	% Cover	Species?	Status	FACW species	0	x 2	0	
						FAC species	0	x 3	0	
				_= Total Cov	ver .	FACU species	13	x 4	52	
						UPL species	40	x 5	200	
						Column Totals	53	(A)	252	(B)
						Prevalenc	e Index =	B/A =	4.75	
						Hydrophytic Vege	tation Inc	dicators	:	
	(=1	_, ,, ,		Dominant		1- Rapid Tes	t For Hyd	rophytic	c Vegeta	tion
Herb Stratum	(Plot Size: _	5'radius)	% Cover	Species?	Status	2- Dominano	ce Test is	> 50%		
Zea mays Abutilon theophrasti			<u>40</u> 8	Х	UPL FACU	3- Prevalenc	e Index is	s =< 3.0		
Chenopodium album			5		FACU	4- Morpholo	ogical Ada	ptation	S	
Unknown species			2		UNK	5- Problema	tic Hydro	phytic V	/egetatio	n
			55	_= Total Cov	ver	Definitions of Vegeta	ation Strat	a:		
						Tree- Woody plants 3 breast height (DBH),	3 in. (7.6cm	n) or moi		neter at
						Sapling/Shrub- Wood greater than or equa				and
						Herb- All herbaceous size, and woody plan	-			less of
Woody Vine Stratum	(Plot Size: _	30'radius)		Dominant Species?	Status	Woody Vines- All wo height.	ody vines g	greater t	han 3.28f	t in
				= Total Cov	ver	Hydropl Vegeta Pres	-	i	No X	
Remarks: (Include photo nu unknown sedge species;					nted corn)					

SOIL Sampling Point: 1_20200706_WL01_W1

Matrix				Redo	x Featu	res	
Color	%	Color	%	Туре	Loc	Texture	Remarks
10YR 3/1	95	10YR 3/6	5	С	М	Sandy Loam	
7.5YR 6/2	85	7.5YR 5/8	15	С	М	Sand	
	Color 10YR 3/1	10YR 3/1 95	Color % Color 10YR 3/1 95 10YR 3/6	Color % Color % 10YR 3/1 95 10YR 3/6 5	Color % Color % Type	Color % Color % Type Loc 10YR 3/1 95 10YR 3/6 5 C M	Color % Color % Type Loc Texture 10YR 3/1 95 10YR 3/6 5 C M Sandy Loam

Hydric Soil Indicators:		Indicators for Problematic Soils:
Histosol (A1)	Polyvalue Below Surface (B15	2 cm Muck (A10)
Histic Epipedon (A2)	Thin Dark Surface (S9)	Coast Prarie Redox (A16)
Black Histic (A3)	Loamy Mucky Mineral (F1)	5 cm Mucky Peat or Peat (S3)
Hydrogen Sulfide (A4)	Loamy Gleyed Matric (F2)	Dark Surface (S7)
Stratified Layers (A5)	Depleted Matrix (F3)	Polyvalue Below Surface (S8)
Depleted Below Dark Surface (A11)	X Redox Dark Surface (F6)	Thin Dark Surface (S9)
Thick Dark Surface (A12)	Depleted Dark Surface (F7)	Iron-Manganese Masses (F12)
Sandy Mucky Mineral (S1)	Redox Depressions (F8)	Piedmont Floodplain Soils (F19)
Sandy Gleyed Matrix (S4)		Mesic Spodic (TA6)
Sandy Redox (S5)		Red Parent Material (F21)
Stripped Matrix (S6)		Very Shallow Dark Surface (TF12)
Dark Surface (S7)		Other (Explain in Remarks)
Restrictive Layer (if observed):		
Type:		Hydric Soil Present? Yes X No
Depth (inches):		
	_	

Remarks:

Project/Site: Cider Solar Project	City/C	ounty: Oakfield/Genessee	Sampling Date: 7/6/2020
Applicant/Owner: Hecate		State: NY	Sampling Point:
Investigator(s): Andrew Sorci	Section	n, Township, Range:	1_20200706_WL01_W2
Landform (hillslope, terrace,etc.): Dip	Local relie	ef (concave, convex, none): <u>Conca</u>	sveSlope (%) <u>0 - 2</u>
Subregion (LRR or MLRA): LRR L	Lat: 43.109832	Long:78.257415	Datum: NAD83
Soil Map Unit Name: Ma		NWI Class	ification: PFO
Are climatic / hyrologic conditions on the si	ite typical for this time of ye	ar? Yes <u>X</u> No (if no	explain in Remarks.)
Are Vegetation , Soil , or Hydrold	ogy significantly distur	bed? Are "Normal Circumstance	s" present? Yes X No
Are Vegetation , Soil , or Hydrold	ogy naturally problem	atic? (if needed, explain any answe	rs in Remarks.)
			
SUMMARY OF FINDINGS - Attach site n	map showing sampling p	oint locations, transects, impo	rtant features, etc.
Hydrophytic Vegetation Present? Yes	X No	Is the Sampled Area	
Hydric Soil Present? Yes	X No	within a Wetland?	Yes X No
Wetland Hydrology Present? Yes	X No	if yes, optional Wetland Site ID:	WL01
Remarks: (Explain alternative procedures here or in a	a separate report.)	<u> </u>	
	. ,		
HYDROLOGY			
Wetland Hydrology Indicators:		Secondary Inc	licators (minimum of two required)
Primary Indicators (minimum of one is required	ed: check all that apply)	Surface	Soil Cracks (B6)
Surface Water (A1)	Water-Stained Leaves	s (B9) Drainage	e Patterns (B10)
High Water Table (A2)	Aquatic Fauna (B13)	X _ Moss Tr	im Lines (B16)
Saturation (A3)	Marl Deposits (B15)	Dry-Sea:	son Water Table (C2)
Water Marks (B1)	Hydrogen Sulfide Odo	or (C1) Crayfish	Burrows (C8)
Sediment Deposits (B2)	Oxidized Rhizosphere		on Visible in Aerial Imagery (C9)
Drift Deposits (B3)	Presence of Reduced		or Stressed Plants (D1)
Algal Mat or Crust (B4)	Recent Iron Reduction		phic Position (D2)
		• • • ——	
Iron Deposits (B5)	Thin Muck Surface (C		Aquitard (D3)
Inundation Visible on Aerial Imagery (B7)			pographic Relief (D4)
Sparsley Vegetated Concave Surface (B8))	X FAC-Neu	itral Test (D5)
Surface Water Present? Yes No	X Depth (inches)		
Water Table Present? Yes No	X Depth (inches)	Wetland Hydrology Pre	sent? Yes X No
Saturation Present? Yes No		_	
Describe Recorded Data (stream gauge, mo	ionitoring well, aerial photos	s, previous inspections), if available	2:
Remarks:			
Nemario.			

VEGETATION - Use scientific names of plants Sampling Point: 1_20200706_WL01_W2 Absolute Dominant Indicator **Dominance Test Worksheet:** (Plot Size: 30'radius) % Cover Species? Status **Tree Stratum Number of Dominant Species** Χ **FACW** That Are OBL, FACW, or FAC: (A) Acer saccharinum 50 Acer rubrum 50 Х FAC **Total Number of Dominant** 100 = Total Cover (B) Species Across All Strata: 3 Percent of Dominant Species That Are OBL, FACW, or FAC: (A/B) 100% **Prevalence Index Worksheet:** 0 x 1 **OBL** species Absolute Dominant Indicator **FACW** species 55 x 2 110 (Plot Size: 15'radius) Status **Shrub Stratum** % Cover Species? **FAC** species 50 150 х3 = Total Cover **FACU** species 0 x 4 0 **UPL** species 0 x 5 0 Column Totals 105 (A) 260 (B) Prevalence Index = B/A = 2.48 **Hydrophytic Vegetation Indicators:** Absolute Dominant Indicator 1- Rapid Test For Hydrophytic Vegetation **Herb Stratum** (Plot Size: 5'radius) % Cover Species? Status X 2- Dominance Test is > 50% 5 Lysimachia nummularia Х **FACW** X 3- Prevalence Index is =< 3.0 5 = Total Cover 4- Morphological Adaptations 5- Problematic Hydrophytic Vegetation **Definitions of Vegetation Strata:** Tree- Woody plants 3 in. (7.6cm) or more in diameter at breast height (DBH), regardless of height. Sapling/Shrub- Woody plants less than 3 in. DBH and greater than or equal to 3.28ft (1m) tall. Herb- All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28ft tall. Absolute Dominant Indicator Woody Vines- All woody vines greater than 3.28ft in (Plot Size: 30'radius) **Woody Vine Stratum** % Cover Species? Status height. = Total Cover Hydrophytic Vegetation Present? Yes X No ___ Remarks: (Include photo numbers here or on a separate sheet.)

SOIL Sampling Point: 1_20200706_WL01_W2

Depth	Matrix				Redo	x Featu	ıres	
(inches	Color	%	Color	%	Type	Loc	Texture	Remarks
0-3	10YR 3/2	100					Loam	
3-8	10YR 2/1	95	10YR 6/2	5	С	М	Sandy Loam	
8-18	10YR 6/2	85	10YR 5/6	15	С	М	Loamy Sand	

Hydric Soil Indicators:		Indicators for Problematic Soils:
Histosol (A1)	Polyvalue Below Surface (B15)	2 cm Muck (A10)
Histic Epipedon (A2)	Thin Dark Surface (S9)	Coast Prarie Redox (A16)
Black Histic (A3)	Loamy Mucky Mineral (F1)	5 cm Mucky Peat or Peat (S3)
Hydrogen Sulfide (A4)	Loamy Gleyed Matric (F2)	Dark Surface (S7)
Stratified Layers (A5)	Depleted Matrix (F3)	Polyvalue Below Surface (S8)
Depleted Below Dark Surface (A11)	Redox Dark Surface (F6)	Thin Dark Surface (S9)
Thick Dark Surface (A12)	Depleted Dark Surface (F7)	Iron-Manganese Masses (F12)
Sandy Mucky Mineral (S1)	Redox Depressions (F8)	Piedmont Floodplain Soils (F19)
Sandy Gleyed Matrix (S4)		Mesic Spodic (TA6)
X Sandy Redox (S5)		Red Parent Material (F21)
Stripped Matrix (S6)		Very Shallow Dark Surface (TF12)
Dark Surface (S7)		Other (Explain in Remarks)
Restrictive Layer (if observed):		
Туре:		Hydric Soil Present? Yes X No
Depth (inches):	_	

Project/Site: Cider Solar Project	City/County: Oakfield/Ger	nnessee Sampling Date: 7/6/2020
Applicant/Owner: Hecate		State: NY Sampling
Investigator(s): Andrew Sorci	Section, Township, Range:	Point:1_20200706_WL01_U
Landform (hillslope, terrace,etc.): Rise	Local relief (concave, convex, r	none): <u>Convex</u> Slope (%) <u>0 - 3</u>
Subregion (LRR or MLRA): LRR L	Lat: 43.109533 Long:7	78.256921 Datum: <u>NAD83</u>
Soil Map Unit Name: Ma		NWI Classification: UPL
Are climatic / hyrologic conditions on the site $% \left(1\right) =\left(1\right) \left(1\right$		
Are Vegetation X, Soil X, or Hydrology		
Are Vegetation, Soil, or Hydrology	naturally problematic? (if needed, exp	lain any answers in Remarks.)
SUMMARY OF FINDINGS - Attach site ma	n showing sampling point locations tran	sects important features etc
Hydrophytic Vegetation Present? Yes	No X Is the Sampled Area	
	within a Wetland?	
Hydric Soil Present? Yes	NO X	
Wetland Hydrology Present? Yes	No X if yes, optional Wet	and site iD:
Remarks: (Explain alternative procedures here or in a se	parate report.)	
Planted corn field		
HYDROLOGY		
Wetland Hydrology Indicators:		Secondary Indicators (minimum of two required)
Primary Indicators (minimum of one is required: c	heck all that apply)	Surface Soil Cracks (B6)
Surface Water (A1)	Water-Stained Leaves (B9)	Drainage Patterns (B10)
High Water Table (A2)	Aquatic Fauna (B13)	Moss Trim Lines (B16)
Saturation (A3)	Marl Deposits (B15)	Dry-Season Water Table (C2)
Water Marks (B1)	Hydrogen Sulfide Odor (C1)	Crayfish Burrows (C8)
Sediment Deposits (B2)	Oxidized Rhizospheres on Living Roots (C3)	Saturation Visible in Aerial Imagery (C9)
Drift Deposits (B3)	Presence of Reduced Iron (C4)	Stunted or Stressed Plants (D1)
Algal Mat or Crust (B4)	Recent Iron Reduction in Tilled Soils (C6)	Geomorphic Position (D2)
Iron Deposits (B5)	Thin Muck Surface (C7)	Shallow Aquitard (D3)
Inundation Visible on Aerial Imagery (B7)	Other (Explain in Remarks)	Microtopographic Relief (D4)
Sparsley Vegetated Concave Surface (B8)		FAC-Neutral Test (D5)
	Double (inch on)	The Real at 1631 (63)
Surface Water Present? Yes No X	Depth (inches)	
Water Table Present? Yes NoX	- ' ' 	Hydrology Present? Yes No _X
Saturation Present? Yes No _X	Depth (inches)	
Describe Recorded Data (stream gauge, mon	toring well, aerial photos, previous inspection	ns), if available:
("
Remarks:		

VEGETATION - Use scien	itific names	of plants				Sampl	ing Point	: 1_2020	00706_W	L01_U1
Tree Stratum	(Plot Size:	30'radius)	Absolute % Cover	Dominant Species?	Indicator Status	Number of Dom That Are OBL, FA	inant Spe	cies	0	(A)
				_= Total Cov	ver	Total Numbe Species Ac	er of Dom ross All St	inant trata:	2	(B)
						Percent of Dor That Are OBL,	-		0%	_(A/B)
						Prevalence Index	Workshee	et:		
			Absolute	Dominant	Indicator	OBL species	0	x 1	0	
Shrub Stratum	(Plot Size:	15'radius)	% Cover	Species?	Status	FACW species	0	x 2	0	
						FAC species	1	_ x 3 _	3	
			-	_= Total Co	ver	FACU species	5	x 4	20	
						UPL species	0	x 5	0	
						Column Totals	6	(A)	23	 (B)
						Prevalenc	e Index =	B/A =	3.83	
						Hydrophytic Vege	etation Inc	dicators	:	
			Absolute	Dominant	Indicator	1- Rapid Tes	st For Hyd	rophytic	c Vegeta	tion
Herb Stratum	(Plot Size:	5'radius)	% Cover	Species?	Status	2- Dominan	ce Test is	> 50%		
Chenopodium album			5	X	FACU	3- Prevalenc	ce Index is	s =< 3.0		
Unknown species Rumex crispus			3 1	Х	UNK FAC	4- Morpholo			s	
Numex enspus			9	= Total Co		5- Problema	_	-		n
						Definitions of Veget	ation Strat	a:		
						Tree- Woody plants breast height (DBH),		•		eter at
						Sapling/Shrub- Wood greater than or equa				and
						Herb- All herbaceous				less of
Woody Vine Stratum	(Plot Size:	30'radius)		Dominant Species?	Indicator Status	Woody Vines- All wo height.	ody vines į	greater tl	han 3.28f	t in
				= Total Co	ver	Hydrop	-			
						Vegeta Pres	ation sent? Yes	5	No X	_
Remarks: (Include photo no Unknown sedge	umbers here	or on a sep	arate shee	t.)		1				

SOIL Sampling Point: 1_20200706_WL01_U1 Depth Matrix **Redox Features** (inches Color % Color Texture Remarks % Type Loc 0-20 10YR 2/2 99 10YR 3/6 C Μ Clay Loam 1 **Hydric Soil Indicators:** Indicators for Problematic Soils: Histosol (A1) Polyvalue Below Surface (B15) 2 cm Muck (A10) Histic Epipedon (A2) Thin Dark Surface (S9) Coast Prarie Redox (A16) Black Histic (A3) Loamy Mucky Mineral (F1) 5 cm Mucky Peat or Peat (S3) Hydrogen Sulfide (A4) Loamy Gleyed Matric (F2) Dark Surface (S7) Stratified Layers (A5) Depleted Matrix (F3) Polyvalue Below Surface (S8) Depleted Below Dark Surface (A11) Redox Dark Surface (F6) Thin Dark Surface (S9) Thick Dark Surface (A12) Depleted Dark Surface (F7) Iron-Manganese Masses (F12) Sandy Mucky Mineral (S1) Redox Depressions (F8) Piedmont Floodplain Soils (F19) Sandy Gleyed Matrix (S4) Mesic Spodic (TA6) Sandy Redox (S5) Red Parent Material (F21) Stripped Matrix (S6) Very Shallow Dark Surface (TF12) Dark Surface (S7) Other (Explain in Remarks) Restrictive Layer (if observed): Type: Hydric Soil Present? Yes No Χ Depth (inches): Remarks:

Project/Site: Cider Solar Project	City/Co	ounty: Oakfield/Gen	essee Sa	ampling Date: 7/6/2020
Applicant/Owner: Hecate	_		State: NY	Sampling Point:
Investigator(s): Andrew Sorci	Sectio	n, Township, Range:		1_20200706_WL02_W1
Landform (hillslope, terrace,etc.): Depression	Local relie	f (concave, convex, r	ione): <u>Linear</u>	Slope (%) <u>0 - 5</u>
Subregion (LRR or MLRA): LRR L	Lat: 43.110435	Long:7	8.254124	Datum: NAD83
Soil Map Unit Name: RoA		_	NWI Classifica	ation: PFO
Are climatic / hyrologic conditions on the site t	ypical for this time of ye	ar? Yes <u>X</u> No	(if no, ex	plain in Remarks.)
Are Vegetation , Soil , or Hydrology	significantly distur	bed? Are "Normal (Circumstances" p	resent? Yes X No
Are Vegetation, Soil, or Hydrology	naturally problema	atic? (if needed, exp	lain any answers in	Remarks.)
SUMMARY OF FINDINGS - Attach site map	showing sampling po	oint locations, tran	sects, importai	nt features, etc.
Hydrophytic Vegetation Present? Yes X	No	Is the Sampled Area		
		within a Wetland?	' Yes	X No
Hydric Soil Present? Yes X	No	if was antional Watl		WL02
Wetland Hydrology Present? Yes X	No	if yes, optional Wetl	and site ib.	VVLOZ
Remarks: (Explain alternative procedures here or in a sep	parate report.)			
HYDROLOGY				
Wetland Hydrology Indicators:			Secondary Indicat	ors (minimum of two required)
Primary Indicators (minimum of one is required: ch	neck all that apply)		Surface Soil	Cracks (B6)
Surface Water (A1)	Water-Stained Leaves	(B9)	Drainage Pa	tterns (B10)
High Water Table (A2)	Aquatic Fauna (B13)		X Moss Trim L	ines (B16)
Saturation (A3)	Marl Deposits (B15)		Dry-Season	Water Table (C2)
Water Marks (B1)	Hydrogen Sulfide Odo	or (C1)	Crayfish Bur	rows (C8)
Sediment Deposits (B2)	Oxidized Rhizosphere	s on Living Roots (C3)	Saturation V	isible in Aerial Imagery (C9)
Drift Deposits (B3)	Presence of Reduced	Iron (C4)	Stunted or S	tressed Plants (D1)
Algal Mat or Crust (B4)	Recent Iron Reduction	n in Tilled Soils (C6)	X Geomorphic	: Position (D2)
Iron Deposits (B5)	Thin Muck Surface (C	7)	Shallow Aqu	iitard (D3)
Inundation Visible on Aerial Imagery (B7)	Other (Explain in Rem			raphic Relief (D4)
Sparsley Vegetated Concave Surface (B8)	Other (Explain in Neill	arioj	X FAC-Neutral	
			TAC Neutral	1631 (03)
Surface Water Present? Yes NoX	Depth (inches)	_		
Water Table Present? Yes NoX	Depth (inches)	Wetland H	lydrology Presen	t? Yes X No
Saturation Present? Yes No X	Depth (inches)	_		
Describe Recorded Data (stream gauge, monit	oring well, aerial photos	, previous inspection	s), if available:	
Parada				
Remarks:				

VEGETATION - Use scientific names of plants Sampling Point: 1_20200706_WL02_W1 Absolute Dominant Indicator **Dominance Test Worksheet:** (Plot Size: 30'radius) % Cover Species? Status **Tree Stratum Number of Dominant Species** 45 Χ FAC That Are OBL, FACW, or FAC: 6 (A) Populus deltoides Salix nigra 25 Χ OBL **Total Number of Dominant** Acer saccharinum 10 **FACW** (B) Species Across All Strata: 6 80 = Total Cover Percent of Dominant Species (A/B) That Are OBL, FACW, or FAC: 100% **Prevalence Index Worksheet:** 25 x 1 25 **OBL** species Absolute Dominant Indicator **FACW** species 30 x 2 60 (Plot Size: 15'radius) % Cover Species? **Shrub Stratum** Status **FAC** species 60 180 х3 **FACW** Fraxinus pennsylvanica Χ 5 = Total Cover **FACU** species 0 x 4 0 **UPL** species 0 x 5 0 Column Totals 115 265 (B) (A) Prevalence Index = B/A = 2.3

Absolute Dominant Indicator

Species?

Status

% Cover

			Absolute	Dominant	Indicator
Herb Stratum	(Plot Size:	5'radius)	% Cover	Species?	Status
Lysimachia nummularia	a		10	Χ	FACW
Phragmites australis			5	Χ	FACW
			15	= Total Cov	er

Hydrophytic Vegetation Indicators:

- 1- Rapid Test For Hydrophytic Vegetation
- X 2- Dominance Test is > 50%
- X 3- Prevalence Index is =< 3.0
 - 4- Morphological Adaptations
 - 5- Problematic Hydrophytic Vegetation

Definitions of Vegetation Strata:

Tree- Woody plants 3 in. (7.6cm) or more in diameter at breast height (DBH), regardless of height.

Sapling/Shrub- Woody plants less than 3 in. DBH and greater than or equal to 3.28ft (1m) tall.

Herb- All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28ft tall.

Woody Vines- All woody vines greater than 3.28ft in height.

Hydrophytic

Vegetation

Present? Yes X No _____

Vitis riparia 15 X FAC
15 = Total Cover

(Plot Size: 30'radius)

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

Woody Vine Stratum

SOIL Sampling Point: 1_20200706_WL02_W1

OIL								Sampling Point: 1_20200706_WL02_W
Depth	Matrix				Redo	x Feature	es	
(inches	Color	%	Color	%	Type	Loc	Texture	Remarks
0-4	10YR 3/2	100					Sandy Loam	
4-12	10YR 6/2	85	10YR 5/6	15	С	М	Loamy Sand	
Hydric So	il Indicators:							Indicators for Problematic Soils:
•	tosol (A1)				Polyvalu	e Below Su	urface (B15)	2 cm Muck (A10)
Hist	tic Epipedon (A2)			Thin Dar	k Surface ((S9)	Coast Prarie Redox (A16)
Blac	ck Histic (A3)				Loamy N	lucky Min	eral (F1)	5 cm Mucky Peat or Peat (S3)
—— Hyd	drogen Sulfide	(A4)			Loamy G	leyed Mat	ric (F2)	Dark Surface (S7)
Stra	atified Layers	(A5)		Depleted Matrix (F3)		3)	Polyvalue Below Surface (S8)	
Dep	oleted Below I	Dark Su	rface (A11)	Redox Dark Surface (F6)		e (F6)	Thin Dark Surface (S9)	
Thic	ck Dark Surfac	e (A12))		Depleted	d Dark Surf	face (F7)	Iron-Manganese Masses (F12)
San	dy Mucky Mii	neral (S	1)		Redox D	epressions	s (F8)	Piedmont Floodplain Soils (F19)
San	dy Gleyed Ma	itrix (S4	.)					Mesic Spodic (TA6)
X San	dy Redox (S5))						Red Parent Material (F21)
	pped Matrix (Very Shallow Dark Surface (TF12)
Dar	k Surface (S7)							Other (Explain in Remarks)
Restrictiv	ve Layer (if obs	erved):						
		Type:					Hydri	c Soil Present? Yes X No
	Depth (in	ches):						 -
		_						
Remarks	s:							

Project/Site: Cider Solar Project	City/County: Oakfield/Ger	nessee Sampling Date: 7/6/2020					
Applicant/Owner: Hecate	State: NY Sampling						
Investigator(s): Andrew Sorci	Section, Township, Range:	Point:1_20200706_WL02_U					
Landform (hillslope, terrace,etc.): Rise	Local relief (concave, convex,	none): <u>Convex</u> Slope (%) <u>0 - 3</u>					
Subregion (LRR or MLRA): LRR L	Lat: 43.110425 Long:	78.254203 Datum: NAD83					
Soil Map Unit Name: RoA		NWI Classification: UPL					
Are climatic / hyrologic conditions on the site $% \left(1\right) =\left(1\right) \left(1\right$	typical for this time of year? Yes X No	(if no, explain in Remarks.)					
Are Vegetation, Soil, or Hydrology	significantly disturbed? Are "Normal	Circumstances" present? Yes X No					
Are Vegetation, Soil, or Hydrology	naturally problematic? (if needed, exp	plain any answers in Remarks.)					
SUMMARY OF FINDINGS - Attach site ma	p showing sampling point locations, trar	nsects, important features, etc.					
Hydrophytic Vegetation Present? Yes X	•	a					
Hydric Soil Present? Yes	No within a Wetland?	Yes No X					
Wetland Hydrology Present? Yes	No X if yes, optional Wet	land Site ID:					
Remarks: (Explain alternative procedures here or in a se	eparate report.)						
HYDROLOGY Wetland Hydrology Indicators:		Secondary Indicators (minimum of two required)					
Primary Indicators (minimum of one is required: o	check all that apply)	Surface Soil Cracks (B6)					
Surface Water (A1)	Water-Stained Leaves (B9)	Drainage Patterns (B10)					
High Water Table (A2)	Aquatic Fauna (B13)	Moss Trim Lines (B16)					
Saturation (A3)	Marl Deposits (B15)	Dry-Season Water Table (C2)					
Water Marks (B1)	Hydrogen Sulfide Odor (C1)	C1) Crayfish Burrows (C8)					
Sediment Deposits (B2)	Oxidized Rhizospheres on Living Roots (C3)	Saturation Visible in Aerial Imagery (C9)					
Drift Deposits (B3)	Presence of Reduced Iron (C4)	Stunted or Stressed Plants (D1)					
Algal Mat or Crust (B4)	Recent Iron Reduction in Tilled Soils (C6)	Geomorphic Position (D2)					
Iron Deposits (B5)	Thin Muck Surface (C7)	Shallow Aquitard (D3)					
Inundation Visible on Aerial Imagery (B7)	Other (Explain in Remarks)	Microtopographic Relief (D4)					
Sparsley Vegetated Concave Surface (B8)		FAC-Neutral Test (D5)					
Surface Water Present? Yes No X	Depth (inches)						
Water Table Present? Yes No X	Depth (inches) Wetland I	Hydrology Present? Yes No X					
Saturation Present? Yes No X	Depth (inches)	<u> </u>					
Describe Recorded Data (stream gauge, mon	itoring well, aerial photos, previous inspection	ns), if available:					
Remarks:							

VEGETATION - Use scientific names of plants Sampling Point: 1_20200706_WL02_U1 Absolute Dominant Indicator **Dominance Test Worksheet:** (Plot Size: 30'radius) % Cover Species? Status **Tree Stratum Number of Dominant Species** That Are OBL, FACW, or FAC: (A) = Total Cover **Total Number of Dominant** Species Across All Strata: (B) 3 Percent of Dominant Species That Are OBL, FACW, or FAC: 66.7% (A/B) **Prevalence Index Worksheet:** x 1 0 **OBL** species Absolute Dominant Indicator **FACW** species 15 30 (Plot Size: 15'radius) % Cover Species? Status x 2 **Shrub Stratum FAC** species 45 15 х3 10 Χ **FACW** Fraxinus pennsylvanica 10 = Total Cover **FACU** species 78 x 4 312 **UPL** species 0 x 5 0 Column Totals 108 (A) 387 (B) Prevalence Index = B/A = 3.58 **Hydrophytic Vegetation Indicators:** Absolute Dominant Indicator 1- Rapid Test For Hydrophytic Vegetation **Herb Stratum** (Plot Size: 5'radius) % Cover Species? Status X 2- Dominance Test is > 50% 60 Solidago canadensis Χ **FACU** 3- Prevalence Index is =< 3.0 5 Galium mollugo **FACU** 4- Morphological Adaptations Phragmites australis 5 **FACW** Erigeron annuus 5 **FACU** 5- Problematic Hydrophytic Vegetation Toxicodendron radicans 5 FAC Parthenocissus quinquefolia 5 **FACU Definitions of Vegetation Strata:** Taraxacum officinale **FACU** 3 Tree- Woody plants 3 in. (7.6cm) or more in diameter at 88 = Total Cover breast height (DBH), regardless of height. Sapling/Shrub- Woody plants less than 3 in. DBH and greater than or equal to 3.28ft (1m) tall. Herb- All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28ft tall. Absolute Dominant Indicator Woody Vines- All woody vines greater than 3.28ft in (Plot Size: 30'radius) Species? **Woody Vine Stratum** % Cover Status height. **FAC** Vitis riparia 10 Χ 10 = Total Cover Hydrophytic Vegetation Present? Yes X No ___ Remarks: (Include photo numbers here or on a separate sheet.)

SOIL Sampling Point: 1_20200706_WL02_U1

Depth Matrix					Redo	x Featu	ıres	
(inches	Color	%	Color	%	Type	Loc	Texture	Remarks
0-6	10YR 3/2	100					Sandy Loam	
6-18	10YR 6/2	85	10YR 5/6	15	С	М	Loamy Sand	
							·	
•	oil Indicators:							Indicators for Problematic Soils:
	tosol (A1)				=		Surface (B15)	2 cm Muck (A10)
	tic Epipedon (A2)			Thin Dar			Coast Prarie Redox (A16)
	ck Histic (A3)				-	=	ineral (F1)	5 cm Mucky Peat or Peat (S3)
	drogen Sulfide				-	-	atric (F2)	Dark Surface (S7)
	atified Layers		5 (2.4.4)		Depleted			Polyvalue Below Surface (S8)
	pleted Below I				Redox D			Thin Dark Surface (S9)
	ck Dark Surfac				-		urface (F7)	Iron-Manganese Masses (F12)
	ndy Mucky Mi				Redox D	epressio	ns (F8)	Piedmont Floodplain Soils (F19)
	ndy Gleyed Ma	-)					Mesic Spodic (TA6)
	ndy Redox (S5)							Red Parent Material (F21)
	ipped Matrix (Very Shallow Dark Surface (TF12) Other (Explain in Remarks)
Dai	rk Surface (S7))						Other (Explain in Kemarks)
Restrictiv	ve Layer (if obs	erved):						
	, ,							
	Donath (in	Type:					Hydri	c Soil Present? Yes X No No
	Depth (in	icnes): _						
Remarks	ς·							
Remark	.							

Project/Site: Cider Solar Project	City/County: Oakfield/Genessee Sampling Date: 7/6/2020								
Applicant/Owner: Hecate	State: NY Sampling Point:								
Investigator(s): Andrew Sorci	Section, Township, Range: 1_20200706_WL03_W1								
Landform (hillslope, terrace,etc.): Depression Loc	cal relief (concave, convex, none): Linear Slope (%) 0 - 5								
Subregion (LRR or MLRA): LRR L Lat: 43.11	0392 Long: -78.255206 Datum: NAD83								
Soil Map Unit Name: RoA	NWI Classification: PFO								
Are climatic / hyrologic conditions on the site typical for this time	e of year? Yes X No (if no, explain in Remarks.)								
Are Vegetation, Soil, or Hydrologysignificantly	disturbed? Are "Normal Circumstances" present? Yes X No								
Are Vegetation, Soil, or Hydrologynaturally pr	oblematic? (if needed, explain any answers in Remarks.)								
SUMMARY OF FINDINGS - Attach site map showing samp	ling point locations, transects, important features, etc.								
Hydrophytic Vegetation Present? Yes X No	Is the Sampled Area								
Hydric Soil Present? Yes X No	within a Wetland? Yes X No								
Wetland Hydrology Present? Yes X No	if yes, optional Wetland Site ID: WL03								
Remarks: (Explain alternative procedures here or in a separate report.)									
drainage ditch situated between two agricultural fields									
aramage attensituated between two agricultural nelas									
HYDROLOGY									
Wetland Hydrology Indicators:	Secondary Indicators (minimum of two required)								
Primary Indicators (minimum of one is required: check all that apply)	Surface Soil Cracks (B6)								
Surface Water (A1) Water-Stained	Leaves (B9) Drainage Patterns (B10)								
High Water Table (A2)Aquatic Fauna	(B13) X Moss Trim Lines (B16)								
Saturation (A3)Marl Deposits	(B15) Dry-Season Water Table (C2)								
Water Marks (B1) Hydrogen Sulfi	ide Odor (C1) Crayfish Burrows (C8)								
Sediment Deposits (B2) Oxidized Rhizo	ospheres on Living Roots (C3) Saturation Visible in Aerial Imagery (C9)								
Drift Deposits (B3) Presence of Re	educed Iron (C4) Stunted or Stressed Plants (D1)								
Algal Mat or Crust (B4) Recent Iron Re	eduction in Tilled Soils (C6) X Geomorphic Position (D2)								
Iron Deposits (B5) Thin Muck Sur	face (C7) Shallow Aquitard (D3)								
Inundation Visible on Aerial Imagery (B7) Other (Explain	in Remarks) Microtopographic Relief (D4)								
Sparsley Vegetated Concave Surface (B8)	X FAC-Neutral Test (D5)								
Surface Water Present? Yes No X Depth (inches)									
	Wetland Hydrology Present? Yes X No								
	wetiand flydrology riesent: Tes X NO								
Saturation Present? Yes No X Depth (inches)									
Describe Recorded Data (stream gauge, monitoring well, aerial	photos, previous inspections), if available:								
Remarks:									

VEGETATION - Use scientific names of plants Sampling Point: 1_20200706_WL03_W1 Absolute Dominant Indicator **Dominance Test Worksheet:** (Plot Size: 30'radius) % Cover Species? Status **Tree Stratum Number of Dominant Species** 40 Χ **FACW** That Are OBL, FACW, or FAC: 3 (A) Fraxinus pennsylvanica Populus deltoides 40 Х **FAC Total Number of Dominant** 80 = Total Cover (B) Species Across All Strata: 3 Percent of Dominant Species (A/B) That Are OBL, FACW, or FAC: 100% **Prevalence Index Worksheet:** 0 x 1 **OBL** species Absolute Dominant Indicator **FACW** species 43 86 (Plot Size: 15'radius) % Cover Species? Status x 2 **Shrub Stratum FAC** species 165 55 х3 = Total Cover **FACU** species 0 x 4 0 **UPL** species 0 x 5 0 Column Totals 98 (A) 251 (B) Prevalence Index = B/A = 2.56 **Hydrophytic Vegetation Indicators:** Absolute Dominant Indicator 1- Rapid Test For Hydrophytic Vegetation **Herb Stratum** (Plot Size: 5'radius) % Cover Species? Status X 2- Dominance Test is > 50% 3 Carex scoparia **FACW** X 3- Prevalence Index is =< 3.0 3 = Total Cover 4- Morphological Adaptations 5- Problematic Hydrophytic Vegetation **Definitions of Vegetation Strata:** Tree- Woody plants 3 in. (7.6cm) or more in diameter at breast height (DBH), regardless of height. Sapling/Shrub- Woody plants less than 3 in. DBH and greater than or equal to 3.28ft (1m) tall. Herb- All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28ft tall. Absolute Dominant Indicator Woody Vines- All woody vines greater than 3.28ft in (Plot Size: 30'radius) Species? **Woody Vine Stratum** % Cover Status height. **FAC** Vitis riparia 15 Χ 15 = Total Cover Hydrophytic Vegetation Present? Yes X No ___ Remarks: (Include photo numbers here or on a separate sheet.)

SOIL Sampling Point: 1_20200706_WL03_W1

Depth	Matrix	[Redo	ox Featı	ures				
(inches	Color	%	Color	%	Туре	Loc	7	exture	Remarks		
0-4	10YR 3/2	100						Loam			
4-12	10YR 6/2	85	10YR 5/6	15	С	М	Loa	my Sand			
Hydric So	oil Indicators:								Indicators for Problematic Soils:		
Hist	tosol (A1)				Polyvalu	e Below	Surface (E	315)	2 cm Muck (A10)		
Hist	tic Epipedon (A2)			Thin Dar	k Surfac	e (S9)		Coast Prarie Redox (A16)		
Blac	ck Histic (A3)				Loamy N	∕lucky M	lineral (F1)		5 cm Mucky Peat or Peat (S3)		
Нус	drogen Sulfide	e (A4)			Loamy G	ileyed M	latric (F2)		Dark Surface (S7)		
Stratified Layers (A5)				Depleted Matrix (F3)					Polyvalue Below Surface (S8)		
Dep	oleted Below	Dark Su	rface (A11)	Redox Dark Surface (F6)					Thin Dark Surface (S9)		
Thic	ck Dark Surfac	ce (A12)			Depleted Dark Surface (F7)				Iron-Manganese Masses (F12)		
	ndy Mucky Mi				Redox Depressions (F8)				Piedmont Floodplain Soils (F19)		
	ndy Gleyed Ma)						Mesic Spodic (TA6)		
	ndy Redox (S5)								Red Parent Material (F21)		
	pped Matrix (Very Shallow Dark Surface (TF12)		
Dar	k Surface (S7))							Other (Explain in Remarks)		
Restrictiv	ve Layer (if obs	erved):									
		Type:									
	Depth (in	_						Hydri	c Soil Present? Yes X No		
	Deptii (ii										
Remarks	s:						<u> </u>				

Project/Site: Cider Solar Project	City/County: Oakfield/Genessee Sampling Date: 7/6/2020							
Applicant/Owner: Hecate	State: NY Sampling							
Investigator(s): Andrew Sorci	Point:1_20200706_WL03_U							
Landform (hillslope, terrace,etc.): Rise	Local relief (concave, convex, r	none): <u>Convex</u> Slope (%) <u>1 - 2</u>						
Subregion (LRR or MLRA): LRR L	Lat: 43.110431 Long:7	78.255254 Datum: NAD83						
Soil Map Unit Name:		NWI Classification: UPL						
Are climatic / hyrologic conditions on the site \ensuremath{t}	typical for this time of year? Yes X No	(if no, explain in Remarks.)						
Are Vegetation, Soil, or Hydrology								
Are Vegetation, Soil, or Hydrology	naturally problematic? (if needed, exp	lain any answers in Remarks.)						
SUMMARY OF FINDINGS - Attach site map	n showing sampling point locations tran	spaces important foatures ats						
Hydrophytic Vegetation Present? Yes X	No Is the Sampled Area within a Wetland?							
Hydric Soil Present? Yes	NOX	Yes NoX						
Wetland Hydrology Present? Yes	NoX if yes, optional Wetl	and Site ID:						
Remarks: (Explain alternative procedures here or in a se	parate report.)							
Edge of agricultural field								
HYDROLOGY								
Wetland Hydrology Indicators:		Secondary Indicators (minimum of two required)						
Primary Indicators (minimum of one is required: cl	neck all that apply)	Surface Soil Cracks (B6)						
Surface Water (A1)	Water-Stained Leaves (B9)	Drainage Patterns (B10)						
High Water Table (A2)	Aquatic Fauna (B13)	Moss Trim Lines (B16)						
Saturation (A3)	Marl Deposits (B15)	Dry-Season Water Table (C2)						
Water Marks (B1)	Hydrogen Sulfide Odor (C1)	Crayfish Burrows (C8)						
Sediment Deposits (B2)	Oxidized Rhizospheres on Living Roots (C3)	Saturation Visible in Aerial Imagery (C9)						
Drift Deposits (B3)	Presence of Reduced Iron (C4)	Stunted or Stressed Plants (D1)						
Algal Mat or Crust (B4)	Recent Iron Reduction in Tilled Soils (C6)	Geomorphic Position (D2)						
Iron Deposits (B5)	Thin Muck Surface (C7)							
	Other (Explain in Remarks)	Shallow Aquitard (D3)						
	Other (Explain in Remarks)	Microtopographic Relief (D4)						
Sparsley Vegetated Concave Surface (B8)		FAC-Neutral Test (D5)						
Surface Water Present? Yes No X	Depth (inches)							
Water Table Present? Yes No X	Depth (inches) Wetland F	Hydrology Present? Yes No X						
Saturation Present? Yes No X	Depth (inches)							
Describe Recorded Data (stream gauge, moni	toring well periol photos provious inspection	us) if available:						
Describe Recorded Data (stream gauge, mon	tornig well, aerial photos, previous inspection	is), ii avaliable.						
Remarks:								

VEGETATION - Use scientific names of plants Sampling Point: 1_20200706_WL03_U1 Absolute Dominant Indicator **Dominance Test Worksheet:** (Plot Size: 30'radius) % Cover Species? Status **Tree Stratum Number of Dominant Species** That Are OBL, FACW, or FAC: (A) = Total Cover **Total Number of Dominant** (B) Species Across All Strata: 3 Percent of Dominant Species That Are OBL, FACW, or FAC: 66.7% (A/B) **Prevalence Index Worksheet:** 0 x 1 **OBL** species Absolute Dominant Indicator **FACW** species 18 36 (Plot Size: 15'radius) % Cover Species? Status x 2 **Shrub Stratum** FAC species 43 129 х3 30 Χ **FAC** Apocynum cannabinum Fraxinus pennsylvanica 15 Χ **FACW FACU** species 45 x 4 180 45 = Total Cover 5 **UPL** species x 5 25 Column Totals 111 (A) 370 (B) Prevalence Index = B/A = 3.33 **Hydrophytic Vegetation Indicators:** Absolute Dominant Indicator 1- Rapid Test For Hydrophytic Vegetation **Herb Stratum** (Plot Size: 5'radius) % Cover Species? Status X 2- Dominance Test is > 50% 40 Solidago canadensis Χ **FACU** 3- Prevalence Index is =< 3.0 Clematis virginiana 10 FAC 4- Morphological Adaptations 5 UPL Asclepias syriaca Erigeron annuus 5 **FACU** 5- Problematic Hydrophytic Vegetation Geum canadense 3 FAC Phalaris arundinacea 3 **FACW Definitions of Vegetation Strata:** = Total Cover 66 Tree- Woody plants 3 in. (7.6cm) or more in diameter at breast height (DBH), regardless of height. Sapling/Shrub- Woody plants less than 3 in. DBH and greater than or equal to 3.28ft (1m) tall. Herb- All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28ft tall. Absolute Dominant Indicator Woody Vines- All woody vines greater than 3.28ft in (Plot Size: 30'radius) Status **Woody Vine Stratum** % Cover Species? height. = Total Cover Hydrophytic Vegetation Present? Yes X No ___ Remarks: (Include photo numbers here or on a separate sheet.)

OIL								Sampling Point. 1_20200706_WL03_01
Depth	Matrix	[Redo	x Featu	res	
(inches	Color	%	Color	%	Type	Loc	Texture	Remarks
0-12	10YR 3/2	100					Sandy Loa	am
12-18	10YR 3/1	90	10YR 4/6	10	С	М	Sandy Loa	am
Hydric Sc	oil Indicators:							Indicators for Problematic Soils:
-	tosol (A1)				Polyvalu	e Below	Surface (B15)	2 cm Muck (A10)
His	tic Epipedon (A2)			Thin Dar	k Surface	e (S9)	Coast Prarie Redox (A16)
Bla	ck Histic (A3)				Loamy N	lucky Mi	neral (F1)	5 cm Mucky Peat or Peat (S3)
Hydrogen Sulfide (A4)					Loamy G	leyed M	atric (F2)	Dark Surface (S7)
Stratified Layers (A5)					Depleted	d Matrix	(F3)	Polyvalue Below Surface (S8)
Depleted Below Dark Surface (A11)					Redox D	ark Surfa	ce (F6)	Thin Dark Surface (S9)
Thick Dark Surface (A12)					Depleted	d Dark Su	ırface (F7)	Iron-Manganese Masses (F12)
	ndy Mucky Mi	-			Redox D	epressio	ns (F8)	Piedmont Floodplain Soils (F19)
	ndy Gleyed Ma	-	.)					Mesic Spodic (TA6)
	ndy Redox (S5)							Red Parent Material (F21)
	ipped Matrix (Very Shallow Dark Surface (TF12)
Dar	rk Surface (S7))						Other (Explain in Remarks)
Restrictiv	ve Layer (if obs	erved):						
		Type:					-	lydric Soil Present? Yes No X
	Depth (in	nches):						,,
Remarks	··							
Kemark	o.							

Project/Site: Cider Solar Project	City/County: Oakfield/Genessee Sampling Date: 7/7/20							
Applicant/Owner: Hecate	State: NY Sampling Point:							
Investigator(s): Andrew Sorci	Section, Towns	hip, Range: 1_20200707_WL4_W1						
Landform (hillslope, terrace,etc.): Dip	Local relief (concav	re, convex, none): Concave Slope (%) 1 - 3						
Subregion (LRR or MLRA): LRR L	Lat: <u>43.106864</u>	Long:78.256132						
Soil Map Unit Name: RoA		NWI Classification: PEM						
Are climatic / hyrologic conditions on the site	e typical for this time of year? Yes	X No (if no, explain in Remarks.)						
Are Vegetation, Soil, or Hydrolog	gysignificantly disturbed? A	re "Normal Circumstances" present? Yes X No						
Are Vegetation, Soil, or Hydrolog	gynaturally problematic? (if	needed, explain any answers in Remarks.)						
SUMMARY OF FINDINGS - Attach site m	ap showing sampling point loca	tions, transects, important features, etc.						
		impled Area						
	X No within a	Wetland? Yes X No						
· —		otional Wetland Site ID: WL04						
Remarks: (Explain alternative procedures here or in a								
Nemarks. (Explain alternative procedures here of in a	separate report.							
LIVEROLOGY								
HYDROLOGY Wetland Underland Indicators		Cocondan Indicators (minimum of two required)						
Wetland Hydrology Indicators:	also also all the at a goals A	Secondary Indicators (minimum of two required)						
Primary Indicators (minimum of one is required		Surface Soil Cracks (B6)						
Surface Water (A1)	Water-Stained Leaves (B9)	Drainage Patterns (B10)						
High Water Table (A2)	Aquatic Fauna (B13)	Moss Trim Lines (B16)						
Saturation (A3)	Marl Deposits (B15)	Dry-Season Water Table (C2)						
Water Marks (B1)	Hydrogen Sulfide Odor (C1)	Crayfish Burrows (C8)						
Sediment Deposits (B2)	X Oxidized Rhizospheres on Living							
Drift Deposits (B3)	Presence of Reduced Iron (C4)	Stunted or Stressed Plants (D1)						
Algal Mat or Crust (B4)	Recent Iron Reduction in Tilled	Soils (C6) X Geomorphic Position (D2)						
Iron Deposits (B5)	Thin Muck Surface (C7)	Shallow Aquitard (D3)						
Inundation Visible on Aerial Imagery (B7)	Other (Explain in Remarks)	Microtopographic Relief (D4)						
Sparsley Vegetated Concave Surface (B8)		X FAC-Neutral Test (D5)						
Surface Water Present? Yes No >	(Depth (inches)							
Water Table Present? Yes No >	(Depth (inches)	Wetland Hydrology Present? Yes X No						
Saturation Present? Yes No >								
Describe Recorded Data (stream gauge, mo	nitoring well periol photos provious	s inspections) if availables						
Describe Necolded Data (stream gauge, mo	intornig wen, aeriai priotos, previou	s inspections), it available.						
Remarks:								

		•								L4_W1
				Dominant		Dominance Test V	Vorkshee	t:		
Tree Stratum	(Plot Size:	30'radius)	% Cover	Species?	Status	Number of Domi That Are OBL, FA	•		1	(A)
			= Total Cov		/er	Total Numbe Species Ac			1	(B)
						Percent of Dor That Are OBL,	•		100%	(A/B)
						Prevalence Index \	Norkshee	t:		
			Absoluto	Dominant	Indicator	OBL species	0	x 1	0	
Shrub Stratum	(Plot Size:	15'radius)	% Cover	Species?	Status	FACW species	65	x 2	130	
	·	·				FAC species	0	x 3	0	
				= Total Cov	/er	FACU species	15	x 4	60	
						UPL species	0	x 5	0	
						Column Totals	80	(A)	190	(B)
						Prevalenc			2.38	`,
						Hydrophytic Vege	tation Inc	licators	s:	
		_, ,		Dominant		X 1- Rapid Tes	t For Hyd	rophyti	ic Vegeta	tion
Herb Stratum	(Plot Size:	5'radius)	% Cover	Species?	Status	X 2- Dominan	ce Test is	> 50%		
Phalaris arundinacea			50	Х	FACW	X 3- Prevalenc	e Index is	=< 3.0		
Poa compressa Cyperus strigosus			<u>15</u> 15		FACU FACW	4- Morpholo	ogical Ada	ptation	ıs	
Unknown species		_	15		UNK	5- Problema	_	-		n
			95	_= Total Cov	/er			,,,,,,		
						Definitions of Vegeta	ation Strat	a:		
						Tree- Woody plants 3 breast height (DBH),				neter at
						Sapling/Shrub- Wood greater than or equa				and
						Herb- All herbaceous size, and woody plan	•		. •	less of
Woody Vine Stratum	(Plot Size:	30'radius)		Dominant Species?	Indicator Status	Woody Vines- All wo height.	ody vines g	greater t	than 3.28f	t in
				_= Total Cov	/er	Hydropl Vegeta	ition			
Remarks: (Include photo nu unknown grass species (I			arate shee	t.)			ution ent? Yes	X	No	

SOIL Sampling Point: 1_20200707_WL4_W1

Depth	Matrix				Redo	x Featur	es	
(inches	Color	%	Color	%	Туре	Loc	Texture	Remarks
0-12	10YR 4/1	90	10YR 4/6	10	С	M	Loam	
12-16	10YR 3/1	95	10YR 4/6	5	С	M	Clay Loam	

Hydric Soil Indicators:		Indicators for Problematic Soils:
Histosol (A1)	Polyvalue Below Surface (B15)	2 cm Muck (A10)
Histic Epipedon (A2)	Thin Dark Surface (S9)	Coast Prarie Redox (A16)
Black Histic (A3)	Loamy Mucky Mineral (F1)	5 cm Mucky Peat or Peat (S3)
Hydrogen Sulfide (A4)	Loamy Gleyed Matric (F2)	Dark Surface (S7)
Stratified Layers (A5)	X Depleted Matrix (F3)	Polyvalue Below Surface (S8)
Depleted Below Dark Surface (A11)	X Redox Dark Surface (F6)	Thin Dark Surface (S9)
Thick Dark Surface (A12)	Depleted Dark Surface (F7)	Iron-Manganese Masses (F12)
Sandy Mucky Mineral (S1)	Redox Depressions (F8)	Piedmont Floodplain Soils (F19)
Sandy Gleyed Matrix (S4)		Mesic Spodic (TA6)
Sandy Redox (S5)		Red Parent Material (F21)
Stripped Matrix (S6)		Very Shallow Dark Surface (TF12)
Dark Surface (S7)		Other (Explain in Remarks)
Restrictive Layer (if observed):		
Type:	Hydr	ic Soil Present? Yes X No
Depth (inches):		 _
	_	

Project/Site: Cider Solar Project	City/County: Oakfield/Ge	nnesee Sampling Date: 7/24/2020					
Applicant/Owner: Hecate	nt/Owner: Hecate State: NY						
Investigator(s): Andrew Sorci	Section, Township, Range	1_20200724_WL4_W2					
Landform (hillslope, terrace,etc.): Dip	Local relief (concave, convex, none): None Slope (%) 0 - 2						
Subregion (LRR or MLRA): LRR L	Lat: 43.106799 Long:	78.256826 Datum: NAD83					
Soil Map Unit Name: RoA		NWI Classification: PSS					
Are climatic / hyrologic conditions on the site ty	pical for this time of year? Yes X No	(if no, explain in Remarks.)					
Are Vegetation, Soil, or Hydrology	significantly disturbed? Are "Normal	Circumstances" present? Yes X No					
Are Vegetation, Soil, or Hydrology	naturally problematic? (if needed, ex	plain any answers in Remarks.)					
SUMMARY OF FINDINGS - Attach site map	showing sampling point locations, trai	nsects, important features, etc.					
Hydrophytic Vegetation Present? Yes X	No Is the Sampled Are						
	within a Wetland?	Yes X No					
Hydric Soil Present? Yes X	Noif yes, entired West						
Wetland Hydrology Present? Yes X	No if yes, optional Wet	Idilu Site ID. WE04					
Remarks: (Explain alternative procedures here or in a sepa	rate report.)						
HYDROLOGY							
Wetland Hydrology Indicators:		Secondary Indicators (minimum of two required)					
Primary Indicators (minimum of one is required: che	eck all that apply)	Surface Soil Cracks (B6)					
Surface Water (A1)	Water-Stained Leaves (B9)	Drainage Patterns (B10)					
High Water Table (A2)	Aquatic Fauna (B13)	Moss Trim Lines (B16)					
Saturation (A3)	Marl Deposits (B15)	Dry-Season Water Table (C2)					
Water Marks (B1)	Hydrogen Sulfide Odor (C1)	Crayfish Burrows (C8)					
Sediment Deposits (B2)	Oxidized Rhizospheres on Living Roots (C3)	X Saturation Visible in Aerial Imagery (C9)					
Drift Deposits (B3)	Presence of Reduced Iron (C4)	Stunted or Stressed Plants (D1)					
Algal Mat or Crust (B4)	Recent Iron Reduction in Tilled Soils (C6)	Geomorphic Position (D2)					
Iron Deposits (B5)	Thin Muck Surface (C7)	Shallow Aquitard (D3)					
Inundation Visible on Aerial Imagery (B7)	Other (Explain in Remarks)	Microtopographic Relief (D4)					
	Other (Explain in Kemarks)						
Sparsley Vegetated Concave Surface (B8)		X FAC-Neutral Test (D5)					
Surface Water Present? Yes NoX	Depth (inches)						
Water Table Present? Yes No _ X	Depth (inches) Wetland	Hydrology Present? Yes X No					
Saturation Present? Yes NoX	Depth (inches)						
Describe Recorded Data (stream gauge, monito	oring well, aerial photos, previous inspection	ns), if available:					
Remarks:							

VEGETATION - Use scientific names of plants Sampling Point: 1_20200724_WL4_W2 Absolute Dominant Indicator **Dominance Test Worksheet:** (Plot Size: 30'radius) % Cover Species? **Tree Stratum** Status **Number of Dominant Species** That Are OBL. FACW, or FAC: (A) 2 = Total Cover **Total Number of Dominant** Species Across All Strata: 2 (B) **Percent of Dominant Species** That Are OBL, FACW, or FAC: 100% (A/B) Prevalence Index Worksheet: OBL species x 1 0 Absolute Dominant Indicator 200 400 (Plot Size: 15'radius) % Cover Species? Status **FACW** species x 2 **Shrub Stratum FACW** Fraxinus pennsylvanica 75 Χ FAC species O х3 0 Rosa multiflora 5 **FACU** FACU species 5 20 x 4 80 = Total Cover **UPL** species n x 5 0 **Column Totals** 205 (A) 420 (B) Prevalence Index = B/A = 2.05 **Hydrophytic Vegetation Indicators:** Absolute Dominant Indicator X 1- Rapid Test For Hydrophytic Vegetation **Herb Stratum** (Plot Size: 5'radius) % Cover Species? Status X 2- Dominance Test is > 50% Phalaris arundinacea 80 Χ **FACW** X 3- Prevalence Index is =< 3.0 Solidago gigantea 20 **FACW** 4- Morphological Adaptations Lysimachia nummularia 15 **FACW** Symphyotrichum lanceolatum 10 **FACW** 5- Problematic Hydrophytic Vegetation 125 = Total Cover **Definitions of Vegetation Strata:** Tree- Woody plants 3 in. (7.6cm) or more in diameter at breast height (DBH), regardless of height. Sapling/Shrub- Woody plants less than 3 in. DBH and greater than or equal to 3.28ft (1m) tall. Herb- All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28ft tall. Absolute Dominant Indicator Woody Vines- All woody vines greater than 3.28ft in (Plot Size: 30'radius) Status **Woody Vine Stratum** % Cover Species? height. = Total Cover Hydrophytic Vegetation Present? Yes X No ____ Remarks: (Include photo numbers here or on a separate sheet.)

SOIL Sampling Point: 1_20200724_WL4_W2

Depth	Matrix				Redo	x Featu	res	
(inches	Color	%	Color	%	Type	Loc	Texture	Remarks
0-12	7.5YR 2.5/1	100					Sandy Clay Lo	pam
12-20	2.5Y 5/1	85	10YR 4/6	15	С	М	Sandy Clay Lo	pam
Handai'a C	-:! !d:							Indicators for Dualdon et a Calle
-	oil Indicators: stosol (A1)				Polyvalu	o Polow	Surface (B15)	Indicators for Problematic Soils: 2 cm Muck (A10)
	stic Epipedon (Δ2)			Thin Dar			Coast Prarie Redox (A16)
	ack Histic (A3)	72)					neral (F1)	5 cm Mucky Peat or Peat (S3)
Hydrogen Sulfide (A4)							atric (F2)	Dark Surface (S7)
Stratified Layers (A5)					Depleted	-		Polyvalue Below Surface (S8)
	pleted Below [rface (A11)		Redox D			Thin Dark Surface (S9)
	ick Dark Surfac						ırface (F7)	Iron-Manganese Masses (F12)
	ndy Mucky Mir			Redox Depressions (F8)				Piedmont Floodplain Soils (F19)
Sar	ndy Gleyed Ma	itrix (S4	· -					Mesic Spodic (TA6)
Sar	ndy Redox (S5)							Red Parent Material (F21)
Str	ipped Matrix (S6)						Very Shallow Dark Surface (TF12)
Da	rk Surface (S7)							Other (Explain in Remarks)
Restricti	ive Layer (if obs	erved):						
nest let		Type:					10.	dute Catt Danasant 2 - Mary M. Na
	Depth (in	_					ну	dric Soil Present? Yes X No
	Deptii (iii	-						
Remark	:S:						-	

Project/Site: Cider Solar Project	City/County: Oakfield/Ger	nnesee Sampling Date: 7/24/2020						
Applicant/Owner: Hecate State: NY Sampling Point:								
Investigator(s): Andrew Sorci	Section, Township, Range:	Section, Township, Range: 1_20200724_WL4_W3						
Landform (hillslope, terrace,etc.): Dip	Local relief (concave, convex,	none): <u>Concave</u> Slope (%) <u>1 - 3</u>						
Subregion (LRR or MLRA): LRR L	Lat: 43.107260 Long:	78.257019 Datum: NAD83						
Soil Map Unit Name: RoA		NWI Classification: PFO						
Are climatic / hyrologic conditions on the site	e typical for this time of year? Yes X No	(if no, explain in Remarks.)						
Are Vegetation, Soil, or Hydrolog	gy significantly disturbed? Are "Normal	Circumstances" present? Yes X No						
Are Vegetation, Soil, or Hydrolog	gy naturally problematic? (if needed, exp	olain any answers in Remarks.)						
SUMMARY OF FINDINGS - Attach site m	ap showing sampling point locations, trar	nsects, important features, etc.						
Hydrophytic Vegetation Present? Yes	X No Is the Sampled Area	a						
Hydric Soil Present? Yes	X No within a Wetland?	Yes X No						
Wetland Hydrology Present? Yes	X No if yes, optional Wet	land Site ID: WL04						
Remarks: (Explain alternative procedures here or in a	separate report.)							
HYDROLOGY								
Wetland Hydrology Indicators:		Secondary Indicators (minimum of two required)						
Primary Indicators (minimum of one is required:	check all that apply)	Surface Soil Cracks (B6)						
Surface Water (A1)	Water-Stained Leaves (B9)	Drainage Patterns (B10)						
High Water Table (A2)	Aquatic Fauna (B13)	X Moss Trim Lines (B16)						
Saturation (A3)	Marl Deposits (B15)	Dry-Season Water Table (C2)						
Water Marks (B1)	Hydrogen Sulfide Odor (C1)	Crayfish Burrows (C8)						
Sediment Deposits (B2)	Oxidized Rhizospheres on Living Roots (C3)	Saturation Visible in Aerial Imagery (C9)						
Drift Deposits (B3)	Presence of Reduced Iron (C4)	Stunted or Stressed Plants (D1)						
Algal Mat or Crust (B4)	Recent Iron Reduction in Tilled Soils (C6)							
	Thin Muck Surface (C7)	X Geomorphic Position (D2)						
Iron Deposits (B5)	· ·	Shallow Aquitard (D3)						
Inundation Visible on Aerial Imagery (B7)	Other (Explain in Remarks)	Microtopographic Relief (D4)						
Sparsley Vegetated Concave Surface (B8)		X FAC-Neutral Test (D5)						
Surface Water Present? Yes No>	C Depth (inches)							
Water Table Present? Yes No _ >	C Depth (inches) Wetland I	etland Hydrology Present? Yes X No						
Saturation Present? Yes No>	C Depth (inches)							
Describe Recorded Data (stream gauge, mo	nitoring well, aerial photos, previous inspectior	ns), if available:						
Remarks:								

VEGETATION - Use scier	itilic mannes (n piaiits	Ala a di di	D :	to alter t	1			0724_WI	L4_VV3
Tree Stratum	(Plot Size: 3	30'radius)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test V				
Fraxinus pennsylvanica	• –		75	X	FACW	Number of Dom That Are OBL, F	•		4	(A)
rraxinus pennsylvanica			75 = Total Cover			Total Number of Dominant			(B)	
						Percent of Doi That Are OBL,	minant Spe	ecies	100%	_(A/B)
						Prevalence Index	Workshee	t:		
			Ahsolute	Dominant	Indicator	OBL species	15	x 1	15	
Shrub Stratum	(Plot Size: 1	L5'radius)	% Cover	Species?	Status	FACW species	90	x 2	180	
						FAC species	5	x 3	15	
				_= Total Cov	ver	FACU species	0	x 4	0	
						UPL species	0	x 5	0	
						Column Totals	110	(A)	210	(B)
						Prevalenc	ce Index =	B/A =	1.91	
						Hydrophytic Vege	etation Ind	licators	:	
Herb Stratum	(Plot Size: _	5'radius)	Absolute % Cover	Dominant Species?	Indicator Status	X 2- Dominance Test is > 50%			tion	
Glyceria striata			15	X	OBL					
Lysimachia nummularia			15 X FACW 30 = Total Cover			4- Morphological Adaptations				
					5- Problematic Hydrophytic Vegetation			n		
						Definitions of Vegetation Strata:				
						Tree- Woody plants breast height (DBH),				neter at
						Sapling/Shrub- Woo greater than or equa				and
						Herb- All herbaceou size, and woody plan				less of
Woody Vine Stratum	(Plot Size: _3	30'radius)		Dominant Species?	Indicator Status	Woody Vines- All wo	oody vines g	greater tl	han 3.28fi	t in
Vitis riparia			5 X FAC			-				
			5	_= Total Cov	er/er	Hydrophytic Vegetation Present? Yes X No				

SOIL Sampling Point: 1_20200724_WL4_W3

JOIL									Jamping 1 ont. 1_20200724_WL4_W3
Depth <u>Matrix</u>					Redo	ox Featu	res		
(inches	Color	%	Со	lor	%	Type	Loc	Texture	Remarks
0-4	7.5YR 2.5/1	100						Sandy Loam	
4-14	10YR 3/1	90	5YR	3/4	10	С	М	Clay Loam	
								•	
-	oil Indicators:						D 1 6	C (D45)	Indicators for Problematic Soils:
	stosol (A1)	4.21				•		Surface (B15)	2 cm Muck (A10)
	stic Epipedon (A2)					k Surface		Coast Prarie Redox (A16)
	ack Histic (A3)	(0.4)				-	-	neral (F1)	5 cm Mucky Peat or Peat (S3)
	drogen Sulfide						ileyed Ma		Dark Surface (S7)
Stratified Layers (A5)			441		-	d Matrix (•	Polyvalue Below Surface (S8)	
Depleted Below Dark Surface (A11)			11)			ark Surfa		Thin Dark Surface (S9)	
Thick Dark Surface (A12)							rface (F7)	Iron-Manganese Masses (F12)	
Sandy Mucky Mineral (S1)					кеаох D	epression	is (F8)	Piedmont Floodplain Soils (F19)	
Sandy Gleyed Matrix (S4)				_				Mesic Spodic (TA6)	
Sandy Redox (S5)						Red Parent Material (F21)			
Stripped Matrix (S6)						Very Shallow Dark Surface (TF12)			
Dark Surface (S7)							Other (Explain in Remarks)		
Restrict	ive Layer (if obs	erved):							
		Type:						Hydi	ric Soil Present? Yes X No
	Depth (in	_						Tiyui	The Soff Present: Pes NO
	-1 (
Remark	ss:								

Project/Site: Cider Solar Project	City/County: Oakfield/Gene	essee Sampling Date: 7/7/2020		
Applicant/Owner: Hecate		State: <u>NY</u> Sampling		
Investigator(s): Andrew Sorci	Section, Township, Range:	Point:1_20200707_WL4_U1		
Landform (hillslope, terrace,etc.): Rise	Local relief (concave, convex, n	one): <u>None</u> Slope (%) <u>2 - 5</u>		
Subregion (LRR or MLRA): LRR L	Lat: 43.106803 Long:7	8.255878 Datum: <u>NAD83</u>		
Soil Map Unit Name:		NWI Classification: UPL		
Are climatic / hyrologic conditions on the site	e typical for this time of year? Yes X No	(if no, explain in Remarks.)		
Are Vegetation, Soil, or Hydrolog	y significantly disturbed? Are "Normal C	ircumstances" present? Yes X No		
Are Vegetation, Soil, or Hydrolog	ynaturally problematic? (if needed, expl	ain any answers in Remarks.)		
SUMMARY OF FINDINGS - Attach site m	ap showing sampling point locations, trans	sects, important features, etc.		
Hydrophytic Vegetation Present? Yes	No X Is the Sampled Area	a		
Hydric Soil Present? Yes	No X within a Wetland?	Yes No X		
Wetland Hydrology Present? Yes	No X if yes, optional Wetla	and Site ID:		
Remarks: (Explain alternative procedures here or in a	eparate report.)			
hay field, recently mowed.				
HYDROLOGY				
Wetland Hydrology Indicators:		Secondary Indicators (minimum of two required)		
Primary Indicators (minimum of one is required:	•	Surface Soil Cracks (B6)		
Surface Water (A1)	Water-Stained Leaves (B9)	Drainage Patterns (B10)		
High Water Table (A2)	Aquatic Fauna (B13)	Moss Trim Lines (B16)		
Saturation (A3)	Marl Deposits (B15)	Dry-Season Water Table (C2)		
		Crayfish Burrows (C8)		
Water Marks (B1)	Hydrogen Sulfide Odor (C1)			
Sediment Deposits (B2)	Oxidized Rhizospheres on Living Roots (C3)	Saturation Visible in Aerial Imagery (C9)		
Drift Deposits (B3)	Presence of Reduced Iron (C4)	Stunted or Stressed Plants (D1)		
Algal Mat or Crust (B4)	Recent Iron Reduction in Tilled Soils (C6)	Geomorphic Position (D2)		
Iron Deposits (B5)	Thin Muck Surface (C7)	Shallow Aquitard (D3)		
Inundation Visible on Aerial Imagery (B7)	Other (Explain in Remarks)	Microtopographic Relief (D4)		
Sparsley Vegetated Concave Surface (B8)		FAC-Neutral Test (D5)		
Surface Water Present? Yes No X	Depth (inches)			
Water Table Present? Yes No X	Depth (inches) Wetland H	ydrology Present? Yes No X		
Saturation Present? Yes No X		<u> </u>		
Describe Recorded Data (stream gauge, moi	nitoring well, aerial photos, previous inspections	s), if available:		
Remarks:				

VEGETATION - Use scientific names of plants Sampling Point: 1_20200707_WL4_U1 Absolute Dominant Indicator **Dominance Test Worksheet:** (Plot Size: 30'radius) % Cover Species? Status **Tree Stratum Number of Dominant Species** That Are OBL, FACW, or FAC: (A) = Total Cover **Total Number of Dominant** (B) Species Across All Strata: 3 Percent of Dominant Species (A/B) That Are OBL, FACW, or FAC: 0% **Prevalence Index Worksheet:** x 1 0 **OBL** species Absolute Dominant Indicator **FACW** species 0 (Plot Size: 15'radius) % Cover Status x 2 **Shrub Stratum** Species? FAC species 0 х3 = Total Cover FACU species 75 x 4 300 **UPL** species 0 x 5 0 Column Totals 75 (A) 300 (B) Prevalence Index = B/A = **Hydrophytic Vegetation Indicators:** Absolute Dominant Indicator 1- Rapid Test For Hydrophytic Vegetation **Herb Stratum** (Plot Size: 5'radius) % Cover Species? Status 2- Dominance Test is > 50% 20 Poa pratensis Χ **FACU** 3- Prevalence Index is =< 3.0 Χ Lolium perenne 20 **FACU** 4- Morphological Adaptations Unknown species 20 Χ UNK Trifolium repens 15 **FACU** 5- Problematic Hydrophytic Vegetation Plantago major 10 **FACU** Trifolium pratense 5 **FACU Definitions of Vegetation Strata: FACU** Solidago canadensis 5 Tree- Woody plants 3 in. (7.6cm) or more in diameter at 95 = Total Cover breast height (DBH), regardless of height. Sapling/Shrub- Woody plants less than 3 in. DBH and greater than or equal to 3.28ft (1m) tall. Herb- All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28ft tall. Absolute Dominant Indicator Woody Vines- All woody vines greater than 3.28ft in (Plot Size: 30'radius) Status **Woody Vine Stratum** % Cover Species? height. = Total Cover Hydrophytic Vegetation Present? Yes ____ No __X Remarks: (Include photo numbers here or on a separate sheet.) unknown grass (mowed recently)

SOIL Sampling Point: 1_20200707_WL4_U1

exture Remarks y Loam Clay
y Loam
Clay
Indicators for Problematic Soils:
15) 2 cm Muck (A10)
Coast Prarie Redox (A16)
5 cm Mucky Peat or Peat (S3)
Dark Surface (S7)
Polyvalue Below Surface (S8)
Thin Dark Surface (S9)
Iron-Manganese Masses (F12)
Piedmont Floodplain Soils (F19)
Mesic Spodic (TA6)
Red Parent Material (F21)
Very Shallow Dark Surface (TF12)
Other (Explain in Remarks)
Hydric Soil Present? Yes No X
Tryante John Federic: 163 No A

Project/Site: Cider Solar Project	City/C	ounty: Oakfield/Genessee	Sampling Date: 7/7/2020					
Applicant/Owner: Hecate State: NY Sampling Point:								
Investigator(s): Andrew Sorci Section, Township, Range: 1_20200707_WL05_W1								
Landform (hillslope, terrace, etc.): Depressi	ion Local relie	Local relief (concave, convex, none): Linear Slope (%) 0 -						
Subregion (LRR or MLRA): LRR L	Lat: 43.102705	Long: -78.255315	Datum: NAD83					
Soil Map Unit Name: La NWI Classification: PEM								
Are climatic / hyrologic conditions on the site typical for this time of year? Yes X No (if no, explain in Remarks.)								
Are Vegetation , Soil , or Hydrolo	gy significantly distur	bed? Are "Normal Circumstances	" present? Yes X No					
Are Vegetation , Soil , or Hydrolo	gy naturally problem	atic? (if needed, explain any answer	s in Remarks.)					
<u> </u>								
SUMMARY OF FINDINGS - Attach site m	nap showing sampling p	oint locations, transects, impor	tant features, etc.					
Hydrophytic Vegetation Present? Yes	X No	Is the Sampled Area						
Hydric Soil Present? Yes	X No	within a Wetland?	res X No					
	X No	if yes, optional Wetland Site ID:	WL05_W1					
			_					
Remarks: (Explain alternative procedures here or in a Drainage ditch	r separate report.)							
Drainage ditteri								
HYDROLOGY								
Wetland Hydrology Indicators:		Secondary Ind	cators (minimum of two required)					
Primary Indicators (minimum of one is required	l: check all that apply)	Surface S	oil Cracks (B6)					
Surface Water (A1)	Water-Stained Leaves	s (B9) X Drainage	X Drainage Patterns (B10)					
High Water Table (A2)	Aquatic Fauna (B13)	Moss Trii	Moss Trim Lines (B16)					
Saturation (A3)	Marl Deposits (B15)		Dry-Season Water Table (C2)					
Water Marks (B1)	Hydrogen Sulfide Odd		Burrows (C8)					
Sediment Deposits (B2)	Oxidized Rhizosphere		n Visible in Aerial Imagery (C9)					
			or Stressed Plants (D1)					
Drift Deposits (B3)	Presence of Reduced	· · ·						
Algal Mat or Crust (B4)	Recent Iron Reductio	· · · —	phic Position (D2)					
Iron Deposits (B5)	Thin Muck Surface (C		Shallow Aquitard (D3)					
Inundation Visible on Aerial Imagery (B7)	Other (Explain in Rem	narks) Microtop	ographic Relief (D4)					
Sparsley Vegetated Concave Surface (B8)		X FAC-Neu	tral Test (D5)					
Surface Water Present? Yes No	X Depth (inches)							
Water Table Present? Yes No		 Wetland Hydrology Pres 	ent? Yes X No					
<u> </u>		_						
Saturation Present? Yes No		_						
Describe Recorded Data (stream gauge, mo	onitoring well, aerial photos	s, previous inspections), if available	:					
Remarks:								

VEGETATION - Use scientific names of plants Sampling Point: 1_20200707_WL05_W1 Absolute Dominant Indicator **Dominance Test Worksheet:** (Plot Size: 30'radius) % Cover Species? Status **Tree Stratum Number of Dominant Species** That Are OBL, FACW, or FAC: (A) = Total Cover **Total Number of Dominant** (B) Species Across All Strata: 3 Percent of Dominant Species That Are OBL, FACW, or FAC: (A/B) 100% **Prevalence Index Worksheet:** 45 x 1 45 **OBL** species Absolute Dominant Indicator **FACW** species 0 0 (Plot Size: 15'radius) % Cover Species? Status x 2 **Shrub Stratum** FAC species 45 х3 135 Cornus racemosa 30 Χ **FAC** Sambucus racemosa 5 **FACU FACU** species 5 x 4 20 = Total Cover 35 5 **UPL** species x 5 25 Column Totals 100 (A) 225 (B) Prevalence Index = B/A = 2.25 **Hydrophytic Vegetation Indicators:** Absolute Dominant Indicator 1- Rapid Test For Hydrophytic Vegetation **Herb Stratum** (Plot Size: 5'radius) % Cover Species? Status X 2- Dominance Test is > 50% 30 Typha angustifolia Χ OBL X 3- Prevalence Index is =< 3.0 Χ Rumex crispus 15 FAC 4- Morphological Adaptations Asclepias incarnata 10 OBL Cicuta maculata 5 OBL 5- Problematic Hydrophytic Vegetation Symphyotrichum urophyllum 5 UPL 65 = Total Cover **Definitions of Vegetation Strata:** Tree- Woody plants 3 in. (7.6cm) or more in diameter at breast height (DBH), regardless of height. Sapling/Shrub- Woody plants less than 3 in. DBH and greater than or equal to 3.28ft (1m) tall. Herb- All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28ft tall. Absolute Dominant Indicator Woody Vines- All woody vines greater than 3.28ft in (Plot Size: 30'radius) **Woody Vine Stratum** % Cover Species? Status height. = Total Cover Hydrophytic Vegetation Present? Yes X No ___ Remarks: (Include photo numbers here or on a separate sheet.)

SOIL Sampling Point: 1_20200707_WL05_W1

Depth Matrix Redox Features

(inches	Color	%	Color	%	Type	Loc	Texture	Remarks		
0-12	10YR 4/1	70	10YR 4/6	30	С	М	Sandy Loam			
							·			
Hvdric So	il Indicators:							Indicators for Problematic Soils:		
	tosol (A1)				Polyvalu	e Below :	Surface (B15)	2 cm Muck (A10)		
	tic Epipedon (A2)			, Thin Dar		, ,	Coast Prarie Redox (A16)		
	ck Histic (A3)	·					neral (F1)	5 cm Mucky Peat or Peat (S3)		
Нус	drogen Sulfide	(A4)			Loamy G	leyed Ma	atric (F2)	Dark Surface (S7)		
Stratified Layers (A5)				Х	Depleted	l Matrix	(F3)	Polyvalue Below Surface (S8)		
Depleted Below Dark Surface (A11)					Redox Da	ark Surfa	ce (F6)	Thin Dark Surface (S9)		
Thick Dark Surface (A12)					Depleted	l Dark Su	ırface (F7)	Iron-Manganese Masses (F12)		
Sandy Mucky Mineral (S1)			Redox Depressions (F8)				Piedmont Floodplain Soils (F19)			
San	dy Gleyed Ma	atrix (S4	.)					Mesic Spodic (TA6)		
San	dy Redox (S5))						Red Parent Material (F21)		
Stri	pped Matrix (S6)						Very Shallow Dark Surface (TF12)		
Dar	k Surface (S7)							Other (Explain in Remarks)		
Restrictiv	ve Layer (if obs	erved):								
		Typo:								
	5 .1 /:	Type:					Hydr	ic Soil Present? Yes X No		
	Depth (in	cnes): _								
Remarks	·•									
Kemarks).									

Project/Site: Cider Solar Project	City/County: Oakfield/Gen	essee Sampling Date: 7/7/2020		
Applicant/Owner: Hecate		State: <u>NY</u> Sampling		
Investigator(s): Andrew Sorci	Section, Township, Range:	Point:1_20200709_WL05_U		
Landform (hillslope, terrace,etc.): Floodplai	nLocal relief (concave, convex, n	one): <u>None</u> Slope (%) <u>0 - 3</u>		
Subregion (LRR or MLRA): LRR L	Lat: <u>43.102842</u> Long: <u>-7</u>	8.255215 Datum: NAD83		
Soil Map Unit Name: La		NWI Classification: UPL		
Are climatic / hyrologic conditions on the site	typical for this time of year? Yes X No	(if no, explain in Remarks.)		
Are Vegetation, Soil, or Hydrolog				
Are Vegetation, Soil, or Hydrolog	y naturally problematic? (if needed, expl	ain any answers in Remarks.)		
CLINANA A DV OF FINIDINGS. Attack site was				
	ap showing sampling point locations, tran	•		
Hydrophytic Vegetation Present? Yes	No X Is the Sampled Area			
Hydric Soil Present? Yes	No X within a Wetland?	Yes NoX		
Wetland Hydrology Present? Yes	No X if yes, optional Wetl	and Site ID:		
Remarks: (Explain alternative procedures here or in a s	eparate report.)			
Edge of agricultural field, disturbed				
HYDROLOGY				
Wetland Hydrology Indicators:		Secondary Indicators (minimum of two required)		
Primary Indicators (minimum of one is required:	check all that apply)	Surface Soil Cracks (B6)		
Surface Water (A1)	Water-Stained Leaves (B9)	Drainage Patterns (B10)		
High Water Table (A2)	Aquatic Fauna (B13)	Moss Trim Lines (B16)		
Saturation (A3)	Marl Deposits (B15)	Dry-Season Water Table (C2)		
Water Marks (B1)	Hydrogen Sulfide Odor (C1)	Crayfish Burrows (C8)		
Sediment Deposits (B2)	Oxidized Rhizospheres on Living Roots (C3)	Saturation Visible in Aerial Imagery (C9)		
		Stunted or Stressed Plants (D1)		
Drift Deposits (B3)	Presence of Reduced Iron (C4)			
Algal Mat or Crust (B4)	Recent Iron Reduction in Tilled Soils (C6)	Geomorphic Position (D2)		
Iron Deposits (B5)	Thin Muck Surface (C7)	Shallow Aquitard (D3)		
Inundation Visible on Aerial Imagery (B7)	Other (Explain in Remarks)	Microtopographic Relief (D4)		
Sparsley Vegetated Concave Surface (B8)		FAC-Neutral Test (D5)		
Surface Water Present? Yes No X	Depth (inches)			
Water Table Present? Yes No X	Depth (inches) Wetland H	lydrology Present? Yes No X		
Saturation Present? Yes No X	Depth (inches)			
		\		
Describe Recorded Data (stream gauge, mor	nitoring well, aerial photos, previous inspection	s), if available:		
Remarks:				

VEGETATION - Use scientific names of plants Sampling Point: 1_20200709_WL05_U1 Absolute Dominant Indicator **Dominance Test Worksheet:** (Plot Size: 30'radius) % Cover Species? Status **Tree Stratum Number of Dominant Species** That Are OBL, FACW, or FAC: (A) = Total Cover **Total Number of Dominant** Species Across All Strata: (B) 2 Percent of Dominant Species (A/B) That Are OBL, FACW, or FAC: 0% **Prevalence Index Worksheet:** x 1 0 **OBL** species Absolute Dominant Indicator **FACW** species 0 0 (Plot Size: 15'radius) % Cover Status x 2 **Shrub Stratum** Species? FAC species 30 10 х3 = Total Cover **FACU** species 0 x 4 0 **UPL** species 55 x 5 275 Column Totals 65 (A) 305 (B) Prevalence Index = B/A = 4.69 **Hydrophytic Vegetation Indicators:** Absolute Dominant Indicator 1- Rapid Test For Hydrophytic Vegetation **Herb Stratum** (Plot Size: 5'radius) % Cover Species? Status 2- Dominance Test is > 50% 30 UPL Artemisia vulgaris 3- Prevalence Index is =< 3.0 20 Χ Zea mays UPL 4- Morphological Adaptations 10 **FAC** Rumex crispus 5 UPL Daucus carota 5- Problematic Hydrophytic Vegetation 65 = Total Cover **Definitions of Vegetation Strata:** Tree- Woody plants 3 in. (7.6cm) or more in diameter at breast height (DBH), regardless of height. Sapling/Shrub- Woody plants less than 3 in. DBH and greater than or equal to 3.28ft (1m) tall. Herb- All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28ft tall. Absolute Dominant Indicator Woody Vines- All woody vines greater than 3.28ft in (Plot Size: 30'radius) **Woody Vine Stratum** % Cover Species? Status height. = Total Cover Hydrophytic Vegetation Present? Yes ____ No _X Remarks: (Include photo numbers here or on a separate sheet.)

SOIL Sampling Point: 1_20200709_WL05_U1 Depth Matrix **Redox Features** (inches % Color Color % Type Texture Remarks Loc 0-18 10YR 3/2 100 Loam **Hydric Soil Indicators:** Indicators for Problematic Soils: Histosol (A1) Polyvalue Below Surface (B15) 2 cm Muck (A10) Histic Epipedon (A2) Thin Dark Surface (S9) Coast Prarie Redox (A16) Black Histic (A3) Loamy Mucky Mineral (F1) 5 cm Mucky Peat or Peat (S3) Hydrogen Sulfide (A4) Loamy Gleyed Matric (F2) Dark Surface (S7) Stratified Layers (A5) Depleted Matrix (F3) Polyvalue Below Surface (S8) Depleted Below Dark Surface (A11) Redox Dark Surface (F6) Thin Dark Surface (S9) Thick Dark Surface (A12) Depleted Dark Surface (F7) Iron-Manganese Masses (F12) Sandy Mucky Mineral (S1) Redox Depressions (F8) Piedmont Floodplain Soils (F19) Sandy Gleyed Matrix (S4) Mesic Spodic (TA6) Sandy Redox (S5) Red Parent Material (F21) Stripped Matrix (S6) Very Shallow Dark Surface (TF12) Dark Surface (S7) Other (Explain in Remarks) Restrictive Layer (if observed): Type: Hydric Soil Present? Yes No Χ Depth (inches): Remarks:

Project/Site: Cider Solar Project	City/County: Oakfield/Ger	nessee Sampling Date: 7/7/2020				
Applicant/Owner: Hecate	State: NY Sampling Point:					
Investigator(s): Andrew Sorci	1_20200707_WL6_W1					
Landform (hillslope, terrace,etc.): Dip	Local relief (concave, convex,	none): Linear Slope (%) 2 - 5				
Subregion (LRR or MLRA): LRR L	Lat: 43.108082 Long:	78.242825 Datum: <u>NAD83</u>				
Soil Map Unit Name: Ma		NWI Classification: PEM				
Are climatic / hyrologic conditions on the site t	ypical for this time of year? Yes X No	(if no, explain in Remarks.)				
Are Vegetation \underline{X} , Soil $\underline{\hspace{1cm}}$, or Hydrology	significantly disturbed? Are "Normal	Circumstances" present? Yes X No				
Are Vegetation, Soil, or Hydrology	naturally problematic? (if needed, exp	plain any answers in Remarks.)				
SUMMARY OF FINDINGS - Attach site maj	showing sampling point locations, tran	sects. important features. etc.				
Hydrophytic Vegetation Present? Yes	No X Is the Sampled Are.					
	within a Wetland?	Yes X No				
Hydric Soil Present? Yes X						
Wetland Hydrology Present? Yes X		WLOO				
Remarks: (Explain alternative procedures here or in a se						
depressional wetland in active soy bean	field; vegetation problemmatic					
HYDROLOGY						
Wetland Hydrology Indicators:		Secondary Indicators (minimum of two required)				
Primary Indicators (minimum of one is required: cl	neck all that apply)	Surface Soil Cracks (B6)				
Surface Water (A1)	Water-Stained Leaves (B9)	Drainage Patterns (B10)				
High Water Table (A2)	Aquatic Fauna (B13)	Moss Trim Lines (B16)				
Saturation (A3)	Marl Deposits (B15)	Dry-Season Water Table (C2)				
Water Marks (B1)	Hydrogen Sulfide Odor (C1)	Crayfish Burrows (C8)				
Sediment Deposits (B2)	Oxidized Rhizospheres on Living Roots (C3)	X Saturation Visible in Aerial Imagery (C9)				
Drift Deposits (B3)	Presence of Reduced Iron (C4)					
Algal Mat or Crust (B4)	Recent Iron Reduction in Tilled Soils (C6)	in Tilled Soils (C6) X Geomorphic Position (D2) Shallow Aquitard (D3)				
Iron Deposits (B5)	Thin Muck Surface (C7)					
	Other (Explain in Remarks)					
Inundation Visible on Aerial Imagery (B7)	Other (Explain in Kemarks)	Microtopographic Relief (D4)				
Sparsley Vegetated Concave Surface (B8)		FAC-Neutral Test (D5)				
Surface Water Present? Yes No X	Depth (inches)					
Water Table Present? Yes No X	Depth (inches) Wetland I	Hydrology Present? Yes X No				
Saturation Present? Yes No X	Depth (inches)					
Describe Recorded Data (stream gauge, moni	toring well, aerial photos, previous inspection	ns), if available:				
Remarks:						

VEGETATION - Use scien	itific names	of plants				Sampling Point: 1_20200707_WL6_W1				
Tree Stratum	(Plot Size:	30'radius)	Absolute % Cover	Dominant Species?	Indicator Status	Number of Domi	inant Spe	cies	0	(A)
				_= Total Cov	ver .	Total Number of Dominant Species Across All Strata: 1			(B)	
						Percent of Dor That Are OBL,	-		0%	_(A/B)
						Prevalence Index \	Workshee	et:		
			Ahsolute	Dominant	Indicator	OBL species	0	x 1	0	
Shrub Stratum	(Plot Size:	15'radius)	% Cover	Species?	Status	FACW species	0	x 2	0	
						FAC species	0	x 3	0	
				_= Total Cov	ver .	FACU species	0	x 4	0	
						UPL species	15	x 5	75	
						Column Totals	15	(A)	75	(B)
						Prevalenc	e Index =	B/A =	5	
						Hydrophytic Vege	tation Inc	dicators	s:	
			Absolute	Dominant	Indicator	1- Rapid Tes	t For Hyd	lrophyti	c Vegeta	tion
Herb Stratum	(Plot Size:	5'radius)	% Cover	Species?	Status	2- Dominan	ce Test is	> 50%		
Glycine max			<u>15</u>	X	UPL	3- Prevalenc	ce Index is	s =< 3.0		
			15	_= Total Cov	ver .	4- Morpholo	ogical Ada	aptation	ıs	
						5- Problema	itic Hydro	phytic \	√egetatio	on
						Definitions of Veget	ation Strat	ta:		
						Tree- Woody plants breast height (DBH),				neter at
						Sapling/Shrub- Wood greater than or equa				and
						Herb- All herbaceous size, and woody plan				lless of
Woody Vine Stratum	(Plot Size:	30'radius)		Dominant Species?	Indicator Status	Woody Vines- All wo height.	ody vines į	greater t	:han 3.28t	t in
·				_= Total Cov	ver	Hydropl Vegeta	-			

SOIL Sampling Point: 1_20200707_WL6_W1

Depth	Matrix				Redo	x Featu	ires		
(inches	Color	%	Color	%	Type	Loc	Texture	Remarks	
0-5	10YR 3/2	100					Loam		
5-9	10YR 3/1	95	10YR 4/6	5	С	М	Loam		
9-16	10YR 4/1	90	10YR 4/1	10	С	М	Clay Loam		

Hydric Soil Indicators:		Indicators for Problematic Soils:
Histosol (A1)	Polyvalue Below Surface (B15)	2 cm Muck (A10)
Histic Epipedon (A2)	Thin Dark Surface (S9)	Coast Prarie Redox (A16)
Black Histic (A3)	Loamy Mucky Mineral (F1)	5 cm Mucky Peat or Peat (S3)
Hydrogen Sulfide (A4)	Loamy Gleyed Matric (F2)	Dark Surface (S7)
Stratified Layers (A5)	X Depleted Matrix (F3)	Polyvalue Below Surface (S8)
Depleted Below Dark Surface (A11)	X Redox Dark Surface (F6)	Thin Dark Surface (S9)
Thick Dark Surface (A12)	Depleted Dark Surface (F7)	Iron-Manganese Masses (F12)
Sandy Mucky Mineral (S1)	Redox Depressions (F8)	Piedmont Floodplain Soils (F19)
Sandy Gleyed Matrix (S4)		Mesic Spodic (TA6)
Sandy Redox (S5)		Red Parent Material (F21)
Stripped Matrix (S6)		Very Shallow Dark Surface (TF12)
Dark Surface (S7)		Other (Explain in Remarks)
Restrictive Layer (if observed):		
Туре:		Hydric Soil Present? Yes X No
Depth (inches):		

Remarks:

Project/Site: Cider Solar Project	City/County: Oakfield/Gen	essee Sampling Date: 7/7/2020				
Applicant/Owner: Hecate		State: <u>NY</u> Sampling				
Investigator(s): Andrew Sorci	Section, Township, Range:	Section, Township, Range: Point:1_20200707_WL6_U				
Landform (hillslope, terrace,etc.): Rise	Local relief (concave, convex, n	one): <u>Convex</u> Slope (%) <u>2 - 5</u>				
Subregion (LRR or MLRA): LRR L	Lat: 43.108083 Long:7	8.242820 Datum: NAD83				
Soil Map Unit Name: Ma		NWI Classification: UPL				
Are climatic / hyrologic conditions on the site						
Are Vegetation X, Soil , or Hydrolog	·					
Are Vegetation, Soil, or Hydrolog	gy naturally problematic? (if needed, expl	ain any answers in Remarks.)				
SUMMARY OF FINDINGS - Attach site m	ap showing sampling point locations, trans	sects, important features, etc.				
Hydrophytic Vegetation Present? Yes	No X Is the Sampled Area					
Hydric Soil Present? Yes	No X within a Wetland?	Yes No X				
Wetland Hydrology Present? Yes	No X if yes, optional Wetla	and Site ID:				
Remarks: (Explain alternative procedures here or in a	separate report.)					
active soy bean field						
HYDROLOGY						
Wetland Hydrology Indicators:		Secondary Indicators (minimum of two required)				
Primary Indicators (minimum of one is required:	check all that apply)	Surface Soil Cracks (B6)				
Surface Water (A1)	Water-Stained Leaves (B9)	Drainage Patterns (B10)				
High Water Table (A2)	Aquatic Fauna (B13)	Moss Trim Lines (B16)				
Saturation (A3)	Marl Deposits (B15)	Dry-Season Water Table (C2)				
Water Marks (B1)	Hydrogen Sulfide Odor (C1)	Crayfish Burrows (C8)				
Sediment Deposits (B2)	Oxidized Rhizospheres on Living Roots (C3)	Saturation Visible in Aerial Imagery (C9)				
Drift Deposits (B3)	Presence of Reduced Iron (C4)	Stunted or Stressed Plants (D1)				
Algal Mat or Crust (B4)	Recent Iron Reduction in Tilled Soils (C6)	Geomorphic Position (D2)				
Iron Deposits (B5)	Thin Muck Surface (C7)	Shallow Aquitard (D3)				
Inundation Visible on Aerial Imagery (B7)	Other (Explain in Remarks)	Microtopographic Relief (D4)				
Sparsley Vegetated Concave Surface (B8)		FAC-Neutral Test (D5)				
Surface Water Present? Yes No >	(Depth (inches)					
Water Table Present? Yes No		ydrology Present? Yes No X				
<u> </u>	<u> </u>	yurology rresent: resNoX				
						
Describe Recorded Data (stream gauge, mo	nitoring well, aerial photos, previous inspection	s), if available:				
Remarks:						

	mic names	of plants				Sampli	ng Point	: 1_202	00707_W	L6_U1
Tree Stratum	(Plot Size:	30'radius)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test V Number of Domi That Are OBL, FA	nant Spe	cies	0	(A)
				_= Total Cov	/er	Total Numbe Species Ac	r of Dom ross All St	inant trata:	1	(B)
						Percent of Don That Are OBL,	-		0%	_(A/B)
						Prevalence Index \	Norkshee	et:		
			Absolute	Dominant	Indicator	OBL species	0	x 1	0	
Shrub Stratum	(Plot Size:	15'radius)	% Cover	Species?	Status	FACW species	0	x 2	0	
						FAC species	0	x 3	0	
				_= Total Cov	/er	FACU species	0	x 4	0	
						UPL species	15	x 5	75	
						Column Totals	15	(A)	75	(B)
						Prevalenc	e Index =	B/A =	5	
						Hydrophytic Vege	tation Inc	dicators	: :	
			Absolute	Dominant	Indicator	1- Rapid Tes	t For Hyd	lrophyti	c Vegeta	tion
Herb Stratum	(Plot Size:	5'radius)	% Cover	Species?	Status	2- Dominan	ce Test is	> 50%		
Glyciene max			<u>15</u>	X	UPL	3- Prevalenc	e Index is	s =< 3.0		
			15	_= Total Cov	/er	4- Morpholo	gical Ada	aptation	S	
						5- Problema	tic Hydro	phytic \	/egetatio	on
						Definitions of Vegeta	ation Strat	ta:		
						Tree- Woody plants 3 breast height (DBH),				neter at
						Sapling/Shrub- Wood greater than or equa				and
						Herb- All herbaceous size, and woody plan				lless of
Woody Vine Stratum	(Plot Size:	30'radius)		Dominant Species?	Indicator Status	Woody Vines- All wo height.	ody vines į	greater t	han 3.281	t in
				_= Total Cov	/er	Hydropl Vegeta Pres	-		NI- V	

SOIL Sampling Point: 1_20200707_WL6_U1

Depth	Matrix				Redo	ox Featı	ıres	
(inches	Color	%	Color	%	Type	Loc	Texture	Remarks
0-6	10YR 3/2	100					Loam	
6-14	10YR 3/1	100					Clay Loan	n
14-20	10YR 4/1	90	10YR 4/4	10	С	М	Clay	
							·	
Hydric Sc	oil Indicators:							Indicators for Problematic Soils:
His	tosol (A1)				Polyvalu	e Below	Surface (B15)	2 cm Muck (A10)
His	tic Epipedon ((A2)			Thin Dar	k Surfac	e (S9)	Coast Prarie Redox (A16)
Black Histic (A3)					•	•	ineral (F1)	5 cm Mucky Peat or Peat (S3)
Hydrogen Sulfide (A4)							latric (F2)	Dark Surface (S7)
Stratified Layers (A5)					Depleted			Polyvalue Below Surface (S8)
Depleted Below Dark Surface (A11)			Redox Dark Surface (F6)				Thin Dark Surface (S9)	
Thick Dark Surface (A12)			Depleted Dark Surface (F7)				Iron-Manganese Masses (F12)	
	ndy Mucky Mi			Redox Depressions (F8)				Piedmont Floodplain Soils (F19)
	ndy Gleyed Ma	-)					Mesic Spodic (TA6)
	ndy Redox (S5							Red Parent Material (F21)
	ipped Matrix (Very Shallow Dark Surface (TF12)
Dar	rk Surface (S7))						Other (Explain in Remarks)
Restrictiv	ve Layer (if obs	erved):						
		Type:					H	ydric Soil Present? Yes No X
	Depth (ir	nches):						 -
Remarks	··							
Kemark.	.							

Project/Site: Cider Solar Project	City/Co	ounty: Oakfield/Gen	essee S	ampling Date: <u>7/8/2020</u>		
Applicant/Owner: Hecate		State: NY Sampling Point:				
Investigator(s): Andrew Sorci	Sectio	Section, Township, Range: 1_20200708_WL07_W1				
Landform (hillslope, terrace,etc.): Depression	n Local relie	Local relief (concave, convex, none): Linear Slope (%) 0				
Subregion (LRR or MLRA): LRR L	Lat: 43.099916	Long: -78	.261152	Datum: NAD83		
Soil Map Unit Name: OdA			NWI Classific	ation: PSS		
Are climatic / hyrologic conditions on the site	typical for this time of ye	ar? Yes <u>X</u> No	(if no, ex	plain in Remarks.)		
Are Vegetation, Soil, or Hydrology	significantly distur	bed? Are "Normal (Circumstances" ¡	oresent? Yes X No		
Are Vegetation, Soil, or Hydrology	naturally problema	atic? (if needed, expl	ain any answers i	n Remarks.)		
SUMMARY OF FINDINGS - Attach site ma	p showing sampling po	oint locations, tran	sects, importa	nt features, etc.		
Hydrophytic Vegetation Present? Yes X	. No	Is the Sampled Area				
Hydric Soil Present? Yes X	No No	within a Wetland?	Ye	s X No		
Wetland Hydrology Present? Yes X	. No	if yes, optional Wetl	and Site ID:	WL07		
Remarks: (Explain alternative procedures here or in a se	eparate report.)					
Riparian area to stream						
•						
HYDROLOGY						
Wetland Hydrology Indicators:			-	tors (minimum of two required)		
Primary Indicators (minimum of one is required: c	heck all that apply)		Surface Soil	Cracks (B6)		
X Surface Water (A1)	Water-Stained Leaves	s (B9)	Drainage Patterns (B10)			
X High Water Table (A2)	Aquatic Fauna (B13)		Moss Trim Lines (B16)			
X Saturation (A3)	Marl Deposits (B15)		Dry-Season Water Table (C2)			
Water Marks (B1)	Hydrogen Sulfide Odo	or (C1)	Crayfish Burrows (C8)			
Sediment Deposits (B2)	Oxidized Rhizosphere	s on Living Roots (C3)	X Saturation	Visible in Aerial Imagery (C9)		
Drift Deposits (B3)	Presence of Reduced			Stressed Plants (D1)		
Algal Mat or Crust (B4)	Recent Iron Reduction		X Geomorphic Position (D2)			
Iron Deposits (B5)	Thin Muck Surface (C7	` ,	Shallow Aquitard (D3)			
Inundation Visible on Aerial Imagery (B7)	Other (Explain in Rem	iarks)		graphic Relief (D4)		
Sparsley Vegetated Concave Surface (B8)			X FAC-Neutra	l Test (D5)		
Surface Water Present? Yes X No	Depth (inches) 1					
Water Table Present? Yes X No	Depth (inches) 0	Wetland H	ydrology Preser	nt? Yes X No		
Saturation Present? Yes X No	Depth (inches) 0	_				
			-\ '£' - - -			
Describe Recorded Data (stream gauge, moni	toring well, aerial photos	s, previous inspection	s), if available:			
Remarks:						

VEGETATION - Use scientific names of plants Sampling Point: 1_20200708_WL07_W1 Absolute Dominant Indicator **Dominance Test Worksheet:** (Plot Size: 30'radius) % Cover Species? Status **Tree Stratum Number of Dominant Species** 20 Х FAC That Are OBL, FACW, or FAC: 5 (A) Acer negundo 20 = Total Cover **Total Number of Dominant** (B) Species Across All Strata: 5 Percent of Dominant Species (A/B) That Are OBL, FACW, or FAC: 100% **Prevalence Index Worksheet:** 40 40 x 1 **OBL** species Absolute Dominant Indicator **FACW** species 80 160 (Plot Size: 15'radius) % Cover Species? Status x 2 **Shrub Stratum** FAC species 135 45 х3 Cornus amomum 40 Χ **FACW** Cornus racemosa 25 Χ FAC **FACU** species 0 x 4 0 65 = Total Cover **UPL** species 0 x 5 0 Column Totals 165 (A) 335 (B) Prevalence Index = B/A = 2.03 **Hydrophytic Vegetation Indicators:** Absolute Dominant Indicator 1- Rapid Test For Hydrophytic Vegetation **Herb Stratum** (Plot Size: 5'radius) % Cover Species? Status X 2- Dominance Test is > 50% 40 Typha angustifolia OBL X 3- Prevalence Index is =< 3.0 Symphyotrichum lanceolatum 40 Х **FACW** 4- Morphological Adaptations 80 = Total Cover 5- Problematic Hydrophytic Vegetation **Definitions of Vegetation Strata:** Tree- Woody plants 3 in. (7.6cm) or more in diameter at breast height (DBH), regardless of height. Sapling/Shrub- Woody plants less than 3 in. DBH and greater than or equal to 3.28ft (1m) tall. Herb- All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28ft tall. Absolute Dominant Indicator Woody Vines- All woody vines greater than 3.28ft in (Plot Size: 30'radius) **Woody Vine Stratum** % Cover Species? Status height. = Total Cover Hydrophytic Vegetation Present? Yes X No ___ Remarks: (Include photo numbers here or on a separate sheet.)

SOIL Sampling Point: 1_20200708_WL07_W1

								1 0
Depth	Matrix				Redo	x Featu		
(inches	Color	%	Color	%	Type	Loc	Texture	Remarks
0-5	10YR 5/1	70	10YR 4/6	30	С	М	Silt Loam	
III. data Ca								to discours for Book largest's Caller
-	oil Indicators:				Dobardio	o Dolovy (Surface (D15)	Indicators for Problematic Soils:
	tosol (A1)	۸۵۱			-		Surface (B15)	2 cm Muck (A10) Coast Prarie Redox (A16)
Histic Epipedon (A2)				$\overline{}$		k Surface	: (39) neral (F1)	5 cm Mucky Peat or Peat (S3)
Black Histic (A3)					•	leyed Ma	, ,	
Hydrogen Sulfide (A4) Stratified Layers (A5)					-	-		Dark Surface (S7)
- 						d Matrix (Polyvalue Below Surface (S8)
Depleted Below Dark Surface (A11)					ark Surfa	-	Thin Dark Surface (S9)	
Thick Dark Surface (A12) Sandy Mucky Mineral (S1)				-		rface (F7)	Iron-Manganese Masses (F12)	
				Redox Depressions (F8)			15 (F8)	Piedmont Floodplain Soils (F19)
	ndy Gleyed Ma	-)					Mesic Spodic (TA6)
	ndy Redox (S5)							Red Parent Material (F21)
	ipped Matrix (•						Very Shallow Dark Surface (TF12)
Dai	rk Surface (S7)							Other (Explain in Remarks)
D = at = i at i	/:f aba							
Restrictiv	ve Layer (if obs	ervea):						
		Type:					Hydric	Soil Present? Yes X No
	Depth (in	ches):						
		_						
Remark	s:							

Project/Site: Cider Solar Project	City/County: Oakfield/Ger	nessee Sampling Date: 7/7/2020		
Applicant/Owner: Hecate		State: NY Sampling Point:		
Investigator(s): Andrew Sorci	1_20200708_WL07_W2			
Landform (hillslope, terrace,etc.): Depression	Local relief (concave, convex, none): Linear Slope (%) 0 -			
Subregion (LRR or MLRA): LRR L	Lat: 43.098942 Long: -	78.266750 Datum: NAD83		
Soil Map Unit Name: OdA		NWI Classification: PEM		
Are climatic / hyrologic conditions on the site t	ypical for this time of year? Yes X No	(if no, explain in Remarks.)		
Are Vegetation, Soil, or Hydrology	significantly disturbed? Are "Normal	Circumstances" present? Yes X No		
Are Vegetation , Soil , or Hydrology	naturally problematic? (if needed, exp	lain any answers in Remarks.)		
SUMMARY OF FINDINGS - Attach site map	a showing sampling point locations tran	spects important features etc		
Hydrophytic Vegetation Present? Yes X	No Is the Sampled Area within a Wetland?			
Hydric Soil Present? Yes X	NO	Yes X No		
Wetland Hydrology Present? Yes X	No if yes, optional Wet	land Site ID: WL07		
Remarks: (Explain alternative procedures here or in a sep	parate report.)			
HYDROLOGY				
Wetland Hydrology Indicators:		Secondary Indicators (minimum of two required)		
Primary Indicators (minimum of one is required: cl	neck all that apply)	Surface Soil Cracks (B6)		
Surface Water (A1)	Water-Stained Leaves (B9)	Drainage Patterns (B10)		
High Water Table (A2)	Aquatic Fauna (B13)	Moss Trim Lines (B16)		
Saturation (A3)	Marl Deposits (B15)	Dry-Season Water Table (C2)		
Water Marks (B1)	Hydrogen Sulfide Odor (C1)	Crayfish Burrows (C8)		
Sediment Deposits (B2)	Oxidized Rhizospheres on Living Roots (C3)	X Saturation Visible in Aerial Imagery (C9)		
Drift Deposits (B3)	Presence of Reduced Iron (C4)	Stunted or Stressed Plants (D1)		
Algal Mat or Crust (B4)	Recent Iron Reduction in Tilled Soils (C6)	X Geomorphic Position (D2)		
				
Iron Deposits (B5)	Thin Muck Surface (C7)	Shallow Aquitard (D3)		
Inundation Visible on Aerial Imagery (B7)	Other (Explain in Remarks)	Microtopographic Relief (D4)		
Sparsley Vegetated Concave Surface (B8)		X FAC-Neutral Test (D5)		
Surface Water Present? Yes No X	Depth (inches)			
Water Table Present? Yes No X	Depth (inches) Wetland I	Hydrology Present? Yes X No		
Saturation Present? Yes No X	Depth (inches)	 -		
Describe Recorded Data (streem gauge monit	toring well porial photos provious inspection	oc) if available.		
Describe Recorded Data (stream gauge, monit	toring well, aerial photos, previous inspection	is), if available:		
Remarks:				

VEGETATION - Use scientific names of plants Sampling Point: 1_20200708_WL07_W2 Absolute Dominant Indicator **Dominance Test Worksheet:** (Plot Size: 30'radius) % Cover Species? Status **Tree Stratum Number of Dominant Species** That Are OBL, FACW, or FAC: (A) = Total Cover **Total Number of Dominant** Species Across All Strata: (B) 2 Percent of Dominant Species That Are OBL, FACW, or FAC: (A/B) 100% **Prevalence Index Worksheet: OBL** species 11 x 1 11 Absolute Dominant Indicator **FACW** species 115 230 (Plot Size: 15'radius) % Cover Species? Status x 2 **Shrub Stratum FAC** species 0 х3 Salix interior Χ **FACW** 15 15 = Total Cover **FACU** species 0 x 4 0 **UPL** species 0 x 5 0 Column Totals 126 (A) 241 (B) Prevalence Index = B/A = 1.91 **Hydrophytic Vegetation Indicators:** Absolute Dominant Indicator X 1- Rapid Test For Hydrophytic Vegetation **Herb Stratum** (Plot Size: 5'radius) % Cover Species? Status X 2- Dominance Test is > 50% 90 Poa palustris Х **FACW** X 3- Prevalence Index is =< 3.0 Agrostis gigantea 10 **FACW** 4- Morphological Adaptations Alisma plantago-aquatica 5 OBL Typha angustifolia 3 OBL 5- Problematic Hydrophytic Vegetation Asclepias incarnata 3 OBL 111 = Total Cover **Definitions of Vegetation Strata:** Tree- Woody plants 3 in. (7.6cm) or more in diameter at breast height (DBH), regardless of height. Sapling/Shrub- Woody plants less than 3 in. DBH and greater than or equal to 3.28ft (1m) tall. Herb- All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28ft tall. Absolute Dominant Indicator Woody Vines- All woody vines greater than 3.28ft in (Plot Size: 30'radius) **Woody Vine Stratum** % Cover Species? Status height. = Total Cover Hydrophytic Vegetation Present? Yes X No ____ Remarks: (Include photo numbers here or on a separate sheet.)

SOIL Sampling Point: 1_20200708_wL07_w2

JOIL								Jamping 1 ont. 1_20200708_WE07_W2
Depth	Matrix	(Redo	ox Featur	es	
(inches	Color	%	Color	%	Type	Loc	Texture	Remarks
0-2	10YR 3/2	100					Loam	
2-12	10YR 5/1	65	7.5YR 5/6	35	С	М	Clay	
	·						•	
•	oil Indicators:							Indicators for Problematic Soils:
	tosol (A1)				=		urface (B15)	2 cm Muck (A10)
	tic Epipedon ((A2)				k Surface		Coast Prarie Redox (A16)
	ck Histic (A3)				-	/lucky Min		5 cm Mucky Peat or Peat (S3)
	drogen Sulfide				-	ileyed Mat		Dark Surface (S7)
	atified Layers				=	d Matrix (F	-	Polyvalue Below Surface (S8)
	pleted Below					ark Surfac		Thin Dark Surface (S9)
	ck Dark Surfac				-	d Dark Sur		Iron-Manganese Masses (F12)
	ndy Mucky Mi			Redox Depressions (F8)				Piedmont Floodplain Soils (F19)
	ndy Gleyed Ma	-)					Mesic Spodic (TA6)
	ndy Redox (S5							Red Parent Material (F21)
	ipped Matrix (rk Surface (S7)							Very Shallow Dark Surface (TF12)
Dai	K Surface (37))						Other (Explain in Remarks)
Restrictiv	ve Layer (if obs	erved):						
		Type:					Hydrid	Soil Present? Yes X No
	Depth (ir	_					Trydric	750111C3C11C: 1C3 X 1V0
	-1 (
Remark	s:							

Project/Site: Cider Solar Project	City/County: Oakfield/Ger	essee Sampling Date: 7/7/2020					
Applicant/Owner: Hecate	Section Township Page: 1 20200708 WL07 U1						
Investigator(s): Andy Smith	Section, Township, Range:	1_20200708_WL07_U1					
Landform (hillslope, terrace,etc.): Rise	Local relief (concave, convex, r	none): <u>Convex</u> Slope (%) <u>5 - 15</u>					
Subregion (LRR or MLRA): LRR L	Lat: 43.099862 Long: -7	78.261138 Datum: <u>NAD83</u>					
Soil Map Unit Name: OdA		NWI Classification: UPL					
Are climatic / hyrologic conditions on the site	typical for this time of year? Yes X No	(if no, explain in Remarks.)					
Are Vegetation, Soil, or Hydrology	significantly disturbed? Are "Normal	Circumstances" present? Yes X No					
Are Vegetation, Soil, or Hydrology	naturally problematic? (if needed, exp	lain any answers in Remarks.)					
SUMMARY OF FINDINGS - Attach site ma	showing sampling point locations, tran	sects, important features, etc.					
Hydrophytic Vegetation Present? Yes	No X Is the Sampled Area	-					
	within a Wetland?	Yes No X					
Hydric Soil Present? Yes	No X						
Wetland Hydrology Present? Yes	No X if yes, optional Wetl	and site ib.					
Remarks: (Explain alternative procedures here or in a se	parate report.)						
HYDROLOGY							
Wetland Hydrology Indicators:		Secondary Indicators (minimum of two required)					
Primary Indicators (minimum of one is required: c	heck all that apply)	Surface Soil Cracks (B6)					
Surface Water (A1)	Water-Stained Leaves (B9)	Drainage Patterns (B10)					
High Water Table (A2)	Aquatic Fauna (B13)	Moss Trim Lines (B16)					
Saturation (A3)	Marl Deposits (B15)	Dry-Season Water Table (C2)					
Water Marks (B1)	Hydrogen Sulfide Odor (C1)	Crayfish Burrows (C8)					
Sediment Deposits (B2)	Oxidized Rhizospheres on Living Roots (C3)	Saturation Visible in Aerial Imagery (C9)					
Drift Deposits (B3)	Presence of Reduced Iron (C4)	Stunted or Stressed Plants (D1)					
Algal Mat or Crust (B4)	Recent Iron Reduction in Tilled Soils (C6)	Geomorphic Position (D2)					
Iron Deposits (B5)	Thin Muck Surface (C7)	Shallow Aquitard (D3)					
- 	Other (Explain in Remarks)						
Inundation Visible on Aerial Imagery (B7)	Other (Explain in Kemarks)	Microtopographic Relief (D4)					
Sparsley Vegetated Concave Surface (B8)		FAC-Neutral Test (D5)					
Surface Water Present? Yes No X	Depth (inches)						
Water Table Present? Yes No _ X	Depth (inches) Wetland H	Hydrology Present? Yes No X					
Saturation Present? Yes No X	Depth (inches)						
Describe Recorded Data (stream gauge, moni	toring well, aerial photos, previous inspection	ns), if available:					
, , ,	, , , , , , , , , , , , , , , , , , , ,	"					
Remarks:							

VEGETATION - Use scientific names of plants Sampling Point: 1_20200708_WL07_U1 Absolute Dominant Indicator **Dominance Test Worksheet:** (Plot Size: 30'radius) % Cover Species? Status **Tree Stratum Number of Dominant Species** 60 Х FAC That Are OBL, FACW, or FAC: (A) Acer negundo 60 = Total Cover **Total Number of Dominant** Species Across All Strata: 7 (B) Percent of Dominant Species That Are OBL, FACW, or FAC: 42.9% (A/B) **Prevalence Index Worksheet:** 0 x 1 **OBL** species Absolute Dominant Indicator **FACW** species 15 30 (Plot Size: 15'radius) % Cover Species? x 2 **Shrub Stratum Status** FAC species 75 225 FACU х3 Rubus idaeus 20 Χ Cornus racemosa 15 Χ FAC **FACU** species 50 x 4 200 **FACU** Lonicera morrowii 15 Χ **UPL** species 35 x 5 175 50 = Total Cover Column Totals 175 (A) 630 (B) Prevalence Index = B/A = 3.6 **Hydrophytic Vegetation Indicators:** Absolute Dominant Indicator 1- Rapid Test For Hydrophytic Vegetation **Herb Stratum** (Plot Size: 5'radius) % Cover Species? Status 2- Dominance Test is > 50% UPL Artemisia vulgaris 35 Χ 3- Prevalence Index is =< 3.0 Χ Symphyotrichum lanceolatum 15 **FACW** 4- Morphological Adaptations Solidago canadensis 15 Χ **FACU** 65 = Total Cover 5- Problematic Hydrophytic Vegetation **Definitions of Vegetation Strata:** Tree- Woody plants 3 in. (7.6cm) or more in diameter at breast height (DBH), regardless of height. Sapling/Shrub- Woody plants less than 3 in. DBH and greater than or equal to 3.28ft (1m) tall. Herb- All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28ft tall. Absolute Dominant Indicator Woody Vines- All woody vines greater than 3.28ft in (Plot Size: 30'radius) **Woody Vine Stratum** % Cover Species? Status height. = Total Cover Hydrophytic Vegetation Present? Yes ____ No _X

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

SOIL Sampling Point: 1_20200708_WL07_U1 Depth Matrix **Redox Features** (inches % Color Color % Type Texture Remarks Loc 0-12 10YR 3/2 100 Silt Loam **Hydric Soil Indicators:** Indicators for Problematic Soils: Histosol (A1) Polyvalue Below Surface (B15) 2 cm Muck (A10) Histic Epipedon (A2) Thin Dark Surface (S9) Coast Prarie Redox (A16) Black Histic (A3) Loamy Mucky Mineral (F1) 5 cm Mucky Peat or Peat (S3) Hydrogen Sulfide (A4) Loamy Gleyed Matric (F2) Dark Surface (S7) Stratified Layers (A5) Depleted Matrix (F3) Polyvalue Below Surface (S8) Depleted Below Dark Surface (A11) Redox Dark Surface (F6) Thin Dark Surface (S9) Thick Dark Surface (A12) Depleted Dark Surface (F7) Iron-Manganese Masses (F12) Sandy Mucky Mineral (S1) Redox Depressions (F8) Piedmont Floodplain Soils (F19) Sandy Gleyed Matrix (S4) Mesic Spodic (TA6) Sandy Redox (S5) Red Parent Material (F21) Stripped Matrix (S6) Very Shallow Dark Surface (TF12) Dark Surface (S7) Other (Explain in Remarks) Restrictive Layer (if observed): Type: Rock Hydric Soil Present? Yes No Χ Depth (inches): 12 Remarks:

Project/Site: Cider Solar Project	City/C	ounty: Oakfield/Genessee San	npling Date: 7/8/2020				
Applicant/Owner: Hecate		State: NY Sampling Point:					
Investigator(s): Andrew Sorci	Section	n, Township, Range:1	_20200708_WL08_W1				
Landform (hillslope, terrace,etc.): Depression	on Local relie	ef (concave, convex, none): Concave	Slope (%) <u>0 - 2</u>				
Subregion (LRR or MLRA): LRR L	Lat: 43.106040	Lat: 43.106040 Long:78.270946 Datum: NAD83					
Soil Map Unit Name: PhB		NWI Classificat	ion: PEM				
Are climatic / hyrologic conditions on the site	e typical for this time of ye	ar? Yes X No (if no, expl	ain in Remarks.)				
Are Vegetation, Soil, or Hydrolog	gysignificantly distur	bed? Are "Normal Circumstances" pre	esent? Yes X No				
Are Vegetation, Soil, or Hydrolog	gynaturally problem	atic? (if needed, explain any answers in R	emarks.)				
			_				
SUMMARY OF FINDINGS - Attach site m	ap showing sampling p	oint locations, transects, important	features, etc.				
Hydrophytic Vegetation Present? Yes	X No	Is the Sampled Area					
Hydric Soil Present? Yes	X No	within a Wetland? Yes X No					
Wetland Hydrology Present? Yes	X No	if yes, optional Wetland Site ID:	WL08				
Remarks: (Explain alternative procedures here or in a	separate report.)						
Edge of agricultural field, no crops grow	wing in wetland area						
HYDROLOGY							
Wetland Hydrology Indicators:		Secondary Indicator	rs (minimum of two required)				
Primary Indicators (minimum of one is required:	: check all that apply)	Surface Soil Ci					
Surface Water (A1)	Water-Stained Leave	s (B9) Drainage Patt	erns (B10)				
High Water Table (A2)	Aquatic Fauna (B13)	Moss Trim Lin					
Saturation (A3)	Marl Deposits (B15)		Dry-Season Water Table (C2)				
Water Marks (B1)	Hydrogen Sulfide Odd	 -					
Sediment Deposits (B2)			ible in Aerial Imagery (C9)				
Drift Deposits (B3)	Presence of Reduced		essed Plants (D1)				
Algal Mat or Crust (B4)	Recent Iron Reductio	·	, ,				
Iron Deposits (B5)	Thin Muck Surface (C						
Inundation Visible on Aerial Imagery (B7)	Other (Explain in Rem	arks)Microtopogra	phic Relief (D4)				
Sparsley Vegetated Concave Surface (B8)		X FAC-Neutral T	est (D5)				
Surface Water Present? Yes No >	C Depth (inches)						
Water Table Present? Yes No >	C Depth (inches)	Wetland Hydrology Present?	Yes X No				
Saturation Present? Yes No >	C Depth (inches)	_					
Describe Besserded Date (streets assessment		- - - - - - - - - - - - - -					
Describe Recorded Data (stream gauge, mo	nitoring well, aerial photos	s, previous inspections), if available:					
Remarks:							

VEGETATION - Use scien	tific names of plants				Sampli	ng Point:	1_202	:00708_W	L08_W1
Tree Stratum	(Plot Size: 30'radius)	Absolute % Cover	Dominant Species?	Indicator Status	Number of Domi	inant Spec	ies	2	(A)
			_= Total Cov	ver	Total Numbe Species Ac	er of Domi	nant	2	_(B)
					Percent of Dor That Are OBL,	-		100%	(A/B)
					Prevalence Index \	Workshee	t:		
		Absolute	Dominant	Indicator	OBL species	25	_ x 1	25	
Shrub Stratum	(Plot Size: 15'radius)	% Cover	Species?	Status	FACW species	25	x 2	50	
					FAC species	0	_ x 3	0	
		-	_= Total Cov	ver	FACU species	0	x 4	0	
					UPL species	0	x 5	0	
					Column Totals	50	(A)	75	(B)
					Prevalenc	e Index =	B/A = _	1.5	
					Hydrophytic Vege	tation Ind	licator	s:	
		Absolute	Dominant	Indicator	X 1- Rapid Tes	t For Hydi	ophyt	ic Vegeta	tion
Herb Stratum	(Plot Size:5'radius)	% Cover	Species?	Status	X 2- Dominan	ce Test is >	> 50%		
Phalaris arundinacea		25	X	FACW	X 3- Prevalence	ce Index is	=< 3.0		
Eleocharis obtusa		<u>25</u> 50	= Total Cov	<u>OBL</u> ver	4- Morpholo	ogical Ada	ptatior	าร	
			_		5- Problema	itic Hydroj	ohytic '	Vegetatio	n
					Definitions of Veget	ation Strata	a:		
					Tree- Woody plants : breast height (DBH),				neter at
					Sapling/Shrub- Wood greater than or equa				and
					Herb- All herbaceous size, and woody plan				less of
Woody Vine Stratum	(Plot Size: 30'radius)		Dominant Species?	Indicator Status	Woody Vines- All wo height.	ody vines g	reater	than 3.28f	t in
			= Total Cov	ver	Hydropi Vegeta Pres	-	X	No	
Remarks: (Include photo no	umbers here or on a sep	arate shee	t.)		_				

SOIL Sampling Point: 1_20200708_WL08_W1

Matrix				Redo	x Featu	res		
Color	%	Color	%	Type	Loc	Texture	Remarks	
10YR 4/2	90	10YR 5/8	10	С	М	Clay Loam		
10YR 5/1	80	10YR 4/6	20	С	M	Clay Loam		
10YR 6/1	70	10YR 5/8	30	С	М	Clay		
	Color 10YR 4/2 10YR 5/1	Matrix Color % 10YR 4/2 90 10YR 5/1 80 10YR 6/1 70	Color % Color 10YR 4/2 90 10YR 5/8 10YR 5/1 80 10YR 4/6	Color % Color % 10YR 4/2 90 10YR 5/8 10 10YR 5/1 80 10YR 4/6 20	Color % Color % Type 10YR 4/2 90 10YR 5/8 10 C 10YR 5/1 80 10YR 4/6 20 C	Color % Color % Type Loc 10YR 4/2 90 10YR 5/8 10 C M 10YR 5/1 80 10YR 4/6 20 C M	Color % Color % Type Loc Texture 10YR 4/2 90 10YR 5/8 10 C M Clay Loam 10YR 5/1 80 10YR 4/6 20 C M Clay Loam	Color % Type Loc Texture Remarks 10YR 4/2 90 10YR 5/8 10 C M Clay Loam 10YR 5/1 80 10YR 4/6 20 C M Clay Loam

Hydric Soil Indicators:		Indicators for Problematic Soils:
Histosol (A1)	Polyvalue Below Surface (B15)	2 cm Muck (A10)
Histic Epipedon (A2)	Thin Dark Surface (S9)	Coast Prarie Redox (A16)
Black Histic (A3)	Loamy Mucky Mineral (F1)	5 cm Mucky Peat or Peat (S3)
Hydrogen Sulfide (A4)	Loamy Gleyed Matric (F2)	Dark Surface (S7)
Stratified Layers (A5)	X Depleted Matrix (F3)	Polyvalue Below Surface (S8)
Depleted Below Dark Surface (A11)	Redox Dark Surface (F6)	Thin Dark Surface (S9)
Thick Dark Surface (A12)	Depleted Dark Surface (F7)	Iron-Manganese Masses (F12)
Sandy Mucky Mineral (S1)	Redox Depressions (F8)	Piedmont Floodplain Soils (F19)
Sandy Gleyed Matrix (S4)		Mesic Spodic (TA6)
Sandy Redox (S5)		Red Parent Material (F21)
Stripped Matrix (S6)		Very Shallow Dark Surface (TF12)
Dark Surface (S7)		Other (Explain in Remarks)
Restrictive Layer (if observed):		
Type:		Hydric Soil Present? Yes X No
Depth (inches):		Tryune son resent. Tes X 100
235 (333).		

Project/Site: Cider Solar Project	City/County: Oakfield/Gen	essee Sampling Date: 7/8/2020					
Applicant/Owner: Hecate	State: NY Sampling						
Investigator(s): Andy Smith	Section, Township, Range:	Point:1_0200708_WL08_U1					
Landform (hillslope, terrace,etc.): Rise	Local relief (concave, convex, none): Convex Slope (%) 2 - 4						
Subregion (LRR or MLRA): LRR L	Lat: 43.106006 Long:78.270827 Datum: NAD83						
Soil Map Unit Name: PhB		NWI Classification: UPL					
Are climatic / hyrologic conditions on the site \ensuremath{t}	ypical for this time of year? Yes X No	(if no, explain in Remarks.)					
Are Vegetation, Soil, or Hydrology		·					
Are Vegetation, Soil, or Hydrology	naturally problematic? (if needed, exp	lain any answers in Remarks.)					
SUMMARY OF FINDINGS - Attach site may	showing sampling point locations, tran	sects, important features, etc.					
Hydrophytic Vegetation Present? Yes	No X Is the Sampled Area						
Hydric Soil Present? Yes	$\frac{1}{1}$ No X within a Wetland?	Yes No X					
· —							
Wetland Hydrology Present? Yes		and site ib.					
Remarks: (Explain alternative procedures here or in a sep	parate report.)						
HYDROLOGY							
Wetland Hydrology Indicators:		Secondary Indicators (minimum of two required)					
Primary Indicators (minimum of one is required: ch	neck all that apply)	Surface Soil Cracks (B6)					
Surface Water (A1)	Water-Stained Leaves (B9)	Drainage Patterns (B10)					
High Water Table (A2)	Aquatic Fauna (B13)	Moss Trim Lines (B16)					
Saturation (A3)	Marl Deposits (B15)	Dry-Season Water Table (C2)					
Water Marks (B1)	Hydrogen Sulfide Odor (C1)	Crayfish Burrows (C8)					
Sediment Deposits (B2)	Oxidized Rhizospheres on Living Roots (C3)	Saturation Visible in Aerial Imagery (C9)					
Drift Deposits (B3)	Presence of Reduced Iron (C4)	Stunted or Stressed Plants (D1)					
Algal Mat or Crust (B4)	Recent Iron Reduction in Tilled Soils (C6)	Geomorphic Position (D2)					
Iron Deposits (B5)	Thin Muck Surface (C7)	Shallow Aquitard (D3)					
Inundation Visible on Aerial Imagery (B7)	Other (Explain in Remarks)	Microtopographic Relief (D4)					
	Other (Explain in Remarks)						
Sparsley Vegetated Concave Surface (B8)		FAC-Neutral Test (D5)					
Surface Water Present? Yes NoX	Depth (inches)						
Water Table Present? Yes No X	Depth (inches) Wetland F	lydrology Present? Yes No X					
Saturation Present? Yes No X	Depth (inches)						
Describe Recorded Data (stream gauge, monit	toring well, aerial photos, previous inspection	s), if available:					
Remarks:							

VEGETATION - Use scientific names of plants Sampling Point: 1_0200708_WL08_U1 Absolute Dominant Indicator **Dominance Test Worksheet:** (Plot Size: 30'radius) % Cover Species? Status **Tree Stratum Number of Dominant Species** 30 Χ UPL That Are OBL, FACW, or FAC: (A) Carya tomentosa 30 = Total Cover **Total Number of Dominant** (B) Species Across All Strata: 5 Percent of Dominant Species (A/B) That Are OBL, FACW, or FAC: 40% **Prevalence Index Worksheet:** 0 x 1 **OBL** species Absolute Dominant Indicator **FACW** species 0 0 (Plot Size: 15'radius) % Cover Species? Status x 2 **Shrub Stratum** FAC species 55 х3 165 Cornus racemosa 25 Χ **FAC** Rhus aromatica 15 Χ UPI **FACU** species 40 x 4 160 40 = Total Cover **UPL** species 50 x 5 250 Column Totals 145 (A) 575 (B) Prevalence Index = B/A = 3.97 **Hydrophytic Vegetation Indicators:** Absolute Dominant Indicator 1- Rapid Test For Hydrophytic Vegetation **Herb Stratum** (Plot Size: 5'radius) % Cover Species? Status 2- Dominance Test is > 50% **FACU** Cirsium arvense 35 3- Prevalence Index is =< 3.0 Toxicodendron radicans 30 Χ **FAC** 4- Morphological Adaptations Leucanthemum vulgare 5 UPL Dipsacus fullonum 5 **FACU** 5- Problematic Hydrophytic Vegetation 75 = Total Cover **Definitions of Vegetation Strata:** Tree- Woody plants 3 in. (7.6cm) or more in diameter at breast height (DBH), regardless of height. Sapling/Shrub- Woody plants less than 3 in. DBH and greater than or equal to 3.28ft (1m) tall. Herb- All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28ft tall. Absolute Dominant Indicator Woody Vines- All woody vines greater than 3.28ft in (Plot Size: 30'radius) Status **Woody Vine Stratum** % Cover Species? height. = Total Cover Hydrophytic Vegetation Present? Yes ____ No _X Remarks: (Include photo numbers here or on a separate sheet.)

SOIL Sampling Point: 1_0200708_WL08_U1

JOIL								Jamping 1 Jint. 1_0200708_WE08_01		
Depth	Matrix				Redo	ox Featu	res			
(inches	Color	%	Color	%	Type	Loc	Texture	Remarks		
0-10	10YR 6/3	80	10YR 5/4	20	С	М	Loam			
Hydric So	oil Indicators:							Indicators for Problematic Soils:		
His	tosol (A1)				Polyvalu	e Below S	Surface (B15)	2 cm Muck (A10)		
His	tic Epipedon (A2)			Thin Dar	k Surface	e (S9)	Coast Prarie Redox (A16)		
Bla	ck Histic (A3)				Loamy N	∕lucky Mi	neral (F1)	5 cm Mucky Peat or Peat (S3)		
Нус	drogen Sulfide	(A4)			Loamy G	Sleyed Ma	atric (F2)	Dark Surface (S7)		
Stra	atified Layers	(A5)			Depleted	d Matrix ((F3)	Polyvalue Below Surface (S8)		
Dep	pleted Below [Dark Su	rface (A11)		Redox D	ark Surfa	ce (F6)	Thin Dark Surface (S9)		
Thic	ck Dark Surfac	e (A12)			Depleted	d Dark Su	ırface (F7)	Iron-Manganese Masses (F12)		
San	ndy Mucky Mir	neral (S	1)		Redox Depressions (F8)			Piedmont Floodplain Soils (F19)		
San	ndy Gleyed Ma	atrix (S4)					Mesic Spodic (TA6)		
San	ndy Redox (S5))						Red Parent Material (F21)		
Stri	ipped Matrix (S6)						Very Shallow Dark Surface (TF12)		
Dar	rk Surface (S7)							Other (Explain in Remarks)		
Restrictiv	ve Layer (if obs	erved):								
		Type:	Rock				Ну	dric Soil Present? Yes No X		
	Depth (in	ches):	10							
Remarks	s:									

Project/Site: Cider Solar Project	City/County: Oakfield/Gen	essee Sampling Date: 7/9/2020
Applicant/Owner: Hecate		State: NY Sampling Point:
Investigator(s): Andrew Sorci	Section, Township, Range:	1_20200709_WL09_W1
Landform (hillslope, terrace,etc.): Dip	Local relief (concave, convex, r	ione): <u>Concave</u> Slope (%) <u>0 - 2</u>
Subregion (LRR or MLRA): LRR L	Lat: <u>43.107164</u> Long: <u>-7</u>	8.260358 Datum: NAD83
Soil Map Unit Name: Ma		NWI Classification: PEM
Are climatic / hyrologic conditions on the site	e typical for this time of year? Yes X No	(if no, explain in Remarks.)
Are Vegetation, Soil, or Hydrolog	gy significantly disturbed? Are "Normal (Circumstances" present? Yes X No
Are Vegetation, Soil, or Hydrolog	gy naturally problematic? (if needed, exp	lain any answers in Remarks.)
SUMMARY OF FINDINGS - Attach site m	ap showing sampling point locations, tran	sects, important features, etc.
	X No Is the Sampled Area	
	X No within a Wetland?	Yes X No
	X No if yes, optional Wetl	and Site ID: WL09
Remarks: (Explain alternative procedures here or in a	<u> </u>	
nemarks. (Explain alternative procedures here of in a	separate герогс <i>.)</i>	
HYDROLOGY		Canadam Indianton (minimum of two manimal)
Wetland Hydrology Indicators:	alocal all Made and A	Secondary Indicators (minimum of two required)
Primary Indicators (minimum of one is required:		Surface Soil Cracks (B6)
Surface Water (A1)	Water-Stained Leaves (B9)	Drainage Patterns (B10)
High Water Table (A2)	Aquatic Fauna (B13)	Moss Trim Lines (B16)
Saturation (A3)	Marl Deposits (B15)	Dry-Season Water Table (C2)
Water Marks (B1)	Hydrogen Sulfide Odor (C1)	Crayfish Burrows (C8)
Sediment Deposits (B2)	X Oxidized Rhizospheres on Living Roots (C3)	Saturation Visible in Aerial Imagery (C9)
Drift Deposits (B3)	Presence of Reduced Iron (C4)	Stunted or Stressed Plants (D1)
Algal Mat or Crust (B4)	Recent Iron Reduction in Tilled Soils (C6)	X Geomorphic Position (D2)
Iron Deposits (B5)	Thin Muck Surface (C7)	Shallow Aquitard (D3)
Inundation Visible on Aerial Imagery (B7)	Other (Explain in Remarks)	Microtopographic Relief (D4)
Sparsley Vegetated Concave Surface (B8)		X FAC-Neutral Test (D5)
Surface Water Present? Yes No X	(Depth (inches)	
Water Table Present? Yes No X	C Depth (inches) Wetland H	lydrology Present? Yes X No
Saturation Present? Yes No X		
Describe Recorded Data (stream gauge me	nitoring well, aerial photos, previous inspection	s) if available:
Describe Recorded Data (stream gauge, mor	mitoring well, aerial photos, previous hispection	sj, ii avaliable.
Remarks:		

VEGETATION - Use scientific names of plants Sampling Point: 1_20200709_WL09_W1 Absolute Dominant Indicator **Dominance Test Worksheet:** (Plot Size: 30'radius) % Cover Species? Status **Tree Stratum Number of Dominant Species** That Are OBL, FACW, or FAC: (A) = Total Cover **Total Number of Dominant** Species Across All Strata: (B) 4 Percent of Dominant Species That Are OBL, FACW, or FAC: (A/B) 100% **Prevalence Index Worksheet:** 23 x 1 23 **OBL** species Absolute Dominant Indicator **FACW** species 100 200 (Plot Size: 15'radius) % Cover Species? Status x 2 **Shrub Stratum FAC** species 0 х3 Salix interior Χ **FACW** 10 10 = Total Cover **FACU** species 8 x 4 32 5 **UPL** species x 5 25 Column Totals 136 (A) 280 (B) Prevalence Index = B/A = 2.06 **Hydrophytic Vegetation Indicators:** Absolute Dominant Indicator X 1- Rapid Test For Hydrophytic Vegetation **Herb Stratum** (Plot Size: 5'radius) % Cover Species? Status X 2- Dominance Test is > 50% 30 Poa palustris Χ **FACW** X 3- Prevalence Index is =< 3.0 Χ Agrostis gigantea 30 **FACW** 4- Morphological Adaptations Bidens frondosa 20 Χ **FACW** Alisma plantago-aquatica 15 OBL 5- Problematic Hydrophytic Vegetation Phalaris arundinacea 10 **FACW** Eleocharis obtusa 8 OBL **Definitions of Vegetation Strata:** UPL Bromus inermis 5 Tree- Woody plants 3 in. (7.6cm) or more in diameter at Arctium minus 5 **FACU** breast height (DBH), regardless of height. 3 **FACU** Plantago major 126 = Total Cover Sapling/Shrub- Woody plants less than 3 in. DBH and greater than or equal to 3.28ft (1m) tall. Herb- All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28ft tall. Absolute Dominant Indicator Woody Vines- All woody vines greater than 3.28ft in (Plot Size: 30'radius) **Woody Vine Stratum** % Cover Species? Status height. = Total Cover Hydrophytic Vegetation Present? Yes X No ____ Remarks: (Include photo numbers here or on a separate sheet.)

Sampling Point: 1_20200709_WL09_W1 **SOIL**

Depth	Matrix				Redo	x Featur	es	
(inches	Color	%	Color	%	Type	Loc	Texture	Remarks
0-8	10YR 2/1	95	10YR 4/6	5	С	PL	Sandy Loam	
8-15	10YR 5/1	85	10YR 5/8	15	С	M	Clay	
Hydric So	il Indicators:							Indicators for Problematic Soils:
i i yui ic 30								indicators for Problematic Sons.
-					Polyvalu	e Below Si		
Hist	tosol (A1) tic Epipedon (A	42)			-	e Below Si k Surface	urface (B15)	2 cm Muck (A10) Coast Prarie Redox (A16)
Hist	tosol (A1)	4 2)			Thin Dar		urface (B15) (S9)	2 cm Muck (A10)
Hist Hist Blac	tosol (A1) tic Epipedon (<i>i</i>				Thin Dar Loamy M	k Surface	urface (B15) (S9) eral (F1)	2 cm Muck (A10) Coast Prarie Redox (A16)
Hist Hist Blac Hyc	tosol (A1) tic Epipedon (A ck Histic (A3)	(A4)			Thin Dar Loamy N Loamy G	k Surface Jucky Min	urface (B15) (S9) eral (F1) tric (F2)	2 cm Muck (A10) Coast Prarie Redox (A16) 5 cm Mucky Peat or Peat (S3)
Hist Hist Blac Hyc	tosol (A1) tic Epipedon (/ ck Histic (A3) drogen Sulfide	(A4) (A5)	rface (A11)	X	Thin Dar Loamy N Loamy G Depleted	k Surface Mucky Min Bleyed Mat	urface (B15) (S9) eral (F1) cric (F2)	2 cm Muck (A10) Coast Prarie Redox (A16) 5 cm Mucky Peat or Peat (S3) Dark Surface (S7)
Hist Hist Blac Hyc Stra	tosol (A1) tic Epipedon (A ck Histic (A3) drogen Sulfide atified Layers ((A4) A5) Dark Su		X	Thin Dar Loamy M Loamy G Depleted Redox D	k Surface Jucky Min ileyed Mat d Matrix (F	urface (B15) (S9) eral (F1) cric (F2) eral (F6)	2 cm Muck (A10) Coast Prarie Redox (A16) 5 cm Mucky Peat or Peat (S3) Dark Surface (S7) Polyvalue Below Surface (S8)
Hist Hist Blac Hyc Stra Dep Thic	tosol (A1) tic Epipedon (A ck Histic (A3) drogen Sulfide atified Layers (bleted Below D	(A4) (A5) Dark Su e (A12))	X X	Thin Dar Loamy M Loamy G Depleted Redox D Depleted	k Surface Jucky Min Gleyed Mat d Matrix (F ark Surfac	urface (B15) (S9) eral (F1) cric (F2) (S3) e (F6) face (F7)	2 cm Muck (A10) Coast Prarie Redox (A16) 5 cm Mucky Peat or Peat (S3) Dark Surface (S7) Polyvalue Below Surface (S8) Thin Dark Surface (S9)
Hist Hist Blac Hyc Stra Dep Thic	tosol (A1) tic Epipedon (A tk Histic (A3) drogen Sulfide atified Layers (bleted Below E tk Dark Surfac	(A4) (A5) Dark Su e (A12) neral (S	1)	X X	Thin Dar Loamy M Loamy G Depleted Redox D Depleted	k Surface Mucky Min ileyed Mat d Matrix (F ark Surfac d Dark Sur	urface (B15) (S9) eral (F1) cric (F2) (S3) e (F6) face (F7)	2 cm Muck (A10) Coast Prarie Redox (A16) 5 cm Mucky Peat or Peat (S3) Dark Surface (S7) Polyvalue Below Surface (S8) Thin Dark Surface (S9) Iron-Manganese Masses (F12)
Hist Hist Blac Hyc Stra Dep Thic San	tosol (A1) tic Epipedon (A ck Histic (A3) drogen Sulfide atified Layers (oleted Below E ck Dark Surfac dy Mucky Mir	(A4) (A5) Dark Su e (A12) neral (S trix (S4	1)	X X	Thin Dar Loamy M Loamy G Depleted Redox D Depleted	k Surface Mucky Min ileyed Mat d Matrix (F ark Surfac d Dark Sur	urface (B15) (S9) eral (F1) cric (F2) (S3) e (F6) face (F7)	2 cm Muck (A10) Coast Prarie Redox (A16) 5 cm Mucky Peat or Peat (S3) Dark Surface (S7) Polyvalue Below Surface (S8) Thin Dark Surface (S9) Iron-Manganese Masses (F12) Piedmont Floodplain Soils (F19)
Hist Hist Blac Hyc Stra Dep Thic San San	tosol (A1) tic Epipedon (A ck Histic (A3) drogen Sulfide atified Layers (bleted Below E ck Dark Surfac dy Mucky Mir dy Gleyed Ma	(A4) (A5) Dark Su e (A12) neral (S trix (S4	1)	X X	Thin Dar Loamy M Loamy G Depleted Redox D Depleted	k Surface Mucky Min ileyed Mat d Matrix (F ark Surfac d Dark Sur	urface (B15) (S9) eral (F1) cric (F2) (S3) e (F6) face (F7)	2 cm Muck (A10) Coast Prarie Redox (A16) 5 cm Mucky Peat or Peat (S3) Dark Surface (S7) Polyvalue Below Surface (S8) Thin Dark Surface (S9) Iron-Manganese Masses (F12) Piedmont Floodplain Soils (F19) Mesic Spodic (TA6)

Remarks:

Depth (inches):

Project/Site: Cider Solar Project	City/County: Oakfield/Gen	essee Sampling Date: 7/9/2020
Applicant/Owner: Hecate		State: NY Sampling
Investigator(s): Andy Smith	Section, Township, Range:	Point:1_20200709_WL09_U
Landform (hillslope, terrace,etc.): Rise	Local relief (concave, convex, r	none): <u>Convex</u> Slope (%) <u>2 - 5</u>
Subregion (LRR or MLRA): LRR L	Lat: 43.107061 Long: -7	78.260631 Datum: NAD83
Soil Map Unit Name: Ma		NWI Classification: UPL
Are climatic / hyrologic conditions on the site	e typical for this time of year? Yes X No	(if no, explain in Remarks.)
Are Vegetation, Soil, or Hydrolog	gy significantly disturbed? Are "Normal of	Circumstances" present? Yes X No
Are Vegetation, Soil, or Hydrolog	gy naturally problematic? (if needed, exp	lain any answers in Remarks.)
SLIMMARY OF FINDINGS - Attach site ma	ap showing sampling point locations, tran	sects important features etc
Hydrophytic Vegetation Present? Yes	No X Is the Sampled Area	-
Hydric Soil Present? Yes	No X within a Wetland?	Yes No X
· —		
Wetland Hydrology Present? Yes		and site ib.
Remarks: (Explain alternative procedures here or in a s	separate report.)	
HYDROLOGY		
Wetland Hydrology Indicators:		Secondary Indicators (minimum of two required)
Primary Indicators (minimum of one is required:	check all that apply)	Surface Soil Cracks (B6)
Surface Water (A1)	Water-Stained Leaves (B9)	Drainage Patterns (B10)
High Water Table (A2)	Aquatic Fauna (B13)	Moss Trim Lines (B16)
Saturation (A3)	Marl Deposits (B15)	Dry-Season Water Table (C2)
Water Marks (B1)	Hydrogen Sulfide Odor (C1)	Crayfish Burrows (C8)
Sediment Deposits (B2)	Oxidized Rhizospheres on Living Roots (C3)	Saturation Visible in Aerial Imagery (C9)
Drift Deposits (B3)	Presence of Reduced Iron (C4)	Stunted or Stressed Plants (D1)
Algal Mat or Crust (B4)	Recent Iron Reduction in Tilled Soils (C6)	Geomorphic Position (D2)
Iron Deposits (B5)	Thin Muck Surface (C7)	Shallow Aquitard (D3)
Inundation Visible on Aerial Imagery (B7)		Microtopographic Relief (D4)
	Other (Explain in Remarks)	
Sparsley Vegetated Concave Surface (B8)		FAC-Neutral Test (D5)
Surface Water Present? Yes No X	Depth (inches)	
Water Table Present? Yes No X	(Depth (inches) Wetland H	lydrology Present? Yes No X
Saturation Present? Yes NoX	(Depth (inches)	
Describe Recorded Data (stream gauge mor	nitoring well, aerial photos, previous inspection	s) if available:
	,	
Remarks:		

VEGETATION - Use scie	ntific names of plar	ts			Sampling Point: 1_20200709_WL09_U
Tree Stratum	(Plot Size: 30'radius		Dominant Species?	Indicator Status	Dominance Test Worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: 0 (A)
			= Total Co	ver	Total Number of Dominant Species Across All Strata: 1 (B) Percent of Dominant Species
					That Are OBL, FACW, or FAC: 0% (A/E Prevalence Index Worksheet:
		م م م م	Dominout	lun di naka u	OBL species 0 x 1 0
Shrub Stratum	(Plot Size: 15'radius		Dominant Species?	Status	FACW species 5 x 2 10
		_ *			FAC species 0 x 3 0
			= Total Co	ver	FACU species 0 x 4 0
					UPL species 90 x 5 450
					Column Totals 95 (A) 460 (
					Prevalence Index = B/A = 4.84
					Hydrophytic Vegetation Indicators:
		Absolute	Dominant	Indicator	1- Rapid Test For Hydrophytic Vegetation
Herb Stratum	(Plot Size: 5'radius	_) % Cover	Species?	Status	2- Dominance Test is > 50%
Zea mays		90	Х	UPL	3- Prevalence Index is =< 3.0
Cyperus strigosus		<u>5</u> 95	= Total Co	FACW_ver	4- Morphological Adaptations
				• • •	5- Problematic Hydrophytic Vegetation
					Definitions of Vegetation Strata: Tree- Woody plants 3 in. (7.6cm) or more in diameter a breast height (DBH), regardless of height.
					Sapling/Shrub- Woody plants less than 3 in. DBH and greater than or equal to 3.28ft (1m) tall.
					Herb- All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28ft tall.
Woody Vine Stratum	(Plot Size: 30'radius		Proposition of the series of t	Status	Woody Vines- All woody vines greater than 3.28ft in height.
			= Total Co	ver	Hydrophytic Vegetation Present? Yes NoX
Remarks: (Include photo n	umbers here or on a	eparate shee	et.)		

SOIL Sampling Point: 1_20200709_WL09_U1 Depth Matrix **Redox Features** (inches Color % Color % Texture Remarks Type Loc 0-12 10YR 3/1 100 Silty Clay Loam 12-18 10YR 5/1 90 10YR 5/8 10 C Μ Clay **Hydric Soil Indicators:** Indicators for Problematic Soils: Histosol (A1) Polyvalue Below Surface (B15) 2 cm Muck (A10) Histic Epipedon (A2) Thin Dark Surface (S9) Coast Prarie Redox (A16) Black Histic (A3) Loamy Mucky Mineral (F1) 5 cm Mucky Peat or Peat (S3) Hydrogen Sulfide (A4) Loamy Gleyed Matric (F2) Dark Surface (S7) Stratified Layers (A5) Depleted Matrix (F3) Polyvalue Below Surface (S8) Depleted Below Dark Surface (A11) Redox Dark Surface (F6) Thin Dark Surface (S9) Thick Dark Surface (A12) Depleted Dark Surface (F7) Iron-Manganese Masses (F12) Sandy Mucky Mineral (S1) Redox Depressions (F8) Piedmont Floodplain Soils (F19) Sandy Gleyed Matrix (S4) Mesic Spodic (TA6) Sandy Redox (S5) Red Parent Material (F21) Stripped Matrix (S6) Very Shallow Dark Surface (TF12) Dark Surface (S7) Other (Explain in Remarks) Restrictive Layer (if observed): Type: Hydric Soil Present? Yes No Χ Depth (inches): Remarks:

Project/Site: Cider Solar Project	City/Co	ounty: Oakfield/Genessee	Sampling Date: 7/9/2020			
Applicant/Owner: Hecate State: NY Sampling Point:						
Investigator(s): Andrew Sorci Section, Township, Range: 1_20200709_WL10_W1						
Landform (hillslope, terrace,etc.): Depress	ion Local relie	ef (concave, convex, none): <u>Conca</u>	veSlope (%) <u>0 - 2</u>			
Subregion (LRR or MLRA): LRR L	Lat: 43.101376	Long:78.256767	Datum: NAD83			
Soil Map Unit Name: La		NWI Class	ification: PEM			
Are climatic / hyrologic conditions on the sit	te typical for this time of ye	ar? Yes <u>X</u> No (if no,	explain in Remarks.)			
Are Vegetation X , Soil , or Hydrolo	ogy significantly distur	bed? Are "Normal Circumstance	s" present? Yes X No			
Are Vegetation , Soil , or Hydrolo	naturally problem	atic? (if needed, explain any answe	rs in Remarks.)			
SUMMARY OF FINDINGS - Attach site m	nap showing sampling po	oint locations, transects, impo	rtant features, etc.			
Hydrophytic Vegetation Present? Yes	X No	Is the Sampled Area				
Hydric Soil Present? Yes	X No	within a Wetland?	Yes X No			
Wetland Hydrology Present? Yes	X No	if yes, optional Wetland Site ID:	WL10			
Remarks: (Explain alternative procedures here or in a	separate report.)					
edge of agricultural field						
LIVEROLOGY						
HYDROLOGY Wetland Hydrology Indicators:		Secondary Inc	licators (minimum of two required)			
Primary Indicators (minimum of one is required	t check all that annly)		Soil Cracks (B6)			
Surface Water (A1)	Water-Stained Leaves		e Patterns (B10)			
						
High Water Table (A2)	Aquatic Fauna (B13)		m Lines (B16)			
Saturation (A3)	Marl Deposits (B15)		son Water Table (C2)			
Water Marks (B1)	Hydrogen Sulfide Odd	or (C1) Crayfish	Burrows (C8)			
Sediment Deposits (B2)	Oxidized Rhizosphere	s on Living Roots (C3)Saturation	on Visible in Aerial Imagery (C9)			
Drift Deposits (B3)	Presence of Reduced	Iron (C4) Stunted	or Stressed Plants (D1)			
Algal Mat or Crust (B4)	Recent Iron Reduction	n in Tilled Soils (C6) X Geomor	phic Position (D2)			
Iron Deposits (B5)	Thin Muck Surface (C	7)Shallow	Aquitard (D3)			
Inundation Visible on Aerial Imagery (B7)	Other (Explain in Rem	narks) Microto	pographic Relief (D4)			
Sparsley Vegetated Concave Surface (B8)		FAC-Neu	itral Test (D5)			
Surface Water Present? Yes No	X Depth (inches)					
		 Wetland Hydrology Pre 	sent? Yes X No			
Water Table Present? Yes No		- Wetiand Hydrology Fre	Sent: 165 X NO			
Saturation Present? Yes No	X Depth (inches)	_				
Describe Recorded Data (stream gauge, mo	onitoring well, aerial photos	s, previous inspections), if available	2:			
, ,						
Remarks:						

	tific names	of plants				Sampling Point: 1_20200709_WL10_W1
Tree Stratum	(Plot Size:	30'radius)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test Worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: 1 (A)
				_= Total Cov	er	Total Number of Dominant Species Across All Strata: 2 (B) Percent of Dominant Species That Are OBL, FACW, or FAC: 50% (A/B)
Shrub Stratum	(Plot Size:	15'radius)	Absolute % Cover	Dominant Species?	Indicator Status	Prevalence Index Worksheet: OBL species 0 x 1 0 FACW species 60 x 2 120
				_= Total Cov	ver	FAC species 0 x 3 0 FACU species 15 x 4 60 UPL species 0 x 5 0 Column Totals 75 (A) 180 (B)
Herb Stratum Cyperus strigosus Abutilon theophrasti	(Plot Size:	5'radius)	Absolute % Cover 60 15 75	Dominant Species? X X = Total Cov	Status FACW FACU	Prevalence Index = B/A =
Woody Vine Stratum	(Plot Size:	30'radius)		Dominant Species?	Indicator Status	Definitions of Vegetation Strata: Tree- Woody plants 3 in. (7.6cm) or more in diameter at breast height (DBH), regardless of height. Sapling/Shrub- Woody plants less than 3 in. DBH and greater than or equal to 3.28ft (1m) tall. Herb- All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28ft tall. Woody Vines- All woody vines greater than 3.28ft in height.
				_= Total Cov	ver	Hydrophytic Vegetation Present? Yes X No

SOIL Sampling Point: 1_20200709_WL10_W1

Depth	Matrix	[Redo	x Feat	ures	
(inches	Color	%	Color	%	Туре	Loc	Texture	Remarks
0-3	10YR 3/2	100					Clay Loam	
3-8	10YR 3/1	95	10YR 4/6	5	С	M	Clay Loam	
8-16	7.5YR 4/4	40	7.5YR 5/8	60	С	M	Clay	

Hydric Soil Indicators:		Indicators for Problematic Soils:
Histosol (A1)	Polyvalue Below Surface (B15)	2 cm Muck (A10)
Histic Epipedon (A2)	Thin Dark Surface (S9)	Coast Prarie Redox (A16)
Black Histic (A3)	Loamy Mucky Mineral (F1)	5 cm Mucky Peat or Peat (S3)
Hydrogen Sulfide (A4)	Loamy Gleyed Matric (F2)	Dark Surface (S7)
Stratified Layers (A5)	X Depleted Matrix (F3)	Polyvalue Below Surface (S8)
Depleted Below Dark Surface (A11)	Redox Dark Surface (F6)	Thin Dark Surface (S9)
Thick Dark Surface (A12)	Depleted Dark Surface (F7)	Iron-Manganese Masses (F12)
Sandy Mucky Mineral (S1)	Redox Depressions (F8)	Piedmont Floodplain Soils (F19)
Sandy Gleyed Matrix (S4)		Mesic Spodic (TA6)
Sandy Redox (S5)		Red Parent Material (F21)
Stripped Matrix (S6)		Very Shallow Dark Surface (TF12)
Dark Surface (S7)		Other (Explain in Remarks)
Restrictive Layer (if observed):		
Туре:	Ну	vdric Soil Present? Yes X No
Depth (inches):	_	
	_	

Project/Site: Cider Solar Project	City/County: Oakfield/G	ennessee Sampling Date: 7/9/2020
Applicant/Owner: Hecate	7	State: NY Sampling
Investigator(s): Andrew Sorci	Section, Township, Range	e: Point:1_20200709_WL10_U
Landform (hillslope, terrace,etc.): Rise	Local relief (concave, convex	, none): <u>Convex</u> Slope (%) <u>0 - 5</u>
Subregion (LRR or MLRA): LRR L	Lat: 43.101396 Long:	-78.257187 Datum: NAD83
Soil Map Unit Name: La		NWI Classification: UPL
Are climatic / hyrologic conditions on the site	typical for this time of year? Yes X	No (if no, explain in Remarks.)
Are Vegetation, Soil, or Hydrology	significantly disturbed? Are "Norma	al Circumstances" present? Yes X No
Are Vegetation, Soil, or Hydrology	naturally problematic? (if needed, e	xplain any answers in Remarks.)
SUMMARY OF FINDINGS - Attach site ma	n showing sampling point locations, tra	ansects, important features, etc.
Hydrophytic Vegetation Present? Yes	No X Is the Sampled Ar	
Hydric Soil Present? Yes	No X within a Wetland	
		
Wetland Hydrology Present? Yes	<u> </u>	
Remarks: (Explain alternative procedures here or in a se	eparate report.)	
HYDROLOGY		
Wetland Hydrology Indicators:		Secondary Indicators (minimum of two required)
Primary Indicators (minimum of one is required: o	check all that apply)	Surface Soil Cracks (B6)
Surface Water (A1)	Water-Stained Leaves (B9)	Drainage Patterns (B10)
High Water Table (A2)	Aquatic Fauna (B13)	Moss Trim Lines (B16)
Saturation (A3)	Marl Deposits (B15)	Dry-Season Water Table (C2)
Water Marks (B1)	Hydrogen Sulfide Odor (C1)	Crayfish Burrows (C8)
Sediment Deposits (B2)	Oxidized Rhizospheres on Living Roots (C3	
Drift Deposits (B3)	Presence of Reduced Iron (C4)	Stunted or Stressed Plants (D1)
Algal Mat or Crust (B4)	Recent Iron Reduction in Tilled Soils (C6)	Geomorphic Position (D2)
Iron Deposits (B5)	Thin Muck Surface (C7)	Shallow Aquitard (D3)
Inundation Visible on Aerial Imagery (B7)		Microtopographic Relief (D4)
	Other (Explain in Remarks)	
Sparsley Vegetated Concave Surface (B8)		FAC-Neutral Test (D5)
Surface Water Present? Yes No X	Depth (inches)	
Water Table Present? Yes No X	Depth (inches) Wetland	Hydrology Present? Yes No X
Saturation Present? Yes No X	Depth (inches)	
Describe Recorded Data (stream gauge, mon	itoring well aerial photos previous inspecti	ons) if available:
Describe Recorded Data (stream Badge) mon	normig wen, derial priocos, previous inspecti	ons,, ii avanasie.
Remarks:		

VEGETATION - Use scientific names of plants Sampling Point: 1_20200709_WL10_U1 Absolute Dominant Indicator **Dominance Test Worksheet:** (Plot Size: 30'radius) % Cover Species? Status **Tree Stratum Number of Dominant Species** That Are OBL, FACW, or FAC: (A) = Total Cover **Total Number of Dominant** Species Across All Strata: (B) 3 Percent of Dominant Species That Are OBL, FACW, or FAC: 33.3% (A/B) **Prevalence Index Worksheet:** x 1 0 **OBL** species Absolute Dominant Indicator **FACW** species 31 62 (Plot Size: 15'radius) Status x 2 **Shrub Stratum** % Cover Species? FAC species 45 15 х3 = Total Cover FACU species 56 x 4 224 **UPL** species 0 x 5 0 Column Totals 102 (A) 331 (B) Prevalence Index = B/A = 3.25 **Hydrophytic Vegetation Indicators:** Absolute Dominant Indicator 1- Rapid Test For Hydrophytic Vegetation **Herb Stratum** (Plot Size: 5'radius) % Cover Species? Status 2- Dominance Test is > 50% 25 Phalaris arundinacea Χ **FACW** 3- Prevalence Index is =< 3.0 Χ Trifolium repens 20 **FACU** 4- Morphological Adaptations Ambrosia artemisiifolia 20 Χ **FACU** Plantago major 8 **FACU** 5- Problematic Hydrophytic Vegetation Symphyotrichum lanceolatum 6 **FACW** Euthamia graminifolia 5 FAC **Definitions of Vegetation Strata:** 5 **FACU** Solidago canadensis Tree- Woody plants 3 in. (7.6cm) or more in diameter at Juncus tenuis FAC breast height (DBH), regardless of height. Rumex crispus 3 FAC 3 **FACU** Dipsacus fullonum Sapling/Shrub- Woody plants less than 3 in. DBH and Persicaria maculosa 2 FAC greater than or equal to 3.28ft (1m) tall. = Total Cover 102 Herb- All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28ft tall. Absolute Dominant Indicator Woody Vines- All woody vines greater than 3.28ft in (Plot Size: 30'radius) Status **Woody Vine Stratum** % Cover Species? height. = Total Cover Hydrophytic Vegetation Present? Yes ____ No __X Remarks: (Include photo numbers here or on a separate sheet.)

SOIL Sampling Point: 1_20200709_WL10_U1 Depth Matrix **Redox Features** (inches % Color Color % Type Texture Remarks Loc 0-16 10YR 3/1 100 Clay Loam **Hydric Soil Indicators:** Indicators for Problematic Soils: Histosol (A1) Polyvalue Below Surface (B15) 2 cm Muck (A10) Histic Epipedon (A2) Thin Dark Surface (S9) Coast Prarie Redox (A16) Black Histic (A3) Loamy Mucky Mineral (F1) 5 cm Mucky Peat or Peat (S3) Hydrogen Sulfide (A4) Loamy Gleyed Matric (F2) Dark Surface (S7) Stratified Layers (A5) Depleted Matrix (F3) Polyvalue Below Surface (S8) Depleted Below Dark Surface (A11) Redox Dark Surface (F6) Thin Dark Surface (S9) Thick Dark Surface (A12) Depleted Dark Surface (F7) Iron-Manganese Masses (F12) Sandy Mucky Mineral (S1) Redox Depressions (F8) Piedmont Floodplain Soils (F19) Sandy Gleyed Matrix (S4) Mesic Spodic (TA6) Sandy Redox (S5) Red Parent Material (F21) Stripped Matrix (S6) Very Shallow Dark Surface (TF12) Dark Surface (S7) Other (Explain in Remarks) Restrictive Layer (if observed): Type: Hydric Soil Present? Yes No Χ Depth (inches): Remarks:

Project/Site: Cider Solar Project	City/Co	ounty: Oakfield/Gennessee	Sampling Date: 7/9/2020		
Applicant/Owner: Hecate	State: NY	Sampling Point:			
Investigator(s): Andrew Sorci	Sectio	on, Township, Range: 1_20200709_WL11_W1			
Landform (hillslope, terrace,etc.): Depress	ion Local relie	ef (concave, convex, none): Linear	Slope (%) <u>0 - 10</u>		
Subregion (LRR or MLRA): LRR L	Lat: 43.089847	Long:78.275840	Datum: NAD83		
Soil Map Unit Name: OvA		NWI Class	fication: PEM		
Are climatic / hyrologic conditions on the sit	te typical for this time of ye	ar? Yes X No (if no,	explain in Remarks.)		
Are Vegetation, Soil, or Hydrolo	ogysignificantly distur	bed? Are "Normal Circumstances	" present? Yes X No		
Are Vegetation, Soil, or Hydrolo	ogynaturally problem	atic? (if needed, explain any answer	s in Remarks.)		
SUMMARY OF FINDINGS - Attach site n	nap showing sampling p	oint locations, transects, impor	tant features, etc.		
Hydrophytic Vegetation Present? Yes	X No	Is the Sampled Area			
Hydric Soil Present? Yes	X No	within a Wetland?	Yes X No		
Wetland Hydrology Present? Yes	X No	if yes, optional Wetland Site ID:	WL11		
Remarks: (Explain alternative procedures here or in a	a separate report.)				
Agricultural field drainage					
HYDROLOGY					
Wetland Hydrology Indicators:		Secondary Ind	icators (minimum of two required)		
Primary Indicators (minimum of one is required	d. check all that annly)		Soil Cracks (B6)		
Surface Water (A1)	Water-Stained Leaves		Patterns (B10)		
High Water Table (A2)	Aquatic Fauna (B13)	· · · · · · · · · · · · · · · · · · ·	m Lines (B16)		
	 -				
Saturation (A3)	Marl Deposits (B15)		on Water Table (C2)		
Water Marks (B1)	Hydrogen Sulfide Odd		Burrows (C8)		
Sediment Deposits (B2)	X Oxidized Rhizosphere	s on Living Roots (C3) X Saturation	on Visible in Aerial Imagery (C9)		
Drift Deposits (B3)	Presence of Reduced	Iron (C4) Stunted	or Stressed Plants (D1)		
Algal Mat or Crust (B4)	Recent Iron Reduction	n in Tilled Soils (C6) X Geomor	phic Position (D2)		
Iron Deposits (B5)	Thin Muck Surface (C	C7) Shallow Aquitard (D3)			
Inundation Visible on Aerial Imagery (B7)	Other (Explain in Rem	marks) Microtopographic Relief (D4)			
Sparsley Vegetated Concave Surface (B8)		X FAC-Neu	tral Test (D5)		
Surface Water Present? Yes No	X Depth (inches)				
Water Table Present? Yes No		 Wetland Hydrology Pres 	ent? Yes X No		
		- Wetland Hydrology Fres			
Saturation Present? Yes No	X Depth (inches)				
Describe Recorded Data (stream gauge, mo	onitoring well, aerial photos	s, previous inspections), if available	:		
Remarks:					

VEGETATION - Use scientific names of plants Sampling Point: 1_20200709_WL11_W1 Absolute Dominant Indicator **Dominance Test Worksheet:** (Plot Size: 30'radius) % Cover Species? Status **Tree Stratum Number of Dominant Species** That Are OBL, FACW, or FAC: (A) = Total Cover **Total Number of Dominant** Species Across All Strata: (B) 2 Percent of Dominant Species That Are OBL, FACW, or FAC: (A/B) 100% **Prevalence Index Worksheet:** 25 x 1 25 **OBL** species Absolute Dominant Indicator **FACW** species 8 16 (Plot Size: 15'radius) % Cover Species? Status x 2 **Shrub Stratum** 0 FAC species х3 = Total Cover **FACU** species 0 x 4 0 **UPL** species 0 x 5 0 Column Totals 33 (A) 41 (B) Prevalence Index = B/A = 1.24 **Hydrophytic Vegetation Indicators:** Absolute Dominant Indicator X 1- Rapid Test For Hydrophytic Vegetation **Herb Stratum** (Plot Size: 5'radius) % Cover Species? Status X 2- Dominance Test is > 50% Leersia oryzoides 15 OBL X 3- Prevalence Index is =< 3.0 Typha angustifolia Χ OBL 10 4- Morphological Adaptations Phalaris arundinacea 5 **FACW** Bidens frondosa 3 **FACW** 5- Problematic Hydrophytic Vegetation 33 = Total Cover **Definitions of Vegetation Strata:** Tree- Woody plants 3 in. (7.6cm) or more in diameter at breast height (DBH), regardless of height. Sapling/Shrub- Woody plants less than 3 in. DBH and greater than or equal to 3.28ft (1m) tall. Herb- All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28ft tall. Absolute Dominant Indicator Woody Vines- All woody vines greater than 3.28ft in (Plot Size: 30'radius) **Woody Vine Stratum** % Cover Species? Status height. = Total Cover Hydrophytic Vegetation Present? Yes X No ___ Remarks: (Include photo numbers here or on a separate sheet.)

SOIL Sampling Point: 1_20200709_WL11_W1

Depth	Matrix	(Redo	ox Feati	ıres		
(inches	Color	%	Color	%	Type	Loc	Textu	ire	Remarks
0-5	5YR 5/2	90	5YR 5/8	10	С	PL	Clay	/	
-	il Indicators:							Indi	cators for Problematic Soils:
	cosol (A1)						Surface (B15)		_2 cm Muck (A10)
	ic Epipedon (Thin Dar				_Coast Prarie Redox (A16)
	ck Histic (A3)				-	-	ineral (F1)	_ 5 cm Mucky Peat or Peat (S3)	
Hydrogen Sulfide (A4)					-	-	latric (F2)	Dark Surface (S7)	
Stratified Layers (A5)					Deplete			Polyvalue Below Surface (S8)	
	leted Below			Redox Dark Surface (F6)					Thin Dark Surface (S9)
	ck Dark Surfac			Depleted Dark Surface (F7)					Iron-Manganese Masses (F12)
	dy Mucky Mi dy Gleyed Ma	-	-		Redox Depressions (F8)				Piedmont Floodplain Soils (F19) Masic Species (TA6)
	dy Redox (S5)						_ Mesic Spodic (TA6) Red Parent Material (F21)
	pped Matrix (Very Shallow Dark Surface (TF12)
	k Surface (S7)								Other (Explain in Remarks)
	K Juliude (J)	,							
Restrictiv	e Layer (if obs	erved):							
		Type:						Undric Soil	Drocont Voc. V No.
	Depth (ir	-						Hydric Soil	Present? Yes X No
	Deptii (ii	_							
Remarks	:						<u>'</u>		

Project/Site: Cider Solar Project	City/County: Oakfield/Ger	nnessee Sampling Date: 7/9/2020			
Applicant/Owner: Hecate		State: NY Sampling			
Investigator(s): Andrew Sorci	Section, Township, Range:	Point:1_20200709_WL11_U			
Landform (hillslope, terrace,etc.): Shoulder	none): <u>Convex</u> Slope (%) <u>0 - 45</u>				
Subregion (LRR or MLRA): LRR L	Lat: 43.089877 Long:	78.275804 Datum: NAD83			
Soil Map Unit Name: OvA		NWI Classification: UPL			
Are climatic / hyrologic conditions on the site	typical for this time of year? Yes X No	(if no, explain in Remarks.)			
Are Vegetation, Soil, or Hydrology	significantly disturbed? Are "Normal	Circumstances" present? Yes X No			
Are Vegetation, Soil, or Hydrology	naturally problematic? (if needed, exp	llain any answers in Remarks.)			
SUMMARY OF FINDINGS - Attach site ma	p showing sampling point locations, trar	nsects, important features, etc.			
Hydrophytic Vegetation Present? Yes	No X Is the Sampled Area	a			
Hydric Soil Present? Yes	No X within a Wetland?	Yes No X			
Wetland Hydrology Present? Yes	No X if yes, optional Wet	land Site ID:			
Remarks: (Explain alternative procedures here or in a se					
HYDROLOGY					
Wetland Hydrology Indicators:		Secondary Indicators (minimum of two required)			
Primary Indicators (minimum of one is required: c	heck all that apply)	Surface Soil Cracks (B6)			
Surface Water (A1)	Water-Stained Leaves (B9)	Drainage Patterns (B10)			
High Water Table (A2)	Aquatic Fauna (B13)	Moss Trim Lines (B16)			
Saturation (A3)	Marl Deposits (B15)	Dry-Season Water Table (C2)			
Water Marks (B1)	Hydrogen Sulfide Odor (C1)	Crayfish Burrows (C8)			
Sediment Deposits (B2)	Oxidized Rhizospheres on Living Roots (C3)	Saturation Visible in Aerial Imagery (C9)			
Drift Deposits (B3)	Presence of Reduced Iron (C4)	Stunted or Stressed Plants (D1)			
Algal Mat or Crust (B4)	Recent Iron Reduction in Tilled Soils (C6)	lled Soils (C6) Geomorphic Position (D2)			
Iron Deposits (B5)	Thin Muck Surface (C7)	Shallow Aquitard (D3)			
Inundation Visible on Aerial Imagery (B7)	Other (Explain in Remarks)	Microtopographic Relief (D4)			
Sparsley Vegetated Concave Surface (B8)		FAC-Neutral Test (D5)			
Surface Water Present? Yes No X	Depth (inches)				
Water Table Present? Yes No X	Depth (inches) Wetland I	Hydrology Present? Yes No X			
Saturation Present? Yes No X	Depth (inches)				
Describe Recorded Data (stream gauge, moni	toring well, aerial photos, previous inspection	ns), if available:			
Remarks:					

VEGETATION - Use scientific names of plants Sampling Point: 1_20200709_WL11_U1 Absolute Dominant Indicator **Dominance Test Worksheet:** (Plot Size: 30'radius) % Cover Species? Status **Tree Stratum Number of Dominant Species** That Are OBL, FACW, or FAC: (A) = Total Cover **Total Number of Dominant** Species Across All Strata: (B) 2 Percent of Dominant Species 50% (A/B) That Are OBL, FACW, or FAC: **Prevalence Index Worksheet:** x 1 0 **OBL** species Absolute Dominant Indicator **FACW** species 5 10 (Plot Size: 15'radius) % Cover Species? Status x 2 **Shrub Stratum** FAC species 13 39 х3 **FAC** Cornus racemosa Χ 5 = Total Cover **FACU** species 40 x 4 160 **UPL** species 14 x 5 70 Column Totals 72 (A) 279 (B) Prevalence Index = B/A = 3.88 **Hydrophytic Vegetation Indicators:** Absolute Dominant Indicator 1- Rapid Test For Hydrophytic Vegetation **Herb Stratum** (Plot Size: 5'radius) % Cover Species? Status 2- Dominance Test is > 50% Solidago canadensis 35 Х **FACU** 3- Prevalence Index is =< 3.0 Daucus carota 10 UPL 4- Morphological Adaptations 5 **FACW** Agrostis gigantea Ambrosia artemisiifolia 5 **FACU** 5- Problematic Hydrophytic Vegetation FAC Juncus tenuis Packera anonyma 4 UPI **Definitions of Vegetation Strata:** FAC Geum canadense 3 Tree- Woody plants 3 in. (7.6cm) or more in diameter at 67 = Total Cover breast height (DBH), regardless of height. Sapling/Shrub- Woody plants less than 3 in. DBH and greater than or equal to 3.28ft (1m) tall. Herb- All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28ft tall. Absolute Dominant Indicator Woody Vines- All woody vines greater than 3.28ft in (Plot Size: 30'radius) Status **Woody Vine Stratum** % Cover Species? height. = Total Cover Hydrophytic Vegetation Present? Yes ____ No __X Remarks: (Include photo numbers here or on a separate sheet.)

SOIL Sampling Point: 1_20200709_WL11_U1 Depth Matrix **Redox Features** (inches % Color Color % Type Texture Remarks Loc 0-8 7.5YR 3/2 100 Clay Loam **Hydric Soil Indicators:** Indicators for Problematic Soils: Histosol (A1) Polyvalue Below Surface (B15) 2 cm Muck (A10) Histic Epipedon (A2) Thin Dark Surface (S9) Coast Prarie Redox (A16) Black Histic (A3) Loamy Mucky Mineral (F1) 5 cm Mucky Peat or Peat (S3) Hydrogen Sulfide (A4) Loamy Gleyed Matric (F2) Dark Surface (S7) Stratified Layers (A5) Depleted Matrix (F3) Polyvalue Below Surface (S8) Depleted Below Dark Surface (A11) Redox Dark Surface (F6) Thin Dark Surface (S9) Thick Dark Surface (A12) Depleted Dark Surface (F7) Iron-Manganese Masses (F12) Sandy Mucky Mineral (S1) Redox Depressions (F8) Piedmont Floodplain Soils (F19) Sandy Gleyed Matrix (S4) Mesic Spodic (TA6) Sandy Redox (S5) Red Parent Material (F21) Stripped Matrix (S6) Very Shallow Dark Surface (TF12) Dark Surface (S7) Other (Explain in Remarks) Restrictive Layer (if observed): Type: Hydric Soil Present? Yes No Χ Depth (inches): Remarks:

Project/Site: Cider Solar Project	City/Co	ounty: Oakfield/Gennessee	Sampling Date: 7/9/2020		
Applicant/Owner: Hecate	State: NY	Sampling Point:			
Investigator(s): Andrew Sorci	Sectio	n, Township, Range: 1_20200709_WL12_W1			
Landform (hillslope, terrace,etc.): Depressi		ef (concave, convex, none): Linear Slope (%) 0 - 10			
Subregion (LRR or MLRA): LRR L	Lat: 43.091616	Long-78.276189	Datum: NAD83		
Soil Map Unit Name: La		NWI Class	ification: PEM		
Are climatic / hyrologic conditions on the sit	te typical for this time of ye	ar? Yes <u>X</u> No (if no,	explain in Remarks.)		
Are Vegetation , Soil , or Hydrolo	gy significantly distur	bed? Are "Normal Circumstances	s" present? Yes X No		
Are Vegetation , Soil , or Hydrolo	naturally problem	atic? (if needed, explain any answe	rs in Remarks.)		
CURANA DV OF FINIDINGS. Attack site on			stant factories at a		
SUMMARY OF FINDINGS - Attach site m	nap snowing sampling po	•	rtant features, etc.		
Hydrophytic Vegetation Present? Yes	X No	Is the Sampled Area			
Hydric Soil Present? Yes	X No	within a Wetland?	Yes X No		
Wetland Hydrology Present? Yes	X No	if yes, optional Wetland Site ID:	WL12		
Remarks: (Explain alternative procedures here or in a	separate report.)				
HYDROLOGY					
Wetland Hydrology Indicators:		Secondary Ind	licators (minimum of two required)		
Primary Indicators (minimum of one is required	d: check all that apply)	X Surface	Soil Cracks (B6)		
Surface Water (A1)	Water-Stained Leaves	(B9) X Drainage	e Patterns (B10)		
High Water Table (A2)	Aquatic Fauna (B13)	Moss Tri	m Lines (B16)		
Saturation (A3)	Marl Deposits (B15)	Dry-Seas	son Water Table (C2)		
Water Marks (B1)	Hydrogen Sulfide Odd	or (C1) Crayfish	Burrows (C8)		
Sediment Deposits (B2)	Oxidized Rhizosphere	s on Living Roots (C3) X Saturation	on Visible in Aerial Imagery (C9)		
Drift Deposits (B3)	Presence of Reduced		or Stressed Plants (D1)		
Algal Mat or Crust (B4)	Recent Iron Reduction		phic Position (D2)		
Iron Deposits (B5)	Thin Muck Surface (C	· · · ——	•		
Inundation Visible on Aerial Imagery (B7)					
	Other (Explain in Ken				
Sparsley Vegetated Concave Surface (B8)			itral Test (D5)		
Surface Water Present? Yes No	X Depth (inches)	_			
Water Table Present? Yes No No	X Depth (inches)	Wetland Hydrology Pre	sent? Yes X No		
Saturation Present? Yes No:	X Depth (inches)	_			
Describe Recorded Data (stream gauge, mo	onitoring well perial photos	nrevious inspections) if available	31		
Describe Necorded Data (stream gauge, mo	Jilitoring Well, aeriai priotos	s, previous inspections), it available	:-		
Remarks:					

VEGETATION - Use scientific names of plants Sampling Point: 1_20200709_WL12_W1 Absolute Dominant Indicator **Dominance Test Worksheet:** (Plot Size: 30'radius) % Cover Species? Status **Tree Stratum Number of Dominant Species** That Are OBL, FACW, or FAC: (A) = Total Cover **Total Number of Dominant** Species Across All Strata: (B) 1 Percent of Dominant Species That Are OBL, FACW, or FAC: (A/B) 100% **Prevalence Index Worksheet:** 31 **OBL** species 31 x 1 Absolute Dominant Indicator **FACW** species 10 20 (Plot Size: 15'radius) % Cover Status x 2 **Shrub Stratum** Species? **FAC** species 0 х3 = Total Cover **FACU** species 0 x 4 0 **UPL** species 0 x 5 0 Column Totals 41 (A) 51 (B) Prevalence Index = B/A = 1.24 **Hydrophytic Vegetation Indicators:** Absolute Dominant Indicator X 1- Rapid Test For Hydrophytic Vegetation **Herb Stratum** (Plot Size: 5'radius) % Cover Species? Status X 2- Dominance Test is > 50% 25 Leersia oryzoides Х OBL X 3- Prevalence Index is =< 3.0 Epilobium hirsutum **FACW** 4- Morphological Adaptations Typha angustifolia 5 OBL Bidens frondosa 5 **FACW** 5- Problematic Hydrophytic Vegetation Alisma subcordatum 1 OBL 41 = Total Cover **Definitions of Vegetation Strata:** Tree- Woody plants 3 in. (7.6cm) or more in diameter at breast height (DBH), regardless of height. Sapling/Shrub- Woody plants less than 3 in. DBH and greater than or equal to 3.28ft (1m) tall. Herb- All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28ft tall. Absolute Dominant Indicator Woody Vines- All woody vines greater than 3.28ft in (Plot Size: 30'radius) **Woody Vine Stratum** % Cover Species? Status height. = Total Cover Hydrophytic Vegetation Present? Yes X No ___ Remarks: (Include photo numbers here or on a separate sheet.)

SOIL

Sampling Point: 1_20200709_WL12_W1

Depth	Matrix				Redo	x Featur		
inches	Color	%	Color	% Type Loc Texture		Texture	Remarks	
0-3	7.5YR 4/2	85	7.5YR 5/6	15	С	М	Clay Loam	
3-7	5YR 5/2	80	5YR 5/8	20	С	М	Clay	
Hydric So	il Indicators:							Indicators for Problematic Soils:
Histosol (A1)					Polyvalu	e Below S	urface (B15)	2 cm Muck (A10)
Hist	cic Epipedon (A2)			Thin Dar	k Surface	(S9)	Coast Prarie Redox (A16)
Blac	ck Histic (A3)				Loamy N	lucky Min	eral (F1)	5 cm Mucky Peat or Peat (S3)
Нус	lrogen Sulfide	(A4)			Loamy G	leyed Ma	tric (F2)	Dark Surface (S7)
Stra	ntified Layers ((A5)		Х	Depleted	d Matrix (f	F3)	Polyvalue Below Surface (S8)
Dep	leted Below [Dark Su	ırface (A11)		Redox Da	ark Surfac	e (F6)	Thin Dark Surface (S9)
Thic	ck Dark Surfac	e (A12)		Depleted	d Dark Sur	face (F7)	Iron-Manganese Masses (F12)
San	dy Mucky Mir	neral (S	51)		Redox D	epression	s (F8)	Piedmont Floodplain Soils (F19)
 San	dy Gleyed Ma	itrix (S4	1)					Mesic Spodic (TA6)
 San	dy Redox (S5)							Red Parent Material (F21)
Stripped Matrix (S6)								Very Shallow Dark Surface (TF12)
	k Surface (S7)	-						Other (Explain in Remarks)
Restrictiv	e Layer (if obse	erved):						
		Type:	Gravel Fill				Hydric	Soil Present? Yes X No

Remarks:

Depth (inches): 7

Project/Site: Cider Solar Project	City/County: Oakfield/Ger	nnessee Sampling Date: 7/9/2020				
Applicant/Owner: Hecate		State: NY Sampling				
Investigator(s): Andrew Sorci	Section, Township, Range:	Point:1_20200709_WL12_U				
Landform (hillslope, terrace,etc.): Shoulder	Local relief (concave, convex,	none): <u>Convex</u> Slope (%) <u>0 - 45</u>				
Subregion (LRR or MLRA): LRR L	Lat: <u>43.091599</u> Long: <u>-</u>	78.276210 Datum: NAD83				
Soil Map Unit Name: La		NWI Classification: UPL				
Are climatic / hyrologic conditions on the site						
Are Vegetation, Soil, or Hydrology		·				
Are Vegetation, Soil, or Hydrology	naturally problematic? (if needed, exp	olain any answers in Remarks.)				
SUMMARY OF FINDINGS - Attach site ma	p showing sampling point locations, tran	sects. important features, etc.				
Hydrophytic Vegetation Present? Yes	No X Is the Sampled Area					
Hydric Soil Present? Yes	within a Wetland?	Yes No X				
· —	No X if yes, optional Wet					
Wetland Hydrology Present? Yes		ialiu Site ID.				
Remarks: (Explain alternative procedures here or in a se	parate report.)					
HYDROLOGY						
Wetland Hydrology Indicators:		Secondary Indicators (minimum of two required)				
Primary Indicators (minimum of one is required: c	heck all that apply)	Surface Soil Cracks (B6)				
Surface Water (A1)	Water-Stained Leaves (B9)	Drainage Patterns (B10)				
High Water Table (A2)	Aquatic Fauna (B13)	Moss Trim Lines (B16)				
Saturation (A3)	Marl Deposits (B15)	Dry-Season Water Table (C2)				
Water Marks (B1)	Hydrogen Sulfide Odor (C1)	Crayfish Burrows (C8)				
Sediment Deposits (B2)	Oxidized Rhizospheres on Living Roots (C3)	Saturation Visible in Aerial Imagery (C9)				
Drift Deposits (B3)	Presence of Reduced Iron (C4)	Stunted or Stressed Plants (D1)				
Algal Mat or Crust (B4)	Recent Iron Reduction in Tilled Soils (C6)	oils (C6) Geomorphic Position (D2)				
Iron Deposits (B5)	Thin Muck Surface (C7)	Shallow Aquitard (D3)				
Inundation Visible on Aerial Imagery (B7)		Other (Explain in Remarks) Microtopographic Relief (D4)				
Sparsley Vegetated Concave Surface (B8)		FAC-Neutral Test (D5)				
	Depth (inches)					
	= · · · · 	Judralagu Pracant? Vac Na V				
Water Table Present? Yes No X	- ' ' -	Hydrology Present? Yes NoX				
Saturation Present? Yes No X	Depth (inches)					
Describe Recorded Data (stream gauge, moni	toring well, aerial photos, previous inspection	ns), if available:				
2						
Remarks:						

VEGETATION - Use scientific names of plants Sampling Point: 1_20200709_WL12_U1 Absolute Dominant Indicator **Dominance Test Worksheet:** (Plot Size: 30'radius) % Cover Species? Status **Tree Stratum Number of Dominant Species** That Are OBL, FACW, or FAC: (A) = Total Cover **Total Number of Dominant** Species Across All Strata: (B) 2 Percent of Dominant Species 50% (A/B) That Are OBL, FACW, or FAC: **Prevalence Index Worksheet:** x 1 0 **OBL** species Absolute Dominant Indicator **FACW** species 25 50 (Plot Size: 15'radius) % Cover Status x 2 **Shrub Stratum** Species? FAC species 5 х3 15 = Total Cover **FACU** species 25 x 4 100 **UPL** species 25 x 5 125 Column Totals 80 (A) 290 (B) Prevalence Index = B/A = 3.62 **Hydrophytic Vegetation Indicators:** Absolute Dominant Indicator 1- Rapid Test For Hydrophytic Vegetation **Herb Stratum** (Plot Size: 5'radius) % Cover Species? Status 2- Dominance Test is > 50% 25 Agrostis gigantea **FACW** 3- Prevalence Index is =< 3.0 Χ Solidago canadensis 25 **FACU** 4- Morphological Adaptations 15 UPL Centaurea nigra 10 UPL Daucus carota 5- Problematic Hydrophytic Vegetation Geum canadense 5 FAC 80 = Total Cover **Definitions of Vegetation Strata:** Tree- Woody plants 3 in. (7.6cm) or more in diameter at breast height (DBH), regardless of height. Sapling/Shrub- Woody plants less than 3 in. DBH and greater than or equal to 3.28ft (1m) tall. Herb- All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28ft tall. Absolute Dominant Indicator Woody Vines- All woody vines greater than 3.28ft in (Plot Size: 30'radius) **Woody Vine Stratum** % Cover Species? Status height. = Total Cover Hydrophytic Vegetation Present? Yes ____ No _X Remarks: (Include photo numbers here or on a separate sheet.)

SOIL Sampling Point: 1_20200709_WL12_U1 Depth Matrix **Redox Features** (inches % Color Color % Type Texture Remarks Loc 0-8 7.5YR 3/2 100 Clay Loam **Hydric Soil Indicators:** Indicators for Problematic Soils: Histosol (A1) Polyvalue Below Surface (B15) 2 cm Muck (A10) Histic Epipedon (A2) Thin Dark Surface (S9) Coast Prarie Redox (A16) Black Histic (A3) Loamy Mucky Mineral (F1) 5 cm Mucky Peat or Peat (S3) Hydrogen Sulfide (A4) Loamy Gleyed Matric (F2) Dark Surface (S7) Stratified Layers (A5) Depleted Matrix (F3) Polyvalue Below Surface (S8) Depleted Below Dark Surface (A11) Redox Dark Surface (F6) Thin Dark Surface (S9) Thick Dark Surface (A12) Depleted Dark Surface (F7) Iron-Manganese Masses (F12) Sandy Mucky Mineral (S1) Redox Depressions (F8) Piedmont Floodplain Soils (F19) Sandy Gleyed Matrix (S4) Mesic Spodic (TA6) Sandy Redox (S5) Red Parent Material (F21) Stripped Matrix (S6) Very Shallow Dark Surface (TF12) Dark Surface (S7) Other (Explain in Remarks) Restrictive Layer (if observed): Type: Gravel Fill Hydric Soil Present? Yes No Χ Depth (inches): 8 Remarks:

Project/Site: Cider Solar Project	City/Co	ounty: Oakfield/Gen	essee Sa	impling Date: 7/9/2020	
Applicant/Owner: Hecate			State: <u>NY</u>	Sampling Point:	
Investigator(s): Andrew Sorci	Section	on, Township, Range: 1_20200709_WL13_W1			
Landform (hillslope, terrace,etc.): Depression	Local relie	f (concave, convex, n	one): Linear	Slope (%) <u>0 - 5</u>	
Subregion (LRR or MLRA): LRR L	Lat: <u>43.091516</u>	Long: -78	.274663	Datum: NAD83	
Soil Map Unit Name: GnA			NWI Classifica	tion: PEM	
Are climatic / hyrologic conditions on the site ty	pical for this time of year	ar? Yes X No	(if no, exp	olain in Remarks.)	
Are Vegetation, Soil, or Hydrology	significantly disturl	bed? Are "Normal C	Circumstances" p	resent? Yes X No	
Are Vegetation, Soil, or Hydrology	naturally problema	atic? (if needed, expl	ain any answers in	Remarks.)	
SUMMARY OF FINDINGS - Attach site map	showing sampling po	oint locations, trans	sects, importar	nt features, etc.	
Hydrophytic Vegetation Present? Yes X	No No	Is the Sampled Area		•	
Hydric Soil Present? Yes X	 No	within a Wetland?	Yes	X No	
Wetland Hydrology Present? Yes X	No	if yes, optional Wetla	and Site ID:	WL13	
Remarks: (Explain alternative procedures here or in a sep				 -	
nemarks. (Explain alternative procedures here of in a sep	arate report.				
HYDROLOGY Westernal Dividuals and Indicators:			Cacandam, Indicat	are (minimum of two required)	
Wetland Hydrology Indicators:				ors (minimum of two required)	
Primary Indicators (minimum of one is required: ch		(PO)	Surface Soil		
Surface Water (A1)	Water-Stained Leaves	(89)	Drainage Pat		
High Water Table (A2)	Aquatic Fauna (B13)		Moss Trim L	•	
X Saturation (A3)	Marl Deposits (B15)			Water Table (C2)	
Water Marks (B1)	Hydrogen Sulfide Odo	r (C1)	Crayfish Bur	rows (C8)	
Sediment Deposits (B2)	Oxidized Rhizospheres	on Living Roots (C3)	Saturation V	isible in Aerial Imagery (C9)	
Drift Deposits (B3)	Presence of Reduced I	ron (C4)	Stunted or S	tressed Plants (D1)	
Algal Mat or Crust (B4)	Recent Iron Reduction	n in Tilled Soils (C6) X Geomorphic Position (D2)			
Iron Deposits (B5)	Thin Muck Surface (C7	7) Shallow Aquitard (D3)			
Inundation Visible on Aerial Imagery (B7)	Other (Explain in Rem	arks)	Microtopogr	aphic Relief (D4)	
Sparsley Vegetated Concave Surface (B8)			X FAC-Neutral	Test (D5)	
Surface Water Present? Yes No X	Depth (inches)				
Water Table Present? Yes No X	Depth (inches)	- Wetland H	ydrology Present	:? Yes X No	
Saturation Present? Yes X No	Depth (inches) 0	-	y ar orogy i resem	res <u>x</u> no	
	- 	-	\ .c		
Describe Recorded Data (stream gauge, monitor	oring well, aerial photos	, previous inspections	s), if available:		
Remarks:					

Tree Stratum (Plot S	iize: <u>30</u>	0'radius)	Absolute % Cover	Dominant Species? = Total Cov	Status	Dominance Test Worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: 1 (A)
				= Total Cov		
					ver	Total Number of Dominant Species Across All Strata:1 (B) Percent of Dominant Species That Are OBL, FACW, or FAC:100% (A/B)
Shrub Stratum (Plot S	iize: 1	5'radius)	Absolute % Cover	Dominant Species?	Indicator Status	Prevalence Index Worksheet: OBL species 25 x 1 25 FACW species 5 x 2 10
				_= Total Cov	ver	FAC species 0 x 3 0 FACU species 0 x 4 0 UPL species 0 x 5 0 Column Totals 30 (A) 35 (B Prevalence Index = B/A = 1.17
Herb Stratum (Plot S Ludwigia palustris Bidens frondosa	iize: _ <u>5</u>	s'radius)	Absolute % Cover 25 5 30	Dominant Species? X = Total Cov	Status OBL FACW	Hydrophytic Vegetation Indicators: X 1- Rapid Test For Hydrophytic Vegetation X 2- Dominance Test is > 50% X 3- Prevalence Index is =< 3.0 4- Morphological Adaptations 5- Problematic Hydrophytic Vegetation
Woody Vine Stratum (Plot S	iize: <u>3</u> 0	<u>0'radius</u>)		Dominant Species?	Indicator Status	Definitions of Vegetation Strata: Tree- Woody plants 3 in. (7.6cm) or more in diameter at breast height (DBH), regardless of height. Sapling/Shrub- Woody plants less than 3 in. DBH and greater than or equal to 3.28ft (1m) tall. Herb- All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28ft tall. Woody Vines- All woody vines greater than 3.28ft in height.
				_= Total Cov	ver	Hydrophytic Vegetation Present? Yes X No

SOIL Sampling Point: 1_20200709_WL13_W1

Depth	Matrix				Redo	x Featu	ıres		
(inches	Color	%	Color	%	Type	Loc	Te	exture	Remarks
0-8	10YR 5/1	60	10YR 5/8	40	C	M	Silty (Clay Loam	
Hydric So	il Indicators:								Indicators for Problematic Soils:
Hiss Hiss Blac Hyc Stra Dep Thic San San Stri	tosol (A1) tic Epipedon (A tic Epipedon (A tic Epipedon (A tick Histic (A3) drogen Sulfide atified Layers (A tick Dark Surfac tick Dark Surfac tick Dark Surfac tick Gleyed Ma tick Gleyed Ma tick Redox (S5) pped Matrix (A tick Surface (S7)	(A4) (A5) Dark Sur e (A12) neral (S2 trix (S4)	1)	X	Thin Dar Loamy M Loamy G Depleted Redox D	k Surface Jucky M Jeyed M J Matrix ark Surfa J Dark Su	ineral (F1) latric (F2) (F3) ace (F6) urface (F7)	15)	2 cm Muck (A10) Coast Prarie Redox (A16) 5 cm Mucky Peat or Peat (S3) Dark Surface (S7) Polyvalue Below Surface (S8) Thin Dark Surface (S9) Iron-Manganese Masses (F12) Piedmont Floodplain Soils (F19) Mesic Spodic (TA6) Red Parent Material (F21) Very Shallow Dark Surface (TF12) Other (Explain in Remarks)
Restrictiv	ve Layer (if obse Depth (in	Type:						Hydric S	Soil Present? Yes X No
Remarks	5:								

Project/Site: Cider Solar Project	City/Coun	ty: Oakfield/Genessee	Sampling Date: 7/9/2020		
Applicant/Owner: Hecate		State: NY			
Investigator(s): Andrew Sorci	Section, T	n, Township, Range: 1_20200710_WL13_W2			
Landform (hillslope, terrace,etc.): Depression	Local relief (c	oncave, convex, none): <u>Lin</u>	earSlope (%) <u>2 - 4</u>		
Subregion (LRR or MLRA): LRR L	Lat: 43.090548	Long: <u>-78.273061</u>	Datum: NAD83		
Soil Map Unit Name: GnA		NWI Cla	assification: PEM		
Are climatic / hyrologic conditions on the site to	ypical for this time of year?	Yes <u>X</u> No (if	no, explain in Remarks.)		
Are Vegetation X , Soil , or Hydrology	significantly disturbed	? Are "Normal Circumstan	ces" present? Yes X No		
Are Vegetation, Soil, or Hydrology	naturally problematic	? (if needed, explain any ans	wers in Remarks.)		
SUMMARY OF FINDINGS - Attach site map	showing sampling point	locations, transects, imp	portant features, etc.		
Hydrophytic Vegetation Present? Yes		he Sampled Area			
		thin a Wetland?	Vos. V. No.		
Hydric Soil Present? Yes X	NO		Yes X No		
Wetland Hydrology Present? Yes X	No if y	es, optional Wetland Site ID	: WL13		
Remarks: (Explain alternative procedures here or in a sep	parate report.)				
corn field					
HYDROLOGY					
Wetland Hydrology Indicators:		Secondary	Indicators (minimum of two required)		
Primary Indicators (minimum of one is required: ch	eck all that apply)	Surfa	ce Soil Cracks (B6)		
Surface Water (A1)	Water-Stained Leaves (B9) Drain	Drainage Patterns (B10)		
X High Water Table (A2)	Aquatic Fauna (B13)		Moss Trim Lines (B16)		
X Saturation (A3)	Marl Deposits (B15)		eason Water Table (C2)		
Water Marks (B1)	Hydrogen Sulfide Odor (C		ish Burrows (C8)		
					
Sediment Deposits (B2)	Oxidized Rhizospheres on		ation Visible in Aerial Imagery (C9)		
Drift Deposits (B3)	Presence of Reduced Iron		ed or Stressed Plants (D1)		
Algal Mat or Crust (B4)	Recent Iron Reduction in	Tilled Soils (C6) X Geon	norphic Position (D2)		
Iron Deposits (B5)	Thin Muck Surface (C7)	Shallo	ow Aquitard (D3)		
Inundation Visible on Aerial Imagery (B7)	Other (Explain in Remarks	marks) Microtopographic Relief (D4)			
Sparsley Vegetated Concave Surface (B8)		FAC-1	Neutral Test (D5)		
Surface Water Present? Yes No X	Depth (inches)				
Water Table Present? Yes X No	Depth (inches) 5	Wetland Hydrology F	Present? Yes X No		
Saturation Present? Yes X No	Depth (inches) 3		<u> </u>		
	- ' '				
Describe Recorded Data (stream gauge, monit	oring well, aerial photos, pr	evious inspections), if availa	ble:		
Remarks:					
Remarks.					

	ntific names of plant	S			Sampling Point: 1_20200710_WL13_W2
Tree Stratum	(Plot Size: 30'radius		Dominant Species?	Indicator Status	Dominance Test Worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: 0 (A)
			_= Total Cov	ver	Total Number of Dominant Species Across All Strata: 1 (B) Percent of Dominant Species That Are OBL, FACW, or FAC: 0% (A/B)
Charak Charakana	(Dlat Cian, 15 radius		Dominant		Prevalence Index Worksheet: OBL species 0 x 1 0 FACW species 2 x 2 4
Shrub Stratum	(Plot Size: 15'radius	, % Cover	Species? = Total Cov	Status	FAC species 0 x 3 0
			_= 10tal Cov	VC1	FACU species 0 x 4 0 UPL species 15 x 5 75 Column Totals 17 (A) 79 (B) Prevalence Index = B/A = 4.65
Herb Stratum Daucus carota Cyperus strigosus	(Plot Size: 5'radius	Absolute % Cover 15 2 17	Dominant Species? X = Total Cov	Status UPL FACW	Hydrophytic Vegetation Indicators: 1- Rapid Test For Hydrophytic Vegetation 2- Dominance Test is > 50% 3- Prevalence Index is =< 3.0 4- Morphological Adaptations 5- Problematic Hydrophytic Vegetation
Woody Vine Stratum	(Plot Size: 30'radius		Dominant Species?	Indicator Status	Definitions of Vegetation Strata: Tree- Woody plants 3 in. (7.6cm) or more in diameter at breast height (DBH), regardless of height. Sapling/Shrub- Woody plants less than 3 in. DBH and greater than or equal to 3.28ft (1m) tall. Herb- All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28ft tall. Woody Vines- All woody vines greater than 3.28ft in height.
			_= Total Cov	/er	Hydrophytic Vegetation Present? Yes NoX

SOIL Sampling Point: 1_20200710_WL13_W2

Depth	Matrix				Redo	ox Featu	res	
(inches	Color	%	Color	%	Type	Loc	Texture	Remarks
0-6	10YR 5/2	80	10YR 5/6	20	С	М	Clay Loam	
	oil Indicators:				D = l = l	- D-I	Cf (D45)	Indicators for Problematic Soils:
	tosol (A1)	۸۵۱			=	k Surface	Surface (B15)	2 cm Muck (A10)
	tic Epipedon (. ck Histic (A3)	AZ)					e (59) neral (F1)	Coast Prarie Redox (A16) 5 cm Mucky Peat or Peat (S3)
	drogen Sulfide	(Δ4)			•	•	atric (F2)	Dark Surface (S7)
					•	d Matrix	• •	Polyvalue Below Surface (S8)
Stratified Layers (A5) Depleted Below Dark Surface (A11)					- ·	ark Surfa		Thin Dark Surface (S9)
	ck Dark Surfac						ırface (F7)	Iron-Manganese Masses (F12)
	ndy Mucky Mir				-	epressio		Piedmont Floodplain Soils (F19)
	ndy Gleyed Ma						. ,	Mesic Spodic (TA6)
San	ndy Redox (S5))						Red Parent Material (F21)
Stri	ipped Matrix (S6)						Very Shallow Dark Surface (TF12)
Dar	rk Surface (S7)							Other (Explain in Remarks)
Restrictiv	ve Layer (if obs	erved):						
		Type:					Hydric	Soil Present? Yes X No
	Depth (in	ches):					,	
		_						
Remarks	s:							

Project/Site: Cider Solar Project	City/County: Oakfield/Gen	essee Sampling Date: 7/9/2020				
Applicant/Owner: Hecate		State: NY Sampling				
Investigator(s): Andrew Sorci	Section, Township, Range:	Point:1_20200709_WL13_U				
Landform (hillslope, terrace,etc.): Terrace	Local relief (concave, convex, n	one): <u>None</u> Slope (%) <u>2 - 5</u>				
Subregion (LRR or MLRA): LRR L	Lat: <u>43.091540</u> Long: <u>-7</u>	8.274772 Datum: <u>NAD83</u>				
Soil Map Unit Name: GnA		NWI Classification: UPL				
Are climatic / hyrologic conditions on the sit	e typical for this time of year? Yes X No	(if no, explain in Remarks.)				
Are Vegetation X , Soil X , or Hydrolo						
Are Vegetation, Soil, or Hydrolo	gynaturally problematic? (if needed, expl	ain any answers in Remarks.)				
	nap showing sampling point locations, tran	· · · · · · · · · · · · · · · · · · ·				
Hydrophytic Vegetation Present? Yes	No X Is the Sampled Area					
Hydric Soil Present? Yes	No X within a Wetland?	Yes NoX				
Wetland Hydrology Present? Yes	No X if yes, optional Wetl	and Site ID:				
Remarks: (Explain alternative procedures here or in a	separate report.)					
Edge of field, recent ground disturband	ce					
HYDROLOGY						
Wetland Hydrology Indicators:		Secondary Indicators (minimum of two required)				
Primary Indicators (minimum of one is required	: check all that apply)	Surface Soil Cracks (B6)				
Surface Water (A1)	Water-Stained Leaves (B9)	Drainage Patterns (B10)				
High Water Table (A2)	Aquatic Fauna (B13)	Moss Trim Lines (B16)				
Saturation (A3)	Marl Deposits (B15)	Dry-Season Water Table (C2)				
Water Marks (B1)	Hydrogen Sulfide Odor (C1)	Crayfish Burrows (C8)				
Sediment Deposits (B2)		Saturation Visible in Aerial Imagery (C9)				
	Oxidized Rhizospheres on Living Roots (C3)					
Drift Deposits (B3)	Presence of Reduced Iron (C4)	Stunted or Stressed Plants (D1)				
Algal Mat or Crust (B4)	Recent Iron Reduction in Tilled Soils (C6)	Geomorphic Position (D2)				
Iron Deposits (B5)	Thin Muck Surface (C7)	Shallow Aquitard (D3)				
Inundation Visible on Aerial Imagery (B7)	Other (Explain in Remarks)	Microtopographic Relief (D4)				
Sparsley Vegetated Concave Surface (B8)		FAC-Neutral Test (D5)				
Surface Water Present? Yes No	X Depth (inches)					
Water Table Present? Yes No	X Depth (inches) Wetland H	lydrology Present? Yes No X				
Saturation Present? Yes No	X Depth (inches) 0					
		\				
Describe Recorded Data (stream gauge, mo	nitoring well, aerial photos, previous inspection	s), if available:				
Remarks:						

VEGETATION - Use scientific names of plants Sampling Point: 1_20200709_WL13_U1 Absolute Dominant Indicator **Dominance Test Worksheet:** (Plot Size: 30'radius) % Cover Species? Status **Tree Stratum Number of Dominant Species** That Are OBL, FACW, or FAC: (A) = Total Cover **Total Number of Dominant** Species Across All Strata: (B) 1 Percent of Dominant Species (A/B) That Are OBL, FACW, or FAC: 0% **Prevalence Index Worksheet:** x 1 0 **OBL** species Absolute Dominant Indicator **FACW** species 15 30 (Plot Size: 15'radius) Status x 2 **Shrub Stratum** % Cover Species? FAC species 5 х3 15 = Total Cover FACU species 55 x 4 220 **UPL** species 5 x 5 25 Column Totals 80 (A) 290 (B) Prevalence Index = B/A = 3.62 **Hydrophytic Vegetation Indicators:** Absolute Dominant Indicator 1- Rapid Test For Hydrophytic Vegetation **Herb Stratum** (Plot Size: 5'radius) % Cover Species? Status 2- Dominance Test is > 50% 40 Χ **FACU** Solidago canadensis 3- Prevalence Index is =< 3.0 Agrostis gigantea 15 **FACW** 4- Morphological Adaptations 10 FACU Lotus corniculatus 5 FAC Equisetum arvense 5- Problematic Hydrophytic Vegetation Artemisia vulgaris UPL Trifolium repens 5 **FACU Definitions of Vegetation Strata:** 80 = Total Cover Tree- Woody plants 3 in. (7.6cm) or more in diameter at breast height (DBH), regardless of height. Sapling/Shrub- Woody plants less than 3 in. DBH and greater than or equal to 3.28ft (1m) tall. Herb- All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28ft tall. Absolute Dominant Indicator Woody Vines- All woody vines greater than 3.28ft in (Plot Size: 30'radius) **Woody Vine Stratum** % Cover Species? Status height. = Total Cover Hydrophytic Vegetation Present? Yes ____ No _X Remarks: (Include photo numbers here or on a separate sheet.)

SOIL Sampling Point: 1_20200709_WL13_U1

Depth	Depth Matrix Redox						res		
(inches	Color	%	Color	%	Туре	Loc	Texture	Remarks	
0-7	10YR 4/1	85	10YR 5/8	15	С	М	Clay Loam		
7-12	10YR 5/1	60	10YR 5/8	40	С	М	Clay		
							•		
-	oil Indicators:							Indicators for Problematic Soils:	
Histosol (A1)							Surface (B15)	2 cm Muck (A10)	
Histic Epipedon (A2)						k Surface	` '	Coast Prarie Redox (A16)	
	ck Histic (A3)				•	•	neral (F1)	5 cm Mucky Peat or Peat (S3)	
Нус	drogen Sulfide	(A4)			Loamy G	leyed Ma	itric (F2)	Dark Surface (S7)	
Stra	atified Layers	(A5)			Depleted	d Matrix (F3)	Polyvalue Below Surface (S8)	
Dep	oleted Below I	Dark Su	rface (A11)		Redox D	ark Surfa	ce (F6)	Thin Dark Surface (S9)	
Thic	ck Dark Surfac	e (A12)		Depleted Dark Surface (F7)				Iron-Manganese Masses (F12)	
San	ndy Mucky Mir	neral (S	1)	Redox Depressions (F8)				Piedmont Floodplain Soils (F19)	
San	ndy Gleyed Ma	atrix (S4	.)					Mesic Spodic (TA6)	
San	ndy Redox (S5))						Red Parent Material (F21)	
Stri	pped Matrix (S6)						Very Shallow Dark Surface (TF12)	
Dar	k Surface (S7))						Other (Explain in Remarks)	
Restrictiv	ve Layer (if obs	erved):							
		Type:					Hydric	Soil Present? Yes No X	
Depth (inches):							,,,,,,	· · · · · · · · · · · · · · · · · · ·	
Remarks	 S:								
Remarks	··								

Project/Site: Cider Solar Project	City/Co	ounty: Oakfield/Gen	nesee	Sampling Date: 10/8/2020	
Applicant/Owner: Hecate	State: NY Sampling Point:				
Investigator(s): Andrew Sorci	Sectio	n, Township, Range:		1_20200710_WL15_W1	
Landform (hillslope, terrace,etc.): Dip	Local relie	Local relief (concave, convex, none): None Slope (%) 0 - 2			
Subregion (LRR or MLRA): LRR L	Lat: 43.090927	Long:7	8.271248	Datum: NAD83	
Soil Map Unit Name:	NWI Classification: PFO				
Are climatic / hyrologic conditions on the site	typical for this time of ye	ar? Yes X No	(if no,	explain in Remarks.)	
Are Vegetation , Soil , or Hydrology	significantly distur	bed? Are "Normal C	Circumstances	" present? Yes X No	
Are Vegetation, Soil, or Hydrology	naturally problem	atic? (if needed, expl	ain any answers	s in Remarks.)	
SUMMARY OF FINDINGS - Attach site ma	p showing sampling p	oint locations, trans	sects, impor	tant features, etc.	
Hydrophytic Vegetation Present? Yes X	No	Is the Sampled Area			
Hydric Soil Present? Yes X	No	within a Wetland?	١	res X No	
Wetland Hydrology Present? Yes X	No	if yes, optional Wetla	and Site ID:	WL15	
Remarks: (Explain alternative procedures here or in a se	parate report.)				
riparian to pond					
HADBOLOCA					
HYDROLOGY Wetland Hydrology Indicators:			Secondary Indi	cators (minimum of two required)	
Primary Indicators (minimum of one is required: c	heck all that apply)			oil Cracks (B6)	
Surface Water (A1)	Water-Stained Leaves	s (B9)	Drainage Patterns (B10)		
High Water Table (A2)	Aquatic Fauna (B13)	. (23)	Moss Trim Lines (B16)		
· · ·			Dry-Season Water Table (C2)		
Saturation (A3)	Marl Deposits (B15)	(04)			
Water Marks (B1)	Hydrogen Sulfide Odd			Burrows (C8)	
Sediment Deposits (B2)	Oxidized Rhizosphere			n Visible in Aerial Imagery (C9)	
Drift Deposits (B3)	Presence of Reduced	Iron (C4)	Stunted o	or Stressed Plants (D1)	
Algal Mat or Crust (B4)	Recent Iron Reduction	n in Tilled Soils (C6)	X Geomorp	hic Position (D2)	
Iron Deposits (B5)	Thin Muck Surface (C	7)	Shallow A	Aquitard (D3)	
Inundation Visible on Aerial Imagery (B7)	Other (Explain in Rem	narks)	Microtopographic Relief (D4)		
Sparsley Vegetated Concave Surface (B8)			X FAC-Neutral Test (D5)		
Surface Water Present? Yes No X	Depth (inches)				
Water Table Present? Yes No X	Depth (inches)	– Wetland H	vdrology Pres	ent? Yes X No	
Saturation Present? Yes No X	Depth (inches)	_	,	<u> </u>	
Saturation Fresent: TesNO_X		_			
Describe Recorded Data (stream gauge, moni	toring well, aerial photos	s, previous inspections	s), if available:		
Domarka					
Remarks:					

VEGETATION - Use scientific names of plants Sampling Point: 1_20200710_WL15_W1 Absolute Dominant Indicator **Dominance Test Worksheet:** (Plot Size: 30'radius) % Cover Species? Status **Tree Stratum Number of Dominant Species** 60 Χ **FACW** That Are OBL, FACW, or FAC: (A) Fraxinus pennsylvanica 60 = Total Cover **Total Number of Dominant** Species Across All Strata: (B) 4 Percent of Dominant Species That Are OBL, FACW, or FAC: (A/B) 100% **Prevalence Index Worksheet:** x 1 8 **OBL** species 8 Absolute Dominant Indicator **FACW** species 125 250 (Plot Size: 15'radius) Status x 2 **Shrub Stratum** % Cover Species? **FAC** species 10 30 х3 = Total Cover **FACU** species 0 x 4 0 **UPL** species 0 x 5 0 Column Totals 143 (A) 288 (B) Prevalence Index = B/A = 2.01 **Hydrophytic Vegetation Indicators:** Absolute Dominant Indicator X 1- Rapid Test For Hydrophytic Vegetation **Herb Stratum** (Plot Size: 5'radius) % Cover Species? Status X 2- Dominance Test is > 50% 40 Phalaris arundinacea Х **FACW** X 3- Prevalence Index is =< 3.0 Χ Bidens frondosa 10 **FACW** 4- Morphological Adaptations Impatiens capensis 10 Χ **FACW** Alisma subcordatum 5 OBL 5- Problematic Hydrophytic Vegetation Ranunculus hispidus 5 FAC Agrostis gigantea 5 **FACW Definitions of Vegetation Strata:** FAC Euthamia graminifolia 5 Tree- Woody plants 3 in. (7.6cm) or more in diameter at Asclepias incarnata 3 OBL breast height (DBH), regardless of height. 83 = Total Cover Sapling/Shrub- Woody plants less than 3 in. DBH and greater than or equal to 3.28ft (1m) tall. Herb- All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28ft tall. Absolute Dominant Indicator Woody Vines- All woody vines greater than 3.28ft in (Plot Size: 30'radius) **Woody Vine Stratum** % Cover Species? Status height. = Total Cover Hydrophytic Vegetation Present? Yes X No ___ Remarks: (Include photo numbers here or on a separate sheet.)

SOIL Sampling Point: 1_20200710_WL15_W1

								- 0	
Depth <u>Matrix</u>					Redo	x Featu	ires		
(inches	Color	%	Color	%	Type	Loc	Texture	Remarks	
0-3	10YR 2/2	100					Sandy Loam		
3-12	10YR 4/1	90	10YR 5/6	10	С	М	Sandy Loam		
- ۱ دمایتام ۲۰	ail Indicaters:							Indicators for Problematic Soils:	
-	oil Indicators: tosol (A1)				Polyvalii	e Relow	Surface (B15)	2 cm Muck (A10)	
	tic Epipedon (Δ2)			Thin Dar			Coast Prarie Redox (A16)	
	ck Histic (A3)	, (2)					ineral (F1)	5 cm Mucky Peat or Peat (S3)	
Hydrogen Sulfide (A4)					=	=	atric (F2)	Dark Surface (S7)	
Stratified Layers (A5)					Depleted			Polyvalue Below Surface (S8)	
Depleted Below Dark Surface (A11)					Redox D			Thin Dark Surface (S9)	
Thick Dark Surface (A12)							urface (F7)	Iron-Manganese Masses (F12)	
Sar	Sandy Mucky Mineral (S1)				Redox D	epressio	ns (F8)	Piedmont Floodplain Soils (F19)	
Sar	ndy Gleyed Ma	atrix (S4	1)					Mesic Spodic (TA6)	
Sar	ndy Redox (S5)						Red Parent Material (F21)	
Stri	ipped Matrix ((S6)						Very Shallow Dark Surface (TF12)	
Dark Surface (S7)							Other (Explain in Remarks)		
Restrictiv	ve Layer (if obs	erved):							
		Type:					Hydric	: Soil Present? Yes X No	
	Depth (ir	_					Hyund	. Soli Present: Tes A NO	
	Deptii (ii	-							
Remark	s:								

Project/Site: Cider Solar Project	City/County: Elba/Genese	e Sampling Date: 7/14/2020					
Applicant/Owner: Hecate		State: NY Sampling Point:Upland-WL1					
Investigator(s): Justin Ahn	Section, Township, Range:	Section, Township, Range:					
Landform (hillslope, terrace,etc.): Toeslope	Local relief (concave, convex, r	none): <u>Linear</u> Slope (%) <u>1 - 5</u>					
Subregion (LRR or MLRA): LRR L	Lat: 43.095836 Long: -7	78.185447 Datum: NAD83					
Soil Map Unit Name: OdA		NWI Classification: UPL					
Are climatic / hyrologic conditions on the site t	cypical for this time of year? Yes X No	(if no, explain in Remarks.)					
Are Vegetation, Soil, or Hydrology	significantly disturbed? Are "Normal	Circumstances" present? Yes X No					
Are Vegetation, Soil, or Hydrology	naturally problematic? (if needed, exp	lain any answers in Remarks.)					
SUMMARY OF FINDINGS - Attach site map	showing sampling point locations, tran	sects, important features, etc.					
Hydrophytic Vegetation Present? Yes	No X Is the Sampled Area	-					
Hydric Soil Present? Yes X	within a Wetland?	Yes No X					
Wetland Hydrology Present? Yes		and site ib.					
Remarks: (Explain alternative procedures here or in a sep	parate report.)						
HYDROLOGY							
Wetland Hydrology Indicators:		Secondary Indicators (minimum of two required)					
Primary Indicators (minimum of one is required: cl	neck all that apply)	Surface Soil Cracks (B6)					
Surface Water (A1)	Water-Stained Leaves (B9)	Drainage Patterns (B10)					
High Water Table (A2)	Aquatic Fauna (B13)	Moss Trim Lines (B16)					
Saturation (A3)	Marl Deposits (B15)	Dry-Season Water Table (C2)					
Water Marks (B1)	Hydrogen Sulfide Odor (C1)	Crayfish Burrows (C8)					
Sediment Deposits (B2)	Oxidized Rhizospheres on Living Roots (C3)	Saturation Visible in Aerial Imagery (C9)					
Drift Deposits (B3)	Presence of Reduced Iron (C4)	Stunted or Stressed Plants (D1)					
Algal Mat or Crust (B4)	Recent Iron Reduction in Tilled Soils (C6)	Geomorphic Position (D2)					
Iron Deposits (B5)	Thin Muck Surface (C7)	Shallow Aquitard (D3)					
Inundation Visible on Aerial Imagery (B7)		Microtopographic Relief (D4)					
	Other (Explain in Remarks)						
Sparsley Vegetated Concave Surface (B8)		FAC-Neutral Test (D5)					
Surface Water Present? Yes No X	Depth (inches)						
Water Table Present? Yes No X	Depth (inches) Wetland H	Hydrology Present? Yes No X					
Saturation Present? Yes NoX	Depth (inches)						
Describe Recorded Data (stream gauge, monit	toring well aerial photos previous inspection	us) if available:					
Describe Recorded Data (stream gauge) month	toring well, derial prioces, previous inspession	isy, ii uvullusie.					
Remarks:							

VEGETATION - Use scientific names of plants Sampling Point: Upland-WL15 Absolute Dominant Indicator **Dominance Test Worksheet:** (Plot Size: 30'radius) % Cover Species? Status **Tree Stratum Number of Dominant Species** That Are OBL, FACW, or FAC: (A) = Total Cover **Total Number of Dominant** (B) Species Across All Strata: 2 Percent of Dominant Species (A/B) That Are OBL, FACW, or FAC: 0% **Prevalence Index Worksheet:** x 1 0 **OBL** species Absolute Dominant Indicator **FACW** species 0 0 (Plot Size: 15'radius) Status x 2 **Shrub Stratum** % Cover Species? 5 FAC species х3 15 = Total Cover **FACU** species 45 x 4 180 **UPL** species 90 x 5 450 Column Totals 140 (A) 645 (B) Prevalence Index = B/A = 4.61 **Hydrophytic Vegetation Indicators:** Absolute Dominant Indicator 1- Rapid Test For Hydrophytic Vegetation **Herb Stratum** (Plot Size: 5'radius) % Cover Species? Status 2- Dominance Test is > 50% 60 UPL Zea mays 3- Prevalence Index is =< 3.0 25 Χ Abutilon theophrasti **FACU** 4- Morphological Adaptations Alliaria petiolata 20 **FACU** Daucus carota 10 UPL 5- Problematic Hydrophytic Vegetation 10 UPL Asclepias syriaca Leucanthemum vulgare 10 UPL **Definitions of Vegetation Strata:** FAC Rumex crispus 5 Tree- Woody plants 3 in. (7.6cm) or more in diameter at 140 = Total Cover breast height (DBH), regardless of height. Sapling/Shrub- Woody plants less than 3 in. DBH and greater than or equal to 3.28ft (1m) tall. Herb- All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28ft tall. Absolute Dominant Indicator Woody Vines- All woody vines greater than 3.28ft in (Plot Size: 30'radius) **Woody Vine Stratum** % Cover Species? Status height. = Total Cover Hydrophytic Vegetation Present? Yes ____ No _X Remarks: (Include photo numbers here or on a separate sheet.)

epth Matrix Redox Features Inches Color % Type Loc Texture 0-10 10YR 4/2 95 7.5YR 5/8 5 C PL Silty Clay Loam	Remarks
	TOTAL
0-10 10TK 4/2 95 7.5TK 5/8 5 C PL SIILY CIAY LOAIII	
•	dicators for Problematic Soils:
Histosol (A1) Polyvalue Below Surface (B15)	2 cm Muck (A10)
Histic Epipedon (A2) Thin Dark Surface (S9)	Coast Prarie Redox (A16)
Black Histic (A3)Loamy Mucky Mineral (F1)	5 cm Mucky Peat or Peat (S3)
Hydrogen Sulfide (A4) Loamy Gleyed Matric (F2)	Dark Surface (S7)
Stratified Layers (A5) X Depleted Matrix (F3) Parkets d Paleys Park Surface (A11)	Polyvalue Below Surface (S8)
Depleted Below Dark Surface (A11) Redox Dark Surface (F6) Thick Dark Surface (A12) Redox Dark Surface (F7)	Thin Dark Surface (S9)
Thick Dark Surface (A12) Depleted Dark Surface (F7) Depleted Dark Surface (F8)	Iron-Manganese Masses (F12)
Sandy Mucky Mineral (S1) Redox Depressions (F8) Sandy Gleyed Matrix (S4)	Piedmont Floodplain Soils (F19) Mesic Spodic (TA6)
Sandy Redox (S5)	Red Parent Material (F21)
Stripped Matrix (S6)	Very Shallow Dark Surface (TF12)
Dark Surface (S7)	Other (Explain in Remarks)
Dailt Sailtace (57)	Other (Explain in Remarks)
Restrictive Layer (if observed):	
Type: Rock Hydric So	Present? Yes X No No
Depth (inches): 10	
De vestiles.	
Remarks:	

Project/Site: Cider Solar Project	City/Cou	unty: Oakfield/Gennesee Sampling Date: 7/10/2020			
Applicant/Owner: Hecate		State: <u>NY</u> Sampling Point:			
Investigator(s): Andrew Sorci	Section	, Township, Range: 1_20200710_WL16_W1			
Landform (hillslope, terrace, etc.): Depression	Local relief (concave, convex, none): Concave Slope (%) 0 - 2				
Subregion (LRR or MLRA): LRR L Soil Map Unit Name:	Lat: 43.091146	Long: <u>-78.270969</u> Datum: <u>NAD83</u> NWI Classification: PEM			
Are climatic / hyrologic conditions on the site ty	vpical for this time of yea				
		ed? Are "Normal Circumstances" present? Yes X No			
Are Vegetation , Soil , or Hydrology					
SUMMARY OF FINDINGS - Attach site map	showing sampling poi	int locations, transects, important features, etc.			
Hydrophytic Vegetation Present? Yes		s the Sampled Area			
	,	within a Wetland? Yes X No			
Hydric Soil Present? Yes X	No	163 <u>X</u> 100			
Wetland Hydrology Present? Yes X		if yes, optional Wetland Site ID: WL16			
Remarks: (Explain alternative procedures here or in a sep	arate report.)				
edge of corn field					
HYDROLOGY					
Wetland Hydrology Indicators:		Secondary Indicators (minimum of two required)			
Primary Indicators (minimum of one is required: ch	neck all that apply)	Surface Soil Cracks (B6)			
Surface Water (A1)	Water-Stained Leaves (
X High Water Table (A2)	Aquatic Fauna (B13)	Moss Trim Lines (B16)			
X Saturation (A3)	Marl Deposits (B15)	Dry-Season Water Table (C2)			
					
Water Marks (B1)	Hydrogen Sulfide Odor				
Sediment Deposits (B2)	Oxidized Rhizospheres				
Drift Deposits (B3)	Presence of Reduced Ir				
Algal Mat or Crust (B4)	Recent Iron Reduction	in Tilled Soils (C6) X Geomorphic Position (D2)			
Iron Deposits (B5)	Thin Muck Surface (C7)	Shallow Aquitard (D3)			
Inundation Visible on Aerial Imagery (B7)	Other (Explain in Rema	rks) Microtopographic Relief (D4)			
Sparsley Vegetated Concave Surface (B8)		FAC-Neutral Test (D5)			
Surface Water Present? Yes No X	Depth (inches)				
Water Table Present? Yes X No	Depth (inches) 6	Wetland Hydrology Present? Yes X No			
Saturation Present? Yes X No	Depth (inches) 0	Wedana Hydrology Freschit. Tes X			
Saturation Fresent: Fes X NO	Depth (inches)				
Describe Recorded Data (stream gauge, monit	oring well, aerial photos,	previous inspections), if available:			
Remarks:					
Nemarks.					

Size: _3	80'radius)	Absolute % Cover	Dominant Species? _= Total Cov	Status	Dominance Test Worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: Total Number of Dominant	١)	
			= Total Cov	/er			
					Species Across All Strata:1 (E	3)	
					Percent of Dominant Species That Are OBL, FACW, or FAC: 0% (A	A/B)	
					Prevalence Index Worksheet:		
		Absolute	Dominant	Indicator	OBL species x 1 0	_	
Size: _	15'radius)	% Cover	Species?	Status	FACW species 0 x 2 0	_	
					FAC species 0 x 3 0	_	
			= Total Cov	/er	FACU species 0 x 4 0	_	
					UPL species 15 x 5 75		
					Column Totals 15 (A) 75	(B)	
					Prevalence Index = B/A = 5	_	
					Hydrophytic Vegetation Indicators:		
				Indicator	1- Rapid Test For Hydrophytic Vegetation	n	
Size: _	5'radius)	% Cover	Species?	Status	2- Dominance Test is > 50%		
		15	X	UPL	3- Prevalence Index is =< 3.0 4- Morphological Adaptations 5- Problematic Hydrophytic Vegetation		
		15	_= 10tal Co\	/er			
					Definitions of Vegetation Strata:		
					Tree- Woody plants 3 in. (7.6cm) or more in diamete breast height (DBH), regardless of height.	er at	
					Sapling/Shrub- Woody plants less than 3 in. DBH and greater than or equal to 3.28ft (1m) tall.	1	
					Herb- All herbaceous (non-woody) plants, regardless size, and woody plants less than 3.28ft tall.	of	
Size: _	30'radius)			Indicator Status	Woody Vines- All woody vines greater than 3.28ft in height.		
			_= Total Cov	/er	Hydrophytic Vegetation Present? Yes NoX		
	Size: _	Size: 15'radius) Size: 5'radius)	Size: 15'radius) % Cover Absolute Size: 5'radius) % Cover 15 15 Absolute	Size: 15'radius) % Cover Species? Absolute Dominant Species? 15 X 15 = Total Cov Absolute Dominant Species? Absolute Dominant Species?	Absolute Dominant Indicator Size: 5'radius)	Absolute Dominant Indicator Size: 15'radius)	

SOIL Sampling Point: 1_20200710_WL16_W1

Depth	Matrix				Red	ox Featu			
(inches	Color	%	Color	%	Type	Loc	Texture	Remarks	
0-6	10YR 5/2	80	10YR 5/6	20	С	М	Clay		
	oil Indicators:					5.1	. (245)	Indicators for Problematic Soils:	
	tosol (A1)	۸۵۱			-		Surface (B15)	2 cm Muck (A10)	
	tic Epipedon (/ ck Histic (A3)	AZ)				k Surface	(59) neral (F1)	Coast Prarie Redox (A16) 5 cm Mucky Peat or Peat (S3)	
	• •	(04)			•	Sleyed Ma	` '	Dark Surface (S7)	
Hydrogen Sulfide (A4) Stratified Layers (A5)			$\overline{}$	•	d Matrix (, ,	Polyvalue Below Surface (S8)		
Depleted Below Dark Surface (A11)				-	ark Surfa	•	Thin Dark Surface (S9)		
Thick Dark Surface (A11)						rface (F7)	Iron-Manganese Masses (F12)		
	ndy Mucky Mir					epression		Piedmont Floodplain Soils (F19)	
	ndy Gleyed Ma					op. 655.6.	()	Mesic Spodic (TA6)	
	ndy Redox (S5)	-	,					Red Parent Material (F21)	
	pped Matrix (Very Shallow Dark Surface (TF12)	
Dar	k Surface (S7)							Other (Explain in Remarks)	
Restrictiv	ve Layer (if obse	erved):							
		Type:					Hydri	c Soil Present? Yes X No	
	Depth (in	_					,	νες <u>λ</u> πε	
		_							
Remarks	s:								

Project/Site: Cider Solar Project	City/County: Elba/Genese	e Sampling Date: 7/14/2020		
Applicant/Owner: Hecate		State: NY Sampling Point:Upland-WL1		
Investigator(s): Justin Ahn	Section, Township, Range:			
Landform (hillslope, terrace,etc.): <u>Toeslope</u>	Local relief (concave, convex, ı	none): <u>Linear</u> Slope (%) <u>1 - 5</u>		
Subregion (LRR or MLRA): LRR L	Lat: 43.103463 Long:7	78.164127 Datum: <u>NAD83</u>		
Soil Map Unit Name: Ld		NWI Classification: UPL		
Are climatic / hyrologic conditions on the site t	typical for this time of year? Yes X No	(if no, explain in Remarks.)		
Are Vegetation, Soil, or Hydrology	significantly disturbed? Are "Normal	Circumstances" present? Yes X No		
Are Vegetation, Soil, or Hydrology	naturally problematic? (if needed, exp	lain any answers in Remarks.)		
SUMMARY OF FINDINGS - Attach site map	showing sampling point locations, tran	sects, important features, etc.		
Hydrophytic Vegetation Present? Yes X				
Hydric Soil Present? Yes	No X within a Wetland?	Yes No X		
·	if was antiqual Mat			
Remarks: (Explain alternative procedures here or in a se	parate report.)			
HYDROLOGY				
Wetland Hydrology Indicators:		Secondary Indicators (minimum of two required)		
Primary Indicators (minimum of one is required: cl	neck all that apply)	Surface Soil Cracks (B6)		
Surface Water (A1)	Water-Stained Leaves (B9)	Drainage Patterns (B10)		
High Water Table (A2)	Aquatic Fauna (B13)	Moss Trim Lines (B16)		
Saturation (A3)	Marl Deposits (B15)	Dry-Season Water Table (C2)		
Water Marks (B1)	Hydrogen Sulfide Odor (C1)	Crayfish Burrows (C8)		
Sediment Deposits (B2)	Oxidized Rhizospheres on Living Roots (C3)	Saturation Visible in Aerial Imagery (C9)		
Drift Deposits (B3)	Presence of Reduced Iron (C4)	Stunted or Stressed Plants (D1)		
Algal Mat or Crust (B4)	Recent Iron Reduction in Tilled Soils (C6)	Geomorphic Position (D2)		
Iron Deposits (B5)	Thin Muck Surface (C7)	Shallow Aquitard (D3)		
Inundation Visible on Aerial Imagery (B7)	Other (Explain in Remarks)	Microtopographic Relief (D4)		
Sparsley Vegetated Concave Surface (B8)		FAC-Neutral Test (D5)		
	Double (in short)			
Surface Water Present? Yes No X	Depth (inches)			
Water Table Present? Yes NoX	- ' '	Hydrology Present? Yes No X		
Saturation Present? Yes No _ X	Depth (inches)			
Describe Recorded Data (stream gauge, monit	toring well, aerial photos, previous inspection	ns), if available:		
,				
Remarks:				

VEGETATION - Use scientific names of plants Sampling Point: Upland-WL16 Absolute Dominant Indicator **Dominance Test Worksheet:** (Plot Size: 30'radius) % Cover Species? Status **Tree Stratum Number of Dominant Species** 40 Χ FAC That Are OBL, FACW, or FAC: (A) Acer rubrum Fagus grandifolia 30 Χ **FACU Total Number of Dominant** 70 = Total Cover (B) Species Across All Strata: 5 Percent of Dominant Species (A/B) That Are OBL, FACW, or FAC: 60% **Prevalence Index Worksheet:** 0 x 1 **OBL** species Absolute Dominant Indicator **FACW** species 10 20 (Plot Size: 15'radius) % Cover Species? Status x 2 **Shrub Stratum FAC** species 255 85 х3 = Total Cover **FACU** species 75 x 4 300 **UPL** species 0 x 5 0 Column Totals 170 (A) 575 (B) Prevalence Index = B/A = 3.38 **Hydrophytic Vegetation Indicators:** Absolute Dominant Indicator 1- Rapid Test For Hydrophytic Vegetation **Herb Stratum** (Plot Size: 5'radius) % Cover Species? Status X 2- Dominance Test is > 50% 40 **FACU** Alliaria petiolata 3- Prevalence Index is =< 3.0 30 Χ **FAC** Menispermum canadense 4- Morphological Adaptations Phalaris arundinacea 10 **FACW** Oxalis corniculata 5 **FACU** 5- Problematic Hydrophytic Vegetation 85 = Total Cover **Definitions of Vegetation Strata:** Tree- Woody plants 3 in. (7.6cm) or more in diameter at breast height (DBH), regardless of height. Sapling/Shrub- Woody plants less than 3 in. DBH and greater than or equal to 3.28ft (1m) tall. Herb- All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28ft tall. Absolute Dominant Indicator Woody Vines- All woody vines greater than 3.28ft in (Plot Size: 30'radius) Species? **Woody Vine Stratum** % Cover Status height. **FAC** Vitis riparia 15 Χ 15 = Total Cover Hydrophytic Vegetation Present? Yes X No ___

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

SOIL Sampling Point: Upland-WL16 Depth Matrix **Redox Features** (inches % Color Color % Type Texture Remarks Loc 0-10 10YR 4/3 100 Silt Loam **Hydric Soil Indicators:** Indicators for Problematic Soils: Histosol (A1) Polyvalue Below Surface (B15) 2 cm Muck (A10) Histic Epipedon (A2) Thin Dark Surface (S9) Coast Prarie Redox (A16) Black Histic (A3) Loamy Mucky Mineral (F1) 5 cm Mucky Peat or Peat (S3) Hydrogen Sulfide (A4) Loamy Gleyed Matric (F2) Dark Surface (S7) Stratified Layers (A5) Depleted Matrix (F3) Polyvalue Below Surface (S8) Depleted Below Dark Surface (A11) Redox Dark Surface (F6) Thin Dark Surface (S9) Thick Dark Surface (A12) Depleted Dark Surface (F7) Iron-Manganese Masses (F12) Sandy Mucky Mineral (S1) Redox Depressions (F8) Piedmont Floodplain Soils (F19) Sandy Gleyed Matrix (S4) Mesic Spodic (TA6) Sandy Redox (S5) Red Parent Material (F21) Stripped Matrix (S6) Very Shallow Dark Surface (TF12) Dark Surface (S7) Other (Explain in Remarks) Restrictive Layer (if observed): Type: Rock Hydric Soil Present? Yes No Χ Depth (inches): 10 Remarks:

Project/Site: Cider Solar Project	City/County: _(Oakfield/Gennesee Sar	mpling Date: 7/10/2020			
Applicant/Owner: Hecate	State: NY Sampling Point:					
Investigator(s): Andrew Sorci	Section, Towns	Section, Township, Range: 1_20200710_WL17_W1				
Landform (hillslope, terrace,etc.): Depression	n Local relief (conca	Local relief (concave, convex, none): Linear Slope (%) 0 - 15				
Subregion (LRR or MLRA): LRR L	Lat: _43.091589	Long: <u>-78.264761</u>	Datum: NAD83			
Soil Map Unit Name: Wy	NWI Classification: PEM					
Are climatic / hyrologic conditions on the site	typical for this time of year? Yes	X No (if no, exp	lain in Remarks.)			
Are Vegetation , Soil , or Hydrolog	y significantly disturbed? A	re "Normal Circumstances" pro	esent? Yes X No			
Are Vegetation , Soil , or Hydrolog	y naturally problematic? (i	f needed, explain any answers in F	Remarks.)			
						
SUMMARY OF FINDINGS - Attach site ma	ap showing sampling point loca	tions, transects, important	features, etc.			
Hydrophytic Vegetation Present? Yes	(No Is the Sa	ampled Area				
Hydric Soil Present? Yes	No within a	Wetland? Yes	X No			
<u> </u>		ptional Wetland Site ID:	WL17			
Remarks: (Explain alternative procedures here or in a s Associated with stream	eparate report.)					
Associated with stream						
HYDROLOGY						
Wetland Hydrology Indicators:		Secondary Indicato	rs (minimum of two required)			
Primary Indicators (minimum of one is required:	check all that apply)	Surface Soil C	racks (B6)			
X Surface Water (A1)	Water-Stained Leaves (B9)	X Drainage Patt				
High Water Table (A2)	Aquatic Fauna (B13)	Moss Trim Lir				
Saturation (A3)	Marl Deposits (B15)		Dry-Season Water Table (C2)			
						
Water Marks (B1)	Hydrogen Sulfide Odor (C1)	Crayfish Burro				
Sediment Deposits (B2)	Oxidized Rhizospheres on Livin		sible in Aerial Imagery (C9)			
Drift Deposits (B3)	Presence of Reduced Iron (C4)	Stunted or Str	ressed Plants (D1)			
Algal Mat or Crust (B4)	Recent Iron Reduction in Tilled	Soils (C6) X Geomorphic F	osition (D2)			
Iron Deposits (B5)	Thin Muck Surface (C7)	Shallow Aquit	ard (D3)			
Inundation Visible on Aerial Imagery (B7)	Other (Explain in Remarks)	Microtopogra	phic Relief (D4)			
Sparsley Vegetated Concave Surface (B8)		X FAC-Neutral T	est (D5)			
Surface Water Present? Yes X No	Depth (inches) 3					
	_ · · · · 	Made ad Heduales at Duces at) V V N-			
Water Table Present? Yes NoX	_ ' ' 	Wetland Hydrology Present?	? Yes X No			
Saturation Present? Yes NoX	Depth (inches)					
Describe Recorded Data (stream gauge, mor	uitoring well, aerial photos, previou	is inspections), if available:				
Remarks:						

VEGETATION - Use scientific names of plants Sampling Point: 1_20200710_WL17_W1 Absolute Dominant Indicator **Dominance Test Worksheet:** (Plot Size: 30'radius) % Cover Species? Status **Tree Stratum Number of Dominant Species** That Are OBL, FACW, or FAC: (A) = Total Cover **Total Number of Dominant** Species Across All Strata: (B) 3 Percent of Dominant Species That Are OBL, FACW, or FAC: (A/B) 100% **Prevalence Index Worksheet:** 40 40 **OBL** species x 1 Absolute Dominant Indicator **FACW** species 30 60 (Plot Size: 15'radius) Status x 2 **Shrub Stratum** % Cover Species? FAC species 0 х3 = Total Cover **FACU** species 0 x 4 0 **UPL** species 0 x 5 0 Column Totals 70 (A) 100 (B) Prevalence Index = B/A = 1.43 **Hydrophytic Vegetation Indicators:** Absolute Dominant Indicator X 1- Rapid Test For Hydrophytic Vegetation **Herb Stratum** (Plot Size: 5'radius) % Cover Species? Status X 2- Dominance Test is > 50% 20 Phragmites australis Χ **FACW** X 3- Prevalence Index is =< 3.0 Χ OBL Potamogeton crispus 15 4- Morphological Adaptations Nasturtium officinale 15 Χ OBL Bidens frondosa 10 **FACW** 5- Problematic Hydrophytic Vegetation Typha angustifolia 10 OBL 70 = Total Cover **Definitions of Vegetation Strata:** Tree- Woody plants 3 in. (7.6cm) or more in diameter at breast height (DBH), regardless of height. Sapling/Shrub- Woody plants less than 3 in. DBH and greater than or equal to 3.28ft (1m) tall. Herb- All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28ft tall. Absolute Dominant Indicator Woody Vines- All woody vines greater than 3.28ft in (Plot Size: 30'radius) **Woody Vine Stratum** % Cover Species? Status height. = Total Cover Hydrophytic Vegetation Present? Yes X No ___ Remarks: (Include photo numbers here or on a separate sheet.)

OIL		Sampling Point: 1_20200710_WL17_W
Hydric Soil Indicators:		Indicators for Problematic Soils:
Histosol (A1)	Polyvalue Below Surface (B	15) 2 cm Muck (A10)
Histic Epipedon (A2)	Thin Dark Surface (S9)	Coast Prarie Redox (A16)
Black Histic (A3)	Loamy Mucky Mineral (F1)	5 cm Mucky Peat or Peat (S3)
Hydrogen Sulfide (A4)	Loamy Gleyed Matric (F2)	Dark Surface (S7)
Stratified Layers (A5)	Depleted Matrix (F3)	Polyvalue Below Surface (S8)
Depleted Below Dark Surface (A11)	Redox Dark Surface (F6)	Thin Dark Surface (S9)
Thick Dark Surface (A12)	Depleted Dark Surface (F7)	Iron-Manganese Masses (F12)
Sandy Mucky Mineral (S1)	Redox Depressions (F8)	Piedmont Floodplain Soils (F19)
Sandy Gleyed Matrix (S4)		Mesic Spodic (TA6)
Sandy Redox (S5)		Red Parent Material (F21)
Stripped Matrix (S6)		Very Shallow Dark Surface (TF12)
Dark Surface (S7)		Other (Explain in Remarks)
Restrictive Layer (if observed):		
Type:		Hydric Soil Present? Yes X No
Depth (inches):		1174.116 5011 1 ESCITE: 1 ES 116
Remarks:	<u>'</u>	
Assumed hydric due to primary hydro	logy indicators and doinant oblig	ate and FACW veg.

Project/Site: Cider Solar Project	City/C	ounty: Oakfield/Gennessee	Sampling Date: 7/10/2020
Applicant/Owner: Hecate		State: NY	Sampling Point:
Investigator(s): Andrew Sorci	Section	n, Township, Range:	1_20200710_WL17_W2
Landform (hillslope, terrace,etc.): Floodplai	in Local relie	ef (concave, convex, none): No	ne Slope (%) <u>0 - 3</u>
Subregion (LRR or MLRA): LRR L	Lat: 43.091594	Long:78.264762	Datum: NAD83
Soil Map Unit Name: Wy		NWI Cla	assification: PEM
Are climatic / hyrologic conditions on the site	e typical for this time of ye	ar? Yes X No (if i	no, explain in Remarks.)
Are Vegetation , Soil , or Hydrolog	gy significantly distur	bed? Are "Normal Circumstan	ces" present? Yes X No
Are Vegetation, Soil, or Hydrolog	gynaturally problem	atic? (if needed, explain any ans	wers in Remarks.)
SUMMARY OF FINDINGS - Attach site m	ap showing sampling p	oint locations, transects, imp	oortant features, etc.
Hydrophytic Vegetation Present? Yes	X No	Is the Sampled Area	
Hydric Soil Present? Yes	X No	within a Wetland?	Yes X No
Wetland Hydrology Present? Yes	X No	if yes, optional Wetland Site ID	: WL17
Remarks: (Explain alternative procedures here or in a	separate report.)		
Disturbed area			
HYDROLOGY			
Wetland Hydrology Indicators:		Secondary	Indicators (minimum of two required)
Primary Indicators (minimum of one is required:	: check all that apply)		ce Soil Cracks (B6)
Surface Water (A1)	Water-Stained Leaves		age Patterns (B10)
High Water Table (A2)	Aquatic Fauna (B13)		Trim Lines (B16)
Saturation (A3)	Marl Deposits (B15)		eason Water Table (C2)
Water Marks (B1)	Hydrogen Sulfide Odd	 -	ish Burrows (C8)
Sediment Deposits (B2)	Oxidized Rhizosphere		ation Visible in Aerial Imagery (C9)
Drift Deposits (B3)	Presence of Reduced		ed or Stressed Plants (D1)
Algal Mat or Crust (B4)	Recent Iron Reductio		norphic Position (D2)
· ·		· · · ——	•
Iron Deposits (B5)	Thin Muck Surface (C	· ——	ow Aquitard (D3)
Inundation Visible on Aerial Imagery (B7)	Other (Explain in Rem		otopographic Relief (D4)
Sparsley Vegetated Concave Surface (B8)		<u>X</u> FAC-N	Neutral Test (D5)
Surface Water Present? Yes No >	(Depth (inches)		
Water Table Present? Yes No >	C Depth (inches)	Wetland Hydrology P	resent? Yes X No
Saturation Present? Yes No >	C Depth (inches)	_	
		-	
Describe Recorded Data (stream gauge, mo	nitoring well, aerial photos	s, previous inspections), if availa	bie:
Remarks:			

VEGETATION - Use scientific names of plants Sampling Point: 1_20200710_WL17_W2 Absolute Dominant Indicator **Dominance Test Worksheet:** (Plot Size: 30'radius) % Cover Species? Status **Tree Stratum Number of Dominant Species** 10 Χ **FACW** That Are OBL, FACW, or FAC: (A) Acer saccharinum 10 = Total Cover **Total Number of Dominant** (B) Species Across All Strata: 5 Percent of Dominant Species (A/B) That Are OBL, FACW, or FAC: 80% **Prevalence Index Worksheet:** x 1 16 **OBL** species 16 Absolute Dominant Indicator **FACW** species 55 110 (Plot Size: 15'radius) Status x 2 **Shrub Stratum** % Cover Species? **FAC** species 45 135 х3 = Total Cover **FACU** species 33 x 4 132 **UPL** species 0 x 5 0 Column Totals 149 (A) 393 (B) Prevalence Index = B/A = 2.64 **Hydrophytic Vegetation Indicators:** Absolute Dominant Indicator 1- Rapid Test For Hydrophytic Vegetation **Herb Stratum** (Plot Size: 5'radius) % Cover Species? Status X 2- Dominance Test is > 50% Euthamia graminifolia 35 Χ FAC X 3- Prevalence Index is =< 3.0 Eupatorium perfoliatum 25 Χ **FACW** 4- Morphological Adaptations Solidago canadensis 25 Χ **FACU** Symphyotrichum lanceolatum 10 **FACW** 5- Problematic Hydrophytic Vegetation Impatiens pallida 10 **FACW** Scirpus atrovirens 8 OBL **Definitions of Vegetation Strata:** Juncus effusus 8 OBL Tree- Woody plants 3 in. (7.6cm) or more in diameter at Cirsium arvense 5 **FACU** breast height (DBH), regardless of height. 3 **FACU** Cirsium vulgare 129 = Total Cover Sapling/Shrub- Woody plants less than 3 in. DBH and greater than or equal to 3.28ft (1m) tall. Herb- All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28ft tall. Absolute Dominant Indicator Woody Vines- All woody vines greater than 3.28ft in (Plot Size: 30'radius) Species? **Woody Vine Stratum** % Cover Status height. **FAC** Vitis riparia 10 Χ 10 = Total Cover Hydrophytic Vegetation Present? Yes X No ___

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

SOIL Sampling Point: 1_20200710_WL17_W2

Depth	Matrix	· ·						
(inches	Color	%	Color	%	Type	Loc	Texture	Remarks
0-6	10YR 3/1	90	10YR 5/6	10	С	М	Clay Loam	
6-12	10YR 5/1	80	10YR 5/8	20	С	М	Clay	

Hydric Soil Indicators:		Indicators for Problematic Soils:
Histosol (A1)	Polyvalue Below Surface (B15)	2 cm Muck (A10)
Histic Epipedon (A2)	Thin Dark Surface (S9)	Coast Prarie Redox (A16)
Black Histic (A3)	Loamy Mucky Mineral (F1)	5 cm Mucky Peat or Peat (S3)
Hydrogen Sulfide (A4)	Loamy Gleyed Matric (F2)	Dark Surface (S7)
Stratified Layers (A5)	X Depleted Matrix (F3)	Polyvalue Below Surface (S8)
Depleted Below Dark Surface (A11)	X Redox Dark Surface (F6)	Thin Dark Surface (S9)
Thick Dark Surface (A12)	Depleted Dark Surface (F7)	Iron-Manganese Masses (F12)
Sandy Mucky Mineral (S1)	Redox Depressions (F8)	Piedmont Floodplain Soils (F19)
Sandy Gleyed Matrix (S4)		Mesic Spodic (TA6)
Sandy Redox (S5)		Red Parent Material (F21)
Stripped Matrix (S6)		Very Shallow Dark Surface (TF12)
Dark Surface (S7)		Other (Explain in Remarks)
Restrictive Layer (if observed):		
Туре:	Ну	dric Soil Present? Yes X No
Depth (inches):		

Remarks:

Project/Site: Cider Solar Project	City/County: Oakfield/Ger	nnessee Sampling Date: 7/10/2020			
Applicant/Owner: Hecate		State: NY Sampling Point:			
Investigator(s): Andrew Sorci	Section, Township, Range:	1_20200710_WL 17_W3			
$Land form \ (hillslope, terrace, etc.): \ \underline{Floodplain}$	Local relief (concave, convex,	none): <u>Concave</u> Slope (%) <u>0 - 2</u>			
Subregion (LRR or MLRA): LRR L	Lat: <u>43.091961</u> Long: <u>-</u>	78.267903 Datum: <u>NAD83</u>			
Soil Map Unit Name: Wy		NWI Classification: PFO			
Are climatic / hyrologic conditions on the site t	ypical for this time of year? Yes X No	(if no, explain in Remarks.)			
Are Vegetation, Soil, or Hydrology	significantly disturbed? Are "Normal	Circumstances" present? Yes X No			
Are Vegetation, Soil, or Hydrology	naturally problematic? (if needed, exp	olain any answers in Remarks.)			
SUMMARY OF FINDINGS - Attach site maj	showing sampling point locations, tran	sects, important features, etc.			
Hydrophytic Vegetation Present? Yes X					
	within a Wetland?	Yes X No			
Hydric Soil Present? Yes X					
Wetland Hydrology Present? Yes X	_ '' ' ' ' '	WLI7			
Remarks: (Explain alternative procedures here or in a se	parate report.)				
HYDROLOGY					
Wetland Hydrology Indicators:		Secondary Indicators (minimum of two required)			
Primary Indicators (minimum of one is required: cl	neck all that apply)	Surface Soil Cracks (B6)			
Surface Water (A1)	Water-Stained Leaves (B9)	Drainage Patterns (B10)			
High Water Table (A2)	Aquatic Fauna (B13)	X Moss Trim Lines (B16)			
Saturation (A3)	Marl Deposits (B15)	Dry-Season Water Table (C2)			
Water Marks (B1)	Hydrogen Sulfide Odor (C1)	Crayfish Burrows (C8)			
Sediment Deposits (B2)	Oxidized Rhizospheres on Living Roots (C3)	X Saturation Visible in Aerial Imagery (C9)			
Drift Deposits (B3)	Presence of Reduced Iron (C4)	Stunted or Stressed Plants (D1)			
Algal Mat or Crust (B4)	Recent Iron Reduction in Tilled Soils (C6)	X Geomorphic Position (D2)			
Iron Deposits (B5)	Thin Muck Surface (C7)	Shallow Aquitard (D3)			
Inundation Visible on Aerial Imagery (B7)	Other (Explain in Remarks)	Microtopographic Relief (D4)			
Sparsley Vegetated Concave Surface (B8)		FAC-Neutral Test (D5)			
		The Wedital Test (55)			
Surface Water Present? Yes NoX	Depth (inches)				
Water Table Present? Yes No _ X	Depth (inches) Wetland I	Hydrology Present? Yes X No			
Saturation Present? Yes No _ X	Depth (inches)				
Describe Recorded Data (stream gauge, monit	toring well, aerial photos, previous inspection	ns). if available:			
, 5 5 ,		,,			
Remarks:					

VEGETATION - Use scientific names of plants

VEGETATION - Use scient	tific names	of plants				Sampli	ng Point	: 1_202	00710_W	L 17_W
Tree Stratum	(Plot Size:	30'radius)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test V Number of Domi		-		
Acer saccharinum			60	X	FACW	That Are OBL, FA	•		3	(A)
Fraxinus pennsylvanica			10		FACW	Total Numbe	•	_		_` ′
Quercus macrocarpa			10		FACU	Species Aci			5	(B)
			80	= Total Cov	⁄er	Percent of Don		-		_` ′
						That Are OBL, I			60%	(A/B)
						Prevalence Index \	Norkshe	et:		
			Ahsolute	Dominant	Indicator	OBL species	0	x 1	0	
Shrub Stratum	(Plot Size:	15'radius)	% Cover	Species?	Status	FACW species	80	x 2	160	
Rubus idaeus			10	Х	FACU	FAC species	50	_ x 3	150	
			10	= Total Cov	ver .	FACU species	40	x 4	160	
						UPL species	0	x 5	0	
						Column Totals	170	(A)	470	(B)
						Prevalenc	e Index =	B/A = _	2.76	
						Hydrophytic Vege	tation In	dicators	s:	
			Absolute	Dominant	Indicator	1- Rapid Tes	t For Hyd	lrophyti	ic Vegeta	tion
Herb Stratum	(Plot Size:	5'radius)	% Cover	Species?	Status	X 2- Dominano	e Test is	> 50%		
Euthamia graminifolia			40	Х	FAC	X 3- Prevalenc	e Index is	s =< 3.0		
Symphyotrichum lance	olatum		10		FACW					
Alliaria petiolata			10		FACU	4- Morpholo	ogical Ada	aptation	1S	
Geum canadense			<u>5</u> 65	= Total Cov	FAC	5- Problema	tic Hydro	phytic '	Vegetatio	n
				10tal cov	<i>,</i> c i	Definitions of Vegeta	ation Strat	:a:		
						Tree- Woody plants 3 breast height (DBH),	•	•		eter at
						Sapling/Shrub- Wood greater than or equa				and
						Herb- All herbaceous size, and woody plan				ess of
Woody Vine Stratum	(Plot Size:	30'radius)	% Cover	Dominant Species?	Status	Woody Vines- All wo height.	ody vines	greater 1	than 3.28f	t in
Parthenocissus inserta			<u>10</u>	X	FACU					
Vitis riparia			5 15	X _= Total Cov	rAC ver	Hydroph Vegeta Pres	-	. v	No	

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

SOIL Sampling Point: 1_20200710_WL 17_W3

Penth Matrix Redox Features

Depth	Matrix				Reuc	ox Feature	25	
(inches	Color	%	Color	%	Type	Loc	Texture	Remarks
0-8	10YR 3/1	98	10YR 4/5	2	С	М	Clay Loam	
8-15	10YR 5/1	90	10YR 5/1	10	С	M	Clay	
III. alaba 6 a								In the state of the Buckley attacks
•	oil Indicators:				Dalonalo	a Dalaw C	urfo co (D15)	Indicators for Problematic Soils:
His	tosol (A1)	4.2\			•		urface (B15)	2 cm Muck (A10)
Hist	tosol (A1) tic Epipedon (A2)			Thin Dar	k Surface (S9)	2 cm Muck (A10) Coast Prarie Redox (A16)
Hist	tosol (A1)	A2)			Thin Dar		S9)	2 cm Muck (A10)
Hist	tosol (A1) tic Epipedon (Thin Dar Loamy M	k Surface (S9) eral (F1)	2 cm Muck (A10) Coast Prarie Redox (A16)
Hist Hist Blac Hyc	tosol (A1) tic Epipedon (ck Histic (A3)	(A4)			Thin Dar Loamy M Loamy G	k Surface (Iucky Mine	S9) eral (F1) ric (F2)	2 cm Muck (A10) Coast Prarie Redox (A16) 5 cm Mucky Peat or Peat (S3)
Hist Hist Blac Hyc	tosol (A1) tic Epipedon (, ck Histic (A3) drogen Sulfide	(A4) (A5)	rface (A11)	X	Thin Dar Loamy M Loamy G Depleted	k Surface (Jucky Mind leyed Mat	S9) eral (F1) ric (F2) 3)	2 cm Muck (A10) Coast Prarie Redox (A16) 5 cm Mucky Peat or Peat (S3) Dark Surface (S7)
Hiss Hiss Blac Hyc Stra	tosol (A1) tic Epipedon (, ck Histic (A3) drogen Sulfide atified Layers ((A4) (A5) Dark Su		X	Thin Dar Loamy M Loamy G Depleted Redox Da	k Surface (Jucky Mind leyed Mat d Matrix (F	S9) eral (F1) ric (F2) 3) e (F6)	2 cm Muck (A10) Coast Prarie Redox (A16) 5 cm Mucky Peat or Peat (S3) Dark Surface (S7) Polyvalue Below Surface (S8)
Hiss Hiss Blac Hyc Stra Dep Thic	tosol (A1) tic Epipedon (, ck Histic (A3) drogen Sulfide atified Layers (pleted Below I	(A4) (A5) Dark Sure (A12)		X X	Thin Dar Loamy M Loamy G Depleted Redox Da Depleted	k Surface (Mucky Mind Beyed Mat Matrix (F ark Surface	S9) eral (F1) ric (F2) 3) e (F6) face (F7)	2 cm Muck (A10) Coast Prarie Redox (A16) 5 cm Mucky Peat or Peat (S3) Dark Surface (S7) Polyvalue Below Surface (S8) Thin Dark Surface (S9)
Hiss Hiss Blac Hyo Stra Dep Thic	tosol (A1) tic Epipedon (A) ck Histic (A3) drogen Sulfide atified Layers (pleted Below I ck Dark Surfac	(A4) (A5) Dark Sur e (A12) neral (S	1)	X X	Thin Dar Loamy M Loamy G Depleted Redox Da Depleted	k Surface (Mucky Mino ileyed Mat d Matrix (F ark Surface d Dark Surf	S9) eral (F1) ric (F2) 3) e (F6) face (F7)	2 cm Muck (A10) Coast Prarie Redox (A16) 5 cm Mucky Peat or Peat (S3) Dark Surface (S7) Polyvalue Below Surface (S8) Thin Dark Surface (S9) Iron-Manganese Masses (F12)
Hiss Hiss Blac Hyc Stra Dep Thic	tosol (A1) tic Epipedon (A ck Histic (A3) drogen Sulfide atified Layers (pleted Below I ck Dark Surfac ndy Mucky Mir	(A4) (A5) Dark Sur te (A12) neral (Sa atrix (S4	1)	X X	Thin Dar Loamy M Loamy G Depleted Redox Da Depleted	k Surface (Mucky Mino ileyed Mat d Matrix (F ark Surface d Dark Surf	S9) eral (F1) ric (F2) 3) e (F6) face (F7)	2 cm Muck (A10) Coast Prarie Redox (A16) 5 cm Mucky Peat or Peat (S3) Dark Surface (S7) Polyvalue Below Surface (S8) Thin Dark Surface (S9) Iron-Manganese Masses (F12) Piedmont Floodplain Soils (F19)
Hiss Hiss Blac Hyd Stra Dep Thic San San	tosol (A1) tic Epipedon (A) ck Histic (A3) drogen Sulfide atified Layers (pleted Below I ck Dark Surfac andy Mucky Min	(A4) (A5) Dark Sur De (A12) Deral (Satrix (S4	1)	X X	Thin Dar Loamy M Loamy G Depleted Redox Da Depleted	k Surface (Mucky Mino ileyed Mat d Matrix (F ark Surface d Dark Surf	S9) eral (F1) ric (F2) 3) e (F6) face (F7)	2 cm Muck (A10) Coast Prarie Redox (A16) 5 cm Mucky Peat or Peat (S3) Dark Surface (S7) Polyvalue Below Surface (S8) Thin Dark Surface (S9) Iron-Manganese Masses (F12) Piedmont Floodplain Soils (F19) Mesic Spodic (TA6)

Remarks:

Restrictive Layer (if observed):

Type:

Depth (inches):

Hydric Soil Present? Yes X No

Project/Site: Cider Solar Project	City/County: Oakfield/Ger	nnessee Sampling Date: 7/10/2020
Applicant/Owner: Hecate		State: NY Sampling
Investigator(s): Andrew Sorci	Section, Township, Range:	Point:1_20200710_WL17_U
Landform (hillslope, terrace,etc.): Shoulder	Local relief (concave, convex, ı	none): <u>Convex</u> Slope (%) <u>3 - 5</u>
Subregion (LRR or MLRA): LRR L	Lat: <u>43.091684</u> Long: -7	78.264863 Datum: NAD83
Soil Map Unit Name: Wy		NWI Classification: UPL
Are climatic / hyrologic conditions on the site	typical for this time of year? Yes X No	(if no, explain in Remarks.)
Are Vegetation, Soil, or Hydrolog	y significantly disturbed? Are "Normal	Circumstances" present? Yes X No
Are Vegetation, Soil, or Hydrolog	ynaturally problematic? (if needed, exp	lain any answers in Remarks.)
SUMMARY OF FINDINGS - Attach site ma	on showing sampling point locations tran	sects important features etc
Hydrophytic Vegetation Present? Yes	No X Is the Sampled Area	
Hydric Soil Present? Yes	No X within a Wetland?	Yes No X
· —		
Wetland Hydrology Present? Yes	<u> </u>	
Remarks: (Explain alternative procedures here or in a so	eparate report.)	
HYDROLOGY		
Wetland Hydrology Indicators:		Secondary Indicators (minimum of two required)
Primary Indicators (minimum of one is required:	check all that apply)	Surface Soil Cracks (B6)
Surface Water (A1)	Water-Stained Leaves (B9)	Drainage Patterns (B10)
High Water Table (A2)	Aquatic Fauna (B13)	Moss Trim Lines (B16)
Saturation (A3)	Marl Deposits (B15)	Dry-Season Water Table (C2)
Water Marks (B1)	Hydrogen Sulfide Odor (C1)	Crayfish Burrows (C8)
Sediment Deposits (B2)	Oxidized Rhizospheres on Living Roots (C3)	Saturation Visible in Aerial Imagery (C9)
Drift Deposits (B3)	Presence of Reduced Iron (C4)	Stunted or Stressed Plants (D1)
Algal Mat or Crust (B4)	Recent Iron Reduction in Tilled Soils (C6)	Geomorphic Position (D2)
Iron Deposits (B5)	Thin Muck Surface (C7)	Shallow Aquitard (D3)
Inundation Visible on Aerial Imagery (B7)	Other (Explain in Remarks)	Microtopographic Relief (D4)
Sparsley Vegetated Concave Surface (B8)	Other (Explain in Remarks)	
Sparsiey vegetated concave Surface (B8)		FAC-Neutral Test (D5)
Surface Water Present? Yes NoX	Depth (inches)	
Water Table Present? Yes No _X	Depth (inches) Wetland H	Hydrology Present? Yes No X
Saturation Present? Yes No X	Depth (inches)	
Describe Recorded Data (stream gauge, mon	itoring well, aerial photos, previous inspection	ns) if available:
Remarks:		

VEGETATION - Use scientific names of plants Sampling Point: 1_20200710_WL17_U1 Absolute Dominant Indicator **Dominance Test Worksheet:** (Plot Size: 30'radius) % Cover Species? Status **Tree Stratum Number of Dominant Species** That Are OBL, FACW, or FAC: (A) = Total Cover **Total Number of Dominant** Species Across All Strata: (B) 6 Percent of Dominant Species That Are OBL, FACW, or FAC: 16.7% (A/B) **Prevalence Index Worksheet:** 0 x 1 **OBL** species Absolute Dominant Indicator **FACW** species 5 x 2 10 (Plot Size: 15'radius) % Cover Species? **Shrub Stratum Status FAC** species 10 30 х3 Rubus idaeus 20 Χ FACU Lonicera tatarica 8 Х **FACU FACU** species 103 x 4 412 5 Ulmus americana **FACW UPL** species 0 x 5 0 33 = Total Cover Column Totals 118 (A) 452 (B) Prevalence Index = B/A = 3.83 **Hydrophytic Vegetation Indicators:** Absolute Dominant Indicator 1- Rapid Test For Hydrophytic Vegetation **Herb Stratum** (Plot Size: 5'radius) % Cover Species? Status 2- Dominance Test is > 50% 30 **FACU** Cirsium arvense Χ 3- Prevalence Index is =< 3.0 Χ Solidago canadensis 30 **FACU** 4- Morphological Adaptations Arctium minus 15 Χ **FACU** 75 = Total Cover 5- Problematic Hydrophytic Vegetation **Definitions of Vegetation Strata:** Tree- Woody plants 3 in. (7.6cm) or more in diameter at breast height (DBH), regardless of height. Sapling/Shrub- Woody plants less than 3 in. DBH and greater than or equal to 3.28ft (1m) tall. Herb- All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28ft tall. Absolute Dominant Indicator Woody Vines- All woody vines greater than 3.28ft in (Plot Size: 30'radius) Species? **Woody Vine Stratum** % Cover Status height. **FAC** Vitis riparia 10 Χ 10 = Total Cover Hydrophytic Vegetation Present? Yes ____ No _X Remarks: (Include photo numbers here or on a separate sheet.)

SOIL Sampling Point: 1_20200710_WL17_U1

Depth	Matrix	<u></u> -		Redox Features						
inches	Color	%	Color	%	Type	Loc	Texture	Remarks		
0-3	10YR 3/1	100					Sandy Clay Loam			
3-12	10YR 3/2	95	10YR 5/6	5	С	M	Sandy Clay Loam			
12-18	10YR 4/2	90	10YR 5/8	10	С	М	Sandy Clay Loam			
-	il Indicators:							Indicators for Problematic Soils:		
Histosol (A1)					-		Surface (B15)	2 cm Muck (A10)		
Histic Epipedon (A2)					Thin Dar			Coast Prarie Redox (A16)		
Black Histic (A3)					•	-	neral (F1)	5 cm Mucky Peat or Peat (S3)		
Hydrogen Sulfide (A4)							atric (F2)	Dark Surface (S7)		
	atified Layers		5 (2.4.4)		Depleted			Polyvalue Below Surface (S8)		
	oleted Below I				Redox D			Thin Dark Surface (S9)		
	ck Dark Surfac				-		ırface (F7)	Iron-Manganese Masses (F12)		
	dy Mucky Mii	-			Redox D	epressio	ns (F8)	Piedmont Floodplain Soils (F19)		
	dy Gleyed Ma)					Mesic Spodic (TA6)		
	dy Redox (S5)							Red Parent Material (F21)		
	pped Matrix (-						Very Shallow Dark Surface (TF12)		
Dar	k Surface (S7)							Other (Explain in Remarks)		
Restrictiv	e Layer (if obs	erved):								
		Type:					Hydric	Soil Present? Yes No X		
	Depth (in	ches):						<u> </u>		
Remarks	S:									

Project/Site: Cider Solar Project	City/County: Oakfield/Ge	nnessee Sampling Date: 7/13/2020			
Applicant/Owner: Hecate		State: NY Sampling Point:			
Investigator(s): Andrew Sorci	Section, Township, Range:	1_2020073_WL18_W1			
Landform (hillslope, terrace,etc.): Depression	Local relief (concave, convex,	none): <u>Concave</u> Slope (%) <u>0 - 3</u>			
Subregion (LRR or MLRA): LRR L	Lat: 43.088360 Long:	78.247405 Datum: <u>NAD83</u>			
Soil Map Unit Name: RsA		NWI Classification: PEM			
Are climatic / hyrologic conditions on the site t	cypical for this time of year? Yes X No	(if no, explain in Remarks.)			
Are Vegetation, Soil, or Hydrology	significantly disturbed? Are "Normal	Circumstances" present? Yes X No			
Are Vegetation, Soil, or Hydrology	naturally problematic? (if needed, exp	plain any answers in Remarks.)			
SUMMARY OF FINDINGS - Attach site ma	showing sampling point locations, trai	nsects, important features, etc.			
Hydrophytic Vegetation Present? Yes X					
Hydric Soil Present? Yes X	No within a Wetland?	Yes X No			
Wetland Hydrology Present? Yes X		land Site ID: WL18			
Remarks: (Explain alternative procedures here or in a se					
nemarks. (explain alternative procedures here of in a se	parate report.)				
HYDROLOGY					
Wetland Hydrology Indicators:		Secondary Indicators (minimum of two required)			
Primary Indicators (minimum of one is required: cl	heck all that apply)	Surface Soil Cracks (B6)			
Surface Water (A1)	Water-Stained Leaves (B9)	Drainage Patterns (B10)			
High Water Table (A2)	Aquatic Fauna (B13)	Moss Trim Lines (B16)			
Saturation (A3)	Marl Deposits (B15)	Dry-Season Water Table (C2)			
Water Marks (B1)	Hydrogen Sulfide Odor (C1)	Crayfish Burrows (C8)			
Sediment Deposits (B2)	Oxidized Rhizospheres on Living Roots (C3)	Saturation Visible in Aerial Imagery (C9)			
Drift Deposits (B3)	Presence of Reduced Iron (C4)	Stunted or Stressed Plants (D1)			
Algal Mat or Crust (B4)	Recent Iron Reduction in Tilled Soils (C6)	X Geomorphic Position (D2)			
Iron Deposits (B5)	Thin Muck Surface (C7)	Shallow Aquitard (D3)			
Inundation Visible on Aerial Imagery (B7)	Other (Explain in Remarks)	Microtopographic Relief (D4)			
Sparsley Vegetated Concave Surface (B8)		X FAC-Neutral Test (D5)			
Surface Water Present? Yes No X	Depth (inches)				
	- · · · · 	Hydrology Present? Yes X No			
	Depth (inches)	Trydrology Fresent: Tes X NO			
Saturation Present? Yes No X					
Describe Recorded Data (stream gauge, moni-	toring well, aerial photos, previous inspection	ns), if available:			
Remarks:					

			۸ la = - ا	D	ا المامرا					18_W1
Tree Stratum	(Plot Size:	30'radius)	% Cover	Dominant Species?	Status	Dominance Test				
Populus deltoides	•		15	X	FAC	Number of Dom That Are OBL, F.	-		3	(A)
1 opulus deltoldes			15	= Total Cov		Total Number	•			_('')
				=		Species Ac			3	(B)
						Percent of Do	minant Spe	ecies —		=
						That Are OBL,	FACW, or	FAC:	100%	_(A/B)
						Prevalence Index	Workshee	t:		
			مدريا مماريه	Daminant	la disata a	OBL species	6	x 1	6	
Shrub Stratum	(Plot Size:	15'radius)	% Cover	Dominant Species?	Status	FACW species	85	x 2	170	
	`			·		FAC species	20	x 3	60	
				= Total Cov	ver	FACU species	0	x 4	0	
						UPL species	0	x 5	0	
						Column Totals	111	(A)	236	(B
						_	ce Index =		2.13	
						Hydrophytic Vege	etation Inc	licators	:	
				Dominant	Indicator	1- Rapid Te				tion
Herb Stratum	(Plot Size:	5'radius)	% Cover	Species?	Status	X 2- Dominar	ce Test is :	> 50%		
Phalaris arundinacea			70	Х	FACW	X 3- Prevalen	ce Index is	=< 3.0		
Phragmites australis			<u>10</u> 5		FACW FACW	4- Morphol	ogical Ada	ntation	s	
Agrostis gigantea Asclepias incarnata			3		OBL		_	-		
Carex vulpinoidea			3		OBL	5- Problem	atic Hydro	onytic v	egetatic	n
			91	_= Total Cov	ver	Definitions of Veget	ation Strat	a:		
						Tree- Woody plants breast height (DBH),				neter at
						Sapling/Shrub- Woo greater than or equa				and
						Herb- All herbaceou size, and woody pla				less of
Woody Vine Stratum	(Plot Size:	30'radius)		Dominant Species?	Indicator Status	Woody Vines- All wo				t in
Vitis riparia			5	Х	FAC	Tielgite.				
			5	= Total Cov	ver	Hydrop	hytic			
						Veget				
						Pres	sent? Yes	Χ	No	

SOIL Sampling Point: 1_2020073_WL18_W1

Depth	Matrix				Redo	x Featı	ıres	
(inches	Color	%	Color	%	Туре	Loc	Texture	Remarks
0-2	10YR 2/1	100					Sandy Loam	
2-9	10YR 3/1	95	10YR 5/6	5	С	М	Sandy Loam	
9-16	10YR 5/2	85	10YR 5/8	15	С	М	Loamy Sand	

Hydric Soil Indicators:		Indicators for Problematic Soils:
Histosol (A1)	Polyvalue Below Surface (B1	5)2 cm Muck (A10)
Histic Epipedon (A2)	Thin Dark Surface (S9)	Coast Prarie Redox (A16)
Black Histic (A3)	Loamy Mucky Mineral (F1)	5 cm Mucky Peat or Peat (S3)
Hydrogen Sulfide (A4)	Loamy Gleyed Matric (F2)	Dark Surface (S7)
Stratified Layers (A5)	X Depleted Matrix (F3)	Polyvalue Below Surface (S8)
Depleted Below Dark Surface (A11)	Redox Dark Surface (F6)	Thin Dark Surface (S9)
Thick Dark Surface (A12)	Depleted Dark Surface (F7)	Iron-Manganese Masses (F12)
Sandy Mucky Mineral (S1)	Redox Depressions (F8)	Piedmont Floodplain Soils (F19)
Sandy Gleyed Matrix (S4)		Mesic Spodic (TA6)
Sandy Redox (S5)		Red Parent Material (F21)
Stripped Matrix (S6)		Very Shallow Dark Surface (TF12)
Dark Surface (S7)		Other (Explain in Remarks)
Restrictive Layer (if observed):		
Туре:		Hydric Soil Present? Yes X No
Depth (inches):		
	_	

Project/Site: Cider Solar Project	City/County: Oakfield/Gen	nessee Sampling Date: 7/13/2020					
Applicant/Owner: Hecate		State: NY Sampling Point:					
Investigator(s): Andrew Sorci	Section, Township, Range:	1_20200713_WL18_W2					
Landform (hillslope, terrace,etc.): Depressio	n Local relief (concave, convex, r	ione): <u>Concave</u> Slope (%) <u>0 - 3</u>					
Subregion (LRR or MLRA): LRR L	Lat: <u>43.088176</u> Long: <u>-7</u>	8.247515 Datum: NAD83					
Soil Map Unit Name: RsA		NWI Classification: PFO					
Are climatic / hyrologic conditions on the site	typical for this time of year? Yes X No	(if no, explain in Remarks.)					
Are Vegetation, Soil, or Hydrolog	ysignificantly disturbed? Are "Normal of	Circumstances" present? Yes X No					
Are Vegetation, Soil, or Hydrolog	y naturally problematic? (if needed, exp	lain any answers in Remarks.)					
SUMMARY OF FINDINGS - Attach site ma	ap showing sampling point locations, tran	sects, important features, etc.					
	No Is the Sampled Area						
Hydric Soil Present? Yes	within a Wetland?	Yes X No					
Wetland Hydrology Present? Yes		and Site ID: WL18					
	·						
Remarks: (Explain alternative procedures here or in a so	eparate report.)						
HYDROLOGY							
Wetland Hydrology Indicators:		Secondary Indicators (minimum of two required)					
Primary Indicators (minimum of one is required:		Surface Soil Cracks (B6)					
Surface Water (A1)	Water-Stained Leaves (B9)	Drainage Patterns (B10)					
High Water Table (A2)	Aquatic Fauna (B13)	Moss Trim Lines (B16)					
Saturation (A3)	Marl Deposits (B15)	Dry-Season Water Table (C2)					
Water Marks (B1)	Hydrogen Sulfide Odor (C1)	Crayfish Burrows (C8)					
Sediment Deposits (B2)	Oxidized Rhizospheres on Living Roots (C3)	Saturation Visible in Aerial Imagery (C9)					
Drift Deposits (B3)	Presence of Reduced Iron (C4)	Stunted or Stressed Plants (D1)					
Algal Mat or Crust (B4)	Recent Iron Reduction in Tilled Soils (C6)	X Geomorphic Position (D2)					
Iron Deposits (B5)	Thin Muck Surface (C7)	Shallow Aquitard (D3)					
Inundation Visible on Aerial Imagery (B7)	Other (Explain in Remarks)	Microtopographic Relief (D4)					
Sparsley Vegetated Concave Surface (B8)		X FAC-Neutral Test (D5)					
Surface Water Present? Yes No X	Depth (inches)						
Water Table Present? Yes No X	Depth (inches) Wetland H	lydrology Present? Yes X No					
Saturation Present? Yes No X							
Describe Recorded Data (stream gauge, mon	itoring well, aerial photos, previous inspection	s) if available:					
Describe Necorded Data (stream gauge, mon	intorning well, aeriai priotos, previous inspection	s), ii avaliable.					
Remarks:							

VEGETATION - Use scien	itific names	of plants				Sampli	ng Point:	1_20	200713_W	L18_W		
Tree Stratum	(Plot Size:	30'radius)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test V						
Populus deltoides	`		25	X	FAC	Number of Dom That Are OBL, FA	•		4	(A)		
Fraxinus pennsylvanica	 3		20	X	FACW	Total Number	•	_		_ ` ',		
	-		45	= Total Cov		Species Ac			6	(B)		
						Percent of Dor That Are OBL,	-		66.7%	_(A/B)		
						Prevalence Index	Workshee	t:				
			A la a a la ata a	D t t	t	OBL species	0	x 1	0			
Shrub Stratum	(Plot Size:	15'radius)	% Cover	Dominant Species?	Status	FACW species	95	x 2	190			
Cornus amomum			60	Х	FACW	FAC species	36	x 3	108			
Lonicera tatarica			15	Х	FACU	FACU species	20	x 4	80			
			75	_= Total Cov	er	UPL species	0	x 5	0			
						Column Totals	151	(A)	378	(B		
						Prevalenc	e Index =	B/A =	2.5			
						Hydrophytic Vege	tation Ind	licator	rs:			
			Absolute	Dominant	Indicator	1- Rapid Tes	t For Hydi	rophyt	ic Vegeta	tion		
Herb Stratum	(Plot Size:	5'radius)	% Cover	Species?	Status	X 2- Dominance Test is > 50%						
Symphyotrichum lanc	eolatum		15	Х	FACW							
Ranunculus acris			5		FAC	X 3- Prevalence Index is =< 3.0						
Urtica dioica			3		FAC	4- Morpholo	ogical Ada	ptatio	ns			
Viburnum dentatum			<u>3</u> 26	= Total Cov	<u>FAC</u> ver	5- Problematic Hydrophytic Vegetation						
				_		Definitions of Veget	ation Strata	a:				
						Tree- Woody plants breast height (DBH),	•			neter at		
						Sapling/Shrub- Wood greater than or equa				and		
						Herb- All herbaceous				less of		
			Absolute	Dominant	Indicator							
Woody Vine Stratum	(Plot Size:	30'radius)	% Cover	Species?	Status	Woody Vines- All wo height.	ody vines g	reater	than 3.28f	t in		
Parthenocissus inserta	3		5	Х	FACU							
			5	_= Total Cov	er	Hydrop Vegeta Pres	-	Х	No			

SOIL Sampling Point: 1_20200713_WL18_W2

Depth	Matrix	[Redo	x Featu		
(inches	Color	%	Color	%	Type	Loc	Texture	Remarks
0-3	10YR 2/2	100					Sandy Loam	
3-9	10YR 3/1	95	10YR 5/6	5	С	M	Sandy Loam	
9-16	10YR 5/2	85	10YR 5/8	15	С	М	Loamy Sand	

Hydric Soil Indicators:		Indicators for Problematic Soils:
Histosol (A1)	Polyvalue Below Surface (B15)	2 cm Muck (A10)
Histic Epipedon (A2)	Thin Dark Surface (S9)	Coast Prarie Redox (A16)
Black Histic (A3)	Loamy Mucky Mineral (F1)	5 cm Mucky Peat or Peat (S3)
Hydrogen Sulfide (A4)	Loamy Gleyed Matric (F2)	Dark Surface (S7)
Stratified Layers (A5)	X Depleted Matrix (F3)	Polyvalue Below Surface (S8)
Depleted Below Dark Surface (A11)	X Redox Dark Surface (F6)	Thin Dark Surface (S9)
Thick Dark Surface (A12)	Depleted Dark Surface (F7)	Iron-Manganese Masses (F12)
Sandy Mucky Mineral (S1)	Redox Depressions (F8)	Piedmont Floodplain Soils (F19)
Sandy Gleyed Matrix (S4)		Mesic Spodic (TA6)
Sandy Redox (S5)		Red Parent Material (F21)
Stripped Matrix (S6)		Very Shallow Dark Surface (TF12)
Dark Surface (S7)		Other (Explain in Remarks)
Restrictive Layer (if observed):		
Type:		Hydric Soil Present? Yes X No
Depth (inches):		

Project/Site: Cider Solar Project	City/County: Elba/Genesee Sampling Date: _7/15/						
Applicant/Owner: Hecate	-		State: NY Sampling				
Investigator(s): Justin Ahn	Sectio	n, Township, Range:	Point:1_20200713_WL18_U				
Landform (hillslope, terrace,etc.): Toeslope	Local relie	f (concave, convex, n	one): Linear Slope (%) 1 - 5				
Subregion (LRR or MLRA): LRR L	Lat: 43.100398	Long:7	8.157093 Datum: <u>NAD83</u>				
Soil Map Unit Name: RsA			NWI Classification: UPL				
Are climatic / hyrologic conditions on the site t	cypical for this time of ye	ar? Yes <u>X</u> No	(if no, explain in Remarks.)				
Are Vegetation, Soil, or Hydrology	significantly distur	bed? Are "Normal C	Circumstances" present? Yes X No				
Are Vegetation, Soil, or Hydrology	naturally problema	atic? (if needed, expl	ain any answers in Remarks.)				
SUMMARY OF FINDINGS - Attach site maj	showing sampling po	oint locations, trans	sects. important features. etc.				
Hydrophytic Vegetation Present? Yes X		Is the Sampled Area					
Hydric Soil Present? Yes	No X	within a Wetland?	Yes No X				
Wetland Hydrology Present? Yes	No X	if yes, optional Wetla	and Site ID:				
Remarks: (Explain alternative procedures here or in a se							
Nemarks. (Explain diternative procedures here of in a sep	parate report.						
HYDROLOGY							
Wetland Hydrology Indicators:			Secondary Indicators (minimum of two required)				
Primary Indicators (minimum of one is required: cl	neck all that apply)		Surface Soil Cracks (B6)				
Surface Water (A1)	Water-Stained Leaves	(B9)	Drainage Patterns (B10)				
High Water Table (A2)	Aquatic Fauna (B13)	(- /	Moss Trim Lines (B16)				
Saturation (A3)	Marl Deposits (B15)		Dry-Season Water Table (C2)				
Water Marks (B1)	Hydrogen Sulfide Odo	or (C1)	Crayfish Burrows (C8)				
Sediment Deposits (B2)	Oxidized Rhizosphere		Saturation Visible in Aerial Imagery (C9)				
Drift Deposits (B3)	Presence of Reduced						
	Recent Iron Reduction						
Algal Mat or Crust (B4)		` ,	Geomorphic Position (D2)				
Iron Deposits (B5)	Thin Muck Surface (C		Shallow Aquitard (D3)				
Inundation Visible on Aerial Imagery (B7)	Other (Explain in Rem	arks)	Microtopographic Relief (D4)				
Sparsley Vegetated Concave Surface (B8)			FAC-Neutral Test (D5)				
Surface Water Present? Yes No X	Depth (inches)	_					
Water Table Present? Yes No _ X	Depth (inches)	Wetland H	ydrology Present? Yes No X				
Saturation Present? Yes No X	Depth (inches)	_					
Describe Recorded Data (stream gauge, monit	toring well, aerial photos	. previous inspection	s), if available:				
	6 - 7 7	,,,					
Remarks:							

VEGETATION - Use scientific names of plants Sampling Point: 1_20200713_WL18_U1 Absolute Dominant Indicator **Dominance Test Worksheet:** (Plot Size: 30'radius) % Cover Species? Status **Tree Stratum Number of Dominant Species** 50 Χ **FACW** That Are OBL, FACW, or FAC: (A) Acer saccharinum Fraxinus pennsylvanica 20 Х **FACW Total Number of Dominant** 70 = Total Cover Species Across All Strata: (B) 7 Percent of Dominant Species That Are OBL, FACW, or FAC: 57.1% (A/B) **Prevalence Index Worksheet:** 0 x 1 **OBL** species Absolute Dominant Indicator **FACW** species 70 x 2 140 (Plot Size: 15'radius) % Cover Species? Status **Shrub Stratum FAC** species 50 150 х3 20 Χ FACU Lonicera tatarica 20 = Total Cover **FACU** species 55 x 4 220 **UPL** species 0 x 5 0 Column Totals 175 (A) 510 (B) Prevalence Index = B/A = 2.91 **Hydrophytic Vegetation Indicators:** Absolute Dominant Indicator 1- Rapid Test For Hydrophytic Vegetation **Herb Stratum** (Plot Size: 5'radius) % Cover Species? Status X 2- Dominance Test is > 50% 30 Toxicodendron radicans Х FAC X 3- Prevalence Index is =< 3.0 Х Solidago canadensis 15 **FACU** 4- Morphological Adaptations Persicaria virginiana 15 Χ FAC

FAC

Status

FACU

= Total Cover

Absolute Dominant Indicator

Species?

Χ

= Total Cover

Definitions of Vegetation Strata:

Tree- Woody plants 3 in. (7.6cm) or more in diameter at breast height (DBH), regardless of height.

5- Problematic Hydrophytic Vegetation

Sapling/Shrub- Woody plants less than 3 in. DBH and greater than or equal to 3.28ft (1m) tall.

Herb- All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28ft tall.

Woody Vines- All woody vines greater than 3.28ft in height.

Hydrophytic

Vegetation

Present? Yes X No _____

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

(Plot Size: 30'radius)

Prunella vulgaris

Woody Vine Stratum

Parthenocissus quinquefolia

5

65

% Cover

20

20

SOIL Sampling Point: 1_20200713_WL18_U1 Depth Matrix **Redox Features** (inches % Color Color % Type Texture Remarks Loc 0-18 10YR 3/6 100 Silty Clay Loam **Hydric Soil Indicators:** Indicators for Problematic Soils: Histosol (A1) Polyvalue Below Surface (B15) 2 cm Muck (A10) Histic Epipedon (A2) Thin Dark Surface (S9) Coast Prarie Redox (A16) Black Histic (A3) Loamy Mucky Mineral (F1) 5 cm Mucky Peat or Peat (S3) Hydrogen Sulfide (A4) Loamy Gleyed Matric (F2) Dark Surface (S7) Stratified Layers (A5) Depleted Matrix (F3) Polyvalue Below Surface (S8) Depleted Below Dark Surface (A11) Redox Dark Surface (F6) Thin Dark Surface (S9) Thick Dark Surface (A12) Depleted Dark Surface (F7) Iron-Manganese Masses (F12) Sandy Mucky Mineral (S1) Redox Depressions (F8) Piedmont Floodplain Soils (F19) Sandy Gleyed Matrix (S4) Mesic Spodic (TA6) Sandy Redox (S5) Red Parent Material (F21) Stripped Matrix (S6) Very Shallow Dark Surface (TF12) Dark Surface (S7) Other (Explain in Remarks) Restrictive Layer (if observed): Type: Hydric Soil Present? Yes No Χ Depth (inches): Remarks:

Project/Site: Cider Solar Project	City/County: Oakfield/Ge	nnessee Sampling Date: 7/13/2020						
Applicant/Owner: Hecate		State: NY Sampling Point:						
Investigator(s): Andrew Sorci	vestigator(s): Andrew Sorci Section, Township, Rang							
Landform (hillslope, terrace,etc.): Dip	Local relief (concave, convex,	none): <u>Concave</u> Slope (%) <u>0 - 5</u>						
Subregion (LRR or MLRA): LRR L	Lat: <u>43.087079</u> Long:	78.251662 Datum: NAD83						
Soil Map Unit Name: OvA		NWI Classification: PSS						
Are climatic / hyrologic conditions on the site	cypical for this time of year? Yes X No	(if no, explain in Remarks.)						
Are Vegetation, Soil, or Hydrology	significantly disturbed? Are "Normal	Circumstances" present? Yes X No						
Are Vegetation, Soil, or Hydrology	naturally problematic? (if needed, exp	plain any answers in Remarks.)						
SUMMARY OF FINDINGS - Attach site ma	o showing sampling point locations, trai	nsects, important features, etc.						
Hydrophytic Vegetation Present? Yes X								
Hydric Soil Present? Yes X	within a Wetland?	Yes X No						
·								
Wetland Hydrology Present? Yes X		WEIS						
Remarks: (Explain alternative procedures here or in a se	parate report.)							
HYDROLOGY								
Wetland Hydrology Indicators:		Secondary Indicators (minimum of two required)						
Primary Indicators (minimum of one is required: c	heck all that apply)	Surface Soil Cracks (B6)						
Surface Water (A1)	Water-Stained Leaves (B9)	Drainage Patterns (B10)						
High Water Table (A2)	Aquatic Fauna (B13)	Moss Trim Lines (B16)						
Saturation (A3)	Marl Deposits (B15)	Dry-Season Water Table (C2)						
Water Marks (B1)	Hydrogen Sulfide Odor (C1)	Crayfish Burrows (C8)						
Sediment Deposits (B2)	Oxidized Rhizospheres on Living Roots (C3)	Saturation Visible in Aerial Imagery (C9)						
Drift Deposits (B3)	Presence of Reduced Iron (C4)	Stunted or Stressed Plants (D1)						
Algal Mat or Crust (B4)	Recent Iron Reduction in Tilled Soils (C6)	X Geomorphic Position (D2)						
Iron Deposits (B5)	Thin Muck Surface (C7)	Shallow Aquitard (D3)						
Inundation Visible on Aerial Imagery (B7)	Other (Explain in Remarks)	Microtopographic Relief (D4)						
Sparsley Vegetated Concave Surface (B8)	Other (Explain in Remarks)	X FAC-Neutral Test (D5)						
		A PAC-Neutral Test (D3)						
Surface Water Present? Yes NoX	Depth (inches)							
Water Table Present? Yes No X	Depth (inches) Wetland	Hydrology Present? Yes X No						
Saturation Present? Yes No X	Depth (inches)							
Describe Recorded Data (stream gauge, moni	toring well, aerial photos, previous inspection	ns), if available:						
Paradia								
Remarks:								

VEGETATION - Use scientific names of plants Sampling Point: 1_20200713_WL19_W1 Absolute Dominant Indicator **Dominance Test Worksheet:** (Plot Size: 30'radius) % Cover Species? Status **Tree Stratum Number of Dominant Species** That Are OBL, FACW, or FAC: (A) = Total Cover **Total Number of Dominant** Species Across All Strata: (B) Percent of Dominant Species That Are OBL, FACW, or FAC: (A/B) 100% **Prevalence Index Worksheet:** x 1 5 **OBL** species Absolute Dominant Indicator **FACW** species 60 x 2 120 (Plot Size: 15'radius) % Cover Species? Status **Shrub Stratum** FAC species 50 150 х3 Cornus racemosa 30 Χ **FAC** Fraxinus pennsylvanica 25 Χ **FACW** 9 **FACU** species x 4 36 55 = Total Cover **UPL** species 0 x 5 0 Column Totals 124 (A) 311 (B) Prevalence Index = B/A = 2.51 **Hydrophytic Vegetation Indicators:** Absolute Dominant Indicator 1- Rapid Test For Hydrophytic Vegetation **Herb Stratum** (Plot Size: 5'radius) % Cover Species? Status X 2- Dominance Test is > 50% 20 Juncus tenuis FAC X 3- Prevalence Index is =< 3.0 Χ Carex scoparia 15 **FACW** 4- Morphological Adaptations Symphyotrichum lanceolatum 10 **FACW** 10 **FACW** Agrostis gigantea 5- Problematic Hydrophytic Vegetation Solidago canadensis 5 **FACU** Carex vulpinoidea 5 OBL **Definitions of Vegetation Strata:** Phleum pratense **FACU** 4 Tree- Woody plants 3 in. (7.6cm) or more in diameter at 69 = Total Cover breast height (DBH), regardless of height. Sapling/Shrub- Woody plants less than 3 in. DBH and greater than or equal to 3.28ft (1m) tall. Herb- All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28ft tall. Absolute Dominant Indicator Woody Vines- All woody vines greater than 3.28ft in (Plot Size: 30'radius) Status **Woody Vine Stratum** % Cover Species? height. = Total Cover Hydrophytic Vegetation Present? Yes X No ___

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

SOIL Sampling Point: 1_20200713_WL19_W1

Depth	Matrix	[Redo	ox Featur		
(inches	Color	%	Color	%	Type	Loc	Texture	Remarks
0-8	10YR 3/2	98	10YR 5/6	2	С	М	Sandy Loam	
8-15	10YR 4/2	90	10YR 5/8	10	С	М	Loamy Sand	

Hydric Soil Indicators:		Indicators for Problematic Soils:
Histosol (A1)	Polyvalue Below Surface (B15)	2 cm Muck (A10)
Histic Epipedon (A2)	Thin Dark Surface (S9)	Coast Prarie Redox (A16)
Black Histic (A3)	Loamy Mucky Mineral (F1)	5 cm Mucky Peat or Peat (S3)
Hydrogen Sulfide (A4)	Loamy Gleyed Matric (F2)	Dark Surface (S7)
Stratified Layers (A5)	X Depleted Matrix (F3)	Polyvalue Below Surface (S8)
Depleted Below Dark Surface (A11)	Redox Dark Surface (F6)	Thin Dark Surface (S9)
Thick Dark Surface (A12)	Depleted Dark Surface (F7)	Iron-Manganese Masses (F12)
Sandy Mucky Mineral (S1)	Redox Depressions (F8)	Piedmont Floodplain Soils (F19)
Sandy Gleyed Matrix (S4)		Mesic Spodic (TA6)
Sandy Redox (S5)		Red Parent Material (F21)
Stripped Matrix (S6)		Very Shallow Dark Surface (TF12)
Dark Surface (S7)		Other (Explain in Remarks)
Restrictive Layer (if observed):		
Туре:	Hyc	dric Soil Present? Yes X No
Depth (inches):		

Project/Site: Cider Solar Project	City/County: Oakfield/Ger	nnessee Sampling Date: 7/13/2020						
Applicant/Owner: Hecate		State: NY Sampling						
Investigator(s): Andrew Sorci	Section, Township, Range:	Point:1_20200713_WL19_U						
Landform (hillslope, terrace,etc.): Shoulder	n (hillslope, terrace,etc.): Shoulder Local relief (concave, convex							
Subregion (LRR or MLRA): LRR L	Lat: 43.087174 Long:	78.251662 Datum: <u>NAD83</u>						
Soil Map Unit Name: OvA		NWI Classification: UPL						
Are climatic / hyrologic conditions on the site \ensuremath{t}	ypical for this time of year? Yes X No	(if no, explain in Remarks.)						
Are Vegetation, Soil, or Hydrology		· · · · · · · · · · · · · · · · · · ·						
Are Vegetation, Soil, or Hydrology	naturally problematic? (if needed, exp	lain any answers in Remarks.)						
SUMMARY OF FINDINGS - Attach site maj	showing sampling point locations, tran	sects, important features, etc.						
Hydrophytic Vegetation Present? Yes X		a						
Hydric Soil Present? Yes	No X within a Wetland?	Yes No X						
Wetland Hydrology Present? Yes	No X if yes, optional Wet	land Site ID:						
Remarks: (Explain alternative procedures here or in a se	parate report.)							
HYDROLOGY								
Wetland Hydrology Indicators:		Secondary Indicators (minimum of two required)						
Primary Indicators (minimum of one is required: cl	neck all that apply)	Surface Soil Cracks (B6)						
Surface Water (A1)	Water-Stained Leaves (B9)	Drainage Patterns (B10)						
High Water Table (A2)	Aquatic Fauna (B13)	Moss Trim Lines (B16)						
Saturation (A3)	Marl Deposits (B15)	Dry-Season Water Table (C2)						
Water Marks (B1)	Hydrogen Sulfide Odor (C1)	Crayfish Burrows (C8)						
Sediment Deposits (B2)	Oxidized Rhizospheres on Living Roots (C3)	Saturation Visible in Aerial Imagery (C9)						
Drift Deposits (B3)	Presence of Reduced Iron (C4)	Stunted or Stressed Plants (D1)						
Algal Mat or Crust (B4)	Recent Iron Reduction in Tilled Soils (C6)	Geomorphic Position (D2)						
Iron Deposits (B5)	Thin Muck Surface (C7)	C7) Shallow Aquitard (D3)						
Inundation Visible on Aerial Imagery (B7)	Other (Explain in Remarks)	Microtopographic Relief (D4)						
Sparsley Vegetated Concave Surface (B8)		FAC-Neutral Test (D5)						
Surface Water Present? Yes No X	Depth (inches)							
Water Table Present? Yes No X	= ' ' 	Hydrology Present? Yes No X						
Saturation Present? Yes No X	Depth (inches)	7						
Describe Recorded Data (stream gauge, monit	toring well, aerial photos, previous inspection	ns), if available:						
Remarks:								

VEGETATION - Use scientific names of plants Sampling Point: 1_20200713_WL19_U1 Absolute Dominant Indicator **Dominance Test Worksheet:** (Plot Size: 30'radius) % Cover Species? Status **Tree Stratum Number of Dominant Species** That Are OBL, FACW, or FAC: (A) = Total Cover **Total Number of Dominant** (B) Species Across All Strata: Percent of Dominant Species (A/B) That Are OBL, FACW, or FAC: 75% **Prevalence Index Worksheet:** x 1 0 **OBL** species Absolute Dominant Indicator **FACW** species 27 54 (Plot Size: 15'radius) % Cover Species? x 2 **Shrub Stratum** Status FAC species 40 х3 120 20 Χ **FACW** Fraxinus pennsylvanica Cornus racemosa 15 Χ FAC **FACU** species 55 x 4 220 35 = Total Cover **UPL** species 0 x 5 0 Column Totals 122 (A) 394 (B) Prevalence Index = B/A = 3.23 **Hydrophytic Vegetation Indicators:** Absolute Dominant Indicator 1- Rapid Test For Hydrophytic Vegetation **Herb Stratum** (Plot Size: 5'radius) % Cover Species? Status X 2- Dominance Test is > 50% 45 Solidago canadensis Х **FACU** 3- Prevalence Index is =< 3.0 Toxicodendron radicans 15 FAC 4- Morphological Adaptations Phleum pratense 10 **FACU** Symphyotrichum lanceolatum 7 **FACW** 5- Problematic Hydrophytic Vegetation Juncus tenuis 5 FAC 82 = Total Cover **Definitions of Vegetation Strata:** Tree- Woody plants 3 in. (7.6cm) or more in diameter at breast height (DBH), regardless of height. Sapling/Shrub- Woody plants less than 3 in. DBH and greater than or equal to 3.28ft (1m) tall. Herb- All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28ft tall. Absolute Dominant Indicator Woody Vines- All woody vines greater than 3.28ft in (Plot Size: 30'radius) Species? **Woody Vine Stratum** % Cover Status height. **FAC** Vitis riparia Χ 5 = Total Cover Hydrophytic Vegetation Present? Yes X No ____

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

SOIL

| Depth | Matrix | Redox Features | | Color % Color % Type Loc Texture | Remarks | |

Sandy Loam

10YR 3/2 100

0-8

8-18	10YR 3/3	95	10YR	4/6	5	С	М		Loam	1							
												, ,					
	oil Indicators: tosol (A1)					Bolyvalı	ıo Polow	Surface (D1E\		Indicators f		obiemat < (A10)	IC 50	iis:		
	tic Epipedon (۸۵۱				-	rk Surfac		D13)	_			ie Redo	ν (Λ΄	16)		
	ck Histic (A3)	A2)						ineral (F1	١	_			ky Peat			3)	
	drogen Sulfide	(Δ/)				-	-	atric (F2)	-	_			ce (S7)		zat (3.	٥)	
	atified Layers (d Matrix			-			Below S		ce (S8	3)	
	pleted Below [face (A	11)			ark Surfa			=			Surface			-)	
	ck Dark Surfac		1400 (71	,				urface (F7	')	_			ganese I	-		12)	
	ndy Mucky Mir		L)				epressio		,	-			Floodp				
	ndy Gleyed Ma	-	-				-	(* -)		_			dic (TA		(,	
	ndy Redox (S5)		•							_		-	t Mate	-	21)		
	ipped Matrix (_			ow Darl			TF12)	
	rk Surface (S7)									_			olain in			•	
										_							
Restrictiv	ve Layer (if obs	erved):															
		Type:								Hydric S	oil Presen	ıt?	Yes	ı	No	Х	
	Depth (in	ches):															
Remark	s:																

Project/Site: Cider Solar Project	City/County: Oakfield/Ger	nnessee Sampling Date: 7/14/2020					
Applicant/Owner: Hecate		State: NY Sampling Point:					
Investigator(s): Andrew Sorci	Section, Township, Range:	1_20200714_WL20_W1					
Landform (hillslope, terrace,etc.): Depression	Local relief (concave, convex,	none): <u>Concave</u> Slope (%) <u>0 - 5</u>					
Subregion (LRR or MLRA): LRR L	Lat: 43.087035 Long:	78.253518 Datum: NAD83					
Soil Map Unit Name: La		NWI Classification: PEM					
Are climatic / hyrologic conditions on the site t	typical for this time of year? Yes X No	(if no, explain in Remarks.)					
Are Vegetation, Soil, or Hydrology	significantly disturbed? Are "Normal	Circumstances" present? Yes X No					
Are Vegetation, Soil, or Hydrology	naturally problematic? (if needed, exp	olain any answers in Remarks.)					
SUMMARY OF FINDINGS - Attach site map	showing sampling point locations, tran	sects. important features, etc.					
Hydrophytic Vegetation Present? Yes X	No Is the Sampled Are.						
Hydric Soil Present? Yes X	within a Wetland?	Yes X No					
•							
Wetland Hydrology Present? Yes X		WEZO					
Remarks: (Explain alternative procedures here or in a se	parate report.)						
HYDROLOGY							
Wetland Hydrology Indicators:		Secondary Indicators (minimum of two required)					
Primary Indicators (minimum of one is required: cl		Surface Soil Cracks (B6)					
Surface Water (A1)	Water-Stained Leaves (B9)	Drainage Patterns (B10)					
High Water Table (A2)	Aquatic Fauna (B13)	Moss Trim Lines (B16)					
Saturation (A3)	Marl Deposits (B15)	Dry-Season Water Table (C2)					
Water Marks (B1)	Hydrogen Sulfide Odor (C1)	Crayfish Burrows (C8)					
Sediment Deposits (B2)	Oxidized Rhizospheres on Living Roots (C3)	Saturation Visible in Aerial Imagery (C9)					
Drift Deposits (B3)	Presence of Reduced Iron (C4)	Stunted or Stressed Plants (D1)					
Algal Mat or Crust (B4)	Recent Iron Reduction in Tilled Soils (C6)	X Geomorphic Position (D2)					
Iron Deposits (B5)	Thin Muck Surface (C7)	Shallow Aquitard (D3)					
Inundation Visible on Aerial Imagery (B7)	Other (Explain in Remarks)	Microtopographic Relief (D4)					
Sparsley Vegetated Concave Surface (B8)		X FAC-Neutral Test (D5)					
Surface Water Present? Yes No X	Depth (inches)						
Water Table Present? Yes No X	- · · · · 	Hydrology Present? Yes X No					
Saturation Present? Yes No X	Depth (inches)						
Describe Recorded Data (stream gauge, monit	toring well, aerial photos, previous inspection	ns), if available:					
Remarks:							

VEGETATION - Use scientific names of plants Sampling Point: 1_20200714_WL20_W1 Absolute Dominant Indicator **Dominance Test Worksheet:** (Plot Size: 30'radius) % Cover Species? Status **Tree Stratum Number of Dominant Species** That Are OBL, FACW, or FAC: (A) = Total Cover **Total Number of Dominant** Species Across All Strata: (B) 3 Percent of Dominant Species That Are OBL, FACW, or FAC: (A/B) 100% **Prevalence Index Worksheet:** x 1 14 **OBL** species 14 Absolute Dominant Indicator **FACW** species 42 84 (Plot Size: 15'radius) % Cover x 2 **Shrub Stratum** Species? **Status** FAC species х3 147 49 Viburnum dentatum **FAC** = Total Cover 4 **FACU** species 0 x 4 0 **UPL** species 0 x 5 0 Column Totals 105 245 (B) (A) Prevalence Index = B/A = 2.33 **Hydrophytic Vegetation Indicators:** Absolute Dominant Indicator 1- Rapid Test For Hydrophytic Vegetation **Herb Stratum** (Plot Size: 5'radius) % Cover Species? Status X 2- Dominance Test is > 50% 30 Echinochloa crus-galli FAC X 3- Prevalence Index is =< 3.0 Impatiens pallida 20 Χ **FACW** 4- Morphological Adaptations Ranunculus hispidus 15 Χ FAC Lysimachia nummularia 10 **FACW** 5- Problematic Hydrophytic Vegetation Glyceria striata 8 OBL Eupatorium perfoliatum 7 **FACW Definitions of Vegetation Strata:** Scirpus atrovirens OBL 6 Tree- Woody plants 3 in. (7.6cm) or more in diameter at Symphyotrichum lanceolatum 5 **FACW** breast height (DBH), regardless of height. 101 = Total Cover Sapling/Shrub- Woody plants less than 3 in. DBH and greater than or equal to 3.28ft (1m) tall. Herb- All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28ft tall. Absolute Dominant Indicator Woody Vines- All woody vines greater than 3.28ft in (Plot Size: 30'radius) **Woody Vine Stratum** % Cover Species? Status height. = Total Cover Hydrophytic Vegetation Present? Yes X No ___ Remarks: (Include photo numbers here or on a separate sheet.)

SOIL Sampling Point: 1_20200714_WL20_W1

Depth _	Matrix				Redo	x Featu	res	
(inches	Color	%	Color	%	Type	Loc	Texture	Remarks
0-7	10YR 2/1	95	10YR 4/6	5	С	М	Silty Clay Loam	
7-15	10YR 4/1	90	10YR 4/6	10	С	М	Silty Clay Loam	

Hydric Soil Indicators:		Indicators for Problematic Soils:
Histosol (A1)	Polyvalue Below Surface (B15)2 cm Muck (A10)
Histic Epipedon (A2)	Thin Dark Surface (S9)	Coast Prarie Redox (A16)
Black Histic (A3)	Loamy Mucky Mineral (F1	.)5 cm Mucky Peat or Peat (S3)
Hydrogen Sulfide (A4)	Loamy Gleyed Matric (F2)	Dark Surface (S7)
Stratified Layers (A5)	Depleted Matrix (F3)	Polyvalue Below Surface (S8)
Depleted Below Dark Surface (A11)	X Redox Dark Surface (F6)	Thin Dark Surface (S9)
Thick Dark Surface (A12)	Depleted Dark Surface (F7	7) Iron-Manganese Masses (F12)
Sandy Mucky Mineral (S1)	Redox Depressions (F8)	Piedmont Floodplain Soils (F19)
Sandy Gleyed Matrix (S4)		Mesic Spodic (TA6)
Sandy Redox (S5)		Red Parent Material (F21)
Stripped Matrix (S6)		Very Shallow Dark Surface (TF12)
Dark Surface (S7)		Other (Explain in Remarks)
Restrictive Layer (if observed):		
Type		
Type:		Hydric Soil Present? Yes X No
Depth (inches):		

Remarks:

Project/Site: Cider Solar Project	City/Co	ounty: Oakfield/Gen	nessee	Sampling Date: 7/14/2020	
Applicant/Owner: Hecate	_		State: NY	Sampling Point:	
Investigator(s): Andrew Sorci	Section	n, Township, Range:		1_20200714_WL20_W2	
Landform (hillslope, terrace,etc.): Floodplain	Local relie	f (concave, convex, r	none): None	Slope (%) <u>0 - 3</u>	
Subregion (LRR or MLRA): LRR L	Lat: 43.087122	Long:7	8.253799	Datum: NAD83	
Soil Map Unit Name: La			NWI Classif	ication: PFO	
Are climatic / hyrologic conditions on the site	typical for this time of yea	ar? Yes <u>X</u> No	(if no, e	explain in Remarks.)	
Are Vegetation, Soil, or Hydrology	significantly disturb	ped? Are "Normal (Circumstances"	present? Yes X No	
Are Vegetation, Soil, or Hydrology	naturally problema	atic? (if needed, exp	lain any answers	in Remarks.)	
SUMMARY OF FINDINGS - Attach site ma	o showing sampling po	oint locations, tran	sects. import	ant features. etc.	
Hydrophytic Vegetation Present? Yes X		Is the Sampled Area			
Hydric Soil Present? Yes X		within a Wetland?		es X No	
Wetland Hydrology Present? Yes X		if yes, optional Wetl		WL20	
		, 50, 50, 50, 51, 51, 51, 51, 51, 51, 51, 51, 51, 51			
Remarks: (Explain alternative procedures here or in a se	parate report.)				
HYDROLOGY					
Wetland Hydrology Indicators:				ators (minimum of two required)	
Primary Indicators (minimum of one is required: c				oil Cracks (B6)	
Surface Water (A1)	Water-Stained Leaves	(B9)	X Drainage	Patterns (B10)	
High Water Table (A2)	Aquatic Fauna (B13)		X Moss Trim		
Saturation (A3)	Marl Deposits (B15)		Dry-Season Water Table (C2)		
Water Marks (B1)	Hydrogen Sulfide Odo	r (C1)	Crayfish B	urrows (C8)	
Sediment Deposits (B2)	Oxidized Rhizospheres	on Living Roots (C3)	Saturation	Visible in Aerial Imagery (C9)	
Drift Deposits (B3)	Presence of Reduced I	ron (C4)	Stunted o	r Stressed Plants (D1)	
Algal Mat or Crust (B4)	Recent Iron Reduction	in Tilled Soils (C6)	XGeomorpl	nic Position (D2)	
Iron Deposits (B5)	Thin Muck Surface (C7	")	Shallow A	quitard (D3)	
Inundation Visible on Aerial Imagery (B7)	Other (Explain in Rem	arks)	Microtopo	ographic Relief (D4)	
Sparsley Vegetated Concave Surface (B8)			X FAC-Neut	al Test (D5)	
Surface Water Present? Yes No X	Depth (inches)				
Water Table Present? Yes No X	Depth (inches)	- Wetland H	lydrology Prese	ent? Yes X No	
Saturation Present? Yes No X	Depth (inches)	-	iyarology i resc		
	<u> </u>	_			
Describe Recorded Data (stream gauge, moni	toring well, aerial photos	, previous inspection	s), if available:		
Remarks:					

VEGETATION - Use scientific names of plants Sampling Point: 1_20200714_WL20_W2 Absolute Dominant Indicator **Dominance Test Worksheet:** (Plot Size: 30'radius) % Cover Species? Status **Tree Stratum** Number of Dominant Species Χ **FACW** That Are OBL, FACW, or FAC: (A) Fraxinus pennsylvanica 85 85 = Total Cover **Total Number of Dominant** (B) Species Across All Strata: 6 Percent of Dominant Species That Are OBL, FACW, or FAC: 83.3% (A/B) **Prevalence Index Worksheet:** 0 x 1 **OBL** species Absolute Dominant Indicator **FACW** species 120 240 (Plot Size: 15'radius) % Cover Species? Status x 2 **Shrub Stratum** FAC species 55 165 Rosa multiflora FACU х3 Χ 10 10 = Total Cover **FACU** species 25 x 4 100 **UPL** species 0 x 5 0 Column Totals 200 (A) 505 (B) Prevalence Index = B/A = 2.52 **Hydrophytic Vegetation Indicators:** Absolute Dominant Indicator 1- Rapid Test For Hydrophytic Vegetation **Herb Stratum** (Plot Size: 5'radius) % Cover Species? Status X 2- Dominance Test is > 50% Impatiens pallida 35 Х **FACW** X 3- Prevalence Index is =< 3.0 Toxicodendron radicans Χ 15 **FAC** 4- Morphological Adaptations Ranunculus hispidus 15 Χ FAC

FACU

FAC

FACU

Status

FAC

= Total Cover

Absolute Dominant Indicator

Species?

Χ

= Total Cover

Definitions of Vegetation Strata:

Tree- Woody plants 3 in. (7.6cm) or more in diameter at breast height (DBH), regardless of height.

5- Problematic Hydrophytic Vegetation

Sapling/Shrub- Woody plants less than 3 in. DBH and greater than or equal to 3.28ft (1m) tall.

Herb- All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28ft tall.

Woody Vines- All woody vines greater than 3.28ft in height.

Hydrophytic

Vegetation

Present? Yes X No _____

eID: 20200810121647

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

(Plot Size: 30'radius)

Parthenocissus quinquefolia

Persicaria virginiana

Circaea canadensis

Woody Vine Stratum

Vitis riparia

10

10

5

90

% Cover

15

15

SOIL Sampling Point: 1_20200714_WL20_W2

Depth	Matrix				Redo	x Featu	res	
(inches	Color	%	Color	%	Туре	Loc	Texture	Remarks
0-7	10YR 2/1	95	10YR 4/6	5	С	М	Silty Clay Loam	
7-15	10YR 4/1	90	10YR 4/6	10	С	М	Silty Clay Loam	

Hydric Soil Indicators:		Indicators for Problematic Soils:
Histosol (A1)	Polyvalue Below Surface (B15)	2 cm Muck (A10)
Histic Epipedon (A2)	Thin Dark Surface (S9)	Coast Prarie Redox (A16)
Black Histic (A3)	Loamy Mucky Mineral (F1)	5 cm Mucky Peat or Peat (S3)
Hydrogen Sulfide (A4)	Loamy Gleyed Matric (F2)	Dark Surface (S7)
Stratified Layers (A5)	X Depleted Matrix (F3)	Polyvalue Below Surface (S8)
Depleted Below Dark Surface (A11)	X Redox Dark Surface (F6)	Thin Dark Surface (S9)
Thick Dark Surface (A12)	Depleted Dark Surface (F7)	Iron-Manganese Masses (F12)
Sandy Mucky Mineral (S1)	Redox Depressions (F8)	Piedmont Floodplain Soils (F19)
Sandy Gleyed Matrix (S4)		Mesic Spodic (TA6)
Sandy Redox (S5)		Red Parent Material (F21)
Stripped Matrix (S6)		Very Shallow Dark Surface (TF12)
Dark Surface (S7)		Other (Explain in Remarks)
Restrictive Layer (if observed):		
Туре:	116	Idria Sail Drasant 2 Vas V Na
	Hy	ydric Soil Present? Yes X No
Depth (inches):		

Project/Site: Cider Solar Project	City/County: Oakfield/Ger	nnessee Sampling Date: 7/14/2020
Applicant/Owner: Hecate		State: NY Sampling Point:
Investigator(s): Andrew Sorci	Section, Township, Range:	1_20200714_WL20_W3
Landform (hillslope, terrace,etc.): Dip	Local relief (concave, convex,	none): <u>None</u> Slope (%) <u>3 - 5</u>
Subregion (LRR or MLRA): LRR L	Lat: <u>43.088437</u> Long: <u>-</u>	78.255322 Datum: NAD83
Soil Map Unit Name: La		NWI Classification: PSS
Are climatic / hyrologic conditions on the site t	cypical for this time of year? Yes X No	(if no, explain in Remarks.)
Are Vegetation, Soil, or Hydrology	significantly disturbed? Are "Normal	Circumstances" present? Yes X No
Are Vegetation, Soil, or Hydrology	naturally problematic? (if needed, exp	olain any answers in Remarks.)
SUMMARY OF FINDINGS - Attach site map	o showing sampling point locations, tran	sects. important features, etc.
Hydrophytic Vegetation Present? Yes X		
Hydric Soil Present? Yes X	within a Wetland?	Yes X No
·		
Wetland Hydrology Present? Yes X		
Remarks: (Explain alternative procedures here or in a se	parate report.)	
HYDROLOGY		
Wetland Hydrology Indicators:		Secondary Indicators (minimum of two required)
Primary Indicators (minimum of one is required: cl		Surface Soil Cracks (B6)
Surface Water (A1)	Water-Stained Leaves (B9)	Drainage Patterns (B10)
High Water Table (A2)	Aquatic Fauna (B13)	Moss Trim Lines (B16)
Saturation (A3)	Marl Deposits (B15)	Dry-Season Water Table (C2)
Water Marks (B1)	Hydrogen Sulfide Odor (C1)	Crayfish Burrows (C8)
Sediment Deposits (B2)	Oxidized Rhizospheres on Living Roots (C3)	Saturation Visible in Aerial Imagery (C9)
Drift Deposits (B3)	Presence of Reduced Iron (C4)	Stunted or Stressed Plants (D1)
Algal Mat or Crust (B4)	Recent Iron Reduction in Tilled Soils (C6)	X Geomorphic Position (D2)
Iron Deposits (B5)	Thin Muck Surface (C7)	Shallow Aquitard (D3)
Inundation Visible on Aerial Imagery (B7)	Other (Explain in Remarks)	Microtopographic Relief (D4)
Sparsley Vegetated Concave Surface (B8)		X FAC-Neutral Test (D5)
Surface Water Present? Yes No X	Depth (inches)	
Water Table Present? Yes No X	- · · · · 	Hydrology Present? Yes X No
Saturation Present? Yes No X	Depth (inches)	γαιοίος, πεσείπει πεσ <u>χ</u> πο
Describe Recorded Data (stream gauge, moni	toring well, aerial photos, previous inspection	ns), if available:
Remarks:		

VEGETATION - Use scientific names of plants Sampling Point: 1_20200714_WL20_W3 Absolute Dominant Indicator **Dominance Test Worksheet:** (Plot Size: 30'radius) % Cover Species? Status **Tree Stratum Number of Dominant Species** That Are OBL, FACW, or FAC: 6 (A) = Total Cover **Total Number of Dominant** Species Across All Strata: (B) 6 Percent of Dominant Species That Are OBL, FACW, or FAC: (A/B) 100% **Prevalence Index Worksheet:** x 1 28 **OBL** species 28 Absolute Dominant Indicator **FACW** species 95 190 (Plot Size: 15'radius) Species? x 2 **Shrub Stratum** % Cover **Status** FAC species х3 45 15 Cornus amomum 35 Χ **FACW** Fraxinus pennsylvanica 35 Х **FACW FACU** species 0 x 4 0 5 FAC Apocynum cannabinum **UPL** species 0 x 5 0 75 = Total Cover Column Totals 138 (A) 263 (B) Prevalence Index = B/A = 1.91 **Hydrophytic Vegetation Indicators:** Absolute Dominant Indicator X 1- Rapid Test For Hydrophytic Vegetation **Herb Stratum** (Plot Size: 5'radius) % Cover Species? Status X 2- Dominance Test is > 50% 10 Carex vulpinoidea Χ OBL X 3- Prevalence Index is =< 3.0 Χ Phalaris arundinacea 10 **FACW** 4- Morphological Adaptations Carex cristatella 10 Χ **FACW** Juncus effusus 8 Χ OBL 5- Problematic Hydrophytic Vegetation Eutrochium purpureum 5 FAC Lycopus americanus 5 OBL **Definitions of Vegetation Strata:** FAC Toxicodendron radicans Tree- Woody plants 3 in. (7.6cm) or more in diameter at Agrostis gigantea **FACW** breast height (DBH), regardless of height. 5 OBL Scirpus atrovirens 63 = Total Cover Sapling/Shrub- Woody plants less than 3 in. DBH and greater than or equal to 3.28ft (1m) tall. Herb- All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28ft tall. Absolute Dominant Indicator Woody Vines- All woody vines greater than 3.28ft in (Plot Size: 30'radius) **Woody Vine Stratum** % Cover Species? Status height. = Total Cover Hydrophytic Vegetation Present? Yes X No ____

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

SOIL Sampling Point: 1_20200714_WL20_W3

Depth	Matrix				Redo	x Feature	es	
(inches	Color	%	Color	%	Туре	Loc	Texture	Remarks
0-4	10YR 3/1	95	10YR 4/6	5	С	М	Clay Loam	
4-10	10YR 4/1	85	10YR 5/8	15	С	М	Clay Loam	

Hydric Soil Indicators:		Indicators for Problematic Soils:
Histosol (A1)	Polyvalue Below Surface (B15)2 cm Muck (A10)
Histic Epipedon (A2)	Thin Dark Surface (S9)	Coast Prarie Redox (A16)
Black Histic (A3)	Loamy Mucky Mineral (F1	.) 5 cm Mucky Peat or Peat (S3)
Hydrogen Sulfide (A4)	Loamy Gleyed Matric (F2)	Dark Surface (S7)
Stratified Layers (A5)	X Depleted Matrix (F3)	Polyvalue Below Surface (S8)
Depleted Below Dark Surface (A11)	X Redox Dark Surface (F6)	Thin Dark Surface (S9)
Thick Dark Surface (A12)	Depleted Dark Surface (F7	7) Iron-Manganese Masses (F12)
Sandy Mucky Mineral (S1)	Redox Depressions (F8)	Piedmont Floodplain Soils (F19)
Sandy Gleyed Matrix (S4)		Mesic Spodic (TA6)
Sandy Redox (S5)		Red Parent Material (F21)
Stripped Matrix (S6)		Very Shallow Dark Surface (TF12)
Dark Surface (S7)		Other (Explain in Remarks)
Restrictive Layer (if observed):		
Type:		
Type:		Hydric Soil Present? Yes X No
Depth (inches):		

Remarks:

Project/Site: Cider Solar Project	City/County: Oakfield/Ger	nnessee Sampling Date: 7/14/2020
Applicant/Owner: Hecate		State: NY Sampling
Investigator(s): Andrew Sorci	Section, Township, Range:	Point:1_20200714_WL20_U
Landform (hillslope, terrace,etc.): Side Slope	Local relief (concave, convex,	none): <u>Convex</u> Slope (%) <u>5 - 15</u>
Subregion (LRR or MLRA): LRR L	Lat: 43.087079 Long:	78.253398 Datum: NAD83
Soil Map Unit Name: La		NWI Classification: UPL
Are climatic / hyrologic conditions on the site	typical for this time of year? Yes X No	(if no, explain in Remarks.)
Are Vegetation, Soil, or Hydrology	significantly disturbed? Are "Normal	Circumstances" present? Yes X No
Are Vegetation, Soil, or Hydrology	naturally problematic? (if needed, exp	plain any answers in Remarks.)
SUMMARY OF FINDINGS - Attach site ma	p showing sampling point locations, trar	sects, important features, etc.
Hydrophytic Vegetation Present? Yes X	No Is the Sampled Are	a
Hydric Soil Present? Yes	No X within a Wetland?	Yes No X
Wetland Hydrology Present? Yes	No X if yes, optional Wet	land Site ID:
Remarks: (Explain alternative procedures here or in a se		
HINDROLOGY		
HYDROLOGY Wetland Hydrology Indicators:		Secondary Indicators (minimum of two required)
Primary Indicators (minimum of one is required: c	heck all that apply)	Surface Soil Cracks (B6)
Surface Water (A1)	Water-Stained Leaves (B9)	 Drainage Patterns (B10)
High Water Table (A2)	Aquatic Fauna (B13)	Moss Trim Lines (B16)
Saturation (A3)	Marl Deposits (B15)	Dry-Season Water Table (C2)
Water Marks (B1)	Hydrogen Sulfide Odor (C1)	Crayfish Burrows (C8)
Sediment Deposits (B2)	Oxidized Rhizospheres on Living Roots (C3)	Saturation Visible in Aerial Imagery (C9)
Drift Deposits (B3)	Presence of Reduced Iron (C4)	Stunted or Stressed Plants (D1)
Algal Mat or Crust (B4)	Recent Iron Reduction in Tilled Soils (C6)	Geomorphic Position (D2)
Iron Deposits (B5)	Thin Muck Surface (C7)	Shallow Aquitard (D3)
Inundation Visible on Aerial Imagery (B7)	Other (Explain in Remarks)	Microtopographic Relief (D4)
Sparsley Vegetated Concave Surface (B8)		FAC-Neutral Test (D5)
Surface Water Present? Yes No X	Depth (inches)	
Water Table Present? Yes No X	Depth (inches) Wetland I	Hydrology Present? Yes No X
Saturation Present? Yes No X	Depth (inches)	
Describe Recorded Data (stream gauge, moni	toring well, aerial photos, previous inspection	ns), if available:
Domonka		
Remarks:		

	iaiiie	s of plants				Sampli	ng Point: 1_20	200/14_W	L20_01
				Dominant		Dominance Test V	Vorksheet:		
Tree Stratum (Plot	Size:	30'radius)	% Cover	Species?	Status	Number of Domi	nant Species		
Pinus strobus			15	Χ	FACU	That Are OBL, FA	CW, or FAC:	5	(A)
Fraxinus pennsylvanica			10	Χ	FACW	Total Numbe	r of Dominant		_
Populus deltoides			5		FAC		ross All Strata:	7	(B)
			30	_= Total Cov	er	Percent of Don	ninant Species		_
						That Are OBL, I	•	71.4%	(A/B)
						Prevalence Index \	Worksheet:		
			A bsoluto	Dominant	Indicator	OBL species	0 x 1	0	
Shrub Stratum (Plot	Size:	15'radius)	% Cover	Dominant Species?	Status	FACW species	35 x 2	70	
Cornus racemosa			20	Χ	FAC	FAC species	60 x 3	180	
Fraxinus pennsylvanica			15	X	FACW	FACU species	58 x 4	232	
			35	_= Total Cov	er	UPL species	8 x 5	40	
						Column Totals	161 (A)	522	(B)
						Prevalenc	e Index = B/A =	3.24	
						Hydrophytic Vege	tation Indicato	rs:	
			Absolute	Dominant	Indicator		t For Hydrophy		tion
Herb Stratum (Plot	Size:	5'radius)	% Cover	Species?	Status	· ·		iic vegeta	cion
Solidago canadonsis			30	X	FACU	X 2- Dominano	ce Test is > 50%		
Solidago canadensis			30	^					
luncus tonuis			15			3- Prevalenc	ce Index is =< 3.0)	
Juncus tenuis Toxicodendron radicans			15 10	Х	FAC				
Toxicodendron radicans			10		FAC FAC	4- Morpholo	ogical Adaptatio	ns	
Toxicodendron radicans Asclepias syriaca			10 8		FAC FAC UPL	4- Morpholo		ns	on
Toxicodendron radicans Asclepias syriaca Phleum pratense	m		10		FAC FAC	4- Morpholo 5- Problema	ogical Adaptatio	ns	on
Toxicodendron radicans Asclepias syriaca	m		10 8 8		FAC FAC UPL FACU	4- Morpholo 5- Problema Definitions of Vegeta	ogical Adaptatio	ns Vegetatio	
Toxicodendron radicans Asclepias syriaca Phleum pratense Symphyotrichum lanceolatu	m		10 8 8 5		FAC UPL FACU FACW	4- Morpholo 5- Problema Definitions of Vegeta Tree- Woody plants 3	ogical Adaptatio tic Hydrophytic ation Strata: 3 in. (7.6cm) or m	ns Vegetatio	
Toxicodendron radicans Asclepias syriaca Phleum pratense Symphyotrichum lanceolatu Phalaris arundinacea	m		10 8 8 5 5		FAC UPL FACU FACW FACW FACW	4- Morpholo 5- Problema Definitions of Vegeta	ogical Adaptatio tic Hydrophytic ation Strata: 3 in. (7.6cm) or m	ns Vegetatio	
Toxicodendron radicans Asclepias syriaca Phleum pratense Symphyotrichum lanceolatu Phalaris arundinacea	m		10 8 8 5 5	X	FAC UPL FACU FACW FACW FACW	4- Morpholo 5- Problema Definitions of Vegeta Tree- Woody plants 3	ogical Adaptation tic Hydrophytic ation Strata: 3 in. (7.6cm) or m regardless of heighty	vegetation ore in diaminght.	neter at
Toxicodendron radicans Asclepias syriaca Phleum pratense Symphyotrichum lanceolatu Phalaris arundinacea	m		10 8 8 5 5	X	FAC UPL FACU FACW FACW FACW	4- Morpholo 5- Problema Definitions of Vegeta Tree- Woody plants 3 breast height (DBH), Sapling/Shrub- Wood greater than or equal	egical Adaptation tic Hydrophytic eation Strata: 3 in. (7.6cm) or more gardless of heighty plants less than I to 3.28ft (1m) take (non-woody) plants (10 m) take	ore in dianght. 13 in. DBH all.	neter at and
Toxicodendron radicans Asclepias syriaca Phleum pratense Symphyotrichum lanceolatu Phalaris arundinacea	m		10 8 8 5 5 5 86	X _= Total Cov	FAC UPL FACU FACW FACW FACW FACU	4- Morpholo 5- Problema Definitions of Vegeta Tree- Woody plants 3 breast height (DBH), Sapling/Shrub- Wood greater than or equal	egical Adaptation tic Hydrophytic eation Strata: 3 in. (7.6cm) or more gardless of heighty plants less than I to 3.28ft (1m) take (non-woody) plants (10 m) take	ore in dianght. 13 in. DBH all.	neter at and
Toxicodendron radicans Asclepias syriaca Phleum pratense Symphyotrichum lanceolatu Phalaris arundinacea Parthenocissus inserta		30'radius)	10 8 8 5 5 5 86	X	FAC UPL FACU FACW FACW FACW FACU	4- Morpholo 5- Problema Definitions of Vegeta Tree- Woody plants 3 breast height (DBH), Sapling/Shrub- Wood greater than or equal Herb- All herbaceous size, and woody plan Woody Vines- All wood	egical Adaptation tic Hydrophytic eation Strata: 3 in. (7.6cm) or more regardless of heightly plants less than 1 to 3.28ft (1m) to 1. (non-woody) plats less than 3.28f	ore in diam ght. n 3 in. DBH ill. nts, regard	and less of
Toxicodendron radicans Asclepias syriaca Phleum pratense Symphyotrichum lanceolatu Phalaris arundinacea Parthenocissus inserta		30'radius)	10 8 8 5 5 5 86 Absolute % Cover	_= Total Cov Dominant Species?	FAC UPL FACU FACW FACW FACU rer Indicator Status FAC	4- Morpholo 5- Problema Definitions of Vegeta Tree- Woody plants 3 breast height (DBH), Sapling/Shrub- Wood greater than or equal Herb- All herbaceous size, and woody plan	egical Adaptation tic Hydrophytic eation Strata: 3 in. (7.6cm) or more regardless of heightly plants less than 1 to 3.28ft (1m) to 1. (non-woody) plats less than 3.28f	ore in diam ght. n 3 in. DBH ill. nts, regard	neter at and less of
Toxicodendron radicans Asclepias syriaca Phleum pratense Symphyotrichum lanceolatu Phalaris arundinacea Parthenocissus inserta Woody Vine Stratum (Plot		30'radius)	10 8 8 5 5 5 86 Absolute % Cover	_= Total Cov Dominant Species?	FAC UPL FACU FACW FACW FACU rer Indicator Status FAC	4- Morpholo 5- Problema Definitions of Vegeta Tree- Woody plants 3 breast height (DBH), Sapling/Shrub- Wood greater than or equal Herb- All herbaceous size, and woody plan Woody Vines- All wood	ation Strata: 3 in. (7.6cm) or magardless of height plants less than 1 to 3.28ft (1m) to 1 to 1 less than 3.28ft ody vines greater	ore in diam ght. n 3 in. DBH ill. nts, regard	and less of
Toxicodendron radicans Asclepias syriaca Phleum pratense Symphyotrichum lanceolatu Phalaris arundinacea Parthenocissus inserta Woody Vine Stratum (Plot		30'radius)	10 8 8 5 5 5 86 Absolute % Cover	_= Total Cov Dominant Species?	FAC UPL FACU FACW FACW FACU rer Indicator Status FAC	4- Morpholo 5- Problema Definitions of Vegeta Tree- Woody plants 3 breast height (DBH), Sapling/Shrub- Wood greater than or equal Herb- All herbaceous size, and woody plan Woody Vines- All wooheight. Hydroph Vegeta	ogical Adaptation tic Hydrophytic ation Strata: 3 in. (7.6cm) or more gardless of height plants less than 1 to 3.28ft (1m) tate (non-woody) plats less than 3.28ft ody vines greater mytic ation	ore in diamyht. 1 3 in. DBH ill. nts, regard t tall. than 3.28f	and less of t in
Toxicodendron radicans Asclepias syriaca Phleum pratense Symphyotrichum lanceolatu Phalaris arundinacea Parthenocissus inserta Woody Vine Stratum (Plot		30'radius)	10 8 8 5 5 5 86 Absolute % Cover	_= Total Cov Dominant Species?	FAC UPL FACU FACW FACW FACU rer Indicator Status FAC	4- Morpholo 5- Problema Definitions of Vegeta Tree- Woody plants 3 breast height (DBH), Sapling/Shrub- Wood greater than or equal Herb- All herbaceous size, and woody plan Woody Vines- All wooheight. Hydroph Vegeta	egical Adaptation tic Hydrophytic eation Strata: 3 in. (7.6cm) or more gardless of height plants less than 1 to 3.28ft (1m) to 1. (non-woody) plats less than 3.28ft ody vines greater enytic	ore in diamyht. 1 3 in. DBH ill. nts, regard t tall. than 3.28f	and less of t in

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

SOIL Sampling Point: 1_20200714_WL20_U1

Depth	Matrix			Redox Features				
(inches	Color	%	Color	%	Type	Loc	Texture	Remarks
0-8	10YR 4/2	99	10YR 3/6	1	С	М	Sandy Clay Loam	
8-15	10YR 5/3	80	10YR 3/2	20	С	М	Loamy Sand	

Hydric Soil Indicators:	Indicators for Problematic Soils:			
Histosol (A1)	Polyvalue Below Surface (B1	15)2 cm Muck (A10)		
Histic Epipedon (A2)	Thin Dark Surface (S9)	Coast Prarie Redox (A16)		
Black Histic (A3)	Loamy Mucky Mineral (F1)	5 cm Mucky Peat or Peat (S3)		
Hydrogen Sulfide (A4)	Loamy Gleyed Matric (F2)	Dark Surface (S7)		
Stratified Layers (A5)	Depleted Matrix (F3)	Polyvalue Below Surface (S8)		
Depleted Below Dark Surface (A11)	Redox Dark Surface (F6)	Thin Dark Surface (S9)		
Thick Dark Surface (A12)	Depleted Dark Surface (F7)	Iron-Manganese Masses (F12)		
Sandy Mucky Mineral (S1)	Redox Depressions (F8)	Piedmont Floodplain Soils (F19)		
Sandy Gleyed Matrix (S4)		Mesic Spodic (TA6)		
Sandy Redox (S5)		Red Parent Material (F21)		
Stripped Matrix (S6)		Very Shallow Dark Surface (TF12)		
Dark Surface (S7)		Other (Explain in Remarks)		
Restrictive Layer (if observed):				
Туре:		Hydric Soil Present? Yes No X		
Depth (inches):	_	 _ 		
	_			

Project/Site: Cider Solar Project	City/Co	ounty: Oakfield/Gen	nessee Sam	pling Date: 7/14/2020		
Applicant/Owner: Hecate		.	State: NY Sa	ampling		
Investigator(s): Andrew Sorci	Sectio	Section, Township, Range: Point:1_20200				
Landform (hillslope, terrace,etc.): Rise	Local relie	ef (concave, convex, r	ione): <u>Convex</u>	Slope (%) 3 - 5		
Subregion (LRR or MLRA): LRR L	Lat: 43.088481	Long:7	8.255411	Datum: NAD83		
Soil Map Unit Name: La	-	_	NWI Classification	on: UPL		
Are climatic / hyrologic conditions on the site	typical for this time of ye	ar? Yes <u>X</u> No	(if no, expla	ain in Remarks.)		
Are Vegetation, Soil, or Hydrology	significantly distur	bed? Are "Normal (Circumstances" pre	sent? Yes X No		
Are Vegetation, Soil, or Hydrology	naturally problems	atic? (if needed, exp	lain any answers in Re	emarks.)		
SUMMARY OF FINDINGS - Attach site ma	n showing sampling po	oint locations, tran	sects, important	features, etc.		
Hydrophytic Vegetation Present? Yes X		Is the Sampled Area				
Hydric Soil Present? Yes		within a Wetland?	Yes	No X		
		if yes, optional Wetl	-			
Wetland Hydrology Present? Yes	No X	ii yes, optional weti				
Remarks: (Explain alternative procedures here or in a se	parate report.)					
HYDROLOGY						
Wetland Hydrology Indicators:			Secondary Indicators	s (minimum of two required)		
Primary Indicators (minimum of one is required: o	heck all that apply)		Surface Soil Cra	acks (B6)		
Surface Water (A1)	Water-Stained Leaves	s (B9)	Drainage Patte	erns (B10)		
High Water Table (A2)	Aquatic Fauna (B13)		Moss Trim Lines (B16)			
Saturation (A3)	Marl Deposits (B15)		Dry-Season Water Table (C2)			
Water Marks (B1)	Hydrogen Sulfide Odo	or (C1)	Crayfish Burrows (C8)			
Sediment Deposits (B2)	Oxidized Rhizosphere		Saturation Visible in Aerial Imagery (C9)			
Drift Deposits (B3)	Presence of Reduced		Stunted or Stressed Plants (D1)			
Algal Mat or Crust (B4)	Recent Iron Reduction		Geomorphic Position (D2)			
Iron Deposits (B5)	Thin Muck Surface (C	` ,	Shallow Aquitard (D3)			
Inundation Visible on Aerial Imagery (B7)			Microtopograp			
	Other (Explain in Rem	idi KS)				
Sparsley Vegetated Concave Surface (B8)			FAC-Neutral Te	!St (D5)		
Surface Water Present? Yes No X	Depth (inches)	_				
Water Table Present? Yes No _ X	Depth (inches)	Wetland H	lydrology Present?	Yes No X		
Saturation Present? Yes No X	Depth (inches)	_				
Describe Recorded Data (stream gauge, mon	toring well aerial photos	nrevious inspection	ıs) if available			
Describe Recorded Data (stream Badge) mon	toring wen, derial priotos	, previous inspection	o,, ii availablei			
Remarks:						

VEGETATION - Use scientific names of plants Sampling Point: 1_20200714_WL20_U2 Absolute Dominant Indicator **Dominance Test Worksheet:** (Plot Size: 30'radius) % Cover Species? Status **Tree Stratum Number of Dominant Species** That Are OBL, FACW, or FAC: (A) = Total Cover **Total Number of Dominant** Species Across All Strata: (B) 5 Percent of Dominant Species (A/B) That Are OBL, FACW, or FAC: 60% **Prevalence Index Worksheet:** x 1 0 **OBL** species Absolute Dominant Indicator (Plot Size: 15'radius) **FACW** species 50 100 % Cover Species? x 2 **Shrub Stratum** Status FAC species 60 20 х3 Cornus amomum 25 Χ **FACW** Fraxinus pennsylvanica 25 Χ **FACW FACU** species 54 x 4 216 50 = Total Cover **UPL** species 20 x 5 100 Column Totals 144 (A) 476 (B) Prevalence Index = B/A = 3.31 **Hydrophytic Vegetation Indicators:** Absolute Dominant Indicator 1- Rapid Test For Hydrophytic Vegetation **Herb Stratum** (Plot Size: 5'radius) % Cover Species? Status X 2- Dominance Test is > 50% 20 UPL Daucus carota 3- Prevalence Index is =< 3.0 Χ Dipsacus fullonum 20 **FACU** 4- Morphological Adaptations 15 Χ FAC Prunella vulgaris Phleum pratense 10 **FACU** 5- Problematic Hydrophytic Vegetation 10 **FACU** Poa compressa Erigeron annuus 5 **FACU Definitions of Vegetation Strata: FACU** Solidago canadensis Tree- Woody plants 3 in. (7.6cm) or more in diameter at Toxicodendron radicans 5 FAC breast height (DBH), regardless of height. FACU Cirsium vulgare 4 94 = Total Cover Sapling/Shrub- Woody plants less than 3 in. DBH and greater than or equal to 3.28ft (1m) tall. Herb- All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28ft tall. Absolute Dominant Indicator Woody Vines- All woody vines greater than 3.28ft in (Plot Size: 30'radius) **Woody Vine Stratum** % Cover Species? Status height. = Total Cover Hydrophytic Vegetation Present? Yes X No ____ Remarks: (Include photo numbers here or on a separate sheet.)

SOIL Sampling Point: 1_20200714_WL20_U2

Depth Matrix					x Featur				
(inches	Color	%	Color	%	Type	Loc	Texture	Remarks	
0-5	10YR 3/2	100					Clay Loam		
5-14	10YR 4/3	95	10YR 4/4	5	С	M	Clay Loam		
14-20 10YR 5/3 90		10YR 4/4	10	С	M	Clay Loam			
Hydric Soil	Indicators:							Indicators for Problematic Soils:	
Histo	sol (A1)				Polyvalu	e Below Si	urface (B15)	2 cm Muck (A10)	
Histic	Epipedon (A2)			Thin Dar	k Surface ((S9)	Coast Prarie Redox (A16)	
Black	Histic (A3)				Loamy N	lucky Min	eral (F1)	5 cm Mucky Peat or Peat (S3)	
Hydro	ogen Sulfide	(A4)			Loamy G	leyed Mat	tric (F2)	Dark Surface (S7)	
Strati	ified Layers ((A5)			Depleted	l Matrix (F	3)	Polyvalue Below Surface (S8)	
Depleted Below Dark Surface (A11)					Redox D	ark Surfac	e (F6)	Thin Dark Surface (S9)	
Thick	Dark Surfac	e (A12)			Depleted	l Dark Sur	face (F7)	Iron-Manganese Masses (F12)	
Sandy	y Mucky Mir	neral (S	1)		Redox D	epressions	s (F8)	Piedmont Floodplain Soils (F19)	
Sandy	y Gleyed Ma	atrix (S4)					Mesic Spodic (TA6)	
Sandy	y Redox (S5)							Red Parent Material (F21)	
Stripp	ped Matrix (S6)						Very Shallow Dark Surface (TF12)	
Dark	Surface (S7)							Other (Explain in Remarks)	
Restrictive	Layer (if obse	erved):							
		Type:					Hydri	c Soil Present? Yes No X	
	Depth (in	ches):							
Danasalas									
Remarks:									

Project/Site: Cider Solar Project	City/County: Oakfield/Ger	nnessee Sampling Date: 7/14/2020			
Applicant/Owner: Hecate		State: NY Sampling Point:			
Investigator(s): Andrew Sorci	Section, Township, Range: 1_20200714_WL21				
Landform (hillslope, terrace, etc.): Depression	Local relief (concave, convex, ı	none): <u>Concave</u> Slope (%) <u>0 - 2</u>			
Subregion (LRR or MLRA): _LRR L	Lat: <u>43.089945</u> Long: <u>-7</u>	78.253185 Datum: NAD83			
Soil Map Unit Name: OvB		NWI Classification: PUB			
Are climatic / hyrologic conditions on the site					
Are Vegetation, Soil, or Hydrology	·	· — — —			
Are Vegetation, Soil, or Hydrology	naturally problematic? (if needed, exp	lain any answers in Remarks.)			
SUMMARY OF FINDINGS - Attach site ma	n showing sampling point locations tran	sects important features etc			
Hydrophytic Vegetation Present? Yes X					
	within a Wetland?	Yes X No			
Hydric Soil Present? Yes X					
Wetland Hydrology Present? Yes X		ialid Site ID: WLZ1			
Remarks: (Explain alternative procedures here or in a se	parate report.)				
HYDROLOGY					
Wetland Hydrology Indicators:		Secondary Indicators (minimum of two required)			
Primary Indicators (minimum of one is required: c	heck all that apply)	Surface Soil Cracks (B6)			
X Surface Water (A1)	Water-Stained Leaves (B9)	Drainage Patterns (B10)			
X High Water Table (A2)	Aquatic Fauna (B13)	Moss Trim Lines (B16)			
X Saturation (A3)	Marl Deposits (B15)	Dry-Season Water Table (C2)			
Water Marks (B1)	Hydrogen Sulfide Odor (C1)	Crayfish Burrows (C8)			
Sediment Deposits (B2)	Oxidized Rhizospheres on Living Roots (C3)	Saturation Visible in Aerial Imagery (C9)			
Drift Deposits (B3)	Presence of Reduced Iron (C4)	Stunted or Stressed Plants (D1)			
Algal Mat or Crust (B4)	Recent Iron Reduction in Tilled Soils (C6)	X Geomorphic Position (D2)			
Iron Deposits (B5)	Thin Muck Surface (C7)	Shallow Aquitard (D3)			
X Inundation Visible on Aerial Imagery (B7)	Other (Explain in Remarks)	Microtopographic Relief (D4)			
Sparsley Vegetated Concave Surface (B8)		X FAC-Neutral Test (D5)			
	Double (inches) 26				
Surface Water Present? Yes X No	Depth (inches) 36				
Water Table Present? Yes X No	- ' ' 	Hydrology Present? Yes X No			
Saturation Present? Yes X No	Depth (inches) 0				
Describe Recorded Data (stream gauge, moni	toring well, aerial photos, previous inspection	ns), if available:			
Pomarks					
Remarks:					

VEGETATION - Use scientific names of plants Sampling Point: 1_20200714_WL21_W2 Absolute Dominant Indicator **Dominance Test Worksheet:** (Plot Size: 30'radius) % Cover Species? Status **Tree Stratum Number of Dominant Species** That Are OBL, FACW, or FAC: 5 (A) = Total Cover **Total Number of Dominant** Species Across All Strata: 5 (B) Percent of Dominant Species That Are OBL, FACW, or FAC: (A/B) 100% **Prevalence Index Worksheet:** 60 x 1 60 **OBL** species Absolute Dominant Indicator **FACW** species 25 50 (Plot Size: 15'radius) % Cover Species? Status x 2 **Shrub Stratum** FAC species 45 15 х3 Salix interior 25 Χ **FACW** 25 = Total Cover **FACU** species 0 x 4 0 **UPL** species 0 x 5 0 Column Totals 100 (A) 155 (B) Prevalence Index = B/A = 1.55 **Hydrophytic Vegetation Indicators:** Absolute Dominant Indicator 1- Rapid Test For Hydrophytic Vegetation **Herb Stratum** (Plot Size: 5'radius) % Cover Species? Status X 2- Dominance Test is > 50% 20 Oenanthe javanica Χ OBL X 3- Prevalence Index is =< 3.0 Χ OBL Asclepias incarnata 15 4- Morphological Adaptations Scirpus atrovirens 15 Χ OBL Typha angustifolia 10 OBL 5- Problematic Hydrophytic Vegetation 60 = Total Cover **Definitions of Vegetation Strata:** Tree- Woody plants 3 in. (7.6cm) or more in diameter at breast height (DBH), regardless of height. Sapling/Shrub- Woody plants less than 3 in. DBH and greater than or equal to 3.28ft (1m) tall. Herb- All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28ft tall. Absolute Dominant Indicator Woody Vines- All woody vines greater than 3.28ft in (Plot Size: 30'radius) Species? **Woody Vine Stratum** % Cover Status height. **FAC** Vitis riparia 15 Χ 15 = Total Cover Hydrophytic Vegetation Present? Yes X No ____

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

Depleted Dark Surface (F7) Redox Depressions (F8) Piedmont Floodplain Soils (F19) Mesic Spodic (TA6) Red Parent Material (F21) Very Shallow Dark Surface (TF12) X Other (Explain in Remarks)	DIL		Sampling Point: 1_20200714_WL21_
Polyvalue Below Surface (B15) Thin Dark Surface (S9) Loamy Mucky Mineral (F1) Loamy Gleyed Matric (F2) Depleted Matrix (F3) Redox Dark Surface (F6) Depleted Dark Surface (F7) S1) Redox Depressions (F8) Polyvalue Below Surface (S9) Iron-Manganese Masses (F12) Piedmont Floodplain Soils (F19) Mesic Spodic (TA6) Red Parent Material (F21) Very Shallow Dark Surface (TF12) X Other (Explain in Remarks)			
Polyvalue Below Surface (B15) Thin Dark Surface (S9) Loamy Mucky Mineral (F1) Loamy Gleyed Matric (F2) Depleted Matrix (F3) Polyvalue Below Surface (S8) urface (A11) Redox Dark Surface (F6) Depleted Dark Surface (F7) S1) Redox Depressions (F8) Piedmont Floodplain Soils (F19) Mesic Spodic (TA6) Red Parent Material (F21) Very Shallow Dark Surface (TF12) X Other (Explain in Remarks)			
Polyvalue Below Surface (B15) Thin Dark Surface (S9) Loamy Mucky Mineral (F1) Loamy Gleyed Matric (F2) Depleted Matrix (F3) Polyvalue Below Surface (S8) urface (A11) Redox Dark Surface (F6) Depleted Dark Surface (F7) S1) Redox Depressions (F8) Piedmont Floodplain Soils (F19) Mesic Spodic (TA6) Red Parent Material (F21) Very Shallow Dark Surface (TF12) X Other (Explain in Remarks)			
Polyvalue Below Surface (B15) Thin Dark Surface (S9) Loamy Mucky Mineral (F1) Loamy Gleyed Matric (F2) Depleted Matrix (F3) Polyvalue Below Surface (S8) urface (A11) Redox Dark Surface (F6) Depleted Dark Surface (F7) S1) Redox Depressions (F8) Polyvalue Below Surface (S8) Thin Dark Surface (S9) Iron-Manganese Masses (F12) Piedmont Floodplain Soils (F19) Mesic Spodic (TA6) Red Parent Material (F21) Very Shallow Dark Surface (TF12) X Other (Explain in Remarks)			
Polyvalue Below Surface (B15) Thin Dark Surface (S9) Loamy Mucky Mineral (F1) Loamy Gleyed Matric (F2) Depleted Matrix (F3) Polyvalue Below Surface (S8) urface (A11) Redox Dark Surface (F6) Depleted Dark Surface (F7) S1) Redox Depressions (F8) Polyvalue Below Surface (S8) Thin Dark Surface (S9) Iron-Manganese Masses (F12) Piedmont Floodplain Soils (F19) Mesic Spodic (TA6) Red Parent Material (F21) Very Shallow Dark Surface (TF12) X Other (Explain in Remarks)			
Polyvalue Below Surface (B15) Thin Dark Surface (S9) Loamy Mucky Mineral (F1) Loamy Gleyed Matric (F2) Depleted Matrix (F3) Polyvalue Below Surface (S8) urface (A11) Redox Dark Surface (F6) Depleted Dark Surface (F7) S1) Redox Depressions (F8) Polyvalue Below Surface (S8) Thin Dark Surface (S9) Iron-Manganese Masses (F12) Piedmont Floodplain Soils (F19) Mesic Spodic (TA6) Red Parent Material (F21) Very Shallow Dark Surface (TF12) X Other (Explain in Remarks)			
Polyvalue Below Surface (B15) Thin Dark Surface (S9) Loamy Mucky Mineral (F1) Loamy Gleyed Matric (F2) Depleted Matrix (F3) Polyvalue Below Surface (S8) urface (A11) Redox Dark Surface (F6) Depleted Dark Surface (F7) S1) Redox Depressions (F8) Piedmont Floodplain Soils (F19) Mesic Spodic (TA6) Red Parent Material (F21) Very Shallow Dark Surface (TF12) X Other (Explain in Remarks)			
Polyvalue Below Surface (B15) Thin Dark Surface (S9) Loamy Mucky Mineral (F1) Loamy Gleyed Matric (F2) Depleted Matrix (F3) Polyvalue Below Surface (S8) urface (A11) Redox Dark Surface (F6) Depleted Dark Surface (F7) S1) Redox Depressions (F8) Piedmont Floodplain Soils (F19) Mesic Spodic (TA6) Red Parent Material (F21) Very Shallow Dark Surface (TF12) X Other (Explain in Remarks)			
Polyvalue Below Surface (B15) Thin Dark Surface (S9) Loamy Mucky Mineral (F1) Loamy Gleyed Matric (F2) Depleted Matrix (F3) Polyvalue Below Surface (S8) urface (A11) Redox Dark Surface (F6) Depleted Dark Surface (F7) S1) Redox Depressions (F8) Piedmont Floodplain Soils (F19) Mesic Spodic (TA6) Red Parent Material (F21) Very Shallow Dark Surface (TF12) X Other (Explain in Remarks)			
Polyvalue Below Surface (B15) Thin Dark Surface (S9) Loamy Mucky Mineral (F1) Loamy Gleyed Matric (F2) Depleted Matrix (F3) Polyvalue Below Surface (S8) urface (A11) Redox Dark Surface (F6) Depleted Dark Surface (F7) S1) Redox Depressions (F8) Piedmont Floodplain Soils (F19) Mesic Spodic (TA6) Red Parent Material (F21) Very Shallow Dark Surface (TF12) X Other (Explain in Remarks)			
Polyvalue Below Surface (B15) Thin Dark Surface (S9) Loamy Mucky Mineral (F1) Loamy Gleyed Matric (F2) Depleted Matrix (F3) Polyvalue Below Surface (S7) Depleted Matrix (F3) Polyvalue Below Surface (S8) Thin Dark Surface (S9) Polyvalue Below Surface (S8) Thin Dark Surface (S9) Popleted Dark Surface (F7) S1) Redox Depressions (F8) Piedmont Floodplain Soils (F19) Mesic Spodic (TA6) Red Parent Material (F21) Very Shallow Dark Surface (TF12) X Other (Explain in Remarks)			
Polyvalue Below Surface (B15) Thin Dark Surface (S9) Loamy Mucky Mineral (F1) Loamy Gleyed Matric (F2) Depleted Matrix (F3) Polyvalue Below Surface (S8) urface (A11) Redox Dark Surface (F6) Depleted Dark Surface (F7) S1) Redox Depressions (F8) Piedmont Floodplain Soils (F19) Mesic Spodic (TA6) Red Parent Material (F21) Very Shallow Dark Surface (TF12) X Other (Explain in Remarks)			
Polyvalue Below Surface (B15) Thin Dark Surface (S9) Loamy Mucky Mineral (F1) Loamy Gleyed Matric (F2) Depleted Matrix (F3) Polyvalue Below Surface (S8) urface (A11) Redox Dark Surface (F6) Depleted Dark Surface (F7) S1) Redox Depressions (F8) Piedmont Floodplain Soils (F19) Mesic Spodic (TA6) Red Parent Material (F21) Very Shallow Dark Surface (TF12) X Other (Explain in Remarks)			
Thin Dark Surface (S9) Loamy Mucky Mineral (F1) Loamy Gleyed Matric (F2) Depleted Matrix (F3) Redox Dark Surface (F6) Depleted Dark Surface (F7) S1) Redox Depressions (F8) Mesic Spodic (TA6) Red Parent Material (F21) Very Shallow Dark Surface (TF12) X Other (Explain in Remarks)	Hydric Soil Indicators:		Indicators for Problematic Soils:
Loamy Mucky Mineral (F1) Loamy Gleyed Matric (F2) Depleted Matrix (F3) Redox Dark Surface (F6) Depleted Dark Surface (F7) S1) Redox Depressions (F8) Polyvalue Below Surface (S8) Thin Dark Surface (S9) Iron-Manganese Masses (F12) Piedmont Floodplain Soils (F19) Mesic Spodic (TA6) Red Parent Material (F21) Very Shallow Dark Surface (TF12) X Other (Explain in Remarks)	Histosol (A1)	Polyvalue Below Surface (B15)	2 cm Muck (A10)
Loamy Gleyed Matric (F2) Depleted Matrix (F3) Urface (A11) Redox Dark Surface (F6) Depleted Dark Surface (F7) S1) Redox Depressions (F8) Polyvalue Below Surface (S8) Thin Dark Surface (S9) Iron-Manganese Masses (F12) Piedmont Floodplain Soils (F19) Mesic Spodic (TA6) Red Parent Material (F21) Very Shallow Dark Surface (TF12) X Other (Explain in Remarks)	Histic Epipedon (A2)	Thin Dark Surface (S9)	Coast Prarie Redox (A16)
Depleted Matrix (F3) Polyvalue Below Surface (S8) Thin Dark Surface (S9) Piron-Manganese Masses (F12) Piedmont Floodplain Soils (F19) Mesic Spodic (TA6) Red Parent Material (F21) Very Shallow Dark Surface (TF12) X Other (Explain in Remarks)	Black Histic (A3)	Loamy Mucky Mineral (F1)	5 cm Mucky Peat or Peat (S3)
urface (A11) Redox Dark Surface (F6) Thin Dark Surface (S9) Depleted Dark Surface (F7) Iron-Manganese Masses (F12) Redox Depressions (F8) Piedmont Floodplain Soils (F19) Mesic Spodic (TA6) Red Parent Material (F21) Very Shallow Dark Surface (TF12) X Other (Explain in Remarks)	Hydrogen Sulfide (A4)	Loamy Gleyed Matric (F2)	Dark Surface (S7)
Depleted Dark Surface (F7) Redox Depressions (F8) Piedmont Floodplain Soils (F19) Mesic Spodic (TA6) Red Parent Material (F21) Very Shallow Dark Surface (TF12) X Other (Explain in Remarks)	Stratified Layers (A5)	Depleted Matrix (F3)	Polyvalue Below Surface (S8)
Redox Depressions (F8) Piedmont Floodplain Soils (F19) Mesic Spodic (TA6) Red Parent Material (F21) Very Shallow Dark Surface (TF12) X Other (Explain in Remarks)	Depleted Below Dark Surface (A11)	Redox Dark Surface (F6)	Thin Dark Surface (S9)
Mesic Spodic (TA6) Red Parent Material (F21) Very Shallow Dark Surface (TF12) X Other (Explain in Remarks)	Thick Dark Surface (A12)	Depleted Dark Surface (F7)	Iron-Manganese Masses (F12)
Red Parent Material (F21) Very Shallow Dark Surface (TF12) X Other (Explain in Remarks)	Sandy Mucky Mineral (S1)	Redox Depressions (F8)	Piedmont Floodplain Soils (F19)
Very Shallow Dark Surface (TF12) X Other (Explain in Remarks)	Sandy Gleyed Matrix (S4)	,	Mesic Spodic (TA6)
X Other (Explain in Remarks)	Sandy Redox (S5)		Red Parent Material (F21)
· · · · · · · · · · · · · · · · · · ·	Stripped Matrix (S6)		Very Shallow Dark Surface (TF12)
	Dark Surface (S7)		X Other (Explain in Remarks)
	Restrictive Layer (if observed):		
Livelyie Ceil Dynamata Van V Na	Tyne:		Hudrig Cail Draggart 2 - Van - V - Na
			Hydric Soil Present? Yes X NO
	Depth (inches):		
	Type: Depth (inches): Remarks: Open water primary h	_	Hydric Soil Present

Project/Site: Cider Solar Project	City/County: Oakfield/Ger	nnessee Sampling Date: 7/14/2020		
Applicant/Owner: Hecate		State: NY Sampling		
Investigator(s): Andrew Sorci	Section, Township, Range:	Point:1_20200714_WL21_U		
Landform (hillslope, terrace,etc.): Shoulder	Local relief (concave, convex, r	none): <u>Convex</u> Slope (%) <u>0 - 5</u>		
Subregion (LRR or MLRA): LRR L	Lat: 43.089950 Long:7	78.253116 Datum: <u>NAD83</u>		
Soil Map Unit Name: OvB		NWI Classification: UPL		
Are climatic / hyrologic conditions on the site	e typical for this time of year? Yes X No	(if no, explain in Remarks.)		
Are Vegetation, Soil, or Hydrolog	·· ·	·		
Are Vegetation, Soil, or Hydrolog	gynaturally problematic? (if needed, exp	lain any answers in Remarks.)		
SUMMARY OF FINDINGS - Attach site m	ap showing sampling point locations, tran	sects, important features, etc.		
Hydrophytic Vegetation Present? Yes	No X Is the Sampled Area			
Hydric Soil Present? Yes	within a Wetland?	Yes No X		
· —	if was antiqual Wat			
Wetland Hydrology Present? Yes		land Site ib.		
Remarks: (Explain alternative procedures here or in a	separate report.)			
Mowed/maintained farm road				
HYDROLOGY				
Wetland Hydrology Indicators:		Secondary Indicators (minimum of two required)		
Primary Indicators (minimum of one is required:	check all that apply)	Surface Soil Cracks (B6)		
Surface Water (A1)	Water-Stained Leaves (B9)	Drainage Patterns (B10)		
High Water Table (A2)	Aquatic Fauna (B13)	Moss Trim Lines (B16)		
Saturation (A3)	Marl Deposits (B15)	Dry-Season Water Table (C2)		
Water Marks (B1)	Hydrogen Sulfide Odor (C1)	Crayfish Burrows (C8)		
Sediment Deposits (B2)	Oxidized Rhizospheres on Living Roots (C3)	Saturation Visible in Aerial Imagery (C9)		
Drift Deposits (B3)	Presence of Reduced Iron (C4)	Stunted or Stressed Plants (D1)		
Algal Mat or Crust (B4)	Recent Iron Reduction in Tilled Soils (C6)	Geomorphic Position (D2)		
Iron Deposits (B5)	Thin Muck Surface (C7)	Shallow Aquitard (D3)		
Inundation Visible on Aerial Imagery (B7)	Other (Explain in Remarks)	Microtopographic Relief (D4)		
Sparsley Vegetated Concave Surface (B8)	Caner (Explain in Nemario)	FAC-Neutral Test (D5)		
		The Heatin Test (65)		
Surface Water Present? Yes No >				
Water Table Present? Yes No>	_ ' ' 	Hydrology Present? Yes No X		
Saturation Present? Yes No	(Depth (inches)			
Describe Recorded Data (stream gauge, mo	nitoring well, aerial photos, previous inspectior	ns), if available:		
, 6 6 ,	, , , , , , , , , , , , , , , , , , , ,	,,		
Remarks:				

VEGETATION - Use scientific names of plants Sampling Point: 1_20200714_WL21_U1 Absolute Dominant Indicator **Dominance Test Worksheet:** (Plot Size: 30'radius) % Cover Species? Status **Tree Stratum Number of Dominant Species** That Are OBL, FACW, or FAC: (A) = Total Cover **Total Number of Dominant** (B) Species Across All Strata: 5 Percent of Dominant Species (A/B) That Are OBL, FACW, or FAC: 0% **Prevalence Index Worksheet:** 0 **OBL** species x 1 Absolute Dominant Indicator **FACW** species 0 (Plot Size: 15'radius) Status x 2 **Shrub Stratum** % Cover Species? 0 FAC species х3 = Total Cover FACU species 70 x 4 280 **UPL** species 10 x 5 50 Column Totals 80 (A) 330 (B) Prevalence Index = B/A = 4.12 **Hydrophytic Vegetation Indicators:** Absolute Dominant Indicator 1- Rapid Test For Hydrophytic Vegetation **Herb Stratum** (Plot Size: 5'radius) % Cover Species? Status 2- Dominance Test is > 50% Plantago lanceolata 15 Χ **FACU** 3- Prevalence Index is =< 3.0 Χ Solidago canadensis 15 **FACU** 4- Morphological Adaptations Oxalis corniculata 15 Χ **FACU** Dactylis glomerata 15 Χ **FACU** 5- Problematic Hydrophytic Vegetation Unknown species 15 Χ UNK Daucus carota 10 UPL **Definitions of Vegetation Strata: FACU** Taraxacum officinale 10 Tree- Woody plants 3 in. (7.6cm) or more in diameter at 95 = Total Cover breast height (DBH), regardless of height. Sapling/Shrub- Woody plants less than 3 in. DBH and greater than or equal to 3.28ft (1m) tall. Herb- All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28ft tall. Absolute Dominant Indicator Woody Vines- All woody vines greater than 3.28ft in (Plot Size: 30'radius) **Woody Vine Stratum** % Cover Species? Status height. = Total Cover Hydrophytic Vegetation Present? Yes ____ No __X Remarks: (Include photo numbers here or on a separate sheet.) unknown sedge; unidentifiable due to recent mowing.

SOIL Sampling Point: 1_20200714_WL21_U1

Depth Matrix				Redo	x Featur					
(inches	Color	%	Color	%	Type	Loc	Texture	Remarks		
0-10	10R 4/1	50	2.5YR 5/4	50	С	М	Clay			
10-16	10YR 4/4	100					Clay			
							•			
Hydric Sc	oil Indicators:							Indicators for Problematic Soils:		
•	tosol (A1)				Polvvalu	e Below S	urface (B15)	2 cm Muck (A10)		
	tic Epipedon ((A2)			-	k Surface		Coast Prarie Redox (A16)		
Black Histic (A3)						1ucky Min		5 cm Mucky Peat or Peat (S3)		
Hyd	drogen Sulfide	e (A4)			Loamy G	leyed Ma	tric (F2)	Dark Surface (S7)		
Stra	atified Layers	(A5)			Depleted	d Matrix (I	- 3)	Polyvalue Below Surface (S8)		
Dep	oleted Below	Dark Su	rface (A11)		Redox D	ark Surfac	e (F6)	Thin Dark Surface (S9)		
Thi	ck Dark Surfac	ce (A12)			Depleted	d Dark Sur	face (F7)	Iron-Manganese Masses (F12)		
San	ndy Mucky Mi	neral (S	1)	Redox Depressions (F8)				Piedmont Floodplain Soils (F19)		
San	ndy Gleyed Ma	atrix (S4)					Mesic Spodic (TA6)		
San	ndy Redox (S5)						Red Parent Material (F21)		
Stri	pped Matrix ((S6)						Very Shallow Dark Surface (TF12)		
Dar	k Surface (S7))						Other (Explain in Remarks)		
Restrictiv	ve Layer (if obs	erved):								
		Type:					Llvdr	ic Soil Present? Yes No X		
Depth (inches):							nyui	ic Soil Present? Yes No X		
	2 op (_								
Remarks	 s:									

Project/Site: Cider Solar Project	City/Co	ounty: Oakfield/Gen	nessee	Sampling Date: <u>7/15/2020</u>			
Applicant/Owner: Hecate State: NY Sampling Point:							
Investigator(s): Andrew Sorci Section, Township, Range: 1_20200715_WL22_W1 Landform (hillslope, terrace,etc.): Depression Local relief (concave, convex, none): Linear Slope (%) 0 - 3							
Landform (hillslope, terrace,etc.): Depression	n Local relie	ef (concave, convex, n	ione): <u>Linear</u>	Slope (%) <u>0 - 3</u>			
Subregion (LRR or MLRA): LRR L	Lat: 43.087922	2 Long: -78	3.239581	Datum: NAD83			
Soil Map Unit Name: Wy	NWI Classif	cation: PFO					
Are climatic / hyrologic conditions on the site typical for this time of year? Yes X No (if no, explain in Remarks.)							
Are Vegetation, Soil, or Hydrology	significantly distur	bed? Are "Normal (Circumstances"	present? Yes X No			
Are Vegetation, Soil, or Hydrology	naturally problem	atic? (if needed, expl	lain any answers	in Remarks.)			
SUMMARY OF FINDINGS - Attach site ma	p showing sampling po	oint locations, tran	sects, import	ant features, etc.			
Hydrophytic Vegetation Present? Yes X	No	Is the Sampled Area	<u> </u>				
Hydric Soil Present? Yes X	No No	within a Wetland?	Υ	es X No			
Wetland Hydrology Present? Yes X	No No	if yes, optional Wetl	and Site ID:	WL22			
Remarks: (Explain alternative procedures here or in a se	eparate report.)						
Stream riparian wetland							
HYDROLOGY							
Wetland Hydrology Indicators:			Secondary Indic	ators (minimum of two required)			
Primary Indicators (minimum of one is required: c	check all that apply)			il Cracks (B6)			
X Surface Water (A1)	Water-Stained Leaves	; (B9)	X Drainage Patterns (B10)				
X High Water Table (A2)	Aquatic Fauna (B13)	. ()	X Moss Trim				
X Saturation (A3)	Marl Deposits (B15)			n Water Table (C2)			
Water Marks (B1)	Hydrogen Sulfide Odd	or (C1)		urrows (C8)			
Sediment Deposits (B2)	Oxidized Rhizosphere			Visible in Aerial Imagery (C9)			
Drift Deposits (B3)	Presence of Reduced			Stressed Plants (D1)			
Algal Mat or Crust (B4)	Recent Iron Reduction	` ,		nic Position (D2)			
Iron Deposits (B5)	Thin Muck Surface (C	7)		quitard (D3)			
Inundation Visible on Aerial Imagery (B7)	Other (Explain in Rem	arks)	Microtopo	ographic Relief (D4)			
Sparsley Vegetated Concave Surface (B8)			FAC-Neutr	al Test (D5)			
Surface Water Present? Yes X No	Depth (inches) 5	_					
Water Table Present? Yes X No	Depth (inches) 0	Wetland H	lydrology Prese	nt? Yes X No			
Saturation Present? Yes X No	Depth (inches) 0	_					
Describe Recorded Data (stream gauge, moni	itoring well aerial nhotos	nrevious inspection	s) if available				
Describe Necoraea Data (sa cam gaage, mon	itoring wen, derial priotos	, previous inspection	o,, ii available.				
Remarks:							

VEGETATION - Use scientific names of plants Sampling Point: 1_20200715_WL22_W1 Absolute Dominant Indicator **Dominance Test Worksheet:** (Plot Size: 30'radius) % Cover Species? Status **Tree Stratum Number of Dominant Species** Populus deltoides 50 Х FAC That Are OBL, FACW, or FAC: 5 (A) Salix nigra 25 Χ OBL **Total Number of Dominant** = Total Cover 75 (B) Species Across All Strata: 5 Percent of Dominant Species (A/B) That Are OBL, FACW, or FAC: 100% **Prevalence Index Worksheet:** 25 x 1 25 **OBL** species Absolute Dominant Indicator **FACW** species 40 80 (Plot Size: 15'radius) % Cover Species? x 2 **Shrub Stratum** Status **FAC** species 195 65 х3 Salix lucida 20 Χ **FACW** Cornus amomum 20 Х **FACW** 5 **FACU** species x 4 20 5 **FACU** Lonicera morrowii **UPL** species 0 x 5 0 45 = Total Cover Column Totals 135 (A) 320 (B) Prevalence Index = B/A = 2.37 **Hydrophytic Vegetation Indicators:** Absolute Dominant Indicator 1- Rapid Test For Hydrophytic Vegetation **Herb Stratum** (Plot Size: 5'radius) % Cover Species? Status X 2- Dominance Test is > 50% X 3- Prevalence Index is =< 3.0 = Total Cover 4- Morphological Adaptations 5- Problematic Hydrophytic Vegetation **Definitions of Vegetation Strata:** Tree- Woody plants 3 in. (7.6cm) or more in diameter at breast height (DBH), regardless of height. Sapling/Shrub- Woody plants less than 3 in. DBH and greater than or equal to 3.28ft (1m) tall. Herb- All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28ft tall. Absolute Dominant Indicator Woody Vines- All woody vines greater than 3.28ft in (Plot Size: 30'radius) Species? **Woody Vine Stratum** % Cover Status height. **FAC** Vitis riparia 15 Χ 15 = Total Cover Hydrophytic Vegetation

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

Present? Yes X No ____

SOIL		Sampling Point: 1_20200715_WL22_W1
Hydric Soil Indicators:		Indicators for Problematic Soils:
Histosol (A1)	Polyvalue Below Surface (B2	
Histic Epipedon (A2)	Thin Dark Surface (S9)	Coast Prarie Redox (A16)
Black Histic (A3)	Loamy Mucky Mineral (F1)	5 cm Mucky Peat or Peat (S3)
Hydrogen Sulfide (A4)	Loamy Gleyed Matric (F2)	Dark Surface (S7)
Stratified Layers (A5)	Depleted Matrix (F3)	Polyvalue Below Surface (S8)
Depleted Below Dark Surface (A11)	Redox Dark Surface (F6)	Thin Dark Surface (S9)
Thick Dark Surface (A12)	Depleted Dark Surface (F7)	
Sandy Mucky Mineral (S1)	Redox Depressions (F8)	Piedmont Floodplain Soils (F19)
Sandy Gleyed Matrix (S4)		Mesic Spodic (TA6)
Sandy Redox (S5)		Red Parent Material (F21)
Stripped Matrix (S6)		Very Shallow Dark Surface (TF12)
Dark Surface (S7)		X Other (Explain in Remarks)
Restrictive Layer (if observed):		
Type:		Hydric Soil Present? Yes X No
Depth (inches):		Tryunc son Fresent: Tes X No
——————————————————————————————————————		
Remarks:		
Nemarks.		

Project/Site: Cider Solar Project	City/Co	ounty: Oakfield/Gen	nessee	Sampling Date: <u>7/15/2020</u>	
Applicant/Owner: Hecate			State: NY	Sampling Point:	
Investigator(s): Andrew Sorci	Sectio	Section, Township, Range: 1_20200715_WL23_W1			
Landform (hillslope, terrace,etc.): Floodplain	<u>Local relie</u>	f (concave, convex, n	none): <u>Concav</u>	eSlope (%) <u>0 - 3</u>	
Subregion (LRR or MLRA): LRR L	Lat: 43.09222	5 Long: - 78	8.243456	Datum: NAD83	
Soil Map Unit Name: CaA			NWI Classif	ication: PFO	
Are climatic / hyrologic conditions on the site	typical for this time of ye	ar? Yes X No	(if no, e	explain in Remarks.)	
Are Vegetation , Soil , or Hydrolog	y significantly distur	bed? Are "Normal (Circumstances"	present? Yes X No	
Are Vegetation, Soil, or Hydrolog	ynaturally problema	atic? (if needed, expl	lain any answers	in Remarks.)	
SUMMARY OF FINDINGS - Attach site ma	an showing sampling no	nint locations, tran	sects import	ant features, etc.	
	K No	Is the Sampled Area			
		within a Wetland?		es X No	
	K No	if yes, optional Wetl		WL22	
,	KNo	ii yes, optional weti	and site ib.	VVLZZ	
Remarks: (Explain alternative procedures here or in a s	eparate report.)				
HYDROLOGY					
Wetland Hydrology Indicators:			Secondary India	cators (minimum of two required)	
Primary Indicators (minimum of one is required:	check all that apply)		Surface So	oil Cracks (B6)	
Surface Water (A1)	Water-Stained Leaves	(B9)	Drainage	Patterns (B10)	
High Water Table (A2)	Aquatic Fauna (B13)		X Moss Trim Lines (B16)		
Saturation (A3)	Marl Deposits (B15)		Dry-Seaso	n Water Table (C2)	
Water Marks (B1)	Hydrogen Sulfide Odo	r (C1)	Crayfish Burrows (C8)		
Sediment Deposits (B2)	Oxidized Rhizosphere			n Visible in Aerial Imagery (C9)	
Drift Deposits (B3)	Presence of Reduced			r Stressed Plants (D1)	
Algal Mat or Crust (B4)	Recent Iron Reduction			hic Position (D2)	
Iron Deposits (B5)	Thin Muck Surface (C	` ,		quitard (D3)	
Inundation Visible on Aerial Imagery (B7)	Other (Explain in Rem			ographic Relief (D4)	
	Other (Explain in Kein	ai KS)			
Sparsley Vegetated Concave Surface (B8)			X FAC-Neut	al lest (D5)	
Surface Water Present? Yes NoX	Depth (inches)	_			
Water Table Present? Yes No X	Depth (inches)	Wetland H	lydrology Prese	ent? Yes X No	
Saturation Present? Yes No X	Depth (inches)	_			
Describe Recorded Data (stream gauge, mor	itoring well, aerial photos	. previous inspection	s). if available:		
(3 3 /	0 / 1	, ,	,,		
Remarks:					

VEGETATION - Use scientific names of plants Sampling Point: 1_20200715_WL23_W1 Absolute Dominant Indicator **Dominance Test Worksheet:** (Plot Size: 30'radius) % Cover Species? Status **Tree Stratum Number of Dominant Species** OBL That Are OBL, FACW, or FAC: (A) Salix nigra 75 Fraxinus pennsylvanica 15 **FACW Total Number of Dominant** 90 = Total Cover (B) Species Across All Strata: 5 Percent of Dominant Species (A/B) That Are OBL, FACW, or FAC: 80% **Prevalence Index Worksheet:** x 1 85 **OBL** species 85 Absolute Dominant Indicator **FACW** species 40 80 (Plot Size: 15'radius) % Cover Species? x 2 **Shrub Stratum** Status FAC species 42 14 х3 Rhamnus cathartica 10 Χ **FAC** Lonicera morrowii 10 Χ **FACU FACU** species 10 x 4 40 20 = Total Cover **UPL** species 0 x 5 0 Column Totals 149 (A) 247 (B) Prevalence Index = B/A = 1.66 **Hydrophytic Vegetation Indicators:** Absolute Dominant Indicator 1- Rapid Test For Hydrophytic Vegetation **Herb Stratum** (Plot Size: 5'radius) % Cover Species? Status X 2- Dominance Test is > 50% 25 Impatiens pallida **FACW** X 3- Prevalence Index is =< 3.0 OBL Boehmeria cylindrica 10 Χ 4- Morphological Adaptations Ranunculus hispidus 4 **FAC** = Total Cover 39 5- Problematic Hydrophytic Vegetation **Definitions of Vegetation Strata:** Tree- Woody plants 3 in. (7.6cm) or more in diameter at breast height (DBH), regardless of height. Sapling/Shrub- Woody plants less than 3 in. DBH and greater than or equal to 3.28ft (1m) tall. Herb- All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28ft tall. Absolute Dominant Indicator Woody Vines- All woody vines greater than 3.28ft in (Plot Size: 30'radius) **Woody Vine Stratum** % Cover Species? Status height. = Total Cover Hydrophytic Vegetation Present? Yes X No ____

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

SOIL Sampling Point: 1_20200715_WL23_W1

JOIL							Jamping 1 Ont. 1_20200713_WL23_W1			
Depth Matrix				Redo	ox Featu	res				
(inches	Color	%	Color	%	Type	Loc	Texture	Remarks		
0-7	10YR 3/1	100					Silty Clay Loam			
7-15	10YR 4/1	95	10YR 4/4	5	С	М	Clay Loam			
-	oil Indicators:					5.1.6	. ((245)	Indicators for Problematic Soils:		
	tosol (A1)	(A 2)					Surface (B15)	2 cm Muck (A10)		
	tic Epipedon ((A2)				k Surface	•	Coast Prarie Redox (A16)		
	ck Histic (A3)	. (^ 4 \				-	neral (F1)	5 cm Mucky Peat or Peat (S3) Dark Surface (S7)		
	drogen Sulfide atified Layers					Gleyed Ma d Matrix (Polyvalue Below Surface (S8)		
	pleted Below	-	rface (A11)			ark Surfa	•	Thin Dark Surface (S9)		
	ck Dark Surfac				•		rface (F7)	Iron-Manganese Masses (F12)		
	ndy Mucky Mi					epressior		Piedmont Floodplain Soils (F19)		
	ndy Gleyed Ma				Nedox B	CP1 C33101	13 (1 0)	Mesic Spodic (TA6)		
	ndy Redox (S5	-	,					Red Parent Material (F21)		
	ipped Matrix (Very Shallow Dark Surface (TF12)		
	rk Surface (S7)							Other (Explain in Remarks)		
Restrictiv	ve Layer (if obs	erved):								
		Type:	Rock				Hydric	Soil Present? Yes X No		
	Depth (ir	_					Trydric	3011 Tesent. Tes <u>X</u> 110		
Remark	s:									

Project/Site: Cider Solar Project	City/County: Oakfield/Gen	nessee Sampling Date: 7/15/2020		
Applicant/Owner: Hecate		State: <u>NY</u> Sampling		
Investigator(s): Andrew Sorci	Section, Township, Range:	Point:1_20200715_WL22_U		
Landform (hillslope, terrace, etc.): Shoulde	r Local relief (concave, convex, r	none): <u>Convex</u> Slope (%) <u>5 - 10</u>		
Subregion (LRR or MLRA): LRR L	Lat: <u>43.092365</u> Long: <u>-7</u>	78.243538 Datum: NAD83		
Soil Map Unit Name: Wy		NWI Classification: UPL		
Are climatic / hyrologic conditions on the sit				
Are Vegetation X , Soil X , or Hydrolo				
Are Vegetation, Soil, or Hydrolo	pgynaturally problematic? (if needed, exp	lain any answers in Remarks.)		
SLIMMARY OF FINDINGS - Attach site m	nap showing sampling point locations, tran	sects important features etc		
_	within a Wetland?			
Hydric Soil Present? Yes	NOX	Yes No X		
Wetland Hydrology Present? Yes	No X if yes, optional Wetl	and Site ID:		
Remarks: (Explain alternative procedures here or in a				
Edge of agricultural field, recently tille	d			
HYDROLOGY				
Wetland Hydrology Indicators:		Secondary Indicators (minimum of two required)		
Primary Indicators (minimum of one is required	i: check all that apply)	Surface Soil Cracks (B6)		
Surface Water (A1)	Water-Stained Leaves (B9)	Drainage Patterns (B10)		
High Water Table (A2)	Aquatic Fauna (B13)	Moss Trim Lines (B16)		
Saturation (A3)	Marl Deposits (B15)	Dry-Season Water Table (C2)		
Water Marks (B1)	Hydrogen Sulfide Odor (C1)	Crayfish Burrows (C8)		
Sediment Deposits (B2)	Oxidized Rhizospheres on Living Roots (C3)	Saturation Visible in Aerial Imagery (C9)		
Drift Deposits (B3)	Presence of Reduced Iron (C4)	Stunted or Stressed Plants (D1)		
Algal Mat or Crust (B4)	Recent Iron Reduction in Tilled Soils (C6)	Geomorphic Position (D2)		
Iron Deposits (B5)	Thin Muck Surface (C7)	Shallow Aquitard (D3)		
Inundation Visible on Aerial Imagery (B7)		Microtopographic Relief (D4)		
Sparsley Vegetated Concave Surface (B8)	Other (Explain in Remarks)	FAC-Neutral Test (D5)		
		FAC-Neutral Test (D5)		
Surface Water Present? Yes No	<u> </u>			
Water Table Present? Yes No	X Depth (inches) Wetland H	Hydrology Present? Yes No X		
Saturation Present? Yes No	X Depth (inches)			
Describe Recorded Data (stream gauge mo	onitoring well, aerial photos, previous inspection	s) if available:		
Describe Recorded Data (stream gauge, me	mitoring well, derial photos, previous inspection	si, ii available.		
Remarks:				

VEGETATION - Use scientific names of plants Sampling Point: 1_20200715_WL22_U1 Absolute Dominant Indicator **Dominance Test Worksheet:** (Plot Size: 30'radius) % Cover Species? Status **Tree Stratum Number of Dominant Species** That Are OBL, FACW, or FAC: (A) = Total Cover **Total Number of Dominant** Species Across All Strata: (B) 6 Percent of Dominant Species That Are OBL, FACW, or FAC: 16.7% (A/B) **Prevalence Index Worksheet:** 0 **OBL** species x 1 Absolute Dominant Indicator **FACW** species 0 0 (Plot Size: 15'radius) % Cover Species? Status x 2 **Shrub Stratum** FAC species 5 FACU х3 15 10 Χ Lonicera morrowii Cornus racemosa 5 Χ FAC **FACU** species 20 x 4 80 15 = Total Cover **UPL** species 10 x 5 50 Column Totals 35 (A) 145 (B) Prevalence Index = B/A = 4.14 **Hydrophytic Vegetation Indicators:** Absolute Dominant Indicator 1- Rapid Test For Hydrophytic Vegetation **Herb Stratum** (Plot Size: 5'radius) % Cover Species? Status 2- Dominance Test is > 50% 5 UPL Bromus inermis 3- Prevalence Index is =< 3.0 Х Daucus carota UPL 4- Morphological Adaptations 5 **FACU** Erigeron annuus Χ 5 Χ **FACU** Poa compressa 5- Problematic Hydrophytic Vegetation 20 = Total Cover **Definitions of Vegetation Strata:** Tree- Woody plants 3 in. (7.6cm) or more in diameter at breast height (DBH), regardless of height. Sapling/Shrub- Woody plants less than 3 in. DBH and greater than or equal to 3.28ft (1m) tall. Herb- All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28ft tall. Absolute Dominant Indicator Woody Vines- All woody vines greater than 3.28ft in (Plot Size: 30'radius) **Woody Vine Stratum** % Cover Species? Status height. = Total Cover Hydrophytic Vegetation Present? Yes _____ No __X Remarks: (Include photo numbers here or on a separate sheet.)

SOIL Sampling Point: 1_20200715_WL22_U1

JOIL								Jamping 1 ont. 1_20200/13_WL22_01		
Depth	Matrix	(Redo	x Featu	res			
(inches	Color	%	Color	%	Type	Loc	Texture	Remarks		
0-10	10YR 3/2	100					Sandy Loam			
10-18	10YR 4/3	99	10YR 3/6	1	С	М	Sandy Loam			
							•			
-	oil Indicators:					5.1	C (/D45)	Indicators for Problematic Soils:		
	tosol (A1)	(42)					Surface (B15)	2 cm Muck (A10)		
	tic Epipedon (k Surface		Coast Prarie Redox (A16)		
Black Histic (A3)						ileyed Ma	neral (F1)	5 cm Mucky Peat or Peat (S3)		
Hydrogen Sulfide (A4)						d Matrix (Dark Surface (S7) Polyvalue Below Surface (S8)		
Stratified Layers (A5) Depleted Below Dark Surface (A11)						ark Surfa		Thin Dark Surface (S9)		
Depleted Below Dark Surface (A11) Thick Dark Surface (A12)							rface (F7)	Iron-Manganese Masses (F12)		
Sandy Mucky Mineral (S1)						epression		Piedmont Floodplain Soils (F19)		
Sandy Mucky Milleral (S1) Sandy Gleyed Matrix (S4)						ор. соо.с.	()	Mesic Spodic (TA6)		
	ndy Redox (S5	-	,					Red Parent Material (F21)		
	ipped Matrix (Very Shallow Dark Surface (TF12)		
	rk Surface (S7)							Other (Explain in Remarks)		
Restricti	ve Layer (if obs	erved):								
		Type:					Hvdrid	: Soil Present? Yes No X		
	Depth (ir	nches):					,			
		_								
Remark	S:									

Project/Site: Cider Solar Project	City/County: Oakfield/Ger	nnessee Sampling Date: 7/15/2020		
Applicant/Owner: Hecate		State: NY Sampling		
Investigator(s): Andrew Sorci	Section, Township, Range:	Point:1_20200715_WL23_U		
Landform (hillslope, terrace,etc.): Terrace	Local relief (concave, convex, r	none): <u>None</u> Slope (%) <u>0 - 2</u>		
Subregion (LRR or MLRA): LRR L	Lat: 43.087956 Long: -7	78.239522 Datum: NAD83		
Soil Map Unit Name: Wy		NWI Classification: UPL		
Are climatic / hyrologic conditions on the site \ensuremath{t}	typical for this time of year? Yes X No	(if no, explain in Remarks.)		
Are Vegetation, Soil, or Hydrology	significantly disturbed? Are "Normal	Circumstances" present? Yes X No		
Are Vegetation, Soil, or Hydrology	naturally problematic? (if needed, exp	lain any answers in Remarks.)		
SUMMARY OF FINDINGS - Attach site maj	showing sampling point locations, tran	sects, important features, etc.		
Hydrophytic Vegetation Present? Yes	No X Is the Sampled Area	1		
Hydric Soil Present? Yes	No X within a Wetland?	Yes No X		
Wetland Hydrology Present? Yes	No X if yes, optional Wet	land Site ID:		
Remarks: (Explain alternative procedures here or in a se	parate report.)			
HYDROLOGY				
Wetland Hydrology Indicators:		Secondary Indicators (minimum of two required)		
Primary Indicators (minimum of one is required: cl	neck all that apply)	Surface Soil Cracks (B6)		
Surface Water (A1)	Water-Stained Leaves (B9)	Drainage Patterns (B10)		
High Water Table (A2)	Aquatic Fauna (B13)	Moss Trim Lines (B16)		
Saturation (A3)	Marl Deposits (B15)	Dry-Season Water Table (C2)		
Water Marks (B1)	Hydrogen Sulfide Odor (C1)	Crayfish Burrows (C8)		
Sediment Deposits (B2)	Oxidized Rhizospheres on Living Roots (C3)	Saturation Visible in Aerial Imagery (C9)		
Drift Deposits (B3)	Presence of Reduced Iron (C4)	Stunted or Stressed Plants (D1)		
Algal Mat or Crust (B4)	Recent Iron Reduction in Tilled Soils (C6)	Geomorphic Position (D2)		
Iron Deposits (B5)	Thin Muck Surface (C7)	Shallow Aquitard (D3)		
Inundation Visible on Aerial Imagery (B7)	Other (Explain in Remarks)	Microtopographic Relief (D4)		
Sparsley Vegetated Concave Surface (B8)		FAC-Neutral Test (D5)		
Surface Water Present? Yes No X	Depth (inches)			
Water Table Present? Yes No X	Depth (inches) Wetland F	Hydrology Present? Yes No X		
Saturation Present? Yes No X	Depth (inches)			
Describe Recorded Data (stream gauge, monit	toring well, aerial photos, previous inspection	ns), if available:		
Remarks:				

VEGETATION - Use scientific names of plants Sampling Point: 1_20200715_WL23_U1 Absolute Dominant Indicator **Dominance Test Worksheet:** (Plot Size: 30'radius) % Cover Species? Status **Tree Stratum Number of Dominant Species** Χ UPL That Are OBL, FACW, or FAC: 2 (A) Picea abies 85 Prunus serotina 15 FACU **Total Number of Dominant** 100 = Total Cover (B) Species Across All Strata: 4 Percent of Dominant Species 50% (A/B) That Are OBL, FACW, or FAC: **Prevalence Index Worksheet:** 0 x 1 **OBL** species Absolute Dominant Indicator **FACW** species 5 x 2 10 (Plot Size: 15'radius) % Cover Species? Status **Shrub Stratum** FAC species 5 Populus deltoides х3 15 **FAC** Χ Fraxinus pennsylvanica 5 Χ **FACW FACU** species 30 x 4 120 10 = Total Cover **UPL** species 85 x 5 425 Column Totals 125 (A) 570 (B) Prevalence Index = B/A = 4.56 **Hydrophytic Vegetation Indicators:** Absolute Dominant Indicator 1- Rapid Test For Hydrophytic Vegetation **Herb Stratum** (Plot Size: 5'radius) % Cover Species? Status 2- Dominance Test is > 50% **FACU** Lonicera morrowii 15 Χ 3- Prevalence Index is =< 3.0 15 = Total Cover 4- Morphological Adaptations 5- Problematic Hydrophytic Vegetation **Definitions of Vegetation Strata:** Tree- Woody plants 3 in. (7.6cm) or more in diameter at breast height (DBH), regardless of height. Sapling/Shrub- Woody plants less than 3 in. DBH and greater than or equal to 3.28ft (1m) tall. Herb- All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28ft tall. Absolute Dominant Indicator Woody Vines- All woody vines greater than 3.28ft in (Plot Size: 30'radius) Status **Woody Vine Stratum** % Cover Species? height. = Total Cover Hydrophytic Vegetation Present? Yes _____ No __X Remarks: (Include photo numbers here or on a separate sheet.)

SOIL Sampling Point: 1_20200715_WL23_U1 Depth Matrix **Redox Features** (inches % Color Color % Type Texture Remarks Loc 0-18 10YR 4/3 100 Loamy Sand **Hydric Soil Indicators:** Indicators for Problematic Soils: Histosol (A1) Polyvalue Below Surface (B15) 2 cm Muck (A10) Histic Epipedon (A2) Thin Dark Surface (S9) Coast Prarie Redox (A16) Black Histic (A3) Loamy Mucky Mineral (F1) 5 cm Mucky Peat or Peat (S3) Hydrogen Sulfide (A4) Loamy Gleyed Matric (F2) Dark Surface (S7) Stratified Layers (A5) Depleted Matrix (F3) Polyvalue Below Surface (S8) Depleted Below Dark Surface (A11) Redox Dark Surface (F6) Thin Dark Surface (S9) Thick Dark Surface (A12) Depleted Dark Surface (F7) Iron-Manganese Masses (F12) Sandy Mucky Mineral (S1) Redox Depressions (F8) Piedmont Floodplain Soils (F19) Sandy Gleyed Matrix (S4) Mesic Spodic (TA6) Sandy Redox (S5) Red Parent Material (F21) Stripped Matrix (S6) Very Shallow Dark Surface (TF12) Dark Surface (S7) Other (Explain in Remarks) Restrictive Layer (if observed): Type: Hydric Soil Present? Yes No Χ Depth (inches): Remarks:

Project/Site: Cider Solar Project	City/County: Oakfield/Ger	nnesee Sampling Date: 10/8/2020					
Applicant/Owner: Hecate	licant/Owner: Hecate						
Investigator(s): Andrew Sorci	Section, Township, Range:	1_20201008_WL23_W1					
Landform (hillslope, terrace,etc.): Depression	Local relief (concave, convex,	none): <u>Concave</u> Slope (%) <u>2 - 4</u>					
Subregion (LRR or MLRA): LRR L	Lat: <u>43.096690</u> Long: <u>-</u>	78.234159 Datum: <u>NAD83</u>					
Soil Map Unit Name: CaA		NWI Classification: PFO					
Are climatic / hyrologic conditions on the site t	cypical for this time of year? Yes X No	(if no, explain in Remarks.)					
Are Vegetation, Soil, or Hydrology	significantly disturbed? Are "Normal	Circumstances" present? Yes X No					
Are Vegetation, Soil, or Hydrology	naturally problematic? (if needed, exp	plain any answers in Remarks.)					
SUMMARY OF FINDINGS - Attach site map	showing sampling point locations, trar	nsects, important features, etc.					
Hydrophytic Vegetation Present? Yes X	No Is the Sampled Are	a					
Hydric Soil Present? Yes X	No within a Wetland?	Yes X No					
Wetland Hydrology Present? Yes X		land Site ID: WL23					
Remarks: (Explain alternative procedures here or in a se							
HYDROLOGY							
Wetland Hydrology Indicators:		Secondary Indicators (minimum of two required)					
Primary Indicators (minimum of one is required: cl	heck all that apply)	Surface Soil Cracks (B6)					
Surface Water (A1)	Water-Stained Leaves (B9)	Drainage Patterns (B10)					
High Water Table (A2)	Aquatic Fauna (B13)	Moss Trim Lines (B16)					
Saturation (A3)	Marl Deposits (B15)	Dry-Season Water Table (C2)					
Water Marks (B1)	Hydrogen Sulfide Odor (C1)	Crayfish Burrows (C8)					
Sediment Deposits (B2)	Oxidized Rhizospheres on Living Roots (C3)	X Saturation Visible in Aerial Imagery (C9)					
Drift Deposits (B3)	Presence of Reduced Iron (C4)	Stunted or Stressed Plants (D1)					
Algal Mat or Crust (B4)	Recent Iron Reduction in Tilled Soils (C6)	X Geomorphic Position (D2)					
Iron Deposits (B5)	Thin Muck Surface (C7)	Shallow Aquitard (D3)					
Inundation Visible on Aerial Imagery (B7)	Other (Explain in Remarks)	Microtopographic Relief (D4)					
Sparsley Vegetated Concave Surface (B8)		X FAC-Neutral Test (D5)					
Surface Water Present? Yes No X	Depth (inches)	<u> </u>					
Water Table Present? Yes No X	- · · · · 	Hydrology Present? Yes X No					
Saturation Present? Yes No X	Depth (inches)	., wising, reseme 165 <u>x</u> 165					
Describe Recorded Data (stream gauge, monit	toring well, aerial photos, previous inspection	ns), if available:					
,							
Remarks:							

VEGETATION - Use scientific names of plants Sampling Point: 1_20201008_WL23_W1 Absolute Dominant Indicator **Dominance Test Worksheet:** (Plot Size: 30'radius) % Cover Species? Status **Tree Stratum Number of Dominant Species** Populus deltoides 40 Χ FAC That Are OBL, FACW, or FAC: 6 (A) Fraxinus pennsylvanica 20 Х **FACW Total Number of Dominant** = Total Cover 60 (B) Species Across All Strata: 6 Percent of Dominant Species (A/B) That Are OBL, FACW, or FAC: 100% **Prevalence Index Worksheet:** x 1 15 **OBL** species 15 Absolute Dominant Indicator (Plot Size: 15'radius) **FACW** species 65 130 % Cover Species? Status x 2 **Shrub Stratum** FAC species 70 210 OBL х3 Salix nigra Х 15 Cornus amomum 15 Χ **FACW FACU** species 0 x 4 0 30 = Total Cover **UPL** species 0 x 5 0 Column Totals 150 (A) 355 (B) Prevalence Index = B/A = 2.37 **Hydrophytic Vegetation Indicators:** Absolute Dominant Indicator 1- Rapid Test For Hydrophytic Vegetation **Herb Stratum** (Plot Size: 5'radius) % Cover Species? Status X 2- Dominance Test is > 50% 30 Euthamia graminifolia Χ FAC X 3- Prevalence Index is =< 3.0 20 Χ Symphyotrichum lanceolatum **FACW** 4- Morphological Adaptations 10 **FACW** Agrostis gigantea 60 = Total Cover 5- Problematic Hydrophytic Vegetation **Definitions of Vegetation Strata:** Tree- Woody plants 3 in. (7.6cm) or more in diameter at breast height (DBH), regardless of height. Sapling/Shrub- Woody plants less than 3 in. DBH and greater than or equal to 3.28ft (1m) tall. Herb- All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28ft tall.

Absolute Dominant Indicator

Species?

= Total Cover

Status

height.

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

Woody Vine Stratum

(Plot Size: 30'radius)

% Cover

Woody Vines- All woody vines greater than 3.28ft in

Present? Yes X No ___

Hydrophytic Vegetation SOIL Sampling Point: 1_20201008_WL23_W1

0-7 10YR 3/2 98 10YR 4/4 2 C M Sandy Loam	Depth	Matrix				Redo	ox Featui	res	
	(inches	Color	%	Color	%	Type	Loc	Texture	Remarks
	0-7	10YR 3/2	98	10YR 4/4	2	С	М	Sandy Loam	
7-16 10YR 4/2 90 10YR 4/6 10 C M Sandy Loam	7-16	10YR 4/2	90	10YR 4/6	10	С	М	Sandy Loam	

Hydric Soil Indicators:		Indicators for Problematic Soils:
Histosol (A1)	Polyvalue Below Surface (B15)	2 cm Muck (A10)
Histic Epipedon (A2)	Thin Dark Surface (S9)	Coast Prarie Redox (A16)
Black Histic (A3)	Loamy Mucky Mineral (F1)	5 cm Mucky Peat or Peat (S3)
Hydrogen Sulfide (A4)	Loamy Gleyed Matric (F2)	Dark Surface (S7)
Stratified Layers (A5)	X Depleted Matrix (F3)	Polyvalue Below Surface (S8)
Depleted Below Dark Surface (A11)	Redox Dark Surface (F6)	Thin Dark Surface (S9)
Thick Dark Surface (A12)	Depleted Dark Surface (F7)	Iron-Manganese Masses (F12)
Sandy Mucky Mineral (S1)	Redox Depressions (F8)	Piedmont Floodplain Soils (F19)
Sandy Gleyed Matrix (S4)		Mesic Spodic (TA6)
Sandy Redox (S5)		Red Parent Material (F21)
Stripped Matrix (S6)		Very Shallow Dark Surface (TF12)
Dark Surface (S7)		Other (Explain in Remarks)
Restrictive Layer (if observed):		
Type:		
Type:	Hyd	dric Soil Present? Yes X No
Depth (inches):		

Remarks:

Project/Site: Cider Solar Project	City/County: Elba/Genese	e Sampling Date: 10/08/2020
Applicant/Owner: Hecate		State: NY Sampling Point:Upland-WL2
Investigator(s): Andrew Sorci		
Landform (hillslope, terrace,etc.): Toeslope	Local relief (concave, convex, ı	none): <u>Linear</u> Slope (%) <u>1 - 5</u>
Subregion (LRR or MLRA): LRR L	Lat: 43.096799 Long: <u>-</u> 7	8.23409 Datum: NAD83
Soil Map Unit Name: Ma		NWI Classification: UPL
Are climatic / hyrologic conditions on the site $% \left(1\right) =\left(1\right) \left(1\right$	typical for this time of year? Yes X No	(if no, explain in Remarks.)
Are Vegetation, Soil, or Hydrology	significantly disturbed? Are "Normal	Circumstances" present? Yes X No
Are Vegetation, Soil, or Hydrology	naturally problematic? (if needed, exp	olain any answers in Remarks.)
SUMMARY OF FINDINGS - Attach site ma	p showing sampling point locations, trar	nsects, important features, etc.
Hydrophytic Vegetation Present? Yes	No X Is the Sampled Area	
Hydric Soil Present? Yes	No X within a Wetland?	Yes No X
Wetland Hydrology Present? Yes	No X if yes, optional Wet	land Site ID:
Remarks: (Explain alternative procedures here or in a se		
HYDROLOGY		
Wetland Hydrology Indicators:		Secondary Indicators (minimum of two required)
Primary Indicators (minimum of one is required: o	check all that apply)	Surface Soil Cracks (B6)
Surface Water (A1)	Water-Stained Leaves (B9)	Drainage Patterns (B10)
High Water Table (A2)	Aquatic Fauna (B13)	Moss Trim Lines (B16)
Saturation (A3)	Marl Deposits (B15)	Dry-Season Water Table (C2)
Water Marks (B1)	Hydrogen Sulfide Odor (C1)	Crayfish Burrows (C8)
Sediment Deposits (B2)	Oxidized Rhizospheres on Living Roots (C3)	Saturation Visible in Aerial Imagery (C9)
Drift Deposits (B3)	Presence of Reduced Iron (C4)	Stunted or Stressed Plants (D1)
Algal Mat or Crust (B4)	Recent Iron Reduction in Tilled Soils (C6)	Geomorphic Position (D2)
Iron Deposits (B5)	Thin Muck Surface (C7)	Shallow Aquitard (D3)
Inundation Visible on Aerial Imagery (B7)	Other (Explain in Remarks)	Microtopographic Relief (D4)
Sparsley Vegetated Concave Surface (B8)		FAC-Neutral Test (D5)
Surface Water Present? Yes No X	Depth (inches)	
Water Table Present? Yes No X	Depth (inches) Wetland I	Hydrology Present? Yes No X
Saturation Present? Yes No X	Depth (inches)	
Describe Recorded Data (stream gauge, mon	itoring well, aerial photos, previous inspection	ns), if available:
Remarks:		

VEGETATION - Use scientific names of plants Sampling Point: Upland-WL23 Absolute Dominant Indicator **Dominance Test Worksheet:** (Plot Size: 30'radius) % Cover Species? Status **Tree Stratum Number of Dominant Species** That Are OBL, FACW, or FAC: (A) = Total Cover **Total Number of Dominant** (B) Species Across All Strata: 2 Percent of Dominant Species (A/B) That Are OBL, FACW, or FAC: 0% **Prevalence Index Worksheet:** x 1 0 **OBL** species Absolute Dominant Indicator **FACW** species 10 20 (Plot Size: 15'radius) % Cover Status x 2 **Shrub Stratum** Species? FAC species 0 х3 = Total Cover FACU species 80 x 4 320 **UPL** species 0 x 5 0 Column Totals 90 (A) 340 (B) Prevalence Index = B/A = 3.78 **Hydrophytic Vegetation Indicators:** Absolute Dominant Indicator 1- Rapid Test For Hydrophytic Vegetation **Herb Stratum** (Plot Size: 5'radius) % Cover Species? Status 2- Dominance Test is > 50% 30 **FACU** Ambrosia artemisiifolia 3- Prevalence Index is =< 3.0 25 Χ Alliaria petiolata **FACU** 4- Morphological Adaptations Plantago lanceolata 15 **FACU** Medicago lupulina 10 **FACU** 5- Problematic Hydrophytic Vegetation Bidens frondosa 10 **FACW** 90 = Total Cover **Definitions of Vegetation Strata:** Tree- Woody plants 3 in. (7.6cm) or more in diameter at breast height (DBH), regardless of height. Sapling/Shrub- Woody plants less than 3 in. DBH and greater than or equal to 3.28ft (1m) tall. Herb- All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28ft tall. Absolute Dominant Indicator Woody Vines- All woody vines greater than 3.28ft in (Plot Size: 30'radius) **Woody Vine Stratum** % Cover Species? Status height. = Total Cover Hydrophytic Vegetation Present? Yes _____ No __X Remarks: (Include photo numbers here or on a separate sheet.)

OIL						Sampling Point: Upland-WL23		
Depth _	Matrix	_	Calan	0/		x Feature		
inches	Color	%	Color	%	Туре	Loc	Texture	Remarks
0-12	10YR 3/3	100					Silt Loam	
12-18	10YR 6/3	100					Silt Loam	
18-24	10YR 7/2	90	7.5YR 5/8	10	С	PL	Silt Loam	
Hvdric So	il Indicators:							Indicators for Problematic Soils:
-	osol (A1)				Polyvalu	e Below Su	ırface (B15)	2 cm Muck (A10)
	cic Epipedon (A2)			-	k Surface (Coast Prarie Redox (A16)
Blac	ck Histic (A3)				Loamy N	lucky Mine	eral (F1)	5 cm Mucky Peat or Peat (S3)
Hyd	lrogen Sulfide	(A4)			Loamy G	ileyed Mat	ric (F2)	Dark Surface (S7)
Stratified Layers (A5) Depleted Matrix (F3				3)	Polyvalue Below Surface (S8)			
Dep	Depleted Below Dark Surface (A11) Redox Dark Surface (F6)				e (F6)	Thin Dark Surface (S9)		
Thic	ck Dark Surfac	e (A12)		Depleted Dark Surface (F7)				Iron-Manganese Masses (F12)
San	dy Mucky Mii	neral (S	1)	Redox Depressions (F8)				Piedmont Floodplain Soils (F19)
San	dy Gleyed Ma	atrix (S4	.)					Mesic Spodic (TA6)
San	dy Redox (S5))						Red Parent Material (F21)
Stri	pped Matrix (S6)						Very Shallow Dark Surface (TF12)
Dar	k Surface (S7)							Other (Explain in Remarks)
Restrictiv	re Layer (if obs	erved):						
		Type:					Hydr	ic Soil Present? Yes No X
	Depth (in	ches):						
Remarks								
Kemarks	•							

Project/Site: Cider Solar Project	City/Co	ounty: Oakfield/Geni	nessee S	Sampling Date: 7/15/2020
Applicant/Owner: Hecate	State: NY Sampling Point:			Sampling Point:
Investigator(s): Andy Smith	Section, Township, Range: 1_20200715_WL24			
Landform (hillslope, terrace,etc.): <u>Dip</u>	Local relie	ef (concave, convex, n	one): <u>Concave</u>	Slope (%) <u>2 - 5</u>
Subregion (LRR or MLRA): LRR L	Lat: 43.092619	Long:-78.	23802	Datum: NAD83
Soil Map Unit Name: OvA			NWI Classific	cation: PFO
Are climatic / hyrologic conditions on the site	typical for this time of ye	ar? Yes X No	(if no, ex	plain in Remarks.)
Are Vegetation, Soil, or Hydrology	significantly distur	bed? Are "Normal C	ircumstances" ¡	oresent? Yes X No
Are Vegetation, Soil, or Hydrology	naturally problema	atic? (if needed, expl	ain any answers i	n Remarks.)
SUMMARY OF FINDINGS - Attach site ma	n showing sampling po	oint locations, trans	sects, importa	nt features, etc.
Hydrophytic Vegetation Present? Yes X		Is the Sampled Area		
Hydric Soil Present? Yes X		within a Wetland?	Ye	s X No
		if yes, optional Wetla		WL24
Wetland Hydrology Present? Yes X		n yes, optional wette		
Remarks: (Explain alternative procedures here or in a se	parate report.)			
HYDROLOGY				
Wetland Hydrology Indicators:				tors (minimum of two required)
Primary Indicators (minimum of one is required: c				l Cracks (B6)
Surface Water (A1)	Water-Stained Leaves	s (B9)	Drainage Pa	atterns (B10)
High Water Table (A2)	Aquatic Fauna (B13)		Moss Trim	Lines (B16)
Saturation (A3)	Marl Deposits (B15)		Dry-Season	Water Table (C2)
Water Marks (B1)	Hydrogen Sulfide Odo	or (C1)	Crayfish Bu	rrows (C8)
Sediment Deposits (B2)	Oxidized Rhizosphere	s on Living Roots (C3)	Saturation	Visible in Aerial Imagery (C9)
Drift Deposits (B3)	Presence of Reduced	Iron (C4)	Stunted or	Stressed Plants (D1)
Algal Mat or Crust (B4)	Recent Iron Reduction	n in Tilled Soils (C6)	X Geomorphi	c Position (D2)
Iron Deposits (B5)	Thin Muck Surface (C	7)	Shallow Aq	uitard (D3)
Inundation Visible on Aerial Imagery (B7)	Other (Explain in Rem	arks)	 Microtopog	graphic Relief (D4)
Sparsley Vegetated Concave Surface (B8)			X FAC-Neutra	ıl Test (D5)
Surface Water Present? Yes No X	Depth (inches)			
Water Table Present? Yes No X	Depth (inches)	- Wetland H	ydrology Preser	nt? Yes X No
Saturation Present? Yes No X	Depth (inches)	- Wedana II	yarology r reser	
	<u> </u>	_		
Describe Recorded Data (stream gauge, moni	toring well, aerial photos	s, previous inspections	s), if available:	
Remarks:				

VEGETATION - Use scientific names of plants Sampling Point: 1_20200715_WL24_W1 Absolute Dominant Indicator **Dominance Test Worksheet:** (Plot Size: 30'radius) % Cover Species? Status **Tree Stratum Number of Dominant Species** Χ **FACW** That Are OBL, FACW, or FAC: 5 (A) Fraxinus pennsylvanica 25 Populus deltoides 20 Х FAC **Total Number of Dominant** 45 = Total Cover (B) Species Across All Strata: 5 Percent of Dominant Species (A/B) That Are OBL, FACW, or FAC: 100% **Prevalence Index Worksheet:** x 1 5 **OBL** species Absolute Dominant Indicator **FACW** species 40 x 2 80 (Plot Size: 15'radius) % Cover Species? Status **Shrub Stratum** FAC species 50 150 х3 Rhamnus cathartica Χ **FAC** 10 10 = Total Cover **FACU** species 0 x 4 0 5 **UPL** species x 5 25 Column Totals 100 (A) 260 (B) Prevalence Index = B/A = 2.6 **Hydrophytic Vegetation Indicators:** Absolute Dominant Indicator 1- Rapid Test For Hydrophytic Vegetation **Herb Stratum** (Plot Size: 5'radius) % Cover Species? Status X 2- Dominance Test is > 50% Bidens frondosa 15 **FACW** X 3- Prevalence Index is =< 3.0 15 Toxicodendron radicans Χ FAC 4- Morphological Adaptations Daucus carota 5 UPL Ranunculus hispidus 5 **FAC** 5- Problematic Hydrophytic Vegetation Boehmeria cylindrica 5 OBL 45 = Total Cover **Definitions of Vegetation Strata:**

Absolute Dominant Indicator

Species?

= Total Cover

Status

Tree- Woody plants 3 in. (7.6cm) or more in diameter at breast height (DBH), regardless of height.

Sapling/Shrub- Woody plants less than 3 in. DBH and greater than or equal to 3.28ft (1m) tall.

Herb- All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28ft tall.

Woody Vines- All woody vines greater than 3.28ft in height.

> Hydrophytic Vegetation Present? Yes X No ___

> > eID: 20200811101919

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

Woody Vine Stratum

(Plot Size: 30'radius)

% Cover

SOIL Sampling Point: 1_20200715_WL24_W1

Depth	Matrix				Redo	x Featur	es	
(inches	Color	%	Color	%	Type	Loc	Texture	Remarks
0-9	10YR 3/1	90	10YR 4/4	10	С	М	Sandy Loam	
9-15	10YR 5/4	85	10YR 4/6	15	С	M	Sand	

Hydric Soil Indicators:		Indicators for Problematic Soils:
Histosol (A1)	Polyvalue Below Surface ((B15)2 cm Muck (A10)
Histic Epipedon (A2)	Thin Dark Surface (S9)	Coast Prarie Redox (A16)
Black Histic (A3)	Loamy Mucky Mineral (F1	L)5 cm Mucky Peat or Peat (S3)
Hydrogen Sulfide (A4)	Loamy Gleyed Matric (F2)	Dark Surface (S7)
Stratified Layers (A5)	Depleted Matrix (F3)	Polyvalue Below Surface (S8)
Depleted Below Dark Surface (A11)	X Redox Dark Surface (F6)	Thin Dark Surface (S9)
Thick Dark Surface (A12)	Depleted Dark Surface (F7	7) Iron-Manganese Masses (F12)
Sandy Mucky Mineral (S1)	Redox Depressions (F8)	Piedmont Floodplain Soils (F19)
Sandy Gleyed Matrix (S4)		Mesic Spodic (TA6)
Sandy Redox (S5)		Red Parent Material (F21)
Stripped Matrix (S6)		Very Shallow Dark Surface (TF12)
Dark Surface (S7)		Other (Explain in Remarks)
Restrictive Layer (if observed):		
Type		
Type:		Hydric Soil Present? Yes X No
Depth (inches):		

Remarks:

Project/Site: Cider Solar Project	City/County: Oakfield/	Genessee Sampling Date: 7/15/2020		
Applicant/Owner: Hecate		State: NY Sampling		
Investigator(s): Andrew Sorci	Section, Township, Ran	ge:Point:1_20200715_WL24_U		
Landform (hillslope, terrace,etc.): Rise	Local relief (concave, conve	ex, none): <u>Convex</u> Slope (%) <u>2 - 5</u>		
Subregion (LRR or MLRA): LRR R	Lat: <u>43.092621</u> Long:	-78.238158 Datum: NAD83		
Soil Map Unit Name: OvA		NWI Classification: UPL		
Are climatic / hyrologic conditions on the si	te typical for this time of year? Yes X	No (if no, explain in Remarks.)		
Are Vegetation X, Soil X, or Hydrolo		· · · · · · · · · · · · · · · · · · ·		
Are Vegetation, Soil, or Hydrolo	ogynaturally problematic? (if needed,	explain any answers in Remarks.)		
SUMMARY OF FINDINGS - Attach site r	nap showing sampling point locations, t	ransects, important features, etc.		
Hydrophytic Vegetation Present? Yes	No X Is the Sampled A			
Hydric Soil Present? Yes	within a Wetlan			
· -				
Wetland Hydrology Present? Yes_		Vetianu Site ib.		
Remarks: (Explain alternative procedures here or in	a separate report.)			
Recently plowed field				
HYDROLOGY				
Wetland Hydrology Indicators:		Secondary Indicators (minimum of two required)		
Primary Indicators (minimum of one is require	d: check all that apply)	Surface Soil Cracks (B6)		
Surface Water (A1)	Water-Stained Leaves (B9)	Drainage Patterns (B10)		
High Water Table (A2)	Aquatic Fauna (B13)	Moss Trim Lines (B16)		
Saturation (A3)	Marl Deposits (B15)	Dry-Season Water Table (C2)		
Water Marks (B1)	Hydrogen Sulfide Odor (C1)	Crayfish Burrows (C8)		
Sediment Deposits (B2)	Oxidized Rhizospheres on Living Roots (C	3) Saturation Visible in Aerial Imagery (C9)		
Drift Deposits (B3)	Presence of Reduced Iron (C4)	Stunted or Stressed Plants (D1)		
Algal Mat or Crust (B4)	Recent Iron Reduction in Tilled Soils (C6)	Geomorphic Position (D2)		
Iron Deposits (B5)	Thin Muck Surface (C7)	Shallow Aquitard (D3)		
Inundation Visible on Aerial Imagery (B7)	Other (Explain in Remarks)	Microtopographic Relief (D4)		
Sparsley Vegetated Concave Surface (B8)		FAC-Neutral Test (D5)		
		The Neutral Test (55)		
	X Depth (inches)			
Water Table Present? Yes No		nd Hydrology Present? Yes No _X		
Saturation Present? Yes No	X Depth (inches)			
Describe Recorded Data (stream gauge, m	onitoring well, aerial photos, previous inspec	tions). if available:		
5.18 · 1. · 1. · 1. · 1. · 1. · 1. · 1. ·	,	,,		
Remarks:				

Tree Stratum	(Plot Size: 30'radius)	Absolute Dominant Indicator % Cover Species? Status	
		= Total Cover	
Shrub Stratum	(Plot Size: 15'radius)	Absolute Dominant Indicator % Cover Species? Status	
		= Total Cover	
Herb Stratum	(Plot Size:5'radius)	Absolute Dominant Indicator % Cover Species? Status	
		= Total Cover	
		Absolute Dominant Indicator	
Woody Vine Stratum	(Plot Size: 30'radius)	% Cover Species? Status	
		= Total Cover	
Remarks: (Include photo r	numbers here or on a sep	varate sheet.)	
No vegetation present of			

VEGETATION - Use scientific names of plants

Sampling Point: 1_20200715_WL24_U1

SOIL Sampling Point: 1_20200715_WL24_U1

Depth	pth Matrix		Redox Features					
(inches	Color	%	Color	%	Туре	Loc	Texture	Remarks
0-3	10YR 3/1	100					Loam	
3-12	10YR 3/2	100					Loam	
12-18	10YR 5/4	90	10YR 4/6	10	С	М	Sandy Loam	
ı								
ı								
Hydric Sc	oil Indicators:							Indicators for Problematic Soils:
Histosol (A1)				Polyvalue Below Surface (B15)				2 cm Muck (A10)
Histic Epipedon (A2)			Thin Dark Surface (S9)				Coast Prarie Redox (A16)	
	ck Histic (A3)			Loamy Mucky Mineral (F1)			• •	5 cm Mucky Peat or Peat (S3)
Hydrogen Sulfide (A4)				Loamy Gleyed Matric (F2)				Dark Surface (S7)
	atified Layers			Depleted Matrix (F3)			, ,	Polyvalue Below Surface (S8)
	oleted Below			Redox Dark Surface (F6)				Thin Dark Surface (S9)
	ck Dark Surfac			Depleted Dark Surface (F7)				Iron-Manganese Masses (F12)
Sandy Mucky Mineral (S1)			Redox Depressions (F8)			ns (F8)	Piedmont Floodplain Soils (F19)	
Sandy Gleyed Matrix (S4)							Mesic Spodic (TA6)	
Sandy Redox (S5)			_				Red Parent Material (F21)	
Stripped Matrix (S6)							Very Shallow Dark Surface (TF12)	
Dark Surface (S7)							Other (Explain in Remarks)	
Restrictiv	ve Layer (if obs	erved):						
		Type:					Hydri	c Soil Present? Yes No X
Depth (inches):							,	
		_						
Remarks	S:							

Project/Site: Cider Solar Project	City/County: Oakfield/Ger	nnesee Sampling Date: 10/8/2020							
Applicant/Owner: Hecate		State: NY Sampling Point:							
Investigator(s): Andrew Sorci	Section, Township, Range:	1_20200925_WL_111_w1							
Landform (hillslope, terrace,etc.): Dip	Local relief (concave, convex, none): None Slope (%) 0 - 1								
Subregion (LRR or MLRA): LRR L	Lat: 43.105627 Long:	78.225259 Datum: NAD83							
Soil Map Unit Name: CaA		NWI Classification: PFO							
Are climatic / hyrologic conditions on the site t	ypical for this time of year? Yes X No	(if no, explain in Remarks.)							
Are Vegetation, Soil, or Hydrology	significantly disturbed? Are "Normal	Circumstances" present? Yes X No							
Are Vegetation, Soil, or Hydrology naturally problematic? (if needed, explain any answers in Remarks.)									
SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.									
Hydrophytic Vegetation Present? Yes X									
Hydric Soil Present? Yes X	within a Wetland?	Yes X No							
•									
Wetland Hydrology Present? Yes X	_ '''	WLZ3							
Remarks: (Explain alternative procedures here or in a se	parate report.)								
HYDROLOGY									
Wetland Hydrology Indicators:		Secondary Indicators (minimum of two required)							
Primary Indicators (minimum of one is required: cl	neck all that apply)	Surface Soil Cracks (B6)							
Surface Water (A1)	Water-Stained Leaves (B9)	Drainage Patterns (B10)							
High Water Table (A2)	Aquatic Fauna (B13)	X Moss Trim Lines (B16)							
Saturation (A3)	Marl Deposits (B15)	Dry-Season Water Table (C2)							
Water Marks (B1)	Hydrogen Sulfide Odor (C1)	Crayfish Burrows (C8)							
Sediment Deposits (B2)	Oxidized Rhizospheres on Living Roots (C3)	X Saturation Visible in Aerial Imagery (C9)							
Drift Deposits (B3)	Presence of Reduced Iron (C4)	Stunted or Stressed Plants (D1)							
Algal Mat or Crust (B4)	Recent Iron Reduction in Tilled Soils (C6)	X Geomorphic Position (D2)							
Iron Deposits (B5)	Thin Muck Surface (C7)	Shallow Aquitard (D3)							
Inundation Visible on Aerial Imagery (B7)	Other (Explain in Remarks)	Microtopographic Relief (D4)							
Sparsley Vegetated Concave Surface (B8)		FAC-Neutral Test (D5)							
Surface Water Present? Yes No X	Depth (inches)	<u> </u>							
	= ' ' ===	Hydrology Present? Yes X No							
Water Table Present? Yes No X	- · · · · · · · · · · · · · · · · · · ·	Hydrology Present? Yes X No No							
Saturation Present? Yes No _X	Depth (inches)								
Describe Recorded Data (stream gauge, monit	toring well, aerial photos, previous inspection	ns), if available:							
Domorke									
Remarks:									

VEGETATION - Use scientific names of plants Sampling Point: 1_20200925_WL_111_w1 Absolute Dominant Indicator **Dominance Test Worksheet:** (Plot Size: 30'radius) % Cover Species? Status **Tree Stratum Number of Dominant Species** Χ **FACW** That Are OBL, FACW, or FAC: (A) Fraxinus pennsylvanica 35 35 = Total Cover **Total Number of Dominant** (B) Species Across All Strata: 5 Percent of Dominant Species (A/B) That Are OBL, FACW, or FAC: 60% **Prevalence Index Worksheet:** 0 x 1 **OBL** species Absolute Dominant Indicator **FACW** species 50 x 2 100 (Plot Size: 15'radius) % Cover Species? **Shrub Stratum Status FAC** species 165 55 х3 Viburnum lentago 45 Χ **FAC** Lonicera morrowii 20 Х **FACU FACU** species 30 x 4 120 15 Fraxinus pennsylvanica **FACW UPL** species 0 x 5 0 Rhamnus cathartica 5 FAC Column Totals 135 (A) 385 (B) 85 = Total Cover Prevalence Index = B/A = 2.85 **Hydrophytic Vegetation Indicators:** Absolute Dominant Indicator 1- Rapid Test For Hydrophytic Vegetation **Herb Stratum** (Plot Size: 5'radius) % Cover Species? Status X 2- Dominance Test is > 50% X 3- Prevalence Index is =< 3.0 = Total Cover 4- Morphological Adaptations 5- Problematic Hydrophytic Vegetation **Definitions of Vegetation Strata:** Tree- Woody plants 3 in. (7.6cm) or more in diameter at breast height (DBH), regardless of height. Sapling/Shrub- Woody plants less than 3 in. DBH and greater than or equal to 3.28ft (1m) tall. Herb- All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28ft tall. Absolute Dominant Indicator Woody Vines- All woody vines greater than 3.28ft in (Plot Size: 30'radius) % Cover Species? **Woody Vine Stratum** Status height. Parthenocissus quinquefolia 10 Χ **FACU**

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

Vitis riparia

5

15

Χ

= Total Cover

FAC

Hydrophytic

Vegetation

Present? Yes X No ____

Depth	Matrix				Redo	x Featur	es	
inches	Color	%	Color	%	Туре	Loc	Texture	Remarks
0-7	10YR 3/1	100					Sandy Loam	
7-16	10YR 5/1	75	10YR 5/8	25	С	M	Sandy Loam	
							·	
-	il Indicators:				Dobazalu	o Bolow Si	urface (B1E)	Indicators for Problematic Soils:
	tosol (A1)	۸۵۱			=	k Surface	urface (B15)	2 cm Muck (A10) Coast Prarie Redox (A16)
Histic Epipedon (A2) Black Histic (A3)							• •	5 cm Mucky Peat or Peat (S3)
	lrogen Sulfide	(A4)		Loamy Mucky Mineral (F1) Loamy Gleyed Matric (F2)				Dark Surface (S7)
	atified Layers	-		X Depleted Matrix (F3)				Polyvalue Below Surface (S8)
	oleted Below I		rface (A11)	Redox Dark Surface (F6)				Thin Dark Surface (S9)
	ck Dark Surfac					d Dark Sur		Iron-Manganese Masses (F12)
	dy Mucky Mi					epressions		Piedmont Floodplain Soils (F19)
San	dy Gleyed Ma	atrix (S4)					Mesic Spodic (TA6)
San	dy Redox (S5))						Red Parent Material (F21)
Stri	pped Matrix (S6)						Very Shallow Dark Surface (TF12)
Dar	k Surface (S7))						Other (Explain in Remarks)
Restrictiv	e Layer (if obs	erved):						
		Type:					Hydric	Soil Present? Yes X No
Depth (inches):						,	<u> </u>	
		,						

Project/Site: Cider Solar Project	City/County: Oakfield/Genesse	ee Sampling Date: 9/22/2020				
Applicant/Owner: Hecate	Stat	State: NY Sampling Point:				
Investigator(s): Andrew Sorci	Section, Township, Range:	Section, Township, Range: 1_20200925_WL_111_U1				
Landform (hillslope, terrace,etc.): Rise	Local relief (concave, convex, none	e): None Slope (%) 3 - 5				
Subregion (LRR or MLRA): LRR L	Lat: 43.105655 Long: -78.22	25306 Datum: NAD83				
Soil Map Unit Name: CaA		NWI Classification: <u>UPL</u>				
Are climatic / hyrologic conditions on the site	typical for this time of year? Yes X No	(if no, explain in Remarks.)				
Are Vegetation , Soil , or Hydrolog	y significantly disturbed? Are "Normal Circu	umstances" present? Yes X No				
Are Vegetation, Soil, or Hydrolog	ynaturally problematic? (if needed, explain a	any answers in Remarks.)				
SUMMARY OF FINDINGS - Attach site ma	p showing sampling point locations, transec	ts, important features, etc.				
Hydrophytic Vegetation Present? Yes	No X Is the Sampled Area					
Hydric Soil Present? Yes	No X within a Wetland?	Yes No X				
Wetland Hydrology Present? Yes	No X if yes, optional Wetland	Site ID:				
Remarks: (Explain alternative procedures here or in a s	eparate report.)					
Edge of field						
HYDROLOGY						
Wetland Hydrology Indicators:	Sec	condary Indicators (minimum of two required)				
Primary Indicators (minimum of one is required:		Surface Soil Cracks (B6)				
Surface Water (A1)	Water-Stained Leaves (B9)	Drainage Patterns (B10)				
High Water Table (A2)	Aquatic Fauna (B13)	Moss Trim Lines (B16)				
Saturation (A3)	Marl Deposits (B15)	Dry-Season Water Table (C2)				
Water Marks (B1)	Hydrogen Sulfide Odor (C1)	Crayfish Burrows (C8)				
Sediment Deposits (B2)	Oxidized Rhizospheres on Living Roots (C3)	Saturation Visible in Aerial Imagery (C9)				
Drift Deposits (B3)	Presence of Reduced Iron (C4)	Stunted or Stressed Plants (D1)				
Algal Mat or Crust (B4)	Recent Iron Reduction in Tilled Soils (C6)	Geomorphic Position (D2)				
Iron Deposits (B5)	Thin Muck Surface (C7)	Shallow Aquitard (D3)				
		· · · · · ·				
Inundation Visible on Aerial Imagery (B7)	Other (Explain in Remarks)	Microtopographic Relief (D4)				
Sparsley Vegetated Concave Surface (B8)		FAC-Neutral Test (D5)				
Surface Water Present? Yes NoX	Depth (inches)					
Water Table Present? Yes No X	Depth (inches) Wetland Hydr	ology Present? Yes No X				
Saturation Present? Yes No X	Depth (inches)					
Describe Recorded Data (stream gauge, mor	itoring well, aerial photos, previous inspections), it	f available:				
Describe Recorded Data (stream gauge, mor	itoring wen, aeriai priotos, previous inspections), i	available.				
Remarks:						

VEGETATION - Use scientific names of plants Sampling Point: 1_20200925_WL_111_U1 Absolute Dominant Indicator **Dominance Test Worksheet:** (Plot Size: 30'radius) % Cover Species? Status **Tree Stratum Number of Dominant Species** Χ FACU That Are OBL, FACW, or FAC: (A) Quercus macrocarpa 15 15 = Total Cover **Total Number of Dominant** (B) Species Across All Strata: 5 Percent of Dominant Species (A/B) That Are OBL, FACW, or FAC: 0% **Prevalence Index Worksheet:** x 1 0 **OBL** species Absolute Dominant Indicator **FACW** species 0 (Plot Size: 15'radius) % Cover Species? Status x 2 **Shrub Stratum** 0 FAC species х3 Lonicera morrowii 40 Χ FACU 40 = Total Cover **FACU** species 110 x 4 440 **UPL** species 10 x 5 50 Column Totals 120 (A) 490 (B) Prevalence Index = B/A = 4.08 **Hydrophytic Vegetation Indicators:** Absolute Dominant Indicator 1- Rapid Test For Hydrophytic Vegetation **Herb Stratum** (Plot Size: 5'radius) % Cover Species? Status 2- Dominance Test is > 50% 30 Unknown species Χ UNK 3- Prevalence Index is =< 3.0 Χ Trifolium pratense 15 **FACU** 4- Morphological Adaptations 15 Χ **FACU** Prunus serotina 10 UPL Daucus carota 5- Problematic Hydrophytic Vegetation 10 **FACU** Lotus corniculatus Plantago major 5 **FACU Definitions of Vegetation Strata: FACU** Plantago lanceolata Tree- Woody plants 3 in. (7.6cm) or more in diameter at Symphyotrichum pilosum 5 **FACU** breast height (DBH), regardless of height. 95 = Total Cover Sapling/Shrub- Woody plants less than 3 in. DBH and greater than or equal to 3.28ft (1m) tall. Herb- All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28ft tall. Absolute Dominant Indicator Woody Vines- All woody vines greater than 3.28ft in (Plot Size: 30'radius) **Woody Vine Stratum** % Cover Species? Status height. = Total Cover Hydrophytic Vegetation

Remarks: (Include photo numbers here or on a separate sheet.) unknown grass due to recent mowing

Present? Yes ____ No _X

SOIL Sampling Point: 1_20200925_WL_111_U1

Depth Matrix Redox Features

Depth	Matrix	(Redo	ox Features					
(inches	Color	%	Color	%	Type	Loc	Textur	e	Remarks		
0-14	10YR 3/2	100					Sandy Lo	am			
14-20	10YR 4/3	100					Sand				
Uvdric Sc	oil Indicators:							Inc	dicators for Problematic Soils:		
	tosol (A1)				Polvvalu	e Below Surfa	ace (B15)		2 cm Muck (A10)		
	tic Epipedon ((A2)			•	k Surface (S9	• •		Coast Prarie Redox (A16)		
	ck Histic (A3)	•				Nucky Minera	•		5 cm Mucky Peat or Peat (S3)		
Нус	drogen Sulfide	e (A4)			Loamy G	ileyed Matric	: (F2)		Dark Surface (S7)		
Stra	atified Layers	(A5)			Depleted	d Matrix (F3)			Polyvalue Below Surface (S8)		
Dep	pleted Below	Dark Sui	rface (A11)	Redox Dark Surface (F6)					Thin Dark Surface (S9)		
Thi	ck Dark Surfac	ce (A12)		Depleted Dark Surface (F7)					Iron-Manganese Masses (F12)		
San	ndy Mucky Mi	neral (Sí	1)	Redox Depressions (F8)			8)		Piedmont Floodplain Soils (F19)		
San	ndy Gleyed Ma	atrix (S4)						Mesic Spodic (TA6)		
	ndy Redox (S5)								Red Parent Material (F21)		
	ipped Matrix (Very Shallow Dark Surface (TF12)		
Dar	rk Surface (S7))							Other (Explain in Remarks)		
Restrictiv	ve Layer (if obs	erved):									
		Type:						Hydric Soil	l Present? Yes No X		
	Depth (in	_					'	riyuric 30ii	No X		
		_									
Remarks	s:										

Project/Site: Cider Solar Project	City/County: Oakfield/Ger	nessee Sampling Date: 7/16/2020		
Applicant/Owner: Hecate		State: NY Sampling Point:		
Investigator(s): Andrew Sorci	Section, Township, Range:	1_20200716_WL26_W1		
Landform (hillslope, terrace,etc.): Depression	Local relief (concave, convex, ı	none): <u>Concave</u> Slope (%) <u>0 - 5</u>		
Subregion (LRR or MLRA): LRR L	Lat: <u>43.089285</u> Long: <u>-</u> 7	78.246334 Datum: <u>NAD83</u>		
Soil Map Unit Name: OvB		NWI Classification: PEM		
Are climatic / hyrologic conditions on the site t	ypical for this time of year? Yes X No	(if no, explain in Remarks.)		
Are Vegetation $___$, Soil $___$, or Hydrology	significantly disturbed? Are "Normal	Circumstances" present? Yes X No		
Are Vegetation, Soil, or Hydrology	naturally problematic? (if needed, exp	lain any answers in Remarks.)		
SUMMARY OF FINDINGS - Attach site map	showing sampling point locations, tran	sects, important features, etc.		
Hydrophytic Vegetation Present? Yes X	No Is the Sampled Area			
	within a Wetland?	Yes X No		
Hydric Soil Present? Yes X				
Wetland Hydrology Present? Yes X	No if yes, optional Wet	land Site ID: WL26		
Remarks: (Explain alternative procedures here or in a sep	parate report.)			
HYDROLOGY				
Wetland Hydrology Indicators:		Secondary Indicators (minimum of two required)		
Primary Indicators (minimum of one is required: ch	neck all that apply)	Surface Soil Cracks (B6)		
Surface Water (A1)	Water-Stained Leaves (B9)	Drainage Patterns (B10)		
High Water Table (A2)	Aquatic Fauna (B13)	Moss Trim Lines (B16)		
Saturation (A3)	Marl Deposits (B15)	Dry-Season Water Table (C2)		
Water Marks (B1)	Hydrogen Sulfide Odor (C1)	Crayfish Burrows (C8)		
Sediment Deposits (B2)	Oxidized Rhizospheres on Living Roots (C3)	X Saturation Visible in Aerial Imagery (C9)		
Drift Deposits (B3)	Presence of Reduced Iron (C4)	Stunted or Stressed Plants (D1)		
Algal Mat or Crust (B4)	Recent Iron Reduction in Tilled Soils (C6)	X Geomorphic Position (D2)		
Iron Deposits (B5)	Thin Muck Surface (C7)	Shallow Aquitard (D3)		
Inundation Visible on Aerial Imagery (B7)	Other (Explain in Remarks)	Microtopographic Relief (D4)		
-	Other (Explain in Nemarks)			
Sparsley Vegetated Concave Surface (B8)		X FAC-Neutral Test (D5)		
Surface Water Present? Yes No X	Depth (inches)			
Water Table Present? Yes No X	Depth (inches) Wetland H	Hydrology Present? Yes X No		
Saturation Present? Yes No X	Depth (inches)			
Describe Recorded Data (stream gauge, monit	oring well, aerial photos, previous inspection	ns), if available:		
Remarks:				

vederation - ose scient		or plants	Absolute	Dominant	Indicator	Dominance Test V	Vorksheet		, o, 10_11	
Tree Stratum	(Plot Size:	30'radius)	% Cover	Species?	Status	Number of Domi That Are OBL, FA	nant Spec	ies	2	(A)
				= Total Cov	/er	Total Numbe Species Act	r of Domi	nant	2	(B)
						Percent of Don That Are OBL, I	ninant Spe	ecies —	100%	(A/B)
						Prevalence Index \	Vorkshee	t:		
			Absoluto	Daminant	Indicator	OBL species	0	x 1	0	
Shrub Stratum	(Plot Size:	15'radius)	% Cover	Dominant Species?	Status	FACW species	92	x 2	184	
Fraxinus pennsylvanica	<u> </u>		5	Х	FACW	FAC species	1	_ x 3	3	
			5	_= Total Cov	/er	FACU species	0	x 4	0	
						UPL species	0	x 5	0	
						Column Totals	93	(A)	187	(B)
						Prevalenc			2.01	(2)
						Hydrophytic Vege	tation Ind	licators	:	
			Absolute	Dominant	Indicator	X 1- Rapid Tes	t For Hydi	rophytic	c Vegeta	tion
Herb Stratum	(Plot Size:	5'radius)	% Cover	Species?	Status	X 2- Dominano	-			
Phalaris arundinacea			75	Х	FACW					
Eupatorium perfoliatur	n		8		FACW	X 3- Prevalenc				
Bidens frondosa			4		FACW	4- Morpholo	gical Ada	ptation	S	
Ranunculus hispidus			<u>1</u> 88	= Total Cov	<u>FAC</u> /er	5- Problema	tic Hydro _l	phytic V	egetatio/	n
				_		Definitions of Vegeta	ation Strata	a:		
						Tree- Woody plants 3 breast height (DBH),	3 in. (7.6cm	n) or moi		eter at
						Sapling/Shrub- Wood greater than or equa				and
						Herb- All herbaceous size, and woody plan			_	less of
Woody Vine Stratum	(Plot Size:	30'radius)	Absolute % Cover	Dominant Species?	Indicator Status	Woody Vines- All wo height.	ody vines g	reater tl	han 3.28fi	t in
				_= Total Cov	/er	Hydroph Vegeta	tion			
						Pres	ent? Yes	X	No	
Remarks: (Include photo nu	mbers here	or on a sep	arate shee	t.)						

SOIL Sampling Point: 1_20200716_WL26_W1

Depth	Matrix				Redo	x Featu		
(inches	Color	%	Color	%	Type	Loc	Texture	Remarks
0-3	10YR 3/1	98	10YR 4/6	2	С	М	Silt Loam	
3-14	10YR 4/2	90	10YR 5/6	10	С	М	Silt Loam	
14-18	7.5YR 5/3	85	7.5YR 5/6	15	С	М	Sand	

Hydric Soil Indicators:		Indicators for Problematic Soils:
Histosol (A1)	Polyvalue Below Surface (B15)2 cm Muck (A10)
Histic Epipedon (A2)	Thin Dark Surface (S9)	Coast Prarie Redox (A16)
Black Histic (A3)	Loamy Mucky Mineral (F1	5 cm Mucky Peat or Peat (S3)
Hydrogen Sulfide (A4)	Loamy Gleyed Matric (F2)	Dark Surface (S7)
Stratified Layers (A5)	X Depleted Matrix (F3)	Polyvalue Below Surface (S8)
Depleted Below Dark Surface (A11)	X Redox Dark Surface (F6)	Thin Dark Surface (S9)
Thick Dark Surface (A12)	Depleted Dark Surface (F7) Iron-Manganese Masses (F12)
Sandy Mucky Mineral (S1)	Redox Depressions (F8)	Piedmont Floodplain Soils (F19)
Sandy Gleyed Matrix (S4)		Mesic Spodic (TA6)
Sandy Redox (S5)		Red Parent Material (F21)
Stripped Matrix (S6)		Very Shallow Dark Surface (TF12)
Dark Surface (S7)		Other (Explain in Remarks)
Restrictive Layer (if observed):		
Type:		Hydric Soil Present? Yes X No
Depth (inches):		

oject/Site: Cider Solar Project City/County: Oakfield/Genessee Sampling Date: 7/16/20										
Applicant/Owner: Hecate		State: NY Sampling Point:								
Investigator(s): Andrew Sorci	Sectio	Section, Township, Range: 1_20200716_WL26_W2								
Landform (hillslope, terrace, etc.): Depress	sion Local relie	Local relief (concave, convex, none): Linear Slope (%) 0 -								
Subregion (LRR or MLRA): LRR L	Lat: 43.088495	Long:78.246886	Datum: NAD83							
Soil Map Unit Name:		NWI Class	fication: PSS							
Are climatic / hyrologic conditions on the sit	te typical for this time of ye	ar? Yes <u>X</u> No (if no,	explain in Remarks.)							
Are Vegetation , Soil , or Hydrolo	ogy significantly distur	bed? Are "Normal Circumstances	" present? Yes X No							
Are Vegetation, Soil, or Hydrolo	ogynaturally problema	atic? (if needed, explain any answer	s in Remarks.)							
SUMMARY OF FINDINGS - Attach site m	map showing sampling po	oint locations, transects, impor	tant features, etc.							
Hydrophytic Vegetation Present? Yes	X No	Is the Sampled Area								
Hydric Soil Present? Yes	X No	within a Wetland?	Yes X No							
Wetland Hydrology Present? Yes	X No	if yes, optional Wetland Site ID:	WL26							
Remarks: (Explain alternative procedures here or in a	a separate report.)									
	,									
HYDROLOGY		Casandaniilad	:							
Wetland Hydrology Indicators:			icators (minimum of two required)							
Primary Indicators (minimum of one is required			Surface Soil Cracks (B6)							
Surface Water (A1)	Water-Stained Leaves		Drainage Patterns (B10)							
High Water Table (A2)	Aquatic Fauna (B13)	Moss Tri	Moss Trim Lines (B16)							
Saturation (A3)	Marl Deposits (B15)	Dry-Seas	Dry-Season Water Table (C2)							
Water Marks (B1)	Hydrogen Sulfide Odo	or (C1)Crayfish	Crayfish Burrows (C8)							
Sediment Deposits (B2)	Oxidized Rhizosphere	s on Living Roots (C3) Saturation	n Visible in Aerial Imagery (C9)							
Drift Deposits (B3)	Presence of Reduced	Iron (C4) Stunted	or Stressed Plants (D1)							
Algal Mat or Crust (B4)	Recent Iron Reduction	n in Tilled Soils (C6) X Geomor	X Geomorphic Position (D2)							
Iron Deposits (B5)	Thin Muck Surface (C	7) Shallow	Shallow Aquitard (D3)							
Inundation Visible on Aerial Imagery (B7)			Microtopographic Relief (D4)							
Sparsley Vegetated Concave Surface (B8)			X FAC-Neutral Test (D5)							
		TAC-Neu	trai rest (DS)							
Surface Water Present? Yes No	X Depth (inches)	_								
Water Table Present? Yes No	X Depth (inches)	Wetland Hydrology Pres	ent? Yes X No							
Saturation Present? Yes No	X Depth (inches)	_								
Describe Recorded Data (stream gauge, mo	onitaring wall parial photos	provious inspections) if available								
Describe Recorded Data (stream gauge, mo	officoring well, aerial priotos	s, previous irispections), ii available	•							
Remarks:										

VEGETATION - Use scientific names of plants Sampling Point: 1_20200716_WL26_W2 Absolute Dominant Indicator **Dominance Test Worksheet:** (Plot Size: 30'radius) % Cover Species? Status **Tree Stratum Number of Dominant Species** That Are OBL, FACW, or FAC: (A) = Total Cover **Total Number of Dominant** Species Across All Strata: (B) 7 Percent of Dominant Species That Are OBL, FACW, or FAC: (A/B) 100% **Prevalence Index Worksheet:** 35 x 1 35 **OBL** species Absolute Dominant Indicator **FACW** species 100 200 (Plot Size: 15'radius) Species? x 2 **Shrub Stratum** % Cover Status FAC species 9 3 х3 Cornus amomum 40 Χ **FACW** Fraxinus pennsylvanica 40 Х **FACW FACU** species 15 x 4 60 Rosa multiflora **FACU** 15 **UPL** species 0 x 5 0 95 = Total Cover Column Totals 153 (A) 304 (B) Prevalence Index = B/A = 1.99 **Hydrophytic Vegetation Indicators:** Absolute Dominant Indicator X 1- Rapid Test For Hydrophytic Vegetation **Herb Stratum** (Plot Size: 5'radius) % Cover Species? Status X 2- Dominance Test is > 50% Typha angustifolia 15 Х OBL X 3- Prevalence Index is =< 3.0 Х Bidens frondosa 10 **FACW** 4- Morphological Adaptations Boehmeria cylindrica 10 Χ OBL Symphyotrichum lanceolatum 10 Χ **FACW** 5- Problematic Hydrophytic Vegetation Lycopus americanus 10 Х OBL Geum canadense 3 FAC **Definitions of Vegetation Strata:** 58 = Total Cover Tree- Woody plants 3 in. (7.6cm) or more in diameter at breast height (DBH), regardless of height. Sapling/Shrub- Woody plants less than 3 in. DBH and greater than or equal to 3.28ft (1m) tall. Herb- All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28ft tall. Absolute Dominant Indicator Woody Vines- All woody vines greater than 3.28ft in (Plot Size: 30'radius) **Woody Vine Stratum** % Cover Species? Status height. = Total Cover Hydrophytic Vegetation Present? Yes X No ____ Remarks: (Include photo numbers here or on a separate sheet.)

SOIL Sampling Point: 1_20200716_WL26_W2

DepthMatrix					Redo	x Featur	es			
(inches	Color	%	Color	%	Type	Loc	Texture	Remarks		
0-5	10YR 2/2	100					Sandy Loam			
5-12	10YR 4/2	80	10YR 4/6	20	С	М	Sandy Loam			
-	oil Indicators:				5 1	D 1 6	(045)	Indicators for Problematic Soils:		
	tosol (A1)	۸۵۱			· ·		urface (B15)	2 cm Muck (A10)		
	tic Epipedon (AZ)				k Surface		Coast Prarie Redox (A16)		
	ck Histic (A3) drogen Sulfide	(///			-	lucky Min leyed Ma		5 cm Mucky Peat or Peat (S3) Dark Surface (S7)		
	atified Layers	. ,				d Matrix (I		Polyvalue Below Surface (S8)		
	pleted Below I		rface (A11)		•	ark Surfac	•	Thin Dark Surface (S9)		
	ck Dark Surfac		-			d Dark Sur		Iron-Manganese Masses (F12)		
	ndy Mucky Mi				· ·	epression		Piedmont Floodplain Soils (F19)		
	ndy Gleyed Ma	-				-,	- (- /	Mesic Spodic (TA6)		
	ndy Redox (S5)	-	•					Red Parent Material (F21)		
Stri	ipped Matrix (S6)						Very Shallow Dark Surface (TF12)		
Dar	rk Surface (S7))						Other (Explain in Remarks)		
Restrictiv	ve Layer (if obs	erved):								
		Type:					I I coloi:	- Call Danaget 2 - Van - V - Na		
	Depth (in	_					Hyarid	c Soil Present? Yes X No		
	Deptii (iii	- -								
Remarks	s:									

Project/Site: Cider Solar Project	City/County: Oakfield/Gen	essee Sampling Date: 7/16/2020				
Applicant/Owner: Hecate	State: NY Sampling					
Investigator(s): Andrew Sorci	Section, Township, Range:	Point:1_20200716_WL26_U				
Landform (hillslope, terrace,etc.): Rise	Local relief (concave, convex, n	one): Convex Slope (%) 3 - 5				
Subregion (LRR or MLRA): LRR L	Lat: 43.089193 Long:7	8.246262 Datum: NAD83				
Soil Map Unit Name: OvB		NWI Classification: UPL				
Are climatic / hyrologic conditions on the site	e typical for this time of year? Yes X No	(if no, explain in Remarks.)				
Are Vegetation, Soil, or Hydrolog	gy significantly disturbed? Are "Normal G	Circumstances" present? Yes X No				
Are Vegetation, Soil, or Hydrolog	gynaturally problematic? (if needed, expl	ain any answers in Remarks.)				
SLIMMARY OF FINDINGS - Attach site m	ap showing sampling point locations, tran	sects important features etc				
Hydrophytic Vegetation Present? Yes	No X Is the Sampled Area					
Hydric Soil Present? Yes	No X within a Wetland?	Yes No X				
· —						
Wetland Hydrology Present? Yes						
Remarks: (Explain alternative procedures here or in a	Separate report.)					
HYDROLOGY						
Wetland Hydrology Indicators:		Secondary Indicators (minimum of two required)				
Primary Indicators (minimum of one is required:	check all that apply)	Surface Soil Cracks (B6)				
Surface Water (A1)	Water-Stained Leaves (B9)	Drainage Patterns (B10)				
High Water Table (A2)	Aquatic Fauna (B13)	Moss Trim Lines (B16)				
Saturation (A3)	Marl Deposits (B15)	Dry-Season Water Table (C2)				
Water Marks (B1)	Hydrogen Sulfide Odor (C1)	Crayfish Burrows (C8)				
Sediment Deposits (B2)	Oxidized Rhizospheres on Living Roots (C3)	Saturation Visible in Aerial Imagery (C9)				
Drift Deposits (B3)	Presence of Reduced Iron (C4)	Stunted or Stressed Plants (D1)				
Algal Mat or Crust (B4)	Recent Iron Reduction in Tilled Soils (C6)	Geomorphic Position (D2)				
Iron Deposits (B5)	Thin Muck Surface (C7)	Shallow Aquitard (D3)				
Inundation Visible on Aerial Imagery (B7)	Other (Explain in Remarks)	Microtopographic Relief (D4)				
Sparsley Vegetated Concave Surface (B8)	Other (Explain in Kemarks)					
Sparsiey vegetated Concave Surface (B8)		FAC-Neutral Test (D5)				
Surface Water Present? Yes No X	(Depth (inches)					
Water Table Present? Yes NoX	(Depth (inches) Wetland H	ydrology Present? Yes No X				
Saturation Present? Yes No X	(Depth (inches)					
Describe Recorded Data (stream gauge, mor	nitoring well, aerial photos, previous inspection	s) if available:				
Describe Recorded Bata (stream gauge, mor	meeting well, derial priotos, previous inspection	5))				
Remarks:						

VEGETATION - Use scientific names of plants Sampling Point: 1_20200716_WL26_U1 Absolute Dominant Indicator **Dominance Test Worksheet:** (Plot Size: 30'radius) % Cover Species? Status **Tree Stratum Number of Dominant Species** 75 Χ UPL That Are OBL, FACW, or FAC: (A) Picea abies 75 = Total Cover **Total Number of Dominant** (B) Species Across All Strata: 6 Percent of Dominant Species 50% (A/B) That Are OBL, FACW, or FAC: **Prevalence Index Worksheet:** x 1 5 **OBL** species Absolute Dominant Indicator **FACW** species 13 26 (Plot Size: 15'radius) % Cover Species? Status x 2 **Shrub Stratum** FAC species 27 х3 10 Χ **FACW** Fraxinus pennsylvanica 10 = Total Cover **FACU** species 10 x 4 40 75 **UPL** species x 5 375 Column Totals 112 (A) 473 (B) Prevalence Index = B/A = 4.22 **Hydrophytic Vegetation Indicators:** Absolute Dominant Indicator 1- Rapid Test For Hydrophytic Vegetation **Herb Stratum** (Plot Size: 5'radius) % Cover Species? Status 2- Dominance Test is > 50% 5 Solidago canadensis Х **FACU** 3- Prevalence Index is =< 3.0 Х Boehmeria cylindrica OBL 4- Morphological Adaptations Toxicodendron radicans 5 FAC Χ Cirsium vulgare 5 Х **FACU** 5- Problematic Hydrophytic Vegetation Ranunculus hispidus 4 FAC Impatiens pallida 3 **FACW Definitions of Vegetation Strata:** 27 = Total Cover Tree- Woody plants 3 in. (7.6cm) or more in diameter at breast height (DBH), regardless of height. Sapling/Shrub- Woody plants less than 3 in. DBH and greater than or equal to 3.28ft (1m) tall. Herb- All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28ft tall. Absolute Dominant Indicator Woody Vines- All woody vines greater than 3.28ft in (Plot Size: 30'radius) Status **Woody Vine Stratum** % Cover Species? height. = Total Cover Hydrophytic Vegetation Present? Yes ____ No _X Remarks: (Include photo numbers here or on a separate sheet.)

SOIL Sampling Point: 1_20200716_WL26_U1

Depth	Matrix				Redo	x Featur	res			
(inches	Color	%	Color	%	Type	Loc	Texture	Remarks		
0-3	10YR 3/2	100					Sandy Loam			
3-14	10YR 4/3	99	10YR 3/4	1	С	М	Sandy Loam			
14-20	7.5YR 5/3	95	7.5YR 4/6	5	С	М	Sand			
Ì										
Ì										
Ì										
Hydric So	oil Indicators:							Indicators for Problematic Soils:		
His	tosol (A1)				Polyvalu	e Below S	Surface (B15)	2 cm Muck (A10)		
His	tic Epipedon (A2)			Thin Dar	k Surface	(S9)	Coast Prarie Redox (A16)		
Bla	ck Histic (A3)			Loamy Mucky Mineral (F1)				5 cm Mucky Peat or Peat (S3)		
Ну	drogen Sulfide	e (A4)		Loamy Gleyed Matric (F2)				Dark Surface (S7)		
Str	atified Layers	(A5)		Depleted Matrix (F3)				Polyvalue Below Surface (S8)		
De	pleted Below	Dark Su	rface (A11)	Redox Dark Surface (F6)				Thin Dark Surface (S9)		
Thi	ck Dark Surfac	ce (A12)		Depleted Dark Surface (F7)				Iron-Manganese Masses (F12)		
Sar	ndy Mucky Mi	neral (S	1)		Redox D	epression	s (F8)	Piedmont Floodplain Soils (F19)		
Sar	ndy Gleyed Ma	atrix (S4	.)					Mesic Spodic (TA6)		
Sar	ndy Redox (S5))						Red Parent Material (F21)		
Str	ipped Matrix ((S6)						Very Shallow Dark Surface (TF12)		
Da	rk Surface (S7))						Other (Explain in Remarks)		
Restricti	ve Layer (if obs	erved):								
		Type:					Lludri	s Sail Brasant 2 - Vas - No. V		
	Depth (ir	_					nyun	c Soil Present? Yes No X		
		_								
Remark	s:									
ı										

/: Oakfield/Genessee Sampling Date: 7/16/2020
State: NY Sampling Point:
wnship, Range: 1_20200716_WL27_W1
ncave, convex, none): Concave Slope (%) 0 - 2
Long: -78.246629 Datum: NAD83
NWI Classification: PFO
res X No (if no, explain in Remarks.)
Are "Normal Circumstances" present? Yes X No
(if needed, explain any answers in Remarks.)
locations, transects, important features, etc.
e Sampled Area
nin a Wetland? Yes X No
s, optional Wetland Site ID: WL27
Secondary Indicators (minimum of two required)
Surface Soil Cracks (B6)
X Drainage Patterns (B10)
Moss Trim Lines (B16)
Dry-Season Water Table (C2)
Crayfish Burrows (C8)
.iving Roots (C3) Saturation Visible in Aerial Imagery (C9)
C4) Stunted or Stressed Plants (D1)
Illed Soils (C6) X Geomorphic Position (D2)
Shallow Aquitard (D3)
Microtopographic Relief (D4)
X FAC-Neutral Test (D5)
Wetland Hydrology Present? Yes X No
vious inspections), if available:

VEGETATION - Use scientific names of plants Sampling Point: 1_20200716_WL27_W1 Absolute Dominant Indicator **Dominance Test Worksheet:** (Plot Size: 30'radius) % Cover Species? Status **Tree Stratum Number of Dominant Species** Χ **FACW** That Are OBL, FACW, or FAC: 5 (A) Fraxinus pennsylvanica 35 Salix nigra 30 Х OBL **Total Number of Dominant** = Total Cover 65 (B) Species Across All Strata: 5 Percent of Dominant Species (A/B) That Are OBL, FACW, or FAC: 100% **Prevalence Index Worksheet:** 70 70 x 1 **OBL** species Absolute Dominant Indicator **FACW** species 45 90 (Plot Size: 15'radius) % Cover Species? Status x 2 **Shrub Stratum** FAC species 40 120 х3 20 Χ **FAC** Cornus racemosa 20 = Total Cover **FACU** species 0 x 4 0 **UPL** species 0 x 5 0 Column Totals 155 (A) 280 (B) Prevalence Index = B/A = 1.81 **Hydrophytic Vegetation Indicators:** Absolute Dominant Indicator 1- Rapid Test For Hydrophytic Vegetation **Herb Stratum** (Plot Size: 5'radius) % Cover Species? Status X 2- Dominance Test is > 50% 30 Leersia oryzoides Χ OBL X 3- Prevalence Index is =< 3.0 20 Χ FAC Eutrochium purpureum 4- Morphological Adaptations Verbena hastata 10 **FACW** Cicuta maculata 10 OBL 5- Problematic Hydrophytic Vegetation 70 = Total Cover **Definitions of Vegetation Strata:** Tree- Woody plants 3 in. (7.6cm) or more in diameter at breast height (DBH), regardless of height. Sapling/Shrub- Woody plants less than 3 in. DBH and greater than or equal to 3.28ft (1m) tall. Herb- All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28ft tall. Absolute Dominant Indicator Woody Vines- All woody vines greater than 3.28ft in (Plot Size: 30'radius) **Woody Vine Stratum** % Cover Species? Status height. = Total Cover Hydrophytic Vegetation Present? Yes X No ___

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

SOIL Sampling Point: 1_20200716_WL27_W1

Depth Matrix Color W Color W Type Loc Texture Remarks	JOIL								Jamping 1 Ont. 1_20200710_WL27_W1
Hydric Soil Indicators: Histosol (A1) Histic Epipedon (A2) Black Histic (A3) Hydrogen Sulfide (A4) Stratified Layers (A5) Depleted Below Dark Surface (A11) Thick Dark Surface (A11) Redox Dark Surface (A11) Thick Dark Surface (A12) Depleted Matrix (F3) Depleted Matrix (F3) Depleted Matrix (F3) Depleted Matrix (F3) Depleted Dark Surface (F6) Thick Dark Surface (A12) Sandy Mucky Mineral (F1) Sandy Mucky Mineral (F1) Thick Dark Surface (A12) Depleted Dark Surface (F6) Thick Dark Surface (A12) Sandy Mucky Mineral (S1) Sandy Redox (S5) Stripped Matrix (S4) Sandy Redox (S5) Stripped Matrix (S6) Dark Surface (S7) Restrictive Layer (if observed): Type: Rock Depth (inches): 6	Depth	Matrix	<u> </u>			Redo	ox Featur	res	
Hydric Soil Indicators: Histosol (A1) Histic Epipedon (A2) Black Histic (A3) Loamy Mucky Mineral (F1) Stratified Layers (A5) Depleted Below Dark Surface (A11) Thick Dark Surface (A11) Redox Dark Surface (F7) Thick Dark Surface (A12) Sandy Mucky Mineral (S1) Sandy Mucky Mineral (S1) A Redox Depressions (F8) Piedmont Floodplain Soils (F19) X Sandy Gleyed Matrix (S4) Sandy Redox (S5) Striped Matrix (S6) Dark Surface (S7) Restrictive Layer (if observed): Type: Rock Depth (inches): 6	(inches	Color	%	Color	%	Type	Loc	Texture	Remarks
Hydric Soil Indicators: Histosol (A1) Polyvalue Below Surface (B15) Polyvalue Below (A16) Polyvalue Below (A16) Polyvalue Below (A16) Polyvalue Below (A16) Polyvalue Below Polyvalue Below (A16) Polyvalue (B16) Polyvalue (B16) Polyvalue (A16) Polyvalue (A16) Polyvalue (B16) Polyvalue (A16) Polyvalue (0-3	10YR 3/2	100					Sandy Loam	
Hydric Soil Indicators: Histosol (A1) Polyvalue Below Surface (B15) Polyvalue Below (A16) Polyvalue Below (A16) Polyvalue Below (A16) Polyvalue Below (A16) Polyvalue Below Polyvalue Below (A16) Polyvalue (B16) Polyvalue (B16) Polyvalue (A16) Polyvalue (A16) Polyvalue (B16) Polyvalue (A16) Polyvalue (3-6	10YR 2.5/1	100					Sand	
Histosol (A1)		•							
Histosol (A1)									
Histosol (A1)									
Histosol (A1)									
Histosol (A1)									
Histosol (A1)									
Histosol (A1)									
Histosol (A1)									
Histic Epipedon (A2) Black Histic (A3) Hydrogen Sulfide (A4) Loamy Mucky Mineral (F1) Stratified Layers (A5) Depleted Below Dark Surface (A11) Sandy Mucky Mineral (F2) Sandy Mucky Mineral (F3) Polyvalue Below Surface (S8) Thick Dark Surface (A12) Sandy Mucky Mineral (S1) X Sandy Gleyed Matrix (S4) Sandy Redox (S5) Stripped Matrix (S6) Dark Surface (S7) Restrictive Layer (if observed): Type: Rock Depth (inches): 6	Hydric So	oil Indicators:							Indicators for Problematic Soils:
Black Histic (A3) Loamy Mucky Mineral (F1) 5 cm Mucky Peat or Peat (S3) Hydrogen Sulfide (A4) Loamy Gleyed Matric (F2) Dark Surface (S7) Stratified Layers (A5) Depleted Matrix (F3) Polyvalue Below Surface (S8) Depleted Below Dark Surface (A11) Redox Dark Surface (F6) Thin Dark Surface (S9) Thick Dark Surface (A12) Depleted Dark Surface (F7) Iron-Manganese Masses (F12) Sandy Mucky Mineral (S1) Redox Depressions (F8) Piedmont Floodplain Soils (F19) X Sandy Gleyed Matrix (S4) Mesic Spodic (TA6) Sandy Redox (S5) Red Parent Material (F21) Stripped Matrix (S6) Very Shallow Dark Surface (TF12) Dark Surface (S7) Other (Explain in Remarks) Restrictive Layer (if observed): Type: Rock Depth (inches): 6	His	tosol (A1)				Polyvalu	e Below S	Surface (B15)	2 cm Muck (A10)
Hydrogen Sulfide (A4) Stratified Layers (A5) Depleted Matrix (F3) Depleted Below Dark Surface (A11) Thick Dark Surface (A12) Sandy Mucky Mineral (S1) Sandy Redox (S5) Sandy Redox (S5) Stripped Matrix (S6) Dark Surface (S7) Mesic Spodic (TA6) Stripped Matrix (S6) Dark Surface (S9) Iron-Manganese Masses (F12) Piedmont Floodplain Soils (F19) Mesic Spodic (TA6) Redox Depressions (F8) Mesic Spodic (TA6) Redox Depressions (F8) Other (Explain in Remarks) Restrictive Layer (if observed): Type: Rock Depth (inches): 6	His	tic Epipedon (A2)			Thin Dar	k Surface	(S9)	Coast Prarie Redox (A16)
Stratified Layers (A5) Depleted Matrix (F3) Polyvalue Below Surface (S8) Thin Dark Surface (S9) Thick Dark Surface (A12) Depleted Dark Surface (F7) Iron-Manganese Masses (F12) Sandy Mucky Mineral (S1) X Sandy Gleyed Matrix (S4) Sandy Redox (S5) Stripped Matrix (S6) Dark Surface (S7) Restrictive Layer (if observed): Type: Rock Depleted Matrix (F3) Redox Dark Surface (F6) Thin Dark Surface (S9) Iron-Manganese Masses (F12) Piedmont Floodplain Soils (F19) Mesic Spodic (TA6) Red Parent Material (F21) Very Shallow Dark Surface (TF12) Other (Explain in Remarks) Restrictive Layer (if observed): Hydric Soil Present? Yes X No	Bla	ck Histic (A3)				Loamy N	/lucky Mir	neral (F1)	5 cm Mucky Peat or Peat (S3)
Depleted Below Dark Surface (A11) Thick Dark Surface (A12) Sandy Mucky Mineral (S1) X Sandy Gleyed Matrix (S4) Sandy Redox (S5) Stripped Matrix (S6) Dark Surface (S7) Restrictive Layer (if observed): Type: Rock Depth (inches): 6	Ну	drogen Sulfide	e (A4)			Loamy G	ileyed Ma	tric (F2)	Dark Surface (S7)
Thick Dark Surface (A12) Sandy Mucky Mineral (S1) X Sandy Gleyed Matrix (S4) Sandy Redox (S5) Stripped Matrix (S6) Dark Surface (S7) Restrictive Layer (if observed): Type: Rock Depth (inches): Thick Dark Surface (A12) Depleted Dark Surface (F7) Redox Depressions (F8) Piedmont Floodplain Soils (F19) Mesic Spodic (TA6) Red Parent Material (F21) Very Shallow Dark Surface (TF12) Other (Explain in Remarks) Hydric Soil Present? Yes X No	Str	atified Layers	(A5)			Depleted	d Matrix (F3)	Polyvalue Below Surface (S8)
Sandy Mucky Mineral (S1) X Sandy Gleyed Matrix (S4) Sandy Redox (S5) Stripped Matrix (S6) Dark Surface (S7) Redox Depressions (F8) Piedmont Floodplain Soils (F19) Mesic Spodic (TA6) Red Parent Material (F21) Very Shallow Dark Surface (TF12) Other (Explain in Remarks) Restrictive Layer (if observed): Type: Rock Depth (inches): 6 Hydric Soil Present? Yes X No	De	pleted Below [Dark Sur	face (A11)		Redox D	ark Surfac	ce (F6)	Thin Dark Surface (S9)
X Sandy Gleyed Matrix (S4) Sandy Redox (S5) Stripped Matrix (S6) Dark Surface (S7) Restrictive Layer (if observed): Type: Rock Depth (inches): 6 Mesic Spodic (TA6) Red Parent Material (F21) Very Shallow Dark Surface (TF12) Other (Explain in Remarks) Hydric Soil Present? Yes X No	Thi	ick Dark Surfac	ce (A12)			Depleted	d Dark Sui	rface (F7)	Iron-Manganese Masses (F12)
Sandy Redox (S5) Stripped Matrix (S6) Dark Surface (S7) Red Parent Material (F21) Very Shallow Dark Surface (TF12) Other (Explain in Remarks) Restrictive Layer (if observed): Type: Rock Depth (inches): 6 Hydric Soil Present? Yes X No	Sar	ndy Mucky Mir	neral (S1	1)		Redox D	epression	s (F8)	Piedmont Floodplain Soils (F19)
Stripped Matrix (S6) Dark Surface (S7) Restrictive Layer (if observed): Type: Rock Depth (inches): 6 Very Shallow Dark Surface (TF12) Other (Explain in Remarks) Hydric Soil Present? Yes X No	X_Sar	ndy Gleyed Ma	atrix (S4))					Mesic Spodic (TA6)
Dark Surface (S7) Restrictive Layer (if observed): Type: Rock Depth (inches): 6 Other (Explain in Remarks) Hydric Soil Present? Yes X No	Sar	ndy Redox (S5))						Red Parent Material (F21)
Restrictive Layer (if observed): Type: Rock Depth (inches): 6 Hydric Soil Present? Yes X No	Str	ipped Matrix (S6)						Very Shallow Dark Surface (TF12)
Type: Rock Depth (inches): 6 Hydric Soil Present? Yes X No	Da	rk Surface (S7))						Other (Explain in Remarks)
Depth (inches): 6	Restricti	ve Layer (if obs	erved):						
Depth (inches): 6			Type: F	Rock				Hydric	Soil Present? Yes X No
Remarks:		Depth (in	iches): 6	5				-	
Remarks:			_						
	Remark	s:							

Project/Site: Cider Solar Project	City/County: Oakfield/Ger	essee Sampling Date: 7/15/2020			
Applicant/Owner: Hecate	State: <u>NY</u> Sampling				
Investigator(s): Andrew Sorci	Section, Township, Range:	Point:1_20200716_WL27_U			
Landform (hillslope, terrace,etc.): Shoulder	Local relief (concave, convex, r	none): <u>Convex</u> Slope (%) <u>3 - 5</u>			
Subregion (LRR or MLRA): LRR L	Lat: 43.090755 Long: -7	78.246608 Datum: <u>NAD83</u>			
Soil Map Unit Name: Wy		NWI Classification: UPL			
Are climatic / hyrologic conditions on the site t	cypical for this time of year? Yes X No	(if no, explain in Remarks.)			
Are Vegetation, Soil, or Hydrology	significantly disturbed? Are "Normal	Circumstances" present? Yes X No			
Are Vegetation, Soil, or Hydrology	naturally problematic? (if needed, exp	lain any answers in Remarks.)			
SUMMARY OF FINDINGS - Attach site map	o showing sampling point locations, tran	sects, important features, etc.			
Hydrophytic Vegetation Present? Yes	No X Is the Sampled Area	1			
Hydric Soil Present? Yes	No X within a Wetland?	Yes No X			
Wetland Hydrology Present? Yes	No X if yes, optional Wet	and Site ID:			
Remarks: (Explain alternative procedures here or in a se					
HYDROLOGY					
Wetland Hydrology Indicators:		Secondary Indicators (minimum of two required)			
Primary Indicators (minimum of one is required: cl	heck all that apply)	Surface Soil Cracks (B6)			
Surface Water (A1)	Water-Stained Leaves (B9)	Drainage Patterns (B10)			
High Water Table (A2)	Aquatic Fauna (B13)	Moss Trim Lines (B16)			
Saturation (A3)	Marl Deposits (B15)	Dry-Season Water Table (C2)			
Water Marks (B1)	Hydrogen Sulfide Odor (C1)	Crayfish Burrows (C8)			
Sediment Deposits (B2)	Oxidized Rhizospheres on Living Roots (C3)	Saturation Visible in Aerial Imagery (C9)			
Drift Deposits (B3)	Presence of Reduced Iron (C4)	Stunted or Stressed Plants (D1)			
Algal Mat or Crust (B4)	Recent Iron Reduction in Tilled Soils (C6)	Geomorphic Position (D2)			
Iron Deposits (B5)	Thin Muck Surface (C7)	Shallow Aquitard (D3)			
Inundation Visible on Aerial Imagery (B7)	Other (Explain in Remarks)	Microtopographic Relief (D4)			
Sparsley Vegetated Concave Surface (B8)		FAC-Neutral Test (D5)			
Surface Water Present? Yes No X	Depth (inches)				
Water Table Present? Yes No X	Depth (inches) Wetland F	Hydrology Present? Yes No X			
Saturation Present? Yes No X	Depth (inches)				
Describe Recorded Data (stream gauge, moni	toring well, aerial photos, previous inspection	ns), if available:			
Remarks:					

VEGETATION - Use scientific names of plants Sampling Point: 1_20200716_WL27_U1 Absolute Dominant Indicator **Dominance Test Worksheet:** (Plot Size: 30'radius) % Cover Species? Status **Tree Stratum Number of Dominant Species** 50 Χ FACU That Are OBL, FACW, or FAC: (A) Juglans nigra 50 = Total Cover **Total Number of Dominant** Species Across All Strata: (B) 7 Percent of Dominant Species That Are OBL, FACW, or FAC: 14.3% (A/B) **Prevalence Index Worksheet:** 0 x 1 **OBL** species Absolute Dominant Indicator **FACW** species 0 x 2 0 (Plot Size: 15'radius) % Cover Species? **Shrub Stratum Status** FAC species 45 FACU 15 х3 Lonicera morrowii 25 Χ Rubus idaeus 25 Χ **FACU FACU** species 160 x 4 640 FAC Cornus racemosa 15 Χ **UPL** species 30 x 5 150 65 = Total Cover Column Totals 205 (A) 835 (B) Prevalence Index = B/A = 4.07 **Hydrophytic Vegetation Indicators:** Absolute Dominant Indicator 1- Rapid Test For Hydrophytic Vegetation **Herb Stratum** (Plot Size: 5'radius) % Cover Species? Status 2- Dominance Test is > 50% 25 UPL Artemisia vulgaris 3- Prevalence Index is =< 3.0 Solidago canadensis 20 Χ **FACU** 4- Morphological Adaptations Glechoma hederacea 10 **FACU** Helminthotheca echioides 5 UPL 5- Problematic Hydrophytic Vegetation Hesperis matronalis 5 **FACU** Oxalis stricta 5 **FACU Definitions of Vegetation Strata:** 70 = Total Cover Tree- Woody plants 3 in. (7.6cm) or more in diameter at breast height (DBH), regardless of height. Sapling/Shrub- Woody plants less than 3 in. DBH and greater than or equal to 3.28ft (1m) tall. Herb- All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28ft tall. Absolute Dominant Indicator Woody Vines- All woody vines greater than 3.28ft in (Plot Size: 30'radius) Species? **Woody Vine Stratum** % Cover Status height. Parthenocissus quinquefolia 20 Χ FACU 20 = Total Cover Hydrophytic Vegetation Present? Yes ____ No _X

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

SOIL Sampling Point: 1_20200716_WL27_U1

JOIL								Jamping 1 Ont. 1_20200710_WL27_01
Depth	Matrix	(Redo	ox Featur	res	
(inches	Color	%	Color	%	Type	Loc	Texture	Remarks
0-9	10YR 3/2	100					Sandy Loam	1
9-20	10YR 3/3	100					Sandy Loam	1
	•						,	
Hydric Sc	oil Indicators:							Indicators for Problematic Soils:
His	tosol (A1)				Polyvalu	e Below S	Surface (B15)	2 cm Muck (A10)
His	tic Epipedon ((A2)			Thin Dar	k Surface	(S9)	Coast Prarie Redox (A16)
Bla	ck Histic (A3)				Loamy N	∕lucky Mir	neral (F1)	5 cm Mucky Peat or Peat (S3)
Hye	drogen Sulfide	e (A4)			Loamy G	ileyed Ma	tric (F2)	Dark Surface (S7)
Str	atified Layers	(A5)			Depleted	d Matrix (F3)	Polyvalue Below Surface (S8)
De	pleted Below	Dark Su	rface (A11)		Redox D	ark Surfac	ce (F6)	Thin Dark Surface (S9)
Thi	ck Dark Surfac	ce (A12))		Depleted	d Dark Sui	rface (F7)	Iron-Manganese Masses (F12)
Sar	ndy Mucky Mi	neral (S	1)		Redox D	epression	s (F8)	Piedmont Floodplain Soils (F19)
Sar	ndy Gleyed Ma	atrix (S4	.)					Mesic Spodic (TA6)
Sar	ndy Redox (S5)						Red Parent Material (F21)
Str	ipped Matrix ((S6)						Very Shallow Dark Surface (TF12)
Da	rk Surface (S7))						Other (Explain in Remarks)
Restricti	ve Layer (if obs	erved):						
		Туре:					Нус	dric Soil Present? Yes No X
	Depth (ir	nches):						
Remark	s:							

Project/Site: Cider Solar Project	City/County: Oakfield/Ger	nessee Sampling Date: 7/16/2020			
Applicant/Owner: Hecate	State: NY Sampling Point:				
Investigator(s): Andrew Sorci	Section, Township, Range: 1_20200716_WL28_W1				
Landform (hillslope, terrace,etc.): Dip	Local relief (concave, convex, none): None Slope (%) 2 - 5				
Subregion (LRR or MLRA): LRR L	Lat: 43.096660 Long:	78.227723 Datum: NAD83			
Soil Map Unit Name: CaA		NWI Classification: PFO			
Are climatic / hyrologic conditions on the site	typical for this time of year? Yes X No	(if no, explain in Remarks.)			
Are Vegetation, Soil, or Hydrology		· — · — · — — · — — · — · — · — · — · —			
Are Vegetation, Soil, or Hydrology	naturally problematic? (if needed, exp	olain any answers in Remarks.)			
SUMMARY OF FINDINGS - Attach site ma	p showing sampling point locations, trar	nsects, important features, etc.			
Hydrophytic Vegetation Present? Yes X					
Hydric Soil Present? Yes X	No within a Wetland?	Yes X No			
Wetland Hydrology Present? Yes X		land Site ID: WL28			
Remarks: (Explain alternative procedures here or in a se					
HYDROLOGY					
Wetland Hydrology Indicators:		Secondary Indicators (minimum of two required)			
Primary Indicators (minimum of one is required: c	heck all that apply)	Surface Soil Cracks (B6)			
Surface Water (A1)	Water-Stained Leaves (B9)	Drainage Patterns (B10)			
High Water Table (A2)	Aquatic Fauna (B13)	Moss Trim Lines (B16)			
Saturation (A3)	Marl Deposits (B15)	Dry-Season Water Table (C2)			
Water Marks (B1)	Hydrogen Sulfide Odor (C1)	Crayfish Burrows (C8)			
Sediment Deposits (B2)	Oxidized Rhizospheres on Living Roots (C3)	Saturation Visible in Aerial Imagery (C9)			
Drift Deposits (B3)	Presence of Reduced Iron (C4)	Stunted or Stressed Plants (D1)			
Algal Mat or Crust (B4)	Recent Iron Reduction in Tilled Soils (C6)	X Geomorphic Position (D2)			
Iron Deposits (B5)	Thin Muck Surface (C7)	Shallow Aquitard (D3)			
Inundation Visible on Aerial Imagery (B7)	Other (Explain in Remarks)	Microtopographic Relief (D4)			
Sparsley Vegetated Concave Surface (B8)		X FAC-Neutral Test (D5)			
Surface Water Present? Yes No X	Depth (inches)				
Water Table Present? Yes No X	- · · · · 	Hydrology Present? Yes X No			
Saturation Present? Yes No X	Depth (inches)				
Describe Recorded Data (stream gauge, moni	toring well, aerial photos, previous inspection	ns), if available:			
Remarks:					

VEGETATION - Use scientific names of plants				Sampli	ing Point: 1_20	209716_W	L28_W
Tree Stratum (Plot Size: _30'radius_)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test V Number of Domi			
Fraxinus pennsylvanica	25	X	FACW	That Are OBL, FA	•	7	(A)
	25	_= Total Cov	er		er of Dominant ross All Strata:	9	_ (B)
				Percent of Don	minant Species		_
				That Are OBL,	-	77.8%	_(A/B)
				Prevalence Index \	Worksheet:		
	Ahsoluta	Dominant	Indicator	OBL species	0 x 1	0	
Shrub Stratum (Plot Size: 15'radius)	% Cover	Species?	Status	FACW species	97 x 2	194	
Cornus racemosa	15	Х	FAC	FAC species	30 x 3	90	
Viburnum opulus	12	Х	FACW	FACU species	20 x 4	80	
Ribes americanum	10	X	FACW	UPL species	0 x 5	0	
Lonicera tatarica	<u>10</u> 47	= Total Cov	FACU	Column Totals	147 (A)	364	(B
	47	_= 10tal Cov	'ei		te Index = B/A =	2.48	(D
	A			Hydrophytic Vege			
Herb Stratum (Plot Size: 5'radius)	% Cover	Dominant Species?	Status		st For Hydrophy	tic Vegeta	tion
· ——		-		X 2- Dominano	ce Test is > 50%		
Onoclea sensibilis Symphyotrichum lanceolatum	25 25	X X	FACW	X 3- Prevalenc	ce Index is =< 3.0)	
Symphyothenum lanceolatum			FACW				
	50	= Total Cov	<u>FACW</u> ver	4- Morpholo	ogical Adaptatio	ns	
	50	_= Total Cov		<u> </u>	ogical Adaptatio atic Hydrophytic		on
	50	_= Total Cov		<u> </u>	atic Hydrophytic		on
	50	_= Total Cov		5- Problema	ation Strata: 3 in. (7.6cm) or m	Vegetation	
	50	_= Total Cov		5- Problema Definitions of Vegeta Tree- Woody plants 3	ation Strata: 3 in. (7.6cm) or m regardless of height	Vegetation ore in diameter of the state of t	neter at
		_	rer	5- Problema Definitions of Vegeta Tree- Woody plants 3 breast height (DBH), Sapling/Shrub- Wood	ation Strata: 3 in. (7.6cm) or m regardless of height dy plants less than it to 3.28ft (1m) takes (non-woody) pla	ore in diamonth. a 3 in. DBH all.	neter at
Woody Vine Stratum (Plot Size: 30'radius)		_= Total Cov Dominant Species?	rer	5- Problema Definitions of Vegeta Tree- Woody plants 3 breast height (DBH), Sapling/Shrub- Wood greater than or equa Herb- All herbaceous size, and woody plan Woody Vines- All wo	ation Strata: 3 in. (7.6cm) or m regardless of heig dy plants less than I to 3.28ft (1m) ta s (non-woody) pla ats less than 3.28f	ore in diamonth. a 3 in. DBH all. nts, regard t tall.	and less of
Vitis riparia	Absolute % Cover 15	Dominant Species? X	Indicator Status FAC	5- Problema Definitions of Vegeta Tree- Woody plants 3 breast height (DBH), Sapling/Shrub- Wood greater than or equa Herb- All herbaceous size, and woody plan	ation Strata: 3 in. (7.6cm) or m regardless of heig dy plants less than I to 3.28ft (1m) ta s (non-woody) pla ats less than 3.28f	ore in diamonth. a 3 in. DBH all. nts, regard t tall.	and less of
• ——	Absolute % Cover 15 10	Dominant Species? X X	Indicator Status FAC FACU	5- Problema Definitions of Vegeta Tree- Woody plants 3 breast height (DBH), Sapling/Shrub- Wood greater than or equa Herb- All herbaceous size, and woody plan Woody Vines- All woheight.	ation Strata: 3 in. (7.6cm) or m regardless of height plants less than I to 3.28ft (1m) to see (non-woody) plants less than 3.28ft ody vines greater hytic	ore in diamonth. a 3 in. DBH all. nts, regard t tall.	and less of
Vitis riparia	Absolute % Cover 15	Dominant Species? X	Indicator Status FAC FACU	5- Problema Definitions of Vegeta Tree- Woody plants 3 breast height (DBH), Sapling/Shrub- Wood greater than or equa Herb- All herbaceous size, and woody plan Woody Vines- All woheight. Hydropl Vegeta	ation Strata: 3 in. (7.6cm) or m regardless of height plants less than I to 3.28ft (1m) to see (non-woody) plants less than 3.28ft ody vines greater hytic	ore in diamonds.	and less of t in

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

SOIL Sampling Point: 1_20209716_WL28_W1

Depth	Matrix				Redo	x Featu	res	
(inches	Color	%	Color	%	Type	Loc	Texture	Remarks
0-5	10YR 3/1	90	5YR 4/6	10	С	М	Silty Clay Loam	
5-12	10YR 4/2	85	5YR 4/6	15	С	M	Silty Clay Loam	
12-20	10YR 4/1	80	5YR 4/6	20	С	М	Clay Loam	

Hydric Soil Indicators:		Indicators for Problematic Soils:
Histosol (A1)	Polyvalue Below Surface (B	15) 2 cm Muck (A10)
Histic Epipedon (A2)	Thin Dark Surface (S9)	Coast Prarie Redox (A16)
Black Histic (A3)	Loamy Mucky Mineral (F1)	5 cm Mucky Peat or Peat (S3)
Hydrogen Sulfide (A4)	Loamy Gleyed Matric (F2)	Dark Surface (S7)
Stratified Layers (A5)	X Depleted Matrix (F3)	Polyvalue Below Surface (S8)
Depleted Below Dark Surface (A11)	X Redox Dark Surface (F6)	Thin Dark Surface (S9)
Thick Dark Surface (A12)	Depleted Dark Surface (F7)	Iron-Manganese Masses (F12)
Sandy Mucky Mineral (S1)	Redox Depressions (F8)	Piedmont Floodplain Soils (F19)
Sandy Gleyed Matrix (S4)		Mesic Spodic (TA6)
Sandy Redox (S5)		Red Parent Material (F21)
Stripped Matrix (S6)		Very Shallow Dark Surface (TF12)
Dark Surface (S7)		Other (Explain in Remarks)
Restrictive Layer (if observed):		
Туре:		Hydric Soil Present? Yes X No
Depth (inches):		

Project/Site: Cider Solar Project	City/County: Oakfield/Gennesee Sampling Date: 7/15/2020					
Applicant/Owner: Hecate	State: NY Sampling Point:					
Investigator(s): Andrew Sorci	Section, Township, Range: 1_20200720_WL28_W2					
Landform (hillslope, terrace,etc.): Dip	Local relief (concave, convex, none): None Slope (%) 2 - 5					
Subregion (LRR or MLRA): LRR L Lat	: <u>43.096482</u> Long: <u>-78.227739</u> Datum: <u>NAD83</u>					
Soil Map Unit Name: CaA	NWI Classification: PEM					
Are climatic / hyrologic conditions on the site typical for	this time of year? Yes X No (if no, explain in Remarks.)					
	ificantly disturbed? Are "Normal Circumstances" present? Yes X No					
Are Vegetation, Soil, or Hydrologynat	urally problematic? (if needed, explain any answers in Remarks.)					
SLIMMARY OF FINDINGS - Attach site man showin	g sampling point locations, transects, important features, etc.					
	Is the Sampled Area					
	within a Watland?					
Hydric Soil Present? Yes X No	<u> </u>					
Wetland Hydrology Present? Yes X No	if yes, optional Wetland Site ID: WL28-2					
Remarks: (Explain alternative procedures here or in a separate repor	t.)					
HYDROLOGY						
Wetland Hydrology Indicators:	Secondary Indicators (minimum of two required)					
Primary Indicators (minimum of one is required: check all tha	t apply) Surface Soil Cracks (B6)					
X Surface Water (A1) Wate	r-Stained Leaves (B9) Drainage Patterns (B10)					
High Water Table (A2) Aqua	tic Fauna (B13) Moss Trim Lines (B16)					
Saturation (A3) Marl	Deposits (B15) Dry-Season Water Table (C2)					
Water Marks (B1) Hydro	ogen Sulfide Odor (C1) Crayfish Burrows (C8)					
Sediment Deposits (B2) X Oxidiz	zed Rhizospheres on Living Roots (C3) X Saturation Visible in Aerial Imagery (C9)					
Drift Deposits (B3) Prese	nce of Reduced Iron (C4) Stunted or Stressed Plants (D1)					
	nt Iron Reduction in Tilled Soils (C6) Geomorphic Position (D2)					
	Muck Surface (C7) Shallow Aquitard (D3)					
	(Explain in Remarks) Microtopographic Relief (D4)					
Sparsley Vegetated Concave Surface (B8)	X FAC-Neutral Test (D5)					
	<u> </u>					
· · ·	· 					
	inches) Wetland Hydrology Present? Yes X No					
Saturation Present? Yes No X Depth (inches)					
Describe Recorded Data (stream gauge, monitoring wel	l, aerial photos, previous inspections), if available:					
Remarks:						
nemarks.						

VEGETATION - Use scientific names of plants Sampling Point: 1_20200720_WL28_W2 Absolute Dominant Indicator **Dominance Test Worksheet:** (Plot Size: 30'radius) % Cover Species? **Tree Stratum** Status **Number of Dominant Species** That Are OBL. FACW, or FAC: (A) 2 = Total Cover **Total Number of Dominant** Species Across All Strata: 2 (B) **Percent of Dominant Species** That Are OBL, FACW, or FAC: 100% (A/B) Prevalence Index Worksheet: OBL species 23 x 1 23 Absolute Dominant Indicator 25 (Plot Size: 15'radius) % Cover Species? Status **FACW** species x 2 50 **Shrub Stratum** 40 FAC species х3 120 = Total Cover FACU species 8 32 x 4 **UPL** species n x 5 0 Column Totals 96 (A) 225 (B) Prevalence Index = B/A = 2.34 **Hydrophytic Vegetation Indicators:** Absolute Dominant Indicator 1- Rapid Test For Hydrophytic Vegetation **Herb Stratum** (Plot Size: 5'radius) % Cover Species? Status X 2- Dominance Test is > 50% FAC Agrostis capillaris 25 X 3- Prevalence Index is =< 3.0 Χ Agrostis gigantea 25 **FACW** 4- Morphological Adaptations Persicaria maculosa 15 FAC Carex vulpinoidea 15 OBL 5- Problematic Hydrophytic Vegetation Glyceria striata 8 OBL Ambrosia artemisiifolia 4 **FACU Definitions of Vegetation Strata:** 4 Acalypha rhomboidea **FACU** Tree- Woody plants 3 in. (7.6cm) or more in diameter at 96 = Total Cover breast height (DBH), regardless of height. Sapling/Shrub- Woody plants less than 3 in. DBH and greater than or equal to 3.28ft (1m) tall. Herb- All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28ft tall. Absolute Dominant Indicator Woody Vines- All woody vines greater than 3.28ft in (Plot Size: 30'radius) **Woody Vine Stratum** % Cover Species? Status height. = Total Cover Hydrophytic Vegetation Present? Yes X No ____ Remarks: (Include photo numbers here or on a separate sheet.)

SOIL Sampling Point:

1_20200720_WL28_W2

Depth	iviatrix				кеа	ox Featur	es	
inches	Color	%	Color	%	Type	Loc	Texture	Remarks
0-8	10YR 4/1	90	10YR 5/8	10	С	М	Clay	
Hydric So	il Indicators:							Indicators for Problematic Soils:
	tosol (A1)						urface (B15)	2 cm Muck (A10)
	tic Epipedon (A2)		-		rk Surface		Coast Prarie Redox (A16)
	ck Histic (A3)	()				Mucky Min		5 cm Mucky Peat or Peat (S3)
	drogen Sulfide					Bleyed Mat		Dark Surface (S7)
	atified Layers		C (0.1.1)	X		d Matrix (F	-	Polyvalue Below Surface (S8)
Depleted Below Dark Surface (A11)						ark Surfac		Thin Dark Surface (S9)
	ck Dark Surfac			-		d Dark Sur		Iron-Manganese Masses (F12)
	dy Mucky Mi			-	Redox D	epressions	S (F8)	Piedmont Floodplain Soils (F19)
	dy Gleyed Ma)					Mesic Spodic (TA6)
	dy Redox (S5)							Red Parent Material (F21)
	pped Matrix (k Surface (S7)							Very Shallow Dark Surface (TF12)
Dai	k surface (57)							Other (Explain in Remarks)
Restrictiv	e Layer (if obs	erved):						
		Type:					Hydrid	Soil Present? Yes X No
	Depth (in	ches):						
Remarks	<u> </u>							

Project/Site: Cider Solar Project			City/Co	ounty: Oakfield/Gennes	see	Sampling Date: <u>7/20/2020</u>		
Applicant/Owner: Hecate				Sta	te: NY	Sampling Point:		
Investigator(s): Andrew Sorci			Section, Township, Range: 1_20200720_WL28_W3					
Landform (hillslope, terrace,etc.):)ip		Local relief (concave, convex, none): None Slope (%) 0 - 5					
Subregion (LRR or MLRA): LRR L			Lat: 43.097307	Long:78.2	26059	Datum: NAD83		
Soil Map Unit Name: HIB					NWI Classif	fication: PEM		
Are climatic / hyrologic conditions or	າ the si¹	te typ	pical for this time of ye	ear? Yes X No	(if no,	explain in Remarks.)		
Are Vegetation, Soil, or I	-			rbed? Are "Normal Circ		· — —		
Are Vegetation, Soil, or I	Hydrolo	ogy _	naturally problem	atic? (if needed, explain	any answers	s in Remarks.)		
SUMMARY OF FINDINGS - Attach	sita n	nand	showing sampling n	oint locations transpo	ts import	tant features etc		
Hydrophytic Vegetation Present?	Yes	X	No	Is the Sampled Area	,t3, 1111por	tant reatures, etc.		
				within a Wetland?	V	'es X No		
Hydric Soil Present?	Yes	X	No					
Wetland Hydrology Present?	Yes_	Х	No	if yes, optional Wetland Site ID: WL28				
Remarks: (Explain alternative procedures he	re or in a	a separ	rate report.)					
HYDROLOGY								
Wetland Hydrology Indicators:				Sec	condary Indic	cators (minimum of two required)		
Primary Indicators (minimum of one is a	required	d: che	ck all that apply)		Surface So	oil Cracks (B6)		
Surface Water (A1)			Water-Stained Leaves	s (B9)	Drainage	Patterns (B10)		
High Water Table (A2)			Aquatic Fauna (B13)		Moss Trin	n Lines (B16)		
Saturation (A3)			Marl Deposits (B15)		Dry-Seaso	on Water Table (C2)		
Water Marks (B1)			— Hydrogen Sulfide Odo	or (C1)	— Crayfish B	surrows (C8)		
Sediment Deposits (B2)			Oxidized Rhizosphere	s on Living Roots (C3) X	 Saturation	n Visible in Aerial Imagery (C9)		
Drift Deposits (B3)		-	Presence of Reduced	Iron (C4)	 Stunted o	r Stressed Plants (D1)		
Algal Mat or Crust (B4)				n in Tilled Soils (C6) X	— Geomorp	hic Position (D2)		
Iron Deposits (B5)			— Thin Muck Surface (C			quitard (D3)		
Inundation Visible on Aerial Image	rv (B7)		Other (Explain in Rem	· ·		ographic Relief (D4)		
Sparsley Vegetated Concave Surfa		_			_	ral Test (D5)		
Surface Water Present? Yes	No		Depth (inches)					
			Depth (inches)		rology Pres	ent? Yes X No		
Water Table Present? Yes	-				lology i les	——————————————————————————————————————		
Saturation Present? Yes	No_		Depth (inches)	_				
Describe Recorded Data (stream gau	uge, mo	onito	ring well, aerial photos	s, previous inspections), i	if available:			
Remarks:								

VEGETATION - Use scientific names of plants Sampling Point: 1_20200720_WL28_W3 Absolute Dominant Indicator **Dominance Test Worksheet:** (Plot Size: 30'radius) % Cover Species? **Tree Stratum** Status **Number of Dominant Species** That Are OBL. FACW, or FAC: (A) 3 = Total Cover **Total Number of Dominant** Species Across All Strata: 5 (B) **Percent of Dominant Species** That Are OBL, FACW, or FAC: 60% (A/B) Prevalence Index Worksheet: OBL species x 1 0 Absolute Dominant Indicator 45 90 (Plot Size: 15'radius) % Cover Species? Status **FACW** species x 2 **Shrub Stratum** FAC species O х3 0 = Total Cover 25 FACU species x 4 100 **UPL** species O x 5 0 Column Totals 70 (A) 190 (B) Prevalence Index = B/A = 2.71 **Hydrophytic Vegetation Indicators:** Absolute Dominant Indicator 1- Rapid Test For Hydrophytic Vegetation **Herb Stratum** (Plot Size: 5'radius) % Cover Species? Status X 2- Dominance Test is > 50% Unknown species 20 UNK X 3- Prevalence Index is =< 3.0 Χ Solidago canadensis 15 **FACU** 4- Morphological Adaptations Cyperus strigosus 15 Χ **FACW** Χ Verbena hastata 15 **FACW** 5- Problematic Hydrophytic Vegetation Agrostis stolonifera 15 Χ **FACW** Cirsium arvense 10 **FACU Definitions of Vegetation Strata:** = Total Cover 90 Tree- Woody plants 3 in. (7.6cm) or more in diameter at breast height (DBH), regardless of height. Sapling/Shrub- Woody plants less than 3 in. DBH and greater than or equal to 3.28ft (1m) tall. Herb- All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28ft tall. Absolute Dominant Indicator Woody Vines- All woody vines greater than 3.28ft in (Plot Size: 30'radius) Status **Woody Vine Stratum** % Cover Species? height. = Total Cover Hydrophytic Vegetation Present? Yes X No ____

Remarks: (Include photo numbers here or on a separate sheet.) unknown grass species unidentifiable due to recent mowing

SOIL Sampling Point: 1_20200720_WL28_W3

Depth	Matrix				Redo	x Featu		
(inches	Color	%	Color	%	Type	Loc	Texture	Remarks
0-12	10YR 4/2	90	10YR 5/8	10	С	M	Clay	
Hydric Sc	oil Indicators:							Indicators for Problematic Soils:
-	tosol (A1)				Polyvalu	e Below S	Surface (B15)	2 cm Muck (A10)
	tic Epipedon (Δ2)				k Surface		Coast Prarie Redox (A16)
	ck Histic (A3)	, ·-,					neral (F1)	5 cm Mucky Peat or Peat (S3)
	drogen Sulfide	(A4)				leyed Ma		Dark Surface (S7)
	atified Layers				-	d Matrix (Polyvalue Below Surface (S8)
	pleted Below I		rface (A11)			ark Surfa		Thin Dark Surface (S9)
	ck Dark Surfac						rface (F7)	Iron-Manganese Masses (F12)
	ndy Mucky Mir				-	epression		Piedmont Floodplain Soils (F19)
	ndy Gleyed Ma	-	-					Mesic Spodic (TA6)
	ndy Redox (S5)		,					Red Parent Material (F21)
	ipped Matrix (Very Shallow Dark Surface (TF12)
	rk Surface (S7)							Other (Explain in Remarks)
	,							
Restrictiv	ve Layer (if obs	erved):						
		Туре:					Lludria	Cail Dracant 2 Vac. V. No.
	Depth (in	_					пуилс	Soil Present? Yes X No
	Deptii (iii	_						
Remarks	c·						l l	
Remark	J.							

Project/Site: Cider Solar Project	City/County: Oakfield/Ger	nessee Sampling Date: 7/16/2020				
Applicant/Owner: Hecate	State: <u>NY</u> Sampling					
Investigator(s): Andrew Sorci	Section, Township, Range: Point:1_20200716_WL28					
Landform (hillslope, terrace,etc.): Rise	Local relief (concave, convex, none): Convex Slope (%)					
Subregion (LRR or MLRA): LRR L	Lat: <u>43.096604</u> Long: <u>-</u> 7	78.227693 Datum: <u>NAD83</u>				
Soil Map Unit Name: CaA		NWI Classification: UPL				
Are climatic / hyrologic conditions on the site t						
Are Vegetation, Soil, or Hydrology		· — —				
Are Vegetation, Soil, or Hydrology	naturally problematic? (if needed, exp	lain any answers in Remarks.)				
SUMMARY OF FINDINGS - Attach site map	showing sampling point locations tran	seets important features etc				
_		•				
Hydrophytic Vegetation Present? Yes	No X Is the Sampled Area within a Wetland?					
Hydric Soil Present? Yes	NOX	Yes NoX				
Wetland Hydrology Present? Yes	No X if yes, optional Wet	land Site ID:				
Remarks: (Explain alternative procedures here or in a sep	parate report.)					
HYDROLOGY						
Wetland Hydrology Indicators:		Secondary Indicators (minimum of two required)				
Primary Indicators (minimum of one is required: cl	neck all that apply)	Surface Soil Cracks (B6)				
Surface Water (A1)	Water-Stained Leaves (B9)	Drainage Patterns (B10)				
High Water Table (A2)	Aquatic Fauna (B13)	Moss Trim Lines (B16)				
Saturation (A3)	Marl Deposits (B15)	Dry-Season Water Table (C2)				
Water Marks (B1)	Hydrogen Sulfide Odor (C1)	Crayfish Burrows (C8)				
Sediment Deposits (B2)	Oxidized Rhizospheres on Living Roots (C3)	Saturation Visible in Aerial Imagery (C9)				
Drift Deposits (B3)	Presence of Reduced Iron (C4)	Stunted or Stressed Plants (D1)				
Algal Mat or Crust (B4)	Recent Iron Reduction in Tilled Soils (C6)	Geomorphic Position (D2)				
Iron Deposits (B5)	Thin Muck Surface (C7)	Shallow Aquitard (D3)				
						
Inundation Visible on Aerial Imagery (B7)	Other (Explain in Remarks)	Microtopographic Relief (D4)				
Sparsley Vegetated Concave Surface (B8)		FAC-Neutral Test (D5)				
Surface Water Present? Yes NoX	Depth (inches)					
Water Table Present? Yes No X	Depth (inches) Wetland H	Hydrology Present? Yes No X				
Saturation Present? Yes No X	Depth (inches)					
Describe Recorded Data (stream gauge, monit	earing wall parial photos, provious inspection	or) if available:				
Describe Recorded Data (stream gauge, month	offing well, aerial photos, previous inspection	is), ii available.				
Remarks:						

VEGETATION - Use scientific names of plants Sampling Point: 1_20200716_WL28_U1 Absolute Dominant Indicator **Dominance Test Worksheet:** (Plot Size: 30'radius) % Cover Species? Status **Tree Stratum Number of Dominant Species** 40 Χ **FACW** That Are OBL, FACW, or FAC: (A) Fraxinus pennsylvanica Prunus serotina 15 Х **FACU Total Number of Dominant** = Total Cover 55 (B) Species Across All Strata: 6 Percent of Dominant Species That Are OBL, FACW, or FAC: 33.3% (A/B) **Prevalence Index Worksheet:** 0 x 1 **OBL** species Absolute Dominant Indicator **FACW** species 40 x 2 80 (Plot Size: 15'radius) % Cover Species? Status **Shrub Stratum FAC** species 36 12 х3 25 Χ FACU Lonicera tatarica 25 = Total Cover **FACU** species 70 x 4 280 **UPL** species 0 x 5 0 Column Totals 122 (A) 396 (B) Prevalence Index = B/A = 3.25 **Hydrophytic Vegetation Indicators:** Absolute Dominant Indicator 1- Rapid Test For Hydrophytic Vegetation **Herb Stratum** (Plot Size: 5'radius) % Cover Species? Status 2- Dominance Test is > 50% **FACU** Alliaria petiolata 10 Χ 3- Prevalence Index is =< 3.0 Toxicodendron radicans 8 Χ **FAC** 4- Morphological Adaptations Geum canadense 4 **FAC** 22 = Total Cover 5- Problematic Hydrophytic Vegetation **Definitions of Vegetation Strata:** Tree- Woody plants 3 in. (7.6cm) or more in diameter at breast height (DBH), regardless of height. Sapling/Shrub- Woody plants less than 3 in. DBH and greater than or equal to 3.28ft (1m) tall. Herb- All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28ft tall. Absolute Dominant Indicator Woody Vines- All woody vines greater than 3.28ft in (Plot Size: 30'radius) Species? **Woody Vine Stratum** % Cover Status height. Parthenocissus quinquefolia 20 Χ FACU 20 = Total Cover Hydrophytic Vegetation Present? Yes ____ No _X

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

SOIL Sampling Point: 1_20200716_WL28_U1

Depth Matrix				Redo	x Feature	es													
(inches	Color	%	Color	%	Type	Loc	Texture	Remarks											
0-3	10YR 2/2	100					Clay Loam												
3-12	10YR 3/2	99	10YR 3/4	1	С	М	Clay Loam												
12-20	10YR 4/2	85	10YR 4/4	15	С	М	Clay Loam												
Hydric So	il Indicators:							Indicators for Problematic Soils:											
His	tosol (A1)			Polyvalue Below Surface (B15)				2 cm Muck (A10)											
His	tic Epipedon (A2)		Thin Dark Surface (S9)				Coast Prarie Redox (A16)											
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)				Loamy Mucky Mineral (F1) Loamy Gleyed Matric (F2) Depleted Matrix (F3) Redox Dark Surface (F6) Depleted Dark Surface (F7)				5 cm Mucky Peat or Peat (S3) Dark Surface (S7) Polyvalue Below Surface (S8) Thin Dark Surface (S9) Iron-Manganese Masses (F12)											
												Redox D	epressions	(F8)	Piedmont Floodplain Soils (F19)				
															Mesic Spodic (TA6)				
											Sandy Redox (S5)								Red Parent Material (F21)
											Stripped Matrix (S6)								Very Shallow Dark Surface (TF12)
				Dar	k Surface (S7))						Other (Explain in Remarks)							
				Restrictiv	ve Layer (if obs	erved):													
		Type:					Hydric	Soil Present? Yes No X											
Depth (inches):						,													
Remarks).																		

Project/Site: Cider Solar Project	City/County: Oakfield/Ge	nessee Sampling Date: 9/24/2020						
Applicant/Owner: Hecate		State: NY Sampling Point:						
Investigator(s): Andrew Sorci	Section, Township, Range: 1_20200924_WL29							
Landform (hillslope, terrace,etc.): Dip	Local relief (concave, convex, none): Concave Slope (%) 1 - 2							
Subregion (LRR or MLRA): LRR L	Lat: <u>43.098268</u> Long:	78.228343 Datum: NAD83						
Soil Map Unit Name:		NWI Classification: PSS						
Are climatic / hyrologic conditions on the site t	cypical for this time of year? Yes X No	(if no, explain in Remarks.)						
Are Vegetation, Soil, or Hydrology	significantly disturbed? Are "Normal Circumstances" present? Yes X No							
Are Vegetation, Soil, or Hydrology	naturally problematic? (if needed, explain any answers in Remarks.)							
SUMMARY OF FINDINGS - Attach site ma	showing sampling point locations, trai	nsects, important features, etc.						
Hydrophytic Vegetation Present? Yes X								
Hydric Soil Present? Yes X	No within a Wetland?							
Wetland Hydrology Present? Yes X	No if yes, optional Wetland Site ID: WL29							
Remarks: (Explain alternative procedures here or in a se								
nemains. (Explain alternative procedures here of in a se	parate report.)							
HYDROLOGY								
Wetland Hydrology Indicators:		Secondary Indicators (minimum of two required)						
Primary Indicators (minimum of one is required: c	heck all that apply)	Surface Soil Cracks (B6)						
Surface Water (A1)	Water-Stained Leaves (B9)	Drainage Patterns (B10)						
High Water Table (A2)	Aquatic Fauna (B13)	X Moss Trim Lines (B16)						
Saturation (A3)	Marl Deposits (B15)	Dry-Season Water Table (C2)						
Water Marks (B1)	Hydrogen Sulfide Odor (C1)	Crayfish Burrows (C8)						
Sediment Deposits (B2)	X Oxidized Rhizospheres on Living Roots (C3)	Saturation Visible in Aerial Imagery (C9)						
Drift Deposits (B3)	Presence of Reduced Iron (C4)	Stunted or Stressed Plants (D1)						
Algal Mat or Crust (B4)	Recent Iron Reduction in Tilled Soils (C6)	X Geomorphic Position (D2)						
Iron Deposits (B5)	Thin Muck Surface (C7)	Shallow Aquitard (D3)						
Inundation Visible on Aerial Imagery (B7)	Other (Explain in Remarks)	Microtopographic Relief (D4)						
Sparsley Vegetated Concave Surface (B8)	Other (Explain in Kemarks)	X FAC-Neutral Test (D5)						
Surface Water Present? Yes NoX	Depth (inches)							
Water Table Present? Yes No X	Depth (inches) Wetland	Hydrology Present? Yes X No						
Saturation Present? Yes NoX	Depth (inches)							
Describe Recorded Data (stream gauge, moni	toring well, aerial photos, previous inspection	ns), if available:						
Damania.								
Remarks:								

VEGETATION - Use scientific names of plants Sampling Point: 1_20200924_WL29 Absolute Dominant Indicator **Dominance Test Worksheet:** (Plot Size: 30'radius) % Cover Species? Status **Tree Stratum Number of Dominant Species** That Are OBL, FACW, or FAC: 5 (A) = Total Cover **Total Number of Dominant** (B) Species Across All Strata: 5 Percent of Dominant Species That Are OBL, FACW, or FAC: (A/B) 100% **Prevalence Index Worksheet:** x 1 3 **OBL** species 3 Absolute Dominant Indicator **FACW** species 90 x 2 180 (Plot Size: 15'radius) % Cover Species? **Shrub Stratum** Status FAC species 54 162 х3 75 Χ **FACW** Fraxinus pennsylvanica Cornus racemosa 25 Х FAC **FACU** species 20 x 4 80 20 **FACU** Lonicera morrowii **UPL** species 0 x 5 0 120 = Total Cover Column Totals 167 (A) 425 (B) Prevalence Index = B/A = 2.54 **Hydrophytic Vegetation Indicators:** Absolute Dominant Indicator 1- Rapid Test For Hydrophytic Vegetation **Herb Stratum** (Plot Size: 5'radius) % Cover Species? Status X 2- Dominance Test is > 50% Agrostis stolonifera 15 **FACW** X 3- Prevalence Index is =< 3.0 Symphyotrichum lateriflorum 8 Χ FAC 4- Morphological Adaptations Persicaria virginiana 6 **FAC** 3 OBL Scirpus atrovirens 5- Problematic Hydrophytic Vegetation 32 = Total Cover **Definitions of Vegetation Strata:** Tree- Woody plants 3 in. (7.6cm) or more in diameter at breast height (DBH), regardless of height. Sapling/Shrub- Woody plants less than 3 in. DBH and greater than or equal to 3.28ft (1m) tall. Herb- All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28ft tall. Absolute Dominant Indicator Woody Vines- All woody vines greater than 3.28ft in (Plot Size: 30'radius) Species? **Woody Vine Stratum** % Cover Status height. **FAC** Vitis riparia 15 Χ 15 = Total Cover Hydrophytic Vegetation Present? Yes X No ____

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

SOIL Sampling Point: 1_20200924_WL29

Depth	Matrix		Redox Features				ıres	
(inches	Color	%	Color	%	Туре	Loc	Texture	Remarks
0-3	10YR 3/1	98	10YR 3/6	2	С	PL	Sandy Loam	
3-8	10YR 3/1	95	10YR 4/6	5	С	М	Sandy Clay Loam	
8-16	10YR 6/2	80	10YR 5/6	20	С	М	Sandy Clay Loam	

Hydric Soil Indicators:		Indicators for Problematic Soils:		
Histosol (A1)	Polyvalue Below Surface (B15)2 cm Muck (A10)		
Histic Epipedon (A2)	Thin Dark Surface (S9)	Coast Prarie Redox (A16)		
Black Histic (A3)	Loamy Mucky Mineral (F1	.) 5 cm Mucky Peat or Peat (S3)		
Hydrogen Sulfide (A4)	Loamy Gleyed Matric (F2)	Dark Surface (S7)		
Stratified Layers (A5)	X Depleted Matrix (F3)	Polyvalue Below Surface (S8)		
Depleted Below Dark Surface (A11)	X Redox Dark Surface (F6)	Thin Dark Surface (S9)		
Thick Dark Surface (A12)	Depleted Dark Surface (F7	7) Iron-Manganese Masses (F12)		
Sandy Mucky Mineral (S1)	Redox Depressions (F8)	Piedmont Floodplain Soils (F19)		
Sandy Gleyed Matrix (S4)		Mesic Spodic (TA6)		
Sandy Redox (S5)		Red Parent Material (F21)		
Stripped Matrix (S6)		Very Shallow Dark Surface (TF12)		
Dark Surface (S7)		Other (Explain in Remarks)		
Restrictive Layer (if observed):				
Type:				
Type:		Hydric Soil Present? Yes X No		
Depth (inches):				

Remarks:

Project/Site: Cider Solar Project	City/C	ounty: Oakfield/Gen	essee Sampling Date: 7/17/2020		
Applicant/Owner: Hecate			State: NY Sampling Point:		
Investigator(s): Andrew Sorci	Section, Township, Range: 1_20200715_WL30_W1				
Landform (hillslope, terrace,etc.): Depression	Local relie	ef (concave, convex, r	none): <u>Concave</u> Slope (%) <u>0 - 2</u>		
Subregion (LRR or MLRA): LRR L	Lat: 43.094814	Long: <u>-</u> 7	78.233172 Datum: NAD83		
Soil Map Unit Name: CaA			NWI Classification: PEM		
Are climatic / hyrologic conditions on the site t	typical for this time of ye	ar? Yes X No	(if no, explain in Remarks.)		
Are Vegetation X , Soil , or Hydrology	significantly distur	bed? Are "Normal of	Circumstances" present? Yes X No		
Are Vegetation, Soil, or Hydrology	naturally problem	atic? (if needed, exp	lain any answers in Remarks.)		
SUMMARY OF FINDINGS - Attach site map	p showing sampling p	oint locations, tran	sects, important features, etc.		
Hydrophytic Vegetation Present? Yes X	No	Is the Sampled Area	ea		
Hydric Soil Present? Yes X	No	within a Wetland?	Yes X No		
Wetland Hydrology Present? Yes X		if yes, optional Wetl	land Site ID: WL29		
Remarks: (Explain alternative procedures here or in a se					
In agricultural field; wet area not cultivat					
magnetical meta, wet area not earlived	.cu				
HYDROLOGY					
Wetland Hydrology Indicators:			Secondary Indicators (minimum of two required)		
Primary Indicators (minimum of one is required: c	heck all that apply)		Surface Soil Cracks (B6)		
X Surface Water (A1)	Water-Stained Leaves	s (B9)	Drainage Patterns (B10)		
X High Water Table (A2)	Aquatic Fauna (B13)		Moss Trim Lines (B16)		
X Saturation (A3)	Marl Deposits (B15)		Dry-Season Water Table (C2)		
Water Marks (B1)	Hydrogen Sulfide Odd	or (C1)	Crayfish Burrows (C8)		
Sediment Deposits (B2)	Oxidized Rhizosphere	s on Living Roots (C3)	X Saturation Visible in Aerial Imagery (C9)		
Drift Deposits (B3)	Presence of Reduced	Iron (C4)	Stunted or Stressed Plants (D1)		
Algal Mat or Crust (B4)	Recent Iron Reduction	n in Tilled Soils (C6)	X Geomorphic Position (D2)		
Iron Deposits (B5)	Thin Muck Surface (C	7)	Shallow Aquitard (D3)		
Inundation Visible on Aerial Imagery (B7)	Other (Explain in Rem	narks)	Microtopographic Relief (D4)		
Sparsley Vegetated Concave Surface (B8)		•	X FAC-Neutral Test (D5)		
Surface Water Present? Yes X No	Depth (inches) 3		<u> </u>		
Water Table Present? Yes X No	Depth (inches) 0	– Wetland F	Hydrology Present? Yes X No		
Saturation Present? Yes X No	Depth (inches) 0	- VVetidita i	Tydrology Tresent. Tes X No		
	<u> </u>	_			
Describe Recorded Data (stream gauge, moni-	toring well, aerial photos	s, previous inspection	ns), if available:		
Remarks:					
remarks.					

VEGETATION - Use scientific names of plants Sampling Point: 1_20200715_WL30_W1 Absolute Dominant Indicator **Dominance Test Worksheet:** (Plot Size: 30'radius) % Cover Species? Status **Tree Stratum Number of Dominant Species** That Are OBL, FACW, or FAC: (A) = Total Cover **Total Number of Dominant** Species Across All Strata: (B) 3 Percent of Dominant Species That Are OBL, FACW, or FAC: (A/B) 100% **Prevalence Index Worksheet:** x 1 2 **OBL** species 2 Absolute Dominant Indicator **FACW** species 36 72 (Plot Size: 15'radius) Status x 2 **Shrub Stratum** % Cover Species? **FAC** species 45 х3 135 = Total Cover **FACU** species 11 x 4 44 **UPL** species 5 x 5 25 Column Totals 99 (A) 278 (B) Prevalence Index = B/A = 2.81 **Hydrophytic Vegetation Indicators:** Absolute Dominant Indicator 1- Rapid Test For Hydrophytic Vegetation **Herb Stratum** (Plot Size: 5'radius) % Cover Species? Status X 2- Dominance Test is > 50% 30 Cyperus strigosus Χ **FACW** X 3- Prevalence Index is =< 3.0 25 Χ Persicaria maculosa **FAC** 4- Morphological Adaptations Echinochloa crus-galli 20 Χ FAC 6 **FACW** Agrostis gigantea 5- Problematic Hydrophytic Vegetation Ambrosia artemisiifolia 6 **FACU** Abutilon theophrasti 5 **FACU Definitions of Vegetation Strata:** UPL Daucus carota 5 Tree- Woody plants 3 in. (7.6cm) or more in diameter at Asclepias incarnata 2 OBL breast height (DBH), regardless of height. 99 = Total Cover Sapling/Shrub- Woody plants less than 3 in. DBH and greater than or equal to 3.28ft (1m) tall. Herb- All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28ft tall. Absolute Dominant Indicator Woody Vines- All woody vines greater than 3.28ft in (Plot Size: 30'radius) **Woody Vine Stratum** % Cover Species? Status height. = Total Cover Hydrophytic Vegetation Present? Yes X No ____ Remarks: (Include photo numbers here or on a separate sheet.)

SOIL Sampling Point: 1_20200715_WL30_W1

Depth	Matrix							
(inches	Color	%	Color	%	Type	Loc	Texture	Remarks
0-13	10YR 4/2	90	10YR 5/8	10	С	М	Clay Loam	
13-18	10YR 5/2	70	10YR 5/8	30	С	M	Sand	

Hydric Soil Indicators:		Indicators for Problematic Soils:
Histosol (A1)	Polyvalue Below Surface (B15)2 cm Muck (A10)
Histic Epipedon (A2)	Thin Dark Surface (S9)	Coast Prarie Redox (A16)
Black Histic (A3)	Loamy Mucky Mineral (F1	5 cm Mucky Peat or Peat (S3)
Hydrogen Sulfide (A4)	Loamy Gleyed Matric (F2)	Dark Surface (S7)
Stratified Layers (A5)	X Depleted Matrix (F3)	Polyvalue Below Surface (S8)
Depleted Below Dark Surface (A11)	Redox Dark Surface (F6)	Thin Dark Surface (S9)
Thick Dark Surface (A12)	Depleted Dark Surface (F7	Iron-Manganese Masses (F12)
Sandy Mucky Mineral (S1)	Redox Depressions (F8)	Piedmont Floodplain Soils (F19)
Sandy Gleyed Matrix (S4)		Mesic Spodic (TA6)
Sandy Redox (S5)		Red Parent Material (F21)
Stripped Matrix (S6)		Very Shallow Dark Surface (TF12)
Dark Surface (S7)		Other (Explain in Remarks)
Restrictive Layer (if observed):		
Туре:		Hydric Soil Present? Yes X No
Depth (inches):		·

Project/Site: Cider Solar Project	City/County: Oakfield/Ger	nessee Sampling Date: 7/17/2020			
Applicant/Owner: Hecate	State: NY Sampling Point:				
Investigator(s): Andrew Sorci	Section, Township, Range:	1_20200715_WL29_W3			
Landform (hillslope, terrace,etc.): Dip	Local relief (concave, convex,	none): <u>Concave</u> Slope (%) <u>0 - 2</u>			
Subregion (LRR or MLRA): LRR L	Lat: <u>43.095764</u> Long: <u>-</u>	78.231925 Datum: NAD83			
Soil Map Unit Name: CaA		NWI Classification: PFO			
Are climatic / hyrologic conditions on the site t	ypical for this time of year? Yes X No	(if no, explain in Remarks.)			
Are Vegetation $___$, Soil $___$, or Hydrology	significantly disturbed? Are "Normal	Circumstances" present? Yes X No			
Are Vegetation, Soil, or Hydrology	naturally problematic? (if needed, exp	plain any answers in Remarks.)			
SUMMARY OF FINDINGS - Attach site map	showing sampling point locations, tran	sects, important features, etc.			
Hydrophytic Vegetation Present? Yes X	No Is the Sampled Are.				
	within a Wetland?	Yes X No			
Hydric Soil Present? Yes X	NO				
Wetland Hydrology Present? Yes X	No if yes, optional Wet	land Site ID: WL29			
Remarks: (Explain alternative procedures here or in a sep	parate report.)				
HYDROLOGY					
Wetland Hydrology Indicators:		Secondary Indicators (minimum of two required)			
Primary Indicators (minimum of one is required: cl	neck all that apply)	Surface Soil Cracks (B6)			
Surface Water (A1)	Water-Stained Leaves (B9)	Drainage Patterns (B10)			
High Water Table (A2)	Aquatic Fauna (B13)	Moss Trim Lines (B16)			
Saturation (A3)	Marl Deposits (B15)	Dry-Season Water Table (C2)			
Water Marks (B1)	Hydrogen Sulfide Odor (C1)	Crayfish Burrows (C8)			
Sediment Deposits (B2)	Oxidized Rhizospheres on Living Roots (C3)	Saturation Visible in Aerial Imagery (C9)			
Drift Deposits (B3)	Presence of Reduced Iron (C4)	Stunted or Stressed Plants (D1)			
Algal Mat or Crust (B4)	Recent Iron Reduction in Tilled Soils (C6)	X Geomorphic Position (D2)			
Iron Deposits (B5)	Thin Muck Surface (C7)	Shallow Aquitard (D3)			
Inundation Visible on Aerial Imagery (B7)	Other (Explain in Remarks)				
	Other (Explain in Nemarks)	Microtopographic Relief (D4)			
Sparsley Vegetated Concave Surface (B8)		X FAC-Neutral Test (D5)			
Surface Water Present? Yes NoX	Depth (inches)				
Water Table Present? Yes No _ X	Depth (inches) Wetland I	Hydrology Present? Yes X No			
Saturation Present? Yes No X	Depth (inches)				
Describe Recorded Data (stream gauge, monit	toring well, aerial photos, previous inspection	ns), if available:			
	-				
Remarks:					

VEGETATION - Use scientific names of plants Sampling Point: 1 20200715 WI29 W3

				Dominant		Dominance Test V	Vorksheet:		
Tree Stratum	(Plot Size:	30'radius)	% Cover	Species?	Status	Number of Domi	nant Species		
Populus deltoides			60	Χ	FAC	That Are OBL, FA	.CW, or FAC:	6	(A)
Salix nigra			30	Χ	OBL	Total Numbe	r of Dominant		_
			90	_= Total Cov	/er	Species Acı	oss All Strata:	7	(B)
						Percent of Don	ninant Species		
						That Are OBL, I	ACW, or FAC:	85.7%	(A/B)
						Prevalence Index V	Vorksheet:		
			Absoluto	Dominant	Indicator	OBL species	30 x 1	30	
Shrub Stratum	(Plot Size:	15'radius)	% Cover	Species?	Status	FACW species	50 x 2	100	
Fraxinus pennsylvanic	a		30	Х	FACW	FAC species	80 x 3	240	
Lonicera morrowii			15	Х	FACU	FACU species	15 x 4	60	
			45	_= Total Cov	/er	UPL species	0 x 5	0	
						Column Totals	175 (A)	430	(B
						Prevalenc	e Index = B/A =	2.46	
						Hydrophytic Vege	tation Indicator	rs:	
			Absolute	Dominant	Indicator		t For Hydrophy		tion
Herb Stratum	(Plot Size:	5'radius)	% Cover	Species?	Status	-		ile vegeta	cion
Phragmites australis			20	Х	FACW		ce Test is > 50%		
Toxicodendron radical	ns		15	X	FAC	X 3- Prevalenc	e Index is =< 3.0)	
			35	= Total Cov	/er	4- Morpholo	gical Adaptatio	ns	
						5- Problema	tic Hydrophytic	Vegetatio	on
						Definitions of Vegeta	ntion Strata:		
						Tree- Woody plants 3 breast height (DBH),	. ,		neter at
						Sapling/Shrub- Wood greater than or equal			and
						Herb- All herbaceous size, and woody plan			less of
Woody Vine Stratum	(Plot Size:	30'radius)	Absolute % Cover	Dominant Species?	Indicator Status	Woody Vines- All wo			t in
			5	Х	FAC	height.			
Vitis riparia			5	= Total Cov		Hydroph	vetic		
Vitis riparia			5	- Total Co			IVLIC		
Vitis riparia				10tal co		Vegeta	•		

SOIL Sampling Point: 1_20200715_WL29_W3

(inches Color % Type Loc Texture Remarks 0-8 10YR 2/1 90 10YR 4/4 10 C PL Loam	Depth	Matrix				Redo	x Feati			
0-8 10YR 2/1 90 10YR 4/4 10 C PL Loam	(inches	Color	%	Color	%	Type	Loc	Texture	Remarks	
	0-8	10YR 2/1	90	10YR 4/4	10	С	PL	Loam		
8-12 10YR 2/2 95 10YR 4/4 5 C M Loam	8-12	10YR 2/2	95	10YR 4/4	5	С	M	Loam		
12-16 10YR 5/2 80 10YR 5/8 20 C M Sand	12-16	10YR 5/2	80	10YR 5/8	20	С	M	Sand		

Hydric Soil Indicators:		Indicators for Problematic Soils:
Histosol (A1)	Polyvalue Below Surface (B15)	2 cm Muck (A10)
Histic Epipedon (A2)	Thin Dark Surface (S9)	Coast Prarie Redox (A16)
Black Histic (A3)	Loamy Mucky Mineral (F1)	5 cm Mucky Peat or Peat (S3)
Hydrogen Sulfide (A4)	Loamy Gleyed Matric (F2)	Dark Surface (S7)
Stratified Layers (A5)	Depleted Matrix (F3)	Polyvalue Below Surface (S8)
Depleted Below Dark Surface (A11)	X Redox Dark Surface (F6)	Thin Dark Surface (S9)
Thick Dark Surface (A12)	Depleted Dark Surface (F7)	Iron-Manganese Masses (F12)
Sandy Mucky Mineral (S1)	Redox Depressions (F8)	Piedmont Floodplain Soils (F19)
Sandy Gleyed Matrix (S4)		Mesic Spodic (TA6)
Sandy Redox (S5)		Red Parent Material (F21)
Stripped Matrix (S6)		Very Shallow Dark Surface (TF12)
Dark Surface (S7)		Other (Explain in Remarks)
Restrictive Layer (if observed):		
Туре:		Hydric Soil Present? Yes X No
Depth (inches):		

Remarks:

Project/Site: Cider Solar Project	City/County: Oakfield/Ger	essee Sampling Date: 7/17/2020			
Applicant/Owner: Hecate		State: NY Sampling			
Investigator(s): Andrew Sorci	Section, Township, Range:	Point:1_20200717_WL29_U			
Landform (hillslope, terrace,etc.): Rise	Local relief (concave, convex, r	none): None Slope (%) 0 - 3			
Subregion (LRR or MLRA): LRR L	Lat: 43.095362 Long: -7	78.231783 Datum: NAD83			
Soil Map Unit Name: CaA		NWI Classification: UPL			
Are climatic / hyrologic conditions on the site \ensuremath{t}	ypical for this time of year? Yes X No	(if no, explain in Remarks.)			
Are Vegetation, Soil, or Hydrology	significantly disturbed? Are "Normal	Circumstances" present? Yes X No			
Are Vegetation, Soil, or Hydrology	naturally problematic? (if needed, exp	lain any answers in Remarks.)			
SUMMARY OF FINDINGS - Attach site maj	showing sampling point locations, tran	sects, important features, etc.			
Hydrophytic Vegetation Present? Yes	No X Is the Sampled Area	1			
Hydric Soil Present? Yes	No X within a Wetland?	Yes No X			
Wetland Hydrology Present? Yes	No X if yes, optional Wet	and Site ID:			
Remarks: (Explain alternative procedures here or in a se	parate report.)				
HYDROLOGY					
Wetland Hydrology Indicators:		Secondary Indicators (minimum of two required)			
Primary Indicators (minimum of one is required: cl		Surface Soil Cracks (B6)			
Surface Water (A1)	Water-Stained Leaves (B9)	Drainage Patterns (B10)			
High Water Table (A2)	Aquatic Fauna (B13)	Moss Trim Lines (B16)			
Saturation (A3)	Marl Deposits (B15)	Dry-Season Water Table (C2)			
Water Marks (B1)	Hydrogen Sulfide Odor (C1)	Crayfish Burrows (C8)			
Sediment Deposits (B2)	Oxidized Rhizospheres on Living Roots (C3)	Saturation Visible in Aerial Imagery (C9)			
Drift Deposits (B3)	Presence of Reduced Iron (C4)	Stunted or Stressed Plants (D1)			
Algal Mat or Crust (B4)	Recent Iron Reduction in Tilled Soils (C6)	Geomorphic Position (D2)			
Iron Deposits (B5)	Thin Muck Surface (C7)	Shallow Aquitard (D3)			
Inundation Visible on Aerial Imagery (B7)	Other (Explain in Remarks)	Microtopographic Relief (D4)			
Sparsley Vegetated Concave Surface (B8)		FAC-Neutral Test (D5)			
Surface Water Present? Yes No X	Depth (inches)				
Water Table Present? Yes No X	Depth (inches) Wetland F	Hydrology Present? Yes No X			
Saturation Present? Yes No X	Depth (inches)				
Describe Recorded Data (stream gauge, monit	toring well, aerial photos, previous inspection	ns), if available:			
Remarks:					

t Size:	30'radius)	Absolute % Cover	Dominant	Indicator	Dansinanaa Taat Markabaat.			
			Species?	Status	Dominance Test Worksheet: Number of Dominant Species That Are OBL, FACW, or FAC:	0	(A)	
			= Total Cove		Total Number of Dominant Species Across All Strata:	1	(B)	
					Percent of Dominant Species That Are OBL, FACW, or FAC:	0%	(A/B)	
					Prevalence Index Worksheet:			
		Absolute	Dominant	Indicator	OBL species 0 x 1	0		
t Size:	15'radius)	% Cover	Species?	Status	FACW species 4 x 2	8		
•					FAC species 0 x 3	0		
			= Total Cov	er	FACU species 15 x 4	60		
					· — — —			
					Prevalence Index = B/A =	4.74	(B)	
					Hydrophytic Vegetation Indicators:	:		
Herb Stratum (Plot Size: 5'radius					1- Rapid Test For Hydrophytic Vegetation			
t Size:	5'radius)	% Cover	Species?	Status	2- Dominance Test is > 50%			
		85 X UPL			3- Prevalence Index is =< 3.0			
		104	= Total Cov		5- Problematic Hydrophytic V	egetatio	n	
			_		Definitions of Vegetation Strata:			
					Tree- Woody plants 3 in. (7.6cm) or mor		eter at	
							and	
							less of	
t Size:	30'radius)			Status	Woody Vines- All woody vines greater theight.	nan 3.28f	t in	
			= Total Cov	er	Hydrophytic Vegetation Present? Yes	No <u>X</u>		
	t Size:	t Size: 15'radius)	Absolute **Size:	Absolute Dominant Size: 5'radius) % Cover Species? Absolute Dominant Species? 85 X 10 5 4 104 = Total Cov Absolute Dominant Species?	Absolute Dominant Indicator t Size: 5'radius) % Cover Species? Status 85 X UPL 10 FACU 5 FACU 4 FACW 104 = Total Cover	Absolute Dominant Indicator t Size: 15'radius)	Percent of Dominant Species That Are OBL, FACW, or FAC: 0% Absolute Dominant Indicator Species Status	

SOIL Sampling Point: 1_20200717_WL29_U1 Depth Matrix **Redox Features** (inches Color % Color % Texture Remarks Type Loc 0-16 10YR 2/2 100 Sandy Clay Loam 16-20 10YR 5/2 70 10YR 5/8 30 C Μ Sand **Hydric Soil Indicators:** Indicators for Problematic Soils: Histosol (A1) Polyvalue Below Surface (B15) 2 cm Muck (A10) Histic Epipedon (A2) Thin Dark Surface (S9) Coast Prarie Redox (A16) Black Histic (A3) Loamy Mucky Mineral (F1) 5 cm Mucky Peat or Peat (S3) Hydrogen Sulfide (A4) Loamy Gleyed Matric (F2) Dark Surface (S7) Stratified Layers (A5) Depleted Matrix (F3) Polyvalue Below Surface (S8) Depleted Below Dark Surface (A11) Redox Dark Surface (F6) Thin Dark Surface (S9) Thick Dark Surface (A12) Depleted Dark Surface (F7) Iron-Manganese Masses (F12) Sandy Mucky Mineral (S1) Redox Depressions (F8) Piedmont Floodplain Soils (F19) Sandy Gleyed Matrix (S4) Mesic Spodic (TA6) Sandy Redox (S5) Red Parent Material (F21) Stripped Matrix (S6) Very Shallow Dark Surface (TF12) Dark Surface (S7) Other (Explain in Remarks) Restrictive Layer (if observed): Type: Hydric Soil Present? Yes No Χ Depth (inches): Remarks:

Project/Site: Cider Solar Project	ounty: Elba/Genesee	Sampling Date: 7/24/2020				
Applicant/Owner: Hecate	S	tate: NY Sampling Point:				
Investigator(s): Justin Ahn	n, Township, Range:	02-20200724-WL-53-53W				
Landform (hillslope, terrace,etc.): Depression	Local relie	f (concave, convex, no	one): <u>Concave</u> Slope (%) <u>0 - 1</u>			
Subregion (LRR or MLRA): LRR L	Lat: 43.098335	Long: <u>-</u> 78.	192491 Datum: <u>NAD83</u>			
Soil Map Unit Name: Wk			NWI Classification: PEM			
Are climatic / hyrologic conditions on the site type	oical for this time of yea	ar? Yes X No	(if no, explain in Remarks.)			
Are Vegetation, Soil, or Hydrology _	significantly distur	bed? Are "Normal C	ircumstances" present? Yes X No			
Are Vegetation, Soil, or Hydrology _	naturally problema	atic? (if needed, expla	iin any answers in Remarks.)			
SUMMARY OF FINDINGS - Attach site map s	showing sampling no	oint locations, trans	ects, important features, etc.			
Hydrophytic Vegetation Present? Yes X	No	Is the Sampled Area				
Hydric Soil Present? Yes X	No No	within a Wetland?	Yes X No			
•		if yes, optional Wetla				
Wetland Hydrology Present? Yes X	No	Ti yes, optional wetla	110 Site 15. 17200			
Remarks: (Explain alternative procedures here or in a separ	rate report.)					
HYDROLOGY						
Wetland Hydrology Indicators:		<u>-</u>	Secondary Indicators (minimum of two required)			
Primary Indicators (minimum of one is required: che			Surface Soil Cracks (B6)			
X Surface Water (A1)	Water-Stained Leaves	(B9)	Drainage Patterns (B10)			
High Water Table (A2)	Aquatic Fauna (B13)	-	Moss Trim Lines (B16)			
X Saturation (A3)	Marl Deposits (B15)	-	Dry-Season Water Table (C2)			
Water Marks (B1)	Hydrogen Sulfide Odo	r (C1)	Crayfish Burrows (C8)			
Sediment Deposits (B2)	Oxidized Rhizospheres	s on Living Roots (C3)	Saturation Visible in Aerial Imagery (C9)			
Drift Deposits (B3)	Presence of Reduced	Iron (C4)	Stunted or Stressed Plants (D1)			
Algal Mat or Crust (B4)	Recent Iron Reduction	iction in Tilled Soils (C6) Geomorphic Position (D2)				
Iron Deposits (B5)	Thin Muck Surface (C7	7)	Shallow Aquitard (D3)			
Inundation Visible on Aerial Imagery (B7)	Other (Explain in Rem	arks)	Microtopographic Relief (D4)			
Sparsley Vegetated Concave Surface (B8)	<u> </u>	-	FAC-Neutral Test (D5)			
Surface Water Present? Yes X No	Depth (inches) 1	_				
	Depth (inches)	- Wetland Hy	drology Present? Yes X No			
	- · · · · · · · · · · · · · · · · · · ·	- Wetland Hy	Autology Present: Pes X No			
	· · · · · · · · · · · · · · · · · · ·	_				
Describe Recorded Data (stream gauge, monito	ring well, aerial photos	, previous inspections), if available:			
Remarks:						

VEGETATION - Use scientific names of plants Sampling Point: 02-20200724-WL-53-53W Absolute Dominant Indicator **Dominance Test Worksheet:** (Plot Size: 30'radius) % Cover Species? Status **Tree Stratum Number of Dominant Species** That Are OBL, FACW, or FAC: (A) = Total Cover **Total Number of Dominant** Species Across All Strata: (B) 2 Percent of Dominant Species That Are OBL, FACW, or FAC: (A/B) 100% **Prevalence Index Worksheet:** 50 x 1 50 **OBL** species Absolute Dominant Indicator **FACW** species 10 20 (Plot Size: 15'radius) % Cover Status x 2 **Shrub Stratum** Species? FAC species 5 х3 15 = Total Cover FACU species 0 x 4 0 **UPL** species 0 x 5 0 Column Totals 65 (A) 85 (B) Prevalence Index = B/A = 1.31 **Hydrophytic Vegetation Indicators:** Absolute Dominant Indicator 1- Rapid Test For Hydrophytic Vegetation **Herb Stratum** (Plot Size: 5'radius) % Cover Species? Status X 2- Dominance Test is > 50% 40 Typha angustifolia Х OBL X 3- Prevalence Index is =< 3.0 OBL Alisma triviale 10 4- Morphological Adaptations Bidens frondosa 10 **FACW** 60 = Total Cover 5- Problematic Hydrophytic Vegetation **Definitions of Vegetation Strata:** Tree- Woody plants 3 in. (7.6cm) or more in diameter at breast height (DBH), regardless of height. Sapling/Shrub- Woody plants less than 3 in. DBH and greater than or equal to 3.28ft (1m) tall. Herb- All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28ft tall. Absolute Dominant Indicator Woody Vines- All woody vines greater than 3.28ft in (Plot Size: 30'radius) Species? **Woody Vine Stratum** % Cover Status height. **FAC** Vitis riparia Χ 5 = Total Cover Hydrophytic Vegetation Present? Yes X No ____ Remarks: (Include photo numbers here or on a separate sheet.)

SOIL Sampling Point: 02-20200724-WL-53-53W

JOIL								Jamping 1 out. 02-20200724-WL-33-33			
Depth	Matrix				Redo	ox Featu	ires				
(inches	Color	%	Color	%	Type	Loc	Texture	Remarks			
0-14	10YR 5/1	80	10YR 6/8	20	С	М	Sandy Loam				
-	oil Indicators:						S ((D15)	Indicators for Problematic Soils:			
	tosol (A1)	4.2)			-		Surface (B15)	2 cm Muck (A10)			
	tic Epipedon (A2)				k Surface		Coast Prarie Redox (A16)			
Black Histic (A3)				-	=	ineral (F1)	5 cm Mucky Peat or Peat (S3)				
Hydrogen Sulfide (A4)						atric (F2)	Dark Surface (S7)				
Stratified Layers (A5)				-	d Matrix		Polyvalue Below Surface (S8)				
Depleted Below Dark Surface (A11) Thick Dark Surface (A12)					ark Surfa	urface (F7)	Thin Dark Surface (S9) Iron-Manganese Masses (F12)				
	idy Mucky Mir				-	epressio		Piedmont Floodplain Soils (F19)			
	ndy Macky Mil ndy Gleyed Ma				nedux D	epiessio	115 (FO)	Mesic Spodic (TA6)			
	ndy Redox (S5)	-)					Red Parent Material (F21)			
	ipped Matrix (Very Shallow Dark Surface (TF12)			
	rk Surface (S7)							Other (Explain in Remarks)			
	K Surface (57)							Other (Explain in Remarks)			
Restrictiv	ve Layer (if obse	erved):									
		Type:					Hydri	c Soil Present? Yes X No			
	Depth (in	ches):									
Remarks	s:										

Project/Site: Cider Solar Project	City/County: Elba/Genese	e Sampling Date: 7/24/2020			
Applicant/Owner: Hecate	State: NY Sampling Point:02-20200724				
Investigator(s): Justin Ahn	Section, Township, Range:	WL-53-53U			
Landform (hillslope, terrace,etc.): Toeslope	Local relief (concave, convex, none): Linear Slope (%) 1 -				
Subregion (LRR or MLRA): LRR L	Lat: <u>43.098366</u> Long: -7	78.192498 Datum: <u>NAD83</u>			
Soil Map Unit Name: Wk		NWI Classification: UPL			
Are climatic / hyrologic conditions on the site $% \left(1\right) =\left(1\right) \left(1\right$	typical for this time of year? Yes X No	(if no, explain in Remarks.)			
Are Vegetation, Soil, or Hydrolog	y significantly disturbed? Are "Normal	Circumstances" present? Yes X No			
Are Vegetation, Soil, or Hydrolog	y naturally problematic? (if needed, exp	lain any answers in Remarks.)			
SUMMARY OF FINDINGS - Attach site ma	p showing sampling point locations, tran	sects, important features, etc.			
Hydrophytic Vegetation Present? Yes	No X Is the Sampled Area	a			
Hydric Soil Present? Yes	No X within a Wetland?	Yes No X			
Wetland Hydrology Present? Yes	No X if yes, optional Wet	land Site ID:			
Remarks: (Explain alternative procedures here or in a si	<u> </u>				
HYDROLOGY					
Wetland Hydrology Indicators:		Secondary Indicators (minimum of two required)			
Primary Indicators (minimum of one is required:	check all that apply)	Surface Soil Cracks (B6)			
Surface Water (A1)	Water-Stained Leaves (B9)	Drainage Patterns (B10)			
High Water Table (A2)	Aquatic Fauna (B13)	Moss Trim Lines (B16)			
Saturation (A3)	Marl Deposits (B15)	Dry-Season Water Table (C2)			
Water Marks (B1)	Hydrogen Sulfide Odor (C1)	Crayfish Burrows (C8)			
Sediment Deposits (B2)	Oxidized Rhizospheres on Living Roots (C3)	Saturation Visible in Aerial Imagery (C9)			
Drift Deposits (B3)	Presence of Reduced Iron (C4)	Stunted or Stressed Plants (D1)			
Algal Mat or Crust (B4)	Recent Iron Reduction in Tilled Soils (C6)	Geomorphic Position (D2)			
Iron Deposits (B5)	Thin Muck Surface (C7)	Shallow Aquitard (D3)			
Inundation Visible on Aerial Imagery (B7)	Other (Explain in Remarks)	Microtopographic Relief (D4)			
Sparsley Vegetated Concave Surface (B8)		FAC-Neutral Test (D5)			
Surface Water Present? Yes No X	Depth (inches)				
Water Table Present? Yes No X	· · · · 	Hydrology Present? Yes No X			
Saturation Present? Yes No X	— ' ' 				
Describe Recorded Data (stream gauge, mon	itoring well, aerial photos, previous inspection	ns), if available:			
Remarks:					

VEGETATION - Use scien	ntific names	of plants				Sampli	ng Point	: 02-202	200724-W	L-53-53l
			Absolute			Dominance Test V	Vorkshee	t:		
Tree Stratum	(Plot Size:	30'radius)	% Cover	Species?	Status	Number of Domi That Are OBL, FA	-		1	(A)
				_= Total Cov	ver	Total Numbe Species Ac			2	(B)
						Percent of Don That Are OBL, I	•		50%	(A/B)
						Prevalence Index \	Norkshee	et:		
			Ahsoluta	Dominant	Indicator	OBL species	5	x 1	5	
Shrub Stratum	(Plot Size:	15'radius)	% Cover	Species?	Status	FACW species	0	x 2	0	
						FAC species	20	x 3	60	
				= Total Cov	ver	FACU species	15	x 4	60	
						UPL species	0	x 5	0	
						Column Totals	40	(A)	125	(B)
						Prevalenc			3.12	(-/
						Hydrophytic Vege	tation Inc	dicators	:	
			Absolute	Dominant	Indicator	1- Rapid Tes	t For Hyd	rophyti	c Vegeta	tion
Herb Stratum	(Plot Size:	5'radius)	% Cover	Species?	Status	2- Dominano	ce Test is	> 50%		
Equisetum arvense			20	Х	FAC	3- Prevalenc	e Index is	s =< 3.0		
Typha angustifolia Abutilon theophrasti			<u> </u>		OBL FACU	4- Morpholo			ς	
Abutilon theophrasti			30	_= Total Cov		5- Problema	_			n
						Definitions of Vegeta	ation Strat	a:		
						Tree- Woody plants 3			re in diam	eter at
						breast height (DBH),		•		
						Sapling/Shrub- Wood greater than or equa				and
						Herb- All herbaceous size, and woody plan	-			less of
Woody Vine Stratum	(Plot Size:	30'radius)		Dominant Species?	Indicator Status	Woody Vines- All wo height.	ody vines į	greater t	han 3.28f	t in
Parthenocissus quinqu	uefolia		10	X	FACU					
			10	_= Total Cov	ver	Hydroph Vegeta Pres	•	:	No X	
								·	<u>/</u>	-
Remarks: (Include photo no	umbers here	or on a sep	arate shee	t.)						

SOIL Sampling Point: 02-20200724-WL-53-53U Depth Matrix **Redox Features** (inches % Color Color % Type Texture Remarks Loc 0-20 10YR 3/3 100 Silty Clay Loam **Hydric Soil Indicators:** Indicators for Problematic Soils: Histosol (A1) Polyvalue Below Surface (B15) 2 cm Muck (A10) Histic Epipedon (A2) Thin Dark Surface (S9) Coast Prarie Redox (A16) Black Histic (A3) Loamy Mucky Mineral (F1) 5 cm Mucky Peat or Peat (S3) Hydrogen Sulfide (A4) Loamy Gleyed Matric (F2) Dark Surface (S7) Stratified Layers (A5) Depleted Matrix (F3) Polyvalue Below Surface (S8) Depleted Below Dark Surface (A11) Redox Dark Surface (F6) Thin Dark Surface (S9) Thick Dark Surface (A12) Depleted Dark Surface (F7) Iron-Manganese Masses (F12) Sandy Mucky Mineral (S1) Redox Depressions (F8) Piedmont Floodplain Soils (F19) Sandy Gleyed Matrix (S4) Mesic Spodic (TA6) Sandy Redox (S5) Red Parent Material (F21) Stripped Matrix (S6) Very Shallow Dark Surface (TF12) Dark Surface (S7) Other (Explain in Remarks) Restrictive Layer (if observed): Type: Hydric Soil Present? Yes No Χ Depth (inches): Remarks:

Project/Site: Cider Solar Project	City/County: Oakfield/Ger	nessee Sampling Date: 7/20/2020						
Applicant/Owner: Hecate		State: NY Sampling Point:						
Investigator(s): Andrew Sorci	Section, Township, Range:	1_07202020_WL31_W3						
Landform (hillslope, terrace,etc.): Toeslope	Local relief (concave, convex,	none): <u>Concave</u> Slope (%) <u>2 - 5</u>						
Subregion (LRR or MLRA): LRR L	Lat: 43.095153 Long: -	78.226697 Datum: NAD83						
Soil Map Unit Name: HIB		NWI Classification: PSS						
Are climatic / hyrologic conditions on the site t	ypical for this time of year? Yes X No	(if no, explain in Remarks.)						
Are Vegetation, Soil, or Hydrology	significantly disturbed? Are "Normal	Circumstances" present? Yes X No						
Are Vegetation, Soil, or Hydrology	naturally problematic? (if needed, exp	llain any answers in Remarks.)						
SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.								
Hydrophytic Vegetation Present? Yes X	No Is the Sampled Area	a						
Hydric Soil Present? Yes X	No within a Wetland?	Yes X No						
Wetland Hydrology Present? Yes X	No if yes, optional Wet	land Site ID: WL31						
Remarks: (Explain alternative procedures here or in a seg								
HYDROLOGY Wetland Hydrology Indicators:		Secondary Indicators (minimum of two required)						
Primary Indicators (minimum of one is required: cl	neck all that anniv)	Surface Soil Cracks (B6)						
Surface Water (A1)	Water-Stained Leaves (B9)	Drainage Patterns (B10)						
High Water Table (A2)	Aquatic Fauna (B13)	Moss Trim Lines (B16)						
Saturation (A3)	Marl Deposits (B15)	Dry-Season Water Table (C2)						
Water Marks (B1)	Hydrogen Sulfide Odor (C1)	Crayfish Burrows (C8)						
Sediment Deposits (B2)	Oxidized Rhizospheres on Living Roots (C3)	Saturation Visible in Aerial Imagery (C9)						
· · · · · ·	Presence of Reduced Iron (C4)							
Drift Deposits (B3)		Stunted or Stressed Plants (D1)						
Algal Mat or Crust (B4)	Recent Iron Reduction in Tilled Soils (C6)	X Geomorphic Position (D2)						
Iron Deposits (B5)	Thin Muck Surface (C7)	Shallow Aquitard (D3)						
Inundation Visible on Aerial Imagery (B7)	Other (Explain in Remarks)	Microtopographic Relief (D4)						
Sparsley Vegetated Concave Surface (B8)		X FAC-Neutral Test (D5)						
Surface Water Present? Yes No X	Depth (inches)							
Water Table Present? Yes No X	Depth (inches) Wetland I	Hydrology Present? Yes X No						
Saturation Present? Yes No X	Depth (inches)							
Describe Recorded Data (stream gauge, monit	toring well, aerial photos, previous inspection	ns), if available:						
Pomarke								
Remarks:								

VEGETATION - Use scientific names of plants Sampling Point: 1_07202020_WL31_W3 Absolute Dominant Indicator **Dominance Test Worksheet:** (Plot Size: 30'radius) % Cover Species? Status **Tree Stratum Number of Dominant Species** 10 Χ OBL That Are OBL, FACW, or FAC: (A) Salix nigra 10 = Total Cover **Total Number of Dominant** (B) Species Across All Strata: 4 Percent of Dominant Species (A/B) That Are OBL, FACW, or FAC: 100% **Prevalence Index Worksheet:** 10 x 1 10 **OBL** species Absolute Dominant Indicator **FACW** species 90 x 2 180 (Plot Size: 15'radius) % Cover Species? Status **Shrub Stratum** FAC species 20 60 х3 Salix amygdaloides 45 Χ **FACW** Acer negundo 20 Χ FAC **FACU** species 0 x 4 0 65 = Total Cover **UPL** species 0 x 5 0 Column Totals 120 (A) 250 (B) Prevalence Index = B/A = 2.08 **Hydrophytic Vegetation Indicators:** Absolute Dominant Indicator 1- Rapid Test For Hydrophytic Vegetation **Herb Stratum** (Plot Size: 5'radius) % Cover Species? Status X 2- Dominance Test is > 50% 40 Phragmites australis **FACW** X 3- Prevalence Index is =< 3.0 5 Agrostis stolonifera **FACW** 4- Morphological Adaptations 45 = Total Cover 5- Problematic Hydrophytic Vegetation **Definitions of Vegetation Strata:** Tree- Woody plants 3 in. (7.6cm) or more in diameter at breast height (DBH), regardless of height. Sapling/Shrub- Woody plants less than 3 in. DBH and greater than or equal to 3.28ft (1m) tall. Herb- All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28ft tall. Absolute Dominant Indicator Woody Vines- All woody vines greater than 3.28ft in (Plot Size: 30'radius) Status **Woody Vine Stratum** % Cover Species? height. = Total Cover Hydrophytic Vegetation Present? Yes X No ___ Remarks: (Include photo numbers here or on a separate sheet.)

SOIL Sampling Point: 1_07202020_WL31_W3

Depth	pth Matrix Redox Features								
(inches	Color	%	Color	%	Type	Loc	•	Гexture	Remarks
0-9	7.5YR 4/2	90	10YR 5/6	10	C	M	Lo	amy Sand	
Hiss Hiss Blan Hyc Stra Dep Thin San San Stri	bil Indicators: tosol (A1) tic Epipedon (A1) ck Histic (A3) drogen Sulfide atified Layers (B1) bleted Below E ck Dark Surfac ady Mucky Mir ady Gleyed Ma ady Redox (S5) speed Matrix (S7)	(A4) (A5) Dark Sur e (A12) neral (S2 trix (S4)	1)	X	Thin Dar Loamy M Loamy G Depleted Redox D Depleted	k Surface Iucky Mi Ieyed Ma I Matrix ark Surfa	neral (F1 atric (F2) (F3) ce (F6) arface (F7)	Indicators for Problematic Soils: 2 cm Muck (A10) Coast Prarie Redox (A16) 5 cm Mucky Peat or Peat (S3) Dark Surface (S7) Polyvalue Below Surface (S8) Thin Dark Surface (S9) Iron-Manganese Masses (F12) Piedmont Floodplain Soils (F19) Mesic Spodic (TA6) Red Parent Material (F21) Very Shallow Dark Surface (TF12) Other (Explain in Remarks)
Restrictiv	ve Layer (if obse Depth (in	Type:						Hydric !	Soil Present? Yes X No
Remark	5:								

WETLAND DETERMINATION DATA FORM - Northcentral and Northeast Region
SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.
HYDROLOGY

VEGETATION - Use scientific names of plants Sampling Point: Upland-WL31 Absolute Dominant Indicator **Dominance Test Worksheet:** (Plot Size: 30'radius) % Cover Species? Status **Tree Stratum Number of Dominant Species** Χ FACU That Are OBL, FACW, or FAC: (A) Quercus muehlenbergii 15 15 = Total Cover **Total Number of Dominant** (B) Species Across All Strata: 3 Percent of Dominant Species (A/B) That Are OBL, FACW, or FAC: 0% **Prevalence Index Worksheet:** x 1 0 **OBL** species Absolute Dominant Indicator **FACW** species 10 20 (Plot Size: 15'radius) % Cover Species? Status x 2 **Shrub Stratum FAC** species 5 х3 15 Berberis vulgaris Χ FACU 15 15 = Total Cover **FACU** species 50 x 4 200 **UPL** species 40 x 5 200 Column Totals 105 (A) 435 (B) Prevalence Index = B/A = 4.14 **Hydrophytic Vegetation Indicators:** Absolute Dominant Indicator 1- Rapid Test For Hydrophytic Vegetation **Herb Stratum** (Plot Size: 5'radius) % Cover Species? Status 2- Dominance Test is > 50% 40 Χ UPL Daucus carota 3- Prevalence Index is =< 3.0 Agrostis gigantea 10 **FACW** 4- Morphological Adaptations Ambrosia artemisiifolia 10 **FACU** Plantago major 5 **FACU** 5- Problematic Hydrophytic Vegetation Taraxacum officinale **FACU** Juncus tenuis 5 FAC **Definitions of Vegetation Strata:** 75 = Total Cover Tree- Woody plants 3 in. (7.6cm) or more in diameter at breast height (DBH), regardless of height. Sapling/Shrub- Woody plants less than 3 in. DBH and greater than or equal to 3.28ft (1m) tall. Herb- All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28ft tall. Absolute Dominant Indicator Woody Vines- All woody vines greater than 3.28ft in (Plot Size: 30'radius) **Woody Vine Stratum** % Cover Species? Status height. = Total Cover Hydrophytic Vegetation Present? Yes _____ No __X

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

0-18 10YR 3/2 95 10YR 4	4/6 5 C	M S	andy Loam			
Hydric Soil Indicators:			Inc	dicators for Problemati	c Soils:	
Histosol (A1)	Polyval	ue Below Surface		2 cm Muck (A10)	0 001131	
Histic Epipedon (A2)		irk Surface (S9)		Coast Prarie Redo	x (A16)	
Black Histic (A3)		Mucky Mineral (F	1)	 5 cm Mucky Peat		
Hydrogen Sulfide (A4)	Loamy	Gleyed Matric (F2)	Dark Surface (S7)		
Stratified Layers (A5)	Deplete	ed Matrix (F3)		Polyvalue Below Surface (S8)		
Depleted Below Dark Surface (A11	.) Redox I	Dark Surface (F6)		Thin Dark Surface (S9)		
Thick Dark Surface (A12)	Deplete	ed Dark Surface (F	7)	Iron-Manganese Masses (F12)		
Sandy Mucky Mineral (S1)	Redox I	Depressions (F8)		Piedmont Floodplain Soils (F19)		
Sandy Gleyed Matrix (S4)				5)		
Sandy Redox (S5)				Red Parent Mater	ial (F21)	
Stripped Matrix (S6)				Very Shallow Dark Surface (TF12)		
Dark Surface (S7)				Other (Explain in F	Remarks)	
Restrictive Layer (if observed):						
Туре:			Hydric Soil	l Present? Yes	No X	
Depth (inches):			Tryune 3011			
Remarks:						

Project/Site: Cider Solar Project	City/County: Oakfield/Ger	nnesee Sampling Date: 10/8/2020						
Applicant/Owner: Hecate	State: NY Sampling Point:							
Investigator(s): Andrew Sorci	Section, Township, Range:	1_20200720_WL32_W1						
Landform (hillslope, terrace,etc.): Depression	Local relief (concave, convex, r	none): <u>Concave</u> Slope (%) <u>0 - 3</u>						
Subregion (LRR or MLRA): LRR L	Lat: 43.093354 Long: -7	78.227280 Datum: <u>NAD83</u>						
Soil Map Unit Name:		NWI Classification: PEM						
Are climatic / hyrologic conditions on the site \ensuremath{t}	ypical for this time of year? Yes X No	(if no, explain in Remarks.)						
Are Vegetation, Soil, or Hydrology	significantly disturbed? Are "Normal	Circumstances" present? Yes X No						
Are Vegetation, Soil, or Hydrology	naturally problematic? (if needed, exp	lain any answers in Remarks.)						
SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.								
Hydrophytic Vegetation Present? Yes X	No Is the Sampled Area							
Hydric Soil Present? Yes X	No within a Wetland?	Yes X No						
· —								
Wetland Hydrology Present? Yes X		WESZ						
Remarks: (Explain alternative procedures here or in a sep	parate report.)							
HYDROLOGY								
Wetland Hydrology Indicators:		Secondary Indicators (minimum of two required)						
Primary Indicators (minimum of one is required: ch		Surface Soil Cracks (B6)						
Surface Water (A1)	Water-Stained Leaves (B9)	Drainage Patterns (B10)						
High Water Table (A2)	Aquatic Fauna (B13)	Moss Trim Lines (B16)						
X Saturation (A3)	Marl Deposits (B15)	Dry-Season Water Table (C2)						
Water Marks (B1)	Hydrogen Sulfide Odor (C1)	Crayfish Burrows (C8)						
Sediment Deposits (B2)	Oxidized Rhizospheres on Living Roots (C3)	Saturation Visible in Aerial Imagery (C9)						
Drift Deposits (B3)	Presence of Reduced Iron (C4)	Stunted or Stressed Plants (D1)						
Algal Mat or Crust (B4)	Recent Iron Reduction in Tilled Soils (C6)	X Geomorphic Position (D2)						
Iron Deposits (B5)	Thin Muck Surface (C7)	Shallow Aquitard (D3)						
Inundation Visible on Aerial Imagery (B7)	Other (Explain in Remarks)	Microtopographic Relief (D4)						
Sparsley Vegetated Concave Surface (B8)		X FAC-Neutral Test (D5)						
Surface Water Present? Yes No X	Depth (inches)							
Water Table Present? Yes No X	Depth (inches) Wetland H	Hydrology Present? Yes X No						
Saturation Present? Yes X No	Depth (inches) 8							
		se) if available.						
Describe Recorded Data (stream gauge, monit	oring wen, aeriai priotos, previous inspection	is), ii avaliable.						
Remarks:								

VEGETATION - Use scientific names of plants Sampling Point: 1_20200720_WL32_W1 Absolute Dominant Indicator **Dominance Test Worksheet:** (Plot Size: 30'radius) % Cover Species? Status **Tree Stratum Number of Dominant Species** That Are OBL, FACW, or FAC: (A) = Total Cover **Total Number of Dominant** Species Across All Strata: (B) 3 Percent of Dominant Species That Are OBL, FACW, or FAC: (A/B) 100% **Prevalence Index Worksheet:** 30 x 1 30 **OBL** species Absolute Dominant Indicator **FACW** species 40 80 (Plot Size: 15'radius) Status x 2 **Shrub Stratum** % Cover Species? **FAC** species 30 10 х3 = Total Cover **FACU** species 0 x 4 0 **UPL** species 0 x 5 0 Column Totals 80 (A) 140 (B) Prevalence Index = B/A = 1.75 **Hydrophytic Vegetation Indicators:** Absolute Dominant Indicator X 1- Rapid Test For Hydrophytic Vegetation **Herb Stratum** (Plot Size: 5'radius) % Cover Species? Status X 2- Dominance Test is > 50% 20 Leersia oryzoides Χ OBL X 3- Prevalence Index is =< 3.0 Χ Impatiens capensis 15 **FACW** 4- Morphological Adaptations Symphyotrichum lanceolatum 15 Χ **FACW** Eutrochium purpureum 10 FAC 5- Problematic Hydrophytic Vegetation Bidens frondosa 10 **FACW** Alisma subcordatum 10 OBL **Definitions of Vegetation Strata:** 80 = Total Cover Tree- Woody plants 3 in. (7.6cm) or more in diameter at breast height (DBH), regardless of height. Sapling/Shrub- Woody plants less than 3 in. DBH and greater than or equal to 3.28ft (1m) tall. Herb- All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28ft tall. Absolute Dominant Indicator Woody Vines- All woody vines greater than 3.28ft in (Plot Size: 30'radius) **Woody Vine Stratum** % Cover Species? Status height. = Total Cover Hydrophytic Vegetation Present? Yes X No ___ Remarks: (Include photo numbers here or on a separate sheet.)

SOIL Sampling Point: 1_20200720_WL32_W1

Depth	Matrix				Redo	x Featı		
(inches	Color	%	Color	%	Type	Loc	Texture	Remarks
0-3	10YR 4/5	70	10YR 3/2	30	С	М	Sandy Loam	
3-8	7.5YR 2.5/1	98	7.5YR 5/6	2	С	М	Mucky Loam	
8-16	10YR 3/1	95	10YR 4/6	5	С	М	Sandy Loam	

Hydric Soil Indicators: Indicators for Problematic Soils:	Indicators for Problematic Soils:			
Histosol (A1) Polyvalue Below Surface (B15) 2 cm Muck (A10)				
Histic Epipedon (A2) Thin Dark Surface (S9) Coast Prarie Redox (A16)				
Black Histic (A3) Loamy Mucky Mineral (F1) 5 cm Mucky Peat or Peat (S3)				
Hydrogen Sulfide (A4) Loamy Gleyed Matric (F2) Dark Surface (S7)				
Stratified Layers (A5) Depleted Matrix (F3) Polyvalue Below Surface (S8)				
Depleted Below Dark Surface (A11) X Redox Dark Surface (F6) Thin Dark Surface (S9)				
Thick Dark Surface (A12)Depleted Dark Surface (F7)Iron-Manganese Masses (F12)				
Sandy Mucky Mineral (S1) Redox Depressions (F8) Piedmont Floodplain Soils (F19)				
Sandy Gleyed Matrix (S4)Mesic Spodic (TA6)				
Sandy Redox (S5) Red Parent Material (F21)				
Stripped Matrix (S6)Very Shallow Dark Surface (TF12)				
Dark Surface (S7) Other (Explain in Remarks)				
Restrictive Layer (if observed):				
Type: Hydric Soil Present? Yes X No				
Depth (inches):				

Project/Site: Cider Solar Project	City/County: Oakfield/Genessee Sampling Date: 7/15/2020						
Applicant/Owner: Hecate		State: NY Sampling					
Investigator(s): Andrew Sorci	Section, Township, Range:	Point:1_20200720_WL32_U					
Landform (hillslope, terrace,etc.): Rise	Local relief (concave, convex, none): Convex Slope (%) 3						
Subregion (LRR or MLRA): LRR L	Lat: 43.093281 Long:	78.227351 Datum: NAD83					
Soil Map Unit Name: OvA		NWI Classification: UPL					
Are climatic / hyrologic conditions on the site t	ypical for this time of year? Yes X No	(if no, explain in Remarks.)					
Are Vegetation, Soil, or Hydrology	significantly disturbed? Are "Normal	Circumstances" present? Yes X No					
Are Vegetation, Soil, or Hydrology	naturally problematic? (if needed, exp	plain any answers in Remarks.)					
SUMMARY OF FINDINGS - Attach site map	showing sampling point locations, trai	nsects, important features, etc.					
Hydrophytic Vegetation Present? Yes	No X Is the Sampled Are						
Hydric Soil Present? Yes X	No within a Wetland?	Yes No X					
	No X if yes, optional Wet	land Site ID:					
Remarks: (Explain alternative procedures here or in a sep	parate report.)						
HYDROLOGY							
Wetland Hydrology Indicators:		Secondary Indicators (minimum of two required)					
Primary Indicators (minimum of one is required: cl	neck all that apply)	Surface Soil Cracks (B6)					
Surface Water (A1)	Water-Stained Leaves (B9)	Drainage Patterns (B10)					
High Water Table (A2)	Aquatic Fauna (B13)	Moss Trim Lines (B16)					
Saturation (A3)	Marl Deposits (B15)	Dry-Season Water Table (C2)					
Water Marks (B1)	Hydrogen Sulfide Odor (C1)	Crayfish Burrows (C8)					
Sediment Deposits (B2)	Oxidized Rhizospheres on Living Roots (C3)	Saturation Visible in Aerial Imagery (C9)					
Drift Deposits (B3)	Presence of Reduced Iron (C4)	Stunted or Stressed Plants (D1)					
Algal Mat or Crust (B4)	Recent Iron Reduction in Tilled Soils (C6)	Geomorphic Position (D2)					
Iron Deposits (B5)	Thin Muck Surface (C7)	Shallow Aquitard (D3)					
Inundation Visible on Aerial Imagery (B7)	Other (Explain in Remarks)	Microtopographic Relief (D4)					
Sparsley Vegetated Concave Surface (B8)		FAC-Neutral Test (D5)					
Surface Water Present? Yes No X	Depth (inches)						
	= · · · · 	No. V					
Water Table Present? Yes No X	- · · · · 	Hydrology Present? Yes NoX					
Saturation Present? Yes No X	Depth (inches)						
Describe Recorded Data (stream gauge, monit	coring well, aerial photos, previous inspection	ns), if available:					
Remarks:							

VEGETATION - Use scientific names of plants Sampling Point: 1_20200720_WL32_U1 Absolute Dominant Indicator **Dominance Test Worksheet:** (Plot Size: 30'radius) % Cover Species? Status **Tree Stratum Number of Dominant Species** Χ FACU That Are OBL, FACW, or FAC: (A) Prunus serotina 40 = Total Cover **Total Number of Dominant** Species Across All Strata: (B) 7 Percent of Dominant Species That Are OBL, FACW, or FAC: 28.6% (A/B) **Prevalence Index Worksheet:** x 1 0 **OBL** species Absolute Dominant Indicator **FACW** species 0 0 (Plot Size: 15'radius) % Cover Species? x 2 **Status Shrub Stratum FAC** species 37 FACU х3 111 25 Χ Lonicera morrowii Cornus racemosa 15 Χ FAC **FACU** species 120 x 4 480 5 **FACU** Rosa multiflora **UPL** species 21 x 5 105 45 = Total Cover Column Totals 178 (A) 696 (B) Prevalence Index = B/A = 3.91 **Hydrophytic Vegetation Indicators:** Absolute Dominant Indicator 1- Rapid Test For Hydrophytic Vegetation **Herb Stratum** (Plot Size: 5'radius) % Cover Species? Status 2- Dominance Test is > 50% Phleum pratense 15 Х **FACU** 3- Prevalence Index is =< 3.0 Х Bromus inermis 15 UPL 4- Morphological Adaptations Dactylis glomerata 15 Χ **FACU** Toxicodendron radicans 12 Χ FAC 5- Problematic Hydrophytic Vegetation Taraxacum officinale 10 **FACU** Trifolium pratense 10 **FACU Definitions of Vegetation Strata:** UPL Daucus carota 6 Tree- Woody plants 3 in. (7.6cm) or more in diameter at Ranunculus acris FAC breast height (DBH), regardless of height. 5 Geum canadense FAC 93 = Total Cover Sapling/Shrub- Woody plants less than 3 in. DBH and greater than or equal to 3.28ft (1m) tall. Herb- All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28ft tall. Absolute Dominant Indicator Woody Vines- All woody vines greater than 3.28ft in (Plot Size: 30'radius) **Woody Vine Stratum** % Cover Species? Status height. = Total Cover Hydrophytic Vegetation Present? Yes _____ No __X

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

SOIL Sampling Point: 1_20200720_WL32_U1

Matrix				Redo	x Featu		
Color	%	Color	%	Type	Loc	Texture	Remarks
10YR 4/2	100					Sandy Clay Loam	
10YR 4/2	60	2.5YR 4/6	40	С	М	Sandy Clay Loam	
7.5YR 3/2	60	7.5YR 4/6	40	С	М	Sandy Loam	
L(Color 0YR 4/2 0YR 4/2		Color % Color 0YR 4/2 100 0YR 4/2 60 2.5YR 4/6	Color % OYR 4/2 100 OYR 4/2 60 2.5YR 4/6 40	Color % Color % Type OYR 4/2 100 0YR 4/2 60 2.5YR 4/6 40 C	Color % Color % Type Loc OYR 4/2 100 0YR 4/2 60 2.5YR 4/6 40 C M	Color % Color % Type Loc Texture OYR 4/2 100 Sandy Clay Loam OYR 4/2 60 2.5YR 4/6 40 C M Sandy Clay Loam

Hydric Soil Indicators:		Indicators for Problematic Soils:			
Histosol (A1)	Polyvalue Below Surface (B15)	2 cm Muck (A10)			
Histic Epipedon (A2)	Thin Dark Surface (S9)	Coast Prarie Redox (A16)			
Black Histic (A3)	Loamy Mucky Mineral (F1)	5 cm Mucky Peat or Peat (S3)			
Hydrogen Sulfide (A4)	Loamy Gleyed Matric (F2)	Dark Surface (S7)			
Stratified Layers (A5)	X Depleted Matrix (F3)	Polyvalue Below Surface (S8)			
Depleted Below Dark Surface (A11)	Redox Dark Surface (F6)	Thin Dark Surface (S9)			
Thick Dark Surface (A12)	Depleted Dark Surface (F7)	Iron-Manganese Masses (F12)			
Sandy Mucky Mineral (S1)	Redox Depressions (F8)	Piedmont Floodplain Soils (F19)			
Sandy Gleyed Matrix (S4)		Mesic Spodic (TA6)			
Sandy Redox (S5)		Red Parent Material (F21)			
Stripped Matrix (S6)		Very Shallow Dark Surface (TF12)			
Dark Surface (S7)		Other (Explain in Remarks)			
Restrictive Layer (if observed):					
Туре:	Ну	/dric Soil Present? Yes X No			
Depth (inches):					
-	_				

Project/Site: Cider Solar Project	City/C	ounty: Oakfield/Genessee	Sampling Date: <u>7/20/2020</u>						
Applicant/Owner: Hecate		State: NY Sampling Point:							
Investigator(s): Andrew Sorci	Section	Section, Township, Range: 1_20200720_WL33_W1							
Landform (hillslope, terrace,etc.): Depression	on Local relie	Local relief (concave, convex, none): Linear Slope (%) 0 - 5							
Subregion (LRR or MLRA): LRR L	Lat: 43.089710	Long: -78.216954	Datum: NAD83						
Soil Map Unit Name: CaA		NWI Class	sification: PEM						
Are climatic / hyrologic conditions on the site	e typical for this time of ye	ar? Yes <u>X</u> No (if no	, explain in Remarks.)						
Are Vegetation , Soil , or Hydrolog	gy significantly distur	bed? Are "Normal Circumstance	s" present? Yes X No						
Are Vegetation , Soil , or Hydrolog	gy naturally problem	atic? (if needed, explain any answe	rs in Remarks.)						
SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.									
Hydrophytic Vegetation Present? Yes	X No	Is the Sampled Area							
Hydric Soil Present? Yes	X No	within a Wetland?	Yes X No						
<u> </u>	X No	if yes, optional Wetland Site ID:	WL33						
Remarks: (Explain alternative procedures here or in a	separate report.)								
Drainage ditch									
HYDROLOGY Wetland Hydrology Indicators:		Cocondary In	disators (minimum of two required)						
Wetland Hydrology Indicators:			dicators (minimum of two required)						
Primary Indicators (minimum of one is required:			Surface Soil Cracks (B6)						
Surface Water (A1)	Water-Stained Leave		e Patterns (B10)						
High Water Table (A2)	Aquatic Fauna (B13)	Moss Tr	im Lines (B16)						
Saturation (A3)	Marl Deposits (B15)	Dry-Sea	son Water Table (C2)						
Water Marks (B1)	Hydrogen Sulfide Odd	or (C1)Crayfish	Burrows (C8)						
Sediment Deposits (B2)	Oxidized Rhizosphere	s on Living Roots (C3) X Saturati	on Visible in Aerial Imagery (C9)						
Drift Deposits (B3)	Presence of Reduced	Iron (C4) Stunted	or Stressed Plants (D1)						
Algal Mat or Crust (B4)	Recent Iron Reductio	n in Tilled Soils (C6) X Geomo	phic Position (D2)						
Iron Deposits (B5)	Thin Muck Surface (C	7) Shallow	Aquitard (D3)						
Inundation Visible on Aerial Imagery (B7)	Other (Explain in Ren		pographic Relief (D4)						
Sparsley Vegetated Concave Surface (B8)	Other (Explain in Ren		utral Test (D5)						
Sparsiey vegetated coricave surface (B8)		FAC-INE	atrai rest (D5)						
Surface Water Present? Yes No X	Depth (inches)	_							
Water Table Present? Yes No X	(Depth (inches)	Wetland Hydrology Pre	sent? Yes X No						
Saturation Present? Yes No X	Depth (inches)	_							
Describe Described Data (street, as a second									
Describe Recorded Data (stream gauge, mo	nitoring well, aerial photos	s, previous inspections), if available	2:						
Remarks:									

VEGETATION - Use scientific names of plants Sampling Point: 1_20200720_WL33_W1 Absolute Dominant Indicator **Dominance Test Worksheet:** (Plot Size: 30'radius) % Cover Species? Status **Tree Stratum Number of Dominant Species** That Are OBL, FACW, or FAC: (A) = Total Cover **Total Number of Dominant** Species Across All Strata: (B) 3 Percent of Dominant Species That Are OBL, FACW, or FAC: (A/B) 100% **Prevalence Index Worksheet:** 10 x 1 10 **OBL** species Absolute Dominant Indicator **FACW** species 70 140 (Plot Size: 15'radius) % Cover Species? Status x 2 **Shrub Stratum FAC** species 30 10 х3 Χ **FAC** Apocynum cannabinum 10 10 = Total Cover **FACU** species 0 x 4 0 **UPL** species 0 x 5 0 Column Totals 90 (A) 180 (B) Prevalence Index = B/A = 2 **Hydrophytic Vegetation Indicators:** Absolute Dominant Indicator 1- Rapid Test For Hydrophytic Vegetation **Herb Stratum** (Plot Size: 5'radius) % Cover Species? Status X 2- Dominance Test is > 50% 20 Phalaris arundinacea **FACW** X 3- Prevalence Index is =< 3.0 Χ Poa palustris 20 **FACW** 4- Morphological Adaptations 15 **FACW** Agrostis gigantea Phragmites australis 15 **FACW** 5- Problematic Hydrophytic Vegetation Asclepias incarnata 10 OBL 80 = Total Cover **Definitions of Vegetation Strata:** Tree- Woody plants 3 in. (7.6cm) or more in diameter at breast height (DBH), regardless of height. Sapling/Shrub- Woody plants less than 3 in. DBH and greater than or equal to 3.28ft (1m) tall. Herb- All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28ft tall. Absolute Dominant Indicator Woody Vines- All woody vines greater than 3.28ft in (Plot Size: 30'radius) **Woody Vine Stratum** % Cover Species? Status height. = Total Cover Hydrophytic Vegetation Present? Yes X No ___ Remarks: (Include photo numbers here or on a separate sheet.)

SOIL Sampling Point: 1_20200720_WL33_W1

Depth	Depth Matrix Redox Features							
(inches	Color	%	Color	%	Type	Loc	Texture	Remarks
0-9	10YR 4/2	90	10YR 4/6	10	С	M	Sandy Clay Loam	
Hydric Sc	oil Indicators:							Indicators for Problematic Soils:
-	tosol (A1)				Polyvalu	e Below	Surface (B15)	2 cm Muck (A10)
	tic Epipedon (A2)			Thin Dar			Coast Prarie Redox (A16)
	ck Histic (A3)	,					ineral (F1)	5 cm Mucky Peat or Peat (S3)
Hydrogen Sulfide (A4)					-	-	latric (F2)	Dark Surface (S7)
Stratified Layers (A5)					, Depleted	-		Polyvalue Below Surface (S8)
Depleted Below Dark Surface (A11)					Redox D			Thin Dark Surface (S9)
	ck Dark Surfac						urface (F7)	Iron-Manganese Masses (F12)
	ndy Mucky Mii				Redox D			Piedmont Floodplain Soils (F19)
	ndy Gleyed Ma						Mesic Spodic (TA6)	
Sar	ndy Redox (S5))						Red Parent Material (F21)
Stri	ipped Matrix (S6)						Very Shallow Dark Surface (TF12)
Dar	rk Surface (S7))						Other (Explain in Remarks)
Restrictiv	ve Layer (if obs	erved):						
		Tuno. I	Dool:					
	5 11 /:	Type: I					Hydric	Soil Present? Yes X No
	Depth (in	icnes): S)					
Remarks	c:							
Remark	3.							

Project/Site: Cider Solar Project		City/C	County: Oakfield/Gen	iessee .	Sampling Date: <u>7/20/2020</u>		
Applicant/Owner: Hecate		State: NYSampling Point:					
Investigator(s): Andrew Sorci		Section, Township, Range: 1_20200720_WL33_W2					
Landform (hillslope, terrace,etc.): Dip		Local relief (concave, convex, none): Concave Slope (%) 0 - 3					
Subregion (LRR or MLRA): LRR L S		Lat: 43.088280	Long: <u>-</u> 7	78.219097	Datum: NAD83		
oil Map Unit Name: CaA				NWI Classifi	cation: PFO		
Are climatic / hyrologic conditions on the	e site t	ypical for this time of ye	ear? Yes <u>X</u> No	(if no, e	xplain in Remarks.)		
Are Vegetation, Soil, or Hydi	ology	significantly distu	rbed? Are "Normal (Circumstances"	present? Yes X No		
Are Vegetation, Soil, or Hydi	ology	naturally problem	natic? (if needed, exp	lain any answers	in Remarks.)		
SUMMARY OF FINDINGS - Attach sit	e mar	showing sampling p	oint locations, tran	sects. importa	ant features. etc.		
Hydrophytic Vegetation Present? Ye		No	Is the Sampled Area				
			within a Wetland?		as V No		
Hydric Soil Present? Ye	s X	No		Ye			
Wetland Hydrology Present? Ye	-	No	if yes, optional Wetl	land Site ID:	WL33		
Remarks: (Explain alternative procedures here or	in a sep	parate report.)					
HYDROLOGY							
Wetland Hydrology Indicators:				Secondary Indica	ators (minimum of two required)		
Primary Indicators (minimum of one is requ	ired: ch	neck all that apply)		Surface So	il Cracks (B6)		
Surface Water (A1)	_	Water-Stained Leave	es (B9)	Drainage Patterns (B10)			
High Water Table (A2)		Aquatic Fauna (B13)		Moss Trim Lines (B16)			
Saturation (A3)	_	Marl Deposits (B15)		Dry-Season Water Table (C2)			
Water Marks (B1)		Hydrogen Sulfide Od	or (C1)	Crayfish Burrows (C8)			
Sediment Deposits (B2)	_	Oxidized Rhizosphere	es on Living Roots (C3)	Saturation Visible in Aerial Imagery (C9)			
Drift Deposits (B3)	_	Presence of Reduced		Stunted or Stressed Plants (D1)			
Algal Mat or Crust (B4)	_	Recent Iron Reductio		X Geomorphic Position (D2)			
Iron Deposits (B5)	_	Thin Muck Surface (C	` '	Shallow Aquitard (D3)			
Inundation Visible on Aerial Imagery (– ا70			Microtopographic Relief (D4)			
	_						
Sparsley Vegetated Concave Surface (38) ———			X FAC-Neutr	ai rest (D5)		
Surface Water Present? Yes No	X	Depth (inches)					
Water Table Present? Yes No	X_	Depth (inches)	Wetland H	Hydrology Prese	nt? Yes X No		
Saturation Present? Yes No	X	Depth (inches)	_				
Describe Recorded Data (stream gauge,	monit	coring well periol photo	s provious inspection	oc) if available:			
Describe Necorded Data (stream gauge,	momi	tornig well, aeriai prioto	s, previous irispection	is), ii available.			
Remarks:							

VEGETATION - Use scientific names of plants Sampling Point: 1_20200720_WL33_W2 Absolute Dominant Indicator **Dominance Test Worksheet:** (Plot Size: 30'radius) % Cover Species? Status **Tree Stratum Number of Dominant Species** 50 Χ **FACW** That Are OBL, FACW, or FAC: (A) Fraxinus pennsylvanica Populus deltoides 25 Χ FAC **Total Number of Dominant** Acer saccharinum 15 **FACW** Species Across All Strata: (B) 4 90 = Total Cover Percent of Dominant Species That Are OBL, FACW, or FAC: (A/B) 100% **Prevalence Index Worksheet:** 5 5 x 1 **OBL** species Absolute Dominant Indicator **FACW** species 95 x 2 190 (Plot Size: 15'radius) % Cover Species? **Shrub Stratum** Status **FAC** species 75 25 х3 30 Χ **FACW** Fraxinus pennsylvanica 30 = Total Cover **FACU** species 0 x 4 0 **UPL** species 0 x 5 0 Column Totals 125 (A) 270 (B) Prevalence Index = B/A = 2.16 **Hydrophytic Vegetation Indicators:** Absolute Dominant Indicator 1- Rapid Test For Hydrophytic Vegetation **Herb Stratum** (Plot Size: 5'radius) % Cover Species? Status X 2- Dominance Test is > 50% 5 Carex tuckermanii Х OBL X 3- Prevalence Index is =< 3.0 5 = Total Cover 4- Morphological Adaptations 5- Problematic Hydrophytic Vegetation **Definitions of Vegetation Strata:** Tree- Woody plants 3 in. (7.6cm) or more in diameter at breast height (DBH), regardless of height. Sapling/Shrub- Woody plants less than 3 in. DBH and greater than or equal to 3.28ft (1m) tall. Herb- All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28ft tall. Absolute Dominant Indicator Woody Vines- All woody vines greater than 3.28ft in (Plot Size: 30'radius) **Woody Vine Stratum** % Cover Species? Status height. = Total Cover Hydrophytic Vegetation Present? Yes X No ___

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

SOIL Sampling Point: 1_20200720_WL33_W2

Depth	Matrix				Redo			
(inches	Color	%	Color	%	Type	Loc	Texture	Remarks
0-9	10YR 2/1	85	10YR 5/2	15	D	М	Sandy Clay Loam	
9-16	10YR 4/2	80	10YR 5/6	20	С	М	Sandy Clay Loam	

Hydric Soil Indicators:		Indicators for Problematic Soils:			
Histosol (A1)	Polyvalue Below Surface (B15)	2 cm Muck (A10)			
Histic Epipedon (A2)	Thin Dark Surface (S9)	Coast Prarie Redox (A16)			
Black Histic (A3)	Loamy Mucky Mineral (F1)	5 cm Mucky Peat or Peat (S3)			
Hydrogen Sulfide (A4)	Loamy Gleyed Matric (F2)	Dark Surface (S7)			
Stratified Layers (A5)	X Depleted Matrix (F3)	Polyvalue Below Surface (S8)			
Depleted Below Dark Surface (A11)	X Redox Dark Surface (F6)	Thin Dark Surface (S9)			
Thick Dark Surface (A12)	Depleted Dark Surface (F7)	Iron-Manganese Masses (F12)			
Sandy Mucky Mineral (S1)	Redox Depressions (F8)	Piedmont Floodplain Soils (F19)			
Sandy Gleyed Matrix (S4)		Mesic Spodic (TA6)			
Sandy Redox (S5)		Red Parent Material (F21)			
Stripped Matrix (S6)		Very Shallow Dark Surface (TF12)			
Dark Surface (S7)		Other (Explain in Remarks)			
Restrictive Layer (if observed):					
Туре:		Hydric Soil Present? Yes X No			
Depth (inches):					

Project/Site: Cider Solar Project	City/County: Oakfield/Genessee Sampling Date: 7					
Applicant/Owner: Hecate		State: NY Sampling				
Investigator(s): Andrew Sorci	Section, Township, Range: Point:1_20200720_WL33					
Landform (hillslope, terrace,etc.): Shoulder	Local relief (concave, convex, r	none): <u>Convex</u> Slope (%) <u>2 - 30</u>				
Subregion (LRR or MLRA): LRR L	Lat: <u>43.089694</u> Long: <u>-7</u>	78.216920 Datum: NAD83				
Soil Map Unit Name: CaA		NWI Classification: UPL				
Are climatic / hyrologic conditions on the site t	ypical for this time of year? Yes X No	(if no, explain in Remarks.)				
Are Vegetation \underline{X} , Soil \underline{X} , or Hydrology	significantly disturbed? Are "Normal	Circumstances" present? Yes X No				
Are Vegetation, Soil, or Hydrology	naturally problematic? (if needed, exp	lain any answers in Remarks.)				
SUMMARY OF FINDINGS - Attach site map	showing sampling point locations, tran	sects, important features, etc.				
Hydrophytic Vegetation Present? Yes	No X Is the Sampled Area	1				
Hydric Soil Present? Yes	No X within a Wetland?	Yes No X				
Wetland Hydrology Present? Yes	No X if yes, optional Wetland Site ID:					
Remarks: (Explain alternative procedures here or in a se	parate report.)					
HYDROLOGY						
Wetland Hydrology Indicators:		Secondary Indicators (minimum of two required)				
Primary Indicators (minimum of one is required: cl	neck all that apply)	Surface Soil Cracks (B6)				
Surface Water (A1)	Water-Stained Leaves (B9)	Drainage Patterns (B10)				
High Water Table (A2)	Aquatic Fauna (B13)	Moss Trim Lines (B16)				
Saturation (A3)	Marl Deposits (B15)	Dry-Season Water Table (C2)				
Water Marks (B1)	Hydrogen Sulfide Odor (C1)	Crayfish Burrows (C8)				
Sediment Deposits (B2)	Oxidized Rhizospheres on Living Roots (C3)	Saturation Visible in Aerial Imagery (C9)				
Drift Deposits (B3)	Presence of Reduced Iron (C4)	Stunted or Stressed Plants (D1)				
Algal Mat or Crust (B4)	Recent Iron Reduction in Tilled Soils (C6)	Geomorphic Position (D2)				
Iron Deposits (B5)	Thin Muck Surface (C7)	Shallow Aquitard (D3)				
Inundation Visible on Aerial Imagery (B7)	Other (Explain in Remarks)	Microtopographic Relief (D4)				
Sparsley Vegetated Concave Surface (B8)		FAC-Neutral Test (D5)				
Surface Water Present? Yes No X	Depth (inches)					
Water Table Present? Yes No X	Depth (inches) Wetland H	Hydrology Present? Yes No X				
Saturation Present? Yes No X	Depth (inches)	 -				
Describe Recorded Data (stream gauge, monit	toring well, aerial photos, previous inspection	ns), if available:				
Remarks:						

VEGETATION - Use scientific names of plants Sampling Point: 1_20200720_WL33_U1 Absolute Dominant Indicator **Dominance Test Worksheet:** (Plot Size: 30'radius) % Cover Species? Status **Tree Stratum Number of Dominant Species** That Are OBL, FACW, or FAC: (A) = Total Cover **Total Number of Dominant** Species Across All Strata: (B) 3 Percent of Dominant Species That Are OBL, FACW, or FAC: 33.3% (A/B) **Prevalence Index Worksheet:** x 1 0 **OBL** species Absolute Dominant Indicator **FACW** species 20 40 (Plot Size: 15'radius) Status x 2 **Shrub Stratum** % Cover Species? 0 FAC species х3 = Total Cover **FACU** species 35 x 4 140 **UPL** species 15 x 5 75 Column Totals 70 (A) 255 (B) Prevalence Index = B/A = 3.64 **Hydrophytic Vegetation Indicators:** Absolute Dominant Indicator 1- Rapid Test For Hydrophytic Vegetation **Herb Stratum** (Plot Size: 5'radius) % Cover Species? Status 2- Dominance Test is > 50% 25 Unknown species UNK 3- Prevalence Index is =< 3.0 Χ Phleum pratense 20 **FACU** 4- Morphological Adaptations Phalaris arundinacea 20 Χ **FACW** Daucus carota 15 UPL 5- Problematic Hydrophytic Vegetation Plantago lanceolata 15 **FACU** 95 = Total Cover **Definitions of Vegetation Strata:** Tree- Woody plants 3 in. (7.6cm) or more in diameter at breast height (DBH), regardless of height. Sapling/Shrub- Woody plants less than 3 in. DBH and greater than or equal to 3.28ft (1m) tall. Herb- All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28ft tall. Absolute Dominant Indicator Woody Vines- All woody vines greater than 3.28ft in (Plot Size: 30'radius) **Woody Vine Stratum** % Cover Species? Status height. = Total Cover Hydrophytic Vegetation Present? Yes ____ No _X Remarks: (Include photo numbers here or on a separate sheet.) unknown grass species due to recent mowing

SOIL Sampling Point: 1_20200720_WL33_U1 Depth Matrix **Redox Features** (inches % Color Color % Type Texture Remarks Loc 0-4 10YR 3/2 100 Sandy Loam Gravelly **Hydric Soil Indicators:** Indicators for Problematic Soils: Histosol (A1) Polyvalue Below Surface (B15) 2 cm Muck (A10) Histic Epipedon (A2) Thin Dark Surface (S9) Coast Prarie Redox (A16) Black Histic (A3) Loamy Mucky Mineral (F1) 5 cm Mucky Peat or Peat (S3) Hydrogen Sulfide (A4) Loamy Gleyed Matric (F2) Dark Surface (S7) Stratified Layers (A5) Depleted Matrix (F3) Polyvalue Below Surface (S8) Depleted Below Dark Surface (A11) Redox Dark Surface (F6) Thin Dark Surface (S9) Thick Dark Surface (A12) Depleted Dark Surface (F7) Iron-Manganese Masses (F12) Sandy Mucky Mineral (S1) Redox Depressions (F8) Piedmont Floodplain Soils (F19) Sandy Gleyed Matrix (S4) Mesic Spodic (TA6) Sandy Redox (S5) Red Parent Material (F21) Stripped Matrix (S6) Very Shallow Dark Surface (TF12) Dark Surface (S7) Other (Explain in Remarks) Restrictive Layer (if observed): Type: Dense Road Fill Hydric Soil Present? Yes No Χ Depth (inches): 4 Remarks:

Project/Site: Cider Solar Project	City/C	ounty: Oakfield/Gen	essee	Sampling Date: <u>7/20/2020</u>		
Applicant/Owner: Hecate	State: NY Sampling Point:					
Investigator(s): Andrew Sorci	Section, Township, Range: 1_20200720_WL34_W1					
Landform (hillslope, terrace,etc.): Depressio	n Local relie	ef (concave, convex, n	one): Linear	Slope (%) <u>0 - 10</u>		
Subregion (LRR or MLRA): LRR L	Lat: _43.094391	Long:7	8.217803	Datum: NAD83		
Soil Map Unit Name: CaA			NWI Classif	ication: PFO		
Are climatic / hyrologic conditions on the site	typical for this time of ye	ar? Yes X No	(if no, e	explain in Remarks.)		
Are Vegetation , Soil , or Hydrology	y significantly distur	bed? Are "Normal (Circumstances'	present? Yes X No		
Are Vegetation , Soil , or Hydrology	naturally problem	atic? (if needed, expl	ain any answers	in Remarks.)		
<u> </u>						
SUMMARY OF FINDINGS - Attach site ma	p showing sampling p	oint locations, tran	sects, import	ant features, etc.		
Hydrophytic Vegetation Present? Yes >	(No	Is the Sampled Area	ı			
Hydric Soil Present? Yes	 < No	within a Wetland?	Υ	es X No		
Wetland Hydrology Present? Yes		if yes, optional Wetla	and Site ID:	WL34		
Remarks: (Explain alternative procedures here or in a si			_			
Associated with drainage ditch	eparate report.					
7.550 clated with dramage arten						
HYDROLOGY						
Wetland Hydrology Indicators:			Secondary India	cators (minimum of two required)		
Primary Indicators (minimum of one is required:	check all that apply)		Surface So	oil Cracks (B6)		
Surface Water (A1)	Water-Stained Leave	s (B9)	X Drainage Patterns (B10)			
High Water Table (A2)	Aquatic Fauna (B13)		X Moss Trim Lines (B16)			
Saturation (A3)	Marl Deposits (B15)		Dry-Season Water Table (C2)			
Water Marks (B1)	Hydrogen Sulfide Odd	or (C1)	Crayfish Burrows (C8)			
Sediment Deposits (B2)		s on Living Roots (C3)	Saturation Visible in Aerial Imagery (C9)			
Drift Deposits (B3)	Presence of Reduced		Stunted or Stressed Plants (D1)			
Algal Mat or Crust (B4)	Recent Iron Reductio	•	X Geomorphic Position (D2)			
		` ,				
Iron Deposits (B5)	Thin Muck Surface (C		Shallow Aquitard (D3)			
Inundation Visible on Aerial Imagery (B7)	Other (Explain in Ren	narks)	Microtopographic Relief (D4)			
Sparsley Vegetated Concave Surface (B8)			FAC-Neut	ral Test (D5)		
Surface Water Present? Yes No X	Depth (inches)					
Water Table Present? Yes No X	Depth (inches)	Wetland H	lydrology Prese	ent? Yes X No		
Saturation Present? Yes No X		_				
		_				
Describe Recorded Data (stream gauge, mon	itoring well, aerial photo	s, previous inspection	s), if available:			
Remarks:						
Nemarks.						

VEGETATION - Use scient	ific names	of plants				Sampli	ng Point: 1_	_20200720_W	L34_W1
		"	Absolute			Dominance Test V	Vorksheet:		
Tree Stratum Populus deltoides	(Plot Size:	30'radius)	% Cover	Species?	Status FAC	Number of Domi That Are OBL, FA	-		(A)
			80	_= Total Cov	ver	Total Numbe Species Ac		 (B)	
						Percent of Don That Are OBL, I	•		(A/B)
						Prevalence Index \	Worksheet:		
			Absolute	Dominant	Indicator	OBL species	0 :	x 1 0	
Shrub Stratum	(Plot Size:	15'radius)	% Cover	Species?	Status	FACW species	20	x 2 40	
Fraxinus pennsylvanica			20	Χ	FACW	FAC species	80	x 3 240	
			20	_= Total Co	ver	FACU species	15	x 4 60	
						UPL species	0	x 5 0	
						Column Totals	115	(A) 340	(B)
						Prevalenc	e Index = B/A	A = 2.96	
						Hydrophytic Vege	tation Indica	ators:	
	/DL + C:	et. at . A		Dominant		1- Rapid Tes	t For Hydrop	hytic Vegeta	tion
Herb Stratum	(Plot Size:5'radius)	% Cover	Species?	? Status	X 2- Dominance Test is > 50%				
-				= Total Cov	ver	X 3- Prevalence Index is =< 3.0			
					• • •	4- Morphological Adaptations			
						5- Problematic Hydrophytic Vegetation Definitions of Vegetation Strata:			
						Tree- Woody plants 3 breast height (DBH),			neter at
						Sapling/Shrub- Wood greater than or equa			and
						Herb- All herbaceous size, and woody plan			lless of
Woody Vine Stratum	(Plot Size:	30'radius)	Absolute % Cover	Dominant Species?	Indicator Status	Woody Vines- All wo height.	ody vines grea	nter than 3.28	it in
Parthenocissus quinque	efolia		<u>15</u>	X	FACU				
			15	_= Total Cov	ver	Hydroph Vegeta Pres	tion	X No	
Remarks: (Include photo nur	mbers here	or on a sep	arate shee	t.)		1			

SOIL Sampling Point: 1_20200720_WL34_W1

Color					x Featu	162	
COIOI	%	Color	%	Type	Loc	Texture	Remarks
10YR 2/1	100					Sandy Loam	
10YR 3/1	100					Sandy Loam	
10YR 3/2	90	7.5YR 5/6	10	С	M	Sandy Clay Loam	
10YR 6/3	50	10YR 4/6	50	С	M	Sand	
1	0YR 3/1 0YR 3/2	OYR 2/1 100 OYR 3/1 100 OYR 3/2 90 OYR 6/3 50	OYR 3/1 100 OYR 3/2 90 7.5YR 5/6	OYR 3/1 100 OYR 3/2 90 7.5YR 5/6 10	OYR 3/1 100 OYR 3/2 90 7.5YR 5/6 10 C	OYR 3/1 100 OYR 3/2 90 7.5YR 5/6 10 C M	OYR 3/1 100 Sandy Loam OYR 3/2 90 7.5YR 5/6 10 C M Sandy Clay Loam

Hydric Soil Indicators:		Indicators for Problematic Soils:		
Histosol (A1)	2 cm Muck (A10)			
Histic Epipedon (A2)	Thin Dark Surface (S9)	Coast Prarie Redox (A16)		
Black Histic (A3)	Loamy Mucky Mineral (F1)	5 cm Mucky Peat or Peat (S3)		
Hydrogen Sulfide (A4)	Loamy Gleyed Matric (F2)	Dark Surface (S7)		
Stratified Layers (A5)	Depleted Matrix (F3)	Polyvalue Below Surface (S8)		
Depleted Below Dark Surface (A11)	Redox Dark Surface (F6)	Thin Dark Surface (S9)		
Thick Dark Surface (A12)	Depleted Dark Surface (F7)	Iron-Manganese Masses (F12)		
Sandy Mucky Mineral (S1)	Redox Depressions (F8)	Piedmont Floodplain Soils (F19)		
Sandy Gleyed Matrix (S4)		Mesic Spodic (TA6)		
Sandy Redox (S5)		Red Parent Material (F21)		
Stripped Matrix (S6)		Very Shallow Dark Surface (TF12)		
Dark Surface (S7)		X Other (Explain in Remarks)		
Restrictive Layer (if observed):				
Type:		Hydric Soil Present? Yes X No		
Depth (inches):	_			
	_			

Remarks:

Project/Site: Cider Solar Project	City/County: Oakfield/Ge	enessee Sampling Date: 7/21/2020		
Applicant/Owner: Hecate	State: NY Sampling			
Investigator(s): Andrew Sorci	Section, Township, Range	Point:1_20200720_WL34_U		
Landform (hillslope, terrace,etc.): Rise	Local relief (concave, convex	none): Convex Slope (%) 3 - 5		
Subregion (LRR or MLRA): LRR L	Lat: <u>43.094332</u> Long:	-78.217788 Datum: NAD83		
Soil Map Unit Name: HIA		NWI Classification: UPL		
Are climatic / hyrologic conditions on the sit	e typical for this time of year? Yes X N	o (if no, explain in Remarks.)		
Are Vegetation, Soil, or Hydrolo	gy significantly disturbed? Are "Norma	l Circumstances" present? Yes X No		
Are Vegetation, Soil, or Hydrolo	gy naturally problematic? (if needed, ex	plain any answers in Remarks.)		
SLIMMARY OF FINDINGS - Attach site m	nap showing sampling point locations, tra	nsects important features etc		
Hydrophytic Vegetation Present? Yes	No X Is the Sampled Ar			
Hydric Soil Present? Yes	No X within a Wetland?			
· —				
Wetland Hydrology Present? Yes				
Remarks: (Explain alternative procedures here or in a	separate report.)			
HYDROLOGY				
Wetland Hydrology Indicators:		Secondary Indicators (minimum of two required)		
Primary Indicators (minimum of one is required	: check all that apply)	Surface Soil Cracks (B6)		
Surface Water (A1)	Water-Stained Leaves (B9)	Drainage Patterns (B10)		
High Water Table (A2)	Aquatic Fauna (B13)	Moss Trim Lines (B16)		
Saturation (A3)	Marl Deposits (B15)	Dry-Season Water Table (C2)		
Water Marks (B1)	Hydrogen Sulfide Odor (C1)	Crayfish Burrows (C8)		
Sediment Deposits (B2)	Oxidized Rhizospheres on Living Roots (C3)	Saturation Visible in Aerial Imagery (C9)		
Drift Deposits (B3)	Presence of Reduced Iron (C4)	Stunted or Stressed Plants (D1)		
Algal Mat or Crust (B4)	Recent Iron Reduction in Tilled Soils (C6)	Geomorphic Position (D2)		
Iron Deposits (B5)	Thin Muck Surface (C7)	Shallow Aquitard (D3)		
Inundation Visible on Aerial Imagery (B7)	Other (Explain in Remarks)	Microtopographic Relief (D4)		
Sparsley Vegetated Concave Surface (B8)	Other (Explain in Nemarks)			
Sparsiey vegetated Concave Surrace (B8)		FAC-Neutral Test (D5)		
Surface Water Present? Yes No	X Depth (inches)			
Water Table Present? Yes No	X Depth (inches) Wetland	Hydrology Present? Yes No X		
Saturation Present? Yes No	X Depth (inches)			
Describe Recorded Data (stream gauge mo	onitoring well, aerial photos, previous inspection	ons) if available:		
Describe Necoraea Data (stream gaage, me	mitoring wen, derial photos, previous hispean	nis), ii avaliasiei		
Remarks:				

VEGETATION - Use scientific names of plants Sampling Point: 1_20200720_WL34_U1 Absolute Dominant Indicator **Dominance Test Worksheet:** (Plot Size: 30'radius) % Cover Species? Status **Tree Stratum Number of Dominant Species** Χ FACU That Are OBL, FACW, or FAC: (A) Juglans nigra 45 45 = Total Cover **Total Number of Dominant** (B) Species Across All Strata: 5 Percent of Dominant Species (A/B) That Are OBL, FACW, or FAC: 40% **Prevalence Index Worksheet:** 0 x 1 **OBL** species Absolute Dominant Indicator **FACW** species 0 x 2 0 (Plot Size: 15'radius) % Cover Species? Status **Shrub Stratum** FAC species 50 150 х3 = Total Cover **FACU** species 140 x 4 560 **UPL** species 0 x 5 0 Column Totals 190 (A) 710 (B) Prevalence Index = B/A = 3.74 **Hydrophytic Vegetation Indicators:** Absolute Dominant Indicator 1- Rapid Test For Hydrophytic Vegetation **Herb Stratum** (Plot Size: 5'radius) % Cover Species? Status 2- Dominance Test is > 50% 50 **FACU** Alliaria petiolata 3- Prevalence Index is =< 3.0 FAC 25 Χ Xanthium strumarium 4- Morphological Adaptations Lolium perenne 15 **FACU** Solidago canadensis 10 **FACU** 5- Problematic Hydrophytic Vegetation Geum canadense 5 FAC 105 = Total Cover **Definitions of Vegetation Strata:** Tree- Woody plants 3 in. (7.6cm) or more in diameter at breast height (DBH), regardless of height. Sapling/Shrub- Woody plants less than 3 in. DBH and greater than or equal to 3.28ft (1m) tall. Herb- All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28ft tall. Absolute Dominant Indicator Woody Vines- All woody vines greater than 3.28ft in (Plot Size: 30'radius) % Cover Species? **Woody Vine Stratum** Status height. Parthenocissus quinquefolia 20 Χ **FACU** Vitis riparia 20 Χ FAC Hydrophytic 40 = Total Cover Vegetation Present? Yes _____ No __X Remarks: (Include photo numbers here or on a separate sheet.)

SOIL Sampling Point: 1_20200720_WL34_U1 Depth Matrix **Redox Features** (inches % Color Color % Type Texture Remarks Loc 0-16 10YR 3/2 100 Sandy Loam **Hydric Soil Indicators:** Indicators for Problematic Soils: Histosol (A1) Polyvalue Below Surface (B15) 2 cm Muck (A10) Histic Epipedon (A2) Thin Dark Surface (S9) Coast Prarie Redox (A16) Black Histic (A3) Loamy Mucky Mineral (F1) 5 cm Mucky Peat or Peat (S3) Hydrogen Sulfide (A4) Loamy Gleyed Matric (F2) Dark Surface (S7) Stratified Layers (A5) Depleted Matrix (F3) Polyvalue Below Surface (S8) Depleted Below Dark Surface (A11) Redox Dark Surface (F6) Thin Dark Surface (S9) Thick Dark Surface (A12) Depleted Dark Surface (F7) Iron-Manganese Masses (F12) Sandy Mucky Mineral (S1) Redox Depressions (F8) Piedmont Floodplain Soils (F19) Sandy Gleyed Matrix (S4) Mesic Spodic (TA6) Sandy Redox (S5) Red Parent Material (F21) Stripped Matrix (S6) Very Shallow Dark Surface (TF12) Dark Surface (S7) Other (Explain in Remarks) Restrictive Layer (if observed): Type: Hydric Soil Present? Yes No Χ Depth (inches): Remarks:

Project/Site: Cider Solar Project	City/C	ounty: Oakfield/Genes	ssee Sampling Date: 7/21/2020		
Applicant/Owner: Hecate	State: NY Sampling Poin				
Investigator(s): Andrew Sorci	Section	on, Township, Range: 1_07212020_WL35_W1			
Landform (hillslope, terrace,etc.): Depression	Local relie	ef (concave, convex, no	ne): Concave Slope (%) 0 - 1		
Subregion (LRR or MLRA): LRR L	Lat: 43.089777	Long: -78	.225032 Datum: NAD83		
Soil Map Unit Name: HIA	NWI Classification: PEM				
Are climatic / hyrologic conditions on the site t	cypical for this time of ye	ear? Yes X No	(if no, explain in Remarks.)		
Are Vegetation X , Soil , or Hydrology	significantly distu	rbed? Are "Normal Ci	rcumstances" present? Yes X No		
Are Vegetation , Soil , or Hydrology	naturally problem	atic? (if needed, explai	in any answers in Remarks.)		
					
SUMMARY OF FINDINGS - Attach site map	showing sampling p	oint locations, transe	ects, important features, etc.		
Hydrophytic Vegetation Present? Yes	No X	Is the Sampled Area			
Hydric Soil Present? Yes X	 No	within a Wetland?	Yes X No		
· —		if yes, optional Wetlar			
Wetland Hydrology Present? Yes X		ii yes, optional wetiai	WESS		
Remarks: (Explain alternative procedures here or in a se	parate report.)				
Edge of active agricultural field (wheat)					
HYDROLOGY					
Wetland Hydrology Indicators:			Secondary Indicators (minimum of two required)		
Primary Indicators (minimum of one is required: cl	neck all that apply)	<u>-</u>	Surface Soil Cracks (B6)		
		c (BO)			
Surface Water (A1)	Water-Stained Leave		Drainage Patterns (B10)		
High Water Table (A2)	Aquatic Fauna (B13)	_	Moss Trim Lines (B16)		
Saturation (A3)	Marl Deposits (B15)	_	Dry-Season Water Table (C2)		
Water Marks (B1)	Hydrogen Sulfide Odd	or (C1)	Crayfish Burrows (C8)		
Sediment Deposits (B2)	Oxidized Rhizosphere	es on Living Roots (C3)	X Saturation Visible in Aerial Imagery (C9)		
Drift Deposits (B3)	Presence of Reduced	Iron (C4)	Stunted or Stressed Plants (D1)		
Algal Mat or Crust (B4)	Recent Iron Reductio	n in Tilled Soils (C6)	X Geomorphic Position (D2)		
Iron Deposits (B5)	Thin Muck Surface (C		Shallow Aquitard (D3)		
Inundation Visible on Aerial Imagery (B7)	Other (Explain in Ren	narks)	Microtopographic Relief (D4)		
Sparsley Vegetated Concave Surface (B8)		_	FAC-Neutral Test (D5)		
		_	The Neutral Test (53)		
Surface Water Present? Yes NoX	Depth (inches)	_			
Water Table Present? Yes No X	Depth (inches)	Wetland Hy	drology Present? Yes X No		
Saturation Present? Yes No X	Depth (inches)				
Describe Based of Data (stresses assessed			of southeles		
Describe Recorded Data (stream gauge, monit	toring well, aerial photo	s, previous inspections)	i, if available:		
Remarks:					

VEGETATION - Use scientific names of plants Sampling Point: 1_07212020_WL35_W1 Absolute Dominant Indicator **Dominance Test Worksheet:** (Plot Size: 30'radius) % Cover Species? Status **Tree Stratum Number of Dominant Species** That Are OBL, FACW, or FAC: (A) = Total Cover **Total Number of Dominant** Species Across All Strata: (B) Percent of Dominant Species (A/B) That Are OBL, FACW, or FAC: 50% **Prevalence Index Worksheet:** 8 **OBL** species x 1 Absolute Dominant Indicator **FACW** species 0 0 (Plot Size: 15'radius) Status x 2 **Shrub Stratum** % Cover Species? FAC species 144 48 х3 = Total Cover **FACU** species 35 x 4 140 **UPL** species 10 x 5 50 Column Totals 101 (A) 342 (B) Prevalence Index = B/A = 3.39 **Hydrophytic Vegetation Indicators:** Absolute Dominant Indicator 1- Rapid Test For Hydrophytic Vegetation **Herb Stratum** (Plot Size: 5'radius) % Cover Species? Status 2- Dominance Test is > 50% 25 Amaranthus retroflexus Χ **FACU** 3- Prevalence Index is =< 3.0 25 Χ Echinochloa crus-galli **FAC** 4- Morphological Adaptations 10 Χ **FAC** Persicaria maculosa 10 Χ UPL Daucus carota 5- Problematic Hydrophytic Vegetation 8 **FACU** Portulaca oleracea Eleocharis obtusa 8 OBL **Definitions of Vegetation Strata:** FAC Gnaphalium uliginosum Tree- Woody plants 3 in. (7.6cm) or more in diameter at Setaria pumila FAC breast height (DBH), regardless of height. Panicum virgatum 3 FAC 2 Chenopodium album **FACU** Sapling/Shrub- Woody plants less than 3 in. DBH and 101 = Total Cover greater than or equal to 3.28ft (1m) tall. Herb- All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28ft tall. Absolute Dominant Indicator Woody Vines- All woody vines greater than 3.28ft in (Plot Size: 30'radius) **Woody Vine Stratum** % Cover Species? Status height. = Total Cover Hydrophytic Vegetation Present? Yes ____ No __X Remarks: (Include photo numbers here or on a separate sheet.)

SOIL Sampling Point: 1_07212020_WL35_W1

Depth	Matrix		Redox Features							
(inches	Color	%	Color	%	Туре	Loc	Texture	Remarks		
0-14	7.5YR 4/2	90	10YR 4/4	10	С	М	Clay Loam			
14-18	7.5YR 5/3	70	7.5YR 5/8	30	С	M	Sandy Clay Loam			

Hydric Soil Indicators:		Indicators for Problematic Soils:		
Histosol (A1)	Polyvalue Below Surface (B15)2 cm Muck (A10)		
Histic Epipedon (A2)	Thin Dark Surface (S9)	Coast Prarie Redox (A16)		
Black Histic (A3)	Loamy Mucky Mineral (F1	.)5 cm Mucky Peat or Peat (S3)		
Hydrogen Sulfide (A4)	Loamy Gleyed Matric (F2)	Dark Surface (S7)		
Stratified Layers (A5)	X Depleted Matrix (F3)	Polyvalue Below Surface (S8)		
Depleted Below Dark Surface (A11)	Redox Dark Surface (F6)	Thin Dark Surface (S9)		
Thick Dark Surface (A12)	Depleted Dark Surface (F7	7) Iron-Manganese Masses (F12)		
Sandy Mucky Mineral (S1)	Redox Depressions (F8)	Piedmont Floodplain Soils (F19)		
Sandy Gleyed Matrix (S4)		Mesic Spodic (TA6)		
Sandy Redox (S5)		Red Parent Material (F21)		
Stripped Matrix (S6)		Very Shallow Dark Surface (TF12)		
Dark Surface (S7)		Other (Explain in Remarks)		
Restrictive Layer (if observed):				
Type:				
Type:		Hydric Soil Present? Yes X No		
Depth (inches):				

Remarks:

Project/Site: Cider Solar Project	City/County: Oakfield/Gen	essee Sampling Date: 7/21/2020			
Applicant/Owner: Hecate	State: NY Sampling				
Investigator(s): Andrew Sorci	Section, Township, Range:	Point:1_07212020_WL35_U			
Landform (hillslope, terrace,etc.): Rise	Local relief (concave, convex, r	one): <u>Convex</u> Slope (%) <u>1 - 3</u>			
Subregion (LRR or MLRA): LRR L	Lat: <u>43.089788</u> Long: <u>-7</u>	8.225128 Datum: NAD83			
Soil Map Unit Name: HIA		NWI Classification: UPL			
Are climatic / hyrologic conditions on the site	typical for this time of year? Yes X No	(if no, explain in Remarks.)			
Are Vegetation, Soil, or Hydrolog	y significantly disturbed? Are "Normal 0	Circumstances" present? Yes X No			
Are Vegetation, Soil, or Hydrolog	y naturally problematic? (if needed, exp	lain any answers in Remarks.)			
SLIMMARY OF FINDINGS - Attach site ma	ap showing sampling point locations, tran	sects important features etc			
Hydrophytic Vegetation Present? Yes	No X Is the Sampled Area				
Hydric Soil Present? Yes	No X within a Wetland?	Yes No X			
· —					
Wetland Hydrology Present? Yes		and site ib.			
Remarks: (Explain alternative procedures here or in a s	eparate report.)				
HYDROLOGY					
Wetland Hydrology Indicators:		Secondary Indicators (minimum of two required)			
Primary Indicators (minimum of one is required:	check all that apply)	Surface Soil Cracks (B6)			
Surface Water (A1)	Water-Stained Leaves (B9)	Drainage Patterns (B10)			
High Water Table (A2)	Aquatic Fauna (B13)	Moss Trim Lines (B16)			
Saturation (A3)	Marl Deposits (B15)	Dry-Season Water Table (C2)			
Water Marks (B1)	Hydrogen Sulfide Odor (C1)	Crayfish Burrows (C8)			
Sediment Deposits (B2)	Oxidized Rhizospheres on Living Roots (C3)	Saturation Visible in Aerial Imagery (C9)			
Drift Deposits (B3)	Presence of Reduced Iron (C4)	Stunted or Stressed Plants (D1)			
Algal Mat or Crust (B4)	Recent Iron Reduction in Tilled Soils (C6)	Geomorphic Position (D2)			
Iron Deposits (B5)	Thin Muck Surface (C7)	Shallow Aquitard (D3)			
Inundation Visible on Aerial Imagery (B7)		Microtopographic Relief (D4)			
	Other (Explain in Remarks)				
Sparsley Vegetated Concave Surface (B8)		FAC-Neutral Test (D5)			
Surface Water Present? Yes No X	Depth (inches)				
Water Table Present? Yes No X	Depth (inches) Wetland H	lydrology Present? Yes No X			
Saturation Present? Yes No _ X	Depth (inches)				
Describe Recorded Data (stream gauge mor	nitoring well, aerial photos, previous inspection	s) if available:			
Remarks:					

VEGETATION - Use scientific names of plants Sampling Point: 1_07212020_WL35_U1 Absolute Dominant Indicator **Dominance Test Worksheet:** (Plot Size: 30'radius) % Cover Species? Status **Tree Stratum Number of Dominant Species** That Are OBL, FACW, or FAC: (A) = Total Cover **Total Number of Dominant** (B) Species Across All Strata: 2 Percent of Dominant Species (A/B) That Are OBL, FACW, or FAC: 0% **Prevalence Index Worksheet:** x 1 0 **OBL** species Absolute Dominant Indicator **FACW** species 0 (Plot Size: 15'radius) % Cover Status x 2 **Shrub Stratum** Species? FAC species х3 21 = Total Cover FACU species 23 x 4 92 **UPL** species 55 x 5 275 Column Totals 85 (A) 388 (B) Prevalence Index = B/A = 4.56 **Hydrophytic Vegetation Indicators:** Absolute Dominant Indicator 1- Rapid Test For Hydrophytic Vegetation **Herb Stratum** (Plot Size: 5'radius) % Cover Species? Status 2- Dominance Test is > 50% UPL Daucus carota 35 3- Prevalence Index is =< 3.0 20 Χ Daucus carota UPL 4- Morphological Adaptations Polygonum aviculare 15 **FACU** Plantago major 8 **FACU** 5- Problematic Hydrophytic Vegetation Echinochloa crus-galli 5 FAC Gnaphalium uliginosum 2 FAC **Definitions of Vegetation Strata:** 85 = Total Cover Tree- Woody plants 3 in. (7.6cm) or more in diameter at breast height (DBH), regardless of height. Sapling/Shrub- Woody plants less than 3 in. DBH and greater than or equal to 3.28ft (1m) tall. Herb- All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28ft tall. Absolute Dominant Indicator Woody Vines- All woody vines greater than 3.28ft in (Plot Size: 30'radius) Status **Woody Vine Stratum** % Cover Species? height. = Total Cover Hydrophytic Vegetation Present? Yes _____ No __X Remarks: (Include photo numbers here or on a separate sheet.)

SOIL Sampling Point: 1_07212020_WL35_U1

Depth	Matrix				Redo			
(inches	Color	%	Color	%	Type	Loc	Texture	Remarks
0-15	10YR 3/2	98	10YR 4/4	2	С	М	Sandy Clay Loan	1
15-20	10YR 4/2	95	10YR 5/6	5	С	М	Sandy Clay Loan	1
Hydric Sc	oil Indicators:							Indicators for Problematic Soils:
Histosol (A1)				Polyvalu	e Below	Surface (B15)	2 cm Muck (A10)	
His	tic Epipedon (A2)		Thin Dark Surface (S9)				Coast Prarie Redox (A16)
Bla	ck Histic (A3)			Loamy Mucky Mineral (F1)			ineral (F1)	5 cm Mucky Peat or Peat (S3)
Нус	drogen Sulfide	(A4)			Loamy Gleyed Matric (F2)			Dark Surface (S7)
Str	atified Layers	(A5)			Depleted	d Matrix	(F3)	Polyvalue Below Surface (S8)
Dej	pleted Below [Dark Su	rface (A11)		Redox D	ark Surfa	ace (F6)	Thin Dark Surface (S9)
Thi	ck Dark Surfac	Dark Surface (A12)				d Dark Sı	urface (F7)	Iron-Manganese Masses (F12)
Sar	ndy Mucky Mir	neral (S	1)		Redox D	epressio	ns (F8)	Piedmont Floodplain Soils (F19)
 Sar	ndy Gleyed Ma	atrix (S4	!)		•			Mesic Spodic (TA6)
 Sar	ndy Redox (S5))						Red Parent Material (F21)
Stripped Matrix (S6)							Very Shallow Dark Surface (TF12)	
	rk Surface (S7)	-						Other (Explain in Remarks)
Dord 1:01								
Kestrictiv	ve Layer (if obs	ervea):						
		Type:					Hydri	c Soil Present? Yes No X
	Depth (in	ches):						

Remarks:

Project/Site: Cider Solar Project	City/County: Oakfield/Ger	nessee Sampling Date: 7/21/2020					
Applicant/Owner: Hecate		State: NY Sampling Point:					
Investigator(s): Andrew Sorci	tigator(s): Andrew Sorci Section, Township, Range						
Landform (hillslope, terrace,etc.): Depression	orm (hillslope, terrace,etc.): Depression Local relief (concave, convex,						
Subregion (LRR or MLRA): LRR L	Lat: _43.090225 Long:	78.224613 Datum: NAD83					
Soil Map Unit Name: LoA		NWI Classification: PFO					
Are climatic / hyrologic conditions on the site t	ypical for this time of year? Yes X No	(if no, explain in Remarks.)					
Are Vegetation, Soil, or Hydrology	significantly disturbed? Are "Normal	Circumstances" present? Yes X No					
Are Vegetation, Soil, or Hydrology	naturally problematic? (if needed, exp	plain any answers in Remarks.)					
SUMMARY OF FINDINGS - Attach site map	showing sampling point locations, tran	sects. important features. etc.					
Hydrophytic Vegetation Present? Yes X	No Is the Sampled Are.						
Hydric Soil Present? Yes X	No within a Wetland?	Yes X No					
Wetland Hydrology Present? Yes X	No if yes, optional Wet						
Remarks: (Explain alternative procedures here or in a seg							
HYDROLOGY							
Wetland Hydrology Indicators:		Secondary Indicators (minimum of two required)					
Primary Indicators (minimum of one is required: cl	neck all that apply)	Surface Soil Cracks (B6)					
Surface Water (A1)	Water-Stained Leaves (B9)	Drainage Patterns (B10)					
High Water Table (A2)	Aquatic Fauna (B13)	Moss Trim Lines (B16)					
Saturation (A3)	Marl Deposits (B15)	Dry-Season Water Table (C2)					
Water Marks (B1)	Hydrogen Sulfide Odor (C1)	Crayfish Burrows (C8)					
Sediment Deposits (B2)	Oxidized Rhizospheres on Living Roots (C3)	Saturation Visible in Aerial Imagery (C9)					
Drift Deposits (B3)	Presence of Reduced Iron (C4)	Stunted or Stressed Plants (D1)					
Algal Mat or Crust (B4)	Recent Iron Reduction in Tilled Soils (C6)	X Geomorphic Position (D2)					
Iron Deposits (B5)	Thin Muck Surface (C7)	Shallow Aquitard (D3)					
Inundation Visible on Aerial Imagery (B7)	Other (Explain in Remarks)	Microtopographic Relief (D4)					
Sparsley Vegetated Concave Surface (B8)		X FAC-Neutral Test (D5)					
Surface Water Present? Yes No X	Depth (inches)						
Water Table Present? Yes No X	- · · · 	Hydrology Present? Yes X No					
Saturation Present? Yes No X	Depth (inches)						
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:							
Remarks:							

VEGETATION - Use scien	ntific names of plants				Sampling Point: 1_07212020_wL36_w1
Tree Stratum _Acer saccharinum	(Plot Size: 30'radius)	90	ominant pecies? X Total Cove	Status FACW	Dominance Test Worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: 1 (A) Total Number of Dominant
					Species Across All Strata:(B) Percent of Dominant Species That Are OBL, FACW, or FAC:(A/B)
					Prevalence Index Worksheet:
Shrub Stratum	(Plot Size: 15'radius)	Absolute Do	ominant pecies?	Indicator Status	OBL species 0 x 1 0 FACW species 90 x 2 180
					FAC species 0 x 3 0
		=	Total Cove	er	FACU species 0 x 4 0
					UPL species 0 x 5 0
					Column Totals 90 (A) 180 (B) Prevalence Index = B/A = 2
					Hydrophytic Vegetation Indicators:
	(DL 1.5)	Absolute Do			X 1- Rapid Test For Hydrophytic Vegetation
Herb Stratum	(Plot Size:5'radius _)	% Cover S	pecies?	Status	X 2- Dominance Test is > 50%
		=	Total Cove	er	X 3- Prevalence Index is =< 3.0
					4- Morphological Adaptations
					5- Problematic Hydrophytic Vegetation
					Definitions of Vegetation Strata:
					Tree- Woody plants 3 in. (7.6cm) or more in diameter at breast height (DBH), regardless of height.
					Sapling/Shrub- Woody plants less than 3 in. DBH and greater than or equal to 3.28ft (1m) tall.
					Herb- All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28ft tall.
Woody Vine Stratum	(Plot Size: 30'radius)	Absolute Do % Cover S		Indicator Status	Woody Vines- All woody vines greater than 3.28ft in height.
		=1	Total Cove	er	Hydrophytic Vegetation Present? Yes X No
Remarks: (Include photo n	umbers here or on a sep	parate sheet.)			

SOIL Sampling Point: 1_07212020_wL36_w1

								54mpm6 + 6mt 1_6/222026_11250_112
Depth	Matrix	(Redo	x Featu		
(inches	Color	%	Color	%	Type	Loc	Texture	Remarks
0-4	10YR 2/1	100					Loam	
4-8	10YR 3/1	100					Silty Clay Loam	
8-16	10YR 5/2	80	10YR 5/8	20	С	M	Sandy Loam	

Hydric Soil Indicators:		Indicators for Problematic Soils:		
Histosol (A1)	Polyvalue Below Surface (B15)	2 cm Muck (A10)		
Histic Epipedon (A2)	Thin Dark Surface (S9)	Coast Prarie Redox (A16)		
Black Histic (A3)	Loamy Mucky Mineral (F1)	5 cm Mucky Peat or Peat (S3)		
Hydrogen Sulfide (A4)	Loamy Gleyed Matric (F2)	Dark Surface (S7)		
Stratified Layers (A5)	X Depleted Matrix (F3)	Polyvalue Below Surface (S8)		
Depleted Below Dark Surface (A11)	Redox Dark Surface (F6)	Thin Dark Surface (S9)		
Thick Dark Surface (A12)	Depleted Dark Surface (F7)	Iron-Manganese Masses (F12)		
Sandy Mucky Mineral (S1)	Redox Depressions (F8)	Piedmont Floodplain Soils (F19)		
Sandy Gleyed Matrix (S4)		Mesic Spodic (TA6)		
Sandy Redox (S5)		Red Parent Material (F21)		
Stripped Matrix (S6)		Very Shallow Dark Surface (TF12)		
Dark Surface (S7)		Other (Explain in Remarks)		
Restrictive Layer (if observed):				
Туре:	Ну	/dric Soil Present? Yes X No		
Depth (inches):				
-	_			

Project/Site: Cider Solar Project	City/County: Oakfield/Ger	nessee Sampling Date: 7/21/2020			
Applicant/Owner: Hecate		State: NY Sampling			
Investigator(s): Andrew Sorci	Section, Township, Range:	Point:1_07212020_WL36_U			
Landform (hillslope, terrace,etc.): Rise	Local relief (concave, convex, none): <u>Convex</u> Slope (%) <u>2</u> -				
Subregion (LRR or MLRA): LRR L	Lat: 43.090153 Long: -7	78.224691 Datum: NAD83			
Soil Map Unit Name: HIA		NWI Classification: UPL			
Are climatic / hyrologic conditions on the site t	ypical for this time of year? Yes X No	(if no, explain in Remarks.)			
Are Vegetation, Soil, or Hydrology	significantly disturbed? Are "Normal	Circumstances" present? Yes X No			
Are Vegetation, Soil, or Hydrology	naturally problematic? (if needed, exp	lain any answers in Remarks.)			
SUMMARY OF FINDINGS - Attach site map	showing sampling point locations, tran	sects, important features, etc.			
Hydrophytic Vegetation Present? Yes	No X Is the Sampled Area	a			
Hydric Soil Present? Yes	No X within a Wetland?	Yes No X			
Wetland Hydrology Present? Yes	No X if yes, optional Wet	land Site ID:			
Remarks: (Explain alternative procedures here or in a seg	parate report.)				
HYDROLOGY					
Wetland Hydrology Indicators:		Secondary Indicators (minimum of two required)			
Primary Indicators (minimum of one is required: cl	neck all that apply)	Surface Soil Cracks (B6)			
Surface Water (A1)	Water-Stained Leaves (B9)	Drainage Patterns (B10)			
High Water Table (A2)	Aquatic Fauna (B13)	Moss Trim Lines (B16)			
Saturation (A3)	Marl Deposits (B15)	Dry-Season Water Table (C2)			
Water Marks (B1)	Hydrogen Sulfide Odor (C1)	Crayfish Burrows (C8)			
Sediment Deposits (B2)	Oxidized Rhizospheres on Living Roots (C3)	Saturation Visible in Aerial Imagery (C9)			
Drift Deposits (B3)	Presence of Reduced Iron (C4)	Stunted or Stressed Plants (D1)			
Algal Mat or Crust (B4)	Recent Iron Reduction in Tilled Soils (C6)	Geomorphic Position (D2)			
Iron Deposits (B5)	Thin Muck Surface (C7)	Shallow Aquitard (D3)			
Inundation Visible on Aerial Imagery (B7)	Other (Explain in Remarks)	Microtopographic Relief (D4)			
Sparsley Vegetated Concave Surface (B8)		FAC-Neutral Test (D5)			
Surface Water Present? Yes No X	Depth (inches)				
Water Table Present? Yes No X	= ' ' 	Hydrology Present? Yes No X			
Saturation Present? Yes No X	Depth (inches)	Tydrology Frescht: TesNoX			
Describe Recorded Data (stream gauge, monit	toring well, aerial photos, previous inspection	ns). if available:			
, 5 5 7	5 / 1 /1	,,			
Remarks:					

VEGETATION - Use scientific names of plants Sampling Point: 1_07212020_WL36_U1 Absolute Dominant Indicator **Dominance Test Worksheet:** (Plot Size: 30'radius) % Cover Species? Status **Tree Stratum Number of Dominant Species** Χ FAC That Are OBL, FACW, or FAC: (A) Acer rubrum 30 Acer saccharinum 30 Χ **FACW Total Number of Dominant** = Total Cover 60 (B) Species Across All Strata: 9 Percent of Dominant Species That Are OBL, FACW, or FAC: 44.4% (A/B) **Prevalence Index Worksheet:** 0 x 1 **OBL** species Absolute Dominant Indicator **FACW** species 31 62 (Plot Size: 15'radius) % Cover Species? Status x 2 **Shrub Stratum** FAC species 117 х3 351 Rhamnus cathartica 80 Χ **FAC** 80 = Total Cover **FACU** species 23 x 4 92 **UPL** species 0 x 5 0 Column Totals 171 (A) 505 (B) Prevalence Index = B/A = 2.95 **Hydrophytic Vegetation Indicators:** Absolute Dominant Indicator 1- Rapid Test For Hydrophytic Vegetation **Herb Stratum** (Plot Size: 5'radius) % Cover Species? Status 2- Dominance Test is > 50% Ambrosia artemisiifolia **FACU** X 3- Prevalence Index is =< 3.0 3 Х Solidago canadensis **FACU** 4- Morphological Adaptations Cirsium arvense 3 Χ **FACU** Oxalis corniculata 3 Χ **FACU** 5- Problematic Hydrophytic Vegetation Carex cristatella 1 **FACW** 14 = Total Cover **Definitions of Vegetation Strata:** Tree- Woody plants 3 in. (7.6cm) or more in diameter at

Absolute Dominant Indicator

Species?

Χ

Χ

= Total Cover

Status

FACU

FAC

% Cover

10

7

17

breast height (DBH), regardless of height.

Sapling/Shrub- Woody plants less than 3 in. DBH and greater than or equal to 3.28ft (1m) tall.

Herb- All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28ft tall.

Woody Vines- All woody vines greater than 3.28ft in height.

> Hydrophytic Vegetation Present? Yes _____ No __X

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

Woody Vine Stratum

Vitis riparia

Parthenocissus inserta

(Plot Size: 30'radius)

SOIL Sampling Point: 1_07212020_wL36_U1

Depth	Matrix	(Redo	ox Featu	res			
(inches	Color	%	Color	%	Туре	Loc	Tex	ture	Remarks	
0-3	10YR 2/2	100					Sandy	Loam		
3-12	10YR 3/2	100					Sandy	Loam		
12-18	10YR 5/2	85	10YR 5/8	15	С	М	Sandy	Loam		
					_					
-	oil Indicators:				Dobacoliu	o Dolow	Curtage /D15		Indicators for Problematic Soils:	
	tosol (A1) tic Epipedon ((42)			-	e Below k Surface	Surface (B15	_	2 cm Muck (A10) Coast Prarie Redox (A16)	
		(AZ)					neral (F1)	=	5 cm Mucky Peat or Peat (S3)	
Black Histic (A3) Hydrogen Sulfide (A4)				-	-	atric (F2)	_	Dark Surface (S7)		
Stratified Layers (A5)					d Matrix		_	Polyvalue Below Surface (S8)		
Depleted Below Dark Surface (A11)					ark Surfa		_	Thin Dark Surface (S9)		
Thick Dark Surface (A12)						ırface (F7)	=	Iron-Manganese Masses (F12)		
Sandy Mucky Mineral (S1)					epressio		_	Piedmont Floodplain Soils (F19)		
	ndy Gleyed Ma								Mesic Spodic (TA6)	
	ndy Redox (S5	-					Red Parent Material (F21)			
Stri	ipped Matrix ((S6)						_	Very Shallow Dark Surface (TF12)	
Dar	rk Surface (S7)						_	Other (Explain in Remarks)	
Restrictiv	ve Layer (if obs	erved):								
		Type:						Lludria C	oil Present? Yes No X	
	Depth (ir	-						nyuric S	oil Present? Yes No X	
	Deptii (ii	_								
Remarks	s:									

Project/Site: Cider Solar Project	City/Cou	unty: Oakfield/Genessee	Sampling Date: 7/21/2020		
Applicant/Owner: Hecate		State: NY	Sampling Point:		
Investigator(s): Andrew Sorci	Section	Section, Township, Range: 1_07212020_WL37_W1			
Landform (hillslope, terrace,etc.): Dip	Local relief	Local relief (concave, convex, none): Concave Slope (%) 0 - 1			
Subregion (LRR or MLRA): LRR L Soil	Lat: 43.090503	Long:78.226211	Datum: NAD83		
Map Unit Name: HIB		NWI Classi	fication: PEM		
Are climatic / hyrologic conditions on the site	typical for this time of year	r? Yes <u>X</u> No (if no,	explain in Remarks.)		
Are Vegetation X , Soil , or Hydrolog	y significantly disturb	ed? Are "Normal Circumstances	" present? Yes X No		
Are Vegetation , Soil , or Hydrolog	y naturally problemat	ic? (if needed, explain any answer	s in Remarks.)		
					
SUMMARY OF FINDINGS - Attach site m	ap showing sampling poi	int locations, transects, impor	tant features, etc.		
Hydrophytic Vegetation Present? Yes	X No I	s the Sampled Area			
Hydric Soil Present? Yes	X No	within a Wetland?	Yes X No		
<u> </u>	X No i	f yes, optional Wetland Site ID:	WL37		
Remarks: (Explain alternative procedures here or in a	separate report.)	_			
Edge of agricultural field	,				
HYDROLOGY					
Wetland Hydrology Indicators:			icators (minimum of two required)		
Primary Indicators (minimum of one is required:			foil Cracks (B6)		
Surface Water (A1)	Water-Stained Leaves (B9) Drainage	Patterns (B10)		
High Water Table (A2)	Aquatic Fauna (B13)	Moss Tri	Moss Trim Lines (B16)		
Saturation (A3)	Marl Deposits (B15)	Dry-Seas	on Water Table (C2)		
Water Marks (B1)	Hydrogen Sulfide Odor	(C1) Crayfish	Burrows (C8)		
Sediment Deposits (B2)	Oxidized Rhizospheres	on Living Roots (C3) X Saturation	n Visible in Aerial Imagery (C9)		
Drift Deposits (B3)	Presence of Reduced Ir		or Stressed Plants (D1)		
Algal Mat or Crust (B4)	Recent Iron Reduction	· · · —	phic Position (D2)		
Iron Deposits (B5)	Thin Muck Surface (C7)	· · · —	Aquitard (D3)		
Inundation Visible on Aerial Imagery (B7)	Other (Explain in Rema		oographic Relief (D4)		
Sparsley Vegetated Concave Surface (B8)		FAC-Neu	tral Test (D5)		
Surface Water Present? Yes No X	Depth (inches)				
Water Table Present? Yes No X	Depth (inches)	Wetland Hydrology Pres	ent? Yes X No		
Saturation Present? Yes No X	-	,			
					
Describe Recorded Data (stream gauge, mor	nitoring well, aerial photos,	previous inspections), it available	:		
Remarks:					
nemarks.					

VEGETATION - Use scientific names of plants Sampling Point: 1_07212020_WL37_W1 Absolute Dominant Indicator **Dominance Test Worksheet:** (Plot Size: 30'radius) % Cover Species? Status **Tree Stratum Number of Dominant Species** That Are OBL, FACW, or FAC: (A) = Total Cover **Total Number of Dominant** Species Across All Strata: (B) 1 Percent of Dominant Species That Are OBL, FACW, or FAC: (A/B) 100% **Prevalence Index Worksheet:** 20 20 **OBL** species x 1 Absolute Dominant Indicator **FACW** species 0 0 (Plot Size: 15'radius) Status x 2 **Shrub Stratum** % Cover Species? FAC species 90 270 х3 = Total Cover **FACU** species 2 x 4 8 **UPL** species 4 x 5 20 Column Totals 116 318 (B) (A) Prevalence Index = B/A = 2.74 **Hydrophytic Vegetation Indicators:** Absolute Dominant Indicator 1- Rapid Test For Hydrophytic Vegetation **Herb Stratum** (Plot Size: 5'radius) % Cover Species? Status X 2- Dominance Test is > 50% 90 Echinochloa crus-galli Х FAC X 3- Prevalence Index is =< 3.0 Eleocharis obtusa 20 OBL 4- Morphological Adaptations 4 UPL Daucus carota Abutilon theophrasti 2 **FACU** 5- Problematic Hydrophytic Vegetation 116 = Total Cover **Definitions of Vegetation Strata:** Tree- Woody plants 3 in. (7.6cm) or more in diameter at breast height (DBH), regardless of height. Sapling/Shrub- Woody plants less than 3 in. DBH and greater than or equal to 3.28ft (1m) tall. Herb- All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28ft tall. Absolute Dominant Indicator Woody Vines- All woody vines greater than 3.28ft in (Plot Size: 30'radius) **Woody Vine Stratum** % Cover Species? Status height. = Total Cover Hydrophytic Vegetation Present? Yes X No ___ Remarks: (Include photo numbers here or on a separate sheet.)

SOIL Sampling Point: 1_07212020_WL37_W1

Depth	Depth Matrix Redox Featu					x Feature	res			
(inches	Color	%	Color	%	Type	Loc	Texture	Remarks		
0-14	7.5YR 4/2	90	10YR 4/4	10	С	М	Clay Loam			
14-18	7.5YR 5/3	70	7.5YR 5/8	30	С	М	Clay Loam			
-	oil Indicators:						5 (5.45)	Indicators for Problematic Soils:		
Histosol (A1)				-		urface (B15)	2 cm Muck (A10)			
Histic Epipedon (A2)					k Surface (•	Coast Prarie Redox (A16)			
	ck Histic (A3)					lucky Min	• •	5 cm Mucky Peat or Peat (S3)		
	drogen Sulfide	. ,			•	leyed Mat	• •	Dark Surface (S7)		
Str	atified Layers ((A5)		X	X Depleted Matrix (F3)			Polyvalue Below Surface (S8)		
De	pleted Below [Dark Su	rface (A11)		Redox D	ark Surface	e (F6)	Thin Dark Surface (S9)		
Th	ck Dark Surfac	e (A12)			Depleted	d Dark Surf	face (F7)	Iron-Manganese Masses (F12)		
Saı	ndy Mucky Mir	neral (S	1)		Redox D	epressions	(F8)	Piedmont Floodplain Soils (F19)		
Sai	ndy Gleyed Ma	trix (S4)					Mesic Spodic (TA6)		
Saı	ndy Redox (S5)							Red Parent Material (F21)		
Str	ipped Matrix (S6)						Very Shallow Dark Surface (TF12)		
								Other (Explain in Remarks)		
	rk Surface (S7)									
Da	rk Surface (S7) ve Layer (if obse									
Da	ve Layer (if obse						Hydric	Soil Present? Yes X No		

Remarks:

Project/Site: Cider Solar Project	City/C	ounty: Oakfield/Genessee	Sampling Date: 7/21/2020				
Applicant/Owner: Hecate		State: NY	Sampling Point:				
Investigator(s): Andrew Sorci Section, Township, Range: 1_07212020_WL38_W1							
Landform (hillslope, terrace,etc.): Depression	on Local relie	Local relief (concave, convex, none): Concave Slope (%) 0 - 2					
Subregion (LRR or MLRA): LRR L	Lat: 43.090235	Long:78.226793	Datum: NAD83				
Soil Map Unit Name: HIB		NWI Class	sification: PEM				
Are climatic / hyrologic conditions on the site	e typical for this time of ye	ar? Yes <u>X</u> No (if no	, explain in Remarks.)				
Are Vegetation X , Soil , or Hydrolog	gy significantly distu	bed? Are "Normal Circumstance	es" present? Yes X No				
Are Vegetation , Soil , or Hydrolog	gy naturally problem	atic? (if needed, explain any answe	ers in Remarks.)				
							
SUMMARY OF FINDINGS - Attach site m	ap showing sampling p	oint locations, transects, impo	rtant features, etc.				
Hydrophytic Vegetation Present? Yes	X No	Is the Sampled Area					
Hydric Soil Present? Yes	X No	within a Wetland?	Yes X No				
_ ·	X No	if yes, optional Wetland Site ID:	WL38				
Remarks: (Explain alternative procedures here or in a	separate report.)						
Edge of agricultural field							
HYDROLOGY Wetland Hydrology Indicators:		Cocondany In	dicators (minimum of two required)				
Wetland Hydrology Indicators:			dicators (minimum of two required)				
Primary Indicators (minimum of one is required:			Soil Cracks (B6)				
Surface Water (A1)	Water-Stained Leave		e Patterns (B10)				
High Water Table (A2)	Aquatic Fauna (B13)	Moss Tr	rim Lines (B16)				
Saturation (A3)	Marl Deposits (B15)	Dry-Sea	son Water Table (C2)				
Water Marks (B1)	Hydrogen Sulfide Odo	or (C1) Crayfish	Burrows (C8)				
Sediment Deposits (B2)	Oxidized Rhizosphere	s on Living Roots (C3) X Saturati	on Visible in Aerial Imagery (C9)				
Drift Deposits (B3)	Presence of Reduced	Iron (C4) Stunted	or Stressed Plants (D1)				
Algal Mat or Crust (B4)	Recent Iron Reductio	n in Tilled Soils (C6) X Geomo	rphic Position (D2)				
Iron Deposits (B5)	Thin Muck Surface (C	7) Shallow	Aquitard (D3)				
Inundation Visible on Aerial Imagery (B7)	Other (Explain in Ren		ppographic Relief (D4)				
Sparsley Vegetated Concave Surface (B8)	Other (Explain in Ken		utral Test (D5)				
Sparsiey vegetated concave surface (Bo)			utiai iest (D3)				
Surface Water Present? Yes No >	(Depth (inches)	_					
Water Table Present? Yes No _>	(Depth (inches)	Wetland Hydrology Pre	esent? Yes X No				
Saturation Present? Yes No >	(Depth (inches)						
Describe Descrided Data (streets serves see							
Describe Recorded Data (stream gauge, mo	nitoring well, aerial photo	s, previous inspections), if available	e:				
Remarks:							

VEGETATION - Use scientific names of plants Sampling Point: 1_07212020_WL38_W1 Absolute Dominant Indicator **Dominance Test Worksheet:** (Plot Size: 30'radius) % Cover Species? Status **Tree Stratum Number of Dominant Species** That Are OBL, FACW, or FAC: (A) = Total Cover **Total Number of Dominant** Species Across All Strata: (B) 3 Percent of Dominant Species That Are OBL, FACW, or FAC: (A/B) 100% **Prevalence Index Worksheet:** 20 20 **OBL** species x 1 Absolute Dominant Indicator **FACW** species 0 0 (Plot Size: 15'radius) Status x 2 **Shrub Stratum** % Cover Species? FAC species 40 120 х3 = Total Cover **FACU** species 12 x 4 48 **UPL** species 0 x 5 0 Column Totals 72 (A) 188 (B) Prevalence Index = B/A = 2.61 **Hydrophytic Vegetation Indicators:** Absolute Dominant Indicator 1- Rapid Test For Hydrophytic Vegetation **Herb Stratum** (Plot Size: 5'radius) % Cover Species? Status X 2- Dominance Test is > 50% 25 Echinochloa crus-galli FAC X 3- Prevalence Index is =< 3.0 Χ OBL Eleocharis obtusa 20 4- Morphological Adaptations Persicaria maculosa 15 Χ **FAC** Polygonum aviculare 12 **FACU** 5- Problematic Hydrophytic Vegetation 72 = Total Cover **Definitions of Vegetation Strata:** Tree- Woody plants 3 in. (7.6cm) or more in diameter at breast height (DBH), regardless of height. Sapling/Shrub- Woody plants less than 3 in. DBH and greater than or equal to 3.28ft (1m) tall. Herb- All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28ft tall. Absolute Dominant Indicator Woody Vines- All woody vines greater than 3.28ft in (Plot Size: 30'radius) **Woody Vine Stratum** % Cover Species? Status height. = Total Cover Hydrophytic Vegetation Present? Yes X No ___ Remarks: (Include photo numbers here or on a separate sheet.)

SOIL		Sampling Point: 1_07212020_wL38_w1
Hydric Soil Indicators:		Indicators for Problematic Soils:
Histosol (A1)	Polyvalue Below Surface (
Histic Epipedon (A2)	Thin Dark Surface (S9)	Coast Prarie Redox (A16)
Black Histic (A3)	Loamy Mucky Mineral (F1	
Hydrogen Sulfide (A4)	Loamy Gleyed Matric (F2)	
Stratified Layers (A5)	X Depleted Matrix (F3)	Polyvalue Below Surface (S8)
Depleted Below Dark Surface (A11)	Redox Dark Surface (F6)	Thin Dark Surface (S9)
Thick Dark Surface (A12)	Depleted Dark Surface (F7	
Sandy Mucky Mineral (S1)	Redox Depressions (F8)	Piedmont Floodplain Soils (F19)
Sandy Gleyed Matrix (S4)		Mesic Spodic (TA6)
Sandy Redox (S5)		Red Parent Material (F21)
Stripped Matrix (S6)		Very Shallow Dark Surface (TF12)
Dark Surface (S7)		Other (Explain in Remarks)
Restrictive Layer (if observed):		
Туре:		Hydric Soil Present? Yes X No
Depth (inches):		
. , ,		
Remarks:		

Project/Site: Cider Solar Project	City/County: Oakfield/Ger	nessee Sampling Date: 7/21/2020		
Applicant/Owner: Hecate		State: NY Sampling		
Investigator(s): Andrew Sorci	Section, Township, Range:	Point:1_07212020_WL37/38_U1		
Landform (hillslope, terrace,etc.): Rise	Local relief (concave, convex, none): None Slope (%)			
Subregion (LRR or MLRA): LRR L	Lat: 43.090427 Long: -7	78.226432 Datum: <u>NAD83</u>		
Soil Map Unit Name: HIB		NWI Classification: UPL		
Are climatic / hyrologic conditions on the site	cypical for this time of year? Yes X No	(if no, explain in Remarks.)		
Are Vegetation, Soil, or Hydrology	significantly disturbed? Are "Normal	Circumstances" present? Yes X No		
Are Vegetation, Soil, or Hydrology	naturally problematic? (if needed, exp	lain any answers in Remarks.)		
SUMMARY OF FINDINGS - Attach site ma	showing sampling point locations, tran	sects, important features, etc.		
Hydrophytic Vegetation Present? Yes	No X Is the Sampled Area	-		
Hydric Soil Present? Yes	No X within a Wetland?	Yes No X		
·				
Wetland Hydrology Present? Yes		idilu Site iD.		
Remarks: (Explain alternative procedures here or in a se	parate report.)			
HYDROLOGY				
Wetland Hydrology Indicators:		Secondary Indicators (minimum of two required)		
Primary Indicators (minimum of one is required: c	heck all that apply)	Surface Soil Cracks (B6)		
Surface Water (A1)	Water-Stained Leaves (B9)	Drainage Patterns (B10)		
High Water Table (A2)	Aquatic Fauna (B13)	Moss Trim Lines (B16)		
Saturation (A3)	Marl Deposits (B15)	Dry-Season Water Table (C2)		
Water Marks (B1)	Hydrogen Sulfide Odor (C1)	Crayfish Burrows (C8)		
Sediment Deposits (B2)	Oxidized Rhizospheres on Living Roots (C3)	Saturation Visible in Aerial Imagery (C9)		
Drift Deposits (B3)	Presence of Reduced Iron (C4)	Stunted or Stressed Plants (D1)		
Algal Mat or Crust (B4)	Recent Iron Reduction in Tilled Soils (C6)	Geomorphic Position (D2)		
Iron Deposits (B5)	Thin Muck Surface (C7)	Shallow Aquitard (D3)		
Inundation Visible on Aerial Imagery (B7)	Other (Explain in Remarks)	Microtopographic Relief (D4)		
Sparsley Vegetated Concave Surface (B8)		FAC-Neutral Test (D5)		
		The Wedital Fest (65)		
Surface Water Present? Yes NoX	Depth (inches)			
Water Table Present? Yes No _ X	Depth (inches) Wetland H	Hydrology Present? Yes No X		
Saturation Present? Yes NoX	Depth (inches)			
Describe Recorded Data (stream gauge, moni	toring well, aerial photos, previous inspection	ns), if available:		
,	6 - 7 - 7 - 1 -			
Remarks:				

VEGETATION - Use scientific names of plants Sampling Point: 1_07212020_WL37/38_U1 Absolute Dominant Indicator **Dominance Test Worksheet:** (Plot Size: 30'radius) % Cover Species? Status **Tree Stratum Number of Dominant Species** That Are OBL, FACW, or FAC: (A) = Total Cover **Total Number of Dominant** Species Across All Strata: (B) 2 Percent of Dominant Species (A/B) That Are OBL, FACW, or FAC: 0% **Prevalence Index Worksheet:** 0 **OBL** species x 1 Absolute Dominant Indicator **FACW** species 0 0 (Plot Size: 15'radius) % Cover Species? Status x 2 **Shrub Stratum** FAC species х3 6 = Total Cover FACU species 1 x 4 4 **UPL** species 78 x 5 390 Column Totals 81 (A) 400 (B) Prevalence Index = B/A = 4.94 **Hydrophytic Vegetation Indicators:** Absolute Dominant Indicator 1- Rapid Test For Hydrophytic Vegetation **Herb Stratum** (Plot Size: 5'radius) % Cover Species? Status 2- Dominance Test is > 50% UPL Daucus carota 75 3- Prevalence Index is =< 3.0 Χ Daucus carota 3 UPL 4- Morphological Adaptations Echinochloa crus-galli 2 **FAC** Abutilon theophrasti 1 **FACU** 5- Problematic Hydrophytic Vegetation 81 = Total Cover **Definitions of Vegetation Strata:** Tree- Woody plants 3 in. (7.6cm) or more in diameter at breast height (DBH), regardless of height. Sapling/Shrub- Woody plants less than 3 in. DBH and greater than or equal to 3.28ft (1m) tall. Herb- All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28ft tall. Absolute Dominant Indicator Woody Vines- All woody vines greater than 3.28ft in (Plot Size: 30'radius) **Woody Vine Stratum** % Cover Species? Status height. = Total Cover Hydrophytic Vegetation Present? Yes _____ No __X Remarks: (Include photo numbers here or on a separate sheet.)

SOIL

Sampling Point: 1_07212020_WL37/38_U1

Depth	Matrix				Redo	x Featu	ires			
inches	Color	%	Color	%	Type	Loc	Texture	Remarks		
0-12	10YR 3/2	99	10YR 3/4	1	С	M	Sandy Clay Loam			
12-18	7.5YR 4/2	85	10YR 5/6	15	С	М	Sandy Clay Loam			
Hydric So	oil Indicators:						Ir	dicators for Problematic Soils:		
	tosol (A1)				Polyvalu	e Below	Surface (B15)	2 cm Muck (A10)		
	tic Epipedon (A2)			Thin Dar			Coast Prarie Redox (A16)		
	ck Histic (A3)			Loamy Mucky Mineral (F1)				5 cm Mucky Peat or Peat (S3)		
Нус	drogen Sulfide	de (A4) Loamy Gleyed Matric (F2)				Dark Surface (S7)				
Stra	atified Layers ((A5)		Depleted Matrix (F3)				Polyvalue Below Surface (S8)		
Dep	oleted Below [Dark Su	rface (A11)	Redox Dark Surface (F6)				Thin Dark Surface (S9)		
Thi	ck Dark Surfac	e (A12)			Depleted	l Dark Su	urface (F7)	Iron-Manganese Masses (F12)		
San	ndy Mucky Mir	neral (S	1)		Redox Depressions (F8)			Piedmont Floodplain Soils (F19)		
San	ndy Gleyed Ma	itrix (S4	1)					Mesic Spodic (TA6)		
San	ndy Redox (S5)						-	Red Parent Material (F21)		
Stri	pped Matrix (S6)					-	Very Shallow Dark Surface (TF12)		
Dar	k Surface (S7)						_	Other (Explain in Remarks)		
Restrictiv	ve Layer (if obse	erved):								
		Type:					Hydric So	il Present? Yes No X		
	Depth (in	ches):					,			
Remarks										

Project/Site: Cider Solar Project	City/C	ounty: Oakfield/Gen	essee Sa	ampling Date: 7/21/2020			
Applicant/Owner: Hecate			State: NY	Sampling Point:			
Investigator(s): Andrew Sorci Section, Township, Range: 1_07212020_WL39_W1							
Landform (hillslope, terrace,etc.): Depressio	n Local relie	Local relief (concave, convex, none): Concave Slope (%) 2 - 5					
Subregion (LRR or MLRA): LRR L	Lat: 43.090066	Long:7	8.231832	Datum: NAD83			
Soil Map Unit Name: RsA			NWI Classifica	ation: PSS			
Are climatic / hyrologic conditions on the site	typical for this time of ye	ar? Yes X No	(if no, exp	plain in Remarks.)			
Are Vegetation , Soil , or Hydrology	y significantly distur	bed? Are "Normal (Circumstances" p	resent? Yes X No			
Are Vegetation , Soil , or Hydrology	y naturally problem	atic? (if needed, expl	ain any answers in	Remarks.)			
							
SUMMARY OF FINDINGS - Attach site ma	p showing sampling p	oint locations, tran	sects, importar	nt features, etc.			
Hydrophytic Vegetation Present? Yes >	(No	Is the Sampled Area					
Hydric Soil Present? Yes	No No	within a Wetland?	Yes	X No			
Wetland Hydrology Present? Yes	 (No	if yes, optional Wetl	and Site ID:	WL39			
Remarks: (Explain alternative procedures here or in a se	eparate report.)						
	. ,						
HYDROLOGY							
Wetland Hydrology Indicators:				ors (minimum of two required)			
Primary Indicators (minimum of one is required:	check all that apply)		Surface Soil	Cracks (B6)			
Surface Water (A1)	Water-Stained Leave	r-Stained Leaves (B9) Drainage Patterns (B10)					
X High Water Table (A2)	Aquatic Fauna (B13)		X Moss Trim Lines (B16)				
X Saturation (A3)	Marl Deposits (B15)		Dry-Season \	Water Table (C2)			
Water Marks (B1)	Hydrogen Sulfide Odd	or (C1)	Crayfish Bur	rows (C8)			
Sediment Deposits (B2)	Oxidized Rhizosphere	s on Living Roots (C3)	X Saturation V	isible in Aerial Imagery (C9)			
Drift Deposits (B3)	Presence of Reduced	Iron (C4)		tressed Plants (D1)			
Algal Mat or Crust (B4)	Recent Iron Reductio		X Geomorphic				
		, ,					
Iron Deposits (B5)	Thin Muck Surface (C		Shallow Aqu				
Inundation Visible on Aerial Imagery (B7)	Other (Explain in Ren	narks)		raphic Relief (D4)			
Sparsley Vegetated Concave Surface (B8)			X FAC-Neutral	Test (D5)			
Surface Water Present? Yes No X	Depth (inches)						
Water Table Present? Yes X No	Depth (inches) 8	Wetland H	ydrology Present	t? Yes X No			
Saturation Present? Yes X No	Depth (inches) 0	_					
		_					
Describe Recorded Data (stream gauge, mon	litoring well, aerial photo	s, previous inspection	s), if available:				
Remarks:							
Remarks.							

VEGETATION - Use scientific names of plants Sampling Point: 1_07212020_WL39_W1 Absolute Dominant Indicator **Dominance Test Worksheet:** (Plot Size: 30'radius) % Cover Species? Status **Tree Stratum Number of Dominant Species** That Are OBL, FACW, or FAC: (A) = Total Cover **Total Number of Dominant** Species Across All Strata: (B) Percent of Dominant Species That Are OBL, FACW, or FAC: (A/B) 100% **Prevalence Index Worksheet:** 135 x 1 135 **OBL** species Absolute Dominant Indicator **FACW** species 25 50 (Plot Size: 15'radius) % Cover Species? x 2 **Shrub Stratum** Status FAC species 5 OBL х3 15 Cephalanthus occidentalis 50 Χ Salix nigra 25 Χ OBL **FACU** species 0 x 4 0 15 Fraxinus pennsylvanica **FACW UPL** species 0 x 5 0 Cornus amomum 10 **FACW** Column Totals 165 (A) 200 (B) 100 = Total Cover Prevalence Index = B/A = 1.21 **Hydrophytic Vegetation Indicators:** Absolute Dominant Indicator 1- Rapid Test For Hydrophytic Vegetation **Herb Stratum** (Plot Size: 5'radius) % Cover Species? Status X 2- Dominance Test is > 50% 40 Typha angustifolia Х OBL X 3- Prevalence Index is =< 3.0 OBL Carex lupulina 10 4- Morphological Adaptations Alisma subcordatum 10 OBL 60 = Total Cover 5- Problematic Hydrophytic Vegetation **Definitions of Vegetation Strata:** Tree- Woody plants 3 in. (7.6cm) or more in diameter at breast height (DBH), regardless of height. Sapling/Shrub- Woody plants less than 3 in. DBH and greater than or equal to 3.28ft (1m) tall. Herb- All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28ft tall. Absolute Dominant Indicator Woody Vines- All woody vines greater than 3.28ft in (Plot Size: 30'radius) Species? **Woody Vine Stratum** % Cover Status height. **FAC** Vitis riparia Χ 5 = Total Cover Hydrophytic Vegetation Present? Yes X No ____

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

SOIL Sampling Point: 1_07212020_wL39_w1

Depth	Matrix				Redo	ures		
(inches	Color	%	Color	%	Туре	Loc	Texture	Rem
0-2	10YR 2/1	100					Silt Loam	
2-8	10YR 3/1	90	10YR 3/6	10	С	М	Silt Loam	
8-14	10YR 4/2	85	10YR 5/6	15	С	М	Clay	

Hydric Soil Indicators:		Indicators for Problematic Soils:
Histosol (A1)	Polyvalue Below Surface (B15)	2 cm Muck (A10)
Histic Epipedon (A2)	Thin Dark Surface (S9)	Coast Prarie Redox (A16)
Black Histic (A3)	Loamy Mucky Mineral (F1)	5 cm Mucky Peat or Peat (S3)
Hydrogen Sulfide (A4)	Loamy Gleyed Matric (F2)	Dark Surface (S7)
Stratified Layers (A5)	X Depleted Matrix (F3)	Polyvalue Below Surface (S8)
Depleted Below Dark Surface (A11)	Redox Dark Surface (F6)	Thin Dark Surface (S9)
Thick Dark Surface (A12)	Depleted Dark Surface (F7)	Iron-Manganese Masses (F12)
Sandy Mucky Mineral (S1)	Redox Depressions (F8)	Piedmont Floodplain Soils (F19)
Sandy Gleyed Matrix (S4)		Mesic Spodic (TA6)
Sandy Redox (S5)		Red Parent Material (F21)
Stripped Matrix (S6)		Very Shallow Dark Surface (TF12)
Dark Surface (S7)		Other (Explain in Remarks)
Restrictive Layer (if observed):		
Туре:	Ну	/dric Soil Present? Yes X No
Depth (inches):		
-	_	

Project/Site: Cider Solar Project	City/Co	ounty: Oakfield/Genessee	Sampling Date: <u>7/21/2020</u>		
Applicant/Owner: Hecate		State: NY	Sampling Point:		
Investigator(s): Andrew Sorci	Sectio	Section, Township, Range: 1_07212020_WL39_W2			
Landform (hillslope, terrace,etc.): Dip	Local relie	Local relief (concave, convex, none): Concave Slope (%) 0 - 1			
Subregion (LRR or MLRA): LRR L Soil	Lat: 43.090062	Long:78.231918	Datum: NAD83		
Map Unit Name: RsA		NWI Classifi	cation: PEM		
Are climatic / hyrologic conditions on the sit	te typical for this time of ye	ar? Yes <u>X</u> No (if no, e	explain in Remarks.)		
Are Vegetation , Soil , or Hydrolo	ogy significantly distur	bed? Are "Normal Circumstances"	present? Yes X No		
Are Vegetation , Soil , or Hydrolo	ogy naturally problema	atic? (if needed, explain any answers	in Remarks.)		
					
SUMMARY OF FINDINGS - Attach site n	map showing sampling po	oint locations, transects, import	ant features, etc.		
Hydrophytic Vegetation Present? Yes	X No	Is the Sampled Area			
Hydric Soil Present? Yes	X No	within a Wetland? γ	es X No		
Wetland Hydrology Present? Yes	X No	if yes, optional Wetland Site ID:	WL39		
Remarks: (Explain alternative procedures here or in a	a separate report.)		<u> </u>		
Edge of agricultural field	, ,				
HYDROLOGY Wotland Hydrology Indicators:		Cocondany India	ators (minimum of two required)		
Wetland Hydrology Indicators:			ators (minimum of two required)		
Primary Indicators (minimum of one is required			il Cracks (B6)		
Surface Water (A1)	Water-Stained Leaves		Patterns (B10)		
High Water Table (A2)	Aquatic Fauna (B13)	Moss Trim	Moss Trim Lines (B16)		
Saturation (A3)	Marl Deposits (B15)	Dry-Seaso	n Water Table (C2)		
Water Marks (B1)	Hydrogen Sulfide Odo	r (C1) Crayfish B	urrows (C8)		
Sediment Deposits (B2)	Oxidized Rhizosphere	s on Living Roots (C3) X Saturation	Visible in Aerial Imagery (C9)		
Drift Deposits (B3)	Presence of Reduced	Iron (C4) Stunted or	Stressed Plants (D1)		
Algal Mat or Crust (B4)	Recent Iron Reduction	n in Tilled Soils (C6) X Geomorph	nic Position (D2)		
Iron Deposits (B5)	Thin Muck Surface (C	7) Shallow A	quitard (D3)		
Inundation Visible on Aerial Imagery (B7)		· ——	ographic Relief (D4)		
Sparsley Vegetated Concave Surface (B8)		X FAC-Neutr			
sparsiey vegetated concave surface (bo)			di Test (D5)		
Surface Water Present? Yes No	X Depth (inches)	_			
Water Table Present? Yes No	X Depth (inches)	Wetland Hydrology Prese	nt? Yes X No		
Saturation Present? Yes No	X Depth (inches)				
Describe Descrided Date (streets as as as					
Describe Recorded Data (stream gauge, mo	onitoring well, aerial photos	, previous inspections), if available:			
Remarks:					

VEGETATION - Use scient	ific names	of plants				Sampli	ng Point	: 1_072	12020_W	L39_W2
Tree Stratum	(Plot Size:	30'radius)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test V Number of Domi That Are OBL, FA	nant Spe	cies	2	(A)
-				= Total Cov	.er		•	_		_(^)
				10ta1 co	rci	Total Numbe Species Ac			2	(B)
						Percent of Don That Are OBL, I	-		100%	(A/B)
						Prevalence Index \	Norkshee	et:		
			A l l k -	Danisant	la dia da a	OBL species	75	x 1	75	
Shrub Stratum	(Plot Size:	15'radius)	% Cover	Dominant Species?	Status	FACW species	0	x 2	0	
Jiii ab Jii ataiii	(1.100.0120.		75 0010.	000.001	010100	FAC species	22	x 3	66	
				= Total Cov	/er	FACU species	2	— х 4	8	
						UPL species	0	x 5 _	0	
						Column Totals	99	(A)	149	(B)
						Prevalenc	e Index =	B/A = _	1.51	
						Hydrophytic Vege	tation In	dicator	s:	
			Absolute	Dominant	Indicator	1- Rapid Tes	t For Hyd	Irophyti	ic Vegeta	tion
Herb Stratum	(Plot Size:	5'radius)	% Cover	Species?	Status	X 2- Dominano	-		J	
Eleocharis obtusa			75	Х	OBL	-				
Echinochloa crus-galli			20	Х	FAC	X 3- Prevalenc	e Index is	s =< 3.0		
Abutilon theophrasti			2		FACU	4- Morpholo	ogical Ada	aptation	าร	
Xanthium strumarium			<u>2</u> 99	= Total Cov	FAC /er	5- Problema	tic Hydro	phytic '	Vegetatio	n
				10tal co	7 C1	Definitions of Vegeta	ation Strat	ta:		
						Tree- Woody plants 3 breast height (DBH),	3 in. (7.6cr	m) or mo		eter at
						Sapling/Shrub- Wood greater than or equa				and
						Herb- All herbaceous size, and woody plan	•			less of
Woody Vine Stratum	(Plot Size:	30'radius)		Dominant Species?	Indicator Status	Woody Vines- All wo height.	ody vines	greater 1	than 3.28f	t in
				= Total Cov	ver	Hydropl Vegeta	-			
						Pres	ent? Yes	s <u>X</u>	No	_
Remarks: (Include photo nu	mbers here	or on a sep	arate shee	t.)						

OIL								Sampling Point: 1_07212020_WL39_W2		
Depth	Matrix			-	Redo	x Featur	-es			
(inches	Color	%	Color	%	Type	Loc	Texture	Remarks		
0-12	10YR 4/2	75	10YR 4/4	25	С	M	Clay Loam			
Hydric So	oil Indicators:							Indicators for Problematic Soils:		
His	tosol (A1)				Polyvalu	e Below S	Surface (B15)	2 cm Muck (A10)		
His	tic Epipedon (A2)			Thin Dar	k Surface	(S9)	Coast Prarie Redox (A16)		
Bla	ck Histic (A3)				Loamy N	lucky Mir	neral (F1)	5 cm Mucky Peat or Peat (S3)		
Hyd	drogen Sulfide	(A4)			Loamy G	ileyed Ma	tric (F2)	Dark Surface (S7)		
Stra	atified Layers	(A5)		Х	Depleted	d Matrix (F3)	Polyvalue Below Surface (S8)		
Der	pleted Below [Dark Su	rface (A11)		Redox D	ark Surfac	ce (F6)	Thin Dark Surface (S9)		
Thi	ck Dark Surfac	e (A12)		Depleted	d Dark Sui	rface (F7)	Iron-Manganese Masses (F12)		
San	ndy Mucky Mir	neral (S	1)		Redox D	epression	s (F8)	Piedmont Floodplain Soils (F19)		
	ndy Gleyed Ma			-				Mesic Spodic (TA6)		
	ndy Redox (S5)							Red Parent Material (F21)		
	ipped Matrix (Very Shallow Dark Surface (TF12)		
	rk Surface (S7)							Other (Explain in Remarks)		
Restrictiv	ve Layer (if obs	erved):								
		Type:					Hydrid	Soil Present? Yes X No		
	Depth (in	-					liyana	75611 Tesente. 1es <u>X</u> No		
Remarks	s:									

Project/Site: Cider Solar Project	City/Co	ounty: Oakfield/Gen	essee S	ampling Date: <u>7/20/2020</u>		
Applicant/Owner: Hecate			State: <u>NY</u>	Sampling Point:		
Investigator(s): Andrew Sorci	Section, Township, Range: 1_07212020_WL39_W3					
Landform (hillslope, terrace,etc.): Depression	Local relief (concave, convex, none): Concave Slope (%) 0 - 2					
Subregion (LRR or MLRA): LRR L	Lat: 43.090034	Long:7	8.231475	Datum: NAD83		
Soil Map Unit Name: RsA			NWI Classific	ation: PFO		
Are climatic / hyrologic conditions on the site t	ypical for this time of ye	ar? Yes <u>X</u> No	(if no, ex	plain in Remarks.)		
Are Vegetation , Soil , or Hydrology	significantly distur	bed? Are "Normal (Circumstances" p	oresent? Yes X No		
Are Vegetation , Soil , or Hydrology	naturally problema	atic? (if needed, exp	lain any answers ir	n Remarks.)		
						
SUMMARY OF FINDINGS - Attach site map	showing sampling po	oint locations, tran	sects, importa	nt features, etc.		
Hydrophytic Vegetation Present? Yes X	No	Is the Sampled Area	1			
Hydric Soil Present? Yes X	No	within a Wetland?	Yes X No			
Wetland Hydrology Present? Yes X		if yes, optional Wetl	and Site ID:	WL39		
Remarks: (Explain alternative procedures here or in a seg						
Nemarks. (Explain alternative procedures here of in a se	parate report.					
HYDROLOGY						
Wetland Hydrology Indicators:			Secondary Indica	tors (minimum of two required)		
Primary Indicators (minimum of one is required: cl	neck all that apply)		Surface Soil	Cracks (B6)		
Surface Water (A1)	Water-Stained Leaves	s (B9)	Drainage Pa	tterns (B10)		
X High Water Table (A2)	Aquatic Fauna (B13)		X Moss Trim I	ines (B16)		
X Saturation (A3)	Marl Deposits (B15)			Water Table (C2)		
Water Marks (B1)	Hydrogen Sulfide Odo	or (C1)	Crayfish Bu			
Sediment Deposits (B2)	Oxidized Rhizosphere			/isible in Aerial Imagery (C9)		
Drift Deposits (B3)	Presence of Reduced			Stressed Plants (D1)		
						
Algal Mat or Crust (B4)	Recent Iron Reduction	` '	X Geomorphic			
Iron Deposits (B5)	Thin Muck Surface (C		Shallow Aqu			
Inundation Visible on Aerial Imagery (B7)	Other (Explain in Rem	arks)	Microtopog	raphic Relief (D4)		
Sparsley Vegetated Concave Surface (B8)			X FAC-Neutra	l Test (D5)		
Surface Water Present? Yes No X	Depth (inches)					
Water Table Present? Yes X No	Depth (inches) 5	- Wetland H	lydrology Presen	t? Yes X No		
Saturation Present? Yes X No	Depth (inches) 0	_	, 3,			
	- ' ' '	_				
Describe Recorded Data (stream gauge, monit	toring well, aerial photos	, previous inspection	s), if available:			
Domonto						
Remarks:						

VEGETATION - Use scientific names of plants Sampling Point: 1_07212020_wL39_w3

	ntific names	, or p	Ahsoluta	Dominant	Indicator	1		7212020_W	
Tree Stratum	(Plot Size:	30'radius)	% Cover	Species?	Status	Dominance Test V			
	·		50	•	FACW	Number of Domi That Are OBL, FA	•	7	(A)
Fraxinus pennsylvanica Salix nigra	d		50 15	X X	OBL		•	/	_(^)
Jank Higha			65	= Total Cov			r of Dominant ross All Strata:	7	(B)
				10ta1 cov		·		/	_(D)
						Percent of Don That Are OBL, I	•	100%	(A/B)
						mat Are Obt, i	ACW, OF FAC.	100%	(A/D)
						Prevalence Index \	Vorksheet:		
			Absolute	Dominant	Indicator	OBL species	45 x 1	L 45	
Shrub Stratum	(Plot Size:	15'radius)	% Cover	Species?	Status	FACW species	80 x 2	160	
Cephalanthus occiden	italis		15	Х	OBL	FAC species	35 x 3	3 105	
Fraxinus pennsylvanic	а		10	Х	FACW	FACU species	0 x 4	1 0	-
			25	= Total Cov	/er	UPL species	0 x 5	5 0	
						Column Totals	160 (A		(B
						_		·	(D
						Prevalenc	e Index = B/A =	1.94	
						Hydrophytic Vege	tation Indicato	ors:	
			Absolute	Dominant	Indicator	1- Rapid Tes	t For Hydrophy	ytic Vegeta	tion
Herb Stratum	(Plot Size:	5'radius)	% Cover	Species?	Status	X 2- Dominano	ce Test is > 50%	6	
Bidens frondosa			20	Χ	FACW				
Solanum dulcamara			20	Χ	FAC		e Index is =< 3		
Panicum virgatum			15	Х	FAC	4- Morpholo	gical Adaptati	ons	
Boehmeria cylindrica			10		OBL	5- Problema	tic Hydrophyti	c Vegetatio	on
Alisma subcordatum			<u>5</u> 70	= Total Cov	OBL				
				10tal Cov	/EI	Definitions of Vegeta	ntion Strata:		
						Tree- Woody plants 3 breast height (DBH),	, ,		neter at
						Sapling/Shrub- Wood greater than or equa			and
						Herb- All herbaceous			lless of
			Absolute	Dominant	Indicator	size, and woody plan	ıs 1835 tildil 3.28	it tall.	
	/DIa+ C:	30'radius)	% Cover	Species?	Status	Woody Vines- All wo height.	ody vines greate	r than 3.281	t in
Woody Vine Stratum	(Plot Size:								
Woody Vine Stratum	(Plot Size:			= Total Cov	/er	Hydroni	nytic		
Woody Vine Stratum	(Plot Size:			_= Total Cov	ver	Hydroph Vegeta	-		

 $Form\ adapted\ from\ US\ Army\ Corp\ of\ Engineers\ -\ Northcentral\ and\ Northeast\ Region\ -\ Wetlands\ Determintation\ Form\ -\ version\ 2.0$

Depth (inches								Sampling Point: 1_07212020_WL39_W 3		
	Matrix	· ·			Redo	x Feature	25			
	Color	%	Color	%	Туре	Loc	Texture	Remarks		
0-14	2.5Y 3/1	80	7.5YR 3/4	20	С	М	Clay Loam			
Hydric Soil	Indicators:							Indicators for Problematic Soils:		
-	osol (A1)				Polyvalu	e Below Su	ırface (B15)	2 cm Muck (A10)		
Histic	c Epipedon (A2)			Thin Dar	k Surface (S9)	Coast Prarie Redox (A16)		
Black	K Histic (A3)				Loamy N	lucky Mine	eral (F1)	5 cm Mucky Peat or Peat (S3)		
Hydr	ogen Sulfide	(A4)			Loamy G	leyed Mat	ric (F2)	Dark Surface (S7)		
Strat	ified Layers	(A5)			Depleted	d Matrix (F	3)	Polyvalue Below Surface (S8)		
	eted Below I		rface (A11)	Х	Redox D	ark Surface	e (F6)	Thin Dark Surface (S9)		
	c Dark Surfac					d Dark Surf		Iron-Manganese Masses (F12)		
	ly Mucky Mi					epressions		Piedmont Floodplain Soils (F19)		
	, ly Gleyed Ma						` ,	Mesic Spodic (TA6)		
	ly Redox (S5)		,					Red Parent Material (F21)		
	ped Matrix (Very Shallow Dark Surface (TF12)		
	Surface (S7)							Other (Explain in Remarks)		
Restrictive	Layer (if obs	erved):								
		Type:					Hydri	c Soil Present? Yes X No		
Depth (inches):						Tiyun	C SONT TESENT: TES X NO			

Project/Site: Cider Solar Project	City/County: Oakfield/Ger	nessee Sampling Date: 7/21/2020
Applicant/Owner: Hecate		State: NY Sampling
Investigator(s): Andrew Sorci	Section, Township, Range:	Point:1_07212020_WL39_U
Landform (hillslope, terrace,etc.): Rise	Local relief (concave, convex, ı	none): <u>None</u> Slope (%) <u>0 - 1</u>
Subregion (LRR or MLRA): LRR L	Lat: <u>43.090098</u> Long: <u>-</u> 7	78.232046 Datum: <u>NAD83</u>
Soil Map Unit Name: RsA		NWI Classification: UPL
Are climatic / hyrologic conditions on the site \ensuremath{t}	typical for this time of year? Yes X No	(if no, explain in Remarks.)
Are Vegetation, Soil, or Hydrology	significantly disturbed? Are "Normal	Circumstances" present? Yes X No
Are Vegetation, Soil, or Hydrology	naturally problematic? (if needed, exp	lain any answers in Remarks.)
SUMMARY OF FINDINGS - Attach site maj	showing sampling point locations, trar	sects, important features, etc.
Hydrophytic Vegetation Present? Yes	No X Is the Sampled Area	a
Hydric Soil Present? Yes	No X within a Wetland?	Yes NoX
Wetland Hydrology Present? Yes	No X if yes, optional Wet	land Site ID:
Remarks: (Explain alternative procedures here or in a se	parate report.)	
HYDROLOGY		
Wetland Hydrology Indicators:		Secondary Indicators (minimum of two required)
Primary Indicators (minimum of one is required: cl	neck all that apply)	Surface Soil Cracks (B6)
Surface Water (A1)	Water-Stained Leaves (B9)	Drainage Patterns (B10)
High Water Table (A2)	Aquatic Fauna (B13)	Moss Trim Lines (B16)
Saturation (A3)	Marl Deposits (B15)	Dry-Season Water Table (C2)
Water Marks (B1)	Hydrogen Sulfide Odor (C1)	Crayfish Burrows (C8)
Sediment Deposits (B2)	Oxidized Rhizospheres on Living Roots (C3)	Saturation Visible in Aerial Imagery (C9)
Drift Deposits (B3)	Presence of Reduced Iron (C4)	Stunted or Stressed Plants (D1)
Algal Mat or Crust (B4)	Recent Iron Reduction in Tilled Soils (C6)	Geomorphic Position (D2)
Iron Deposits (B5)	Thin Muck Surface (C7)	Shallow Aquitard (D3)
Inundation Visible on Aerial Imagery (B7)	Other (Explain in Remarks)	Microtopographic Relief (D4)
Sparsley Vegetated Concave Surface (B8)		FAC-Neutral Test (D5)
Surface Water Present? Yes No X	Depth (inches)	
Water Table Present? Yes No X	Depth (inches) Wetland H	Hydrology Present? Yes No X
Saturation Present? Yes No X	Depth (inches)	
Describe Recorded Data (stream gauge, monit	toring well, aerial photos, previous inspection	ns), if available:
Remarks:		

adius)	% Cover Absolute % Cover	Dominant Species? = Total Cov Dominant Species? = Total Cov	Status /er Indicator Status	Dominance Test Worksheet:Number of Dominant Species That Are OBL, FACW, or FAC:0(A)Total Number of Dominant Species Across All Strata:1(B)Percent of Dominant Species That Are OBL, FACW, or FAC:0%(A/B)Prevalence Index Worksheet:OBL species0x 10FACW species0x 20FAC species5x 315FACU species0x 40UPL species80x 5400Column Totals85(A)415(B)Prevalence Index = B/A =4.88
adius)	% Cover	Dominant Species? = Total Cov	Indicator Status	Total Number of Dominant Species Across All Strata: 1 (B) Percent of Dominant Species That Are OBL, FACW, or FAC: 0% (A/B) Prevalence Index Worksheet: OBL species 0 x 1 0 FACW species 0 x 2 0 FAC species 5 x 3 15 FACU species 0 x 4 0 UPL species 80 x 5 400 Column Totals 85 (A) 415 (B)
adius)	% Cover	Species? _= Total Cov	Status	Prevalence Index Worksheet: OBL species 0 x 1 0 FACW species 0 x 2 0 FAC species 5 x 3 15 FACU species 0 x 4 0 UPL species 80 x 5 400 Column Totals 85 (A) 415 (B)
adius)	% Cover	Species? _= Total Cov	Status	FACW species 0 x 2 0 FAC species 5 x 3 15 FACU species 0 x 4 0 UPL species 80 x 5 400 Column Totals 85 (A) 415 (B)
adius)	% Cover	Species? _= Total Cov	Status	FAC species 5 x 3 15 FACU species 0 x 4 0 UPL species 80 x 5 400 Column Totals 85 (A) 415 (B)
		_	ver	FACU species 0 x 4 0 UPL species 80 x 5 400 Column Totals 85 (A) 415 (B)
		_	ver	UPL species 80 x 5 400 Column Totals 85 (A) 415 (B)
				Column Totals 85 (A) 415 (B)
				Hydrophytic Vegetation Indicators:
idius)			Indicator	1- Rapid Test For Hydrophytic Vegetation
	% Cover	Species?	Status	2- Dominance Test is > 50%
	80	Х	UPL	3- Prevalence Index is =< 3.0
		= Total Cov		4- Morphological Adaptations
_		_		5- Problematic Hydrophytic Vegetation
				Definitions of Vegetation Strata: Tree- Woody plants 3 in. (7.6cm) or more in diameter at breast height (DBH), regardless of height.
				Sapling/Shrub- Woody plants less than 3 in. DBH and greater than or equal to 3.28ft (1m) tall.
				Herb- All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28ft tall.
			Status	Woody Vines- All woody vines greater than 3.28ft in height.
		_= Total Cov	ver	Hydrophytic Vegetation Present? Yes NoX
	adius)	adius) % Cover	Absolute Dominant adius) % Cover Species?	Absolute Dominant Indicator adius) % Cover Species? Status = Total Cover

SOIL

Depth Matrix Redox Features
(inches Color % Color % Type Loc Texture Remarks

	Color	%	Color	%	Type	Loc	Texture	Remarks			
14-20	10YR 3/2	100					Sandy Clay Loam				
14-20	7.5YR 4/2	90	7.5YR 4/6	10	С	М	Sandy Clay Loam				
Hydric Soil	Indicators:							Indicators for Problematic Soils:			
Histo	osol (A1)				Polyvalu	e Below :	Surface (B15)	2 cm Muck (A10)			
Histi	c Epipedon (A2)			Thin Dar	k Surface	e (S9)	Coast Prarie Redox (A16)			
	k Histic (A3)				Loamy N	lucky Mi	neral (F1)	5 cm Mucky Peat or Peat (S3)			
	ogen Sulfide				Loamy G	leyed Ma	atric (F2)	Dark Surface (S7)			
Strat	ified Layers	(A5)			Depleted	l Matrix	(F3)	Polyvalue Below Surface (S8)			
	eted Below I				Redox Da			Thin Dark Surface (S9)			
	Thick Dark Surface (A12)						rface (F7)	Iron-Manganese Masses (F12)			
	dy Mucky Mineral (S1) Redox Depressions (F8) Piedmont Flo						Piedmont Floodplain Soils (F19)				
	ly Gleyed Ma)					Mesic Spodic (TA6)			
	ly Redox (S5)						-	Red Parent Material (F21)			
	ped Matrix (Very Shallow Dark Surface (TF12)			
Dark	Surface (S7)							Other (Explain in Remarks)			
Restrictive	e Layer (if obs	erved):									
		Type:					Hydric S	Soil Present? Yes No X			
	Depth (in	ches):					,				
Remarks:											

Project/Site: Cider Solar Project	City/County: Oakfield/Ger	nessee Sampling Date: 7/21/2020				
Applicant/Owner: Hecate		State: NY Sampling Point:				
Investigator(s): Andrew Sorci	Section, Township, Range:	1_20200720_WL40_W1				
Landform (hillslope, terrace,etc.): Toeslope	Local relief (concave, convex, none): Concave Slope (%) 0 - 5					
Subregion (LRR or MLRA): LRR L	Lat: 43.093694 Long: -78.225875 Datum: NAD83					
Soil Map Unit Name: HIB		NWI Classification: PFO				
Are climatic / hyrologic conditions on the site t	ypical for this time of year? Yes X No	(if no, explain in Remarks.)				
Are Vegetation, Soil, or Hydrology	significantly disturbed? Are "Normal	Circumstances" present? Yes X No				
Are Vegetation, Soil, or Hydrology	naturally problematic? (if needed, exp	plain any answers in Remarks.)				
SUMMARY OF FINDINGS - Attach site map	showing sampling point locations, tran	nsects, important features, etc.				
Hydrophytic Vegetation Present? Yes X	No Is the Sampled Area					
Hydric Soil Present? Yes X	within a Wetland?	Yes X No				
Wetland Hydrology Present? Yes X	No if yes, optional Wet					
	_ '' ' ' ' '					
Remarks: (Explain alternative procedures here or in a se	parate report.)					
HYDROLOGY						
Wetland Hydrology Indicators:		Secondary Indicators (minimum of two required)				
Primary Indicators (minimum of one is required: cl	neck all that apply)	Surface Soil Cracks (B6)				
Surface Water (A1)	Water-Stained Leaves (B9)	Drainage Patterns (B10)				
High Water Table (A2)	Aquatic Fauna (B13)	Moss Trim Lines (B16)				
Saturation (A3)	Marl Deposits (B15)	Dry-Season Water Table (C2)				
Water Marks (B1)	Hydrogen Sulfide Odor (C1)	Crayfish Burrows (C8)				
Sediment Deposits (B2)	Oxidized Rhizospheres on Living Roots (C3)	Saturation Visible in Aerial Imagery (C9)				
Drift Deposits (B3)	Presence of Reduced Iron (C4)	Stunted or Stressed Plants (D1)				
Algal Mat or Crust (B4)	Recent Iron Reduction in Tilled Soils (C6)	X Geomorphic Position (D2)				
Iron Deposits (B5)	Thin Muck Surface (C7)	Shallow Aquitard (D3)				
Inundation Visible on Aerial Imagery (B7)	Other (Explain in Remarks)	Microtopographic Relief (D4)				
Sparsley Vegetated Concave Surface (B8)		X FAC-Neutral Test (D5)				
Surface Water Present? Yes No X	Depth (inches)					
	- · · · 	Hydrology Present? Yes X No				
	- · · · · ·	Hydrology Present? Yes X No				
Saturation Present? Yes No X	Depth (inches)					
Describe Recorded Data (stream gauge, monit	toring well, aerial photos, previous inspection	ns), if available:				
Remarks:						

VEGETATION - Use scientific names of plants Sampling Point: 1_20200720_WL40_W1 Absolute Dominant Indicator **Dominance Test Worksheet:** (Plot Size: 30'radius) % Cover Species? Status **Tree Stratum Number of Dominant Species** 60 Χ **FACW** That Are OBL, FACW, or FAC: 5 (A) Fraxinus pennsylvanica Salix nigra 15 Х OBL **Total Number of Dominant** = Total Cover 75 (B) Species Across All Strata: 5 Percent of Dominant Species (A/B) That Are OBL, FACW, or FAC: 100% **Prevalence Index Worksheet:** 40 40 x 1 **OBL** species Absolute Dominant Indicator **FACW** species 103 206 (Plot Size: 15'radius) % Cover Species? Status x 2 **Shrub Stratum** FAC species 10 30 х3 Rhamnus cathartica Χ **FAC** 10 10 = Total Cover **FACU** species 0 x 4 0 **UPL** species 0 x 5 0 Column Totals 153 (A) 276 (B) Prevalence Index = B/A = 1.8 **Hydrophytic Vegetation Indicators:** Absolute Dominant Indicator 1- Rapid Test For Hydrophytic Vegetation **Herb Stratum** (Plot Size: 5'radius) % Cover Species? Status X 2- Dominance Test is > 50% Phragmites australis 35 Χ **FACW** X 3- Prevalence Index is =< 3.0 Χ OBL Carex stipata 15 4- Morphological Adaptations Boehmeria cylindrica 10 OBL Symphyotrichum lanceolatum 8 **FACW** 5- Problematic Hydrophytic Vegetation 68 = Total Cover **Definitions of Vegetation Strata:** Tree- Woody plants 3 in. (7.6cm) or more in diameter at breast height (DBH), regardless of height. Sapling/Shrub- Woody plants less than 3 in. DBH and greater than or equal to 3.28ft (1m) tall. Herb- All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28ft tall. Absolute Dominant Indicator Woody Vines- All woody vines greater than 3.28ft in (Plot Size: 30'radius) **Woody Vine Stratum** % Cover Species? Status height. = Total Cover Hydrophytic Vegetation Present? Yes X No ___

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

SOIL Sampling Point: 1_20200720_wL40_w1

								P 0		
Depth					Redo	x Featu	ires			
(inches	Color	%	Color	%	Type	Loc	Texture	Remarks		
0-12	10YR 2/1	100					Silt Loam			
12-18	2.5Y 5/1	95	2.5Y 7/8	5	С	М	Loamy Sand			
Lludric Co	oil Indicators:							Indicators for Problematic Soils:		
-	tosol (A1)				Polyvalu	e Below	Surface (B15)	2 cm Muck (A10)		
	tic Epipedon (A2)			Thin Dar			Coast Prarie Redox (A16)		
	ck Histic (A3)	,					ineral (F1)	5 cm Mucky Peat or Peat (S3)		
Hydrogen Sulfide (A4)						•	atric (F2)	Dark Surface (S7)		
Stratified Layers (A5)					Depleted			Polyvalue Below Surface (S8)		
X Depleted Below Dark Surface (A11)					Redox D			Thin Dark Surface (S9)		
Thick Dark Surface (A12)					Depleted	d Dark Su	urface (F7)	Iron-Manganese Masses (F12)		
Sandy Mucky Mineral (S1)			1)		Redox D	epressio	ns (F8)	Piedmont Floodplain Soils (F19)		
San	idy Gleyed Ma	atrix (S4	.)					Mesic Spodic (TA6)		
San	dy Redox (S5)						Red Parent Material (F21)		
Stri	pped Matrix ((S6)						Very Shallow Dark Surface (TF12)		
Dar	k Surface (S7))					Other (Explain in Remarks)			
Restrictiv	ve Layer (if obs	erved):								
		Type:					Hvdrid	Soil Present? Yes X No		
	Depth (ir	_					Hyund	John Fresent: Tes A NO		
	Dept. (-								
Remarks	s:									

Project/Site: Cider Solar Project	City/County: Oakfield/Gen	essee Sampling Date: 7/21/2020			
Applicant/Owner: Hecate		State: <u>NY</u> Sampling			
Investigator(s): Andrew Sorci	Section, Township, Range:	Point:1_20200720_WL40_U			
Landform (hillslope, terrace,etc.): Rise	Local relief (concave, convex, n	one): <u>Convex</u> Slope (%) <u>3 - 8</u>			
Subregion (LRR or MLRA): LRR L	Lat: 43.093680 Long:7	8.226019 Datum: <u>NAD83</u>			
Soil Map Unit Name: HIB		NWI Classification: UPL			
Are climatic / hyrologic conditions on the site $% \left(1\right) =\left(1\right) \left(1\right$	typical for this time of year? Yes X No	(if no, explain in Remarks.)			
Are Vegetation, Soil, or Hydrology	significantly disturbed? Are "Normal C	Circumstances" present? Yes X No			
Are Vegetation, Soil, or Hydrology	naturally problematic? (if needed, expl	ain any answers in Remarks.)			
SUMMARY OF FINDINGS - Attach site ma	n showing sampling point locations tran	sacts important features atc			
	· · · · · · · · · · · · · · · · · · ·				
Hydrophytic Vegetation Present? Yes	No X Is the Sampled Area within a Wetland?				
Hydric Soil Present? Yes	NOX	Yes NoX			
Wetland Hydrology Present? Yes	NoX if yes, optional Wetla	and Site ID:			
Remarks: (Explain alternative procedures here or in a se	parate report.)				
HYDROLOGY					
Wetland Hydrology Indicators:		Secondary Indicators (minimum of two required)			
Primary Indicators (minimum of one is required: c	heck all that apply)	Surface Soil Cracks (B6)			
Surface Water (A1)	Water-Stained Leaves (B9)	Drainage Patterns (B10)			
High Water Table (A2)	Aquatic Fauna (B13)	Moss Trim Lines (B16)			
Saturation (A3)	Marl Deposits (B15)	Dry-Season Water Table (C2)			
Water Marks (B1)	Hydrogen Sulfide Odor (C1)	Crayfish Burrows (C8)			
Sediment Deposits (B2)	Oxidized Rhizospheres on Living Roots (C3)	Saturation Visible in Aerial Imagery (C9)			
Drift Deposits (B3)	Presence of Reduced Iron (C4)	Stunted or Stressed Plants (D1)			
Algal Mat or Crust (B4)	Recent Iron Reduction in Tilled Soils (C6)				
		Geomorphic Position (D2)			
Iron Deposits (B5)	Thin Muck Surface (C7)	Shallow Aquitard (D3)			
Inundation Visible on Aerial Imagery (B7)	Other (Explain in Remarks)	Microtopographic Relief (D4)			
Sparsley Vegetated Concave Surface (B8)		FAC-Neutral Test (D5)			
Surface Water Present? Yes No X	Depth (inches)				
Water Table Present? Yes No X	Depth (inches) Wetland H	lydrology Present? Yes No X			
Saturation Present? Yes No X	Depth (inches)				
		\			
Describe Recorded Data (stream gauge, mon	toring well, aerial photos, previous inspection	s), if available:			
Remarks:					

VEGETATION - Use scien	tific names	of plants				Sampl T	ing Point	: 1_202	00720_WI	L40_U1
Tuo o Stuatum	(Plot Size:	30'radius \	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test	Workshee	t:		
Tree Stratum	•			·		Number of Dom	•		2	(A)
Fraxinus pennsylvanica			<u>40</u> 40	= Total Cov	FACW ver	That Are OBL, F. Total Number	•		3	(A)
				_ 10ta1 001		Species Ad			6	(B)
						Percent of Do				_
						That Are OBL,	FACW, or	FAC:	50%	(A/B)
						Prevalence Index	Workshee	et:		
			Absolute	Dominant	Indicator	OBL species	0	x 1	0	
Shrub Stratum	(Plot Size:	15'radius)	% Cover	Species?	Status	FACW species	40	x 2	80	
Lonicera morrowii	•	·	50	X	FACU	FAC species	55	x 3	165	
Rhamnus cathartica			50	X	FAC	FACU species	65	x 4	260	
			100	_= Total Cov	ver	UPL species	0	x 5	0	
						Column Totals	160	(A)	505	—— (B)
						_		_ ` ` _		(D)
						Prevalenc	ce Index =	в/А = _	3.16	
						Hydrophytic Vege	etation Inc	dicators	:	
		Absolute	Dominant	Indicator	1- Rapid Test For Hydrophytic Vegetation					
Herb Stratum	(Plot Size:	5'radius)	% Cover	Species?	Status	2- Dominar	ce Test is	> 50%		
Circaea canadensis			5	X	FACU	3- Prevalen	ce Index is	s =< 3.0		
			5	_= Total Cov	/er	4- Morphol	ogical Ada	ptation	s	
						5- Problem	_	-		n
								pyo		
						Definitions of Veget	tation Strat	a:		
						Tree- Woody plants breast height (DBH),	-	•		eter at
						Sapling/Shrub- Woo greater than or equa				and
						Herb- All herbaceou size, and woody pla				ess of
Woody Vine Stratum	(Plot Size:	30'radius)		Dominant Species?	Indicator Status	Woody Vines- All wo				in
Parthenocissus quinqu	efolia		10	X	FACU					
Vitis riparia			5 15	= Total Cov	FAC	Hydrop	-			
			15	10(a) C0\	/CI	Veget Pres	ation sent? Yes	;	No X	
										

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

SOIL Sampling Point: 1_20200720_WL40_U1

Depth	Matrix				Redo	ox Feat	ures				
(inches	Color	%	Color	%	Туре	Loc		Texture	Remarks		
0-10	10YR 3/2	100					Sa	ndy Loam			
10-14	10YR 4/3	100					Sa	ndy Loam			
14-20	10YR 5/4	100					Sand	y Clay Loam			
	20111 07 1						00	,,			
Hydric Sc	oil Indicators:								Indicators for Problematic Soils:		
His	tosol (A1)				Polyvalu	e Below	Surface (B15)	2 cm Muck (A10)		
His	tic Epipedon (A2)			Thin Dar	k Surfac	ce (S9)	-	Coast Prarie Redox (A16)		
Bla	Black Histic (A3)					/lucky N	1ineral (F1)	5 cm Mucky Peat or Peat (S3)		
Hydrogen Sulfide (A4)					Loamy Gleyed Matric (F2)				Dark Surface (S7)		
Stratified Layers (A5)					Depleted Matrix (F3)			-	Polyvalue Below Surface (S8)		
Depleted Below Dark Surface (A11)					Redox Dark Surface (F6)				Thin Dark Surface (S9)		
Thick Dark Surface (A12)					Depleted Dark Surface (F7)				Iron-Manganese Masses (F12)		
Sandy Mucky Mineral (S1)				Redox Depressions (F8)			-	Piedmont Floodplain Soils (F19)			
Sar	ndy Gleyed Ma	atrix (S4	1)		-			-	Mesic Spodic (TA6)		
Sar	ndy Redox (S5)						-	Red Parent Material (F21)		
	ipped Matrix (Very Shallow Dark				Very Shallow Dark Surface (TF12)		
Dar	rk Surface (S7))						-	Other (Explain in Remarks)		
Restrictiv	ve Layer (if obs	erved):									
		Type:									
	Depth (ir	_						Hyaric S	Soil Present? Yes NoX		
	Deptii (ii	- -									
Remark	s:						l.				

Project/Site: Cider Solar Project		City/C	ounty: Oakfield/Gen	iessee	Sampling Date: <u>7/20/2020</u>			
Applicant/Owner: Hecate			State: NY Sampling Point:					
Investigator(s): Andrew Sorci		Section	on, Township, Range:		1_20200720_WL41_W1			
Landform (hillslope, terrace,etc.): Dip		Local relie	ef (concave, convex, r	none): <u>Concav</u>	<u>/e</u> Slope (%) <u>0 - 3</u>			
Subregion (LRR or MLRA): LRR L		Lat: <u>43.094835</u> Long: <u>-78.222539</u> Datum: <u>NAD83</u>						
Soil Map Unit Name: LoA			NWI Classification: PFO					
Are climatic / hyrologic conditions on the	site ty	ypical for this time of ye	ear? Yes <u>X</u> No	(if no,	explain in Remarks.)			
Are Vegetation , Soil , or Hydro	ology	significantly distu	rbed? Are "Normal (Circumstances'	present? Yes X No			
Are Vegetation, Soil, or Hydro	ology	naturally problem	atic? (if needed, exp	lain any answers	s in Remarks.)			
SUMMARY OF FINDINGS - Attach site	map	showing sampling p	oint locations. tran	sects. import	tant features. etc.			
Hydrophytic Vegetation Present? Yes		No	Is the Sampled Area					
Hydric Soil Present? Yes	X	 No	within a Wetland?		es X No			
Wetland Hydrology Present? Yes		No	if yes, optional Wetl	land Site ID:	WL41			
Remarks: (Explain alternative procedures here or i	n a sep	parate report.)						
	пазер	variate reportify						
HYDROLOGY								
Wetland Hydrology Indicators:				Secondary Indi	cators (minimum of two required)			
Primary Indicators (minimum of one is requi	ed: ch	eck all that apply)		Surface S	oil Cracks (B6)			
Surface Water (A1)		Water-Stained Leave	s (B9)	Drainage	Patterns (B10)			
High Water Table (A2)	_	Aquatic Fauna (B13)		Moss Trir	n Lines (B16)			
Saturation (A3)	_	Marl Deposits (B15)		Dry-Seaso	on Water Table (C2)			
Water Marks (B1)		Hydrogen Sulfide Odo	or (C1)	Crayfish E	Burrows (C8)			
Sediment Deposits (B2)		Oxidized Rhizosphere	es on Living Roots (C3)	Saturation Visible in Aerial Imagery (C9)				
Drift Deposits (B3)	_	Presence of Reduced	Iron (C4)	Stunted or Stressed Plants (D1)				
Algal Mat or Crust (B4)		Recent Iron Reductio	n in Tilled Soils (C6)	X Geomorphic Position (D2)				
Iron Deposits (B5)	_	Thin Muck Surface (C	7)	Shallow A	Aquitard (D3)			
Inundation Visible on Aerial Imagery (B	7)	Other (Explain in Ren	narks)	Microtop	ographic Relief (D4)			
Sparsley Vegetated Concave Surface (B	_		•	X FAC-Neut				
Surface Water Present? Yes No	Х	Depth (inches)						
	Х	Depth (inches)	— Wetland H	Hvdrology Pres	ent? Yes X No			
	X	Depth (inches)	_	.,				
				.a\ :f aa:labla.				
Describe Recorded Data (stream gauge,	nonit	oring well, aerial photo	s, previous inspection	is), if available:				
Remarks:								

Sampling Point: 1 20200720 WL41 W1 VEGETATION - Use scientific names of plants

/EGETATION - Use scien	unc name:	o oi piaiits				1			L41_W	
Tree Stratum	(Plot Size:	30'radius)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test V				
	-			·	EA C\A/	Number of Domi	•	Е	(A)	
Fraxinus pennsylvanica Crataegus crus-galli	1		40 15	X X	FACW FAC	That Are OBL, FA		5	_ (A)	
Crataegus crus-gaiii			15 55	= Total Cov			r of Dominant	6	(D)	
				_= 10tal cov	/CI	· ·	ross All Strata:	6	(B)	
						Percent of Dominant Species That Are OBL, FACW, or FAC: 83.3%				
						That Are OBL, I	-ACW, or FAC:	83.3%	(A/B)	
						Prevalence Index \	Worksheet:			
			Absolute	Dominant	Indicator	OBL species	40 x 1	40		
Shrub Stratum	(Plot Size:	15'radius)	% Cover	Species?	Status	FACW species	70 x 2	140		
Lonicera morrowii			15	Х	FACU	FAC species	15 x 3	45		
Fraxinus pennsylvanica	9		15	Χ	FACW	FACU species	16 x 4	64		
			30	_= Total Cov	⁄er	UPL species	0 x 5	0		
						· —				
						Column Totals	141 (A)	289	(B	
						Prevalenc	e Index = B/A =	2.05		
						Hydrophytic Vege	tation Indicato	rs:		
			Absolute	Dominant	Indicator	1- Rapid Tes	t For Hydrophy	tic Vegeta	tion	
Herb Stratum	% Cover	Species?	Status	X 2- Dominano	ce Test is > 50%					
Cicuta maculata			20	Х	OBL	-		,		
Symplocarpus foetidus	5		20	Х	OBL		e Index is =< 3.0			
Impatiens pallida			10		FACW	4- Morpholo	gical Adaptatio	ns		
Bidens frondosa			5		FACW	5- Problema	tic Hydrophytic	Vegetatio	n	
Geranium robertianum	<u> </u>		1	T . 10	FACU					
			56	_= Total Cov	/er	Definitions of Vegeta	ation Strata:			
						Tree- Woody plants 3 breast height (DBH),			neter at	
						Sapling/Shrub- Wood greater than or equa			and	
						Herb- All herbaceous			less of	
			Absolute	Dominant	Indicator	size, and woody plan	ts iess trian 3.28T	ı ıdli.		
Woody Vine Stratum	(Plot Size:	30'radius)	% Cover	Species?	Status	Woody Vines- All wo height.	ody vines greater	than 3.28f	t in	
•			= Total Cover			Lludrophytic				
				= Total Cov	⁄er	Hydroni	nvtic			
				_= Total Cov	ver .	Hydroph Vegeta	-			

SOIL Sampling Point: 1_20200720_WL41_W1

Depth	Matrix	trix Redox Features					ıres	
(inches	Color	%	Color	%	Type	Loc	Texture	Remarks
0-10	10YR 3/1	90	10YR 4/4	10	С	М	Silty Clay Loam	
10-16	10YR 4/1	90	10YR 4/6	10	С	М	Sandy Loam	

Hydric Soil Indicators:		Indicators for Problematic Soils:
Histosol (A1)	Polyvalue Below Surface (B15)	2 cm Muck (A10)
Histic Epipedon (A2)	Thin Dark Surface (S9)	Coast Prarie Redox (A16)
Black Histic (A3)	Loamy Mucky Mineral (F1)	5 cm Mucky Peat or Peat (S3)
Hydrogen Sulfide (A4)	Loamy Gleyed Matric (F2)	Dark Surface (S7)
Stratified Layers (A5)	X Depleted Matrix (F3)	Polyvalue Below Surface (S8)
Depleted Below Dark Surface (A11)	X Redox Dark Surface (F6)	Thin Dark Surface (S9)
Thick Dark Surface (A12)	Depleted Dark Surface (F7)	Iron-Manganese Masses (F12)
Sandy Mucky Mineral (S1)	Redox Depressions (F8)	Piedmont Floodplain Soils (F19)
Sandy Gleyed Matrix (S4)		Mesic Spodic (TA6)
Sandy Redox (S5)		Red Parent Material (F21)
Stripped Matrix (S6)		Very Shallow Dark Surface (TF12)
Dark Surface (S7)		Other (Explain in Remarks)
Restrictive Layer (if observed):		
Type:	Ну	dric Soil Present? Yes X No
Depth (inches):		

Project/Site: Cider Solar Project	City/Co	ounty: Oakfield/Geness	ee Sampling Date: 7/20/	2020		
Applicant/Owner: Hecate		Sta	e: NY Sampling Point:			
Investigator(s): Andrew Sorci	Sectio	n, Township, Range:	1_20200720_WL42_	_W1		
Landform (hillslope, terrace,etc.): Depression	on Local relie	f (concave, convex, non	e): <u>Linear</u> Slope (%) <u>0 -</u>	10		
Subregion (LRR or MLRA): LRR L	Lat: 43.097417	Lat: 43.097417 Long: -78.219370 Datum: NAD83				
Soil Map Unit Name: CaA		NWI Classification: PFO				
Are climatic / hyrologic conditions on the site	typical for this time of ye	ar? Yes <u>X</u> No	(if no, explain in Remarks.)			
Are Vegetation , Soil , or Hydrolog	y significantly distur	bed? Are "Normal Circ	umstances" present? Yes X N	О		
Are Vegetation , Soil , or Hydrolog	y naturally problema	atic? (if needed, explain	any answers in Remarks.)			
						
SUMMARY OF FINDINGS - Attach site ma	ap showing sampling po	oint locations, transed	ts, important features, etc.			
Hydrophytic Vegetation Present? Yes	X No	Is the Sampled Area				
Hydric Soil Present? Yes	within a Wetland?	Yes X No				
· —	X No	if yes, optional Wetland	Site ID: WL41			
Remarks: (Explain alternative procedures here or in a s	separate report.)					
Associated with drainage ditch	. ,					
G						
HYDROLOGY				. 1		
Wetland Hydrology Indicators:		Se	ondary Indicators (minimum of two re	equirea)		
Primary Indicators (minimum of one is required:			Surface Soil Cracks (B6)			
Surface Water (A1)	Water-Stained Leaves	(B9)	Drainage Patterns (B10)			
High Water Table (A2)	Aquatic Fauna (B13)	<u> </u>	Moss Trim Lines (B16)			
Saturation (A3)	Marl Deposits (B15)		Dry-Season Water Table (C2)			
Water Marks (B1)	Hydrogen Sulfide Odo	or (C1)	Crayfish Burrows (C8)			
Sediment Deposits (B2)	X Oxidized Rhizosphere	s on Living Roots (C3)	Saturation Visible in Aerial Imagery (C9)			
Drift Deposits (B3)	Presence of Reduced	Iron (C4)	Stunted or Stressed Plants (D1)			
Algal Mat or Crust (B4)	Recent Iron Reduction		X Geomorphic Position (D2)			
Iron Deposits (B5)	Thin Muck Surface (C	· · · —				
	Other (Explain in Rem	·	Shallow Aquitard (D3)			
Inundation Visible on Aerial Imagery (B7)	Other (Explain in Kein		Microtopographic Relief (D4)			
Sparsley Vegetated Concave Surface (B8)			FAC-Neutral Test (D5)			
Surface Water Present? Yes No X	Depth (inches)	_				
Water Table Present? Yes No X	Depth (inches)	Wetland Hyd	ology Present? Yes X No			
Saturation Present? Yes No X	Depth (inches)	_				
		-				
Describe Recorded Data (stream gauge, mor	nitoring well, aerial photos	, previous inspections),	t available:			
Remarks:						
Nemario.						

-+ C: 20'radiu			Indicator	Dominance Test V	Vorkchaa	٠+٠		
ot Size: 30'radiu	S_) % Cover		Status	Number of Domi		_		
	90	Х	FAC	That Are OBL, FA	-		3	(A)
	90	_= Total Cov	ver				3	(B)
					-		100%	(A/B)
				Prevalence Index \	Norkshee	et:		
	مديناه مطا	Daminant	lia di aaka ii	OBL species	0	x 1	0	
ot Size: 15'radiu			Status	FACW species	15	x 2	30	
	 10	X	FACW	FAC species	90	x 3	270	
				FACU species	3	x 4	12	
				UPL species	0	x 5	0	
				Column Totals	108	(A)	312	(B)
				Prevalenc	e Index =	B/A =	2.89	
				Hydrophytic Vege	tation Inc	dicators	:	
Herb Stratum (Plot Size: 5'radius)				1- Rapid Test For Hydrophytic Vegetation				
		Species?		X 2- Dominan	ce Test is	> 50%		
um		- Total Cov	•	X 3- Prevalenc	e Index is	s =< 3.0		
		= 10(a) CO	vei	4- Morpholo	gical Ada	aptation	S	
				5- Problema	tic Hydro	phytic V	egetatio)	n
				Definitions of Veget	ation Strat	ta:		
								eter at
								and
								ess of
ot Size: 30'radiu			Indicator Status	*	ody vines į	greater tl	nan 3.28ft	t in
ia	3	T-t-l C-	FACU					
	3	_= Total Cov	<i>r</i> er	Vegeta	ition	s X	No	
	ot Size: 5'radius um ot Size: 30'radiu	Absolute % Cover 10 10 ot Size: 5'radius)	Absolute Dominant Species? 10 X 10 = Total Cov Absolute Dominant Species? 10 X 10 = Total Cov Absolute Dominant Species? 5 X 5 = Total Cov Absolute Dominant Species? 5 X 5 = Total Cov Absolute Species? 3 Species?	Absolute Dominant Indicator % Cover Species? Status 10 X FACW 10 = Total Cover Absolute Dominant Indicator Species? Status 10 Total Cover Absolute Dominant Indicator Species? Status The status of the status	Absolute Dominant Indicator Species Ac Species Ac Species Ac Percent of Dom That Are OBL, I OBL species FACW species FACW species Out Size: 15'radius 10	Species Across All Sign	Total Number of Dominant Species Across All Strata: Percent of Dominant Species That Are OBL, FACW, or FAC: Absolute Dominant Indicator Species Status	Total Number of Dominant Species Across All Strata: 3 Percent of Dominant Species That Are OBL, FACW, or FAC: 100% Absolute Dominant Indicator W Cover Species? Status 10 X FACW 10 = Total Cover Absolute Dominant Indicator FACW species 3 x 4 12 UPL species 90 x 3 270 FACU species 3 x 4 12 UPL species 0 x 5 0 Column Totals 108 (A) 312 Prevalence Index = B/A = 2.89 Hydrophytic Vegetation Indicators: 1- Rapid Test For Hydrophytic Vegetations Species Sp

SOIL Sampling Point: 1_20200720_WL42_W1

	Depth Matrix Redox Features					es		
inches	Color	%	Color	%	Type	Loc	Texture	Remarks
0-8	10YR 2/1	95	2.5YR 4/8	5	С	PL	Sandy Loam	
8-18	10YR 3/2	100					Sandy Loam	
Hydric So	oil Indicators:							Indicators for Problematic Soils:
His	tosol (A1)				Polyvalu	e Below Si	urface (B15)	2 cm Muck (A10)
Hist	tic Epipedon (A2)			Thin Dar	k Surface ((S9)	Coast Prarie Redox (A16)
Bla	ck Histic (A3)				Loamy N	lucky Min	eral (F1)	5 cm Mucky Peat or Peat (S3)
		(0.0)			Loamy G	ileyed Mat	ric (F2)	Dark Surface (S7)
Hyd	drogen Sulfide	e (A4)						
	_			Χ	Depleted	d Matrix (F	3)	Polyvalue Below Surface (S8)
Stra	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)			X	•	d Matrix (F ark Surfac	·	Polyvalue Below Surface (S8) Thin Dark Surface (S9)
Stratified Layers (A5) Depleted Below Dark Surface (A11)				X	Redox D	•	e (F6)	 '
Stra Dep Thic	atified Layers (oleted Below I ck Dark Surfac	(A5) Dark Sui ce (A12)		X	Redox Da	ark Surfac	e (F6) face (F7)	Thin Dark Surface (S9)
Stra Dep Thio	atified Layers oleted Below I ck Dark Surfac ndy Mucky Min	(A5) Dark Sur ce (A12) neral (S	1)	X	Redox Da	ark Surface	e (F6) face (F7)	Thin Dark Surface (S9) Iron-Manganese Masses (F12)
Stra Dep Thic	atified Layers oleted Below I ck Dark Surfac ndy Mucky Min	(A5) Dark Surce (A12) neral (Satrix (S4	1)	X	Redox Da	ark Surface	e (F6) face (F7)	Thin Dark Surface (S9) Iron-Manganese Masses (F12) Piedmont Floodplain Soils (F19)
Stra Der Thic San San San	atified Layers (pleted Below I ck Dark Surfac ndy Mucky Min ndy Gleyed Ma	(A5) Dark Surce (A12) neral (Sa atrix (S4	1)	X	Redox Da	ark Surface	e (F6) face (F7)	Thin Dark Surface (S9) Iron-Manganese Masses (F12) Piedmont Floodplain Soils (F19) Mesic Spodic (TA6)

Remarks:

Depth (inches):

Project/Site: Cider Solar Project	City/County: Oakfield/Ger	nessee Sampling Date: 7/21/2020
Applicant/Owner: Hecate		
Investigator(s): Andrew Sorci	Section, Township, Range:	Point:1_20200720_WL41_U
Landform (hillslope, terrace,etc.): Rise	Local relief (concave, convex, ı	none): <u>Convex</u> Slope (%) <u>2 - 5</u>
Subregion (LRR or MLRA): LRR L	Lat: <u>43.094754</u> Long: <u>-</u> 7	
Soil Map Unit Name: CaA		NWI Classification: UPL
Are climatic / hyrologic conditions on the site \ensuremath{t}	ypical for this time of year? Yes X No	(if no, explain in Remarks.)
Are Vegetation, Soil, or Hydrology	significantly disturbed? Are "Normal	Circumstances" present? Yes X No
Are Vegetation, Soil, or Hydrology	naturally problematic? (if needed, exp	lain any answers in Remarks.)
SUMMARY OF FINDINGS - Attach site maj	showing sampling point locations, tran	sects, important features, etc.
Hydrophytic Vegetation Present? Yes X		a
Hydric Soil Present? Yes	No X within a Wetland?	Yes No X
Wetland Hydrology Present? Yes	No X if yes, optional Wet	land Site ID:
Remarks: (Explain alternative procedures here or in a se	parate report.)	
		Secondary Indicators (minimum of two required)
	neck all that annly)	
		
		
 -		
		
Inundation Visible on Aerial Imagery (B7)	Other (Explain in Remarks)	Microtopographic Relief (D4)
Sparsley Vegetated Concave Surface (B8)		FAC-Neutral Test (D5)
Surface Water Present? Yes No X	Depth (inches)	
Water Table Present? Yes No X	Depth (inches) Wetland H	Hydrology Present? Yes No X
Saturation Present? Yes No X	Depth (inches)	<u> </u>
Applicant/Owner: Hecate		
Pomarke		
Nemans.		

VEGETATION - Use scientific names of plants Sampling Point: 1_20200720_WL41_U1 Absolute Dominant Indicator **Dominance Test Worksheet:** (Plot Size: 30'radius) % Cover Species? Status **Tree Stratum Number of Dominant Species** That Are OBL, FACW, or FAC: (A) = Total Cover **Total Number of Dominant** (B) Species Across All Strata: 5 Percent of Dominant Species (A/B) That Are OBL, FACW, or FAC: 60% **Prevalence Index Worksheet:** x 1 0 **OBL** species Absolute Dominant Indicator **FACW** species 15 30 (Plot Size: 15'radius) % Cover Species? x 2 **Shrub Stratum Status** FAC species 55 х3 165 Rhamnus cathartica 25 Χ **FAC** Lonicera morrowii 20 Χ FACU **FACU** species 40 x 4 160 Rosa multiflora **FACU** 6 **UPL** species 0 x 5 0 51 = Total Cover Column Totals 110 (A) 355 (B) Prevalence Index = B/A = 3.23 **Hydrophytic Vegetation Indicators:** Absolute Dominant Indicator 1- Rapid Test For Hydrophytic Vegetation **Herb Stratum** (Plot Size: 5'radius) % Cover Species? Status X 2- Dominance Test is > 50% Persicaria virginiana 15 FAC 3- Prevalence Index is =< 3.0 Χ Agrostis stolonifera 10 **FACW** 4- Morphological Adaptations Impatiens pallida 5 **FACW** Geum canadense 5 FAC 5- Problematic Hydrophytic Vegetation Symphyotrichum lateriflorum 5 FAC Toxicodendron radicans 5 FAC **Definitions of Vegetation Strata: FACU** Circaea canadensis 4 Tree- Woody plants 3 in. (7.6cm) or more in diameter at 49 = Total Cover breast height (DBH), regardless of height. Sapling/Shrub- Woody plants less than 3 in. DBH and greater than or equal to 3.28ft (1m) tall. Herb- All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28ft tall. Absolute Dominant Indicator Woody Vines- All woody vines greater than 3.28ft in (Plot Size: 30'radius) Species? **Woody Vine Stratum** % Cover Status height. Parthenocissus quinquefolia FACU 10 Χ 10 = Total Cover Hydrophytic Vegetation Present? Yes X No ___

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

SOIL Sampling Point: 1_20200720_WL41_U1

Depth	Matrix				Redo	x Featu	ires				
(inches	Color	%	Color	%	Туре	Loc	Texture		Remarks		
0-12	10YR 3/2	98	10YR 3/4	2	С	М	Sandy Clay Loar	m			
12-20	10YR 4/3	90	5Y 7/6	10	С	М	Clay Loam				
Hydric So	oil Indicators:							Indi	cators for Problematic Soils:		
-	tosol (A1)				Polyvalu	e Below	Surface (B15)		2 cm Muck (A10)		
	tic Epipedon (A2)		Thin Dark Surface (S9)					Coast Prarie Redox (A16)		
Blac	ck Histic (A3)			Loamy Mucky Mineral (F1)					5 cm Mucky Peat or Peat (S3)		
Нус	drogen Sulfide	(A4)			Loamy G	leyed M	atric (F2)		Dark Surface (S7)		
Stra	atified Layers ((A5)			Depleted	d Matrix	(F3)		Polyvalue Below Surface (S8)		
Dep	oleted Below [Dark Su	rface (A11)		Redox D	ark Surfa	nce (F6)		_Thin Dark Surface (S9)		
Thic	ck Dark Surfac	e (A12)	1		Depleted	d Dark Su	urface (F7)		_Iron-Manganese Masses (F12)		
San	ıdy Mucky Mir	neral (S	1)		Redox D	epressio	ns (F8)		Piedmont Floodplain Soils (F19)		
San	idy Gleyed Ma	atrix (S4	.)						Mesic Spodic (TA6)		
San	ıdy Redox (S5))							Red Parent Material (F21)		
Stri	pped Matrix (S6)							Very Shallow Dark Surface (TF12)		
Dar	Dark Surface (S7)								Other (Explain in Remarks)		
Restrictiv	ve Layer (if obse	erved):									
		Type:					Hvdri	ic Soil	Present? Yes No X		
	Depth (in	ches):							· · · · · · · · · · · · · · · · · · ·		

Remarks:

Project/Site: Cider Solar Project	City/County: Oakfield/Gennesee Sampling Date: 10/1/2020
Applicant/Owner: Hecate	State: NY Sampling Point:
Investigator(s): Andrew Sorci	Section, Township, Range: 1_20201001_WL113_W1
Landform (hillslope, terrace,etc.): Footslope	Local relief (concave, convex, none): Concave Slope (%) 0 - 5
Subregion (LRR or MLRA): LRR L	Lat: 43.108947 Long: -78.171408 Datum: NAD83
Soil Map Unit Name: CaA	NWI Classification: PFO
Are climatic / hyrologic conditions on the site typical	for this time of year? Yes X No (if no, explain in Remarks.)
Are Vegetation, Soil, or Hydrologys	significantly disturbed? Are "Normal Circumstances" present? Yes X No
Are Vegetation, Soil, or Hydrologyr	naturally problematic? (if needed, explain any answers in Remarks.)
SUMMARY OF FINDINGS - Attach site map show	ving sampling point locations, transects, important features, etc.
Hydrophytic Vegetation Present? Yes X No	Is the Sampled Area
Hydric Soil Present? Yes X No	within a Wetland?
	if yes, optional Wetland Site ID: WL42
Wetland Hydrology Present? Yes X No Remarks: (Explain alternative procedures here or in a separate re	
LIMPROLOGY	
HYDROLOGY	
Wetland Hydrology Indicators:	Secondary Indicators (minimum of two required)
Primary Indicators (minimum of one is required: check all	that apply) Surface Soil Cracks (B6)
Surface Water (A1)W	ater-Stained Leaves (B9) Drainage Patterns (B10)
High Water Table (A2)	quatic Fauna (B13) X Moss Trim Lines (B16)
Saturation (A3)	arl Deposits (B15) Dry-Season Water Table (C2)
Water Marks (B1) Hy	vdrogen Sulfide Odor (C1) Crayfish Burrows (C8)
Sediment Deposits (B2)	xidized Rhizospheres on Living Roots (C3) Saturation Visible in Aerial Imagery (C9)
Drift Deposits (B3)	esence of Reduced Iron (C4)Stunted or Stressed Plants (D1)
Algal Mat or Crust (B4)	ecent Iron Reduction in Tilled Soils (C6) X Geomorphic Position (D2)
Iron Deposits (B5)	nin Muck Surface (C7)Shallow Aquitard (D3)
Inundation Visible on Aerial Imagery (B7)	ther (Explain in Remarks) Microtopographic Relief (D4)
Sparsley Vegetated Concave Surface (B8)	X FAC-Neutral Test (D5)
Surface Water Present? Yes No X Dept	ch (inches)
Water Table Present? Yes No _ X _ Dept	th (inches) Wetland Hydrology Present? Yes X No
Saturation Present? Yes No X Dept	ch (inches)
Describe Recorded Data (stream gauge, monitoring v	well, aerial photos, previous inspections), if available:
Remarks:	

VEGETATION - Use scien	unc names	oi piants				Janipi	ilig Politi	1_202	201001_W	L113_W
Tree Stratum	(Plot Size:	30'radius)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test Number of Dom				
Quercus bicolor			25	Χ	FACW	That Are OBL, F.	•		5	(A)
Acer saccharinum			20 45			Total Numbe Species Ac			5	 _(B)
						Percent of Do That Are OBL,	-		100%	(A/B
						Prevalence Index	Workshee	et:		
			Absoluto	Dominant	Indicator	OBL species	0	x 1	0	
Shrub Stratum	(Plot Size:	15'radius)	% Cover	Species?	Status	FACW species	200	x 2	400	
Fraxinus pennsylvanica	a		30	Х	FACW	FAC species	20	x 3	60	
			30	_= Total Cov	er er	FACU species	0	x 4	0	
						UPL species	0	x 5	0	
						Column Totals	220	(A)	460	(E
						Prevalen	ce Index =	B/A =	2.09	
						Hydrophytic Veg	etation Inc	dicator	· C•	
			Ahsolute	Dominant	Indicator	X 1- Rapid Te				tion
Herb Stratum	(Plot Size:	5'radius)	% Cover	Species?	Status		•		ic vegeta	LIOII
Agrostis stolonifera			50	Х	FACW	X 2- Dominar				
Impatiens capensis			30	Х	FACW	X 3- Prevalen	ce Index is	s =< 3.0)	
Lysimachia nummulari	ia		25		FACW	4- Morphol	ogical Ada	ptation	ns	
Symphyotrichum lance Urtica dioica	eolatum		20 15		FACW FAC	5- Problem	atic Hydro	phytic	Vegetatio	n
Persicaria virginiana			5		FAC	Definitions of Vege	tation Strat	a:		
			145	_= Total Cov	ver	Tree- Woody plants breast height (DBH)	•	-		ieter at
						Sapling/Shrub- Woo greater than or equa				and
						Herb- All herbaceou size, and woody pla				less of
Woody Vine Stratum	(Plot Size:	30'radius)	Absolute Dominant % Cover Species?		Indicator Status	Woody Vines- All woody vines greater than 3.28ft in height.				
				= Total Cov	ver	Hydrop Veget: Pres	-	v	No	

SOIL

Sampling Point: 1_20201001_WL113_W1

Depth	Matrix				Redo	x Featu	ıres	
(inches	Color	%	Color	%	Type	Loc	Texture	Remarks
0-8	10YR 3/2	98	10YR 3/3	2	С	М	Sandy Clay Loam	
8-16	10YR 5/2	70	10YR 5/8	30	С	М	Clay Loam	

Hydric Soil Indicators:		Indicators for Problematic Soils:
Histosol (A1)	Polyvalue Below Surface (B15)	2 cm Muck (A10)
Histic Epipedon (A2)	Thin Dark Surface (S9)	Coast Prarie Redox (A16)
Black Histic (A3)	Loamy Mucky Mineral (F1)	5 cm Mucky Peat or Peat (S3)
Hydrogen Sulfide (A4)	Loamy Gleyed Matric (F2)	Dark Surface (S7)
Stratified Layers (A5)	X Depleted Matrix (F3)	Polyvalue Below Surface (S8)
Depleted Below Dark Surface (A11)	Redox Dark Surface (F6)	Thin Dark Surface (S9)
Thick Dark Surface (A12)	Depleted Dark Surface (F7)	Iron-Manganese Masses (F12)
Sandy Mucky Mineral (S1)	Redox Depressions (F8)	Piedmont Floodplain Soils (F19)
Sandy Gleyed Matrix (S4)		Mesic Spodic (TA6)
Sandy Redox (S5)		Red Parent Material (F21)
Stripped Matrix (S6)		Very Shallow Dark Surface (TF12)
Dark Surface (S7)		Other (Explain in Remarks)
Restrictive Layer (if observed): Type:		Hydric Soil Present? Yes X No
Depth (inches):		·

Project/Site: Cider Solar Project	City/County: Oakfield/Ge	enessee Sampling Date: 7/21/2020				
Applicant/Owner: Hecate		State: NY Sampling				
Investigator(s): Andrew Sorci	Point:1_20200720_WL42_U					
Landform (hillslope, terrace,etc.): Rise	Local relief (concave, convex,	none): <u>Concave</u> Slope (%) <u>1 - 10</u>				
Subregion (LRR or MLRA): LRR L	Lat: 43.097375 Long:78.219360 Datum: NA					
Soil Map Unit Name: HIB		NWI Classification: UPL				
Are climatic / hyrologic conditions on the site t	ypical for this time of year? Yes X N	o (if no, explain in Remarks.)				
Are Vegetation, Soil, or Hydrology	significantly disturbed? Are "Norma	Circumstances" present? Yes X No				
Are Vegetation, Soil, or Hydrology	naturally problematic? (if needed, ex	plain any answers in Remarks.)				
SUMMARY OF FINDINGS - Attach site map	showing sampling point locations, tra	nsects, important features, etc.				
Hydrophytic Vegetation Present? Yes	No X Is the Sampled Are					
Hydric Soil Present? Yes	No X within a Wetland?					
Wetland Hydrology Present? Yes	No X if yes, optional We	tland Site ID:				
Remarks: (Explain alternative procedures here or in a set						
Remarks. (Explain alternative procedures here of in a se	oarate report.)					
HYDROLOGY		Consider Indicator (minimum of two as a visual)				
Wetland Hydrology Indicators:	and all the translation	Secondary Indicators (minimum of two required)				
Primary Indicators (minimum of one is required: cl		Surface Soil Cracks (B6)				
Surface Water (A1)	Water-Stained Leaves (B9)	Drainage Patterns (B10)				
High Water Table (A2)	Aquatic Fauna (B13)	Moss Trim Lines (B16)				
Saturation (A3)	Marl Deposits (B15)	Dry-Season Water Table (C2)				
Water Marks (B1)	Hydrogen Sulfide Odor (C1)	Crayfish Burrows (C8)				
Sediment Deposits (B2)	Oxidized Rhizospheres on Living Roots (C3)	Saturation Visible in Aerial Imagery (C9)				
Drift Deposits (B3)	Presence of Reduced Iron (C4)	Stunted or Stressed Plants (D1)				
Algal Mat or Crust (B4)	Recent Iron Reduction in Tilled Soils (C6)	Geomorphic Position (D2)				
Iron Deposits (B5)	Thin Muck Surface (C7)	Shallow Aquitard (D3)				
Inundation Visible on Aerial Imagery (B7)	Other (Explain in Remarks)	Microtopographic Relief (D4)				
Sparsley Vegetated Concave Surface (B8)		FAC-Neutral Test (D5)				
Surface Water Present? Yes No X	Depth (inches)					
Water Table Present? Yes No X	Depth (inches) Wetland	Hydrology Present? Yes No X				
Saturation Present? Yes No X	Depth (inches)					
Describe Recorded Data (streem gauge monit	ering well posici photos provious inspectio	una) if availables				
Describe Recorded Data (stream gauge, monit	oning well, aerial photos, previous inspection	ons), ii available.				
Remarks:						

VEGETATION - Use scientific names of plants Sampling Point: 1_20200720_WL42_U1 Absolute Dominant Indicator **Dominance Test Worksheet:** (Plot Size: 30'radius) % Cover Species? Status **Tree Stratum Number of Dominant Species** That Are OBL, FACW, or FAC: (A) = Total Cover **Total Number of Dominant** Species Across All Strata: (B) 5 Percent of Dominant Species (A/B) That Are OBL, FACW, or FAC: 20% **Prevalence Index Worksheet:** x 1 0 **OBL** species Absolute Dominant Indicator **FACW** species 0 0 (Plot Size: 15'radius) % Cover Species? Status x 2 **Shrub Stratum** 9 FAC species 3 х3 = Total Cover FACU species 42 x 4 168 **UPL** species 30 x 5 150 Column Totals 75 (A) 327 (B) Prevalence Index = B/A = 4.36 **Hydrophytic Vegetation Indicators:** Absolute Dominant Indicator 1- Rapid Test For Hydrophytic Vegetation **Herb Stratum** (Plot Size: 5'radius) % Cover Species? Status 2- Dominance Test is > 50% 25 UPL Zea mays 3- Prevalence Index is =< 3.0 15 Χ Lolium perenne **FACU** 4- Morphological Adaptations Trifolium pratense 5 **FACU** Solidago canadensis 5 **FACU** 5- Problematic Hydrophytic Vegetation Daucus carota Χ UPL Plantago major 4 **FACU Definitions of Vegetation Strata: FACU** Ambrosia artemisiifolia 3 Tree- Woody plants 3 in. (7.6cm) or more in diameter at 62 = Total Cover breast height (DBH), regardless of height. Sapling/Shrub- Woody plants less than 3 in. DBH and greater than or equal to 3.28ft (1m) tall. Herb- All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28ft tall. Absolute Dominant Indicator Woody Vines- All woody vines greater than 3.28ft in (Plot Size: 30'radius) % Cover Species? **Woody Vine Stratum** Status height. Parthenocissus quinquefolia 10 Χ **FACU** Vitis riparia 3 Χ FAC Hydrophytic 13 = Total Cover Vegetation Present? Yes ____ No _X Remarks: (Include photo numbers here or on a separate sheet.)

SOIL Sampling Point: 1_20200720_WL42_U1

JOIL								Jamping 1 Jint. 1_20200720_WL42_01			
Depth	Matrix	(Redo	x Featu	res				
(inches	Color	%	Color	%	Type	Loc	Texture	Remarks			
0-14	10YR 3/2	100					Sandy Loam				
14-20	10YR 3/2	95	10YR 5/6	5	С	М	Sandy Loam				
Hydric Sc	oil Indicators:							Indicators for Problematic Soils:			
His	tosol (A1)				Polyvalu	e Below S	Surface (B15)	2 cm Muck (A10)			
His	tic Epipedon ((A2)			Thin Dar	k Surface	(S9)	Coast Prarie Redox (A16)			
Bla	ck Histic (A3)				Loamy N	lucky Mir	neral (F1)	5 cm Mucky Peat or Peat (S3)			
Нус	drogen Sulfide	e (A4)			Loamy G	leyed Ma	atric (F2)	Dark Surface (S7)			
Stra	atified Layers	(A5)			Depleted	d Matrix (F3)	Polyvalue Below Surface (S8)			
Dej	pleted Below	Dark Su	rface (A11)		Redox D	ark Surfa	ce (F6)	Thin Dark Surface (S9)			
Thi	ck Dark Surfac	ce (A12)			Depleted	d Dark Su	rface (F7)	Iron-Manganese Masses (F12)			
Sar	ndy Mucky Mi	neral (S	1)		Redox D	epression	ns (F8)	Piedmont Floodplain Soils (F19)			
Sar	ndy Gleyed Ma	atrix (S4)					Mesic Spodic (TA6)			
Sar	ndy Redox (S5))						Red Parent Material (F21)			
Stri	ipped Matrix ((S6)						Very Shallow Dark Surface (TF12)			
Dar	rk Surface (S7))						Other (Explain in Remarks)			
Restrictiv	ve Layer (if obs	erved):									
		Type:					Hydric	Soil Present? Yes No X			
	Depth (in	nches):					,				
		_									
Remark	s:										

Project/Site: Cider Solar Project	City/County: Elba/Genese	e Sampling Date: 7/22/2020
Applicant/Owner: Hecate		State: NY Sampling Point:Upland-WL4
Investigator(s): Justin Ahn	Section, Township, Range:	
Landform (hillslope, terrace,etc.): Toeslope	Local relief (concave, convex, r	none): <u>Linear</u> Slope (%) <u>1 - 5</u>
Subregion (LRR or MLRA): LRR L	Lat: 43.097375 Long:	-78.219358 Datum: <u>NAD83</u>
Soil Map Unit Name: CaA		NWI Classification: UPL
Are climatic / hyrologic conditions on the site t	cypical for this time of year? Yes X No	(if no, explain in Remarks.)
Are Vegetation, Soil, or Hydrology	significantly disturbed? Are "Normal	Circumstances" present? Yes X No
Are Vegetation, Soil, or Hydrology	naturally problematic? (if needed, exp	lain any answers in Remarks.)
SUMMARY OF FINDINGS - Attach site ma	showing sampling point locations, tran	sects, important features, etc.
	No X within a Wetland?	Yes No X
·		
HYDROLOGY		
Wetland Hydrology Indicators:		Secondary Indicators (minimum of two required)
Primary Indicators (minimum of one is required: cl	heck all that apply)	Surface Soil Cracks (B6)
Surface Water (A1)	Water-Stained Leaves (B9)	Drainage Patterns (B10)
High Water Table (A2)	Aquatic Fauna (B13)	Moss Trim Lines (B16)
Saturation (A3)	Marl Deposits (B15)	Dry-Season Water Table (C2)
Water Marks (B1)	Hydrogen Sulfide Odor (C1)	Crayfish Burrows (C8)
Sediment Deposits (B2)	Oxidized Rhizospheres on Living Roots (C3)	Saturation Visible in Aerial Imagery (C9)
Drift Deposits (B3)	Presence of Reduced Iron (C4)	Stunted or Stressed Plants (D1)
Algal Mat or Crust (B4)	Recent Iron Reduction in Tilled Soils (C6)	Geomorphic Position (D2)
Iron Deposits (B5)	Thin Muck Surface (C7)	Shallow Aquitard (D3)
Inundation Visible on Aerial Imagery (B7)	Other (Explain in Remarks)	Microtopographic Relief (D4)
Sparsley Vegetated Concave Surface (B8)		FAC-Neutral Test (D5)
Surface Water Present? Yes No X	Depth (inches)	
Water Table Present? Yes No X	Depth (inches) Wetland H	Hydrology Present? Yes No X
Saturation Present? Yes No X	Depth (inches)	
Applicant/Owner: Hecate Section, Township, Range: Load refunding from the state of the state		
Describe Neodraed Data (stream Badge, mom	toring well, derial prioces, previous inspection	is, in available.
Remarks:		

VEGETATION - Use scientific names of plants Sampling Point: Upland-WL41 Absolute Dominant Indicator **Dominance Test Worksheet:** (Plot Size: 30'radius) % Cover Species? Status **Tree Stratum Number of Dominant Species** That Are OBL, FACW, or FAC: (A) = Total Cover **Total Number of Dominant** (B) Species Across All Strata: 2 Percent of Dominant Species (A/B) That Are OBL, FACW, or FAC: 50% **Prevalence Index Worksheet:** x 1 0 **OBL** species Absolute Dominant Indicator **FACW** species 50 x 2 100 (Plot Size: 15'radius) % Cover Species? Status **Shrub Stratum** FAC species 0 х3 = Total Cover FACU species 30 x 4 120 5 **UPL** species x 5 25 Column Totals 85 (A) 245 (B) Prevalence Index = B/A = 2.88 **Hydrophytic Vegetation Indicators:** Absolute Dominant Indicator 1- Rapid Test For Hydrophytic Vegetation **Herb Stratum** (Plot Size: 5'radius) % Cover Species? Status 2- Dominance Test is > 50% 40 Phalaris arundinacea **FACW** X 3- Prevalence Index is =< 3.0 **FACU** 20 Χ Trifolium pratense 4- Morphological Adaptations Symphyotrichum lanceolatum 10 **FACW** Trifolium repens 5 **FACU** 5- Problematic Hydrophytic Vegetation **FACU** Erigeron strigosus Daucus carota 5 UPI **Definitions of Vegetation Strata:** 85 = Total Cover Tree- Woody plants 3 in. (7.6cm) or more in diameter at breast height (DBH), regardless of height. Sapling/Shrub- Woody plants less than 3 in. DBH and greater than or equal to 3.28ft (1m) tall. Herb- All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28ft tall. Absolute Dominant Indicator Woody Vines- All woody vines greater than 3.28ft in (Plot Size: 30'radius) Status **Woody Vine Stratum** % Cover Species? height. = Total Cover Hydrophytic Vegetation Present? Yes ____ No __X Remarks: (Include photo numbers here or on a separate sheet.) disturbed, farm land

SOIL Sampling Point: Upland-WL41 Depth Matrix **Redox Features** (inches % Color Color % Type Texture Remarks Loc 0-20 10YR 4/6 100 Clay Loam **Hydric Soil Indicators:** Indicators for Problematic Soils: Histosol (A1) Polyvalue Below Surface (B15) 2 cm Muck (A10) Histic Epipedon (A2) Thin Dark Surface (S9) Coast Prarie Redox (A16) Black Histic (A3) Loamy Mucky Mineral (F1) 5 cm Mucky Peat or Peat (S3) Hydrogen Sulfide (A4) Loamy Gleyed Matric (F2) Dark Surface (S7) Stratified Layers (A5) Depleted Matrix (F3) Polyvalue Below Surface (S8) Depleted Below Dark Surface (A11) Redox Dark Surface (F6) Thin Dark Surface (S9) Thick Dark Surface (A12) Depleted Dark Surface (F7) Iron-Manganese Masses (F12) Sandy Mucky Mineral (S1) Redox Depressions (F8) Piedmont Floodplain Soils (F19) Sandy Gleyed Matrix (S4) Mesic Spodic (TA6) Sandy Redox (S5) Red Parent Material (F21) Stripped Matrix (S6) Very Shallow Dark Surface (TF12) Dark Surface (S7) Other (Explain in Remarks) Restrictive Layer (if observed): Type: Hydric Soil Present? Yes No Χ Depth (inches): Remarks:

Project/Site: Cider Solar Project	City/County	: Oakfield/Gennese	e Sampling Date: 10/1/2020
Applicant/Owner: Hecate	State	: NY Sampling Point:Upland-WL4	
Investigator(s): Andrew Sorci	Section, To	wnship, Range:	
Landform (hillslope, terrace,etc.): Rise	Local relief (cor	ncave, convex, none)	: <u>Convex</u> Slope (%) <u>5 - 15</u>
Subregion (LRR or MLRA): LRR L	Lat: 43.108852	Long: <u>-78.17</u>	Datum: NAD83
Soil Map Unit Name:		N	WI Classification: UPL
Are climatic / hyrologic conditions on the site t	ypical for this time of year? Y	es X No	(if no, explain in Remarks.)
Are Vegetation, Soil, or Hydrology	significantly disturbed?	Are "Normal Circur	nstances" present? Yes X No
Are Vegetation, Soil, or Hydrology	naturally problematic?	(if needed, explain ar	ny answers in Remarks.)
SUMMARY OF FINDINGS - Attach site map	showing sampling point l	ocations. transects	s. important features. etc.
Hydrophytic Vegetation Present? Yes X		e Sampled Area	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,
Hydric Soil Present? Yes		in a Wetland?	Yes No X
		s, optional Wetland S	
Wetland Hydrology Present? Yes			
Remarks: (Explain alternative procedures here or in a se	parate report.)		
HYDROLOGY			
Wetland Hydrology Indicators:		Seco	ndary Indicators (minimum of two required)
Primary Indicators (minimum of one is required: cl	neck all that apply)		Surface Soil Cracks (B6)
Surface Water (A1)	Water-Stained Leaves (B9)		Drainage Patterns (B10)
High Water Table (A2)	Aquatic Fauna (B13)		Moss Trim Lines (B16)
Saturation (A3)	Marl Deposits (B15)		Dry-Season Water Table (C2)
Water Marks (B1)	Hydrogen Sulfide Odor (C1)		- Crayfish Burrows (C8)
Sediment Deposits (B2)	Oxidized Rhizospheres on L	·	Saturation Visible in Aerial Imagery (C9)
Drift Deposits (B3)	Presence of Reduced Iron (Stunted or Stressed Plants (D1)
Algal Mat or Crust (B4)	Recent Iron Reduction in Til	·	Geomorphic Position (D2)
Iron Deposits (B5)	Thin Muck Surface (C7)		Shallow Aquitard (D3)
Inundation Visible on Aerial Imagery (B7)			Microtopographic Relief (D4)
	Other (Explain in Remarks)		-
Sparsley Vegetated Concave Surface (B8)			FAC-Neutral Test (D5)
Surface Water Present? Yes No X	Depth (inches)		
Water Table Present? Yes No X	Depth (inches)	Wetland Hydro	logy Present? Yes No _ X
Saturation Present? Yes No X	Depth (inches)		
Describe Recorded Data (stream gauge, moni	oring well aerial photos prev	vious inspections) if	available:
Describe Recorded Data (stream gauge, mom	ioring wen, derial priocos, pre-	nous mspections,, in	
Remarks:			

ree Stratum Fraxinus pennsylvanica Quercus macrocarpa	(Plot Size: 30'radius)	% Cover	Dominant Species?	Status	Dominance Test W				
	3				I Number of Demir	aant Enacia			
			Χ	FACW	Number of Domir That Are OBL, FA	•		7	(A)
		15	Χ	FACU	Total Number	•			-` '
		30	= Total Cov	/er	Species Acr			10	(B)
					Percent of Dom	ninant Spec	ies		_
					That Are OBL, F	•		70%	(A/B)
					Prevalence Index V	Vorksheet:			
					OBL species	0	x 1	0	
hrub Stratum	(Plot Size: 15'radius)	Absolute % Cover	Dominant Species?	Indicator Status	FACW species	90	x 2	180	
	(FIOU 3126		·				-		
Cornus racemosa		<u>5</u> 5	X	FAC	FAC species	65	x 3_	195	
Lonicera morrowii Rubus idaeus		<u>5</u>	X X	FACU FACU	FACU species	25	x 4	100	
Nabas ladeus		15	= Total Cov		UPL species	0	x 5	0	
			_		Column Totals	180	(A)	475	(B
					Prevalence	e Index = B,	/A =	2.64	
					Hydrophytic Veget	tation Indic	ators	<u> </u>	
			Dominant	Indicator	1- Rapid Test	t For Hydro	phytic	: Vegetat	tion
lerb Stratum	(Plot Size: 5'radius)	% Cover	Species?	Status	X 2- Dominanc	e Test is > !	50%		
Lysimachia nummular		50	Х	FACW	X 3- Prevalence	e Index is =	< 3.0		
Symphyotrichum later	iflorum	35	X	FAC				_	
Impatiens capensis		<u>25</u>	Х	FACW	4- Morpholo	-			
Dryopteris expansa Persicaria virginiana		<u>5</u> 5		FAC FAC	5- Problemat	tic Hydroph	ıytic \	egetation/	
1 ersicaria virginiaria		120	= Total Cov		Definitions of Vegeta	tion Strata:			
					Tree- Woody plants 3 breast height (DBH), r				eter at
					Sapling/Shrub- Wood greater than or equal				and
					Herb- All herbaceous size, and woody plant				ess of
Voody Vine Stratum	(Plot Size: 30'radius)	Absolute % Cover	Dominant Species?	Indicator Status	Woody Vines- All woo height.	ody vines gre	eater t	nan 3.28ft	: in
Vitis riparia		10	X	FAC					
Toxicodendron radical	ns	5	- Total Cou	FAC	Hydroph	•			
		15	_= Total Cov	ver .	Vegeta	tion ent? Yes_	.,		

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

Depth inches	Matrix	OIL						Sampling Point: Upland-WL42	
inches	Depth Matrix					ox Feature			
	Color	%	Color	%	Type	Loc	Texture	Remarks	
0-15	10YR 3/2	100					Silt Loam		
15-20	7.5YR 5/3	85	7.5YR 4/4	15	С	M	Silt Loam		
-	Indicators:						(045)	Indicators for Problematic Soils:	
	sol (A1)	۸۵۱		Polyvalue Below Surface (B15)				2 cm Muck (A10)	
	c Epipedon (. c Histic (A3)	MZJ		Thin Dark Surface (S9)				Coast Prarie Redox (A16) 5 cm Mucky Peat or Peat (S3)	
Black Histic (A3) Hydrogen Sulfide (A4)				Loamy Mucky Mineral (F1) Loamy Gleyed Matric (F2)				Dark Surface (S7)	
Stratified Layers (A5)				Depleted Matrix (F3)				Polyvalue Below Surface (S8)	
Depleted Below Dark Surface (A11)					-	ark Surface		Thin Dark Surface (S9)	
Thick Dark Surface (A12)			Depleted Dark Surface (F7)				Iron-Manganese Masses (F12)		
Sandy Mucky Mineral (S1)			Redox Depressions (F8)				Piedmont Floodplain Soils (F19)		
Sandy Gleyed Matrix (S4)							Mesic Spodic (TA6)		
	, ly Redox (S5)		•					Red Parent Material (F21)	
	ped Matrix (Very Shallow Dark Surface (TF12)	
	Surface (S7)	-						Other (Explain in Remarks)	
Restrictive	Layer (if obs	erved):							
		Type:					Hydri	ic Soil Present? Yes No X	
	Depth (in	ches):					·		
Remarks:									

Project/Site: Cider Solar Project	City/C	ounty: Oakfield/Genessee	Sampling Date: 7/20/2020			
Applicant/Owner: Hecate		State: NY Sampling Point:				
Investigator(s): Andrew Sorci	Section	n, Township, Range:	1_20200720_WL43_W1			
Landform (hillslope, terrace,etc.): Depressi	on Local relie	ef (concave, convex, none):	Linear Slope (%) <u>0 - 10</u>			
Subregion (LRR or MLRA): LRR L	Lat: 43.090674	Long:78.21770	Datum: NAD83			
Soil Map Unit Name: HIB		NWI	Classification: PFO			
Are climatic / hyrologic conditions on the site	e typical for this time of ye	ar? Yes X No	(if no, explain in Remarks.)			
Are Vegetation , Soil , or Hydrolog	gy significantly distur	bed? Are "Normal Circums	tances" present? Yes X No			
Are Vegetation , Soil , or Hydrolog	gy naturally problem	atic? (if needed, explain any a	answers in Remarks.)			
						
SUMMARY OF FINDINGS - Attach site m	ap showing sampling p	oint locations, transects, i	mportant features, etc.			
Hydrophytic Vegetation Present? Yes	X No	Is the Sampled Area				
Hydric Soil Present? Yes	X No	within a Wetland? Yes X No				
	X No	if yes, optional Wetland Site	e ID: WL43			
Remarks: (Explain alternative procedures here or in a	separate report.)					
Associated with stream	. ,					
HYDROLOGY		Canada				
Wetland Hydrology Indicators:			ary Indicators (minimum of two required)			
Primary Indicators (minimum of one is required:			ırface Soil Cracks (B6)			
Surface Water (A1)	Water-Stained Leaves	S (B9) X DI	X Drainage Patterns (B10)			
High Water Table (A2)	Aquatic Fauna (B13)	X_M	X Moss Trim Lines (B16)			
Saturation (A3)	Marl Deposits (B15)	Dı	ry-Season Water Table (C2)			
Water Marks (B1)	Hydrogen Sulfide Odd	or (C1)Cr	ayfish Burrows (C8)			
Sediment Deposits (B2)	Oxidized Rhizosphere	s on Living Roots (C3) Sa	ituration Visible in Aerial Imagery (C9)			
Drift Deposits (B3)	Presence of Reduced	Iron (C4) St	unted or Stressed Plants (D1)			
Algal Mat or Crust (B4)	Recent Iron Reductio	n in Tilled Soils (C6) X G	eomorphic Position (D2)			
Iron Deposits (B5)	Thin Muck Surface (C	• • • • • • • • • • • • • • • • • • • •	nallow Aquitard (D3)			
Inundation Visible on Aerial Imagery (B7)	Other (Explain in Rem		Microtopographic Relief (D4)			
	Other (Explain in Ken					
Sparsley Vegetated Concave Surface (B8)			AC-Neutral Test (D5)			
Surface Water Present? Yes No	C Depth (inches)	_				
Water Table Present? Yes No >	(Depth (inches)	Wetland Hydrolog	gy Present? Yes X No			
Saturation Present? Yes No	Depth (inches)	_				
Describe Described Data (streets as a second			-ti-lai.			
Describe Recorded Data (stream gauge, mo	nitoring well, aerial photos	s, previous inspections), if ava	allable:			
Remarks:						

VEGETATION - Use scien	tific names	of plants				Sampli	ng Point: 1_20	200720_W	L43_W
Tree Stratum	(Plot Size:	30'radius)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test V Number of Domi			
Acer negundo			55	X	FAC	That Are OBL, FA	•	5	(A)
Populus deltoides			25	X	FAC		r of Dominant		_(' ')
			80	= Total Cov			ross All Strata:	6	(B)
				_		Percent of Dor	=		_` ′
						That Are OBL,	•	83.3%	(A/B)
						Prevalence Index \	Worksheet:		
						OBL species	14 x 1	14	
Shrub Stratum	(Plot Size:	15'radius)	Absolute % Cover	Dominant Species?	Indicator Status	FACW species	50 x 2		
Lonicera morrowii			10	Х	FACU	FAC species	102 x 3	306	
Fraxinus pennsylvanica	3		5	Χ	FACW	FACU species	10 x 4	40	
			15	_= Total Cov	/er	UPL species	0 x 5	-	
						· -			
						Column Totals	176 (A)	-	(B
						Prevalenc	e Index = B/A =	2.61	
						Hydrophytic Vege	tation Indicato	rs:	
			Absolute	Dominant	Indicator	1- Rapid Tes	t For Hydrophy	tic Vegeta	tion
Herb Stratum	% Cover	Species?	Status	X 2- Dominan	ce Test is > 50%	_			
Phalaris arundinacea			35	Х	FACW				
Boehmeria cylindrica			10		OBL	X 3- Prevalenc	ce Index is =< 3.	U	
Impatiens capensis			10		FACW	4- Morpholo	ogical Adaptatio	ns	
Symphyotrichum later	<u>iflorum</u>		7		FAC	5- Problema	tic Hydrophytic	Vegetatio	on
Asclepias incarnata			<u>4</u> 66	= Total Cov	OBL				
				10tal cov	, C1	Definitions of Veget	ation Strata:		
						Tree- Woody plants in breast height (DBH),			neter at
						Sapling/Shrub- Wood greater than or equa			and
						Herb- All herbaceous		_	less of
			Absolute	Dominant	Indicator	3126, and woody plan	13 1533 HIGH 3.201	t tall.	
Woody Vine Stratum	(Plot Size:	30'radius)	% Cover	Species?	Status	Woody Vines- All wo	ody vines greater	than 3.28f	t in
			15	Х	FAC	height.			
Vitis riparia						1			
Vitis riparia			15	_= Total Cov	/er	Hydropl	nytic		
Vitis riparia			15	_= Total Cov	er/er	Vegeta	-		

SOIL Sampling Point: 1_20200720_WL43_W1

Depth	Depth Matrix				Redo			
inches	Color	%	Color	%	Type	Loc	Texture	Remarks
0-8	7.5YR 3/1	95	10YR 4/6	5	С	М	Sandy Clay Loam	1
8-16	10YR 4/2	100					Clay Loam	
Hydric So	oil Indicators:							Indicators for Problematic Soils:
Histosol (A1)					Polyvalu	e Below	Surface (B15)	2 cm Muck (A10)
Histic Epipedon (A2)					Thin Dar	k Surface	e (S9)	Coast Prarie Redox (A16)
Black Histic (A3)					Loamy N	lucky Mi	ineral (F1)	5 cm Mucky Peat or Peat (S3)
Ну	drogen Sulfide	e (A4)		Loamy Gleyed Matric (F2)				Dark Surface (S7)
Str	atified Layers	(A5)		Depleted Matrix (F3)				Polyvalue Below Surface (S8)
De	pleted Below	Dark Su	rface (A11)	X Redox Dark Surface (F6)				Thin Dark Surface (S9)
 Thi	ick Dark Surfac	ce (A12))	Depleted Dark Surface (F7)				Iron-Manganese Masses (F12)
Sar	ndy Mucky Mi	neral (S	1)	Redox Depressions (F8)				Piedmont Floodplain Soils (F19)
Sar	ndy Gleyed Ma	atrix (S4	.)					Mesic Spodic (TA6)
Sandy Redox (S5)								Red Parent Material (F21)
Str	ipped Matrix ((S6)						Very Shallow Dark Surface (TF12)
Dark Surface (S7)								Other (Explain in Remarks)
Restricti	ve Layer (if obs	erved):						
		Type:					Hydrid	Soil Present? Yes X No
	Depth (in	_					Hyund	
	Depth (ii							

Remarks:

Project/Site: Cider Solar Project	City/Co	ounty: Oakfield/Genessee	Sampling Date: <u>7/20/2020</u>			
Applicant/Owner: Hecate		State: NY Sampling Point:				
Investigator(s): Andrew Sorci	Section	Section, Township, Range: 1_20200720_WL43_				
Landform (hillslope, terrace,etc.): Dip	Local relie	f (concave, convex, none): None	Slope (%) <u>0 - 2</u>			
Subregion (LRR or MLRA): LRR L	Lat: 43.090849	Long: -78.217833	Datum: NAD83			
Soil Map Unit Name: HIB		NWI Class	ification: PEM			
Are climatic / hyrologic conditions on the site	e typical for this time of yea	ar? Yes X No (if no,	explain in Remarks.)			
Are Vegetation , Soil , or Hydrolog	gy significantly disturl	bed? Are "Normal Circumstances	s" present? Yes X No			
Are Vegetation , Soil , or Hydrolog	gy naturally problema	atic? (if needed, explain any answer	rs in Remarks.)			
<u> </u>						
SUMMARY OF FINDINGS - Attach site m	ap showing sampling po	oint locations, transects, impor	rtant features, etc.			
Hydrophytic Vegetation Present? Yes	X No	Is the Sampled Area				
Hydric Soil Present? Yes	X No	within a Wetland?	Yes X No			
		if yes, optional Wetland Site ID: WL43				
	<u></u>					
Remarks: (Explain alternative procedures here or in a						
Edge of agricultural field; on margin of	stream bank					
HYDROLOGY						
Wetland Hydrology Indicators:		Secondary Ind	licators (minimum of two required)			
Primary Indicators (minimum of one is required	check all that apply)	Surface S	Surface Soil Cracks (B6)			
Surface Water (A1)	Water-Stained Leaves	(B9) Drainage	e Patterns (B10)			
High Water Table (A2)	Aquatic Fauna (B13)		m Lines (B16)			
Saturation (A3)			Dry-Season Water Table (C2)			
	Marl Deposits (B15)					
Water Marks (B1)	Hydrogen Sulfide Odo		Burrows (C8)			
Sediment Deposits (B2)	Oxidized Rhizospheres	s on Living Roots (C3) X Saturation	on Visible in Aerial Imagery (C9)			
Drift Deposits (B3)	Presence of Reduced I	ron (C4) Stunted	or Stressed Plants (D1)			
Algal Mat or Crust (B4)	Recent Iron Reduction	in Tilled Soils (C6) Geomor	phic Position (D2)			
Iron Deposits (B5)	Thin Muck Surface (C7	7) Shallow	Aquitard (D3)			
Inundation Visible on Aerial Imagery (B7)	Other (Explain in Rema	arks) Microto _l	Microtopographic Relief (D4)			
Sparsley Vegetated Concave Surface (B8)		X FAC-Neu	itral Test (D5)			
Surface Water Present? Yes No	· · · · <u>-</u>	-				
Water Table Present? Yes No _ >		Wetland Hydrology Pres	sent? Yes X No			
Saturation Present? Yes No	(Depth (inches)	_				
Describe Recorded Data (stream gauge, mo	nitoring well aerial photos	nrevious inspections) if available	••			
Describe necoraed bata (stream gaage, mo	meding wen, dendi photos	, previous inspections), ii uvaliubie	•			
Remarks:						

VEGETATION - Use scientific names of plants Sampling Point: 1_20200720_WL43_W2 Absolute Dominant Indicator **Dominance Test Worksheet:** (Plot Size: 30'radius) % Cover Species? Status **Tree Stratum Number of Dominant Species** That Are OBL, FACW, or FAC: (A) = Total Cover **Total Number of Dominant** Species Across All Strata: (B) 5 Percent of Dominant Species (A/B) That Are OBL, FACW, or FAC: 80% **Prevalence Index Worksheet:** 25 x 1 25 **OBL** species Absolute Dominant Indicator **FACW** species 35 70 (Plot Size: 15'radius) Status x 2 **Shrub Stratum** % Cover Species? **FAC** species 45 15 х3 = Total Cover **FACU** species 15 x 4 60 **UPL** species 5 x 5 25 Column Totals 95 (A) 225 (B) Prevalence Index = B/A = 2.37 **Hydrophytic Vegetation Indicators:** Absolute Dominant Indicator 1- Rapid Test For Hydrophytic Vegetation **Herb Stratum** (Plot Size: 5'radius) % Cover Species? Status X 2- Dominance Test is > 50% 20 Phalaris arundinacea Χ **FACW** X 3- Prevalence Index is =< 3.0 Х Bidens frondosa 15 **FACW** 4- Morphological Adaptations Carex vulpinoidea 15 Χ OBL Acalypha rhomboidea 15 Χ **FACU** 5- Problematic Hydrophytic Vegetation Cicuta maculata 10 OBL Symphyotrichum lateriflorum 5 FAC **Definitions of Vegetation Strata:** UPL Daucus carota 5 Tree- Woody plants 3 in. (7.6cm) or more in diameter at 85 = Total Cover breast height (DBH), regardless of height. Sapling/Shrub- Woody plants less than 3 in. DBH and greater than or equal to 3.28ft (1m) tall. Herb- All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28ft tall. Absolute Dominant Indicator Woody Vines- All woody vines greater than 3.28ft in (Plot Size: 30'radius) Species? **Woody Vine Stratum** % Cover Status height. **FAC** Vitis riparia 10 Χ 10 = Total Cover Hydrophytic Vegetation Present? Yes X No ___

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

SOIL Sampling Point: 1_20200720_WL43_W2

Depth Matrix				Redo	x Featu	ures		
(inches	Color	%	Color	%	Type	Loc	Texture	Remarks
0-12	10YR 2/1	100					Sandy Clay Loam	
12-18	10YR 4/1	85	10YR 4/6	15	С	М	Sandy Loam	
Hydric Sc	oil Indicators:							Indicators for Problematic Soils:
His	tosol (A1)				Polyvalu	e Below	Surface (B15)	2 cm Muck (A10)
His	tic Epipedon ((A2)		$\overline{}$	Thin Dar			Coast Prarie Redox (A16)
	ck Histic (A3)				•	•	ineral (F1)	5 cm Mucky Peat or Peat (S3)
	drogen Sulfide				Loamy G	leyed M	latric (F2)	Dark Surface (S7)
	atified Layers				Depleted			Polyvalue Below Surface (S8)
X De _l	pleted Below I	Dark Sui	face (A11)		Redox D	ark Surfa	ace (F6)	Thin Dark Surface (S9)
	ck Dark Surfac				Depleted	d Dark Si	urface (F7)	Iron-Manganese Masses (F12)
Sar	ndy Mucky Mi	neral (S:	1)		Redox D	epressio	ons (F8)	Piedmont Floodplain Soils (F19)
Sandy Gleyed Matrix (S4)					_			Mesic Spodic (TA6)
Sar	ndy Redox (S5))						Red Parent Material (F21)
Stri	ipped Matrix ((S6)						Very Shallow Dark Surface (TF12)
Dar	rk Surface (S7))						Other (Explain in Remarks)
Restrictiv	ve Layer (if obs	erved):						
	Туре:						Hydric	Soil Present? Yes X No
Depth (inches):								<u> </u>
Remark	S:							

Project/Site: Cider Solar Project	City/County: Oakfield/Gen	essee Sampling Date: 7/21/2020				
Applicant/Owner: Hecate	State: NY Sampling					
Investigator(s): Andrew Sorci	Section, Township, Range:	Point:1_20200720_WL43_U				
Landform (hillslope, terrace,etc.): Rise	Local relief (concave, convex, r	none): <u>Convex</u> Slope (%) <u>2 - 4</u>				
Subregion (LRR or MLRA): LRR L	Lat: 43.090714 Long: 4	3.090714 Datum: <u>NAD83</u>				
Soil Map Unit Name: HIB		NWI Classification: UPL				
Are climatic / hyrologic conditions on the site	e typical for this time of year? Yes X No	(if no, explain in Remarks.)				
Are Vegetation, Soil, or Hydrolog	y significantly disturbed? Are "Normal of	Circumstances" present? Yes X No				
Are Vegetation, Soil, or Hydrolog	ynaturally problematic? (if needed, exp	lain any answers in Remarks.)				
SLIMMARY OF FINDINGS - Attach site ma	ap showing sampling point locations, tran	sects important features etc				
Hydrophytic Vegetation Present? Yes	No X Is the Sampled Area	-				
Hydric Soil Present? Yes	No X within a Wetland?	Yes No X				
· —						
Wetland Hydrology Present? Yes	<u> </u>					
Remarks: (Explain alternative procedures here or in a s	eparate report.)					
HYDROLOGY						
Wetland Hydrology Indicators:		Secondary Indicators (minimum of two required)				
Primary Indicators (minimum of one is required:	check all that apply)	Surface Soil Cracks (B6)				
Surface Water (A1)	Water-Stained Leaves (B9)	Drainage Patterns (B10)				
High Water Table (A2)	Aquatic Fauna (B13)	Moss Trim Lines (B16)				
Saturation (A3)	Marl Deposits (B15)	Dry-Season Water Table (C2)				
Water Marks (B1)	Hydrogen Sulfide Odor (C1)	Crayfish Burrows (C8)				
Sediment Deposits (B2)	Oxidized Rhizospheres on Living Roots (C3)	Saturation Visible in Aerial Imagery (C9)				
Drift Deposits (B3)	Presence of Reduced Iron (C4)	Stunted or Stressed Plants (D1)				
Algal Mat or Crust (B4)	Recent Iron Reduction in Tilled Soils (C6)	Geomorphic Position (D2)				
Iron Deposits (B5)	Thin Muck Surface (C7)	Shallow Aquitard (D3)				
Inundation Visible on Aerial Imagery (B7)						
	Other (Explain in Remarks)	Microtopographic Relief (D4)				
Sparsley Vegetated Concave Surface (B8)		FAC-Neutral Test (D5)				
Surface Water Present? Yes NoX	Depth (inches)					
Water Table Present? Yes No X	Depth (inches) Wetland H	Hydrology Present? Yes No X				
Saturation Present? Yes No X	Depth (inches)					
Describe Recorded Data (stream gauge mor	nitoring well, aerial photos, previous inspection	us) if available:				
besame necoraca bata (stream gaage, mor	mtoring well, derial priotos, previous inspection	sy, ii available.				
Remarks:						

VEGETATION - Use scientific names of plants Sampling Point: 1_20200720_WL43_U1 Absolute Dominant Indicator **Dominance Test Worksheet:** (Plot Size: 30'radius) % Cover Species? Status **Tree Stratum Number of Dominant Species** 10 Χ FAC That Are OBL, FACW, or FAC: (A) Acer negundo 10 = Total Cover **Total Number of Dominant** Species Across All Strata: (B) 7 Percent of Dominant Species That Are OBL, FACW, or FAC: 28.6% (A/B) **Prevalence Index Worksheet:** x 1 5 **OBL** species Absolute Dominant Indicator **FACW** species 0 x 2 0 (Plot Size: 15'radius) % Cover Species? **Shrub Stratum Status** FAC species 50 150 FACU х3 Rubus idaeus 15 Χ Rhus aromatica 15 Χ UPL **FACU** species 60 x 4 240 10 Χ **FACU** Lonicera morrowii **UPL** species 43 x 5 215 40 = Total Cover Column Totals 158 (A) 610 (B) Prevalence Index = B/A = 3.86 **Hydrophytic Vegetation Indicators:** Absolute Dominant Indicator 1- Rapid Test For Hydrophytic Vegetation **Herb Stratum** (Plot Size: 5'radius) % Cover Species? Status 2- Dominance Test is > 50% 25 **FACU** Solidago canadensis Χ 3- Prevalence Index is =< 3.0 Χ UPL Zea mays 20 4- Morphological Adaptations Alliaria petiolata 10 **FACU** 8 UPL Asclepias syriaca 5- Problematic Hydrophytic Vegetation Boehmeria cylindrica 5 OBL 68 = Total Cover **Definitions of Vegetation Strata:** Tree- Woody plants 3 in. (7.6cm) or more in diameter at breast height (DBH), regardless of height. Sapling/Shrub- Woody plants less than 3 in. DBH and greater than or equal to 3.28ft (1m) tall. Herb- All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28ft tall. Absolute Dominant Indicator Woody Vines- All woody vines greater than 3.28ft in (Plot Size: 30'radius) Species? **Woody Vine Stratum** % Cover Status height. 40 **FAC** Vitis riparia Χ 40 = Total Cover Hydrophytic Vegetation Present? Yes ____ No _X

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

SOIL Sampling Point: 1_20200720_WL43_U1 Depth Matrix **Redox Features** (inches Color % Color % Type Texture Remarks Loc 0-14 10YR 3/2 100 Sandy Loam 14-16 10YR 4/2 100 Sandy Clay Loam **Hydric Soil Indicators:** Indicators for Problematic Soils: Histosol (A1) Polyvalue Below Surface (B15) 2 cm Muck (A10) Histic Epipedon (A2) Thin Dark Surface (S9) Coast Prarie Redox (A16) Black Histic (A3) Loamy Mucky Mineral (F1) 5 cm Mucky Peat or Peat (S3) Hydrogen Sulfide (A4) Loamy Gleyed Matric (F2) Dark Surface (S7) Stratified Layers (A5) Depleted Matrix (F3) Polyvalue Below Surface (S8) Depleted Below Dark Surface (A11) Redox Dark Surface (F6) Thin Dark Surface (S9) Thick Dark Surface (A12) Depleted Dark Surface (F7) Iron-Manganese Masses (F12) Sandy Mucky Mineral (S1) Redox Depressions (F8) Piedmont Floodplain Soils (F19) Sandy Gleyed Matrix (S4) Mesic Spodic (TA6) Sandy Redox (S5) Red Parent Material (F21) Stripped Matrix (S6) Very Shallow Dark Surface (TF12) Dark Surface (S7) Other (Explain in Remarks) Restrictive Layer (if observed): Type: Hydric Soil Present? Yes No Χ Depth (inches): Remarks:

Project/Site: Cider Solar Project	City/Co	ounty: Oakfield/Gen	essee Sampling Date: 7/20/2020				
Applicant/Owner: Hecate	State: NY Sampling Point:						
Investigator(s): Andrew Sorci	Sectio	n, Township, Range:	1_20200721_WL44_W1				
Landform (hillslope, terrace,etc.): Depression	f (concave, convex, n	one): Concave Slope (%) 2 - 5					
Subregion (LRR or MLRA): LRR L	Lat: 43.073955	Long:7	8.216827 Datum: NAD83				
Soil Map Unit Name: Wy			NWI Classification: PEM				
Are climatic / hyrologic conditions on the site t	ypical for this time of ye	ar? Yes <u>X</u> No	(if no, explain in Remarks.)				
Are Vegetation, Soil, or Hydrology	significantly distur	bed? Are "Normal (Circumstances" present? Yes X No				
Are Vegetation, Soil, or Hydrology	naturally problema	atic? (if needed, expl	ain any answers in Remarks.)				
SUMMARY OF FINDINGS - Attach site map	showing sampling po	oint locations, tran	sects, important features, etc.				
Hydrophytic Vegetation Present? Yes X		Is the Sampled Area	-				
Hydric Soil Present? Yes X		within a Wetland?	Yes X No				
		if yes, optional Wetl					
Wetland Hydrology Present? Yes X		ii yes, optional weti					
Remarks: (Explain alternative procedures here or in a sep							
HYDROLOGY							
Wetland Hydrology Indicators:			Secondary Indicators (minimum of two required)				
Primary Indicators (minimum of one is required: ch	neck all that apply)		Surface Soil Cracks (B6)				
Surface Water (A1)	Water-Stained Leaves	(B9)	Drainage Patterns (B10)				
High Water Table (A2)	Aquatic Fauna (B13)		Moss Trim Lines (B16)				
Saturation (A3)	Marl Deposits (B15)		Dry-Season Water Table (C2)				
Water Marks (B1)	Hydrogen Sulfide Odo	or (C1)	Crayfish Burrows (C8)				
Sediment Deposits (B2)	Oxidized Rhizosphere	s on Living Roots (C3)					
Drift Deposits (B3)	Presence of Reduced						
Algal Mat or Crust (B4)	 Recent Iron Reduction						
Iron Deposits (B5)	Thin Muck Surface (C	` ,	Shallow Aquitard (D3)				
Inundation Visible on Aerial Imagery (B7)	Other (Explain in Rem		Microtopographic Relief (D4)				
Sparsley Vegetated Concave Surface (B8)	Other (Explain in Neili	urksj	X FAC-Neutral Test (D5)				
			AC-Neutral Test (D3)				
Surface Water Present? Yes No _ X	Depth (inches)	=					
Water Table Present? Yes NoX	Depth (inches)	Wetland H	ydrology Present? Yes X No				
Saturation Present? Yes No X	Depth (inches)	_					
Describe Recorded Data (stream gauge, monit	toring well, aerial photos	, previous inspection	s), if available:				
Remarks:							

Tree Stratum (Sampling Point: 1_20200721_WL44	_W1
	(Plot Size:	30'radius)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test Worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: 1 (A	۹)
				_= Total Cov	er	Total Number of Dominant	3)
						•	4/B)
						Prevalence Index Worksheet:	
			Absolute	Dominant	Indicator	OBL species x 1 0	_
Shrub Stratum ((Plot Size:	15'radius)	% Cover	Species?	Status	FACW species 100 x 2 200	_
						FAC species 0 x 3 0	_
				= Total Cov	ver .	FACU species 0 x 4 0	_
						UPL species 0 x 5 0	
						Column Totals 100 (A) 200	(B)
						Prevalence Index = B/A = 2	_
						Hydrophytic Vegetation Indicators:	
			Absolute	Dominant	Indicator	X 1- Rapid Test For Hydrophytic Vegetation	n
Herb Stratum ((Plot Size:	5'radius)	% Cover	Species?	Status	X 2- Dominance Test is > 50%	
Phalaris arundinacea			100	X	FACW	X 3- Prevalence Index is =< 3.0	
			100	= Total Cov	ver .	4- Morphological Adaptations	
						5- Problematic Hydrophytic Vegetation	
						Definitions of Vegetation Strata:	
						Tree- Woody plants 3 in. (7.6cm) or more in diameted breast height (DBH), regardless of height.	er at
						Sapling/Shrub- Woody plants less than 3 in. DBH and greater than or equal to 3.28ft (1m) tall.	Ł
						Herb- All herbaceous (non-woody) plants, regardless size, and woody plants less than 3.28ft tall.	of
Woody Vine Stratum ((Plot Size:	30'radius)		Dominant Species?	Indicator Status	Woody Vines- All woody vines greater than 3.28ft in height.	
				_= Total Cov	ver	Hydrophytic Vegetation Present? Yes X No	

SOIL Sampling Point: 1_20200721_WL44_W1

Depth	Matrix				Redo	ox Featu	ires	
(inches	Color	%	Color	%	Type	Loc	Texture	Remarks
3-12	10YR 3/1	85	10YR 4/4	15	С	М	Clay Loam	
12-16	10YR 3/1	80	10YR 5/6	20	С	М	Sandy Clay Loam	
-	il Indicators:				Dobardio	o Dolovi	Surface (D1E)	Indicators for Problematic Soils:
	tosol (A1)	۸٦١			-		Surface (B15)	2 cm Muck (A10)
	tic Epipedon (A2)		Thin Dark Surface (S9)		• •	Coast Prarie Redox (A16)	
	ck Histic (A3)				-	-	ineral (F1)	5 cm Mucky Peat or Peat (S3)
	drogen Sulfide				•	•	atric (F2)	Dark Surface (S7)
	atified Layers (•	d Matrix	•	Polyvalue Below Surface (S8)
Dep	oleted Below [Dark Su	rface (A11)	X	Redox D	ark Surfa	ace (F6)	Thin Dark Surface (S9)
Thic	ck Dark Surfac	e (A12))		Depleted	d Dark Su	urface (F7)	Iron-Manganese Masses (F12)
San	dy Mucky Mir	neral (S	1)		Redox D	epressio	ns (F8)	Piedmont Floodplain Soils (F19)
San	dy Gleyed Ma	itrix (S4	!)					Mesic Spodic (TA6)
San	dy Redox (S5)							Red Parent Material (F21)
Stri	pped Matrix (S6)						Very Shallow Dark Surface (TF12)
Dar	k Surface (S7)							Other (Explain in Remarks)
Restrictiv	e Layer (if obse	erved):						
		Type:					Hydric	Soil Present? Yes X No
	Depth (in	ches):						

Remarks:

Project/Site: Cider Solar Project	City/County: Oakfield/Ger	nessee Sampling Date: 7/21/2020					
Applicant/Owner: Hecate	State: NY Sampling						
Investigator(s): Andrew Sorci	Section, Township, Range:	Point:1_20200721_WL44_U					
Landform (hillslope, terrace,etc.): Rise	dform (hillslope, terrace,etc.): Rise Local relief (concave, convex						
Subregion (LRR or MLRA): LRR L	Lat: _43.074137Long:	78.216873 Datum: <u>NAD83</u>					
Soil Map Unit Name: HIB		NWI Classification: UPL					
Are climatic / hyrologic conditions on the site							
Are Vegetation, Soil, or Hydrology		Circumstances" present? Yes X No					
Are Vegetation, Soil, or Hydrology	naturally problematic? (if needed, exp	olain any answers in Remarks.)					
SUMMARY OF FINDINGS - Attach site ma	p showing sampling point locations, trai	nsects, important features, etc.					
Hydrophytic Vegetation Present? Yes X							
Hydric Soil Present? Yes	No X within a Wetland?	Yes No X					
•							
Wetland Hydrology Present? Yes X							
Remarks: (Explain alternative procedures here or in a se	parate report.)						
HYDROLOGY							
Wetland Hydrology Indicators:		Secondary Indicators (minimum of two required)					
Primary Indicators (minimum of one is required: c	heck all that apply)	Surface Soil Cracks (B6)					
Surface Water (A1)	Water-Stained Leaves (B9)	Drainage Patterns (B10)					
High Water Table (A2)	Aquatic Fauna (B13)	Moss Trim Lines (B16)					
Saturation (A3)	Marl Deposits (B15)	Dry-Season Water Table (C2)					
Water Marks (B1)	Hydrogen Sulfide Odor (C1)	Crayfish Burrows (C8)					
Sediment Deposits (B2)	Oxidized Rhizospheres on Living Roots (C3)	Saturation Visible in Aerial Imagery (C9)					
Drift Deposits (B3)	Presence of Reduced Iron (C4)	Stunted or Stressed Plants (D1)					
Algal Mat or Crust (B4)	Recent Iron Reduction in Tilled Soils (C6)	X Geomorphic Position (D2)					
Iron Deposits (B5)	Thin Muck Surface (C7)	Shallow Aquitard (D3)					
Inundation Visible on Aerial Imagery (B7)	Other (Explain in Remarks)	Microtopographic Relief (D4)					
	Other (Explain in Kemarks)						
Sparsley Vegetated Concave Surface (B8)		X FAC-Neutral Test (D5)					
Surface Water Present? Yes NoX	Depth (inches)						
Water Table Present? Yes No _ X	Depth (inches) Wetland	Hydrology Present? Yes X No					
Saturation Present? Yes NoX	Depth (inches)						
Describe Recorded Data (stream gauge, moni	toring well, aerial photos, previous inspection	ns), if available:					
Remarks:							
i e e e e e e e e e e e e e e e e e e e							

VEGETATION - Use scien	tific names	of plants				Sampl	ing Point	: 1_202	00721_W	L44_U1
Tree Stratum	(Plot Size:	30'radius)	Absolute % Cover	Dominant Species?	Indicator Status	Number of Dom That Are OBL, F.	inant Spe	cies	3	(A)
				= Total Co	ver	Total Number Species Ad Percent of Do That Are OBL,	cross All St minant Sp	rata: ecies	3	(B) (A/B)
						Prevalence Index		_	100/0	
			Absoluto	Dominant	Indicator	OBL species	0	x 1	0	
Shrub Stratum	(Plot Size:	15'radius)	% Cover	Species?	Status	FACW species	60	x 2	120	
Populus deltoides			30	Х	FAC	FAC species	70	x 3	210	
			30	= Total Co	ver	FACU species	0	x 4	0	
						UPL species	0	x 5	0	
						Column Totals	130	(A)	330	(B)
						Prevalen	ce Index =		2.54	
						Hydrophytic Vego	etation Inc	dicators	5:	
	(5)	_, ,,		Dominant		1- Rapid Te	st For Hyd	rophyti	c Vegeta	tion
Herb Stratum	(Plot Size:	5'radius)	% Cover	Species?	Status	X 2- Dominar	ce Test is	> 50%		
<u>Phalaris arundinacea</u> Euthamia graminifolia			<u>60</u> 40	X X	FACW FAC	X 3- Prevalen	ce Index is	s =< 3.0		
Lutilainila graniiniinolla			100	= Total Cov		4- Morphol	ogical Ada	ptation	ıS	
				_		5- Problem	atic Hydro	phytic \	/egetatic	'n
						Definitions of Veget	ation Strat	a:		
						Tree- Woody plants breast height (DBH),				eter at
						Sapling/Shrub- Woo greater than or equa				and
						Herb- All herbaceou size, and woody pla	•			less of
Woody Vine Stratum	(Plot Size:	30'radius)		Dominant Species?	Indicator Status	Woody Vines- All wo height.	oody vines į	greater t	han 3.28f	t in
				= Total Cov	ver	Hydrop	-			
						Veget Pre	ation sent? Yes	sX_	No	_
Remarks: (Include photo nu	ımbers here	or on a sep	arate shee	t.)		1				

SOIL Sampling Point: 1_20200721_WL44_U1 Depth Matrix **Redox Features** (inches Color % Color % Type Texture Remarks Loc 0-14 10YR 3/2 100 Sandy Loam 14-20 10YR 3/2 95 5YR 4/6 5 C Μ Sandy Clay Loam **Hydric Soil Indicators:** Indicators for Problematic Soils: Histosol (A1) Polyvalue Below Surface (B15) 2 cm Muck (A10) Histic Epipedon (A2) Thin Dark Surface (S9) Coast Prarie Redox (A16) Black Histic (A3) Loamy Mucky Mineral (F1) 5 cm Mucky Peat or Peat (S3) Hydrogen Sulfide (A4) Loamy Gleyed Matric (F2) Dark Surface (S7) Stratified Layers (A5) Depleted Matrix (F3) Polyvalue Below Surface (S8) Depleted Below Dark Surface (A11) Redox Dark Surface (F6) Thin Dark Surface (S9) Thick Dark Surface (A12) Depleted Dark Surface (F7) Iron-Manganese Masses (F12) Sandy Mucky Mineral (S1) Redox Depressions (F8) Piedmont Floodplain Soils (F19) Sandy Gleyed Matrix (S4) Mesic Spodic (TA6) Sandy Redox (S5) Red Parent Material (F21) Stripped Matrix (S6) Very Shallow Dark Surface (TF12) Dark Surface (S7) Other (Explain in Remarks) Restrictive Layer (if observed): Type: Hydric Soil Present? Yes No Χ Depth (inches): Remarks:

Project/Site: Cider Solar Project	Site: Cider Solar Project City/County: Oakfield/Genessee Sampling Date: 7/22/2020							
Applicant/Owner: Hecate	State: <u>NY</u>	Sampling Point:						
Investigator(s): Andrew Sorci	Section	Section, Township, Range: 1_07222020_WL45_W1						
Landform (hillslope, terrace, etc.): Depressio	n Local relief	Local relief (concave, convex, none): Concave Slope (%) 0 - 5						
Subregion (LRR or MLRA): LRR L	Lat: 43.080266	Long: -78.216803	Datum: NAD83					
Soil Map Unit Name: ApA		NWI Classi	fication: PEM					
Are climatic / hyrologic conditions on the site	typical for this time of yea	r? Yes X No (if no,	explain in Remarks.)					
Are Vegetation , Soil , or Hydrolog	y significantly disturb	ed? Are "Normal Circumstances	" present? Yes X No					
Are Vegetation , Soil , or Hydrolog	y naturally problema	tic? (if needed, explain any answer	s in Remarks.)					
								
SUMMARY OF FINDINGS - Attach site ma	ap showing sampling po	int locations, transects, impor	tant features, etc.					
Hydrophytic Vegetation Present? Yes >	X No I	ls the Sampled Area						
Hydric Soil Present? Yes	X No	within a Wetland?	Yes X No					
Wetland Hydrology Present? Yes		f yes, optional Wetland Site ID:	WL45					
Remarks: (Explain alternative procedures here or in a s								
Associated with drainage ditch	eparate report.							
Associated with dramage diten								
HYDROLOGY								
Wetland Hydrology Indicators:		Secondary Ind	icators (minimum of two required)					
Primary Indicators (minimum of one is required:	check all that apply)	Surface S	oil Cracks (B6)					
Surface Water (A1)	Water-Stained Leaves	(B9) X Drainage	X Drainage Patterns (B10)					
High Water Table (A2)	Aquatic Fauna (B13)	Moss Tri	Moss Trim Lines (B16)					
Saturation (A3)	Marl Deposits (B15)	 Dry-Seas	Dry-Season Water Table (C2)					
Water Marks (B1)	Hydrogen Sulfide Odor	(C1) Crayfish	Crayfish Burrows (C8)					
Sediment Deposits (B2)	Oxidized Rhizospheres		X Saturation Visible in Aerial Imagery (C9)					
Drift Deposits (B3)	Presence of Reduced Ir		Stunted or Stressed Plants (D1)					
	Recent Iron Reduction	· · · —						
Algal Mat or Crust (B4)		· · · —	X Geomorphic Position (D2)					
Iron Deposits (B5)	Thin Muck Surface (C7)							
Inundation Visible on Aerial Imagery (B7)	Other (Explain in Rema		ographic Relief (D4)					
Sparsley Vegetated Concave Surface (B8)		X FAC-Neu	tral Test (D5)					
Surface Water Present? Yes No X	Depth (inches)							
Water Table Present? Yes No X	Depth (inches)	Wetland Hydrology Pres	ent? Yes X No					
Saturation Present? Yes No X		, ,,						
								
Describe Recorded Data (stream gauge, mon	nitoring well, aerial photos,	previous inspections), if available	:					
Remarks:								
Nemarks.								

VEGETATION - Use scien	ntific names	of plants		Sampling Point: 1_07222020_wL45_w1			
Tree Stratum	(Plot Size:	30'radius)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test Worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: 2	(A)
				= Total Cov	ver	Total Number of Dominant	_
						Species Across All Strata: 2	(B)
						Percent of Dominant Species That Are OBL, FACW, or FAC: 100%	(A/B)
						Prevalence Index Worksheet:	
			Absoluto	Dominant	Indicator	OBL species 8 x 1 8	
Shrub Stratum	(Plot Size:	15'radius)	% Cover	Species?	Status	FACW species 3 x 2 6	
	,	·		·		FAC species 5 x 3 15	
				= Total Cov	ver	FACU species 0 x 4 0	
						UPL species 0 x 5 0	
						Column Totals 16 (A) 29	—— (B)
						Prevalence Index = B/A = 1.81	(D)
						Hydrophytic Vegetation Indicators:	
				Dominant		1- Rapid Test For Hydrophytic Vegetat	tion
Herb Stratum	(Plot Size:	5'radius)	% Cover	Species?	Status	X 2- Dominance Test is > 50%	
Typha angustifolia			8	X	OBL	X 3- Prevalence Index is =< 3.0	
Persicaria maculosa Phalaris arundinacea			<u>5</u>	Х	FAC FACW	4- Morphological Adaptations	
			16	= Total Cov		5- Problematic Hydrophytic Vegetatio	n
						Definitions of Vegetation Strata:	
						Tree- Woody plants 3 in. (7.6cm) or more in diam breast height (DBH), regardless of height.	eter at
						Sapling/Shrub- Woody plants less than 3 in. DBH a greater than or equal to 3.28ft (1m) tall.	and
						Herb- All herbaceous (non-woody) plants, regardl size, and woody plants less than 3.28ft tall.	less of
Woody Vine Stratum	(Plot Size:	30'radius)		Dominant Species?	Indicator Status	Woody Vines- All woody vines greater than 3.28ft height.	t in
				_= Total Cov	ver	Hydrophytic Vegetation	
						Present? Yes X No	_
Remarks: (Include photo n	umbers here	or on a sep	arate shee	t.)		1	

SOIL Sampling Point: 1_07222020_wL45_w1

Depth	Matrix				Redo	x Featu	ires	
(inches	Color	%	Color	%	Type	Loc	Texture	Remarks
0-4	10YR 4/1	95	10YR 4/4	5	С	М	Loamy Sand	
4-16	7.5YR 5/1	90	7.5YR 4/6	10	С	М	Sandy Clay Loam	

Hydric Soil Indicators:		Indicators for Problematic Soils:
Histosol (A1)	Polyvalue Below Surface ((B15)2 cm Muck (A10)
Histic Epipedon (A2)	Thin Dark Surface (S9)	Coast Prarie Redox (A16)
Black Histic (A3)	Loamy Mucky Mineral (F1	L)5 cm Mucky Peat or Peat (S3)
Hydrogen Sulfide (A4)	Loamy Gleyed Matric (F2)	Dark Surface (S7)
Stratified Layers (A5)	X Depleted Matrix (F3)	Polyvalue Below Surface (S8)
Depleted Below Dark Surface (A11)	Redox Dark Surface (F6)	Thin Dark Surface (S9)
Thick Dark Surface (A12)	Depleted Dark Surface (F7	7) Iron-Manganese Masses (F12)
Sandy Mucky Mineral (S1)	Redox Depressions (F8)	Piedmont Floodplain Soils (F19)
Sandy Gleyed Matrix (S4)		Mesic Spodic (TA6)
Sandy Redox (S5)		Red Parent Material (F21)
Stripped Matrix (S6)		Very Shallow Dark Surface (TF12)
Dark Surface (S7)		Other (Explain in Remarks)
Restrictive Layer (if observed):		
Type:		
Type:		Hydric Soil Present? Yes X No
Depth (inches):		

Remarks:

Project/Site: Cider Solar Project	City/County:	Oakfield/Genessee	Sampling Date: 7/22/2020			
Applicant/Owner: Hecate		State: NY	Sampling			
Investigator(s): Andrew Sorci	vnship, Range:	Point:1_07222020_WL45_U				
Landform (hillslope, terrace,etc.): <u>Terrace</u>	Local relief (cor	cave, convex, none): No	ne Slope (%) <u>0 - 1</u>			
Subregion (LRR or MLRA): LRR L	Lat: <u>43.080195</u>	Long:78.216840	Datum: NAD83			
Soil Map Unit Name: OnB		NWI Cla	assification: UPL			
Are climatic / hyrologic conditions on the sit	e typical for this time of year? Y	es X No (if r	no, explain in Remarks.)			
Are Vegetation, Soil, or Hydrolo	gysignificantly disturbed?	Are "Normal Circumstan	ces" present? Yes X No			
Are Vegetation, Soil, or Hydrolo	gynaturally problematic?	(if needed, explain any answ	vers in Remarks.)			
SUMMARY OF FINDINGS - Attach site m	nan showing sampling point l	ocations transects imr	nortant features, etc			
Hydrophytic Vegetation Present? Yes		e Sampled Area	or tarre reactives, etc.			
Hydric Soil Present? Yes		n a Wetland?	Yes No X			
· —		, optional Wetland Site ID				
Wetland Hydrology Present? Yes		, optional Wetland Site ID	·			
Remarks: (Explain alternative procedures here or in a	separate report.)					
HYDROLOGY						
Wetland Hydrology Indicators:		Secondary	Indicators (minimum of two required)			
Primary Indicators (minimum of one is required	: check all that apply)	Surfa	ce Soil Cracks (B6)			
Surface Water (A1)	Water-Stained Leaves (B9)	Drain	age Patterns (B10)			
High Water Table (A2)	Aquatic Fauna (B13)	Moss	Moss Trim Lines (B16)			
Saturation (A3)	Marl Deposits (B15)	Dry-S	Dry-Season Water Table (C2)			
Water Marks (B1)	Hydrogen Sulfide Odor (C1)	 Crayfi	Crayfish Burrows (C8)			
Sediment Deposits (B2)	Oxidized Rhizospheres on Li	on Living Roots (C3) Saturation Visible in Aerial Imagery (C9)				
Drift Deposits (B3)	Presence of Reduced Iron (C		Stunted or Stressed Plants (D1)			
Algal Mat or Crust (B4)	Recent Iron Reduction in Til	· ——	Geomorphic Position (D2)			
Iron Deposits (B5)	Thin Muck Surface (C7)	. , , , , ,				
Inundation Visible on Aerial Imagery (B7)			Microtopographic Relief (D4)			
	Other (Explain in Remarks)	FAC-Neutral Test (D5)				
Sparsley Vegetated Concave Surface (B8)		FAC-N	leutral Test (DS)			
Surface Water Present? Yes No	X Depth (inches)					
Water Table Present? Yes No	X Depth (inches)	Wetland Hydrology P	resent? Yes No X			
Saturation Present? Yes No	X Depth (inches)					
Describe Recorded Data (stream gauge, mo	unitoring well aerial photos prev	ious inspections) if availa	hle:			
2 000 100 11000 1000 2 000 (00 00 11 80 080) 1110						
Remarks:						

VEGETATION - Use scientific names of plants Sampling Point: 1_07222020_WL45_U1 Absolute Dominant Indicator **Dominance Test Worksheet:** (Plot Size: 30'radius) % Cover Species? Status **Tree Stratum Number of Dominant Species** That Are OBL, FACW, or FAC: (A) = Total Cover **Total Number of Dominant** (B) Species Across All Strata: 5 Percent of Dominant Species (A/B) That Are OBL, FACW, or FAC: 40% **Prevalence Index Worksheet:** x 1 0 **OBL** species Absolute Dominant Indicator **FACW** species 16 (Plot Size: 15'radius) % Cover Species? Status x 2 **Shrub Stratum** FAC species 5 х3 15 Cornus racemosa **FAC** Χ Fraxinus pennsylvanica 3 Χ **FACW** FACU species 32 x 4 128 8 = Total Cover **UPL** species 30 x 5 150 Column Totals 75 (A) 309 (B) Prevalence Index = B/A = 4.12 **Hydrophytic Vegetation Indicators:** Absolute Dominant Indicator 1- Rapid Test For Hydrophytic Vegetation **Herb Stratum** (Plot Size: 5'radius) % Cover Species? Status 2- Dominance Test is > 50% 20 Abutilon theophrasti Χ **FACU** 3- Prevalence Index is =< 3.0 Χ Bromus inermis 15 UPL 4- Morphological Adaptations Glycine max 15 Χ UPL Solidago canadensis 7 **FACU** 5- Problematic Hydrophytic Vegetation Ambrosia artemisiifolia 5 **FACU** Phalaris arundinacea 5 **FACW Definitions of Vegetation Strata:** 67 = Total Cover Tree- Woody plants 3 in. (7.6cm) or more in diameter at breast height (DBH), regardless of height. Sapling/Shrub- Woody plants less than 3 in. DBH and greater than or equal to 3.28ft (1m) tall. Herb- All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28ft tall. Absolute Dominant Indicator Woody Vines- All woody vines greater than 3.28ft in (Plot Size: 30'radius) Status **Woody Vine Stratum** % Cover Species? height. = Total Cover Hydrophytic Vegetation Present? Yes ____ No __X Remarks: (Include photo numbers here or on a separate sheet.)

SOIL Sampling Point: 1_07222020_WL45_U1

Depth	Matrix				Redo	x Featu	ires			
(inches	Color	%	Color	%	Type	Loc	Texture	Remarks		
0-9	10YR 2/2	100					Sandy Loam			
9-18	7.5YR 5/3	80	7.5YR 5/8	20	С	M	Sandy Loam			
U. d.t. C.	. II I II A							Indicators for Buckley at a Calley		
•	oil Indicators: tosol (A1)				Polyvalu	a Ralow	Surface (B15)	Indicators for Problematic Soils: 2 cm Muck (A10)		
		A2)			Thin Dar			Coast Prarie Redox (A16)		
Histic Epipedon (A2) Black Histic (A3)							ineral (F1)	5 cm Mucky Peat or Peat (S3)		
Hydrogen Sulfide (A4)					-	-	atric (F2)	Dark Surface (S7)		
Stratified Layers (A5)					Depleted	-		Polyvalue Below Surface (S8)		
Depleted Below Dark Surface (A11)					Redox Da			Thin Dark Surface (S9)		
Thick Dark Surface (A12)				Depleted	l Dark Su	ırface (F7)	Iron-Manganese Masses (F12)			
San	ndy Mucky Mir	neral (S	1)		Redox D	epressio	ns (F8)	Piedmont Floodplain Soils (F19)		
San	ndy Gleyed Ma	atrix (S4)					Mesic Spodic (TA6)		
San	ndy Redox (S5))						Red Parent Material (F21)		
Stri	ipped Matrix (S6)						Very Shallow Dark Surface (TF12)		
Dar	rk Surface (S7)							Other (Explain in Remarks)		
Restrictiv	ve Layer (if obs	erved):								
		Type:					Hydrid	c Soil Present? Yes NoX		
	Depth (in	ches):								
Remarks	··									
Remarks	.									

Project/Site: Cider Solar Project	City/County: Oakfield/Geni	nesee Sampling Date: 7/22/2020					
Applicant/Owner: Hecate State: NY Sampling							
Investigator(s): Andrew Sorci	Section, Township, Range:	Point:1_07222020_WL45_U					
Landform (hillslope, terrace,etc.): <u>Terrace</u>	Local relief (concave, convex, n	one): <u>None</u> Slope (%) <u>0 - 10</u>					
Subregion (LRR or MLRA): LRR L	Lat: <u>43.080183</u> Long: <u>-78</u>						
Soil Map Unit Name: RsA		NWI Classification: UPL					
Are climatic / hyrologic conditions on the site	typical for this time of year? Yes X No	(if no, explain in Remarks.)					
Are Vegetation, Soil, or Hydrology	· -						
Are Vegetation, Soil, or Hydrology	naturally problematic? (if needed, expl	ain any answers in Remarks.)					
SUMMARY OF FINDINGS - Attach site ma	n showing sampling point locations trans	sects, important features, etc.					
Hydrophytic Vegetation Present? Yes	No X Is the Sampled Area						
	within a Wetland?	Yes No X					
Hydric Soil Present? Yes	NOX						
Wetland Hydrology Present? Yes	No X if yes, optional Wetla	and site iD:					
Remarks: (Explain alternative procedures here or in a se	parate report.)						
HYDROLOGY							
Wetland Hydrology Indicators:		Secondary Indicators (minimum of two required)					
Primary Indicators (minimum of one is required: c	heck all that apply)	Surface Soil Cracks (B6)					
Surface Water (A1)	Water-Stained Leaves (B9)	Drainage Patterns (B10)					
High Water Table (A2)	Aquatic Fauna (B13)	Moss Trim Lines (B16)					
Saturation (A3)	Marl Deposits (B15)	Dry-Season Water Table (C2)					
Water Marks (B1)	Hydrogen Sulfide Odor (C1)	Crayfish Burrows (C8)					
Sediment Deposits (B2)	Oxidized Rhizospheres on Living Roots (C3)	Saturation Visible in Aerial Imagery (C9)					
Drift Deposits (B3)	Presence of Reduced Iron (C4)	Stunted or Stressed Plants (D1)					
Algal Mat or Crust (B4)	Recent Iron Reduction in Tilled Soils (C6)	Geomorphic Position (D2)					
Iron Deposits (B5)	Thin Muck Surface (C7)						
		Shallow Aquitard (D3)					
Inundation Visible on Aerial Imagery (B7)	Other (Explain in Remarks)	Microtopographic Relief (D4)					
Sparsley Vegetated Concave Surface (B8)		FAC-Neutral Test (D5)					
Surface Water Present? Yes NoX	Depth (inches)						
Water Table Present? Yes No X	Depth (inches) Wetland H	ydrology Present? Yes No X					
Saturation Present? Yes No X	Depth (inches)						
) :C					
Describe Recorded Data (stream gauge, moni	toring well, aerial photos, previous inspections	s), if available:					
Remarks:							

VEGETATION - Use scientific names of plants Sampling Point: 1_07222020_WL45_U2 Absolute Dominant Indicator **Dominance Test Worksheet:** (Plot Size: 30'radius) % Cover Species? Status **Tree Stratum Number of Dominant Species** That Are OBL, FACW, or FAC: (A) = Total Cover **Total Number of Dominant** (B) Species Across All Strata: 5 Percent of Dominant Species (A/B) That Are OBL, FACW, or FAC: 40% **Prevalence Index Worksheet:** x 1 0 **OBL** species Absolute Dominant Indicator **FACW** species 16 (Plot Size: 15'radius) % Cover Species? Status x 2 **Shrub Stratum** FAC species 5 х3 15 Cornus racemosa **FAC** Χ Fraxinus pennsylvanica 3 Χ **FACW** FACU species 32 x 4 128 8 = Total Cover **UPL** species 30 x 5 150 Column Totals 75 (A) 309 (B) Prevalence Index = B/A = 4.12 **Hydrophytic Vegetation Indicators:** Absolute Dominant Indicator 1- Rapid Test For Hydrophytic Vegetation **Herb Stratum** (Plot Size: 5'radius) % Cover Species? Status 2- Dominance Test is > 50% 20 Abutilon theophrasti Χ **FACU** 3- Prevalence Index is =< 3.0 Χ Bromus inermis 15 UPL 4- Morphological Adaptations 15 Χ UPL Daucus carota Solidago canadensis 7 **FACU** 5- Problematic Hydrophytic Vegetation Ambrosia artemisiifolia 5 **FACU** Phalaris arundinacea 5 **FACW Definitions of Vegetation Strata:** 67 = Total Cover Tree- Woody plants 3 in. (7.6cm) or more in diameter at breast height (DBH), regardless of height. Sapling/Shrub- Woody plants less than 3 in. DBH and greater than or equal to 3.28ft (1m) tall. Herb- All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28ft tall. Absolute Dominant Indicator Woody Vines- All woody vines greater than 3.28ft in (Plot Size: 30'radius) Status **Woody Vine Stratum** % Cover Species? height. = Total Cover Hydrophytic Vegetation Present? Yes ____ No __X Remarks: (Include photo numbers here or on a separate sheet.)

SOIL Sampling Point: 1_07222020_WL45_U2

									1 0		
Depth	Matrix				Redo	x Featu	res				
(inches	Color	%	Color	%	Type	Loc	Texture	e	Remarks		
0-9	10YR 2/2	100					Sandy Loa	am			
9-20	7.5YR 5/3	95	7.5YR 5/8	5	С	M	Sandy Loa	am			
-	oil Indicators:						- 4>	Ind	icators for Problematic Soils:		
	tosol (A1)	4.21					Surface (B15)		2 cm Muck (A10)		
	tic Epipedon (A2)			Thin Dar				Coast Prarie Redox (A16)		
	ck Histic (A3)	(0.4)			-	=	neral (F1)	5 cm Mucky Peat or Peat (S3)			
	drogen Sulfide						atric (F2)	Dark Surface (S7)			
Stratified Layers (A5) Depleted Below Dark Surface (A11)					Depleted Redox Da			Polyvalue Below Surface (S8) Thin Dark Surface (S9)			
	ck Dark Surfac						ırface (F7)	Thin Dark Surface (S9)			
	ndy Mucky Mir	-			Redox De			Iron-Manganese Masses (F12)			
	ndy Gleyed Ma				Nedox Di	срі Сэзіо	113 (1 0)		Piedmont Floodplain Soils (F19) Mesic Spodic (TA6)		
	ndy Redox (S5)	-	,						Red Parent Material (F21)		
	ipped Matrix (Very Shallow Dark Surface (TF12)		
	rk Surface (S7)	•							Other (Explain in Remarks)		
	` ,										
Restrictiv	ve Layer (if obs	erved):									
		Type:									
	Depth (in	_					F	Hydric Soil	Present? Yes No _X		
	Deptii (iii	- -									
Remark	s:										

Project/Site: Cider Solar Project	City/County: Oakfield/Ger	nessee Sampling Date: 7/20/2020				
Applicant/Owner: Hecate		State: NY Sampling Point:				
Investigator(s): Andrew Sorci	Section, Township, Range:	1_20200722_WL46_W2				
Landform (hillslope, terrace,etc.): Dip	Local relief (concave, convex, none): None Slope (%) 0 - 1					
Subregion (LRR or MLRA): LRR L	Lat: 43.079274 Long: -	78.220638 Datum: NAD83				
Soil Map Unit Name: RaA		NWI Classification: PFO				
Are climatic / hyrologic conditions on the site t	ypical for this time of year? Yes X No	(if no, explain in Remarks.)				
Are Vegetation $___$, Soil $___$, or Hydrology	significantly disturbed? Are "Normal	Circumstances" present? Yes X No				
Are Vegetation, Soil, or Hydrology	naturally problematic? (if needed, exp	olain any answers in Remarks.)				
SUMMARY OF FINDINGS - Attach site map	showing sampling point locations, tran	nsects, important features, etc.				
Hydrophytic Vegetation Present? Yes X	No Is the Sampled Area					
Hydric Soil Present? Yes X	No within a Wetland?	Yes X No				
Wetland Hydrology Present? Yes X	No if yes, optional Wet	land Site ID: WL46				
Remarks: (Explain alternative procedures here or in a seg						
HYDROLOGY						
Wetland Hydrology Indicators:		Secondary Indicators (minimum of two required)				
Primary Indicators (minimum of one is required: ch	neck all that apply)	Surface Soil Cracks (B6)				
Surface Water (A1)	Water-Stained Leaves (B9)	Drainage Patterns (B10)				
High Water Table (A2)	Aquatic Fauna (B13)	X Moss Trim Lines (B16)				
Saturation (A3)	Marl Deposits (B15)	Dry-Season Water Table (C2)				
Water Marks (B1)	Hydrogen Sulfide Odor (C1)	Crayfish Burrows (C8)				
Sediment Deposits (B2)	Oxidized Rhizospheres on Living Roots (C3)	Saturation Visible in Aerial Imagery (C9)				
Drift Deposits (B3)	Presence of Reduced Iron (C4)	Stunted or Stressed Plants (D1)				
Algal Mat or Crust (B4)	Recent Iron Reduction in Tilled Soils (C6)	X Geomorphic Position (D2)				
Iron Deposits (B5)	Thin Muck Surface (C7)	Shallow Aquitard (D3)				
Inundation Visible on Aerial Imagery (B7)	Other (Explain in Remarks)	Microtopographic Relief (D4)				
Sparsley Vegetated Concave Surface (B8)		FAC-Neutral Test (D5)				
Surface Water Present? Yes No X	Depth (inches)					
Water Table Present? Yes No X	= ' ' 	Hydrology Present? Yes X No				
Saturation Present? Yes No X	Depth (inches)	<u> </u>				
Describe Recorded Data (stream gauge, monit	coring well, aerial photos, previous inspection	ns), if available:				
Remarks:						

VEGETATION - Use scier				Dominant		Dominance Test V	Vorkshee	t:	_	L46_W2
Tree Stratum	(Plot Size:	30'radius)	% Cover	Species?	Status	Number of Domi	nant Spe	cies		
Fraxinus pennsylvanic	a		75	X	FACW	That Are OBL, FA	ACW, or F	AC:	3	(A)
			75	_= Total Cov	ver .	Total Numbe Species Ac			4	(B)
						Percent of Dor That Are OBL,	-		75%	(A/B)
						Prevalence Index \	Norkshee	et:		
			Absolute	Dominant	Indicator	OBL species	0	x 1	0	
Shrub Stratum	(Plot Size:	15'radius)	% Cover	Species?	Status	FACW species	75	x 2	150	
Rhamnus cathartica			70	Х	FAC	FAC species	80	x 3	240	
			70	_= Total Cov	/er	FACU species	10	x 4	40	
						UPL species	0	x 5	0	
						Column Totals	165	(A)	430	(B)
						Prevalenc	e Index =	B/A =	2.61	
						Hydrophytic Vege	tation In	dicators	:	
	/DL . C:	II II \		Dominant		1- Rapid Tes	t For Hyd	rophyti	c Vegeta	tion
Herb Stratum	(Plot Size:	5'radius)	% Cover	Species?	Status	X 2- Dominan	ce Test is	> 50%		
Alliaria petiolata Persicaria virginiana			<u>10</u>	X X	FACU FAC	X 3- Prevalence Index is =< 3.0				
T CI SICUITO VII GIITIOTIO			20	= Total Cov		4- Morpholo	ogical Ada	ptation	S	
				_		5- Problema	tic Hydro	phytic \	/egetatio	n
						Definitions of Veget	ation Strat	a:		
						Tree- Woody plants breast height (DBH),				eter at
						Sapling/Shrub- Wood greater than or equa				and
						Herb- All herbaceous size, and woody plan			_	less of
Woody Vine Stratum	(Plot Size:	30'radius)		Dominant Species?	Indicator Status	Woody Vines- All wo height.	ody vines	greater t	han 3.28f	t in
				_= Total Cov	/er	Hydropl Vegeta Pres	•		No	

SOIL Sampling Point: 1_20200722_WL46_W2

Depth	Matrix	(Redo	x Feat		
(inches	Color	%	Color	%	Type	Loc	Texture	Remarks
0-7	10YR 2/1	100					Clay Loam	
7-14	10YR 5/1	90	7.5YR 6/6	10	С	M	Clay Loam	
14-18	10YR 4/2	85	7.5YR 5/6	15	С	M	Sandy Clay Loam	

Hydric Soil Indicators:		Indicators for Problematic Soils:
Histosol (A1)	Polyvalue Below Surface ((B15)2 cm Muck (A10)
Histic Epipedon (A2)	Thin Dark Surface (S9)	Coast Prarie Redox (A16)
Black Histic (A3)	Loamy Mucky Mineral (F1	L)5 cm Mucky Peat or Peat (S3)
Hydrogen Sulfide (A4)	Loamy Gleyed Matric (F2)	Dark Surface (S7)
Stratified Layers (A5)	X Depleted Matrix (F3)	Polyvalue Below Surface (S8)
Depleted Below Dark Surface (A11)	Redox Dark Surface (F6)	Thin Dark Surface (S9)
Thick Dark Surface (A12)	Depleted Dark Surface (F7	7) Iron-Manganese Masses (F12)
Sandy Mucky Mineral (S1)	Redox Depressions (F8)	Piedmont Floodplain Soils (F19)
Sandy Gleyed Matrix (S4)		Mesic Spodic (TA6)
Sandy Redox (S5)		Red Parent Material (F21)
Stripped Matrix (S6)		Very Shallow Dark Surface (TF12)
Dark Surface (S7)		Other (Explain in Remarks)
Restrictive Layer (if observed):		
Type:		
Type:		Hydric Soil Present? Yes X No
Depth (inches):		

Remarks:

Project/Site: Cider Solar Project	City/County: Oakfield/Ger	nessee Sampling Date: 7/22/2020			
Applicant/Owner: Hecate		State: NY Sampling Point:			
Investigator(s): Andrew Sorci	Section, Township, Range:	1_20200722_WL46_W1			
Landform (hillslope, terrace,etc.): Toeslope	Local relief (concave, convex, none): None Slope (%) 0 - 1				
Subregion (LRR or MLRA): LRR L	Lat: 43.079277 Long: -78.220641 Datum: NAD83				
Soil Map Unit Name: RaA		NWI Classification: PEM			
Are climatic / hyrologic conditions on the site t	ypical for this time of year? Yes X No	(if no, explain in Remarks.)			
Are Vegetation, Soil, or Hydrology	significantly disturbed? Are "Normal	Circumstances" present? Yes X No			
Are Vegetation, Soil, or Hydrology	naturally problematic? (if needed, exp	lain any answers in Remarks.)			
SUMMARY OF FINDINGS - Attach site map	showing sampling point locations, tran	sects. important features. etc.			
Hydrophytic Vegetation Present? Yes X					
Hydric Soil Present? Yes X	within a Wetland?	Yes X No			
Wetland Hydrology Present? Yes X	No if yes, optional Wet	land Site ID: WL46			
Remarks: (Explain alternative procedures here or in a seg	_ '' ' ' ' '				
nemarks. (explain alternative procedures here of in a sep	barate report.)				
HYDROLOGY					
Wetland Hydrology Indicators:		Secondary Indicators (minimum of two required)			
Primary Indicators (minimum of one is required: ch	neck all that apply)	Surface Soil Cracks (B6)			
Surface Water (A1)	Water-Stained Leaves (B9)	Drainage Patterns (B10)			
High Water Table (A2)	Aquatic Fauna (B13)	X Moss Trim Lines (B16)			
Saturation (A3)	Marl Deposits (B15)	Dry-Season Water Table (C2)			
Water Marks (B1)	Hydrogen Sulfide Odor (C1)	Crayfish Burrows (C8)			
Sediment Deposits (B2)	Oxidized Rhizospheres on Living Roots (C3)	Saturation Visible in Aerial Imagery (C9)			
Drift Deposits (B3)	Presence of Reduced Iron (C4)	Stunted or Stressed Plants (D1)			
Algal Mat or Crust (B4)	Recent Iron Reduction in Tilled Soils (C6)	X Geomorphic Position (D2)			
Iron Deposits (B5)	Thin Muck Surface (C7)	Shallow Aquitard (D3)			
Inundation Visible on Aerial Imagery (B7)	Other (Explain in Remarks)	Microtopographic Relief (D4)			
Sparsley Vegetated Concave Surface (B8)		X FAC-Neutral Test (D5)			
Surface Water Present? Yes No X	Depth (inches)				
	- · · · 	Hydrology Present? Yes X No			
	Depth (inches)	Tyurology Fresent: Tes X NO			
Saturation Present? Yes No X					
Describe Recorded Data (stream gauge, monit	toring well, aerial photos, previous inspection	ns), if available:			
Remarks:					

VEGETATION - Use scientific names of plants Sampling Point: 1_20200722_WL46_W1 Absolute Dominant Indicator **Dominance Test Worksheet:** (Plot Size: 30'radius) % Cover Species? Status **Tree Stratum Number of Dominant Species** 20 Χ **FACW** That Are OBL, FACW, or FAC: (A) Fraxinus pennsylvanica 20 = Total Cover **Total Number of Dominant** Species Across All Strata: (B) 2 Percent of Dominant Species That Are OBL, FACW, or FAC: (A/B) 100% **Prevalence Index Worksheet:** 15 x 1 15 **OBL** species Absolute Dominant Indicator **FACW** species 100 200 (Plot Size: 15'radius) Status x 2 **Shrub Stratum** % Cover Species? FAC species 30 90 х3 = Total Cover **FACU** species 0 x 4 0 **UPL** species 0 x 5 0 Column Totals 145 (A) 305 (B) Prevalence Index = B/A = 2.1 **Hydrophytic Vegetation Indicators:** Absolute Dominant Indicator X 1- Rapid Test For Hydrophytic Vegetation **Herb Stratum** (Plot Size: 5'radius) % Cover Species? Status X 2- Dominance Test is > 50% Χ Phalaris arundinacea 65 **FACW** X 3- Prevalence Index is =< 3.0 OBL Scirpus atrovirens 15 4- Morphological Adaptations Eutrochium purpureum 15 **FAC** Euthamia graminifolia 15 FAC 5- Problematic Hydrophytic Vegetation Solidago gigantea 15 **FACW** 125 = Total Cover **Definitions of Vegetation Strata:** Tree- Woody plants 3 in. (7.6cm) or more in diameter at breast height (DBH), regardless of height. Sapling/Shrub- Woody plants less than 3 in. DBH and greater than or equal to 3.28ft (1m) tall. Herb- All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28ft tall. Absolute Dominant Indicator Woody Vines- All woody vines greater than 3.28ft in (Plot Size: 30'radius) **Woody Vine Stratum** % Cover Species? Status height. = Total Cover Hydrophytic Vegetation Present? Yes X No ___ Remarks: (Include photo numbers here or on a separate sheet.)

SOIL Sampling Point: 1_20200722_WL46_W1

Depth	Matrix				Redo	x Featu	ıres	
(inches	Color	%	Color	%	Type	Loc	Texture	Remarks
0-14	5Y 4/2	97	10YR 4/4	3	С	М	Sandy Clay Loam	
14-18	7.5YR 5/3	90	10YR 5/6	10	С	М	Clay Loam	

Hydric Soil Indicators:		Indicators for Problematic Soils:
Histosol (A1)	Polyvalue Below Surface (B15)	2 cm Muck (A10)
Histic Epipedon (A2)	Thin Dark Surface (S9)	Coast Prarie Redox (A16)
Black Histic (A3)	Loamy Mucky Mineral (F1)	5 cm Mucky Peat or Peat (S3)
Hydrogen Sulfide (A4)	Loamy Gleyed Matric (F2)	Dark Surface (S7)
Stratified Layers (A5)	X Depleted Matrix (F3)	Polyvalue Below Surface (S8)
Depleted Below Dark Surface (A11)	Redox Dark Surface (F6)	Thin Dark Surface (S9)
Thick Dark Surface (A12)	Depleted Dark Surface (F7)	Iron-Manganese Masses (F12)
Sandy Mucky Mineral (S1)	Redox Depressions (F8)	Piedmont Floodplain Soils (F19)
Sandy Gleyed Matrix (S4)		Mesic Spodic (TA6)
Sandy Redox (S5)		Red Parent Material (F21)
Stripped Matrix (S6)		Very Shallow Dark Surface (TF12)
Dark Surface (S7)		Other (Explain in Remarks)
Restrictive Layer (if observed):		
Туре:	Hyc	dric Soil Present? Yes X No
Depth (inches):		

Remarks:

Project/Site: Cider Solar Project	City/Cou	ınty: Elba/Genesee	Sam	pling Date: 7/23/2020		
Applicant/Owner: Hecate	State: NY Sampling					
Investigator(s): Justin Ahn	Section	oint:1_20200722_WL46_U				
Landform (hillslope, terrace,etc.): <u>Toeslope</u>	Local relief	(concave, convex, n	one): <u>Linear</u>	Slope (%) <u>1 - 5</u>		
Subregion (LRR or MLRA): LRR L	Lat: 43.080479	Long:7	8.219795	Datum: NAD83		
Soil Map Unit Name: RsA			NWI Classificati	on: UPL		
Are climatic / hyrologic conditions on the site	typical for this time of year	? Yes X No	(if no, expla	in in Remarks.)		
Are Vegetation, Soil, or Hydrology	significantly disturbed	ed? Are "Normal C	ircumstances" pre	sent? Yes X No		
Are Vegetation, Soil, or Hydrology	naturally problemat	ic? (if needed, expla	ain any answers in Ro	emarks.)		
SUMMARY OF FINDINGS - Attach site ma	n showing sampling noi	nt locations trans	sects important	features etc		
Hydrophytic Vegetation Present? Yes X		s the Sampled Area		reaction cost even		
Hydric Soil Present? Yes		vithin a Wetland?	Yes	No X		
		f yes, optional Wetla	_			
Wetland Hydrology Present? Yes		yes, optional wette				
Remarks: (Explain alternative procedures here or in a se	parate report.)					
HYDROLOGY						
Wetland Hydrology Indicators:		-	Secondary Indicator	s (minimum of two required)		
Primary Indicators (minimum of one is required: o	heck all that apply)		Surface Soil Cr	acks (B6)		
Surface Water (A1)	Water-Stained Leaves (B9)	Drainage Patte	erns (B10)		
High Water Table (A2)	Aquatic Fauna (B13)		Moss Trim Lines (B16)			
Saturation (A3)	Marl Deposits (B15)	-	Dry-Season Water Table (C2)			
Water Marks (B1)	Hydrogen Sulfide Odor	(C1)	Crayfish Burrows (C8)			
Sediment Deposits (B2)	Oxidized Rhizospheres	· ·	Saturation Visible in Aerial Imagery (C9)			
Drift Deposits (B3)	Presence of Reduced Ir	-	Stunted or Stressed Plants (D1)			
Algal Mat or Crust (B4)	Recent Iron Reduction i	· · ·	Geomorphic Position (D2)			
Iron Deposits (B5)	Thin Muck Surface (C7)	` ´ -	Shallow Aquitard (D3)			
Inundation Visible on Aerial Imagery (B7)		-				
	Other (Explain in Rema	iks)	Microtopographic Relief (D4)			
Sparsley Vegetated Concave Surface (B8)		-	FAC-Neutral Te	est (D5)		
Surface Water Present? Yes No X	Depth (inches)					
Water Table Present? Yes No _ X	Depth (inches)	Wetland H	ydrology Present?	Yes No X		
Saturation Present? Yes No X	Depth (inches)					
Describe Recorded Data (stream gauge, mon	toring well aerial photos	nrevious inspections	s) if available			
2 000 100 11000 1000 2 000 (00. 00.11 8 00.80) 110011	toring trail, darial priotos,		,,,			
Remarks:						

	f plants				Jampii	116 1 01111.	1_202	00722_WI	
Tree Stratum (Plot Size: 30	0'radius)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test V Number of Domi				
Fraxinus pennsylvanica		40	Х	FACW	That Are OBL, FA	CW, or FAC	C:	6	(A)
Acer negundo		20	Х	FAC	Total Number of Dominant				
	-	60	_= Total Cov	er	Species Acı	ross All Stra	ata:	8	(B)
					Percent of Don	ninant Spec	cies		
					That Are OBL, I	FACW, or F	AC:	75%	(A/B)
					Prevalence Index V	Norksheet:	:		
		Absolute	Dominant	Indicator	OBL species	0	x 1_	0	
Shrub Stratum (Plot Size: 15	5'radius)	% Cover	Species?	Status	FACW species	60	x 2	120	
Lindera benzoin		20	Χ	FACW	FAC species	70	_ x 3 _	210	
Populus deltoides		10	X Tatal Car	FAC	FACU species	30	x 4	120	
	-	30	_= Total Cov	ei	UPL species	0	x 5	0	
					Column Totals	160	(A)_	450	(B)
					Prevalenc	e Index = B	/A = _	2.81	
					Hydrophytic Vege	tation Indi	cators	:	
					1 1				
		Absolute	Dominant	Indicator				c Vegetat	tion
Herb Stratum (Plot Size: _5	5'radius)	Absolute % Cover	Dominant Species?	Indicator Status	1- Rapid Tes	t For Hydro	phyti	c Vegetat	tion
Herb Stratum (Plot Size: _5 Toxicodendron radicans	5'radius)				1- Rapid Tes	t For Hydro	ophytio	c Vegetat	tion
·	5'radius)	% Cover	Species?	Status	1- Rapid Tes X 2- Dominand X 3- Prevalence	t For Hydro ce Test is > ce Index is =	ophytic 50% =< 3.0		tion
Toxicodendron radicans	5'radius) 	% Cover	Species?	Status FAC FACU	1- Rapid Tes	t For Hydro ce Test is > ce Index is =	ophytic 50% =< 3.0		tion
Toxicodendron radicans	5'radius) 	% Cover 30 10	Species? X X	Status FAC FACU	1- Rapid Tes X 2- Dominand X 3- Prevalence	t For Hydro ce Test is > ce Index is = ogical Adap	ophytic 50% =< 3.0 tation	s	
Toxicodendron radicans	5'radius) 	% Cover 30 10	Species? X X	Status FAC FACU	1- Rapid Tes X 2- Dominand X 3- Prevalenc 4- Morpholo	t For Hydro ce Test is > ce Index is = ogical Adap tic Hydropl	50% =< 3.0 tation	s	
Toxicodendron radicans	5'radius) 	% Cover 30 10	Species? X X	Status FAC FACU	1- Rapid Tes X 2- Dominand X 3- Prevalenc 4- Morpholo 5- Problema	t For Hydro ce Test is > ce Index is = ogical Adapa tic Hydropl ation Strata: 3 in. (7.6cm)	50% =< 3.0 tation hytic \	s /egetatio re in diam	n
Toxicodendron radicans	5'radius) 	% Cover 30 10	Species? X X	Status FAC FACU	1- Rapid Tes X 2- Dominand X 3- Prevalence 4- Morpholo 5- Problema Definitions of Vegeta Tree- Woody plants 3	t For Hydro ce Test is > ce Index is = ogical Adap tic Hydropl ation Strata: 3 in. (7.6cm) regardless o	50% =< 3.0 tation hytic V or mon f heigh	s /egetatio re in diam it. 3 in. DBH a	n eter at
Toxicodendron radicans	5'radius)	% Cover 30 10	Species? X X	Status FAC FACU	1- Rapid Tes X 2- Dominand X 3- Prevalenc 4- Morpholo 5- Problema Definitions of Vegeta Tree- Woody plants 3 breast height (DBH), Sapling/Shrub- Wood	t For Hydro ce Test is > ce Index is = ogical Adap tic Hydropl ation Strata: 3 in. (7.6cm) regardless of dy plants less I to 3.28ft (1	50% =< 3.0 tation hytic N or mon f heigh s than 3 m) tall y) plant	s /egetatio re in diam it. 3 in. DBH a	eter at
Toxicodendron radicans Alliaria petiolata		% Cover 30 10 40	Species? X X	Status FAC FACU rer	1- Rapid Tes X 2- Dominand X 3- Prevalence 4- Morpholo 5- Problema Definitions of Vegeta Tree- Woody plants 3 breast height (DBH), Sapling/Shrub- Wood greater than or equal Herb- All herbaceous size, and woody plan Woody Vines- All wood	t For Hydro ce Test is > ce Index is = ogical Adap tic Hydropl ation Strata: 3 in. (7.6cm) regardless of dy plants less I to 3.28ft (1	ophytic 50% =< 3.0 tation hytic N or mod f heigh s than 3 m) tall y) plant 3.28ft t	s /egetatio re in diam it. 3 in. DBH a ts, regardl	eter at and less of
Toxicodendron radicans Alliaria petiolata		% Cover 30 10 40 Absolute % Cover 20	Species? X X = Total Cov Dominant Species? X	FACU FACU Indicator Status FACU	1- Rapid Tes X 2- Dominand X 3- Prevalence 4- Morpholo 5- Problema Definitions of Vegeta Tree- Woody plants 3 breast height (DBH), Sapling/Shrub- Wood greater than or equal Herb- All herbaceous size, and woody plan	t For Hydro ce Test is > ce Index is = ogical Adap tic Hydropl ation Strata: 3 in. (7.6cm) regardless of dy plants less I to 3.28ft (1	ophytic 50% =< 3.0 tation hytic N or mod f heigh s than 3 m) tall y) plant 3.28ft t	s /egetatio re in diam it. 3 in. DBH a ts, regardl	eter at and less of
Toxicodendron radicans Alliaria petiolata Woody Vine Stratum (Plot Size: 30		% Cover 30 10 40 Absolute % Cover 20 10	Species? X X = Total Cov Dominant Species? X X	FACU FACU FACU FACU FACU FACU	1- Rapid Tes X 2- Dominand X 3- Prevalence 4- Morpholo 5- Problema Definitions of Vegeta Tree- Woody plants 3 breast height (DBH), Sapling/Shrub- Wood greater than or equal Herb- All herbaceous size, and woody plan Woody Vines- All wood	t For Hydro ce Test is > ce Index is = ogical Adap tic Hydropl ation Strata: 3 in. (7.6cm) regardless o dy plants less I to 3.28ft (1 c (non-wood) ts less than 3 ody vines gro	ophytic 50% =< 3.0 tation hytic N or mod f heigh s than 3 m) tall y) plant 3.28ft t	s /egetatio re in diam it. 3 in. DBH a ts, regardl	eter at and less of
Toxicodendron radicans Alliaria petiolata Woody Vine Stratum (Plot Size: 30 Parthenocissus quinquefolia		% Cover 30 10 40 Absolute % Cover 20	Species? X X = Total Cov Dominant Species? X	FACU FACU FACU FACU FACU FACU	1- Rapid Tes X 2- Dominand X 3- Prevalence 4- Morpholo 5- Problema Definitions of Vegeta Tree- Woody plants 3 breast height (DBH), Sapling/Shrub- Wood greater than or equal Herb- All herbaceous size, and woody plan Woody Vines- All wooheight. Hydroph Vegeta	t For Hydro ce Test is > ce Index is = ce In	ophytic 50% =< 3.0 tation hytic N or mon f heigh s than 3 m) tall y) plant 3.28ft the	s/egetatio re in diam it. 3 in. DBH a ts, regardl tall.	eter at and less of t in

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

SOIL Sampling Point: 1_20200722_WL46_U1

JOIL								Jamping 1 ont. 1_20200722_WL40_01
Depth	Matrix	<u> </u>			Redo	ox Featu	res	
(inches	Color	%	Color	%	Type	Loc	Texture	Remarks
0-10	10YR 4/6	100					Silt Loam	
10-20	10YR 4/6	90	7.5YR 5/8	10	С	PL	Silt Loam	
-	oil Indicators:						- 4>	Indicators for Problematic Soils:
	tosol (A1)	(A 2)			-		Surface (B15)	2 cm Muck (A10)
	tic Epipedon ((A2)				k Surface		Coast Prarie Redox (A16)
	ck Histic (A3)	. / ^ 4\			-		neral (F1)	5 cm Mucky Peat or Peat (S3)
	drogen Sulfide				-	ileyed Ma		Dark Surface (S7)
Stratified Layers (A5) Depleted Below Dark Surface (A11)					-	d Matrix ark Surfa		Polyvalue Below Surface (S8) Thin Dark Surface (S9)
	ck Dark Surfac						rface (F7)	Iron-Manganese Masses (F12)
	ndy Mucky Mi				-	epression		Piedmont Floodplain Soils (F19)
	ndy Gleyed Ma				Nedox D	ергеззіоі	15 (1 6)	Mesic Spodic (TA6)
	ndy Redox (S5)	-	1					Red Parent Material (F21)
	ipped Matrix (Very Shallow Dark Surface (TF12)
	rk Surface (S7)							Other (Explain in Remarks)
		,						
Restricti	ve Layer (if obs	erved):						
		Type:					Llive	dria Cail Drasant? Van Na V
	Depth (in	_					Нус	dric Soil Present? Yes NoX
	Deptii (ii							
Remark	s:							

Project/Site: Cider Solar Project	City/County: Oa	kfield/Genessee S	ampling Date: <u>7/20/2020</u>			
Applicant/Owner: Hecate		State: NY	Sampling Point:			
Investigator(s): Andrew Sorci	Section, Townsh	ip, Range:	1_20200722_WL47_W1			
Landform (hillslope, terrace,etc.): Dip	Local relief (concave, convex, none): Concave Slope (%) 0 - 2					
Subregion (LRR or MLRA): LRR L	Lat: 43.108216	Lat: 43.108216 Long: -78.232744 Datum: NAD83				
Soil Map Unit Name: CbA		NWI Classific	ation: PFO			
Are climatic / hyrologic conditions on the site	typical for this time of year? Yes	X No (if no, ex	plain in Remarks.)			
Are Vegetation, Soil, or Hydrology	significantly disturbed? Are "Normal Circumstances" present? Yes X No					
Are Vegetation, Soil, or Hydrology	naturally problematic? (if	needed, explain any answers in	n Remarks.)			
SUMMARY OF FINDINGS - Attach site ma	showing sampling point locat	ions, transects, importa	nt features. etc.			
Hydrophytic Vegetation Present? Yes X		npled Area				
Hydric Soil Present? Yes X	within a	Wetland? Yes	s X No			
Wetland Hydrology Present? Yes X		tional Wetland Site ID:	WL47-1			
Remarks: (Explain alternative procedures here or in a se						
HYDROLOGY						
Wetland Hydrology Indicators:		Secondary Indica	tors (minimum of two required)			
Primary Indicators (minimum of one is required: c	neck all that apply)		Cracks (B6)			
Surface Water (A1)	Water-Stained Leaves (B9)	 Drainage Pa	itterns (B10)			
High Water Table (A2)	Aquatic Fauna (B13)	X Moss Trim I	Lines (B16)			
Saturation (A3)	Marl Deposits (B15)	Dry-Season	Dry-Season Water Table (C2)			
Water Marks (B1)	Hydrogen Sulfide Odor (C1)	Crayfish Bu	Crayfish Burrows (C8)			
Sediment Deposits (B2)	X Oxidized Rhizospheres on Living	Roots (C3) Saturation	Saturation Visible in Aerial Imagery (C9)			
Drift Deposits (B3)	Presence of Reduced Iron (C4)	Stunted or S	Stunted or Stressed Plants (D1)			
Algal Mat or Crust (B4)	Recent Iron Reduction in Tilled S	oils (C6) X Geomorphi	X Geomorphic Position (D2)			
Iron Deposits (B5)	Thin Muck Surface (C7)	Shallow Aqu	Shallow Aquitard (D3)			
Inundation Visible on Aerial Imagery (B7)	Other (Explain in Remarks)	Microtopog	Microtopographic Relief (D4)			
Sparsley Vegetated Concave Surface (B8)		X FAC-Neutra	X FAC-Neutral Test (D5)			
Surface Water Present? Yes No X	Depth (inches)					
Water Table Present? Yes No X	Depth (inches)	Wetland Hydrology Presen	t? Yes X No			
Saturation Present? Yes No X	Depth (inches)					
Describe Recorded Data (stream gauge, moni	toring well, aerial photos, previous	inspections), if available:				
Pamarke						
Remarks:						

Sampling Point: 1 20200722 WL47 W1 VEGETATION - Use scientific names of plants

VEGETATION - Use scien	tific names	or plants				Janipii	ilg Pullit.	1_202	00722_WI	L47_W
Tree Stratum	(Plot Size:	30'radius)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test V Number of Domi				
Fraxinus pennsylvanica			50	Χ	FACW	That Are OBL, FA	•		6	(A)
Quercus macrocarpa			10		FACU	Total Numbe	r of Domi	nant		=
			60	_= Total Cov	ver .	Species Ac			6	(B)
						Percent of Don	ninant Spe	ecies		_
						That Are OBL,	•		100%	(A/B)
						Prevalence Index \	Norkshee	t:		
			A bookuto	Dominant	Indicator	OBL species	15	x 1	15	
Shrub Stratum	(Plot Size:	15'radius)	% Cover	Dominant Species?	Status	FACW species	115	x 2	230	
Rhamnus cathartica			10	Χ	FAC	FAC species	33	x 3	99	
Fraxinus pennsylvanica	1		10	X	FACW	FACU species	10	x 4	40	
Acer rubrum			3		FAC	UPL species	0	x 5	0	
			23	_= Total Cov	ver	Column Totals	173	(A)	384	(B
						Prevalenc		_ ` `-	2.22	(5
								<u> </u>		
						Hydrophytic Vege				
	/DL + 6:	Elizaber 1		Dominant		1- Rapid Tes	t For Hydi	rophyti	c Vegetat	tion
Herb Stratum	(Plot Size:		% Cover	Species?	Status	X 2- Dominano	ce Test is	> 50%		
Carex grayi			35	X	FACW	X 3- Prevalenc	e Index is	=< 3.0		
Agrostis stolonifera			20	X	FACW	4- Morpholo	ogical Ada	ntation	nc.	
Toxicodendron radicar Boehmeria cylindrica	15		<u>20</u> 15	X	FAC OBL			-		
Boernnena cymianea			90	= Total Cov		5- Problema	tic Hydroj	ohytic \	vegetatio	n
						Definitions of Vegeta	ation Strata	a:		
						Tree- Woody plants 3 breast height (DBH),	•	-		eter at
						Sapling/Shrub- Wood greater than or equa				and
						Herb- All herbaceous size, and woody plan	•			ess of
Woody Vine Stratum	(Plot Size:	30'radius)	Absolute % Cover	Dominant Species?	Indicator Status	Woody Vines- All wo height.				t in
				_= Total Cov	ver	Hydropl Vegeta	-			

SOIL Sampling Point: 1_20200722_WL47_W1

Depth	Matrix				Redo	ox Featu	res	
(inches	Color	%	Color	%	Type	Loc	Texture	Remark
0-12	10YR 2/1	95	5YR 5/6	5	С	PL	Silt Loam	
12-16	10YR 6/1	80	7.5YR 5/6	20	С	М	Silty Clay Loam	

Hydric Soil Indicators:		Indicators for Problematic Soils:
Histosol (A1)	Polyvalue Below Surface (B15)	2 cm Muck (A10)
Histic Epipedon (A2)	Thin Dark Surface (S9)	Coast Prarie Redox (A16)
Black Histic (A3)	Loamy Mucky Mineral (F1)	5 cm Mucky Peat or Peat (S3)
Hydrogen Sulfide (A4)	Loamy Gleyed Matric (F2)	Dark Surface (S7)
Stratified Layers (A5)	Depleted Matrix (F3)	Polyvalue Below Surface (S8)
Depleted Below Dark Surface (A11)	X Redox Dark Surface (F6)	Thin Dark Surface (S9)
Thick Dark Surface (A12)	Depleted Dark Surface (F7)	Iron-Manganese Masses (F12)
Sandy Mucky Mineral (S1)	Redox Depressions (F8)	Piedmont Floodplain Soils (F19)
Sandy Gleyed Matrix (S4)		Mesic Spodic (TA6)
Sandy Redox (S5)		Red Parent Material (F21)
Stripped Matrix (S6)		Very Shallow Dark Surface (TF12)
Dark Surface (S7)		Other (Explain in Remarks)
Restrictive Layer (if observed):		
Type:		
		Hydric Soil Present? Yes X No
Depth (inches):		

Project/Site: Cider Solar Project	City/Cour	nty: Oakfield/Gen	essee Sampling Date: 7/22/2020		
Applicant/Owner: Hecate			State: NY Sampling Point:		
Investigator(s): Andrew Sorci	Section,	Township, Range:	1_20200722_WL47_W2		
Landform (hillslope, terrace,etc.): Toeslope	Local relief (concave, convex, n	one): <u>None</u> Slope (%) <u>0 - 5</u>		
Subregion (LRR or MLRA): LRR L	Lat: 43.108174	Long:7	8.233044 Datum: NAD83		
Soil Map Unit Name: CbA			NWI Classification: PEM		
Are climatic / hyrologic conditions on the site	:ypical for this time of year?	Yes X No	(if no, explain in Remarks.)		
Are Vegetation, Soil, or Hydrology	significantly disturbe	d? Are "Normal C	Circumstances" present? Yes X No		
Are Vegetation, Soil, or Hydrology	naturally problemation	? (if needed, expl	ain any answers in Remarks.)		
SUMMARY OF FINDINGS - Attach site ma	showing sampling poir	t locations, trans	sects, important features, etc.		
Hydrophytic Vegetation Present? Yes X	No Is	the Sampled Area			
Hydric Soil Present? Yes X	No w	ithin a Wetland?	Yes X No		
Wetland Hydrology Present? Yes X		yes, optional Wetla	and Site ID: WL47-2		
Remarks: (Explain alternative procedures here or in a se					
Fallow agricultural field; may have been		ently			
Tallow agricultural field, filay flave been	sprayed by pesticide reco	Citity			
HYDROLOGY					
Wetland Hydrology Indicators:			Secondary Indicators (minimum of two required)		
Primary Indicators (minimum of one is required: c	neck all that apply)		X Surface Soil Cracks (B6)		
X Surface Water (A1)	Water-Stained Leaves (B	9)	Drainage Patterns (B10)		
X High Water Table (A2)	Aquatic Fauna (B13)		Moss Trim Lines (B16)		
X Saturation (A3)	Marl Deposits (B15)		Dry-Season Water Table (C2)		
Water Marks (B1)	Hydrogen Sulfide Odor (C1)	Crayfish Burrows (C8)		
Sediment Deposits (B2)	Oxidized Rhizospheres o	n Living Roots (C3)	X Saturation Visible in Aerial Imagery (C9)		
Drift Deposits (B3)	Presence of Reduced Iro	n (C4)	Stunted or Stressed Plants (D1)		
Algal Mat or Crust (B4)	Recent Iron Reduction in	Tilled Soils (C6)	Geomorphic Position (D2)		
Iron Deposits (B5)	Thin Muck Surface (C7)		Shallow Aquitard (D3)		
Inundation Visible on Aerial Imagery (B7)	Other (Explain in Remark	(S)	Microtopographic Relief (D4)		
Sparsley Vegetated Concave Surface (B8)		FAC-Neutral Test (D5)			
			The Realiantest (BS)		
Surface Water Present? Yes X No	Depth (inches) 1				
Water Table Present? Yes X No	Depth (inches) 5	Wetland H	ydrology Present? Yes X No		
Saturation Present? Yes X No	Depth (inches) 0				
Describe Recorded Data (stream gauge, moni	toring well, aerial photos, r	revious inspections	s), if available:		
2 000 100 11000 1000 2 000 (001 00111 80080) 1110111		. conduction	., ., ., ., ., ., ., ., ., ., ., ., ., .		
Remarks:					

VEGETATION - Use scien	tific names	of plants				Sampling Point: 1_20200722_WL47_W2
Tree Stratum	(Plot Size:	30'radius)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test Worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: 1 (A)
				_= Total Cov	ver	Total Number of Dominant Species Across All Strata: 2 (B) Percent of Dominant Species
						That Are OBL, FACW, or FAC: 50% (A/B)
						Prevalence Index Worksheet:
			Absolute	Dominant	Indicator	OBL species 0 x 1 0
Shrub Stratum	(Plot Size:	15'radius)	% Cover	Species?	Status	FACW species 40 x 2 80
						FAC species 0 x 3 0
				= Total Cov	/er	FACU species 15 x 4 60
						UPL species 0 x 5 0
						Column Totals 55 (A) 140 (B)
						Prevalence Index = B/A = 2.55
						Hydrophytic Vegetation Indicators:
				Dominant		1- Rapid Test For Hydrophytic Vegetation
Herb Stratum	(Plot Size:	5'radius)	% Cover	Species?	Status	2- Dominance Test is > 50%
Cyperus strigosus Abutilon theophrasti			<u>40</u> 15	X X	FACW FACU	X 3- Prevalence Index is =< 3.0
Abutiion theophrasti			<u>15</u> 55	= Total Cov		4- Morphological Adaptations
				_		5- Problematic Hydrophytic Vegetation
						Definitions of Vegetation Strata:
						Tree- Woody plants 3 in. (7.6cm) or more in diameter at breast height (DBH), regardless of height.
						Sapling/Shrub- Woody plants less than 3 in. DBH and greater than or equal to 3.28ft (1m) tall.
						Herb- All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28ft tall.
Woody Vine Stratum	(Plot Size:	30'radius)		Dominant Species?	Indicator Status	Woody Vines- All woody vines greater than 3.28ft in height.
				_= Total Cov	/er	Hydrophytic Vegetation Present? Yes X No
Remarks: (Include photo nu	umbers here	or on a sep	arate shee	t.)		

SOIL Sampling Point: 1_20200722_WL47_W2

Depth	Matrix				Redo	x Featu	res		
(inches	Color	%	Color	%	Туре	Loc	Texture	Remarks	
0-9	2.5Y 3/1	95	10YR 4/6	5	С	М	Clay Loam		
9-16	2.5Y 2.5/1	100					Clay		

Hydric Soil Indicators:		Indicators for Problematic Soils:
Histosol (A1)	Polyvalue Below Surface (B15)2 cm Muck (A10)
Histic Epipedon (A2)	Thin Dark Surface (S9)	Coast Prarie Redox (A16)
Black Histic (A3)	Loamy Mucky Mineral (F1)5 cm Mucky Peat or Peat (S3)
Hydrogen Sulfide (A4)	Loamy Gleyed Matric (F2)	Dark Surface (S7)
Stratified Layers (A5)	Depleted Matrix (F3)	Polyvalue Below Surface (S8)
Depleted Below Dark Surface (A11)	X Redox Dark Surface (F6)	Thin Dark Surface (S9)
Thick Dark Surface (A12)	Depleted Dark Surface (F7	r)Iron-Manganese Masses (F12)
Sandy Mucky Mineral (S1)	Redox Depressions (F8)	Piedmont Floodplain Soils (F19)
Sandy Gleyed Matrix (S4)		Mesic Spodic (TA6)
Sandy Redox (S5)		Red Parent Material (F21)
Stripped Matrix (S6)		Very Shallow Dark Surface (TF12)
Dark Surface (S7)		Other (Explain in Remarks)
Restrictive Layer (if observed):		
Type:		
Type:		Hydric Soil Present? Yes X No
Depth (inches):		

Remarks:

Project/Site: Cider Solar Project	City/Co	ounty: Oakfield/Ger	nessee Sampling Date: 7/22/2020			
Applicant/Owner: Hecate			State: NY Sampling Point:			
Investigator(s): Andrew Sorci	Section	n, Township, Range:	1_20200722_WL48_W1			
Landform (hillslope, terrace,etc.): Dip	Local relie	f (concave, convex, r	none): <u>Linear</u> Slope (%) <u>0 - 1</u>			
Subregion (LRR or MLRA): LRR L	Lat: 43.107837	Long:7	78.232852 Datum: NAD83			
Soil Map Unit Name: CbA			NWI Classification: PEM			
Are climatic / hyrologic conditions on the site t	typical for this time of yea	ar? Yes <u>X</u> No	(if no, explain in Remarks.)			
Are Vegetation, Soil, or Hydrology	significantly disturl	bed? Are "Normal	Circumstances" present? Yes X No			
Are Vegetation, Soil, or Hydrology	naturally problema	atic? (if needed, exp	lain any answers in Remarks.)			
SUMMARY OF FINDINGS - Attach site map	p showing sampling po	oint locations, tran	sects, important features, etc.			
Hydrophytic Vegetation Present? Yes X	No	Is the Sampled Area	a			
Hydric Soil Present? Yes X	No	within a Wetland?	Yes X No			
Wetland Hydrology Present? Yes X		if yes, optional Wet	land Site ID: WL48			
Remarks: (Explain alternative procedures here or in a se	parate report.)					
Along dirt access road	parate reporti,					
HYDROLOGY						
Wetland Hydrology Indicators:			Secondary Indicators (minimum of two required)			
Primary Indicators (minimum of one is required: cl	heck all that apply)		X Surface Soil Cracks (B6)			
X Surface Water (A1)	Water-Stained Leaves	(B9)	Drainage Patterns (B10)			
X High Water Table (A2)	Aquatic Fauna (B13)		Moss Trim Lines (B16)			
X Saturation (A3)	Marl Deposits (B15)		Dry-Season Water Table (C2)			
Water Marks (B1)	Hydrogen Sulfide Odo	r (C1)	Crayfish Burrows (C8)			
Sediment Deposits (B2)	Oxidized Rhizospheres	s on Living Roots (C3)	X Saturation Visible in Aerial Imagery (C9)			
Drift Deposits (B3)	Presence of Reduced I		Stunted or Stressed Plants (D1)			
Algal Mat or Crust (B4)	Recent Iron Reduction		X Geomorphic Position (D2)			
Iron Deposits (B5)	Thin Muck Surface (C7		Shallow Aquitard (D3)			
Inundation Visible on Aerial Imagery (B7)			Microtopographic Relief (D4)			
Sparsley Vegetated Concave Surface (B8)	Other (Explain in Kelli	Other (Explain in Remarks) Microtopographic Relief (D4) X FAC-Neutral Test (D5)				
Sparsiey vegetated concave surface (Bo)			A PAC-Neutral Test (D3)			
Surface Water Present? Yes X No	Depth (inches) 2	_				
Water Table Present? Yes X No	Depth (inches) 0	Wetland H	Hydrology Present? Yes X No			
Saturation Present? Yes X No	Depth (inches) 0	_				
Describe Recorded Data (stream gauge, moni	toring well, aerial photos	previous inspection	ns), if available:			
2 0001.00 1.0001.000 2 000 (001.001.11 80.080) 1.101.11	toring tren, derial priotes	, p. 01.000				
Remarks:						

VEGETATION - Use scie	ntific names of plants				Sampling Point: 1_20200722_wL48_w1
Tree Stratum	(Plot Size: 30'radius)	Absolute I % Cover	Dominant Species?	Indicator Status	Dominance Test Worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: 1 (A)
		=	Total Cov	er	Total Number of Dominant Species Across All Strata: Percent of Dominant Species That Are OBL, FACW, or FAC: 100% (A/B)
					Prevalence Index Worksheet: OBL species 5 x 1 5
Shrub Stratum	(Plot Size:15'radius)	Absolute [% Cover	Species?	Status	FACW species 50 x 2 100 FAC species 0 x 3 0
		=	- Total Cov	er	FACU species 0 x 4 0 UPL species 0 x 5 0 Column Totals 55 (A) 105 (B Prevalence Index = B/A = 1.91
Herb Stratum Agrostis stolonifera Typha angustifolia	(Plot Size:5'radius)	<u>50</u> 5	Dominant Species? X = Total Cov	Status FACW OBL	Hydrophytic Vegetation Indicators: X 1- Rapid Test For Hydrophytic Vegetation X 2- Dominance Test is > 50% X 3- Prevalence Index is =< 3.0 4- Morphological Adaptations 5- Problematic Hydrophytic Vegetation
Woody Vine Stratum	(Plot Size: _30'radius_)	Absolute I % Cover		Indicator Status	Definitions of Vegetation Strata: Tree- Woody plants 3 in. (7.6cm) or more in diameter at breast height (DBH), regardless of height. Sapling/Shrub- Woody plants less than 3 in. DBH and greater than or equal to 3.28ft (1m) tall. Herb- All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28ft tall. Woody Vines- All woody vines greater than 3.28ft in height.
		=======================================	Total Cov	er	Hydrophytic Vegetation Present? Yes X No
Remarks: (Include photo n	umbers here or on a sep	arate sheet.))		

SOIL Sampling Point: 1_20200722_WL48_W1

Depth	Matrix				Redo	ox Featu	res			
(inches	Color	%	Color	%	Type	Loc	Texture	Remarks		
0-12	10YR 4/2	80	10YR 5/8	20	С	М	Clay			
Hydric So	il Indicators:							Indicators for Problematic Soils:		
Hist	tosol (A1)				Polyvalu	e Below S	Surface (B15)	2 cm Muck (A10)		
Hist	tic Epipedon (A2)			Thin Dar	k Surface	e (S9)	Coast Prarie Redox (A16)		
Blac	ck Histic (A3)				Loamy N	∕lucky Mi	neral (F1)	5 cm Mucky Peat or Peat (S3)		
Нус	lrogen Sulfide	(A4)			Loamy G	Gleyed Ma	atric (F2)	Dark Surface (S7)		
Stra	atified Layers	(A5)		X	Deplete	d Matrix ((F3)	Polyvalue Below Surface (S8)		
Dep	oleted Below I	Dark Su	rface (A11)		Redox D	ark Surfa	ce (F6)	Thin Dark Surface (S9)		
Thic	ck Dark Surfac	e (A12)			Deplete	d Dark Su	rface (F7)	Iron-Manganese Masses (F12)		
San	dy Mucky Mii	neral (S	1)		Redox D	epressior	ns (F8)	Piedmont Floodplain Soils (F19)		
San	dy Gleyed Ma	atrix (S4	.)					Mesic Spodic (TA6)		
San	dy Redox (S5))						Red Parent Material (F21)		
Stri	pped Matrix (S6)						Very Shallow Dark Surface (TF12)		
Dar	k Surface (S7))						Other (Explain in Remarks)		
Restrictiv	e Layer (if obs	erved):								
		Type:					Hydri	c Soil Present? Yes X No		
	Depth (in	_					,	<u> </u>		
Remarks	s:									

Project/Site: Cider Solar Project	City/County: Oakfield/Ger	nessee Sampling Date: 7/22/2020					
Applicant/Owner: Hecate		State: NY Sampling					
Investigator(s): Andrew Sorci	igator(s): Andrew Sorci Section, Township, Rang						
Landform (hillslope, terrace,etc.): Rise	Local relief (concave, convex, ı	none): <u>None</u> Slope (%) <u>0 - 3</u>					
Subregion (LRR or MLRA): LRR L	Lat: 43.107831 Long:7	78.232790 Datum: NAD83					
Soil Map Unit Name: CbA		NWI Classification: UPL					
Are climatic / hyrologic conditions on the site t	cypical for this time of year? Yes X No	(if no, explain in Remarks.)					
Are Vegetation, Soil, or Hydrology	significantly disturbed? Are "Normal	Circumstances" present? Yes X No					
Are Vegetation, Soil, or Hydrology	naturally problematic? (if needed, exp	lain any answers in Remarks.)					
SUMMARY OF FINDINGS - Attach site map	showing sampling point locations, trar	sects, important features, etc.					
Hydrophytic Vegetation Present? Yes	No X Is the Sampled Area	i					
Hydric Soil Present? Yes	No X within a Wetland?	Yes No X					
Wetland Hydrology Present? Yes	No X if yes, optional Wet	land Site ID:					
Remarks: (Explain alternative procedures here or in a se							
HYDROLOGY							
Wetland Hydrology Indicators:		Secondary Indicators (minimum of two required)					
Primary Indicators (minimum of one is required: cl	heck all that apply)	Surface Soil Cracks (B6)					
Surface Water (A1)	Water-Stained Leaves (B9)	Drainage Patterns (B10)					
High Water Table (A2)	Aquatic Fauna (B13)	Moss Trim Lines (B16)					
Saturation (A3)	Marl Deposits (B15)	Dry-Season Water Table (C2)					
Water Marks (B1)	Hydrogen Sulfide Odor (C1)	Crayfish Burrows (C8)					
Sediment Deposits (B2)	Oxidized Rhizospheres on Living Roots (C3)	Saturation Visible in Aerial Imagery (C9)					
Drift Deposits (B3)	Presence of Reduced Iron (C4)	Stunted or Stressed Plants (D1)					
Algal Mat or Crust (B4)	Recent Iron Reduction in Tilled Soils (C6)	Geomorphic Position (D2)					
Iron Deposits (B5)	Thin Muck Surface (C7)	Shallow Aquitard (D3)					
Inundation Visible on Aerial Imagery (B7)	Other (Explain in Remarks)	Microtopographic Relief (D4)					
Sparsley Vegetated Concave Surface (B8)		FAC-Neutral Test (D5)					
Surface Water Present? Yes No X	Depth (inches)						
Water Table Present? Yes No X	Depth (inches) Wetland I	Hydrology Present? Yes No X					
Saturation Present? Yes No X	Depth (inches)						
Describe Recorded Data (stream gauge, monit	toring well, aerial photos, previous inspection	ns), if available:					
Remarks:							

VEGETATION - Use scientific names of plants Sampling Point: 1_20200722_WL47/ W48 U1 Dominance Test Worksheet: Absolute Dominant Indicator (Plot Size: 30'radius) % Cover Species? Status **Tree Stratum Number of Dominant Species** That Are OBL, FACW, or FAC: (A) = Total Cover **Total Number of Dominant** (B) Species Across All Strata: 5 Percent of Dominant Species (A/B) That Are OBL, FACW, or FAC: 0% **Prevalence Index Worksheet:** x 1 0 **OBL** species Absolute Dominant Indicator **FACW** species 20 40 (Plot Size: 15'radius) Status x 2 **Shrub Stratum** % Cover Species? FAC species 10 30 х3 = Total Cover **FACU** species 100 x 4 400 5 **UPL** species x 5 25 Column Totals 135 (A) 495 (B) Prevalence Index = B/A = 3.67 **Hydrophytic Vegetation Indicators:** Absolute Dominant Indicator 1- Rapid Test For Hydrophytic Vegetation **Herb Stratum** (Plot Size: 5'radius) % Cover Species? Status 2- Dominance Test is > 50% 25 Lotus corniculatus Χ **FACU** 3- Prevalence Index is =< 3.0 Χ Phleum pratense 20 **FACU** 4- Morphological Adaptations 20 Χ Dactylis glomerata **FACU** Cirsium arvense 15 Χ **FACU** 5- Problematic Hydrophytic Vegetation Trifolium pratense 15 Х **FACU** Toxicodendron radicans 10 FAC **Definitions of Vegetation Strata:** Agrostis gigantea 10 **FACW** Tree- Woody plants 3 in. (7.6cm) or more in diameter at Phalaris arundinacea 10 **FACW** breast height (DBH), regardless of height. UPL Daucus carota 5 5 FACU Cichorium intybus Sapling/Shrub- Woody plants less than 3 in. DBH and 135 = Total Cover greater than or equal to 3.28ft (1m) tall. Herb- All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28ft tall. Absolute Dominant Indicator Woody Vines- All woody vines greater than 3.28ft in (Plot Size: 30'radius) **Woody Vine Stratum** % Cover Species? Status height. = Total Cover Hydrophytic Vegetation Present? Yes ____ No __X Remarks: (Include photo numbers here or on a separate sheet.)

SOIL								Sampling Point: 1_20200722_WL47/		
Depth Matrix			Redo	x Featu	ires	W48_U1				
(inches	Color	%	Color	%	Type	Loc	Texture	Remarks		
0-11	10YR 4/3	99	10YR 6/2	1	С	М	Sandy Clay Loam			
11-20	10YR 4/3	95	10YR 5/8	5	С	М	Sandy Clay Loam			
Hudric Sc	oil Indicators:							Indicators for Problematic Soils:		
-	tosol (A1)				Polyvalu	e Below	Surface (B15)	2 cm Muck (A10)		
	tic Epipedon (A2)			Thin Dar		· · ·	Coast Prarie Redox (A16)		
	ck Histic (A3)	,			•		ineral (F1)	5 cm Mucky Peat or Peat (S3)		
	drogen Sulfide	(A4)				•	atric (F2)	Dark Surface (S7)		
	atified Layers				Depleted	-		Polyvalue Below Surface (S8)		
	pleted Below I		rface (A11)		Redox Da			Thin Dark Surface (S9)		
	ck Dark Surfac				•		urface (F7)	Iron-Manganese Masses (F12)		
	ndy Mucky Mii				Redox De			Piedmont Floodplain Soils (F19)		
	ndy Gleyed Ma	-	-			•		Mesic Spodic (TA6)		
	ndy Redox (S5)	-	•					Red Parent Material (F21)		
Stripped Matrix (S6)							Very Shallow Dark Surface (TF12)			
	rk Surface (S7)							Other (Explain in Remarks)		
Restrictiv	ve Layer (if obs	erved):								
		Type:					Hydric S	Soil Present? Yes No X		
	Depth (in	ches):					,			
		_								
Remarks	s:									

Project/Site: Cider Solar Project	City/Co	ounty: Oakfield/Gen	essee S	ampling Date: 7/22/2020	
Applicant/Owner: Hecate	<u>.</u>	·	State: NY	Sampling Point:	
Investigator(s): Andrew Sorci	Sectio	Section, Township, Range: 1_20200722_WL49_W1			
Landform (hillslope, terrace,etc.): Dip	Local relie	ef (concave, convex, n	ione): None	Slope (%) <u>0 - 2</u>	
Subregion (LRR or MLRA): LRR L	Lat: 43.107692	Long:7	8.235515	Datum: NAD83	
Soil Map Unit Name: CbA		_	NWI Classific	ation: PFO	
Are climatic / hyrologic conditions on the site t	ypical for this time of ye	ar? Yes <u>X</u> No	(if no, ex	plain in Remarks.)	
Are Vegetation , Soil , or Hydrology	significantly distur	bed? Are "Normal (Circumstances" p	present? Yes X No	
Are Vegetation, Soil, or Hydrology	naturally problems	atic? (if needed, expl	lain any answers ir	ı Remarks.)	
SUMMARY OF FINDINGS - Attach site map	o showing sampling po	oint locations, tran	sects. importa	nt features, etc.	
Hydrophytic Vegetation Present? Yes X		Is the Sampled Area			
Hydric Soil Present? Yes X	No No	within a Wetland?	Yes	s X No	
· —		if yes, optional Wetl		WL49	
Wetland Hydrology Present? Yes X		Tryes, optional weth			
Remarks: (Explain alternative procedures here or in a se	parate report.)				
HYDROLOGY					
Wetland Hydrology Indicators:				tors (minimum of two required)	
Primary Indicators (minimum of one is required: cl	neck all that apply)		Surface Soil Cracks (B6)		
Surface Water (A1)	Water-Stained Leaves	s (B9)	Drainage Patterns (B10)		
High Water Table (A2)	Aquatic Fauna (B13)		X Moss Trim Lines (B16)		
Saturation (A3)	Marl Deposits (B15)		Dry-Season Water Table (C2)		
Water Marks (B1)	Hydrogen Sulfide Odo	or (C1)	Crayfish Burrows (C8)		
Sediment Deposits (B2)	Oxidized Rhizosphere	s on Living Roots (C3)	Saturation \	/isible in Aerial Imagery (C9)	
Drift Deposits (B3)	Presence of Reduced	Iron (C4)	Stunted or S	Stressed Plants (D1)	
Algal Mat or Crust (B4)	Recent Iron Reduction	n in Tilled Soils (C6)	Geomorphi	c Position (D2)	
Iron Deposits (B5)	Thin Muck Surface (C	7)	Shallow Aqu	uitard (D3)	
Inundation Visible on Aerial Imagery (B7)	Other (Explain in Rem			raphic Relief (D4)	
Sparsley Vegetated Concave Surface (B8)	Other (Explain in Nem	arro,	X FAC-Neutra		
Surface Water Present? Yes NoX	Depth (inches)	_			
Water Table Present? Yes NoX	Depth (inches)	Wetland H	lydrology Presen	t? Yes X No	
Saturation Present? Yes No X	Depth (inches)	_			
Describe Recorded Data (stream gauge, monit	toring well, aerial photos	s, previous inspection	s), if available:		
Remarks:					
nemarks.					

VEGETATION - Use scientific names of plants Sampling Point: 1_20200722_WL49_W1 Absolute Dominant Indicator **Dominance Test Worksheet:** (Plot Size: 30'radius) % Cover Species? Status **Tree Stratum Number of Dominant Species** Χ FAC That Are OBL, FACW, or FAC: 6 (A) Acer rubrum 65 Ulmus americana 30 Χ **FACW Total Number of Dominant** 95 = Total Cover (B) Species Across All Strata: 6 Percent of Dominant Species (A/B) That Are OBL, FACW, or FAC: 100% **Prevalence Index Worksheet:** x 1 15 **OBL** species 15 Absolute Dominant Indicator **FACW** species 65 130 (Plot Size: 15'radius) % Cover Species? Status x 2 **Shrub Stratum FAC** species 70 210 х3 Lindera benzoin 20 Χ **FACW** 20 = Total Cover **FACU** species 0 x 4 0 **UPL** species 0 x 5 0 Column Totals 150 (A) 355 (B) Prevalence Index = B/A = 2.37 **Hydrophytic Vegetation Indicators:** Absolute Dominant Indicator 1- Rapid Test For Hydrophytic Vegetation **Herb Stratum** (Plot Size: 5'radius) % Cover Species? Status X 2- Dominance Test is > 50% Dryopteris carthusiana 15 **FACW** X 3- Prevalence Index is =< 3.0 15 OBL Saururus cernuus Х 4- Morphological Adaptations 30 = Total Cover 5- Problematic Hydrophytic Vegetation **Definitions of Vegetation Strata:** Tree- Woody plants 3 in. (7.6cm) or more in diameter at breast height (DBH), regardless of height. Sapling/Shrub- Woody plants less than 3 in. DBH and greater than or equal to 3.28ft (1m) tall. Herb- All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28ft tall. Absolute Dominant Indicator Woody Vines- All woody vines greater than 3.28ft in (Plot Size: 30'radius) Species? **Woody Vine Stratum** % Cover Status height. **FAC** Vitis riparia Χ 5 = Total Cover Hydrophytic Vegetation Present? Yes X No ___

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

SOIL Sampling Point: 1_20200722_WL49_W

OIL								Sampling Point. 1_20200722_wt49_w		
Depth	Matrix				Redo	x Featu	res			
(inches	Color	%	Color	%	Туре	Loc	Texture	Remarks		
0-7	10YR 2/1	100					Sandy Clay Loam			
7-16	10YR 6/1	85	10YR 6/6	15	С	M	Sandy Clay Loam			
	,		, .				,			
Hydric So	il Indicators:							Indicators for Problematic Soils:		
-	tosol (A1)				Polyvalu	e Below	Surface (B15)	2 cm Muck (A10)		
Histic Epipedon (A2)				Thin Dar	k Surface	e (S9)	Coast Prarie Redox (A16)			
Black Histic (A3)				Loamy N	lucky Mi	neral (F1)	5 cm Mucky Peat or Peat (S3)			
Hydrogen Sulfide (A4)					Loamy G	leyed Ma	atric (F2)	Dark Surface (S7)		
Stratified Layers (A5)				Χ	Depleted	d Matrix	(F3)	Polyvalue Below Surface (S8)		
Dep	oleted Below	Dark Su	rface (A11)		Redox D	ark Surfa	ce (F6)	Thin Dark Surface (S9)		
 Thic	ck Dark Surfac	ce (A12)		Depleted Dark Surface (F7)				Iron-Manganese Masses (F12)		
San	dy Mucky Mi	neral (S	1)	Redox Depressions (F8)				Piedmont Floodplain Soils (F19)		
San	dy Gleyed Ma	atrix (S4)					Mesic Spodic (TA6)		
San	dy Redox (S5))						Red Parent Material (F21)		
Stri	pped Matrix ((S6)						Very Shallow Dark Surface (TF12)		
Dar	k Surface (S7))						Other (Explain in Remarks)		
Restrictiv	e Layer (if obs	erved):								
		Type:					- اسام ال	Sail Dracant? Vac. V. N		
Depth (inches):						Hydric	Soil Present? Yes X No			
	Deptii (ir	- -								
Remarks	5:						l l			

Project/Site: Cider Solar Project	City/County: Oakfield/Gen	essee Sampling Date: 7/22/2020			
Applicant/Owner: Hecate	State: NY Sampling				
Investigator(s): Andrew Sorci	Section, Township, Range: Point:1_20200722_WL49				
Landform (hillslope, terrace,etc.): Rise	Local relief (concave, convex, n	one): <u>Convex</u> Slope (%) <u>1 - 3</u>			
Subregion (LRR or MLRA): LRR L	Lat: <u>43.107899</u> Long: <u>-7</u>	8.235469 Datum: NAD83			
Soil Map Unit Name: CbA		NWI Classification: UPL			
Are climatic / hyrologic conditions on the site					
Are Vegetation, Soil, or Hydrolog	·				
Are Vegetation, Soil, or Hydrolog	gy naturally problematic? (if needed, expl	lain any answers in Remarks.)			
SUMMARY OF FINDINGS - Attach site m	ap showing sampling point locations, trans	sects, important features, etc.			
Hydrophytic Vegetation Present? Yes	No X Is the Sampled Area				
Hydric Soil Present? Yes	No X within a Wetland?	Yes No X			
Wetland Hydrology Present? Yes	No X if yes, optional Wetla				
Remarks: (Explain alternative procedures here or in a					
LINDROLOGY					
HYDROLOGY Wetland Hydrology Indicators:		Secondary Indicators (minimum of two required)			
Primary Indicators (minimum of one is required:	check all that apply)	Surface Soil Cracks (B6)			
Surface Water (A1)	Water-Stained Leaves (B9)	Drainage Patterns (B10)			
High Water Table (A2)	Aquatic Fauna (B13)	Moss Trim Lines (B16)			
Saturation (A3)	Marl Deposits (B15)	Dry-Season Water Table (C2)			
Water Marks (B1)	Hydrogen Sulfide Odor (C1)	Crayfish Burrows (C8)			
Sediment Deposits (B2)	Oxidized Rhizospheres on Living Roots (C3)	Saturation Visible in Aerial Imagery (C9)			
Drift Deposits (B3)	Presence of Reduced Iron (C4)	Stunted or Stressed Plants (D1)			
Algal Mat or Crust (B4)	Recent Iron Reduction in Tilled Soils (C6)	Geomorphic Position (D2)			
Iron Deposits (B5)	Thin Muck Surface (C7)	Shallow Aquitard (D3)			
Inundation Visible on Aerial Imagery (B7)	Other (Explain in Remarks)	Microtopographic Relief (D4)			
Sparsley Vegetated Concave Surface (B8)		FAC-Neutral Test (D5)			
Surface Water Present? Yes No X	(Depth (inches)				
Water Table Present? Yes No X		lydrology Present? Yes No X			
Saturation Present? Yes No X	<u> </u>	, a. c. c. g, c. c			
	nitoring well, aerial photos, previous inspection	s), if available:			
Remarks:					

VEGETATION - Use scientific names of plants Sampling Point: 1_20200722_WL49_U1

VEGETATION - Use scien	unc names	oi piants				Janipii		1_204	200722_W	L49_U1
Tree Stratum	(Plot Size:	30'radius)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test V Number of Domi				
Fraxinus pennsylvanica	l		40	Χ	FACW	That Are OBL, FA	•		3	(A)
Ulmus americana			40	Χ	FACW	Total Numbe	r of Dom	inant		_
Fagus grandifolia			10		FACU	Species Ac			8	(B)
			90	_= Total Cov	⁄er	Percent of Don	ninant Sn	ecies –		_
						That Are OBL,			37.5%	(A/B)
						Prevalence Index \	Norkshe	et:		
						OBL species	0	x 1	0	
Shrub Stratum	(Plot Size:	15'radius)	Absolute % Cover	Dominant Species?	Indicator Status	FACW species	85	x 2	170	
Rhamnus cathartica			25	Х	FAC	FAC species	30	х 3	90	
Unknown species			10	Χ	UNK	FACU species	60	x 4	240	
Lonicera morrowii			10	Х	FACU	_		-		
Rubus idaeus			10	Χ	FACU	UPL species	0	x 5	0	
Lindera benzoin			5		FACW	Column Totals	175	(A)	500	(B
Rosa multiflora			5		FACU	Prevalenc	e Index =	B/A =	2.86	
			65	_= Total Cov	/er			-		
						Hydrophytic Vege	tation In	dicator	s:	
			Absolute	Dominant	Indicator	1- Rapid Tes	t For Hyd	drophyt	ic Vegeta	tion
Herb Stratum	(Plot Size:	5'radius)	% Cover	Species?	Status	2- Dominano	re Test is	> 50%		
Alliaria petiolata			15	Χ	FACU					
Circaea canadensis			10	Х	FACU	X 3- Prevalenc	e Index i	s =< 3.C)	
Ranunculus hispidus			5		FAC	4- Morpholo	ogical Ada	aptatio	ns	
			30	_= Total Cov	ver	5- Problema	tic Hydro	phytic	Vegetatio	n
						Definitions of Vegeta	ation Stra	ta:		
						Tree- Woody plants 3 breast height (DBH),				neter at
						Sapling/Shrub- Wood greater than or equa				and
						Herb- All herbaceous size, and woody plan				less of
Woody Vine Stratum	(Plot Size:	30'radius)	Absolute % Cover	Dominant Species?	Indicator Status	Woody Vines- All wo height.	ody vines	greater	than 3.28f	t in
				= Total Cov	·or	Hydroph				

Unknown apple species

SOIL Sampling Point: 1_20200722_WL49_U1 Depth Matrix **Redox Features** (inches Color % Color % Texture Remarks Type Loc 0-12 7.5YR 3/1 100 Sandy Loam 12-20 7.5YR 3/1 99 7.5YR 4/6 C Μ Sandy Clay Loam **Hydric Soil Indicators:** Indicators for Problematic Soils: Histosol (A1) Polyvalue Below Surface (B15) 2 cm Muck (A10) Histic Epipedon (A2) Thin Dark Surface (S9) Coast Prarie Redox (A16) Black Histic (A3) Loamy Mucky Mineral (F1) 5 cm Mucky Peat or Peat (S3) Hydrogen Sulfide (A4) Loamy Gleyed Matric (F2) Dark Surface (S7) Stratified Layers (A5) Depleted Matrix (F3) Polyvalue Below Surface (S8) Depleted Below Dark Surface (A11) Redox Dark Surface (F6) Thin Dark Surface (S9) Thick Dark Surface (A12) Depleted Dark Surface (F7) Iron-Manganese Masses (F12) Sandy Mucky Mineral (S1) Redox Depressions (F8) Piedmont Floodplain Soils (F19) Sandy Gleyed Matrix (S4) Mesic Spodic (TA6) Sandy Redox (S5) Red Parent Material (F21) Stripped Matrix (S6) Very Shallow Dark Surface (TF12) Dark Surface (S7) Other (Explain in Remarks) Restrictive Layer (if observed): Type: Hydric Soil Present? Yes No Χ Depth (inches): Remarks:

Project/Site: Cider Solar Project	City/County: Oakfield/Ger	nnesee Sampling Date: 7/23/2020			
Applicant/Owner: Hecate		State: NY Sampling			
Investigator(s): Andrew Sorci	Section, Township, Range:	tion, Township, Range: Point:1_07232020_WL50_U			
Landform (hillslope, terrace,etc.): Terrace	Local relief (concave, convex, ı	none): <u>Convex</u> Slope (%) <u>0 - 15</u>			
Subregion (LRR or MLRA): LRR L	Lat: 43.099432 Long:7	78.225268 Datum: <u>NAD83</u>			
Soil Map Unit Name: Ma		NWI Classification: UPL			
Are climatic / hyrologic conditions on the site t	typical for this time of year? Yes X No	(if no, explain in Remarks.)			
Are Vegetation, Soil, or Hydrology	significantly disturbed? Are "Normal	Circumstances" present? Yes X No			
Are Vegetation, Soil, or Hydrology	naturally problematic? (if needed, exp	lain any answers in Remarks.)			
SUMMARY OF FINDINGS - Attach site ma	p showing sampling point locations, trar	sects, important features, etc.			
Hydrophytic Vegetation Present? Yes	No X Is the Sampled Area				
Hydric Soil Present? Yes	No X within a Wetland?	Yes No X			
Wetland Hydrology Present? Yes	No X if yes, optional Wet	land Site ID:			
Remarks: (Explain alternative procedures here or in a se		-			
HYDROLOGY					
Wetland Hydrology Indicators:		Secondary Indicators (minimum of two required)			
Primary Indicators (minimum of one is required: cl	heck all that apply)	Surface Soil Cracks (B6)			
Surface Water (A1)	Water-Stained Leaves (B9)	Drainage Patterns (B10)			
High Water Table (A2)	Aquatic Fauna (B13)	Moss Trim Lines (B16)			
Saturation (A3)	Marl Deposits (B15)	Dry-Season Water Table (C2)			
Water Marks (B1)	Hydrogen Sulfide Odor (C1)	Crayfish Burrows (C8)			
Sediment Deposits (B2)	Oxidized Rhizospheres on Living Roots (C3)	Saturation Visible in Aerial Imagery (C9)			
Drift Deposits (B3)	Presence of Reduced Iron (C4)	Stunted or Stressed Plants (D1)			
Algal Mat or Crust (B4)	Recent Iron Reduction in Tilled Soils (C6)	Geomorphic Position (D2)			
Iron Deposits (B5)	Thin Muck Surface (C7)	Shallow Aquitard (D3)			
Inundation Visible on Aerial Imagery (B7)	Other (Explain in Remarks)	Microtopographic Relief (D4)			
Sparsley Vegetated Concave Surface (B8)		FAC-Neutral Test (D5)			
Surface Water Present? Yes No X	Depth (inches)				
Water Table Present? Yes No X	Depth (inches) Wetland H	Hydrology Present? Yes No X			
Saturation Present? Yes No X	Depth (inches)				
Describe Recorded Data (stream gauge, moni	toring well, aerial photos, previous inspection	ns), if available:			
Remarks:					

VEGETATION - Use scientific names of plants Sampling Point: 1_07232020_WL50_U1 Absolute Dominant Indicator **Dominance Test Worksheet:** (Plot Size: 30'radius) % Cover Species? Status **Tree Stratum Number of Dominant Species** 10 Χ FACU That Are OBL, FACW, or FAC: (A) Juglans cinerea 10 = Total Cover **Total Number of Dominant** Species Across All Strata: (B) 6 Percent of Dominant Species That Are OBL, FACW, or FAC: 16.7% (A/B) **Prevalence Index Worksheet:** 0 x 1 **OBL** species Absolute Dominant Indicator **FACW** species x 2 0 (Plot Size: 15'radius) % Cover Species? Status **Shrub Stratum** FAC species 75 FACU 25 х3 Rubus idaeus 25 Χ Lonicera morrowii 10 Χ **FACU FACU** species 90 x 4 360 35 = Total Cover **UPL** species 0 x 5 0 Column Totals 115 (A) 435 (B) Prevalence Index = B/A = 3.78 **Hydrophytic Vegetation Indicators:** Absolute Dominant Indicator 1- Rapid Test For Hydrophytic Vegetation **Herb Stratum** (Plot Size: 5'radius) % Cover Species? Status 2- Dominance Test is > 50% 40 **FACU** Solidago canadensis 3- Prevalence Index is =< 3.0 20 Χ Euthamia graminifolia **FAC** 4- Morphological Adaptations Symphyotrichum lateriflorum 5 **FAC** 65 = Total Cover 5- Problematic Hydrophytic Vegetation **Definitions of Vegetation Strata:** Tree- Woody plants 3 in. (7.6cm) or more in diameter at breast height (DBH), regardless of height. Sapling/Shrub- Woody plants less than 3 in. DBH and greater than or equal to 3.28ft (1m) tall. Herb- All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28ft tall. Absolute Dominant Indicator Woody Vines- All woody vines greater than 3.28ft in (Plot Size: 30'radius) % Cover Species? **Woody Vine Stratum** Status height. Parthenocissus quinquefolia FACU Χ = Total Cover Hydrophytic Vegetation Present? Yes ____ No _X

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

SOIL Sampling Point: 1_07232020_WL50_U1 Depth Matrix **Redox Features** (inches % Color Color % Type Texture Remarks Loc 0-12 10YR 3/2 100 Sandy Loam **Hydric Soil Indicators:** Indicators for Problematic Soils: Histosol (A1) Polyvalue Below Surface (B15) 2 cm Muck (A10) Histic Epipedon (A2) Thin Dark Surface (S9) Coast Prarie Redox (A16) Black Histic (A3) Loamy Mucky Mineral (F1) 5 cm Mucky Peat or Peat (S3) Hydrogen Sulfide (A4) Loamy Gleyed Matric (F2) Dark Surface (S7) Stratified Layers (A5) Depleted Matrix (F3) Polyvalue Below Surface (S8) Depleted Below Dark Surface (A11) Redox Dark Surface (F6) Thin Dark Surface (S9) Thick Dark Surface (A12) Depleted Dark Surface (F7) Iron-Manganese Masses (F12) Sandy Mucky Mineral (S1) Redox Depressions (F8) Piedmont Floodplain Soils (F19) Sandy Gleyed Matrix (S4) Mesic Spodic (TA6) Sandy Redox (S5) Red Parent Material (F21) Stripped Matrix (S6) Very Shallow Dark Surface (TF12) Dark Surface (S7) Other (Explain in Remarks) Restrictive Layer (if observed): Type: Rock Hydric Soil Present? Yes No Χ Depth (inches): 12 Remarks:

Project/Site: Cider Solar Project	City/Co	ounty: Oakfield/Gen	iessee	Sampling Date: 7/23/2020	
Applicant/Owner: Hecate		·	State: NY	Sampling Point:	
Investigator(s): Andrew Sorci	Sectio	on, Township, Range: 1_07232020_WL51_W1			
Landform (hillslope, terrace,etc.): Toeslope	Local relie	ef (concave, convex, r	none): None	Slope (%) 0 - 5	
Subregion (LRR or MLRA): LRR L	Lat: 43.106205	Long: -7	78.235031	Datum: NAD83	
Soil Map Unit Name: Ma			NWI Classif	fication: PFO	
Are climatic / hyrologic conditions on the site t	ypical for this time of ye	ar? Yes <u>X</u> No	(if no, o	explain in Remarks.)	
Are Vegetation , Soil , or Hydrology	significantly distur	bed? Are "Normal (Circumstances'	'present? Yes X No	
Are Vegetation, Soil, or Hydrology	naturally problema	atic? (if needed, exp	lain any answers	in Remarks.)	
SUMMARY OF FINDINGS - Attach site map	showing sampling no	nint locations tran	sects import	rant features, etc	
Hydrophytic Vegetation Present? Yes X	No	Is the Sampled Area		ant reacures, etc.	
		within a Wetland?		'es X No	
	No	if was antional Wat		WL51	
Wetland Hydrology Present? Yes X	No	if yes, optional Wetl	and site ib.		
Remarks: (Explain alternative procedures here or in a sep	parate report.)				
HYDROLOGY					
Wetland Hydrology Indicators:			Secondary India	cators (minimum of two required)	
Primary Indicators (minimum of one is required: ch	neck all that apply)			oil Cracks (B6)	
Surface Water (A1)	Water-Stained Leaves	s (B9)	Drainage Patterns (B10)		
High Water Table (A2)	Aquatic Fauna (B13)	,	X Moss Trim Lines (B16)		
Saturation (A3)	Marl Deposits (B15)		Dry-Season Water Table (C2)		
Water Marks (B1)	Hydrogen Sulfide Odo	or (C1)	Crayfish Burrows (C8)		
Sediment Deposits (B2)	Oxidized Rhizosphere			n Visible in Aerial Imagery (C9)	
Drift Deposits (B3)	Presence of Reduced			r Stressed Plants (D1)	
Algal Mat or Crust (B4)	Recent Iron Reduction	` '		hic Position (D2)	
Iron Deposits (B5)	Thin Muck Surface (C			equitard (D3)	
Inundation Visible on Aerial Imagery (B7)	Other (Explain in Rem	arks)		ographic Relief (D4)	
Sparsley Vegetated Concave Surface (B8)			FAC-Neut	ral Test (D5)	
Surface Water Present? Yes NoX	Depth (inches)	_			
Water Table Present? Yes No X	Depth (inches)	Wetland H	lydrology Prese	ent? Yes X No	
Saturation Present? Yes No X	Depth (inches)	_			
Describe Recorded Data (stream gauge, monit	coring well, aerial photos	, previous inspection	ıs), if available:		
Remarks:					

VEGETATION - Use scientific names of plants Sampling Point: 1_07232020_WL51_W1 Absolute Dominant Indicator **Dominance Test Worksheet:** (Plot Size: 30'radius) % Cover Species? Status **Tree Stratum Number of Dominant Species** 50 Χ FAC That Are OBL, FACW, or FAC: (A) Acer rubrum Ulmus americana 25 Χ **FACW Total Number of Dominant** Acer saccharinum 25 Χ **FACW** Species Across All Strata: (B) 6 10 Fraxinus pennsylvanica **FACW** Percent of Dominant Species 110 = Total Cover That Are OBL, FACW, or FAC: 66.7% (A/B) **Prevalence Index Worksheet:** 0 x 1 **OBL** species Absolute Dominant Indicator **FACW** species 60 x 2 120 (Plot Size: 15'radius) **Shrub Stratum** % Cover Species? Status **FAC** species 70 210 х3 = Total Cover **FACU** species 35 x 4 140 **UPL** species 0 x 5 0 Column Totals 165 (A) 470 (B) Prevalence Index = B/A = 2.85 **Hydrophytic Vegetation Indicators:** Absolute Dominant Indicator 1- Rapid Test For Hydrophytic Vegetation **Herb Stratum** (Plot Size: 5'radius) % Cover Species? Status X 2- Dominance Test is > 50% 25 **FACU** Alliaria petiolata Χ X 3- Prevalence Index is =< 3.0 Χ FAC Toxicodendron radicans 10 4- Morphological Adaptations 5 **FAC** Geum canadense Persicaria virginiana 5 **FAC** 5- Problematic Hydrophytic Vegetation Geranium robertianum 5 **FACU** 50 = Total Cover **Definitions of Vegetation Strata:** Tree- Woody plants 3 in. (7.6cm) or more in diameter at breast height (DBH), regardless of height. Sapling/Shrub- Woody plants less than 3 in. DBH and greater than or equal to 3.28ft (1m) tall. Herb- All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28ft tall. Absolute Dominant Indicator Woody Vines- All woody vines greater than 3.28ft in (Plot Size: 30'radius) Species? **Woody Vine Stratum** % Cover Status height. Parthenocissus quinquefolia FACU Χ 5 = Total Cover Hydrophytic Vegetation

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

Present? Yes X No ____

SOIL Sampling Point: 1_07232020_WL51_W1

5										
Depth	Matrix			0/		x Featur				
(inches	Color	%	Color	%	Type	Loc	Texture	Remarks		
0-13	10YR 2/1	100					Sandy Loam			
13-18	2.5Y 6/1	85	2.5Y 6/1	15	С	M	Loamy Sand			
Hydric Sc	oil Indicators:							Indicators for Problematic Soils:		
-	tosol (A1)				Polyvalu	e Below S	urface (B15)	2 cm Muck (A10)		
Histic Epipedon (A2)				Thin Dar	k Surface	(S9)	Coast Prarie Redox (A16)			
Black Histic (A3)				Loamy N	lucky Min	eral (F1)	5 cm Mucky Peat or Peat (S3)			
Hydrogen Sulfide (A4)				Loamy G	leyed Ma	tric (F2)	Dark Surface (S7)			
Stra	atified Layers	(A5)			Depleted	d Matrix (f	- 3)	Polyvalue Below Surface (S8)		
X De _l	pleted Below	Dark Su	rface (A11)		Redox D	ark Surfac	e (F6)	Thin Dark Surface (S9)		
Thi	ck Dark Surfa	ce (A12))		Depleted	d Dark Sur	face (F7)	Iron-Manganese Masses (F12)		
Sar	ndy Mucky Mi	neral (S	1)		Redox D	epression	s (F8)	Piedmont Floodplain Soils (F19)		
Sar	ndy Gleyed Ma	atrix (S4	.)					Mesic Spodic (TA6)		
Sar	ndy Redox (S5)						Red Parent Material (F21)		
Stri	ipped Matrix ((S6)						Very Shallow Dark Surface (TF12)		
Dar	rk Surface (S7)						Other (Explain in Remarks)		
							1			
Restrictiv	ve Layer (if obs	erved):								
		Type:								
Depth (inches):			Hydric Soi				Soil Present? Yes X No			
	Depth (ir	ncnes): _								
Remarks	··									
nemark:	S.									

Project/Site: Cider Solar Project	City/C	ounty: Oakfield/Genessee	Sampling Date: 7/20/2020		
Applicant/Owner: Hecate		State: NY	Sampling Point:		
Investigator(s): Andrew Sorci	Section	on, Township, Range:	1_07232020_WL51_W2		
Landform (hillslope, terrace,etc.): Toeslope	Local relie	ef (concave, convex, none): None	Slope (%) <u>0 - 3</u>		
Subregion (LRR or MLRA): LRR L	Lat: _43.106078	Long:78.234980	Datum: NAD83		
Soil Map Unit Name: Ma		NWI Clas	sification: PEM		
Are climatic / hyrologic conditions on the sit	e typical for this time of ye	ear? Yes X No (if no	o, explain in Remarks.)		
Are Vegetation , Soil , or Hydrolog	gy significantly distur	bed? Are "Normal Circumstance	es" present? Yes X No		
Are Vegetation , Soil , or Hydrolog	gy naturally problem	atic? (if needed, explain any answe	ers in Remarks.)		
<u> </u>					
SUMMARY OF FINDINGS - Attach site m	nap showing sampling p	oint locations, transects, impo	rtant features, etc.		
Hydrophytic Vegetation Present? Yes	X No	Is the Sampled Area			
Hydric Soil Present? Yes	X No	within a Wetland?	Yes X No		
<u> </u>	X No	if yes, optional Wetland Site ID:	WL51-2		
Remarks: (Explain alternative procedures here or in a					
Edge of agricultural field	separate report.)				
Luge of agricultural field					
HYDROLOGY					
Wetland Hydrology Indicators:		Secondary In	dicators (minimum of two required)		
Primary Indicators (minimum of one is required	: check all that apply)	Surface	Soil Cracks (B6)		
Surface Water (A1)	Water-Stained Leave	s (B9) Drainag	Drainage Patterns (B10)		
High Water Table (A2)	Aquatic Fauna (B13)	Moss Ti	Moss Trim Lines (B16)		
Saturation (A3)	Marl Deposits (B15)	Dry-Sea	Dry-Season Water Table (C2)		
Water Marks (B1)	Hydrogen Sulfide Odd		Crayfish Burrows (C8)		
Sediment Deposits (B2)	X Oxidized Rhizosphere		ion Visible in Aerial Imagery (C9)		
Drift Deposits (B3)	Presence of Reduced		I or Stressed Plants (D1)		
	Recent Iron Reductio				
Algal Mat or Crust (B4)		` '	rphic Position (D2)		
Iron Deposits (B5)	Thin Muck Surface (C		Aquitard (D3)		
Inundation Visible on Aerial Imagery (B7)	Other (Explain in Ren	narks) Microto	Microtopographic Relief (D4)		
Sparsley Vegetated Concave Surface (B8)		X FAC-Ne	utral Test (D5)		
Surface Water Present? Yes No 2	X Depth (inches)				
Water Table Present? Yes No 2		 Wetland Hydrology Pre 	esent? Yes X No		
Saturation Present? Yes No 2		-			
34tdr4tion 11escht: 1es10/					
Describe Recorded Data (stream gauge, mo	nitoring well, aerial photo	s, previous inspections), if availabl	e:		
Remarks:					

VEGETATION - Use scientific names of plants Sampling Point: 1_07232020_WL51_W2 Absolute Dominant Indicator **Dominance Test Worksheet:** (Plot Size: 30'radius) % Cover Species? Status **Tree Stratum Number of Dominant Species** That Are OBL, FACW, or FAC: (A) = Total Cover **Total Number of Dominant** Species Across All Strata: (B) 3 Percent of Dominant Species That Are OBL, FACW, or FAC: 66.7% (A/B) **Prevalence Index Worksheet:** 0 x 1 **OBL** species Absolute Dominant Indicator **FACW** species 65 130 (Plot Size: 15'radius) Status x 2 **Shrub Stratum** % Cover Species? FAC species 17 х3 51 = Total Cover **FACU** species 55 x 4 220 **UPL** species 0 x 5 0 Column Totals 137 (A) 401 (B) Prevalence Index = B/A = 2.93 **Hydrophytic Vegetation Indicators:** Absolute Dominant Indicator 1- Rapid Test For Hydrophytic Vegetation **Herb Stratum** (Plot Size: 5'radius) % Cover Species? Status X 2- Dominance Test is > 50% Phalaris arundinacea 35 Χ **FACW** X 3- Prevalence Index is =< 3.0 Χ Cyperus strigosus 30 **FACW** 4- Morphological Adaptations Solidago canadensis 20 Χ FACU Ambrosia artemisiifolia 15 **FACU** 5- Problematic Hydrophytic Vegetation Abutilon theophrasti 15 **FACU** Setaria pumila 15 FAC **Definitions of Vegetation Strata: FACU** Amaranthus albus 5 Tree- Woody plants 3 in. (7.6cm) or more in diameter at Rumex crispus 2 FAC breast height (DBH), regardless of height. 137 = Total Cover Sapling/Shrub- Woody plants less than 3 in. DBH and greater than or equal to 3.28ft (1m) tall. Herb- All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28ft tall. Absolute Dominant Indicator Woody Vines- All woody vines greater than 3.28ft in (Plot Size: 30'radius) **Woody Vine Stratum** % Cover Species? Status height. = Total Cover Hydrophytic Vegetation Present? Yes X No ____ Remarks: (Include photo numbers here or on a separate sheet.)

SOIL Sampling Point: 1_07232020_WL51_W2

Depth	Matrix				Redo	x Featu	ıres	
(inches	Color	%	Color	%	Type	Loc	Texture	Remarks
0-5	10YR 3/1	90	7.5YR 4/6	10	С	PL	Loam	
5-13	10YR 4/2	90	7.5YR 4/6	10	С	М	Sandy Loam	
13-18	2.5Y 6/1	90	2.5Y 4/6	10	С	М	Loamy Sand	

Hydric Soil Indicators:		Indicators for Problematic Soils:
Histosol (A1)	Polyvalue Below Surface (B15)2 cm Muck (A10)
Histic Epipedon (A2)	Thin Dark Surface (S9)	Coast Prarie Redox (A16)
Black Histic (A3)	Loamy Mucky Mineral (F1	.)5 cm Mucky Peat or Peat (S3)
Hydrogen Sulfide (A4)	Loamy Gleyed Matric (F2)	Dark Surface (S7)
Stratified Layers (A5)	X Depleted Matrix (F3)	Polyvalue Below Surface (S8)
Depleted Below Dark Surface (A11)	X Redox Dark Surface (F6)	Thin Dark Surface (S9)
Thick Dark Surface (A12)	Depleted Dark Surface (F7	7) Iron-Manganese Masses (F12)
Sandy Mucky Mineral (S1)	Redox Depressions (F8)	Piedmont Floodplain Soils (F19)
Sandy Gleyed Matrix (S4)		Mesic Spodic (TA6)
Sandy Redox (S5)		Red Parent Material (F21)
Stripped Matrix (S6)		Very Shallow Dark Surface (TF12)
Dark Surface (S7)		Other (Explain in Remarks)
Restrictive Layer (if observed):		
Type:		
Type:		Hydric Soil Present? Yes X No
Depth (inches):		

Remarks:

Project/Site: Cider Solar Project	City/County: Oakfield/Gen	essee Sampling Date: 7/23/2020			
Applicant/Owner: Hecate	State: NY Sampling				
Investigator(s): Andrew Sorci	Section, Township, Range:	Point:1_07232020_WL51_U			
Landform (hillslope, terrace,etc.): Rise	Local relief (concave, convex, r	none): <u>None</u> Slope (%) <u>0 - 1</u>			
Subregion (LRR or MLRA): LRR L	Lat: 43.105810 Long: -7	78.234917 Datum: NAD83			
Soil Map Unit Name: NgA		NWI Classification: UPL			
Are climatic / hyrologic conditions on the site	e typical for this time of year? Yes X No	(if no, explain in Remarks.)			
Are Vegetation, Soil, or Hydrolog	gysignificantly disturbed? Are "Normal (Circumstances" present? Yes X No			
Are Vegetation, Soil, or Hydrolog	gynaturally problematic? (if needed, exp	lain any answers in Remarks.)			
SUMMARY OF FINDINGS - Attach site m	ap showing sampling point locations, tran	sects, important features, etc.			
Hydrophytic Vegetation Present? Yes	No X Is the Sampled Area	-			
Hydric Soil Present? Yes	No X within a Wetland?	Yes No X			
		and Site ID:			
Remarks: (Explain alternative procedures here or in a	separate report.)				
HYDROLOGY					
Wetland Hydrology Indicators:		Secondary Indicators (minimum of two required)			
Primary Indicators (minimum of one is required:		Surface Soil Cracks (B6)			
Surface Water (A1)	Water-Stained Leaves (B9)	Drainage Patterns (B10)			
High Water Table (A2)	Aquatic Fauna (B13)	Moss Trim Lines (B16)			
Saturation (A3)	Marl Deposits (B15)	Dry-Season Water Table (C2)			
Water Marks (B1)	Hydrogen Sulfide Odor (C1)	Crayfish Burrows (C8)			
Sediment Deposits (B2)	Oxidized Rhizospheres on Living Roots (C3)	Saturation Visible in Aerial Imagery (C9)			
Drift Deposits (B3)	Presence of Reduced Iron (C4)	Stunted or Stressed Plants (D1)			
Algal Mat or Crust (B4)	Recent Iron Reduction in Tilled Soils (C6)	Geomorphic Position (D2)			
Iron Deposits (B5)	Thin Muck Surface (C7)	Shallow Aquitard (D3)			
Inundation Visible on Aerial Imagery (B7)	Other (Explain in Remarks)	Microtopographic Relief (D4)			
Sparsley Vegetated Concave Surface (B8)		FAC-Neutral Test (D5)			
Surface Water Present? Yes No >	X Depth (inches)				
Water Table Present? Yes No >		Hydrology Present? Yes No X			
Saturation Present? Yes No >		1741010gy 1 resent. 1es 110X			
Describe Recorded Data (stream gauge, mo	nitoring well, aerial photos, previous inspection	s), if available:			
Remarks:					

VEGETATION - Use scientific names of plants Sampling Point: 1_07232020_WL51_U1 Absolute Dominant Indicator **Dominance Test Worksheet:** (Plot Size: 30'radius) **Tree Stratum** % Cover Species? Status **Number of Dominant Species** That Are OBL, FACW, or FAC: (A) = Total Cover **Total Number of Dominant** Species Across All Strata: (B) 2 Percent of Dominant Species 50% (A/B) That Are OBL, FACW, or FAC: **Prevalence Index Worksheet:** x 1 0 **OBL** species Absolute Dominant Indicator **FACW** species 25 50 (Plot Size: 15'radius) % Cover Status x 2 **Shrub Stratum** Species? FAC species 0 х3 = Total Cover FACU species 13 x 4 52 **UPL** species 5 x 5 25 Column Totals 43 (A) 127 (B) Prevalence Index = B/A = 2.95 **Hydrophytic Vegetation Indicators:** Absolute Dominant Indicator 1- Rapid Test For Hydrophytic Vegetation **Herb Stratum** (Plot Size: 5'radius) % Cover Species? Status 2- Dominance Test is > 50% 25 Phalaris arundinacea **FACW** X 3- Prevalence Index is =< 3.0 25 Χ Unknown species UNK 4- Morphological Adaptations Abutilon theophrasti 5 FACU Avena sativa 5 UPL 5- Problematic Hydrophytic Vegetation Chenopodium album **FACU** Plantago major 3 **FACU Definitions of Vegetation Strata:** = Total Cover 68 Tree- Woody plants 3 in. (7.6cm) or more in diameter at breast height (DBH), regardless of height. Sapling/Shrub- Woody plants less than 3 in. DBH and greater than or equal to 3.28ft (1m) tall. Herb- All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28ft tall. Absolute Dominant Indicator Woody Vines- All woody vines greater than 3.28ft in (Plot Size: 30'radius) Status **Woody Vine Stratum** % Cover Species? height. = Total Cover Hydrophytic Vegetation Present? Yes ____ No __X Remarks: (Include photo numbers here or on a separate sheet.) unknown grass species; area may have been sprayed recently

SOIL Sampling Point: 1_07232020_wL51_U1

Depth	Matrix				Redo	x Featu	ires	
(inches	Color	%	Color	%	Type	Loc	Texture	Remarks
0-18	10YR 3/2	95	10YR 4/6	5	С	М	Sandy Loam	
18-20	10YR 2/1	90	7.5YR 6/1	10	С	М	Sandy Clay Loam	
-	oil Indicators:						- (- (-)	Indicators for Problematic Soils:
	tosol (A1)	4.21			•		Surface (B15)	2 cm Muck (A10)
Histic Epipedon (A2)					Thin Dar			Coast Prarie Redox (A16)
Black Histic (A3)				•	•	ineral (F1)	5 cm Mucky Peat or Peat (S3)	
Hydrogen Sulfide (A4)						atric (F2)	Dark Surface (S7)	
Stratified Layers (A5)				Depleted Redox D			Polyvalue Below Surface (S8) Thin Dark Surface (S9)	
Depleted Below Dark Surface (A11) Thick Dark Surface (A12)						urface (F7)	Iron-Manganese Masses (F12)	
	Thick Dark Surface (A12) Sandy Mucky Mineral (S1)				Redox D			Piedmont Floodplain Soils (F19)
	ndy Gleyed Ma	-	-		ricuox D	срісэзіо	113 (1 0)	Mesic Spodic (TA6)
	ndy Redox (S5)	-	• /					Red Parent Material (F21)
	ipped Matrix (Very Shallow Dark Surface (TF12)
	rk Surface (S7)	-						Other (Explain in Remarks)
Restrictiv	ve Layer (if obse	erved):						
		Type:					Hydric	Soil Present? Yes No X
	Depth (in	ches):					,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	· · · · · · · · · · · · · · · · · · ·
Remark	s:							

Project/Site: Cider Solar Project	City/Cou	nty: Oakfield/Genessee	Sampling Date: <u>7/20/2020</u>			
Applicant/Owner: Hecate		State: NY	Sampling Point:			
Investigator(s): Andrew Sorci	Section,	on, Township, Range: 1_07232020_WL52_W1				
Landform (hillslope, terrace,etc.): Dip	Local relief (concave, convex, none): <u>Concav</u>	eSlope (%) <u>0 - 2</u>			
Subregion (LRR or MLRA): LRR L	Lat: 43.107663	Long:78.231590	Datum: NAD83			
Soil Map Unit Name: CaA		NWI Classifi	cation: PEM			
Are climatic / hyrologic conditions on the site	e typical for this time of year	? Yes <u>X</u> No (if no, e	xplain in Remarks.)			
Are Vegetation , Soil , or Hydrolog	gy significantly disturbe	d? Are "Normal Circumstances"	present? Yes X No			
Are Vegetation , Soil , or Hydrolog	gy naturally problemati	c? (if needed, explain any answers	in Remarks.)			
 -						
SUMMARY OF FINDINGS - Attach site m	ap showing sampling poir	nt locations, transects, import	ant features, etc.			
Hydrophytic Vegetation Present? Yes	X No Is	the Sampled Area				
Hydric Soil Present? Yes	X No w	ithin a Wetland? $_{ m Y}$	es X No			
_ ·		yes, optional Wetland Site ID:	WL52			
Remarks: (Explain alternative procedures here or in a						
Edge of corn field	separate report.					
Lage of confinera						
HYDROLOGY						
Wetland Hydrology Indicators:		Secondary Indic	ators (minimum of two required)			
Primary Indicators (minimum of one is required:	check all that apply)	X Surface So	il Cracks (B6)			
Surface Water (A1)	Water-Stained Leaves (B	9) Drainage F	Patterns (B10)			
High Water Table (A2)	Aquatic Fauna (B13)	Moss Trim	Lines (B16)			
Saturation (A3)	Marl Deposits (B15)	Dry-Seaso	n Water Table (C2)			
Water Marks (B1)	Hydrogen Sulfide Odor (C1) Crayfish B	urrows (C8)			
Sediment Deposits (B2)	X Oxidized Rhizospheres o		X Saturation Visible in Aerial Imagery (C9)			
Drift Deposits (B3)	Presence of Reduced Iro		Stunted or Stressed Plants (D1)			
Algal Mat or Crust (B4)	Recent Iron Reduction in		X Geomorphic Position (D2)			
		· · · · · · · · · · · · · · · · · · ·	Shallow Aquitard (D3)			
Iron Deposits (B5)	Thin Muck Surface (C7)					
Inundation Visible on Aerial Imagery (B7)	Other (Explain in Remark		Microtopographic Relief (D4)			
Sparsley Vegetated Concave Surface (B8)		X FAC-Neutr	al Test (D5)			
Surface Water Present? Yes No >	(Depth (inches)					
Water Table Present? Yes No >	(Depth (inches)	Wetland Hydrology Prese	nt? Yes X No			
Saturation Present? Yes No >						
	 -					
Describe Recorded Data (stream gauge, mo	nitoring well, aerial photos, p	revious inspections), if available:				
Remarks:						
Nemarks.						

VEGETATION - Use scien	tific names of plants	3			Sampli	ng Poin	t: 1_ 07 2	232020_W	L52_W1
Tree Stratum	(Plot Size: 30'radius	Absolute % Cover	Dominant Species?	Indicator Status	Number of Domi	inant Spe	ecies	2	(A)
			= Total Co	ver	Total Numbe Species Ac	er of Dom	ninant	2	_(A) _(B)
					Percent of Dor That Are OBL,	-		100%	(A/B)
					Prevalence Index \	Norkshe	et:		
		Absolute	Dominant	Indicator	OBL species	0	x 1	0	
Shrub Stratum	(Plot Size: 15'radius	% Cover		Status	FACW species	3	x 2	6	
					FAC species	5	x 3	15	
			_= Total Co	ver	FACU species	0	x 4	0	
					UPL species	0	x 5	0	
					Column Totals	8	(A)	21	(B)
					Prevalenc	e Index =	= B/A = _	2.62	
					Hydrophytic Vege	tation In	dicator	s:	
			Dominant	Indicator	1- Rapid Tes	t For Hy	drophyt	ic Vegeta	tion
Herb Stratum	(Plot Size: 5'radius	% Cover	Species?	Status	X 2- Dominan	ce Test is	s > 50%		
Echinochloa crus-galli		5	X	FAC	X 3- Prevalence	e Index i	is =< 3.0)	
Cyperus strigosus	·	<u>3</u>	= Total Co	<u>FACW</u> ver	4- Morpholo	ogical Ad	aptatior	าร	
			_		5- Problema	tic Hydro	ophytic	Vegetatio	n
					Definitions of Vegeta	ation Stra	ita:		
					Tree- Woody plants 3 breast height (DBH),				eter at
					Sapling/Shrub- Wood greater than or equa				and
					Herb- All herbaceous size, and woody plan	•			less of
Woody Vine Stratum	(Plot Size: 30'radius		Dominant Species?	Indicator Status	Woody Vines- All wo height.	ody vines	greater	than 3.28f	t in
			= Total Co	ver	Hydropl Vegeta Pres	ation	es X	No	
Remarks: (Include photo nu	ımbers here or on a se	parate shee	et.)						

SOIL Sampling Point: 1_07232020_WL52_W1

Depth	Matrix				Redo	x Featu	res	
(inches	Color	%	Color	%	Type	Loc	Texture	Remarks
0-7	2.5Y 2.5/1	95	10YR 4/4	5	С	PL	Silt Loam	
7-14	10YR 3/1	95	10YR 4/6	5	С	M	Silty Clay Loam	
14-20	2.5Y 6/1	85	2.5Y 4/6	15	С	М	Loamy Sand	

Hydric Soil Indicators:		Indicators for Problematic Soils:
Histosol (A1)	Polyvalue Below Surface ((B15)2 cm Muck (A10)
Histic Epipedon (A2)	Thin Dark Surface (S9)	Coast Prarie Redox (A16)
Black Histic (A3)	Loamy Mucky Mineral (F1	L)5 cm Mucky Peat or Peat (S3)
Hydrogen Sulfide (A4)	Loamy Gleyed Matric (F2)	Dark Surface (S7)
Stratified Layers (A5)	Depleted Matrix (F3)	Polyvalue Below Surface (S8)
Depleted Below Dark Surface (A11)	X Redox Dark Surface (F6)	Thin Dark Surface (S9)
Thick Dark Surface (A12)	Depleted Dark Surface (F7	7) Iron-Manganese Masses (F12)
Sandy Mucky Mineral (S1)	Redox Depressions (F8)	Piedmont Floodplain Soils (F19)
Sandy Gleyed Matrix (S4)		Mesic Spodic (TA6)
Sandy Redox (S5)		Red Parent Material (F21)
Stripped Matrix (S6)		Very Shallow Dark Surface (TF12)
Dark Surface (S7)		Other (Explain in Remarks)
Restrictive Layer (if observed):		
Type		
Type:		Hydric Soil Present? Yes X No
Depth (inches):		

Project/Site: Cider Solar Project	City/County: Oakfield/Ger	nessee Sampling Date: 7/23/2020			
Applicant/Owner: Hecate		State: NY Sampling			
Investigator(s): Andrew Sorci	Section, Township, Range:	Point:1_20200723_WL52_U			
Landform (hillslope, terrace,etc.): Rise	Local relief (concave, convex, r	none): <u>None</u> Slope (%) <u>0 - 1</u>			
Subregion (LRR or MLRA): LRR L	Lat: 43.107644 Long: -7	78.230914 Datum: NAD83			
Soil Map Unit Name: CaA		NWI Classification: UPL			
Are climatic / hyrologic conditions on the site t	typical for this time of year? Yes X No	(if no, explain in Remarks.)			
Are Vegetation, Soil, or Hydrology	significantly disturbed? Are "Normal	Circumstances" present? Yes X No			
Are Vegetation, Soil, or Hydrology	naturally problematic? (if needed, exp	lain any answers in Remarks.)			
SUMMARY OF FINDINGS - Attach site map	showing sampling point locations, tran	sects, important features, etc.			
Hydrophytic Vegetation Present? Yes	No X Is the Sampled Area	1			
Hydric Soil Present? Yes	No X within a Wetland? Yes No X				
Wetland Hydrology Present? Yes	No X if yes, optional Wet	land Site ID:			
Remarks: (Explain alternative procedures here or in a se	parate report.)				
HYDROLOGY					
Wetland Hydrology Indicators:		Secondary Indicators (minimum of two required)			
Primary Indicators (minimum of one is required: cl	neck all that apply)	Surface Soil Cracks (B6)			
Surface Water (A1)	Water-Stained Leaves (B9)	Drainage Patterns (B10)			
High Water Table (A2)	Aquatic Fauna (B13)	Moss Trim Lines (B16)			
Saturation (A3)	Marl Deposits (B15)	Dry-Season Water Table (C2)			
Water Marks (B1)	Hydrogen Sulfide Odor (C1)	Crayfish Burrows (C8)			
Sediment Deposits (B2)	Oxidized Rhizospheres on Living Roots (C3)	Saturation Visible in Aerial Imagery (C9)			
Drift Deposits (B3)	Presence of Reduced Iron (C4)	Stunted or Stressed Plants (D1)			
Algal Mat or Crust (B4)	Recent Iron Reduction in Tilled Soils (C6)	Geomorphic Position (D2)			
Iron Deposits (B5)	Thin Muck Surface (C7)	Shallow Aquitard (D3)			
Inundation Visible on Aerial Imagery (B7)	Other (Explain in Remarks)	Microtopographic Relief (D4)			
Sparsley Vegetated Concave Surface (B8)		FAC-Neutral Test (D5)			
Surface Water Present? Yes No X	Depth (inches)				
Water Table Present? Yes No X	Depth (inches) Wetland H	Hydrology Present? Yes No X			
Saturation Present? Yes No X	Depth (inches)	 			
Describe Recorded Data (stream gauge, moni	toring well, aerial photos, previous inspection	ns), if available:			
Remarks:					

Indicato Status ver Indicato Status ver UPL ver	Number of Dominant Species That Are OBL, FACW, or FAC: Total Number of Dominant Species Across All Strata: Percent of Dominant Species That Are OBL, FACW, or FAC: O% (A/B) Prevalence Index Worksheet: OBL species O
Indicato Status ver Indicato Status UPL	Total Number of Dominant Species Across All Strata: 1 (B) Percent of Dominant Species That Are OBL, FACW, or FAC: 0% (A/B) Prevalence Index Worksheet: OBL species 0 x 1 0 FACW species 0 x 2 0 FAC species 0 x 3 0 FACU species 0 x 4 0 UPL species 75 x 5 375 Column Totals 75 (A) 375 (B) Prevalence Index = B/A = 5 Hydrophytic Vegetation Indicators: 1 - Rapid Test For Hydrophytic Vegetation 2 - Dominance Test is > 50% 3 - Prevalence Index is =< 3.0
Status ver Indicato Status UPL	That Are OBL, FACW, or FAC:(A/B)
Status ver Indicato Status UPL	OBL species 0 x 1 0 FACW species 0 x 2 0 FAC species 0 x 3 0 FACU species 0 x 4 0 UPL species 75 x 5 375 Column Totals 75 (A) 375 (B) Prevalence Index = B/A = 5 Hydrophytic Vegetation Indicators: 1- Rapid Test For Hydrophytic Vegetation 2- Dominance Test is > 50% 3- Prevalence Index is =< 3.0
Status ver Indicato Status UPL	FACW species 0 x 2 0 FAC species 0 x 3 0 FACU species 0 x 4 0 UPL species 75 x 5 375 Column Totals 75 (A) 375 (B) Prevalence Index = B/A = 5 Hydrophytic Vegetation Indicators: 1- Rapid Test For Hydrophytic Vegetation 2- Dominance Test is > 50% 3- Prevalence Index is =< 3.0
Status ver Indicato Status UPL	FACW species 0 x 2 0 FAC species 0 x 3 0 FACU species 0 x 4 0 UPL species 75 x 5 375 Column Totals 75 (A) 375 (B) Prevalence Index = B/A = 5 Hydrophytic Vegetation Indicators: 1- Rapid Test For Hydrophytic Vegetation 2- Dominance Test is > 50% 3- Prevalence Index is =< 3.0
Indicato Status UPL	FACU species 0 x 4 0 UPL species 75 x 5 375 Column Totals 75 (A) 375 (B) Prevalence Index = B/A = 5 Hydrophytic Vegetation Indicators: 1- Rapid Test For Hydrophytic Vegetation 2- Dominance Test is > 50% 3- Prevalence Index is =< 3.0
Indicato Status UPL	UPL species 75 x 5 375 Column Totals 75 (A) 375 (B) Prevalence Index = B/A = 5 Hydrophytic Vegetation Indicators: 1- Rapid Test For Hydrophytic Vegetation 2- Dominance Test is > 50% 3- Prevalence Index is =< 3.0
Status UPL	Column Totals 75 (A) 375 (B) Prevalence Index = B/A = 5 Hydrophytic Vegetation Indicators: 1- Rapid Test For Hydrophytic Vegetation 2- Dominance Test is > 50% 3- Prevalence Index is =< 3.0
Status UPL	Prevalence Index = B/A = 5 Hydrophytic Vegetation Indicators: 1- Rapid Test For Hydrophytic Vegetation 2- Dominance Test is > 50% 3- Prevalence Index is =< 3.0
Status UPL	Hydrophytic Vegetation Indicators: 1- Rapid Test For Hydrophytic Vegetation 2- Dominance Test is > 50% 3- Prevalence Index is =< 3.0
Status UPL	1- Rapid Test For Hydrophytic Vegetation 2- Dominance Test is > 50% 3- Prevalence Index is =< 3.0
Status UPL	2- Dominance Test is > 50% 3- Prevalence Index is =< 3.0
UPL	3- Prevalence Index is =< 3.0
ver	4- Morphological Adaptations
	4- Moi phological Adaptations
	5- Problematic Hydrophytic Vegetation
	Definitions of Vegetation Strata:
	Tree- Woody plants 3 in. (7.6cm) or more in diameter at breast height (DBH), regardless of height.
	Sapling/Shrub- Woody plants less than 3 in. DBH and greater than or equal to 3.28ft (1m) tall.
	Herb- All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28ft tall.
Indicato Status	r Woody Vines- All woody vines greater than 3.28ft in height.
ver	Hydrophytic Vegetation Present? Yes NoX
?	nt Indicator ? Status over

SOIL Sampling Point: 1_20200723_WL52_U1

Depth	Matrix	(Redo	ox Featu	res	
(inches	Color	%	Color	%	Туре	Loc	Texture	Remarks
0-6	2.5Y 3/2	100					Silty Clay Loam	
6-14	2.5Y 3/2	95	10YR 4/4	5	С	М	Silty Clay Loam	
14-20	2.5Y 3/2	70	2.5Y 4/6	30	С	М	Clay Loam	

Hydric Soil Indicators:		Indicators for Problematic Soils:		
Histosol (A1)	Polyvalue Below Surface (B15)	2 cm Muck (A10)		
Histic Epipedon (A2)	Thin Dark Surface (S9)	Coast Prarie Redox (A16)		
Black Histic (A3)	Loamy Mucky Mineral (F1)	5 cm Mucky Peat or Peat (S3)		
Hydrogen Sulfide (A4)	Loamy Gleyed Matric (F2)	Dark Surface (S7)		
Stratified Layers (A5)	Depleted Matrix (F3)	Polyvalue Below Surface (S8)		
Depleted Below Dark Surface (A11)	Redox Dark Surface (F6)	Thin Dark Surface (S9)		
Thick Dark Surface (A12)	Depleted Dark Surface (F7)	Iron-Manganese Masses (F12)		
Sandy Mucky Mineral (S1)	Redox Depressions (F8)	Piedmont Floodplain Soils (F19)		
Sandy Gleyed Matrix (S4)		Mesic Spodic (TA6)		
Sandy Redox (S5)		Red Parent Material (F21)		
Stripped Matrix (S6)		Very Shallow Dark Surface (TF12)		
Dark Surface (S7)		Other (Explain in Remarks)		
Restrictive Layer (if observed):				
Type:		Hydric Soil Present? Yes No X		
Depth (inches):	_	 		
	_			

Remarks:

Project/Site: Cider Solar Project	City/C	ounty: Oakfield/Genesse	e Sampling Date: 7/23/2020			
Applicant/Owner: Hecate		State	e: <u>NY</u> Sampling Point:			
Investigator(s): Andrew Sorci	Section	Section, Township, Range: 1_20200723_WL53_W1				
Landform (hillslope, terrace,etc.): Floodplain	Local relie	ef (concave, convex, none)): Concave Slope (%) 5 - 15			
Subregion (LRR or MLRA): LRR L	Lat: 43.105327	Long: -78.22				
Soil Map Unit Name: CaA			IWI Classification: PSS			
Are climatic / hyrologic conditions on the site t	cypical for this time of ye	ar? Yes X No	(if no, explain in Remarks.)			
Are Vegetation , Soil , or Hydrology	significantly distu	bed? Are "Normal Circu	mstances" present? Yes X No			
Are Vegetation , Soil , or Hydrology	naturally problem	atic? (if needed, explain a	ny answers in Remarks.)			
<u> </u>						
SUMMARY OF FINDINGS - Attach site map	p showing sampling p	oint locations, transect	s, important features, etc.			
Hydrophytic Vegetation Present? Yes X	No	Is the Sampled Area				
Hydric Soil Present? Yes X	 No	within a Wetland? Yes X No				
Wetland Hydrology Present? Yes X		if yes, optional Wetland	Site ID: WL53			
Remarks: (Explain alternative procedures here or in a se	parate report.)					
Riparian area associated with stream						
HYDROLOGY						
Wetland Hydrology Indicators:		Seco	ondary Indicators (minimum of two required)			
Primary Indicators (minimum of one is required: cl	heck all that apply)		Surface Soil Cracks (B6)			
Surface Water (A1)	Water-Stained Leave	s (B9) X	 Drainage Patterns (B10)			
High Water Table (A2)	Aquatic Fauna (B13)		Moss Trim Lines (B16)			
Saturation (A3)	Marl Deposits (B15)		Dry-Season Water Table (C2)			
Water Marks (B1)	Hydrogen Sulfide Odo	 or (C1)	Crayfish Burrows (C8)			
Sediment Deposits (B2)		s on Living Roots (C3)	Saturation Visible in Aerial Imagery (C9)			
· · · · · · · · · · · · · · · · · · ·			_			
Drift Deposits (B3)	Presence of Reduced		X Geomorphic Position (D2)			
Algal Mat or Crust (B4)	Recent Iron Reductio	· · · · · · · · · · · · · · · · · · ·				
Iron Deposits (B5)	Thin Muck Surface (C	· —	_ Shallow Aquitard (D3)			
Inundation Visible on Aerial Imagery (B7)	Other (Explain in Ren	narks)	Microtopographic Relief (D4)			
Sparsley Vegetated Concave Surface (B8)		<u>X</u>	FAC-Neutral Test (D5)			
Surface Water Present? Yes No X	Depth (inches)					
Water Table Present? Yes No X	Depth (inches)	– Wetland Hydro	ology Present? Yes X No			
Saturation Present? Yes No X	 Depth (inches)	_				
		_				
Describe Recorded Data (stream gauge, moni-	toring well, aerial photo	s, previous inspections), if	available:			
Remarks:						
ACHIGINS.						

VEGETATION - Use scientific names of plants Sampling Point: 1_20200723_WL53_W1 Absolute Dominant Indicator **Dominance Test Worksheet:** (Plot Size: 30'radius) % Cover Species? Status **Tree Stratum Number of Dominant Species** That Are OBL, FACW, or FAC: (A) = Total Cover **Total Number of Dominant** Species Across All Strata: (B) Percent of Dominant Species That Are OBL, FACW, or FAC: (A/B) 100% **Prevalence Index Worksheet:** 10 10 **OBL** species x 1 Absolute Dominant Indicator **FACW** species 125 250 (Plot Size: 15'radius) Species? x 2 **Shrub Stratum** % Cover Status **FAC** species 105 35 х3 Rhamnus cathartica 35 Χ **FAC** Fraxinus pennsylvanica 30 Χ **FACW FACU** species 15 x 4 60 20 Cornus amomum Χ **FACW UPL** species 0 x 5 0 Lonicera morrowii 15 **FACU** Column Totals 185 425 (B) 100 = Total Cover (A) Prevalence Index = B/A = 2.3 **Hydrophytic Vegetation Indicators:** Absolute Dominant Indicator 1- Rapid Test For Hydrophytic Vegetation **Herb Stratum** (Plot Size: 5'radius) % Cover Species? Status X 2- Dominance Test is > 50% Phalaris arundinacea 65 Х **FACW** X 3- Prevalence Index is =< 3.0 Bidens frondosa 10 **FACW** 4- Morphological Adaptations Boehmeria cylindrica 10 OBL 85 = Total Cover 5- Problematic Hydrophytic Vegetation **Definitions of Vegetation Strata:** Tree- Woody plants 3 in. (7.6cm) or more in diameter at breast height (DBH), regardless of height. Sapling/Shrub- Woody plants less than 3 in. DBH and greater than or equal to 3.28ft (1m) tall. Herb- All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28ft tall. Absolute Dominant Indicator Woody Vines- All woody vines greater than 3.28ft in (Plot Size: 30'radius) **Woody Vine Stratum** % Cover Species? Status height. = Total Cover Hydrophytic Vegetation Present? Yes X No ____ Remarks: (Include photo numbers here or on a separate sheet.)

SOIL Sampling Point: 1_20200723_WL53_W1

Depth _	Matrix		Redox Features							
(inches	Color	%	Color	%	Туре	Loc	Texture	Remarks		
0-4	10YR 3/1	95	10YR 3/4	5	С	M	Sandy Clay Loam			
4-6	10YR 4/2	80	10YR 6/8	20	С	M	Sandy Loam			

Hydric Soil Indicators:		Indicators for Problematic Soils:
Histosol (A1)	Polyvalue Below Surface (B15) 2 cm Muck (A10)
Histic Epipedon (A2)	Thin Dark Surface (S9)	Coast Prarie Redox (A16)
Black Histic (A3)	Loamy Mucky Mineral (F1	5 cm Mucky Peat or Peat (S3)
Hydrogen Sulfide (A4)	Loamy Gleyed Matric (F2)	Dark Surface (S7)
Stratified Layers (A5)	X Depleted Matrix (F3)	Polyvalue Below Surface (S8)
Depleted Below Dark Surface (A11)	X Redox Dark Surface (F6)	Thin Dark Surface (S9)
Thick Dark Surface (A12)	Depleted Dark Surface (F7	') Iron-Manganese Masses (F12)
Sandy Mucky Mineral (S1)	Redox Depressions (F8)	Piedmont Floodplain Soils (F19)
Sandy Gleyed Matrix (S4)		Mesic Spodic (TA6)
Sandy Redox (S5)		Red Parent Material (F21)
Stripped Matrix (S6)		Very Shallow Dark Surface (TF12)
Dark Surface (S7)		Other (Explain in Remarks)
Restrictive Layer (if observed):		
Type: Rock		Hydric Soil Present? Yes X No
Depth (inches): 6		

Project/Site: Cider Solar Project	City/Co	ounty: Oakfield/Ger	nessee Sampling Date: 7/23/2020				
Applicant/Owner: Hecate			State: NY Sampling Point:				
Investigator(s): Andrew Sorci	1_20200723_WL53_W2						
Landform (hillslope, terrace,etc.): Depression	none): Linear Slope (%) 1 - 3						
Subregion (LRR or MLRA): LRR L	78.227260 Datum: NAD83						
Soil Map Unit Name: CaA	NWI Classification: PEM						
Are climatic / hyrologic conditions on the site t	ypical for this time of ye	ar? Yes X No	(if no, explain in Remarks.)				
Are Vegetation, Soil, or Hydrology	significantly distur	bed? Are "Normal	Circumstances" present? Yes X No				
Are Vegetation, Soil, or Hydrology	naturally problems	atic? (if needed, exp	lain any answers in Remarks.)				
SUMMARY OF FINDINGS - Attach site map	showing sampling po	oint locations, tran	sects, important features, etc.				
Hydrophytic Vegetation Present? Yes X	No	Is the Sampled Area	9				
Hydric Soil Present? Yes X	Yes X No						
Wetland Hydrology Present? Yes X	if yes, optional Wet	land Site ID: WL53					
		, , ,					
Remarks: (Explain alternative procedures here or in a se Associated with stream	parate report.)						
Associated with stream							
HYDROLOGY							
Wetland Hydrology Indicators:			Secondary Indicators (minimum of two required)				
Primary Indicators (minimum of one is required: cl	neck all that apply)		Surface Soil Cracks (B6)				
X Surface Water (A1)	s (B9)	Drainage Patterns (B10)					
X High Water Table (A2)	Aquatic Fauna (B13)		Moss Trim Lines (B16)				
X Saturation (A3)	Marl Deposits (B15)	Dry-Season Water Table (C2)					
Water Marks (B1)	Hydrogen Sulfide Odo	or (C1)	Crayfish Burrows (C8)				
Sediment Deposits (B2)	s on Living Roots (C3)						
Drift Deposits (B3)	Presence of Reduced						
Algal Mat or Crust (B4)	n in Tilled Soils (C6)						
Iron Deposits (B5)							
	7)	Shallow Aquitard (D3)					
Inundation Visible on Aerial Imagery (B7)	Other (Explain in Rem	iarks)	Microtopographic Relief (D4)				
Sparsley Vegetated Concave Surface (B8)			FAC-Neutral Test (D5)				
Surface Water Present? Yes X No	Depth (inches) 3	_					
Water Table Present? Yes X No	Depth (inches) 0	Wetland H	Hydrology Present? Yes X No				
Saturation Present? Yes X No	Depth (inches) 0	_					
			\				
Describe Recorded Data (stream gauge, moni	toring well, aerial photos	s, previous inspection	is), if available:				
Remarks:							

VEGETATION - Use scien	tific names of plants				Sampling Point: 1_20200723_WL53_W2				
Tree Stratum	(Plot Size: 30'radius)	Absolute D % Cover	ominant Species?	Indicator Status	Dominance Test Worksheet: Number of Dominant Species				
					That Are OBL, FACW, or FAC: 1	(A)			
		=	Total Cov	er	Total Number of Dominant Species Across All Strata: 1	(B)			
					Percent of Dominant Species That Are OBL, FACW, or FAC: 100%	_(A/B)			
					Prevalence Index Worksheet:				
		Absolute D	ominant	Indicator	OBL species 75 x 1 75				
Shrub Stratum	(Plot Size: 15'radius)		Species?	Status	FACW species 0 x 2 0				
					FAC species 0 x 3 0				
		=	Total Cov	er	FACU species 0 x 4 0				
					UPL species 0 x 5 0				
					Column Totals 75 (A) 75	(B)			
					Prevalence Index = B/A = 1				
					Hydrophytic Vegetation Indicators:				
		Absolute D	ominant	Indicator	X 1- Rapid Test For Hydrophytic Vegeta	tion			
Herb Stratum	(Plot Size: 5'radius)	% Cover	Species?	Status	X 2- Dominance Test is > 50%				
Typha angustifolia		75	Χ	OBL	X 3- Prevalence Index is =< 3.0				
		=	Total Cov	er	4- Morphological Adaptations				
					5- Problematic Hydrophytic Vegetation				
				Definitions of Vegetation Strata:					
					Tree- Woody plants 3 in. (7.6cm) or more in diam	neter at			
					breast height (DBH), regardless of height.				
					Sapling/Shrub- Woody plants less than 3 in. DBH greater than or equal to 3.28ft (1m) tall.	and			
					Herb- All herbaceous (non-woody) plants, regard size, and woody plants less than 3.28ft tall.	less of			
Woody Vine Stratum	(Plot Size: 30'radius)	Absolute D % Cover		Indicator Status	Woody Vines- All woody vines greater than 3.28f height.	t in			
		=	Total Cov	er	Hydrophytic Vegetation Present? Yes X No	_			
Remarks: (Include photo nu	ımbers here or on a sep	parate sheet.)							

		Sampling Point: 1_20200723_wL53_w2			
Hydric Soil Indicators:		Indicators for Problematic Soils:			
Histosol (A1)	Polyvalue Below Surface (B15) 2 cm Muck (A10)			
Histic Epipedon (A2)	Thin Dark Surface (S9)	Coast Prarie Redox (A16)			
Black Histic (A3)	Loamy Mucky Mineral (F1)	5 cm Mucky Peat or Peat (S3)			
Hydrogen Sulfide (A4)	Loamy Gleyed Matric (F2)	Dark Surface (S7)			
Stratified Layers (A5)	Depleted Matrix (F3)	Polyvalue Below Surface (S8)			
Depleted Below Dark Surface (A11)	Redox Dark Surface (F6)	Thin Dark Surface (S9)			
Thick Dark Surface (A12)	Depleted Dark Surface (F7)	Iron-Manganese Masses (F12)			
Sandy Mucky Mineral (S1)	Redox Depressions (F8)	Piedmont Floodplain Soils (F19)			
Sandy Gleyed Matrix (S4)		Mesic Spodic (TA6)			
Sandy Redox (S5)		Red Parent Material (F21)			
Stripped Matrix (S6)		Very Shallow Dark Surface (TF12)			
Dark Surface (S7)		X Other (Explain in Remarks)			
Restrictive Layer (if observed):					
Type:		Hydric Soil Present? Yes X No			
Depth (inches):	_	.,			
. ,	_				
		hydrology and dominant obligate veg			

Project/Site: Cider Solar Project	City/County: Elba/Genese	e Sampling Date: 7/24/2020			
Applicant/Owner: Hecate		State: NY Sampling			
Investigator(s): Justin Ahn	Section, Township, Range:	Point:1_20200723_WL53_U			
Landform (hillslope, terrace,etc.): Toeslope	none): <u>Linear</u> Slope (%) <u>1 - 5</u>				
Subregion (LRR or MLRA): LRR L	78.227565 Datum: NAD83				
Soil Map Unit Name: CIB		NWI Classification: UPL			
Are climatic / hyrologic conditions on the site \ensuremath{t}	ypical for this time of year? Yes X No	(if no, explain in Remarks.)			
Are Vegetation, Soil, or Hydrology	significantly disturbed? Are "Normal	Circumstances" present? Yes X No			
Are Vegetation, Soil, or Hydrology	naturally problematic? (if needed, exp	lain any answers in Remarks.)			
SUMMARY OF FINDINGS - Attach site map	showing sampling point locations, tran	sects, important features, etc.			
Hydrophytic Vegetation Present? Yes	No X Is the Sampled Area	a			
Hydric Soil Present? Yes	No X within a Wetland?	Yes No X			
Wetland Hydrology Present? Yes	No X if yes, optional Wet	land Site ID:			
Remarks: (Explain alternative procedures here or in a seg	parate report.)	_			
HYDROLOGY					
Wetland Hydrology Indicators:		Secondary Indicators (minimum of two required)			
Primary Indicators (minimum of one is required: cl	neck all that apply)	Surface Soil Cracks (B6)			
Surface Water (A1)	Water-Stained Leaves (B9)	Drainage Patterns (B10)			
High Water Table (A2)	Moss Trim Lines (B16)				
Saturation (A3)	Dry-Season Water Table (C2)				
Water Marks (B1)	Crayfish Burrows (C8)				
Sediment Deposits (B2)	Sediment Deposits (B2) Oxidized Rhizospheres on Living Roots (C3)				
Drift Deposits (B3)	Presence of Reduced Iron (C4)	Stunted or Stressed Plants (D1)			
Algal Mat or Crust (B4)	Recent Iron Reduction in Tilled Soils (C6)	Geomorphic Position (D2)			
Iron Deposits (B5)	Thin Muck Surface (C7)	Shallow Aquitard (D3)			
Inundation Visible on Aerial Imagery (B7)	Other (Explain in Remarks)	Microtopographic Relief (D4)			
Sparsley Vegetated Concave Surface (B8)		FAC-Neutral Test (D5)			
Surface Water Present? Yes No X	Depth (inches)				
Water Table Present? Yes No X	= ' ' 	Hydrology Present? Yes No X			
Saturation Present? Yes No X	Depth (inches)				
Describe Recorded Data (stream gauge, monit	toring well, aerial photos, previous inspection	ns), if available:			
	g,, p, p	,			
Remarks:					

VEGETATION - Use scien	itific names	of plants				Sampi	ing Point:	1_202	00723_W	L53_U1
			Dominant		Dominance Test Worksheet:					
Tree Stratum	(Plot Size:	30'radius)	% Cover	Species?	Status	Number of Dom That Are OBL, FA	•		1	(A)
			= Total Cover			Total Number of Dominant Species Across All Strata: 2			(B)	
						Percent of Dor That Are OBL,	•		50%	(A/B)
						Prevalence Index	Workshee	t:		
			Ahsoluta	Dominant	Indicator	OBL species	5	_ x 1	5	
Shrub Stratum	(Plot Size:	15'radius)	% Cover		Status	FACW species	0	x 2	0	
						FAC species	20	x 3	60	
				= Total Co	ver	FACU species	15	x 4	60	
						UPL species	0	x 5	0	
						Column Totals	40	(A)	125	(B)
						_	ce Index = I		3.12	(-,
						Hydrophytic Vege	tation Ind	licators	s:	
				Dominant		1- Rapid Tes	st For Hydr	rophyti	c Vegeta	tion
Herb Stratum	(Plot Size:	5'radius)	% Cover	Species?	Status	2- Dominan	ce Test is >	> 50%		
Equisetum arvense			20	Х	FAC	3- Prevalenc	ce Index is	=< 3.0		
Typha angustifolia Abutilon theophrasti			<u>5</u>		OBL FACU	4- Morphol	ogical Ada	ptation	ıs	
			30	= Total Cov		5- Problema		-		n
						Definitions of Veget	ation Strata	a:		
						Tree- Woody plants breast height (DBH),		-		ieter at
						Sapling/Shrub- Wood greater than or equa				and
						Herb- All herbaceous			_	less of
Woody Vine Stratum	(Plot Size:	30'radius)	Absolute % Cover	Dominant Species?	Indicator Status	Woody Vines- All wo height.	ody vines g	reater t	:han 3.28f	t in
Parthenocissus quinqu	uefolia		10	X	FACU					
			10	_= Total Cov	ver	Hydrop Vegeta Pres	-		No X	_
Remarks: (Include photo no	umbers here	or on a sep	arate shee	t.)		1				

SOIL Sampling Point: 1_20200723_WL53_U1 Depth Matrix **Redox Features** (inches % Color Color % Type Texture Remarks Loc 0-20 10YR 3/3 100 Silty Clay Loam **Hydric Soil Indicators:** Indicators for Problematic Soils: Histosol (A1) Polyvalue Below Surface (B15) 2 cm Muck (A10) Histic Epipedon (A2) Thin Dark Surface (S9) Coast Prarie Redox (A16) Black Histic (A3) Loamy Mucky Mineral (F1) 5 cm Mucky Peat or Peat (S3) Hydrogen Sulfide (A4) Loamy Gleyed Matric (F2) Dark Surface (S7) Stratified Layers (A5) Depleted Matrix (F3) Polyvalue Below Surface (S8) Depleted Below Dark Surface (A11) Redox Dark Surface (F6) Thin Dark Surface (S9) Thick Dark Surface (A12) Depleted Dark Surface (F7) Iron-Manganese Masses (F12) Sandy Mucky Mineral (S1) Redox Depressions (F8) Piedmont Floodplain Soils (F19) Sandy Gleyed Matrix (S4) Mesic Spodic (TA6) Sandy Redox (S5) Red Parent Material (F21) Stripped Matrix (S6) Very Shallow Dark Surface (TF12) Dark Surface (S7) Other (Explain in Remarks) Restrictive Layer (if observed): Type: Hydric Soil Present? Yes No Χ Depth (inches): Remarks:

Project/Site: Cider Solar Project	City/Co	ounty: Oakfield/Gen	essee .	Sampling Date: 7/23/2020			
Applicant/Owner: Hecate			State: <u>NY</u>	Sampling Point:			
Investigator(s): Andrew Sorci		1_20200723_WL54					
Landform (hillslope, terrace,etc.): Depression	Local relie	ef (concave, convex, n	(concave, convex, none): Linear Slope (%) 0 - 3				
Subregion (LRR or MLRA): LRR L	Long:7	8.213647	Datum: NAD83				
Soil Map Unit Name: ApA	NWI Classifi	cation: PEM					
Are climatic / hyrologic conditions on the site t	ypical for this time of ye	ar? Yes X No	(if no, e	xplain in Remarks.)			
Are Vegetation , Soil , or Hydrology	significantly distur	bed? Are "Normal (ircumstances"	present? Yes X No			
Are Vegetation , Soil , or Hydrology	naturally problema	atic? (if needed, expl	ain any answers i	in Remarks.)			
							
SUMMARY OF FINDINGS - Attach site map	showing sampling po	oint locations, tran	sects, importa	ant features, etc.			
Hydrophytic Vegetation Present? Yes X	No	Is the Sampled Area					
Hydric Soil Present? Yes X	Υe	es X No					
Wetland Hydrology Present? Yes X	No No	if yes, optional Wetl	and Site ID:	WL54			
Remarks: (Explain alternative procedures here or in a sep							
Associated with drainage ditch	darate report.						
Associated with drainage diten							
HYDROLOGY							
Wetland Hydrology Indicators:			Secondary Indica	ators (minimum of two required)			
Primary Indicators (minimum of one is required: ch	neck all that apply)		Surface So	il Cracks (B6)			
X Surface Water (A1)	X Drainage Patterns (B10)						
High Water Table (A2)	Moss Trim Lines (B16)						
Saturation (A3)	Dry-Season Water Table (C2)						
Water Marks (B1)	Crayfish Burrows (C8)						
Sediment Deposits (B2)	Saturation Visible in Aerial Imagery (C9)						
Drift Deposits (B3)	Stunted or Stressed Plants (D1)						
Algal Mat or Crust (B4)	Geomorphic Position (D2)						
							
Iron Deposits (B5)	Shallow Aquitard (D3)						
Inundation Visible on Aerial Imagery (B7)	Other (Explain in Rem	arks)	Microtopographic Relief (D4)				
Sparsley Vegetated Concave Surface (B8)			X FAC-Neutra	al Test (D5)			
Surface Water Present? Yes X No	Depth (inches) 2						
Water Table Present? Yes No X	Depth (inches)	- Wetland H	ydrology Prese	nt? Yes X No			
Saturation Present? Yes No X	 Depth (inches)	_	, 0,				
		_					
Describe Recorded Data (stream gauge, monit	coring well, aerial photos	, previous inspection	s), if available:				
Domarko							
Remarks:							

	30'radius)	% Cover	Dominant Species? = Total Cov Dominant Species?	Status er	Percent of Dom That Are OBL, F Prevalence Index W	nant Species CW, or FAC: r of Dominar oss All Strata ninant Specie FACW, or FAC	nt a:	2 2 2 00%	(A) (B) (A/B)
Plot Size:	15'radius)		Dominant		Total Number Species Acr Percent of Dom That Are OBL, F Prevalence Index W	r of Dominar oss All Strata ninant Specie FACW, or FAC	nt a: es	2	(B)
Plot Size:	15'radius)			la disease a	That Are OBL, F	ACW, or FA		00%	(A/B)
Plot Size:	15'radius)			la disaban		Vorksheet:			
Plot Size:	15'radius)			l al: a.a.t.a.u					
Plot Size:	15'radius)				OBL species	0 :	x 1	0	
				Status	FACW species	100	x 2	200	
					FAC species	0	x 3	0	
			_= Total Cov	er	FACU species	0 :	x 4	0	
					UPL species	0 :	x 5	0	
					Column Totals	100	(A)	200	(B)
					Prevalence	e Index = B/A	4 =	2	
					Hydrophytic Veget	tation Indica	itors:		
Diet Sizo	5'radius \				X 1- Rapid Test	t For Hydrop	hytic V	'egetat	ion
PIOL SIZE:			-		X 2- Dominanc	e Test is > 50	0%		
			X		X 3- Prevalence	e Index is =<	3.0		
		100			4- Morphological Adaptations				
					5- Problemat	tic Hydrophy	tic Veg	getatio	n
					Definitions of Vegeta	tion Strata:			
								n diame	eter at
								ı. DBH a	ınd
									ess of
Plot Size:	30'radius)			Indicator Status	Woody Vines- All woo height.	ody vines grea	iter thar	າ 3.28ft	in
	-		= Total Cov	er		-			
							X No	ວ	_
bers here	or on a sep	arate shee	t.)		<u> </u>				
P	lot Size:	lot Size:	lot Size: 5'radius) % Cover 75 25 100 lot Size: 30'radius) Absolute % Cover	lot Size:5'radius) % Cover Species?	75 X FACW 25 X FACW 100 = Total Cover Absolute Dominant Indicator % Cover Species? Status = Total Cover	Absolute Dominant Indicator % Cover Species? Status 75 X FACW 25 X FACW 100 = Total Cover Definitions of Vegeta Tree- Woody plants 3 breast height (DBH), is Sapling/Shrub- Wood greater than or equal Herb- All herbaceous size, and woody plant Woody Vines- All wood height. Hydroph Vegeta Prese	Absolute Dominant Indicator % Cover Species? Status 75	Not Size:	Absolute Dominant Indicator % Cover Species? Status 75

OIL		Sampling Point: 1_20200723_WL5
Hydric Soil Indicators:		Indicators for Problematic Soils:
Histosol (A1)	Polyvalue Below Surface (B15)	2 cm Muck (A10)
Histic Epipedon (A2)	Thin Dark Surface (S9)	Coast Prarie Redox (A16)
Black Histic (A3)	Loamy Mucky Mineral (F1)	5 cm Mucky Peat or Peat (S3)
Hydrogen Sulfide (A4)	Loamy Gleyed Matric (F2)	Dark Surface (S7)
Stratified Layers (A5)	Depleted Matrix (F3)	Polyvalue Below Surface (S8)
Depleted Below Dark Surface (A11)	Redox Dark Surface (F6)	Thin Dark Surface (S9)
Thick Dark Surface (A12)	Depleted Dark Surface (F7)	Iron-Manganese Masses (F12)
Sandy Mucky Mineral (S1)	Redox Depressions (F8)	Piedmont Floodplain Soils (F19)
Sandy Gleyed Matrix (S4)		Mesic Spodic (TA6)
Sandy Redox (S5)		Red Parent Material (F21)
Stripped Matrix (S6)		Very Shallow Dark Surface (TF12)
Dark Surface (S7)		X Other (Explain in Remarks)
Restrictive Layer (if observed):		
Туре:	Hv	rdric Soil Present? Yes X No
Depth (inches):		
= ep : (e.,es).		

Project/Site: Cider Solar Project	City/County: Oakfield/Genessee Sampling Date: 9/28/2020						
Applicant/Owner: Hecate	-	State: NY Sampling Point:					
Investigator(s): Andrew Sorci	Section, Township, Rai	nge:1_20200928_WL54_W2					
Landform (hillslope, terrace,etc.): Dip	Local relief (concave, conv	vex, none): None Slope (%) 5 - 10					
Subregion (LRR or MLRA): LRR L	Subregion (LRR or MLRA): LRR L Lat: 43.085554 Long:						
Soil Map Unit Name:		NWI Classification: PFO					
Are climatic / hyrologic conditions on the site	typical for this time of year? Yes X	No (if no, explain in Remarks.)					
Are Vegetation, Soil, or Hydrolog	y significantly disturbed? Are "Nor	mal Circumstances" present? Yes X No					
Are Vegetation, Soil, or Hydrolog	ynaturally problematic? (if needed	l, explain any answers in Remarks.)					
SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.							
Hydrophytic Vegetation Present? Yes		-					
Hydric Soil Present? Yes	within a Wetlan						
		Wetland Site ID: WL54					
Wetland Hydrology Present? Yes>		Wetiand Site ID. WL54					
Remarks: (Explain alternative procedures here or in a so	eparate report.)						
HYDROLOGY							
Wetland Hydrology Indicators:		Secondary Indicators (minimum of two required)					
Primary Indicators (minimum of one is required:	check all that apply)	Surface Soil Cracks (B6)					
Surface Water (A1)	Water-Stained Leaves (B9)	Drainage Patterns (B10)					
High Water Table (A2)	Aquatic Fauna (B13)	Moss Trim Lines (B16)					
Saturation (A3)	Marl Deposits (B15)	Dry-Season Water Table (C2)					
Water Marks (B1)	Hydrogen Sulfide Odor (C1)	or (C1) Crayfish Burrows (C8)					
Sediment Deposits (B2)	Oxidized Rhizospheres on Living Roots (es on Living Roots (C3) Saturation Visible in Aerial Imagery (C9)					
Drift Deposits (B3)	Presence of Reduced Iron (C4)	Stunted or Stressed Plants (D1)					
Algal Mat or Crust (B4)	Recent Iron Reduction in Tilled Soils (C6						
Iron Deposits (B5)	Thin Muck Surface (C7)	Shallow Aquitard (D3)					
Inundation Visible on Aerial Imagery (B7)	Other (Explain in Remarks)	Microtopographic Relief (D4)					
Sparsley Vegetated Concave Surface (B8)	Other (Explain in Remarks)						
Sparsiey vegetated concave surface (B8)		X FAC-Neutral Test (D5)					
Surface Water Present? Yes NoX	Depth (inches)						
Water Table Present? Yes No _ X	Depth (inches) Wetla	and Hydrology Present? Yes X No					
Saturation Present? Yes NoX	Depth (inches)						
Describe Recorded Data (stream gauge, mon	itoring well, aerial photos, previous inspe	ctions). if available:					
(5 5)		,,					
Remarks:							

VEGETATION - Use scientific names of plants Sampling Point: 1_20200928_WL54_W2 Absolute Dominant Indicator **Dominance Test Worksheet:** (Plot Size: 30'radius) % Cover Species? Status **Tree Stratum Number of Dominant Species** 80 Х **FACW** That Are OBL, FACW, or FAC: 5 (A) Acer saccharinum 80 = Total Cover **Total Number of Dominant** (B) Species Across All Strata: 5 Percent of Dominant Species That Are OBL, FACW, or FAC: (A/B) 100% **Prevalence Index Worksheet:** x 1 8 **OBL** species Absolute Dominant Indicator **FACW** species 93 x 2 186 (Plot Size: 15'radius) % Cover Species? Status **Shrub Stratum** FAC species 225 75 х3 Rhamnus cathartica 60 Χ **FAC** 60 = Total Cover 5 **FACU** species x 4 20 **UPL** species 0 x 5 0 Column Totals 181 (A) 439 (B) Prevalence Index = B/A = 2.43 **Hydrophytic Vegetation Indicators:** Absolute Dominant Indicator 1- Rapid Test For Hydrophytic Vegetation **Herb Stratum** (Plot Size: 5'radius) % Cover Species? Status X 2- Dominance Test is > 50% 8 Carex cristatella **FACW** X 3- Prevalence Index is =< 3.0 8 Χ OBL Glyceria striata 4- Morphological Adaptations Viola sororia 5 **FAC** Circaea canadensis 5 **FACU** 5- Problematic Hydrophytic Vegetation Carex grayi 5 **FACW** 31 = Total Cover **Definitions of Vegetation Strata:** Tree- Woody plants 3 in. (7.6cm) or more in diameter at breast height (DBH), regardless of height. Sapling/Shrub- Woody plants less than 3 in. DBH and greater than or equal to 3.28ft (1m) tall. Herb- All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28ft tall. Absolute Dominant Indicator Woody Vines- All woody vines greater than 3.28ft in (Plot Size: 30'radius) Species? **Woody Vine Stratum** % Cover Status height. **FAC** Vitis riparia 10 Χ 10 = Total Cover Hydrophytic Vegetation Present? Yes X No ___

SOIL Sampling Point: 1_20200928_WL54_W2

Depth	Matrix				Redo	x Featu	ıres	
(inches	Color	%	Color	%	Type	Loc	Texture	Remarks
0-7	10YR 3/1	90	10Y 3/6	10	С	PL	Sandy Clay Loam	
7-16	10YR 5/2	85	10YR 4/6	15	С	М	Sandy Loam	

Hydric Soil Indicators:		Indicators for Problematic Soils:
Histosol (A1)	Polyvalue Below Surface (B15)2 cm Muck (A10)
Histic Epipedon (A2)	Thin Dark Surface (S9)	Coast Prarie Redox (A16)
Black Histic (A3)	Loamy Mucky Mineral (F1	.)5 cm Mucky Peat or Peat (S3)
Hydrogen Sulfide (A4)	Loamy Gleyed Matric (F2)	Dark Surface (S7)
Stratified Layers (A5)	X Depleted Matrix (F3)	Polyvalue Below Surface (S8)
Depleted Below Dark Surface (A11)	X Redox Dark Surface (F6)	Thin Dark Surface (S9)
Thick Dark Surface (A12)	Depleted Dark Surface (F7	7) Iron-Manganese Masses (F12)
Sandy Mucky Mineral (S1)	Redox Depressions (F8)	Piedmont Floodplain Soils (F19)
Sandy Gleyed Matrix (S4)		Mesic Spodic (TA6)
Sandy Redox (S5)		Red Parent Material (F21)
Stripped Matrix (S6)		Very Shallow Dark Surface (TF12)
Dark Surface (S7)		Other (Explain in Remarks)
Restrictive Layer (if observed):		
Type:		
Type:		Hydric Soil Present? Yes X No
Depth (inches):		

Remarks:

Project/Site: Cider Solar Project	City/County: Oakfield/Gen	essee Sampling Date: 7/22/2020			
Applicant/Owner: Hecate		State: NY Sampling			
Investigator(s): Andrew Sorci	Section, Township, Range:	Point:1_20200723_WL54_U			
Landform (hillslope, terrace,etc.): Terrace	Local relief (concave, convex, r	none): <u>None</u> Slope (%) <u>0 - 1</u>			
Subregion (LRR or MLRA): LRR L	Lat: <u>43.085298</u> Long: -7	78.213700 Datum: NAD83			
Soil Map Unit Name: ApA		NWI Classification: UPL			
Are climatic / hyrologic conditions on the site	e climatic / hyrologic conditions on the site typical for this time of year? Yes X				
Are Vegetation, Soil, or Hydrolog	y significantly disturbed? Are "Normal of	Circumstances" present? Yes X No			
Are Vegetation, Soil, or Hydrolog	y naturally problematic? (if needed, exp	lain any answers in Remarks.)			
SUMMARY OF FINDINGS - Attach site ma	ap showing sampling point locations, tran	sects, important features, etc.			
Hydrophytic Vegetation Present? Yes	No X Is the Sampled Area	-			
Hydric Soil Present? Yes	No X within a Wetland?	Yes No X			
Wetland Hydrology Present? Yes		and site ib.			
Remarks: (Explain alternative procedures here or in a s	eparate report.)				
HYDROLOGY					
Wetland Hydrology Indicators:		Secondary Indicators (minimum of two required)			
Primary Indicators (minimum of one is required:	check all that apply)	Surface Soil Cracks (B6)			
Surface Water (A1)	Water-Stained Leaves (B9)	Drainage Patterns (B10)			
High Water Table (A2)	Aquatic Fauna (B13)	Moss Trim Lines (B16)			
Saturation (A3)	Marl Deposits (B15)	Dry-Season Water Table (C2)			
Water Marks (B1)	Hydrogen Sulfide Odor (C1)	Crayfish Burrows (C8)			
Sediment Deposits (B2)	Oxidized Rhizospheres on Living Roots (C3)	Saturation Visible in Aerial Imagery (C9)			
Drift Deposits (B3)	Presence of Reduced Iron (C4)				
Algal Mat or Crust (B4)	Recent Iron Reduction in Tilled Soils (C6)	Geomorphic Position (D2)			
Iron Deposits (B5)	Thin Muck Surface (C7)	Shallow Aquitard (D3)			
Inundation Visible on Aerial Imagery (B7)	Other (Explain in Remarks)	Microtopographic Relief (D4)			
Sparsley Vegetated Concave Surface (B8)	Other (Explain in Kemarks)	FAC-Neutral Test (D5)			
		FAC-Neutral Test (D5)			
Surface Water Present? Yes NoX	Depth (inches)				
Water Table Present? Yes NoX	Depth (inches) Wetland F	lydrology Present? Yes No X			
Saturation Present? Yes No X	Depth (inches)				
Describe Recorded Data (stream gauge mon	nitoring well, aerial photos, previous inspection	s) if available:			
Describe Necoraea Data (stream Baage, mon	troining well, derial priotos, previous hispection	o,, ii avaliabie.			
Remarks:					

VEGETATION - Use scientific names of plants Sampling Point: 1_20200723_WL54_U1 Absolute Dominant Indicator **Dominance Test Worksheet:** (Plot Size: 30'radius) % Cover Species? Status **Tree Stratum Number of Dominant Species** That Are OBL, FACW, or FAC: (A) = Total Cover **Total Number of Dominant** (B) Species Across All Strata: 5 Percent of Dominant Species (A/B) 0% That Are OBL, FACW, or FAC: **Prevalence Index Worksheet:** x 1 0 **OBL** species Absolute Dominant Indicator **FACW** species 10 (Plot Size: 15'radius) Status x 2 **Shrub Stratum** % Cover Species? 27 FAC species х3 = Total Cover FACU species 47 x 4 188 **UPL** species 23 x 5 115 Column Totals 84 (A) 340 (B) Prevalence Index = B/A = 4.05 **Hydrophytic Vegetation Indicators:** Absolute Dominant Indicator 1- Rapid Test For Hydrophytic Vegetation **Herb Stratum** (Plot Size: 5'radius) % Cover Species? Status 2- Dominance Test is > 50% UPL Daucus carota 15 Χ 3- Prevalence Index is =< 3.0 Х Trifolium pratense 15 **FACU** 4- Morphological Adaptations Phleum pratense 10 Χ **FACU** Leucanthemum vulgare 8 Χ UPL 5- Problematic Hydrophytic Vegetation Solidago canadensis 8 Х **FACU** Setaria pumila 7 FAC **Definitions of Vegetation Strata: FACU** Ambrosia artemisiifolia 6 Tree- Woody plants 3 in. (7.6cm) or more in diameter at Phalaris arundinacea **FACW** breast height (DBH), regardless of height. Acalypha rhomboidea 4 **FACU** 4 **FACU** Erigeron annuus Sapling/Shrub- Woody plants less than 3 in. DBH and Rumex crispus 2 **FAC** greater than or equal to 3.28ft (1m) tall. 84 = Total Cover Herb- All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28ft tall. Absolute Dominant Indicator Woody Vines- All woody vines greater than 3.28ft in (Plot Size: 30'radius) **Woody Vine Stratum** % Cover Species? Status height. = Total Cover Hydrophytic Vegetation Present? Yes ____ No __X Remarks: (Include photo numbers here or on a separate sheet.)

SOIL Sampling Point: 1_20200723_WL54_U1 Depth Matrix **Redox Features** (inches Color % Color % Texture Remarks Type Loc 0-12 10YR 3/2 100 Sandy Loam 12-18 10YR 3/2 85 2.5YR 4/8 15 C Μ Sandy Clay Loam **Hydric Soil Indicators:** Indicators for Problematic Soils: Histosol (A1) Polyvalue Below Surface (B15) 2 cm Muck (A10) Histic Epipedon (A2) Thin Dark Surface (S9) Coast Prarie Redox (A16) Black Histic (A3) Loamy Mucky Mineral (F1) 5 cm Mucky Peat or Peat (S3) Hydrogen Sulfide (A4) Loamy Gleyed Matric (F2) Dark Surface (S7) Stratified Layers (A5) Depleted Matrix (F3) Polyvalue Below Surface (S8) Depleted Below Dark Surface (A11) Redox Dark Surface (F6) Thin Dark Surface (S9) Thick Dark Surface (A12) Depleted Dark Surface (F7) Iron-Manganese Masses (F12) Sandy Mucky Mineral (S1) Redox Depressions (F8) Piedmont Floodplain Soils (F19) Sandy Gleyed Matrix (S4) Mesic Spodic (TA6) Sandy Redox (S5) Red Parent Material (F21) Stripped Matrix (S6) Very Shallow Dark Surface (TF12) Dark Surface (S7) Other (Explain in Remarks) Restrictive Layer (if observed): Type: Hydric Soil Present? Yes No Χ Depth (inches): Remarks:

Project/Site: Cider Solar Project	City/County: Oakfield/Genessee Sampling Date: 7/23/2020					
Applicant/Owner: Hecate	State: NY Sampling Point:					
Investigator(s): Andrew Sorci	Sectio	n, Township, Range:		1_20200723_WL55_W1		
Landform (hillslope, terrace,etc.): Dip	f (concave, convex, n	one): <u>Concave</u>	Slope (%) <u>1 - 3</u>			
Subregion (LRR or MLRA): LRR L	Long:7	8.214293	Datum: NAD83			
Soil Map Unit Name: HIB			NWI Classifica	tion: PEM		
Are climatic / hyrologic conditions on the site t	cypical for this time of ye	ar? Yes X No	(if no, exp	lain in Remarks.)		
Are Vegetation, Soil, or Hydrology	significantly distur	bed? Are "Normal C	Circumstances" pr	esent? Yes X No		
Are Vegetation, Soil, or Hydrology	naturally problema	atic? (if needed, expl	ain any answers in	Remarks.)		
SUMMARY OF FINDINGS - Attach site map	o showing sampling po	oint locations, trans	sects, importan	t features, etc.		
Hydrophytic Vegetation Present? Yes X		Is the Sampled Area				
Hydric Soil Present? Yes X		within a Wetland?	Yes	X No		
		if yes, optional Wetla	-	WL55		
Wetland Hydrology Present? Yes X		Tryes, optional weth		VVE33		
Remarks: (Explain alternative procedures here or in a se	paratic reports,					
HYDROLOGY						
Wetland Hydrology Indicators:			Secondary Indicato	ors (minimum of two required)		
Primary Indicators (minimum of one is required: cl	heck all that apply)		Surface Soil (
Surface Water (A1)	Water-Stained Leaves	5 (B9) Drainage Patterns (B10)				
High Water Table (A2)	Aquatic Fauna (B13)					
Saturation (A3)	Marl Deposits (B15)	Dry-Season Water Table (C2)				
Water Marks (B1)	Hydrogen Sulfide Odo					
Sediment Deposits (B2)	Oxidized Rhizosphere					
Drift Deposits (B3)	Presence of Reduced					
	Recent Iron Reduction					
Algal Mat or Crust (B4)			X Geomorphic			
Iron Deposits (B5)	Thin Muck Surface (C		Shallow Aqui			
Inundation Visible on Aerial Imagery (B7)	Other (Explain in Rem	arks)		aphic Relief (D4)		
Sparsley Vegetated Concave Surface (B8)			X FAC-Neutral	Test (D5)		
Surface Water Present? Yes No _ X	Depth (inches)	_				
Water Table Present? Yes No X	Depth (inches)	Wetland H	ydrology Present	? Yes X No		
Saturation Present? Yes No X	Depth (inches)	-				
Describe Recorded Data (stream gauge, monit	toring well, aerial photos	, previous inspection	s), if available:			
Remarks:						
ACHUINS.						

VEGETATION - Use scientific names of plants Sampling Point: 1_20200723_WL55_W1 Absolute Dominant Indicator **Dominance Test Worksheet:** (Plot Size: 30'radius) % Cover Species? Status **Tree Stratum Number of Dominant Species** That Are OBL, FACW, or FAC: (A) = Total Cover **Total Number of Dominant** (B) Species Across All Strata: 5 Percent of Dominant Species (A/B) That Are OBL, FACW, or FAC: 80% **Prevalence Index Worksheet:** 0 x 1 **OBL** species Absolute Dominant Indicator **FACW** species 103 206 (Plot Size: 15'radius) % Cover Species? x 2 **Shrub Stratum** Status FAC species 13 39 х3 Cornus amomum **FACW** Χ Fraxinus pennsylvanica 3 Χ **FACW FACU** species 6 x 4 24 8 = Total Cover **UPL** species 0 x 5 0 Column Totals 122 (A) 269 (B) Prevalence Index = B/A = 2.2 **Hydrophytic Vegetation Indicators:** Absolute Dominant Indicator 1- Rapid Test For Hydrophytic Vegetation **Herb Stratum** (Plot Size: 5'radius) % Cover Species? Status X 2- Dominance Test is > 50% 90 Phragmites australis **FACW** X 3- Prevalence Index is =< 3.0 5 Symphyotrichum lanceolatum **FACW** 4- Morphological Adaptations Solanum dulcamara 5 FAC Equisetum arvense 3 **FAC** 5- Problematic Hydrophytic Vegetation 103 = Total Cover **Definitions of Vegetation Strata:** Tree- Woody plants 3 in. (7.6cm) or more in diameter at breast height (DBH), regardless of height. Sapling/Shrub- Woody plants less than 3 in. DBH and greater than or equal to 3.28ft (1m) tall. Herb- All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28ft tall. Absolute Dominant Indicator Woody Vines- All woody vines greater than 3.28ft in (Plot Size: 30'radius) % Cover Species? **Woody Vine Stratum** Status height. Parthenocissus quinquefolia **FACU** 6 Vitis riparia 5 Χ FAC Hydrophytic = Total Cover 11 Vegetation Present? Yes X No ___

SOIL Sampling Point: 1_20200723_WL55_W1

Depth	Matrix				Redo	x Featı	ıres		
(inches	Color	%	Color	%	Type	Loc	Texture	Remarks	
0-9	10YR 3/1	90	10YR 4/4	10	С	М	Sandy Loam		
9-20	10YR 3/2	90	10YR 4/6	10	С	М	Sandy Loam		

Hydric Soil Indicators:		Indicators for Problematic Soils:
Histosol (A1)	Polyvalue Below Surface (B15)	2 cm Muck (A10)
Histic Epipedon (A2)	Thin Dark Surface (S9)	Coast Prarie Redox (A16)
Black Histic (A3)	Loamy Mucky Mineral (F1)	5 cm Mucky Peat or Peat (S3)
Hydrogen Sulfide (A4)	Loamy Gleyed Matric (F2)	Dark Surface (S7)
Stratified Layers (A5)	Depleted Matrix (F3)	Polyvalue Below Surface (S8)
Depleted Below Dark Surface (A11)	X Redox Dark Surface (F6)	Thin Dark Surface (S9)
Thick Dark Surface (A12)	Depleted Dark Surface (F7)	Iron-Manganese Masses (F12)
Sandy Mucky Mineral (S1)	Redox Depressions (F8)	Piedmont Floodplain Soils (F19)
Sandy Gleyed Matrix (S4)		Mesic Spodic (TA6)
Sandy Redox (S5)		Red Parent Material (F21)
Stripped Matrix (S6)		Very Shallow Dark Surface (TF12)
Dark Surface (S7)		Other (Explain in Remarks)
Restrictive Layer (if observed):		
Type:		W 1: 6 15
		Hydric Soil Present? Yes X No
Depth (inches):		

Project/Site: Cider Solar Project	City/County: Oakfield/Ger	nessee Sampling Date: 7/20/2020				
Applicant/Owner: Hecate		State: NY Sampling Point:				
Investigator(s): Andrew Sorci	Section, Township, Range:	1_20200723_WL55_W2				
Landform (hillslope, terrace,etc.): Dip	Local relief (concave, convex,	none): <u>None</u> Slope (%) <u>2 - 4</u>				
Subregion (LRR or MLRA): LRR L	Lat: <u>43.084367</u> Long:	78.215222 Datum: NAD83				
Soil Map Unit Name: OvA		NWI Classification: PFO				
Are climatic / hyrologic conditions on the site t	ypical for this time of year? Yes X No	(if no, explain in Remarks.)				
Are Vegetation, Soil, or Hydrology	significantly disturbed? Are "Normal	Circumstances" present? Yes X No				
Are Vegetation, Soil, or Hydrology	naturally problematic? (if needed, exp	plain any answers in Remarks.)				
SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.						
Hydrophytic Vegetation Present? Yes X						
Hydric Soil Present? Yes X	No within a Wetland?	Yes X No				
Wetland Hydrology Present? Yes X	No if yes, optional Wet	land Site ID: WL55				
Remarks: (Explain alternative procedures here or in a set						
HYDROLOGY						
Wetland Hydrology Indicators:		Secondary Indicators (minimum of two required)				
Primary Indicators (minimum of one is required: ch	neck all that apply)	Surface Soil Cracks (B6)				
Surface Water (A1)	Water-Stained Leaves (B9)	Drainage Patterns (B10)				
High Water Table (A2)	Aquatic Fauna (B13)	X Moss Trim Lines (B16)				
Saturation (A3)	Marl Deposits (B15)	Dry-Season Water Table (C2)				
Water Marks (B1)	Hydrogen Sulfide Odor (C1)	Crayfish Burrows (C8)				
Sediment Deposits (B2)	Oxidized Rhizospheres on Living Roots (C3)	Saturation Visible in Aerial Imagery (C9)				
Drift Deposits (B3)	Presence of Reduced Iron (C4)	Stunted or Stressed Plants (D1)				
Algal Mat or Crust (B4)	Recent Iron Reduction in Tilled Soils (C6)	X Geomorphic Position (D2)				
Iron Deposits (B5)	Thin Muck Surface (C7)	Shallow Aquitard (D3)				
Inundation Visible on Aerial Imagery (B7)	Other (Explain in Remarks)	Microtopographic Relief (D4)				
Sparsley Vegetated Concave Surface (B8)	<u> </u>	X FAC-Neutral Test (D5)				
Surface Water Present? Yes No X	Depth (inches)					
Water Table Present? Yes No X	Depth (inches) Wetland I	Hydrology Present? Yes X No				
Saturation Present? Yes No X	Depth (inches)					
Describe Recorded Data (stream gauge, monit	toring well, aerial photos, previous inspection	ns), if available:				
Domarka						
Remarks:						

VEGETATION - Use scien	tific names o	of plants				Sampli	ng Point:	1_202	.00723_W	L55_W2
Tue a Chuatum	(Plot Size: 3	O'radius \	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test V	Vorksheet	::		
Tree Stratum	_	o raulus)				Number of Domi	•		_	/A\
Fraxinus pennsylvanica			<u>75</u> 75	= Total Cov	FACW /er	That Are OBL, FA	•	_	5	_(A)
				10tal co	761	Total Numbe Species Ac			5	(B)
						Percent of Dor		_		=` ′
						That Are OBL,	•		100%	(A/B)
						Prevalence Index \	Workshee	t:		
			Absoluto	Dominant	Indicator	OBL species	10	x 1	10	
Shrub Stratum	(Plot Size: 1	15'radius)	% Cover	Species?	Status	FACW species	110	x 2	220	
Fraxinus pennsylvanica	 1		20	Х	FACW	FAC species	10	x 3	30	
			20	= Total Cov	/er	FACU species	0	x 4	0	
						UPL species	0	x 5	0	
						Column Totals	130	(A)	260	(B)
						Prevalenc	e Index =	B/A =	2	
						Hydrophytic Vege	tation Ind	icator	s:	
			Absolute	Dominant	Indicator	1- Rapid Tes	t For Hydi	ophyt	ic Vegeta	tion
Herb Stratum	(Plot Size:	5'radius)	% Cover	Species?	Status	X 2- Dominan	ce Test is >	> 50%		
Lysimachia nummulari	a		15	X	FACW	X 3- Prevalenc	e Index is	=< 3.0		
Glyceria striata			10 25	= Total Cov	OBL ver	4- Morpholo	ogical Ada	otation	าร	
				10ta1 co	, C1	5- Problema				n
						Definitions of Veget	ation Strata	a:		
						Tree- Woody plants : breast height (DBH),				eter at
						Sapling/Shrub- Wood greater than or equa				and
						Herb- All herbaceous size, and woody plan				less of
Woody Vine Stratum	(Plot Size: 3	30'radius)	% Cover	Dominant Species?	Status	Woody Vines- All wo height.	ody vines g	reater	than 3.28f	t in
Vitis riparia			10	X _= Total Cov	<u>FAC</u> /er	Hydropl Vegeta Pres	-	X	No	

 $Form\ adapted\ from\ US\ Army\ Corp\ of\ Engineers\ -\ Northcentral\ and\ Northeast\ Region\ -\ Wetlands\ Determintation\ Form\ -\ version\ 2.0$

SOIL Sampling Point: 1_20200723_WL55_W2 Depth Matrix **Redox Features** (inches Color % Color Texture Remarks % Type Loc 7.5YR 2.5/1 100 0-4 Loam 4-15 10YR 3/1 90 5YR 3/4 10 C Μ Clay Loam **Hydric Soil Indicators:** Indicators for Problematic Soils: Histosol (A1) Polyvalue Below Surface (B15) 2 cm Muck (A10) Histic Epipedon (A2) Thin Dark Surface (S9) Coast Prarie Redox (A16) Black Histic (A3) Loamy Mucky Mineral (F1) 5 cm Mucky Peat or Peat (S3) Hydrogen Sulfide (A4) Loamy Gleyed Matric (F2) Dark Surface (S7) Stratified Layers (A5) Depleted Matrix (F3) Polyvalue Below Surface (S8) Depleted Below Dark Surface (A11) X Redox Dark Surface (F6) Thin Dark Surface (S9) Thick Dark Surface (A12) Depleted Dark Surface (F7) Iron-Manganese Masses (F12) Sandy Mucky Mineral (S1) Redox Depressions (F8) Piedmont Floodplain Soils (F19) Sandy Gleyed Matrix (S4) Mesic Spodic (TA6) Sandy Redox (S5) Red Parent Material (F21) Stripped Matrix (S6) Very Shallow Dark Surface (TF12) Dark Surface (S7) Other (Explain in Remarks) Restrictive Layer (if observed): Type: Hydric Soil Present? Yes No Depth (inches): Remarks:

Project/Site: Cider Solar Project	City/County: Oakfield/Genessee Sampling Date: 7/20/2020					
Applicant/Owner: Hecate	State: NY Sampling Point:					
Investigator(s): Andrew Sorci	1_20200723_WL55_W3					
Landform (hillslope, terrace,etc.): Dip	Local relief (concave, convex, r	none): <u>Concave</u> Slope (%) <u>0 - 1</u>				
Subregion (LRR or MLRA): LRR R	Lat: <u>43.084008</u> Long: -7	78.214274 Datum: NAD83				
Soil Map Unit Name: HIB		NWI Classification: PSS				
Are climatic / hyrologic conditions on the site	typical for this time of year? Yes X No	(if no, explain in Remarks.)				
Are Vegetation, Soil, or Hydrolog	y significantly disturbed? Are "Normal of	Circumstances" present? Yes X No				
Are Vegetation, Soil, or Hydrolog	ynaturally problematic? (if needed, exp	lain any answers in Remarks.)				
SLIMMARY OF FINDINGS - Attach site ma	ap showing sampling point locations, tran	sects important features etc				
	X No Is the Sampled Area					
	within a Wetland?	Yes X No				
	X Noif yes, entired West					
Wetland Hydrology Present? Yes>	No if yes, optional Wetl	and Site ID: WL55				
Remarks: (Explain alternative procedures here or in a so	eparate report.)					
HYDROLOGY						
Wetland Hydrology Indicators:		Secondary Indicators (minimum of two required)				
Primary Indicators (minimum of one is required:	check all that apply)	Surface Soil Cracks (B6)				
Surface Water (A1)	Water-Stained Leaves (B9)	Drainage Patterns (B10)				
High Water Table (A2)	Aquatic Fauna (B13)	Moss Trim Lines (B16)				
Saturation (A3)	Marl Deposits (B15)	Dry-Season Water Table (C2)				
Water Marks (B1)	Hydrogen Sulfide Odor (C1)	Crayfish Burrows (C8)				
Sediment Deposits (B2)	Oxidized Rhizospheres on Living Roots (C3)					
Drift Deposits (B3)	Presence of Reduced Iron (C4)	Stunted or Stressed Plants (D1)				
Algal Mat or Crust (B4)	Recent Iron Reduction in Tilled Soils (C6)	X Geomorphic Position (D2)				
Iron Deposits (B5)	Thin Muck Surface (C7)	Shallow Aquitard (D3)				
Inundation Visible on Aerial Imagery (B7)	Other (Explain in Remarks)	Microtopographic Relief (D4)				
	Other (Explain in Kemarks)					
Sparsley Vegetated Concave Surface (B8)		X FAC-Neutral Test (D5)				
Surface Water Present? Yes NoX	Depth (inches)					
Water Table Present? Yes No _ X	Depth (inches) Wetland H	lydrology Present? Yes X No				
Saturation Present? Yes NoX	Depth (inches)					
Describe Recorded Data (stream gauge, mon	nitoring well, aerial photos, previous inspection	s). if available:				
(5 5)		"				
Remarks:						

VEGETATION - Use scientific names of plants Sampling Point: 1_20200723_WL55_W3 Absolute Dominant Indicator **Dominance Test Worksheet:** (Plot Size: 30'radius) % Cover Species? Status **Tree Stratum Number of Dominant Species** That Are OBL, FACW, or FAC: (A) = Total Cover **Total Number of Dominant** Species Across All Strata: (B) 2 Percent of Dominant Species That Are OBL, FACW, or FAC: (A/B) 100% **Prevalence Index Worksheet:** x 1 0 **OBL** species Absolute Dominant Indicator **FACW** species 200 x 2 400 (Plot Size: 15'radius) % Cover Species? Status **Shrub Stratum** FAC species 0 х3 Fraxinus pennsylvanica 75 Χ **FACW** Rosa multiflora 5 **FACU FACU** species 5 x 4 20 80 = Total Cover **UPL** species 0 x 5 0 Column Totals 205 (A) 420 (B) Prevalence Index = B/A = 2.05 **Hydrophytic Vegetation Indicators:** Absolute Dominant Indicator X 1- Rapid Test For Hydrophytic Vegetation **Herb Stratum** (Plot Size: 5'radius) % Cover Species? Status X 2- Dominance Test is > 50% Phalaris arundinacea 80 Χ **FACW** X 3- Prevalence Index is =< 3.0 Solidago gigantea 20 **FACW** 4- Morphological Adaptations Lysimachia nummularia 15 **FACW** Symphyotrichum lanceolatum 10 **FACW** 5- Problematic Hydrophytic Vegetation 125 = Total Cover **Definitions of Vegetation Strata:** Tree- Woody plants 3 in. (7.6cm) or more in diameter at breast height (DBH), regardless of height. Sapling/Shrub- Woody plants less than 3 in. DBH and greater than or equal to 3.28ft (1m) tall. Herb- All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28ft tall. Absolute Dominant Indicator Woody Vines- All woody vines greater than 3.28ft in (Plot Size: 30'radius) **Woody Vine Stratum** % Cover Species? Status height. = Total Cover Hydrophytic Vegetation Present? Yes X No ___ Remarks: (Include photo numbers here or on a separate sheet.)

SOIL Sampling Point: 1_20200723_WL55_W3 Depth Matrix **Redox Features** (inches Color % Color % Texture Remarks Type Loc 0-12 7.5YR 2.5/1 100 Sandy Loam 12-18 2.5Y 5/1 10YR 4/6 15 C Μ Sandy Clay Loam **Hydric Soil Indicators:** Indicators for Problematic Soils: Histosol (A1) Polyvalue Below Surface (B15) 2 cm Muck (A10) Histic Epipedon (A2) Thin Dark Surface (S9) Coast Prarie Redox (A16) Black Histic (A3) Loamy Mucky Mineral (F1) 5 cm Mucky Peat or Peat (S3) Hydrogen Sulfide (A4) Loamy Gleyed Matric (F2) Dark Surface (S7) Stratified Layers (A5) Depleted Matrix (F3) Polyvalue Below Surface (S8) X Depleted Below Dark Surface (A11) Redox Dark Surface (F6) Thin Dark Surface (S9) Thick Dark Surface (A12) Depleted Dark Surface (F7) Iron-Manganese Masses (F12) Sandy Mucky Mineral (S1) Redox Depressions (F8) Piedmont Floodplain Soils (F19) Sandy Gleyed Matrix (S4) Mesic Spodic (TA6) Sandy Redox (S5) Red Parent Material (F21) Stripped Matrix (S6) Very Shallow Dark Surface (TF12) Dark Surface (S7) Other (Explain in Remarks) Restrictive Layer (if observed): Type: Hydric Soil Present? Yes No Depth (inches): Remarks:

Project/Site: Cider Solar Project	City/County: Oakfield/Ger	nessee Sampling Date: 7/23/2020				
Applicant/Owner: Hecate		State: NY Sampling				
Investigator(s): Andrew Sorci	Section, Township, Range:	Point:1_20200723_WL55_U				
Landform (hillslope, terrace,etc.): Rise	Local relief (concave, convex, r	none): <u>Convex</u> Slope (%) <u>3 - 5</u>				
Subregion (LRR or MLRA): LRR L	Lat: 43.084181 Long: -7	78.214178 Datum: NAD83				
Soil Map Unit Name: HIB		NWI Classification: UPL				
Are climatic / hyrologic conditions on the site t						
Are Vegetation, Soil, or Hydrology		· — — — — — — — — — — — — — — — — — — —				
Are Vegetation, Soil, or Hydrology naturally problematic? (if needed, explain any answers in Remarks.)						
SUMMARY OF FINDINGS - Attach site maj	showing sampling point locations, tran	sects, important features, etc.				
Hydrophytic Vegetation Present? Yes X	No Is the Sampled Area	1				
Hydric Soil Present? Yes	No X within a Wetland?	Yes No X				
Wetland Hydrology Present? Yes	No X if yes, optional Wet	land Site ID:				
Remarks: (Explain alternative procedures here or in a se	parate report.)					
	,					
HYDROLOGY						
Wetland Hydrology Indicators:		Secondary Indicators (minimum of two required)				
Primary Indicators (minimum of one is required: cl	neck all that apply)	Surface Soil Cracks (B6)				
Surface Water (A1)	Water-Stained Leaves (B9)	Drainage Patterns (B10)				
High Water Table (A2)	Aquatic Fauna (B13)	Moss Trim Lines (B16)				
Saturation (A3)	Marl Deposits (B15)	Dry-Season Water Table (C2)				
Water Marks (B1)	Hydrogen Sulfide Odor (C1)	Crayfish Burrows (C8)				
Sediment Deposits (B2)	Oxidized Rhizospheres on Living Roots (C3)	Saturation Visible in Aerial Imagery (C9)				
Drift Deposits (B3)	Presence of Reduced Iron (C4)	Stunted or Stressed Plants (D1)				
Algal Mat or Crust (B4)	Recent Iron Reduction in Tilled Soils (C6)	Geomorphic Position (D2)				
Iron Deposits (B5)	Thin Muck Surface (C7)	Shallow Aquitard (D3)				
Inundation Visible on Aerial Imagery (B7)	Other (Explain in Remarks)	Microtopographic Relief (D4)				
Sparsley Vegetated Concave Surface (B8)		FAC-Neutral Test (D5)				
Surface Water Present? Yes No X	Depth (inches)					
Water Table Present? Yes No X	= ' ' 	Hydrology Present? Yes No X				
Saturation Present? Yes No X	Depth (inches)	rydrology rieselit: Tes No_X				
Describe Recorded Data (stream gauge, monit	toring well, aerial photos, previous inspectior	ns), if available:				
Remarks:						

VEGETATION - Use scientific names of plants Sampling Point: 1 20200723 WL55 U1 Absolute Dominant Indicator **Dominance Test Worksheet:** (Plot Size: 30'radius) % Cover Species? Status **Tree Stratum Number of Dominant Species** Populus deltoides 50 Х FAC That Are OBL, FACW, or FAC: (A) Salix nigra 20 Χ OBL Total Number of Dominant 70 = Total Cover Species Across All Strata: 7 (B) Percent of Dominant Species That Are OBL, FACW, or FAC: 57.1% (A/B) **Prevalence Index Worksheet:** 20 x 1 20 **OBL** species Absolute Dominant Indicator **FACW** species 5 10 (Plot Size: 15'radius) % Cover Species? Status x 2 **Shrub Stratum** FAC species 111 х3 333 Cornus racemosa 25 Χ **FAC** Lonicera morrowii 15 Χ **FACU FACU** species 45 x 4 180 40 = Total Cover **UPL** species 0 x 5 0 Column Totals 181 (A) 543 (B) Prevalence Index = B/A = 3 **Hydrophytic Vegetation Indicators:** Absolute Dominant Indicator 1- Rapid Test For Hydrophytic Vegetation **Herb Stratum** (Plot Size: 5'radius) % Cover Species? Status X 2- Dominance Test is > 50% 25 **FACU** Solidago canadensis X 3- Prevalence Index is =< 3.0 25 Χ FAC Euthamia graminifolia 4- Morphological Adaptations Equisetum arvense 5 FAC Phragmites australis 5 **FACW** 5- Problematic Hydrophytic Vegetation Ranunculus acris 3 FAC Geum canadense 3 FAC **Definitions of Vegetation Strata:** = Total Cover 66 Tree- Woody plants 3 in. (7.6cm) or more in diameter at breast height (DBH), regardless of height. Sapling/Shrub- Woody plants less than 3 in. DBH and greater than or equal to 3.28ft (1m) tall. Herb- All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28ft tall. Absolute Dominant Indicator Woody Vines- All woody vines greater than 3.28ft in (Plot Size: 30'radius) % Cover Species? **Woody Vine Stratum Status** height. Parthenocissus quinquefolia FACU Χ 5 = Total Cover Hydrophytic Vegetation Present? Yes X No ____

SOIL Sampling Point: 1_20200723_WL55_U1

Depth	Matrix	[Redo	ox Featı	ıres		
(inches	Color	%	Color	%	Туре	Loc	Т	exture	Remarks
0-12	10YR 3/2	100					San	dy Loam	
12-20	10YR 3/2	98	10YR 4/6	2	С	М	San	dy Loam	
								·	
Hydric So	il Indicators:								Indicators for Problematic Soils:
-	tosol (A1)				Polyvalu	e Below	Surface (B	15)	2 cm Muck (A10)
Hist	tic Epipedon (A2)			Thin Dar	k Surfac	e (S9)		Coast Prarie Redox (A16)
Blac	ck Histic (A3)				Loamy N	lucky M	ineral (F1)		5 cm Mucky Peat or Peat (S3)
Нус	drogen Sulfide	e (A4)			Loamy G	ileyed M	latric (F2)		Dark Surface (S7)
Stra	atified Layers	(A5)			Depleted	d Matrix	(F3)		Polyvalue Below Surface (S8)
Dep	oleted Below	Dark Su	rface (A11)		Redox D	ark Surfa	ace (F6)		Thin Dark Surface (S9)
Thic	ck Dark Surfac	ce (A12)			Depleted	d Dark Si	urface (F7)		Iron-Manganese Masses (F12)
San	dy Mucky Mi	neral (S	1)		Redox D	epressio	ns (F8)		Piedmont Floodplain Soils (F19)
San	dy Gleyed Ma	atrix (S4)						Mesic Spodic (TA6)
San	dy Redox (S5))							Red Parent Material (F21)
	pped Matrix (Very Shallow Dark Surface (TF12)
Dar	k Surface (S7))							Other (Explain in Remarks)
Postrictio	e Layer (if obs	omrod).							
Restrictiv	re Layer (II obs								
		Type:						Hydrid	Soil Present? Yes NoX
	Depth (in	nches): _							
Remarks	 S:								

Project/Site: Cider Solar Project	City/Co	ounty: Oakfield/Gen	nesee	Sampling Date: <u>7/24/2020</u>
Applicant/Owner: Hecate			State: NY	Sampling Point:
Investigator(s): Andrew Sorci	Section	n, Township, Range:		1_20200724_WL56_W1
Landform (hillslope, terrace,etc.): Floodplain	Local relie	f (concave, convex, n	one): Linear	Slope (%) <u>0 - 15</u>
Subregion (LRR or MLRA): LRR L	Lat: 43.107468	Long:7	8.253776	Datum: NAD83
Soil Map Unit Name: W			NWI Classif	ication: PFO
Are climatic / hyrologic conditions on the site typi	ical for this time of yea	ar? Yes X No	(if no, e	explain in Remarks.)
Are Vegetation , Soil , or Hydrology	significantly disturl	bed? Are "Normal (Circumstances'	present? Yes X No
Are Vegetation , Soil , or Hydrology	naturally problema	atic? (if needed, expl	ain any answers	in Remarks.)
SUMMARY OF FINDINGS - Attach site map sl	howing sampling po	oint locations, trans	sects, import	ant features, etc.
Hydrophytic Vegetation Present? Yes X	No	Is the Sampled Area	l	
Hydric Soil Present? Yes X	No	within a Wetland?	Υ	es X No
<u> </u>		if yes, optional Wetla	and Site ID:	WL56
Remarks: (Explain alternative procedures here or in a separa			_	
riparian along stream	ate report.			
HYDROLOGY				
Wetland Hydrology Indicators:			Secondary India	cators (minimum of two required)
Primary Indicators (minimum of one is required: chec	k all that apply)		Surface So	oil Cracks (B6)
X Surface Water (A1)	Water-Stained Leaves	(B9)	Drainage	Patterns (B10)
X High Water Table (A2)	Aquatic Fauna (B13)		Moss Trin	n Lines (B16)
Saturation (A3)	Marl Deposits (B15)		Dry-Seaso	n Water Table (C2)
X Water Marks (B1)	Hydrogen Sulfide Odo	r (C1)	Cravfish B	urrows (C8)
Sediment Deposits (B2)	Oxidized Rhizospheres			n Visible in Aerial Imagery (C9)
Drift Deposits (B3)	Presence of Reduced I			r Stressed Plants (D1)
				
Algal Mat or Crust (B4)	Recent Iron Reduction			hic Position (D2)
Iron Deposits (B5)	Thin Muck Surface (C7			quitard (D3)
Inundation Visible on Aerial Imagery (B7)	Other (Explain in Rem	arks)	Microtope	ographic Relief (D4)
Sparsley Vegetated Concave Surface (B8)			FAC-Neut	ral Test (D5)
Surface Water Present? Yes X No E	Depth (inches) 24			
Water Table Present? Yes X No	Depth (inches) 0	- Wetland H	lvdrology Prese	ent? Yes X No
	Depth (inches)	=	7	
	<u> </u>	_		
Describe Recorded Data (stream gauge, monitori	ing well, aerial photos	, previous inspection	s), if available:	
Domorks				
Remarks:				

VEGETATION - Use scientific names of plants Sampling Point: 1_20200724_WL56_W1 Absolute Dominant Indicator **Dominance Test Worksheet:** (Plot Size: 30'radius) % Cover Species? Status **Tree Stratum Number of Dominant Species** 70 Χ FAC That Are OBL, FACW, or FAC: (A) Acer negundo 70 = Total Cover **Total Number of Dominant** (B) Species Across All Strata: 5 Percent of Dominant Species (A/B) That Are OBL, FACW, or FAC: 80% **Prevalence Index Worksheet:** 10 x 1 10 **OBL** species Absolute Dominant Indicator **FACW** species 15 30 (Plot Size: 15'radius) Status x 2 **Shrub Stratum** % Cover Species? **FAC** species 110 330 х3 = Total Cover **FACU** species 0 x 4 0 **UPL** species 15 x 5 75 Column Totals 150 445 (B) (A) Prevalence Index = B/A = 2.97 **Hydrophytic Vegetation Indicators:** Absolute Dominant Indicator 1- Rapid Test For Hydrophytic Vegetation **Herb Stratum** (Plot Size: 5'radius) % Cover Species? Status X 2- Dominance Test is > 50% Impatiens pallida 15 Χ **FACW** X 3- Prevalence Index is =< 3.0 Χ UPL Brassica juncea 15 4- Morphological Adaptations Urtica dioica 15 Χ **FAC** Eutrochium maculatum 10 OBL 5- Problematic Hydrophytic Vegetation Xanthium strumarium 10 FAC 65 = Total Cover **Definitions of Vegetation Strata:** Tree- Woody plants 3 in. (7.6cm) or more in diameter at breast height (DBH), regardless of height. Sapling/Shrub- Woody plants less than 3 in. DBH and greater than or equal to 3.28ft (1m) tall. Herb- All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28ft tall. Absolute Dominant Indicator Woody Vines- All woody vines greater than 3.28ft in (Plot Size: 30'radius) Species? **Woody Vine Stratum** % Cover Status height. **FAC** Vitis riparia 15 Χ 15 = Total Cover Hydrophytic Vegetation Present? Yes X No ___

OIL		Sampling Point: 1_20200724_WL56_W1
Hydric Soil Indicators:		Indicators for Problematic Soils:
Histosol (A1)	Polyvalue Below Surface (B1	5) 2 cm Muck (A10)
Histic Epipedon (A2)	Thin Dark Surface (S9)	Coast Prarie Redox (A16)
Black Histic (A3)	Loamy Mucky Mineral (F1)	5 cm Mucky Peat or Peat (S3)
Hydrogen Sulfide (A4)	Loamy Gleyed Matric (F2)	Dark Surface (S7)
Stratified Layers (A5)	Depleted Matrix (F3)	Polyvalue Below Surface (S8)
Depleted Below Dark Surface (A11)	Redox Dark Surface (F6)	Thin Dark Surface (S9)
Thick Dark Surface (A12)	Depleted Dark Surface (F7)	Iron-Manganese Masses (F12)
Sandy Mucky Mineral (S1)	Redox Depressions (F8)	Piedmont Floodplain Soils (F19)
Sandy Gleyed Matrix (S4)		Mesic Spodic (TA6)
Sandy Redox (S5)		Red Parent Material (F21)
Stripped Matrix (S6)		Very Shallow Dark Surface (TF12)
Dark Surface (S7)		X Other (Explain in Remarks)
Restrictive Layer (if observed):		
Type:		Hydric Soil Present? Yes X No
Depth (inches):		
· ` `		

Project/Site: Cider Solar Project	City/County: Oakfield/Gen	essee Sampling Date: 7/24/2020
Applicant/Owner: Hecate		State: <u>NY</u> Sampling
Investigator(s): Andrew Sorci	Section, Township, Range:	Point:1_20200724_WL56_U
Landform (hillslope, terrace,etc.): Terrace	Local relief (concave, convex, n	none): <u>Convex</u> Slope (%) <u>0 - 1</u>
Subregion (LRR or MLRA): LRR L	Lat: 43.107573 Long:7	78.253747 Datum: NAD83
Soil Map Unit Name: RoA		NWI Classification: UPL
Are climatic / hyrologic conditions on the sit		
Are Vegetation X, Soil , or Hydrolo	· ·	
Are Vegetation, Soil, or Hydrolo	gynaturally problematic? (if needed, expl	lain any answers in Remarks.)
SUMMANDY OF FINIDINGS. Attack site w		anata improvement fonturas ata
	nap showing sampling point locations, tran	•
Hydrophytic Vegetation Present? Yes	No X Is the Sampled Area within a Wetland?	
Hydric Soil Present? Yes	NO X	Yes NoX
Wetland Hydrology Present? Yes	NoX if yes, optional Wetl	and Site ID:
Remarks: (Explain alternative procedures here or in a	separate report.)	
Mowed access road		
HYDROLOGY		
Wetland Hydrology Indicators:		Secondary Indicators (minimum of two required)
Primary Indicators (minimum of one is required	: check all that apply)	Surface Soil Cracks (B6)
Surface Water (A1)	Water-Stained Leaves (B9)	Drainage Patterns (B10)
High Water Table (A2)	Aquatic Fauna (B13)	Moss Trim Lines (B16)
Saturation (A3)	Marl Deposits (B15)	Dry-Season Water Table (C2)
Water Marks (B1)	Hydrogen Sulfide Odor (C1)	Crayfish Burrows (C8)
Sediment Deposits (B2)	Oxidized Rhizospheres on Living Roots (C3)	Saturation Visible in Aerial Imagery (C9)
Drift Deposits (B3)	Presence of Reduced Iron (C4)	Stunted or Stressed Plants (D1)
Algal Mat or Crust (B4)	Recent Iron Reduction in Tilled Soils (C6)	Geomorphic Position (D2)
Iron Deposits (B5)	Thin Muck Surface (C7)	Shallow Aquitard (D3)
Inundation Visible on Aerial Imagery (B7)	Other (Explain in Remarks)	Microtopographic Relief (D4)
Sparsley Vegetated Concave Surface (B8)		FAC-Neutral Test (D5)
Surface Water Present? Yes No 2	X Depth (inches)	
Water Table Present? Yes No 2	X Depth (inches) Wetland H	lydrology Present? Yes No X
Saturation Present? Yes No	X Depth (inches)	
Describe Described Data (stream gauge me	enitaring well periol photos provious inspection	s) if available.
Describe Recorded Data (stream gauge, mo	onitoring well, aerial photos, previous inspection	s), ii avallable:
Remarks:		

VEGETATION - Use scientific names of plants Sampling Point: 1_20200724_WL56_U1 Absolute Dominant Indicator **Dominance Test Worksheet:** (Plot Size: 30'radius) **Tree Stratum** % Cover Species? Status **Number of Dominant Species** That Are OBL, FACW, or FAC: (A) = Total Cover **Total Number of Dominant** (B) Species Across All Strata: 3 Percent of Dominant Species (A/B) That Are OBL, FACW, or FAC: 0% **Prevalence Index Worksheet:** x 1 0 **OBL** species Absolute Dominant Indicator **FACW** species 0 (Plot Size: 15'radius) % Cover Status x 2 **Shrub Stratum** Species? 0 FAC species х3 = Total Cover **FACU** species 75 x 4 300 **UPL** species 10 x 5 50 Column Totals 85 (A) 350 (B) Prevalence Index = B/A = 4.12 **Hydrophytic Vegetation Indicators:** Absolute Dominant Indicator 1- Rapid Test For Hydrophytic Vegetation **Herb Stratum** (Plot Size: 5'radius) % Cover Species? Status 2- Dominance Test is > 50% 30 Medicago lupulina Χ **FACU** 3- Prevalence Index is =< 3.0 Plantago lanceolata 25 Χ **FACU** 4- Morphological Adaptations Taraxacum officinale 20 Χ **FACU** Unknown species 15 UNK 5- Problematic Hydrophytic Vegetation Artemisia vulgaris 10 UPL 100 = Total Cover **Definitions of Vegetation Strata:** Tree- Woody plants 3 in. (7.6cm) or more in diameter at breast height (DBH), regardless of height. Sapling/Shrub- Woody plants less than 3 in. DBH and greater than or equal to 3.28ft (1m) tall. Herb- All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28ft tall. Absolute Dominant Indicator Woody Vines- All woody vines greater than 3.28ft in (Plot Size: 30'radius) Status **Woody Vine Stratum** % Cover Species? height. = Total Cover Hydrophytic Vegetation Present? Yes ____ No _ X Remarks: (Include photo numbers here or on a separate sheet.) unknown grass species, due to recent mowing

SOIL Sampling Point: 1_20200724_WL56_U1

Depth	Matrix				Redo	x Featur	es	
inches	Color	%	Color	%	Type	Loc	Texture	Remarks
0-4	10YR 3/2	100					Sandy Loam	
4-9	10YR 3/2	95	10YR 4/6	5	С	М	Sandy Loam	
9-18	7.5YR 5/3	85	7.5YR 5/8	15	С	М	Sand	
-	oil Indicators:				Doberste	o Dolassi C	urface (D15)	Indicators for Problematic Soils:
	tosol (A1) tic Epipedon (Δ2١			-	е веіоw S k Surface	urface (B15)	2 cm Muck (A10) Coast Prarie Redox (A16)
	ck Histic (A3)	~ 4)				r Surrace 1ucky Mir	` '	5 cm Mucky Peat or Peat (S3)
	drogen Sulfide	(A4)			•	leyed Ma	, ,	Dark Surface (S7)
	atified Layers				-	d Matrix (I		Polyvalue Below Surface (S8)
	oleted Below [-	rface (A11)		-	ark Surfac	•	Thin Dark Surface (S9)
	ck Dark Surfac					d Dark Sur		Iron-Manganese Masses (F12)
	ıdy Mucky Mir				-	epression		Piedmont Floodplain Soils (F19)
San	ıdy Gleyed Ma	itrix (S4	.)					Mesic Spodic (TA6)
San	ıdy Redox (S5)							Red Parent Material (F21)
Stri	pped Matrix (S6)						Very Shallow Dark Surface (TF12)
Dar	k Surface (S7)							Other (Explain in Remarks)
Restrictiv	ve Layer (if obs	erved):						
		Type:					Hydric	c Soil Present? Yes No X
	Depth (in	ches):						
Remarks								
Kemarks).							

Project/Site: Cider Solar Project	City/County: Elba/Genese	ee Sampling Date: 7/8/2020
Applicant/Owner: Hecate		State: NY Sampling Point:
Investigator(s): Justin Ahn	Section, Township, Range:	2-20200708-WL-01-1W
Landform (hillslope, terrace, etc.): Depression	Local relief (concave, convex,	none): <u>Concave</u> Slope (%) <u>0 - 1</u>
Subregion (LRR or MLRA): LRR L	Lat: <u>43.109566</u> Long:	78.185488 Datum: NAD83
Soil Map Unit Name: HIB		NWI Classification: PFO
Are climatic / hyrologic conditions on the site $% \left(1\right) =\left(1\right) \left(1\right$	typical for this time of year? Yes X No	(if no, explain in Remarks.)
Are Vegetation, Soil, or Hydrology	significantly disturbed? Are "Normal	Circumstances" present? Yes X No
Are Vegetation, Soil, or Hydrology	naturally problematic? (if needed, exp	plain any answers in Remarks.)
SUMMARY OF FINDINGS - Attach site ma	p showing sampling point locations, tra	nsects, important features, etc.
Hydrophytic Vegetation Present? Yes X	No Is the Sampled Are	a
Hydric Soil Present? Yes X	No within a Wetland?	Yes X No
Wetland Hydrology Present? Yes X	No if yes, optional Wet	tland Site ID: WL57
Remarks: (Explain alternative procedures here or in a se	<u> </u>	
HYDROLOGY		
Wetland Hydrology Indicators:		Secondary Indicators (minimum of two required)
Primary Indicators (minimum of one is required: o	check all that apply)	X Surface Soil Cracks (B6)
Surface Water (A1)	Water-Stained Leaves (B9)	X Drainage Patterns (B10)
High Water Table (A2)	Aquatic Fauna (B13)	Moss Trim Lines (B16)
Saturation (A3)	Marl Deposits (B15)	Dry-Season Water Table (C2)
Water Marks (B1)	Hydrogen Sulfide Odor (C1)	Crayfish Burrows (C8)
Sediment Deposits (B2)	Oxidized Rhizospheres on Living Roots (C3)	Saturation Visible in Aerial Imagery (C9)
Drift Deposits (B3)	Presence of Reduced Iron (C4)	Stunted or Stressed Plants (D1)
Algal Mat or Crust (B4)	Recent Iron Reduction in Tilled Soils (C6)	X Geomorphic Position (D2)
Iron Deposits (B5)	Thin Muck Surface (C7)	Shallow Aquitard (D3)
Inundation Visible on Aerial Imagery (B7)	Other (Explain in Remarks)	Microtopographic Relief (D4)
Sparsley Vegetated Concave Surface (B8)		FAC-Neutral Test (D5)
Surface Water Present? Yes No X	Depth (inches)	
Water Table Present? Yes No X	- ' ' 	Hydrology Present? Yes X No
Saturation Present? Yes No X	Depth (inches)	
Describe Recorded Data (stream gauge, mon	itoring well, aerial photos, previous inspectio	ns), if available:
Remarks:		
neilidiks.		

VEGETATION - Use scien	tific names	of plants				Sampii	ng Point: o	2-202	200708-W	L-01-1V
Tree Stratum	(Plot Size:	30'radius)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test V Number of Domi		S		
Fraxinus pennsylvanica	ì		50	Χ	FACW	That Are OBL, FA	-		7	(A)
			50	_= Total Cov	er	Total Numbe Species Ac	r of Domina ross All Strat		8	(B)
						Percent of Don That Are OBL,	=		87.5%	(A/B)
						Prevalence Index \	Worksheet:			
						OBL species	0	x 1	0	
Shrub Stratum	(Plot Size:	15'radius)	Absolute % Cover	Dominant Species?	Indicator Status	FACW species		x 2	200	
Lindera benzoin			35	Χ	FACW	FAC species	55	x 3_	165	
Carpinus caroliniana			20	X	FAC	FACU species	15	x 4	60	
			55	_= Total Cov	er	UPL species	0	x 5	0	
						Column Totals	170	(A)	425	(B)
						Prevalenc	e Index = B/	_	2.5	
						Hydrophytic Vege	tation Indica	ators	:	
			Absolute	Dominant	Indicator	1- Rapid Tes	t For Hydrop	ohyti	c Vegetat	tion
Herb Stratum	(Plot Size:	5'radius)	% Cover	Species?	Status	X 2- Dominano	ce Test is > 5	0%		
Carex blanda			20	X	FAC	X 3- Prevalenc				
Impatiens capensis			<u>15</u>	X	FACW					
Toxicodendron radical	ns		<u>10</u> 45	X = Total Cov	FAC	4- Morpholo				
			45	_= Total Cov	ei	5- Problema	tic Hydroph	ytic \	/egetatio	n
						Definitions of Vegeta	ation Strata:			
						Tree- Woody plants 3 breast height (DBH),				eter at
						Sapling/Shrub- Wood greater than or equa				and
						Herb- All herbaceous size, and woody plan				less of
			Absolute	Dominant	Indicator					
Woody Vine Stratum	(Plot Size:	30'radius)	% Cover	Species?	Status	Woody Vines- All wo height.	ody vines grea	ater t	han 3.28ft	t in
Parthenocissus quinqu	ıefolia		15	Х	FACU					
Vitis riparia			5	X	FAC	Hydroph	nytic			
			20	_= Total Cov	er	Vegeta	ition ent? Yes			

)IL								Sampling Point: 02-20200708-WL-01 -		
Depth	Matrix				Redo	x Featur	es			
nches	Color	%	Color	%	Туре	Loc	Texture	Remarks		
0-6	10YR 2/2	100					Clay Loam			
5-18	7.5YR 5/2	90	10YR 6/8	10	С	PL	Sandy Loam			
							·			
	oil Indicators:							Indicators for Problematic Soils:		
	tosol (A1)				•		urface (B15)	2 cm Muck (A10)		
	tic Epipedon (A2)				k Surface		Coast Prarie Redox (A16)		
	ck Histic (A3)	()			-	lucky Min		5 cm Mucky Peat or Peat (S3)		
	drogen Sulfide	-				leyed Mat		Dark Surface (S7)		
	atified Layers		-f (A44)		•	d Matrix (F		Polyvalue Below Surface (S8) Thin Dark Surface (S9)		
	pleted Below I					ark Surfac				
	ck Dark Surfac				•	d Dark Sur		Iron-Manganese Masses (F12)		
_	ndy Mucky Min ndy Gleyed Ma	-	-		Redux D	epressions	5 (F8)	Piedmont Floodplain Soils (F19) Mesic Spodic (TA6)		
	ndy Redox (S5)	-	1					Red Parent Material (F21)		
	ipped Matrix (Very Shallow Dark Surface (TF12)		
	rk Surface (S7)							Other (Explain in Remarks)		
	1 Surrace (57)	'						other (Explain in Remarks)		
estrictiv	ve Layer (if obs	erved):								
	7. (
		Type:					Hydric	Soil Present? Yes X No		
	Depth (in	ches):								
emark	S:									
remark.	5.									

Project/Site: Cider Solar Project	City/County: Elba/Genese	e Sampling Date: 7/13/2020
Applicant/Owner: Hecate		State: NY Sampling Point:
Investigator(s): Justin Ahn	Section, Township, Range:	02-20200713-WL-13-13W
Landform (hillslope, terrace,etc.): Depression	Local relief (concave, convex, r	none): <u>Concave</u> Slope (%) <u>0 - 1</u>
Subregion (LRR or MLRA): LRR L	Lat: 43.106787 Long:7	78.184244 Datum: NAD83
Soil Map Unit Name: OvA		NWI Classification: PFO
Are climatic / hyrologic conditions on the site ty	pical for this time of year? Yes X No	(if no, explain in Remarks.)
Are Vegetation, SoilX_, or Hydrology	significantly disturbed? Are "Normal	Circumstances" present? Yes X No
Are Vegetation, Soil, or Hydrology	naturally problematic? (if needed, exp	lain any answers in Remarks.)
SUMMARY OF FINDINGS - Attach site map	showing sampling point locations, tran	sects, important features, etc.
Hydrophytic Vegetation Present? Yes X	No Is the Sampled Area	1
Hydric Soil Present? Yes X	No within a Wetland?	Yes X No
Wetland Hydrology Present? Yes X		and Site ID: WL57
Remarks: (Explain alternative procedures here or in a sep-	arate report.)	
HYDROLOGY		
Wetland Hydrology Indicators:		Secondary Indicators (minimum of two required)
Primary Indicators (minimum of one is required: ch		Surface Soil Cracks (B6)
Surface Water (A1)	X Water-Stained Leaves (B9)	Drainage Patterns (B10)
High Water Table (A2)	Aquatic Fauna (B13)	X Moss Trim Lines (B16)
X Saturation (A3)	Marl Deposits (B15)	Dry-Season Water Table (C2)
Water Marks (B1)	Hydrogen Sulfide Odor (C1)	Crayfish Burrows (C8)
Sediment Deposits (B2)	Oxidized Rhizospheres on Living Roots (C3)	Saturation Visible in Aerial Imagery (C9)
Drift Deposits (B3)	Presence of Reduced Iron (C4)	Stunted or Stressed Plants (D1)
Algal Mat or Crust (B4)	Recent Iron Reduction in Tilled Soils (C6)	Geomorphic Position (D2)
Iron Deposits (B5)	Thin Muck Surface (C7)	Shallow Aquitard (D3)
Inundation Visible on Aerial Imagery (B7)	Other (Explain in Remarks)	Microtopographic Relief (D4)
Sparsley Vegetated Concave Surface (B8)	<u> </u>	FAC-Neutral Test (D5)
Surface Water Present? Yes No X	Depth (inches)	
	· · · · · · · · · · · · · · · · · · ·	Hydrology Present? Yes X No
	· · · · · · ——	iyurology Fresent: Tes X NO
Saturation Present? Yes X No	Depth (inches) 5	
Describe Recorded Data (stream gauge, monito	oring well, aerial photos, previous inspection	s), if available:
Remarks:		
Remarks:		

VEGETATION - Use scientific names of plants Sampling Point: 02-20200713-WL-13-13W Absolute Dominant Indicator **Dominance Test Worksheet:** (Plot Size: 30'radius) % Cover Species? Status **Tree Stratum Number of Dominant Species** Populus deltoides 30 Х FAC That Are OBL, FACW, or FAC: (A) 30 = Total Cover **Total Number of Dominant** (B) Species Across All Strata: 5 Percent of Dominant Species (A/B) That Are OBL, FACW, or FAC: 80% **Prevalence Index Worksheet:** 80 x 1 80 **OBL** species Absolute Dominant Indicator **FACW** species 80 160 (Plot Size: 15'radius) Species? Status x 2 **Shrub Stratum** % Cover **FAC** species 105 35 х3 40 Χ **FACW** Fraxinus pennsylvanica 40 = Total Cover **FACU** species 30 x 4 120 **UPL** species 0 x 5 0 Column Totals 225 (A) 465 (B) Prevalence Index = B/A = 2.07 **Hydrophytic Vegetation Indicators:** Absolute Dominant Indicator 1- Rapid Test For Hydrophytic Vegetation **Herb Stratum** (Plot Size: 5'radius) % Cover Species? Status X 2- Dominance Test is > 50% 40 Carex retrorsa Х OBL X 3- Prevalence Index is =< 3.0 30 Х Carex cristatella **FACW** 4- Morphological Adaptations Dactylis glomerata 30 Χ **FACU** 20 OBL Typha angustifolia 5- Problematic Hydrophytic Vegetation Scirpus atrovirens 20 OBL Agrostis gigantea 10 **FACW Definitions of Vegetation Strata:** Prunella vulgaris 5 FAC Tree- Woody plants 3 in. (7.6cm) or more in diameter at 155 = Total Cover breast height (DBH), regardless of height. Sapling/Shrub- Woody plants less than 3 in. DBH and greater than or equal to 3.28ft (1m) tall. Herb- All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28ft tall. Absolute Dominant Indicator Woody Vines- All woody vines greater than 3.28ft in (Plot Size: 30'radius) **Woody Vine Stratum** % Cover Species? Status height. = Total Cover Hydrophytic Vegetation Present? Yes X No ___

SOIL Sampling Point: 02-20200713-WL-13-13W

Depth	Matrix				Redo	ox Featu	ires	
(inches	Color	%	Color	%	Туре	Loc	Texture	Remarks
0-6	10YR 3/2	100					Sandy Clay Loam	
6-20	10YR 7/4	80	10YR 6/6	20	С	PL	Sandy Clay Loam	
Hydric S	oil Indicators:							Indicators for Problematic Soils:
His	tosol (A1)				Polyvalu	e Below	Surface (B15)	2 cm Muck (A10)
His	tic Epipedon (A2)			Thin Dar	k Surfac	e (S9)	Coast Prarie Redox (A16)
Bla	ck Histic (A3)				Loamy N	∕lucky M	ineral (F1)	5 cm Mucky Peat or Peat (S3)
Ну	drogen Sulfide	e (A4)			Loamy G	ileyed M	atric (F2)	Dark Surface (S7)
Str	atified Layers	(A5)			Depleted	d Matrix	(F3)	Polyvalue Below Surface (S8)
De	pleted Below I	Dark Sui	rface (A11)		Redox D	ark Surfa	ace (F6)	Thin Dark Surface (S9)
	ck Dark Surfac				-		urface (F7)	Iron-Manganese Masses (F12)
	ndy Mucky Mi				Redox D	epressio	ns (F8)	Piedmont Floodplain Soils (F19)
	ndy Gleyed Ma)					Mesic Spodic (TA6)
	ndy Redox (S5)							Red Parent Material (F21)
	ipped Matrix (Very Shallow Dark Surface (TF12)
	rk Surface (S7))						X Other (Explain in Remarks)
Restricti	ve Layer (if obs	erved):						
		Type:					Hydric	Soil Present? Yes X No
	Depth (in	- iches):					,	
Remark	s:							

Project/Site: Cider Solar Project	City/County: Elba/Genese	e Sampling Date: 7/8/2020
Applicant/Owner: Hecate		State: NY Sampling Point:02-20200708
Investigator(s): Justin Ahn	Section, Township, Range:	WL-01-1U
Landform (hillslope, terrace,etc.): Toeslope	Local relief (concave, convex, r	none): <u>Convex</u> Slope (%) <u>1 - 5</u>
Subregion (LRR or MLRA): LRR L	Lat: 43.109319 Long: -7	78.185688 Datum: <u>NAD83</u>
Soil Map Unit Name: HIB		NWI Classification: UPL
Are climatic / hyrologic conditions on the site \ensuremath{t}	typical for this time of year? Yes X No	(if no, explain in Remarks.)
Are Vegetation, Soil, or Hydrology	significantly disturbed? Are "Normal	Circumstances" present? Yes X No
Are Vegetation, Soil, or Hydrology	naturally problematic? (if needed, exp	lain any answers in Remarks.)
SUMMARY OF FINDINGS - Attach site ma	showing sampling point locations, tran	sects, important features, etc.
Hydrophytic Vegetation Present? Yes X	No Is the Sampled Area	a
Hydric Soil Present? Yes	No X within a Wetland?	Yes No X
Wetland Hydrology Present? Yes	No X if yes, optional Wet	land Site ID:
Remarks: (Explain alternative procedures here or in a se		
	od die ropolity	
HYDROLOGY		
Wetland Hydrology Indicators:		Secondary Indicators (minimum of two required)
Primary Indicators (minimum of one is required: cl	neck all that apply)	Surface Soil Cracks (B6)
Surface Water (A1)	Water-Stained Leaves (B9)	Drainage Patterns (B10)
High Water Table (A2)	Aquatic Fauna (B13)	Moss Trim Lines (B16)
Saturation (A3)	Marl Deposits (B15)	Dry-Season Water Table (C2)
Water Marks (B1)	Hydrogen Sulfide Odor (C1)	Crayfish Burrows (C8)
Sediment Deposits (B2)	Oxidized Rhizospheres on Living Roots (C3)	Saturation Visible in Aerial Imagery (C9)
Drift Deposits (B3)	Presence of Reduced Iron (C4)	Stunted or Stressed Plants (D1)
Algal Mat or Crust (B4)	Recent Iron Reduction in Tilled Soils (C6)	Geomorphic Position (D2)
Iron Deposits (B5)	Thin Muck Surface (C7)	Shallow Aquitard (D3)
Inundation Visible on Aerial Imagery (B7)	Other (Explain in Remarks)	Microtopographic Relief (D4)
Sparsley Vegetated Concave Surface (B8)		FAC-Neutral Test (D5)
Surface Water Present? Yes No X	Depth (inches)	
Water Table Present? Yes No X	= ' ' 	Hydrology Present? Yes No X
Saturation Present? Yes No X	Depth (inches)	Tydrology Frescht: TesNoX
		on) if available.
Describe Recorded Data (stream gauge, moni	toring well, aerial photos, previous inspection	is), if available:
Remarks:		

VEGETATION - Use scientific names of plants				Jampin	116 1 01116. 02 20	200708-W	L-01-10
Tree Stratum (Plot Size: 30'radius	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test W			
Acer rubrum	40	Х	FAC	Number of Domi That Are OBL, FA	•	7	(A)
	40	_= Total Cov	er		r of Dominant ross All Strata:	7	(B)
				Percent of Don	ninant Species		_
				That Are OBL, F	FACW, or FAC:	100%	(A/B)
				Prevalence Index V	Worksheet:		
	Absolute	Dominant	Indicator	OBL species	0 x 1	0	
Shrub Stratum (Plot Size: 15'radius	% Cover	Species?	Status	FACW species	75 x 2	150	
Carpinus caroliniana	30	Х	FAC	FAC species	80 x 3	240	
Fraxinus pennsylvanica	10	X	FACW	FACU species	20 x 4	80	
	40	_= Total Cov	er	UPL species	0 x 5	0	
				Column Totals	175 (A)	470	(B)
				Prevalence	e Index = B/A =	2.69	
				Hydrophytic Vege	tation Indicator	s:	
	Absolute	Dominant	Indicator	1- Rapid Tes	t For Hydrophyt	ic Vegeta	tion
Herb Stratum (Plot Size: 5'radius	% Cover	Species?	Status	X 2- Dominano	ce Test is > 50%		
Impatiens capensis	30	Х	FACW	X 3- Prevalenc	e Index is =< 3.0)	
Lindera benzoin	<u>15</u> 15	X X	FACW				
Fraxinus pennsylvanica	15	Λ.	$\Gamma \Lambda C M$	4- Morpholo	oical Adantation	nc	
Solidago altissima	10		FACU	· ·	ogical Adaptation		
Solidago altissima Parthenocissus quinquefolia	<u>10</u>		FACU	· ·	ogical Adaptation tic Hydrophytic		n
Solidago altissima Parthenocissus quinquefolia Phragmites australis	10 10 5			5- Problema	tic Hydrophytic		n
Parthenocissus quinquefolia	10	= Total Cov	FACU FACW	5- Problema Definitions of Vegeta Tree- Woody plants 3	tic Hydrophytic ation Strata: 3 in. (7.6cm) or mo	Vegetatio	
Parthenocissus quinquefolia	10 5		FACU FACW	5- Problema Definitions of Vegeta Tree- Woody plants 3 breast height (DBH), Sapling/Shrub- Wood	tic Hydrophytic ation Strata: B in. (7.6cm) or moregardless of height	Vegetation version of the version of	eter at
Parthenocissus quinquefolia	10 5		FACU FACW	5- Problema Definitions of Vegeta Tree- Woody plants 3 breast height (DBH), Sapling/Shrub- Wood greater than or equal Herb- All herbaceous	tic Hydrophytic ation Strata: 3 in. (7.6cm) or moregardless of height plants less than at the strategy of th	Vegetation ore in diament. 3 in. DBH in.	eter at
Parthenocissus quinquefolia	10 5 85	_= Total Cov	FACU FACW FACW	5- Problema Definitions of Vegeta Tree- Woody plants 3 breast height (DBH), Sapling/Shrub- Wood greater than or equal	tic Hydrophytic ation Strata: 3 in. (7.6cm) or moregardless of height plants less than at the strategy of th	Vegetation ore in diament. 3 in. DBH in.	eter at
Parthenocissus quinquefolia Phragmites australis Woody Vine Stratum (Plot Size: 30'radius	10 5 85 Absolute % Cover	_= Total Cov Dominant Species?	FACU FACW FACW Ter Indicator Status	5- Problema Definitions of Vegeta Tree- Woody plants 3 breast height (DBH), Sapling/Shrub- Wood greater than or equal Herb- All herbaceous	tic Hydrophytic ation Strata: 3 in. (7.6cm) or moregardless of height plants less than 1 to 3.28ft (1m) tal (non-woody) plants less than 3.28ft	vegetation ore in diament. 3 in. DBH ints, regarditall.	and less of
Parthenocissus quinquefolia Phragmites australis	10 5 85 Absolute % Cover 10	_= Total Cov Dominant Species?	FACU FACW FACW Ter Indicator Status FAC	5- Problema Definitions of Vegeta Tree- Woody plants 3 breast height (DBH), Sapling/Shrub- Wood greater than or equal Herb- All herbaceous size, and woody plant Woody Vines- All wooheight.	tic Hydrophytic ation Strata: 3 in. (7.6cm) or moregardless of heig dy plants less than 1 to 3.28ft (1m) tal (non-woody) plants less than 3.28ft ody vines greater	vegetation ore in diament. 3 in. DBH ints, regarditall.	and less of
Parthenocissus quinquefolia Phragmites australis Woody Vine Stratum (Plot Size: 30'radius	10 5 85 Absolute % Cover	_= Total Cov Dominant Species?	FACU FACW FACW Ter Indicator Status FAC	5- Problema Definitions of Vegeta Tree- Woody plants 3 breast height (DBH), Sapling/Shrub- Wood greater than or equal Herb- All herbaceous size, and woody plant Woody Vines- All woo height.	tic Hydrophytic ation Strata: 3 in. (7.6cm) or moregardless of heighty plants less than at the strategy of t	vegetation ore in diament. 3 in. DBH ints, regarditall.	and less of
Parthenocissus quinquefolia Phragmites australis Woody Vine Stratum (Plot Size: 30'radius	10 5 85 Absolute % Cover 10	_= Total Cov Dominant Species?	FACU FACW FACW Ter Indicator Status FAC	5- Problema Definitions of Vegeta Tree- Woody plants 3 breast height (DBH), Sapling/Shrub- Wood greater than or equal Herb- All herbaceous size, and woody plant Woody Vines- All woo height. Hydroph Vegeta	tic Hydrophytic ation Strata: 3 in. (7.6cm) or moregardless of heighty plants less than at the strategy of t	ore in diam ht. 3 in. DBH II. hts, regard tall. than 3.28f	and less of

SOIL Sampling Point: 02-20200708-WL-01-1U

Depth Matrix Redox Features

Depth	Matrix		Redox Features						
(inches	Color	%	Color	%	Туре	Loc	Т	exture	Remarks
0-6	10YR 4/3	100					Si	lt Loam	
6-16	7.5YR 5/6	100					Si	lt Loam	
-	il Indicators:								Indicators for Problematic Soils:
Histosol (A1) Histic Epipedon (A2)				Polyvalue Below Surface (B15)				15)	2 cm Muck (A10)
Histic Epipedon (A2)				Thin Dark Surface (S9)				-	Coast Prarie Redox (A16)
Black Histic (A3)					Loamy Mucky Mineral (F1)				5 cm Mucky Peat or Peat (S3)
Hydrogen Sulfide (A4)					Loamy Gleyed Matric (F2)				Dark Surface (S7)
Stratified Layers (A5) Depleted Relew Park Surface (A11)					Depleted Matrix (F3)				Polyvalue Below Surface (S8)
Depleted Below Dark Surface (A11)					Redox Dark Surface (F6)				Thin Dark Surface (S9)
Thick Dark Surface (A12)					Depleted Dark Surface (F7)				Iron-Manganese Masses (F12)
Sandy Mucky Mineral (S1)					Redox Depressions (F8)				Piedmont Floodplain Soils (F19)
Sandy Gleyed Matrix (S4)								_	Mesic Spodic (TA6)
Sandy Redox (S5)					_			-	Red Parent Material (F21)
Stripped Matrix (S6)								-	Very Shallow Dark Surface (TF12)
Dai	k Surface (S7))						=	Other (Explain in Remarks)
Restrictiv	ve Layer (if obs	erved):							
	•	Type:						Undete C	all Danaget 2 - May No May N
Depth (inches):					Hydric Soil Present? Yes No _ X				
	Deptii (ii	_							
Remarks	S:						I		

Applicant/Owner: Hecate State: NY Sampling Point:02- Investigator(s): Justin Ahn Section, Township, Range: WL-13-13U Landform (hillslane, terrace etc.): Tooslane Local relief (consave, convex, none): Linear Slope (%), 1				
Section, 15 miles				
Landform (hillsland terrace etc.): Toosland Local relief (concave convey nano): Lincor (201) 4				
Landform (hillslope, terrace,etc.): Toeslope Local relief (concave, convex, none): Linear Slope (%) 1	- 5			
Subregion (LRR or MLRA): LRR L Lat: 43.106867 Long: -78.188163 Datum: NAD	83			
Soil Map Unit Name: HIB NWI Classification: UPL				
Are climatic / hyrologic conditions on the site typical for this time of year? Yes X No (if no, explain in Remarks.)				
Are Vegetation, Soil, or Hydrologysignificantly disturbed? Are "Normal Circumstances" present? YesX	No			
Are Vegetation, Soil, or Hydrology naturally problematic? (if needed, explain any answers in Remarks.)				
SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.				
Hydrophytic Vegetation Present? Yes No X Is the Sampled Area				
Hydric Soil Present? Yes No X within a Wetland? Yes No X				
Wetland Hydrology Present? Yes No X if yes, optional Wetland Site ID:	if ves. optional Wetland Site ID:			
Remarks: (Explain alternative procedures here or in a separate report.)				
HYDROLOGY				
Wetland Hydrology Indicators: Secondary Indicators (minimum of two	required)			
Primary Indicators (minimum of one is required: check all that apply) Surface Soil Cracks (B6)				
Surface Water (A1) Water-Stained Leaves (B9) Drainage Patterns (B10)				
High Water Table (A2) Aquatic Fauna (B13) Moss Trim Lines (B16)				
Saturation (A3) Marl Deposits (B15) Dry-Season Water Table (C2)				
Water Marks (B1) Hydrogen Sulfide Odor (C1) Crayfish Burrows (C8)				
Sediment Deposits (B2) Oxidized Rhizospheres on Living Roots (C3) Saturation Visible in Aerial Image	y (C9)			
Drift Deposits (B3) Presence of Reduced Iron (C4) Stunted or Stressed Plants (D1)				
Algal Mat or Crust (B4) Recent Iron Reduction in Tilled Soils (C6) Geomorphic Position (D2)				
Iron Deposits (B5)Thin Muck Surface (C7)Shallow Aquitard (D3)				
Inundation Visible on Aerial Imagery (B7) Other (Explain in Remarks) Microtopographic Relief (D4)				
Sparsley Vegetated Concave Surface (B8) FAC-Neutral Test (D5)				
Surface Water Present? Yes No X Depth (inches)				
Water Table Present? Yes No X Depth (inches) Wetland Hydrology Present? Yes No	X			
Saturation Present? Yes No X Depth (inches)				
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:				
Remarks:				

VEGETATION - Use scientific names of plants Sampling Point: 02-20200713-WL-13-13U Absolute Dominant Indicator **Dominance Test Worksheet:** (Plot Size: 30'radius) % Cover Species? Status **Tree Stratum Number of Dominant Species** That Are OBL, FACW, or FAC: (A) = Total Cover **Total Number of Dominant** Species Across All Strata: (B) 2 Percent of Dominant Species 50% (A/B) That Are OBL, FACW, or FAC: **Prevalence Index Worksheet:** 10 x 1 10 **OBL** species Absolute Dominant Indicator **FACW** species 5 10 (Plot Size: 15'radius) % Cover Status x 2 **Shrub Stratum** Species? FAC species 30 90 х3 = Total Cover **FACU** species 55 x 4 220 **UPL** species 0 x 5 0 Column Totals 100 (A) 330 (B) Prevalence Index = B/A = 3.3 **Hydrophytic Vegetation Indicators:** Absolute Dominant Indicator 1- Rapid Test For Hydrophytic Vegetation **Herb Stratum** (Plot Size: 5'radius) % Cover Species? Status 2- Dominance Test is > 50% 40 **FACU** Abutilon theophrasti 3- Prevalence Index is =< 3.0 FAC 30 Χ Panicum virgatum 4- Morphological Adaptations Ambrosia artemisiifolia 10 FACU Rorippa palustris 10 OBL 5- Problematic Hydrophytic Vegetation Cyperus esculentus 5 **FACW** Solidago canadensis 5 **FACU Definitions of Vegetation Strata:** 100 = Total Cover Tree- Woody plants 3 in. (7.6cm) or more in diameter at breast height (DBH), regardless of height. Sapling/Shrub- Woody plants less than 3 in. DBH and greater than or equal to 3.28ft (1m) tall. Herb- All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28ft tall. Absolute Dominant Indicator Woody Vines- All woody vines greater than 3.28ft in (Plot Size: 30'radius) **Woody Vine Stratum** % Cover Species? Status height. = Total Cover Hydrophytic Vegetation Present? Yes ____ No _ X Remarks: (Include photo numbers here or on a separate sheet.)

SOIL Sampling Point: 02-20200713-WL-13-13U

JOIL								Jamping 1 ont. 02-20200/13-WE-13-130		
Depth Matrix				Redo	x Featu	ires				
(inches	Color	%	Color	%	Type	Loc	Texture	Remarks		
0-6	10YR 3/2	100					Silt Loam			
6-12	10YR 3/2	95	10YR 5/6	5	С	PL	Silty Clay Loam			
-	oil Indicators:				Dalvaralı	a Dalaw	Surface (B15)	Indicators for Problematic Soils:		
	tosol (A1) tic Epipedon ((Δ2)			Thin Dar			2 cm Muck (A10) Coast Prarie Redox (A16)		
	ck Histic (A3)						ineral (F1)	5 cm Mucky Peat or Peat (S3)		
	drogen Sulfide				-	-	atric (F2)	Dark Surface (S7)		
	atified Layers				Depleted			Polyvalue Below Surface (S8)		
	pleted Below	-	rface (A11)	-	Redox D			Thin Dark Surface (S9)		
	ck Dark Surfac						ırface (F7)	Iron-Manganese Masses (F12)		
	ndy Mucky Mi				Redox D			Piedmont Floodplain Soils (F19)		
Sar	ndy Gleyed Ma	atrix (S4)					Mesic Spodic (TA6)		
Sar	ndy Redox (S5)						Red Parent Material (F21)		
Str	ipped Matrix ((S6)						Very Shallow Dark Surface (TF12)		
Dark Surface (S7)								Other (Explain in Remarks)		
Restrictiv	ve Layer (if obs	erved):								
Туре:					Hydri	c Soil Present? Yes No X				
	Depth (ir	nches):					·			
Remark	S:									

Project/Site: Cider Solar Project	City/County: Elba/Genese	e Sampling Date: 7/8/2020			
Applicant/Owner: Hecate		State: NY Sampling Point:			
Investigator(s): Justin Ahn	Section, Township, Range: 02_20200708-WL-02-2W				
Landform (hillslope, terrace,etc.): Depression	Local relief (concave, convex, r	none): Concave Slope (%) 0 - 1			
Subregion (LRR or MLRA): LRR L	Lat: 43.107801 Long: -7	78.184616 Datum: NAD83			
Soil Map Unit Name: OvA		NWI Classification: PEM			
Are climatic / hyrologic conditions on the site type	oical for this time of year? Yes X No	(if no, explain in Remarks.)			
Are Vegetation, Soil, or Hydrology _	significantly disturbed? Are "Normal	Circumstances" present? Yes X No			
Are Vegetation , Soil , or Hydrology	naturally problematic? (if needed, exp	lain any answers in Remarks.)			
SUMMARY OF FINDINGS - Attach site map s	showing campling point locations tran	scorts important foatures etc			
Hydrophytic Vegetation Present? Yes X	No Is the Sampled Area within a Wetland?				
Hydric Soil Present? Yes X	_ NO	Yes X No			
Wetland Hydrology Present? Yes X	No if yes, optional Wet	land Site ID: WL58			
Remarks: (Explain alternative procedures here or in a separ	rate report.)				
HYDROLOGY					
Wetland Hydrology Indicators:		Secondary Indicators (minimum of two required)			
Primary Indicators (minimum of one is required: che	ck all that apply)	Surface Soil Cracks (B6)			
X Surface Water (A1)	Water-Stained Leaves (B9)	X Drainage Patterns (B10)			
High Water Table (A2)	X Aquatic Fauna (B13)	Moss Trim Lines (B16)			
Saturation (A3)	Marl Deposits (B15)	Dry-Season Water Table (C2)			
Water Marks (B1)	Hydrogen Sulfide Odor (C1)	Crayfish Burrows (C8)			
	X Oxidized Rhizospheres on Living Roots (C3)	Saturation Visible in Aerial Imagery (C9)			
Drift Deposits (B3)	Presence of Reduced Iron (C4)	Stunted or Stressed Plants (D1)			
 ' ' '					
Algal Mat or Crust (B4)	Recent Iron Reduction in Tilled Soils (C6)	Geomorphic Position (D2)			
Iron Deposits (B5)	Thin Muck Surface (C7)	Shallow Aquitard (D3)			
Inundation Visible on Aerial Imagery (B7)	Other (Explain in Remarks)	Microtopographic Relief (D4)			
Sparsley Vegetated Concave Surface (B8)		FAC-Neutral Test (D5)			
Surface Water Present? Yes X No	Depth (inches) 2				
Water Table Present? Yes No X	Depth (inches) Wetland H	Hydrology Present? Yes X No			
	Depth (inches)				
Describe Recorded Data (stream gauge, monito	ring well, aerial photos, previous inspection	ns), it available:			
Remarks:					

02_20200708-WL-02-2W **VEGETATION** - Use scientific names of plants Sampling Point: Absolute Dominant Indicator **Dominance Test Worksheet:** (Plot Size: 30'radius) % Cover Species? Status **Tree Stratum Number of Dominant Species** That Are OBL, FACW, or FAC: (A) = Total Cover **Total Number of Dominant** Species Across All Strata: (B) 6 Percent of Dominant Species That Are OBL, FACW, or FAC: 83.3% (A/B) **Prevalence Index Worksheet:** x 1 75 **OBL** species 75 Absolute Dominant Indicator **FACW** species 50 100 (Plot Size: 15'radius) x 2 **Shrub Stratum** % Cover Species? Status 20 60 **FAC** species х3 = Total Cover **FACU** species 30 x 4 120 **UPL** species 0 x 5 0 Column Totals 175 355 (B) (A) Prevalence Index = B/A = 2.03 **Hydrophytic Vegetation Indicators:** Absolute Dominant Indicator 1- Rapid Test For Hydrophytic Vegetation **Herb Stratum** (Plot Size: 5'radius) % Cover Species? Status X 2- Dominance Test is > 50% 40 Typha angustifolia Х OBL X 3- Prevalence Index is =< 3.0 30 Х Leersia oryzoides OBL 4- Morphological Adaptations 20 Χ **FACU** Phleum pratense Phalaris arundinacea 20 Χ **FACW** 5- Problematic Hydrophytic Vegetation Xanthium strumarium 20 Χ FAC Carex alopecoidea 20 Χ FACW **Definitions of Vegetation Strata:** Agrostis gigantea 10 **FACW** Tree- Woody plants 3 in. (7.6cm) or more in diameter at Abutilon theophrasti 5 **FACU** breast height (DBH), regardless of height. Dipsacus fullonum 5 **FACU** 5 OBL Eleocharis obtusa Sapling/Shrub- Woody plants less than 3 in. DBH and 175 = Total Cover greater than or equal to 3.28ft (1m) tall. Herb- All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28ft tall. Absolute Dominant Indicator Woody Vines- All woody vines greater than 3.28ft in (Plot Size: 30'radius) **Woody Vine Stratum** % Cover Species? **Status** height. = Total Cover Hydrophytic Vegetation Present? Yes X No ___

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

SOIL Sampling Point: 02_20200708-wL-02-2w

Depth	Matrix	Matrix Redox Features		es				
(inches	Color	%	Color	%	Type	Loc	Texture	Remarks
0-12	10YR 2/2	95	7.5YR 5/8	5	С	PL	Clay Loam	
12-24	10YR 4/2	75	7.5YR 7/1	25	D	М	Clay	
Hydric So	oil Indicators:							Indicators for Problematic Soils:
Histosol (A1)					Polyvalu	e Below Si	urface (B15)	2 cm Muck (A10)
His	tic Epipedon (A2)			Thin Dar	k Surface	(S9)	Coast Prarie Redox (A16)
Bla	ck Histic (A3)				Loamy N	lucky Min	eral (F1)	5 cm Mucky Peat or Peat (S3)
Hyd	drogen Sulfide	(A4)			Loamy G	leyed Mat	ric (F2)	Dark Surface (S7)
Stratified Layers (A5)					Depleted	l Matrix (F	3)	Polyvalue Below Surface (S8)
Depleted Below Dark Surface (A11)			ırface (A11)	Χ	Redox Da	ark Surfac	e (F6)	Thin Dark Surface (S9)
Thick Dark Surface (A12)				Depleted	l Dark Sur	face (F7)	Iron-Manganese Masses (F12)	
Thi	ck Dark Surtac	(, , ,	Sandy Mucky Mineral (S1)					
		•	•		Redox Do	epressions	s (F8)	Piedmont Floodplain Soils (F19)
San		neral (S	51)		Redox Do	epressions	s (F8)	Piedmont Floodplain Soils (F19) Mesic Spodic (TA6)
San	ndy Mucky Mir	neral (S atrix (S4	51)		Redox Do	epressions	s (F8)	
San San San	ndy Mucky Mir ndy Gleyed Ma	neral (S atrix (S4	51)		Redox De	epressions	s (F8)	Mesic Spodic (TA6)

Restrictive	Layer (if	observed):
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Type: ______
Depth (inches):

Hydric Soil Present? Yes X No

Remarks:

Project/Site: Cider Solar Project	City/County: Elba/Genesee	Sampling Date: 7/8/2020		
Applicant/Owner: Hecate		State: NY Sampling Point:02-2020070		
Investigator(s): Justin Ahn	Section, Township, Range:	WL-02-2U		
Landform (hillslope, terrace, etc.): Toeslope	Local relief (concave, convex, n	one): <u>Linear</u> Slope (%) <u>1 - 5</u>		
Subregion (LRR or MLRA): LRR L	Lat: 43.107831 Long:7	8.185015 Datum: NAD83		
Soil Map Unit Name: HIB		NWI Classification: UPL		
Are climatic / hyrologic conditions on the sit	e typical for this time of year? Yes X No	(if no, explain in Remarks.)		
Are Vegetation, Soil, or Hydrolo	gysignificantly disturbed? Are "Normal (Circumstances" present? Yes X No		
Are Vegetation, Soil, or Hydrolo	gynaturally problematic? (if needed, expl	ain any answers in Remarks.)		
		_		
SUMMARY OF FINDINGS - Attach site m	nap showing sampling point locations, tran	sects, important features, etc.		
Hydrophytic Vegetation Present? Yes	No X Is the Sampled Area			
Hydric Soil Present? Yes	No X within a Wetland?	Yes NoX		
Wetland Hydrology Present? Yes	No X if yes, optional Wetl	and Site ID:		
Remarks: (Explain alternative procedures here or in a	separate report.)			
disturbed, adjacent to cultivated corn	field			
•				
HYDDOLOGY				
HYDROLOGY Wetland Hydrology Indicators:		Secondary Indicators (minimum of two required)		
	· chack all that apply)	Surface Soil Cracks (B6)		
Primary Indicators (minimum of one is required				
Surface Water (A1)	Water-Stained Leaves (B9)	Drainage Patterns (B10)		
High Water Table (A2)	Aquatic Fauna (B13)	Moss Trim Lines (B16)		
Saturation (A3)	Marl Deposits (B15)	Dry-Season Water Table (C2)		
Water Marks (B1)	Hydrogen Sulfide Odor (C1)	Crayfish Burrows (C8)		
Sediment Deposits (B2)	Oxidized Rhizospheres on Living Roots (C3)	Saturation Visible in Aerial Imagery (C9)		
Drift Deposits (B3)	Presence of Reduced Iron (C4)	Stunted or Stressed Plants (D1)		
Algal Mat or Crust (B4)	Recent Iron Reduction in Tilled Soils (C6)	Geomorphic Position (D2)		
Iron Deposits (B5)	Thin Muck Surface (C7)	Shallow Aquitard (D3)		
Inundation Visible on Aerial Imagery (B7)	Other (Explain in Remarks)	Microtopographic Relief (D4)		
Sparsley Vegetated Concave Surface (B8)		FAC-Neutral Test (D5)		
Surface Water Present? Yes No	 · · · · '			
Water Table Present? Yes No	_ · · · · _	lydrology Present? Yes No _X		
Saturation Present? Yes No	X Depth (inches)			
Describe Recorded Data (stream gauge mo	unitoring well, aerial photos, previous inspection	s) if available:		
2 000 100 11000 404 2 414 (00 0411 84480) 1110				
Remarks:				

VEGETATION - Use scientific names of plants Sampling Point: 02-20200708-WL-02-2U Absolute Dominant Indicator **Dominance Test Worksheet:** (Plot Size: 30'radius) % Cover Species? Status **Tree Stratum Number of Dominant Species** That Are OBL, FACW, or FAC: (A) = Total Cover **Total Number of Dominant** (B) Species Across All Strata: 2 Percent of Dominant Species (A/B) That Are OBL, FACW, or FAC: 0% **Prevalence Index Worksheet:** x 1 0 **OBL** species Absolute Dominant Indicator **FACW** species 20 40 (Plot Size: 15'radius) Status x 2 **Shrub Stratum** % Cover Species? 0 FAC species х3 = Total Cover **FACU** species 40 x 4 160 **UPL** species 60 x 5 300 Column Totals 120 (A) 500 (B) Prevalence Index = B/A = 4.17 **Hydrophytic Vegetation Indicators:** Absolute Dominant Indicator 1- Rapid Test For Hydrophytic Vegetation **Herb Stratum** (Plot Size: 5'radius) % Cover Species? Status 2- Dominance Test is > 50% 60 UPL Daucus carota 3- Prevalence Index is =< 3.0 Χ Phleum pratense 30 **FACU** 4- Morphological Adaptations 20 **FACW** Agrostis gigantea Abutilon theophrasti 10 **FACU** 5- Problematic Hydrophytic Vegetation 120 = Total Cover **Definitions of Vegetation Strata:** Tree- Woody plants 3 in. (7.6cm) or more in diameter at breast height (DBH), regardless of height. Sapling/Shrub- Woody plants less than 3 in. DBH and greater than or equal to 3.28ft (1m) tall. Herb- All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28ft tall. Absolute Dominant Indicator Woody Vines- All woody vines greater than 3.28ft in (Plot Size: 30'radius) **Woody Vine Stratum** % Cover Species? Status height. = Total Cover Hydrophytic Vegetation Present? Yes ____ No _X Remarks: (Include photo numbers here or on a separate sheet.)

SOIL Sampling Point: 02-20200708-WL-02-2U

,								3amping 1 omt. 02-20200706-WE-02-20
Depth	Matrix				Redo	x Featu	ires	
(inches	Color	%	Color	%	Type	Loc	Texture	Remarks
0-6	10YR 3/4	95	7.5YR 6/8	5	С	PL	Silt Loam	
6-12	10YR 3/4	60	7.5YR 6/8	40	С	M	Loam	
Hydric Sc	oil Indicators:							Indicators for Problematic Soils:
-	tosol (A1)				Polyvalu	e Below	Surface (B15)	2 cm Muck (A10)
	tic Epipedon (A2)			-	k Surface		Coast Prarie Redox (A16)
	ck Histic (A3)	,					neral (F1)	5 cm Mucky Peat or Peat (S3)
	drogen Sulfide	(A4)			-	-	atric (F2)	Dark Surface (S7)
Stra	atified Layers	(A5)				d Matrix		Polyvalue Below Surface (S8)
Dej	pleted Below [Dark Su	rface (A11)		Redox D	ark Surfa	ice (F6)	Thin Dark Surface (S9)
Thi	ck Dark Surfac	e (A12))		Depleted	d Dark Su	ırface (F7)	Iron-Manganese Masses (F12)
Sar	ndy Mucky Mir	neral (S	1)		Redox D	epressio	ns (F8)	Piedmont Floodplain Soils (F19)
Sar	ndy Gleyed Ma	atrix (S4	1)					Mesic Spodic (TA6)
Sar	ndy Redox (S5))						Red Parent Material (F21)
Stri	ipped Matrix (S6)			Very Shallow Dark Surfa			Very Shallow Dark Surface (TF12)
Dar	rk Surface (S7))						Other (Explain in Remarks)
Restrictiv	ve Layer (if obs	erved):						
Type:					Hydrid	Soil Present? Yes No X		
	Depth (in	ches):						
Remarks	c·							
remark.	J.							

Project/Site: Cider Solar Project	City/County: Elba/Genese	e Sampling Date: 7/8/2020			
Applicant/Owner: Hecate	State: NY Sampling Point:				
Investigator(s): Justin Ahn	Section, Township, Range:	02-20200708-WL-03-3W			
Landform (hillslope, terrace, etc.): Depression	Local relief (concave, convex,	none): <u>Concave</u> Slope (%) <u>0 - 1</u>			
Subregion (LRR or MLRA): LRR L	Lat: <u>43.111208</u> Long: <u>-</u>	78.186188 Datum: <u>NAD83</u>			
Soil Map Unit Name: ApA		NWI Classification: PEM			
Are climatic / hyrologic conditions on the site t	ypical for this time of year? Yes X No	(if no, explain in Remarks.)			
Are Vegetation $___$, Soil $___$, or Hydrology	significantly disturbed? Are "Normal	Circumstances" present? Yes X No			
Are Vegetation, Soil, or Hydrology	naturally problematic? (if needed, exp	plain any answers in Remarks.)			
SUMMARY OF FINDINGS - Attach site map	showing sampling point locations, trar	nsects, important features, etc.			
Hydrophytic Vegetation Present? Yes X	No Is the Sampled Are	a			
Hydric Soil Present? Yes X	No within a Wetland?	Yes X No			
Wetland Hydrology Present? Yes X	No if yes, optional Wet	land Site ID: WL59			
Remarks: (Explain alternative procedures here or in a seg					
HYDROLOGY Westland Hydrology Indicators:		Secondary Indicators / minimum of two required			
Wetland Hydrology Indicators: Primary Indicators (minimum of one is required: ch	neck all that anniv)	X Surface Soil Cracks (B6)			
Surface Water (A1)	Water-Stained Leaves (B9)	Drainage Patterns (B10)			
High Water Table (A2)	Aquatic Fauna (B13)	Moss Trim Lines (B16)			
Saturation (A3)	Marl Deposits (B15)	Dry-Season Water Table (C2)			
Water Marks (B1)	Hydrogen Sulfide Odor (C1)	Crayfish Burrows (C8)			
Sediment Deposits (B2)	Oxidized Rhizospheres on Living Roots (C3)	Saturation Visible in Aerial Imagery (C9)			
Drift Deposits (B3)	Presence of Reduced Iron (C4)	Stunted or Stressed Plants (D1)			
X Algal Mat or Crust (B4)					
	Recent Iron Reduction in Tilled Soils (C6)	X Geomorphic Position (D2)			
Iron Deposits (B5)	Thin Muck Surface (C7)	Shallow Aquitard (D3)			
Inundation Visible on Aerial Imagery (B7)	Other (Explain in Remarks)	Microtopographic Relief (D4)			
X Sparsley Vegetated Concave Surface (B8)		FAC-Neutral Test (D5)			
Surface Water Present? Yes No _ X	Depth (inches)				
Water Table Present? Yes No X	Depth (inches) Wetland I	Hydrology Present? Yes X No			
Saturation Present? Yes No X	Depth (inches)				
Describe Recorded Data (stream gauge, monit	coring well, aerial photos, previous inspection	ns), if available:			
Remarks:					

VEGETATION - Use scie	ntific names	of plants				Sampl	ing Point	: 02-202	200708-WL-	03-3W
				Dominant		Dominance Test \	Norkshee	t:		
Tree Stratum	(Plot Size:	30'radius)	% Cover	Species?	Status	Number of Dom That Are OBL, F	-		3	(A)
				_= Total Cov	ver	Total Numbe Species Ac			3	(B)
						Percent of Doi That Are OBL,	•		100%	_(A/B)
						Prevalence Index	Workshee	et:		
			Absolute	Dominant	Indicator	OBL species	70	x 1	70	
Shrub Stratum	(Plot Size:	15'radius)	% Cover	Species?	Status	FACW species	0	x 2	0	
						FAC species	30	x 3	90	
				_= Total Cov	ver	FACU species	0	x 4	0	
						UPL species	0	x 5	0	
						Column Totals	100	(A)	160	(B)
						Prevalend	ce Index =	B/A =	1.6	
						Hydrophytic Vege	etation Inc	dicator	s:	
Harla Charles	/DI-+ C:	Floradius \		Dominant		1- Rapid Te	st For Hyd	rophyt	ic Vegeta	tion
Herb Stratum	(Plot Size:		% Cover	Species?	Status	X 2- Dominan	ce Test is	> 50%		
<u>Leersia oryzoides</u> Equisetum arvense			<u>40</u> 30	X X	OBL FAC	X 3- Prevalen	ce Index is	s =< 3.0)	
Carex lupuliformis			20	X	OBL	4- Morphol	ogical Ada	ptation	ns	
Typha angustifolia			10		OBL	5- Problema	atic Hydro	phytic	Vegetatio	n
			100	_= Total Cov	ver	Definitions of Veget	ation Stuat			
						Definitions of Veget			to altere	
						Tree- Woody plants breast height (DBH),	•	•		ieter at
						Sapling/Shrub- Woo greater than or equa				and
						Herb- All herbaceousize, and woody plan			_	less of
Woody Vine Stratum	(Plot Size:	30'radius)	Absolute % Cover	Dominant Species?	Indicator Status	Woody Vines- All wo height.	ody vines	greater	than 3.28f	t in
				= Total Cov	ver	Hydrop	-			
						Veget Pres	ation sent? Yes	sX_	No	
Remarks: (Include photo r disturbed, adjacent to o		or on a sep	arate shee	t.)		1				
aistarbea, aujatent to t	Join Helu									

SOIL Sampling Point: 02-20200708-WL-03-3W Depth Matrix **Redox Features** (inches Color % Color % Texture Remarks Type Loc 0-6 10YR 4/1 90 7.5YR 6/6 C PLClay Loam 10 **Hydric Soil Indicators:** Indicators for Problematic Soils: Histosol (A1) Polyvalue Below Surface (B15) 2 cm Muck (A10) Histic Epipedon (A2) Thin Dark Surface (S9) Coast Prarie Redox (A16) Black Histic (A3) Loamy Mucky Mineral (F1) 5 cm Mucky Peat or Peat (S3) Hydrogen Sulfide (A4) Loamy Gleyed Matric (F2) Dark Surface (S7) Stratified Layers (A5) X Depleted Matrix (F3) Polyvalue Below Surface (S8) Depleted Below Dark Surface (A11) Redox Dark Surface (F6) Thin Dark Surface (S9) Thick Dark Surface (A12) Depleted Dark Surface (F7) Iron-Manganese Masses (F12) Sandy Mucky Mineral (S1) Redox Depressions (F8) Piedmont Floodplain Soils (F19) Sandy Gleyed Matrix (S4) Mesic Spodic (TA6) Sandy Redox (S5) Red Parent Material (F21) Stripped Matrix (S6) Very Shallow Dark Surface (TF12) Dark Surface (S7) Other (Explain in Remarks) Restrictive Layer (if observed): Type: Rock Hydric Soil Present? Yes No Depth (inches): 6 Remarks:

Project/Site: Cider Solar Project	City/County: Elba/Genese	e Sampling Date: 7/8/2020			
Applicant/Owner: Hecate	State: NY Sampling Point:02-20				
Investigator(s): Justin Ahn	Section, Township, Range:	WL-03-3U			
Landform (hillslope, terrace,etc.): <u>Toeslope</u>	Local relief (concave, convex, ı	none): <u>Convex</u> Slope (%) <u>1 - 5</u>			
Subregion (LRR or MLRA): LRR L	Lat: _43.111197 Long:7	78.186072 Datum: NAD83			
Soil Map Unit Name: ApA		NWI Classification: UPL			
Are climatic / hyrologic conditions on the site	e typical for this time of year? Yes X No	(if no, explain in Remarks.)			
Are Vegetation, Soil, or Hydrolog	ysignificantly disturbed? Are "Normal	Circumstances" present? Yes X No			
Are Vegetation, Soil, or Hydrolog	ynaturally problematic? (if needed, exp	lain any answers in Remarks.)			
SLIMMARY OF FINDINGS - Attach site ma	ap showing sampling point locations, trar	sects important features etc			
Hydrophytic Vegetation Present? Yes	No X Is the Sampled Area				
Hydric Soil Present? Yes	No X within a Wetland?	Yes No X			
· —					
Wetland Hydrology Present? Yes					
Remarks: (Explain alternative procedures here or in a s	separate report.)				
HYDROLOGY					
Wetland Hydrology Indicators:		Secondary Indicators (minimum of two required)			
Primary Indicators (minimum of one is required:	check all that apply)	Surface Soil Cracks (B6)			
Surface Water (A1)	Water-Stained Leaves (B9)	Drainage Patterns (B10)			
High Water Table (A2)	Aquatic Fauna (B13)	Moss Trim Lines (B16)			
Saturation (A3)	Marl Deposits (B15)	Dry-Season Water Table (C2)			
Water Marks (B1)	Hydrogen Sulfide Odor (C1)	Crayfish Burrows (C8)			
Sediment Deposits (B2)	Oxidized Rhizospheres on Living Roots (C3)	Saturation Visible in Aerial Imagery (C9)			
Drift Deposits (B3)	Presence of Reduced Iron (C4)	Stunted or Stressed Plants (D1)			
Algal Mat or Crust (B4)	Recent Iron Reduction in Tilled Soils (C6)	Geomorphic Position (D2)			
Iron Deposits (B5)	Thin Muck Surface (C7)	Shallow Aquitard (D3)			
Inundation Visible on Aerial Imagery (B7)					
	Other (Explain in Remarks)	Microtopographic Relief (D4)			
Sparsley Vegetated Concave Surface (B8)		FAC-Neutral Test (D5)			
Surface Water Present? Yes No X	Depth (inches)				
Water Table Present? Yes No X	Depth (inches) Wetland H	Hydrology Present? Yes No X			
Saturation Present? Yes No _ X	Depth (inches)				
Describe Recorded Data (stream gauge mor	nitoring well, aerial photos, previous inspection	ns) if available:			
Remarks:					

absolute 6 Cover 40 30 10 10	Dominant Species? = Total Cov Dominant Species? = Total Cov Dominant Species? X X	Status er Indicator Status er	Dominance Test Worksheet:Number of Dominant Species That Are OBL, FACW, or FAC:1(A)Total Number of Dominant Species Across All Strata:3(B)Percent of Dominant Species That Are OBL, FACW, or FAC:33.3%(A/B)Prevalence Index Worksheet:OBL species0x 10FACW species20x 240FAC species30x 390FACU species10x 440UPL species40x 5200Column Totals100(A)370(B)Prevalence Index = B/A =3.7Hydrophytic Vegetation Indicators:1- Rapid Test For Hydrophytic Vegetation2- Dominance Test is > 50%3- Prevalence Index is =< 3.0
absolute 6 Cover 40 30 10	Dominant Species? = Total Cov Dominant Species? X	er Indicator Status er Indicator Status UPL	That Are OBL, FACW, or FAC: 1 (A) Total Number of Dominant Species Across All Strata: 3 (B) Percent of Dominant Species That Are OBL, FACW, or FAC: 33.3% (A/B) Prevalence Index Worksheet: OBL species 0 x1 0 FACW species 20 x2 40 FAC species 30 x3 90 FACU species 10 x4 40 UPL species 40 x5 200 Column Totals 100 (A) 370 (B) Prevalence Index = B/A = 3.7 Hydrophytic Vegetation Indicators: 1- Rapid Test For Hydrophytic Vegetation 2- Dominance Test is > 50%
absolute 6 Cover 40 30 10 10	Dominant Species? = Total Cov Dominant Species? X	Indicator Status er Indicator Status UPL	Species Across All Strata: 3 (B) Percent of Dominant Species That Are OBL, FACW, or FAC: 33.3% (A/B) Prevalence Index Worksheet: OBL species 0 x 1 0 FACW species 20 x 2 40 FAC species 30 x 3 90 FACU species 10 x 4 40 UPL species 40 x 5 200 Column Totals 100 (A) 370 (B) Prevalence Index = B/A = 3.7 Hydrophytic Vegetation Indicators: 1- Rapid Test For Hydrophytic Vegetation 2- Dominance Test is > 50%
absolute 6 Cover 40 30 10 10	Species? _= Total Cov Dominant Species? X	Status er Indicator Status UPL	That Are OBL, FACW, or FAC: 33.3% (A/B) Prevalence Index Worksheet: OBL species 0 x1 0 FACW species 20 x2 40 FAC species 30 x3 90 FACU species 10 x4 40 UPL species 40 x5 200 Column Totals 100 (A) 370 (B) Prevalence Index = B/A = 3.7 Hydrophytic Vegetation Indicators: 1- Rapid Test For Hydrophytic Vegetation 2- Dominance Test is > 50%
absolute 6 Cover 40 30 10 10	Species? _= Total Cov Dominant Species? X	Status er Indicator Status UPL	OBL species 0 x 1 0 FACW species 20 x 2 40 FAC species 30 x 3 90 FACU species 10 x 4 40 UPL species 40 x 5 200 Column Totals 100 (A) 370 (B) Prevalence Index = B/A = 3.7 Hydrophytic Vegetation Indicators: 1- Rapid Test For Hydrophytic Vegetation 2- Dominance Test is > 50%
absolute 6 Cover 40 30 10 10	Species? _= Total Cov Dominant Species? X	Status er Indicator Status UPL	FACW species 20 x 2 40 FAC species 30 x 3 90 FACU species 10 x 4 40 UPL species 40 x 5 200 Column Totals 100 (A) 370 (B) Prevalence Index = B/A = 3.7 Hydrophytic Vegetation Indicators: 1- Rapid Test For Hydrophytic Vegetation 2- Dominance Test is > 50%
absolute 6 Cover 40 30 10 10	Species? _= Total Cov Dominant Species? X	Status er Indicator Status UPL	FAC species 30 x 3 90 FACU species 10 x 4 40 UPL species 40 x 5 200 Column Totals 100 (A) 370 (B) Prevalence Index = B/A = 3.7 Hydrophytic Vegetation Indicators: 1- Rapid Test For Hydrophytic Vegetation 2- Dominance Test is > 50%
% Cover 40 30 10 10	Dominant Species? X	Indicator Status UPL	FACU species 10 x 4 40 UPL species 40 x 5 200 Column Totals 100 (A) 370 (B) Prevalence Index = B/A = 3.7 Hydrophytic Vegetation Indicators: 1- Rapid Test For Hydrophytic Vegetation 2- Dominance Test is > 50%
% Cover 40 30 10 10	Dominant Species? X	Indicator Status UPL	UPL species 40 x 5 200 Column Totals 100 (A) 370 (B) Prevalence Index = B/A = 3.7 Hydrophytic Vegetation Indicators: 1- Rapid Test For Hydrophytic Vegetation 2- Dominance Test is > 50%
% Cover 40 30 10 10	Species?	Status UPL	Column Totals 100 (A) 370 (B) Prevalence Index = B/A = 3.7 Hydrophytic Vegetation Indicators: 1- Rapid Test For Hydrophytic Vegetation 2- Dominance Test is > 50%
% Cover 40 30 10 10	Species?	Status UPL	Prevalence Index = B/A = 3.7 Hydrophytic Vegetation Indicators: 1- Rapid Test For Hydrophytic Vegetation 2- Dominance Test is > 50%
% Cover 40 30 10 10	Species?	Status UPL	Prevalence Index = B/A = 3.7 Hydrophytic Vegetation Indicators: 1- Rapid Test For Hydrophytic Vegetation 2- Dominance Test is > 50%
% Cover 40 30 10 10	Species?	Status UPL	1- Rapid Test For Hydrophytic Vegetation 2- Dominance Test is > 50%
% Cover 40 30 10 10	Species?	Status UPL	2- Dominance Test is > 50%
40 30 10 10	Х	UPL	
30 10 10			3- Prevalence Index is =< 3.0
10 10	^	FAC	
10		FACW	4- Morphological Adaptations
_		FACW	5- Problematic Hydrophytic Vegetation
5		FACU	
95	_= Total Cov	er	Definitions of Vegetation Strata:
			Tree- Woody plants 3 in. (7.6cm) or more in diameter at breast height (DBH), regardless of height.
			Sapling/Shrub- Woody plants less than 3 in. DBH and greater than or equal to 3.28ft (1m) tall.
			Herb- All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28ft tall.
bsolute 6 Cover	Dominant Species?	Indicator Status	Woody Vines- All woody vines greater than 3.28ft in height.
5	Х	FACU	
5	_= Total Cov	er	Hydrophytic Vegetation Present? Yes NoX
1	5 Cover 5 5	Cover Species? 5 X	5 X FACU 5 = Total Cover

SOIL Sampling Point: 02-20200708-WL-03-3U Depth Matrix **Redox Features** (inches % Color Color % Type Texture Remarks Loc 0-6 10YR 3/3 100 Silt Loam **Hydric Soil Indicators:** Indicators for Problematic Soils: Histosol (A1) Polyvalue Below Surface (B15) 2 cm Muck (A10) Histic Epipedon (A2) Thin Dark Surface (S9) Coast Prarie Redox (A16) Black Histic (A3) Loamy Mucky Mineral (F1) 5 cm Mucky Peat or Peat (S3) Hydrogen Sulfide (A4) Loamy Gleyed Matric (F2) Dark Surface (S7) Stratified Layers (A5) Depleted Matrix (F3) Polyvalue Below Surface (S8) Depleted Below Dark Surface (A11) Redox Dark Surface (F6) Thin Dark Surface (S9) Thick Dark Surface (A12) Depleted Dark Surface (F7) Iron-Manganese Masses (F12) Sandy Mucky Mineral (S1) Redox Depressions (F8) Piedmont Floodplain Soils (F19) Sandy Gleyed Matrix (S4) Mesic Spodic (TA6) Sandy Redox (S5) Red Parent Material (F21) Stripped Matrix (S6) Very Shallow Dark Surface (TF12) Dark Surface (S7) Other (Explain in Remarks) Restrictive Layer (if observed): Type: Dense Hydric Soil Present? Yes No Χ Depth (inches): 6 Remarks:

Project/Site: Cider Solar Project	City/County: Elba/Genesse	Sampling Date: 7/9/2020			
Applicant/Owner: Hecate		State: NY Sampling Point:			
Investigator(s): Justin Ahn	Section, Township, Range: 02-20200709-WL-04-4W				
Landform (hillslope, terrace,etc.): Depression	Local relief (concave, convex, r	none): <u>Concave</u> Slope (%) <u>0 - 0</u>			
Subregion (LRR or MLRA): LRR L	Lat: 43.115088 Long: -7	78.177836 Datum: NAD83			
Soil Map Unit Name: LoA		NWI Classification: PSS			
Are climatic / hyrologic conditions on the site typic	cal for this time of year? Yes X No	(if no, explain in Remarks.)			
Are Vegetation, Soil, or Hydrology	significantly disturbed? Are "Normal	Circumstances" present? Yes X No			
Are Vegetation, Soil, or Hydrology	naturally problematic? (if needed, exp	lain any answers in Remarks.)			
SUMMARY OF FINDINGS - Attach site map sh	nowing sampling point locations, tran	sects, important features, etc.			
Hydrophytic Vegetation Present? Yes X	No Is the Sampled Area	a			
Hydric Soil Present? Yes X I	No within a Wetland?	Yes X No			
·		land Site ID: WL60			
Remarks: (Explain alternative procedures here or in a separat	te report.)				
HYDROLOGY					
Wetland Hydrology Indicators:		Secondary Indicators (minimum of two required)			
Primary Indicators (minimum of one is required: check	all that apply)	Surface Soil Cracks (B6)			
X Surface Water (A1)	Water-Stained Leaves (B9)	Drainage Patterns (B10)			
High Water Table (A2)	Aquatic Fauna (B13)	Moss Trim Lines (B16)			
Saturation (A3)	Marl Deposits (B15)	Dry-Season Water Table (C2)			
Water Marks (B1)	 Hydrogen Sulfide Odor (C1)	Crayfish Burrows (C8)			
Sediment Deposits (B2)	Oxidized Rhizospheres on Living Roots (C3)	Saturation Visible in Aerial Imagery (C9)			
Drift Deposits (B3)	Presence of Reduced Iron (C4)	Stunted or Stressed Plants (D1)			
Algal Mat or Crust (B4)	Recent Iron Reduction in Tilled Soils (C6)	Geomorphic Position (D2)			
Iron Deposits (B5)	Thin Muck Surface (C7)	Shallow Aquitard (D3)			
	Other (Explain in Remarks)				
Inundation Visible on Aerial Imagery (B7)	Other (Explain in Kemarks)	Microtopographic Relief (D4)			
Sparsley Vegetated Concave Surface (B8)		FAC-Neutral Test (D5)			
Surface Water Present? Yes X No D	epth (inches) 2				
Water Table Present? Yes No X D	epth (inches) Wetland H	Hydrology Present? Yes X No			
Saturation Present? Yes No X D	epth (inches)	, —			
Describe Recorded Data (stream gauge, monitoring	ng well, aerial photos, previous inspectior	ns), if available:			
, , , , , , , , , , , , , , , , , , , ,		·			
Remarks:					

VEGETATION - Use scientific names of plants Sampling Point: 02-20200709-WL-04-4W Absolute Dominant Indicator **Dominance Test Worksheet:** (Plot Size: 30'radius) % Cover Species? Status **Tree Stratum Number of Dominant Species** That Are OBL, FACW, or FAC: (A) = Total Cover **Total Number of Dominant** Species Across All Strata: (B) 2 Percent of Dominant Species 50% (A/B) That Are OBL, FACW, or FAC: **Prevalence Index Worksheet:** 10 x 1 10 **OBL** species Absolute Dominant Indicator **FACW** species 60 120 (Plot Size: 15'radius) % Cover Species? Status x 2 **Shrub Stratum** FAC species 45 15 х3 Symphyotrichum pilosum FACU Χ 5 = Total Cover 5 **FACU** species x 4 20 **UPL** species 15 x 5 75 Column Totals 105 (A) 270 (B) Prevalence Index = B/A = 2.57 **Hydrophytic Vegetation Indicators:** Absolute Dominant Indicator 1- Rapid Test For Hydrophytic Vegetation **Herb Stratum** (Plot Size: 5'radius) % Cover Species? Status 2- Dominance Test is > 50% Solidago gigantea 50 Х **FACW** X 3- Prevalence Index is =< 3.0 Xanthium strumarium 15 **FAC** 4- Morphological Adaptations 15 UPL Asclepias syriaca 10 OBL Scirpus atrovirens 5- Problematic Hydrophytic Vegetation Phalaris arundinacea 10 **FACW** 100 = Total Cover **Definitions of Vegetation Strata:** Tree- Woody plants 3 in. (7.6cm) or more in diameter at breast height (DBH), regardless of height. Sapling/Shrub- Woody plants less than 3 in. DBH and greater than or equal to 3.28ft (1m) tall. Herb- All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28ft tall. Absolute Dominant Indicator Woody Vines- All woody vines greater than 3.28ft in (Plot Size: 30'radius) **Woody Vine Stratum** % Cover Species? Status height. = Total Cover Hydrophytic Vegetation Present? Yes X No ___ Remarks: (Include photo numbers here or on a separate sheet.)

SOIL Sampling Point: 02-20200709-WL-04-4W Depth Matrix **Redox Features** (inches Color % Color Texture Remarks % Type Loc 0-14 10YR 3/1 95 10YR 3/3 C PΙ Silt Loam 5 **Hydric Soil Indicators:** Indicators for Problematic Soils: Histosol (A1) Polyvalue Below Surface (B15) 2 cm Muck (A10) Histic Epipedon (A2) Thin Dark Surface (S9) Coast Prarie Redox (A16) Black Histic (A3) Loamy Mucky Mineral (F1) 5 cm Mucky Peat or Peat (S3) Hydrogen Sulfide (A4) Loamy Gleyed Matric (F2) Dark Surface (S7) Stratified Layers (A5) Depleted Matrix (F3) Polyvalue Below Surface (S8) Depleted Below Dark Surface (A11) X Redox Dark Surface (F6) Thin Dark Surface (S9) Thick Dark Surface (A12) Depleted Dark Surface (F7) Iron-Manganese Masses (F12) Sandy Mucky Mineral (S1) Redox Depressions (F8) Piedmont Floodplain Soils (F19) Sandy Gleyed Matrix (S4) Mesic Spodic (TA6) Sandy Redox (S5) Red Parent Material (F21) Stripped Matrix (S6) Very Shallow Dark Surface (TF12) Dark Surface (S7) Other (Explain in Remarks) Restrictive Layer (if observed): Type: Hydric Soil Present? Yes No Depth (inches): Remarks:

eID: 20200803121220

Applicant/Oursey Hearts
Applicant/Owner: Hecate State: NY Sampling Point:02-20200709
Investigator(s): Justin Ahn Section, Township, Range: WL-04-4U
Landform (hillslope, terrace,etc.): Toeslope Local relief (concave, convex, none): Convex Slope (%) 1 - 5
Subregion (LRR or MLRA): LRR L Lat: 43.114920 Long: -78.177955 Datum: NAD83
Soil Map Unit Name: HIB NWI Classification: UPL
Are climatic / hyrologic conditions on the site typical for this time of year? Yes X No (if no, explain in Remarks.)
Are Vegetation, Soil, or Hydrologysignificantly disturbed? Are "Normal Circumstances" present? YesX _No
Are Vegetation, Soil, or Hydrology naturally problematic? (if needed, explain any answers in Remarks.)
SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.
Hydrophytic Vegetation Present? Yes No X Is the Sampled Area
Hydric Soil Present? Yes No X within a Wetland? Yes No X
Wetland Hydrology Present? Yes No X if yes, optional Wetland Site ID:
Remarks: (Explain alternative procedures here or in a separate report.)
Remarks. (Explain alternative procedures here of in a separate report.)
HYDROLOGY Secondary Indicators (minimum of two required)
Wetland Hydrology Indicators: Secondary Indicators (minimum of two required) Surface Soil Cracks (R6)
Primary Indicators (minimum of one is required: check all that apply) Surface Soil Cracks (B6)
Surface Water (A1) Water-Stained Leaves (B9) Drainage Patterns (B10)
High Water Table (A2) Aquatic Fauna (B13) Moss Trim Lines (B16)
Saturation (A3)Marl Deposits (B15)Dry-Season Water Table (C2)
Water Marks (B1) Hydrogen Sulfide Odor (C1) Crayfish Burrows (C8)
Sediment Deposits (B2) Oxidized Rhizospheres on Living Roots (C3) Saturation Visible in Aerial Imagery (C9)
Drift Deposits (B3) Presence of Reduced Iron (C4) Stunted or Stressed Plants (D1)
Algal Mat or Crust (B4) Recent Iron Reduction in Tilled Soils (C6) Geomorphic Position (D2)
Iron Deposits (B5) Thin Muck Surface (C7) Shallow Aquitard (D3)
Inundation Visible on Aerial Imagery (B7) Other (Explain in Remarks) Microtopographic Relief (D4)
Sparsley Vegetated Concave Surface (B8)FAC-Neutral Test (D5)
Surface Water Present? Yes No X Depth (inches)
Water Table Present? Yes No X Depth (inches) Wetland Hydrology Present? Yes No X
Saturation Present? Yes No X Depth (inches)
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:
Remarks:

VEGETATION - Use scientific names of plants Sampling Point: 02-20200709-WL-04-4U Absolute Dominant Indicator **Dominance Test Worksheet:** (Plot Size: 30'radius) % Cover Species? Status **Tree Stratum Number of Dominant Species** That Are OBL, FACW, or FAC: (A) = Total Cover **Total Number of Dominant** Species Across All Strata: (B) 3 Percent of Dominant Species That Are OBL, FACW, or FAC: 33.3% (A/B) **Prevalence Index Worksheet:** 0 x 1 **OBL** species Absolute Dominant Indicator **FACW** species 10 20 (Plot Size: 15'radius) % Cover Species? Status x 2 **Shrub Stratum** FAC species 45 15 х3 20 Χ FACU Lonicera tatarica 20 = Total Cover **FACU** species 25 x 4 100 **UPL** species 40 x 5 200 Column Totals 90 (A) 365 (B) Prevalence Index = B/A = 4.06 **Hydrophytic Vegetation Indicators:** Absolute Dominant Indicator 1- Rapid Test For Hydrophytic Vegetation **Herb Stratum** (Plot Size: 5'radius) % Cover Species? Status 2- Dominance Test is > 50% 40 UPL Daucus carota 3- Prevalence Index is =< 3.0 Χ Apocynum cannabinum 15 **FAC** 4- Morphological Adaptations Solidago gigantea 10 **FACW** Phytolacca americana 5 **FACU** 5- Problematic Hydrophytic Vegetation 70 = Total Cover **Definitions of Vegetation Strata:** Tree- Woody plants 3 in. (7.6cm) or more in diameter at breast height (DBH), regardless of height. Sapling/Shrub- Woody plants less than 3 in. DBH and greater than or equal to 3.28ft (1m) tall. Herb- All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28ft tall. Absolute Dominant Indicator Woody Vines- All woody vines greater than 3.28ft in (Plot Size: 30'radius) **Woody Vine Stratum** % Cover Species? Status height. = Total Cover Hydrophytic Vegetation Present? Yes ____ No _X Remarks: (Include photo numbers here or on a separate sheet.)

SOIL Sampling Point: 02-20200709-WL-04-4U Depth Matrix **Redox Features** (inches % Color Color % Type Texture Remarks Loc 0-8 10YR 3/4 100 Silt Loam **Hydric Soil Indicators:** Indicators for Problematic Soils: Histosol (A1) Polyvalue Below Surface (B15) 2 cm Muck (A10) Histic Epipedon (A2) Thin Dark Surface (S9) Coast Prarie Redox (A16) Black Histic (A3) Loamy Mucky Mineral (F1) 5 cm Mucky Peat or Peat (S3) Hydrogen Sulfide (A4) Loamy Gleyed Matric (F2) Dark Surface (S7) Stratified Layers (A5) Depleted Matrix (F3) Polyvalue Below Surface (S8) Depleted Below Dark Surface (A11) Redox Dark Surface (F6) Thin Dark Surface (S9) Thick Dark Surface (A12) Depleted Dark Surface (F7) Iron-Manganese Masses (F12) Sandy Mucky Mineral (S1) Redox Depressions (F8) Piedmont Floodplain Soils (F19) Sandy Gleyed Matrix (S4) Mesic Spodic (TA6) Sandy Redox (S5) Red Parent Material (F21) Stripped Matrix (S6) Very Shallow Dark Surface (TF12) Dark Surface (S7) Other (Explain in Remarks) Restrictive Layer (if observed): Type: Rock Hydric Soil Present? Yes No Χ Depth (inches): 8 Remarks:

Project/Site: Cider Solar Project	City/County: Elba/Gennes	see Sampling Date: 7/9/2020				
Applicant/Owner: Hecate		State: NY Sampling Point:				
Investigator(s): Justin Ahn	gator(s): <u>Justin Ahn</u> Section, Township, Range					
Landform (hillslope, terrace,etc.): Depression	Local relief (concave, convex,	none): <u>Concave</u> Slope (%) <u>0 - 1</u>				
Subregion (LRR or MLRA): LRR L	Lat: <u>43.115404</u> Long:	78.174823 Datum: <u>NAD83</u>				
Soil Map Unit Name: HIB		NWI Classification: PSS				
Are climatic / hyrologic conditions on the site t	ypical for this time of year? Yes X No	(if no, explain in Remarks.)				
Are Vegetation, Soil, or Hydrology	significantly disturbed? Are "Normal	Circumstances" present? Yes X No				
Are Vegetation, Soil, or Hydrology	naturally problematic? (if needed, exp	plain any answers in Remarks.)				
SUMMARY OF FINDINGS - Attach site map	showing sampling point locations, tran	sects, important features, etc.				
Hydrophytic Vegetation Present? Yes X	No Is the Sampled Are.					
	within a Wetland?	Yes X No				
Hydric Soil Present? Yes X	NO					
Wetland Hydrology Present? Yes X	No if yes, optional wet	land Site ID: WL61				
Remarks: (Explain alternative procedures here or in a sep	parate report.)					
HYDROLOGY						
Wetland Hydrology Indicators:		Secondary Indicators (minimum of two required)				
Primary Indicators (minimum of one is required: ch	neck all that apply)	Surface Soil Cracks (B6)				
Surface Water (A1)	Water-Stained Leaves (B9)	X Drainage Patterns (B10)				
High Water Table (A2)	Aquatic Fauna (B13)	Moss Trim Lines (B16)				
Saturation (A3)	Marl Deposits (B15)	Dry-Season Water Table (C2)				
Water Marks (B1)	Hydrogen Sulfide Odor (C1)	Crayfish Burrows (C8)				
Sediment Deposits (B2)	Oxidized Rhizospheres on Living Roots (C3)	Saturation Visible in Aerial Imagery (C9)				
Drift Deposits (B3)	Presence of Reduced Iron (C4)	Stunted or Stressed Plants (D1)				
Algal Mat or Crust (B4)	Recent Iron Reduction in Tilled Soils (C6)	X Geomorphic Position (D2)				
Iron Deposits (B5)	Thin Muck Surface (C7)	Shallow Aguitard (D3)				
Inundation Visible on Aerial Imagery (B7)	Other (Explain in Remarks)	Microtopographic Relief (D4)				
Sparsley Vegetated Concave Surface (B8)	other (Explain in Nemarks)	FAC-Neutral Test (D5)				
		PAC-Neutral Test (D3)				
Surface Water Present? Yes NoX	Depth (inches)					
Water Table Present? Yes No X	Depth (inches) Wetland I	Hydrology Present? Yes X No				
Saturation Present? Yes NoX	Depth (inches)					
Describe Recorded Data (stream gauge, monit	coring well, aerial photos, previous inspection	ns), if available:				
, , ,						
Remarks:						

VEGETATION - Use scientific names of plants Sampling Point: 02-20200709-WL-05-5W Absolute Dominant Indicator **Dominance Test Worksheet:** (Plot Size: 30'radius) % Cover Species? Status **Tree Stratum Number of Dominant Species** 30 Х OBL That Are OBL, FACW, or FAC: (A) Salix nigra 30 = Total Cover **Total Number of Dominant** (B) Species Across All Strata: 5 Percent of Dominant Species That Are OBL, FACW, or FAC: (A/B) 100% **Prevalence Index Worksheet:** x 1 85 **OBL** species 85 Absolute Dominant Indicator **FACW** species 40 80 (Plot Size: 15'radius) x 2 **Shrub Stratum** % Cover Species? Status FAC species х3 0 = Total Cover **FACU** species 0 x 4 0 5 **UPL** species x 5 25 Column Totals 130 (A) 190 (B) Prevalence Index = B/A = 1.46 **Hydrophytic Vegetation Indicators:** Absolute Dominant Indicator X 1- Rapid Test For Hydrophytic Vegetation **Herb Stratum** (Plot Size: 5'radius) % Cover Species? Status X 2- Dominance Test is > 50% 20 Carex alopecoidea Х **FACW** X 3- Prevalence Index is =< 3.0 Х OBL Juncus effusus 20 4- Morphological Adaptations Scirpus atrovirens 15 Χ OBL Carex lupuliformis 15 Χ OBL 5- Problematic Hydrophytic Vegetation Solidago gigantea 10 **FACW** Impatiens capensis 10 **FACW Definitions of Vegetation Strata:** Typha angustifolia 5 OBL Tree- Woody plants 3 in. (7.6cm) or more in diameter at Leucanthemum vulgare 5 UPL breast height (DBH), regardless of height. 100 = Total Cover Sapling/Shrub- Woody plants less than 3 in. DBH and greater than or equal to 3.28ft (1m) tall. Herb- All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28ft tall. Absolute Dominant Indicator Woody Vines- All woody vines greater than 3.28ft in (Plot Size: 30'radius) **Woody Vine Stratum** % Cover Species? **Status** height. = Total Cover Hydrophytic Vegetation Present? Yes X No ___ Remarks: (Include photo numbers here or on a separate sheet.)

SOIL Sampling Point: 02-20200709-WL-05-5W

Depth	Matrix	(Redo	ox Featı	ures			
(inches	Color	%	Color	%	Туре	Loc		ture	Remarks	
0-6	10YR 3/2	100					Silt	Loam		
6-18	10YR 4/1	60	10YR 4/6	40	С	М	Sand	/ Loam		
	•		•							
-	oil Indicators: tosol (A1)				Polyvalu	e Below	Surface (B15	3	Indicators for Problematic Soils: 2 cm Muck (A10)	
	tic Epipedon (Δ2)			Thin Dar		-	')	Coast Prarie Redox (A16)	
	ck Histic (A3)	, (2)							5 cm Mucky Peat or Peat (S3)	
Hydrogen Sulfide (A4)			Loamy Mucky Mineral (F1) Loamy Gleyed Matric (F2)					Dark Surface (S7)		
Stratified Layers (A5)			X Depleted Matrix (F3)					Polyvalue Below Surface (S8)		
Depleted Below Dark Surface (A11)			X Redox Dark Surface (F6)					Thin Dark Surface (S9)		
Thick Dark Surface (A12)			Depleted Dark Surface (F7)					Iron-Manganese Masses (F12)		
Sandy Mucky Mineral (S1)			Redox Depressions (F8)					Piedmont Floodplain Soils (F19)		
Sandy Gleyed Matrix (S4)								Mesic Spodic (TA6)		
San	ndy Redox (S5)							Red Parent Material (F21)	
Stri	pped Matrix ((S6)							Very Shallow Dark Surface (TF12)	
Dar	k Surface (S7))							Other (Explain in Remarks)	
Restrictiv	ve Layer (if obs	erved):								
Restrictiv	re Luyer (ii obs									
	Donth /in	Type:						Hydri	c Soil Present? Yes X No	
	Depth (ir	- icries):								
Remarks	s:						l l			

Project/Site: Cider Solar Project	City/County: Elba/Genese	e Sampling Date: 7/9/2020		
Applicant/Owner: Hecate		State: NY Sampling Point:02-20200709		
Investigator(s): Justin Ahn	Section, Township, Range:	WL-05-5U		
Landform (hillslope, terrace,etc.): Toeslope	Local relief (concave, convex, r	none): <u>Linear</u> Slope (%) <u>1 - 5</u>		
Subregion (LRR or MLRA): LRR L	Lat: 43.115337 Long: -7	78.174780 Datum: <u>NAD83</u>		
Soil Map Unit Name: HIB		NWI Classification: UPL		
Are climatic / hyrologic conditions on the site t	cypical for this time of year? Yes X No	(if no, explain in Remarks.)		
Are Vegetation, Soil, or Hydrology	significantly disturbed? Are "Normal	Circumstances" present? Yes X No		
Are Vegetation, Soil, or Hydrology	naturally problematic? (if needed, exp	lain any answers in Remarks.)		
SUMMARY OF FINDINGS - Attach site ma	showing sampling point locations, tran	sects. important features. etc.		
Hydrophytic Vegetation Present? Yes	No X Is the Sampled Area	-		
Hydric Soil Present? Yes	No X within a Wetland?	Yes No X		
Wetland Hydrology Present? Yes	No X if yes, optional Wet			
Remarks: (Explain alternative procedures here or in a se	parate report.)			
LIVERELECT				
HYDROLOGY Wetland Hydrology Indicators:		Secondary Indicators (minimum of two required)		
Primary Indicators (minimum of one is required: c	heck all that apply)	Surface Soil Cracks (B6)		
Surface Water (A1)	Water-Stained Leaves (B9)	Drainage Patterns (B10)		
High Water Table (A2)	Aquatic Fauna (B13)	Moss Trim Lines (B16)		
Saturation (A3)	Marl Deposits (B15)	Dry-Season Water Table (C2)		
Water Marks (B1)	Hydrogen Sulfide Odor (C1)	Crayfish Burrows (C8)		
Sediment Deposits (B2)	Oxidized Rhizospheres on Living Roots (C3)	Saturation Visible in Aerial Imagery (C9)		
Drift Deposits (B3)	Presence of Reduced Iron (C4)	Stunted or Stressed Plants (D1)		
Algal Mat or Crust (B4)	Recent Iron Reduction in Tilled Soils (C6)	Geomorphic Position (D2)		
Iron Deposits (B5)	Thin Muck Surface (C7)	Shallow Aquitard (D3)		
				
Inundation Visible on Aerial Imagery (B7)	Other (Explain in Remarks)	Microtopographic Relief (D4)		
Sparsley Vegetated Concave Surface (B8)		FAC-Neutral Test (D5)		
Surface Water Present? Yes No X	Depth (inches)			
Water Table Present? Yes No X	Depth (inches) Wetland H	Hydrology Present? Yes No X		
Saturation Present? Yes No X	Depth (inches)			
Describe Recorded Data (stream gauge, moni	toring well perial photos previous inspection	ns) if available		
Describe Necorded Data (stream gauge, mon	torning well, derial priocos, previous inspection	is), ii availabie.		
Remarks:				

VEGETATION - Use scientific names of plants Sampling Point: 02-20200709-WL-05-5U Absolute Dominant Indicator **Dominance Test Worksheet:** (Plot Size: 30'radius) % Cover Species? Status **Tree Stratum Number of Dominant Species** Populus deltoides 40 Х FAC That Are OBL, FACW, or FAC: (A) Juglans nigra 30 Χ FACU **Total Number of Dominant** 70 = Total Cover (B) Species Across All Strata: 5 Percent of Dominant Species (A/B) That Are OBL, FACW, or FAC: 40% **Prevalence Index Worksheet:** x 1 2 **OBL** species Absolute Dominant Indicator **FACW** species 5 x 2 10 (Plot Size: 15'radius) % Cover Species? Status **Shrub Stratum** FAC species 50 150 х3 = Total Cover **FACU** species 75 x 4 300 **UPL** species 15 x 5 75 Column Totals 147 (A) 537 (B) Prevalence Index = B/A = 3.65 **Hydrophytic Vegetation Indicators:** Absolute Dominant Indicator 1- Rapid Test For Hydrophytic Vegetation **Herb Stratum** (Plot Size: 5'radius) % Cover Species? Status 2- Dominance Test is > 50% 20 **FACU** Oxalis stricta 3- Prevalence Index is =< 3.0 Χ UPL Leucanthemum vulgare 15 4- Morphological Adaptations Sonchus asper 10 **FACU** Solidago canadensis 10 **FACU** 5- Problematic Hydrophytic Vegetation Phalaris arundinacea 5 **FACW** Phleum pratense 5 **FACU Definitions of Vegetation Strata:** Boehmeria cylindrica 2 OBL Tree- Woody plants 3 in. (7.6cm) or more in diameter at 67 = Total Cover breast height (DBH), regardless of height. Sapling/Shrub- Woody plants less than 3 in. DBH and greater than or equal to 3.28ft (1m) tall. Herb- All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28ft tall. Absolute Dominant Indicator Woody Vines- All woody vines greater than 3.28ft in (Plot Size: 30'radius) Species? **Woody Vine Stratum** % Cover Status height. **FAC** Vitis riparia 10 Χ 10 = Total Cover Hydrophytic Vegetation Present? Yes ____ No _X

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

Depth	Matrix	(Redo	ox Featur	es	
(inches	Color	%	Color	%	Туре	Loc	Texture	Remarks
0-6	10YR 3/3	100					Silt Loam	
6-12	10YR 5/6	70	10YR 3/3	30	С	М	Silt Loam	
-	oil Indicators:					5.1.0	(245)	Indicators for Problematic Soils:
	tosol (A1)	(42)			-		urface (B15)	2 cm Muck (A10)
	tic Epipedon ((A2)				k Surface		Coast Prarie Redox (A16)
Black Histic (A3)			Loamy Mucky Mineral (F1) Loamy Gleyed Matric (F2)				5 cm Mucky Peat or Peat (S3) Dark Surface (S7)	
Hydrogen Sulfide (A4) Stratified Layers (A5)							Polyvalue Below Surface (S8)	
Depleted Below Dark Surface (A11)			Depleted Matrix (F3) Redox Dark Surface (F6)				Thin Dark Surface (S9)	
Thick Dark Surface (A12)					d Dark Sur		Iron-Manganese Masses (F12)	
Sandy Mucky Mineral (S1)			Redox Depressions (F8)				Piedmont Floodplain Soils (F19)	
Sandy Gleyed Matrix (S4)		Nedox Depressions (Fo)				Mesic Spodic (TA6)		
Sandy Redox (S5)						Red Parent Material (F21)		
	ipped Matrix (Very Shallow Dark Surface (TF12)
	rk Surface (S7							Other (Explain in Remarks)
Restrictiv	ve Layer (if obs	erved):						
		Type:					Hydri	c Soil Present? Yes No X
	Depth (ir	_					riyani	To The sent:
	- op (_						
Remarks	s:						,	

Project/Site: Cider Solar Project	City/County: Elba/Genese	e Sampling Date: 7/9/2020
Applicant/Owner: Hecate		State: NY Sampling Point:
Investigator(s): Justin Ahn	Section, Township, Range:	02-20200709-WL-06-6W
Landform (hillslope, terrace,etc.): Depression	Local relief (concave, convex,	none): <u>Concave</u> Slope (%) <u>0 - 1</u>
Subregion (LRR or MLRA): LRR L	Lat: 43.115603 Long: -7	78.174301 Datum: NAD83
Soil Map Unit Name: HIB		NWI Classification: PSS
Are climatic / hyrologic conditions on the site t	ypical for this time of year? Yes X No	(if no, explain in Remarks.)
Are Vegetation, Soil, or Hydrology		
Are Vegetation, Soil, or Hydrology	naturally problematic? (if needed, exp	olain any answers in Remarks.)
SUMMARY OF FINDINGS - Attach site map	showing sampling point locations, tran	nsects, important features, etc.
Hydrophytic Vegetation Present? Yes X	No Is the Sampled Are	
Hydric Soil Present? Yes X	within a Wetland?	Yes X No
· —		land Site ID: WL62
Wetland Hydrology Present? Yes X		<u> </u>
Remarks: (Explain alternative procedures here or in a sep	parate report.)	
HYDROLOGY		
Wetland Hydrology Indicators:		Secondary Indicators (minimum of two required)
Primary Indicators (minimum of one is required: cl		X Surface Soil Cracks (B6)
Surface Water (A1)	Water-Stained Leaves (B9)	Drainage Patterns (B10)
High Water Table (A2)	Aquatic Fauna (B13)	Moss Trim Lines (B16)
Saturation (A3)	Marl Deposits (B15)	Dry-Season Water Table (C2)
Water Marks (B1)	Hydrogen Sulfide Odor (C1)	Crayfish Burrows (C8)
Sediment Deposits (B2)	Oxidized Rhizospheres on Living Roots (C3)	Saturation Visible in Aerial Imagery (C9)
Drift Deposits (B3)	Presence of Reduced Iron (C4)	Stunted or Stressed Plants (D1)
X Algal Mat or Crust (B4)	Recent Iron Reduction in Tilled Soils (C6)	Geomorphic Position (D2)
Iron Deposits (B5)	Thin Muck Surface (C7)	Shallow Aquitard (D3)
Inundation Visible on Aerial Imagery (B7)	Other (Explain in Remarks)	Microtopographic Relief (D4)
Sparsley Vegetated Concave Surface (B8)		FAC-Neutral Test (D5)
Surface Water Present? Yes No X	Depth (inches)	-
Water Table Present? Yes No X	= ' ' 	Hydrology Present? Yes X No
Saturation Present? Yes No X	Depth (inches)	.,u.e.eg,eee
Describe Recorded Data (stream gauge, monit	toring well, aerial photos, previous inspection	ns), if available:
Remarks:		

		Ahsoluta	Dominant	Indicator	Danis and Tank Wandahaak			
Tree Stratum	(Plot Size: 30'radius)	% Cover	Species?	Status	Dominance Test Worksheet:			
	·		-		Number of Dominant Species			
Fraxinus pennsylvanio	<u>:a</u>	40	X	FACW	That Are OBL, FACW, or FAC: 4 (A)			
Populus deltoides		30	= Total Cov	FAC	Total Number of Dominant			
		70	10(a) CO	/ei	Species Across All Strata: 6 (B)			
					Percent of Dominant Species			
					That Are OBL, FACW, or FAC: 66.7% (A/			
					Prevalence Index Worksheet:			
		Absolute	Dominant	Indicator	OBL species 0 x 1 0			
Shrub Stratum	(Plot Size: 15'radius)	% Cover	Species?	Status	FACW species 60 x 2 120			
Lonicera tatarica		5	Χ	FACU	FAC species 65 x 3 195			
		5	_= Total Cov	ver .	FACU species 30 x 4 120			
					UPL species 2 x 5 10			
					Column Totals 157 (A) 445			
					Prevalence Index = B/A = 2.83			
					Hydrophytic Vegetation Indicators:			
		Absolute	Dominant	Indicator	1- Rapid Test For Hydrophytic Vegetation			
Herb Stratum	(Plot Size: 5'radius)	% Cover	Species?	Status	X 2- Dominance Test is > 50%			
Impatiens capensis		20	Х	FACW				
Reynoutria japonica		5		FACU	X 3- Prevalence Index is =< 3.0			
Toxicodendron radica	ans	5		FAC	4- Morphological Adaptations			
Persicaria virginiana		5		FAC	5- Problematic Hydrophytic Vegetation			
Leucanthemum vulga	ire	2		UPL				
		37	_= Total Cov	/er	Definitions of Vegetation Strata:			
					Tree- Woody plants 3 in. (7.6cm) or more in diameter breast height (DBH), regardless of height.			
					Sapling/Shrub- Woody plants less than 3 in. DBH and greater than or equal to 3.28ft (1m) tall.			
					Herb- All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28ft tall.			
		Absolute	Dominant	Indicator				
Woody Vine Stratum	(Plot Size: 30'radius)	% Cover	Species?	Status	Woody Vines- All woody vines greater than 3.28ft in height.			
		25	Х	FAC				
Vitis riparia		20	Х	FACU	Hydrophytic			
Vitis riparia Parthenocissus quinq	uefolia			•	Vegetation			
<u> </u>	uefolia	45	= Total Cov	•	1			

Depth	Depth Matrix				Redo	x Feature			
(inches	Color	%	Color	%	Туре	Loc	Texture	Remarks	
0-8	10YR 2/2	100					Clay		
8-14	10YR 4/2	90	2.5YR 5/6	10	С	PL	Sandy Loam		
	,		, -				, ,		
Hvdric So	oil Indicators:							Indicators for Problematic Soils:	
-	tosol (A1)				Polyvalu	e Below Sı	urface (B15)	2 cm Muck (A10)	
	tic Epipedon (A2)				k Surface (Coast Prarie Redox (A16)	
Black Histic (A3)				Loamy N	lucky Min	eral (F1)	5 cm Mucky Peat or Peat (S3)		
Hydrogen Sulfide (A4)				Loamy G	leyed Mat	ric (F2)	Dark Surface (S7)		
Stra	atified Layers	Layers (A5)			Depleted	d Matrix (F	3)	Polyvalue Below Surface (S8)	
X Dep	oleted Below I	Dark Su	rface (A11)		Redox D	ark Surfac	e (F6)	Thin Dark Surface (S9)	
Thic	ck Dark Surfac	ce (A12)		Depleted Dark Surface		face (F7)	Iron-Manganese Masses (F12)		
San	ndy Mucky Mi	neral (S	1)		Redox D	epressions	s (F8)	Piedmont Floodplain Soils (F19)	
San	ndy Gleyed Ma	atrix (S4)					Mesic Spodic (TA6)	
San	ndy Redox (S5))						Red Parent Material (F21)	
Stri	pped Matrix ((S6)						Very Shallow Dark Surface (TF12)	
Dar	k Surface (S7))						Other (Explain in Remarks)	
Restrictiv	ve Layer (if obs	erved):							
		Type:					Hydric S	Soil Present? Yes X No	
	Depth (in	nches):						<u> </u>	
Remarks							·		

Project/Site: Cider Solar Project	City/County: Elba/Genese	e Sampling Date: 7/9/2020		
Applicant/Owner: Hecate		State: NY Sampling Point:02-20200709		
Investigator(s): Justin Ahn	Section, Township, Range:	WL-06-6U		
Landform (hillslope, terrace,etc.): <u>Toeslope</u>	Local relief (concave, convex,	none): <u>Linear</u> Slope (%) <u>1 - 5</u>		
Subregion (LRR or MLRA): LRR L	Lat: 43.115720 Long:	78.173633 Datum: NAD83		
Soil Map Unit Name: HIB		NWI Classification: UPL		
Are climatic / hyrologic conditions on the site	e typical for this time of year? Yes X No	(if no, explain in Remarks.)		
Are Vegetation, Soil, or Hydrolog	gy significantly disturbed? Are "Normal	Circumstances" present? Yes X No		
Are Vegetation, Soil, or Hydrolog	ynaturally problematic? (if needed, exp	lain any answers in Remarks.)		
SLIMMARY OF FINDINGS - Attach site ma	ap showing sampling point locations, trai	sects important features etc		
Hydrophytic Vegetation Present? Yes	No X Is the Sampled Are			
Hydric Soil Present? Yes	No X within a Wetland?	Yes No X		
· —				
Wetland Hydrology Present? Yes	<u> </u>			
Remarks: (Explain alternative procedures here or in a s	separate report.)			
HYDROLOGY				
Wetland Hydrology Indicators:		Secondary Indicators (minimum of two required)		
Primary Indicators (minimum of one is required:	check all that apply)	Surface Soil Cracks (B6)		
Surface Water (A1)	Water-Stained Leaves (B9)	Drainage Patterns (B10)		
High Water Table (A2)	Aquatic Fauna (B13)	Moss Trim Lines (B16)		
Saturation (A3)	Marl Deposits (B15)	Dry-Season Water Table (C2)		
Water Marks (B1)	Hydrogen Sulfide Odor (C1)	Crayfish Burrows (C8)		
Sediment Deposits (B2)	Oxidized Rhizospheres on Living Roots (C3)	Saturation Visible in Aerial Imagery (C9)		
Drift Deposits (B3)	Presence of Reduced Iron (C4)	Stunted or Stressed Plants (D1)		
Algal Mat or Crust (B4)	Recent Iron Reduction in Tilled Soils (C6)	Geomorphic Position (D2)		
Iron Deposits (B5)	Thin Muck Surface (C7)	Shallow Aquitard (D3)		
Inundation Visible on Aerial Imagery (B7)		Microtopographic Relief (D4)		
	Other (Explain in Remarks)			
Sparsley Vegetated Concave Surface (B8)		FAC-Neutral Test (D5)		
Surface Water Present? Yes NoX	Depth (inches)			
Water Table Present? Yes No X	Depth (inches) Wetland	Hydrology Present? Yes No X		
Saturation Present? Yes No X	Depth (inches)			
Describe Recorded Data (stream gauge mor	nitoring well, aerial photos, previous inspection	ns) if available:		
Describe Necorded Bata (stream gauge) mor	meeting well, deflat prioces, previous inspection	io), ii available.		
Remarks:				

VEGETATION - Use scientific names of plants Sampling Point: 02-20200709-WL-06-6U Absolute Dominant Indicator **Dominance Test Worksheet:** (Plot Size: 30'radius) % Cover Species? Status **Tree Stratum Number of Dominant Species** Х FAC That Are OBL, FACW, or FAC: (A) Acer rubrum 40 = Total Cover **Total Number of Dominant** (B) Species Across All Strata: 5 Percent of Dominant Species (A/B) That Are OBL, FACW, or FAC: 40% **Prevalence Index Worksheet:** 0 x 1 **OBL** species Absolute Dominant Indicator **FACW** species 15 30 (Plot Size: 15'radius) % Cover Species? Status x 2 **Shrub Stratum FAC** species 40 120 х3 Χ FACU Lonicera tatarica 10 10 = Total Cover **FACU** species 50 x 4 200 **UPL** species 0 x 5 0 Column Totals 105 (A) 350 (B) Prevalence Index = B/A = 3.33 **Hydrophytic Vegetation Indicators:** Absolute Dominant Indicator 1- Rapid Test For Hydrophytic Vegetation **Herb Stratum** (Plot Size: 5'radius) % Cover Species? Status 2- Dominance Test is > 50% 20 **FACU** Cirsium arvense Χ 3- Prevalence Index is =< 3.0 Х Solidago gigantea 15 **FACW** 4- Morphological Adaptations Alliaria petiolata 15 Χ **FACU** Phytolacca americana 5 **FACU** 5- Problematic Hydrophytic Vegetation 55 = Total Cover **Definitions of Vegetation Strata:** Tree- Woody plants 3 in. (7.6cm) or more in diameter at breast height (DBH), regardless of height. Sapling/Shrub- Woody plants less than 3 in. DBH and greater than or equal to 3.28ft (1m) tall. Herb- All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28ft tall. Absolute Dominant Indicator Woody Vines- All woody vines greater than 3.28ft in (Plot Size: 30'radius) **Woody Vine Stratum** % Cover Species? Status height. = Total Cover Hydrophytic Vegetation Present? Yes ____ No _X Remarks: (Include photo numbers here or on a separate sheet.)

SOIL Sampling Point: 02-20200709-WL-06-6U Depth Matrix **Redox Features** (inches % Color Color % Type Texture Remarks Loc 0-6 10YR 4/4 100 Silt Loam **Hydric Soil Indicators:** Indicators for Problematic Soils: Histosol (A1) Polyvalue Below Surface (B15) 2 cm Muck (A10) Histic Epipedon (A2) Thin Dark Surface (S9) Coast Prarie Redox (A16) Black Histic (A3) Loamy Mucky Mineral (F1) 5 cm Mucky Peat or Peat (S3) Hydrogen Sulfide (A4) Loamy Gleyed Matric (F2) Dark Surface (S7) Stratified Layers (A5) Depleted Matrix (F3) Polyvalue Below Surface (S8) Depleted Below Dark Surface (A11) Redox Dark Surface (F6) Thin Dark Surface (S9) Thick Dark Surface (A12) Depleted Dark Surface (F7) Iron-Manganese Masses (F12) Sandy Mucky Mineral (S1) Redox Depressions (F8) Piedmont Floodplain Soils (F19) Sandy Gleyed Matrix (S4) Mesic Spodic (TA6) Sandy Redox (S5) Red Parent Material (F21) Stripped Matrix (S6) Very Shallow Dark Surface (TF12) Dark Surface (S7) Other (Explain in Remarks) Restrictive Layer (if observed): Type: Dense Hydric Soil Present? Yes No Χ Depth (inches): 6 Remarks:

Project/Site: Cider Solar Project	City/Co	ounty: Elba/Genesee	Sampling Date: <u>7/10/2020</u>	
Applicant/Owner: Hecate		State: NY	Sampling Point:	
Investigator(s): Justin Ahn	Section	n, Township, Range:	02-20200710-WL-07-7W	
Landform (hillslope, terrace,etc.): Depress	sion Local relie	f (concave, convex, none): <u>Conca</u>	slope (%) <u>0 - 1</u>	
Subregion (LRR or MLRA): LRR L	Lat: 43.116131	Long:78.173112	Datum: NAD83	
Soil Map Unit Name: LoA		NWI Class	ification: PSS	
Are climatic / hyrologic conditions on the si	site typical for this time of yea	ar? Yes <u>X</u> No (if no,	explain in Remarks.)	
Are Vegetation, Soil, or Hydrold	logysignificantly disturb	bed? Are "Normal Circumstance:	s" present? Yes X No	
Are Vegetation, Soil, or Hydrolo	logynaturally problema	atic? (if needed, explain any answe	rs in Remarks.)	
CLINANA DV OF FINIDINGS. Attack site of			whomat for a trump of a	
SUMMARY OF FINDINGS - Attach site r			rtant reatures, etc.	
Hydrophytic Vegetation Present? Yes	X No	Is the Sampled Area		
Hydric Soil Present? Yes	X No	within a Wetland?	Yes X No	
Wetland Hydrology Present? Yes_	X No	if yes, optional Wetland Site ID:	WL63	
Remarks: (Explain alternative procedures here or in	a separate report.)			
HYDROLOGY				
Wetland Hydrology Indicators:		Secondary Inc	licators (minimum of two required)	
Primary Indicators (minimum of one is required	ed: check all that apply)	X Surface	Soil Cracks (B6)	
Surface Water (A1)	Water-Stained Leaves	(B9) Drainage	Drainage Patterns (B10)	
High Water Table (A2)	Aquatic Fauna (B13)	Moss Tri	Moss Trim Lines (B16)	
Saturation (A3)	Marl Deposits (B15)	Dry-Seas	Dry-Season Water Table (C2)	
Water Marks (B1)	Hydrogen Sulfide Odo	r (C1) Crayfish	Crayfish Burrows (C8)	
Sediment Deposits (B2)	Oxidized Rhizospheres	s on Living Roots (C3) Saturation	Saturation Visible in Aerial Imagery (C9)	
Drift Deposits (B3)	Presence of Reduced I	Iron (C4) Stunted	or Stressed Plants (D1)	
Algal Mat or Crust (B4)	Recent Iron Reduction		phic Position (D2)	
Iron Deposits (B5)	Thin Muck Surface (C7	` '	Aquitard (D3)	
Inundation Visible on Aerial Imagery (B7)			pographic Relief (D4)	
X Sparsley Vegetated Concave Surface (B8)				
sparsiey vegetated concave surface (Bo)	1	FAC-NEU	itral Test (D5)	
Surface Water Present? Yes No	X Depth (inches)	_		
Water Table Present? Yes No	X Depth (inches)	Wetland Hydrology Pre	sent? Yes X No	
Saturation Present? Yes No	X Depth (inches)	_		
Describe Recorded Data (stream gauge, m	conitoring well serial photos	previous inspections) if available) ·	
Describe Recorded Data (stream gauge, mi	ionitoring wen, aeriai photos	, previous inspections), it available		
Remarks:				

VEGETATION - Use scientific names of plants Sampling Point: Wetland-WL63 Absolute Dominant Indicator **Dominance Test Worksheet:** (Plot Size: 30'radius) % Cover Species? Status **Tree Stratum Number of Dominant Species** That Are OBL, FACW, or FAC: (A) = Total Cover **Total Number of Dominant** Species Across All Strata: (B) 2 Percent of Dominant Species That Are OBL, FACW, or FAC: (A/B) 100% **Prevalence Index Worksheet:** 40 x 1 40 **OBL** species Absolute Dominant Indicator **FACW** species 70 140 (Plot Size: 15'radius) Status x 2 **Shrub Stratum** % Cover Species? **FAC** species 5 х3 15 = Total Cover **FACU** species 0 x 4 0 **UPL** species 10 x 5 50 Column Totals 125 245 (B) (A) Prevalence Index = B/A = 1.96 **Hydrophytic Vegetation Indicators:** Absolute Dominant Indicator X 1- Rapid Test For Hydrophytic Vegetation **Herb Stratum** (Plot Size: 5'radius) % Cover Species? Status X 2- Dominance Test is > 50% 50 Phalaris arundinacea **FACW** X 3- Prevalence Index is =< 3.0 Χ OBL Leersia oryzoides 30 4- Morphological Adaptations Cyperus esculentus 20 **FACW** 10 UPL Asclepias syriaca 5- Problematic Hydrophytic Vegetation Asclepias incarnata 10 OBL Acer rubrum 5 FAC **Definitions of Vegetation Strata:** 125 = Total Cover Tree- Woody plants 3 in. (7.6cm) or more in diameter at breast height (DBH), regardless of height. Sapling/Shrub- Woody plants less than 3 in. DBH and greater than or equal to 3.28ft (1m) tall. Herb- All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28ft tall. Absolute Dominant Indicator Woody Vines- All woody vines greater than 3.28ft in (Plot Size: 30'radius) **Woody Vine Stratum** % Cover Species? Status height. = Total Cover Hydrophytic Vegetation Present? Yes X No ___

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

Sisymbrium officinale was also on notes, herb, 5% cover, not listed in drop down

SOIL Sampling Point: Wetland-WL63

Depth	Matrix	[Redo	ox Feature	es	
(inches	Color	%	Color	%	Type	Loc	Texture	Rema
4-14	2.5Y 3/2	60	10YR 2/1	40	С	М	Silt Loam	
0-4	2.5Y 3/3	100					Silt Loam	

Hydric Soil Indicators:		Indicators for Problematic Soils:
Histosol (A1)	Polyvalue Below Surface ((B15)2 cm Muck (A10)
Histic Epipedon (A2)	Thin Dark Surface (S9)	Coast Prarie Redox (A16)
Black Histic (A3)	Loamy Mucky Mineral (F1	L)5 cm Mucky Peat or Peat (S3)
Hydrogen Sulfide (A4)	Loamy Gleyed Matric (F2)	Dark Surface (S7)
Stratified Layers (A5)	Depleted Matrix (F3)	Polyvalue Below Surface (S8)
Depleted Below Dark Surface (A11)	X Redox Dark Surface (F6)	Thin Dark Surface (S9)
Thick Dark Surface (A12)	Depleted Dark Surface (F7	7) Iron-Manganese Masses (F12)
Sandy Mucky Mineral (S1)	Redox Depressions (F8)	Piedmont Floodplain Soils (F19)
Sandy Gleyed Matrix (S4)		Mesic Spodic (TA6)
Sandy Redox (S5)		Red Parent Material (F21)
Stripped Matrix (S6)		Very Shallow Dark Surface (TF12)
Dark Surface (S7)		Other (Explain in Remarks)
Restrictive Layer (if observed):		
Type		
Type:		Hydric Soil Present? Yes X No
Depth (inches):		

Remarks:

Project/Site: Cider Solar Project	City/County: Elba/Genese	e Sampling Date: 7/10/2020	
Applicant/Owner: Hecate		State: NY Sampling Point:02-20200710	
Investigator(s): Justin Ahn	Section, Township, Range:	WL-07-7U	
Landform (hillslope, terrace,etc.): Toeslope	Local relief (concave, convex, ı	none): <u>Linear</u> Slope (%) <u>1 - 5</u>	
Subregion (LRR or MLRA): LRR L	Lat: <u>43.116116</u> Long: <u>-7</u>	78.173009 Datum: NAD83	
Soil Map Unit Name: LoA		NWI Classification: UPL	
Are climatic / hyrologic conditions on the site t	cypical for this time of year? Yes X No	(if no, explain in Remarks.)	
Are Vegetation, Soil, or Hydrology	significantly disturbed? Are "Normal	Circumstances" present? Yes X No	
Are Vegetation, Soil, or Hydrology	naturally problematic? (if needed, exp	llain any answers in Remarks.)	
SUMMARY OF FINDINGS - Attach site ma	showing sampling point locations, trar	nsects, important features, etc.	
Hydrophytic Vegetation Present? Yes	No X Is the Sampled Area	a	
Hydric Soil Present? Yes	No X within a Wetland?	Yes No X	
Wetland Hydrology Present? Yes	No X if yes, optional Wet	land Site ID:	
Remarks: (Explain alternative procedures here or in a se	<u> </u>		
HYDROLOGY			
Wetland Hydrology Indicators:		Secondary Indicators (minimum of two required)	
Primary Indicators (minimum of one is required: c	heck all that apply)	Surface Soil Cracks (B6)	
Surface Water (A1)	Water-Stained Leaves (B9)	Drainage Patterns (B10)	
High Water Table (A2)	Aquatic Fauna (B13)	Moss Trim Lines (B16)	
Saturation (A3)	Marl Deposits (B15)	Dry-Season Water Table (C2)	
Water Marks (B1)	Hydrogen Sulfide Odor (C1)	Crayfish Burrows (C8)	
Sediment Deposits (B2)	Oxidized Rhizospheres on Living Roots (C3)	Saturation Visible in Aerial Imagery (C9)	
Drift Deposits (B3)	Presence of Reduced Iron (C4)	Stunted or Stressed Plants (D1)	
Algal Mat or Crust (B4)	Recent Iron Reduction in Tilled Soils (C6)	Geomorphic Position (D2)	
Iron Deposits (B5)	Thin Muck Surface (C7)	Shallow Aquitard (D3)	
Inundation Visible on Aerial Imagery (B7)	Other (Explain in Remarks)	Microtopographic Relief (D4)	
Sparsley Vegetated Concave Surface (B8)		FAC-Neutral Test (D5)	
Surface Water Present? Yes No X	Depth (inches)		
Water Table Present? Yes No X	Depth (inches) Wetland H	Hydrology Present? Yes No X	
Saturation Present? Yes No X	Depth (inches)		
Describe Recorded Data (stream gauge, moni	toring well, aerial photos, previous inspection	ns), if available:	
Remarks:			

VEGETATION - Use scientific names of plants						Sampling Point: 02-20200710-WL-07-7U				
Tree Stratum	(Plot Size:	30'radius)	Absolute % Cover	Dominant Species?	Indicator Status	Number of Dom	inant Spe	cies	0	(A)
			= Total Cover		Total Number of Dominant Species Across All Strata: 1 (B)				_	
						Percent of Dor That Are OBL,	-		0%	(A/B)
						Prevalence Index	Workshee	et:		
			Absolute	Dominant	Indicator	OBL species	5	x 1	5	
Shrub Stratum	(Plot Size:	15'radius)	% Cover	Species?	Status	FACW species	0	x 2	0	
						FAC species	0	_ x 3	0	
			= Total Cover		FACU species	0	x 4	0		
						UPL species	60	x 5	300	
						Column Totals	65	(A)	305	(B)
						Prevalenc	e Index =	B/A =	4.69	
						Hydrophytic Vege	tation Inc	dicators	:	
			Absolute Dominant Indicator		1- Rapid Test For Hydrophytic Vegetation					
Herb Stratum	(Plot Size:	5'radius)	% Cover	Species?	Status	2- Dominance Test is > 50%				
Zea mays			60	Х	UPL	3- Prevalence Index is =< 3.0				
Leersia oryzoides			<u>5</u> 65	OBL 4- Morphological Adaptations						
					5- Problematic Hydrophytic Vegetation					
					Definitions of Vegetation Strata: Tree- Woody plants 3 in. (7.6cm) or more in diameter at breast height (DBH), regardless of height.					
						Sapling/Shrub- Wood greater than or equa				and
						Herb- All herbaceous				ess of
Woody Vine Stratum	(Plot Size:	30'radius)		Dominant Species?	Status	Woody Vines- All wo height.	ody vines g	greater th	nan 3.28f	in
	= Total Cover				ver	Hydrophytic Vegetation Present? Yes NoX				
Remarks: (Include photo nu	umbers here	or on a sep	arate shee	t.)						

SOIL Sampling Point: 02-20200710-WL-07-7U Depth Matrix **Redox Features** (inches Color % Color % Texture Remarks Type Loc 0-12 10YR 3/3 90 10YR 3/6 C PΙ Clay 10 **Hydric Soil Indicators:** Indicators for Problematic Soils: Histosol (A1) Polyvalue Below Surface (B15) 2 cm Muck (A10) Histic Epipedon (A2) Thin Dark Surface (S9) Coast Prarie Redox (A16) Black Histic (A3) Loamy Mucky Mineral (F1) 5 cm Mucky Peat or Peat (S3) Hydrogen Sulfide (A4) Loamy Gleyed Matric (F2) Dark Surface (S7) Stratified Layers (A5) Depleted Matrix (F3) Polyvalue Below Surface (S8) Depleted Below Dark Surface (A11) Redox Dark Surface (F6) Thin Dark Surface (S9) Thick Dark Surface (A12) Depleted Dark Surface (F7) Iron-Manganese Masses (F12) Sandy Mucky Mineral (S1) Redox Depressions (F8) Piedmont Floodplain Soils (F19) Sandy Gleyed Matrix (S4) Mesic Spodic (TA6) Sandy Redox (S5) Red Parent Material (F21) Stripped Matrix (S6) Very Shallow Dark Surface (TF12) Dark Surface (S7) Other (Explain in Remarks) Restrictive Layer (if observed): Type: Hydric Soil Present? Yes No Χ Depth (inches):

Remarks:

Project/Site: Cider Solar Project	oject/Site: Cider Solar Project City/County: Elba/Genesee Sampling Date: 7/10/202							
Applicant/Owner: Hecate		State: NY Sampling Point:						
Investigator(s): Justin Ahn	Secti	Section, Township, Range: 02-20200710-08-8W						
Landform (hillslope, terrace,etc.): <u>Depres</u>	ssion Local reli	ef (concave, convex, none): Conca	ave Slope (%) <u>0 - 1</u>					
Subregion (LRR or MLRA): LRR L	Lat: 43.164066	Long:78.164066	Datum: NAD83					
Soil Map Unit Name: Ld		NWI Class	ification: PFO					
Are climatic / hyrologic conditions on the s	site typical for this time of y	ear? Yes <u>X</u> No <u>(if no</u>	, explain in Remarks.)					
Are Vegetation, Soil, or Hydrol	ologysignificantly distu	rbed? Are "Normal Circumstance	s" present? Yes X No					
Are Vegetation, Soil, or Hydrol	ologynaturally problem	natic? (if needed, explain any answe	rs in Remarks.)					
SUMMARY OF FINDINGS - Attach site	man showing sampling r	ooint locations, transects, imno	rtant features, etc.					
Hydrophytic Vegetation Present? Yes		Is the Sampled Area	realite reactaries, even					
=		within a Wetland?	Yes X No					
Hydric Soil Present? Yes_		if yes, optional Wetland Site ID:						
Wetland Hydrology Present? Yes_		ii yes, optional wetland site ib.	VVL04					
Remarks: (Explain alternative procedures here or in	n a separate report.)							
HYDROLOGY								
Wetland Hydrology Indicators:		Secondary Inc	dicators (minimum of two required)					
Primary Indicators (minimum of one is require	ed: check all that apply)	Surface	Soil Cracks (B6)					
Surface Water (A1)	X Water-Stained Leave	es (B9) X Drainag	X Drainage Patterns (B10)					
High Water Table (A2)	Aquatic Fauna (B13)	X Moss Tr	X Moss Trim Lines (B16)					
Saturation (A3)	Marl Deposits (B15)	Dry-Sea	Dry-Season Water Table (C2)					
Water Marks (B1)	Hydrogen Sulfide Od	or (C1) Crayfish	Crayfish Burrows (C8)					
Sediment Deposits (B2)			on Visible in Aerial Imagery (C9)					
Drift Deposits (B3)	Presence of Reduced		or Stressed Plants (D1)					
Algal Mat or Crust (B4)	Recent Iron Reduction		phic Position (D2)					
Iron Deposits (B5)	Thin Muck Surface (• • —						
			Shallow Aquitard (D3)					
Inundation Visible on Aerial Imagery (B7			Microtopographic Relief (D4)					
Sparsley Vegetated Concave Surface (B8	<u> </u>	FAC-Net	utral Test (D5)					
Surface Water Present? Yes No	X Depth (inches)							
Water Table Present? Yes No	X Depth (inches)	Wetland Hydrology Pre	sent? Yes X No					
Saturation Present? Yes No	X Depth (inches)							
Describe Recorded Data (stream gauge, m	manitaring wall parial photo	os provious inspections) if available).					
Describe Recorded Data (stream gauge, in	nomitoring well, aeriai photo	s, previous inspections), it available	:-					
Remarks:								

'EGETATION - Use scient	inc names of plants				1	ng Point:		allu-vv L	J 4
	(D) (C) 20(modition)		Dominant		Dominance Test V	Vorksheet	:		
Tree Stratum	(Plot Size: 30'radius)	% Cover	Species?	Status	Number of Domi	nant Spec	ies		
Tilia americana		60	X	FACU	That Are OBL, FA	CW, or FA	،C:	4	(A)
Fraxinus pennsylvanica		40	X	FACW	Total Numbe	r of Domir	nant		
		100	= Total Cov	er	Species Ac	ross All Str	ata:	6	(B)
					Percent of Don	ninant Spe	cies		_
					That Are OBL, I	•		66.7%	(A/B)
					ŕ		_		= ' '
					Prevalence Index \	Norksheet	t:		
		Absolute	Dominant	Indicator	OBL species	20	x 1	20	
Shrub Stratum	(Plot Size: 15'radius)	% Cover	Species?	Status	FACW species	125	_ x 2	250	
Tilia americana		30	Х	FACU	FAC species	5	x 3	15	
Fraxinus pennsylvanica		20	Х	FACW	FACU species	114	x 4	456	=
Lindera benzoin		10		FACW	· –				
Alnus glutinosa		10		FACW	UPL species	0	_ x 5	0	
		70	= Total Cov	er	Column Totals	264	(A)	741	(B)
					Prevalenc	e Index = [B/A = _	2.81	
					Hydrophytic Vege	tation Ind	icator	s:	
		Absolute	Dominant	Indicator	1- Rapid Tes	t For Hydr	ophyti	ic Vegetat	tion
Herb Stratum	(Plot Size: 5'radius)	% Cover	Species?	Status	X 2- Dominano	co Tost is S	 . ΕΩ0/		
Lindera benzoin		30	Х	FACW					
Carex disperma		20	X	OBL	X 3- Prevalenc	e Index is	=< 3.0		
Carex grayi		15		FACW	4- Morpholo	ogical Adap	otation	าร	
Alliaria petiolata		10		FACU	5- Problema	tic Hydror	hvtic '	Vegetatio	n
Geranium robertianum		10		FACU		tio i i y di o p	,,,,,,,	• състать	
Geum canadense		5		FAC	Definitions of Vegeta	ation Strata	1:		
Polystichum acrostichoi	des	2		FACU	_				
Oxalis corniculata		2		FACU	Tree- Woody plants 3 breast height (DBH),	•	•		eter at
		94	_= Total Cov	er	breast height (DDH),	regardiess (or ricigi		
					Sapling/Shrub- Wood greater than or equa				and
					Herb- All herbaceous			_	ess of
		A la a . l . i	D :	to die i	size, and woody plan	ts less than	3.28ft	tall.	
Woody Vine Stratum	(Plot Size: 30'radius)	% Cover	Dominant Species?	Status	Woody Vines- All wo height.	ody vines g	reater	than 3.28ft	t in
			= Total Cov	ıer					
			10(a) C0(C.	Hydroph	-			
					Vegeta	ition ent? Yes _.	v	No	
					ries	cur: Yes	٨	NO	_

OIL								Sampling Point: Wetland-WL64		
Depth	Matrix				Redo	x Feature	es			
(inches	Color	%	Color	%	Type	Loc	Texture	Remarks		
0-4	10YR 4/2	100					Sandy Loam			
4-16	2.5Y 6/2	95	2.5Y 6/8	5	С	PL	Silt Loam			
•	il Indicators:				Dobardu	o Dolovy Cr		Indicators for Problematic Soils:		
Histosol (A1)					•	e Below St k Surface (urface (B15)	2 cm Muck (A10) Coast Prarie Redox (A16)		
Histic Epipedon (A2) Black Histic (A3)						lucky Min	· · ·	5 cm Mucky Peat or Peat (S3)		
Hydrogen Sulfide (A4)			Loamy Gleyed Matric (F2)				Dark Surface (S7)			
	Stratified Layers (A5)				•	d Matrix (F		Polyvalue Below Surface (S8)		
	oleted Below I		face (A11)	X Depleted Matrix (F3) Redox Dark Surface (F6)			=	Thin Dark Surface (S9)		
	ck Dark Surfac		` ,	Depleted Dark Surface (F7)				Iron-Manganese Masses (F12)		
San	dy Mucky Mii	neral (S1	L)		Redox Depressions (F8)			Piedmont Floodplain Soils (F19)		
San	dy Gleyed Ma	atrix (S4))					Mesic Spodic (TA6)		
San	dy Redox (S5))						Red Parent Material (F21)		
Stri	pped Matrix ((S6)					_	Very Shallow Dark Surface (TF12)		
Dar	k Surface (S7))					-	Other (Explain in Remarks)		
Restrictiv	ve Layer (if obs	erved):								
		Type:					Hydric S	Soil Present? Yes X No		
Depth (inches):						,				

Project/Site: Cider Solar Project	City/County: Elba/Genese	e Sampling Date: 7/10/2020		
Applicant/Owner: Hecate		State: NY Sampling Point:02-20200710		
Investigator(s): Justin Ahn	Section, Township, Range:	WL-08-8U		
Landform (hillslope, terrace,etc.): Toeslope	Local relief (concave, convex, r	none): <u>Linear</u> Slope (%) <u>1 - 5</u>		
Subregion (LRR or MLRA): LRR L	Lat: 43.109463 Long: -7	78.163958 Datum: <u>NAD83</u>		
Soil Map Unit Name: Ld		NWI Classification: UPL		
Are climatic / hyrologic conditions on the site \ensuremath{t}	typical for this time of year? Yes X No	(if no, explain in Remarks.)		
Are Vegetation, Soil, or Hydrology	significantly disturbed? Are "Normal	Circumstances" present? Yes X No		
Are Vegetation, Soil, or Hydrology	naturally problematic? (if needed, exp	lain any answers in Remarks.)		
SUMMARY OF FINDINGS - Attach site maj	showing sampling point locations, tran	sects, important features, etc.		
Hydrophytic Vegetation Present? Yes	No X Is the Sampled Area	a		
Hydric Soil Present? Yes	No X within a Wetland?	Yes No X		
Wetland Hydrology Present? Yes	No X if yes, optional Wet	land Site ID:		
Remarks: (Explain alternative procedures here or in a se	parate report.)			
HYDROLOGY				
Wetland Hydrology Indicators:		Secondary Indicators (minimum of two required)		
Primary Indicators (minimum of one is required: cl		Surface Soil Cracks (B6)		
Surface Water (A1)	Water-Stained Leaves (B9)	Drainage Patterns (B10)		
High Water Table (A2)	Aquatic Fauna (B13)	Moss Trim Lines (B16)		
Saturation (A3)	Marl Deposits (B15)	Dry-Season Water Table (C2)		
Water Marks (B1)	Hydrogen Sulfide Odor (C1)	Crayfish Burrows (C8)		
Sediment Deposits (B2)	Oxidized Rhizospheres on Living Roots (C3)	Saturation Visible in Aerial Imagery (C9)		
Drift Deposits (B3)	Presence of Reduced Iron (C4)	Stunted or Stressed Plants (D1)		
Algal Mat or Crust (B4)	Recent Iron Reduction in Tilled Soils (C6)	Geomorphic Position (D2)		
Iron Deposits (B5)	Thin Muck Surface (C7)	Shallow Aquitard (D3)		
Inundation Visible on Aerial Imagery (B7)	Other (Explain in Remarks)	Microtopographic Relief (D4)		
Sparsley Vegetated Concave Surface (B8)		FAC-Neutral Test (D5)		
Surface Water Present? Yes No X	Depth (inches)			
Water Table Present? Yes No X	Depth (inches) Wetland F	Hydrology Present? Yes No X		
Saturation Present? Yes No X	Depth (inches)			
Describe Recorded Data (stream gauge, monit	toring well, aerial photos, previous inspection	ns), if available:		
		·		
Remarks:				

VEGETATION - Use scientific names of plants Sampling Point: 02-20200710-WL-08-8U Absolute Dominant Indicator **Dominance Test Worksheet:** (Plot Size: 30'radius) % Cover Species? Status **Tree Stratum Number of Dominant Species** 30 Χ **FACW** That Are OBL, FACW, or FAC: (A) Fraxinus pennsylvanica 30 = Total Cover **Total Number of Dominant** (B) Species Across All Strata: Percent of Dominant Species 50% (A/B) That Are OBL, FACW, or FAC: **Prevalence Index Worksheet:** 0 x 1 **OBL** species Absolute Dominant Indicator **FACW** species 60 120 (Plot Size: 15'radius) Status x 2 **Shrub Stratum** % Cover Species? 5 15 FAC species х3 = Total Cover **FACU** species 30 x 4 120 **UPL** species 30 x 5 150 Column Totals 125 (A) 405 (B) Prevalence Index = B/A = 3.24 **Hydrophytic Vegetation Indicators:** Absolute Dominant Indicator 1- Rapid Test For Hydrophytic Vegetation **Herb Stratum** (Plot Size: 5'radius) % Cover Species? Status 2- Dominance Test is > 50% 30 UPL Daucus carota Χ 3- Prevalence Index is =< 3.0 20 Χ Lindera benzoin **FACW** 4- Morphological Adaptations Solidago canadensis 20 Χ **FACU** Phragmites australis 10 **FACW** 5- Problematic Hydrophytic Vegetation Oxalis corniculata 10 **FACU** Toxicodendron radicans 5 FAC **Definitions of Vegetation Strata:** 95 = Total Cover Tree- Woody plants 3 in. (7.6cm) or more in diameter at breast height (DBH), regardless of height. Sapling/Shrub- Woody plants less than 3 in. DBH and greater than or equal to 3.28ft (1m) tall. Herb- All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28ft tall. Absolute Dominant Indicator Woody Vines- All woody vines greater than 3.28ft in (Plot Size: 30'radius) **Woody Vine Stratum** % Cover Species? Status height. = Total Cover Hydrophytic Vegetation Present? Yes ____ No _ X

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

Daucus carota = Glycine max, Glycine max not included on list

SOIL Sampling Point: 02-20200710-WL-08-8U Depth Matrix **Redox Features** (inches Color % Color Texture Remarks % Type Loc 0-12 10YR 4/2 98 10YR 5/6 C PΙ 2 Loam **Hydric Soil Indicators:** Indicators for Problematic Soils: Histosol (A1) Polyvalue Below Surface (B15) 2 cm Muck (A10) Histic Epipedon (A2) Thin Dark Surface (S9) Coast Prarie Redox (A16) Black Histic (A3) Loamy Mucky Mineral (F1) 5 cm Mucky Peat or Peat (S3) Hydrogen Sulfide (A4) Loamy Gleyed Matric (F2) Dark Surface (S7) Stratified Layers (A5) Depleted Matrix (F3) Polyvalue Below Surface (S8) Depleted Below Dark Surface (A11) Redox Dark Surface (F6) Thin Dark Surface (S9) Thick Dark Surface (A12) Depleted Dark Surface (F7) Iron-Manganese Masses (F12) Sandy Mucky Mineral (S1) Redox Depressions (F8) Piedmont Floodplain Soils (F19) Sandy Gleyed Matrix (S4) Mesic Spodic (TA6) Sandy Redox (S5) Red Parent Material (F21) Stripped Matrix (S6) Very Shallow Dark Surface (TF12) Dark Surface (S7) Other (Explain in Remarks) Restrictive Layer (if observed): Type: Hydric Soil Present? Yes No Χ Depth (inches): Remarks:

Project/Site: Cider Solar Project	City/County: Elba/Genesee	Sampling Date: 7/10/2020		
Applicant/Owner: Hecate		State: NY Sampling Point:		
Investigator(s): Justin Ahn	Section, Township, Range:	02-20200710-WL-09-9W		
Landform (hillslope, terrace,etc.): Depressio	Local relief (concave, convex, r	none): <u>Concave</u> Slope (%) <u>0 - 1</u>		
Subregion (LRR or MLRA): LRR L	Lat: 43.105503 Long:7	78.175703 Datum: NAD83		
Soil Map Unit Name: Wk		NWI Classification: PEM		
Are climatic / hyrologic conditions on the site	typical for this time of year? Yes X No	(if no, explain in Remarks.)		
Are Vegetation, Soil, or Hydrolog	y significantly disturbed? Are "Normal 0	Circumstances" present? Yes X No		
Are Vegetation, Soil, or Hydrolog	y naturally problematic? (if needed, exp	lain any answers in Remarks.)		
CLIBARA DV OF FINIDINGS. Attack site was				
	ap showing sampling point locations, tran			
Hydrophytic Vegetation Present? Yes	No Is the Sampled Area	1		
Hydric Soil Present? Yes>	No within a Wetland?	Yes X No		
Wetland Hydrology Present? Yes>	No if yes, optional Wetl	and Site ID: WL65		
Remarks: (Explain alternative procedures here or in a so	eparate report.)			
HYDROLOGY				
Wetland Hydrology Indicators:		Secondary Indicators (minimum of two required)		
Primary Indicators (minimum of one is required:	check all that apply)	Surface Soil Cracks (B6)		
X Surface Water (A1)	Water-Stained Leaves (B9)	Drainage Patterns (B10)		
X High Water Table (A2)	Aquatic Fauna (B13)	Moss Trim Lines (B16)		
X Saturation (A3)	Marl Deposits (B15)	Dry-Season Water Table (C2)		
		Crayfish Burrows (C8)		
Water Marks (B1)	Hydrogen Sulfide Odor (C1)			
Sediment Deposits (B2)	Oxidized Rhizospheres on Living Roots (C3)	Saturation Visible in Aerial Imagery (C9)		
Drift Deposits (B3)	Presence of Reduced Iron (C4)	Stunted or Stressed Plants (D1)		
Algal Mat or Crust (B4)	Recent Iron Reduction in Tilled Soils (C6)	Geomorphic Position (D2)		
Iron Deposits (B5)	Thin Muck Surface (C7)	Shallow Aquitard (D3)		
Inundation Visible on Aerial Imagery (B7)	Other (Explain in Remarks)	Microtopographic Relief (D4)		
Sparsley Vegetated Concave Surface (B8)		FAC-Neutral Test (D5)		
Surface Water Present? Yes X No	Depth (inches) 2			
Water Table Present? Yes X No	Depth (inches) 0 Wetland H	lydrology Present? Yes X No		
Saturation Present? Yes X No	Depth (inches) 0			
Describe Described Data (streets as a second		a) if another in		
Describe Recorded Data (stream gauge, mon	nitoring well, aerial photos, previous inspection	is), it available:		
Remarks:	_			

VEGETATION - Use scientific names of plants Sampling Point: Wetland-WL65 Absolute Dominant Indicator **Dominance Test Worksheet:** (Plot Size: 30'radius) % Cover Species? Status **Tree Stratum Number of Dominant Species** That Are OBL, FACW, or FAC: (A) = Total Cover **Total Number of Dominant** (B) Species Across All Strata: 3 Percent of Dominant Species That Are OBL, FACW, or FAC: (A/B) 100% **Prevalence Index Worksheet:** 110 110 **OBL** species x 1 Absolute Dominant Indicator **FACW** species 0 0 (Plot Size: 15'radius) Status x 2 **Shrub Stratum** % Cover Species? **FAC** species 30 90 х3 = Total Cover **FACU** species 10 x 4 40 2 **UPL** species x 5 10 Column Totals 152 (A) 250 (B) Prevalence Index = B/A = 1.64 **Hydrophytic Vegetation Indicators:** Absolute Dominant Indicator 1- Rapid Test For Hydrophytic Vegetation **Herb Stratum** (Plot Size: 5'radius) % Cover Species? Status X 2- Dominance Test is > 50% 80 Typha angustifolia OBL X 3- Prevalence Index is =< 3.0 Χ OBL Leersia oryzoides 30 4- Morphological Adaptations Euthamia graminifolia 15 FAC Cirsium arvense 10 **FACU** 5- Problematic Hydrophytic Vegetation Leucanthemum vulgare 2 UPL 137 = Total Cover **Definitions of Vegetation Strata:** Tree- Woody plants 3 in. (7.6cm) or more in diameter at breast height (DBH), regardless of height. Sapling/Shrub- Woody plants less than 3 in. DBH and greater than or equal to 3.28ft (1m) tall. Herb- All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28ft tall. Absolute Dominant Indicator Woody Vines- All woody vines greater than 3.28ft in (Plot Size: 30'radius) Species? **Woody Vine Stratum** % Cover Status height. **FAC** Vitis riparia 15 Χ 15 = Total Cover Hydrophytic Vegetation Present? Yes X No ___ Remarks: (Include photo numbers here or on a separate sheet.)

SOIL Sampling Point: Wetland-WL65

Depth	Matrix				Redo	ox Featu	ıres				
(inches	Color	%	Color	%	Type	Loc	Textu	ire	Remarks		
0-10	10YR 4/1	90	5YR 4/6	10	С	PL	Clay	/			
Hydric Sc	oil Indicators:							Indi	cators for Problematic Soils:		
His	tosol (A1)				Polyvalu	e Below	Surface (B15)		_2 cm Muck (A10)		
His	tic Epipedon (A2)			Thin Dar	k Surfac	e (S9)		_Coast Prarie Redox (A16)		
Bla	ck Histic (A3)				Loamy N	lucky M	ineral (F1)		_5 cm Mucky Peat or Peat (S3)		
Нус	drogen Sulfide	(A4)			Loamy G	ileyed M	atric (F2)	Dark Surface (S7)			
Stra	atified Layers	(A5)		X Depleted Matrix (F3)					Polyvalue Below Surface (S8)		
Depleted Below Dark Surface (A11)				Redox Dark Surface (F6)					_ Thin Dark Surface (S9)		
Thi	ck Dark Surfac	e (A12)		Depleted Dark Surface (F7)					Iron-Manganese Masses (F12)		
San	ndy Mucky Mir	neral (S	1)	Redox Depressions (F8)			ns (F8)		Piedmont Floodplain Soils (F19)		
San	ndy Gleyed Ma	atrix (S4)						_Mesic Spodic (TA6)		
San	ndy Redox (S5))							Red Parent Material (F21)		
Stri	ipped Matrix (S6)							Very Shallow Dark Surface (TF12)		
Dar	rk Surface (S7)								Other (Explain in Remarks)		
Restrictiv	ve Layer (if obs	erved):									
	, ,	Type:							2 V V N		
	Donth /in	_						Hydric Soil I	Present? Yes X No		
	Depth (in	cnes):		<u></u>							
Remarks											

Project/Site: Cider Solar Project	City/County: Elba/Genese	e Sampling Date: 7/10/2020		
Applicant/Owner: Hecate		State: NY Sampling Point:02-20200710		
Investigator(s): Justin Ahn	Section, Township, Range:	WL-09-9U		
Landform (hillslope, terrace,etc.): Toeslope	Local relief (concave, convex, r	none): <u>Linear</u> Slope (%) <u>1 - 5</u>		
Subregion (LRR or MLRA): LRR L	Lat: 43.105519 Long: -7	78.175663 Datum: <u>NAD83</u>		
Soil Map Unit Name: Wk		NWI Classification: UPL		
Are climatic / hyrologic conditions on the site \ensuremath{t}	typical for this time of year? Yes X No	(if no, explain in Remarks.)		
Are Vegetation, Soil, or Hydrology	significantly disturbed? Are "Normal	Circumstances" present? Yes X No		
Are Vegetation, Soil, or Hydrology	naturally problematic? (if needed, exp	lain any answers in Remarks.)		
SUMMARY OF FINDINGS - Attach site map	showing sampling point locations, tran	sects, important features, etc.		
Hydrophytic Vegetation Present? Yes	No X Is the Sampled Area	a		
Hydric Soil Present? Yes	No X within a Wetland?	Yes No X		
Wetland Hydrology Present? Yes	No X if yes, optional Wet	land Site ID:		
Remarks: (Explain alternative procedures here or in a se	parate report.)			
HYDROLOGY				
Wetland Hydrology Indicators:		Secondary Indicators (minimum of two required)		
Primary Indicators (minimum of one is required: cl	neck all that apply)	Surface Soil Cracks (B6)		
Surface Water (A1)	Water-Stained Leaves (B9)	Drainage Patterns (B10)		
High Water Table (A2)	Aquatic Fauna (B13)	Moss Trim Lines (B16)		
Saturation (A3)	Marl Deposits (B15)	Dry-Season Water Table (C2)		
Water Marks (B1)	Hydrogen Sulfide Odor (C1)	Crayfish Burrows (C8)		
Sediment Deposits (B2)	Oxidized Rhizospheres on Living Roots (C3)	Saturation Visible in Aerial Imagery (C9)		
Drift Deposits (B3)	Presence of Reduced Iron (C4)	Stunted or Stressed Plants (D1)		
Algal Mat or Crust (B4)	Recent Iron Reduction in Tilled Soils (C6)	Geomorphic Position (D2)		
Iron Deposits (B5)	Thin Muck Surface (C7)	Shallow Aquitard (D3)		
Inundation Visible on Aerial Imagery (B7)	Other (Explain in Remarks)	Microtopographic Relief (D4)		
Sparsley Vegetated Concave Surface (B8)		FAC-Neutral Test (D5)		
Surface Water Present? Yes No X	Depth (inches)			
Water Table Present? Yes No X	Depth (inches) Wetland F	Hydrology Present? Yes No X		
Saturation Present? Yes No X	Depth (inches)	<u> </u>		
Describe Recorded Data (stream gauge, moni	toring well, aerial photos, previous inspection	ns), if available:		
Remarks:				

VEGETATION - Use scientific names of plants Sampling Point: 02-20200710-WL-09-9U Absolute Dominant Indicator **Dominance Test Worksheet:** (Plot Size: 30'radius) % Cover Species? Status **Tree Stratum Number of Dominant Species** That Are OBL, FACW, or FAC: (A) = Total Cover **Total Number of Dominant** (B) Species Across All Strata: 3 Percent of Dominant Species (A/B) That Are OBL, FACW, or FAC: 0% **Prevalence Index Worksheet:** 0 **OBL** species x 1 Absolute Dominant Indicator **FACW** species 0 (Plot Size: 15'radius) Status x 2 **Shrub Stratum** % Cover Species? 0 FAC species х3 = Total Cover FACU species 75 x 4 300 **UPL** species 0 x 5 0 Column Totals 75 (A) 300 (B) Prevalence Index = B/A = **Hydrophytic Vegetation Indicators:** Absolute Dominant Indicator 1- Rapid Test For Hydrophytic Vegetation **Herb Stratum** (Plot Size: 5'radius) % Cover Species? Status 2- Dominance Test is > 50% 30 Lotus corniculatus **FACU** 3- Prevalence Index is =< 3.0 Χ Melilotus officinalis 20 **FACU** 4- Morphological Adaptations Trifolium pratense 15 Χ **FACU** Ambrosia artemisiifolia 10 **FACU** 5- Problematic Hydrophytic Vegetation 75 = Total Cover **Definitions of Vegetation Strata:** Tree- Woody plants 3 in. (7.6cm) or more in diameter at breast height (DBH), regardless of height. Sapling/Shrub- Woody plants less than 3 in. DBH and greater than or equal to 3.28ft (1m) tall. Herb- All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28ft tall. Absolute Dominant Indicator Woody Vines- All woody vines greater than 3.28ft in (Plot Size: 30'radius) **Woody Vine Stratum** % Cover Species? Status height. = Total Cover Hydrophytic Vegetation Present? Yes ____ No _X Remarks: (Include photo numbers here or on a separate sheet.)

OIL								Sampling Point: 02-20200710-wL-09-9		
DepthMatrix				Redo	ox Feature					
(inches	Color	%	Color	%	Type	Loc	Texture	Remarks		
0-3 10YR 3/3 95 5YR 5/6		5YR 5/6	5	С	PL	Loam				
Hydric Sc	oil Indicators:							Indicators for Problematic Soils:		
	tosol (A1)				•		rface (B15)	2 cm Muck (A10)		
Histic Epipedon (A2)					.	k Surface (•	Coast Prarie Redox (A16)		
Black Histic (A3)					•	/lucky Mine		5 cm Mucky Peat or Peat (S3)		
Hydrogen Sulfide (A4)				•	ileyed Mati		Dark Surface (S7)			
Stratified Layers (A5)				•	d Matrix (F		Polyvalue Below Surface (S8)			
Depleted Below Dark Surface (A11)			Redox Dark Surface (F6)				Thin Dark Surface (S9)			
Thick Dark Surface (A12)			Depleted Dark Surface (F7)				Iron-Manganese Masses (F12)			
	ndy Mucky Mii				Redox D	epressions	(F8)	Piedmont Floodplain Soils (F19)		
	ndy Gleyed Ma		1)					Mesic Spodic (TA6)		
	ndy Redox (S5)							Red Parent Material (F21)		
	pped Matrix (Very Shallow Dark Surface (TF12)		
Dar	k Surface (S7)							Other (Explain in Remarks)		
Restrictiv	ve Layer (if obs	erved):								
		Type:	Dense				Hydri	ic Soil Present? Yes No X		
	Depth (in	iches):	3							
Remarks	s:									

Project/Site: Cider Solar Project	City/Co	ounty: Elba/Genese	Sampling Date: 7/10/2020			
Applicant/Owner: Hecate			State: NY Sampling Point: 02-2020071			
Investigator(s): Justin Ahn	Sectio	Section, Township, Range: WL-10-10W				
Landform (hillslope, terrace, etc.): Depression	n Local relie	Local relief (concave, convex, none): Concave Slope (%) 0 - 1				
Subregion (LRR or MLRA): LRR L	Lat: 43.105086	Long:7	8.166815 Datum: NAD83			
Soil Map Unit Name: ApA			NWI Classification: PFO			
Are climatic / hyrologic conditions on the site	typical for this time of ye	ar? Yes <u>X</u> No	(if no, explain in Remarks.)			
Are Vegetation, Soil, or Hydrology	significantly distur	bed? Are "Normal (Circumstances" present? Yes X No			
Are Vegetation, Soil, or Hydrology	naturally problem	atic? (if needed, exp	lain any answers in Remarks.)			
SUMMARY OF FINDINGS - Attach site ma	n showing sampling n	nint locations tran	sects important features etc			
Hydrophytic Vegetation Present? Yes X		Is the Sampled Area				
Hydric Soil Present? Yes X		within a Wetland?	Yes X No			
•		if yes, optional Wetl				
Wetland Hydrology Present? Yes X		ii yes, optional weti				
Remarks: (Explain alternative procedures here or in a se	eparate report.)					
HYDROLOGY						
Wetland Hydrology Indicators:			Secondary Indicators (minimum of two required)			
Primary Indicators (minimum of one is required: o	check all that apply)		Surface Soil Cracks (B6)			
Surface Water (A1)	X Water-Stained Leaves	s (B9)	X Drainage Patterns (B10)			
High Water Table (A2)	Aquatic Fauna (B13)		X Moss Trim Lines (B16)			
Saturation (A3)	Marl Deposits (B15)		Dry-Season Water Table (C2)			
Water Marks (B1)	Hydrogen Sulfide Odd	or (C1)	Crayfish Burrows (C8)			
Sediment Deposits (B2)	Oxidized Rhizosphere		Saturation Visible in Aerial Imagery (C9)			
Drift Deposits (B3)	Presence of Reduced		Stunted or Stressed Plants (D1)			
	Recent Iron Reduction					
Algal Mat or Crust (B4)		` '	Geomorphic Position (D2)			
Iron Deposits (B5)	Thin Muck Surface (C		Shallow Aquitard (D3)			
Inundation Visible on Aerial Imagery (B7)	Other (Explain in Rem	iarks)	Microtopographic Relief (D4)			
Sparsley Vegetated Concave Surface (B8)			FAC-Neutral Test (D5)			
Surface Water Present? Yes No X	Depth (inches)	_				
Water Table Present? Yes No X	Depth (inches)	Wetland H	lydrology Present? Yes X No			
Saturation Present? Yes No X	Depth (inches)	_				
Describe Recorded Data (stream gauge, moni	itoring well, aerial photos	s, previous inspection	s), if available:			
Pomarks:						
Remarks:						

VEGETATION - Use scien	tific names of plants				Sampli	ng Point: Wet	land-WL	66
Tree Stratum	(Plot Size: 30'radius)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test V			
Fraxinus pennsylvanica		50	Х	FACW	That Are OBL, FA	-	5	(A)
Acer saccharinum		30	X	FACW		er of Dominant		_` ´
		80	= Total Cov	/er		ross All Strata:	5	(B)
					Percent of Dor	_		
					That Are OBL,	•	100%	(A/B)
					Prevalence Index \	Worksheet:		
					OBL species	30 x 1	30	
Church Churchine	(Diet Circy 15 radius)	Absolute % Cover				165 x 2	330	
Shrub Stratum	(Plot Size: 15'radius)		Species?	Status	FACW species			
Acer saccharinum		20	Х	FACW	FAC species	27 x 3	81	
		20	_= Total Cov	/er	FACU species	2 x 4	8	
					UPL species	5 x 5	25	
					Column Totals	229 (A)	474	(B)
					_	 -		(-/
					Prevalenc	e Index = B/A =	2.07	
					Hydrophytic Vege	tation Indicator	rs:	
		Absolute	Dominant	Indicator		st For Hydrophyt		tion
Herb Stratum	(Plot Size: 5'radius)	% Cover	Species?	Status	'		ic vegeta	tion
	(1.1010.201		-		X 2- Dominan	ce Test is > 50%		
<u>Carex alopecoidea</u> Glyceria striata		<u>40</u> 30	X X	FACW OBL	X 3- Prevalenc	ce Index is =< 3.0)	
Phalaris arundinacea		20	^	FACW	4- Morpholo	ogical Adaptatio	ns	
Arisaema triphyllum		15		FAC	<u> </u>	itic Hydrophytic		'n
Leucanthemum vulgar	e	5		UPL	5- Problema	itic nyuropiiytic	vegetatio	711
Lindera benzoin		5		FACW	Definitions of Vegeta	ation Strata		
Toxicodendron radicar	ns	5		FAC				
Persicaria virginiana		5		FAC	Tree- Woody plants 3 breast height (DBH),			ieter at
Euthamia graminifolia		2		FAC	2. 2001	6		
Oxalis corniculata		<u>2</u> 129	= Total Cov	FACU /er	Sapling/Shrub- Wood greater than or equa			and
			10tai cov	/C1	greater than or equa	1 to 3.261t (1111) ta		
					Herb- All herbaceous			less of
		م در دا د د دا د	Daminant	la dia atau	size, and woody plan	its less than 3.28ft	tall.	
Woody Vine Stratum	(Plot Size: 30'radius)	% Cover	Dominant Species?	Status	Woody Vines- All wo height.	ody vines greater	than 3.28f	t in
			= Total Cov	/er		L		
			10.01 000	, C1	Hydropl Vegeta	-		
						ent? Yes X	No	
Remarks: (Include photo nu	mbers here or on a sep	arate shee	t.)		•			

SOIL Sampling Point: Wetland-WL66

Depth	Matrix				Redo	ox Featui	res		
(inches	Color	%	Color	%	Туре	Loc	Texture	Remarks	
0-10	10YR 5/2	95	5YR 5/6	5	С	PL	Silt Loam		
10-18	10YR 7/4	70	10YR 6/8	30	С	М	Sandy Loam		

Hydric Soil Indicators:		Indicators for Problematic Soils:
Histosol (A1)	Polyvalue Below Surface ((B15)2 cm Muck (A10)
Histic Epipedon (A2)	Thin Dark Surface (S9)	Coast Prarie Redox (A16)
Black Histic (A3)	Loamy Mucky Mineral (F1	L)5 cm Mucky Peat or Peat (S3)
Hydrogen Sulfide (A4)	Loamy Gleyed Matric (F2)	Dark Surface (S7)
Stratified Layers (A5)	X Depleted Matrix (F3)	Polyvalue Below Surface (S8)
Depleted Below Dark Surface (A11)	Redox Dark Surface (F6)	Thin Dark Surface (S9)
Thick Dark Surface (A12)	Depleted Dark Surface (F7	7) Iron-Manganese Masses (F12)
Sandy Mucky Mineral (S1)	Redox Depressions (F8)	Piedmont Floodplain Soils (F19)
Sandy Gleyed Matrix (S4)		Mesic Spodic (TA6)
Sandy Redox (S5)		Red Parent Material (F21)
Stripped Matrix (S6)		Very Shallow Dark Surface (TF12)
Dark Surface (S7)		Other (Explain in Remarks)
Restrictive Layer (if observed):		
Type:		
Type:		Hydric Soil Present? Yes X No
Depth (inches):		

Remarks:

Project/Site: Cider Solar Project	City/County: Elba/Genese	e Sampling Date: 7/10/2020
Applicant/Owner: Hecate		State: NY Sampling Point:
Investigator(s): Justin Ahn	Section, Township, Range:	02-20200710-WL-10-11W
Landform (hillslope, terrace,etc.): Depression	Local relief (concave, convex,	none): <u>Concave</u> Slope (%) <u>0 - 1</u>
Subregion (LRR or MLRA): LRR L	Lat: 43.104958 Long:	78.166816 Datum: NAD83
Soil Map Unit Name: ApA		NWI Classification: PSS
Are climatic / hyrologic conditions on the site t	<u> </u>	
Are Vegetation, Soil, or Hydrology		
Are Vegetation, Soil, or Hydrology	naturally problematic? (if needed, exp	plain any answers in Remarks.)
SUMMARY OF FINDINGS - Attach site map	showing sampling point locations, tran	nsects, important features, etc.
Hydrophytic Vegetation Present? Yes X		
Hydric Soil Present? Yes X	No within a Wetland?	Yes X No
Wetland Hydrology Present? Yes X		land Site ID: WL66
Remarks: (Explain alternative procedures here or in a set	_ '''	
	• •	
HYDROLOGY		
Wetland Hydrology Indicators:		Secondary Indicators (minimum of two required)
Primary Indicators (minimum of one is required: cl	neck all that apply)	Surface Soil Cracks (B6)
Surface Water (A1)	Water-Stained Leaves (B9)	X Drainage Patterns (B10)
High Water Table (A2)	Aquatic Fauna (B13)	Moss Trim Lines (B16)
Saturation (A3)	Marl Deposits (B15)	Dry-Season Water Table (C2)
Water Marks (B1)	Hydrogen Sulfide Odor (C1)	Crayfish Burrows (C8)
Sediment Deposits (B2)	Oxidized Rhizospheres on Living Roots (C3)	Saturation Visible in Aerial Imagery (C9)
Drift Deposits (B3)	Presence of Reduced Iron (C4)	Stunted or Stressed Plants (D1)
Algal Mat or Crust (B4)	Recent Iron Reduction in Tilled Soils (C6)	X Geomorphic Position (D2)
Iron Deposits (B5)	Thin Muck Surface (C7)	Shallow Aquitard (D3)
Inundation Visible on Aerial Imagery (B7)	Other (Explain in Remarks)	Microtopographic Relief (D4)
Sparsley Vegetated Concave Surface (B8)		FAC-Neutral Test (D5)
Surface Water Present? Yes No X	Depth (inches)	
Water Table Present? Yes No X	= ' ' 	Hydrology Present? Yes X No
Saturation Present? Yes No X	Depth (inches)	119 119 119 119 119 119 119 119 119 119
Describe Recorded Data (stream gauge, monit		ns), if available:
Remarks:		

VEGETATION - Use scientific names of plants Sampling Point: 02-20200710-WL-10-11W Absolute Dominant Indicator **Dominance Test Worksheet:** (Plot Size: 30'radius) % Cover Species? Status **Tree Stratum Number of Dominant Species** That Are OBL, FACW, or FAC: 3 (A) = Total Cover **Total Number of Dominant** Species Across All Strata: (B) 4 Percent of Dominant Species (A/B) That Are OBL, FACW, or FAC: 75% **Prevalence Index Worksheet:** 40 x 1 40 **OBL** species Absolute Dominant Indicator **FACW** species 50 100 (Plot Size: 15'radius) % Cover Species? Status x 2 **Shrub Stratum FAC** species 40 120 х3 Χ FACU Lonicera tatarica 15 15 = Total Cover **FACU** species 15 x 4 60 **UPL** species 0 x 5 0 Column Totals 145 (A) 320 (B) Prevalence Index = B/A = 2.21 **Hydrophytic Vegetation Indicators:** Absolute Dominant Indicator 1- Rapid Test For Hydrophytic Vegetation **Herb Stratum** (Plot Size: 5'radius) % Cover Species? Status X 2- Dominance Test is > 50% 40 Carex disperma Χ OBL X 3- Prevalence Index is =< 3.0 Χ Phalaris arundinacea 30 **FACW** 4- Morphological Adaptations Apocynum cannabinum 30 Χ FAC Carex alopecoidea 20 **FACW** 5- Problematic Hydrophytic Vegetation Toxicodendron radicans 10 FAC 130 = Total Cover **Definitions of Vegetation Strata:** Tree- Woody plants 3 in. (7.6cm) or more in diameter at breast height (DBH), regardless of height. Sapling/Shrub- Woody plants less than 3 in. DBH and greater than or equal to 3.28ft (1m) tall. Herb- All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28ft tall. Absolute Dominant Indicator Woody Vines- All woody vines greater than 3.28ft in (Plot Size: 30'radius) **Woody Vine Stratum** % Cover Species? Status height. = Total Cover Hydrophytic Vegetation Present? Yes X No ___ Remarks: (Include photo numbers here or on a separate sheet.)

SOIL Sampling Point: 02-20200710-WL-10-11W

Depth	Matrix				Redo	x Featu	res	
(inches	Color	%	Color	%	Туре	Loc	Texture	Remarks
0-12	10YR 3/1	90	10YR 3/6	10	С	PL	Silt Loam	5.5
Hudric Sa	oil Indicators:							Indicators for Problematic Soils:
-	stosol (A1)				Polyvalu	e Relow ⁽	Surface (B15)	2 cm Muck (A10)
	stic Epipedon (Δ2\			=	k Surface		Coast Prarie Redox (A16)
	ick Histic (A3)	72)					neral (F1)	5 cm Mucky Peat or Peat (S3)
	drogen Sulfide	Δ(ΔΔ)			-	ileyed Ma		Dark Surface (S7)
	atified Layers (-	d Matrix (Polyvalue Below Surface (S8)
	pleted Below [rface (A11)			ark Surfa		Thin Dark Surface (S9)
	ick Dark Surfac						rface (F7)	Iron-Manganese Masses (F12)
	ndy Mucky Mir				-	epressior		Piedmont Floodplain Soils (F19)
	ndy Gleyed Ma				Nedox D	epressioi	15 (1 6)	Mesic Spodic (TA6)
	ndy Redox (S5)	-	1					Red Parent Material (F21)
	ipped Matrix (Very Shallow Dark Surface (TF12)
	rk Surface (S7)							Other (Explain in Remarks)
	ik Surface (S7)	'						Other (Explain in Remarks)
Restricti	ve Layer (if obs	erved):						
	, (
		Type:					Hyd	ric Soil Present? Yes X No
	Depth (in	iches): _						
Remark	S:							

Project/Site: Cider Solar Project	City/County: _Elba/Genes	see Sampling Date: 7/10/2020
Applicant/Owner: Hecate		State: NY Sampling Point:02-20200710
Investigator(s): Justin Ahn	Section, Township, Range	e: WL-10-10U
Landform (hillslope, terrace,etc.): Toeslope	Local relief (concave, convex	, none): <u>Linear</u> Slope (%) <u>1 - 5</u>
Subregion (LRR or MLRA): LRR L	Lat: <u>43.105308</u> Long:	-78.167014 Datum: NAD83
Soil Map Unit Name: HIB		NWI Classification: UPL
Are climatic / hyrologic conditions on the site	typical for this time of year? Yes X	lo (if no, explain in Remarks.)
Are Vegetation, Soil, or Hydrology	ysignificantly disturbed? Are "Norma	al Circumstances" present? Yes X No
Are Vegetation, Soil, or Hydrology	ynaturally problematic? (if needed, e	xplain any answers in Remarks.)
SUMMARY OF FINDINGS - Attach site ma	n showing sampling point locations, tra	ansects, important features, etc.
Hydrophytic Vegetation Present? Yes		
Hydric Soil Present? Yes	No X within a Wetland	? Yes No X
Wetland Hydrology Present? Yes	No X if yes, optional We	etland Site ID:
Remarks: (Explain alternative procedures here or in a se	eparate report.)	
HYDROLOGY		
Wetland Hydrology Indicators:		Secondary Indicators (minimum of two required)
Primary Indicators (minimum of one is required:	check all that apply)	Surface Soil Cracks (B6)
Surface Water (A1)	Water-Stained Leaves (B9)	Drainage Patterns (B10)
High Water Table (A2)	Aquatic Fauna (B13)	Moss Trim Lines (B16)
Saturation (A3)	Marl Deposits (B15)	Dry-Season Water Table (C2)
Water Marks (B1)	Hydrogen Sulfide Odor (C1)	Crayfish Burrows (C8)
Sediment Deposits (B2)	Oxidized Rhizospheres on Living Roots (C3	
Drift Deposits (B3)	Presence of Reduced Iron (C4)	Stunted or Stressed Plants (D1)
Algal Mat or Crust (B4)	Recent Iron Reduction in Tilled Soils (C6)	Geomorphic Position (D2)
Iron Deposits (B5)	Thin Muck Surface (C7)	Shallow Aquitard (D3)
Inundation Visible on Aerial Imagery (B7)		Microtopographic Relief (D4)
	Other (Explain in Remarks)	
Sparsley Vegetated Concave Surface (B8)		FAC-Neutral Test (D5)
Surface Water Present? Yes NoX	Depth (inches)	
Water Table Present? Yes No X	Depth (inches) Wetland	Hydrology Present? Yes No X
Saturation Present? Yes No X	Depth (inches)	
Describe Recorded Data (stream gauge, mon	itoring well aerial photos, previous inspecti	ons) if available:
Describe Resoraca Data (stream Baage) men	itoring wen, derial photos, previous inspecti	ons,, in available.
Remarks:		

VEGETATION - Use scientific names of plants Sampling Point: 02-20200710-WL-10-10U Absolute Dominant Indicator **Dominance Test Worksheet:** (Plot Size: 30'radius) % Cover Species? Status **Tree Stratum Number of Dominant Species** 60 Х **FACW** That Are OBL, FACW, or FAC: 3 (A) Acer saccharinum 60 = Total Cover **Total Number of Dominant** (B) Species Across All Strata: 4 Percent of Dominant Species (A/B) That Are OBL, FACW, or FAC: 75% **Prevalence Index Worksheet:** 0 x 1 **OBL** species Absolute Dominant Indicator **FACW** species 90 180 (Plot Size: 15'radius) % Cover Species? Status x 2 **Shrub Stratum FAC** species 70 210 х3 20 Χ **FACW** Fraxinus pennsylvanica 20 = Total Cover **FACU** species 0 x 4 0 **UPL** species 40 x 5 200 Column Totals 200 (A) 590 (B) Prevalence Index = B/A = 2.95 **Hydrophytic Vegetation Indicators:** Absolute Dominant Indicator 1- Rapid Test For Hydrophytic Vegetation **Herb Stratum** (Plot Size: 5'radius) % Cover Species? Status X 2- Dominance Test is > 50% 50 Euthamia graminifolia FAC X 3- Prevalence Index is =< 3.0 Leucanthemum vulgare Χ UPL 40 4- Morphological Adaptations Toxicodendron radicans 20 **FAC** Phalaris arundinacea 10 **FACW** 5- Problematic Hydrophytic Vegetation 120 = Total Cover **Definitions of Vegetation Strata:** Tree- Woody plants 3 in. (7.6cm) or more in diameter at breast height (DBH), regardless of height. Sapling/Shrub- Woody plants less than 3 in. DBH and greater than or equal to 3.28ft (1m) tall. Herb- All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28ft tall. Absolute Dominant Indicator Woody Vines- All woody vines greater than 3.28ft in (Plot Size: 30'radius) **Woody Vine Stratum** % Cover Species? Status height. = Total Cover Hydrophytic Vegetation Present? Yes X No ___ Remarks: (Include photo numbers here or on a separate sheet.)

SOIL Sampling Point: 02-20200710-WL-10-10U

							Sampling Point: 02-20200710-WL-10-1 0
Matrix	[Redo	x Feature	S	
Color	%	Color	%	Type	Loc	Texture	Remarks
2.5Y 5/4	100					Silt Loam	
2.5Y 5/4	60	2.5Y 6/4	40	С	М	Loam	
		,					
							Indicators for Problematic Soils:
							2 cm Muck (A10)
	(A2)				•	•	Coast Prarie Redox (A16)
							5 cm Mucky Peat or Peat (S3)
_				-	•		Dark Surface (S7)
-				•	•		Polyvalue Below Surface (S8)
							Thin Dark Surface (S9)
ck Dark Surfac	ce (A12)			Depleted	d Dark Surfa	ace (F7)	Iron-Manganese Masses (F12)
dy Mucky Mi	neral (S	1)		Redox D	epressions	(F8)	Piedmont Floodplain Soils (F19)
dy Gleyed Ma	atrix (S4	.)					Mesic Spodic (TA6)
							Red Parent Material (F21)
							Very Shallow Dark Surface (TF12)
k Surface (S7))						Other (Explain in Remarks)
ve Layer (if obs	erved):						
	Type:					Hydrid	c Soil Present? Yes No X
Depth (ir	nches):						
S:							
	Color 2.5Y 5/4 2.5Y 5/4	2.5Y 5/4 100 2.5Y 5/4 60 2.5Y	Color % Color 2.5Y 5/4 100 2.5Y 5/4 60 2.5Y 6/4 iil Indicators: tosol (A1) tic Epipedon (A2) ck Histic (A3) drogen Sulfide (A4) etified Layers (A5) cleted Below Dark Surface (A11) ck Dark Surface (A12) dy Mucky Mineral (S1) dy Gleyed Matrix (S4) dy Redox (S5) pped Matrix (S6) ck Surface (S7) re Layer (if observed): Type: Depth (inches):	Color % Color % 2.5Y 5/4 100 2.5Y 5/4 60 2.5Y 6/4 40 2.5Y 6	Color % Color % Type 2.5Y 5/4 100 2.5Y 5/4 60 2.5Y 6/4 40 C Polyvalu Thin Dar Loamy M drogen Sulfide (A4) atified Layers (A5) bleted Below Dark Surface (A11) ck Dark Surface (A12) dy Mucky Mineral (S1) dy Gleyed Matrix (S4) dy Redox (S5) pped Matrix (S6) k Surface (S7) Polyvalu Thin Dar Loamy M Loamy G Redox D R	Color % Color % Type Loc 2.5Y 5/4 100 2.5Y 5/4 60 2.5Y 6/4 40 C M Polyvalue Below Su Thin Dark Surface (St.) Itic Epipedon (A2) Ick Histic (A3) Idrogen Sulfide (A4) Polyvalue Below Su Thin Dark Surface (St.) Idrogen Sulfide (A4) Polyvalue Below Su Thin Dark Surface (St.) Loamy Mucky Mine Loamy Gleyed Matrix (F3) Idrogen Sulfide (A4) Polyvalue Below Su Thin Dark Surface (St.) Loamy Mucky Mine (St.) Redox Dark Surface (A11) Ick Dark Surface (A12) Idy Mucky Mineral (S1) Idy Gleyed Matrix (S4) Idy Redox (S5) Idy Redox (S5	Color % Color % Type Loc Texture 2.5Y 5/4 100 Silt Loam 2.5Y 5/4 60 2.5Y 6/4 40 C M Loam Polyvalue Below Surface (B15) Thin Dark Surface (S9) Loamy Mucky Mineral (F1) Loamy Gleyed Matric (F2) Depleted Matrix (F3) Redox Dark Surface (F6) Depleted Dark Surface (F7) Redox Depressions (F8) Redox Depressions (F8)

Project/Site: Cider Solar Project	City/County: Elba/Genese	e Sampling Date: 7/10/2020
Applicant/Owner: Hecate		State: NY Sampling Point:02-20200710
Investigator(s): Justin Ahn	Section, Township, Range:	WL-10-11U
Landform (hillslope, terrace,etc.): <u>Toeslope</u>	Local relief (concave, convex,	none): <u>Linear</u> Slope (%) <u>1 - 5</u>
Subregion (LRR or MLRA): LRR L	Lat: 43.104977 Long:	78.167117 Datum: NAD83
Soil Map Unit Name: HIB		NWI Classification: UPL
Are climatic / hyrologic conditions on the site t	· · · · · · · · · · · · · · · · · · ·	
Are Vegetation, Soil, or Hydrology		· — · — · — —
Are Vegetation, Soil, or Hydrology	naturally problematic? (if needed, exp	plain any answers in Remarks.)
SUMMARY OF FINDINGS - Attach site map	showing sampling point locations, tran	sects, important features, etc.
Hydrophytic Vegetation Present? Yes	No X Is the Sampled Area	
Hydric Soil Present? Yes	No X within a Wetland?	Yes No X
		
Remarks: (Explain alternative procedures here or in a set In powerline easement	parate report.)	
in powernie easement		
HYDROLOGY		
Wetland Hydrology Indicators:		Secondary Indicators (minimum of two required)
Primary Indicators (minimum of one is required: cl		Surface Soil Cracks (B6)
Surface Water (A1)	Water-Stained Leaves (B9)	Drainage Patterns (B10)
High Water Table (A2)	Aquatic Fauna (B13)	Moss Trim Lines (B16)
Saturation (A3)	Marl Deposits (B15)	Dry-Season Water Table (C2)
Water Marks (B1)	Hydrogen Sulfide Odor (C1)	Crayfish Burrows (C8)
Sediment Deposits (B2)	Oxidized Rhizospheres on Living Roots (C3)	Saturation Visible in Aerial Imagery (C9)
Drift Deposits (B3)	Presence of Reduced Iron (C4)	Stunted or Stressed Plants (D1)
Algal Mat or Crust (B4)	Recent Iron Reduction in Tilled Soils (C6)	Geomorphic Position (D2)
Iron Deposits (B5)	Thin Muck Surface (C7)	Shallow Aquitard (D3)
Inundation Visible on Aerial Imagery (B7)	Other (Explain in Remarks)	Microtopographic Relief (D4)
Sparsley Vegetated Concave Surface (B8)		FAC-Neutral Test (D5)
Surface Water Present? Yes No X	Depth (inches)	
Water Table Present? Yes No X	Depth (inches) Wetland I	Hydrology Present? Yes No X
Saturation Present? Yes No X	Depth (inches)	
	- <u> </u>	\
Describe Recorded Data (stream gauge, monit	coring well, aerial photos, previous inspection	ns), if available:
Remarks:		

VEGETATION - Use scientific names of plants Sampling Point: 02-20200710-WL-10-11U Absolute Dominant Indicator **Dominance Test Worksheet:** (Plot Size: 30'radius) % Cover Species? Status **Tree Stratum Number of Dominant Species** That Are OBL, FACW, or FAC: (A) = Total Cover **Total Number of Dominant** Species Across All Strata: (B) 2 Percent of Dominant Species 50% (A/B) That Are OBL, FACW, or FAC: **Prevalence Index Worksheet:** 0 x 1 **OBL** species Absolute Dominant Indicator **FACW** species 10 20 (Plot Size: 15'radius) % Cover Species? Status x 2 **Shrub Stratum FAC** species 55 х3 165 Χ FACU Lonicera tatarica 10 10 = Total Cover **FACU** species 10 x 4 40 7 **UPL** species x 5 35 Column Totals 82 (A) 260 (B) Prevalence Index = B/A = 3.17 **Hydrophytic Vegetation Indicators:** Absolute Dominant Indicator 1- Rapid Test For Hydrophytic Vegetation **Herb Stratum** (Plot Size: 5'radius) % Cover Species? Status 2- Dominance Test is > 50% 50 Χ Apocynum cannabinum FAC 3- Prevalence Index is =< 3.0 Phalaris arundinacea 10 **FACW** 4- Morphological Adaptations Leucanthemum vulgare 5 UPL Toxicodendron radicans 5 FAC 5- Problematic Hydrophytic Vegetation Asclepias syriaca 2 UPL 72 = Total Cover **Definitions of Vegetation Strata:** Tree- Woody plants 3 in. (7.6cm) or more in diameter at breast height (DBH), regardless of height. Sapling/Shrub- Woody plants less than 3 in. DBH and greater than or equal to 3.28ft (1m) tall. Herb- All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28ft tall. Absolute Dominant Indicator Woody Vines- All woody vines greater than 3.28ft in (Plot Size: 30'radius) Status **Woody Vine Stratum** % Cover Species? height. = Total Cover Hydrophytic Vegetation Present? Yes ____ No _ X Remarks: (Include photo numbers here or on a separate sheet.)

OIL								Sampling Point. 02-20200710-WL-10-1 .
Depth	Matrix					ox Featur		
(inches	Color	%	Color	%	Type	Loc	Texture	Remarks
0-12	10YR 3/2	100					Silt Loam	
12-16	10YR 3/2	60	10YR 5/6	40	С	М	Silt Loam	
-	oil Indicators:							Indicators for Problematic Soils:
	tosol (A1)	· \		-	=		urface (B15)	2 cm Muck (A10)
	tic Epipedon (k Surface		Coast Prarie Redox (A16)
	ck Histic (A3)				-	Aucky Min		5 cm Mucky Peat or Peat (S3)
	drogen Sulfide				-	ileyed Mat		Dark Surface (S7)
	atified Layers		5 (2.4.)		-	d Matrix (F	•	Polyvalue Below Surface (S8)
	pleted Below					ark Surfac		Thin Dark Surface (S9)
	ck Dark Surfac			-		d Dark Sur		Iron-Manganese Masses (F12)
	ndy Mucky Mi	-	-	-	Redox D	epressions	s (F8)	Piedmont Floodplain Soils (F19)
	ndy Gleyed Ma	-	.)					Mesic Spodic (TA6)
	ndy Redox (S5)							Red Parent Material (F21)
	ipped Matrix (Very Shallow Dark Surface (TF12)
Dar	rk Surface (S7))						Other (Explain in Remarks)
Restrictiv	ve Layer (if obs	erved):						
		Type:					Hydr	ic Soil Present? Yes No X
	Depth (in	nches):						
Remarks	 S:							

Project/Site: Cider Solar Project	City/County: Elba/Genese	e Sampling Date: 7/13/2020
Applicant/Owner: Hecate		State: NY Sampling Point:
Investigator(s): Justin Ahn	Section, Township, Range:	02-20200713-WL-12-12W
Landform (hillslope, terrace,etc.): Depression	Local relief (concave, convex,	none): <u>Concave</u> Slope (%) <u>0 - 1</u>
Subregion (LRR or MLRA): LRR L	Lat: 43.106931 Long:	78.184104 Datum: NAD83
Soil Map Unit Name: OvA		NWI Classification: PEM
Are climatic / hyrologic conditions on the site t	ypical for this time of year? Yes X No	(if no, explain in Remarks.)
Are Vegetation, Soil, or Hydrology	significantly disturbed? Are "Normal	Circumstances" present? Yes X No
Are Vegetation, Soil, or Hydrology	naturally problematic? (if needed, exp	plain any answers in Remarks.)
SUMMARY OF FINDINGS - Attach site map	showing sampling point locations, trai	nsects, important features, etc.
Hydrophytic Vegetation Present? Yes X	No Is the Sampled Are	a
Hydric Soil Present? Yes X	No within a Wetland?	Yes X No
Wetland Hydrology Present? Yes X	No if yes, optional Wet	land Site ID: WL67
Remarks: (Explain alternative procedures here or in a seg		
HYDROLOGY		
Wetland Hydrology Indicators:		Secondary Indicators (minimum of two required)
Primary Indicators (minimum of one is required: ch	neck all that apply)	X Surface Soil Cracks (B6)
Surface Water (A1)	Water-Stained Leaves (B9)	Drainage Patterns (B10)
High Water Table (A2)	Aquatic Fauna (B13)	Moss Trim Lines (B16)
Saturation (A3)	Marl Deposits (B15)	Dry-Season Water Table (C2)
Water Marks (B1)	Hydrogen Sulfide Odor (C1)	Crayfish Burrows (C8)
Sediment Deposits (B2)	Oxidized Rhizospheres on Living Roots (C3)	Saturation Visible in Aerial Imagery (C9)
Drift Deposits (B3)	Presence of Reduced Iron (C4)	Stunted or Stressed Plants (D1)
X Algal Mat or Crust (B4)	Recent Iron Reduction in Tilled Soils (C6)	X Geomorphic Position (D2)
Iron Deposits (B5)	Thin Muck Surface (C7)	Shallow Aquitard (D3)
Inundation Visible on Aerial Imagery (B7)	Other (Explain in Remarks)	Microtopographic Relief (D4)
Sparsley Vegetated Concave Surface (B8)		FAC-Neutral Test (D5)
Surface Water Present? Yes No X	Depth (inches)	
Water Table Present? Yes No X	= ' ' 	Hydrology Present? Yes X No
Saturation Present? Yes No X	Depth (inches)	
Describe Recorded Data (stream gauge, monit	coring well, aerial photos, previous inspection	ns), if available:
Remarks:		

VEGETATION - Use scientific names of plants Sampling Point: 02-20200713-WL-12-12W Absolute Dominant Indicator **Dominance Test Worksheet:** (Plot Size: 30'radius) % Cover Species? Status **Tree Stratum Number of Dominant Species** That Are OBL, FACW, or FAC: (A) = Total Cover **Total Number of Dominant** Species Across All Strata: (B) 3 Percent of Dominant Species That Are OBL, FACW, or FAC: (A/B) 100% **Prevalence Index Worksheet:** 40 x 1 40 **OBL** species Absolute Dominant Indicator **FACW** species 90 180 (Plot Size: 15'radius) Status x 2 **Shrub Stratum** % Cover Species? 0 **FAC** species х3 = Total Cover **FACU** species 40 x 4 160 **UPL** species 0 x 5 0 Column Totals 170 (A) 380 (B) Prevalence Index = B/A = 2.24 **Hydrophytic Vegetation Indicators:** Absolute Dominant Indicator X 1- Rapid Test For Hydrophytic Vegetation **Herb Stratum** (Plot Size: 5'radius) % Cover Species? Status X 2- Dominance Test is > 50% 50 Cyperus esculentus Χ **FACW** X 3- Prevalence Index is =< 3.0 Χ OBL Cyperus odoratus 40 4- Morphological Adaptations Carex intumescens 40 Χ **FACW** Abutilon theophrasti 30 **FACU** 5- Problematic Hydrophytic Vegetation Amaranthus retroflexus 10 **FACU** 170 = Total Cover **Definitions of Vegetation Strata:** Tree- Woody plants 3 in. (7.6cm) or more in diameter at breast height (DBH), regardless of height. Sapling/Shrub- Woody plants less than 3 in. DBH and greater than or equal to 3.28ft (1m) tall. Herb- All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28ft tall. Absolute Dominant Indicator Woody Vines- All woody vines greater than 3.28ft in (Plot Size: 30'radius) **Woody Vine Stratum** % Cover Species? Status height. = Total Cover Hydrophytic Vegetation Present? Yes X No ___ Remarks: (Include photo numbers here or on a separate sheet.)

SOIL

Sampling Point: 02-20200713-WL-12-12W

Histosol (A1) Polyvalue Below Surface (B15) Polyvalue Below Surface (B15) Polyvalue Below Surface (B15) Polyvalue Below Surface (S9) Coast Prarie Redox (A10) Coast Prarie Redox (A10) Polyvalue Below (A10) Coast Prarie Redox (A10) Polyvalue Below (A10) Some Mucky Mineral (F1) Some Mucky Peat or Redox (B11) Dark Surface (S7) Dark Surface (S7) Polyvalue Below Surface (S9) Thin Dark Surface (F6) Thin Dark Surface (S9) Thin Dark Surface (S9) Thin Dark Surface (F6) Thin Dark Surface (S9) Iron-Manganese Mass Piedmont Floodplain Mesic Spodic (TA6) Sandy Redox (S5) Stripped Matrix (S6) Dark Surface (S7) Other (Explain in Renovement				x Features	Redo				Matrix	Depth
ydric Soil Indicators: Histosol (A1) Histic Epipedon (A2) Black Histic (A3) Hydrogen Sulfide (A4) Stratified Layers (A5) X Depleted Below Dark Surface (A11) X Depleted Below Dark Surface (A11) Redox Dark Surface (F6) Thic Dark Surface (A12) Sandy Mucky Mineral (S1) Redox Dark Surface (F7) Thick Dark Surface (A12) Sandy Mucky Mineral (S1) Redox Dark Surface (F7) Thick Dark Surface (A12) Sandy Mucky Mineral (S1) Redox Depressions (F8) Piedmont Floodplain Sandy Redox (S5) Stripped Matrix (S6) Dark Surface (S7) Other (Explain in Ren		Remarks	Texture	Loc	Type	%	Color	%	Color	nches
Hydric Soil Indicators: Histosol (A1) Histic Epipedon (A2) Black Histic (A3) Hydrogen Sulfide (A4) Stratified Layers (A5) X Depleted Matrix (F2) Thick Dark Surface (A12) Dark Surface (F7) Sandy Mucky Mineral (S1) Redox Dark Surface (F7) Sandy Mucky Mineral (S1) Redox Dark Surface (F8) Mesic Spodic (TA6) Sandy Redox (S5) Stripped Matrix (S6) Dark Surface (S7) Red Parent Material (S1) Stripped Matrix (S6) Dark Surface (S7) Other (Explain in Ren			Clay					100	10YR 3/1	0-6
Histosol (A1) Polyvalue Below Surface (B15) Polyvalue Below Surface (B15) Polyvalue Below Surface (B15) Polyvalue Below Surface (S9) Coast Prarie Redox (A10) Coast Prarie Redox (A10) Polyvalue Below (A10) Coast Prarie Redox (A10) Polyvalue Below (A10) Some Mucky Mineral (F1) Doark Surface (S7) Doark Surface (S7) Doark Surface (S9) Doark Surface (S7) Doark Surface (S7) Doark Surface (S9) Doark Surface (F6) Thin Dark Surface (S9) Doark Surface (F6) Thin Dark Surface (S9) Doark Surface (F6) Thin Dark Surface (S9) Doark Surface (F7) Iron-Manganese Mass Piedmont Floodplain Mesic Spodic (TA6) Red Parent Material (S1) Sandy Redox (S5) Stripped Matrix (S6) Doark Surface (S7) Other (Explain in Ren			Clay	M	С	20	7.5YR 5/6	80	10YR 5/2	6-16
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Histosol (A1) Polyvalue Below Surface (B15) Polyvalue Below Surface (B15) Polyvalue Below Surface (B15) Polyvalue Below Surface (S9) Coast Prarie Redox (A10) Polyvalue Below Surface (S9) Coast Prarie Redox (A10) Polyvalue Below (A10) Some Mucky Mineral (F1) Some Mucky Peat or Redox Surface (S7) Stratified Layers (A5) X Depleted Matrix (F3) Polyvalue Below Surface (S9) X Depleted Below Dark Surface (A11) Polyvalue Below Surface (F6) Polyvalue Below Surface (S9) Polyvalue Below Surface (S9) Redox Dark Surface (F6) Piedmont Floodplain Sandy Mucky Mineral (S1) Sandy Redox (S5) Stripped Matrix (S4) Piedmont Floodplain Mesic Spodic (TA6) Red Parent Material (S1) Sandy Redox (S5) Stripped Matrix (S6) Dark Surface (S7) Other (Explain in Ren										
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Hydrogen Sulfide (A4) Stratified Layers (A5) X Depleted Matrix (F3) Polyvalue Below Surf Redox Dark Surface (F6) Thin Dark Surface (S9) Thick Dark Surface (A12) Depleted Dark Surface (F7) Sandy Mucky Mineral (S1) Sandy Gleyed Matrix (S4) Sandy Redox (S5) Stripped Matrix (S6) Dark Surface (S7) Loamy Gleyed Matrix (F2) Depleted Matrix (F3) Polyvalue Below Surf Thin Dark Surface (S9) Iron-Manganese Mass Piedmont Floodplain Mesic Spodic (TA6) Red Parent Material (S1) Very Shallow Dark Surface (S7) Other (Explain in Ren		5 cm Mucky Peat or Peat	(F1)	•				,		
Stratified Layers (A5) X Depleted Below Dark Surface (A11) Thick Dark Surface (A12) Sandy Mucky Mineral (S1) Sandy Gleyed Matrix (S4) Sandy Redox (S5) Stripped Matrix (S6) Depleted Matrix (F3) Polyvalue Below Surface (S9 Thin Dark Surface (S9 Iron-Manganese Mass Piedmont Floodplain Mesic Spodic (TA6) Red Parent Material (S6) Very Shallow Dark Surface (S7) Other (Explain in Ren								(A4)		
XDepleted Below Dark Surface (A11)Redox Dark Surface (F6)Thin Dark Surface (S9)Thick Dark Surface (A12)Depleted Dark Surface (F7)Iron-Manganese MassSandy Mucky Mineral (S1)Redox Depressions (F8)Piedmont FloodplainSandy Gleyed Matrix (S4)Mesic Spodic (TA6)Sandy Redox (S5)Red Parent MaterialStripped Matrix (S6)Very Shallow Dark Surface (S7)		Polyvalue Below Surface (· - /							
Thick Dark Surface (A12) Sandy Mucky Mineral (S1) Sandy Gleyed Matrix (S4) Sandy Redox (S5) Stripped Matrix (S6) Dark Surface (S7) Depleted Dark Surface (F7) Redox Depressions (F8) Piedmont Floodplain Mesic Spodic (TA6) Red Parent Material Very Shallow Dark Surface (S7) Other (Explain in Ren		Thin Dark Surface (S9)	5)				rface (A11)			
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Sandy Redox (S5) Stripped Matrix (S6) Dark Surface (S7) Red Parent Material (Very Shallow Dark Surface (S7) Other (Explain in Ren		Piedmont Floodplain Soils					1)	neral (S1	dy Mucky Mir	San
Stripped Matrix (S6) Dark Surface (S7) Other (Explain in Ren	6)	Mesic Spodic (TA6))	itrix (S4)	dy Gleyed Ma	San
Dark Surface (S7) Other (Explain in Ren	rial (F21)	Red Parent Material (F21)							dy Redox (S5)	San
	k Surface (TF12)	Very Shallow Dark Surface						S6)	pped Matrix (S	Stri
Restrictive Layer (if observed):	Remarks)	Other (Explain in Remarks							k Surface (S7)	Dar
Restrictive Layer (ii observed).									vo Lavor (if obse	Postrictiv
Toward Control of the										Restrictiv
Type: Hydric Soil Present? Yes X	X No	oil Present? Yes X No	Hydric					_		
Depth (inches):								ches):	Depth (in	
Remarks:										Dama aulu

Project/Site: Cider Solar Project	City/County: Elba/Genese	Sampling Date: 7/13/2020
Applicant/Owner: Hecate		State: NY Sampling Point:02-20200713
Investigator(s): Justin Ahn	Section, Township, Range:	WL-12-12U
Landform (hillslope, terrace,etc.): <u>Toeslope</u>	Local relief (concave, convex, r	none): <u>Linear</u> Slope (%) <u>1 - 5</u>
Subregion (LRR or MLRA): LRR L	Lat: <u>43.106779</u> Long: -7	78.184255 Datum: NAD83
Soil Map Unit Name: La		NWI Classification: UPL
Are climatic / hyrologic conditions on the site	typical for this time of year? Yes X No	(if no, explain in Remarks.)
Are Vegetation, Soil, or Hydrolog	y significantly disturbed? Are "Normal of	Circumstances" present? Yes X No
Are Vegetation, Soil, or Hydrolog	ynaturally problematic? (if needed, exp	lain any answers in Remarks.)
SLIMMARY OF FINDINGS - Attach site ma	ap showing sampling point locations, tran	sects important features etc
Hydrophytic Vegetation Present? Yes	No X Is the Sampled Area	-
Hydric Soil Present? Yes	No X within a Wetland?	Yes No X
· —		
Wetland Hydrology Present? Yes		and site ib.
Remarks: (Explain alternative procedures here or in a s	eparate report.)	
HYDROLOGY		
Wetland Hydrology Indicators:		Secondary Indicators (minimum of two required)
Primary Indicators (minimum of one is required:	check all that apply)	Surface Soil Cracks (B6)
Surface Water (A1)	Water-Stained Leaves (B9)	Drainage Patterns (B10)
High Water Table (A2)	Aquatic Fauna (B13)	Moss Trim Lines (B16)
Saturation (A3)	Marl Deposits (B15)	Dry-Season Water Table (C2)
Water Marks (B1)	Hydrogen Sulfide Odor (C1)	Crayfish Burrows (C8)
Sediment Deposits (B2)	Oxidized Rhizospheres on Living Roots (C3)	Saturation Visible in Aerial Imagery (C9)
Drift Deposits (B3)	Presence of Reduced Iron (C4)	Stunted or Stressed Plants (D1)
Algal Mat or Crust (B4)	Recent Iron Reduction in Tilled Soils (C6)	Geomorphic Position (D2)
Iron Deposits (B5)	Thin Muck Surface (C7)	Shallow Aquitard (D3)
Inundation Visible on Aerial Imagery (B7)		Microtopographic Relief (D4)
	Other (Explain in Remarks)	
Sparsley Vegetated Concave Surface (B8)		FAC-Neutral Test (D5)
Surface Water Present? Yes NoX	Depth (inches)	
Water Table Present? Yes No X	Depth (inches) Wetland H	lydrology Present? Yes No X
Saturation Present? Yes No X	Depth (inches)	
Describe Recorded Data (stream gauge mor	nitoring well, aerial photos, previous inspection	s) if available:
Describe Necorded Bata (stream gauge, mor	meering wen, derial priotos, previous inspection	o,, ii avaliabie.
Remarks:		

VEGETATION - Use scientific names of plants Sampling Point: 02-20200713-WL-12-12U Absolute Dominant Indicator **Dominance Test Worksheet:** (Plot Size: 30'radius) % Cover Species? Status **Tree Stratum Number of Dominant Species** That Are OBL, FACW, or FAC: (A) = Total Cover **Total Number of Dominant** (B) Species Across All Strata: 6 Percent of Dominant Species 50% (A/B) That Are OBL, FACW, or FAC: **Prevalence Index Worksheet:** 0 x 1 **OBL** species Absolute Dominant Indicator **FACW** species 15 30 (Plot Size: 15'radius) % Cover Species? Status x 2 **Shrub Stratum** FAC species 45 х3 135 Rhamnus cathartica 30 Χ **FAC** Rubus allegheniensis 30 Χ **FACU FACU** species 105 x 4 420 60 = Total Cover **UPL** species 0 x 5 0 Column Totals 165 (A) 585 (B) Prevalence Index = B/A = 3.55 **Hydrophytic Vegetation Indicators:** Absolute Dominant Indicator 1- Rapid Test For Hydrophytic Vegetation **Herb Stratum** (Plot Size: 5'radius) % Cover Species? Status 2- Dominance Test is > 50% 40 **FACU** Solidago canadensis 3- Prevalence Index is =< 3.0 Polypogon viridis 15 Χ **FACW** 4- Morphological Adaptations Toxicodendron radicans 5 FAC 60 = Total Cover 5- Problematic Hydrophytic Vegetation **Definitions of Vegetation Strata:** Tree- Woody plants 3 in. (7.6cm) or more in diameter at breast height (DBH), regardless of height. Sapling/Shrub- Woody plants less than 3 in. DBH and greater than or equal to 3.28ft (1m) tall. Herb- All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28ft tall. Absolute Dominant Indicator Woody Vines- All woody vines greater than 3.28ft in (Plot Size: 30'radius) % Cover Species? **Woody Vine Stratum** Status height. Parthenocissus quinquefolia Χ **FACU** 35 Vitis riparia 10 Χ FAC Hydrophytic 45 = Total Cover Vegetation Present? Yes ____ No _ X

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

SOIL Sampling Point: 02-20200713-WL-12-12U

	Matrix				Redo	x Featu	res	
inches	Color	%	Color	%	Type	Loc	Texture	Remarks
0-4	10YR 3/2	100					Silty Clay Loam	
4-16	10YR 5/3	90	10YR 6/4	10	С	PL	Sandy Clay Loam	
16-20	10YR 5/1	90	7.5YR 5/6	10	С	PL	Sandy Clay Loam	
-	il Indicators:					5.1	C ((D45)	Indicators for Problematic Soils:
	tosol (A1)	۸۵۱			-		Surface (B15)	2 cm Muck (A10)
	tic Epipedon (ck Histic (A3)	AZ)				k Surface		Coast Prarie Redox (A16)
	drogen Sulfide	. (^ 4 \			-	-	neral (F1) atric (F2)	5 cm Mucky Peat or Peat (S3) Dark Surface (S7)
	atified Layers					d Matrix		Polyvalue Below Surface (S8)
	oleted Below I		rface (A11)		-	ark Surfa		Thin Dark Surface (S9)
	ck Dark Surfac						rface (F7)	Iron-Manganese Masses (F12)
	idy Mucky Mii				-	epression		Piedmont Floodplain Soils (F19)
	dy Gleyed Ma	-			nedon D	ср. сээ.о.	.5 (1.5)	Mesic Spodic (TA6)
	dy Redox (S5)		,					Red Parent Material (F21)
	pped Matrix (Very Shallow Dark Surface (TF12)
	k Surface (S7)							Other (Explain in Remarks)
	e Layer (if obs	erved):						
Restrictiv		Type:					Hydric	Soil Present? Yes No X
Restrictiv							Tryunc .	
Restrictiv	Depth (in	_						

Project/Site: Cider Solar Project	City/County: Elba/Genesee	Sampling Date: <u>7/16/2020</u>
Applicant/Owner: Hecate	State: <u>NY</u>	Sampling Point:
Investigator(s): Justin Ahn	Section, Township, Range:	02-20200716-WL-26-26W
Landform (hillslope, terrace,etc.): Depression	Local relief (concave, convex, none): Concave	Slope (%) <u>0 - 1</u>
Subregion (LRR or MLRA): LRR L	at: 43.098775 Long: -78.179059	Datum: NAD83
Soil Map Unit Name: ApA	NWI Classifi	cation: PFO
Are climatic / hyrologic conditions on the site typical	or this time of year? Yes X No (if no, e	xplain in Remarks.)
Are Vegetation, Soil, or Hydrologys	gnificantly disturbed? Are "Normal Circumstances"	present? Yes X No
Are Vegetation, Soil, or Hydrologyr	aturally problematic? (if needed, explain any answers	in Remarks.)
SUMMARY OF FINDINGS - Attach site map show	ing sampling point locations, transects, importa	ant features, etc.
Hydrophytic Vegetation Present? Yes X No	Is the Sampled Area	
	within a Wetland?	es X No
Hydric Soil Present? Yes X No		
Wetland Hydrology Present? Yes X No	if yes, optional Wetland Site ID: W	
Remarks: (Explain alternative procedures here or in a separate re	oort.)	
HYDROLOGY		
Wetland Hydrology Indicators:	Secondary Indica	ators (minimum of two required)
Primary Indicators (minimum of one is required: check all	hat apply) Surface So	il Cracks (B6)
X Surface Water (A1) W	ter-Stained Leaves (B9) X Drainage P	atterns (B10)
High Water Table (A2)	uatic Fauna (B13) Moss Trim	Lines (B16)
Saturation (A3)	rl Deposits (B15) Dry-Season	n Water Table (C2)
Water Marks (B1) Hy	drogen Sulfide Odor (C1) Crayfish Bu	urrows (C8)
Sediment Deposits (B2)	dized Rhizospheres on Living Roots (C3) Saturation	Visible in Aerial Imagery (C9)
Drift Deposits (B3)	esence of Reduced Iron (C4) Stunted or	Stressed Plants (D1)
		ic Position (D2)
	· · · 	quitard (D3)
		graphic Relief (D4)
		al Test (D5)
Sparsley Vegetated Concave Surface (B8)		ai rest (D5)
Surface Water Present? Yes X No Dept	(inches)2	
Water Table Present? Yes NoX Dept	n (inches) Wetland Hydrology Prese	nt? Yes X No
Saturation Present? Yes No X Dept	n (inches)	
Describe Recorded Data (stream gauge, monitoring v	rell, aerial photos, previous inspections), if available:	
Demodes		
Remarks:		

VEGETATION - Use scientific names of plants Sampling Point: 02-20200716-WL-26-26W Absolute Dominant Indicator **Dominance Test Worksheet:** (Plot Size: 30'radius) % Cover Species? Status **Tree Stratum Number of Dominant Species** That Are OBL, FACW, or FAC: (A) = Total Cover **Total Number of Dominant** Species Across All Strata: (B) 3 Percent of Dominant Species That Are OBL, FACW, or FAC: (A/B) 100% **Prevalence Index Worksheet:** x 1 12 **OBL** species 12 Absolute Dominant Indicator **FACW** species 80 160 (Plot Size: 15'radius) Status x 2 **Shrub Stratum** % Cover Species? FAC species 45 15 х3 = Total Cover 5 **FACU** species x 4 20 **UPL** species 0 x 5 0 Column Totals 112 (A) 237 (B) Prevalence Index = B/A = 2.12 **Hydrophytic Vegetation Indicators:** Absolute Dominant Indicator 1- Rapid Test For Hydrophytic Vegetation **Herb Stratum** (Plot Size: 5'radius) % Cover Species? Status X 2- Dominance Test is > 50% 50 Solidago gigantea **FACW** X 3- Prevalence Index is =< 3.0 Χ Carex cristatella 30 **FACW** 4- Morphological Adaptations Scirpus atrovirens 10 OBL Geum aleppicum 10 FAC 5- Problematic Hydrophytic Vegetation Phytolacca americana 5 **FACU** Typha angustifolia 2 OBI **Definitions of Vegetation Strata:** 107 = Total Cover Tree- Woody plants 3 in. (7.6cm) or more in diameter at breast height (DBH), regardless of height. Sapling/Shrub- Woody plants less than 3 in. DBH and greater than or equal to 3.28ft (1m) tall. Herb- All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28ft tall. Absolute Dominant Indicator Woody Vines- All woody vines greater than 3.28ft in (Plot Size: 30'radius) Species? **Woody Vine Stratum** % Cover Status height. **FAC** Vitis riparia Χ 5 = Total Cover Hydrophytic Vegetation Present? Yes X No ____ Remarks: (Include photo numbers here or on a separate sheet.)

Depth Matrix Redox Features
Hydric Soil Indicators: Histosol (A1) Polyvalue Below Surface (B15) Pistic Epipedon (A2) Black Histic (A3) Loamy Mucky Mineral (F1) Straftifed Layers (A5) Depleted Below Dark Surface (A11) Redox Dark Surface (F6) Thin Dark Surface (F7) Straftifed Layers (A5) Depleted Below Dark Surface (A11) Redox Dark Surface (F6) Thin Dark Surface (S9) Thick Dark Surface (A12) Depleted Dark Surface (F7) Sandy Mucky Mineral (S1) Redox Depressions (F8) Piedmont Floodplain Soils (F19) Sandy Gleyed Matrix (S4) Sandy Redox (S5) Stripped Matrix (S6) Dark Surface (S7) Stripped Matrix (S6) Dark Surface (F7) Hydric Soil Present? Yes X No Depleted Dark Surface (F7) Piedmont Floodplain Remarks)
Histosol (A1)
Hydrogen Sulfide (A4) Stratified Layers (A5) Depleted Matrix (F3) 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 (F6) Thin Dark Surface (S9) Iron-Manganese Masses (F12) Piedmont Floodplain Soils (F19) Mesic Spodic (TA6) Red Parent Material (F21) Stripped Matrix (S6) Dark Surface (S7) Restrictive Layer (if observed): Type: Depth (inches): Hydric Soil Present? Yes X No
Thick Dark Surface (A12) Sandy Mucky Mineral (S1) Sandy Gleyed Matrix (S4) Sandy Redox (S5) Stripped Matrix (S6) Dark Surface (S7) Restrictive Layer (if observed): Type: Depleted Dark Surface (F7) Redox Depressions (F8) Piedmont Floodplain Soils (F19) Mesic Spodic (TA6) Red Parent Material (F21) Very Shallow Dark Surface (TF12) Other (Explain in Remarks) Hydric Soil Present? Yes X No Depth (inches):
Stripped Matrix (S6) Dark Surface (S7) Restrictive Layer (if observed): Type: Depth (inches): Type: Depth (inches): Very Shallow Dark Surface (TF12) Other (Explain in Remarks) Hydric Soil Present? Yes X No
Type: Hydric Soil Present? Yes X No Depth (inches):
Depth (inches):
Remarks:

Project/Site: Cider Solar Project	City/C	ounty: Elba/Genesee	Sam	pling Date: <u>7/17/2020</u>	
Applicant/Owner: Hecate			State: <u>NY</u> Sa	mpling Point:02-2020071	
Investigator(s): Justin Ahn	Section	Section, Township, Range:		'L-26-26U	
Landform (hillslope, terrace,etc.): Toeslo	oe Local relie	Local relief (concave, convex, r		Slope (%) <u>1 - 5</u>	
Subregion (LRR or MLRA): LRR L	Lat: 43.098786	Lat: 43.098786 Long: -78		Datum: NAD83	
Soil Map Unit Name: ApA			NWI Classification	on: UPL	
Are climatic / hyrologic conditions on the s	ite typical for this time of ye	ar? Yes X No	(if no, expla	in in Remarks.)	
Are Vegetation, Soil, or Hydrol	ogysignificantly distur	significantly disturbed? Are "Normal of		Circumstances" present? Yes X No	
Are Vegetation, Soil, or Hydrol	ogynaturally problem	atic? (if needed, expla	ain any answers in Re	emarks.)	
SUMMARY OF FINDINGS - Attach site	man showing sampling n	oint locations trans	sects important	features etc	
Hydrophytic Vegetation Present? Yes	No X	Is the Sampled Area			
Hydric Soil Present? Yes	No X	within a Wetland? Yes No X			
_		if yes, optional Wetla			
Wetland Hydrology Present? Yes	NoX	n yes, optional wette			
Remarks: (Explain alternative procedures here or in	a separate report.)				
HYDROLOGY					
Wetland Hydrology Indicators:		-	Secondary Indicators	(minimum of two required)	
Primary Indicators (minimum of one is require	ed: check all that apply)	ck all that apply)		Surface Soil Cracks (B6)	
Surface Water (A1)	Water-Stained Leaves	Water-Stained Leaves (B9)		Drainage Patterns (B10)	
High Water Table (A2)	Aquatic Fauna (B13)	Aquatic Fauna (B13)		Moss Trim Lines (B16)	
Saturation (A3)	Marl Deposits (B15)	Marl Deposits (B15)		Dry-Season Water Table (C2)	
Water Marks (B1)	Hydrogen Sulfide Odd	Hydrogen Sulfide Odor (C1)		Crayfish Burrows (C8)	
Sediment Deposits (B2)		Oxidized Rhizospheres on Living Roots (C3)		Saturation Visible in Aerial Imagery (C9)	
Drift Deposits (B3)		Presence of Reduced Iron (C4)		Stunted or Stressed Plants (D1)	
Algal Mat or Crust (B4)		Recent Iron Reduction in Tilled Soils (C6)		Geomorphic Position (D2)	
Iron Deposits (B5)		Thin Muck Surface (C7)		Shallow Aquitard (D3)	
Inundation Visible on Aerial Imagery (B7		Other (Explain in Remarks)		Microtopographic Relief (D4)	
		Other (Explain in Remarks)			
Sparsley Vegetated Concave Surface (B8			FAC-Neutral Te	st (D5)	
Surface Water Present? Yes No	X Depth (inches)	_			
Water Table Present? Yes No	X Depth (inches)	Wetland H	ydrology Present?	Yes No X	
Saturation Present? Yes No	X Depth (inches)	_			
Describe Recorded Data (stream gauge, m	onitoring well aerial photo	nrevious inspections	s) if available		
Tooling Hood and Tata (on earl gauge)	ormorm's many derical priores.	, p. e	,,, a raa		
Remarks:					

VEGETATION - Use scientific names of plants Sampling Point: 02-20200717-WL-26-26U Absolute Dominant Indicator **Dominance Test Worksheet:** (Plot Size: 30'radius) % Cover Species? Status **Tree Stratum Number of Dominant Species** That Are OBL, FACW, or FAC: (A) = Total Cover **Total Number of Dominant** Species Across All Strata: (B) 2 Percent of Dominant Species 50% (A/B) That Are OBL, FACW, or FAC: **Prevalence Index Worksheet:** x 1 0 **OBL** species Absolute Dominant Indicator **FACW** species 5 10 (Plot Size: 15'radius) % Cover Status x 2 **Shrub Stratum** Species? FAC species 35 105 х3 = Total Cover **FACU** species 30 x 4 120 **UPL** species 10 x 5 50 Column Totals 80 (A) 285 (B) Prevalence Index = B/A = 3.56 **Hydrophytic Vegetation Indicators:** Absolute Dominant Indicator 1- Rapid Test For Hydrophytic Vegetation **Herb Stratum** (Plot Size: 5'radius) % Cover Species? Status 2- Dominance Test is > 50% 30 Ambrosia artemisiifolia **FACU** 3- Prevalence Index is =< 3.0 20 Χ Apocynum cannabinum **FAC** 4- Morphological Adaptations Euthamia graminifolia 10 **FAC** 10 UPL Daucus carota 5- Problematic Hydrophytic Vegetation 5 FAC Geum aleppicum Agrostis gigantea 5 **FACW Definitions of Vegetation Strata:** 80 = Total Cover Tree- Woody plants 3 in. (7.6cm) or more in diameter at breast height (DBH), regardless of height. Sapling/Shrub- Woody plants less than 3 in. DBH and greater than or equal to 3.28ft (1m) tall. Herb- All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28ft tall. Absolute Dominant Indicator Woody Vines- All woody vines greater than 3.28ft in (Plot Size: 30'radius) **Woody Vine Stratum** % Cover Species? Status height. = Total Cover Hydrophytic Vegetation Present? Yes ____ No __X Remarks: (Include photo numbers here or on a separate sheet.)

SOIL Sampling Point: 02-20200717-WL-26-26U Depth Matrix **Redox Features** (inches Color % Color Texture Remarks % Type Loc 0-14 10YR 3/3 98 7.5YR 4/6 C PLSandy Loam 2 **Hydric Soil Indicators:** Indicators for Problematic Soils: Histosol (A1) Polyvalue Below Surface (B15) 2 cm Muck (A10) Histic Epipedon (A2) Thin Dark Surface (S9) Coast Prarie Redox (A16) Black Histic (A3) Loamy Mucky Mineral (F1) 5 cm Mucky Peat or Peat (S3) Hydrogen Sulfide (A4) Loamy Gleyed Matric (F2) Dark Surface (S7) Stratified Layers (A5) Depleted Matrix (F3) Polyvalue Below Surface (S8) Depleted Below Dark Surface (A11) Redox Dark Surface (F6) Thin Dark Surface (S9) Thick Dark Surface (A12) Depleted Dark Surface (F7) Iron-Manganese Masses (F12) Sandy Mucky Mineral (S1) Redox Depressions (F8) Piedmont Floodplain Soils (F19) Sandy Gleyed Matrix (S4) Mesic Spodic (TA6) Sandy Redox (S5) Red Parent Material (F21) Stripped Matrix (S6) Very Shallow Dark Surface (TF12) Dark Surface (S7) Other (Explain in Remarks) Restrictive Layer (if observed): Type: Hydric Soil Present? Yes No Χ Depth (inches): Remarks:

eID: 20200730135047

Project/Site: Cider Solar Project	City/County: Elba/Genese	e Sampling Date: 7/13/2020		
Applicant/Owner: Hecate		State: NY Sampling Point:		
Investigator(s): Justin Ahn	02-20200713-WL-14-14W			
Landform (hillslope, terrace,etc.): Depression	Local relief (concave, convex,	none): <u>Concave</u> Slope (%) <u>0 - 1</u>		
Subregion (LRR or MLRA): LRR L	Lat: 43.103305 Long:	78.188157 Datum: NAD83		
Soil Map Unit Name: OnB		NWI Classification: PFO		
Are climatic / hyrologic conditions on the site t	<u> </u>			
Are Vegetation, Soil, or Hydrology				
Are Vegetation, Soil, or Hydrology	naturally problematic? (if needed, exp	plain any answers in Remarks.)		
SUMMARY OF FINDINGS - Attach site maj	showing sampling point locations, tran	nsects, important features, etc.		
Hydrophytic Vegetation Present? Yes X	No Is the Sampled Are.			
Hydric Soil Present? Yes X	within a Wetland?	Yes X No		
Wetland Hydrology Present? Yes X		land Site ID: WL69		
Remarks: (Explain alternative procedures here or in a se	_ '''	<u> </u>		
HYDROLOGY Wetland Hydrology Indicators:		Secondary Indicators (minimum of two required)		
Primary Indicators (minimum of one is required: cl	neck all that anniv)	X Surface Soil Cracks (B6)		
Surface Water (A1)	Water-Stained Leaves (B9)	Drainage Patterns (B10)		
High Water Table (A2)	Aquatic Fauna (B13)	X Moss Trim Lines (B16)		
Saturation (A3)	Marl Deposits (B15)	Dry-Season Water Table (C2)		
X Water Marks (B1)	Hydrogen Sulfide Odor (C1)	Crayfish Burrows (C8)		
Sediment Deposits (B2)	Oxidized Rhizospheres on Living Roots (C3)	Saturation Visible in Aerial Imagery (C9)		
Drift Deposits (B3)	Presence of Reduced Iron (C4)	Stunted or Stressed Plants (D1)		
Algal Mat or Crust (B4)	Recent Iron Reduction in Tilled Soils (C6)	Geomorphic Position (D2)		
Iron Deposits (B5)	Thin Muck Surface (C7)	Shallow Aquitard (D3)		
Inundation Visible on Aerial Imagery (B7)	Other (Explain in Remarks)	Microtopographic Relief (D4)		
Sparsley Vegetated Concave Surface (B8)	Other (Explain in Nemarks)	FAC-Neutral Test (D5)		
		TAC-Neutral rest (D3)		
Surface Water Present? Yes NoX	Depth (inches)			
Water Table Present? Yes NoX	- · · · · · · · · · · · · · · · · · · ·	Hydrology Present? Yes X No		
Saturation Present? Yes No _ X	Depth (inches)			
Describe Recorded Data (stream gauge, monit	toring well, aerial photos, previous inspection	ns), if available:		
Remarks:				

VEGETATION - Use scientific names of plants

VEGETATION - Use scien	tific name:	of plants				Sampling Point: 02-20200713-WL-14	-14V		
				Dominant	Indicator	Dominance Test Worksheet:			
Tree Stratum	(Plot Size:	30'radius)	% Cover	Species?	Status	Number of Dominant Species			
Populus deltoides			30	Χ	FAC	That Are OBL, FACW, or FAC: 7 (A))		
Fraxinus pennsylvanica	1		20	X	FACW	Total Number of Dominant			
			50	_= Total Cov	ver	Species Across All Strata: 8 (B))		
						Percent of Dominant Species			
						That Are OBL, FACW, or FAC: 87.5% (A)	/B)		
						Prevalence Index Worksheet:			
						OBL species 0 x 1 0			
Shrub Stratum	(Plot Size:	15'radius)	Absolute % Cover	Dominant Species?	Indicator Status	FACW species 115 x 2 230	•		
Fraxinus pennsylvanic	a		40	Х	FACW	FAC species 110 x 3 330			
Rhamnus cathartica			20	Х	FAC	FACU species 15 x 4 60			
			60	_= Total Cov	ver .	UPL species 0 x 5 0	=		
						Column Totals 240 (A) 620	(B)		
						Prevalence Index = B/A = 2.58	. (- /		
						Trevalence mack - b/A - 2.30			
						Hydrophytic Vegetation Indicators:			
	(51 . 5)	_, ,,		Dominant		1- Rapid Test For Hydrophytic Vegetation			
Herb Stratum	(Plot Size:	5'radius)	% Cover	Species?	Status	X 2- Dominance Test is > 50%			
Microstegium vimineu			50	X	FAC	X 3- Prevalence Index is =< 3.0			
Fraxinus pennsylvanica	a		40	Х	FACW	4- Morphological Adaptations			
<u>Phalaris arundinacea</u> Ambrosia artemisiifoli	<u> </u>		<u>15</u> 10		FACW FACU				
Ambi osia ai ternisirioni	<u>a</u>		115	= Total Cov		5- Problematic Hydrophytic Vegetation			
				=		Definitions of Vegetation Strata:			
						Tree- Woody plants 3 in. (7.6cm) or more in diameter breast height (DBH), regardless of height.	at		
						Sapling/Shrub- Woody plants less than 3 in. DBH and greater than or equal to 3.28ft (1m) tall.			
						Herb- All herbaceous (non-woody) plants, regardless (size, and woody plants less than 3.28ft tall.	of		
			Absolute	Dominant	Indicator				
Woody Vine Stratum	(Plot Size:	30'radius)	% Cover	Species?	Status	Woody Vines- All woody vines greater than 3.28ft in height.			
Vitis riparia	c 1:		10	X	FAC				
Parthenocissus quinqu	ıetolia		5	X	FACU	Hydrophytic			
			15	_= Total Cov	/er	Vegetation			
						Present? Yes X No			

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

SOIL

Sampling Point: 02-20200713-WL-14-14W

							1 0		
Depth Matr	ix			Redo	ox Feature	es			
inches Color	%	Color	%	Type	Loc	Texture	Remarks		
0-6 10YR 3/2	90	7.5YR 5/8	10	С	PL	Silt Loam			
6-18 10YR 4/3	60	10YR 6/8	40	С	М	Silt Loam			
Hydric Soil Indicators:						5 ()	Indicators for Problematic Soils:		
Histosol (A1)	. (42)			-		urface (B15)	2 cm Muck (A10)		
Histic Epipedor					k Surface (Nucky Min		Coast Prarie Redox (A16) 5 cm Mucky Peat or Peat (S3)		
Black Histic (A3) Hydrogen Sulfide (A4)				-	ileyed Mat		Dark Surface (S7)		
Stratified Layers (A5)				-	d Matrix (F		Polyvalue Below Surface (S8)		
Depleted Below Dark Surface (A11)				-	ark Surfac	•	Thin Dark Surface (S9)		
Thick Dark Surface (A12)			Depleted Dark Surface (F7)				Iron-Manganese Masses (F12)		
Sandy Mucky N	-		Redox Depressions (F8)				Piedmont Floodplain Soils (F19)		
Sandy Gleyed N	-	-	nedox Depressions (i.e)			(- /	Mesic Spodic (TA6)		
 Sandy Redox (S		,					Red Parent Material (F21)		
Stripped Matrix	(S6)						Very Shallow Dark Surface (TF12)		
Dark Surface (S	7)						Other (Explain in Remarks)		
Restrictive Layer (if ol	oserved):								
, ,	Type:					Hydric	Soil Present? Yes X No		
Depth (inches):					Trydile			
Remarks:									

Project/Site: Cider Solar Project	City/County: Elba/Genese	e Sampling Date: 7/13/2020		
Applicant/Owner: Hecate		State: NY Sampling Point:02-20200713		
Investigator(s): Justin Ahn	Section, Township, Range:	WL-14-14U		
Landform (hillslope, terrace, etc.): Toeslope	Local relief (concave, convex,	none): <u>Linear</u> Slope (%) <u>1 - 5</u>		
Subregion (LRR or MLRA): LRR L	Lat: 43.103208 Long:	78.188256 Datum: NAD83		
Soil Map Unit Name: OnB		NWI Classification: UPL		
Are climatic / hyrologic conditions on the site $% \left(x\right) =\left(x\right) +\left(x\right) +\left($	typical for this time of year? Yes X No	(if no, explain in Remarks.)		
Are Vegetation, Soil, or Hydrology	significantly disturbed? Are "Normal	Circumstances" present? Yes X No		
Are Vegetation, Soil, or Hydrology	naturally problematic? (if needed, exp	plain any answers in Remarks.)		
SUMMARY OF FINDINGS - Attach site ma	p showing sampling point locations, trai	nsects, important features, etc.		
Hydrophytic Vegetation Present? Yes X				
Hydric Soil Present? Yes	No X within a Wetland?	Yes No X		
Wetland Hydrology Present? Yes	No X if yes, optional Wet			
Remarks: (Explain alternative procedures here or in a se				
nemarks. (Explain alternative procedures here of in a se	parate report.)			
HYDROLOGY				
Wetland Hydrology Indicators:		Secondary Indicators (minimum of two required)		
Primary Indicators (minimum of one is required: c	heck all that apply)	Surface Soil Cracks (B6)		
Surface Water (A1)	Water-Stained Leaves (B9)	Drainage Patterns (B10)		
High Water Table (A2)	Aquatic Fauna (B13)	Moss Trim Lines (B16)		
Saturation (A3)	Marl Deposits (B15)	Dry-Season Water Table (C2)		
Water Marks (B1)	Hydrogen Sulfide Odor (C1)	Crayfish Burrows (C8)		
Sediment Deposits (B2)	Oxidized Rhizospheres on Living Roots (C3)	Saturation Visible in Aerial Imagery (C9)		
Drift Deposits (B3)	Presence of Reduced Iron (C4)	Stunted or Stressed Plants (D1)		
Algal Mat or Crust (B4)	Recent Iron Reduction in Tilled Soils (C6)	Geomorphic Position (D2)		
Iron Deposits (B5)	Thin Muck Surface (C7)	Shallow Aquitard (D3)		
Inundation Visible on Aerial Imagery (B7)	Other (Explain in Remarks)	Microtopographic Relief (D4)		
Sparsley Vegetated Concave Surface (B8)		FAC-Neutral Test (D5)		
Surface Water Present? Yes No X	Depth (inches)			
Water Table Present? Yes No X	= ' ' 	Hydrology Present? Yes No X		
Saturation Present? Yes No X	Depth (inches)	inyurology Fresent: TesNOX		
				
Describe Recorded Data (stream gauge, moni	toring well, aerial photos, previous inspection	ns), if available:		
Remarks:				

VEGETATION - Use scientific names of plants Sampling Point: 02-20200713-WL-14-14U Absolute Dominant Indicator **Dominance Test Worksheet:** (Plot Size: 30'radius) % Cover Species? Status **Tree Stratum Number of Dominant Species** Populus deltoides Х FAC That Are OBL, FACW, or FAC: (A) 40 = Total Cover **Total Number of Dominant** Species Across All Strata: 7 (B) Percent of Dominant Species That Are OBL, FACW, or FAC: 57.1% (A/B) **Prevalence Index Worksheet:** 0 x 1 **OBL** species Absolute Dominant Indicator **FACW** species 30 x 2 60 (Plot Size: 15'radius) % Cover Species? Status **Shrub Stratum** FAC species 165 FACU 55 х3 Rubus argutus 30 Х Fraxinus pennsylvanica 20 Χ **FACW FACU** species 70 x 4 280 50 = Total Cover **UPL** species 0 x 5 0 Column Totals 155 (A) 505 (B) Prevalence Index = B/A = 3.26 **Hydrophytic Vegetation Indicators:** Absolute Dominant Indicator 1- Rapid Test For Hydrophytic Vegetation **Herb Stratum** (Plot Size: 5'radius) % Cover Species? Status X 2- Dominance Test is > 50% 10 **FACU** Solidago canadensis 3- Prevalence Index is =< 3.0 Fraxinus pennsylvanica 10 **FACW** 4- Morphological Adaptations 20 = Total Cover 5- Problematic Hydrophytic Vegetation

Absolute Dominant Indicator

Species?

Χ

Χ

= Total Cover

Status

FACU

FAC

Definitions of Vegetation Strata:

Tree- Woody plants 3 in. (7.6cm) or more in diameter at breast height (DBH), regardless of height.

Sapling/Shrub- Woody plants less than 3 in. DBH and greater than or equal to 3.28ft (1m) tall.

Herb- All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28ft tall.

Woody Vines- All woody vines greater than 3.28ft in height.

Hydrophytic
Vegetation
Present? Yes X No_____

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

Woody Vine Stratum

Vitis riparia

Parthenocissus quinquefolia

(Plot Size: 30'radius)

% Cover

30

15

45

SOIL Sampling Point: 02-20200713-WL-14-14U

OIL								Sampling Point: 02-20200713-WL-14-14
Depth	Matrix				Redo	x Featur	es	
(inches	Color	%	Color	%	Type	Loc	Texture	Remarks
0-6	10YR 3/3	95	10YR 4/6	5	С	PL	Sandy Loam	
6-16	10YR 5/3	95	10YR 4/6	5	С	PL	Sand	
	,-		, ,					
-	il Indicators:					_		Indicators for Problematic Soils:
	cosol (A1)	4.21			-		urface (B15)	2 cm Muck (A10)
	cic Epipedon (A2)				k Surface	• •	Coast Prarie Redox (A16)
Black Histic (A3) Hydrogen Sulfide (A4)			Loamy Mucky Mineral (F1) Loamy Gleyed Matric (F2)				5 cm Mucky Peat or Peat (S3) Dark Surface (S7)	
Stratified Layers (A5)			Depleted Matrix (F3)				Polyvalue Below Surface (S8)	
Depleted Below Dark Surface (A11)			Redox Dark Surface (F6)			•	Thin Dark Surface (S9)	
Thick Dark Surface (A12)			Depleted Dark Surface (F7)				Iron-Manganese Masses (F12)	
	dy Mucky Mir			Redox Depressions (F8)				Piedmont Floodplain Soils (F19)
	dy Gleyed Ma				Mesic Spodic (TA6)			Mesic Spodic (TA6)
San	dy Redox (S5)							Red Parent Material (F21)
Stri	pped Matrix (S6)						Very Shallow Dark Surface (TF12)
Dar	k Surface (S7)							Other (Explain in Remarks)
Restrictiv	e Layer (if obse	erved):						
		Type:					Hydric	Soil Present? Yes No X
	Depth (in	-					Tryune	163 NO_X_
		<u> </u>						
Remarks	::							

Project/Site: Cider Solar Project	City/County: Elba/Genese	e Sampling Date: 7/14/2020					
Applicant/Owner: Hecate		State: NY Sampling Point:					
Investigator(s): Justin Ahn	tigator(s): <u>Justin Ahn</u> Section, Township, Rang						
Landform (hillslope, terrace,etc.): Depression	Local relief (concave, convex,	none): <u>Concave</u> Slope (%) <u>0 - 1</u>					
Subregion (LRR or MLRA): LRR L	Lat: <u>43.103305</u> Long:	78.188146 Datum: <u>NAD83</u>					
Soil Map Unit Name: Wk		NWI Classification: PEM					
Are climatic / hyrologic conditions on the site t	cypical for this time of year? Yes X No	(if no, explain in Remarks.)					
Are Vegetation, Soil, or Hydrology							
Are Vegetation, Soil, or Hydrology	naturally problematic? (if needed, exp	plain any answers in Remarks.)					
SUMMARY OF FINDINGS - Attach site map	showing sampling point locations, trai	nsects, important features, etc.					
Hydrophytic Vegetation Present? Yes X							
Hydric Soil Present? Yes X	within a Wetland?	Yes X No					
Wetland Hydrology Present? Yes X		land Site ID: WL70					
Remarks: (Explain alternative procedures here or in a se		<u></u>					
HYDROLOGY							
Wetland Hydrology Indicators:		Secondary Indicators (minimum of two required)					
Primary Indicators (minimum of one is required: cl	heck all that apply)	Surface Soil Cracks (B6)					
Surface Water (A1)	Water-Stained Leaves (B9)	X Drainage Patterns (B10)					
High Water Table (A2)	Aquatic Fauna (B13)	Moss Trim Lines (B16)					
Saturation (A3)	Marl Deposits (B15)	Dry-Season Water Table (C2)					
Water Marks (B1)	Hydrogen Sulfide Odor (C1)	Crayfish Burrows (C8)					
Sediment Deposits (B2)	Oxidized Rhizospheres on Living Roots (C3)	Saturation Visible in Aerial Imagery (C9)					
Drift Deposits (B3)	Presence of Reduced Iron (C4)	Stunted or Stressed Plants (D1)					
Algal Mat or Crust (B4)	Recent Iron Reduction in Tilled Soils (C6)	X Geomorphic Position (D2)					
Iron Deposits (B5)	Thin Muck Surface (C7)	Shallow Aquitard (D3)					
Inundation Visible on Aerial Imagery (B7)	Other (Explain in Remarks)	Microtopographic Relief (D4)					
Sparsley Vegetated Concave Surface (B8)		FAC-Neutral Test (D5)					
	Depth (inches)						
	= · · · · 	Hydrology Present? Yes X No					
Water Table Present? Yes No X	- · · · · · · · —	Trydrology Fresent: Tes X No					
Saturation Present? Yes No X	Depth (inches)						
Describe Recorded Data (stream gauge, moni-	toring well, aerial photos, previous inspection	ns), if available:					
Remarks:							
- -							

VEGETATION - Use scientific names of plants Sampling Point: 02-20200714-WL-15-15W Absolute Dominant Indicator **Dominance Test Worksheet:** (Plot Size: 30'radius) % Cover Species? Status **Tree Stratum Number of Dominant Species** That Are OBL, FACW, or FAC: (A) = Total Cover **Total Number of Dominant** Species Across All Strata: (B) 5 Percent of Dominant Species (A/B) That Are OBL, FACW, or FAC: 60% **Prevalence Index Worksheet:** 30 x 1 30 **OBL** species Absolute Dominant Indicator **FACW** species 50 100 (Plot Size: 15'radius) x 2 **Shrub Stratum** % Cover Species? Status 5 **FAC** species х3 15 = Total Cover FACU species 60 x 4 240 **UPL** species 30 x 5 150 Column Totals 175 (A) 535 (B) Prevalence Index = B/A = 3.06 **Hydrophytic Vegetation Indicators:** Absolute Dominant Indicator 1- Rapid Test For Hydrophytic Vegetation **Herb Stratum** (Plot Size: 5'radius) % Cover Species? Status X 2- Dominance Test is > 50% Mentha spicata 30 Х **FACW** 3- Prevalence Index is =< 3.0 Х Asclepias incarnata 30 OBL 4- Morphological Adaptations Leucanthemum vulgare 20 Χ UPL Alliaria petiolata 20 Χ **FACU** 5- Problematic Hydrophytic Vegetation Solidago gigantea 20 Χ **FACW** Dactylis glomerata 15 **FACU Definitions of Vegetation Strata:** Cichorium intybus 15 **FACU** Tree- Woody plants 3 in. (7.6cm) or more in diameter at Cirsium arvense **FACU** breast height (DBH), regardless of height. Cirsium vulgare 5 **FACU** 5 UPL Artemisia vulgaris Sapling/Shrub- Woody plants less than 3 in. DBH and Daucus carota 5 UPL greater than or equal to 3.28ft (1m) tall. Rumex crispus 5 FAC Herb- All herbaceous (non-woody) plants, regardless of 175 = Total Cover size, and woody plants less than 3.28ft tall. Absolute Dominant Indicator Woody Vines- All woody vines greater than 3.28ft in (Plot Size: 30'radius) **Woody Vine Stratum** % Cover Species? Status height. = Total Cover Hydrophytic Vegetation Present? Yes X No ___ Remarks: (Include photo numbers here or on a separate sheet.)

SOIL

Sampling Point: 02-20200714-WL-15-15W

Depth	Matrix			Redox Features					
(inches	Color	%	Color	%	Туре	Loc	Texture	Remarks	
0-4	2.5Y 4/3	90	7.5YR 4/6	10	С	PL	Silty Clay Loam		
4-20	2.5Y 4/2	60	10YR 5/4	40	С	M	Silty Clay Loam		

Hydric Soil Indicators:		Indicators for Problematic Soils:
Histosol (A1)	Polyvalue Below Surface ((B15)2 cm Muck (A10)
Histic Epipedon (A2)	Thin Dark Surface (S9)	Coast Prarie Redox (A16)
Black Histic (A3)	Loamy Mucky Mineral (F1	L)5 cm Mucky Peat or Peat (S3)
Hydrogen Sulfide (A4)	Loamy Gleyed Matric (F2)	Dark Surface (S7)
Stratified Layers (A5)	X Depleted Matrix (F3)	Polyvalue Below Surface (S8)
Depleted Below Dark Surface (A11)	Redox Dark Surface (F6)	Thin Dark Surface (S9)
Thick Dark Surface (A12)	Depleted Dark Surface (F7	7) Iron-Manganese Masses (F12)
Sandy Mucky Mineral (S1)	Redox Depressions (F8)	Piedmont Floodplain Soils (F19)
Sandy Gleyed Matrix (S4)		Mesic Spodic (TA6)
Sandy Redox (S5)		Red Parent Material (F21)
Stripped Matrix (S6)		Very Shallow Dark Surface (TF12)
Dark Surface (S7)		Other (Explain in Remarks)
Restrictive Layer (if observed):		
Type:		
Type:		Hydric Soil Present? Yes X No
Depth (inches):		

Project/Site: Cider Solar Project	City/Co	ounty: Elba/Genesee	Sampling Date: 7/14/2020			
Applicant/Owner: Hecate		State: NY Sampling Point:02-2020 n Township Range: WL-15-15U				
Investigator(s): Justin Ahn	Sectio	Section, Township, Range:				
Landform (hillslope, terrace,etc.): Toeslop	<u>e</u> Local relie	ef (concave, convex, none): <u>Linea</u>	r Slope (%) <u>1 - 5</u>			
Subregion (LRR or MLRA): LRR L	Lat: 43.095836	Long: <u>-78.185447</u>	Datum: NAD83			
Soil Map Unit Name: Wk		NWI Class	sification: <u>UPL</u>			
Are climatic / hyrologic conditions on the si	• • • • • • • • • • • • • • • • • • • •		, explain in Remarks.)			
Are Vegetation, Soil, or Hydrolo		bed? Are "Normal Circumstance	· — —			
Are Vegetation, Soil, or Hydrolo	ogynaturally problem	atic? (if needed, explain any answe	ers in Remarks.)			
SUMMARY OF FINDINGS - Attach site n	nap showing sampling po	oint locations, transects, impo	rtant features, etc.			
Hydrophytic Vegetation Present? Yes	No X	Is the Sampled Area	,			
Hydric Soil Present? Yes	X No	within a Wetland?	Yes No X			
Wetland Hydrology Present? Yes	No X	if yes, optional Wetland Site ID:				
Remarks: (Explain alternative procedures here or in a	a separate report.)	-				
Nemarks. (Explain alternative procedures here of in a	a separate report.					
HYDROLOCY						
HYDROLOGY Wetland Hydrology Indicators:		Secondary Inc	dicators (minimum of two required)			
Primary Indicators (minimum of one is required	d: check all that apply)		Soil Cracks (B6)			
Surface Water (A1)	Water-Stained Leaves		Drainage Patterns (B10)			
High Water Table (A2)	Aquatic Fauna (B13)		Moss Trim Lines (B16)			
Saturation (A3)	Marl Deposits (B15)		Dry-Season Water Table (C2)			
Water Marks (B1)	Hydrogen Sulfide Odd		Crayfish Burrows (C8)			
Sediment Deposits (B2)	Oxidized Rhizosphere		Saturation Visible in Aerial Imagery (C9)			
						
Drift Deposits (B3)	Presence of Reduced		Stunted or Stressed Plants (D1)			
Algal Mat or Crust (B4)	Recent Iron Reduction	·	Geomorphic Position (D2)			
Iron Deposits (B5)	Thin Muck Surface (C	·	Shallow Aquitard (D3)			
Inundation Visible on Aerial Imagery (B7)		arks)Microto	Microtopographic Relief (D4)			
Sparsley Vegetated Concave Surface (B8)		FAC-Ne	utral Test (D5)			
Surface Water Present? Yes No	X Depth (inches)					
Water Table Present? Yes No	X Depth (inches)	Wetland Hydrology Pre	esent? Yes No X			
Saturation Present? Yes No	X Depth (inches)	_				
Describe Recorded Data (stream gauge, mo	onitaring wall parial photos	nrovious inspections) if available	٥٠			
Describe Recorded Data (stream gauge, mi	officoring well, derial priotos	, previous irispections), ir availabi	е.			
Remarks:						

VEGETATION - Use scientific names of plants Sampling Point: 02-20200714-WL-15-15U Absolute Dominant Indicator **Dominance Test Worksheet:** (Plot Size: 30'radius) % Cover Species? Status **Tree Stratum Number of Dominant Species** That Are OBL, FACW, or FAC: (A) = Total Cover **Total Number of Dominant** (B) Species Across All Strata: 2 Percent of Dominant Species (A/B) That Are OBL, FACW, or FAC: 0% **Prevalence Index Worksheet:** x 1 0 **OBL** species Absolute Dominant Indicator **FACW** species 0 0 (Plot Size: 15'radius) Status x 2 **Shrub Stratum** % Cover Species? 5 FAC species х3 15 = Total Cover **FACU** species 45 x 4 180 **UPL** species 90 x 5 450 Column Totals 140 (A) 645 (B) Prevalence Index = B/A = 4.61 **Hydrophytic Vegetation Indicators:** Absolute Dominant Indicator 1- Rapid Test For Hydrophytic Vegetation **Herb Stratum** (Plot Size: 5'radius) % Cover Species? Status 2- Dominance Test is > 50% 60 UPL Zea mays 3- Prevalence Index is =< 3.0 25 Χ Abutilon theophrasti **FACU** 4- Morphological Adaptations Alliaria petiolata 20 **FACU** Daucus carota 10 UPL 5- Problematic Hydrophytic Vegetation 10 UPL Asclepias syriaca Leucanthemum vulgare 10 UPL **Definitions of Vegetation Strata:** FAC Rumex crispus 5 Tree- Woody plants 3 in. (7.6cm) or more in diameter at 140 = Total Cover breast height (DBH), regardless of height. Sapling/Shrub- Woody plants less than 3 in. DBH and greater than or equal to 3.28ft (1m) tall. Herb- All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28ft tall. Absolute Dominant Indicator Woody Vines- All woody vines greater than 3.28ft in (Plot Size: 30'radius) **Woody Vine Stratum** % Cover Species? Status height. = Total Cover Hydrophytic Vegetation Present? Yes ____ No __X Remarks: (Include photo numbers here or on a separate sheet.)

OIL								Sampling Point: 02-20200714-WL-15-15 U
Depth Matrix					Redo	x Featu	res	
(inches	Color	%	Color	%	Type	Loc	Texture	Remarks
0-10	10YR 4/2	95	7.5YR 5/8	5	С	PL	Silty Clay Loam	
Hydric Sc	oil Indicators:							Indicators for Problematic Soils:
His	tosol (A1)				Polyvalu	e Below	Surface (B15)	2 cm Muck (A10)
His	tic Epipedon (A2)			Thin Dar	k Surface	e (S9)	Coast Prarie Redox (A16)
Bla	ck Histic (A3)				Loamy N	lucky Mi	neral (F1)	5 cm Mucky Peat or Peat (S3)
Hydrogen Sulfide (A4)					Loamy G	leyed Ma	atric (F2)	Dark Surface (S7)
Stratified Layers (A5)			Χ	Depleted	d Matrix	(F3)	Polyvalue Below Surface (S8)	
Depleted Below Dark Surface (A11)				Redox D	ark Surfa	ce (F6)	Thin Dark Surface (S9)	
Thi	ck Dark Surfac	e (A12)		Depleted	d Dark Su	rface (F7)	Iron-Manganese Masses (F12)
San	ndy Mucky Mir	neral (S	51)	Redox Depressions (F8)				Piedmont Floodplain Soils (F19)
San	ndy Gleyed Ma	itrix (S4	4)					Mesic Spodic (TA6)
San	ndy Redox (S5)							Red Parent Material (F21)
Stri	ipped Matrix (S6)						Very Shallow Dark Surface (TF12)
Dar	rk Surface (S7)							Other (Explain in Remarks)
Restrictiv	ve Layer (if obs	erved):						
		Type:	Rock				Hydric	Soil Present? Yes X No
	Depth (in	ches):	10	_				· · · · · · · · · · · · · · · · · · ·
Remarks	s:							

Project/Site: Cider Solar Project	City/County: Elba/Genese	e Sampling Date: 7/14/2020					
Applicant/Owner: Hecate		State: NY Sampling Point:					
Investigator(s): Justin Ahn	igator(s): <u>Justin Ahn</u> Section, Township, Rang						
Landform (hillslope, terrace,etc.): Depression	Local relief (concave, convex, r	none): <u>Concave</u> Slope (%) <u>0 - 1</u>					
Subregion (LRR or MLRA): LRR L	Lat: 43.103576 Long:7	78.164104 Datum: NAD83					
Soil Map Unit Name: ApA		NWI Classification: PFO					
Are climatic / hyrologic conditions on the site typic	cal for this time of year? Yes X No	(if no, explain in Remarks.)					
Are Vegetation, Soil, or Hydrology	significantly disturbed? Are "Normal of the control	Circumstances" present? Yes X No					
Are Vegetation, Soil, or Hydrology	naturally problematic? (if needed, exp	lain any answers in Remarks.)					
SUMMARY OF FINDINGS - Attach site map sh	nowing sampling point locations, tran	sects. important features. etc.					
	No Is the Sampled Area	-					
	No within a Wetland?	Yes X No					
· —		land Site ID: WL71					
		Alia Site ID. VVE/ I					
Remarks: (Explain alternative procedures here or in a separat	te report.)						
HYDROLOGY							
Wetland Hydrology Indicators:		Secondary Indicators (minimum of two required)					
Primary Indicators (minimum of one is required: check	call that apply)	X Surface Soil Cracks (B6)					
X Surface Water (A1) X	Water-Stained Leaves (B9)	X Drainage Patterns (B10)					
High Water Table (A2)	_ Aquatic Fauna (B13)	X Moss Trim Lines (B16)					
Saturation (A3)	Marl Deposits (B15)	Dry-Season Water Table (C2)					
Water Marks (B1)	— Hydrogen Sulfide Odor (C1)	Crayfish Burrows (C8)					
Sediment Deposits (B2)	Oxidized Rhizospheres on Living Roots (C3)	Saturation Visible in Aerial Imagery (C9)					
Drift Deposits (B3)	Presence of Reduced Iron (C4)	Stunted or Stressed Plants (D1)					
Algal Mat or Crust (B4)	Recent Iron Reduction in Tilled Soils (C6)	Geomorphic Position (D2)					
Iron Deposits (B5)	Thin Muck Surface (C7)	Shallow Aquitard (D3)					
Inundation Visible on Aerial Imagery (B7)	Other (Explain in Remarks)						
	Other (Explain in Kemarks)						
Sparsley Vegetated Concave Surface (B8)		FAC-Neutral Test (D5)					
Surface Water Present? Yes X No D	Pepth (inches) 5						
Water Table Present? Yes No _X _ D	Pepth (inches) Wetland F	Hydrology Present? Yes X No					
Saturation Present? Yes No X D	Pepth (inches)						
Describe Recorded Data (stream gauge, monitori	ng well, aerial photos, previous inspection	ns). if available:					
,	0 - ,						
Remarks:							

VEGETATION - Use scientific names of plants Sampling Point: 02-20200714-WL-16-16W Absolute Dominant Indicator **Dominance Test Worksheet:** (Plot Size: 30'radius) % Cover Species? Status **Tree Stratum Number of Dominant Species** 40 Х FAC That Are OBL, FACW, or FAC: (A) Acer rubrum Fagus grandifolia 30 Χ FACU **Total Number of Dominant** 70 = Total Cover Species Across All Strata: (B) 7 Percent of Dominant Species That Are OBL, FACW, or FAC: 57.1% (A/B) **Prevalence Index Worksheet:** 10 x 1 10 **OBL** species Absolute Dominant Indicator **FACW** species 17 34 (Plot Size: 15'radius) x 2 **Shrub Stratum** % Cover Species? Status **FAC** species 195 65 х3 = Total Cover **FACU** species 55 x 4 220 **UPL** species 0 x 5 0 Column Totals 147 (A) 459 (B) Prevalence Index = B/A = 3.12 **Hydrophytic Vegetation Indicators:** Absolute Dominant Indicator 1- Rapid Test For Hydrophytic Vegetation **Herb Stratum** (Plot Size: 5'radius) % Cover Species? Status X 2- Dominance Test is > 50% 10 Boehmeria cylindrica Х OBL 3- Prevalence Index is =< 3.0 Х Persicaria virginiana 10 **FAC** 4- Morphological Adaptations 10 Χ **FACU** Alliaria petiolata Leersia virginica 10 Χ **FACW** 5- Problematic Hydrophytic Vegetation Toxicodendron radicans 5 FAC Arisaema triphyllum 5 FAC **Definitions of Vegetation Strata:** FAC Acer rubrum Tree- Woody plants 3 in. (7.6cm) or more in diameter at Impatiens capensis **FACW** breast height (DBH), regardless of height. 5 **FACU** Fagus grandifolia 2 Onoclea sensibilis **FACW** Sapling/Shrub- Woody plants less than 3 in. DBH and 67 = Total Cover greater than or equal to 3.28ft (1m) tall. Herb- All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28ft tall. Absolute Dominant Indicator Woody Vines- All woody vines greater than 3.28ft in (Plot Size: 30'radius) Species? **Woody Vine Stratum** % Cover Status height. Parthenocissus quinquefolia FACU 10 Χ 10 = Total Cover Hydrophytic Vegetation

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

Present? Yes X No ___

SOIL

Sampling Point: 02-20200714-WL-16-16W

Depth	Matrix				Redo	ox Featu	res	
(inches	Color	%	Color	%	Type	Loc	Texture	Remarks
0-14	10YR 2/1	95	7.5YR 4/6	5	С	PL	Silty Clay Loam	
14-20	10YR 5/4	100					Silty Clay Loam	
Hydric So	oil Indicators:							Indicators for Problematic Soils:
•	tosol (A1)				Polyvalu	e Below	Surface (B15)	2 cm Muck (A10)
	tic Epipedon (A2)			•	k Surface	•	Coast Prarie Redox (A16)
	ck Histic (A3)	-			Loamy N	Лucky Mi	neral (F1)	5 cm Mucky Peat or Peat (S3)
Hydrogen Sulfide (A4)					Loamy G	Sleyed Ma	atric (F2)	Dark Surface (S7)
Stratified Layers (A5)				Depleted	d Matrix	(F3)	Polyvalue Below Surface (S8)	
Depleted Below Dark Surface (A11)			rface (A11)	Χ	Redox D	ark Surfa	ce (F6)	Thin Dark Surface (S9)
Thick Dark Surface (A12)					Depleted	d Dark Su	ırface (F7)	Iron-Manganese Masses (F12)
San	idy Mucky Mii	neral (S	1)		Redox D	epression	ns (F8)	Piedmont Floodplain Soils (F19)
San	idy Gleyed Ma	atrix (S4)					Mesic Spodic (TA6)
San	idy Redox (S5))						Red Parent Material (F21)
Stri	pped Matrix (S6)						Very Shallow Dark Surface (TF12)
Dar	k Surface (S7)						Other (Explain in Remarks)	
Restrictiv	ve Layer (if obs	erved):						
		Type:					Lludria C	oil Drosont? Vos. V. No.
	Depth (in	_					Hydric S	oil Present? Yes X No
	Deptii (iii	-						
Remarks	5:						·	

Project/Site: Cider Solar Project	City/County: Elba/Genese	e Sampling Date: 7/14/2020		
Applicant/Owner: Hecate		State: NY Sampling Point:02-20200714		
Investigator(s): Justin Ahn	Section, Township, Range:	WL-16-16U		
Landform (hillslope, terrace,etc.): Toeslope	Local relief (concave, convex,	none): Linear Slope (%) 1 - 5		
Subregion (LRR or MLRA): LRR L	Lat: 43.103463 Long:	78.164127 Datum: NAD83		
Soil Map Unit Name: ApA		NWI Classification: UPL		
Are climatic / hyrologic conditions on the site	typical for this time of year? Yes X No	(if no, explain in Remarks.)		
Are Vegetation, Soil, or Hydrology	/significantly disturbed? Are "Normal	Circumstances" present? Yes X No		
Are Vegetation, Soil, or Hydrology	naturally problematic? (if needed, exp	plain any answers in Remarks.)		
SUMMARY OF FINDINGS - Attach site ma	n showing sampling point locations, trai	sects important features, etc.		
Hydrophytic Vegetation Present? Yes				
Hydric Soil Present? Yes	No X within a Wetland?	Yes No X		
Wetland Hydrology Present? Yes				
Remarks: (Explain alternative procedures here or in a se	eparate report.)			
HYDROLOGY				
Wetland Hydrology Indicators:		Secondary Indicators (minimum of two required)		
Primary Indicators (minimum of one is required:	check all that apply)	Surface Soil Cracks (B6)		
Surface Water (A1)	Water-Stained Leaves (B9)	Drainage Patterns (B10)		
High Water Table (A2)	Aquatic Fauna (B13)	Moss Trim Lines (B16)		
Saturation (A3)	Marl Deposits (B15)	Dry-Season Water Table (C2)		
Water Marks (B1)	Hydrogen Sulfide Odor (C1)	Crayfish Burrows (C8)		
Sediment Deposits (B2)	Oxidized Rhizospheres on Living Roots (C3)	Saturation Visible in Aerial Imagery (C9)		
Drift Deposits (B3)	Presence of Reduced Iron (C4)	Stunted or Stressed Plants (D1)		
Algal Mat or Crust (B4)	Recent Iron Reduction in Tilled Soils (C6)	Geomorphic Position (D2)		
Iron Deposits (B5)	Thin Muck Surface (C7)	Shallow Aquitard (D3)		
Inundation Visible on Aerial Imagery (B7)		Microtopographic Relief (D4)		
	Other (Explain in Remarks)			
Sparsley Vegetated Concave Surface (B8)		FAC-Neutral Test (D5)		
Surface Water Present? Yes NoX	Depth (inches)			
Water Table Present? Yes No X	Depth (inches) Wetland	Hydrology Present? Yes No X		
Saturation Present? Yes No X	Depth (inches)			
Describe Recorded Data (stream gauge, mon	itoring well, aerial photos, previous inspection	ns), if available:		
2 000 100 11000 1000 2000 (00 00 110 110 00 1				
Remarks:				

VEGETATION - Use scientific names of plants Sampling Point: 02-20200714-WL-16-16U Absolute Dominant Indicator **Dominance Test Worksheet:** (Plot Size: 30'radius) % Cover Species? Status **Tree Stratum Number of Dominant Species** 40 Х FAC That Are OBL, FACW, or FAC: (A) Acer rubrum Fagus grandifolia 30 Χ **FACU Total Number of Dominant** 70 = Total Cover (B) Species Across All Strata: 5 Percent of Dominant Species (A/B) That Are OBL, FACW, or FAC: 60% **Prevalence Index Worksheet:** 0 x 1 **OBL** species Absolute Dominant Indicator **FACW** species 10 20 (Plot Size: 15'radius) % Cover Status x 2 **Shrub Stratum** Species? **FAC** species 255 85 х3 = Total Cover **FACU** species 75 x 4 300 **UPL** species 0 x 5 0 Column Totals 170 (A) 575 (B) Prevalence Index = B/A = 3.38 **Hydrophytic Vegetation Indicators:** Absolute Dominant Indicator 1- Rapid Test For Hydrophytic Vegetation **Herb Stratum** (Plot Size: 5'radius) % Cover Species? Status X 2- Dominance Test is > 50% 40 **FACU** Alliaria petiolata 3- Prevalence Index is =< 3.0 FAC 30 Χ Menispermum canadense 4- Morphological Adaptations Phalaris arundinacea 10 **FACW** Oxalis corniculata 5 **FACU** 5- Problematic Hydrophytic Vegetation 85 = Total Cover **Definitions of Vegetation Strata:** Tree- Woody plants 3 in. (7.6cm) or more in diameter at breast height (DBH), regardless of height. Sapling/Shrub- Woody plants less than 3 in. DBH and greater than or equal to 3.28ft (1m) tall. Herb- All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28ft tall. Absolute Dominant Indicator Woody Vines- All woody vines greater than 3.28ft in (Plot Size: 30'radius) Species? **Woody Vine Stratum** % Cover Status height. **FAC** Vitis riparia 15 Χ 15 = Total Cover Hydrophytic Vegetation Present? Yes X No ___

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

SOIL Sampling Point: Upland-WL71 Depth Matrix **Redox Features** (inches % Color Color % Type Texture Remarks Loc 0-10 10YR 4/3 100 Silt Loam **Hydric Soil Indicators:** Indicators for Problematic Soils: Histosol (A1) Polyvalue Below Surface (B15) 2 cm Muck (A10) Histic Epipedon (A2) Thin Dark Surface (S9) Coast Prarie Redox (A16) Black Histic (A3) Loamy Mucky Mineral (F1) 5 cm Mucky Peat or Peat (S3) Hydrogen Sulfide (A4) Loamy Gleyed Matric (F2) Dark Surface (S7) Stratified Layers (A5) Depleted Matrix (F3) Polyvalue Below Surface (S8) Depleted Below Dark Surface (A11) Redox Dark Surface (F6) Thin Dark Surface (S9) Thick Dark Surface (A12) Depleted Dark Surface (F7) Iron-Manganese Masses (F12) Sandy Mucky Mineral (S1) Redox Depressions (F8) Piedmont Floodplain Soils (F19) Sandy Gleyed Matrix (S4) Mesic Spodic (TA6) Sandy Redox (S5) Red Parent Material (F21) Stripped Matrix (S6) Very Shallow Dark Surface (TF12) Dark Surface (S7) Other (Explain in Remarks) Restrictive Layer (if observed): Type: Rock Hydric Soil Present? Yes No Χ Depth (inches): 10 Remarks:

Project/Site: Cider Solar Project	City/County: Elba/Genesee Sampling Date: 7/14/2020				
Applicant/Owner: Hecate	State: NY Sampling Point:				
Investigator(s): Justin Ahn	Section, Township, Range: 02-20200714-WL-17-17W				
Landform (hillslope, terrace,etc.): Depression Lo	cal relief (concave, convex, none): <u>Concave</u> Slope (%) <u>0 - 1</u>				
Subregion (LRR or MLRA): LRR L Lat: 43.10	00398 Long: <u>-78.157093</u> Datum: <u>NAD83</u>				
Soil Map Unit Name: OnB	NWI Classification: PFO				
Are climatic / hyrologic conditions on the site typical for this time	e of year? Yes X No (if no, explain in Remarks.)				
Are Vegetation, Soil, or Hydrologysignificantle	y disturbed? Are "Normal Circumstances" present? Yes X No				
Are Vegetation, Soil, or Hydrologynaturally p	roblematic? (if needed, explain any answers in Remarks.)				
SUMMARY OF FINDINGS - Attach site map showing samp	oling point locations, transects, important features, etc.				
Hydrophytic Vegetation Present? Yes X No	Is the Sampled Area				
Hydric Soil Present? Yes X No	within a Wetland? Yes X No				
	if yes, optional Wetland Site ID: WL72				
Wetland Hydrology Present? Yes X No	WETZ				
Remarks: (Explain alternative procedures here or in a separate report.)					
HYDROLOGY					
Wetland Hydrology Indicators:	Secondary Indicators (minimum of two required)				
Primary Indicators (minimum of one is required: check all that apply)	Surface Soil Cracks (B6)				
X Surface Water (A1) Water-Stained					
High Water Table (A2) X Aquatic Fauna	Moss Trim Lines (B16)				
Saturation (A3) Marl Deposits	(B15) Dry-Season Water Table (C2)				
Water Marks (B1) Hydrogen Sul	fide Odor (C1) X Crayfish Burrows (C8)				
Sediment Deposits (B2) Oxidized Rhiz	ospheres on Living Roots (C3) Saturation Visible in Aerial Imagery (C9)				
Drift Deposits (B3) Presence of R	educed Iron (C4) Stunted or Stressed Plants (D1)				
Algal Mat or Crust (B4) Recent Iron R	eduction in Tilled Soils (C6) Geomorphic Position (D2)				
Iron Deposits (B5) Thin Muck Su	rface (C7) Shallow Aquitard (D3)				
Inundation Visible on Aerial Imagery (B7) Other (Explain	n in Remarks) Microtopographic Relief (D4)				
Sparsley Vegetated Concave Surface (B8)	FAC-Neutral Test (D5)				
Surface Water Present? Yes X No Depth (inches)	2				
Water Table Present? Yes No X Depth (inches)	Wetland Hydrology Present? Yes X No				
Saturation Present? Yes No X Depth (inches)	Wedana nyarology resent: Tes ne				
Describe Recorded Data (stream gauge, monitoring well, aerial	photos, previous inspections), if available:				
Remarks:					

VEGETATION - Use scientific names of plants Sampling Point: 02-20200714-WL-17-17W Absolute Dominant Indicator **Dominance Test Worksheet:** (Plot Size: 30'radius) **Tree Stratum** % Cover Species? Status **Number of Dominant Species** Χ **FACW** That Are OBL, FACW, or FAC: (A) Fraxinus pennsylvanica 40 = Total Cover **Total Number of Dominant** Species Across All Strata: (B) 6 Percent of Dominant Species That Are OBL, FACW, or FAC: 66.7% (A/B) **Prevalence Index Worksheet:** 50 x 1 50 **OBL** species Absolute Dominant Indicator **FACW** species 65 130 (Plot Size: 15'radius) % Cover Species? Status x 2 **Shrub Stratum FAC** species 30 90 х3 Rhamnus cathartica 30 Χ **FAC** Lonicera tatarica 20 Χ FACU **FACU** species 50 x 4 200 50 = Total Cover **UPL** species 0 x 5 0 (A) Column Totals 195 470 (B)

Absolute Dominant Indicator

Species?

= Total Cover

Status

Herb Stratum	(Plot Size:	5'radius)	Absolute % Cover	Dominant Species?	Indicator Status
Polygonum aviculare			30	Χ	FACU
Typha angustifolia			20	Χ	OBL
Alisma subcordatum			20	Χ	OBL
Carex intumescens			10		FACW
Iris versicolor			10		OBL
Symphyotrichum lance	eolatum		10		FACW
Impatiens capensis			5		FACW
			105	_= Total Cov	rer

(Plot Size: 30'radius)

Hydrophytic Vegetation Indicators:									
	1- Rapid Test For Hydrophytic Vegetation								
Χ	_2- Dominance Test is > 50%								
Χ	_3- Prevalence Index is =< 3.0								
	4- Morphological Adaptations								
	5- Problematic Hydrophytic Vegetation								

2.41

Prevalence Index = B/A =

Definitions of Vegetation Strata: Tree- Woody plants 3 in. (7.6cm) or more in diameter at breast height (DBH), regardless of height. Sapling/Shrub- Woody plants less than 3 in. DBH and greater than or equal to 3.28ft (1m) tall. Herb- All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28ft tall.

Woody Vines- All woody vines greater than 3.28ft in height.

Hydrophytic

Vegetation

Present? Yes X No _____

eID: 20200730080528

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

Woody Vine Stratum

% Cover

SOIL Sampling Point: 02-20200714-WL-17-17W

Depth	•			Redo	x Featu	res				
inches	Color	lor % Color % Type Loc Texture		Texture	Remarks					
0-4	10YR 4/2	100					Silty Clay Loam			
4-20	10YR 4/2	80	2.5Y 3/6	20	С	М	Silty Clay Loam			
-	oil Indicators:					- 1		Indicators for Problematic Soils:		
	Histosol (A1)				-		Surface (B15)	2 cm Muck (A10)		
Histic Epipedon (A2)						k Surface	• •	Coast Prarie Redox (A16)		
	ck Histic (A3)	(0.4)			•	lucky Mir	` ,	5 cm Mucky Peat or Peat (S3)		
	drogen Sulfide	. ,			-	leyed Ma		Dark Surface (S7)		
	atified Layers		-f (A44)		-	d Matrix (•	Polyvalue Below Surface (S8)		
	oleted Below I					ark Surfa		Thin Dark Surface (S9)		
	ck Dark Surfac			Depleted Dark Surface (F7) Redox Depressions (F8)				Iron-Manganese Masses (F12)		
	idy Mucky Mii				Kedox D	epression	S (F8)	Piedmont Floodplain Soils (F19)		
	idy Gleyed Ma	-)					Mesic Spodic (TA6)		
	idy Redox (S5)							Red Parent Material (F21)		
	pped Matrix (·k Surface (S7)	•						Very Shallow Dark Surface (TF12) Other (Explain in Remarks)		
Dai	K Surface (37)							Other (Explain in Remarks)		
Restrictiv	ve Layer (if obs	erved):								
		Type:					Hydric	Soil Present? Yes X No		
	Depth (in	_					riyuric			
	Deptil (III	_								
Remarks										

Project/Site: Cider Solar Project	City/County: Elba/Genese	e Sampling Date: 7/14/2020				
Applicant/Owner: Hecate	State: NY Sampling Point:					
Investigator(s): Justin Ahn	Section, Township, Range:	02-20200714-WL-17-17U				
Landform (hillslope, terrace,etc.): Toeslope	Local relief (concave, convex, r	none): <u>Linear</u> Slope (%) <u>1 - 5</u>				
Subregion (LRR or MLRA): LRR L	Lat: <u>43.100520</u> Long: <u>-7</u>	78.157136 Datum: <u>NAD83</u>				
Soil Map Unit Name: OnB		NWI Classification: UPL				
Are climatic / hyrologic conditions on the site \ensuremath{t}	ypical for this time of year? Yes X No	(if no, explain in Remarks.)				
Are Vegetation, Soil, or Hydrology		· — — — — — — — — — — — — — — — — — — —				
Are Vegetation, Soil, or Hydrology	naturally problematic? (if needed, exp	lain any answers in Remarks.)				
SUMMARY OF FINDINGS - Attach site map	showing sampling point locations, tran	sects, important features, etc.				
Hydrophytic Vegetation Present? Yes	No X Is the Sampled Area	-				
	within a Wetland?	Yes No X				
Hydric Soil Present? Yes	NOX					
Wetland Hydrology Present? Yes	No X if yes, optional Wetl	and Site ID:				
Remarks: (Explain alternative procedures here or in a sep	parate report.)					
HYDROLOGY						
Wetland Hydrology Indicators:		Secondary Indicators (minimum of two required)				
Primary Indicators (minimum of one is required: ch	neck all that apply)	Surface Soil Cracks (B6)				
Surface Water (A1)	Water-Stained Leaves (B9)	Drainage Patterns (B10)				
High Water Table (A2)	Aquatic Fauna (B13)	Moss Trim Lines (B16)				
Saturation (A3)	Marl Deposits (B15)	Dry-Season Water Table (C2)				
Water Marks (B1)	Hydrogen Sulfide Odor (C1)	Crayfish Burrows (C8)				
Sediment Deposits (B2)	Oxidized Rhizospheres on Living Roots (C3)	Saturation Visible in Aerial Imagery (C9)				
Drift Deposits (B3)	Presence of Reduced Iron (C4)	Stunted or Stressed Plants (D1)				
Algal Mat or Crust (B4)	Recent Iron Reduction in Tilled Soils (C6)	Geomorphic Position (D2)				
Iron Deposits (B5)	Thin Muck Surface (C7)	Shallow Aquitard (D3)				
Inundation Visible on Aerial Imagery (B7)	Other (Explain in Remarks)	Microtopographic Relief (D4)				
	Other (Explain in Nemarks)					
Sparsley Vegetated Concave Surface (B8)		FAC-Neutral Test (D5)				
Surface Water Present? Yes NoX	Depth (inches)					
Water Table Present? Yes No _ X	Depth (inches) Wetland H	lydrology Present? Yes No X				
Saturation Present? Yes No X	Depth (inches)					
Describe Recorded Data (stream gauge, monit	oring well, aerial photos, previous inspection	s), if available:				
Remarks:						

VEGETATION - Use scient	tific names	of plants				Sampli	ng Point: ເ	2-20	200714-W	L-17-17
Tree Stratum	(Plot Size:	30'radius)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test V Number of Domi		ıç		
Juglans nigra			40	Χ	FACU	That Are OBL, FA	•		3	(A)
Fraxinus pennsylvanica			20	X	FACW	Total Numbe	-	-		-` ′
			60	= Total Cov	er		ross All Stra		7	(B)
						Percent of Don That Are OBL,	-		42.9%	(A/B)
						Prevalence Index \	Worksheet:			
			A booksto	Dominant	Indicator	OBL species	0	x 1	0	
Shrub Stratum	(Plot Size:	15'radius)	% Cover	Species?	Status	FACW species	20	x 2	40	
Lonicera tatarica			25	Χ	FACU	FAC species	30	x 3	90	
			25	_= Total Cov	er	FACU species	115	x 4	460	
						UPL species	30	x 5	150	
						Column Totals	195	(A)	740	(B
						Prevalenc	e Index = B/	/A =	3.79	
						Hydrophytic Vege	tation Indic	ator	s:	
			Absolute	Dominant	Indicator	1- Rapid Tes	t For Hydro	phyt	ic Vegetat	tion
Herb Stratum	(Plot Size:	5'radius)	% Cover	Species?	Status	2- Dominano	ce Test is > !	50%		
Zea mays			30	X	UPL	3- Prevalenc	e Index is =	< 3.0		
Symphoricarpos orbicu Toxicodendron radican			<u>30</u> 20	X	FACU FAC	4- Morpholo	ogical Adapt	ation	าร	
Allium vineale	. <u>. </u>		15	Λ	FACU	5- Problema	-			'n
Polygonum aviculare			5		FACU	5- Problema	uc nyuropr	iytic	vegetatio	П
			100	_= Total Cov	er	Definitions of Vegeta	ation Strata:			
						Tree- Woody plants 3 breast height (DBH),				eter at
						Sapling/Shrub- Wood greater than or equa				and
						Herb- All herbaceous size, and woody plan			_	ess of
Woody Vine Stratum	(Plot Size:	30'radius)	Absolute % Cover	Dominant Species?	Indicator Status	Woody Vines- All wo height.	ody vines gre	eater	than 3.28ft	t in
Vitis riparia			10	Χ	FAC					
			10	_= Total Cov	er	Hydropl Vegeta Pres	-		No X	

SOIL Sampling Point: 02-20200714-WL-17-17U Depth Matrix **Redox Features** (inches % Color Color % Type Texture Remarks Loc 0-8 10YR 4/3 100 Silty Clay Loam **Hydric Soil Indicators:** Indicators for Problematic Soils: Histosol (A1) Polyvalue Below Surface (B15) 2 cm Muck (A10) Histic Epipedon (A2) Thin Dark Surface (S9) Coast Prarie Redox (A16) Black Histic (A3) Loamy Mucky Mineral (F1) 5 cm Mucky Peat or Peat (S3) Hydrogen Sulfide (A4) Loamy Gleyed Matric (F2) Dark Surface (S7) Stratified Layers (A5) Depleted Matrix (F3) Polyvalue Below Surface (S8) Depleted Below Dark Surface (A11) Redox Dark Surface (F6) Thin Dark Surface (S9) Thick Dark Surface (A12) Depleted Dark Surface (F7) Iron-Manganese Masses (F12) Sandy Mucky Mineral (S1) Redox Depressions (F8) Piedmont Floodplain Soils (F19) Sandy Gleyed Matrix (S4) Mesic Spodic (TA6) Sandy Redox (S5) Red Parent Material (F21) Stripped Matrix (S6) Very Shallow Dark Surface (TF12) Dark Surface (S7) Other (Explain in Remarks) Restrictive Layer (if observed): Type: Gravel Fill Hydric Soil Present? Yes No Χ Depth (inches): 8 Remarks:

Project/Site: Cider Solar Project	City/County: Elba/Genese	e Sampling Date: 7/15/2020				
Applicant/Owner: Hecate	State: NY Sampling Point:					
Investigator(s): Justin Ahn	Section, Township, Range: 02-20200715-WL-18-18					
Landform (hillslope, terrace,etc.): Depression	Local relief (concave, convex,	none): <u>Concave</u> Slope (%) <u>0 - 1</u>				
Subregion (LRR or MLRA): LRR L	Lat: 43.100407 Long: -	78.157104 Datum: NAD83				
Soil Map Unit Name: CaA		NWI Classification: PFO				
Are climatic / hyrologic conditions on the site t	<u> </u>					
Are Vegetation, Soil, or Hydrology		· — · — · — — · — — · — · — · — · — · —				
Are Vegetation, Soil, or Hydrology	naturally problematic? (if needed, exp	olain any answers in Remarks.)				
SUMMARY OF FINDINGS - Attach site maj	showing sampling point locations, tran	nsects, important features, etc.				
Hydrophytic Vegetation Present? Yes X	No Is the Sampled Area					
Hydric Soil Present? Yes X	No within a Wetland?	Yes X No				
Wetland Hydrology Present? Yes X	No if yes, optional Wet	land Site ID: WL73				
Remarks: (Explain alternative procedures here or in a se						
HYDROLOGY						
Wetland Hydrology Indicators:		Secondary Indicators (minimum of two required)				
Primary Indicators (minimum of one is required: cl	neck all that apply)	Surface Soil Cracks (B6)				
Surface Water (A1)	Water-Stained Leaves (B9)	X Drainage Patterns (B10)				
High Water Table (A2)	Aquatic Fauna (B13)	X Moss Trim Lines (B16)				
Saturation (A3)	Marl Deposits (B15)	Dry-Season Water Table (C2)				
Water Marks (B1)	Hydrogen Sulfide Odor (C1)	Crayfish Burrows (C8)				
Sediment Deposits (B2)	Oxidized Rhizospheres on Living Roots (C3)	Saturation Visible in Aerial Imagery (C9)				
Drift Deposits (B3)	Presence of Reduced Iron (C4)	Stunted or Stressed Plants (D1)				
Algal Mat or Crust (B4)	Recent Iron Reduction in Tilled Soils (C6)	Geomorphic Position (D2)				
Iron Deposits (B5)	Thin Muck Surface (C7)	Shallow Aquitard (D3)				
Inundation Visible on Aerial Imagery (B7)	Other (Explain in Remarks)	Microtopographic Relief (D4)				
Sparsley Vegetated Concave Surface (B8)		FAC-Neutral Test (D5)				
Surface Water Present? Yes No X	Depth (inches)	<u> </u>				
Water Table Present? Yes No X	= ' ' 	Hydrology Present? Yes X No				
Saturation Present? Yes No X	Depth (inches)	Tyurology Fresent: Tes_X_NO				
Describe Recorded Data (stream gauge, monit		ns) if available:				
Remarks:						

VEGETATION - Use scientific names of plants

/EGETATION - Use scier		•	Absolute	Dominant	Indicator		ing Point:			
Tree Stratum	(Dlot Size:	30'radius)	% Cover	Species?	Status	Dominance Test \	Norkshee [®]	t:		
	(1 100 3126.			-		Number of Dom	•		_	
Acer saccharinum			40	X	FACW	That Are OBL, F	ACW, or FA	AC: _	6	(A)
Fraxinus pennsylvanica	3		40	X	FACW	Total Numbe	er of Domi	nant		
Populus deltoides			20	X	FAC	Species Ac	cross All St	rata:	11	(B)
			100	_= Total Cov	/er	Percent of Dor	minant Spe	ecies		
						That Are OBL,	FACW, or	FAC:	54.5%	(A/B)
								_		_
						Prevalence Index	Workshee	t:		
			Absolute	Dominant	Indicator	OBL species	5	_ x 1	5	
Shrub Stratum	(Plot Size:	15'radius)	% Cover	Species?	Status	FACW species	145	_ x 2	290	
Fraxinus pennsylvanic	a		30	Х	FACW	FAC species	65	х 3	195	
Rosa multiflora			10	Χ	FACU	FACU species	105	x 4	420	
Lonicera tatarica			10	Х	FACU	UPL species	0	x 5	0	
			50	_= Total Cov	/er					
						Column Totals	320	(A)	910	(B)
						Prevalend	ce Index =	B/A = _	2.84	
						Hydrophytic Vege	etation Inc	licator	s:	
			Absolute	Dominant	Indicator	1- Rapid Tes				tion
Herb Stratum	(Plot Size:	5'radius)	% Cover	Species?	Status		•		ic vegetai	cion
Alliaria petiolata			30	Х	FACU	X 2- Dominan				
Reynoutria japonica			25	Х	FACU	X 3- Prevalen	ce Index is	=< 3.0)	
Impatiens capensis			20	Χ	FACW	4- Morphol	ogical Ada	ptation	าร	
Juncus tenuis			20	Χ	FAC	5- Problema	atic Hvdro	phytic	Vegetatio	n
Fraxinus pennsylvanic	<u>a</u>		15		FACW		, ,		-0	
Geum canadense			15		FAC	Definitions of Veget	ation Strat	a:		
Toxicodendron radica	ns		10		FAC				ara in diana	otor ot
Woodwardia areolata			5		OBL	Tree- Woody plants breast height (DBH),				ieter at
			140	_= Total Cov	/er	5. casee.g (2.2))	. 080. 0.000	0		
						Sapling/Shrub- Woo				and
						greater than or equa	al to 3.28ft ((1m) tal	II.	
						Herb- All herbaceous	s (non-woo	dv) plar	nts, regardl	less of
						size, and woody plar				
			Absolute	Dominant	Indicator					
Woody Vine Stratum	(Plot Size:	30'radius)	% Cover	Species?	Status	Woody Vines- All wo height.	ody vines g	greater	than 3.28f1	t in
Parthenocissus quinqu	uefolia		30	Χ	FACU					
			30	= Total Cov	/er	Hydrop	hytic			
						Vegeta	-			
						0				

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

SOIL

Sampling Point: 02-20200715-WL-18-18W

Depth	Matrix				Redo	x Featu	res		
(inches	Color	%	Color	%	Туре	Loc	Texture	Remarks	
0-12	10YR 3/2	90	7.5YR 4/6	10	С	PL	Silt Loam		
12-20	2.5Y 6/4	80	2.5Y 6/8	20	С	M	Sandy Loam		
							2		

Hydric Soil Indicators:		Indicators for Problematic Soils:
Histosol (A1)	Polyvalue Below Surface (B15)	2 cm Muck (A10)
Histic Epipedon (A2)	Thin Dark Surface (S9)	Coast Prarie Redox (A16)
Black Histic (A3)	Loamy Mucky Mineral (F1)	5 cm Mucky Peat or Peat (S3)
Hydrogen Sulfide (A4)	Loamy Gleyed Matric (F2)	Dark Surface (S7)
Stratified Layers (A5)	Depleted Matrix (F3)	Polyvalue Below Surface (S8)
Depleted Below Dark Surface (A11)	X Redox Dark Surface (F6)	Thin Dark Surface (S9)
Thick Dark Surface (A12)	Depleted Dark Surface (F7)	Iron-Manganese Masses (F12)
Sandy Mucky Mineral (S1)	Redox Depressions (F8)	Piedmont Floodplain Soils (F19)
Sandy Gleyed Matrix (S4)		Mesic Spodic (TA6)
Sandy Redox (S5)		Red Parent Material (F21)
Stripped Matrix (S6)		Very Shallow Dark Surface (TF12)
Dark Surface (S7)		Other (Explain in Remarks)
Restrictive Layer (if observed):		
Type:		W 1: 6 15
		Hydric Soil Present? Yes X No
Depth (inches):		

Project/Site: Cider Solar Project	City/County: Elba/	Genesee Sampling Date: 7/15/2020					
Applicant/Owner: Hecate		State: NY Sampling Point:					
Investigator(s): Justin Ahn Section, Township, Range: 02-20200715-WL-19-19							
Landform (hillslope, terrace,etc.): Depressio	Local relief (concave, c	onvex, none): <u>Concave</u> Slope (%) <u>0 - 1</u>					
Subregion (LRR or MLRA): LRR L	Lat: 43.094959	Long: <u>-78.175383</u> Datum: <u>NAD83</u>					
Soil Map Unit Name: CaA		NWI Classification: PEM					
Are climatic / hyrologic conditions on the site	typical for this time of year? Yes	X No (if no, explain in Remarks.)					
Are Vegetation , Soil , or Hydrolog	y significantly disturbed? Are "	Normal Circumstances" present? Yes X No					
Are Vegetation, Soil, or Hydrolog	ynaturally problematic? (if nee	eded, explain any answers in Remarks.)					
SUMMARY OF FINDINGS - Attach site ma	p showing sampling point location	ns, transects, important features, etc.					
Hydrophytic Vegetation Present? Yes >	X No Is the Samp						
Hydric Soil Present? Yes	X No within a We	etland? Yes X No					
Wetland Hydrology Present? Yes	X No if yes, option	nal Wetland Site ID: $WL73$					
Remarks: (Explain alternative procedures here or in a s	eparate report.)						
HYDROLOGY							
Wetland Hydrology Indicators:		Secondary Indicators (minimum of two required)					
Primary Indicators (minimum of one is required:	check all that apply)	Surface Soil Cracks (B6)					
X Surface Water (A1)	X Water-Stained Leaves (B9)	X Drainage Patterns (B10)					
X High Water Table (A2)	X Aquatic Fauna (B13)	Moss Trim Lines (B16)					
Saturation (A3)	Marl Deposits (B15)	Dry-Season Water Table (C2)					
Water Marks (B1)	Hydrogen Sulfide Odor (C1)	Crayfish Burrows (C8)					
Sediment Deposits (B2)	Oxidized Rhizospheres on Living Roo	ots (C3) Saturation Visible in Aerial Imagery (C9)					
Drift Deposits (B3)	Presence of Reduced Iron (C4)	Stunted or Stressed Plants (D1)					
Algal Mat or Crust (B4)	Recent Iron Reduction in Tilled Soils						
		Shallow Aquitard (D3)					
Iron Deposits (B5)	Thin Muck Surface (C7)						
Inundation Visible on Aerial Imagery (B7)	Other (Explain in Remarks)	Microtopographic Relief (D4)					
Sparsley Vegetated Concave Surface (B8)		FAC-Neutral Test (D5)					
Surface Water Present? Yes X No	Depth (inches) 2						
Water Table Present? Yes X No	Depth (inches) 18 W	etland Hydrology Present? Yes X No					
Saturation Present? Yes No X	Depth (inches)	 -					
							
Describe Recorded Data (stream gauge, mon	itoring well, aerial photos, previous in	spections), if available:					
Remarks:							
Nemario.							

VEGETATION - Use scientific names of plants Sampling Point: 02-20200715-WL-19-19W

VEGETATION - Use scient	tific names	or plants				Sampli	ig i Oilit	. 02-20	200/15-W	L-19-19
Tree Stratum	(Plot Size:	30'radius)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test W Number of Domi				
Acer saccharinum			50	Χ	FACW	That Are OBL, FA	•		5	(A)
Fraxinus pennsylvanica		30 X FACW 80 = Total Cover		Total Number of Dominant Species Across All Strata: 5 (B)			(B)			
						Percent of Don That Are OBL, F			100%	(A/B)
						Prevalence Index V	Vorkshe	et:		
			Ahsolute	Dominant	Indicator	OBL species	65	x 1	65	
hrub Stratum	(Plot Size:	15'radius)	% Cover	Species?	Status	FACW species	110	x 2	220	
Fraxinus pennsylvanica	1		20	Χ	FACW	FAC species	15	x 3	45	
			20	_= Total Cov	er	FACU species	5	x 4	20	
						UPL species	0	x 5	0	
						Column Totals	195	(A)	350	(B
						Prevalence	e Index =	B/A = _	1.79	
						Hydrophytic Vege	ation In	dicators	s:	
			Absolute	Dominant	Indicator	X 1- Rapid Tes	For Hyd	Irophyti	ic Vegeta	tion
Herb Stratum	(Plot Size:	5'radius)	% Cover	Species?	Status	X 2- Dominano	e Test is	> 50%		
Leersia oryzoides			30	Х	OBL	X 3- Prevalenc	e Index i	s =< 3 0		
Glyceria striata			20	X	OBL					
Persicaria maculosa			<u>15</u>		FAC	4- Morpholo	_	•		
Eleocharis obtusa			<u>15</u> 10		OBL FACW	5- Problema	tic Hydro	phytic '	Vegetatio	n
Phragmites australis Oxalis stricta		5 FACU Definitions of Vegetation Strata:								
		95= Total Cover		Tree- Woody plants 3 breast height (DBH),	in. (7.6cr	m) or mo		eter at		
						Sapling/Shrub- Wood greater than or equal				and
				Herb- All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28ft tall.						
Woody Vine Stratum	(Plot Size:	30'radius)	Absolute % Cover	Dominant Species?	Indicator Status	Woody Vines- All woo height.	ody vines	greater t	than 3.28f	t in
				= Total Cov						

SOIL

Sampling Point: 02-20200715-WL-19-19W

Depth	Matrix				Redo	x Featu	ires	
(inches	Color	%	Color	%	Туре	Loc	Texture	Remarks
0-10	10YR 4/2	90	5YR 4/6	10	С	PL	Clay	
10-20	7.5YR 7/4	60	7.5YR 6/8	40	С	М	Clay	

Hydric Soil Indicators:		Indicators for Problematic Soils:
Histosol (A1)	Polyvalue Below Surface (B15)	2 cm Muck (A10)
Histic Epipedon (A2)	Thin Dark Surface (S9)	Coast Prarie Redox (A16)
Black Histic (A3)	Loamy Mucky Mineral (F1)	5 cm Mucky Peat or Peat (S3)
Hydrogen Sulfide (A4)	Loamy Gleyed Matric (F2)	Dark Surface (S7)
Stratified Layers (A5)	X Depleted Matrix (F3)	Polyvalue Below Surface (S8)
Depleted Below Dark Surface (A11)	Redox Dark Surface (F6)	Thin Dark Surface (S9)
Thick Dark Surface (A12)	Depleted Dark Surface (F7)	Iron-Manganese Masses (F12)
Sandy Mucky Mineral (S1)	Redox Depressions (F8)	Piedmont Floodplain Soils (F19)
Sandy Gleyed Matrix (S4)		Mesic Spodic (TA6)
Sandy Redox (S5)		Red Parent Material (F21)
Stripped Matrix (S6)		Very Shallow Dark Surface (TF12)
Dark Surface (S7)		Other (Explain in Remarks)
Restrictive Layer (if observed):		
Type:		
		vdric Soil Present? Yes X No
Depth (inches):		

Project/Site: Cider Solar Project	City/County: _Elba/Genes	see Sampling Date: 7/16/2020			
Applicant/Owner: Hecate	State: NY Sampling Point:				
Investigator(s): Justin Ahn	Section, Township, Range: 02-20200716-WL-22-22W				
Landform (hillslope, terrace,etc.): Depression	Local relief (concave, convex	, none): <u>Concave</u> Slope (%) <u>0 - 1</u>			
Subregion (LRR or MLRA): LRR L	Lat: 43.089952 Long:	-78.176469 Datum: <u>NAD83</u>			
Soil Map Unit Name: CaA		NWI Classification: PEM			
Are climatic / hyrologic conditions on the site ty	ypical for this time of year? Yes X	No (if no, explain in Remarks.)			
Are Vegetation, Soil, or Hydrology	significantly disturbed? Are "Norma	al Circumstances" present? Yes X No			
Are Vegetation, Soil, or Hydrology	naturally problematic? (if needed, e	xplain any answers in Remarks.)			
SUMMARY OF FINDINGS - Attach site map	showing sampling point locations, tra	ansects, important features, etc.			
Hydrophytic Vegetation Present? Yes X	No Is the Sampled Ar				
Hydric Soil Present? Yes X	No within a Wetland				
		etland Site ID: WL73			
Wetland Hydrology Present? Yes X		VVE/5			
Remarks: (Explain alternative procedures here or in a sep	arate report.)				
HYDROLOGY					
Wetland Hydrology Indicators:		Secondary Indicators (minimum of two required)			
Primary Indicators (minimum of one is required: ch	eck all that apply)	Surface Soil Cracks (B6)			
X Surface Water (A1)	Water-Stained Leaves (B9)	Drainage Patterns (B10)			
High Water Table (A2)	Aquatic Fauna (B13)	Moss Trim Lines (B16)			
Saturation (A3)	Marl Deposits (B15)	Dry-Season Water Table (C2)			
Water Marks (B1)	Hydrogen Sulfide Odor (C1)	Crayfish Burrows (C8)			
Sediment Deposits (B2)	Oxidized Rhizospheres on Living Roots (C3) Saturation Visible in Aerial Imagery (C9)			
Drift Deposits (B3)	Presence of Reduced Iron (C4)	Stunted or Stressed Plants (D1)			
Algal Mat or Crust (B4)	Recent Iron Reduction in Tilled Soils (C6)	Geomorphic Position (D2)			
Iron Deposits (B5)	Thin Muck Surface (C7)	Shallow Aquitard (D3)			
Inundation Visible on Aerial Imagery (B7)	Other (Explain in Remarks)	Microtopographic Relief (D4)			
X Sparsley Vegetated Concave Surface (B8)	Other (Explain in Nemarks)	FAC-Neutral Test (D5)			
		TAC-Neutral Test (D3)			
Surface Water Present? Yes X No	Depth (inches) 2				
Water Table Present? Yes NoX	Hydrology Present? Yes X No				
Saturation Present? Yes No _ X	Depth (inches)				
Describe Recorded Data (stream gauge, monit	oring well, aerial photos, previous inspection	ons), if available:			
, ,		,			
Remarks:					

VEGETATION - Use scientific names of plants Sampling Point: 02-20200716-WL-22-22W Absolute Dominant Indicator **Dominance Test Worksheet:** (Plot Size: 30'radius) % Cover Species? Status **Tree Stratum Number of Dominant Species** That Are OBL, FACW, or FAC: (A) = Total Cover **Total Number of Dominant** Species Across All Strata: (B) 3 Percent of Dominant Species That Are OBL, FACW, or FAC: (A/B) 100% **Prevalence Index Worksheet:** 30 x 1 30 **OBL** species Absolute Dominant Indicator **FACW** species 50 100 (Plot Size: 15'radius) Status x 2 **Shrub Stratum** % Cover Species? FAC species 0 х3 = Total Cover **FACU** species 0 x 4 0 **UPL** species 0 x 5 0 Column Totals 80 (A) 130 (B) Prevalence Index = B/A = 1.62 **Hydrophytic Vegetation Indicators:** Absolute Dominant Indicator X 1- Rapid Test For Hydrophytic Vegetation **Herb Stratum** (Plot Size: 5'radius) % Cover Species? Status X 2- Dominance Test is > 50% 30 Phalaris arundinacea Χ **FACW** X 3- Prevalence Index is =< 3.0 Χ OBL Leersia oryzoides 20 4- Morphological Adaptations Solidago gigantea 20 Χ **FACW** Alisma subcordatum 5 OBL 5- Problematic Hydrophytic Vegetation Typha angustifolia 5 OBL 80 = Total Cover **Definitions of Vegetation Strata:** Tree- Woody plants 3 in. (7.6cm) or more in diameter at breast height (DBH), regardless of height. Sapling/Shrub- Woody plants less than 3 in. DBH and greater than or equal to 3.28ft (1m) tall. Herb- All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28ft tall. Absolute Dominant Indicator Woody Vines- All woody vines greater than 3.28ft in (Plot Size: 30'radius) **Woody Vine Stratum** % Cover Species? Status height. = Total Cover Hydrophytic Vegetation Present? Yes X No ___ Remarks: (Include photo numbers here or on a separate sheet.)

SOIL

Sampling Point: 02-20200716-WL-22-22W

lydric Soil Indicators: Indic Histosol (A1) Polyvalue Below Surface (B15)	Remarks
Note	
lydric Soil Indicators: Indic Histosol (A1) Polyvalue Below Surface (B15)	
Histosol (A1) Polyvalue Below Surface (B15)	
Histosol (A1) Polyvalue Below Surface (B15)	
Histosol (A1) Polyvalue Below Surface (B15)	
Histosol (A1) Polyvalue Below Surface (B15)	
Histosol (A1) Polyvalue Below Surface (B15)	
Histosol (A1) Polyvalue Below Surface (B15)	
Histosol (A1) Polyvalue Below Surface (B15)	
Histosol (A1) Polyvalue Below Surface (B15)	
Histosol (A1) Polyvalue Below Surface (B15)	
<u> </u>	ators for Problematic Soils:
Histic Eninodon (A2) Thin Dark Surface (CO)	2 cm Muck (A10)
Histic Epipedon (A2) Black Histic (A3) Loamy Mucky Mineral (F1)	Coast Prarie Redox (A16)
Black Histic (A3) Loamy Mucky Mineral (F1) Hydrogen Sulfide (A4) Loamy Gleyed Matric (F2)	5 cm Mucky Peat or Peat (S3) Dark Surface (S7)
Stratified Layers (A5) X Depleted Matrix (F3)	Polyvalue Below Surface (S8)
Depleted Below Dark Surface (A11) X Redox Dark Surface (F6)	Thin Dark Surface (S9)
Thick Dark Surface (A12) Depleted Dark Surface (F7) Depleted Dark Surface (F7)	Iron-Manganese Masses (F12)
Sandy Mucky Mineral (S1) Redox Depressions (F8)	Piedmont Floodplain Soils (F19)
Sandy Gleyed Matrix (S4)	Mesic Spodic (TA6)
Sandy Redox (S5)	Red Parent Material (F21)
Stripped Matrix (S6)	Very Shallow Dark Surface (TF12)
Dark Surface (S7)	Other (Explain in Remarks)
	- , ,
Restrictive Layer (if observed):	
Type: Hydric Soil P	resent? Yes X No
Depth (inches):	
· · · · · · · · · · · · · · · · · · ·	

Project/Site: Cider Solar Project	City/County: Elba/Genese	e Sampling Date: 7/15/2020				
Applicant/Owner: Hecate		State: NY Sampling Point:02-20200715				
Investigator(s): Justin Ahn	Section, Township, Range:	WL-18-18U				
Landform (hillslope, terrace,etc.): Toeslope	Local relief (concave, convex, r	none): <u>Linear</u> Slope (%) <u>1 - 5</u>				
Subregion (LRR or MLRA): LRR L	Lat: <u>43.094888</u> Long: -7	78.175702 Datum: <u>NAD83</u>				
Soil Map Unit Name: CaA		NWI Classification: UPL				
Are climatic / hyrologic conditions on the site \ensuremath{t}	typical for this time of year? Yes X No	(if no, explain in Remarks.)				
Are Vegetation, Soil, or Hydrology	significantly disturbed? Are "Normal	Circumstances" present? Yes X No				
Are Vegetation, Soil, or Hydrology	naturally problematic? (if needed, exp	lain any answers in Remarks.)				
SUMMARY OF FINDINGS - Attach site maj	showing sampling point locations, tran	sects, important features, etc.				
Hydrophytic Vegetation Present? Yes	No X Is the Sampled Area	a				
Hydric Soil Present? Yes	No X within a Wetland?	within a Wetland? Yes No X				
Wetland Hydrology Present? Yes	No X if yes, optional Wet	land Site ID:				
Remarks: (Explain alternative procedures here or in a se	parate report.)					
HYDROLOGY						
Wetland Hydrology Indicators:		Secondary Indicators (minimum of two required)				
Primary Indicators (minimum of one is required: cl	neck all that apply)	Surface Soil Cracks (B6)				
Surface Water (A1)	Water-Stained Leaves (B9)	Drainage Patterns (B10)				
High Water Table (A2)	Aquatic Fauna (B13)	Moss Trim Lines (B16)				
Saturation (A3)	Marl Deposits (B15)	Dry-Season Water Table (C2)				
Water Marks (B1)	Hydrogen Sulfide Odor (C1)	Crayfish Burrows (C8)				
Sediment Deposits (B2)	Oxidized Rhizospheres on Living Roots (C3)	Saturation Visible in Aerial Imagery (C9)				
Drift Deposits (B3)	Presence of Reduced Iron (C4)	Stunted or Stressed Plants (D1)				
Algal Mat or Crust (B4)	Recent Iron Reduction in Tilled Soils (C6)	Geomorphic Position (D2)				
Iron Deposits (B5)	Thin Muck Surface (C7)	Shallow Aquitard (D3)				
Inundation Visible on Aerial Imagery (B7)	Other (Explain in Remarks)	Microtopographic Relief (D4)				
Sparsley Vegetated Concave Surface (B8)		FAC-Neutral Test (D5)				
Surface Water Present? Yes No X	Depth (inches)					
Water Table Present? Yes No X	Depth (inches) Wetland H	Hydrology Present? Yes No X				
Saturation Present? Yes No X	Depth (inches)	 				
Describe Recorded Data (stream gauge, monit	toring well, aerial photos, previous inspection	ns), if available:				
Remarks:						

VEGETATION - Use scientific names of plants Sampling Point: 02-20200715-WL-18-18U Absolute Dominant Indicator **Dominance Test Worksheet:** (Plot Size: 30'radius) % Cover Species? Status **Tree Stratum Number of Dominant Species** Quercus alba Χ FACU That Are OBL, FACW, or FAC: (A) 40 = Total Cover **Total Number of Dominant** (B) Species Across All Strata: 6 Percent of Dominant Species 50% (A/B) That Are OBL, FACW, or FAC: **Prevalence Index Worksheet:** 0 x 1 **OBL** species Absolute Dominant Indicator **FACW** species 5 10 (Plot Size: 15'radius) % Cover Species? Status x 2 **Shrub Stratum** FAC species 60 180 FACU х3 Rubus allegheniensis 20 Χ Cornus racemosa 20 Χ FAC **FACU** species 80 x 4 320 40 = Total Cover **UPL** species 0 x 5 0 Column Totals 145 (A) 510 (B) Prevalence Index = B/A = 3.52 **Hydrophytic Vegetation Indicators:** Absolute Dominant Indicator 1- Rapid Test For Hydrophytic Vegetation **Herb Stratum** (Plot Size: 5'radius) % Cover Species? Status 2- Dominance Test is > 50% 20 Toxicodendron radicans FAC 3- Prevalence Index is =< 3.0 Oxalis corniculata **FACU** 4- Morphological Adaptations Impatiens capensis 5 **FACW** 30 = Total Cover 5- Problematic Hydrophytic Vegetation **Definitions of Vegetation Strata:** Tree- Woody plants 3 in. (7.6cm) or more in diameter at breast height (DBH), regardless of height.

Absolute Dominant Indicator

Species?

Χ

= Total Cover

Status

FAC

FACU

% Cover

20

15

35

Sapling/Shrub- Woody plants less than 3 in. DBH and greater than or equal to 3.28ft (1m) tall.

Herb- All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28ft tall.

Woody Vines- All woody vines greater than 3.28ft in height.

Hydrophytic
Vegetation
Present? Yes _____ No __X__

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

Woody Vine Stratum

Parthenocissus quinquefolia

Vitis riparia

(Plot Size: 30'radius)

SOIL Sampling Point: 02-20200715-WL-18-18U

Depth	Matrix				Redo	ox Featı	ures				
(inches	Color	%	Color	%	Туре	Loc	Texture	Remarks			
0-16	10YR 4/3	100					Clay				
16-20	2.5Y 7/3	85	2.5Y 6/8	15	С	PL	Silty Clay Loam				
Hydric So	il Indicators:							Indicators for Problematic Soils:			
Hist	tosol (A1)				Polyvalu	e Below	Surface (B15)	2 cm Muck (A10)			
		A2)			Thin Dar			Coast Prarie Redox (A16)			
	, ,				· ·		ineral (F1)	5 cm Mucky Peat or Peat (S3)			
							latric (F2)	Dark Surface (S7)			
	-		(0.4.4)		-			Polyvalue Below Surface (S8)			
	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)			ark Surface (A11) Redox Dark Surface			Thin Dark Surface (S9) Iron-Manganese Masses (F12)				
	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)				Redox D			Piedmont Floodplain Soils (F19)			
					Nedox D	ергеззіо	7113 (1 0 <i>)</i>	Mesic Spodic (TA6)			
			,					Red Parent Material (F21)			
								Very Shallow Dark Surface (TF12)			
	Histic Epipedon (A2) Black Histic (A3) Hydrogen Sulfide (A4) Stratified Layers (A5) Depleted Below Dark Surface (A12) Thick Dark Surface (A12) Sandy Mucky Mineral (S1) Sandy Gleyed Matrix (S4) Sandy Redox (S5) Stripped Matrix (S6)							Other (Explain in Remarks)			
Restrictiv	e Layer (if obs	erved):									
		Type:					Hydric	Soil Present? Yes No X			
	Depth (in	nches):						 -			
Remarks	5:										

Project/Site: Cider Solar Project	City/County: Elba/Genese	e Sampling Date: 7/16/2020
Applicant/Owner: Hecate		State: NY Sampling Point:02-2020071
Investigator(s): Justin Ahn	Section, Township, Range:	WL-19-19U
Landform (hillslope, terrace,etc.): Toeslope	Local relief (concave, convex, ı	none): <u>Linear</u> Slope (%) <u>1 - 5</u>
Subregion (LRR or MLRA): LRR L	Lat: <u>43.094884</u> Long: <u>-7</u>	8.175711 Datum: <u>NAD83</u>
Soil Map Unit Name: CaA		NWI Classification: UPL
Are climatic / hyrologic conditions on the site t	typical for this time of year? Yes X No	(if no, explain in Remarks.)
Are Vegetation, Soil, or Hydrology	significantly disturbed? Are "Normal	Circumstances" present? Yes X No
Are Vegetation, Soil, or Hydrology	naturally problematic? (if needed, exp	lain any answers in Remarks.)
SUMMARY OF FINDINGS - Attach site map	showing sampling point locations, tran	sects. important features. etc.
Hydrophytic Vegetation Present? Yes	No X Is the Sampled Area	-
Hydric Soil Present? Yes	No X within a Wetland?	Yes No X
Wetland Hydrology Present? Yes	No X if yes, optional Wet	land Site ID:
Remarks: (Explain alternative procedures here or in a se	parate report.)	
HYDROLOGY		
Wetland Hydrology Indicators:		Secondary Indicators (minimum of two required)
Primary Indicators (minimum of one is required: cl	neck all that apply)	Surface Soil Cracks (B6)
Surface Water (A1)	Water-Stained Leaves (B9)	Drainage Patterns (B10)
High Water Table (A2)	Aquatic Fauna (B13)	Moss Trim Lines (B16)
Saturation (A3)	Marl Deposits (B15)	Dry-Season Water Table (C2)
Water Marks (B1)	Hydrogen Sulfide Odor (C1)	Crayfish Burrows (C8)
Sediment Deposits (B2)	Oxidized Rhizospheres on Living Roots (C3)	Saturation Visible in Aerial Imagery (C9)
Drift Deposits (B3)	Presence of Reduced Iron (C4)	Stunted or Stressed Plants (D1)
Algal Mat or Crust (B4)	Recent Iron Reduction in Tilled Soils (C6)	Geomorphic Position (D2)
Iron Deposits (B5)	Thin Muck Surface (C7)	Shallow Aquitard (D3)
	Other (Explain in Remarks)	
Inundation Visible on Aerial Imagery (B7)	Other (Explain in Kelliarks)	Microtopographic Relief (D4)
Sparsley Vegetated Concave Surface (B8)		FAC-Neutral Test (D5)
Surface Water Present? Yes NoX	Depth (inches)	
Water Table Present? Yes No X	Depth (inches) Wetland H	Hydrology Present? Yes No X
Saturation Present? Yes No _ X	Depth (inches)	
Describe Recorded Data (stream gauge, moni	toring well aerial photos previous inspection	ns) if available:
2 000 100 11000 1000 2 000 (00 00111 80 080) 1110111	,	
Remarks:		

Size: 30'radius		Dominant Species? = Total Cov	Status	Number of Domi That Are OBL, FA Total Numbe	nant Spec CW, or Fa	cies AC: inant	0	_(A)
		= Total Cov	/er	Total Numbe	r of Domi	inant		_` ′
				Percent of Don	oss All St	_	1	_(B)
				That Are OBL, F	-		0%	_(A/B)
				Prevalence Index V	Vorkshee	et:		
	Absolute	Dominant	Indicator	OBL species	0	x 1_	0	
Size: 15'radius			Status	FACW species	0	x 2 _	0	
				FAC species	0	_ x 3	0	
		_= Total Cov	/er	FACU species	0	_ x 4	0	
				UPL species	60	x 5	300	
				Column Totals	60	(A)	300	(B)
				Prevalence	e Index =	B/A = _	5	
				Hydrophytic Vege	tation Inc	dicators	s:	
	Absolute	Dominant	Indicator	1- Rapid Tes	t For Hyd	rophyti	ic Vegeta	tion
Size: 5'radius	_) % Cover	Species?	Status	2- Dominano	e Test is	> 50%		
	60	X	UPL	3- Prevalenc	e Index is	s =< 3.0		
	60	_= rotarco	יאפו	4- Morpholo	gical Ada	ptation	ıs	
				5- Problema	tic Hydro	phytic \	Vegetatio	n
				Definitions of Vegeta	ition Strat	a:		
							neter at	
								and
								less of
Size: 30'radius			Indicator Status	Woody Vines- All woo height.	ody vines į	greater t	than 3.28f	t in
		= Total Cov	/er	Vegeta	tion	i	No X	_
	Size: 5'radius Size: 30'radius	Size: 15'radius) % Cover Size: 5'radius) % Cover 60 60 Size: 30'radius) % Cover	Size: 15'radius) % Cover Species? = Total Cov Absolute Dominant Species? 60 X 60 = Total Cov Size: 30'radius) % Cover Species?	Absolute Dominant Indicator Size: 5'radius)	Absolute Dominant Indicator Species Status Total Cover FACW species FACU species FACU species FACU species FACU species FACU species FACU species UPL species Column Totals Prevalence Size: 5'radius Absolute Dominant Indicator % Cover Species? Status 60	Absolute Dominant Indicator Species Status Total Cover Species Status	Absolute Dominant Indicator Species? Status = Total Cover	Absolute Dominant Indicator Species Status Absolute Dominant Indicator FACW species 0

SOIL Sampling Point: 02-20200715-WL-19-19U Depth Matrix **Redox Features** (inches Color % Color Texture Remarks % Type Loc 0-14 10YR 4/3 95 7.5YR 5/6 C PLSandy Clay Loam 5 **Hydric Soil Indicators:** Indicators for Problematic Soils: Histosol (A1) Polyvalue Below Surface (B15) 2 cm Muck (A10) Histic Epipedon (A2) Thin Dark Surface (S9) Coast Prarie Redox (A16) Black Histic (A3) Loamy Mucky Mineral (F1) 5 cm Mucky Peat or Peat (S3) Hydrogen Sulfide (A4) Loamy Gleyed Matric (F2) Dark Surface (S7) Stratified Layers (A5) Depleted Matrix (F3) Polyvalue Below Surface (S8) Depleted Below Dark Surface (A11) Redox Dark Surface (F6) Thin Dark Surface (S9) Thick Dark Surface (A12) Depleted Dark Surface (F7) Iron-Manganese Masses (F12) Sandy Mucky Mineral (S1) Redox Depressions (F8) Piedmont Floodplain Soils (F19) Sandy Gleyed Matrix (S4) Mesic Spodic (TA6) Sandy Redox (S5) Red Parent Material (F21) Stripped Matrix (S6) Very Shallow Dark Surface (TF12) Dark Surface (S7) Other (Explain in Remarks) Restrictive Layer (if observed): Type: Hydric Soil Present? Yes No Χ Depth (inches): Remarks:

Project/Site: Cider Solar Project	City/County: Elba/Genese	ee Sampling Date: 7/15/2020
Applicant/Owner: Hecate		State: NY Sampling Point:02-20200716
Investigator(s): Justin Ahn	Section, Township, Range:	WL-22-22U
Landform (hillslope, terrace, etc.): Toeslope	Local relief (concave, convex,	none): <u>Linear</u> Slope (%) <u>1 - 5</u>
Subregion (LRR or MLRA): LRR L	Lat: <u>43.100398</u> Long:	78.157093 Datum: NAD83
Soil Map Unit Name: CaA		NWI Classification: UPL
Are climatic / hyrologic conditions on the site $% \left(x\right) =\left(x\right) +\left(x\right) +\left($	typical for this time of year? Yes X No	(if no, explain in Remarks.)
Are Vegetation, Soil, or Hydrology	significantly disturbed? Are "Normal	Circumstances" present? Yes X No
Are Vegetation, Soil, or Hydrology	naturally problematic? (if needed, ex	plain any answers in Remarks.)
SUMMARY OF FINDINGS - Attach site ma	p showing sampling point locations, tra	nsects, important features, etc.
Hydrophytic Vegetation Present? Yes X		
Hydric Soil Present? Yes	No X within a Wetland?	Yes No X
Wetland Hydrology Present? Yes	No X if yes, optional Wet	land Site ID:
Remarks: (Explain alternative procedures here or in a se		
HYDROLOGY Wetland Hydrology Indicators:		Secondary Indicators (minimum of two required)
Primary Indicators (minimum of one is required: c	heck all that apply)	Surface Soil Cracks (B6)
Surface Water (A1)	Water-Stained Leaves (B9)	Drainage Patterns (B10)
High Water Table (A2)	Aquatic Fauna (B13)	Moss Trim Lines (B16)
Saturation (A3)	Marl Deposits (B15)	Dry-Season Water Table (C2)
Water Marks (B1)	Hydrogen Sulfide Odor (C1)	Crayfish Burrows (C8)
Sediment Deposits (B2)	Oxidized Rhizospheres on Living Roots (C3)	Saturation Visible in Aerial Imagery (C9)
Drift Deposits (B3)	Presence of Reduced Iron (C4)	Stunted or Stressed Plants (D1)
Algal Mat or Crust (B4)	Recent Iron Reduction in Tilled Soils (C6)	Geomorphic Position (D2)
Iron Deposits (B5)	Thin Muck Surface (C7)	Shallow Aquitard (D3)
Inundation Visible on Aerial Imagery (B7)	Other (Explain in Remarks)	Microtopographic Relief (D4)
Sparsley Vegetated Concave Surface (B8)		FAC-Neutral Test (D5)
	Depth (inches)	
	= ' ' 	Hydrology Present? Yes No X
Water Table Present? Yes No X	Depth (inches) Wetland Depth (inches)	Hydrology Present? Yes No X
Saturation Present? Yes No X		\
Describe Recorded Data (stream gauge, moni	toring well, aerial photos, previous inspectio	ns), if available:
Remarks:		

VEGETATION - Use scie	ntific names	of plants				Sampii	iig Fuiit. u	12-20	200716-W	L-22-22
Tree Stratum	(Plot Size:	30'radius)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test V		_		
Acer saccharinum	()		50	X	FACW	Number of Domi	•		4	(A)
Fraxinus pennsylvanic	a		20	X	FACW	Total Number of Dominan			-	_ (, ,
			70	= Total Cov	er		ross All Strat		7	(B)
						Percent of Dor	ninant Speci	ies		_
						That Are OBL,	FACW, or FA	VC:	57.1%	(A/B)
						Prevalence Index \	Norksheet:			
			A booksto	Dominant	Indicator	OBL species	0	x 1	0	
Shrub Stratum	(Plot Size:	15'radius)	% Cover	Species?	Status	FACW species	70	x 2	140	
Lonicera tatarica			20	Х	FACU	FAC species	50	x 3	150	
			20	_= Total Cov	er	FACU species	55	x 4	220	
						UPL species	0	x 5	0	
						Column Totals	175	(A)	510	(B)
						Prevalenc	e Index = B/	'A =	2.91	
						Hydrophytic Vege	tation Indic	ator	s:	
			Absolute	Dominant	Indicator	1- Rapid Tes	t For Hydro	phyti	ic Vegetat	tion
Herb Stratum	(Plot Size:	5'radius)	% Cover	Species?	Status	X 2- Dominan	ce Test is > 5	50%		
Toxicodendron radica	ins		30	X	FAC	X 3- Prevalenc				
Solidago canadensis			<u>15</u>	X	FACU	4- Morpholo				
Persicaria virginiana Prunella vulgaris			<u>15</u> 5	X	FAC FAC	<u> </u>	-			
			65	= Total Cov		5- Problema	tic Hydroph	ytic	vegetatio	on
						Definitions of Veget	ation Strata:			
						Tree- Woody plants in breast height (DBH),				eter at
						Sapling/Shrub- Wood greater than or equa				and
						Herb- All herbaceous size, and woody plan				less of
Woody Vine Stratum	(Plot Size:	30'radius)	Absolute % Cover	Dominant Species?	Indicator Status	Woody Vines- All wo				t in
Parthenocissus quinq	uefolia		20	X	FACU					
			20	_= Total Cov	rer	Hydropl Vegeta Pres	-			

SOIL Sampling Point: 02-20200716-WL-22-22U Depth Matrix **Redox Features** (inches % Color Color % Type Texture Remarks Loc 0-18 10YR 3/6 100 Silty Clay Loam **Hydric Soil Indicators:** Indicators for Problematic Soils: Histosol (A1) Polyvalue Below Surface (B15) 2 cm Muck (A10) Histic Epipedon (A2) Thin Dark Surface (S9) Coast Prarie Redox (A16) Black Histic (A3) Loamy Mucky Mineral (F1) 5 cm Mucky Peat or Peat (S3) Hydrogen Sulfide (A4) Loamy Gleyed Matric (F2) Dark Surface (S7) Stratified Layers (A5) Depleted Matrix (F3) Polyvalue Below Surface (S8) Depleted Below Dark Surface (A11) Redox Dark Surface (F6) Thin Dark Surface (S9) Thick Dark Surface (A12) Depleted Dark Surface (F7) Iron-Manganese Masses (F12) Sandy Mucky Mineral (S1) Redox Depressions (F8) Piedmont Floodplain Soils (F19) Sandy Gleyed Matrix (S4) Mesic Spodic (TA6) Sandy Redox (S5) Red Parent Material (F21) Stripped Matrix (S6) Very Shallow Dark Surface (TF12) Dark Surface (S7) Other (Explain in Remarks) Restrictive Layer (if observed): Type: Hydric Soil Present? Yes No Χ Depth (inches): Remarks:

Project/Site: Cider Solar Project	City/County: Elba/Genese	Sampling Date: 7/15/2020
Applicant/Owner: Hecate		State: NY Sampling Point:
Investigator(s): Justin Ahn	Section, Township, Range:	02-20200715-WL-20-20W
Landform (hillslope, terrace,etc.): Depression	on Local relief (concave, convex, r	none): <u>Concave</u> Slope (%) <u>0 - 1</u>
Subregion (LRR or MLRA): LRR L	Lat: 43.094042 Long: -7	78.177959 Datum: NAD83
Soil Map Unit Name: OvB		NWI Classification: PSS
Are climatic / hyrologic conditions on the site	e typical for this time of year? Yes X No	(if no, explain in Remarks.)
Are Vegetation, Soil, or Hydrolog	gy significantly disturbed? Are "Normal of	Circumstances" present? Yes X No
Are Vegetation, Soil, or Hydrolog	gynaturally problematic? (if needed, exp	lain any answers in Remarks.)
SUMMARY OF FINDINGS - Attach site m	ap showing sampling point locations, tran	sects. important features. etc.
	X No Is the Sampled Area	-
	X No within a Wetland?	Yes X No
<u> </u>		and Site ID: WL74
Remarks: (Explain alternative procedures here or in a second	<u> </u>	<u> </u>
HYDROLOGY		
Wetland Hydrology Indicators:		Secondary Indicators (minimum of two required)
Primary Indicators (minimum of one is required:	check all that apply)	Surface Soil Cracks (B6)
Surface Water (A1)	X Water-Stained Leaves (B9)	Drainage Patterns (B10)
High Water Table (A2)	X Aquatic Fauna (B13)	X Moss Trim Lines (B16)
Saturation (A3)	Marl Deposits (B15)	Dry-Season Water Table (C2)
Water Marks (B1)	Hydrogen Sulfide Odor (C1)	Crayfish Burrows (C8)
Sediment Deposits (B2)	Oxidized Rhizospheres on Living Roots (C3)	Saturation Visible in Aerial Imagery (C9)
Drift Deposits (B3)	Presence of Reduced Iron (C4)	Stunted or Stressed Plants (D1)
Algal Mat or Crust (B4)	Recent Iron Reduction in Tilled Soils (C6)	Geomorphic Position (D2)
Iron Deposits (B5)	Thin Muck Surface (C7)	Shallow Aquitard (D3)
Inundation Visible on Aerial Imagery (B7)	Other (Explain in Remarks)	Microtopographic Relief (D4)
Sparsley Vegetated Concave Surface (B8)		FAC-Neutral Test (D5)
Surface Water Present? Yes No X	(Depth (inches)	
Water Table Present? Yes No X	— ·	lydrology Present? Yes X No
Saturation Present? Yes No X	_ ' ' 	γγατοιο ς γ τε σετίε. Τε σ <u>λ</u> το
	nitoring well, aerial photos, previous inspection	s), if available:
Remarks:		

VEGETATION - Use scientific names of plants Sampling Point: 02-20200715-WL-20-20W Absolute Dominant Indicator **Dominance Test Worksheet:** (Plot Size: 30'radius) % Cover Species? Status **Tree Stratum Number of Dominant Species** 50 Χ **FACW** That Are OBL, FACW, or FAC: 6 (A) Salix alba 50 = Total Cover **Total Number of Dominant** (B) Species Across All Strata: 8 Percent of Dominant Species (A/B) That Are OBL, FACW, or FAC: 75% **Prevalence Index Worksheet: OBL** species 15 15 x 1 Absolute Dominant Indicator (Plot Size: 15'radius) % Cover Species? **Shrub Stratum** Status Fraxinus pennsylvanica 20 Χ **FACW** Salix alba 10 Χ **FACW** 30 = Total Cover

Absolute Dominant Indicator

Χ

Χ

= Total Cover

Status

FACU

FAC

% Cover Species?

30

10

40

Herb Stratum	(Plot Size:	5'radius)		Dominant Species?	Indicator Status
Phragmites australis			30	Χ	FACW
Reynoutria japonica			25	Χ	FACU
Typha angustifolia			15	Χ	OBL
			70	_= Total Cov	er

(Plot Size: 30'radius)

FACW species	110	x 2	220	_
FAC species	10	х 3	30	
FACU species	55	x 4	220	_
UPL species	0	x 5	0	_
Column Totals	190	(A)	485	(B)
Prevale	nce Index = B	/A =	2.55	

Hydrophytic Vegetation Indicators: 1- Rapid Test For Hydrophytic Vegetation X 2- Dominance Test is > 50% X 3- Prevalence Index is =< 3.0 4- Morphological Adaptations 5- Problematic Hydrophytic Vegetation

Definitions of Vegetation Strata:

Tree- Woody plants 3 in. (7.6cm) or more in diameter at breast height (DBH), regardless of height.

Sapling/Shrub- Woody plants less than 3 in. DBH and greater than or equal to 3.28ft (1m) tall.

Herb- All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28ft tall.

Woody Vines- All woody vines greater than 3.28ft in height.

> Hydrophytic Vegetation Present? Yes X No ___

> > eID: 20200730100500

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

Woody Vine Stratum

Vitis riparia

Parthenocissus quinquefolia

SOIL

Sampling Point: 02-20200715-WL-20-20W

0-4 10 4-20 10 Hydric Soil Inc	Color DYR 3/2 DYR 5/4 dicators:	90 90	Color 5YR 4/6 7.5YR 6/8	% 10 10	Type C C	PL PL	Texture Silty Clay Loam Clay	Remarks		
4-20 10 Hydric Soil Inc Histoso	OYR 5/4									
Hydric Soil Inc Histoso		90	7.5YR 6/8	10	С	PL	Clay			
Histoso	dicators:									
Histoso	dicators:									
Histoso	dicators:									
Histoso	dicators:									
Histoso	dicators:									
Histoso	dicators:									
Histoso	dicators:									
Histoso	dicators:									
	J / A 1 \				Dobasku	o Bolow S		ndicators for Problematic Soils:		
		(2)			=	k Surface	Surface (B15) 	2 cm Muck (A10) Coast Prarie Redox (A16)		
Histic Epipedon (A2) Black Histic (A3)						neral (F1)	5 cm Mucky Peat or Peat (S3)			
Hydrogen Sulfide (A4)				•	leyed Ma	· · · —	Dark Surface (S7)			
Stratified Layers (A5)				•	l Matrix (· · · —	Polyvalue Below Surface (S8)			
Stratified Layers (A5) Depleted Below Dark Surface (A11)				•	ark Surfac	· —	Thin Dark Surface (S9)			
Thick D	ark Surface	e (A12)		Depleted Dark Surface (F7)				Iron-Manganese Masses (F12)		
Sandy N	Mucky Min	eral (S1)			Redox D	epression	s (F8)	Piedmont Floodplain Soils (F19)		
Sandy 0	Gleyed Ma	trix (S4)					_	Mesic Spodic (TA6)		
Sandy F	Redox (S5)						_	Red Parent Material (F21)		
Strippe	d Matrix (S	66)					_	Very Shallow Dark Surface (TF12)		
Dark Su	urface (S7)						_	Other (Explain in Remarks)		
Restrictive La	yer (if obse	rved):								
		Туре:					Hydric Sc	oil Present? Yes X No		
	Depth (inc	-					Tryune se	πττεσεπε. τεσ <u>χ</u> πεσ		
Remarks:										

Project/Site: Cider Solar Project	City/County: Elba/Genese	e Sampling Date: 7/15/2020
Applicant/Owner: Hecate		State: NY Sampling Point:02-20200715
Investigator(s): Justin Ahn	Section, Township, Range:	WL-20-20U
Landform (hillslope, terrace,etc.): Toeslope	Local relief (concave, convex, r	none): <u>Linear</u> Slope (%) <u>1 - 5</u>
Subregion (LRR or MLRA): LRR L	Lat: 43.094105 Long: -7	78.177897 Datum: <u>NAD83</u>
Soil Map Unit Name: OvB		NWI Classification: UPL
Are climatic / hyrologic conditions on the site $\boldsymbol{\theta}$	cypical for this time of year? Yes X No	(if no, explain in Remarks.)
Are Vegetation, Soil, or Hydrology	significantly disturbed? Are "Normal	Circumstances" present? Yes X No
Are Vegetation, Soil, or Hydrology	naturally problematic? (if needed, exp	lain any answers in Remarks.)
SUMMARY OF FINDINGS - Attach site ma	o showing sampling point locations, tran	sects, important features, etc.
Hydrophytic Vegetation Present? Yes	No X Is the Sampled Area	a
Hydric Soil Present? Yes	No X within a Wetland?	Yes No X
Wetland Hydrology Present? Yes	No X if yes, optional Wet	land Site ID:
Remarks: (Explain alternative procedures here or in a se	parate report.)	
HYDROLOGY		
Wetland Hydrology Indicators:		Secondary Indicators (minimum of two required)
Primary Indicators (minimum of one is required: c	heck all that apply)	Surface Soil Cracks (B6)
Surface Water (A1)	Water-Stained Leaves (B9)	Drainage Patterns (B10)
High Water Table (A2)	Aquatic Fauna (B13)	Moss Trim Lines (B16)
Saturation (A3)	Marl Deposits (B15)	Dry-Season Water Table (C2)
Water Marks (B1)	Hydrogen Sulfide Odor (C1)	Crayfish Burrows (C8)
Sediment Deposits (B2)	Oxidized Rhizospheres on Living Roots (C3)	Saturation Visible in Aerial Imagery (C9)
Drift Deposits (B3)	Presence of Reduced Iron (C4)	Stunted or Stressed Plants (D1)
Algal Mat or Crust (B4)	Recent Iron Reduction in Tilled Soils (C6)	Geomorphic Position (D2)
Iron Deposits (B5)	Thin Muck Surface (C7)	Shallow Aquitard (D3)
Inundation Visible on Aerial Imagery (B7)	Other (Explain in Remarks)	Microtopographic Relief (D4)
Sparsley Vegetated Concave Surface (B8)		FAC-Neutral Test (D5)
Surface Water Present? Yes No X	Depth (inches)	
Water Table Present? Yes No X	Depth (inches) Wetland F	Hydrology Present? Yes No X
Saturation Present? Yes No X	Depth (inches)	
Describe Recorded Data (stream gauge, moni	toring well, aerial photos, previous inspection	ns), if available:
Remarks:		

VEGETATION - Use scientific names of plants Sampling Point: 02-20200715-WL-20-20U Absolute Dominant Indicator **Dominance Test Worksheet:** (Plot Size: 30'radius) % Cover Species? Status **Tree Stratum Number of Dominant Species** That Are OBL, FACW, or FAC: (A) = Total Cover **Total Number of Dominant** Species Across All Strata: (B) Percent of Dominant Species (A/B) That Are OBL, FACW, or FAC: 25% **Prevalence Index Worksheet:** 0 **OBL** species x 1 Absolute Dominant Indicator **FACW** species 0 0 (Plot Size: 15'radius) % Cover Status x 2 **Shrub Stratum** Species? 30 90 **FAC** species х3 = Total Cover **FACU** species 40 x 4 160 **UPL** species 45 x 5 225 Column Totals 115 (A) 475 (B) Prevalence Index = B/A = 4.13 **Hydrophytic Vegetation Indicators:** Absolute Dominant Indicator 1- Rapid Test For Hydrophytic Vegetation **Herb Stratum** (Plot Size: 5'radius) % Cover Species? Status 2- Dominance Test is > 50% 40 UPL Zea mays 3- Prevalence Index is =< 3.0 15 Alliaria petiolata Χ **FACU** 4- Morphological Adaptations Daucus carota 5 UPL Solidago canadensis 5 **FACU** 5- Problematic Hydrophytic Vegetation 65 = Total Cover **Definitions of Vegetation Strata:** Tree- Woody plants 3 in. (7.6cm) or more in diameter at breast height (DBH), regardless of height. Sapling/Shrub- Woody plants less than 3 in. DBH and greater than or equal to 3.28ft (1m) tall. Herb- All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28ft tall. Absolute Dominant Indicator Woody Vines- All woody vines greater than 3.28ft in (Plot Size: 30'radius) Species? **Woody Vine Stratum** % Cover Status height. Vitis riparia **FAC** 30 Parthenocissus quinquefolia 20 Χ **FACU** Hydrophytic 50 = Total Cover Vegetation Present? Yes ____ No _X Remarks: (Include photo numbers here or on a separate sheet.)

SOIL Sampling Point: 02-20200715-WL-20-20U Depth Matrix **Redox Features** (inches % Color Color % Type Texture Remarks Loc 0-12 10YR 4/3 100 Silt Loam **Hydric Soil Indicators:** Indicators for Problematic Soils: Histosol (A1) Polyvalue Below Surface (B15) 2 cm Muck (A10) Histic Epipedon (A2) Thin Dark Surface (S9) Coast Prarie Redox (A16) Black Histic (A3) Loamy Mucky Mineral (F1) 5 cm Mucky Peat or Peat (S3) Hydrogen Sulfide (A4) Loamy Gleyed Matric (F2) Dark Surface (S7) Stratified Layers (A5) Depleted Matrix (F3) Polyvalue Below Surface (S8) Depleted Below Dark Surface (A11) Redox Dark Surface (F6) Thin Dark Surface (S9) Thick Dark Surface (A12) Depleted Dark Surface (F7) Iron-Manganese Masses (F12) Sandy Mucky Mineral (S1) Redox Depressions (F8) Piedmont Floodplain Soils (F19) Sandy Gleyed Matrix (S4) Mesic Spodic (TA6) Sandy Redox (S5) Red Parent Material (F21) Stripped Matrix (S6) Very Shallow Dark Surface (TF12) Dark Surface (S7) Other (Explain in Remarks) Restrictive Layer (if observed): Type: Hydric Soil Present? Yes No Χ Depth (inches): Remarks:

Project/Site: Cider Solar Project	City/Co	ounty: Elba/Genese	Sampling Date: 7/15/2020
Applicant/Owner: Hecate		State: NY Sampling Point:	
Investigator(s): Justin Ahn	Section	n, Township, Range:	02-20200715-WL-21-21W
Landform (hillslope, terrace,etc.): Depression	Local relie	f (concave, convex, n	none): <u>Concave</u> Slope (%) <u>0 - 1</u>
Subregion (LRR or MLRA): LRR L	Lat: 43.094368	8 Long: <u>-7</u>	8.179752 Datum: NAD83
Soil Map Unit Name: CaA			NWI Classification: PFO
Are climatic / hyrologic conditions on the site t	cypical for this time of year	ar? Yes <u>X</u> No	(if no, explain in Remarks.)
Are Vegetation $\underline{\hspace{1cm}}$, Soil $\underline{\hspace{1cm}}$, or Hydrology	significantly distur	bed? Are "Normal (Circumstances" present? Yes X No
Are Vegetation, Soil, or Hydrology	naturally problema	atic? (if needed, expl	lain any answers in Remarks.)
SUMMARY OF FINDINGS - Attach site map	showing sampling po	oint locations, tran	sects, important features, etc.
Hydrophytic Vegetation Present? Yes X		Is the Sampled Area	-
Hydric Soil Present? Yes X		within a Wetland?	Yes X No
Wetland Hydrology Present? Yes X		if yes, optional Wetl	and Site ID: WI 75
		, 60, 60, 61, 61, 61, 61, 61, 61, 61, 61, 61, 61	<u> </u>
Remarks: (Explain alternative procedures here or in a sep	parate report.)		
HYDROLOGY			
Wetland Hydrology Indicators:			Secondary Indicators (minimum of two required)
Primary Indicators (minimum of one is required: cl			Surface Soil Cracks (B6)
Surface Water (A1)	X Water-Stained Leaves	(B9)	X Drainage Patterns (B10)
High Water Table (A2)	Aquatic Fauna (B13)		X Moss Trim Lines (B16)
Saturation (A3)	Marl Deposits (B15)		Dry-Season Water Table (C2)
Water Marks (B1)	Hydrogen Sulfide Odo	r (C1)	Crayfish Burrows (C8)
Sediment Deposits (B2)	Oxidized Rhizospheres	s on Living Roots (C3)	Saturation Visible in Aerial Imagery (C9)
Drift Deposits (B3)	Presence of Reduced	Iron (C4)	Stunted or Stressed Plants (D1)
Algal Mat or Crust (B4)	Recent Iron Reduction	n in Tilled Soils (C6)	Geomorphic Position (D2)
Iron Deposits (B5)	Thin Muck Surface (C7	7)	Shallow Aquitard (D3)
Inundation Visible on Aerial Imagery (B7)	Other (Explain in Rem	arks)	Microtopographic Relief (D4)
Sparsley Vegetated Concave Surface (B8)			FAC-Neutral Test (D5)
Surface Water Present? Yes No X	Depth (inches)		
Water Table Present? Yes No X	Depth (inches)	Wetland H	lydrology Present? Yes X No
Saturation Present? Yes No X	Depth (inches)	-	<u> </u>
Describe Recorded Data (stream gauge, monit	toring well periol photos	nrovious inspostion	ss) if available:
Describe Recorded Data (stream gauge, month	tornig well, aeriai priotos	, previous irispection	s), ii avaliable.
Remarks:			

VEGETATION - Use scientific names of plants

/EGETATION - Use scier			Absolute	Dominant	Indicator		ing Point			
Tree Stratum	(Plot Size:	30'radius)	% Cover	Species?	Status	Dominance Test \				
	(* ************************************			·	FAC	Number of Dom That Are OBL, FA	•		6	(A)
Populus deltoides Fraxinus pennsylvanica	<u> </u>		<u>40</u> 30	X	FACW		•	_	0	_(^)
Traxinus pennisyrvanies	1			= Total Cov		Total Number			6	(B)
				10ta1 co		Species Ac		-	6	(D)
						Percent of Dor That Are OBL,	•		100%	(A/B)
						mat Are OBL,	racw, or	rac.	100%	(A/D)
						Prevalence Index	Workshee	t:		
			Absolute	Dominant	Indicator	OBL species	0	x 1	0	
Shrub Stratum	(Plot Size:	L5'radius)	% Cover	Species?	Status	FACW species	127	x 2	254	
Fraxinus pennsylvanic	a		30	Х	FACW	FAC species	80	x 3	240	
Lonicera tatarica			5		FACU	FACU species	5	x 4	20	-
			35	_= Total Cov	er	UPL species	0	x 5	0	
						Column Totals	212	(A)	514	(B
						Prevalenc	ce Index =	B/A =	2.42	
						Hydrophytic Vege	station Inc	licator		
			Absolute	Dominant	Indicator	1- Rapid Tes				ion
Herb Stratum	(Plot Size:	5'radius)	% Cover	Species?	Status	X 2- Dominan	•		c vegetat	.1011
Cyperus esculentus			30	Х	FACW					
Persicaria virginiana			20	Χ	FAC	X 3- Prevalence	ce index is	=< 3.0		
Phalaris arundinacea			15		FACW	4- Morphol	ogical Ada	ptatior	ıs	
Solidago gigantea			10		FACW	5- Problema	atic Hydro	phytic '	Vegetatio	n
Fraxinus pennsylvanic			10		FACW					
Toxicodendron radica	ns		10		FAC	Definitions of Veget	ation Strat	a:		
Phragmites australis			2	= Total Cov	FACW	Tree- Woody plants	3 in. (7.6cm	n) or mo	re in diam	eter at
			97	_= 10tal Cov	rer	breast height (DBH),	•	•		
						Sapling/Shrub- Woo	dv nlants le	ss than	3 in DBH a	and
						greater than or equa				
						Herb- All herbaceous	s (non-woo	dv) nlan	ıts, regardl	ess of
						size, and woody plar			_	233 01
			Absolute	Dominant	Indicator					
Noody Vine Stratum	(Plot Size:	30'radius)	% Cover	Species?	Status	Woody Vines- All wo height.	ody vines g	greater t	than 3.28ft	in
Vitis riparia			10	X	FAC					
			10	_= Total Cov	ver	Hydrop	hytic			
						Vegeta				
						Pres	sent? Yes	Х	No	

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

SOIL Sampling Point: 02-20200715-WL-21-21W

Depth	Matrix				Redo	x Featur	es	
(inches	Color	%	Color	%	Type	Loc	Texture	Remarks
0-16	10YR 5/4	90	7.5YR 6/8	10	С	PL	Silt Loam	
Uvdrie Ce	oil Indicators:							Indicators for Problematic Soils:
-	tosol (A1)				Polyvalu	a Ralow S	urface (B15)	2 cm Muck (A10)
	tic Epipedon (Δ2١			-	k Surface		Coast Prarie Redox (A16)
	ck Histic (A3)	A2)				lucky Min		5 cm Mucky Peat or Peat (S3)
	drogen Sulfide	(()(1)			=	leyed Ma		Dark Surface (S7)
	atified Layers (•	d Matrix (I	, ,	Polyvalue Below Surface (S8)
	pleted Below [rface (A11)			ark Surfac		Thin Dark Surface (S9)
	ck Dark Surfac					d Dark Sur		Iron-Manganese Masses (F12)
	ndy Mucky Mir				-	epression		Piedmont Floodplain Soils (F19)
	ndy Gleyed Ma				Nedox D	ергеззіон	3 (1 0)	Mesic Spodic (TA6)
	ndy Gleyed Ivia ndy Redox (S5)	-)					Red Parent Material (F21)
	ipped Matrix (Very Shallow Dark Surface (TF12)
	rk Surface (S7)							X Other (Explain in Remarks)
Dai	ik Surface (S7)	1						Other (Explain in Kemarks)
Restrictiv	ve Layer (if obs	erved):						
	7. (
	5 .1 /:	Type:					Hydric	: Soil Present? Yes X No No
	Depth (in	iches):						
Remark	.							
Remark	5.							

Project/Site: Cider Solar Project	City/County: Elba/Genese	e Sampling Date: 7/15/2020				
Applicant/Owner: Hecate	State: NY Sampling Point:02					
Investigator(s): Justin Ahn	Section, Township, Range: WL-21-21U					
Landform (hillslope, terrace,etc.): Toeslope	Local relief (concave, convex,	none): <u>Linear</u> Slope (%) <u>1 - 5</u>				
Subregion (LRR or MLRA): LRR L	Lat: <u>43.094302</u> Long: <u>-7</u>	78.179652 Datum: NAD83				
Soil Map Unit Name: <u>CaA</u>		NWI Classification: UPL				
Are climatic / hyrologic conditions on the site	typical for this time of year? Yes X No	(if no, explain in Remarks.)				
Are Vegetation, Soil, or Hydrology	significantly disturbed? Are "Normal	Circumstances" present? Yes X No				
Are Vegetation, Soil, or Hydrology	naturally problematic? (if needed, exp	plain any answers in Remarks.)				
SUMMARY OF FINDINGS - Attach site ma	p showing sampling point locations, trai	nsects, important features, etc.				
Hydrophytic Vegetation Present? Yes X	No Is the Sampled Are	a				
Hydric Soil Present? Yes	No X within a Wetland?	Yes No X				
Wetland Hydrology Present? Yes	No X if yes, optional Wet	land Site ID:				
Remarks: (Explain alternative procedures here or in a se						
HYDROLOGY						
Wetland Hydrology Indicators:		Secondary Indicators (minimum of two required)				
Primary Indicators (minimum of one is required: c	heck all that apply)	Surface Soil Cracks (B6)				
Surface Water (A1)	Water-Stained Leaves (B9)	Drainage Patterns (B10)				
High Water Table (A2)	Aquatic Fauna (B13)	Moss Trim Lines (B16)				
Saturation (A3)	Marl Deposits (B15)	Dry-Season Water Table (C2)				
Water Marks (B1)	Hydrogen Sulfide Odor (C1)	Crayfish Burrows (C8)				
Sediment Deposits (B2)	Oxidized Rhizospheres on Living Roots (C3)	Saturation Visible in Aerial Imagery (C9)				
Drift Deposits (B3)	Presence of Reduced Iron (C4)	Stunted or Stressed Plants (D1)				
Algal Mat or Crust (B4)	Recent Iron Reduction in Tilled Soils (C6)	Geomorphic Position (D2)				
Iron Deposits (B5)	Thin Muck Surface (C7)	Shallow Aquitard (D3)				
Inundation Visible on Aerial Imagery (B7)	Other (Explain in Remarks)	Microtopographic Relief (D4)				
Sparsley Vegetated Concave Surface (B8)		FAC-Neutral Test (D5)				
Surface Water Present? Yes No X	Depth (inches)					
Water Table Present? Yes No X	Depth (inches) Wetland	Hydrology Present? Yes No X				
Saturation Present? Yes No X	Depth (inches)	 				
Describe Recorded Data (stream gauge, moni	toring well, aerial photos, previous inspection	ns), if available:				
Remarks:						

VEGETATION - Use scientific names of plants Sampling Point: 02-20200715-WL-21-21U Absolute Dominant Indicator **Dominance Test Worksheet:** (Plot Size: 30'radius) % Cover Species? Status **Tree Stratum Number of Dominant Species** That Are OBL, FACW, or FAC: (A) = Total Cover **Total Number of Dominant** (B) Species Across All Strata: 6 Percent of Dominant Species That Are OBL, FACW, or FAC: 83.3% (A/B) **Prevalence Index Worksheet:** 0 x 1 **OBL** species Absolute Dominant Indicator **FACW** species 45 90 (Plot Size: 15'radius) % Cover Species? Status x 2 **Shrub Stratum FAC** species 45 х3 135 20 Χ **FACW** Fraxinus pennsylvanica 20 = Total Cover **FACU** species 0 x 4 0 **UPL** species 30 x 5 150 Column Totals 120 (A) 375 (B) Prevalence Index = B/A = 3.12 **Hydrophytic Vegetation Indicators:** Absolute Dominant Indicator 1- Rapid Test For Hydrophytic Vegetation **Herb Stratum** (Plot Size: 5'radius) % Cover Species? Status X 2- Dominance Test is > 50% 30 UPL Zea mays Х 3- Prevalence Index is =< 3.0 Х Toxicodendron radicans 15 **FAC** 4- Morphological Adaptations 15 Χ **FACW** Fraxinus pennsylvanica Persicaria virginiana 15 Χ FAC 5- Problematic Hydrophytic Vegetation Impatiens capensis 10 **FACW** 85 = Total Cover **Definitions of Vegetation Strata:** Tree- Woody plants 3 in. (7.6cm) or more in diameter at breast height (DBH), regardless of height. Sapling/Shrub- Woody plants less than 3 in. DBH and greater than or equal to 3.28ft (1m) tall. Herb- All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28ft tall. Absolute Dominant Indicator Woody Vines- All woody vines greater than 3.28ft in (Plot Size: 30'radius) Species? **Woody Vine Stratum** % Cover Status height. **FAC** Vitis riparia 15 Χ 15 = Total Cover Hydrophytic Vegetation Present? Yes X No ___

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

SOIL Sampling Point: 02-20200715-WL-21-21U Depth Matrix **Redox Features** (inches Color % Color % Texture Remarks Type Loc 0-16 10YR 5/4 95 7.5YR 6/8 C PΙ Silt Loam 5 **Hydric Soil Indicators:** Indicators for Problematic Soils: Histosol (A1) Polyvalue Below Surface (B15) 2 cm Muck (A10) Histic Epipedon (A2) Thin Dark Surface (S9) Coast Prarie Redox (A16) Black Histic (A3) Loamy Mucky Mineral (F1) 5 cm Mucky Peat or Peat (S3) Hydrogen Sulfide (A4) Loamy Gleyed Matric (F2) Dark Surface (S7) Stratified Layers (A5) Depleted Matrix (F3) Polyvalue Below Surface (S8) Depleted Below Dark Surface (A11) Redox Dark Surface (F6) Thin Dark Surface (S9) Thick Dark Surface (A12) Depleted Dark Surface (F7) Iron-Manganese Masses (F12) Sandy Mucky Mineral (S1) Redox Depressions (F8) Piedmont Floodplain Soils (F19) Sandy Gleyed Matrix (S4) Mesic Spodic (TA6) Sandy Redox (S5) Red Parent Material (F21) Stripped Matrix (S6) Very Shallow Dark Surface (TF12) Dark Surface (S7) Other (Explain in Remarks)

Restrictive Layer (if observed):			
Type:	 Hydric Soil Present?	Yes	No X
Depth (inches):			

Remarks:

Project/Site: Cider Solar Project	City/County: Elba/Genesee Sampling Date: 7/1				
Applicant/Owner: Hecate	State: NY Sampling Point:				
Investigator(s): Justin Ahn	Section, Township, Range: 02-20200716-W				
Landform (hillslope, terrace,etc.): Depression	Local relief (concave, convex, none): Concave Slope (%) <u>0 - 1</u>			
Subregion (LRR or MLRA): LRR L	Lat: 43.091781 Long:-78.179274 Datum:	NAD83			
Soil Map Unit Name: HIA	NWI Classification: PEM				
Are climatic / hyrologic conditions on the site typical	I for this time of year? Yes X No (if no, explain in Rema	rks.)			
Are Vegetation, Soil, or Hydrology	significantly disturbed? Are "Normal Circumstances" present? Yes	X No			
Are Vegetation, Soil, or Hydrology	naturally problematic? (if needed, explain any answers in Remarks.)				
SUMMARY OF FINDINGS - Attach site map sho	wing sampling point locations, transects, important features,	etc.			
Hydrophytic Vegetation Present? Yes X N					
Hydric Soil Present? Yes X N	within a Wetland?				
Wetland Hydrology Present? Yes X N					
	<u> </u>				
Remarks: (Explain alternative procedures here or in a separate	report.)				
HYDROLOGY					
Wetland Hydrology Indicators:	Secondary Indicators (minimum	of two required)			
Primary Indicators (minimum of one is required: check a	Il that apply) Surface Soil Cracks (B6)				
Surface Water (A1) X	Water-Stained Leaves (B9) Drainage Patterns (B10)				
High Water Table (A2)	Aquatic Fauna (B13) Moss Trim Lines (B16)	Moss Trim Lines (B16)			
Saturation (A3)	Marl Deposits (B15) Dry-Season Water Table (C	2)			
Water Marks (B1)	Hydrogen Sulfide Odor (C1) Crayfish Burrows (C8)	Crayfish Burrows (C8)			
Sediment Deposits (B2) X	Oxidized Rhizospheres on Living Roots (C3) Saturation Visible in Aerial	Saturation Visible in Aerial Imagery (C9)			
Drift Deposits (B3)	Presence of Reduced Iron (C4) Stunted or Stressed Plants	Stunted or Stressed Plants (D1)			
Algal Mat or Crust (B4)	Recent Iron Reduction in Tilled Soils (C6) Geomorphic Position (D2)	Geomorphic Position (D2)			
Iron Deposits (B5)	Thin Muck Surface (C7) Shallow Aquitard (D3)				
Inundation Visible on Aerial Imagery (B7)	Other (Explain in Remarks) Microtopographic Relief (D	4)			
Sparsley Vegetated Concave Surface (B8)	FAC-Neutral Test (D5)				
	oth (inches)				
		No			
	· · · · — — — — — — — — — — — — — — — —	_ No			
Saturation Present? Yes No X De	oth (inches)				
Describe Recorded Data (stream gauge, monitoring	g well, aerial photos, previous inspections), if available:				
Remarks:					
nemarks.					

VEGETATION - Use scientific names of plants Sampling Point: 02-20200716-WL-23-23W Absolute Dominant Indicator **Dominance Test Worksheet:** (Plot Size: 30'radius) % Cover Species? Status **Tree Stratum Number of Dominant Species** That Are OBL, FACW, or FAC: (A) = Total Cover **Total Number of Dominant** Species Across All Strata: (B) Percent of Dominant Species (A/B) That Are OBL, FACW, or FAC: 100% **Prevalence Index Worksheet:** 70 x 1 70 **OBL** species Absolute Dominant Indicator **FACW** species 15 30 (Plot Size: 15'radius) % Cover Species? Status x 2 **Shrub Stratum FAC** species 10 30 OBL х3 Asclepias incarnata Χ 10 10 = Total Cover **FACU** species 22 x 4 88 2 **UPL** species x 5 10 Column Totals 119 (A) 228 (B) Prevalence Index = B/A = 1.92 **Hydrophytic Vegetation Indicators:** Absolute Dominant Indicator 1- Rapid Test For Hydrophytic Vegetation **Herb Stratum** (Plot Size: 5'radius) % Cover Species? Status X 2- Dominance Test is > 50% 30 Typha angustifolia OBL X 3- Prevalence Index is =< 3.0 Χ OBL Leersia oryzoides 30 4- Morphological Adaptations Ambrosia artemisiifolia 15 **FACU** Solidago gigantea 15 **FACW** 5- Problematic Hydrophytic Vegetation Alliaria petiolata 5 **FACU** Rumex crispus 5 FAC **Definitions of Vegetation Strata:** UPL Daucus carota 2 Tree- Woody plants 3 in. (7.6cm) or more in diameter at Cirsium vulgare 2 **FACU** breast height (DBH), regardless of height. 104 = Total Cover Sapling/Shrub- Woody plants less than 3 in. DBH and greater than or equal to 3.28ft (1m) tall. Herb- All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28ft tall. Absolute Dominant Indicator Woody Vines- All woody vines greater than 3.28ft in (Plot Size: 30'radius) Species? **Woody Vine Stratum** % Cover Status height. **FAC** Vitis riparia Χ 5 = Total Cover Hydrophytic Vegetation Present? Yes X No ____

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

SOIL

Sampling Point: 02-20200716-WL-23-23W

Depth	Matrix		-		Redo	x Featu	res	
inches	Color	%	Color	%	Туре	Loc	Texture	Remarks
0-6	10YR 4/4	95	7.5YR 6/8	5	С	PL	Silty Clay Loam	
6-18	10YR 5/1	60	7.5YR 6/8	40	С	M	Silty Clay Loam	
Hvdric Sc	oil Indicators:						<u> </u>	ndicators for Problematic Soils:
-	tosol (A1)				Polyvalu	e Below S	Surface (B15)	2 cm Muck (A10)
His	tic Epipedon (A2)			Thin Dar	k Surface	e (S9)	Coast Prarie Redox (A16)
Bla	ck Histic (A3)				Loamy N	lucky Mi	neral (F1)	5 cm Mucky Peat or Peat (S3)
Нус	drogen Sulfide	(A4)			Loamy G	leyed Ma	atric (F2)	Dark Surface (S7)
Stra	atified Layers	(A5)		Х	Depleted	l Matrix ((F3)	Polyvalue Below Surface (S8)
Depleted Below Dark Surface (A11)					Redox D	ark Surfa	ce (F6)	Thin Dark Surface (S9)
Thick Dark Surface (A12)					Depleted	l Dark Su	rface (F7)	Iron-Manganese Masses (F12)
Sandy Mucky Mineral (S1)					Redox D	epressior	ns (F8)	Piedmont Floodplain Soils (F19)
San	idy Gleyed Ma	itrix (S4	!)				_	Mesic Spodic (TA6)
San	idy Redox (S5)						_	Red Parent Material (F21)
Stri	pped Matrix (S6)					_	Very Shallow Dark Surface (TF12)
Dar	k Surface (S7)						_	Other (Explain in Remarks)
Restrictiv	ve Layer (if obs	erved):						
		Type:					Hydric So	oil Present? Yes X No
	Depth (in	ches):						
Remarks	5:							

Project/Site: Cider Solar Project	City/County: Elba/Genese	Sampling Date: 7/23/2020				
Applicant/Owner: Hecate	State: NY Sampling Point:					
Investigator(s): Justin Ahn	Section, Township, Range: 02-20200716-WL-23-					
Landform (hillslope, terrace,etc.): <u>Toeslope</u>	Local relief (concave, convex, r	one): <u>Linear</u> Slope (%) <u>1 - 5</u>				
Subregion (LRR or MLRA): LRR L	Lat: 43.091797 Long: <u>-7</u>	8.179326 Datum: <u>NAD83</u>				
Soil Map Unit Name: HIA		NWI Classification: UPL				
Are climatic / hyrologic conditions on the site t	ypical for this time of year? Yes X No	(if no, explain in Remarks.)				
Are Vegetation, Soil, or Hydrology		·				
Are Vegetation, Soil, or Hydrology	naturally problematic? (if needed, exp	lain any answers in Remarks.)				
SUMMARY OF FINDINGS - Attach site map	showing sampling point locations, tran	sects, important features, etc.				
Hydrophytic Vegetation Present? Yes	No X Is the Sampled Area					
Hydric Soil Present? Yes	$\frac{1}{1}$ No X within a Wetland?	Yes No X				
· —						
Wetland Hydrology Present? Yes		and Site ID.				
Remarks: (Explain alternative procedures here or in a sep	parate report.)					
HYDROLOGY						
Wetland Hydrology Indicators:		Secondary Indicators (minimum of two required)				
Primary Indicators (minimum of one is required: cl	neck all that apply)	Surface Soil Cracks (B6)				
Surface Water (A1)	Water-Stained Leaves (B9)	Drainage Patterns (B10)				
High Water Table (A2)	Aquatic Fauna (B13)	Moss Trim Lines (B16)				
Saturation (A3)	Marl Deposits (B15)	Dry-Season Water Table (C2)				
Water Marks (B1)	Hydrogen Sulfide Odor (C1)	Crayfish Burrows (C8)				
Sediment Deposits (B2)	Oxidized Rhizospheres on Living Roots (C3)	Saturation Visible in Aerial Imagery (C9)				
Drift Deposits (B3)	Presence of Reduced Iron (C4)	Stunted or Stressed Plants (D1)				
Algal Mat or Crust (B4)	Recent Iron Reduction in Tilled Soils (C6)	Geomorphic Position (D2)				
Iron Deposits (B5)	Thin Muck Surface (C7)	Shallow Aquitard (D3)				
Inundation Visible on Aerial Imagery (B7)	Other (Explain in Remarks)	Microtopographic Relief (D4)				
Sparsley Vegetated Concave Surface (B8)	other (Explain in Heritalite)	FAC-Neutral Test (D5)				
		The Heatini rest (55)				
Surface Water Present? Yes NoX	Depth (inches)					
Water Table Present? Yes NoX	Depth (inches) Wetland F	lydrology Present? Yes No X				
Saturation Present? Yes No _ X	Depth (inches)					
Describe Recorded Data (stream gauge, monit	toring well, aerial photos, previous inspection	s). if available:				
00.,	5 - , p					
Remarks:						

VEGETATION - Use scientific names of plants Sampling Point: 02-20200716-WL-23-23U Absolute Dominant Indicator **Dominance Test Worksheet:** (Plot Size: 30'radius) % Cover Species? Status **Tree Stratum Number of Dominant Species** That Are OBL, FACW, or FAC: (A) = Total Cover **Total Number of Dominant** (B) Species Across All Strata: 2 Percent of Dominant Species (A/B) That Are OBL, FACW, or FAC: 0% **Prevalence Index Worksheet:** x 1 0 **OBL** species Absolute Dominant Indicator **FACW** species 10 20 (Plot Size: 15'radius) % Cover Status x 2 **Shrub Stratum** Species? FAC species 0 х3 = Total Cover FACU species 80 x 4 320 **UPL** species 0 x 5 0 Column Totals 90 (A) 340 (B) Prevalence Index = B/A = 3.78 **Hydrophytic Vegetation Indicators:** Absolute Dominant Indicator 1- Rapid Test For Hydrophytic Vegetation **Herb Stratum** (Plot Size: 5'radius) % Cover Species? Status 2- Dominance Test is > 50% 30 **FACU** Ambrosia artemisiifolia 3- Prevalence Index is =< 3.0 25 Χ Alliaria petiolata **FACU** 4- Morphological Adaptations Plantago lanceolata 15 **FACU** Medicago lupulina 10 **FACU** 5- Problematic Hydrophytic Vegetation Bidens frondosa 10 **FACW** 90 = Total Cover **Definitions of Vegetation Strata:** Tree- Woody plants 3 in. (7.6cm) or more in diameter at breast height (DBH), regardless of height. Sapling/Shrub- Woody plants less than 3 in. DBH and greater than or equal to 3.28ft (1m) tall. Herb- All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28ft tall. Absolute Dominant Indicator Woody Vines- All woody vines greater than 3.28ft in (Plot Size: 30'radius) **Woody Vine Stratum** % Cover Species? Status height. = Total Cover Hydrophytic Vegetation Present? Yes ____ No __X Remarks: (Include photo numbers here or on a separate sheet.)

Soll Sampling Point: 02-20200716-WL-23-2

OIL						Sampling Point: 02-20200716-WL-23-23			
Depth Matrix					Redo	x Feature			
(inches	Color	%	Color	%	Type	Loc	Texture	Remarks	
0-12	10YR 3/3	100					Silt Loam		
12-18	10YR 6/3	100					Silt Loam		
18-24	10YR 7/2	90	7.5YR 5/8	10	С	PL	Silt Loam		
10 2 .	20111 7/2	30	7.5		J		one Louin		
Hydric So	il Indicators:							Indicators for Problematic Soils:	
•	tosol (A1)				Polyvalu	e Below Su	rface (B15)	2 cm Muck (A10)	
Hist	tic Epipedon (A2)			Thin Dar	k Surface (S9)	Coast Prarie Redox (A16)	
Blad	ck Histic (A3)				Loamy N	lucky Mine	eral (F1)	5 cm Mucky Peat or Peat (S3)	
Hydrogen Sulfide (A4)					Loamy G	ileyed Matı	ric (F2)	Dark Surface (S7)	
Stratified Layers (A5)					Depleted	d Matrix (F	3)	Polyvalue Below Surface (S8)	
Dep	oleted Below	Dark Su	rface (A11)		Redox D	ark Surface	(F6)	Thin Dark Surface (S9)	
Thic	ck Dark Surfac	ce (A12))		Depleted	d Dark Surf	ace (F7)	Iron-Manganese Masses (F12)	
San	dy Mucky Mi	neral (S	1)		Redox D	epressions	(F8)	Piedmont Floodplain Soils (F19)	
San	dy Gleyed Ma	atrix (S4	.)					Mesic Spodic (TA6)	
San	dy Redox (S5))						Red Parent Material (F21)	
Stri	pped Matrix (S6)						Very Shallow Dark Surface (TF12)	
Dar	k Surface (S7))						Other (Explain in Remarks)	
Restrictiv	ve Layer (if obs	erved):							
		Type:					Hydric	: Soil Present? Yes No X	
	Depth (in	iches):						<u> </u>	
Remarks	S:								

Project/Site: Cider Solar Project	City/County: Elba/Genesee Sampling Date: 7/					
Applicant/Owner: Hecate	State: NY Sampling Point:					
Investigator(s): Justin Ahn	Sectio	Section, Township, Range: 02-20				
Landform (hillslope, terrace,etc.): Depression	Local relie	ef (concave, convex, n	none): <u>Concave</u> Slope (%) <u>0 - 1</u>			
Subregion (LRR or MLRA): LRR L	Lat: <u>43.09469</u>	4 Long: <u>-</u> 78	8.169038 Datum: <u>NAD83</u>			
Soil Map Unit Name: ArB			NWI Classification: PFO			
Are climatic / hyrologic conditions on the site t	typical for this time of ye	ar? Yes <u>X</u> No	(if no, explain in Remarks.)			
Are Vegetation, Soil, or Hydrology	significantly distur	bed? Are "Normal (Circumstances" present? Yes X No			
Are Vegetation, Soil, or Hydrology	naturally problema	atic? (if needed, expl	lain any answers in Remarks.)			
SUMMARY OF FINDINGS - Attach site map	o showing sampling po	oint locations. tran	sects. important features. etc.			
Hydrophytic Vegetation Present? Yes X		Is the Sampled Area	-			
Hydric Soil Present? Yes X		within a Wetland?	Yes X No			
		if yes, optional Wetl				
		, (23) 3 pt. 3 11 21.	<u> </u>			
Remarks: (Explain alternative procedures here or in a se	parate report.)					
HYDROLOGY						
Wetland Hydrology Indicators:			Secondary Indicators (minimum of two required)			
Primary Indicators (minimum of one is required: cl	heck all that apply)		Surface Soil Cracks (B6)			
Surface Water (A1)	X Water-Stained Leaves	s (B9)	Drainage Patterns (B10)			
High Water Table (A2)	Aquatic Fauna (B13)		X Moss Trim Lines (B16)			
Saturation (A3)	Marl Deposits (B15)		Dry-Season Water Table (C2)			
Water Marks (B1)	Hydrogen Sulfide Odo	or (C1)	Crayfish Burrows (C8)			
Sediment Deposits (B2)	Oxidized Rhizosphere	s on Living Roots (C3)	Saturation Visible in Aerial Imagery (C9)			
Drift Deposits (B3)	Presence of Reduced	Iron (C4)	Stunted or Stressed Plants (D1)			
Algal Mat or Crust (B4)	Recent Iron Reduction	n in Tilled Soils (C6)	Geomorphic Position (D2)			
Iron Deposits (B5)	Thin Muck Surface (C	7)	Shallow Aquitard (D3)			
Inundation Visible on Aerial Imagery (B7)	Other (Explain in Rem	arks)	Microtopographic Relief (D4)			
Sparsley Vegetated Concave Surface (B8)			FAC-Neutral Test (D5)			
Surface Water Present? Yes No X	Depth (inches)					
Water Table Present? Yes No X	Depth (inches)	- Wetland H	lydrology Present? Yes X No			
	Depth (inches)	- Wetiana n	Tydrology Frescht: Tes X NO			
Saturation Present? Yes No X		_				
Describe Recorded Data (stream gauge, moni-	toring well, aerial photos	, previous inspection	s), if available:			
Remarks:						

VEGETATION - Use scientific names of plants

/EGETATION - Use scie		or promote	A l l + -	Danisant	to disease.			20200716-V	
Tuo o Chuotuus	(Dlot Sizo:	30'radius)	Absolute % Cover	Dominant Species?	Status	Dominance Test W	Vorksheet:		
Tree Stratum	(Plot Size.			species:		Number of Domi	•		
Tilia americana			40	Х	FACU	That Are OBL, FA	CW, or FAC:	4	(A)
Fraxinus pennsylvani	ca		30	X	FACW		r of Dominant		
			70	_= Total Cov	/er	Species Acr	oss All Strata:	7	(B)
						Percent of Dom	ninant Species	5	
						That Are OBL, F	FACW, or FAC	57.1%	_(A/B
						Prevalence Index V	Vorksheet:		
			Absolute	Dominant	Indicator	OBL species	0 x	10	
Shrub Stratum	(Plot Size:	15'radius)	% Cover	Species?	Status	FACW species	145 x	2 290	
Fraxinus pennsylvan	ica		40	Χ	FACW	FAC species	20 x	3 60	
Lonicera tatarica			15	X	FACU	FACU species	70 x	4 280	
			55	_= Total Cov	/er	UPL species	0 x	5 0	
						Column Totals	235 (A	A) 630	(E
						Prevalence	e Index = B/A	= 2.68	
						Hydrophytic Vege	tation Indicat	ors:	
			Absolute	Dominant	Indicator		t For Hydroph		ition
Herb Stratum	(Plot Size:	5'radius)	% Cover	Species?	Status	· ·			
Onoclea sensibilis			50	Х	FACW	X 2- Dominano	ce rest is > 50°	%	
Fraxinus pennsylvani	ica		15	Λ	FACW	X 3- Prevalenc	e Index is =< 3	3.0	
Geum canadense	100		10		FAC	4- Morpholo	gical Adaptat	ions	
Solidago gigantea			10		FACW		tic Hydrophyt		an .
Toxicodendron radio	ans		5		FAC		tic riyaropriyt	ic vegetati	<i>)</i>
			90	= Total Cov					
				_	/er	Definitions of Vegeta	ntion Strata:		
				_	ver	Definitions of Vegeta Tree- Woody plants 3 breast height (DBH),	3 in. (7.6cm) or		neter a
			30	_	er	Tree- Woody plants 3	in. (7.6cm) or regardless of he	eight. an 3 in. DBH	
				_	ver	Tree- Woody plants 3 breast height (DBH), 1 Sapling/Shrub- Wood greater than or equal Herb- All herbaceous	in. (7.6cm) or regardless of he ly plants less th to 3.28ft (1m) (non-woody) p	eight. an 3 in. DBH tall. lants, regard	and
				Dominant		Tree- Woody plants 3 breast height (DBH), I Sapling/Shrub- Wood greater than or equal	in. (7.6cm) or regardless of he ly plants less th to 3.28ft (1m) (non-woody) p	eight. an 3 in. DBH tall. lants, regard	and
Noody Vine Stratum	(Plot Size:	_30'radius_)		Dominant Species?		Tree- Woody plants 3 breast height (DBH), 1 Sapling/Shrub- Wood greater than or equal Herb- All herbaceous size, and woody plant Woody Vines- All woody	in. (7.6cm) or regardless of he ly plants less th to 3.28ft (1m) (non-woody) p ts less than 3.28	eight. an 3 in. DBH tall. llants, regard 8ft tall.	and lless of
Noody Vine Stratum Parthenocissus quine		30'radius)	Absolute		Indicator	Tree- Woody plants 3 breast height (DBH), 1 Sapling/Shrub- Wood greater than or equal Herb- All herbaceous size, and woody plant	in. (7.6cm) or regardless of he ly plants less th to 3.28ft (1m) (non-woody) p ts less than 3.28	eight. an 3 in. DBH tall. llants, regard 8ft tall.	and lless of
-		30'radius)	Absolute % Cover	Species?	Indicator Status	Tree- Woody plants 3 breast height (DBH), 1 Sapling/Shrub- Wood greater than or equal Herb- All herbaceous size, and woody plant Woody Vines- All woody	B in. (7.6cm) or regardless of he ly plants less th to 3.28ft (1m) (non-woody) p ts less than 3.28	eight. an 3 in. DBH tall. llants, regard 8ft tall.	and lless of
·		_30'radius_)	Absolute % Cover 15	Species?	Indicator Status FACU FAC	Tree- Woody plants 3 breast height (DBH), 1 Sapling/Shrub- Wood greater than or equal Herb- All herbaceous size, and woody plant Woody Vines- All wooheight.	B in. (7.6cm) or regardless of he ly plants less that to 3.28ft (1m) (non-woody) pts less than 3.28 ody vines greatenytic	eight. an 3 in. DBH tall. llants, regard 8ft tall.	and lless of

SOIL Sampling Point: 02-20200716-WL-24-24W

Depth	Matrix				Redo	x Featu	res	
(inches	Color	%	Color	%	Type	Loc	Texture	Remarks
0-20	10YR 4/2	80	7.5YR 6/8	20	С	M	Sandy Loam	
Hydric Sc	oil Indicators:							Indicators for Problematic Soils:
His	tosol (A1)				Polyvalu	e Below S	Surface (B15)	2 cm Muck (A10)
His	tic Epipedon (A2)			Thin Dar	k Surface	e (S9)	Coast Prarie Redox (A16)
Bla	ck Histic (A3)				Loamy N	lucky Mii	neral (F1)	5 cm Mucky Peat or Peat (S3)
Hydrogen Sulfide (A4)					Loamy G	ileyed Ma	atric (F2)	Dark Surface (S7)
Stratified Layers (A5)				X	Depleted	d Matrix ((F3)	Polyvalue Below Surface (S8)
Depleted Below Dark Surface (A11)					Redox D	ark Surfa	ce (F6)	Thin Dark Surface (S9)
Thi	ck Dark Surfac	e (A12)			Depleted	d Dark Su	rface (F7)	Iron-Manganese Masses (F12)
Sar	ndy Mucky Mir	neral (S	1)		Redox D	epressior	ns (F8)	Piedmont Floodplain Soils (F19)
Sar	ndy Gleyed Ma	itrix (S4)					Mesic Spodic (TA6)
Sar	ndy Redox (S5))						Red Parent Material (F21)
Str	ipped Matrix (S6)						Very Shallow Dark Surface (TF12)
Dai	rk Surface (S7)							Other (Explain in Remarks)
Restrictiv	ve Layer (if obs	erved):						
		Type:					Hydric :	Soil Present? Yes X No
	Depth (in	ches):						
Remark	ς.							
	•							

Project/Site: Cider Solar Project	City/County: Elba/Genese	e Sampling Date: 7/16/2020				
Applicant/Owner: Hecate	State: NY Sampling Point:02-2					
Investigator(s): Justin Ahn	Section, Township, Range: WL-24-24U					
Landform (hillslope, terrace,etc.): <u>Toeslope</u>	Local relief (concave, convex, r	none): <u>Linear</u> Slope (%) <u>1 - 5</u>				
Subregion (LRR or MLRA): LRR L	Lat: 43.094635 Long: -7	8.169169 Datum: <u>NAD83</u>				
Soil Map Unit Name: CIB		NWI Classification: UPL				
Are climatic / hyrologic conditions on the site t	cypical for this time of year? Yes X No	(if no, explain in Remarks.)				
Are Vegetation, Soil, or Hydrology	significantly disturbed? Are "Normal	Circumstances" present? Yes X No				
Are Vegetation, Soil, or Hydrology	naturally problematic? (if needed, exp	lain any answers in Remarks.)				
SUMMARY OF FINDINGS - Attach site ma	o showing sampling point locations, tran	sects. important features. etc.				
Hydrophytic Vegetation Present? Yes	No X Is the Sampled Area	-				
Hydric Soil Present? Yes	No X within a Wetland?	Yes No X				
Wetland Hydrology Present? Yes	No X if yes, optional Wet					
Remarks: (Explain alternative procedures here or in a se	parate report.)					
HYDROLOGY						
Wetland Hydrology Indicators:		Secondary Indicators (minimum of two required)				
Primary Indicators (minimum of one is required: c	heck all that apply)	Surface Soil Cracks (B6)				
Surface Water (A1)	Water-Stained Leaves (B9)	Drainage Patterns (B10)				
High Water Table (A2)	Aquatic Fauna (B13)	Moss Trim Lines (B16)				
Saturation (A3)	Marl Deposits (B15)	Dry-Season Water Table (C2)				
Water Marks (B1)	Hydrogen Sulfide Odor (C1)	Crayfish Burrows (C8)				
Sediment Deposits (B2)	Oxidized Rhizospheres on Living Roots (C3)	Saturation Visible in Aerial Imagery (C9)				
Drift Deposits (B3)	Presence of Reduced Iron (C4)	Stunted or Stressed Plants (D1)				
Algal Mat or Crust (B4)	Recent Iron Reduction in Tilled Soils (C6)	Geomorphic Position (D2)				
Iron Deposits (B5)	Thin Muck Surface (C7)	Shallow Aquitard (D3)				
Inundation Visible on Aerial Imagery (B7)	Other (Explain in Remarks)					
Sparsley Vegetated Concave Surface (B8)	Other (Explain in Nemarks)	Microtopographic Relief (D4) FAC-Neutral Test (D5)				
		rac-neutral rest (D3)				
Surface Water Present? Yes NoX	Depth (inches)					
Water Table Present? Yes NoX	Depth (inches) Wetland H	Hydrology Present? Yes No X				
Saturation Present? Yes No X	Depth (inches)					
Describe Recorded Data (stream gauge, moni	toring well, aerial photos, previous inspection	ns). if available:				
3. · · · · · · · · · · · · · · · · · · ·	3 - 7 - 7 - 1 -					
Remarks:						

VEGETATION - Use scientific names of plants Sampling Point: 02-20200716-WL-24-24U Absolute Dominant Indicator **Dominance Test Worksheet:** (Plot Size: 30'radius) % Cover Species? Status **Tree Stratum Number of Dominant Species** That Are OBL, FACW, or FAC: (A) = Total Cover **Total Number of Dominant** (B) Species Across All Strata: 2 Percent of Dominant Species (A/B) That Are OBL, FACW, or FAC: 0% **Prevalence Index Worksheet:** x 1 0 **OBL** species Absolute Dominant Indicator **FACW** species 0 (Plot Size: 15'radius) % Cover Status x 2 **Shrub Stratum** Species? 0 FAC species х3 = Total Cover **FACU** species 40 x 4 160 **UPL** species 30 x 5 150 Column Totals 70 (A) 310 (B) Prevalence Index = B/A = 4.43 **Hydrophytic Vegetation Indicators:** Absolute Dominant Indicator 1- Rapid Test For Hydrophytic Vegetation **Herb Stratum** (Plot Size: 5'radius) % Cover Species? Status 2- Dominance Test is > 50% 30 UPL Beta vulgaris 3- Prevalence Index is =< 3.0 20 Χ Erigeron canadensis **FACU** 4- Morphological Adaptations Chenopodium album 10 **FACU** Portulaca oleracea 5 **FACU** 5- Problematic Hydrophytic Vegetation Digitaria sanguinalis 5 **FACU** 70 = Total Cover **Definitions of Vegetation Strata:** Tree- Woody plants 3 in. (7.6cm) or more in diameter at breast height (DBH), regardless of height. Sapling/Shrub- Woody plants less than 3 in. DBH and greater than or equal to 3.28ft (1m) tall. Herb- All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28ft tall. Absolute Dominant Indicator Woody Vines- All woody vines greater than 3.28ft in (Plot Size: 30'radius) **Woody Vine Stratum** % Cover Species? Status height. = Total Cover Hydrophytic Vegetation Present? Yes ____ No _X Remarks: (Include photo numbers here or on a separate sheet.)

SOIL Sampling Point: 02-20200716-WL-24-24U Depth Matrix **Redox Features** (inches % Color Color % Type Texture Remarks Loc 0-20 10YR 4/6 100 Sandy Loam **Hydric Soil Indicators:** Indicators for Problematic Soils: Histosol (A1) Polyvalue Below Surface (B15) 2 cm Muck (A10) Histic Epipedon (A2) Thin Dark Surface (S9) Coast Prarie Redox (A16) Black Histic (A3) Loamy Mucky Mineral (F1) 5 cm Mucky Peat or Peat (S3) Hydrogen Sulfide (A4) Loamy Gleyed Matric (F2) Dark Surface (S7) Stratified Layers (A5) Depleted Matrix (F3) Polyvalue Below Surface (S8) Depleted Below Dark Surface (A11) Redox Dark Surface (F6) Thin Dark Surface (S9) Thick Dark Surface (A12) Depleted Dark Surface (F7) Iron-Manganese Masses (F12) Sandy Mucky Mineral (S1) Redox Depressions (F8) Piedmont Floodplain Soils (F19) Sandy Gleyed Matrix (S4) Mesic Spodic (TA6) Sandy Redox (S5) Red Parent Material (F21) Stripped Matrix (S6) Very Shallow Dark Surface (TF12) Dark Surface (S7) Other (Explain in Remarks) Restrictive Layer (if observed): Type: Hydric Soil Present? Yes No Χ Depth (inches): Remarks:

Project/Site: Cider Solar Project	City/Co	Sampling Date: 7/16/2020				
Applicant/Owner: Hecate	State: NY Sampling Point: 02-20200					
Investigator(s): Justin Ahn	Sectio	Section, Township, Range: WL-25-25W				
Landform (hillslope, terrace,etc.): Depression	n Local relie	f (concave, convex, r	one): <u>Concave</u> Slope (%) <u>0 - 1</u>			
Subregion (LRR or MLRA): LRR L	Lat: 43.092095	Long: <u>-</u> -78	3.169055 Datum: <u>NAD83</u>			
Soil Map Unit Name: CaA			NWI Classification: PFO			
Are climatic / hyrologic conditions on the site	typical for this time of ye	ar? Yes <u>X</u> No	(if no, explain in Remarks.)			
Are Vegetation, Soil, or Hydrology	significantly distur	bed? Are "Normal (Circumstances" present? Yes X No			
Are Vegetation, Soil, or Hydrology	naturally problema	atic? (if needed, exp	ain any answers in Remarks.)			
SUMMARY OF FINDINGS - Attach site ma	n showing sampling no	oint locations, tran	sects, important features, etc.			
Hydrophytic Vegetation Present? Yes X		Is the Sampled Area				
Hydric Soil Present? Yes X		within a Wetland?	Yes X No			
		if yes, optional Wetl				
Wetland Hydrology Present? Yes X		ii yes, optional weti	were in the interest of the in			
Remarks: (Explain alternative procedures here or in a se	parate report.)					
HYDROLOGY						
Wetland Hydrology Indicators:			Secondary Indicators (minimum of two required)			
Primary Indicators (minimum of one is required: c	heck all that apply)		Surface Soil Cracks (B6)			
Surface Water (A1)	X Water-Stained Leaves	(B9)	X Drainage Patterns (B10)			
High Water Table (A2)	Aquatic Fauna (B13)		X Moss Trim Lines (B16)			
Saturation (A3)	Marl Deposits (B15)		Dry-Season Water Table (C2)			
Water Marks (B1)	Hydrogen Sulfide Odo	r (C1)	Crayfish Burrows (C8)			
Sediment Deposits (B2)	Oxidized Rhizosphere		Saturation Visible in Aerial Imagery (C9)			
Drift Deposits (B3)	Presence of Reduced		Stunted or Stressed Plants (D1)			
X Algal Mat or Crust (B4)	Recent Iron Reduction					
		` ,	Geomorphic Position (D2)			
Iron Deposits (B5)	Thin Muck Surface (C7		Shallow Aquitard (D3)			
Inundation Visible on Aerial Imagery (B7)	Other (Explain in Rem	arks)	Microtopographic Relief (D4)			
Sparsley Vegetated Concave Surface (B8)			FAC-Neutral Test (D5)			
Surface Water Present? Yes NoX	Depth (inches)	_				
Water Table Present? Yes No X	Depth (inches)	Wetland H	ydrology Present? Yes X No			
Saturation Present? Yes No X	Depth (inches)	-				
Describe Recorded Data (stream gauge, moni	toring well, aerial photos	, previous inspection	s), if available:			
2						
Remarks:						

VEGETATION - Use scientific names of plants Sampling Point: 02-20200716-WL-25-25W Absolute Dominant Indicator **Dominance Test Worksheet:** (Plot Size: 30'radius) % Cover Species? Status **Tree Stratum Number of Dominant Species** 50 Χ **FACW** That Are OBL, FACW, or FAC: (A) Acer saccharinum 50 = Total Cover **Total Number of Dominant** Species Across All Strata: (B) 6 Percent of Dominant Species That Are OBL, FACW, or FAC: 66.7% (A/B) **Prevalence Index Worksheet:** 0 x 1 **OBL** species Absolute Dominant Indicator **FACW** species 110 220 (Plot Size: 15'radius) % Cover Species? x 2 **Shrub Stratum** Status FAC species 25 75 х3 Acer saccharinum 30 Χ **FACW** Fraxinus pennsylvanica 30 Χ **FACW FACU** species 30 x 4 120 60 = Total Cover **UPL** species 0 x 5 0 Column Totals 165 (A) 415 (B) Prevalence Index = B/A = 2.52 **Hydrophytic Vegetation Indicators:** Absolute Dominant Indicator 1- Rapid Test For Hydrophytic Vegetation **Herb Stratum** (Plot Size: 5'radius) % Cover Species? Status X 2- Dominance Test is > 50% 20 **FACU** Allium tricoccum Χ X 3- Prevalence Index is =< 3.0 Χ Arisaema triphyllum 10 FAC 4- Morphological Adaptations Alliaria petiolata 10 Χ **FACU** Carex pedunculata 5 FAC 5- Problematic Hydrophytic Vegetation Persicaria virginiana FAC Toxicodendron radicans 5 FAC **Definitions of Vegetation Strata:** 55 = Total Cover Tree- Woody plants 3 in. (7.6cm) or more in diameter at breast height (DBH), regardless of height. Sapling/Shrub- Woody plants less than 3 in. DBH and greater than or equal to 3.28ft (1m) tall. Herb- All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28ft tall. Absolute Dominant Indicator Woody Vines- All woody vines greater than 3.28ft in (Plot Size: 30'radius) **Woody Vine Stratum** % Cover Species? Status height. = Total Cover Hydrophytic Vegetation Present? Yes X No ___

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

SOIL

Sampling Point: 02-20200716-WL-25-25W

Depth	Matrix				Redo				
inches	Color	%	Color	%	Type	Loc	Texture	Remarks	
0-6	10YR 2/2	100					Silt Loam		
6-18	2.5Y 6/2	80	7.5YR 6/8	20	С	М	Sand		
Hydric Soil Indicators:								Indicators for Problematic Soils:	
Histosol (A1)				Polyvalue Below Surface (B15)				2 cm Muck (A10)	
Histic Epipedon (A2)				Thin Dark Surface (S9)				Coast Prarie Redox (A16)	
Black Histic (A3)				Loamy Mucky Mineral (F1)				5 cm Mucky Peat or Peat (S3)	
Hydrogen Sulfide (A4)				Loamy Gleyed Matric (F2)				Dark Surface (S7)	
Stratified Layers (A5)				X Depleted Matrix (F3)				Polyvalue Below Surface (S8)	
Depleted Below Dark Surface (A11)				Redox Dark Surface (F6)				Thin Dark Surface (S9)	
Thick Dark Surface (A12)				Depleted Dark Surface (F7)				Iron-Manganese Masses (F12)	
Sandy Mucky Mineral (S1)				Redox Depressions (F8)			(F8)	Piedmont Floodplain Soils (F19)	
Sandy Gleyed Matrix (S4)								Mesic Spodic (TA6)	
Sandy Redox (S5)								Red Parent Material (F21)	
Stripped Matrix (S6)								Very Shallow Dark Surface (TF12)	
Dar	k Surface (S7))						Other (Explain in Remarks)	
Restrictiv	e Layer (if obs	erved):							
Туре:							Hydri	Hydric Soil Present? Yes X No	
	Depth (in	iches):						 	
Remarks	:								

Project/Site: Cider Solar Project	City/County: Elba/Genesee Sampling Date: 7/16/				
Applicant/Owner: Hecate		State: NY Sampling Point:02-20200716			
Investigator(s): Justin Ahn	Section, Township, Range:	WL-25-25U			
Landform (hillslope, terrace,etc.): <u>Toeslope</u>	Local relief (concave, convex, ı	none): <u>Linear</u> Slope (%) <u>1 - 5</u>			
Subregion (LRR or MLRA): LRR L	Lat: 43.092223 Long:- <u>78</u>				
Soil Map Unit Name:GnB		NWI Classification: UPL			
Are climatic / hyrologic conditions on the site t	typical for this time of year? Yes X No	(if no, explain in Remarks.)			
Are Vegetation, Soil, or Hydrology	significantly disturbed? Are "Normal	Circumstances" present? Yes X No			
Are Vegetation, Soil, or Hydrology	naturally problematic? (if needed, exp	lain any answers in Remarks.)			
SUMMARY OF FINDINGS - Attach site map	showing sampling point locations, trar	nsects, important features, etc.			
Hydrophytic Vegetation Present? Yes	No X Is the Sampled Area				
Hydric Soil Present? Yes	No X within a Wetland? Yes No X				
Wetland Hydrology Present? Yes	No X if yes, optional Wetland Site ID:				
Remarks: (Explain alternative procedures here or in a se					
HYDROLOGY					
Wetland Hydrology Indicators:		Secondary Indicators (minimum of two required)			
Primary Indicators (minimum of one is required: cl	heck all that apply)	Surface Soil Cracks (B6)			
Surface Water (A1)	Water-Stained Leaves (B9)	Drainage Patterns (B10)			
High Water Table (A2)	Aquatic Fauna (B13)	Moss Trim Lines (B16)			
Saturation (A3)	Marl Deposits (B15)	Dry-Season Water Table (C2)			
Water Marks (B1)	Hydrogen Sulfide Odor (C1)	Crayfish Burrows (C8)			
Sediment Deposits (B2)	Oxidized Rhizospheres on Living Roots (C3)	Saturation Visible in Aerial Imagery (C9)			
Drift Deposits (B3)	Presence of Reduced Iron (C4)	Stunted or Stressed Plants (D1)			
Algal Mat or Crust (B4)	Recent Iron Reduction in Tilled Soils (C6)	Geomorphic Position (D2)			
Iron Deposits (B5)	Thin Muck Surface (C7)	Shallow Aquitard (D3)			
Inundation Visible on Aerial Imagery (B7)	Other (Explain in Remarks)	Microtopographic Relief (D4)			
Sparsley Vegetated Concave Surface (B8)		FAC-Neutral Test (D5)			
Surface Water Present? Yes No X	Depth (inches)				
Water Table Present? Yes No X	Depth (inches) Wetland I	Hydrology Present? Yes No X			
Saturation Present? Yes No X	Depth (inches)	<u> </u>			
Describe Recorded Data (stream gauge, moni	toring well, aerial photos, previous inspection	ns), if available:			
Remarks:					

VEGETATION - Use scientific names of plants Sampling Point: 02-20200716-WL-25-25U Absolute Dominant Indicator **Dominance Test Worksheet:** (Plot Size: 30'radius) % Cover Species? Status **Tree Stratum Number of Dominant Species** 50 Χ FACU That Are OBL, FACW, or FAC: (A) Acer saccharum 50 = Total Cover **Total Number of Dominant** Species Across All Strata: (B) 5 Percent of Dominant Species (A/B) That Are OBL, FACW, or FAC: 20% **Prevalence Index Worksheet:** x 1 0 **OBL** species Absolute Dominant Indicator **FACW** species 0 x 2 0 (Plot Size: 15'radius) % Cover Species? Status **Shrub Stratum FAC** species 25 75 х3 Acer saccharum 30 Χ FACU 30 = Total Cover **FACU** species 130 x 4 520 **UPL** species 0 x 5 0 Column Totals 155 (A) 595 (B) Prevalence Index = B/A = 3.84 **Hydrophytic Vegetation Indicators:** Absolute Dominant Indicator 1- Rapid Test For Hydrophytic Vegetation **Herb Stratum** (Plot Size: 5'radius) % Cover Species? Status 2- Dominance Test is > 50% 30 **FACU** Alliaria petiolata Χ 3- Prevalence Index is =< 3.0 20 Х Menispermum canadense FAC 4- Morphological Adaptations Allium tricoccum 20 Χ **FACU** Toxicodendron radicans 5 **FAC** 5- Problematic Hydrophytic Vegetation 75 = Total Cover **Definitions of Vegetation Strata:** Tree- Woody plants 3 in. (7.6cm) or more in diameter at breast height (DBH), regardless of height. Sapling/Shrub- Woody plants less than 3 in. DBH and greater than or equal to 3.28ft (1m) tall. Herb- All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28ft tall. Absolute Dominant Indicator Woody Vines- All woody vines greater than 3.28ft in (Plot Size: 30'radius) **Woody Vine Stratum** % Cover Species? Status height. = Total Cover Hydrophytic Vegetation Present? Yes ____ No _X Remarks: (Include photo numbers here or on a separate sheet.)

SOIL Sampling Point: 02-20200716-WL-25-25U Depth Matrix **Redox Features** (inches % Color Color % Type Texture Remarks Loc 0-12 10YR 4/6 100 Sandy Loam **Hydric Soil Indicators:** Indicators for Problematic Soils: Histosol (A1) Polyvalue Below Surface (B15) 2 cm Muck (A10) Histic Epipedon (A2) Thin Dark Surface (S9) Coast Prarie Redox (A16) Black Histic (A3) Loamy Mucky Mineral (F1) 5 cm Mucky Peat or Peat (S3) Hydrogen Sulfide (A4) Loamy Gleyed Matric (F2) Dark Surface (S7) Stratified Layers (A5) Depleted Matrix (F3) Polyvalue Below Surface (S8) Depleted Below Dark Surface (A11) Redox Dark Surface (F6) Thin Dark Surface (S9) Thick Dark Surface (A12) Depleted Dark Surface (F7) Iron-Manganese Masses (F12) Sandy Mucky Mineral (S1) Redox Depressions (F8) Piedmont Floodplain Soils (F19) Sandy Gleyed Matrix (S4) Mesic Spodic (TA6) Sandy Redox (S5) Red Parent Material (F21) Stripped Matrix (S6) Very Shallow Dark Surface (TF12) Dark Surface (S7) Other (Explain in Remarks) Restrictive Layer (if observed): Type: Hydric Soil Present? Yes No Χ Depth (inches): Remarks:

Project/Site: Cider Solar Project	City/Co	ounty: Oakfield/Genr	nesee Sar	mpling Date: 9/30/2020
Applicant/Owner: Hecate		9	State: <u>NY</u>	Sampling Point:
Investigator(s): Andrew Sorci	Section	n, Township, Range:	(01_20200930_WL112_W1
Landform (hillslope, terrace,etc.): Dip	Local relie	f (concave, convex, no	one): None	Slope (%) <u>3 - 5</u>
Subregion (LRR or MLRA): LRR L	Lat: 43.109673	Long:78	3.227402	Datum: NAD83
Soil Map Unit Name:			NWI Classificat	tion: PFO
Are climatic / hyrologic conditions on the site	typical for this time of year	ar? Yes X No	(if no, exp	lain in Remarks.)
Are Vegetation, Soil, or Hydrology	significantly distur	bed? Are "Normal C	ircumstances" pr	esent? Yes X No
Are Vegetation, Soil, or Hydrology	naturally problema	atic? (if needed, expla	ain any answers in F	Remarks.)
SUMMARY OF FINDINGS - Attach site ma	n showing sampling no	oint locations, trans	sects importan	t features, etc.
Hydrophytic Vegetation Present? Yes X		Is the Sampled Area		
<u> </u>		within a Wetland?	Yes	X No
Hydric Soil Present? Yes X		if yes, optional Wetla	=	WL79
Wetland Hydrology Present? Yes X		ii yes, optionai wetia	ind Site ID:	
Remarks: (Explain alternative procedures here or in a se	eparate report.)			
HYDROLOGY				
Wetland Hydrology Indicators:			Secondary Indicato	ors (minimum of two required)
Primary Indicators (minimum of one is required:	check all that apply)		Surface Soil C	racks (B6)
Surface Water (A1)	Water-Stained Leaves	(B9)	Drainage Patt	terns (B10)
High Water Table (A2)	Aquatic Fauna (B13)		Moss Trim Lir	nes (B16)
Saturation (A3)	Marl Deposits (B15)	-	Dry-Season W	Vater Table (C2)
Water Marks (B1)	Hydrogen Sulfide Odo	r (C1)	Crayfish Burro	ows (C8)
Sediment Deposits (B2)	X Oxidized Rhizospheres			sible in Aerial Imagery (C9)
Drift Deposits (B3)	Presence of Reduced			ressed Plants (D1)
Algal Mat or Crust (B4)	Recent Iron Reduction	·-	Geomorphic I	• •
		` ´ -	Shallow Aquit	
Iron Deposits (B5)	Thin Muck Surface (C7	-		• •
Inundation Visible on Aerial Imagery (B7)	Other (Explain in Rem	arks)		aphic Relief (D4)
Sparsley Vegetated Concave Surface (B8)		-	X FAC-Neutral 1	Fest (D5)
Surface Water Present? Yes No X	Depth (inches)	_		
Water Table Present? Yes No X	Depth (inches)	Wetland H	ydrology Present?	? Yes X No
Saturation Present? Yes No X	Depth (inches)	_		
Describe Recorded Data (stream gauge, mon	itoring well aerial photos	previous inspections	s) if available	
		, p. 01.000	,,, a valla sie.	
Remarks:				

VEGETATION - Use scientif	lic names	of plants				Sampii	ng Point: (J1_20	200930_v	VL112_
				Dominant		Dominance Test V	Vorksheet:			
Tree Stratum (Plot Size:	30'radius)	% Cover	Species?	Status	Number of Domi	nant Specie	es		
Acer saccharinum			60	Χ	FACW	That Are OBL, FA	ACW, or FAC	: :	6	(A)
Ulmus americana			20	Χ	FACW	Total Number of Dominant				
Fraxinus pennsylvanica			15		FACW		ross All Stra		6	(B)
			95	_= Total Cov	er	Percent of Dor	ninant Spec	ies		_
						That Are OBL,	•		100%	(A/B)
						Prevalence Index \	Worksheet:			
						OBL species	10	x 1	10	
Shrub Stratum (Plot Size:	15'radius)	% Cover	Dominant Species?	Status	FACW species	125	x 2	250	
		·				FAC species	15	x 3	45	
		_		= Total Cov	er	FACU species	3	x 4	12	
						UPL species	0	x 5	0	
						Column Totals	153	(A)	317	(B
						Prevalenc	e Index = B	/A =	2.07	
						Hydrophytic Vege	tation Indic	ators	s:	
			Absolute	Dominant	Indicator	1- Rapid Tes				tion
Herb Stratum (Plot Size: _5'radius_)			% Cover	Species?	Status	X 2- Dominan	•		Ü	
Symphyotrichum lanceol	latum		10	Χ	FACW					
Cinna arundinacea			10	Χ	FACW	X 3- Prevalenc	e maex is =	< 3.0		
Glyceria striata			10	Χ	OBL	4- Morpholo	ogical Adapt	tation	ıs	
Mentha arvensis			5		FACW	5- Problema	tic Hydroph	nytic \	Vegetatio	n
Ranunculus hispidus			5		FAC					
Phragmites australis			5		FACW	Definitions of Vegeta	ation Strata:			
Symphyotrichum lateriflo	orum		5		FAC	Tree- Woody plants 3	3 in (7 6cm)	or mo	re in diam	eter at
Taraxacum officinale			3	T . 10	FACU	breast height (DBH),				icter at
			53	_= Total Cov	er	Sapling/Shrub- Wood greater than or equa				and
						Herb- All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28ft tall.				
Woody Vine Stratum (Plot Size:	30'radius)	Absolute % Cover	Dominant Species?	Indicator Status	Woody Vines- All wo	ody vines gre	eater t	than 3.28f	t in
Toxicodendron radicans			5	Χ	FAC	neight.				
			5	_= Total Cov		Hydropl Vegeta	•			

SOIL Sampling Point: Wetland-WL79

Depth _	Matrix				Redo	x Featu	res	
(inches	Color	%	Color	%	Type	Loc	Texture	Remarks
0-5	10YR 2/1	95	10Y 3/6	5	С	PL	Silty Clay Loam	
5-8	10YR 3/1	90	10YR 4/6	10	С	M	Silty Clay Loam	
8-16	10YR 5/1	70	10YR 4/6	30	С	М	Sandy Loam	

Hydric Soil Indicators:		Indicators for Problematic Soils:
Histosol (A1)	Polyvalue Below Surface (B15)	2 cm Muck (A10)
Histic Epipedon (A2)	Thin Dark Surface (S9)	Coast Prarie Redox (A16)
Black Histic (A3)	Loamy Mucky Mineral (F1)	5 cm Mucky Peat or Peat (S3)
Hydrogen Sulfide (A4)	Loamy Gleyed Matric (F2)	Dark Surface (S7)
Stratified Layers (A5)	X Depleted Matrix (F3)	Polyvalue Below Surface (S8)
Depleted Below Dark Surface (A11)	X Redox Dark Surface (F6)	Thin Dark Surface (S9)
Thick Dark Surface (A12)	Depleted Dark Surface (F7)	Iron-Manganese Masses (F12)
Sandy Mucky Mineral (S1)	Redox Depressions (F8)	Piedmont Floodplain Soils (F19)
Sandy Gleyed Matrix (S4)		Mesic Spodic (TA6)
Sandy Redox (S5)		Red Parent Material (F21)
Stripped Matrix (S6)		Very Shallow Dark Surface (TF12)
Dark Surface (S7)		Other (Explain in Remarks)
Restrictive Layer (if observed):		
Type:	Hydr	ic Soil Present? Yes X No
Depth (inches):		 _
	_	

Remarks:

Project/Site: Cider Solar Project	City/County: Oakfield/Ger	nesee Sampling Date: 9/30/2020
Applicant/Owner: Hecate		State: NY Sampling Point:
Investigator(s): Andrew Sorci	Section, Township, Range:	01_20200930_WL112_U1
Landform (hillslope, terrace,etc.): Rise	Local relief (concave, convex, r	none): <u>Convex</u> Slope (%) <u>5 - 10</u>
Subregion (LRR or MLRA): LRR L	Lat: <u>43.109684</u> Long: <u>-7</u>	78.227432 Datum: <u>NAD83</u>
Soil Map Unit Name: Ma		NWI Classification: UPL
Are climatic / hyrologic conditions on the site t	ypical for this time of year? Yes X No	(if no, explain in Remarks.)
Are Vegetation, Soil, or Hydrology	significantly disturbed? Are "Normal	Circumstances" present? Yes X No
Are Vegetation, Soil, or Hydrology	naturally problematic? (if needed, exp	lain any answers in Remarks.)
SUMMARY OF FINDINGS - Attach site map	showing sampling point locations, tran	sects. important features. etc.
Hydrophytic Vegetation Present? Yes X		-
Hydric Soil Present? Yes	No X within a Wetland?	Yes No X
Wetland Hydrology Present? Yes	if was partiaged West	
Remarks: (Explain alternative procedures here or in a sep	parate report.)	
HYDROLOGY		
Wetland Hydrology Indicators:		Secondary Indicators (minimum of two required)
Primary Indicators (minimum of one is required: ch	neck all that apply)	Surface Soil Cracks (B6)
Surface Water (A1)	Water-Stained Leaves (B9)	Drainage Patterns (B10)
High Water Table (A2)	Aquatic Fauna (B13)	Moss Trim Lines (B16)
Saturation (A3)	Marl Deposits (B15)	Dry-Season Water Table (C2)
Water Marks (B1)	Hydrogen Sulfide Odor (C1)	Crayfish Burrows (C8)
Sediment Deposits (B2)	Oxidized Rhizospheres on Living Roots (C3)	Saturation Visible in Aerial Imagery (C9)
Drift Deposits (B3)	Presence of Reduced Iron (C4)	Stunted or Stressed Plants (D1)
Algal Mat or Crust (B4)	Recent Iron Reduction in Tilled Soils (C6)	Geomorphic Position (D2)
Iron Deposits (B5)	Thin Muck Surface (C7)	Shallow Aquitard (D3)
Inundation Visible on Aerial Imagery (B7)	Other (Explain in Remarks)	Microtopographic Relief (D4)
Sparsley Vegetated Concave Surface (B8)		FAC-Neutral Test (D5)
	Donth (inches)	
Surface Water Present? Yes No X	Depth (inches)	hadralama Buasanta. Wasan Na W
Water Table Present? Yes No _X	- · · · · 	Hydrology Present? Yes No X
Saturation Present? Yes No _X	Depth (inches)	
Describe Recorded Data (stream gauge, monit	toring well, aerial photos, previous inspection	s), if available:
Remarks:		

/EGETATION - Use scie	ntific names	s or plants				Sampii	ng Point:	01_202	200930_W	VL112_
_		"	Absolute			Dominance Test V	Vorksheet	::		
Tree Stratum	(Plot Size:	30'radius)	% Cover	Species?	Status	Number of Domi	nant Spec	ies		
Acer saccharinum			50	X	FACW	That Are OBL, FA	CW, or FA	۸C:	5	(A)
Ulmus americana			20	X	FACW	Total Numbe	r of Domi	nant		
			70	_= Total Cov	er er	Species Ac	ross All St	rata:	8	(B)
						Percent of Dor	ninant Spe	ecies		
						That Are OBL,	FACW, or	FAC:	62.5%	(A/B)
						Prevalence Index \	Norkshee	t:		
						OBL species	0	x 1	0	
Shrub Stratum	(Plot Size:	15'radius)	Absolute % Cover	Dominant Species?	Indicator Status	FACW species	80	_ x 2	160	
Lonicera morrowii			40	Χ	FACU	FAC species	20	x 3	60	
Tilia americana			15	Х	FACU	FACU species	70	_ x 4	280	
			55	_= Total Cov	ver .	UPL species	0	_ ^ ¬ _ _ x 5	0	
						· —				
						Column Totals	170	(A)	500	(B
						Prevalenc	e Index =	B/A = _	2.94	
						Hydrophytic Vege	tation Ind	licators	:	
			Absolute	Dominant	Indicator	1- Rapid Tes	t For Hydi	ophytic	c Vegetat	tion
Herb Stratum	(Plot Size:	5'radius)	% Cover	Species?	Status	X 2- Dominan	ce Test is :	> 50%		
Solidago canadensis			10	Χ	FACU	X 3- Prevalence				
Symphyotrichum land			10	Х	FACW					
Symphyotrichum late	riflorum		10	Х	FAC	4- Morpholo	ogical Ada	ptation	S	
Circaea canadensis			5		FACU	5- Problematic Hydrophytic Vegetation				
			35	_= Total Cov	er					
						Definitions of Veget	ation Strata	a:		
						Tree- Woody plants 3 breast height (DBH),				eter at
						Sapling/Shrub- Woody plants less than 3 in. DBH and				
						greater than or equa	l to 3.28ft (1m) tall		
						Herb- All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28ft tall.				
w	/DI-: 5:	20 ma di \		Dominant		Woody Vines- All wo	ndy vinas a	reater t	han 3 78ft	t in
Woody Vine Stratum	-	30'radius)	% Cover	Species?	Status	height.	ody villes g	i cater t	u.i J.2011	. 111
Toxicodendron radica	ins		10	X	FAC					
			10	_= Total Cov	er er	Hydropl	-			
						Vegeta	ition ent? Yes			

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

SOIL Sampling Point: 01_20200930_WL112_U1

301L								Sampling Fourt. 01_20200930_WLI12_			
Depth	Matrix	(Redo	ox Featur	es				
(inches	Color	%	Color	%	Type	Loc	Texture	Remarks			
0-5	10YR 3/1	100					Sandy Loam				
5-16	10YR 3/2					Sand					
	·	100									
•	oil Indicators:							Indicators for Problematic Soils:			
	stosol (A1)	()			=		Surface (B15)	2 cm Muck (A10)			
	stic Epipedon ((A2)				k Surface		Coast Prarie Redox (A16)			
	ick Histic (A3)	o (A4)			Loamy Mucky Mineral (F1) 5 cm Mucky Peat or Peat Loamy Gleyed Matric (F2) Dark Surface (S7)						
	drogen Sulfide					d Matrix (·-	Polyvalue Below Surface (S8)			
Stratified Layers (A5) Depleted Below Dark Surface (A11)			rface (A11)		•	ark Surfac	-	Thin Dark Surface (S9)			
Thick Dark Surface (A12)				Depleted Dark Surface (F7)			Iron-Manganese Masses (F12)				
	Sandy Mucky Mineral (S1)				Redox Depressions (F8)			Piedmont Floodplain Soils (F19)			
	ndy Gleyed Ma							Mesic Spodic (TA6)			
	ndy Redox (S5	-	,				-	Red Parent Material (F21)			
	ipped Matrix (-	Very Shallow Dark Surface (TF12)			
	rk Surface (S7						-	Other (Explain in Remarks)			
							-				
Restricti	ve Layer (if obs	erved):									
		Type:	Dense				Hydric 9	Soil Present? Yes No X			
	Depth (ir	nches):	16				yao				
Remark	s:										

Project/Site: Cider Solar Project	City/County: Elba/Genese	e Sampling Date: 7/17/2020
Applicant/Owner: Hecate		State: NY Sampling Point:
Investigator(s): Justin Ahn	Section, Township, Range:	02-20200717-WL-27-27W
Landform (hillslope, terrace,etc.): Depression	Local relief (concave, convex, r	none): <u>Concave</u> Slope (%) <u>0 - 1</u>
Subregion (LRR or MLRA): LRR L	Lat: 43.092468 Long:	-78.166319 Datum: NAD83
Soil Map Unit Name: ArB		NWI Classification: PEM
Are climatic / hyrologic conditions on the site type	pical for this time of year? Yes X No	(if no, explain in Remarks.)
Are Vegetation, Soil, or Hydrology _	significantly disturbed? Are "Normal of the control	
Are Vegetation, Soil, or Hydrology _	naturally problematic? (if needed, exp	lain any answers in Remarks.)
SUMMARY OF FINDINGS - Attach site map	showing sampling point locations, tran	sects, important features, etc.
Hydrophytic Vegetation Present? Yes X	No Is the Sampled Area	-
Hydric Soil Present? Yes X	No within a Wetland?	Yes X No
Wetland Hydrology Present? Yes X		and Site ID: WL80
Remarks: (Explain alternative procedures here or in a sepa		
Remarks. (Explain alternative procedures here or in a sepa	rate report.)	
197550		
HYDROLOGY Wetland Hydrology Indicators:		Secondary Indicators (minimum of two required)
Primary Indicators (minimum of one is required: che	ck all that apply)	Surface Soil Cracks (B6)
X Surface Water (A1)	Water-Stained Leaves (B9)	Drainage Patterns (B10)
High Water Table (A2)	Aquatic Fauna (B13)	Moss Trim Lines (B16)
Saturation (A3)	Marl Deposits (B15)	Dry-Season Water Table (C2)
Water Marks (B1)	Hydrogen Sulfide Odor (C1)	Crayfish Burrows (C8)
Sediment Deposits (B2)	Oxidized Rhizospheres on Living Roots (C3)	Saturation Visible in Aerial Imagery (C9)
Drift Deposits (B3)	Presence of Reduced Iron (C4)	Stunted or Stressed Plants (D1)
Algal Mat or Crust (B4)	Recent Iron Reduction in Tilled Soils (C6)	X Geomorphic Position (D2)
Iron Deposits (B5)	Thin Muck Surface (C7)	Shallow Aguitard (D3)
		
Inundation Visible on Aerial Imagery (B7)	Other (Explain in Remarks)	Microtopographic Relief (D4)
Sparsley Vegetated Concave Surface (B8)		FAC-Neutral Test (D5)
Surface Water Present? Yes X No	Depth (inches) 2	
Water Table Present? Yes NoX	Depth (inches) Wetland H	lydrology Present? Yes X No
Saturation Present? Yes NoX	Depth (inches)	
Describe Recorded Data (stream gauge, monito	ring well, aerial photos, previous inspection	is), if available:
·		
Damanda		
Remarks:		

VEGETATION - Use scientific names of plants Sampling Point: 02-20200717-WL-27-27W Absolute Dominant Indicator **Dominance Test Worksheet:** (Plot Size: 30'radius) % Cover Species? Status **Tree Stratum Number of Dominant Species** That Are OBL, FACW, or FAC: (A) = Total Cover **Total Number of Dominant** Species Across All Strata: (B) 2 Percent of Dominant Species That Are OBL, FACW, or FAC: (A/B) 100% **Prevalence Index Worksheet:** 80 x 1 80 **OBL** species Absolute Dominant Indicator **FACW** species 40 80 (Plot Size: 15'radius) Status x 2 **Shrub Stratum** % Cover Species? 0 **FAC** species х3 = Total Cover FACU species 30 x 4 120 **UPL** species 0 x 5 0 Column Totals 150 (A) 280 (B) Prevalence Index = B/A = 1.87 **Hydrophytic Vegetation Indicators:** Absolute Dominant Indicator X 1- Rapid Test For Hydrophytic Vegetation **Herb Stratum** (Plot Size: 5'radius) % Cover Species? Status X 2- Dominance Test is > 50% 60 Leersia oryzoides OBL X 3- Prevalence Index is =< 3.0 Χ Cyperus strigosus 30 **FACW** 4- Morphological Adaptations Typha angustifolia 20 OBL Galinsoga quadriradiata 10 **FACU** 5- Problematic Hydrophytic Vegetation Ambrosia artemisiifolia 10 **FACU** Persicaria lapathifolia 5 **FACW Definitions of Vegetation Strata:** Chenopodium album **FACU** Tree- Woody plants 3 in. (7.6cm) or more in diameter at Agrostis gigantea 5 **FACW** breast height (DBH), regardless of height. 5 **FACU** Lepidium virginicum 150 = Total Cover Sapling/Shrub- Woody plants less than 3 in. DBH and greater than or equal to 3.28ft (1m) tall. Herb- All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28ft tall. Absolute Dominant Indicator Woody Vines- All woody vines greater than 3.28ft in (Plot Size: 30'radius) **Woody Vine Stratum** % Cover Species? Status height. = Total Cover Hydrophytic Vegetation Present? Yes X No ___ Remarks: (Include photo numbers here or on a separate sheet.)

SOIL Sampling Point: 02-20200717-WL-27-27W

Depth	Matrix				Redo	x Featu	res				
(inches	Color	%	Color	%	Type	Loc	Texture	Remarks			
0-14	10YR 4/2	95	5YR 5/8	5	С	PL	Silty Clay Loam				
Hydric Sc	oil Indicators:							Indicators for Problematic Soils:			
His	tosol (A1)				Polyvalu	e Below S	Surface (B15)	2 cm Muck (A10)			
His	tic Epipedon (A2)			Thin Dar			Coast Prarie Redox (A16)			
					-	-	neral (F1)	5 cm Mucky Peat or Peat (S3)			
	ches Color % Color 14 10YR 4/2 95 5YR 5/8 14 10YR 4/2 95 5YR 5/8 14 10YR 4/2 95 5YR 5/8 15 10 10 10 10 10 10 10 10 10 10 10 10 10							-	-	atric (F2)	Dark Surface (S7)
	ydric 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) estrictive Layer (if observed): Type:				Depleted			Polyvalue Below Surface (S8)			
					Redox D			Thin Dark Surface (S9)			
					=		ırface (F7)	Iron-Manganese Masses (F12)			
					Redox D	epressior	ns (F8)	Piedmont Floodplain Soils (F19)			
		-)					Mesic Spodic (TA6)			
								Red Parent Material (F21) Very Shallow Dark Surface (TF12)			
	ydric 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) estrictive Layer (if observed): Type: Depth (inches):				· ·						
Dai	rk Surface (S7))						Other (Explain in Remarks)			
D tui - ti-	I /:£										
Kestricti	ve Layer (if obs	ervea):									
		Type:					Hydric	Soil Present? Yes X No No			
	Depth (in	iches):									
Remark	S:										

Project/Site: Cider Solar Project	City/County: Elba/Genese	e Sampling Date: 7/17/2020					
Applicant/Owner: Hecate	State: NY Sampling Point:02						
Investigator(s): Justin Ahn	Section, Township, Range:	WL-27-27U					
Landform (hillslope, terrace,etc.): Toeslope	Local relief (concave, convex, ı	none): <u>Linear</u> Slope (%) <u>1 - 5</u>					
Subregion (LRR or MLRA): LRR L	Lat: <u>43.092354</u> Long: <u>-7</u>	78.16657 Datum: <u>NAD83</u>					
Soil Map Unit Name: CaA		NWI Classification: UPL					
Are climatic / hyrologic conditions on the site	typical for this time of year? Yes X No	(if no, explain in Remarks.)					
Are Vegetation, Soil, or Hydrology	significantly disturbed? Are "Normal	Circumstances" present? Yes X No					
Are Vegetation, Soil, or Hydrology	naturally problematic? (if needed, exp	lain any answers in Remarks.)					
SUMMARY OF FINDINGS - Attach site ma	p showing sampling point locations, trar	sects, important features, etc.					
Hydrophytic Vegetation Present? Yes	No X Is the Sampled Area						
Hydric Soil Present? Yes	No X within a Wetland?	Yes No X					
Wetland Hydrology Present? Yes	No X if yes, optional Wet	land Site ID:					
Remarks: (Explain alternative procedures here or in a se							
HYDROLOGY							
Wetland Hydrology Indicators:		Secondary Indicators (minimum of two required)					
Primary Indicators (minimum of one is required: c	heck all that apply)	Surface Soil Cracks (B6)					
Surface Water (A1)	Water-Stained Leaves (B9)	Drainage Patterns (B10)					
High Water Table (A2)	Aquatic Fauna (B13)	Moss Trim Lines (B16)					
Saturation (A3)	Marl Deposits (B15)	Dry-Season Water Table (C2)					
Water Marks (B1)	Hydrogen Sulfide Odor (C1)	Crayfish Burrows (C8)					
Sediment Deposits (B2)	Oxidized Rhizospheres on Living Roots (C3)	Saturation Visible in Aerial Imagery (C9)					
Drift Deposits (B3)	Presence of Reduced Iron (C4)	Stunted or Stressed Plants (D1)					
Algal Mat or Crust (B4)	Recent Iron Reduction in Tilled Soils (C6)	Geomorphic Position (D2)					
Iron Deposits (B5)	Thin Muck Surface (C7)	Shallow Aquitard (D3)					
Inundation Visible on Aerial Imagery (B7)	Other (Explain in Remarks)	Microtopographic Relief (D4)					
Sparsley Vegetated Concave Surface (B8)		FAC-Neutral Test (D5)					
Surface Water Present? Yes No X	Depth (inches)						
Water Table Present? Yes No X	Depth (inches) Wetland H	Hydrology Present? Yes No X					
Saturation Present? Yes No X	Depth (inches)	 -					
Describe Recorded Data (stream gauge, moni	toring well, aerial photos, previous inspection	ns), if available:					
, ,		,					
Demonstra							
Remarks:							

VEGETATION - Use scientific names of plants Sampling Point: 02-20200717-WL-27-27U Absolute Dominant Indicator **Dominance Test Worksheet:** (Plot Size: 30'radius) % Cover Species? Status **Tree Stratum Number of Dominant Species** That Are OBL, FACW, or FAC: (A) = Total Cover **Total Number of Dominant** Species Across All Strata: (B) 2 Percent of Dominant Species 50% (A/B) That Are OBL, FACW, or FAC: **Prevalence Index Worksheet:** x 1 30 **OBL** species Absolute Dominant Indicator **FACW** species 10 (Plot Size: 15'radius) Status x 2 **Shrub Stratum** % Cover Species? 0 FAC species х3 = Total Cover FACU species 55 x 4 220 **UPL** species 0 x 5 0 Column Totals 90 (A) 260 (B) Prevalence Index = B/A = 2.89 **Hydrophytic Vegetation Indicators:** Absolute Dominant Indicator 1- Rapid Test For Hydrophytic Vegetation **Herb Stratum** (Plot Size: 5'radius) % Cover Species? Status 2- Dominance Test is > 50% 40 **FACU** Ambrosia artemisiifolia X 3- Prevalence Index is =< 3.0 30 Χ OBL Leersia oryzoides 4- Morphological Adaptations Galinsoga quadriradiata 10 FACU Agrostis gigantea 5 **FACW** 5- Problematic Hydrophytic Vegetation Chenopodium album 5 **FACU** 90 = Total Cover **Definitions of Vegetation Strata:** Tree- Woody plants 3 in. (7.6cm) or more in diameter at breast height (DBH), regardless of height. Sapling/Shrub- Woody plants less than 3 in. DBH and greater than or equal to 3.28ft (1m) tall. Herb- All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28ft tall. Absolute Dominant Indicator Woody Vines- All woody vines greater than 3.28ft in (Plot Size: 30'radius) **Woody Vine Stratum** % Cover Species? Status height. = Total Cover Hydrophytic Vegetation Present? Yes ____ No __X Remarks: (Include photo numbers here or on a separate sheet.) disturbed, farm land

SOIL Sampling Point: 02-20200717-WL-27-27U Depth Matrix **Redox Features** (inches Color % Color % Type Texture Remarks Loc 0-24 7.5YR 4/2 100 Sandy Clay Loam **Hydric Soil Indicators:** Indicators for Problematic Soils: Histosol (A1) Polyvalue Below Surface (B15) 2 cm Muck (A10) Histic Epipedon (A2) Thin Dark Surface (S9) Coast Prarie Redox (A16) Black Histic (A3) Loamy Mucky Mineral (F1) 5 cm Mucky Peat or Peat (S3) Hydrogen Sulfide (A4) Loamy Gleyed Matric (F2) Dark Surface (S7) Stratified Layers (A5) Depleted Matrix (F3) Polyvalue Below Surface (S8) Depleted Below Dark Surface (A11) Redox Dark Surface (F6) Thin Dark Surface (S9) Thick Dark Surface (A12) Depleted Dark Surface (F7) Iron-Manganese Masses (F12) Sandy Mucky Mineral (S1) Redox Depressions (F8) Piedmont Floodplain Soils (F19) Sandy Gleyed Matrix (S4) Mesic Spodic (TA6) Sandy Redox (S5) Red Parent Material (F21) Stripped Matrix (S6) Very Shallow Dark Surface (TF12) Dark Surface (S7) Other (Explain in Remarks) Restrictive Layer (if observed): Type: Hydric Soil Present? Yes No Χ Depth (inches): Remarks:

Project/Site: Cider Solar Project	City/County: Elba/Genese	e Sampling Date: 7/17/2020			
Applicant/Owner: Hecate		State: NY Sampling Point:			
Investigator(s): Justin Ahn	Section, Township, Range:	02-20200717-WL-28-28W			
Landform (hillslope, terrace,etc.): Depression	Local relief (concave, convex,	none): <u>Concave</u> Slope (%) <u>0 - 1</u>			
Subregion (LRR or MLRA): LRR L	Lat: 43.099292 Long:	78.205322 Datum: NAD83			
Soil Map Unit Name: HIB		NWI Classification: PFO			
Are climatic / hyrologic conditions on the site t	<u> </u>				
Are Vegetation, Soil, or Hydrology					
Are Vegetation, Soil, or Hydrology	naturally problematic? (if needed, exp	olain any answers in Remarks.)			
SUMMARY OF FINDINGS - Attach site maj	showing sampling point locations, tran	nsects, important features, etc.			
Hydrophytic Vegetation Present? Yes X	No Is the Sampled Are.				
Hydric Soil Present? Yes X	No within a Wetland?	Yes X No			
Wetland Hydrology Present? Yes X	— · —	land Site ID: WL81			
Remarks: (Explain alternative procedures here or in a se		<u></u>			
HYDROLOGY					
Wetland Hydrology Indicators:		Secondary Indicators (minimum of two required)			
Primary Indicators (minimum of one is required: cl	neck all that apply)	Surface Soil Cracks (B6)			
Surface Water (A1)	Water-Stained Leaves (B9)	X Drainage Patterns (B10)			
High Water Table (A2)	Aquatic Fauna (B13)	Moss Trim Lines (B16)			
Saturation (A3)	Marl Deposits (B15)	Dry-Season Water Table (C2)			
Water Marks (B1)	Hydrogen Sulfide Odor (C1)	Crayfish Burrows (C8)			
Sediment Deposits (B2)	Oxidized Rhizospheres on Living Roots (C3)	Saturation Visible in Aerial Imagery (C9)			
Drift Deposits (B3)	Presence of Reduced Iron (C4)	Stunted or Stressed Plants (D1)			
Algal Mat or Crust (B4)	Recent Iron Reduction in Tilled Soils (C6)	X Geomorphic Position (D2)			
Iron Deposits (B5)	Thin Muck Surface (C7)	Shallow Aquitard (D3)			
Inundation Visible on Aerial Imagery (B7)	Other (Explain in Remarks)	Microtopographic Relief (D4)			
Sparsley Vegetated Concave Surface (B8)		FAC-Neutral Test (D5)			
Surface Water Present? Yes NoX	Depth (inches)				
Water Table Present? Yes No X	Depth (inches) Wetland I	Hydrology Present? Yes X No			
Saturation Present? Yes NoX	Depth (inches)				
Describe Recorded Data (stream gauge, monit	toring well, aerial photos, previous inspection	ns), if available:			
Remarks:					

/EGETATION - Use scien	tific names of plants	1			Sampli	ng Point:	02-20	200717-W	L-28-28\
			Dominant		Dominance Test V	Vorkshee	t:		
Tree Stratum	(Plot Size: 30'radius)	% Cover	Species?	Status	Number of Domi	inant Spec	cies		
Cornus racemosa		40	Χ	FAC	That Are OBL, FA	•		5	(A)
		40	= Total Cov	ver	Total Numbe	r of Domi	nant		_
			-		Species Ac			6	(B)
					Percent of Dor		_		_ ` `
					That Are OBL,			83.3%	(A/B)
								00.070	_` , ,
					Prevalence Index \	Workshee	et:		
		Absolute	Dominant	Indicator	OBL species	0	x 1	0	
Shrub Stratum	(Plot Size: 15'radius)	% Cover	Species?	Status	FACW species	65	x 2	130	
Cornus racemosa		40	Х	FAC	FAC species	125	x 3	375	
Fraxinus pennsylvanica	1	40	Х	FACW	FACU species	22	x 4	88	
		80	_= Total Cov	ver	UPL species	0	x 5	0	
					Column Totals	212	(A)	593	(B)
					Prevalenc			2.8	
					Hydrophytic Vege	tation Inc	dicator		
		Absoluto	Dominant	Indicator					4 :
Herb Stratum	(Plot Size: 5'radius)	% Cover	Species?	Status	1- Rapid Tes	st For Hyd	ropnyt	ic vegeta	tion
	(1 100 5120		•		X 2- Dominan	ce Test is	> 50%		
Persicaria virginiana		30	X	FAC	X 3- Prevalenc	e Index is	=< 3.0)	
Solidago gigantea		<u>15</u>	Х	FACW	4- Morpholo	ogical Ada	ntatio	0.5	
Circaea alpina		10		FACW		_	-		
Toxicodendron radicar Ranunculus acris	15	<u> </u>		FAC FAC	5- Problema	itic Hydro	phytic	Vegetatio	n
Geum canadense		<u>5</u>		FAC					
Allium vineale		2		FACU	Definitions of Veget	ation Strat	a:		
, and it will call		72	_= Total Cov		Tree- Woody plants in breast height (DBH),	•			neter at
					Sapling/Shrub- Wood greater than or equa				and
					Herb- All herbaceous size, and woody plan				less of
		Absolute	Dominant	Indicator					
Woody Vine Stratum	(Plot Size: 30'radius)	% Cover	Species?	Status	Woody Vines- All wo height.	ody vines g	greater	than 3.28f	t in
	efolia	20	Х	FACU					
Parthenocissus quinqu					i contract of the contract of				
Parthenocissus quinqu		20	_= Total Cov	er er	Hydrop	•			
Parthenocissus quinqu		20	_= Total Cov	ver	Vegeta	•			

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

SOIL

Sampling Point: 02-20200717-WL-28-28W

Depth Matrix					Redo	x Featu	res			
inches	Color	%	Color	%	Туре	Loc	Texture	Remarks		
0-10	10YR 4/2	95	5YR 4/6	5	С	PL	Silty Clay Loam			
10-20	5YR 4/2	60	10YR 6/3	40	С	М	Sandy Loam			
Hydric So	il Indicators:						1	ndicators for Problematic Soils:		
Hist	tosol (A1)				Polyvalu	e Below :	Surface (B15)	2 cm Muck (A10)		
Hist	tic Epipedon (42)			Thin Dar	k Surface	e (S9)	Coast Prarie Redox (A16)		
Blac	ck Histic (A3)			Loamy Mucky Mineral (F1)				5 cm Mucky Peat or Peat (S3)		
Hyc	drogen Sulfide	(A4)		Loamy Gleyed Matric (F2)				Dark Surface (S7)		
Stra	atified Layers (A5)		X Depleted Matrix (F3)				Polyvalue Below Surface (S8)		
Dep	oleted Below [ark Su	rface (A11)	Redox Dark Surface (F6)				Thin Dark Surface (S9)		
Thi	ck Dark Surfac	e (A12))	Depleted Dark Surface (F7)				Iron-Manganese Masses (F12)		
San	dy Mucky Mir	neral (S	1)	Redox Depressions (F8)				Piedmont Floodplain Soils (F19)		
San	dy Gleyed Ma	trix (S4	.)				_	Mesic Spodic (TA6)		
San	dy Redox (S5)						_	Red Parent Material (F21)		
Stri	pped Matrix (S6)						Very Shallow Dark Surface (TF12)		
Dar	k Surface (S7)						_	Other (Explain in Remarks)		
Restrictiv	ve Layer (if obse	erved):								
		Type:					Hydric So	oil Present? Yes X No		
	Depth (in	_					Tiyunc 30	7. 110		
	Dopun (III									
Remarks	••						l .			

Project/Site: Cider Solar Project	City/County: Elba/Genesee	Sampling Date: 7/17/2020			
Applicant/Owner: Hecate	-	State: NY Sampling Point:02-2020071			
Investigator(s): Justin Ahn	Section, Township, Range:	WL-28-28U			
Landform (hillslope, terrace,etc.): <u>Toeslope</u>	Local relief (concave, convex, n	one): Linear Slope (%) <u>1 - 5</u>			
Subregion (LRR or MLRA): LRR L	Lat: 43.099533 Long: -78	8.205405 Datum: NAD83			
Soil Map Unit Name: HIB		NWI Classification: UPL			
Are climatic / hyrologic conditions on the site	e typical for this time of year? Yes X No	(if no, explain in Remarks.)			
Are Vegetation, Soil, or Hydrolog	y significantly disturbed? Are "Normal C	Circumstances" present? Yes X No			
Are Vegetation, Soil, or Hydrolog	ynaturally problematic? (if needed, expl	ain any answers in Remarks.)			
SLIMMARY OF FINDINGS - Attach site m	ap showing sampling point locations, tran	sects important features etc			
Hydrophytic Vegetation Present? Yes	No X Is the Sampled Area				
Hydric Soil Present? Yes	No X within a Wetland?	Yes No X			
· —					
Wetland Hydrology Present? Yes					
Remarks: (Explain alternative procedures here or in a	separate report.)				
HYDROLOGY					
Wetland Hydrology Indicators:		Secondary Indicators (minimum of two required)			
Primary Indicators (minimum of one is required:	check all that apply)	Surface Soil Cracks (B6)			
Surface Water (A1)	Water-Stained Leaves (B9)	Drainage Patterns (B10)			
High Water Table (A2)	Aquatic Fauna (B13)	Moss Trim Lines (B16)			
Saturation (A3)	Marl Deposits (B15)	Dry-Season Water Table (C2)			
Water Marks (B1)	Hydrogen Sulfide Odor (C1)	Crayfish Burrows (C8)			
Sediment Deposits (B2)	Oxidized Rhizospheres on Living Roots (C3)	Saturation Visible in Aerial Imagery (C9)			
Drift Deposits (B3)	Presence of Reduced Iron (C4)	Stunted or Stressed Plants (D1)			
Algal Mat or Crust (B4)	Recent Iron Reduction in Tilled Soils (C6)	Geomorphic Position (D2)			
Iron Deposits (B5)	Thin Muck Surface (C7)	Shallow Aquitard (D3)			
Inundation Visible on Aerial Imagery (B7)	Other (Explain in Remarks)	Microtopographic Relief (D4)			
Sparsley Vegetated Concave Surface (B8)	Other (Explain in Kemarks)				
Sparsiey vegetated Concave Surface (B8)		FAC-Neutral Test (D5)			
Surface Water Present? Yes No X	Depth (inches)				
Water Table Present? Yes No _ X	Depth (inches) Wetland H	ydrology Present? Yes No X			
Saturation Present? Yes No _ X	Depth (inches)				
Describe Recorded Data (stream gauge, mo	nitoring well, aerial photos, previous inspection	s). if available:			
		-,,			
Remarks:					

VEGETATION - Use scientific names of plants Sampling Point: 02-20200717-WL-28-28U Absolute Dominant Indicator **Dominance Test Worksheet:** (Plot Size: 30'radius) % Cover Species? Status **Tree Stratum Number of Dominant Species** 50 Х FAC That Are OBL, FACW, or FAC: (A) Cornus racemosa 50 = Total Cover **Total Number of Dominant** (B) Species Across All Strata: 4 Percent of Dominant Species 50% (A/B) That Are OBL, FACW, or FAC: **Prevalence Index Worksheet:** 0 x 1 **OBL** species Absolute Dominant Indicator **FACW** species 30 60 (Plot Size: 15'radius) % Cover Species? Status x 2 **Shrub Stratum FAC** species 75 225 х3 30 Χ **FACW** Fraxinus pennsylvanica 30 = Total Cover **FACU** species 80 x 4 320 **UPL** species 0 x 5 0 Column Totals 185 (A) 605 (B) Prevalence Index = B/A = 3.27 **Hydrophytic Vegetation Indicators:** Absolute Dominant Indicator 1- Rapid Test For Hydrophytic Vegetation **Herb Stratum** (Plot Size: 5'radius) % Cover Species? Status 2- Dominance Test is > 50% 40 **FACU** Alliaria petiolata 3- Prevalence Index is =< 3.0 Χ Hesperis matronalis 40 **FACU** 4- Morphological Adaptations Toxicodendron radicans 20 FAC Geum canadense 5 **FAC** 5- Problematic Hydrophytic Vegetation 105 = Total Cover **Definitions of Vegetation Strata:** Tree- Woody plants 3 in. (7.6cm) or more in diameter at breast height (DBH), regardless of height. Sapling/Shrub- Woody plants less than 3 in. DBH and greater than or equal to 3.28ft (1m) tall. Herb- All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28ft tall. Absolute Dominant Indicator Woody Vines- All woody vines greater than 3.28ft in (Plot Size: 30'radius) **Woody Vine Stratum** % Cover Species? Status height. = Total Cover Hydrophytic Vegetation Present? Yes _____ No __X Remarks: (Include photo numbers here or on a separate sheet.)

SOIL						Sampling Point: 02-20200717-WL-28-2					
Depth	Matrix				Redo	ox Featur	es				
(inches	Color	%	Color	%	Туре	Loc	Texture	Remarks			
0-14	10YR 4/4	95	10YR 5/8	5	С	PL	Sandy Loam				
Hydric So	oil Indicators:							Indicators for Problematic Soils:			
His	tosol (A1)				Polyvalu	e Below S	urface (B15)	2 cm Muck (A10)			
His	tic Epipedon (A2)				k Surface	•	Coast Prarie Redox (A16)			
	ck Histic (A3)				•	/lucky Min		5 cm Mucky Peat or Peat (S3)			
	drogen Sulfide	-			•	ileyed Ma		Dark Surface (S7)			
Stratified Layers (A5)						d Matrix (I	•	Polyvalue Below Surface (S8)			
	oleted Below					ark Surfac		Thin Dark Surface (S9)			
	ck Dark Surfac			Depleted Dark Surface (F7)				Iron-Manganese Masses (F12)			
	ndy Mucky Mi			Redox Depressions (F8)				Piedmont Floodplain Soils (F19)			
	ndy Gleyed Ma		1)					Mesic Spodic (TA6)			
	ndy Redox (S5)							Red Parent Material (F21)			
	pped Matrix (Very Shallow Dark Surface (TF12)			
Dar	k Surface (S7))						Other (Explain in Remarks)			
Restrictiv	ve Layer (if obs	erved):									
		Type:	Rock				Hydrid	c Soil Present? Yes No X			
	Depth (in	nches):	14				,				
Remarks	S:										

Project/Site: Cider Solar Project	City/County: Elba/G	Genesee Sampling Date: 7/17/2020				
Applicant/Owner: Hecate	State: NY Sampling Point:02-20200					
Investigator(s): Justin Ahn	Section, Township, Range: WL-29-29U					
Landform (hillslope, terrace,etc.): Toeslope	Local relief (concave, co	onvex, none): Linear Slope (%) 1 - 5				
Subregion (LRR or MLRA): LRR L	Lat: 43.099763 Lo	ong: <u>-78.204734</u> Datum: <u>NAD83</u>				
Soil Map Unit Name: Ld		NWI Classification: UPL				
Are climatic / hyrologic conditions on the site t	ypical for this time of year? Yes	X No (if no, explain in Remarks.)				
Are Vegetation $___$, Soil $___$, or Hydrology	significantly disturbed? Are "N	Iormal Circumstances" present? Yes X No				
Are Vegetation, Soil, or Hydrology	naturally problematic? (if need	ded, explain any answers in Remarks.)				
SUMMARY OF FINDINGS - Attach site map	showing sampling point location	s, transects, important features, etc.				
Hydrophytic Vegetation Present? Yes	No X Is the Sample					
Hydric Soil Present? Yes	No X within a Wet					
Wetland Hydrology Present? Yes		al Wetland Site ID:				
Remarks: (Explain alternative procedures here or in a seg						
Remarks. (Explain alternative procedures here of in a sep	rarate report.)					
HYDROLOGY		Consider the Books (1985) and the Books (1985)				
Wetland Hydrology Indicators:		Secondary Indicators (minimum of two required)				
Primary Indicators (minimum of one is required: ch		Surface Soil Cracks (B6)				
Surface Water (A1)	Water-Stained Leaves (B9)	Drainage Patterns (B10)				
High Water Table (A2)	Aquatic Fauna (B13)	Moss Trim Lines (B16)				
Saturation (A3)	Marl Deposits (B15)	Dry-Season Water Table (C2)				
Water Marks (B1)	Hydrogen Sulfide Odor (C1)	Crayfish Burrows (C8)				
Sediment Deposits (B2)	Oxidized Rhizospheres on Living Root	ts (C3) Saturation Visible in Aerial Imagery (C9)				
Drift Deposits (B3)	Presence of Reduced Iron (C4)	Stunted or Stressed Plants (D1)				
Algal Mat or Crust (B4)	Recent Iron Reduction in Tilled Soils ((C6) Geomorphic Position (D2)				
Iron Deposits (B5)	Thin Muck Surface (C7)	Shallow Aquitard (D3)				
Inundation Visible on Aerial Imagery (B7)	Other (Explain in Remarks)	Microtopographic Relief (D4)				
Sparsley Vegetated Concave Surface (B8)		FAC-Neutral Test (D5)				
Surface Water Present? Yes No X	Depth (inches)					
Water Table Present? Yes No X	Depth (inches) We	etland Hydrology Present? Yes No X				
Saturation Present? Yes No X	Depth (inches)					
Describe Recorded Data (stream gauge, monit	aring well parial photos provious ins	noctions) if available:				
Describe Recorded Data (stream gauge, month	ornig well, aeriai priotos, previous ilis	pections), ii available.				
Remarks:						

VEGETATION - Use scientific names of plants Sampling Point: 02-20200717-WL-29-29U Absolute Dominant Indicator **Dominance Test Worksheet:** (Plot Size: 30'radius) % Cover Species? Status **Tree Stratum Number of Dominant Species** Χ FAC That Are OBL, FACW, or FAC: (A) Cornus racemosa 40 = Total Cover **Total Number of Dominant** (B) Species Across All Strata: Percent of Dominant Species (A/B) That Are OBL, FACW, or FAC: 50% **Prevalence Index Worksheet:** 20 x 1 20 **OBL** species Absolute Dominant Indicator **FACW** species 0 0 (Plot Size: 15'radius) % Cover Species? Status x 2 **Shrub Stratum FAC** species 50 150 х3 = Total Cover **FACU** species 75 x 4 300 **UPL** species 10 x 5 50 Column Totals 155 (A) 520 (B) Prevalence Index = B/A = 3.35 **Hydrophytic Vegetation Indicators:** Absolute Dominant Indicator 1- Rapid Test For Hydrophytic Vegetation **Herb Stratum** (Plot Size: 5'radius) % Cover Species? Status 2- Dominance Test is > 50% 30 Ambrosia artemisiifolia Χ **FACU** 3- Prevalence Index is =< 3.0 Medicago lupulina 20 Χ **FACU** 4- Morphological Adaptations Ranunculus sceleratus 20 Χ OBL Trifolium hybridum 15 **FACU** 5- Problematic Hydrophytic Vegetation Solidago canadensis 10 **FACU** Persicaria maculosa 10 FAC **Definitions of Vegetation Strata:** UPL Daucus carota 10 Tree- Woody plants 3 in. (7.6cm) or more in diameter at 115 = Total Cover breast height (DBH), regardless of height. Sapling/Shrub- Woody plants less than 3 in. DBH and greater than or equal to 3.28ft (1m) tall. Herb- All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28ft tall. Absolute Dominant Indicator Woody Vines- All woody vines greater than 3.28ft in (Plot Size: 30'radius) Status **Woody Vine Stratum** % Cover Species? height. = Total Cover Hydrophytic Vegetation Present? Yes _____ No __X Remarks: (Include photo numbers here or on a separate sheet.)

SOIL Sampling Point: 02-20200717-WL-29-29U Depth Matrix **Redox Features** (inches % Color Color % Type Texture Remarks Loc 0-14 10YR 4/3 100 Sandy Loam **Hydric Soil Indicators:** Indicators for Problematic Soils: Histosol (A1) Polyvalue Below Surface (B15) 2 cm Muck (A10) Histic Epipedon (A2) Thin Dark Surface (S9) Coast Prarie Redox (A16) Black Histic (A3) Loamy Mucky Mineral (F1) 5 cm Mucky Peat or Peat (S3) Hydrogen Sulfide (A4) Loamy Gleyed Matric (F2) Dark Surface (S7) Stratified Layers (A5) Depleted Matrix (F3) Polyvalue Below Surface (S8) Depleted Below Dark Surface (A11) Redox Dark Surface (F6) Thin Dark Surface (S9) Thick Dark Surface (A12) Depleted Dark Surface (F7) Iron-Manganese Masses (F12) Sandy Mucky Mineral (S1) Redox Depressions (F8) Piedmont Floodplain Soils (F19) Sandy Gleyed Matrix (S4) Mesic Spodic (TA6) Sandy Redox (S5) Red Parent Material (F21) Stripped Matrix (S6) Very Shallow Dark Surface (TF12) Dark Surface (S7) Other (Explain in Remarks) Restrictive Layer (if observed): Type: Hydric Soil Present? Yes No Χ Depth (inches): Remarks:

Project/Site: Cider Solar Project	City/County: Elba/Genese	e Sampling Date: 7/17/2020			
Applicant/Owner: Hecate	State: NY Sampling Point:				
Investigator(s): Justin Ahn	Section, Township, Range: 02-20200717-WL-29-29W				
Landform (hillslope, terrace,etc.): Depression	Local relief (concave, convex, r	none): <u>Concave</u> Slope (%) <u>1 - 5</u>			
Subregion (LRR or MLRA): LRR L	Lat: 43.099485 Long: -7	78.204781 Datum: NAD83			
Soil Map Unit Name: Ld		NWI Classification: PEM			
Are climatic / hyrologic conditions on the site ty	pical for this time of year? Yes X No	(if no, explain in Remarks.)			
Are Vegetation, Soil, or Hydrology	<u> </u>				
Are Vegetation, Soil, or Hydrology	naturally problematic? (if needed, exp	lain any answers in Remarks.)			
SUMMARY OF FINDINGS - Attach site map	showing sampling point locations, tran	sects, important features, etc.			
Hydrophytic Vegetation Present? Yes X	No Is the Sampled Area	-			
Hydric Soil Present? Yes X	No within a Wetland?	Yes X No			
Wetland Hydrology Present? Yes X		land Site ID: WL81			
Remarks: (Explain alternative procedures here or in a sepa		<u></u>			
HADBOLOCA					
HYDROLOGY Wetland Hydrology Indicators:		Secondary Indicators (minimum of two required)			
Primary Indicators (minimum of one is required: che	eck all that apply)	Surface Soil Cracks (B6)			
X Surface Water (A1)	Water-Stained Leaves (B9)	X Drainage Patterns (B10)			
· · ·	X Aquatic Fauna (B13)	Moss Trim Lines (B16)			
Saturation (A3)	Marl Deposits (B15)	Dry-Season Water Table (C2)			
Water Marks (B1)	Hydrogen Sulfide Odor (C1)	Crayfish Burrows (C8)			
Sediment Deposits (B2)	Oxidized Rhizospheres on Living Roots (C3)	Saturation Visible in Aerial Imagery (C9)			
Drift Deposits (B3)	Presence of Reduced Iron (C4)	Stunted or Stressed Plants (D1)			
Algal Mat or Crust (B4)	Recent Iron Reduction in Tilled Soils (C6)	Geomorphic Position (D2)			
Iron Deposits (B5)	Thin Muck Surface (C7)	Shallow Aquitard (D3)			
Inundation Visible on Aerial Imagery (B7)	Other (Explain in Remarks)	Microtopographic Relief (D4)			
Sparsley Vegetated Concave Surface (B8)	Certer (Explain in Nemarks)	FAC-Neutral Test (D5)			
		TAC Neutral rest (03)			
Surface Water Present? Yes X No	Depth (inches) 2				
Water Table Present? Yes NoX	Depth (inches) Wetland I	Hydrology Present? Yes X No			
Saturation Present? Yes No X	Depth (inches)				
Describe Recorded Data (stream gauge, monito	oring well, aerial photos, previous inspection	ns), if available:			
Remarks:					

VEGETATION - Use scientific names of plants Sampling Point: 02-20200717-WL-29-29W Absolute Dominant Indicator **Dominance Test Worksheet:** (Plot Size: 30'radius) % Cover Species? Status **Tree Stratum Number of Dominant Species** That Are OBL, FACW, or FAC: 8 (A) = Total Cover **Total Number of Dominant** (B) Species Across All Strata: 8 Percent of Dominant Species That Are OBL, FACW, or FAC: (A/B) 100% **Prevalence Index Worksheet:** 70 x 1 70 **OBL** species Absolute Dominant Indicator **FACW** species 120 240 (Plot Size: 15'radius) Species? x 2 **Shrub Stratum** % Cover Status **FAC** species 40 х3 120 40 Χ **FACW** Fraxinus pennsylvanica 40 = Total Cover **FACU** species 35 x 4 140 **UPL** species 0 x 5 0 Column Totals 265 (A) 570 (B) Prevalence Index = B/A = 2.15 **Hydrophytic Vegetation Indicators:** Absolute Dominant Indicator 1- Rapid Test For Hydrophytic Vegetation **Herb Stratum** (Plot Size: 5'radius) % Cover Species? Status X 2- Dominance Test is > 50% 30 Fraxinus pennsylvanica Х **FACW** X 3- Prevalence Index is =< 3.0 Х Symphyotrichum puniceum 30 OBL 4- Morphological Adaptations 30 Χ Scirpus atrovirens OBL 20 Χ **FACW** Carex alopecoidea 5- Problematic Hydrophytic Vegetation 20 Χ FAC Juncus tenuis Euthamia graminifolia 20 Χ FAC **Definitions of Vegetation Strata:** Solidago gigantea 20 Χ **FACW** Tree- Woody plants 3 in. (7.6cm) or more in diameter at Trifolium hybridum 15 **FACU** breast height (DBH), regardless of height. Phalaris arundinacea 10 **FACW** 10 Ranunculus sceleratus OBL Sapling/Shrub- Woody plants less than 3 in. DBH and Heuchera richardsonii 10 **FACU** greater than or equal to 3.28ft (1m) tall. Anthemis cotula 10 FACU Herb- All herbaceous (non-woody) plants, regardless of 225 = Total Cover size, and woody plants less than 3.28ft tall. Absolute Dominant Indicator Woody Vines- All woody vines greater than 3.28ft in (Plot Size: 30'radius) **Woody Vine Stratum** % Cover Species? Status height. = Total Cover Hydrophytic Vegetation Present? Yes X No ___

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

SOIL

Sampling Point: 02-20200717-WL-29-29W

Depth	Matrix		Redox Features					
(inches	Color	%	Color	%	Туре	Loc	Texture	Remarks
0-12	10YR 3/1	90	2.5Y 4/8	10	С	PL	Sandy Loam	
12-24	10YR 6/4	80	10YR 6/8	20	С	М	Sandy Loam	

Hydric Soil Indicators:		Indicators for Problematic Soils:
Histosol (A1)	Polyvalue Below Surface (B15)	2 cm Muck (A10)
Histic Epipedon (A2)	Thin Dark Surface (S9)	Coast Prarie Redox (A16)
Black Histic (A3)	Loamy Mucky Mineral (F1)	5 cm Mucky Peat or Peat (S3)
Hydrogen Sulfide (A4)	Loamy Gleyed Matric (F2)	Dark Surface (S7)
Stratified Layers (A5)	Depleted Matrix (F3)	Polyvalue Below Surface (S8)
Depleted Below Dark Surface (A11)	X Redox Dark Surface (F6)	Thin Dark Surface (S9)
Thick Dark Surface (A12)	Depleted Dark Surface (F7)	Iron-Manganese Masses (F12)
Sandy Mucky Mineral (S1)	Redox Depressions (F8)	Piedmont Floodplain Soils (F19)
Sandy Gleyed Matrix (S4)		Mesic Spodic (TA6)
Sandy Redox (S5)		Red Parent Material (F21)
Stripped Matrix (S6)		Very Shallow Dark Surface (TF12)
Dark Surface (S7)		Other (Explain in Remarks)
Restrictive Layer (if observed):		
Туре:	ну	ydric Soil Present? Yes X No
Depth (inches):		

Remarks:

Project/Site: Cider Solar Project	City/County: Elba/Ger	nesee Sampling Date: 7/20/2020			
Applicant/Owner: Hecate	State: NY Sampling Point:				
Investigator(s): Justin Ahn	Section, Township, Range: 02-20200720WL-30-30W				
Landform (hillslope, terrace,etc.): Depression	Local relief (concave, conv	vex, none): Concave Slope (%) 0 - 1			
Subregion (LRR or MLRA): LRR L	Lat: 43.100481 Long	g: <u>-78.211992</u> Datum: <u>NAD83</u>			
Soil Map Unit Name: LoA		NWI Classification: PEM			
Are climatic / hyrologic conditions on the site t	cypical for this time of year? Yes X	No (if no, explain in Remarks.)			
Are Vegetation, Soil, or Hydrology					
Are Vegetation, Soil, or Hydrology	naturally problematic? (if needed	l, explain any answers in Remarks.)			
SUMMARY OF FINDINGS - Attach site map	p showing sampling point locations.	transects, important features, etc.			
Hydrophytic Vegetation Present? Yes X					
Hydric Soil Present? Yes X	within a Wetlar				
Wetland Hydrology Present? Yes X		Wetland Site ID: WL82			
		<u> </u>			
Remarks: (Explain alternative procedures here or in a se	parate report.)				
HYDROLOGY					
Wetland Hydrology Indicators:		Secondary Indicators (minimum of two required)			
Primary Indicators (minimum of one is required: cl		Surface Soil Cracks (B6)			
X Surface Water (A1)	Water-Stained Leaves (B9)	Drainage Patterns (B10)			
X High Water Table (A2)	Aquatic Fauna (B13)	Moss Trim Lines (B16)			
X Saturation (A3)	Marl Deposits (B15)	Dry-Season Water Table (C2)			
Water Marks (B1)	Hydrogen Sulfide Odor (C1)	Crayfish Burrows (C8)			
Sediment Deposits (B2)	Oxidized Rhizospheres on Living Roots (C3) Saturation Visible in Aerial Imagery (C9)			
Drift Deposits (B3)	Presence of Reduced Iron (C4)	Stunted or Stressed Plants (D1)			
X Algal Mat or Crust (B4)	Recent Iron Reduction in Tilled Soils (C6) Geomorphic Position (D2)			
Iron Deposits (B5)	Thin Muck Surface (C7)	Shallow Aquitard (D3)			
Inundation Visible on Aerial Imagery (B7)	Other (Explain in Remarks)	Microtopographic Relief (D4)			
X Sparsley Vegetated Concave Surface (B8)		FAC-Neutral Test (D5)			
Surface Water Present? Yes X No	Depth (inches) 2				
Water Table Present? Yes X No	_ · · · 	and Hydrology Present? Yes X No			
Saturation Present? Yes X No	Depth (inches) 1	ind Hydrology Frescht: Fes X NO			
Describe Recorded Data (stream gauge, moni	toring well, aerial photos, previous inspec	ctions), if available:			
Remarks:					

VEGETATION - Use scientific names of plants Sampling Point: 02-20200720WL-30-30W Absolute Dominant Indicator **Dominance Test Worksheet:** (Plot Size: 30'radius) % Cover Species? Status **Tree Stratum Number of Dominant Species** That Are OBL, FACW, or FAC: (A) = Total Cover **Total Number of Dominant** Species Across All Strata: (B) Percent of Dominant Species That Are OBL, FACW, or FAC: (A/B) 100% **Prevalence Index Worksheet:** 50 x 1 50 **OBL** species Absolute Dominant Indicator **FACW** species 120 240 (Plot Size: 15'radius) Status x 2 **Shrub Stratum** % Cover Species? **FAC** species 0 х3 = Total Cover **FACU** species 0 x 4 0 **UPL** species 0 x 5 0 Column Totals 170 (A) 290 (B) Prevalence Index = B/A = 1.71 **Hydrophytic Vegetation Indicators:** Absolute Dominant Indicator X 1- Rapid Test For Hydrophytic Vegetation **Herb Stratum** (Plot Size: 5'radius) % Cover Species? Status X 2- Dominance Test is > 50% 40 Eupatorium perfoliatum Χ **FACW** X 3- Prevalence Index is =< 3.0 Carex alopecoidea 30 Χ **FACW** 4- Morphological Adaptations Typha angustifolia 30 Χ OBL Epilobium hirsutum 30 Χ **FACW** 5- Problematic Hydrophytic Vegetation Scirpus atrovirens 20 OBL Cyperus esculentus 20 **FACW Definitions of Vegetation Strata:** 170 = Total Cover Tree- Woody plants 3 in. (7.6cm) or more in diameter at breast height (DBH), regardless of height. Sapling/Shrub- Woody plants less than 3 in. DBH and greater than or equal to 3.28ft (1m) tall. Herb- All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28ft tall. Absolute Dominant Indicator Woody Vines- All woody vines greater than 3.28ft in (Plot Size: 30'radius) **Woody Vine Stratum** % Cover Species? Status height. = Total Cover Hydrophytic Vegetation Present? Yes X No ___ Remarks: (Include photo numbers here or on a separate sheet.)

SOIL Sampling Point: 02-20200720WL-30-30W

JOIL								3411phing 1 0111t. 02-2020072011E-30-3011
Depth	Matrix		Matrix			x Featur	es	
(inches	Color	%	Color	%	Type	Loc	Texture	Remarks
0-6	10YR 4/2	95	5YR 4/4	5	С	PL	Clay Loam	
6-16	10YR 3/2	80	7.5YR 5/6	20	С	M	Clay Loam	

Hydric Soil Indicators:		Indicators for Problematic Soils:		
Histosol (A1)	Polyvalue Below Surface (B15)	2 cm Muck (A10)		
Histic Epipedon (A2)	Thin Dark Surface (S9)	Coast Prarie Redox (A16)		
Black Histic (A3)	Loamy Mucky Mineral (F1)	5 cm Mucky Peat or Peat (S3)		
Hydrogen Sulfide (A4)	Loamy Gleyed Matric (F2)	Dark Surface (S7)		
Stratified Layers (A5)	X Depleted Matrix (F3)	Polyvalue Below Surface (S8)		
Depleted Below Dark Surface (A11)	Redox Dark Surface (F6)	Thin Dark Surface (S9)		
Thick Dark Surface (A12)	Depleted Dark Surface (F7)	Iron-Manganese Masses (F12)		
Sandy Mucky Mineral (S1)	Redox Depressions (F8)	Piedmont Floodplain Soils (F19)		
Sandy Gleyed Matrix (S4)		Mesic Spodic (TA6)		
Sandy Redox (S5)		Red Parent Material (F21)		
Stripped Matrix (S6)		Very Shallow Dark Surface (TF12)		
Dark Surface (S7)		Other (Explain in Remarks)		
Restrictive Layer (if observed):				
Type:	Hyd	dric Soil Present? Yes X No		
Depth (inches):		 -		

Remarks:

Project/Site: Cider Solar Project	City/County: Elba/Genese	e Sampling Date: 7/20/2020			
Applicant/Owner: Hecate	State: NY Sampling Point:02-2				
Investigator(s): Justin Ahn	Section, Township, Range:	WL-30-30U			
Landform (hillslope, terrace,etc.): Toeslope	Local relief (concave, convex, ı	none): <u>Linear</u> Slope (%) <u>1 - 5</u>			
Subregion (LRR or MLRA): LRR L	Lat: 43.100397 Long: -78	3.211875 Datum: <u>NAD83</u>			
Soil Map Unit Name: HIB		NWI Classification: UPL			
Are climatic / hyrologic conditions on the sit	te typical for this time of year? Yes X No	(if no, explain in Remarks.)			
Are Vegetation, Soil, or Hydrolo	gy significantly disturbed? Are "Normal	Circumstances" present? Yes X No			
Are Vegetation, Soil, or Hydrolo	gynaturally problematic? (if needed, exp	lain any answers in Remarks.)			
SLIMMARY OF FINDINGS - Attach site m	nap showing sampling point locations, trar	sects important features etc			
Hydrophytic Vegetation Present? Yes	No X Is the Sampled Area	-			
Hydric Soil Present? Yes	No X within a Wetland?	Yes No X			
· —					
Wetland Hydrology Present? Yes					
Remarks: (Explain alternative procedures here or in a	separate report.)				
HYDROLOGY					
Wetland Hydrology Indicators:		Secondary Indicators (minimum of two required)			
Primary Indicators (minimum of one is required	: check all that apply)	Surface Soil Cracks (B6)			
Surface Water (A1)	Water-Stained Leaves (B9)	Drainage Patterns (B10)			
High Water Table (A2)	Aquatic Fauna (B13)	Moss Trim Lines (B16)			
Saturation (A3)	Marl Deposits (B15)	Dry-Season Water Table (C2)			
Water Marks (B1)	Hydrogen Sulfide Odor (C1)	Crayfish Burrows (C8)			
Sediment Deposits (B2)	Oxidized Rhizospheres on Living Roots (C3)	Saturation Visible in Aerial Imagery (C9)			
Drift Deposits (B3)	Presence of Reduced Iron (C4)	Stunted or Stressed Plants (D1)			
Algal Mat or Crust (B4)	Recent Iron Reduction in Tilled Soils (C6)	Geomorphic Position (D2)			
Iron Deposits (B5)	Thin Muck Surface (C7)	Shallow Aquitard (D3)			
Inundation Visible on Aerial Imagery (B7)	Other (Explain in Remarks)	Microtopographic Relief (D4)			
Sparsley Vegetated Concave Surface (B8)	Other (Explain in Remarks)				
Sparsiey vegetated Concave Surrace (B8)		FAC-Neutral Test (D5)			
Surface Water Present? Yes No	X Depth (inches)				
Water Table Present? Yes No	X Depth (inches) Wetland H	Hydrology Present? Yes No X			
Saturation Present? Yes No	X Depth (inches)				
Describe Recorded Data (stream gauge, mo	onitoring well, aerial photos, previous inspection	ns), if available:			
	0 - ,				
Remarks:					

VEGETATION - Use scien	tific names of plants				Sampli	ng Point	t: 02-20 :	200720-W	L-30-30U
Tree Stratum	(Plot Size: 30'radius)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test V Number of Domi That Are OBL, FA	nant Spe	cies	0	(A)
			= Total Cover		Total Numbe Species Ac			2	(B)
					Percent of Dor That Are OBL,	-		0%	_(A/B)
					Prevalence Index \	Norkshe	et:		
		Absolute	Dominant	Indicator	OBL species	0	x 1	0	
Shrub Stratum	(Plot Size: 15'radius)	% Cover	Species?	Status	FACW species	0	x 2	0	
					FAC species	0	x 3	0	<u></u>
			_= Total Cov	ver .	FACU species	20	x 4	80	
					UPL species	60	x 5	300	
					Column Totals	80	(A)	380	(B)
					Prevalenc	e Index =	B/A = _	4.75	
					Hydrophytic Vege	tation In	dicator	s:	
		Absolute	Dominant	Indicator	1- Rapid Tes	t For Hyd	drophyti	ic Vegeta	tion
Herb Stratum	(Plot Size:5'radius)	% Cover	Species?	Status	2- Dominan	ce Test is	> 50%		
Zea mays		60	X	UPL	3- Prevalenc	e Index i	s =< 3.0		
Abutilon theophrasti		<u>20</u> 80	= Total Cov	<u>FACU</u> er	4- Morpholo	ogical Ada	aptatior	ns	
			=		5- Problema	itic Hydro	phytic '	Vegetatio	n
					Definitions of Vegeta	ation Stra	ta:		
					Tree- Woody plants 3 breast height (DBH),				eter at
					Sapling/Shrub- Wood greater than or equa				and
					Herb- All herbaceous size, and woody plan				less of
Woody Vine Stratum	(Plot Size: 30'radius)		Dominant Species?	Indicator Status	Woody Vines- All wo height.	ody vines	greater t	than 3.28f	t in
			_= Total Cov	ver	Hydropl Vegeta Pres	ition	s	No X	_
Remarks: (Include photo nu	umbers here or on a sep	arate shee	t.)						

SOIL Sampling Point: 02-20200720-WL-30-30U Depth Matrix **Redox Features** (inches Color % Color % Texture Remarks Type Loc 0-4 10YR 4/2 100 Silt Loam 4-14 10YR 4/2 95 7.5YR 5/6 5 C PLSilty Clay Loam **Hydric Soil Indicators:** Indicators for Problematic Soils: Histosol (A1) Polyvalue Below Surface (B15) 2 cm Muck (A10) Histic Epipedon (A2) Thin Dark Surface (S9) Coast Prarie Redox (A16) Black Histic (A3) Loamy Mucky Mineral (F1) 5 cm Mucky Peat or Peat (S3) Hydrogen Sulfide (A4) Loamy Gleyed Matric (F2) Dark Surface (S7) Stratified Layers (A5) Depleted Matrix (F3) Polyvalue Below Surface (S8) Depleted Below Dark Surface (A11) Redox Dark Surface (F6) Thin Dark Surface (S9) Thick Dark Surface (A12) Depleted Dark Surface (F7) Iron-Manganese Masses (F12) Sandy Mucky Mineral (S1) Redox Depressions (F8) Piedmont Floodplain Soils (F19) Sandy Gleyed Matrix (S4) Mesic Spodic (TA6) Sandy Redox (S5) Red Parent Material (F21) Stripped Matrix (S6) Very Shallow Dark Surface (TF12) Dark Surface (S7) Other (Explain in Remarks) Restrictive Layer (if observed): Type: Hydric Soil Present? Yes No Χ Depth (inches): Remarks:

Project/Site: Cider Solar Project	City/County: Elba/Genese	e Sampling Date: 7/20/2020						
Applicant/Owner: Hecate		State: NY Sampling Point:						
Investigator(s): Justin Ahn	02-20200720-WL-31-31W							
Landform (hillslope, terrace,etc.): Depression	Local relief (concave, convex, r	none): Concave Slope (%) 0 - 1						
Subregion (LRR or MLRA): LRR L	Lat: 43.100834 Long: -7	78.220165 Datum: NAD83						
Soil Map Unit Name: HIB		NWI Classification: PEM						
Are climatic / hyrologic conditions on the site t		 ` ' ' '						
Are Vegetation X, Soil , or Hydrology								
Are Vegetation, Soil, or Hydrology naturally problematic? (if needed, explain any answers in Remarks.)								
SUMMARY OF FINDINGS - Attach site map	showing sampling point locations, tran	sects, important features, etc.						
Hydrophytic Vegetation Present? Yes	No X Is the Sampled Area							
Hydric Soil Present? Yes X	No within a Wetland? Yes X No							
Wetland Hydrology Present? Yes X	No if yes, optional Wetl	and Site ID: WL83						
Remarks: (Explain alternative procedures here or in a seg								
remarks. (Explain alternative procedures here of in a sex	and report,							
HYDROLOGY								
Wetland Hydrology Indicators:		Secondary Indicators (minimum of two required)						
Primary Indicators (minimum of one is required: ch	neck all that apply)	Surface Soil Cracks (B6)						
X Surface Water (A1)	Water-Stained Leaves (B9)	Drainage Patterns (B10)						
High Water Table (A2)	X Aquatic Fauna (B13)	Moss Trim Lines (B16)						
Saturation (A3)	Marl Deposits (B15)	Dry-Season Water Table (C2)						
Water Marks (B1)	Hydrogen Sulfide Odor (C1)	Crayfish Burrows (C8)						
Sediment Deposits (B2)	X Oxidized Rhizospheres on Living Roots (C3)	Saturation Visible in Aerial Imagery (C9)						
Drift Deposits (B3)	Presence of Reduced Iron (C4)	Stunted or Stressed Plants (D1)						
Algal Mat or Crust (B4)	Recent Iron Reduction in Tilled Soils (C6)	Geomorphic Position (D2)						
								
Iron Deposits (B5)	Thin Muck Surface (C7)	Shallow Aquitard (D3)						
Inundation Visible on Aerial Imagery (B7)	Other (Explain in Remarks)	Microtopographic Relief (D4)						
Sparsley Vegetated Concave Surface (B8)		FAC-Neutral Test (D5)						
Surface Water Present? Yes X No	Depth (inches) 2							
Water Table Present? Yes No X	Depth (inches) Wetland H	Hydrology Present? Yes X No						
Saturation Present? Yes No X	Depth (inches)	<u> </u>						
Describe Recorded Data (stream gauge, monit	coring well, aerial photos, previous inspection	ns), if available:						
Remarks:								

VEGETATION - Use scientific names of plants Sampling Point: 02-20200720-WL-31-31W Absolute Dominant Indicator **Dominance Test Worksheet:** (Plot Size: 30'radius) % Cover Species? Status **Tree Stratum Number of Dominant Species** That Are OBL, FACW, or FAC: (A) = Total Cover **Total Number of Dominant** Species Across All Strata: (B) 3 Percent of Dominant Species That Are OBL, FACW, or FAC: 33.3% (A/B) **Prevalence Index Worksheet:** x 1 5 **OBL** species Absolute Dominant Indicator **FACW** species 60 120 (Plot Size: 15'radius) Status x 2 **Shrub Stratum** % Cover Species? FAC species 20 60 х3 = Total Cover **FACU** species 95 x 4 380 **UPL** species 0 x 5 0 Column Totals 180 (A) 565 (B) Prevalence Index = B/A = 3.14 **Hydrophytic Vegetation Indicators:** Absolute Dominant Indicator 1- Rapid Test For Hydrophytic Vegetation **Herb Stratum** (Plot Size: 5'radius) % Cover Species? Status 2- Dominance Test is > 50% 40 Elymus glaucus Χ FACU 3- Prevalence Index is =< 3.0 30 Χ Epilobium hirsutum **FACW** 4- Morphological Adaptations Trifolium hybridum 25 Χ **FACU** Sorghum halepense 20 **FACU** 5- Problematic Hydrophytic Vegetation Carex alopecoidea 20 **FACW** Rumex crispus 15 FAC **Definitions of Vegetation Strata:** Cyperus strigosus 10 **FACW** Tree- Woody plants 3 in. (7.6cm) or more in diameter at Phleum pratense 10 **FACU** breast height (DBH), regardless of height. Ranunculus acris 5 FAC 5 Typha angustifolia OBL Sapling/Shrub- Woody plants less than 3 in. DBH and 180 = Total Cover greater than or equal to 3.28ft (1m) tall. Herb- All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28ft tall. Absolute Dominant Indicator Woody Vines- All woody vines greater than 3.28ft in (Plot Size: 30'radius) Status **Woody Vine Stratum** % Cover Species? height. = Total Cover Hydrophytic Vegetation Present? Yes ____ No __X Remarks: (Include photo numbers here or on a separate sheet.) altered, farm land

SOIL

OIL								Sampling Point. 02-20200/20-WL-31-3.
Depth Matrix			Redox Features					
(inches	Color	%	Color	%	Type	Loc	Texture	Remarks
0-2	10YR 4/2	100					Clay	
2-24	10YR 4/2	90	7.5YR 5/8	10	С	PL	Clay	
-	oil Indicators:						(0.45)	Indicators for Problematic Soils:
Histosol (A1)				Polyvalue Below Surface (B15)			• •	2 cm Muck (A10)
Histic Epipedon (A2)				Thin Dark Surface (S9)			•	Coast Prarie Redox (A16)
Black Histic (A3)			Loamy Mucky Mineral (F1) Loamy Gleyed Matric (F2)				5 cm Mucky Peat or Peat (S3) Dark Surface (S7)	
Hydrogen Sulfide (A4) Stratified Layers (A5)			X Depleted Matrix (F3)				Polyvalue Below Surface (S8)	
Depleted Below Dark Surface (A11)			Redox Dark Surface (F6)				Thin Dark Surface (S9)	
Thick Dark Surface (A12)			Depleted Dark Surface (F7)				Iron-Manganese Masses (F12)	
Sandy Mucky Mineral (S1)			Redox Depressions (F8)				Piedmont Floodplain Soils (F19)	
Sandy Gleyed Matrix (S4)					•	,	Mesic Spodic (TA6)	
	ndy Redox (S5)							Red Parent Material (F21)
Stripped Matrix (S6)							Very Shallow Dark Surface (TF12)	
Dark Surface (S7)							Other (Explain in Remarks)	
Restrictiv	ve Layer (if obs	erved):						
Type:						Hvdri	c Soil Present? Yes X No	
Depth (inches):					,			
Remark	s:							

Project/Site: Cider Solar Project	City/County: Elba/Genese	Sampling Date: 7/20/2020
Applicant/Owner: Hecate		State: NY Sampling Point:02-20200720
Investigator(s): Justin Ahn	Section, Township, Range:	WL-31-31U
Landform (hillslope, terrace,etc.): <u>Toeslope</u>	Local relief (concave, convex, r	none): <u>Linear</u> Slope (%) <u>1 - 5</u>
Subregion (LRR or MLRA): LRR L	Lat: 43.100847 Long: -78	.219878 Datum: <u>NAD83</u>
Soil Map Unit Name: HIB		NWI Classification: UPL
Are climatic / hyrologic conditions on the site	typical for this time of year? Yes X No	(if no, explain in Remarks.)
Are Vegetation, Soil, or Hydrolog	y significantly disturbed? Are "Normal	Circumstances" present? Yes X No
Are Vegetation, Soil, or Hydrolog	ynaturally problematic? (if needed, exp	lain any answers in Remarks.)
SLIMMARY OF FINDINGS - Attach site ma	ap showing sampling point locations, tran	sects important features etc
Hydrophytic Vegetation Present? Yes	No X Is the Sampled Area	-
Hydric Soil Present? Yes	No X within a Wetland?	Yes No X
· —		
Wetland Hydrology Present? Yes	<u> </u>	and site ib.
Remarks: (Explain alternative procedures here or in a s	eparate report.)	
HYDROLOGY		
Wetland Hydrology Indicators:		Secondary Indicators (minimum of two required)
Primary Indicators (minimum of one is required:	check all that apply)	Surface Soil Cracks (B6)
Surface Water (A1)	Water-Stained Leaves (B9)	Drainage Patterns (B10)
High Water Table (A2)	Aquatic Fauna (B13)	Moss Trim Lines (B16)
Saturation (A3)	Marl Deposits (B15)	Dry-Season Water Table (C2)
Water Marks (B1)	Hydrogen Sulfide Odor (C1)	Crayfish Burrows (C8)
Sediment Deposits (B2)	Oxidized Rhizospheres on Living Roots (C3)	Saturation Visible in Aerial Imagery (C9)
Drift Deposits (B3)	Presence of Reduced Iron (C4)	Stunted or Stressed Plants (D1)
Algal Mat or Crust (B4)	Recent Iron Reduction in Tilled Soils (C6)	Geomorphic Position (D2)
Iron Deposits (B5)	Thin Muck Surface (C7)	Shallow Aquitard (D3)
Inundation Visible on Aerial Imagery (B7)	Other (Explain in Remarks)	Microtopographic Relief (D4)
Sparsley Vegetated Concave Surface (B8)	Other (Explain in Kellians)	
Sparsiey vegetated Concave Surface (B8)		FAC-Neutral Test (D5)
Surface Water Present? Yes No X	Depth (inches)	
Water Table Present? Yes No _ X	Depth (inches) Wetland F	lydrology Present? Yes No X
Saturation Present? Yes No X	Depth (inches)	
Describe Recorded Data (stream gauge mor	nitoring well, aerial photos, previous inspection	s) if available:
Describe Necorded Bata (stream gauge) mor	mening went dental priocess, previous inspection	o,, ii avaliabie.
Remarks:		

VEGETATION - Use scientific names of plants Sampling Point: 02-20200720-WL-31-31U Absolute Dominant Indicator **Dominance Test Worksheet:** (Plot Size: 30'radius) % Cover Species? Status **Tree Stratum Number of Dominant Species** 30 Χ FACU That Are OBL, FACW, or FAC: (A) Juglans nigra 30 = Total Cover **Total Number of Dominant** Species Across All Strata: (B) 6 Percent of Dominant Species That Are OBL, FACW, or FAC: 16.7% (A/B) **Prevalence Index Worksheet:** 0 x 1 **OBL** species Absolute Dominant Indicator **FACW** species 0 x 2 0 (Plot Size: 15'radius) % Cover Species? Status **Shrub Stratum** FAC species 45 FACU 15 х3 Lonicera tatarica 30 Χ Rubus allegheniensis 10 Χ **FACU FACU** species 117 x 4 468 40 = Total Cover **UPL** species 0 x 5 0 Column Totals 132 (A) 513 (B) Prevalence Index = B/A = 3.89 **Hydrophytic Vegetation Indicators:** Absolute Dominant Indicator 1- Rapid Test For Hydrophytic Vegetation **Herb Stratum** (Plot Size: 5'radius) % Cover Species? Status 2- Dominance Test is > 50% 20 **FACU** Solidago canadensis Χ 3- Prevalence Index is =< 3.0 Χ Trifolium repens 15 **FACU** 4- Morphological Adaptations Alliaria petiolata 10 **FACU** Ranunculus acris 5 FAC 5- Problematic Hydrophytic Vegetation Oxalis corniculata 2 **FACU** 52 = Total Cover **Definitions of Vegetation Strata:** Tree- Woody plants 3 in. (7.6cm) or more in diameter at breast height (DBH), regardless of height. Sapling/Shrub- Woody plants less than 3 in. DBH and greater than or equal to 3.28ft (1m) tall. Herb- All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28ft tall. Absolute Dominant Indicator Woody Vines- All woody vines greater than 3.28ft in (Plot Size: 30'radius) Species? **Woody Vine Stratum** % Cover Status height. **FAC** Vitis riparia 10 Χ 10 = Total Cover Hydrophytic Vegetation Present? Yes _____ No __X

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

SOIL Sampling Point: 02-20200720-WL-31-31U

Hydrogen Sulfide (A4) Stratified Layers (A5) Depleted Matrix (F3) Depleted Below Dark Surface (A11) Thick Dark Surface (A12) Depleted Matrix (F3) Redox Dark Surface (F6) Thin Dark Surface (F7) Depleted Dark Surface (F7)	
Hydric Soil Indicators: Histosol (A1) Histic Epipedon (A2) Black Histic (A3) Hydrogen Sulfide (A4) Hydrogen Sulfide (A4) Stratified Layers (A5) Depleted Below Dark Surface (A11) Thick Dark Surface (A12) Histor Clay Indicators for Proble Polyvalue Below Surface (B15) 2 cm Muck (A2) Thin Dark Surface (S9) Coast Prarie R Loamy Mucky Mineral (F1) 5 cm Mucky P Depleted Matrix (F3) Polyvalue Below Depleted Dark Surface (F6) Thin Dark Surface (F7) Iron-Mangane	
Hydric Soil Indicators: Histosol (A1) Histic Epipedon (A2) Black Histic (A3) Hydrogen Sulfide (A4) Hydrogen Sulfide (A4) Stratified Layers (A5) Depleted Below Dark Surface (A11) Thick Dark Surface (A12) Head of the Mark Surface (A12) Indicators for Proble (A1) Polyvalue Below Surface (B15) 2 cm Muck (A2) Coast Prarie R Loamy Mucky Mineral (F1) 5 cm Mucky P Loamy Gleyed Matric (F2) Dark Surface (F3) Polyvalue Belog Matric (F3) Depleted Dark Surface (F6) Thin Dark Surface (F7)	
Hydric Soil Indicators: Histosol (A1) Histic Epipedon (A2) Black Histic (A3) Hydrogen Sulfide (A4) Stratified Layers (A5) Depleted Below Dark Surface (A11) Thick Dark Surface (A12) Indicators for Proble Polyvalue Below Surface (B15) 2 cm Muck (A2) Coast Prarie R Loamy Mucky Mineral (F1) 5 cm Mucky P Loamy Gleyed Matric (F2) Dark Surface (A12) Polyvalue Below Dark Surface (F6) Thin Dark Surface (F7)	
Histosol (A1) Polyvalue Below Surface (B15) 2 cm Muck (A2) Histic Epipedon (A2) Thin Dark Surface (S9) Coast Prarie R Black Histic (A3) Loamy Mucky Mineral (F1) 5 cm Mucky P Hydrogen Sulfide (A4) Loamy Gleyed Matric (F2) Dark Surface (Stratified Layers (A5) Depleted Matrix (F3) Polyvalue Below Depleted Below Dark Surface (A11) Redox Dark Surface (F6) Thin Dark Surface Thick Dark Surface (A12) Depleted Dark Surface (F7) Iron-Mangane	
Histosol (A1) Polyvalue Below Surface (B15) 2 cm Muck (A2) Histic Epipedon (A2) Thin Dark Surface (S9) Coast Prarie R Black Histic (A3) Loamy Mucky Mineral (F1) 5 cm Mucky P Loamy Gleyed Matric (F2) Dark Surface (Stratified Layers (A5) Depleted Below Dark Surface (A11) Thick Dark Surface (A12) Depleted Dark Surface (F7) Iron-Mangane	
Histosol (A1) Polyvalue Below Surface (B15) 2 cm Muck (A2) Histic Epipedon (A2) Thin Dark Surface (S9) Coast Prarie R Black Histic (A3) Loamy Mucky Mineral (F1) 5 cm Mucky P Loamy Gleyed Matric (F2) Dark Surface (Stratified Layers (A5) Depleted Below Dark Surface (A11) Thick Dark Surface (A12) Depleted Dark Surface (F7) Iron-Mangane	
Histosol (A1) Polyvalue Below Surface (B15) 2 cm Muck (A2) Histic Epipedon (A2) Thin Dark Surface (S9) Coast Prarie R Black Histic (A3) Loamy Mucky Mineral (F1) 5 cm Mucky P Hydrogen Sulfide (A4) Loamy Gleyed Matric (F2) Dark Surface (Stratified Layers (A5) Depleted Matrix (F3) Polyvalue Below Depleted Below Dark Surface (A11) Thick Dark Surface (A12) Depleted Dark Surface (F7) Iron-Mangane	
Histosol (A1) Polyvalue Below Surface (B15) 2 cm Muck (A2) Histic Epipedon (A2) Thin Dark Surface (S9) Coast Prarie R Black Histic (A3) Loamy Mucky Mineral (F1) 5 cm Mucky P Hydrogen Sulfide (A4) Loamy Gleyed Matric (F2) Dark Surface (Stratified Layers (A5) Depleted Matrix (F3) Polyvalue Below Depleted Below Dark Surface (A11) Thick Dark Surface (A12) Depleted Dark Surface (F7) Iron-Mangane	
Histosol (A1) Polyvalue Below Surface (B15) 2 cm Muck (A2) Histic Epipedon (A2) Thin Dark Surface (S9) Coast Prarie R Black Histic (A3) Loamy Mucky Mineral (F1) 5 cm Mucky P Hydrogen Sulfide (A4) Loamy Gleyed Matric (F2) Dark Surface (Stratified Layers (A5) Depleted Matrix (F3) Polyvalue Below Depleted Below Dark Surface (A11) Redox Dark Surface (F6) Thin Dark Surface Thick Dark Surface (A12) Depleted Dark Surface (F7) Iron-Mangane	
Histosol (A1) Polyvalue Below Surface (B15) 2 cm Muck (A2) Histic Epipedon (A2) Thin Dark Surface (S9) Coast Prarie R Black Histic (A3) Loamy Mucky Mineral (F1) 5 cm Mucky P Hydrogen Sulfide (A4) Loamy Gleyed Matric (F2) Dark Surface (Stratified Layers (A5) Depleted Matrix (F3) Polyvalue Below Depleted Below Dark Surface (A11) Redox Dark Surface (F6) Thin Dark Surface Thick Dark Surface (A12) Depleted Dark Surface (F7) Iron-Mangane	
Histosol (A1) Polyvalue Below Surface (B15) 2 cm Muck (A2) Histic Epipedon (A2) Thin Dark Surface (S9) Coast Prarie R Black Histic (A3) Loamy Mucky Mineral (F1) 5 cm Mucky P Loamy Gleyed Matric (F2) Dark Surface (Stratified Layers (A5) Depleted Below Dark Surface (A11) Thick Dark Surface (A12) Depleted Dark Surface (F7) Iron-Mangane	
Histosol (A1) Polyvalue Below Surface (B15) 2 cm Muck (A2) Histic Epipedon (A2) Thin Dark Surface (S9) Coast Prarie R Black Histic (A3) Loamy Mucky Mineral (F1) 5 cm Mucky P Loamy Gleyed Matric (F2) Dark Surface (Stratified Layers (A5) Depleted Matrix (F3) Polyvalue Below Depleted Below Dark Surface (A11) Thick Dark Surface (A12) Depleted Dark Surface (F7) Iron-Mangane	
Histic Epipedon (A2) Black Histic (A3) Hydrogen Sulfide (A4) Stratified Layers (A5) Depleted Below Dark Surface (A11) Thick Dark Surface (A12) Thin Dark Surface (S9) Loamy Mucky Mineral (F1) Loamy Gleyed Matric (F2) Dark Surface (Depleted Matrix (F3) Polyvalue Below Dark Surface (A11) Redox Dark Surface (F6) Thin Dark Surface (F7) Iron-Mangane	,
Black Histic (A3) Hydrogen Sulfide (A4) Stratified Layers (A5) Depleted Below Dark Surface (A11) Thick Dark Surface (A12) Loamy Mucky Mineral (F1) Loamy Gleyed Matric (F2) Depleted Matrix (F3) Polyvalue Below Dark Surface (A11) Redox Dark Surface (F6) Thin Dark Surface (F7) Iron-Mangane	edox (A16)
Hydrogen Sulfide (A4) Stratified Layers (A5) Depleted Matrix (F3) Depleted Below Dark Surface (A11) Thick Dark Surface (A12) Loamy Gleyed Matric (F2) Depleted Matrix (F3) Redox Dark Surface (F6) Thin Dark Surface (F7) Iron-Mangane	eat or Peat (S3)
Depleted Below Dark Surface (A11) Thick Dark Surface (A12) Redox Dark Surface (F6) Thin Dark Surface (F7) Iron-Mangane	
Thick Dark Surface (A12) Depleted Dark Surface (F7) Iron-Mangane	ow Surface (S8)
	ace (S9)
Sandy Mucky Mineral (S1) Redox Depressions (F8) Piedmont Floo	se Masses (F12)
	odplain Soils (F19)
Sandy Gleyed Matrix (S4) Mesic Spodic ((TA6)
Sandy Redox (S5) Red Parent Ma	aterial (F21)
	Dark Surface (TF12)
Dark Surface (S7)Other (Explain	in Remarks)
Restrictive Layer (if observed):	
Type: Hydric Soil Present? Yes	No X
Depth (inches):	
Remarks:	

Project/Site: Cider Solar Project	City/County: Elba/Genese	e Sampling Date: 7/20/2020
Applicant/Owner: Hecate		State: NY Sampling Point:
Investigator(s): Justin Ahn	Section, Township, Range:	02-20200720-WL-32-32W
Landform (hillslope, terrace,etc.): Depression	Local relief (concave, convex,	none): <u>Concave</u> Slope (%) <u>0 - 1</u>
Subregion (LRR or MLRA): LRR L	Lat: <u>43.105543</u> Long: <u>-7</u>	78.218782 Datum: NAD83
Soil Map Unit Name: RoA		NWI Classification: PFO
Are climatic / hyrologic conditions on the site	typical for this time of year? Yes X No	(if no, explain in Remarks.)
Are Vegetation, Soil, or Hydrology	significantly disturbed? Are "Normal	Circumstances" present? Yes X No
Are Vegetation, Soil, or Hydrology	naturally problematic? (if needed, exp	plain any answers in Remarks.)
SUMMARY OF FINDINGS - Attach site ma	p showing sampling point locations, tran	nsects, important features, etc.
Hydrophytic Vegetation Present? Yes X		
Hydric Soil Present? Yes X	within a Wetland?	Yes X No
·		land Site ID: WL84
Wetland Hydrology Present? Yes X		<u> </u>
Remarks: (Explain alternative procedures here or in a se	parate report.)	
HYDROLOGY		
Wetland Hydrology Indicators:		Secondary Indicators (minimum of two required)
Primary Indicators (minimum of one is required: c	heck all that apply)	Surface Soil Cracks (B6)
Surface Water (A1)	X Water-Stained Leaves (B9)	X Drainage Patterns (B10)
High Water Table (A2)	Aquatic Fauna (B13)	X Moss Trim Lines (B16)
Saturation (A3)	Marl Deposits (B15)	Dry-Season Water Table (C2)
Water Marks (B1)	Hydrogen Sulfide Odor (C1)	Crayfish Burrows (C8)
Sediment Deposits (B2)	Oxidized Rhizospheres on Living Roots (C3)	Saturation Visible in Aerial Imagery (C9)
Drift Deposits (B3)	Presence of Reduced Iron (C4)	Stunted or Stressed Plants (D1)
Algal Mat or Crust (B4)	Recent Iron Reduction in Tilled Soils (C6)	Geomorphic Position (D2)
Iron Deposits (B5)	Thin Muck Surface (C7)	Shallow Aquitard (D3)
Inundation Visible on Aerial Imagery (B7)	Other (Explain in Remarks)	Microtopographic Relief (D4)
Sparsley Vegetated Concave Surface (B8)	Other (Explain in Kemarks)	FAC-Neutral Test (D5)
		FAC-Neutral Test (D5)
Surface Water Present? Yes NoX	Depth (inches)	
Water Table Present? Yes No X	Depth (inches) Wetland I	Hydrology Present? Yes X No
Saturation Present? Yes No _ X	Depth (inches)	
Describe Recorded Data (stream gauge, moni	toring well aerial photos previous inspection	ns) if available
Describe Necoraea Data (stream gaage, mon	torning well, derial photos, previous inspection	is), ii dvalidote.
Remarks:		

Free Stratum (Plot Size: Acer rubrum Fraxinus pennsylvanica	30'radius)	Absolute % Cover 40 30 70	Dominant Species? X X Total Cov	Status FAC FACW	Number of Domir That Are OBL, FAG Total Number	nant Species CW, or FAC:	6	(A)
Acer rubrum		40 30	X	FAC FACW	That Are OBL, FAG Total Number	CW, or FAC:		_(A)
		30	Х	FACW	Total Number	•		_(A)
Fraxinus pennsylvanica						of Dominant		
		70	_= Total Cov	ver .	Species Acre	Or Dominiance		
					July Species Acro	oss All Strata:	9	(B)
					Percent of Dom	inant Species		_
					That Are OBL, F.	•		(A/B)
					,			_`
					Prevalence Index W	Vorksheet:		
		Ahsolute	Dominant	Indicator	OBL species	15 x 1	1 15	
Shrub Stratum (Plot Size:	15'radius)	% Cover	Species?	Status	FACW species	95 x 2	190	
Fraxinus pennsylvanica		30	Х	FACW	FAC species	50 x 3	3 150	
Lonicera tatarica		10	X Tatal Car	FACU	FACU species	35 x 4	4140	
		40	_= Total Cov	rer	UPL species	10 x !	5 50	
					Column Totals	205 (A) 545	(B
					Prevalence	e Index = B/A =	= 2.66	
					Hydrophytic Veget	ation Indicate	ors:	
		Absolute	Dominant	Indicator		For Hydroph		ation
lerb Stratum (Plot Size:	5'radius)	% Cover	Species?	Status	X 2- Dominance			
Polygonum aviculare		20	Х	FACU	X 3- Prevalence			
Carex intumescens		15	Х	FACW				
Carex alopecoidea		15	Χ	FACW	4- Morpholog	gical Adaptati	ons	
Typha angustifolia		15	Х	OBL	5- Problemat	ic Hydrophyti	c Vegetati	on
Daucus carota		10		UPL				
Toxicodendron radicans		10		FAC	Definitions of Vegeta	tion Strata:		
Impatiens capensis		5		FACW	Tree- Woody plants 3	in (7.6cm) or 1	nara in dian	notor at
		90	_= Total Cov	ver	breast height (DBH), r			neter at
					Sapling/Shrub- Woody greater than or equal			and
					Herb- All herbaceous			lless of
		Alaas I. I	D :	to die i	size, and woody plant	s less than 3.28	itt tall.	
Noody Vine Stratum (Plot Size:	30'radius)	Absolute % Cover	Dominant Species?	Indicator Status	Woody Vines- All woo	ody vines greate	er than 3.28	ft in
Parthenocissus quinquefolia		5	Х	FACU	height.			
		5	_= Total Cov	er er	Hydroph	vtic		
					Vegetat	•		
						ent? Yes X	No	

SOIL

Sampling Point: 02-20200720-WL-32-32W

Hydrogen Sulfide (A4) Stratified Layers (A5) Depleted Matrix (F3) Depleted Below Dark Surface (A11) Thick Dark Surface (A12) Sandy Mucky Mineral (S1) Sandy Gleyed Matrix (S4) Sandy Redox (S5) Loamy Gleyed Matric (F2) Depleted Matrix (F3) Polyvalue Below Dark Surface (F6) Thin Dark Surface (F7) Iron-Mangane Piedmont Floor Sandy Gleyed Matrix (S4) Mesic Spodic Red Parent Matrix (S5)			
#ydric Soil Indicators: Histosol (A1) Histic Epipedon (A2) Black Histic (A3) Hydrogen Sulfide (A4) Coast Prarie For Mucky Mineral (F1) Stratified Layers (A5) Depleted Below Dark Surface (A11) Thick Dark Surface (A12) Sandy Mucky Mineral (S1) Energy Age of Atlanta Surface (F7) Energy Age of August Manager (F8) Polyvalue Below Dark Surface (A11) A Redox Dark Surface (F7) Iron-Mangane Sandy Mucky Mineral (S1) Energy Age of August Mark Surface (F7) Iron-Mangane Sandy Mucky Mineral (S1) Energy Age of August Mark Surface (F8) Piedmont Flored Sandy Redox (S5) Red Parent M			
Hydric Soil Indicators: Histosol (A1) Histic Epipedon (A2) Black Histic (A3) Hydrogen Sulfide (A4) Stratified Layers (A5) Depleted Below Dark Surface (A11) Thick Dark Surface (A12) Sandy Mucky Mineral (S1) Depleted Matrix (F3) Depleted Dark Surface (F6) Thin Dark Surface (F7) Redox Depressions (F8) Mesic Spodic Sandy Redox (S5) Indicators for Proble 1 Indicators for Proble 2 cm Mucky (A2) Coast Prarie F8 Coast Prarie F9 Loamy Mucky Mineral (F1) 5 cm Mucky F9 Dark Surface (F2) Dark Surface (F2) Dark Surface (F6) Thin Dark Surface (F6) Thin Dark Surface (F7) Redox Depressions (F8) Mesic Spodic Sandy Redox (S5)			
Histosol (A1) Polyvalue Below Surface (B15) 2 cm Muck (A Histic Epipedon (A2) Thin Dark Surface (S9) Coast Prarie F Black Histic (A3) Loamy Mucky Mineral (F1) 5 cm Mucky F Loamy Gleyed Matric (F2) Dark Surface F Stratified Layers (A5) Depleted Below Dark Surface (A11) Thick Dark Surface (A12) Depleted Dark Surface (F6) Thin Dark Surface (F7) Iron-Mangane Sandy Mucky Mineral (S1) Redox Depressions (F8) Piedmont Flor Sandy Redox (S5) Red Parent M			
Histosol (A1) Polyvalue Below Surface (B15) 2 cm Muck (A Histic Epipedon (A2) Thin Dark Surface (S9) Coast Prarie F Black Histic (A3) Loamy Mucky Mineral (F1) 5 cm Mucky F Loamy Gleyed Matric (F2) Dark Surface F Stratified Layers (A5) Depleted Below Dark Surface (A11) Thick Dark Surface (A12) Depleted Dark Surface (F6) Thin Dark Surface (F7) Iron-Mangane Sandy Mucky Mineral (S1) Redox Depressions (F8) Piedmont Flor Mesic Spodic Sandy Redox (S5) Red Parent M			
Histosol (A1) Polyvalue Below Surface (B15) 2 cm Muck (A Histic Epipedon (A2) Thin Dark Surface (S9) Coast Prarie F Black Histic (A3) Loamy Mucky Mineral (F1) 5 cm Mucky F Loamy Gleyed Matric (F2) Dark Surface F Stratified Layers (A5) Depleted Below Dark Surface (A11) Thick Dark Surface (A12) Depleted Dark Surface (F6) Thin Dark Surface (F7) Iron-Mangane Sandy Mucky Mineral (S1) Redox Depressions (F8) Piedmont Flor Mesic Spodic Sandy Redox (S5) Red Parent M			
Histosol (A1) Polyvalue Below Surface (B15) 2 cm Muck (A Histic Epipedon (A2) Thin Dark Surface (S9) Coast Prarie F Black Histic (A3) Loamy Mucky Mineral (F1) 5 cm Mucky F Loamy Gleyed Matric (F2) Dark Surface F Stratified Layers (A5) Depleted Below Dark Surface (A11) Thick Dark Surface (A12) Sandy Mucky Mineral (S1) Sandy Gleyed Matrix (S4) Sandy Redox (S5) Polyvalue Below Dark Surface (F6) Thin Dark Surface (F6) Piedmont Floating Sandy Gleyed Matrix (S4) Redox Depressions (F8) Mesic Spodic Red Parent M			
Histosol (A1) Polyvalue Below Surface (B15) 2 cm Muck (A Histic Epipedon (A2) Thin Dark Surface (S9) Coast Prarie F Black Histic (A3) Loamy Mucky Mineral (F1) 5 cm Mucky F Loamy Gleyed Matric (F2) Dark Surface F Stratified Layers (A5) Depleted Below Dark Surface (A11) Thick Dark Surface (A12) Depleted Dark Surface (F6) Thin Dark Surface (F7) Iron-Mangane Sandy Mucky Mineral (S1) Redox Depressions (F8) Piedmont Flor Sandy Redox (S5) Red Parent M			
Histosol (A1) Polyvalue Below Surface (B15) 2 cm Muck (A Histic Epipedon (A2) Thin Dark Surface (S9) Coast Prarie F Black Histic (A3) Loamy Mucky Mineral (F1) 5 cm Mucky F Loamy Gleyed Matric (F2) Dark Surface F Stratified Layers (A5) Depleted Below Dark Surface (A11) Thick Dark Surface (A12) Depleted Dark Surface (F6) Thin Dark Surface (F7) Sandy Mucky Mineral (S1) Redox Depressions (F8) Piedmont Flore Sandy Redox (S5) Red Parent M			
Histosol (A1) Polyvalue Below Surface (B15) 2 cm Muck (A Histic Epipedon (A2) Thin Dark Surface (S9) Coast Prarie F Black Histic (A3) Loamy Mucky Mineral (F1) 5 cm Mucky F Loamy Gleyed Matric (F2) Dark Surface F Stratified Layers (A5) Depleted Below Dark Surface (A11) Thick Dark Surface (A12) Depleted Dark Surface (F6) Thin Dark Surface (F7) Iron-Mangane Sandy Mucky Mineral (S1) Redox Depressions (F8) Piedmont Flor Sandy Redox (S5) Red Parent M			
Histosol (A1) Polyvalue Below Surface (B15) 2 cm Muck (A Histic Epipedon (A2) Thin Dark Surface (S9) Coast Prarie F Black Histic (A3) Loamy Mucky Mineral (F1) 5 cm Mucky F Loamy Gleyed Matric (F2) Dark Surface F Stratified Layers (A5) Depleted Below Dark Surface (A11) Thick Dark Surface (A12) Depleted Dark Surface (F6) Thin Dark Surface (F7) Iron-Mangane Sandy Mucky Mineral (S1) Redox Depressions (F8) Piedmont Flor Mesic Spodic Sandy Redox (S5) Red Parent M			
Histosol (A1) Polyvalue Below Surface (B15) 2 cm Muck (A Histic Epipedon (A2) Thin Dark Surface (S9) Coast Prarie F Black Histic (A3) Loamy Mucky Mineral (F1) 5 cm Mucky F Loamy Gleyed Matric (F2) Dark Surface F Stratified Layers (A5) Depleted Below Dark Surface (A11) Thick Dark Surface (A12) Depleted Dark Surface (F6) Thin Dark Surface (F7) Iron-Mangane Sandy Mucky Mineral (S1) Redox Depressions (F8) Piedmont Floa Mesic Spodic Sandy Redox (S5) Red Parent M			
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) Eloamy Mucky Mineral (F1) Loamy Gleyed Matric (F2) Dark Surface (Dark Surface (F2) Dark Surface (F3) Thin Dark Surface (F6) Thin Dark Surface (F7) Iron-Mangane (F8) Mesic Spodic (F8) Sandy Redox (S5)			
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) Loamy Mucky Mineral (F1) Loamy Mucky Mineral (F2) Dark Surface (F2) Depleted Matrix (F3) Polyvalue Below Dark Surface (F6) Thin Dark Surface (F7) Iron-Mangane Redox Depressions (F8) Piedmont Flow Mesic Spodic Red Parent Mesic Spodic R	•		
Hydrogen Sulfide (A4) Stratified Layers (A5) Depleted Matrix (F3) Depleted Below Dark Surface (A11) Thick Dark Surface (A12) Sandy Mucky Mineral (S1) Sandy Gleyed Matrix (S4) Sandy Redox (S5) Loamy Gleyed Matric (F2) Depleted Matrix (F3) Polyvalue Below Dark Surface (F6) Thin Dark Surface (F7) Iron-Mangane Piedmont Flow Mesic Spodic Red Parent M	5 cm Mucky Peat or Peat (S3)		
Stratified Layers (A5) Depleted Matrix (F3) Polyvalue Below Depleted Below Dark Surface (A11) Thick Dark Surface (A12) Sandy Mucky Mineral (S1) Sandy Gleyed Matrix (S4) Sandy Redox (S5) Depleted Matrix (F3) Polyvalue Below Depleted Dark Surface (F6) Thin Dark Surface (F7) Iron-Mangane Piedmont Flow Mesic Spodic Red Parent M	Dark Surface (S7)		
Depleted Below Dark Surface (A11) X Redox Dark Surface (F6) Thin Dark Surface (F6) Thick Dark Surface (A12) Depleted Dark Surface (F7) Iron-Mangane Sandy Mucky Mineral (S1) Redox Depressions (F8) Piedmont Flow Sandy Gleyed Matrix (S4) Mesic Spodic Sandy Redox (S5) Red Parent M	Polyvalue Below Surface (S8)		
Thick Dark Surface (A12) Sandy Mucky Mineral (S1) Sandy Gleyed Matrix (S4) Sandy Redox (S5) Depleted Dark Surface (F7) Redox Depressions (F8) Piedmont Floration Mesic Spodic Red Parent M	Thin Dark Surface (S9)		
Sandy Mucky Mineral (S1) Sandy Gleyed Matrix (S4) Sandy Redox (S5) Redox Depressions (F8) Mesic Spodic Red Parent M			
Sandy Gleyed Matrix (S4) Sandy Redox (S5) Mesic Spodic Red Parent M	odplain Soils (F19)		
Sandy Redox (S5) Red Parent M			
			
Stripped Matrix (S6) Very Shallow	Dark Surface (TF12)		
Dark Surface (S7) Other (Explain	in Remarks)		
Restrictive Layer (if observed):			
Type: Hydric Soil Present? Yes	X No		
Depth (inches):			
Remarks:			

Project/Site: Cider Solar Project	City/County: Elba/Genese	e Sampling Date: 7/20/2020
Applicant/Owner: Hecate	<u> </u>	State: NY Sampling Point:02-20200720
Investigator(s): Justin Ahn	Section, Township, Range:	WL-32-32U
Landform (hillslope, terrace,etc.): <u>Toeslope</u>	Local relief (concave, convex, r	
Subregion (LRR or MLRA): LRR L	Lat: 43.105456 Long: -7	8.218811 Datum: <u>NAD83</u>
Soil Map Unit Name: RoA		NWI Classification: UPL
Are climatic / hyrologic conditions on the site	typical for this time of year? Yes X No	(if no, explain in Remarks.)
Are Vegetation, Soil, or Hydrolog	significantly disturbed? Are "Normal	Circumstances" present? Yes X No
Are Vegetation, Soil, or Hydrolog	ynaturally problematic? (if needed, exp	lain any answers in Remarks.)
SUMMARY OF FINDINGS - Attach site ma	on showing sampling point locations tran	sects, important features, etc.
Hydrophytic Vegetation Present? Yes		
Hydric Soil Present? Yes	No X within a Wetland?	Yes No X
Wetland Hydrology Present? Yes		
Remarks: (Explain alternative procedures here or in a s	eparate report.)	
HYDROLOGY		
Wetland Hydrology Indicators:		Secondary Indicators (minimum of two required)
Primary Indicators (minimum of one is required:	check all that apply)	Surface Soil Cracks (B6)
Surface Water (A1)	Water-Stained Leaves (B9)	Drainage Patterns (B10)
High Water Table (A2)	Aquatic Fauna (B13)	Moss Trim Lines (B16)
Saturation (A3)	Marl Deposits (B15)	Dry-Season Water Table (C2)
Water Marks (B1)	Hydrogen Sulfide Odor (C1)	Crayfish Burrows (C8)
Sediment Deposits (B2)	Oxidized Rhizospheres on Living Roots (C3)	Saturation Visible in Aerial Imagery (C9)
Drift Deposits (B3)	Presence of Reduced Iron (C4)	Stunted or Stressed Plants (D1)
Algal Mat or Crust (B4)	Recent Iron Reduction in Tilled Soils (C6)	Geomorphic Position (D2)
		
Iron Deposits (B5)	Thin Muck Surface (C7)	Shallow Aquitard (D3)
Inundation Visible on Aerial Imagery (B7)	Other (Explain in Remarks)	Microtopographic Relief (D4)
Sparsley Vegetated Concave Surface (B8)		FAC-Neutral Test (D5)
Surface Water Present? Yes No X	Depth (inches)	
Water Table Present? Yes No X	Depth (inches) Wetland H	Hydrology Present? Yes No X
Saturation Present? Yes No X	Depth (inches)	 _
Describe Recorded Data (stream gauge mon	itoring well, aerial photos, previous inspection	ns) if available:
Describe Necoraea Data (stream Baage, mon	itering wen, denai photos, previous inspection	io), ii available.
Remarks:		

VEGETATION - Use scientific names of plants Sampling Point: 02-20200720-WL-32-32U Absolute Dominant Indicator **Dominance Test Worksheet:** (Plot Size: 30'radius) % Cover Species? Status **Tree Stratum Number of Dominant Species** That Are OBL, FACW, or FAC: (A) = Total Cover **Total Number of Dominant** (B) Species Across All Strata: 5 Percent of Dominant Species (A/B) That Are OBL, FACW, or FAC: 60% **Prevalence Index Worksheet:** x 1 0 **OBL** species Absolute Dominant Indicator **FACW** species 30 60 (Plot Size: 15'radius) % Cover Species? Status x 2 **Shrub Stratum** FAC species 30 90 FACU х3 Lonicera tatarica 40 Χ Fraxinus pennsylvanica 30 Χ **FACW FACU** species 80 x 4 320 70 = Total Cover **UPL** species 0 x 5 0 Column Totals 140 (A) 470 (B) Prevalence Index = B/A = 3.36 **Hydrophytic Vegetation Indicators:** Absolute Dominant Indicator 1- Rapid Test For Hydrophytic Vegetation **Herb Stratum** (Plot Size: 5'radius) % Cover Species? Status X 2- Dominance Test is > 50% **FACU** Reynoutria japonica 30 Χ 3- Prevalence Index is =< 3.0 Toxicodendron radicans 20 Χ **FAC** 4- Morphological Adaptations Lonicera tatarica 10 **FACU** 60 = Total Cover 5- Problematic Hydrophytic Vegetation **Definitions of Vegetation Strata:** Tree- Woody plants 3 in. (7.6cm) or more in diameter at breast height (DBH), regardless of height. Sapling/Shrub- Woody plants less than 3 in. DBH and greater than or equal to 3.28ft (1m) tall. Herb- All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28ft tall. Absolute Dominant Indicator Woody Vines- All woody vines greater than 3.28ft in (Plot Size: 30'radius) Species? **Woody Vine Stratum** % Cover Status height. **FAC** Vitis riparia 10 Χ 10 = Total Cover Hydrophytic Vegetation Present? Yes X No ___

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

SOIL Sampling Point: 02-20200720-WL-32-32U

Depth Matrix Color % Color % Type Loc Texture 0-12 10YR 3/3 98 7.5YR 5/8 2 C PL Clay Loam 12-24 7.5YR 6/1 50 7.5YR 5/8 50 C M Clay Loam Hydric Soil Indicators: Histosol (A1) Histic Epipedon (A2) Black Histic (A3) Hydrogen Sulfide (A4) Stratified Layers (A5) Depleted Below Dark Surface (A11) Redox Features Redox Features Polyvalue Belox Clay Loam Polyvalue Below Surface (B15) Thin Dark Surface (S9) Loamy Mucky Mineral (F1) Loamy Gleyed Matric (F2) Depleted Matrix (F3) Redox Dark Surface (F6)	
O-12 10YR 3/3 98 7.5YR 5/8 2 C PL Clay Loam 12-24 7.5YR 6/1 50 7.5YR 5/8 50 C M Clay Loam Hydric Soil Indicators: Histosol (A1) Histic Epipedon (A2) Black Histic (A3) Hydrogen Sulfide (A4) Stratified Layers (A5) Polyvalue Below Surface (B15) Thin Dark Surface (S9) Loamy Mucky Mineral (F1) Loamy Gleyed Matric (F2) Depleted Matrix (F3)	
Hydric Soil Indicators: Histosol (A1) Histic Epipedon (A2) Black Histic (A3) Hydrogen Sulfide (A4) Stratified Layers (A5) Hydrogen Stratified Layers (A5) Hydrogen Stratified Layers (A5) Hydrogen Stratified Layers (A5) Hydrogen Stratified Layers (A5) Thin Dark Surface (B15) Thin Dark Surface (S9) Loamy Mucky Mineral (F1) Loamy Gleyed Matric (F2) Depleted Matrix (F3)	
Hydric Soil Indicators: Histosol (A1) Histic Epipedon (A2) Black Histic (A3) Hydrogen Sulfide (A4) Stratified Layers (A5) Polyvalue Below Surface (B15) Thin Dark Surface (S9) Loamy Mucky Mineral (F1) Loamy Gleyed Matric (F2) Depleted Matrix (F3)	
Histosol (A1) Polyvalue Below Surface (B15) Thin Dark Surface (S9) Black Histic (A3) Loamy Mucky Mineral (F1) Hydrogen Sulfide (A4) Loamy Gleyed Matric (F2) Stratified Layers (A5) Depleted Matrix (F3)	Indicators for Problematic Soils:
Histosol (A1) Polyvalue Below Surface (B15) Thin Dark Surface (S9) Black Histic (A3) Loamy Mucky Mineral (F1) Hydrogen Sulfide (A4) Loamy Gleyed Matric (F2) Stratified Layers (A5) Depleted Matrix (F3)	Indicators for Problematic Soils:
Histic Epipedon (A2) Black Histic (A3) Hydrogen Sulfide (A4) Stratified Layers (A5) Thin Dark Surface (S9) Loamy Mucky Mineral (F1) Loamy Gleyed Matric (F2) Depleted Matrix (F3)	
Black Histic (A3) Hydrogen Sulfide (A4) Stratified Layers (A5) Loamy Mucky Mineral (F1) Loamy Gleyed Matric (F2) Depleted Matrix (F3)	2 cm Muck (A10)
Hydrogen Sulfide (A4) Stratified Layers (A5) Loamy Gleyed Matric (F2) Depleted Matrix (F3)	Coast Prarie Redox (A16)
Stratified Layers (A5) Depleted Matrix (F3)	5 cm Mucky Peat or Peat (S3)
	Dark Surface (S7)
Depleted Below Dark Surface (A11) Redox Dark Surface (F6)	Polyvalue Below Surface (S8)
	Thin Dark Surface (S9)
Thick Dark Surface (A12) Depleted Dark Surface (F7)	Iron-Manganese Masses (F12)
Sandy Mucky Mineral (S1) Redox Depressions (F8)	Piedmont Floodplain Soils (F19)
Sandy Gleyed Matrix (S4)	Mesic Spodic (TA6)
Sandy Redox (S5)	Red Parent Material (F21)
Stripped Matrix (S6)	Very Shallow Dark Surface (TF12)
Dark Surface (S7)	Other (Explain in Remarks)
Restrictive Layer (if observed):	
Туре:	dric Soil Present? Yes No X
Depth (inches):	
Remarks:	

Project/Site: Cider Solar Project	City/Co	unty: Oakfield/Genessee	Sampling Date: 9/29/2020
Applicant/Owner: Hecate		State: NY	Sampling Point:
Investigator(s): Andrew Sorci	Section	n, Township, Range:	02_20200929_WL33_W2
Landform (hillslope, terrace,etc.): Depression	on Local relief	f (concave, convex, none): Conc	caveSlope (%) <u>0 - 1</u>
Subregion (LRR or MLRA): LRR L	Lat: 43.103147	Long:78.220561	Datum: NAD83
Soil Map Unit Name: LoA		NWI Clas	ssification: PEM
Are climatic / hyrologic conditions on the site	e typical for this time of year	ar? Yes <u>X</u> No <u> (if no</u>	o, explain in Remarks.)
Are Vegetation , Soil , or Hydrolog	gy significantly disturb	ped? Are "Normal Circumstanc	es" present? Yes X No
Are Vegetation , Soil , or Hydrolog	gy naturally problema	tic? (if needed, explain any answ	ers in Remarks.)
SUMMARY OF FINDINGS - Attach site m	ap showing sampling po	int locations, transects, impo	ortant features, etc.
Hydrophytic Vegetation Present? Yes	X No	Is the Sampled Area	
Hydric Soil Present? Yes	X No	within a Wetland?	Yes X No
<u> </u>	X No	if yes, optional Wetland Site ID:	WL85
Remarks: (Explain alternative procedures here or in a s	separate report.)		
Vegetated ditch			
HYDROLOCY			
HYDROLOGY Wetland Hydrology Indicators:		Socondany Ir	ndicators (minimum of two required)
			•
Primary Indicators (minimum of one is required:			e Soil Cracks (B6)
Surface Water (A1)	Water-Stained Leaves		ge Patterns (B10)
High Water Table (A2)	Aquatic Fauna (B13)	Moss T	rim Lines (B16)
Saturation (A3)	Marl Deposits (B15)	Dry-Se	ason Water Table (C2)
Water Marks (B1)	Hydrogen Sulfide Odo	r (C1) Crayfis	h Burrows (C8)
Sediment Deposits (B2)	Oxidized Rhizospheres	on Living Roots (C3) X Satura	tion Visible in Aerial Imagery (C9)
Drift Deposits (B3)	Presence of Reduced I	ron (C4) Stunte	d or Stressed Plants (D1)
Algal Mat or Crust (B4)	Recent Iron Reduction	in Tilled Soils (C6) X Geomo	orphic Position (D2)
Iron Deposits (B5)	Thin Muck Surface (C7	Shallov	v Aquitard (D3)
Inundation Visible on Aerial Imagery (B7)	Other (Explain in Rema		opographic Relief (D4)
Sparsley Vegetated Concave Surface (B8)			eutral Test (D5)
			eutrar rest (D3)
Surface Water Present? Yes NoX	Depth (inches)		
Water Table Present? Yes No _ X	Depth (inches)	Wetland Hydrology Pr	esent? Yes X No
Saturation Present? Yes No X	(Depth (inches)		
Describe Described Date (streets as a second			I
Describe Recorded Data (stream gauge, moi	nitoring well, aerial photos,	, previous inspections), if availab	ie:
Remarks:			

VEGETATION - Use scientific names of plants Sampling Point: 02_20200929_WL33_W2 Absolute Dominant Indicator **Dominance Test Worksheet:** (Plot Size: 30'radius) % Cover Species? Status **Tree Stratum Number of Dominant Species** That Are OBL, FACW, or FAC: 3 (A) = Total Cover **Total Number of Dominant** Species Across All Strata: 5 (B) Percent of Dominant Species (A/B) That Are OBL, FACW, or FAC: 60% **Prevalence Index Worksheet:** 40 x 1 40 **OBL** species Absolute Dominant Indicator **FACW** species 25 50 (Plot Size: 15'radius) % Cover Species? Status x 2 **Shrub Stratum** FAC species 10 30 х3 Lonicera morrowii 40 Χ FACU 40 = Total Cover **FACU** species 65 x 4 260 **UPL** species 0 x 5 0 Column Totals 140 (A) 380 (B) Prevalence Index = B/A = 2.71 **Hydrophytic Vegetation Indicators:** Absolute Dominant Indicator 1- Rapid Test For Hydrophytic Vegetation **Herb Stratum** (Plot Size: 5'radius) % Cover Species? Status X 2- Dominance Test is > 50% Typha angustifolia 40 Χ OBL X 3- Prevalence Index is =< 3.0 Phalaris arundinacea 25 Х **FACW** 4- Morphological Adaptations Solidago canadensis 25 Χ **FACU** 90 = Total Cover 5- Problematic Hydrophytic Vegetation **Definitions of Vegetation Strata:** Tree- Woody plants 3 in. (7.6cm) or more in diameter at breast height (DBH), regardless of height. Sapling/Shrub- Woody plants less than 3 in. DBH and greater than or equal to 3.28ft (1m) tall. Herb- All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28ft tall. Absolute Dominant Indicator Woody Vines- All woody vines greater than 3.28ft in (Plot Size: 30'radius) Species? **Woody Vine Stratum** % Cover Status height. **FAC** Vitis riparia 10 Χ 10 = Total Cover Hydrophytic Vegetation Present? Yes X No ___ Remarks: (Include photo numbers here or on a separate sheet.)

SOIL Sampling Point: 02_20200929_WL33_W2

Depth	Matrix			Redox Features				
inches	Color	%	Color	%	Type	Loc	Texture	Remarks
0-6	10YR 3/1	90	10YR 4/6	10	С	M	Loam	
6-12	10YR 4/1	75	10YR 5/6	25	С	M	Sandy Loam	
Undrie Ce	sil Indicators.							
nyuric 50	oil Indicators:							Indicators for Problematic Soils:
•	tosol (A1)				Polyvalu	e Below S	urface (B15)	Indicators for Problematic Soils:2 cm Muck (A10)
Hist		A2)			•	e Below Si k Surface	• •	
Hist Hist	tosol (A1)	A2)			Thin Dar		(S9)	2 cm Muck (A10)
Hist Hist Blac	tosol (A1) tic Epipedon (Thin Dar Loamy M	k Surface	(S9) eral (F1)	2 cm Muck (A10) Coast Prarie Redox (A16)
Hist Hist Blac Hyc	tosol (A1) tic Epipedon (ck Histic (A3)	(A4)			Thin Dar Loamy M Loamy G	k Surface Iucky Min	(S9) eral (F1) tric (F2)	2 cm Muck (A10) Coast Prarie Redox (A16) 5 cm Mucky Peat or Peat (S3)
Hist Hist Blac Hyc Stra	tosol (A1) tic Epipedon (ck Histic (A3) drogen Sulfide	(A4) (A5)	rface (A11)	X	Thin Dar Loamy M Loamy G Depleted	k Surface Jucky Min Ileyed Mat	(S9) eral (F1) tric (F2) 	2 cm Muck (A10) Coast Prarie Redox (A16) 5 cm Mucky Peat or Peat (S3) Dark Surface (S7)
Hist Hist Blac Hyc Stra Dep	tosol (A1) tic Epipedon (A ck Histic (A3) drogen Sulfide atified Layers ((A4) (A5) Dark Su		X	Thin Dar Loamy M Loamy G Depleted Redox Da	k Surface Jucky Min Ileyed Mat d Matrix (F	(S9) eral (F1) tric (F2) F3) e (F6)	2 cm Muck (A10) Coast Prarie Redox (A16) 5 cm Mucky Peat or Peat (S3) Dark Surface (S7) Polyvalue Below Surface (S8)
Hist Hist Blace Hyce Stra Dep	tosol (A1) tic Epipedon (A ck Histic (A3) drogen Sulfide atified Layers (pleted Below D	(A4) (A5) Dark Su e (A12))	X X	Thin Dar Loamy M Loamy G Depleted Redox Da Depleted	k Surface Jucky Min Ileyed Mat d Matrix (F ark Surfac	(S9) eral (F1) tric (F2) F3) e (F6) face (F7)	2 cm Muck (A10) Coast Prarie Redox (A16) 5 cm Mucky Peat or Peat (S3) Dark Surface (S7) Polyvalue Below Surface (S8) Thin Dark Surface (S9)
Hist Hist Blac Hyc Stra Dep Thic	tosol (A1) tic Epipedon (A ck Histic (A3) drogen Sulfide atified Layers (pleted Below E ck Dark Surfac	(A4) (A5) Dark Su se (A12) neral (S	1)	X X	Thin Dar Loamy M Loamy G Depleted Redox Da Depleted	k Surface Mucky Min Ileyed Mat Il Matrix (F ark Surfac Il Dark Sur	(S9) eral (F1) tric (F2) F3) e (F6) face (F7)	2 cm Muck (A10) Coast Prarie Redox (A16) 5 cm Mucky Peat or Peat (S3) Dark Surface (S7) Polyvalue Below Surface (S8) Thin Dark Surface (S9) Iron-Manganese Masses (F12)
Hist Hist Blace Hyce Stra Dep Thice San	tosol (A1) tic Epipedon (A ck Histic (A3) drogen Sulfide atified Layers (pleted Below E ck Dark Surfac ndy Mucky Mir	(A4) (A5) Dark Su e (A12) neral (S trix (S4	1)	X X	Thin Dar Loamy M Loamy G Depleted Redox Da Depleted	k Surface Mucky Min Ileyed Mat Il Matrix (F ark Surfac Il Dark Sur	(S9) eral (F1) tric (F2) F3) e (F6) face (F7)	2 cm Muck (A10) Coast Prarie Redox (A16) 5 cm Mucky Peat or Peat (S3) Dark Surface (S7) Polyvalue Below Surface (S8) Thin Dark Surface (S9) Iron-Manganese Masses (F12) Piedmont Floodplain Soils (F19)
Hist Hist Blace Hyce Strae Dep Thice San San	tosol (A1) tic Epipedon (A ck Histic (A3) drogen Sulfide atified Layers (pleted Below E ck Dark Surfac ndy Mucky Min	(A4) (A5) Dark Su e (A12) neral (S ttrix (S4	1)	X X	Thin Dar Loamy M Loamy G Depleted Redox Da Depleted	k Surface Mucky Min Ileyed Mat Il Matrix (F ark Surfac Il Dark Sur	(S9) eral (F1) tric (F2) F3) e (F6) face (F7)	2 cm Muck (A10) Coast Prarie Redox (A16) 5 cm Mucky Peat or Peat (S3) Dark Surface (S7) Polyvalue Below Surface (S8) Thin Dark Surface (S9) Iron-Manganese Masses (F12) Piedmont Floodplain Soils (F19) Mesic Spodic (TA6)

Restrictive	Layer	(it o	bserved):
-------------	-------	-------	---------	----

Type: ______
Depth (inches):

Hydric Soil Present? Yes X No

Remarks:

Project/Site: Cider Solar Project	City/County: Elba/Genese	e Sampling Date: 7/20/2020
Applicant/Owner: Hecate		State: NY Sampling Point:
Investigator(s): Justin Ahn	Section, Township, Range:	02-20200720-WL-33-33W
Landform (hillslope, terrace, etc.): Depression	Local relief (concave, convex, r	none): <u>Concave</u> Slope (%) <u>0 - 1</u>
Subregion (LRR or MLRA): LRR L	Lat: 43.104771 Long: -7	78.220513 Datum: NAD83
Soil Map Unit Name: RoA		NWI Classification: PFO
Are climatic / hyrologic conditions on the site	typical for this time of year? Yes X No	(if no, explain in Remarks.)
Are Vegetation, Soil, or Hydrology	significantly disturbed? Are "Normal	Circumstances" present? Yes X No
Are Vegetation, Soil, or Hydrology	naturally problematic? (if needed, exp	lain any answers in Remarks.)
SUMMARY OF FINDINGS - Attach site ma	p showing sampling point locations, tran	sects, important features, etc.
Hydrophytic Vegetation Present? Yes X		
Hydric Soil Present? Yes	within a Wetland?	Yes X No
Wetland Hydrology Present? Yes X		land Site ID: WL85
	<u> </u>	<u> </u>
Remarks: (Explain alternative procedures here or in a se	eparate report.)	
HYDROLOGY		Consider the displace (as in income of the constraint)
Wetland Hydrology Indicators:	shoot all the towards	Secondary Indicators (minimum of two required)
Primary Indicators (minimum of one is required: o		Surface Soil Cracks (B6)
Surface Water (A1)	X Water-Stained Leaves (B9)	Drainage Patterns (B10)
High Water Table (A2)	Aquatic Fauna (B13)	X Moss Trim Lines (B16)
Saturation (A3)	Marl Deposits (B15)	Dry-Season Water Table (C2)
Water Marks (B1)	Hydrogen Sulfide Odor (C1)	Crayfish Burrows (C8)
Sediment Deposits (B2)	Oxidized Rhizospheres on Living Roots (C3)	Saturation Visible in Aerial Imagery (C9)
Drift Deposits (B3)	Presence of Reduced Iron (C4)	Stunted or Stressed Plants (D1)
Algal Mat or Crust (B4)	Recent Iron Reduction in Tilled Soils (C6)	Geomorphic Position (D2)
Iron Deposits (B5)	Thin Muck Surface (C7)	Shallow Aquitard (D3)
Inundation Visible on Aerial Imagery (B7)	Other (Explain in Remarks)	Microtopographic Relief (D4)
X Sparsley Vegetated Concave Surface (B8)		FAC-Neutral Test (D5)
Surface Water Present? Yes No X	Depth (inches)	
Water Table Present? Yes No X	Depth (inches) Wetland F	Hydrology Present? Yes X No
Saturation Present? Yes No X	Depth (inches)	
Describe Recorded Data (stream gauge, mon	itoring well, aerial photos, previous inspectior	os) if available:
Describe Necorded Data (stream gauge, mon	itoring well, aerial photos, previous inspection	is), ii available.
Remarks:		

VEGETATION - Use scientific names of plants Sampling Point: 02-20200720-WL-33-33W

/EGETATION - Use scient	tific names	oi piants				Sampii	116 1 01110	02-20	200720-W	L-33-33
Tree Stratum	(Plot Size:	30'radius)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test V Number of Domi				
Acer saccharinum			50	Χ	FACW	That Are OBL, FA	•		5	(A)
Fraxinus pennsylvanica			50 100	X = Total Cov	FACW ver	Total Numbe Species Ac			5	_ _(B)
						Percent of Don That Are OBL,			100%	_(A/B)
						Prevalence Index \	Norkshe	et:		
			Absolute	Dominant	Indicator	OBL species	85	x 1	85	
Shrub Stratum	(Plot Size:	15'radius)	% Cover	Species?	Status	FACW species	150	x 2	300	
Fraxinus pennsylvanica			20	Х	FACW	FAC species	10	x 3	30	
			20	_= Total Cov	ver .	FACU species	0	x 4	0	
						UPL species	0	x 5	0	
						Column Totals	245	(A)	415	(B
						Prevalenc	e Index =	B/A = _	1.69	
						Hydrophytic Vege	tation In	dicators	s:	
			Absolute	Dominant	Indicator	X 1- Rapid Tes	t For Hyd	drophyti	ic Vegeta	tion
Herb Stratum	(Plot Size:	5'radius)	% Cover	Species?	Status	X 2- Dominano	ce Test is	> 50%		
Glyceria striata			50	Х	OBL	X 3- Prevalenc	e Indev i	s =< 3 N		
Carex cristatella			30	Х	FACW					
Carex crinita			20		OBL	4- Morpholo	ogical Ada	aptation	ıs	
Carex gynandra			10		OBL	5- Problema	tic Hydro	phytic '	Vegetatio	n
<u>Toxicodendron radican</u> <u>Scutellaria lateriflora</u>	S		<u>10</u> 5		FAC OBL					
ocatemana latermora			125	= Total Cov		Definitions of Vegeta	ation Stra	ta:		
						Tree- Woody plants 3 breast height (DBH),		•		eter at
						Sapling/Shrub- Wood greater than or equa				and
						Herb- All herbaceous size, and woody plan				less of
Noody Vine Stratum	(Plot Size:	30'radius)	Absolute % Cover	Dominant Species?	Indicator Status	Woody Vines- All wo height.	ody vines	greater 1	than 3.28f	t in
				= Total Cov	ver	Hydropl Vegeta	-			

SOIL

Sampling Point: 02-20200720-WL-33-33W

	epth Matrix				Redo	x Feature	S	
nches	Color	%	Color	%	Type	Loc	Texture	Remarks
0-10	10YR 3/2	90	7.5YR 6/8	10	С	PL	Clay	
10-20	10YR 3/2	60	7.5YR 6/8	40	С	М	Clay	
ludric Sc	oil Indicators:							Indicators for Problematic Soils:
-	tosol (A1)				Polyvalu	e Below Su	rface (B15)	2 cm Muck (A10)
	tic Epipedon (/	A2)			=			Coast Prarie Redox (A16)
	ck Histic (A3)	Thin Dark Surface (S9) Loamy Mucky Mineral (F1)				5 cm Mucky Peat or Peat (S3)		
	drogen Sulfide		-	leyed Matr		Dark Surface (S7)		
	atified Layers (-	d Matrix (F3		Polyvalue Below Surface (S8)
	oleted Below [rface (A11)		-	ark Surface		Thin Dark Surface (S9)
Thi	ck Dark Surfac	e (A12)		Depleted	d Dark Surfa	ace (F7)	Iron-Manganese Masses (F12)
 San	ndy Mucky Mir	neral (S	1)		Redox D	epressions	(F8)	Piedmont Floodplain Soils (F19)
San	ndy Gleyed Ma	itrix (S4	!)					Mesic Spodic (TA6)
 San	ndy Redox (S5)							Red Parent Material (F21)
Stri	pped Matrix (S6)						Very Shallow Dark Surface (TF12)
	k Surface (S7)							Other (Explain in Remarks)
Dar								
	ve Layer (if obse	erved):						
		erved): Type:					Hydric	Soil Present? Yes X No

Project/Site: Cider Solar Project	City/County: Elba/Genese	Sampling Date: 7/20/2020			
Applicant/Owner: Hecate		State: NY Sampling Point:02-20200720			
Investigator(s): Justin Ahn	Section, Township, Range:	WL-33-33U			
Landform (hillslope, terrace,etc.): Toeslope	Local relief (concave, convex, r	one): <u>Linear</u> Slope (%) <u>1 - 5</u>			
Subregion (LRR or MLRA): LRR L	Lat: 43.104348 Long: <u>-7</u>	8.220402 Datum: NAD83			
Soil Map Unit Name: RoA		NWI Classification: UPL			
Are climatic / hyrologic conditions on the site ty	pical for this time of year? Yes X No	(if no, explain in Remarks.)			
Are Vegetation, Soil, or Hydrology	significantly disturbed? Are "Normal of	Circumstances" present? Yes X No			
Are Vegetation, Soil, or Hydrology	naturally problematic? (if needed, exp	lain any answers in Remarks.)			
SUMMARY OF FINDINGS - Attach site map	showing sampling point locations, tran	sects. important features. etc.			
Hydrophytic Vegetation Present? Yes X	No Is the Sampled Area				
Hydric Soil Present? Yes X	No within a Wetland?	Yes No X			
Wetland Hydrology Present? Yes	No X if yes, optional Wetl				
Remarks: (Explain alternative procedures here or in a sepa	arate report.)				
HYDROLOGY					
Wetland Hydrology Indicators:		Secondary Indicators (minimum of two required)			
Primary Indicators (minimum of one is required: che	eck all that apply)	Surface Soil Cracks (B6)			
Surface Water (A1)	Water-Stained Leaves (B9)	Drainage Patterns (B10)			
High Water Table (A2)	Aquatic Fauna (B13)	Moss Trim Lines (B16)			
Saturation (A3)	Marl Deposits (B15)	Dry-Season Water Table (C2)			
Water Marks (B1)	Hydrogen Sulfide Odor (C1)	Crayfish Burrows (C8)			
Sediment Deposits (B2)	Oxidized Rhizospheres on Living Roots (C3)	Saturation Visible in Aerial Imagery (C9)			
Drift Deposits (B3)	Presence of Reduced Iron (C4)	Stunted or Stressed Plants (D1)			
Algal Mat or Crust (B4)	Recent Iron Reduction in Tilled Soils (C6)	Geomorphic Position (D2)			
Iron Deposits (B5)	Thin Muck Surface (C7)	Shallow Aquitard (D3)			
Inundation Visible on Aerial Imagery (B7)	Other (Explain in Remarks)				
Sparsley Vegetated Concave Surface (B8)	Other (Explain in Nemarks)	Microtopographic Relief (D4)			
		FAC-Neutral Test (D5)			
Surface Water Present? Yes No X	Depth (inches)				
Water Table Present? Yes No X	Depth (inches) Wetland F	lydrology Present? Yes No X			
Saturation Present? Yes No X	Depth (inches)				
Describe Recorded Data (stream gauge, monito	oring well, aerial photos, previous inspection	s). if available:			
2	g, p, p	o,, a.aae.			
Remarks:					

VEGETATION - Use scientif	ic names	of plants				Sampli	ng Point: 02-2 0)200720-W	/L-33-33
Tree Stratum (F	Plot Size:	30'radius)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test V			
Populus deltoides			40	X	FAC	Number of Domi	•	4	(A)
1 opulus deltoides			40	= Total Cov			er of Dominant		_('')
				=			ross All Strata:	7	(B)
						Percent of Dor	ninant Species		_
						That Are OBL,	FACW, or FAC:	57.1%	_(A/B)
						Prevalence Index \	Worksheet:		
			۸ امامار ۱۰۰۰ مار	Daminant	lucali acaba u	OBL species	0 x 1	0	
Shrub Stratum (F	Plot Size:	15'radius)	% Cover	Dominant Species?	Status	FACW species	40 x 2	80	
Lonicera tatarica			30	Х	FACU	FAC species	55 x 3	165	
Fraxinus pennsylvanica			30	X	FACW	FACU species	50 x 4	200	
			60	_= Total Cov	ver	UPL species	5 x 5	25	
						Column Totals	150 (A)	470	(B)
						_	e Index = B/A =	3.13	`
						Hydrophytic Vege	tation Indicato	rs:	
			Absolute	Dominant	Indicator		t For Hydrophy		ition
Herb Stratum (F	Plot Size:	5'radius)	% Cover	Species?	Status	<u> </u>	ce Test is > 50%	_	
Ambrosia artemisiifolia			10	Х	FACU				
Toxicodendron radicans			10	X	FAC		ce Index is =< 3.		
Fraxinus pennsylvanica			10	Х	FACW		ogical Adaptatio		
Prunella vulgaris Daucus carota			<u>5</u> 5		FAC UPL	5- Problema	tic Hydrophytic	Vegetatio	on
Dudeus carota			40	= Total Cov		Definitions of Veget	ation Strata:		
						Tree- Woody plants breast height (DBH),			neter at
						Sapling/Shrub- Wood greater than or equa			and
						Herb- All herbaceous size, and woody plan		_	lless of
Woody Vine Stratum (F	Plot Size:	30'radius)	Absolute % Cover	Dominant Species?	Indicator Status	Woody Vines- All wo height.	ody vines greater	than 3.28f	ft in
	olia		10	X = Total Cov	FACU				
Parthenocissus quinquefo									

SOIL Sampling Point: 02-20200720-WL-33-33U

JOIL								Jamping 1 oint. 02-20200720-WL-33-330		
Depth Matrix			Redo	ox Featu						
(inches	Color	%	Color % Type Loc Texture		Remarks					
0-12	10YR 4/2	100					Silty Clay Loam			
12-16	10YR 4/2	95	10YR 5/6	5	С	PL	Silty Clay Loam			
-	oil Indicators:				Dobasti	o Dolow	Surface (D15)	Indicators for Problematic Soils:		
	itosol (A1) itic Epipedon (۸۵۱			•	k Surface	Surface (B15)	2 cm Muck (A10) Coast Prarie Redox (A16)		
	ick Histic (A3)	AZ)			-		neral (F1)	5 cm Mucky Peat or Peat (S3)		
	• •	(Δ/)			-	Sleyed Ma		Dark Surface (S7)		
Hydrogen Sulfide (A4) Stratified Layers (A5)					-	d Matrix		Polyvalue Below Surface (S8)		
Depleted Below Dark Surface (A11)					-	ark Surfa		Thin Dark Surface (S9)		
	ick Dark Surfac				-		rface (F7)	Iron-Manganese Masses (F12)		
	ndy Mucky Mi				-	epression		Piedmont Floodplain Soils (F19)		
	ndy Gleyed Ma				- Nedox B	CP1 C33101	13 (1 3)	Mesic Spodic (TA6)		
	ndy Redox (S5)	-	,					Red Parent Material (F21)		
	ipped Matrix (Very Shallow Dark Surface (TF12)		
	rk Surface (S7)							Other (Explain in Remarks)		
		•								
Restricti	ve Layer (if obs	erved):								
		Type:					Hydric	Soil Present? Yes X No		
	Depth (in	_					Trydite	155 11 165 165 165 165 165 165 165 165 1		
	- (
Remark	s:									

Project/Site: Cider Solar Project	City/Co	ounty: Elba/Genese	e Sampling Date: 7/20/2020				
Applicant/Owner: Hecate		State: NY Sampling Point:					
Investigator(s): Justin Ahn	Section	Section, Township, Range: 02-20200720-WL-34-3					
Landform (hillslope, terrace, etc.): Depression	n Local relie	f (concave, convex, r	none): <u>Concave</u> Slope (%) <u>0 - 1</u>				
Subregion (LRR or MLRA): LRR L	Lat: 43.105619	Long:7	78.214711 Datum: NAD83				
Soil Map Unit Name: ApA			NWI Classification: PSS				
Are climatic / hyrologic conditions on the site	typical for this time of yea	ar? Yes <u>X</u> No	(if no, explain in Remarks.)				
Are Vegetation, Soil, or Hydrology	significantly disturl	oed? Are "Normal (Circumstances" present? Yes X No				
Are Vegetation, Soil, or Hydrology	naturally problema	itic? (if needed, exp	lain any answers in Remarks.)				
SUMMARY OF FINDINGS - Attach site ma	n showing sampling po	oint locations, tran	sects, important features, etc.				
Hydrophytic Vegetation Present? Yes X		Is the Sampled Area	-				
Hydric Soil Present? Yes X		within a Wetland?	Yes X No				
		if ves ontional Wetl	and Site ID: WL86				
		Tr yes, optional vven	wild site ib. WEOO				
Remarks: (Explain alternative procedures here or in a se	parate report.)						
HYDROLOGY							
Wetland Hydrology Indicators:			Secondary Indicators (minimum of two required)				
Primary Indicators (minimum of one is required: c		()	Surface Soil Cracks (B6)				
Surface Water (A1)	Water-Stained Leaves	(B9)	X Drainage Patterns (B10)				
High Water Table (A2)	Aquatic Fauna (B13)		Moss Trim Lines (B16)				
Saturation (A3)	Marl Deposits (B15)		Dry-Season Water Table (C2)				
Water Marks (B1)	Hydrogen Sulfide Odo	r (C1)	Crayfish Burrows (C8)				
Sediment Deposits (B2)	Oxidized Rhizospheres	on Living Roots (C3)	Saturation Visible in Aerial Imagery (C9)				
Drift Deposits (B3)	Presence of Reduced I	ron (C4)	Stunted or Stressed Plants (D1)				
Algal Mat or Crust (B4)	Recent Iron Reduction	in Tilled Soils (C6)	X Geomorphic Position (D2)				
Iron Deposits (B5)	Thin Muck Surface (C7	')	Shallow Aquitard (D3)				
Inundation Visible on Aerial Imagery (B7)	Other (Explain in Rem	arks)	Microtopographic Relief (D4)				
Sparsley Vegetated Concave Surface (B8)			FAC-Neutral Test (D5)				
Surface Water Present? Yes No X	Depth (inches)						
Water Table Present? Yes No X	Depth (inches)	Wetland F	lydrology Present? Yes X No				
Saturation Present? Yes No X	Depth (inches)	-	<u> </u>				
Describe Recorded Data (stream gauge, moni	itoring well aerial photos	nrevious inspection	is) if available:				
besense necoraca bata (stream gaage, mon	teoring wen, derial photos	, previous inspection	sy, ii available.				
Remarks:							

VEGETATION - Use scientific names of plants Sampling Point: 02-20200720-WL-34-34W Absolute Dominant Indicator **Dominance Test Worksheet:** (Plot Size: 30'radius) % Cover Species? Status **Tree Stratum Number of Dominant Species** That Are OBL, FACW, or FAC: (A) = Total Cover **Total Number of Dominant** Species Across All Strata: (B) 3 Percent of Dominant Species That Are OBL, FACW, or FAC: (A/B) 100% **Prevalence Index Worksheet:** x 1 15 **OBL** species 15 Absolute Dominant Indicator **FACW** species 95 190 (Plot Size: 15'radius) Status x 2 **Shrub Stratum** % Cover Species? FAC species 80 240 х3 = Total Cover **FACU** species 0 x 4 0 **UPL** species 0 x 5 0 Column Totals 190 (A) 445 (B) Prevalence Index = B/A = 2.34 **Hydrophytic Vegetation Indicators:** Absolute Dominant Indicator 1- Rapid Test For Hydrophytic Vegetation **Herb Stratum** (Plot Size: 5'radius) % Cover Species? Status X 2- Dominance Test is > 50% 50 Euthamia graminifolia Χ FAC X 3- Prevalence Index is =< 3.0 Χ Juncus tenuis 30 FAC 4- Morphological Adaptations 25 Χ **FACW** Solidago gigantea Carex alopecoidea 20 **FACW** 5- Problematic Hydrophytic Vegetation Cyperus esculentus 20 **FACW** Symphyotrichum lanceolatum 20 FACW **Definitions of Vegetation Strata:** Juncus effusus 15 OBL Tree- Woody plants 3 in. (7.6cm) or more in diameter at Fraxinus pennsylvanica 10 **FACW** breast height (DBH), regardless of height. 190 = Total Cover Sapling/Shrub- Woody plants less than 3 in. DBH and greater than or equal to 3.28ft (1m) tall. Herb- All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28ft tall. Absolute Dominant Indicator Woody Vines- All woody vines greater than 3.28ft in (Plot Size: 30'radius) **Woody Vine Stratum** % Cover Species? Status height. = Total Cover Hydrophytic Vegetation Present? Yes X No ___ Remarks: (Include photo numbers here or on a separate sheet.)

SOIL

Sampling Point: 02-20200720-WL-34-34W

Depth	epth Matrix Redox Features							
nches C	Color	%	Color	%	Type	Loc	Texture	Remarks
0-12 10\	/R 4/2	95	5YR 4/6	5	С	PL	Clay Loam	
12-24 10\	/R 5/4	80	7.5YR 6/8	20	С	М	Clay Loam	
lydric Soil Indi	icators:							Indicators for Problematic Soils:
Histosol					Polyvalu	e Below Su	urface (B15)	2 cm Muck (A10)
Histic Ep	ipedon (A2)			Thin Dar	k Surface ((S9)	Coast Prarie Redox (A16)
Black His	stic (A3)				Loamy N	lucky Min	eral (F1)	5 cm Mucky Peat or Peat (S3)
Hydroge	n Sulfide	(A4)			Loamy G	leyed Mat	ric (F2)	Dark Surface (S7)
Stratified	d Layers ((A5)		Х	Depleted	d Matrix (F	3)	Polyvalue Below Surface (S8)
Depleted	d Below [Dark Su	rface (A11)		Redox D	ark Surfac	e (F6)	Thin Dark Surface (S9)
Thick Da	rk Surfac	e (A12)			Depleted	d Dark Surf	face (F7)	Iron-Manganese Masses (F12)
Sandy M	lucky Mir	neral (S	1)		Redox D	epressions	s (F8)	Piedmont Floodplain Soils (F19)
Sandy G	leyed Ma	atrix (S4)					Mesic Spodic (TA6)
Sandy Re								Red Parent Material (F21)
 Stripped	Matrix (S6)						Very Shallow Dark Surface (TF12)
	face (S7)	-						Other (Explain in Remarks)
Restrictive Lay	er (if obse	ervea):						
Restrictive Lay	er (if obse	Type:					Hydric	Soil Present? Yes X No

Remarks:

Project/Site: Cider Solar Project	City/County: Elba/Genese	e Sampling Date: 7/20/2020			
Applicant/Owner: Hecate		State: NY Sampling Point:02-20200720			
Investigator(s): Justin Ahn	Section, Township, Range:	WL-34-34U			
Landform (hillslope, terrace, etc.): <u>Toeslope</u>	Local relief (concave, convex, ı	none): <u>Linear</u> Slope (%) <u>1 - 5</u>			
Subregion (LRR or MLRA): LRR L	Lat: 43.105202 Long:7	78.21467 Datum: NAD83			
Soil Map Unit Name: ApA		NWI Classification: UPL			
Are climatic / hyrologic conditions on the site $% \left(x\right) =\left(x\right) +\left(x\right) +\left($	typical for this time of year? Yes X No	(if no, explain in Remarks.)			
Are Vegetation, Soil, or Hydrology	significantly disturbed? Are "Normal	Circumstances" present? Yes X No			
Are Vegetation, Soil, or Hydrology	naturally problematic? (if needed, exp	llain any answers in Remarks.)			
SUMMARY OF FINDINGS - Attach site ma	p showing sampling point locations, trar	nsects, important features, etc.			
Hydrophytic Vegetation Present? Yes	No X Is the Sampled Area	a			
Hydric Soil Present? Yes	No X within a Wetland?	Yes No X			
Wetland Hydrology Present? Yes	No X if yes, optional Wet	land Site ID:			
Remarks: (Explain alternative procedures here or in a se					
HYDROLOGY					
Wetland Hydrology Indicators:		Secondary Indicators (minimum of two required)			
Primary Indicators (minimum of one is required: of	heck all that apply)	Surface Soil Cracks (B6)			
Surface Water (A1)	Water-Stained Leaves (B9)	Drainage Patterns (B10)			
High Water Table (A2)	Aquatic Fauna (B13)	Moss Trim Lines (B16)			
Saturation (A3)	Marl Deposits (B15)	Dry-Season Water Table (C2)			
Water Marks (B1)	Hydrogen Sulfide Odor (C1)	Crayfish Burrows (C8)			
Sediment Deposits (B2)	Oxidized Rhizospheres on Living Roots (C3)	Saturation Visible in Aerial Imagery (C9)			
Drift Deposits (B3)	Presence of Reduced Iron (C4)	Stunted or Stressed Plants (D1)			
Algal Mat or Crust (B4)	Recent Iron Reduction in Tilled Soils (C6)	Geomorphic Position (D2)			
Iron Deposits (B5)	Thin Muck Surface (C7)	Shallow Aquitard (D3)			
Inundation Visible on Aerial Imagery (B7)	Other (Explain in Remarks)	Microtopographic Relief (D4)			
Sparsley Vegetated Concave Surface (B8)		FAC-Neutral Test (D5)			
Surface Water Present? Yes No X	Depth (inches)				
Water Table Present? Yes No X	Depth (inches) Wetland I	Hydrology Present? Yes No X			
Saturation Present? Yes No X	Depth (inches)	 -			
Describe Recorded Data (stream gauge, mon	itoring well, aerial photos, previous inspection	ns), if available:			
Remarks:					

VEGETATION - Use scientific names of plants Sampling Point: 02-20200720-WL-34-34U Absolute Dominant Indicator **Dominance Test Worksheet:** (Plot Size: 30'radius) % Cover Species? Status **Tree Stratum Number of Dominant Species** That Are OBL, FACW, or FAC: (A) = Total Cover **Total Number of Dominant** (B) Species Across All Strata: 3 Percent of Dominant Species (A/B) That Are OBL, FACW, or FAC: 0% **Prevalence Index Worksheet:** x 1 0 **OBL** species Absolute Dominant Indicator **FACW** species 5 10 (Plot Size: 15'radius) % Cover Status x 2 **Shrub Stratum** Species? FAC species 10 30 х3 = Total Cover FACU species 55 x 4 220 **UPL** species 5 x 5 25 Column Totals 75 (A) 285 (B) Prevalence Index = B/A = 3.8 **Hydrophytic Vegetation Indicators:** Absolute Dominant Indicator 1- Rapid Test For Hydrophytic Vegetation **Herb Stratum** (Plot Size: 5'radius) % Cover Species? Status 2- Dominance Test is > 50% 20 Phleum pratense Χ **FACU** 3- Prevalence Index is =< 3.0 Χ Sorghum halepense 20 **FACU** 4- Morphological Adaptations Trifolium repens 15 Χ FACU Euthamia graminifolia 10 FAC 5- Problematic Hydrophytic Vegetation Fraxinus pennsylvanica 5 **FACW** Daucus carota 5 UPI **Definitions of Vegetation Strata:** 75 = Total Cover Tree- Woody plants 3 in. (7.6cm) or more in diameter at breast height (DBH), regardless of height. Sapling/Shrub- Woody plants less than 3 in. DBH and greater than or equal to 3.28ft (1m) tall. Herb- All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28ft tall. Absolute Dominant Indicator Woody Vines- All woody vines greater than 3.28ft in (Plot Size: 30'radius) **Woody Vine Stratum** % Cover Species? Status height. = Total Cover Hydrophytic Vegetation Present? Yes ____ No __X Remarks: (Include photo numbers here or on a separate sheet.)

SOIL Sampling Point: 02-20200720-WL-34-34U Depth Matrix **Redox Features** (inches Color % Color % Texture Remarks Type Loc 0-12 10YR 3/4 100 Clay Loam 12-20 10YR 5/4 90 7.5YR 6/8 10 C PLClay Loam **Hydric Soil Indicators:** Indicators for Problematic Soils: Histosol (A1) Polyvalue Below Surface (B15) 2 cm Muck (A10) Histic Epipedon (A2) Thin Dark Surface (S9) Coast Prarie Redox (A16) Black Histic (A3) Loamy Mucky Mineral (F1) 5 cm Mucky Peat or Peat (S3) Hydrogen Sulfide (A4) Loamy Gleyed Matric (F2) Dark Surface (S7) Stratified Layers (A5) Depleted Matrix (F3) Polyvalue Below Surface (S8) Depleted Below Dark Surface (A11) Redox Dark Surface (F6) Thin Dark Surface (S9) Thick Dark Surface (A12) Depleted Dark Surface (F7) Iron-Manganese Masses (F12) Sandy Mucky Mineral (S1) Redox Depressions (F8) Piedmont Floodplain Soils (F19) Sandy Gleyed Matrix (S4) Mesic Spodic (TA6) Sandy Redox (S5) Red Parent Material (F21) Stripped Matrix (S6) Very Shallow Dark Surface (TF12) Dark Surface (S7) Other (Explain in Remarks) Restrictive Layer (if observed): Type: Hydric Soil Present? Yes No Χ Depth (inches): Remarks:

Project/Site: Cider Solar Project	City/County: Elba/Genesee Sampling Date: 7/21/2020						
Applicant/Owner: Hecate		State: NY Sampling Point:					
Investigator(s): Justin Ahn	Section, Township, Range:	02-20200721-WL-35-35W					
Landform (hillslope, terrace,etc.): Depression	on Local relief (concave, convex, r	none): <u>Concave</u> Slope (%) <u>0 - 1</u>					
Subregion (LRR or MLRA): LRR L	Lat: 43.108336 Long: -7	8.211079 Datum: <u>NAD83</u>					
Soil Map Unit Name: LoA		NWI Classification: PFO					
Are climatic / hyrologic conditions on the site	e typical for this time of year? Yes X No	(if no, explain in Remarks.)					
Are Vegetation, Soil, or Hydrolog	ysignificantly disturbed? Are "Normal of	Circumstances" present? Yes X No					
Are Vegetation, Soil, or Hydrolog	y naturally problematic? (if needed, exp	lain any answers in Remarks.)					
SUMMARY OF FINDINGS - Attach site ma	ap showing sampling point locations, tran	sects, important features, etc.					
	X No Is the Sampled Area	-					
	within a Wetland?	Yes X No					
	<u>^ NO</u>						
Wetland Hydrology Present? Yes	X No if yes, optional Wetl	and site ib					
Remarks: (Explain alternative procedures here or in a s	separate report.)						
HYDROLOGY							
Wetland Hydrology Indicators:		Secondary Indicators (minimum of two required)					
Primary Indicators (minimum of one is required:	check all that apply)	Surface Soil Cracks (B6)					
Surface Water (A1)	X Water-Stained Leaves (B9)	Drainage Patterns (B10)					
High Water Table (A2)	Aquatic Fauna (B13)	X Moss Trim Lines (B16)					
Saturation (A3)	Marl Deposits (B15)	Dry-Season Water Table (C2)					
Water Marks (B1)	Hydrogen Sulfide Odor (C1)	Crayfish Burrows (C8)					
Sediment Deposits (B2)	Oxidized Rhizospheres on Living Roots (C3)	Saturation Visible in Aerial Imagery (C9)					
Drift Deposits (B3)	Presence of Reduced Iron (C4)	Stunted or Stressed Plants (D1)					
X Algal Mat or Crust (B4)	Recent Iron Reduction in Tilled Soils (C6)	Geomorphic Position (D2)					
Iron Deposits (B5)	Thin Muck Surface (C7)	Shallow Aquitard (D3)					
Inundation Visible on Aerial Imagery (B7)	Other (Explain in Remarks)						
	Other (Explain in Kelliarks)	Microtopographic Relief (D4)					
Sparsley Vegetated Concave Surface (B8)		FAC-Neutral Test (D5)					
Surface Water Present? Yes NoX	Depth (inches)						
Water Table Present? Yes No _ X	Depth (inches) Wetland H	lydrology Present? Yes X No					
Saturation Present? Yes No X	Depth (inches)						
Describe Recorded Data (stream gauge, mor	nitoring well, aerial photos, previous inspection	s). if available:					
(3 5 /		"					
Remarks:							

VEGETATION - Use scientific names of plants

'EGETATION - Use scie		о от рашто	ماريا ما ما	Daminant	la disaka a		ing Point			
Tree Stratum	(Plot Siza:	30'radius)	% Cover	Dominant Species?	Status	Dominance Test \				
	(1 100 3126.			•		Number of Dom	•			(•)
Acer saccharinum			40	X	FACW	That Are OBL, F	ACW, or F	AC:	6	(A)
Fraxinus pennsylvani	ca		40	X	FACW	Total Number				
			80	_= Total Cov	er er	Species Ac	ross All St	rata:	7	(B)
						Percent of Doi	•			
						That Are OBL,	FACW, or	FAC:	85.7%	(A/B
						Prevalence Index	Workshee	et:		
						OBL species	40	x 1	40	
hrub Stratum	(Plot Size:	15'radius)	Absolute % Cover	Dominant Species?	Indicator Status	FACW species	135	x 2	270	
Fraxinus pennsylvan	ca		30	Х	FACW	FAC species	67	x 3	201	
Populus deltoides			20	Χ	FAC	FACU species	10	x 4	40	
			50	_= Total Cov	ver .	UPL species	0	x 5	0	
						Column Totals	252	— (A)	551	(I
						_				(
						Prevalend	ce Index =	B/A = _	2.19	
						Hydrophytic Vege	etation Inc	dicator	s:	
			Absolute	Dominant	Indicator	1- Rapid Te	st For Hyd	rophyti	ic Vegetat	ion
lerb Stratum	(Plot Size:	5'radius)	% Cover	Species?	Status	X 2- Dominan	ce Test is	> 50%		
Carex trisperma			30	Х	OBL	X 3- Prevalen	ca Indav is	-< 3 N		
Menispermum canad	dense		30	Χ	FAC					
Circaea alpina			15		FACW	4- Morphol	ogical Ada	ptation	ıs	
Prunella vulgaris			10		FAC	5- Problema	atic Hydro	phytic '	Vegetatio	n
Glyceria striata			10		OBL					
Fraxinus pennsylvan Geum canadense	ca		<u>10</u> 5		FACW FAC	Definitions of Veget	ation Strat	a:		
Oxalis corniculata			5		FACU	Tree- Woody plants	3 in. (7.6cn	n) or mo	re in diam	eter a
Toxicodendron radio	ans		2		FAC	breast height (DBH),				
Toxicoacharon radio	ans		117	= Total Cov		Caralia a /Charala NA/a a	alo con la contra lla		2 :- DDII -	1
				10ta1 cov	Ci	Sapling/Shrub- Woo greater than or equa				and
						B. catc. than or equi	10 0.2011	, car		
						Herb- All herbaceou			_	ess of
						size, and woody plar	nts less thai	n 3.28ft	tall.	
Noody Vinc Streture	/Dlot Circ	30'radius 1		Dominant Species 2		Woody Vines- All wo	odv vines s	greater t	than 3.28ft	in
Voody Vine Stratum		30'radius)	% Cover	Species?	Status	height.	ou, vines 8	5. Catci 1	3.2010	
Parthenocissus quine	quefolia		5	Х	FACU					
			5	_= Total Cov	er er	Hydrop	hytic			
						Veget				
						1	sent? Yes			

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

SOIL

Sampling Point: 02-20200721-WL-35-35W

Depth	Matrix				Redo			
(inches	Color	%	Color	%	Туре	Loc	Texture	Remarks
0-4	10YR 4/2	100					Clay Loam	
4-16	10YR 5/1	80	2.5Y 7/3	20	С	М	Clay	
16-24	5YR 4/4	85	10YR 5/1	15	С	PL	Clay	

Hydric Soil Indicators:		Indicators for Problematic Soils:
Histosol (A1)	Polyvalue Below Surface (B15)	2 cm Muck (A10)
Histic Epipedon (A2)	Thin Dark Surface (S9)	Coast Prarie Redox (A16)
Black Histic (A3)	Loamy Mucky Mineral (F1)	5 cm Mucky Peat or Peat (S3)
Hydrogen Sulfide (A4)	Loamy Gleyed Matric (F2)	Dark Surface (S7)
Stratified Layers (A5)	X Depleted Matrix (F3)	Polyvalue Below Surface (S8)
Depleted Below Dark Surface (A11)	Redox Dark Surface (F6)	Thin Dark Surface (S9)
Thick Dark Surface (A12)	Depleted Dark Surface (F7)	Iron-Manganese Masses (F12)
Sandy Mucky Mineral (S1)	Redox Depressions (F8)	Piedmont Floodplain Soils (F19)
Sandy Gleyed Matrix (S4)		Mesic Spodic (TA6)
Sandy Redox (S5)		Red Parent Material (F21)
Stripped Matrix (S6)		Very Shallow Dark Surface (TF12)
Dark Surface (S7)		Other (Explain in Remarks)
Restrictive Layer (if observed):		
Туре:	Нус	dric Soil Present? Yes X No
Depth (inches):		

Remarks:

Project/Site: Cider Solar Project	City/County: Elba/Genese	e Sampling Date: 7/21/2020		
Applicant/Owner: Hecate		State: NY Sampling Point:02-2020072		
Investigator(s): Justin Ahn	Section, Township, Range:	WL-35-35U		
Landform (hillslope, terrace,etc.): Toeslope	Local relief (concave, convex,	none): <u>Linear</u> Slope (%) <u>1 - 5</u>		
Subregion (LRR or MLRA): LRR L	Lat: <u>43.108068</u> Long: <u>-7</u>	8.211051 Datum: <u>NAD83</u>		
Soil Map Unit Name: HIB		NWI Classification: UPL		
Are climatic / hyrologic conditions on the site	typical for this time of year? Yes X No	(if no, explain in Remarks.)		
Are Vegetation, Soil, or Hydrology	significantly disturbed? Are "Normal	Circumstances" present? Yes X No		
Are Vegetation, Soil, or Hydrology	naturally problematic? (if needed, exp	olain any answers in Remarks.)		
SUMMARY OF FINDINGS - Attach site ma	p showing sampling point locations, trar	nsects, important features, etc.		
Hydrophytic Vegetation Present? Yes X				
Hydric Soil Present? Yes	No X within a Wetland?	Yes No X		
Wetland Hydrology Present? Yes	No X if yes, optional Wet	land Site ID:		
Remarks: (Explain alternative procedures here or in a se				
LINDBOLOCA				
HYDROLOGY Wetland Hydrology Indicators:		Secondary Indicators (minimum of two required)		
Primary Indicators (minimum of one is required: c	heck all that apply)	Surface Soil Cracks (B6)		
Surface Water (A1)	Water-Stained Leaves (B9)	Drainage Patterns (B10)		
High Water Table (A2)	Aquatic Fauna (B13)	Moss Trim Lines (B16)		
Saturation (A3)	Marl Deposits (B15)	Dry-Season Water Table (C2)		
Water Marks (B1)	Hydrogen Sulfide Odor (C1)	Crayfish Burrows (C8)		
Sediment Deposits (B2)	Oxidized Rhizospheres on Living Roots (C3)	Saturation Visible in Aerial Imagery (C9)		
Drift Deposits (B3)	Presence of Reduced Iron (C4)	Stunted or Stressed Plants (D1)		
Algal Mat or Crust (B4)	Recent Iron Reduction in Tilled Soils (C6)	Geomorphic Position (D2)		
Iron Deposits (B5)	Thin Muck Surface (C7)	Shallow Aquitard (D3)		
Inundation Visible on Aerial Imagery (B7)	Other (Explain in Remarks)	Microtopographic Relief (D4)		
Sparsley Vegetated Concave Surface (B8)		FAC-Neutral Test (D5)		
Surface Water Present? Yes No X	Depth (inches)			
Water Table Present? Yes No X	Depth (inches) Wetland I	Hydrology Present? Yes No X		
Saturation Present? Yes No X	Depth (inches)			
Describe Recorded Data (stream gauge, moni	toring well, aerial photos, previous inspection	ns), if available:		
, 5 5.		,		
Remarks:				

VEGETATION - Use scientific names of plants Sampling Point: 02-20200721-WL-35-35U Absolute Dominant Indicator **Dominance Test Worksheet:** (Plot Size: 30'radius) % Cover Species? Status **Tree Stratum Number of Dominant Species** Populus deltoides 50 Х FAC That Are OBL, FACW, or FAC: (A) 50 = Total Cover **Total Number of Dominant** (B) Species Across All Strata: Percent of Dominant Species (A/B) That Are OBL, FACW, or FAC: 75% **Prevalence Index Worksheet:** x 1 5 **OBL** species Absolute Dominant Indicator **FACW** species 20 x 2 40 (Plot Size: 15'radius) % Cover Species? Status **Shrub Stratum** FAC species 75 225 х3 Acer saccharum 50 Χ FACU 50 = Total Cover **FACU** species 65 x 4 260 **UPL** species 0 x 5 0 Column Totals 165 (A) 530 (B) Prevalence Index = B/A = 3.21 **Hydrophytic Vegetation Indicators:** Absolute Dominant Indicator 1- Rapid Test For Hydrophytic Vegetation **Herb Stratum** (Plot Size: 5'radius) % Cover Species? Status X 2- Dominance Test is > 50% 20 Fraxinus pennsylvanica **FACW** 3- Prevalence Index is =< 3.0 FAC Χ Carex pedunculata 15 4- Morphological Adaptations Symphyotrichum lateriflorum 10 FAC Solidago canadensis 10 **FACU** 5- Problematic Hydrophytic Vegetation Nabalus albus 5 **FACU** Carex aquatilis 5 OBL **Definitions of Vegetation Strata:** 65 = Total Cover Tree- Woody plants 3 in. (7.6cm) or more in diameter at breast height (DBH), regardless of height. Sapling/Shrub- Woody plants less than 3 in. DBH and greater than or equal to 3.28ft (1m) tall. Herb- All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28ft tall. Absolute Dominant Indicator Woody Vines- All woody vines greater than 3.28ft in (Plot Size: 30'radius) Status **Woody Vine Stratum** % Cover Species? height. = Total Cover Hydrophytic Vegetation Present? Yes X No ____

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

SOIL							Sampling Point: 02-20200721-WL-35-35 0			
Depth	Matrix			Redo	ox Feature	es				
(inches	Color	%	Color	%	Type	Loc	Texture	Remarks		
0-12 10YR 3/4 100						Silt Loam				
12-20 10YR 3/2 90		90	10YR 6/8	10	С	PL	Silt Loam			
Hydric Sc	oil Indicators:							Indicators for Problematic Soils:		
	tosol (A1)				-		ırface (B15)	2 cm Muck (A10)		
	tic Epipedon ((A2)				k Surface (•	Coast Prarie Redox (A16)		
	ck Histic (A3)	- (0.4)				Aucky Mine		5 cm Mucky Peat or Peat (S3)		
	drogen Sulfide	. ,			-	Gleyed Mat d Matrix (F		Dark Surface (S7) Polyvalue Below Surface (S8)		
Stratified Layers (A5)					-	ark Surface	-	Thin Dark Surface (S9)		
Depleted Below Dark Surface (A11) Thick Dark Surface (A12)						d Dark Surf		Iron-Manganese Masses (F12)		
	ndy Mucky Mi				-	epressions		Piedmont Floodplain Soils (F19)		
	ndy Gleyed Ma					•	,	Mesic Spodic (TA6)		
	ndy Redox (S5		•					Red Parent Material (F21)		
Stri	ipped Matrix ((S6)						Very Shallow Dark Surface (TF12)		
Dar	rk Surface (S7)						Other (Explain in Remarks)		
Restrictiv	ve Layer (if obs	erved):								
		Type:					Hvdri	ic Soil Present? Yes No X		
	Depth (ir	nches):					,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,			
Remark	c·									
Nemark.	3.									

Project/Site: Cider Solar Project	City/County: Elba/Genese	e Sampling Date: 7/21/2020
Applicant/Owner: Hecate		State: NY Sampling Point:
Investigator(s): Justin Ahn	Section, Township, Range:	02-20200721-WL-36-36W
Landform (hillslope, terrace,etc.): Depression	Local relief (concave, convex,	none): <u>Concave</u> Slope (%) <u>0 - 1</u>
Subregion (LRR or MLRA): LRR L	Lat: <u>43.109867</u> Long: <u>-</u> 7	78.204721 Datum: NAD83
Soil Map Unit Name: OnB		NWI Classification: PFO
Are climatic / hyrologic conditions on the site	typical for this time of year? Yes X No	(if no, explain in Remarks.)
Are Vegetation, Soil, or Hydrology	significantly disturbed? Are "Normal	Circumstances" present? Yes X No
Are Vegetation, Soil, or Hydrology	naturally problematic? (if needed, exp	olain any answers in Remarks.)
SUMMARY OF FINDINGS - Attach site ma	p showing sampling point locations, trar	nsects, important features, etc.
Hydrophytic Vegetation Present? Yes X		
Hydric Soil Present? Yes X	No within a Wetland?	Yes X No
Wetland Hydrology Present? Yes X		land Site ID: WL88
Remarks: (Explain alternative procedures here or in a se		
HYDROLOGY		
Wetland Hydrology Indicators:		Secondary Indicators (minimum of two required)
Primary Indicators (minimum of one is required: c	heck all that apply)	Surface Soil Cracks (B6)
Surface Water (A1)	X Water-Stained Leaves (B9)	Drainage Patterns (B10)
High Water Table (A2)	Aquatic Fauna (B13)	X Moss Trim Lines (B16)
Saturation (A3)	Marl Deposits (B15)	Dry-Season Water Table (C2)
Water Marks (B1)	Hydrogen Sulfide Odor (C1)	Crayfish Burrows (C8)
Sediment Deposits (B2)	Oxidized Rhizospheres on Living Roots (C3)	Saturation Visible in Aerial Imagery (C9)
Drift Deposits (B3)	Presence of Reduced Iron (C4)	Stunted or Stressed Plants (D1)
Algal Mat or Crust (B4)	Recent Iron Reduction in Tilled Soils (C6)	Geomorphic Position (D2)
Iron Deposits (B5)	Thin Muck Surface (C7)	Shallow Aquitard (D3)
Inundation Visible on Aerial Imagery (B7)	Other (Explain in Remarks)	Microtopographic Relief (D4)
Sparsley Vegetated Concave Surface (B8)		FAC-Neutral Test (D5)
Surface Water Present? Yes No X	Depth (inches)	
Water Table Present? Yes No X	= ' ' 	Hydrology Present? Yes X No
Saturation Present? Yes No X	Depth (inches)	<u> </u>
Describe Recorded Data (stream gauge, moni	toring well, aerial photos, previous inspection	ns), if available:
Remarks:		
nemans.		

VEGETATION - Use scientific names of plants Sampling Point: 02-20200721-WI-36-36W

VEGETATION - Use scien	tific names	of plants				Sampi	ilig Politi.	02-202	200721-W	L-36-36
Tree Stratum	(Plot Size:	30'radius)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test \ Number of Dom				
Salix alba			40	Х	FACW	That Are OBL, FA	•		7	(A)
Populus deltoides			40	Х	FAC	Total Numbe	•			_ ` `
			80	= Total Cover Species Across All S				7	(B)	
						Percent of Dor		-		- ` '
						That Are OBL,	•		100%	(A/B)
						,				_` ′
						Prevalence Index	Workshee	t:		
						OBL species	5	x 1	5	
Shrub Stratum	(Plot Size:	15'radius \	Absolute % Cover	Dominant Species?	Indicator Status	FACW species	170	x 2	340	
	•			·		_				
Fraxinus pennsylvanica Populus deltoides	a		<u>20</u> 20	X	FACW FAC	FAC species	65	_ x 3_	195	
Salix alba			20	X	FACW	FACU species	0	_ x 4	0	
Jank arba			60	= Total Cov		UPL species	0	x 5	0	
					1	Column Totals	240	(A)	540	(B
						Prevalenc	e Index =	 B/A =	2.25	
						- Trevalence macx - 5/71		_		
						Hydrophytic Vege	tation Inc	licators	5:	
					nt Indicator	1- Rapid Tes	st For Hydi	rophyti	c Vegetat	tion
Herb Stratum	(Plot Size:	5'radius)	% Cover	Species?	Status	X 2- Dominan	ce Test is :	> 50%		
Carex alopecoidea			30	Χ	FACW					
Carex cristatella			30	Χ	FACW	X 3- Prevalence	ce index is	=< 3.0		
Symphyotrichum lance	eolatum		15		FACW	4- Morphol	ogical Ada	ptation	ıs	
Solidago gigantea			10		FACW	5- Problema	atic Hydro _l	ohytic \	√egetatio	n
Fraxinus pennsylvanica	a		5		FACW					
Eleocharis obtusa Ranunculus acris			<u>5</u> 5		OBL FAC	Definitions of Veget	ation Strata	a:		
Ranunculus acris			100	= Total Cov		Tree- Woody plants breast height (DBH),	•			eter at
						Sapling/Shrub- Wood greater than or equa				and
						Herb- All herbaceous				less of
						size, and woody plar				
Woody Vine Stratum	(Plot Size:	30'radius)	Absolute % Cover	Dominant Species?	Indicator Status	Woody Vines- All wo height.	ody vines g	reater t	:han 3.28ft	t in
				= Total Cov	/er	Hydrop Vegeta	-			

SOIL

Sampling Point: 02-20200721-WL-36-36W

Depth Matrix				Redo	x Feature					
(inches	Color	%	Color	%	Type	Loc	Texture	Remarks		
0-6	10YR 3/2	95	7.5YR 4/6	5	С	PL	Clay			
6-20	10YR 4/1	80	10YR 6/4	20	С	М	Clay			
	•		,				•			
Hydric So	il Indicators:							Indicators for Problematic Soils:		
-	osol (A1)				Polyvalu	e Below Su	rface (B15)	2 cm Muck (A10)		
	cic Epipedon (A2)			-	k Surface (Coast Prarie Redox (A16)		
Blac	ck Histic (A3)				Loamy N	lucky Mine	eral (F1)	5 cm Mucky Peat or Peat (S3)		
Hyd	lrogen Sulfide	(A4)			Loamy G	leyed Matı	ric (F2)	Dark Surface (S7)		
Stra	ntified Layers	(A5)		Χ	Depleted	d Matrix (F	3)	Polyvalue Below Surface (S8)		
Depleted Below Dark Surface (A11)				Х	Redox D	ark Surface	(F6)	Thin Dark Surface (S9)		
Thick Dark Surface (A12)					Depleted	Dark Surf	ace (F7)	Iron-Manganese Masses (F12)		
San	dy Mucky Mii	neral (S	51)		Redox D	epressions	(F8)	Piedmont Floodplain Soils (F19)		
San	dy Gleyed Ma	atrix (S4	4)					Mesic Spodic (TA6)		
San	dy Redox (S5))						Red Parent Material (F21)		
Stri	pped Matrix (S6)						Very Shallow Dark Surface (TF12)		
Dar	k Surface (S7))						Other (Explain in Remarks)		
Restrictiv	re Layer (if obs	erved):								
	,	Type:								
	Daniel (in	-					Hydri	c Soil Present? Yes X No		
	Depth (in	icnes):								
Remarks										

Project/Site: Cider Solar Project	City/County: _Elba _/	Genesee Sampling Date: 7/21/2020
Applicant/Owner: Hecate		State: NY Sampling Point:02-2020072
Investigator(s): <u>Justin Ahn</u>	Section, Township,	Range: WL-36-36U
Landform (hillslope, terrace,etc.): Toeslop	e Local relief (concave, c	onvex, none): Linear Slope (%) 1 - 5
Subregion (LRR or MLRA): LRR L	Lat: <u>43.109684</u>	ong: <u>-78.20467</u> Datum: <u>NAD83</u>
Soil Map Unit Name: OnB		NWI Classification: UPL
Are climatic / hyrologic conditions on the si	- ''	X No (if no, explain in Remarks.)
Are Vegetation, Soil, or Hydrolo	· ·	Normal Circumstances" present? Yes X No
Are Vegetation, Soil, or Hydrolo	egynaturally problematic? (if nee	eded, explain any answers in Remarks.)
SUMMARY OF FINDINGS - Attach site r	nap showing sampling point locatio	ns, transects, important features, etc.
Hydrophytic Vegetation Present? Yes	No X Is the Samp	-
Hydric Soil Present? Yes	No X within a We	
Wetland Hydrology Present? Yes		nal Wetland Site ID:
		
Remarks: (Explain alternative procedures here or in	i separate report.)	
HYDROLOGY		
Wetland Hydrology Indicators:		Secondary Indicators (minimum of two required)
Primary Indicators (minimum of one is required	l: check all that apply)	Surface Soil Cracks (B6)
Surface Water (A1)	Water-Stained Leaves (B9)	Drainage Patterns (B10)
High Water Table (A2)	Aquatic Fauna (B13)	Moss Trim Lines (B16)
Saturation (A3)	Marl Deposits (B15)	Dry-Season Water Table (C2)
Water Marks (B1)	Hydrogen Sulfide Odor (C1)	Crayfish Burrows (C8)
Sediment Deposits (B2)	Oxidized Rhizospheres on Living Ro	ots (C3) Saturation Visible in Aerial Imagery (C9)
Drift Deposits (B3)	Presence of Reduced Iron (C4)	Stunted or Stressed Plants (D1)
Algal Mat or Crust (B4)	Recent Iron Reduction in Tilled Soils	(C6) Geomorphic Position (D2)
Iron Deposits (B5)	Thin Muck Surface (C7)	Shallow Aquitard (D3)
Inundation Visible on Aerial Imagery (B7)	Other (Explain in Remarks)	Microtopographic Relief (D4)
Sparsley Vegetated Concave Surface (B8)		FAC-Neutral Test (D5)
	X Depth (inches)	
Water Table Present? Yes No		etland Hydrology Present? Yes No X
Saturation Present? Yes No	 ' ' 	
Saturation Fresent: TesNO	A Depth (menes)	
Describe Recorded Data (stream gauge, m	onitoring well, aerial photos, previous in	spections), if available:
Remarks:		
Remarks.		

VEGETATION - Use scientific names of plants Sampling Point: 02-20200721-WL-36-36U Absolute Dominant Indicator **Dominance Test Worksheet:** (Plot Size: 30'radius) % Cover Species? Status **Tree Stratum Number of Dominant Species** Populus deltoides Χ FAC That Are OBL, FACW, or FAC: (A) 40 = Total Cover **Total Number of Dominant** Species Across All Strata: (B) 4 Percent of Dominant Species (A/B) That Are OBL, FACW, or FAC: 25% **Prevalence Index Worksheet:** 0 x 1 **OBL** species Absolute Dominant Indicator **FACW** species 0 x 2 0 (Plot Size: 15'radius) % Cover Species? Status **Shrub Stratum FAC** species 40 120 Rosa multiflora х3 30 Χ FACU 30 = Total Cover **FACU** species 50 x 4 200 **UPL** species 40 x 5 200 Column Totals 130 (A) 520 (B) Prevalence Index = B/A = **Hydrophytic Vegetation Indicators:** Absolute Dominant Indicator 1- Rapid Test For Hydrophytic Vegetation **Herb Stratum** (Plot Size: 5'radius) % Cover Species? Status 2- Dominance Test is > 50% 30 UPL Triticum aestivum 3- Prevalence Index is =< 3.0 Χ Ambrosia artemisiifolia 15 **FACU** 4- Morphological Adaptations 10 UPL Daucus carota Phleum pratense 5 **FACU** 5- Problematic Hydrophytic Vegetation 60 = Total Cover **Definitions of Vegetation Strata:** Tree- Woody plants 3 in. (7.6cm) or more in diameter at breast height (DBH), regardless of height. Sapling/Shrub- Woody plants less than 3 in. DBH and greater than or equal to 3.28ft (1m) tall. Herb- All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28ft tall. Absolute Dominant Indicator Woody Vines- All woody vines greater than 3.28ft in (Plot Size: 30'radius) **Woody Vine Stratum** % Cover Species? Status height. = Total Cover Hydrophytic Vegetation Present? Yes ____ No _X Remarks: (Include photo numbers here or on a separate sheet.)

OIL								Sampling Point. 02-20200/21-WL-36-30		
Depth Matrix										
(inches	Color	%	Color	%	Type	Loc	Texture	Remarks		
0-12	10YR 4/3	100					Silt Loam			
12-20	10YR 4/3	95	7.5YR 4/6	5	С	PL	Silt Loam			
-	oil Indicators:							Indicators for Problematic Soils:		
	tosol (A1)				•		urface (B15)	2 cm Muck (A10)		
	tic Epipedon ((A2)			-	k Surface (Coast Prarie Redox (A16)		
	ck Histic (A3)				-	/lucky Min		5 cm Mucky Peat or Peat (S3)		
	drogen Sulfide				-	ileyed Mat		Dark Surface (S7)		
	atified Layers				-	d Matrix (F		Polyvalue Below Surface (S8)		
	pleted Below				-	ark Surfac		Thin Dark Surface (S9)		
Thick Dark Surface (A12)					-	d Dark Sur		Iron-Manganese Masses (F12)		
Sandy Mucky Mineral (S1)					Redox D	epressions	s (F8)	Piedmont Floodplain Soils (F19)		
	ndy Gleyed Ma	-	.)					Mesic Spodic (TA6)		
	ndy Redox (S5							Red Parent Material (F21)		
	ipped Matrix (Very Shallow Dark Surface (TF12)		
Dar	rk Surface (S7))						Other (Explain in Remarks)		
Restrictiv	ve Layer (if obs	erved):								
		Type:					Hydri	c Soil Present? Yes No X		
	Depth (ir	nches):					,			
Remarks	ç.									
remark.	J.									

Project/Site: Cider Solar Project	City/County: Elba/Genese	e Sampling Date: 7/21/2020
Applicant/Owner: Hecate		State: NY Sampling Point:
Investigator(s): Justin Ahn	Section, Township, Range:	02-20200721-WL-37-37W
Landform (hillslope, terrace,etc.): Depression	Local relief (concave, convex,	none): <u>Concave</u> Slope (%) <u>0 - 1</u>
Subregion (LRR or MLRA): LRR L	Lat: 43.108228 Long: -7	78.203999 Datum: NAD83
Soil Map Unit Name: LoA		NWI Classification: PFO
Are climatic / hyrologic conditions on the site typi	cal for this time of year? Yes X No	(if no, explain in Remarks.)
Are Vegetation, Soil, or Hydrology	significantly disturbed? Are "Normal	Circumstances" present? Yes X No
Are Vegetation, Soil, or Hydrology	naturally problematic? (if needed, exp	plain any answers in Remarks.)
SUMMARY OF FINDINGS - Attach site map sh	howing sampling point locations trai	sects important features etc
	No Is the Sampled Are	
	within a Wetland?	
<u> </u>	NO	Yes X No No
Wetland Hydrology Present? Yes X	No if yes, optional wet	land Site ID: WL89
Remarks: (Explain alternative procedures here or in a separa	ite report.)	
HYDROLOGY		
Wetland Hydrology Indicators:		Secondary Indicators (minimum of two required)
Primary Indicators (minimum of one is required: check	k all that apply)	Surface Soil Cracks (B6)
Surface Water (A1) X	Water-Stained Leaves (B9)	Drainage Patterns (B10)
X High Water Table (A2)	Aquatic Fauna (B13)	X Moss Trim Lines (B16)
X Saturation (A3)	Marl Deposits (B15)	Dry-Season Water Table (C2)
Water Marks (B1)	— Hydrogen Sulfide Odor (C1)	Crayfish Burrows (C8)
Sediment Deposits (B2)	Oxidized Rhizospheres on Living Roots (C3)	Saturation Visible in Aerial Imagery (C9)
Drift Deposits (B3)	Presence of Reduced Iron (C4)	Stunted or Stressed Plants (D1)
Algal Mat or Crust (B4)	Recent Iron Reduction in Tilled Soils (C6)	Geomorphic Position (D2)
X Iron Deposits (B5)	Thin Muck Surface (C7)	Shallow Aquitard (D3)
	Other (Explain in Remarks)	
Inundation Visible on Aerial Imagery (B7)	Other (Explain in Kemarks)	Microtopographic Relief (D4)
Sparsley Vegetated Concave Surface (B8)		FAC-Neutral Test (D5)
Surface Water Present? Yes NoX D	Depth (inches)	
Water Table Present? Yes X No D	Depth (inches) 0 Wetland	Hydrology Present? Yes X No
Saturation Present? Yes X No D	Depth (inches) 0	
Describe Recorded Data (stream gauge, monitori	ing well aerial photos, previous inspection	ns) if available:
		,
Remarks:		

VEGETATION - Use scientific names of plantsSampling Point: 02-20200721-WL-37-37W

		of plants				1				L-37-37
Tree Stratum	(Plot Size:	30'radius)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test Number of Dom				
Hamamelis virginiana			40	Х	FACU	That Are OBL, F	•		5	(A)
Fraxinus pennsylvanica			30	Χ	FACW	Total Numbe	er of Domi	inant		-
Prunus virginiana			20	Χ	FACU	Species Ac			7	(B)
			90	= Total Cov	/er	Percent of Dor		-		= ' '
						That Are OBL,	•		71.4%	(A/B)
						Prevalence Index	Workshee	et:		
			Δhsolute	Dominant	Indicator	OBL species	45	x 1	45	
Shrub Stratum	(Plot Size:	15'radius)	% Cover	Species?	Status	FACW species	130	x 2	260	
Fraxinus pennsylvanica	9		30	Χ	FACW	FAC species	0	x 3	0	
			30	_= Total Cov	ver .	FACU species	60	x 4	240	
						UPL species	0	x 5	0	
						Column Totals	235	(A)	545	(B
						Prevalend	ce Index =	B/A =	2.32	
						Hydrophytic Vege	etation Inc	dicator	s:	
			Absolute Dominant Indicator			1- Rapid Test For Hydrophytic Vegetation				
Herb Stratum	(Plot Size:	5'radius)	% Cover	Species?	Status	X 2- Dominan	•		J	
Phragmites australis			40	Χ	FACW				,	
Glyceria striata			30	Χ	OBL	X 3- Prevalen				
Onoclea sensibilis			30	X	FACW	4- Morphol	ogical Ada	ptatio	ns	
Cicuta maculata			10		OBL	5- Problema	atic Hydro	phytic	Vegetatio	n
Lysimachia thyrsiflora			5 OBL 115 = Total Cover				D. California of Manageria of Charles			
			115	= Total Cov	/er	Definitions of Venet				
			115	_= Total Cov	ver .	Definitions of Veget				
			115	_= Total Cov	ver	Definitions of Veget Tree- Woody plants breast height (DBH),	3 in. (7.6cn	n) or me		eter at
			115	_= Total Cov	ver	Tree- Woody plants	3 in. (7.6cn regardless dy plants le	n) or mo	ht. 3 in. DBH a	
			115	_= Total Cov	ver	Tree- Woody plants breast height (DBH), Sapling/Shrub- Woo	3 in. (7.6cn regardless dy plants le la to 3.28ft s (non-woo	n) or mo of heigness than (1m) ta	ht. 3 in. DBH a II. nts, regardl	and
Woody Vine Stratum	(Plot Size:	30'radius)		Dominant		Tree- Woody plants breast height (DBH), Sapling/Shrub- Woo greater than or equa Herb- All herbaceous	3 in. (7.6cn regardless dy plants le al to 3.28ft s (non-woonts less tha	n) or mo s of heig ess than (1m) ta ody) plan n 3.28ft	3 in. DBH a II. nts, regardl tall.	and ess of

SOIL Sampling Point: 02-20200721-WL-37-37W

Depth	Matrix				Redo	x Featu	ıres	
(inches	Color	%	Color	%	Type	Loc	Texture	Remarks
0-6	10YR 2/1	100					Silt Loam	
6-24	10YR 7/2	80	10YR 6/8	20	С	М	Silty Clay Loam	
Hydric So	oil Indicators:							Indicators for Problematic Soils:
-	tosol (A1)				Polyvalu	e Below	Surface (B15)	2 cm Muck (A10)
Hist	tic Epipedon (A2)			Thin Dar	k Surfac	e (S9)	Coast Prarie Redox (A16)
Blac	ck Histic (A3)			Х	Loamy N	lucky M	ineral (F1)	5 cm Mucky Peat or Peat (S3)
Нус	drogen Sulfide	(A4)			Loamy G	leyed M	atric (F2)	Dark Surface (S7)
Stra	atified Layers	(A5)		X	Depleted	d Matrix	(F3)	Polyvalue Below Surface (S8)
Dep	oleted Below I	Dark Sui	face (A11)		Redox Da	ark Surfa	ace (F6)	Thin Dark Surface (S9)
	ck Dark Surfac						urface (F7)	Iron-Manganese Masses (F12)
	ıdy Mucky Miı			Redox Depressions (F8)				Piedmont Floodplain Soils (F19)
	idy Gleyed Ma)					Mesic Spodic (TA6)
	idy Redox (S5)							Red Parent Material (F21)
	pped Matrix (Very Shallow Dark Surface (TF12)
Dar	k Surface (S7))						Other (Explain in Remarks)
Restrictiv	ve Layer (if obs	erved):						
		Type:					Hydric	Soil Present? Yes X No
	Depth (in	_					Trydite	3011 resent. res_ <u>x</u> 10
	. ,							
Remarks	5:							

Project/Site: Cider Solar Project	City/Co	Sampling Date: 7/21/2020			
Applicant/Owner: Hecate	State: NY Sampling Point:				
Investigator(s): Justin Ahn	Section, Township, Range: 02-20200721-WL-38				
Landform (hillslope, terrace,etc.): Depression	Local relie	f (concave, convex, n	none): <u>Concave</u> Slope (%) <u>0 - 1</u>		
Subregion (LRR or MLRA): LRR L	Lat: 43.107431	Long:7	78.206446 Datum: <u>NAD83</u>		
Soil Map Unit Name: HIB			NWI Classification: PSS		
Are climatic / hyrologic conditions on the site t	ypical for this time of year	ar? Yes <u>X</u> No	(if no, explain in Remarks.)		
Are Vegetation, Soil, or Hydrology	significantly distur	bed? Are "Normal (Circumstances" present? Yes X No		
Are Vegetation, Soil, or Hydrology	naturally problema	atic? (if needed, expl	lain any answers in Remarks.)		
SUMMARY OF FINDINGS - Attach site map	showing sampling po	oint locations, tran	sects, important features, etc.		
Hydrophytic Vegetation Present? Yes X		Is the Sampled Area			
Hydric Soil Present? Yes X	No	within a Wetland?	Yes X No		
		if yes, optional Wetl	and Site ID: WI 89		
Wetland Hydrology Present? Yes X Remarks: (Explain alternative procedures here or in a seg		, (25) Optional Trees	<u> </u>		
Remarks. (Explain alternative procedures here of in a sep	sarate report.)				
HYDROLOGY			Consider to disabout (minimum of two yearsined)		
Wetland Hydrology Indicators:	a a la a ll tha tha a a a la A		Secondary Indicators (minimum of two required)		
Primary Indicators (minimum of one is required: ch		(DO)	Surface Soil Cracks (B6)		
Surface Water (A1)	X Water-Stained Leaves	(89)	X Drainage Patterns (B10)		
High Water Table (A2)	X Aquatic Fauna (B13)		Moss Trim Lines (B16)		
Saturation (A3)	Marl Deposits (B15)	4	Dry-Season Water Table (C2)		
Water Marks (B1)	Hydrogen Sulfide Odo		Crayfish Burrows (C8)		
Sediment Deposits (B2)	Oxidized Rhizospheres		Saturation Visible in Aerial Imagery (C9)		
Drift Deposits (B3)	Presence of Reduced	Iron (C4)	Stunted or Stressed Plants (D1)		
Algal Mat or Crust (B4)	Recent Iron Reduction	n in Tilled Soils (C6)	Geomorphic Position (D2)		
Iron Deposits (B5)	Thin Muck Surface (C7	7)	Shallow Aquitard (D3)		
Inundation Visible on Aerial Imagery (B7)	Other (Explain in Rem	arks)	Microtopographic Relief (D4)		
Sparsley Vegetated Concave Surface (B8)			FAC-Neutral Test (D5)		
Surface Water Present? Yes No X	Depth (inches)				
Water Table Present? Yes No X	Depth (inches)	Wetland H	lydrology Present? Yes X No		
Saturation Present? Yes No X	Depth (inches)	_			
Describe Recorded Data (stream gauge, monit	toring well, aerial photos	, previous inspection	s), if available:		
Parada					
Remarks:					

VEGETATION - Use scientific names of plants Sampling Point: 02-20200721-WL-38-38W Absolute Dominant Indicator **Dominance Test Worksheet:** (Plot Size: 30'radius) % Cover Species? Status **Tree Stratum Number of Dominant Species** That Are OBL, FACW, or FAC: (A) = Total Cover **Total Number of Dominant** Species Across All Strata: (B) 3 Percent of Dominant Species That Are OBL, FACW, or FAC: 66.7% (A/B) **Prevalence Index Worksheet:** 55 **OBL** species 55 x 1 Absolute Dominant Indicator **FACW** species 15 30 (Plot Size: 15'radius) x 2 **Shrub Stratum** % Cover Species? Status **FAC** species 55 х3 165 = Total Cover FACU species 30 x 4 120 **UPL** species 0 x 5 0 Column Totals 155 (A) 370 (B) Prevalence Index = B/A = 2.39 **Hydrophytic Vegetation Indicators:** Absolute Dominant Indicator 1- Rapid Test For Hydrophytic Vegetation **Herb Stratum** (Plot Size: 5'radius) % Cover Species? Status X 2- Dominance Test is > 50% Persicaria maculosa 30 Χ FAC X 3- Prevalence Index is =< 3.0 Χ Ambrosia artemisiifolia 30 **FACU** 4- Morphological Adaptations Eleocharis obtusa 25 Χ OBL 20 FAC Apocynum cannabinum 5- Problematic Hydrophytic Vegetation 10 **FACW** Cyperus esculentus Glyceria striata 10 OBL **Definitions of Vegetation Strata:** Asclepias incarnata 10 OBL Tree- Woody plants 3 in. (7.6cm) or more in diameter at Juncus effusus OBL breast height (DBH), regardless of height. Juncus tenuis 5 FAC 5 OBL Typha angustifolia Sapling/Shrub- Woody plants less than 3 in. DBH and Phragmites australis 5 **FACW** greater than or equal to 3.28ft (1m) tall. 155 = Total Cover Herb- All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28ft tall. Absolute Dominant Indicator Woody Vines- All woody vines greater than 3.28ft in (Plot Size: 30'radius) **Woody Vine Stratum** % Cover Species? Status height. = Total Cover Hydrophytic

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

altered due to tire tracks, low and high spots in elevation, upland plants are on high points

Vegetation

Present? Yes X No ____

SOIL

Sampling Point: 02-20200721-WL-38-38W

Depth	Matrix	atrix Redox Features						
inches	Color	%	Color	%	Type	Loc	Texture	Remarks
0-10	10YR 3/2	90	7.5YR 4/6	10	С	PL	Clay Loam	
10-20	7.5YR 6/4	80	7.5YR 4/6	20	С	М	Sandy Clay Loam	
	oil Indicators:				Dalonalo	a Dala		ndicators for Problematic Soils:
	tosol (A1) tic Epipedon (A	۸۵۱			Thin Dar		Surface (B15)	2 cm Muck (A10) Coast Prarie Redox (A16)
	ck Histic (A3)	AZ)					e (39) ineral (F1)	5 cm Mucky Peat or Peat (S3)
	drogen Sulfide	(Δ4)			=		atric (F2)	Dark Surface (S7)
	atified Layers (-			Depleted	•	· ′ —	Polyvalue Below Surface (S8)
	oleted Below [rface (A11)		Redox D		· · · —	Thin Dark Surface (S9)
	ck Dark Surfac						urface (F7)	Iron-Manganese Masses (F12)
	ndy Mucky Mir	-			Redox D			Piedmont Floodplain Soils (F19)
Sar	ndy Gleyed Ma	itrix (S4	1)					Mesic Spodic (TA6)
Sar	ndy Redox (S5)							Red Parent Material (F21)
Str	pped Matrix (S6)					_	Very Shallow Dark Surface (TF12)
Daı	k Surface (S7)							Other (Explain in Remarks)
Restricti	ve Layer (if obse	erved):						
		Type:					Hydric Sc	oil Present? Yes X No
	Depth (in	ches):		 -			,	 -
		-						
Remark	s:							
Remark	s:							

Project/Site: Cider Solar Project	City/County: Elba/Genese	e Sampling Date: 7/21/2020			
Applicant/Owner: Hecate	State: NY Sampling Point:02-20200721				
Investigator(s): Justin Ahn	Section, Township, Range: WL-38-38U				
Landform (hillslope, terrace,etc.): <u>Toeslope</u>	Local relief (concave, convex,	none): <u>Linear</u> Slope (%) <u>1 - 5</u>			
Subregion (LRR or MLRA): LRR L	Lat: 43.108362 Long: -7	78.203976 Datum: NAD83			
Soil Map Unit Name: LoA		NWI Classification: UPL			
Are climatic / hyrologic conditions on the site					
Are Vegetation, Soil, or Hydrology					
Are Vegetation, Soil, or Hydrology	naturally problematic? (if needed, exp	olain any answers in Remarks.)			
SUMMARY OF FINDINGS - Attach site ma	showing sampling point locations, trar	nsects, important features, etc.			
Hydrophytic Vegetation Present? Yes X	No Is the Sampled Area	a			
Hydric Soil Present? Yes	No X within a Wetland?	Yes No X			
Wetland Hydrology Present? Yes X		land Site ID:			
Remarks: (Explain alternative procedures here or in a se					
Nemarks. (Explain alternative procedures here of in a se	parate report.				
HYDROLOGY Wetland Hydrology Indicators:		Secondary Indicators (minimum of two required)			
Primary Indicators (minimum of one is required: c	heck all that anniv)	Surface Soil Cracks (B6)			
Surface Water (A1)	Water-Stained Leaves (B9)	Drainage Patterns (B10)			
High Water Table (A2)	Aquatic Fauna (B13)	Moss Trim Lines (B16)			
X Saturation (A3)	Marl Deposits (B15)	Dry-Season Water Table (C2)			
		Crayfish Burrows (C8)			
Water Marks (B1)	Hydrogen Sulfide Odor (C1)				
Sediment Deposits (B2)	Oxidized Rhizospheres on Living Roots (C3)	Saturation Visible in Aerial Imagery (C9)			
Drift Deposits (B3)	Presence of Reduced Iron (C4)	Stunted or Stressed Plants (D1)			
Algal Mat or Crust (B4)	Recent Iron Reduction in Tilled Soils (C6)	Geomorphic Position (D2)			
Iron Deposits (B5)	Thin Muck Surface (C7)	Shallow Aquitard (D3)			
Inundation Visible on Aerial Imagery (B7)	Other (Explain in Remarks)	Microtopographic Relief (D4)			
Sparsley Vegetated Concave Surface (B8)		FAC-Neutral Test (D5)			
Surface Water Present? Yes No X	Depth (inches)				
Water Table Present? Yes No X	Depth (inches) Wetland I	Hydrology Present? Yes X No			
Saturation Present? Yes X No	Depth (inches) 20	 			
Describe Recorded Data (stream gauge, moni	toring well aerial photos, previous inspection	ns) if available:			
besense necoraca bata (stream gaage, mon	toring wen, derial priotos, previous inspection	is), ii dvalidsic.			
Remarks:					
i e e e e e e e e e e e e e e e e e e e					

VEGETATION - Use scientific names of plants Sampling Point: 02-20200721-WL-38-38U Absolute Dominant Indicator **Dominance Test Worksheet:** (Plot Size: 30'radius) % Cover Species? Status **Tree Stratum Number of Dominant Species** Populus deltoides 50 Х FAC That Are OBL, FACW, or FAC: (A) 50 = Total Cover **Total Number of Dominant** Species Across All Strata: 7 (B) Percent of Dominant Species That Are OBL, FACW, or FAC: 57.1% (A/B) **Prevalence Index Worksheet:** 0 x 1 **OBL** species Absolute Dominant Indicator **FACW** species 20 x 2 40 (Plot Size: 15'radius) % Cover Species? Status **Shrub Stratum** FAC species 70 Rosa multiflora FACU х3 210 30 Χ Fagus grandifolia 30 Χ **FACU FACU** species 90 x 4 360 10 **FACU** Prunus virginiana **UPL** species 0 x 5 0 70 = Total Cover Column Totals 180 (A) 610 (B) Prevalence Index = B/A = 3.39 **Hydrophytic Vegetation Indicators:** Absolute Dominant Indicator 1- Rapid Test For Hydrophytic Vegetation **Herb Stratum** (Plot Size: 5'radius) % Cover Species? Status X 2- Dominance Test is > 50% 20 Toxicodendron radicans Χ FAC 3- Prevalence Index is =< 3.0 Х Onoclea sensibilis 10 **FACW** 4- Morphological Adaptations Fraxinus pennsylvanica 10 Χ **FACW** 40 = Total Cover 5- Problematic Hydrophytic Vegetation **Definitions of Vegetation Strata:** Tree- Woody plants 3 in. (7.6cm) or more in diameter at breast height (DBH), regardless of height. Sapling/Shrub- Woody plants less than 3 in. DBH and greater than or equal to 3.28ft (1m) tall. Herb- All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28ft tall. Absolute Dominant Indicator Woody Vines- All woody vines greater than 3.28ft in (Plot Size: 30'radius) Species? **Woody Vine Stratum** % Cover Status height. Parthenocissus quinquefolia 20 Χ FACU 20 = Total Cover Hydrophytic Vegetation

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

Present? Yes X No ___

SOIL Sampling Point: 02-20200721-WL-38-38U Depth Matrix **Redox Features** (inches Color % Color % Texture Remarks Type Loc 0-20 7.5YR 3/3 100 Clay Loam 20-24 10YR 4/2 80 10YR 6/6 20 C Μ Clay Loam **Hydric Soil Indicators:** Indicators for Problematic Soils: Histosol (A1) Polyvalue Below Surface (B15) 2 cm Muck (A10) Histic Epipedon (A2) Thin Dark Surface (S9) Coast Prarie Redox (A16) Black Histic (A3) Loamy Mucky Mineral (F1) 5 cm Mucky Peat or Peat (S3) Hydrogen Sulfide (A4) Loamy Gleyed Matric (F2) Dark Surface (S7) Stratified Layers (A5) Depleted Matrix (F3) Polyvalue Below Surface (S8) Depleted Below Dark Surface (A11) Redox Dark Surface (F6) Thin Dark Surface (S9) Thick Dark Surface (A12) Depleted Dark Surface (F7) Iron-Manganese Masses (F12) Sandy Mucky Mineral (S1) Redox Depressions (F8) Piedmont Floodplain Soils (F19) Sandy Gleyed Matrix (S4) Mesic Spodic (TA6) Sandy Redox (S5) Red Parent Material (F21) Stripped Matrix (S6) Very Shallow Dark Surface (TF12) Dark Surface (S7) Other (Explain in Remarks) Restrictive Layer (if observed): Type: Hydric Soil Present? Yes No Χ Depth (inches): Remarks:

Project/Site: Cider Solar Project	City/County: Elba/Genese	e Sampling Date: 7/21/2020			
Applicant/Owner: Hecate	State: NY Sampling Point:02-20200				
Investigator(s): Justin Ahn	Section, Township, Range: WL-37-37U				
Landform (hillslope, terrace,etc.): Toeslope	Local relief (concave, convex, r	none): <u>Linear</u> Slope (%) <u>1 - 5</u>			
Subregion (LRR or MLRA): LRR L	Lat: 43.1074698 Long: -7	8.2064822 Datum: <u>NAD83</u>			
Soil Map Unit Name: HIB		NWI Classification: UPL			
Are climatic / hyrologic conditions on the site t	cypical for this time of year? Yes X No	(if no, explain in Remarks.)			
Are Vegetation, Soil, or Hydrology	significantly disturbed? Are "Normal	Circumstances" present? Yes X No			
Are Vegetation, Soil, or Hydrology	naturally problematic? (if needed, exp	lain any answers in Remarks.)			
SUMMARY OF FINDINGS - Attach site map	showing sampling point locations, tran	sects, important features, etc.			
Hydrophytic Vegetation Present? Yes	No X Is the Sampled Area				
Hydric Soil Present? Yes	No X within a Wetland?	Yes No X			
Wetland Hydrology Present? Yes	No X if yes, optional Wet	and Site ID:			
Remarks: (Explain alternative procedures here or in a se					
LINDBOLOCA					
HYDROLOGY Wetland Hydrology Indicators:		Secondary Indicators (minimum of two required)			
Primary Indicators (minimum of one is required: cl	heck all that apply)	Surface Soil Cracks (B6)			
Surface Water (A1)	Water-Stained Leaves (B9)	Drainage Patterns (B10)			
High Water Table (A2)	Aquatic Fauna (B13)	Moss Trim Lines (B16)			
Saturation (A3)	Marl Deposits (B15)	Dry-Season Water Table (C2)			
Water Marks (B1)	Hydrogen Sulfide Odor (C1)	Crayfish Burrows (C8)			
Sediment Deposits (B2)	Oxidized Rhizospheres on Living Roots (C3)	Saturation Visible in Aerial Imagery (C9)			
Drift Deposits (B3)	Presence of Reduced Iron (C4)	Stunted or Stressed Plants (D1)			
Algal Mat or Crust (B4)	Recent Iron Reduction in Tilled Soils (C6)	Geomorphic Position (D2)			
Iron Deposits (B5)	Thin Muck Surface (C7)	Shallow Aquitard (D3)			
Inundation Visible on Aerial Imagery (B7)	Other (Explain in Remarks)	Microtopographic Relief (D4)			
Sparsley Vegetated Concave Surface (B8)		FAC-Neutral Test (D5)			
Surface Water Present? Yes No X	Depth (inches)				
Water Table Present? Yes No X	Depth (inches) Wetland F	Hydrology Present? Yes No X			
Saturation Present? Yes No X	Depth (inches)				
Describe Recorded Data (stream gauge, moni	toring well, aerial photos, previous inspection	ns), if available:			
Remarks:					

memarks. (include prioto fi	anners nere	or on a sep	arate SHEE	L. j						
Remarks: (Include photo n	umbare boro	or on a son	arato choo	= Total Cov	ver .	Hydropl Vegeta Pres	-	S	No <u>X</u>	_
Woody Vine Stratum	(Plot Size:	30'radius)	Absolute % Cover	Dominant Species?	Indicator Status	Herb- All herbaceous size, and woody plan Woody Vines- All wo height.	ts less tha	n 3.28ft ta	all.	
						Tree- Woody plants 3 breast height (DBH), Sapling/Shrub- Wood greater than or equa	regardless ly plants le l to 3.28ft	of height ess than 3 (1m) tall.	in. DBH a	and
						Definitions of Vegeta			a i.a .i'	
i incum pratense			100	_= Total Cov		5- Problema	tic Hydro	phytic V	egetatio	n
Glyceria striata Phleum pratense			<u>10</u> 10		OBL FACU	4- Morpholo	_			
Triticum aestivum			30	Χ	UPL	3- Prevalenc				
Ambrosia artemisiifol	ia		50	Х	FACU					
Herb Stratum	(Plot Size:	5'radius)	Absolute % Cover	Dominant Species?	Indicator Status	1- Rapid Tes 2- Dominan	•		Vegetat	tion
1			A1		12 -	Hydrophytic Vege				
						Prevalenc		_	4	
						Column Totals	100	(A)	400	(B)
						UPL species	30	x 5	150	(D)
				10(a) COV		FACU species	60	x 4	240	
				= Total Cov		FAC species	0	_ x 3_	0	
Shrub Stratum	(Plot Size:	15'radius)	% Cover	Species?	Status	FACW species	0	x 2	0	
			Absolute			OBL species	10	x 1	10	
						Prevalence Index \	Workshee	et:		
						Percent of Don That Are OBL,	•		0%	(A/B)
				_= Total Cov	ver .	Total Numbe Species Ac			2	(B)
Tree Stratum	(Plot Size:	30'radius)	% Cover	Species?	Status	Number of Domi That Are OBL, FA	-		0	_(A)
			Absolute	Dominant	Indicator	Dominance Test V	Vorkshee	t:		

SOIL Sampling Point: 02-20200721-WL-37-37U Depth Matrix **Redox Features** (inches Color % Color Texture Remarks % Type Loc 0-16 2.5Y 3/3 95 7.5YR 4/6 C PLClay Loam 5 **Hydric Soil Indicators:** Indicators for Problematic Soils: Histosol (A1) Polyvalue Below Surface (B15) 2 cm Muck (A10) Histic Epipedon (A2) Thin Dark Surface (S9) Coast Prarie Redox (A16) Black Histic (A3) Loamy Mucky Mineral (F1) 5 cm Mucky Peat or Peat (S3) Hydrogen Sulfide (A4) Loamy Gleyed Matric (F2) Dark Surface (S7) Stratified Layers (A5) Depleted Matrix (F3) Polyvalue Below Surface (S8) Depleted Below Dark Surface (A11) Redox Dark Surface (F6) Thin Dark Surface (S9) Thick Dark Surface (A12) Depleted Dark Surface (F7) Iron-Manganese Masses (F12) Sandy Mucky Mineral (S1) Redox Depressions (F8) Piedmont Floodplain Soils (F19) Sandy Gleyed Matrix (S4) Mesic Spodic (TA6) Sandy Redox (S5) Red Parent Material (F21) Stripped Matrix (S6) Very Shallow Dark Surface (TF12) Dark Surface (S7) Other (Explain in Remarks) Restrictive Layer (if observed): Type: Hydric Soil Present? Yes No Χ Depth (inches): Remarks:

Project/Site: Cider Solar Project	City/Co	Sampling Date: 7/21/2020				
Applicant/Owner: Hecate	State: NY Sampling Point:					
Investigator(s): Justin Ahn	Sectio	Section, Township, Range: 02-20200721-WL-3				
Landform (hillslope, terrace, etc.): Depression	Local relie	ef (concave, convex, n	one): <u>Concave</u> Slope (%) <u>0 - 1</u>			
Subregion (LRR or MLRA): LRR L	Lat: 43.1065594	Long: <u>-7</u>	8.2094586 Datum: <u>NAD83</u>			
Soil Map Unit Name: HIB			NWI Classification: PFO			
Are climatic / hyrologic conditions on the site t			(if no, explain in Remarks.)			
Are Vegetation, Soil, or Hydrology			Circumstances" present? Yes X No			
Are Vegetation, Soil, or Hydrology	naturally problem	atic? (if needed, expl	ain any answers in Remarks.)			
SUMMARY OF FINDINGS - Attach site map	showing sampling po	oint locations. trans	sects, important features, etc.			
Hydrophytic Vegetation Present? Yes X	No	Is the Sampled Area				
Hydric Soil Present? Yes X	 No	within a Wetland?	Yes X No			
Wetland Hydrology Present? Yes X	No No	if yes, optional Wetla	and Site ID: WL90			
Remarks: (Explain alternative procedures here or in a seg		,,,				
nemarks. (Explain alternative procedures here of in a sep	darate report.)					
HYDROLOGY						
Wetland Hydrology Indicators:			Secondary Indicators (minimum of two required)			
Primary Indicators (minimum of one is required: ch	neck all that apply)	•	Surface Soil Cracks (B6)			
X Surface Water (A1)	Water-Stained Leaves	s (B9)	Drainage Patterns (B10)			
X High Water Table (A2)	Aquatic Fauna (B13)		Moss Trim Lines (B16)			
X Saturation (A3)	Marl Deposits (B15)	•	Dry-Season Water Table (C2)			
Water Marks (B1)	Hydrogen Sulfide Odo	or (C1)	Crayfish Burrows (C8)			
Sediment Deposits (B2)	Oxidized Rhizosphere		Saturation Visible in Aerial Imagery (C9)			
Drift Deposits (B3)	Presence of Reduced	-	Stunted or Stressed Plants (D1)			
X Algal Mat or Crust (B4)	Recent Iron Reduction		Geomorphic Position (D2)			
Iron Deposits (B5)	Thin Muck Surface (C	• • •	Shallow Aquitard (D3)			
Inundation Visible on Aerial Imagery (B7)	Other (Explain in Rem	•	Microtopographic Relief (D4)			
Sparsley Vegetated Concave Surface (B8)	Other (Explain in Neil	idi K3)	FAC-Neutral Test (D5)			
			TAC-Neutral Test (D3)			
Surface Water Present? Yes X No	Depth (inches) 3	_				
Water Table Present? Yes X No	Depth (inches) 0	Wetland H	ydrology Present? Yes X No			
Saturation Present? Yes X No	Depth (inches) 0	-				
Describe Recorded Data (stream gauge, monit	toring well, aerial photos	s, previous inspections	s), if available:			
Remarks:						
Remarks.						

VEGETATION - Use scientific names of plants Sampling Point: 02-20200721-WI-39-39W

/EGETATION - Use scient	tific names	or plants				Sampii	iig Poliit.	02-20	200721-W	L-39-39
Tree Stratum	(Plot Size:	30'radius)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test V Number of Domi				
Fraxinus pennsylvanica	l		50	Χ	FACW	That Are OBL, FA	•		4	(A)
Salix interior			40	Χ	FACW	Total Numbe	r of Domii	nant		_
			90	_= Total Cov	/er	Species Ac			4	(B)
						Percent of Don	ninant Spe	ecies		_
						That Are OBL,	•		100%	(A/B)
						Prevalence Index \	Workshee ⁻	t:		
			م د ر دا دا د	Daminant	lu di saka u	OBL species	75	x 1	75	
Shrub Stratum	(Plot Size:	15'radius)	% Cover	Dominant Species?	Status	FACW species	90	x 2	180	
Acer rubrum			15	Х	FAC	FAC species	25	x 3	75	
			15	_= Total Cov	/er	FACU species	0	x 4	0	
						UPL species	0	x 5	0	
						Column Totals	190	(A)	330	(B
						Prevalenc	e Index = I	B/A =	1.74	
						Hydrophytic Vege	tation Ind	licators	s:	
			Absolute	Dominant	Indicator	1- Rapid Tes	t For Hydr	ophyti	ic Vegetat	tion
Herb Stratum	(Plot Size:	5'radius)	% Cover	Species?	Status	X 2- Dominano	ce Test is >	> 50%		
Typha angustifolia			50	X	OBL	X 3- Prevalenc	e Index is	=< 3.0		
Epilobium coloratum			15		OBL					
Equisetum arvense			10		FAC	4- Morpholo				
<u>Cicuta maculata</u> Alisma subcordatum			<u>5</u> 5		OBL OBL	5- Problema	tic Hydrop	ohytic '	Vegetatio	n
7 HISTITA SASCOTAACATTI			85	= Total Cov		Definitions of Vegeta	ation Strata	a:		
						Tree- Woody plants 3 breast height (DBH),	•			eter at
						Sapling/Shrub- Wood greater than or equa				and
						Herb- All herbaceous size, and woody plan	•			ess of
Woody Vine Stratum	(Plot Size:	30'radius)	Absolute % Cover	Dominant Species?	Indicator Status	Woody Vines- All wo height.	ody vines g	reater 1	than 3.28ft	t in
				= Total Cov	/er	Hydropl Vegeta Pres	-	Y	No	

SOII

Sampling Point: 02-20200721-WL-39-39W

SUIL								Sampling Point: 02-20200721-wL-39-39w
Depth	Matrix				Redo	x Featu	ıres	
(inches	Color	%	Color	%	Type	Loc	Texture	Remarks
0-12	10YR 4/2	90	7.5YR 4/6	10	С	PL	Silty Clay Loam	
12-20	10YR 4/2	80	7.5YR 4/6	20	С	М	Silty Clay Loam	

Hydric Soil Indicators:		Indicators for Problematic Soils:
Histosol (A1)	Polyvalue Below Surface (B15)2 cm Muck (A10)
Histic Epipedon (A2)	Thin Dark Surface (S9)	Coast Prarie Redox (A16)
Black Histic (A3)	Loamy Mucky Mineral (F1)5 cm Mucky Peat or Peat (S3)
Hydrogen Sulfide (A4)	Loamy Gleyed Matric (F2)	Dark Surface (S7)
Stratified Layers (A5)	X Depleted Matrix (F3)	Polyvalue Below Surface (S8)
Depleted Below Dark Surface (A11)	Redox Dark Surface (F6)	Thin Dark Surface (S9)
Thick Dark Surface (A12)	Depleted Dark Surface (F7	r)Iron-Manganese Masses (F12)
Sandy Mucky Mineral (S1)	Redox Depressions (F8)	Piedmont Floodplain Soils (F19)
Sandy Gleyed Matrix (S4)		Mesic Spodic (TA6)
Sandy Redox (S5)		Red Parent Material (F21)
Stripped Matrix (S6)		Very Shallow Dark Surface (TF12)
Dark Surface (S7)		Other (Explain in Remarks)
Restrictive Layer (if observed):		
Туре:		
туре		Hydric Soil Present? Yes X No
Depth (inches):		

Remarks:

Project/Site: Cider Solar Project	City/County: _Elba/G	Senesee Sampling Date: 7/21/2020
Applicant/Owner: Hecate		State: NY Sampling Point:02-2020072
Investigator(s): Justin Ahn	Section, Township, F	Range: WL-39-39U
Landform (hillslope, terrace,etc.): Toeslope	Local relief (concave, co	nvex, none): <u>Linear</u> Slope (%) <u>1 - 5</u>
Subregion (LRR or MLRA): LRR L	Lat: _43.106589 Lo	ong: -78.209472 Datum: NAD83
Soil Map Unit Name: HIB		NWI Classification: UPL
Are climatic / hyrologic conditions on the sit	e typical for this time of year? Yes	X No (if no, explain in Remarks.)
Are Vegetation, Soil, or Hydrolo	gysignificantly disturbed? Are "No	ormal Circumstances" present? Yes X No
Are Vegetation, Soil, or Hydrolo	gynaturally problematic? (if need	ed, explain any answers in Remarks.)
SUMMARY OF FINDINGS - Attach site m	an showing sampling point locations	s transects important features etc
Hydrophytic Vegetation Present? Yes	No X Is the Sample	-
Hydric Soil Present? Yes	No X within a Wet	
· —		al Wetland Site ID:
Wetland Hydrology Present? Yes		ai wetiand site ib.
Remarks: (Explain alternative procedures here or in a	separate report.)	
HYDROLOGY		
Wetland Hydrology Indicators:		Secondary Indicators (minimum of two required)
Primary Indicators (minimum of one is required	: check all that apply)	Surface Soil Cracks (B6)
Surface Water (A1)	Water-Stained Leaves (B9)	Drainage Patterns (B10)
High Water Table (A2)	Aquatic Fauna (B13)	Moss Trim Lines (B16)
Saturation (A3)	Marl Deposits (B15)	Dry-Season Water Table (C2)
Water Marks (B1)	Hydrogen Sulfide Odor (C1)	Crayfish Burrows (C8)
Sediment Deposits (B2)	Oxidized Rhizospheres on Living Root	
Drift Deposits (B3)	Presence of Reduced Iron (C4)	Stunted or Stressed Plants (D1)
Algal Mat or Crust (B4)	Recent Iron Reduction in Tilled Soils (
Iron Deposits (B5)	Thin Muck Surface (C7)	Shallow Aquitard (D3)
Inundation Visible on Aerial Imagery (B7)	- 	Microtopographic Relief (D4)
	Other (Explain in Remarks)	
Sparsley Vegetated Concave Surface (B8)		FAC-Neutral Test (D5)
Surface Water Present? Yes No	C Depth (inches)	
Water Table Present? Yes No	(Depth (inches) We	tland Hydrology Present? Yes No X
Saturation Present? Yes No	C Depth (inches)	
Describe Recorded Data (stream gauge, mo	nitoring well aerial photos previous insr	pections) if available:
Describe Recorded Data (Stream Badge, mo	meening weni, deriai priocos, previous misp	sections,, in available.
Remarks:		

VEGETATION - Use scientific names of plants Sampling Point: 02-20200721-WL-39-39U Absolute Dominant Indicator **Dominance Test Worksheet:** (Plot Size: 30'radius) % Cover Species? Status **Tree Stratum Number of Dominant Species** That Are OBL, FACW, or FAC: (A) = Total Cover **Total Number of Dominant** Species Across All Strata: (B) 1 Percent of Dominant Species (A/B) That Are OBL, FACW, or FAC: 0% **Prevalence Index Worksheet:** x 1 0 **OBL** species Absolute Dominant Indicator **FACW** species 0 (Plot Size: 15'radius) % Cover Species? Status x 2 **Shrub Stratum** FAC species 5 х3 15 = Total Cover 2 FACU species x 4 8 **UPL** species 50 x 5 250 Column Totals 57 (A) 273 (B) Prevalence Index = B/A = 4.79 **Hydrophytic Vegetation Indicators:** Absolute Dominant Indicator 1- Rapid Test For Hydrophytic Vegetation **Herb Stratum** (Plot Size: 5'radius) % Cover Species? Status 2- Dominance Test is > 50% 50 UPL Zea mays 3- Prevalence Index is =< 3.0 Equisetum arvense 5 **FAC** 4- Morphological Adaptations Abutilon theophrasti 2 **FACU** 57 = Total Cover 5- Problematic Hydrophytic Vegetation **Definitions of Vegetation Strata:** Tree- Woody plants 3 in. (7.6cm) or more in diameter at breast height (DBH), regardless of height. Sapling/Shrub- Woody plants less than 3 in. DBH and greater than or equal to 3.28ft (1m) tall. Herb- All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28ft tall. Absolute Dominant Indicator Woody Vines- All woody vines greater than 3.28ft in (Plot Size: 30'radius) **Woody Vine Stratum** % Cover Species? Status height. = Total Cover Hydrophytic Vegetation Present? Yes _____ No __X Remarks: (Include photo numbers here or on a separate sheet.)

SOIL Sampling Point: 02-20200721-WL-39-39U Depth Matrix **Redox Features** (inches Color % Color % Type Texture Remarks Loc 0-14 7.5YR 4/2 100 Silty Clay Loam **Hydric Soil Indicators:** Indicators for Problematic Soils: Histosol (A1) Polyvalue Below Surface (B15) 2 cm Muck (A10) Histic Epipedon (A2) Thin Dark Surface (S9) Coast Prarie Redox (A16) Black Histic (A3) Loamy Mucky Mineral (F1) 5 cm Mucky Peat or Peat (S3) Hydrogen Sulfide (A4) Loamy Gleyed Matric (F2) Dark Surface (S7) Stratified Layers (A5) Depleted Matrix (F3) Polyvalue Below Surface (S8) Depleted Below Dark Surface (A11) Redox Dark Surface (F6) Thin Dark Surface (S9) Thick Dark Surface (A12) Depleted Dark Surface (F7) Iron-Manganese Masses (F12) Sandy Mucky Mineral (S1) Redox Depressions (F8) Piedmont Floodplain Soils (F19) Sandy Gleyed Matrix (S4) Mesic Spodic (TA6) Sandy Redox (S5) Red Parent Material (F21) Stripped Matrix (S6) Very Shallow Dark Surface (TF12) Dark Surface (S7) Other (Explain in Remarks) Restrictive Layer (if observed): Type: Hydric Soil Present? Yes No Χ Depth (inches): Remarks:

Project/Site: Cider Solar Project	City/County: Oakfield/Ge	nessee Sampling Date: 9/28/2020				
Applicant/Owner: Hecate	State: NY Sampling Point:					
Investigator(s): Andrew Sorci	Section, Township, Range:	Section, Township, Range: 02_20200928_WL48_W2				
Landform (hillslope, terrace,etc.): Depression	Local relief (concave, convex,	none): <u>Concave</u> Slope (%) <u>0 - 5</u>				
Subregion (LRR or MLRA): LRR L	Lat: 43.089035 Long:	78.213860 Datum: NAD83				
Soil Map Unit Name: HIB		NWI Classification: PFO				
Are climatic / hyrologic conditions on the site t	ypical for this time of year? Yes X No	(if no, explain in Remarks.)				
Are Vegetation, Soil, or Hydrology	significantly disturbed? Are "Normal	Circumstances" present? Yes X No				
Are Vegetation, Soil, or Hydrology	naturally problematic? (if needed, exp	plain any answers in Remarks.)				
SUMMARY OF FINDINGS - Attach site map	showing sampling point locations, trai	sects, important features, etc.				
Hydrophytic Vegetation Present? Yes X	No Is the Sampled Are					
Hydric Soil Present? Yes X	within a Wetland?	Yes X No				
Wetland Hydrology Present? Yes X	No if yes, optional Wet	land Site ID: WL91				
Remarks: (Explain alternative procedures here or in a set						
HYDROLOGY						
Wetland Hydrology Indicators:		Secondary Indicators (minimum of two required)				
Primary Indicators (minimum of one is required: cl	neck all that apply)	Surface Soil Cracks (B6)				
Surface Water (A1)	Water-Stained Leaves (B9)	Drainage Patterns (B10)				
High Water Table (A2)	Aquatic Fauna (B13)	Moss Trim Lines (B16)				
Saturation (A3)	Marl Deposits (B15)	Dry-Season Water Table (C2)				
Water Marks (B1)	Hydrogen Sulfide Odor (C1)	Crayfish Burrows (C8)				
Sediment Deposits (B2)	Oxidized Rhizospheres on Living Roots (C3)	Saturation Visible in Aerial Imagery (C9)				
Drift Deposits (B3)	Presence of Reduced Iron (C4)	Stunted or Stressed Plants (D1)				
Algal Mat or Crust (B4)	Recent Iron Reduction in Tilled Soils (C6)	X Geomorphic Position (D2)				
Iron Deposits (B5)	Thin Muck Surface (C7)	Shallow Aquitard (D3)				
Inundation Visible on Aerial Imagery (B7)	Other (Explain in Remarks)	Microtopographic Relief (D4)				
Sparsley Vegetated Concave Surface (B8)		X FAC-Neutral Test (D5)				
Surface Water Present? Yes No X	Depth (inches)					
Water Table Present? Yes No X	- · · · · 	Hydrology Present? Yes X No				
Saturation Present? Yes No X	Depth (inches)					
Describe Recorded Data (stream gauge, monit	toring well, aerial photos, previous inspection	ns), if available:				
Remarks:						

VEGETATION - Use scientific names of plants Sampling Point: 02_20200928_WL48_W2 Absolute Dominant Indicator **Dominance Test Worksheet:** (Plot Size: 30'radius) % Cover Species? Status **Tree Stratum Number of Dominant Species** 40 Χ FAC That Are OBL, FACW, or FAC: (A) Acer rubrum Acer saccharinum 40 Χ **FACW Total Number of Dominant** = Total Cover 80 Species Across All Strata: (B) Percent of Dominant Species That Are OBL, FACW, or FAC: (A/B) 100% **Prevalence Index Worksheet:** 0 x 1 **OBL** species Absolute Dominant Indicator **FACW** species 75 150 (Plot Size: 15'radius) % Cover Species? x 2 **Shrub Stratum** Status **FAC** species 165 55 х3 Lindera benzoin 30 Χ **FACW** Acer rubrum 15 Χ FAC **FACU** species 0 x 4 0 5 Ulmus americana **FACW UPL** species 0 x 5 0 50 = Total Cover Column Totals 130 (A) 315 (B) Prevalence Index = B/A = 2.42 **Hydrophytic Vegetation Indicators:** Absolute Dominant Indicator 1- Rapid Test For Hydrophytic Vegetation **Herb Stratum** (Plot Size: 5'radius) % Cover Species? Status X 2- Dominance Test is > 50% X 3- Prevalence Index is =< 3.0 = Total Cover 4- Morphological Adaptations 5- Problematic Hydrophytic Vegetation **Definitions of Vegetation Strata:** Tree- Woody plants 3 in. (7.6cm) or more in diameter at breast height (DBH), regardless of height. Sapling/Shrub- Woody plants less than 3 in. DBH and greater than or equal to 3.28ft (1m) tall. Herb- All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28ft tall. Absolute Dominant Indicator Woody Vines- All woody vines greater than 3.28ft in (Plot Size: 30'radius) **Woody Vine Stratum** % Cover Species? Status height. = Total Cover Hydrophytic Vegetation Present? Yes X No ____ Remarks: (Include photo numbers here or on a separate sheet.)

SOIL Sampling Point: 02_20200928_WL48_W

Histosol (A1) Polyvalue Below Surface (B15) 2 cm Muck (A Histic Epipedon (A2) Thin Dark Surface (S9) Coast Prarie R Black Histic (A3) Loamy Mucky Mineral (F1) 5 cm Mucky P Hydrogen Sulfide (A4) Loamy Gleyed Matric (F2) Dark Surface (Stratified Layers (A5) Depleted Matrix (F3) Polyvalue Below Thick Dark Surface (A11) Redox Dark Surface (F6) Thin Dark Surface (F7) Iron-Mangane Sandy Mucky Mineral (S1) Redox Depressions (F8) Piedmont Flow Sandy Redox (S5) Stripped Matrix (S4) Stripped Matrix (S6) Dark Surface (S7) Restrictive Layer (if observed):	Sandy Loam M Sandy Loam Indicators for Problematic Soils: Below Surface (B15) Surface (S9) Coast Prarie Redox (A16) Locky Mineral (F1) Eyed Matric (F2) Dark Surface (S7) Matrix (F3) Polyvalue Below Surface (S8) Thin Dark Surface (S9) Iron-Manganese Masses (F12)	% Type L		100	Color 10YR 2/1	(inches 0-13		
Hydric Soil Indicators: Histosol (A1) Histic Epipedon (A2) Black Histic (A3) Hydrogen Sulfide (A4) Stratified Layers (A5) Depleted Below Dark Surface (A11) Thick Dark Surface (A12) Boeleted Below Dark Surface (A11) Thick Dark Surface (F6) Thin Dark Surface (F7) Depleted Dark Surface (F7) Sandy Mucky Mineral (S1) Sandy Mucky Mineral (S1) Redox Dark Surface (F7) Sandy Gleyed Matrix (S4) Sandy Gleyed Matrix (S4) Sandy Redox (S5) Stripped Matrix (S6) Dark Surface (F8) Hydric Soil Present? Yes	Sandy Loam M Sandy Loam Indicators for Problematic Soils: Below Surface (B15) Surface (S9) Lucky Mineral (F1) Eyed Matric (F2) Matrix (F3) Polyvalue Below Surface (S9) Locky Surface (F6) Dark Surface (S9) Iron-Manganese Masses (F12)			100	10YR 2/1	0-13		
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Hydric Soil Indicators: Histosol (A1) Polyvalue Below Surface (B15) 2 cm Muck (A Histic Epipedon (A2) Thin Dark Surface (S9) Coast Pratie R Black Histic (A3) Loamy Mucky Mineral (F1) 5 cm Mucky P Hydrogen Sulfide (A4) Loamy Gleyed Matric (F2) Dark Surface (Stratified Layers (A5) Depleted Matrix (F3) Polyvalue Belox Depleted Below Dark Surface (A11) Redox Dark Surface (F6) Thin Dark Surface (A12) Depleted Dark Surface (F7) Iron-Mangane Sandy Mucky Mineral (S1) Redox Depressions (F8) Piedmont Flot Sandy Gleyed Matrix (S4) Sandy Redox (S5) Red Parent M Stripped Matrix (S6) Dark Surface (S7) Restrictive Layer (if observed):	Indicators for Problematic Soils: Below Surface (B15)	30 C r	OYR 5/8	70	5Y 6/1	13-18		
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Histosol (A1) Histic Epipedon (A2) Black Histic (A3) Hydric Soil Present? Hydric Soil Present? Polyvalue Below Surface (B15) 2 cm Muck (A Thin Dark Surface (S9) Coast Prarie R Coast Prarie R Thin Dark Surface (S9) Loamy Mucky Mineral (F1) 5 cm Mucky P Loamy Gleyed Matric (F2) Dark Surface (S9) Loamy Mucky Mineral (F1) 5 cm Mucky P Dark Surface (F2) Dark Surface (F2) Dark Surface (F3) Thin Dark Surface (F6) Thin Dark Surface (F6) Thin Dark Surface (F7) Iron-Mangane Redox Depressions (F8) Piedmont Flort Mesic Spodic Red Parent M Stripped Matrix (S6) Dark Surface (S7) Restrictive Layer (if observed): Type: Hydric Soil Present? Yes	Below Surface (B15) Surface (S9) Coast Prarie Redox (A16) 5 cm Mucky Peat or Peat (S3) Polyvalue Below Surface (S7) Polyvalue Below Surface (S8) Thin Dark Surface (S9) Dark Surface (F7) Dark Surface (F7)							
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Stratified Layers (A5) Depleted Matrix (F3) Polyvalue Below Dark Surface (A11) Redox Dark Surface (F6) Thin Dark Surface (F7) Iron-Mangane Piedmont Floor Sandy Mucky Mineral (S1) Sandy Gleyed Matrix (S4) Sandy Redox (S5) Stripped Matrix (S6) Dark Surface (S7) Restrictive Layer (if observed): Type: Hydric Soil Present? Yes	Matrix (F3) Polyvalue Below Surface (S8) Thin Dark Surface (S9) Dark Surface (F7) Iron-Manganese Masses (F12)							
X Depleted Below Dark Surface (A11) Redox Dark Surface (F6) Thin Dark Surface (Thin Dark	Thin Dark Surface (S9) Dark Surface (F7) Iron-Manganese Masses (F12)	Loamy Gleyed Matric (F2)						
Thick Dark Surface (A12) Sandy Mucky Mineral (S1) Sandy Gleyed Matrix (S4) Sandy Redox (S5) Stripped Matrix (S6) Dark Surface (S7) Restrictive Layer (if observed): Type: Depleted Dark Surface (F7) Redox Depressions (F8) Piedmont Flow Mesic Spodic Red Parent M Very Shallow Other (Explain	Dark Surface (F7) Iron-Manganese Masses (F12)	Depleted M						
Sandy Mucky Mineral (S1) Sandy Gleyed Matrix (S4) Sandy Redox (S5) Stripped Matrix (S6) Dark Surface (S7) Redox Depressions (F8) Mesic Spodic Red Parent M Very Shallow Other (Explain Type: Hydric Soil Present? Yes		Redox Dark Surface (F6)						
Sandy Gleyed Matrix (S4) Sandy Redox (S5) Stripped Matrix (S6) Dark Surface (S7) Restrictive Layer (if observed): Type: Hydric Soil Present? Yes	pressions (F8) Piedmont Floodolain Soils (F10)	Depleted Dark Surface (F7)			k Dark Surfac	Thic		
Sandy Redox (S5) Stripped Matrix (S6) Dark Surface (S7) Restrictive Layer (if observed): Type: Hydric Soil Present? Yes	Teamont Hoodplain 30iis (113)	Redox Depr		neral (S1)	dy Mucky Mir	San		
Stripped Matrix (S6) Dark Surface (S7) Other (Explain Restrictive Layer (if observed): Type: Hydric Soil Present? Yes	Mesic Spodic (TA6)			trix (S4)	dy Gleyed Ma	San		
Dark Surface (S7) Restrictive Layer (if observed): Type: Hydric Soil Present? Yes	Red Parent Material (F21)				dy Redox (S5)	San		
Restrictive Layer (if observed): Type: Hydric Soil Present? Yes	Very Shallow Dark Surface (TF12)			S6)	oped Matrix (Stri		
Type: Hydric Soil Present? Yes	Other (Explain in Remarks)				k Surface (S7)	Dar		
				erved):	e Layer (if obse	Restrictiv		
Depth (inches):	Hydric Soil Present? Yes X No			Type:				
				ches):	Depth (in			
Remarks:						D a was a who		
Kemarks:					:	Kemarks		

Project/Site: Cider Solar Project	City/County: Elba/Genese	e Sampling Date: 7/22/2020
Applicant/Owner: Hecate		State: NY Sampling Point:
Investigator(s): Justin Ahn	Section, Township, Range:	02-20200722-WL-42-42W
Landform (hillslope, terrace,etc.): Depression	Local relief (concave, convex, r	none): <u>Concave</u> Slope (%) <u>0 - 1</u>
Subregion (LRR or MLRA): LRR L	Lat: 43.088885 Long: -7	8.214995 Datum: <u>NAD83</u>
Soil Map Unit Name: CaA		NWI Classification: PEM
Are climatic / hyrologic conditions on the site t	ypical for this time of year? Yes X No	(if no, explain in Remarks.)
Are Vegetation, Soil, or Hydrology	significantly disturbed? Are "Normal	Circumstances" present? Yes X No
Are Vegetation, Soil, or Hydrology	naturally problematic? (if needed, exp	lain any answers in Remarks.)
SUMMARY OF FINDINGS - Attach site map	showing sampling point locations, tran	sects. important features. etc.
Hydrophytic Vegetation Present? Yes X	No Is the Sampled Area	-
Hydric Soil Present? Yes X	No within a Wetland?	Yes X No
· —		land Site ID: WL91
Wetland Hydrology Present? Yes X Remarks: (Explain alternative procedures here or in a seg		
HYDROLOGY Wetland Hydrology Indicators:		Secondary Indicators (minimum of two required)
Primary Indicators (minimum of one is required: ch	neck all that apply)	Surface Soil Cracks (B6)
X Surface Water (A1)	Water-Stained Leaves (B9)	Drainage Patterns (B10)
High Water Table (A2)	X Aquatic Fauna (B13)	Moss Trim Lines (B16)
Saturation (A3)	Marl Deposits (B15)	Dry-Season Water Table (C2)
Water Marks (B1)	Hydrogen Sulfide Odor (C1)	Crayfish Burrows (C8)
Sediment Deposits (B2)	Oxidized Rhizospheres on Living Roots (C3)	Saturation Visible in Aerial Imagery (C9)
· · · · ·	Presence of Reduced Iron (C4)	
Drift Deposits (B3)		Stunted or Stressed Plants (D1)
Algal Mat or Crust (B4)	Recent Iron Reduction in Tilled Soils (C6)	Geomorphic Position (D2)
Iron Deposits (B5)	Thin Muck Surface (C7)	Shallow Aquitard (D3)
Inundation Visible on Aerial Imagery (B7)	Other (Explain in Remarks)	Microtopographic Relief (D4)
Sparsley Vegetated Concave Surface (B8)		FAC-Neutral Test (D5)
Surface Water Present? Yes X No	Depth (inches) 2	
Water Table Present? Yes No X	Depth (inches) Wetland H	Hydrology Present? Yes X No
Saturation Present? Yes No X	Depth (inches)	
Describe Recorded Data (stream gauge, monit	oring well, aerial photos, previous inspection	ns), if available:
Remarks:		
Tierra Tierra		

VEGETATION - Use scientific names of plants Sampling Point: 02-20200722-WL-42-42W Absolute Dominant Indicator **Dominance Test Worksheet:** (Plot Size: 30'radius) % Cover Species? Status **Tree Stratum Number of Dominant Species** That Are OBL, FACW, or FAC: (A) = Total Cover **Total Number of Dominant** Species Across All Strata: (B) 2 Percent of Dominant Species That Are OBL, FACW, or FAC: (A/B) 100% **Prevalence Index Worksheet:** 47 x 1 47 **OBL** species Absolute Dominant Indicator **FACW** species 60 120 (Plot Size: 15'radius) Status x 2 **Shrub Stratum** % Cover Species? FAC species 5 х3 15 = Total Cover FACU species 0 x 4 0 5 **UPL** species x 5 25 Column Totals 117 (A) 207 (B) Prevalence Index = B/A = 1.77 **Hydrophytic Vegetation Indicators:** Absolute Dominant Indicator X 1- Rapid Test For Hydrophytic Vegetation **Herb Stratum** (Plot Size: 5'radius) % Cover Species? Status X 2- Dominance Test is > 50% 40 Phalaris arundinacea **FACW** X 3- Prevalence Index is =< 3.0 20 Χ Cyperus esculentus **FACW** 4- Morphological Adaptations Eleocharis obtusa 15 OBL 10 OBL Glyceria striata 5- Problematic Hydrophytic Vegetation 10 OBL Asclepias incarnata Carex lupuliformis 10 OBL **Definitions of Vegetation Strata:** FAC Echinochloa crus-galli 5 Tree- Woody plants 3 in. (7.6cm) or more in diameter at Asclepias syriaca 5 UPL breast height (DBH), regardless of height. 2 OBL Alisma triviale 117 = Total Cover Sapling/Shrub- Woody plants less than 3 in. DBH and greater than or equal to 3.28ft (1m) tall. Herb- All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28ft tall. Absolute Dominant Indicator Woody Vines- All woody vines greater than 3.28ft in (Plot Size: 30'radius) **Woody Vine Stratum** % Cover Species? Status height. = Total Cover Hydrophytic Vegetation Present? Yes X No ____ Remarks: (Include photo numbers here or on a separate sheet.)

SOIL

Sampling Point: 02-20200722-WL-42-42W

Hydrogen Sulfide (A4) Stratified Layers (A5) Depleted Matrix (F3) Depleted Below Dark Surface (A11) Thick Dark Surface (A12) Sandy Mucky Mineral (S1) Sandy Gleyed Matrix (S4) Sandy Redox (S5) Stripped Matrix (S6) Loamy Gleyed Matrix (F2) Depleted Matrix (F2) Redox Dark Surface (F6) Thin Dark Surface (S9) Iron-Manganese Masses (P1) Piedmont Floodplain Soils Mesic Spodic (TA6) Red Parent Material (F21) Very Shallow Dark Surface		
Hydric Soil Indicators: Histosol (A1) Histic Epipedon (A2) Black Histic (A3) Hydrogen Sulfide (A4) Stratified Layers (A5) Depleted Below Dark Surface (A11) Thick Dark Surface (A12) Sandy Mucky Mineral (S1) Sandy Gleyed Matrix (S4) Sandy Redox (S5) Stripped Matrix (S6) Dark Surface (S7) Polyvalue Below Surface (B15) 2 cm Muck (A10) Coast Prarie Redox (A16) Coast Prarie Redox (A16) Coast Prarie Redox (A16) Depleted Below Dark Surface (F2) Dark Surface (F2) Dark Surface (F3) Thin Dark Surface (F6) Thin Dark Surface (A12) Depleted Dark Surface (F7) Redox Depressions (F8) Piedmont Floodplain Soils Mesic Spodic (TA6) Red Parent Material (F21) Very Shallow Dark Surface Other (Explain in Remarks	Matrix Redox Features	
Hydric Soil Indicators: Histosol (A1) Histic Epipedon (A2) Black Histic (A3) Hydrogen Sulfide (A4) Depleted Below Dark Surface (A11) Depleted Below Dark Surface (A11) Thick Dark Surface (A12) 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) Red Population Soils: Indicators for Problematic Soils: Indicators for Problematic Soils: 2 cm Muck (A10) 2 cm Muck (A10) Coast Prarie Redox (A16) 5 cm Mucky Peat or Peat Dark Surface (S7) Dark Surface (S7) Dark Surface (S7) Thin Dark Surface (S7) Iron-Manganese Masses (S9) Piedmont Floodplain Soils: Mesic Spodic (TA6) Sandy Redox (S5) Red Parent Material (F21) Stripped Matrix (S6) Dark Surface (S7) Other (Explain in Remarks)	Color % Color % Type Loc 1	Texture Remarks
Hydric Soil Indicators: Histosol (A1) Polyvalue Below Surface (B15) Histic Epipedon (A2) Black Histic (A3) Loamy Mucky Mineral (F1) Stratified Layers (A5) Depleted Below Dark Surface (F6) Thick Dark Surface (A12) Depleted Dark Surface (F7) Sandy Mucky Mineral (S1) Redox Dark Surface (F7) Thick Dark Surface (A12) Sandy Mucky Mineral (S1) Redox Depressions (F8) Mesic Spodic (TA6) Sandy Redox (S5) Sandy Redox (S5) Stripped Matrix (S6) Dark Surface (S7) Other (Explain in Remarks)	10YR 4/4 90 7.5YR 6/8 10 C PL Si	lt Loam
Histosol (A1) Polyvalue Below Surface (B15) Polyvalue Below Surface (B15) Polyvalue Below Surface (B15) Polyvalue Below Surface (B15) Polyvalue Below Surface (S9) Coast Prarie Redox (A16) Loamy Mucky Mineral (F1) Stratified Layers (A4) Depleted Matrix (F2) Dark Surface (S7) Stratified Layers (A5) Depleted Below Dark Surface (A11) Polyvalue Below Surface (F6) Thin Dark Surface (S9) Polyvalue Below Surface (S9) Thick Dark Surface (A12) Depleted Dark Surface (F7) Piedmont Floodplain Soils Sandy Mucky Mineral (S1) Redox Depressions (F8) Piedmont Floodplain Soils Mesic Spodic (TA6) Sandy Redox (S5) Stripped Matrix (S6) Dark Surface (S7) Other (Explain in Remarks)	LOYR 5/1 80 7.5YR 6/8 20 C M CI	ay Loam
Histosol (A1) Polyvalue Below Surface (B15) Phistic Epipedon (A2) Phin Dark Surface (S9) Coast Prarie Redox (A16) Scm Mucky Peat or Peat Dark Surface (S7) Polyvalue Below Surface (S7) Stratified Layers (A5) Depleted Below Dark Surface (A11) Polyvalue Below Surface (F6) Polyvalue Below Surface (S9) Polyvalue Below Surface (S9) Polyvalue Below Surface (S9) Polyvalue Below Surface (S9) Polyvalue Below Surface (F6) Pinin Dark Surface (S9) Piedmont Floodplain Soils Sandy Mucky Mineral (S1) Sandy Redox (S5) Sandy Redox (S5) Stripped Matrix (S6) Dark Surface (S7) Other (Explain in Remarks)		
Histosol (A1) Polyvalue Below Surface (B15) Thin Dark Surface (S9) Coast Prarie Redox (A16) Black Histic (A3) Loamy Mucky Mineral (F1) 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) Polyvalue Below Surface (F8) Thin Dark Surface (S9) Iron-Manganese Masses (P8) Mesic Spodic (TA6) Red Parent Material (F21) Very Shallow Dark Surface Other (Explain in Remarks)		
Histosol (A1) Polyvalue Below Surface (B15) Pistic Epipedon (A2) Polyvalue Below Surface (S9) Polyvalue Below Surface (S9) Coast Prarie Redox (A16) Black Histic (A3) Loamy Mucky Mineral (F1) Stratified Layers (A5) Depleted Below Dark Surface (A11) Polyvalue Below Surface (F2) Dark Surface (S7) Polyvalue Below Surface (S9) Polyvalue		
Histosol (A1) Polyvalue Below Surface (B15) Pistric Epipedon (A2) Polyvalue Below Surface (S9) Coast Prarie Redox (A16) Black Histic (A3) Loamy Mucky Mineral (F1) Stratified Layers (A5) Depleted Below Dark Surface (A11) Thin Dark Surface (F6) Thick Dark Surface (A12) Sandy Mucky Mineral (S1) Polyvalue Below Surface (F7) Redox Dark Surface (F7) Piedmont Floodplain Soils Sandy Gleyed Matrix (S4) Sandy Redox (S5) Stripped Matrix (S6) Dark Surface (S7) Other (Explain in Remarks)		
Histosol (A1) Polyvalue Below Surface (B15) Polyvalue Below Surface (B15) Polyvalue Below Surface (B15) Polyvalue Below Surface (B15) Polyvalue Below Surface (S9) Coast Prarie Redox (A16) Coast Prarie Redox (A16) Som Mucky Peat or Peat Loamy Gleyed Matric (F2) Dark Surface (S7) Stratified Layers (A5) Depleted Below Dark Surface (A11) Polyvalue Below Surface (F3) Polyvalue Below Surface (S9) Polyvalue Below Surface (S9) Polyvalue Below Surface (S9) Polyvalue Below Surface (F3)	Indicators:	Indicators for Problematic Soils:
Histic Epipedon (A2) Black Histic (A3) Hydrogen Sulfide (A4) Depleted Layers (A5) Thin Dark Surface (F2) Depleted Below Dark Surface (A11) Thick Dark Surface (A12) Sandy Mucky Mineral (S1) Sandy Gleyed Matrix (S4) Sandy Redox (S5) Dark Surface (S7) Thin Dark Surface (F8) Depleted Dark Surface (F7) Redox Depressions (F8) Mesic Spodic (TA6) Red Parent Material (F21) Stripped Matrix (S6) Dark Surface (S7) Other (Explain in Remarks)		
Black Histic (A3) Hydrogen Sulfide (A4) Loamy Gleyed Matric (F2) Dark Surface (S7) 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) Loamy Mucky Mineral (F1) Dark Surface (S7) Polyvalue Below Surface (F6) Thin Dark Surface (S9) Iron-Manganese Masses (P7) Mesic Spodic (TA6) Redox Depressions (F8) Piedmont Floodplain Soils Mesic Spodic (TA6) Red Parent Material (F21) Very Shallow Dark Surface Other (Explain in Remarks		
Hydrogen Sulfide (A4) Stratified Layers (A5) Depleted Matrix (F3) 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) Loamy Gleyed Matrix (F3) Polyvalue Below Surface (S9) Thin Dark Surface (S9) Iron-Manganese Masses (Piedmont Floodplain Soils Redox Depressions (F8) Piedmont Floodplain Soils Mesic Spodic (TA6) Red Parent Material (F21) Very Shallow Dark Surface Other (Explain in Remarks)		
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 (A11) Redox Dark Surface (F6) Redox Depressions (F8) Piedmont Floodplain Soils Mesic Spodic (TA6) Red Parent Material (F21) Very Shallow Dark Surface Other (Explain in Remarks)		
Thick Dark Surface (A12) Sandy Mucky Mineral (S1) Sandy Gleyed Matrix (S4) Sandy Redox (S5) Stripped Matrix (S6) Dark Surface (S7) Depleted Dark Surface (F7) Redox Depressions (F8) Piedmont Floodplain Soils Mesic Spodic (TA6) Red Parent Material (F21) Very Shallow Dark Surface Other (Explain in Remarks)	fied Layers (A5) X Depleted Matrix (F3)	Polyvalue Below Surface (S8)
Sandy Mucky Mineral (S1) Sandy Gleyed Matrix (S4) Sandy Redox (S5) Stripped Matrix (S6) Dark Surface (S7) Redox Depressions (F8) Piedmont Floodplain Soils Mesic Spodic (TA6) Red Parent Material (F21) Very Shallow Dark Surface Other (Explain in Remarks)		
Sandy Gleyed Matrix (S4) Sandy Redox (S5) Stripped Matrix (S6) Dark Surface (S7) Mesic Spodic (TA6) Red Parent Material (F21) Very Shallow Dark Surface Other (Explain in Remarks)		
Sandy Redox (S5) Stripped Matrix (S6) Dark Surface (S7) Red Parent Material (F21) Very Shallow Dark Surface Other (Explain in Remarks	/ Mucky Mineral (S1) Redox Depressions (F8)	Piedmont Floodplain Soils (F19)
Stripped Matrix (S6) Dark Surface (S7) Other (Explain in Remarks)	Gleyed Matrix (S4)	Mesic Spodic (TA6)
Dark Surface (S7) Other (Explain in Remarks		Red Parent Material (F21)
	ped Matrix (S6)	Very Shallow Dark Surface (TF12)
Restrictive Layer (if observed):		Other (Explain in Remarks)
	Layer (if observed):	
Type: Hydric Soil Present? Yes X No	Туре:	Hydric Soil Present? Yes X No
Depth (inches):	Depth (inches):	
Remarks:		

Project/Site: Cider Solar Project	City/Co	ounty: Elba/Genesee	Sampling Date: 7/23/2020
Applicant/Owner: Hecate	-	S	tate: NY Sampling Point:
Investigator(s): Justin Ahn	Section	n, Township, Range:	02-20200723-WL-45-45W
Landform (hillslope, terrace,etc.): Depression	Local relie	f (concave, convex, no	one): <u>Concave</u> Slope (%) <u>0 - 1</u>
Subregion (LRR or MLRA): LRR L	Lat: 43.090341	Long: <u>-</u> 78.	209459 Datum: <u>NAD83</u>
Soil Map Unit Name: CaA			NWI Classification: PEM
Are climatic / hyrologic conditions on the site ty	pical for this time of yea	ar? Yes X No	(if no, explain in Remarks.)
Are Vegetation, Soil, or Hydrology	significantly disturb	bed? Are "Normal C	ircumstances" present? Yes X No
Are Vegetation, Soil, or Hydrology	naturally problema	atic? (if needed, expla	iin any answers in Remarks.)
SUMMARY OF FINDINGS - Attach site map	showing sampling po	oint locations, trans	ects, important features, etc.
Hydrophytic Vegetation Present? Yes X		Is the Sampled Area	,po
Hydric Soil Present? Yes X	No	within a Wetland?	Yes X No
•		if yes, optional Wetla	
		Ti yes, optional wetta	11d Site 15. 4VES 1
Remarks: (Explain alternative procedures here or in a sepa	rate report.)		
HYDROLOGY			
Wetland Hydrology Indicators:		<u>-</u>	Secondary Indicators (minimum of two required)
Primary Indicators (minimum of one is required: che			Surface Soil Cracks (B6)
X Surface Water (A1)	Water-Stained Leaves	(B9)	Drainage Patterns (B10)
High Water Table (A2)	Aquatic Fauna (B13)	-	Moss Trim Lines (B16)
X Saturation (A3)	Marl Deposits (B15)	-	Dry-Season Water Table (C2)
Water Marks (B1)	Hydrogen Sulfide Odo	r (C1)	Crayfish Burrows (C8)
Sediment Deposits (B2)	X Oxidized Rhizospheres	s on Living Roots (C3)	Saturation Visible in Aerial Imagery (C9)
Drift Deposits (B3)	Presence of Reduced I	Iron (C4)	Stunted or Stressed Plants (D1)
Algal Mat or Crust (B4)	Recent Iron Reduction	n in Tilled Soils (C6)	Geomorphic Position (D2)
Iron Deposits (B5)	Thin Muck Surface (C7	7)	Shallow Aquitard (D3)
Inundation Visible on Aerial Imagery (B7)	Other (Explain in Rem	arks)	Microtopographic Relief (D4)
Sparsley Vegetated Concave Surface (B8)		-	FAC-Neutral Test (D5)
Surface Water Present? Yes X No	Depth (inches) 1	_	
Water Table Present? Yes No X	Depth (inches)	- Wetland Hy	drology Present? Yes X No
		- VVetidita iii	Autology Present: Pes X No
		-	
Describe Recorded Data (stream gauge, monito	oring well, aerial photos	, previous inspections), if available:
Remarks:			

VEGETATION - Use scientific names of plants Sampling Point: 02-20200723-WL-45-45W Absolute Dominant Indicator **Dominance Test Worksheet:** (Plot Size: 30'radius) % Cover Species? Status **Tree Stratum Number of Dominant Species** That Are OBL, FACW, or FAC: (A) = Total Cover **Total Number of Dominant** Species Across All Strata: (B) 1 Percent of Dominant Species That Are OBL, FACW, or FAC: (A/B) 100% **Prevalence Index Worksheet:** 15 **OBL** species 15 x 1 Absolute Dominant Indicator **FACW** species 100 200 (Plot Size: 15'radius) Status x 2 **Shrub Stratum** % Cover Species? FAC species 0 х3 = Total Cover FACU species 0 x 4 0 **UPL** species 0 x 5 0 Column Totals 115 (A) 215 (B) Prevalence Index = B/A = 1.87 **Hydrophytic Vegetation Indicators:** Absolute Dominant Indicator X 1- Rapid Test For Hydrophytic Vegetation **Herb Stratum** (Plot Size: 5'radius) % Cover Species? Status X 2- Dominance Test is > 50% 75 Phalaris arundinacea Х **FACW** X 3- Prevalence Index is =< 3.0 Carex alopecoidea 10 **FACW** 4- Morphological Adaptations Cyperus esculentus 10 **FACW** Carex lupuliformis 5 OBL 5- Problematic Hydrophytic Vegetation Carex cristatella 5 **FACW** Asclepias incarnata 5 OBL **Definitions of Vegetation Strata:** Typha angustifolia 5 OBL Tree- Woody plants 3 in. (7.6cm) or more in diameter at 115 = Total Cover breast height (DBH), regardless of height. Sapling/Shrub- Woody plants less than 3 in. DBH and greater than or equal to 3.28ft (1m) tall. Herb- All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28ft tall. Absolute Dominant Indicator Woody Vines- All woody vines greater than 3.28ft in (Plot Size: 30'radius) **Woody Vine Stratum** % Cover Species? Status height. = Total Cover Hydrophytic Vegetation Present? Yes X No ____ Remarks: (Include photo numbers here or on a separate sheet.)

SOIL Sampling Point: 02-20200723-WL-45-45W

Depth	Matrix	-			Redo	x Featui	res	
(inches	Color	%	Color	%	Type	Loc	Texture	Remarks
0-20	10YR 4/2	80	10YR 6/6	20	С	M	Clay Loam	
Hydric So	oil Indicators:							Indicators for Problematic Soils:
Hist	tosol (A1)				Polyvalu	e Below S	Surface (B15)	2 cm Muck (A10)
Hist	tic Epipedon (A2)			Thin Dar	k Surface	(S9)	Coast Prarie Redox (A16)
Blac	ck Histic (A3)			X	Loamy N	1ucky Mir	neral (F1)	5 cm Mucky Peat or Peat (S3)
Нус	drogen Sulfide	(A4)			Loamy G	leyed Ma	atric (F2)	Dark Surface (S7)
	atified Layers (-	d Matrix (•	Polyvalue Below Surface (S8)
	oleted Below [ark Surfa		Thin Dark Surface (S9)
	ck Dark Surfac						rface (F7)	Iron-Manganese Masses (F12)
	idy Mucky Mir				Redox D	epression	ns (F8)	Piedmont Floodplain Soils (F19)
	idy Gleyed Ma	-)					Mesic Spodic (TA6)
	idy Redox (S5)							Red Parent Material (F21)
	pped Matrix (Very Shallow Dark Surface (TF12)
Dar	k Surface (S7)							Other (Explain in Remarks)
Restrictiv	ve Layer (if obse	erved):						
		Type:					Hydric	: Soil Present? Yes X No
	Depth (in	ches):					,	<u> </u>
Remarks	5:							

Project/Site: Cider Solar Project	City/County: Elba/Genese	e Sampling Date: 7/23/2020
Applicant/Owner: Hecate		State: NY Sampling Point:
Investigator(s): Justin Ahn	Section, Township, Range:	02-20200723-WL-46-46W
Landform (hillslope, terrace,etc.): Depression	Local relief (concave, convex, r	none): <u>Concave</u> Slope (%) <u>0 - 1</u>
Subregion (LRR or MLRA): LRR L	Lat: 43.090287 Long:7	78.209451 Datum: NAD83
Soil Map Unit Name: <u>CaA</u>		NWI Classification: PFO
Are climatic / hyrologic conditions on the site ty	ypical for this time of year? Yes X No	(if no, explain in Remarks.)
Are Vegetation, Soil, or Hydrology	significantly disturbed? Are "Normal of the control	Circumstances" present? Yes X No
Are Vegetation, Soil, or Hydrology	naturally problematic? (if needed, exp	lain any answers in Remarks.)
SUMMARY OF FINDINGS - Attach site map	showing sampling point locations, tran	sects, important features, etc.
Hydrophytic Vegetation Present? Yes X	No Is the Sampled Area	-
Hydric Soil Present? Yes X	No within a Wetland?	Yes X No
Wetland Hydrology Present? Yes X		and Site ID: WL91
		<u> </u>
Remarks: (Explain alternative procedures here or in a sep	arate report.)	
HYDROLOGY		
Wetland Hydrology Indicators:		Secondary Indicators (minimum of two required)
Primary Indicators (minimum of one is required: ch	eck all that apply)	Surface Soil Cracks (B6)
X Surface Water (A1)	X Water-Stained Leaves (B9)	Drainage Patterns (B10)
High Water Table (A2)	Aquatic Fauna (B13)	X Moss Trim Lines (B16)
X Saturation (A3)	Marl Deposits (B15)	Dry-Season Water Table (C2)
Water Marks (B1)	Hydrogen Sulfide Odor (C1)	Crayfish Burrows (C8)
Sediment Deposits (B2)	Oxidized Rhizospheres on Living Roots (C3)	Saturation Visible in Aerial Imagery (C9)
Drift Deposits (B3)	Presence of Reduced Iron (C4)	Stunted or Stressed Plants (D1)
Algal Mat or Crust (B4)	Recent Iron Reduction in Tilled Soils (C6)	Geomorphic Position (D2)
Iron Deposits (B5)	Thin Muck Surface (C7)	Shallow Aquitard (D3)
Inundation Visible on Aerial Imagery (B7)	Other (Explain in Remarks)	Microtopographic Relief (D4)
Sparsley Vegetated Concave Surface (B8)	Carlo (Explain in thematica)	FAC-Neutral Test (D5)
		The Neutral Test (53)
Surface Water Present? Yes X No	Depth (inches) 2	
Water Table Present? Yes NoX	Depth (inches) Wetland F	Hydrology Present? Yes X No
Saturation Present? Yes X No	Depth (inches) 0	
Describe Recorded Data (stream gauge, monit	oring well, aerial photos, previous inspection	ns), if available:
Remarks:		

VEGETATION - Use scientific names of plants Sampling Point: 02-20200723-WL-46-46W Absolute Dominant Indicator **Dominance Test Worksheet:** (Plot Size: 30'radius) % Cover Species? Status **Tree Stratum Number of Dominant Species** Χ **FACW** That Are OBL, FACW, or FAC: (A) Fraxinus pennsylvanica 40 = Total Cover **Total Number of Dominant** (B) Species Across All Strata: 3 Percent of Dominant Species That Are OBL, FACW, or FAC: (A/B) 100% **Prevalence Index Worksheet:** 50 x 1 50 **OBL** species Absolute Dominant Indicator **FACW** species 60 120 (Plot Size: 15'radius) Status x 2 **Shrub Stratum** % Cover Species? **FAC** species 0 х3 = Total Cover **FACU** species 0 x 4 0 **UPL** species 0 x 5 0 Column Totals 110 (A) 170 (B) Prevalence Index = B/A = 1.55 **Hydrophytic Vegetation Indicators:** Absolute Dominant Indicator X 1- Rapid Test For Hydrophytic Vegetation **Herb Stratum** (Plot Size: 5'radius) % Cover Species? Status X 2- Dominance Test is > 50% 20 Phalaris arundinacea Χ **FACW** X 3- Prevalence Index is =< 3.0 Χ OBL Typha angustifolia 20 4- Morphological Adaptations Carex lupuliformis 10 OBL Eleocharis obtusa 10 OBL 5- Problematic Hydrophytic Vegetation Juncus articulatus 5 OBL Alisma subcordatum 5 OBL **Definitions of Vegetation Strata:** 70 = Total Cover Tree- Woody plants 3 in. (7.6cm) or more in diameter at breast height (DBH), regardless of height. Sapling/Shrub- Woody plants less than 3 in. DBH and greater than or equal to 3.28ft (1m) tall. Herb- All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28ft tall. Absolute Dominant Indicator Woody Vines- All woody vines greater than 3.28ft in (Plot Size: 30'radius) **Woody Vine Stratum** % Cover Species? Status height. = Total Cover Hydrophytic Vegetation Present? Yes X No ____ Remarks: (Include photo numbers here or on a separate sheet.)

SOIL Sampling Point: 02-20200723-WL-46-46W

								Jamping 1 Ont. 02-20200723-WL-40-40		
Depth	Matrix	(Redo	ox Featur	es			
(inches	Color	%	Color	%	Type	Loc	Texture	Remarks		
0-6	10YR 4/2	100					Clay Loam			
6-24	10YR 4/2	90	7.5YR 4/6	10	С	PL	Clay			
-	oil Indicators:				Dobaralu	o Polovi S	urface (B15)	Indicators for Problematic Soils:		
	tosol (A1) tic Epipedon ((42)			-	k Surface		2 cm Muck (A10) Coast Prarie Redox (A16)		
	ck Histic (A3)					Aucky Mir		5 cm Mucky Peat or Peat (S3)		
	drogen Sulfide				-	ileyed Ma		Dark Surface (S7)		
	atified Layers					d Matrix (I		Polyvalue Below Surface (S8)		
	-		rface (A11)		-	ark Surfac	•	Thin Dark Surface (S9)		
	Depleted Below Dark Surface (A11) Thick Dark Surface (A12)			Depleted Dark Surface (F7)				Iron-Manganese Masses (F12)		
	ndy Mucky Mi				-	epression		Piedmont Floodplain Soils (F19)		
	ndy Gleyed Ma					•	, ,	Mesic Spodic (TA6)		
Sar	ndy Redox (S5)						Red Parent Material (F21)		
Str	ipped Matrix ((S6)						Very Shallow Dark Surface (TF12)		
Dai	rk Surface (S7))						Other (Explain in Remarks)		
Restricti	ve Layer (if obs									
		Type:					Hydric S	Soil Present? Yes X No		
	Depth (ir	nches):								
Remark	S:									

Project/Site: Cider Solar Project	City/County:	Elba/Genesee	Sampling Date: _7/22/2020
Applicant/Owner: Hecate		State: NY	Sampling Point:02-20200722
Investigator(s): Justin Ahn	Section, Town	ship, Range:	WL-42-42U
Landform (hillslope, terrace,etc.): Toeslope	Local relief (conca	ve, convex, none): <u>Linea</u>	r Slope (%) <u>1 - 5</u>
Subregion (LRR or MLRA): LRR L	Lat: <u>43.088844</u>	Long: <u>-78.215014</u>	Datum: NAD83
Soil Map Unit Name: CaA		NWI Class	sification: UPL
Are climatic / hyrologic conditions on the sit	e typical for this time of year? Yes	X No (if no	, explain in Remarks.)
Are Vegetation, Soil, or Hydrolo	gysignificantly disturbed?	Are "Normal Circumstance	s" present? Yes X No
Are Vegetation, Soil, or Hydrolo	gynaturally problematic? (if needed, explain any answe	ers in Remarks.)
SLIMMARY OF FINDINGS - Attach site m	an showing sampling point loc	ations transects impo	rtant features etc
			realit reatal est etc.
	within	•	Yes No X
· —		entional Wotland Site ID:	
		ptional Wetland Site ID.	
Remarks: (Explain alternative procedures here or in a	separate report.)		
HYDROLOGY			
Wetland Hydrology Indicators:		Secondary Inc	dicators (minimum of two required)
Primary Indicators (minimum of one is required	check all that apply)	Surface	Soil Cracks (B6)
Surface Water (A1)	Water-Stained Leaves (B9)	Drainag	e Patterns (B10)
High Water Table (A2)	Aquatic Fauna (B13)	Moss Tr	im Lines (B16)
Saturation (A3)	Marl Deposits (B15)	Dry-Sea	son Water Table (C2)
Water Marks (B1)	Hydrogen Sulfide Odor (C1)	 Crayfish	Burrows (C8)
		 ·	
' ' '		· · · <u>——</u>	
			
		` '	•
			
	Other (Explain in Remarks)		
Sparsley Vegetated Concave Surface (B8)		FAC-Nei	utral Test (D5)
Surface Water Present? Yes No	C Depth (inches)		
Water Table Present? Yes No	(Depth (inches)	Wetland Hydrology Pre	esent? Yes No X
Saturation Present? Yes No	(Depth (inches)		
Describe Recorded Data (stream gauge mo	nitoring well aerial photos previo	us inspections) if available	٥٠
Describe Recorded Data (Stream Badge, mo	meeting well, derial priotos, previo	us mspections), it available	.
Investigator(s): Justin Ahn Section, Township, Range: WL-42-42U Landform (hillslope, terrace,etc.): Toeslope Local relief (concave, convex, none): Linear Slope (%) 1-5 Subregion (LRR or MLRA): LRR L Lat: 43.088844 Long:78.215014 Datum: NAD83 Soil Map Unit Name: CaA NHYdrology Significantly disturbed? Are Vegetation, Soil, or Hydrology Significantly disturbed? Are "Normal Circumstances" present? Yes X No Are Vegetation, Soil, or Hydrology anaturally problematic? (if needed, explain any answers in Remarks.) SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc. Hydrology Findings - Attach site map showing sampling point locations, transects, important features, etc. Hydrology Fresent? Yes No X Is the Sampled Area within a Wetland? Yes No X Wetland Hydrology Present? Yes No X If yes, optional Wetland? Yes No X Surface Nate Hydrology Indicators: Primary Indicators (minimum of one is required: check all that apply) Surface Soil Cracks (B6) Surface Water (A1) Water-Stained Leaves (B9) Drainage Patterns (B10) High Water Table (A2) Aquatic Fauna (B13) Moss Trim Lines (B16) Saturation (A3) Marl Deposits (B15) Dry-Season Water Table (C2) Water Marks (B1) Hydrogen Sulfide Odor (C1) Crayfish Burrows (C8) Sediment Deposits (B2) Oxidized Rhizospheres on Living Roots (C3) Saturation Visible in Aerial Imagery (C9) Drift Deposits (B3) Presence of Reduced Iron (C4) Stunted or Stressed Plants (D1) Alagl Mat or Crust (B4) Recent Iron Reduction in Tilled Soils (C6) Geomorphic Position (D2) Inundation Visible on Aerial Imagery (B7) Other (Explain in Remarks) Metal Hydrology Present? Yes No X Depth (inches) Water Present? Yes No X Depth (inches) Wetland Hydrology Present? Yes No No X Depth (inches)			

VEGETATION - Use scientific names of plants Sampling Point: 02-20200722-WL-42-42U Absolute Dominant Indicator **Dominance Test Worksheet:** (Plot Size: 30'radius) % Cover Species? Status **Tree Stratum Number of Dominant Species** That Are OBL, FACW, or FAC: (A) = Total Cover **Total Number of Dominant** Species Across All Strata: (B) 2 Percent of Dominant Species (A/B) That Are OBL, FACW, or FAC: 50% **Prevalence Index Worksheet:** x 1 0 OBL species Absolute Dominant Indicator **FACW** species 50 x 2 100 (Plot Size: 15'radius) % Cover Species? Status **Shrub Stratum** FAC species 0 х3 = Total Cover FACU species 30 x 4 120 5 **UPL** species x 5 25 Column Totals 85 (A) 245 (B) Prevalence Index = B/A = 2.88 **Hydrophytic Vegetation Indicators:** Absolute Dominant Indicator 1- Rapid Test For Hydrophytic Vegetation **Herb Stratum** (Plot Size: 5'radius) % Cover Species? Status 2- Dominance Test is > 50% 40 Phalaris arundinacea **FACW** X 3- Prevalence Index is =< 3.0 20 Χ FACU Trifolium pratense 4- Morphological Adaptations Symphyotrichum lanceolatum 10 **FACW** Trifolium repens 5 **FACU** 5- Problematic Hydrophytic Vegetation **FACU** Erigeron strigosus Daucus carota 5 UPI **Definitions of Vegetation Strata:** 85 = Total Cover Tree- Woody plants 3 in. (7.6cm) or more in diameter at breast height (DBH), regardless of height. Sapling/Shrub- Woody plants less than 3 in. DBH and greater than or equal to 3.28ft (1m) tall. Herb- All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28ft tall. Absolute Dominant Indicator Woody Vines- All woody vines greater than 3.28ft in (Plot Size: 30'radius) Status **Woody Vine Stratum** % Cover Species? height. = Total Cover Hydrophytic Vegetation Present? Yes ____ No __X Remarks: (Include photo numbers here or on a separate sheet.) disturbed, farm land

SOIL Sampling Point: 02-20200722-WL-42-42U Depth Matrix **Redox Features** (inches % Color Color % Type Texture Remarks Loc 0-20 10YR 4/6 100 Clay Loam **Hydric Soil Indicators:** Indicators for Problematic Soils: Histosol (A1) Polyvalue Below Surface (B15) 2 cm Muck (A10) Histic Epipedon (A2) Thin Dark Surface (S9) Coast Prarie Redox (A16) Black Histic (A3) Loamy Mucky Mineral (F1) 5 cm Mucky Peat or Peat (S3) Hydrogen Sulfide (A4) Loamy Gleyed Matric (F2) Dark Surface (S7) Stratified Layers (A5) Depleted Matrix (F3) Polyvalue Below Surface (S8) Depleted Below Dark Surface (A11) Redox Dark Surface (F6) Thin Dark Surface (S9) Thick Dark Surface (A12) Depleted Dark Surface (F7) Iron-Manganese Masses (F12) Sandy Mucky Mineral (S1) Redox Depressions (F8) Piedmont Floodplain Soils (F19) Sandy Gleyed Matrix (S4) Mesic Spodic (TA6) Sandy Redox (S5) Red Parent Material (F21) Stripped Matrix (S6) Very Shallow Dark Surface (TF12) Dark Surface (S7) Other (Explain in Remarks) Restrictive Layer (if observed): Type: Hydric Soil Present? Yes No Χ Depth (inches): Remarks:

Project/Site: Cider Solar Project	City/County: Elba/Genese	e Sampling Date: 7/23/2020
Applicant/Owner: Hecate		State: NY Sampling Point:02-20200723
Investigator(s): Justin Ahn	Section, Township, Range:	WL-46-46U
Landform (hillslope, terrace,etc.): <u>Toeslope</u>	Local relief (concave, convex, r	none): <u>Linear</u> Slope (%) <u>1 - 5</u>
Subregion (LRR or MLRA): LRR L	Lat:43.090605 Long: -7	8.209463 Datum: <u>NAD83</u>
Soil Map Unit Name: CaA		NWI Classification: UPL
Are climatic / hyrologic conditions on the site	e typical for this time of year? Yes X No	(if no, explain in Remarks.)
Are Vegetation, Soil, or Hydrolog	gy significantly disturbed? Are "Normal	Circumstances" present? Yes X No
Are Vegetation, Soil, or Hydrolog	gynaturally problematic? (if needed, exp	lain any answers in Remarks.)
SLIMMARY OF FINDINGS - Attach site m	ap showing sampling point locations, tran	sects important features etc
Hydrophytic Vegetation Present? Yes	No X Is the Sampled Area	-
Hydric Soil Present? Yes	No X within a Wetland?	Yes No X
· —		
Wetland Hydrology Present? Yes		
Remarks: (Explain alternative procedures here or in a	separate report.)	
HYDROLOGY		
Wetland Hydrology Indicators:		Secondary Indicators (minimum of two required)
Primary Indicators (minimum of one is required:	check all that apply)	Surface Soil Cracks (B6)
Surface Water (A1)	Water-Stained Leaves (B9)	Drainage Patterns (B10)
High Water Table (A2)	Aquatic Fauna (B13)	Moss Trim Lines (B16)
Saturation (A3)	Marl Deposits (B15)	Dry-Season Water Table (C2)
Water Marks (B1)	Hydrogen Sulfide Odor (C1)	Crayfish Burrows (C8)
Sediment Deposits (B2)	Oxidized Rhizospheres on Living Roots (C3)	Saturation Visible in Aerial Imagery (C9)
Drift Deposits (B3)	Presence of Reduced Iron (C4)	Stunted or Stressed Plants (D1)
Algal Mat or Crust (B4)	Recent Iron Reduction in Tilled Soils (C6)	Geomorphic Position (D2)
Iron Deposits (B5)	Thin Muck Surface (C7)	Shallow Aquitard (D3)
Inundation Visible on Aerial Imagery (B7)		Microtopographic Relief (D4)
	Other (Explain in Remarks)	
Sparsley Vegetated Concave Surface (B8)		FAC-Neutral Test (D5)
Surface Water Present? Yes NoX	(Depth (inches)	
Water Table Present? Yes No X	(Depth (inches) Wetland H	Hydrology Present? Yes No X
Saturation Present? Yes No X	(Depth (inches)	
Describe Recorded Data (stream gauge, mor	nitoring well, aerial photos, previous inspection	us) if available:
Describe Recorded Data (stream gauge, mor	micorning well, derial priocos, previous inspection	sy, ii available.
Remarks:		

VEGETATION - Use scientific names of plants Sampling Point: 02-20200723-WL-46-46U Absolute Dominant Indicator **Dominance Test Worksheet:** (Plot Size: 30'radius) % Cover Species? Status **Tree Stratum Number of Dominant Species** That Are OBL, FACW, or FAC: (A) = Total Cover **Total Number of Dominant** Species Across All Strata: (B) 2 Percent of Dominant Species 50% (A/B) That Are OBL, FACW, or FAC: **Prevalence Index Worksheet:** x 1 0 **OBL** species Absolute Dominant Indicator **FACW** species 30 60 (Plot Size: 15'radius) % Cover Status x 2 **Shrub Stratum** Species? FAC species 0 х3 = Total Cover FACU species 47 x 4 188 **UPL** species 5 x 5 25 Column Totals 82 (A) 273 (B) Prevalence Index = B/A = 3.33 **Hydrophytic Vegetation Indicators:** Absolute Dominant Indicator 1- Rapid Test For Hydrophytic Vegetation **Herb Stratum** (Plot Size: 5'radius) % Cover Species? Status 2- Dominance Test is > 50% 30 Phalaris arundinacea **FACW** 3- Prevalence Index is =< 3.0 20 Χ Trifolium pratense **FACU** 4- Morphological Adaptations Trifolium repens 10 **FACU** Ambrosia artemisiifolia 10 **FACU** 5- Problematic Hydrophytic Vegetation 5 UPL Daucus carota Erigeron strigosus 5 **FACU Definitions of Vegetation Strata: FACU** Scorzoneroides autumnalis 2 Tree- Woody plants 3 in. (7.6cm) or more in diameter at 82 = Total Cover breast height (DBH), regardless of height. Sapling/Shrub- Woody plants less than 3 in. DBH and greater than or equal to 3.28ft (1m) tall. Herb- All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28ft tall. Absolute Dominant Indicator Woody Vines- All woody vines greater than 3.28ft in (Plot Size: 30'radius) **Woody Vine Stratum** % Cover Species? Status height. = Total Cover Hydrophytic Vegetation Present? Yes ____ No __X Remarks: (Include photo numbers here or on a separate sheet.)

SOIL Sampling Point: 02-20200723-WL-46-46U Depth Matrix **Redox Features** (inches Color % Color % Type Loc Texture Remarks 0-12 10YR 4/6 100 Silty Clay Loam 12-20 10YR 4/6 95 7.5YR 5/8 5 С PLSilty Clay Loam Hydric Soil Indicate

Hydric Soil Indicators:		indicators for Problematic Soils:
Histosol (A1)	Polyvalue Below Surface (B15)	2 cm Muck (A10)
Histic Epipedon (A2)	Thin Dark Surface (S9)	Coast Prarie Redox (A16)
Black Histic (A3)	Loamy Mucky Mineral (F1)	5 cm Mucky Peat or Peat (S3)
Hydrogen Sulfide (A4)	Loamy Gleyed Matric (F2)	Dark Surface (S7)
Stratified Layers (A5)	Depleted Matrix (F3)	Polyvalue Below Surface (S8)
Depleted Below Dark Surface (A11)	Redox Dark Surface (F6)	Thin Dark Surface (S9)
Thick Dark Surface (A12)	Depleted Dark Surface (F7)	Iron-Manganese Masses (F12)
Sandy Mucky Mineral (S1)	Redox Depressions (F8)	Piedmont Floodplain Soils (F19)
Sandy Gleyed Matrix (S4)		Mesic Spodic (TA6)
Sandy Redox (S5)		Red Parent Material (F21)
Stripped Matrix (S6)		Very Shallow Dark Surface (TF12)
Dark Surface (S7)		Other (Explain in Remarks)
Restrictive Layer (if observed):		
Туре:		Hydric Soil Present? Yes No X
Depth (inches):		

Remarks:

Project/Site: Cider Solar Project	City/County: Elba/Genes	see Sampling Date: 7/23/2020
Applicant/Owner: Hecate		State: NYSampling Point:02-20200723
Investigator(s): Justin Ahn	Section, Township, Range	e: WL-45-45U
Landform (hillslope, terrace,etc.): Toeslope	Local relief (concave, convex	, none): <u>Linear</u> Slope (%) <u>1 - 5</u>
Subregion (LRR or MLRA): LRR L	Lat: 43.090158 Long:	-78.210171 Datum: NAD83
Soil Map Unit Name: CaA		NWI Classification: UPL
Are climatic / hyrologic conditions on the site $% \left(1\right) =\left(1\right) \left(1\right$	typical for this time of year? Yes X	lo (if no, explain in Remarks.)
Are Vegetation, Soil, or Hydrology	ysignificantly disturbed? Are "Norma	al Circumstances" present? Yes X No
Are Vegetation, Soil, or Hydrology	ynaturally problematic? (if needed, e	xplain any answers in Remarks.)
SUMMARY OF FINDINGS - Attach site ma	p showing sampling point locations, tra	ansects, important features, etc.
Hydrophytic Vegetation Present? Yes >		
Hydric Soil Present? Yes	No X within a Wetland	? Yes No X
Wetland Hydrology Present? Yes		etland Site ID:
Remarks: (Explain alternative procedures here or in a se		
HYDROLOGY Wetland Hydrology Indicators:		Secondary Indicators (minimum of two required)
Primary Indicators (minimum of one is required:	check all that apply)	Surface Soil Cracks (B6)
Surface Water (A1)	Water-Stained Leaves (B9)	Drainage Patterns (B10)
High Water Table (A2)	Aquatic Fauna (B13)	Moss Trim Lines (B16)
Saturation (A3)	Marl Deposits (B15)	Dry-Season Water Table (C2)
Water Marks (B1)	Hydrogen Sulfide Odor (C1)	Crayfish Burrows (C8)
Sediment Deposits (B2)	Oxidized Rhizospheres on Living Roots (C3	Saturation Visible in Aerial Imagery (C9)
Drift Deposits (B3)	Presence of Reduced Iron (C4)	Stunted or Stressed Plants (D1)
Algal Mat or Crust (B4)	Recent Iron Reduction in Tilled Soils (C6)	Geomorphic Position (D2)
Iron Deposits (B5)	Thin Muck Surface (C7)	Shallow Aquitard (D3)
Inundation Visible on Aerial Imagery (B7)	Other (Explain in Remarks)	Microtopographic Relief (D4)
Sparsley Vegetated Concave Surface (B8)		FAC-Neutral Test (D5)
Surface Water Present? Yes No X	Depth (inches)	
Water Table Present? Yes No X	Depth (inches) Wetland	Hydrology Present? Yes No X
Saturation Present? Yes No X	Depth (inches)	
Describe Recorded Data (stream gauge, mon	itoring well, aerial photos, previous inspecti	ons), if available:
		·
Remarks:		

		Abcoluto	Dominant	Indicator	l			200723-W	
Tree Stratum	(Plot Size: 30'radius)	% Cover	Species?	Status	Dominance Test V				
	·		•		Number of Domi	•			(•)
Fraxinus pennsylvanio	ca	40	X	FACW	That Are OBL, FA	CW, or FA	·C:	6	(A)
Acer negundo		20	X	FAC	Total Numbe				
		60	_= Total Cov	/er	Species Ac	ross All Str	ata:	8	(B)
					Percent of Don	ninant Spe	cies		
					That Are OBL,	FACW, or I	AC:	75%	_(A/B)
					Prevalence Index \	Norksheet	t:		
		Absolute	Dominant	Indicator	OBL species	0	x 1	0	
Shrub Stratum	(Plot Size: 15'radius)	% Cover	Species?	Status	FACW species	60	_ x 2	120	
Lindera benzoin		20	Χ	FACW	FAC species	70	x 3	210	
Populus deltoides		10	Х	FAC	FACU species	30	x 4	120	
		30	_= Total Cov	/er	UPL species	0	x 5	0	
					Column Totals	160	(A)	450	(E
					Prevalenc	e Index = [3/A =	2.81	
					Hydrophytic Vege	tation Ind	icators	s:	
		Absolute	Dominant	Indicator	1- Rapid Tes				tion
Herb Stratum (Plot Size: 5'radius)		% Cover	Species?	Status	•	•		c vegeta	CIOII
		20	•		X 2- Dominance Test is > 50%				
Toxicodendron radica				EAC.					
Alliaria netiolata	ans	<u>30</u>	X	FACIL	X 3- Prevalence	e Index is	=< 3.0		
Alliaria petiolata	ans	10	Х	FACU	X 3- Prevalence				
Alliaria petiolata	ans			FACU	X 3- Prevalence	ogical Adap	otation	ıs	
Alliaria petiolata	ans	10	Х	FACU	X 3- Prevalence	ogical Adap	otation	ıs	ın
Alliaria petiolata	ans	10	Х	FACU	X 3- Prevalence	ogical Adar	otation hytic \	ıs	n
Alliaria petiolata	ans	10	Х	FACU	X 3- Prevalence 4- Morpholo 5- Problema	ogical Adap tic Hydrop ation Strata 3 in. (7.6cm	otation ohytic \ : : or mo	vegetatio	
Alliaria petiolata	ans	10	Х	FACU	X 3- Prevalence 4- Morpholo 5- Problema Definitions of Vegeta Tree- Woody plants 3	ogical Adap tic Hydrop ation Strata 3 in. (7.6cm regardless of	ohytic None	vegetation of the second of th	eter at
Alliaria petiolata	ans	10	Х	FACU	X 3- Prevalence 4- Morpholo 5- Problema Definitions of Vegeta Tree- Woody plants 3 breast height (DBH), Sapling/Shrub- Wood greater than or equa Herb- All herbaceous	ation Strata 3 in. (7.6cm regardless of	otation ohytic \ or mo of heigh ss than 1m) tall	vegetation ore in diament. 3 in. DBH in.	eter at
Alliaria petiolata	ans	10 40	Х	FACU ver	X 3- Prevalence 4- Morpholo 5- Problema Definitions of Vegeta Tree- Woody plants 3 breast height (DBH), Sapling/Shrub- Wood greater than or equa	ation Strata 3 in. (7.6cm regardless of	otation ohytic \ or mo of heigh ss than 1m) tall	vegetation ore in diament. 3 in. DBH in.	eter at
Alliaria petiolata Woody Vine Stratum	(Plot Size: 30'radius)	10 40	X _= Total Cov	FACU ver	X 3- Prevalence 4- Morpholo 5- Problema Definitions of Vegeta Tree- Woody plants 3 breast height (DBH), Sapling/Shrub- Wood greater than or equa Herb- All herbaceous size, and woody plan Woody Vines- All wo	ation Strata 3 in. (7.6cm regardless of to 3.28ft (2.5cm) (non-wood ts less than	otation ohytic \ or mo of heigh ss than 1m) tall dy) plan 3.28ft	vegetation of the second of th	and less of
	(Plot Size: 30'radius)	10 40 Absolute	X _= Total Cov Dominant Species? X	FACU ver	X 3- Prevalence 4- Morpholo 5- Problema Definitions of Vegeta Tree- Woody plants 3 breast height (DBH), Sapling/Shrub- Wood greater than or equa Herb- All herbaceous size, and woody plant	ation Strata 3 in. (7.6cm regardless of the strata) is 3.28ft (2.5cm) (non-wood ts less than	otation ohytic \ or mo of heigh ss than 1m) tall dy) plan 3.28ft	vegetation of the second of th	and less of
Woody Vine Stratum	(Plot Size: 30'radius)	Absolute % Cover	X = Total Cov Dominant Species?	FACU Indicator Status FACU FAC	X 3- Prevalence 4- Morpholo 5- Problema Definitions of Vegeta Tree- Woody plants 3 breast height (DBH), Sapling/Shrub- Wood greater than or equa Herb- All herbaceous size, and woody plan Woody Vines- All wo	ation Strata 3 in. (7.6cm regardless of dy plants less 1 to 3.28ft (1.6) (non-wood ts less than	otation ohytic \ or mo of heigh ss than 1m) tall dy) plan 3.28ft	vegetation of the second of th	and less of

SOIL								Sampling Point: 02-20200723-WL-45-45U		
Depth	Matrix	(Redo	x Featur	es			
(inches	Color	%	Color	%	Type	Loc	Texture	Remarks		
0-10	10YR 4/6	100					Silt Loam			
10-20	10YR 4/6	90	7.5YR 5/8	10	С	PL	Silt Loam			
-	oil Indicators:							Indicators for Problematic Soils:		
	tosol (A1)	'			-		urface (B15)	2 cm Muck (A10)		
	tic Epipedon ((A2)				k Surface		Coast Prarie Redox (A16)		
	ck Histic (A3)	- (0.4)			•	Aucky Min	, ,	5 cm Mucky Peat or Peat (S3)		
	drogen Sulfide					ileyed Ma		Dark Surface (S7)		
	atified Layers		rface (A11)	Depleted Matrix (F3) Redox Dark Surface (F6)				Polyvalue Below Surface (S8) Thin Dark Surface (S9)		
Depleted Below Dark Surface (A11)						d Dark Sur		Iron-Manganese Masses (F12)		
Thick Dark Surface (A12)					-			Piedmont Floodplain Soils (F19)		
Sandy Mucky Mineral (S1) Sandy Gleyed Matrix (S4)				Redox Depressions (F8)				Mesic Spodic (TA6)		
	ndy Redox (S5	-	•)					Red Parent Material (F21)		
	ipped Matrix (Very Shallow Dark Surface (TF12)		
	rk Surface (S7)							Other (Explain in Remarks)		
		,								
Restrictiv	ve Layer (if obs	erved):								
		Type:					Hydrid	Soil Present? Yes No X		
Depth (inches):						riyund	. 3011 F1636111: 163 140X			
		-								
Remark	s:									

Project/Site: Cider Solar Project	City/County: Elba/Genes	see Sampling Date: 7/21/2020			
Applicant/Owner: Hecate	State: NY Sampling Point:02-20				
Investigator(s): Justin Ahn	Section, Township, Range	e: WL-41-41U			
Landform (hillslope, terrace,etc.): Toeslope	Local relief (concave, convex	, none): <u>Linear</u> Slope (%) <u>1 - 5</u>			
Subregion (LRR or MLRA): LRR L	Lat: 43.096881 Long:	-78.211085 Datum: NAD83			
Soil Map Unit Name: CaA		NWI Classification: UPL			
Are climatic / hyrologic conditions on the site t	ypical for this time of year? Yes X N	lo (if no, explain in Remarks.)			
Are Vegetation \underline{X} , Soil $\underline{\hspace{1cm}}$, or Hydrology	significantly disturbed? Are "Norma	Il Circumstances" present? Yes X No			
Are Vegetation, Soil, or Hydrology	naturally problematic? (if needed, e.	xplain any answers in Remarks.)			
SUMMARY OF FINDINGS - Attach site map	showing sampling point locations, tra	ansects, important features, etc.			
Hydrophytic Vegetation Present? Yes X	No Is the Sampled Ar				
Hydric Soil Present? Yes	No X within a Wetland	Yes No X			
Wetland Hydrology Present? Yes	No X if yes, optional We	etland Site ID:			
Remarks: (Explain alternative procedures here or in a sep	parate report.)				
HYDROLOGY					
Wetland Hydrology Indicators:		Secondary Indicators (minimum of two required)			
Primary Indicators (minimum of one is required: cl	neck all that apply)	Surface Soil Cracks (B6)			
Surface Water (A1)	Water-Stained Leaves (B9)	Drainage Patterns (B10)			
High Water Table (A2)	Aquatic Fauna (B13)	Moss Trim Lines (B16)			
Saturation (A3)	Marl Deposits (B15)	Dry-Season Water Table (C2)			
Water Marks (B1)	Hydrogen Sulfide Odor (C1)	Crayfish Burrows (C8)			
Sediment Deposits (B2)	Oxidized Rhizospheres on Living Roots (C3)	Saturation Visible in Aerial Imagery (C9)			
Drift Deposits (B3)	Presence of Reduced Iron (C4)	Stunted or Stressed Plants (D1)			
Algal Mat or Crust (B4)	Recent Iron Reduction in Tilled Soils (C6)	Geomorphic Position (D2)			
Iron Deposits (B5)	Thin Muck Surface (C7)	Shallow Aquitard (D3)			
Inundation Visible on Aerial Imagery (B7)	Other (Explain in Remarks)	Microtopographic Relief (D4)			
Sparsley Vegetated Concave Surface (B8)		FAC-Neutral Test (D5)			
	Davide (inches)	Me Neutral rest (BS)			
Surface Water Present? Yes No X	Depth (inches)				
Water Table Present? Yes NoX	- · · · · · ·	Hydrology Present? Yes No X			
Saturation Present? Yes No _ X	Depth (inches)				
Describe Recorded Data (stream gauge, monit	coring well, aerial photos, previous inspection	ons), if available:			
Remarks:					

VEGETATION - Use scientific names of plants Sampling Point: 02-20200722-WL-41-41U Absolute Dominant Indicator **Dominance Test Worksheet:** (Plot Size: 30'radius) % Cover Species? Status **Tree Stratum Number of Dominant Species** Populus deltoides 20 Χ FAC That Are OBL, FACW, or FAC: (A) 20 = Total Cover **Total Number of Dominant** (B) Species Across All Strata: 4 Percent of Dominant Species (A/B) That Are OBL, FACW, or FAC: 75% **Prevalence Index Worksheet:** 10 x 1 10 **OBL** species Absolute Dominant Indicator **FACW** species 30 60 (Plot Size: 15'radius) % Cover Status x 2 **Shrub Stratum** Species? **FAC** species 85 255 х3 = Total Cover **FACU** species 20 x 4 80 **UPL** species 0 x 5 0 Column Totals 145 (A) 405 (B) Prevalence Index = B/A = 2.79 **Hydrophytic Vegetation Indicators:** Absolute Dominant Indicator 1- Rapid Test For Hydrophytic Vegetation **Herb Stratum** (Plot Size: 5'radius) % Cover Species? Status X 2- Dominance Test is > 50% 30 Toxicodendron radicans FAC X 3- Prevalence Index is =< 3.0 30 Χ Symphyotrichum lanceolatum **FACW** 4- Morphological Adaptations Juncus tenuis 20 FAC Populus deltoides 15 **FAC** 5- Problematic Hydrophytic Vegetation Alisma subcordatum 5 OBL Ranunculus sceleratus 5 OBI **Definitions of Vegetation Strata:** 105 = Total Cover Tree- Woody plants 3 in. (7.6cm) or more in diameter at breast height (DBH), regardless of height. Sapling/Shrub- Woody plants less than 3 in. DBH and greater than or equal to 3.28ft (1m) tall. Herb- All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28ft tall. Absolute Dominant Indicator Woody Vines- All woody vines greater than 3.28ft in (Plot Size: 30'radius) Species? **Woody Vine Stratum** % Cover Status height. Parthenocissus quinquefolia 20 FACU Χ 20 = Total Cover Hydrophytic Vegetation Present? Yes X No ___

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

disturbed, tire tracks, wet plants in low areas

SOIL Sampling Point: 02-20200722-WL-41-41U Depth Matrix **Redox Features** (inches Color % Color Texture Remarks % Type Loc 0-18 10YR 3/4 95 10YR 6/8 C PΙ Silt Loam 5 **Hydric Soil Indicators:** Indicators for Problematic Soils: Histosol (A1) Polyvalue Below Surface (B15) 2 cm Muck (A10) Histic Epipedon (A2) Thin Dark Surface (S9) Coast Prarie Redox (A16) Black Histic (A3) Loamy Mucky Mineral (F1) 5 cm Mucky Peat or Peat (S3) Hydrogen Sulfide (A4) Loamy Gleyed Matric (F2) Dark Surface (S7) Stratified Layers (A5) Depleted Matrix (F3) Polyvalue Below Surface (S8) Depleted Below Dark Surface (A11) Redox Dark Surface (F6) Thin Dark Surface (S9) Thick Dark Surface (A12) Depleted Dark Surface (F7) Iron-Manganese Masses (F12) Sandy Mucky Mineral (S1) Redox Depressions (F8) Piedmont Floodplain Soils (F19) Sandy Gleyed Matrix (S4) Mesic Spodic (TA6) Sandy Redox (S5) Red Parent Material (F21) Stripped Matrix (S6) Very Shallow Dark Surface (TF12) Dark Surface (S7) Other (Explain in Remarks) Restrictive Layer (if observed): Type: Hydric Soil Present? Yes No Χ Depth (inches): Remarks:

Project/Site: Cider Solar Project	City/County: Elba/Genese	e Sampling Date: 7/22/2020			
Applicant/Owner: Hecate	State: NY Sampling Point:				
Investigator(s): Justin Ahn	Section, Township, Range: 02-20200722-WL-41-41V				
Landform (hillslope, terrace,etc.): Depression	Local relief (concave, convex,	none): <u>Concave</u> Slope (%) <u>0 - 1</u>			
Subregion (LRR or MLRA): LRR L	Lat: 43.096544 Long: -7	78.211522 Datum: NAD83			
Soil Map Unit Name: CaA		NWI Classification: PFO			
Are climatic / hyrologic conditions on the site t	cypical for this time of year? Yes X No	(if no, explain in Remarks.)			
Are Vegetation, Soil, or Hydrology	significantly disturbed? Are "Normal	Circumstances" present? Yes X No			
Are Vegetation, Soil, or Hydrology	naturally problematic? (if needed, exp	olain any answers in Remarks.)			
SUMMARY OF FINDINGS - Attach site map	showing sampling point locations, trar	nsects, important features, etc.			
Hydrophytic Vegetation Present? Yes X					
Hydric Soil Present? Yes X	No within a Wetland?	Yes X No			
Wetland Hydrology Present? Yes X		land Site ID: WL92			
Remarks: (Explain alternative procedures here or in a se					
HYDROLOGY					
Wetland Hydrology Indicators:		Secondary Indicators (minimum of two required)			
Primary Indicators (minimum of one is required: cl	heck all that apply)	Surface Soil Cracks (B6)			
Surface Water (A1)	X Water-Stained Leaves (B9)	Drainage Patterns (B10)			
High Water Table (A2)	Aquatic Fauna (B13)	X Moss Trim Lines (B16)			
Saturation (A3)	Marl Deposits (B15)	Dry-Season Water Table (C2)			
Water Marks (B1)	Hydrogen Sulfide Odor (C1)	Crayfish Burrows (C8)			
Sediment Deposits (B2)	Oxidized Rhizospheres on Living Roots (C3)	Saturation Visible in Aerial Imagery (C9)			
Drift Deposits (B3)	Presence of Reduced Iron (C4)	Stunted or Stressed Plants (D1)			
Algal Mat or Crust (B4)	Recent Iron Reduction in Tilled Soils (C6)	Geomorphic Position (D2)			
Iron Deposits (B5)	Thin Muck Surface (C7)	Shallow Aquitard (D3)			
Inundation Visible on Aerial Imagery (B7)	Other (Explain in Remarks)	Microtopographic Relief (D4)			
Sparsley Vegetated Concave Surface (B8)		FAC-Neutral Test (D5)			
Surface Water Present? Yes No X	Depth (inches)				
Water Table Present? Yes No X	= · · · · 	Hydrology Present? Yes X No			
Saturation Present? Yes No X	Depth (inches)	.,,			
Describe Recorded Data (stream gauge, moni		ns), if available:			
Remarks:					

VEGETATION - Use scient	cific names	or plants				Sampii	ing Politic	. 02-20	200722-W	L-41-41
Tree Stratum	(Plot Size:	30'radius)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test V Number of Domi		-		
Fraxinus pennsylvanica			40	Χ	FACW	That Are OBL, FA	CW, or F	AC:	4	(A)
Populus deltoides			30	X	FAC	Total Numbe	r of Domi	nant		_
			70	_= Total Cov	er er	Species Ac	ross All St	rata:	5	(B)
						Percent of Don	ninant Sp	ecies		
						That Are OBL,	FACW, or	FAC:	80%	(A/B)
						Prevalence Index \	Norkshee	et:		
			Absoluto	Dominant	Indicator	OBL species	10	x 1	10	
Shrub Stratum	(Plot Size:	15'radius)	% Cover	Species?	Status	FACW species	65	x 2	130	
Toxicodendron radican	ıS		20	Х	FAC	FAC species	52	х 3	156	
			20	= Total Cov	ver	FACU species	20	x 4	80	
						UPL species	0	x 5	0	
						Column Totals	147	(A)	376	(B)
						Prevalenc	e Index =	B/A =	2.56	
						Hydrophytic Vege	tation Inc	dicators	S:	
			Absolute	Dominant	Indicator	1- Rapid Tes	t For Hyd	rophyti	c Vegetat	tion
Herb Stratum	(Plot Size:	5'radius)	% Cover	Species?	Status	X 2- Dominano	ce Test is:	> 50%		
Cardamine angustata			20	Χ	FACU					
Carex cristatella			15	Х	FACW	X 3- Prevalenc				
Fraxinus pennsylvanica	1		10		FACW	4- Morpholo	ogical Ada	ptation	IS	
Glyceria striata			10		OBL	5- Problema	tic Hydro	phytic \	√egetatio	n
Toxicodendron radican	IS .		<u>2</u> 57	= Total Cov	<u>FAC</u> ver	Definitions of Veget	ation Ctuat			
				-		Definitions of Vegeta				
						Tree- Woody plants 3 breast height (DBH),				eter at
						Sapling/Shrub- Wood greater than or equa				and
						Herb- All herbaceous size, and woody plan				ess of
Woody Vine Stratum	(Plot Size:	30'radius)	% Cover	Dominant Species?	Indicator Status	Woody Vines- All wo height.	ody vines g	greater t	:han 3.28ft	t in
				_= Total Cov	ver	Hydroph Vegeta Pres	ition			

SOIL

Sampling Point: 02-20200722-WL-41-41W

Depth	Matrix				Redo	ox Featu	res			
inches	Color	%	Color	%	Type	Loc	Texture	Remarks		
0-6	10YR 2/2	90	7.5YR 4/6	10	С	PL	Silty Clay Loam			
6-20	7.5YR 6/4	80	7.5YR 4/6	20	С	М	Clay Loam			
ydric So	oil Indicators:							Indicators for Problematic Soils:		
-	tosol (A1)				Polyvalu	e Below	Surface (B15)	2 cm Muck (A10)		
His	tic Epipedon (A2)			Thin Dar	k Surface	e (S9)	Coast Prarie Redox (A16)		
Bla	ck Histic (A3)			Loamy Mucky Mineral (F1)				5 cm Mucky Peat or Peat (S3)		
Нус	drogen Sulfide	(A4)		Loamy Gleyed Matric (F2)				Dark Surface (S7)		
Str	atified Layers ((A5)		Depleted Matrix (F3)				Polyvalue Below Surface (S8)		
De	pleted Below [Dark Su	rface (A11)	X Redox Dark Surface (F6)				Thin Dark Surface (S9)		
Thick Dark Surface (A12)					Depleted	d Dark Su	ırface (F7)	Iron-Manganese Masses (F12)		
Sandy Mucky Mineral (S1)				Redox Depressions (F8)				Piedmont Floodplain Soils (F19)		
Sar	ndy Gleyed Ma	atrix (S4	1)	_				Mesic Spodic (TA6)		
Sar	ndy Redox (S5))					_	Red Parent Material (F21)		
Str	ipped Matrix (S6)					_	Very Shallow Dark Surface (TF12)		
Dai	rk Surface (S7)						-	Other (Explain in Remarks)		
Restricti	ve Layer (if obse	erved):								
		Type:					Hydric S	oil Present? Yes X No		
	Depth (in	ches):						<u> </u>		
Remark	c·									
· Ciliai K	J.									

Project/Site: Cider Solar Project	City/County: _Elba/Genese	e Sampling Date: 7/22/2020			
Applicant/Owner: Hecate	State: NY Sampling Point:02-20				
Investigator(s): Justin Ahn	Section, Township, Range: WL-40-40U				
Landform (hillslope, terrace, etc.): <u>Toeslope</u>	Local relief (concave, convex,	none): <u>Linear</u> Slope (%) <u>1 - 5</u>			
Subregion (LRR or MLRA): LRR L	Lat: 43.095459 Long: -7	78.215298 Datum: <u>NAD83</u>			
Soil Map Unit Name: CaA		NWI Classification: UPL			
Are climatic / hyrologic conditions on the site $% \left(1\right) =\left(1\right) \left(1\right$	typical for this time of year? Yes X No	(if no, explain in Remarks.)			
Are Vegetation, Soil, or Hydrology	significantly disturbed? Are "Normal	Circumstances" present? Yes X No			
Are Vegetation, Soil, or Hydrology	naturally problematic? (if needed, exp	plain any answers in Remarks.)			
SUMMARY OF FINDINGS - Attach site ma	p showing sampling point locations, train	sects. important features. etc.			
Hydrophytic Vegetation Present? Yes X					
Hydric Soil Present? Yes	within a Wetland?	Yes No X			
· —					
Wetland Hydrology Present? Yes					
Remarks: (Explain alternative procedures here or in a se	eparate report.)				
HYDROLOGY					
Wetland Hydrology Indicators:		Secondary Indicators (minimum of two required)			
Primary Indicators (minimum of one is required: o	check all that apply)	Surface Soil Cracks (B6)			
Surface Water (A1)	Water-Stained Leaves (B9)	Drainage Patterns (B10)			
High Water Table (A2)	Aquatic Fauna (B13)	Moss Trim Lines (B16)			
Saturation (A3)	Marl Deposits (B15)	Dry-Season Water Table (C2)			
Water Marks (B1)	Hydrogen Sulfide Odor (C1)	Crayfish Burrows (C8)			
Sediment Deposits (B2)	Oxidized Rhizospheres on Living Roots (C3)	Saturation Visible in Aerial Imagery (C9)			
Drift Deposits (B3)	Presence of Reduced Iron (C4)	Stunted or Stressed Plants (D1)			
Algal Mat or Crust (B4)	Recent Iron Reduction in Tilled Soils (C6)	Geomorphic Position (D2)			
Iron Deposits (B5)	Thin Muck Surface (C7)	Shallow Aquitard (D3)			
Inundation Visible on Aerial Imagery (B7)	Other (Explain in Remarks)				
	Other (Explain in Nemarks)	Microtopographic Relief (D4)			
Sparsley Vegetated Concave Surface (B8)		FAC-Neutral Test (D5)			
Surface Water Present? Yes NoX	Depth (inches)				
Water Table Present? Yes NoX	Depth (inches) Wetland	Hydrology Present? Yes No X			
Saturation Present? Yes NoX	Depth (inches)				
Describe Recorded Data (stream gauge, mon	itoring well, aerial photos, previous inspection	ns), if available:			
(5 5 /					
Remarks:					

VEGETATION - Use scientific names of plants Sampling Point: 02-20200722-WL-40-40U Absolute Dominant Indicator **Dominance Test Worksheet:** (Plot Size: 30'radius) % Cover Species? Status **Tree Stratum Number of Dominant Species** Populus deltoides 20 Χ FAC That Are OBL, FACW, or FAC: (A) 20 = Total Cover **Total Number of Dominant** (B) Species Across All Strata: 4 Percent of Dominant Species (A/B) That Are OBL, FACW, or FAC: 75% **Prevalence Index Worksheet:** 0 x 1 **OBL** species Absolute Dominant Indicator **FACW** species 30 60 (Plot Size: 15'radius) % Cover Species? Status x 2 **Shrub Stratum FAC** species 45 135 х3 = Total Cover **FACU** species 20 x 4 80 **UPL** species 0 x 5 0 Column Totals 95 (A) 275 (B) Prevalence Index = B/A = 2.89 **Hydrophytic Vegetation Indicators:** Absolute Dominant Indicator 1- Rapid Test For Hydrophytic Vegetation **Herb Stratum** (Plot Size: 5'radius) % Cover Species? Status X 2- Dominance Test is > 50% 20 Alliaria petiolata Χ **FACU** X 3- Prevalence Index is =< 3.0 Χ Phalaris arundinacea 20 **FACW** 4- Morphological Adaptations Toxicodendron radicans 15 Χ FAC Fraxinus pennsylvanica 10 **FACW** 5- Problematic Hydrophytic Vegetation Geum canadense 10 FAC 75 = Total Cover **Definitions of Vegetation Strata:** Tree- Woody plants 3 in. (7.6cm) or more in diameter at breast height (DBH), regardless of height. Sapling/Shrub- Woody plants less than 3 in. DBH and greater than or equal to 3.28ft (1m) tall. Herb- All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28ft tall. Absolute Dominant Indicator Woody Vines- All woody vines greater than 3.28ft in (Plot Size: 30'radius) **Woody Vine Stratum** % Cover Species? Status height. = Total Cover Hydrophytic Vegetation Present? Yes X No ___ Remarks: (Include photo numbers here or on a separate sheet.)

SOIL Sampling Point: 02-20200722-WL-40-40U Depth Matrix **Redox Features** (inches % Color Color % Type Texture Remarks Loc 0-20 10YR 4/3 100 Silt Loam **Hydric Soil Indicators:** Indicators for Problematic Soils: Histosol (A1) Polyvalue Below Surface (B15) 2 cm Muck (A10) Histic Epipedon (A2) Thin Dark Surface (S9) Coast Prarie Redox (A16) Black Histic (A3) Loamy Mucky Mineral (F1) 5 cm Mucky Peat or Peat (S3) Hydrogen Sulfide (A4) Loamy Gleyed Matric (F2) Dark Surface (S7) Stratified Layers (A5) Depleted Matrix (F3) Polyvalue Below Surface (S8) Depleted Below Dark Surface (A11) Redox Dark Surface (F6) Thin Dark Surface (S9) Thick Dark Surface (A12) Depleted Dark Surface (F7) Iron-Manganese Masses (F12) Sandy Mucky Mineral (S1) Redox Depressions (F8) Piedmont Floodplain Soils (F19) Sandy Gleyed Matrix (S4) Mesic Spodic (TA6) Sandy Redox (S5) Red Parent Material (F21) Stripped Matrix (S6) Very Shallow Dark Surface (TF12) Dark Surface (S7) Other (Explain in Remarks) Restrictive Layer (if observed): Type: Hydric Soil Present? Yes No Χ Depth (inches): Remarks:

Project/Site: Cider Solar Project	City/County: Elba/Genese	e Sampling Date: 7/23/2020			
Applicant/Owner: Hecate	State: NY Sampling Point:				
Investigator(s): Justin Ahn	Section, Township, Range: 02-20200723-WL-43-43W				
Landform (hillslope, terrace,etc.): Depression	Local relief (concave, convex,	none): <u>Concave</u> Slope (%) <u>0 - 1</u>			
Subregion (LRR or MLRA): LRR L	Lat: 43.089709 Long:	78.214749 Datum: NAD83			
Soil Map Unit Name: CaA		NWI Classification: PEM			
Are climatic / hyrologic conditions on the site t					
Are Vegetation, Soil, or Hydrology		·			
Are Vegetation, Soil, or Hydrology	naturally problematic? (if needed, exp	olain any answers in Remarks.)			
SUMMARY OF FINDINGS - Attach site maj	showing sampling point locations, tran	nsects, important features, etc.			
Hydrophytic Vegetation Present? Yes X					
Hydric Soil Present? Yes X	within a Wetland?	Yes X No			
Wetland Hydrology Present? Yes X		land Site ID: WL93			
Remarks: (Explain alternative procedures here or in a se					
HYDROLOGY Wetland Hydrology Indicators:		Secondary Indicators (minimum of two required)			
Primary Indicators (minimum of one is required: cl	neck all that anniv)	Surface Soil Cracks (B6)			
Surface Water (A1)	Water-Stained Leaves (B9)	X Drainage Patterns (B10)			
High Water Table (A2)	X Aquatic Fauna (B13)	Moss Trim Lines (B16)			
Saturation (A3)	Marl Deposits (B15)	Dry-Season Water Table (C2)			
Water Marks (B1)	Hydrogen Sulfide Odor (C1)	Crayfish Burrows (C8)			
Sediment Deposits (B2)	Oxidized Rhizospheres on Living Roots (C3)	Saturation Visible in Aerial Imagery (C9)			
Drift Deposits (B3)	Presence of Reduced Iron (C4)	Stunted or Stressed Plants (D1)			
Algal Mat or Crust (B4)	Recent Iron Reduction in Tilled Soils (C6)	Geomorphic Position (D2)			
Iron Deposits (B5)	Thin Muck Surface (C7)	Shallow Aquitard (D3)			
Inundation Visible on Aerial Imagery (B7)	Other (Explain in Remarks)	Microtopographic Relief (D4)			
Sparsley Vegetated Concave Surface (B8)	Other (Explain in Nemarks)	FAC-Neutral Test (D5)			
		TAC Neutral Test (55)			
Surface Water Present? Yes NoX	Depth (inches)				
Water Table Present? Yes NoX	- '- '- '	Hydrology Present? Yes X No			
Saturation Present? Yes No _X	Depth (inches)				
Describe Recorded Data (stream gauge, monit	toring well, aerial photos, previous inspection	ns), if available:			
Remarks:					

VEGETATION - Use scientific names of plants Sampling Point: 02-20200723-WL-43-43W Absolute Dominant Indicator **Dominance Test Worksheet:** (Plot Size: 30'radius) % Cover Species? Status **Tree Stratum Number of Dominant Species** That Are OBL, FACW, or FAC: (A) = Total Cover **Total Number of Dominant** Species Across All Strata: (B) Percent of Dominant Species (A/B) That Are OBL, FACW, or FAC: 75% **Prevalence Index Worksheet:** 30 x 1 30 **OBL** species Absolute Dominant Indicator **FACW** species 40 80 (Plot Size: 15'radius) Status x 2 **Shrub Stratum** % Cover Species? **FAC** species 5 х3 15 = Total Cover **FACU** species 10 x 4 40 **UPL** species 0 x 5 0 Column Totals 85 (A) 165 (B) Prevalence Index = B/A = 1.94 **Hydrophytic Vegetation Indicators:** Absolute Dominant Indicator 1- Rapid Test For Hydrophytic Vegetation **Herb Stratum** (Plot Size: 5'radius) % Cover Species? Status X 2- Dominance Test is > 50% 40 Phalaris arundinacea Χ **FACW** X 3- Prevalence Index is =< 3.0 Χ OBL Carex lupuliformis 10 4- Morphological Adaptations Glyceria striata 10 Χ OBL Trifolium pratense 10 Χ **FACU** 5- Problematic Hydrophytic Vegetation Alisma triviale 5 OBL Eleocharis obtusa 5 OBL **Definitions of Vegetation Strata:** FAC Juncus tenuis 5 Tree- Woody plants 3 in. (7.6cm) or more in diameter at 85 = Total Cover breast height (DBH), regardless of height. Sapling/Shrub- Woody plants less than 3 in. DBH and greater than or equal to 3.28ft (1m) tall. Herb- All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28ft tall. Absolute Dominant Indicator Woody Vines- All woody vines greater than 3.28ft in (Plot Size: 30'radius) **Woody Vine Stratum** % Cover Species? Status height. = Total Cover Hydrophytic Vegetation Present? Yes X No ____ Remarks: (Include photo numbers here or on a separate sheet.)

SOIL

Sampling Point: 02-20200723-WL-43-43W

Depth	Matrix				Redo	x Featu	res			
inches	Color	%	Color	%	Type	Loc	Texture	Remarks		
0-6	10YR 4/4	95	7.5YR 6/8	5	С	PL	Silty Clay Loam			
6-20	10YR 4/2	80	7.5YR 6/8	20	С	М	Silty Clay Loam			
-	il Indicators:						- ()	Indicators for Problematic Soils:		
	tosol (A1)	۸۵۱			•		Surface (B15)	2 cm Muck (A10)		
Histic Epipedon (A2)						k Surface	•	Coast Prarie Redox (A16)		
Black Histic (A3)					•	-	neral (F1)	5 cm Mucky Peat or Peat (S3)		
Hydrogen Sulfide (A4)				Loamy Gleyed Matrix (F2)				Dark Surface (S7)		
Stratified Layers (A5)				X Depleted Matrix (F3)				Polyvalue Below Surface (S8)		
Depleted Below Dark Surface (A11)				Redox Dark Surface (F6)				Thin Dark Surface (S9)		
 ,	ck Dark Surfac			Depleted Dark Surface (F7) Redox Depressions (F8)				Iron-Manganese Masses (F12)		
	dy Mucky Mir	-	-	Redox Depressions (F8)				Piedmont Floodplain Soils (F19)		
	dy Gleyed Ma		!)					Mesic Spodic (TA6)		
	dy Redox (S5)							Red Parent Material (F21)		
	pped Matrix (k Surface (S7)							Very Shallow Dark Surface (TF12) Other (Explain in Remarks)		
Dai	k Surface (S7)							Other (Explain in Remarks)		
Restrictiv	ve Layer (if obse	erved):								
		Type:					Hydric	Soil Present? Yes X No		
	Depth (in	ches):								
		, -								
Remarks	S:									
Keillaiks										

Project/Site: Cider Solar Project	City/County: Elba/Genese	e Sampling Date: 7/23/2020		
Applicant/Owner: Hecate	State: NYSampling Point:02-2			
Investigator(s): Justin Ahn	Section, Township, Range:	WL-43-43U		
Landform (hillslope, terrace,etc.): <u>Toeslope</u>	Local relief (concave, convex, ı	none): <u>Linear</u> Slope (%) <u>1 - 5</u>		
Subregion (LRR or MLRA): LRR L	Lat: 43.089838 Long:	78.215082 Datum: NAD83		
Soil Map Unit Name: <u>CaA</u>		NWI Classification: UPL		
Are climatic / hyrologic conditions on the site t	typical for this time of year? Yes X No	(if no, explain in Remarks.)		
Are Vegetation, Soil, or Hydrology	significantly disturbed? Are "Normal	Circumstances" present? Yes X No		
Are Vegetation, Soil, or Hydrology	naturally problematic? (if needed, exp	lain any answers in Remarks.)		
SUMMARY OF FINDINGS - Attach site ma	p showing sampling point locations, tran	sects, important features, etc.		
Hydrophytic Vegetation Present? Yes	No X Is the Sampled Area			
Hydric Soil Present? Yes	No X within a Wetland?	Yes No X		
Wetland Hydrology Present? Yes	No X if yes, optional Wet	land Site ID:		
Remarks: (Explain alternative procedures here or in a se				
HYDROLOGY				
Wetland Hydrology Indicators:		Secondary Indicators (minimum of two required)		
Primary Indicators (minimum of one is required: c	heck all that apply)	Surface Soil Cracks (B6)		
Surface Water (A1)	Water-Stained Leaves (B9)	Drainage Patterns (B10)		
High Water Table (A2)	Aquatic Fauna (B13)	Moss Trim Lines (B16)		
Saturation (A3)	Marl Deposits (B15)	Dry-Season Water Table (C2)		
Water Marks (B1)	Hydrogen Sulfide Odor (C1)	Crayfish Burrows (C8)		
Sediment Deposits (B2)	Oxidized Rhizospheres on Living Roots (C3)	Saturation Visible in Aerial Imagery (C9)		
Drift Deposits (B3)	Presence of Reduced Iron (C4)	Stunted or Stressed Plants (D1)		
Algal Mat or Crust (B4)	Recent Iron Reduction in Tilled Soils (C6)	Geomorphic Position (D2)		
Iron Deposits (B5)	Thin Muck Surface (C7)	Shallow Aquitard (D3)		
Inundation Visible on Aerial Imagery (B7)	Other (Explain in Remarks)	Microtopographic Relief (D4)		
Sparsley Vegetated Concave Surface (B8)		FAC-Neutral Test (D5)		
Surface Water Present? Yes No X	Depth (inches)			
Water Table Present? Yes No X	Depth (inches) Wetland H	Hydrology Present? Yes No X		
Saturation Present? Yes No X	Depth (inches)			
Describe Recorded Data (stream gauge, moni	toring well, aerial photos, previous inspection	ns), if available:		
Remarks:				

VEGETATION - Use scientific names of plants Sampling Point: 02-20200723-WL-43-43U Absolute Dominant Indicator **Dominance Test Worksheet:** (Plot Size: 30'radius) % Cover Species? Status **Tree Stratum Number of Dominant Species** That Are OBL, FACW, or FAC: (A) = Total Cover **Total Number of Dominant** Species Across All Strata: (B) 3 Percent of Dominant Species That Are OBL, FACW, or FAC: 33.3% (A/B) **Prevalence Index Worksheet:** x 1 0 **OBL** species Absolute Dominant Indicator **FACW** species 30 60 (Plot Size: 15'radius) % Cover Species? Status x 2 **Shrub Stratum** FAC species 0 х3 = Total Cover **FACU** species 80 x 4 320 **UPL** species 0 x 5 0 Column Totals 110 (A) 380 (B) Prevalence Index = B/A = 3.45 **Hydrophytic Vegetation Indicators:** Absolute Dominant Indicator 1- Rapid Test For Hydrophytic Vegetation **Herb Stratum** (Plot Size: 5'radius) % Cover Species? Status 2- Dominance Test is > 50% 40 Trifolium repens FACU 3- Prevalence Index is =< 3.0 Χ Phalaris arundinacea 30 **FACW** 4- Morphological Adaptations Trifolium pratense 30 Χ **FACU** Ambrosia artemisiifolia 10 **FACU** 5- Problematic Hydrophytic Vegetation 110 = Total Cover **Definitions of Vegetation Strata:** Tree- Woody plants 3 in. (7.6cm) or more in diameter at breast height (DBH), regardless of height. Sapling/Shrub- Woody plants less than 3 in. DBH and greater than or equal to 3.28ft (1m) tall. Herb- All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28ft tall. Absolute Dominant Indicator Woody Vines- All woody vines greater than 3.28ft in (Plot Size: 30'radius) **Woody Vine Stratum** % Cover Species? Status height. = Total Cover Hydrophytic Vegetation Present? Yes ____ No _X Remarks: (Include photo numbers here or on a separate sheet.)

SOIL Sampling Point: 02-20200723-WL-43-43U Depth Matrix **Redox Features** (inches % Color Color % Type Texture Remarks Loc 0-20 10YR 4/6 100 Silt Loam **Hydric Soil Indicators:** Indicators for Problematic Soils: Histosol (A1) Polyvalue Below Surface (B15) 2 cm Muck (A10) Histic Epipedon (A2) Thin Dark Surface (S9) Coast Prarie Redox (A16) Black Histic (A3) Loamy Mucky Mineral (F1) 5 cm Mucky Peat or Peat (S3) Hydrogen Sulfide (A4) Loamy Gleyed Matric (F2) Dark Surface (S7) Stratified Layers (A5) Depleted Matrix (F3) Polyvalue Below Surface (S8) Depleted Below Dark Surface (A11) Redox Dark Surface (F6) Thin Dark Surface (S9) Thick Dark Surface (A12) Depleted Dark Surface (F7) Iron-Manganese Masses (F12) Sandy Mucky Mineral (S1) Redox Depressions (F8) Piedmont Floodplain Soils (F19) Sandy Gleyed Matrix (S4) Mesic Spodic (TA6) Sandy Redox (S5) Red Parent Material (F21) Stripped Matrix (S6) Very Shallow Dark Surface (TF12) Dark Surface (S7) Other (Explain in Remarks) Restrictive Layer (if observed): Type: Hydric Soil Present? Yes No Χ Depth (inches): Remarks:

Project/Site: Cider Solar Project	City/County: Elba/Genese	e Sampling Date: 7/23/2020			
Applicant/Owner: Hecate	State: NY Sampling Point:				
Investigator(s): Justin Ahn	Section, Township, Range: 02-20200723-WL-44-44W				
Landform (hillslope, terrace,etc.): Depression	Local relief (concave, convex, i	none): <u>Concave</u> Slope (%) <u>0 - 1</u>			
Subregion (LRR or MLRA): LRR L	Lat: <u>43.088913</u> Long:	78.211614 Datum: NAD83			
Soil Map Unit Name: ApA		NWI Classification: PFO			
Are climatic / hyrologic conditions on the site t	ypical for this time of year? Yes X No	(if no, explain in Remarks.)			
Are Vegetation, Soil, or Hydrology	significantly disturbed? Are "Normal	Circumstances" present? Yes X No			
Are Vegetation, Soil, or Hydrology	naturally problematic? (if needed, exp	llain any answers in Remarks.)			
SUMMARY OF FINDINGS - Attach site map	showing sampling point locations, trar	nsects, important features, etc.			
Hydrophytic Vegetation Present? Yes X					
Hydric Soil Present? Yes X	No within a Wetland?	Yes X No			
Wetland Hydrology Present? Yes X	No if yes, optional Wet	land Site ID: WL94			
Remarks: (Explain alternative procedures here or in a se		-			
nemarks. (Explain alternative procedures here of in a se	oarate report.)				
LIVEROLOGY					
HYDROLOGY Wetland Hydrology Indicators:		Secondary Indicators (minimum of two required)			
Primary Indicators (minimum of one is required: cl	neck all that apply)	Surface Soil Cracks (B6)			
Surface Water (A1)	X Water-Stained Leaves (B9)	Drainage Patterns (B10)			
High Water Table (A2)	Aquatic Fauna (B13)	X Moss Trim Lines (B16)			
Saturation (A3)	Marl Deposits (B15)	Dry-Season Water Table (C2)			
Water Marks (B1)	Hydrogen Sulfide Odor (C1)	Crayfish Burrows (C8)			
Sediment Deposits (B2)	Oxidized Rhizospheres on Living Roots (C3)	Saturation Visible in Aerial Imagery (C9)			
Drift Deposits (B3)	Presence of Reduced Iron (C4)	Stunted or Stressed Plants (D1)			
Algal Mat or Crust (B4)	Recent Iron Reduction in Tilled Soils (C6)	Geomorphic Position (D2)			
Iron Deposits (B5)	Thin Muck Surface (C7)	Shallow Aquitard (D3)			
Inundation Visible on Aerial Imagery (B7)	Other (Explain in Remarks)				
	Other (Explain in Kemarks)	Microtopographic Relief (D4)			
Sparsley Vegetated Concave Surface (B8)		FAC-Neutral Test (D5)			
Surface Water Present? Yes No X	Depth (inches)				
Water Table Present? Yes No X	Depth (inches) Wetland H	Hydrology Present? Yes X No			
Saturation Present? Yes NoX	Depth (inches)				
Describe Recorded Data (stream gauge, monit	toring well, aerial photos, previous inspection	ns), if available:			
,					
Remarks:					

VEGETATION - Use scientific names of plants Sampling Point: 02-20200723-WL-44-44W Absolute Dominant Indicator **Dominance Test Worksheet:** (Plot Size: 30'radius) % Cover Species? Status **Tree Stratum Number of Dominant Species** Χ **FACW** That Are OBL, FACW, or FAC: 6 (A) Fraxinus pennsylvanica 40 = Total Cover **Total Number of Dominant** (B) Species Across All Strata: 6 Percent of Dominant Species That Are OBL, FACW, or FAC: (A/B) 100% **Prevalence Index Worksheet:** 0 x 1 **OBL** species Absolute Dominant Indicator **FACW** species 105 210 (Plot Size: 15'radius) % Cover Species? Status x 2 **Shrub Stratum FAC** species 45 15 х3 Lindera benzoin 20 Χ **FACW** 20 = Total Cover **FACU** species 0 x 4 0 **UPL** species 0 x 5 0 Column Totals 120 (A) 255 (B) Prevalence Index = B/A = 2.12 **Hydrophytic Vegetation Indicators:** Absolute Dominant Indicator 1- Rapid Test For Hydrophytic Vegetation **Herb Stratum** (Plot Size: 5'radius) % Cover Species? Status X 2- Dominance Test is > 50% 20 Carex alopecoidea Х **FACW** X 3- Prevalence Index is =< 3.0 Х Lindera benzoin 10 **FACW** 4- Morphological Adaptations Fraxinus pennsylvanica 10 Χ **FACW** Persicaria virginiana 10 Χ FAC 5- Problematic Hydrophytic Vegetation Toxicodendron radicans 5 FAC Circaea alpina 5 **FACW Definitions of Vegetation Strata:** 60 = Total Cover Tree- Woody plants 3 in. (7.6cm) or more in diameter at breast height (DBH), regardless of height. Sapling/Shrub- Woody plants less than 3 in. DBH and greater than or equal to 3.28ft (1m) tall. Herb- All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28ft tall. Absolute Dominant Indicator Woody Vines- All woody vines greater than 3.28ft in (Plot Size: 30'radius) **Woody Vine Stratum** % Cover Species? Status height. = Total Cover Hydrophytic Vegetation Present? Yes X No ____

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

SOIL Sampling Point: 02-20200723-WL-44-44W

JOIL								Jamping 1 ont. 02-20200723-WE-44-44V		
Depth Matrix				Redo	ox Featur	res				
(inches	Color	%	Color	%	Type	Loc	Texture	Remarks		
0-10	10YR 4/2	100					Clay Loam			
10-20	10YR 4/2	90	2.5Y 6/8	10	С	PL	Clay			
Hydric Sc	oil Indicators:							Indicators for Problematic Soils:		
-	tosol (A1)				Polyvalu	e Below S	Surface (B15)	2 cm Muck (A10)		
	tic Epipedon ((A2)			-	k Surface		Coast Prarie Redox (A16)		
	ck Histic (A3)				Loamy N	∕lucky Mir	neral (F1)	5 cm Mucky Peat or Peat (S3)		
Hy	drogen Sulfide	e (A4)			Loamy G	aleyed Ma	itric (F2)	Dark Surface (S7)		
Stratified Layers (A5)				Х	Depleted	d Matrix (F3)	Polyvalue Below Surface (S8)		
Depleted Below Dark Surface (A11)					Redox D	ark Surfac	ce (F6)	Thin Dark Surface (S9)		
Thick Dark Surface (A12)				Depleted Dark Surface (F7)				Iron-Manganese Masses (F12)		
Sar	ndy Mucky Mi	neral (S	1)	Redox Depressions (F8)				Piedmont Floodplain Soils (F19)		
Sar	ndy Gleyed Ma	atrix (S4)					Mesic Spodic (TA6)		
Sar	ndy Redox (S5)						Red Parent Material (F21)		
Str	ipped Matrix ((S6)						Very Shallow Dark Surface (TF12)		
Da	rk Surface (S7))						Other (Explain in Remarks)		
Restricti	ve Layer (if obs	erved):								
		Type:					Hydric	Soil Present? Yes X No		
	Depth (ir	nches):					,			
Remark	s:									

Project/Site: Cider Solar Project	City/County: Elba/Genese	e Sampling Date: 7/23/2020			
Applicant/Owner: Hecate	State: NY Sampling Point:02-20				
Investigator(s): Justin Ahn	Section, Township, Range:	WL-44-44U			
Landform (hillslope, terrace,etc.): Toeslope	Local relief (concave, convex, ı	none): <u>Linear</u> Slope (%) <u>1 - 5</u>			
Subregion (LRR or MLRA): LRR L	Lat: 43.088923 Long: -7	78.211539 Datum: NAD83			
Soil Map Unit Name: ApA		NWI Classification: UPL			
Are climatic / hyrologic conditions on the site	typical for this time of year? Yes X No	(if no, explain in Remarks.)			
Are Vegetation, Soil, or Hydrolog	y significantly disturbed? Are "Normal	Circumstances" present? Yes X No			
Are Vegetation, Soil, or Hydrolog	ynaturally problematic? (if needed, exp	lain any answers in Remarks.)			
SUMMARY OF FINDINGS - Attach site ma	in showing sampling point locations tran	sects important features etc			
Hydrophytic Vegetation Present? Yes					
Hydric Soil Present? Yes	No X within a Wetland?	Yes No X			
Wetland Hydrology Present? Yes	<u> </u>				
Remarks: (Explain alternative procedures here or in a so	eparate report.)				
HYDROLOGY					
Wetland Hydrology Indicators:		Secondary Indicators (minimum of two required)			
Primary Indicators (minimum of one is required:	check all that apply)	Surface Soil Cracks (B6)			
Surface Water (A1)	Water-Stained Leaves (B9)	Drainage Patterns (B10)			
High Water Table (A2)	Aquatic Fauna (B13)	Moss Trim Lines (B16)			
Saturation (A3)	Marl Deposits (B15)	Dry-Season Water Table (C2)			
Water Marks (B1)	Hydrogen Sulfide Odor (C1)	Crayfish Burrows (C8)			
Sediment Deposits (B2)	Oxidized Rhizospheres on Living Roots (C3)	Saturation Visible in Aerial Imagery (C9)			
Drift Deposits (B3)	Presence of Reduced Iron (C4)	Stunted or Stressed Plants (D1)			
Algal Mat or Crust (B4)	Recent Iron Reduction in Tilled Soils (C6)	Geomorphic Position (D2)			
Iron Deposits (B5)	Thin Muck Surface (C7)	Shallow Aquitard (D3)			
Inundation Visible on Aerial Imagery (B7)		Microtopographic Relief (D4)			
	Other (Explain in Remarks)				
Sparsley Vegetated Concave Surface (B8)		FAC-Neutral Test (D5)			
Surface Water Present? Yes NoX	Depth (inches)				
Water Table Present? Yes No X	Depth (inches) Wetland H	Hydrology Present? Yes No X			
Saturation Present? Yes No X	Depth (inches)				
Describe Recorded Data (stream gauge, mon	itoring well, aerial photos, previous inspection	us) if available:			
Describe Nesoraea Data (stream Baage, mon	itoring wen, dendi priotos, previous inspection	isy, ii uvullusie.			
Remarks:					

VEGETATION - Use scientific names of plants Sampling Point: 02-20200723-WL-44-44U Absolute Dominant Indicator **Dominance Test Worksheet:** (Plot Size: 30'radius) % Cover Species? Status **Tree Stratum Number of Dominant Species** Populus deltoides 40 Х FAC That Are OBL, FACW, or FAC: (A) Acer rubrum 30 Χ **FAC Total Number of Dominant** 70 = Total Cover (B) Species Across All Strata: 5 Percent of Dominant Species (A/B) That Are OBL, FACW, or FAC: 60% **Prevalence Index Worksheet:** 0 x 1 **OBL** species Absolute Dominant Indicator **FACW** species 10 20 (Plot Size: 15'radius) % Cover Species? Status x 2 **Shrub Stratum FAC** species 75 225 х3 = Total Cover **FACU** species 25 x 4 100 5 **UPL** species x 5 25 Column Totals 115 (A) 370 (B) Prevalence Index = B/A = 3.22 **Hydrophytic Vegetation Indicators:** Absolute Dominant Indicator 1- Rapid Test For Hydrophytic Vegetation **Herb Stratum** (Plot Size: 5'radius) % Cover Species? Status X 2- Dominance Test is > 50% 20 **FACU** Alliaria petiolata 3- Prevalence Index is =< 3.0 Χ Fraxinus pennsylvanica 10 **FACW** 4- Morphological Adaptations Toxicodendron radicans 5 FAC Artemisia vulgaris 5 UPL 5- Problematic Hydrophytic Vegetation 40 = Total Cover **Definitions of Vegetation Strata:** Tree- Woody plants 3 in. (7.6cm) or more in diameter at breast height (DBH), regardless of height. Sapling/Shrub- Woody plants less than 3 in. DBH and greater than or equal to 3.28ft (1m) tall. Herb- All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28ft tall. Absolute Dominant Indicator Woody Vines- All woody vines greater than 3.28ft in (Plot Size: 30'radius) % Cover Species? **Woody Vine Stratum** Status height. Parthenocissus quinquefolia FACU Χ 5 = Total Cover Hydrophytic Vegetation Present? Yes X No ___

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

SOIL Sampling Point: 02-20200723-WL-44-44U Depth Matrix **Redox Features** (inches % Color Color % Type Texture Remarks Loc 0-20 10YR 4/6 100 Silt Loam **Hydric Soil Indicators:** Indicators for Problematic Soils: Histosol (A1) Polyvalue Below Surface (B15) 2 cm Muck (A10) Histic Epipedon (A2) Thin Dark Surface (S9) Coast Prarie Redox (A16) Black Histic (A3) Loamy Mucky Mineral (F1) 5 cm Mucky Peat or Peat (S3) Hydrogen Sulfide (A4) Loamy Gleyed Matric (F2) Dark Surface (S7) Stratified Layers (A5) Depleted Matrix (F3) Polyvalue Below Surface (S8) Depleted Below Dark Surface (A11) Redox Dark Surface (F6) Thin Dark Surface (S9) Thick Dark Surface (A12) Depleted Dark Surface (F7) Iron-Manganese Masses (F12) Sandy Mucky Mineral (S1) Redox Depressions (F8) Piedmont Floodplain Soils (F19) Sandy Gleyed Matrix (S4) Mesic Spodic (TA6) Sandy Redox (S5) Red Parent Material (F21) Stripped Matrix (S6) Very Shallow Dark Surface (TF12) Dark Surface (S7) Other (Explain in Remarks) Restrictive Layer (if observed): Type: Hydric Soil Present? Yes No Χ Depth (inches): Remarks:

Project/Site: Cider Solar Project	City/County: Oakfield/Ger	nessee Sampling Date: 9/24/2020					
Applicant/Owner: Hecate		State: NY Sampling Point:					
Investigator(s): Andrew Sorci	Section, Township, Range:	1_20200924_wl_110_u1					
Landform (hillslope, terrace,etc.): Dip	orm (hillslope, terrace,etc.): <u>Dip</u> Local relief (concave, convex						
Subregion (LRR or MLRA): LRR L	Lat: 43.087672 Long:	78.232506 Datum: NAD83					
Soil Map Unit Name: La		NWI Classification: PFO					
Are climatic / hyrologic conditions on the site t							
Are Vegetation, Soil, or Hydrology		·					
Are Vegetation, Soil, or Hydrology	naturally problematic? (if needed, exp	olain any answers in Remarks.)					
SUMMARY OF FINDINGS - Attach site map	showing sampling point locations, tran	nsects, important features, etc.					
Hydrophytic Vegetation Present? Yes X							
Hydric Soil Present? Yes X	within a Wetland?	Yes X No					
Wetland Hydrology Present? Yes X		land Site ID: WL95					
Remarks: (Explain alternative procedures here or in a se							
HYDROLOGY							
Wetland Hydrology Indicators:		Secondary Indicators (minimum of two required)					
Primary Indicators (minimum of one is required: cl	heck all that apply)	Surface Soil Cracks (B6)					
Surface Water (A1)	Water-Stained Leaves (B9)	Drainage Patterns (B10)					
High Water Table (A2)	Aquatic Fauna (B13)	X Moss Trim Lines (B16)					
X Saturation (A3)	Marl Deposits (B15)	Dry-Season Water Table (C2)					
Water Marks (B1)	Hydrogen Sulfide Odor (C1)	Crayfish Burrows (C8)					
Sediment Deposits (B2)	Oxidized Rhizospheres on Living Roots (C3)	Saturation Visible in Aerial Imagery (C9)					
Drift Deposits (B3)	Presence of Reduced Iron (C4)	Stunted or Stressed Plants (D1)					
Algal Mat or Crust (B4)	Recent Iron Reduction in Tilled Soils (C6)	Geomorphic Position (D2)					
Iron Deposits (B5)	Thin Muck Surface (C7)	Shallow Aquitard (D3)					
Inundation Visible on Aerial Imagery (B7)	Other (Explain in Remarks)	Microtopographic Relief (D4)					
Sparsley Vegetated Concave Surface (B8)		X FAC-Neutral Test (D5)					
Surface Water Present? Yes No X	Depth (inches)						
Water Table Present? Yes No X	Depth (inches) Wetland I	Hydrology Present? Yes X No					
Saturation Present? Yes X No	Depth (inches) 8	<u> </u>					
Describe Recorded Data (stream gauge, moni	toring well, aerial photos, previous inspection	ns), if available:					
Remarks:							

VEGETATION - Use scientific names of plants Sampling Point: 1_20200924_wl_110_u1 Absolute Dominant Indicator **Dominance Test Worksheet:** (Plot Size: 30'radius) % Cover Species? Status **Tree Stratum Number of Dominant Species** 40 Χ FACU That Are OBL, FACW, or FAC: 3 (A) Acer saccharum Fraxinus pennsylvanica 30 Х **FACW Total Number of Dominant** 70 = Total Cover Species Across All Strata: (B) 4 Percent of Dominant Species (A/B) That Are OBL, FACW, or FAC: 75% **Prevalence Index Worksheet:** 0 x 1 **OBL** species Absolute Dominant Indicator **FACW** species 100 200 (Plot Size: 15'radius) % Cover Species? x 2 **Shrub Stratum** Status FAC species 5 х3 15 Cornus amomum 60 Χ **FACW** Lindera benzoin 10 **FACW FACU** species 40 x 4 160 = Total Cover 70 **UPL** species 0 x 5 0 Column Totals 145 (A) 375 (B) Prevalence Index = B/A = 2.59 **Hydrophytic Vegetation Indicators:** Absolute Dominant Indicator 1- Rapid Test For Hydrophytic Vegetation **Herb Stratum** (Plot Size: 5'radius) % Cover Species? Status X 2- Dominance Test is > 50% 5 Urtica dioica Х FAC X 3- Prevalence Index is =< 3.0 5 = Total Cover 4- Morphological Adaptations 5- Problematic Hydrophytic Vegetation **Definitions of Vegetation Strata:** Tree- Woody plants 3 in. (7.6cm) or more in diameter at breast height (DBH), regardless of height. Sapling/Shrub- Woody plants less than 3 in. DBH and greater than or equal to 3.28ft (1m) tall. Herb- All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28ft tall.

Absolute Dominant Indicator

Species?

= Total Cover

Status

height.

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

Woody Vine Stratum

(Plot Size: 30'radius)

% Cover

Woody Vines- All woody vines greater than 3.28ft in

Present? Yes X No ___

Hydrophytic Vegetation SOIL Sampling Point: 1_20200924_wl_110_u1

								1			
Depth	Matrix	(Redo	x Featu	ires				
(inches	Color	%	Color	%	Type	Loc	Texture	Remarks			
0-8	10YR 2/1	100					Mucky Loam				
8-16	5Y 3/1	95	10YR 5/8	5	С	М	Silty Clay Loam				
•	oil Indicators:				Dalosalo	- D-I	Cf (D45)	Indicators for Problematic Soils:			
	tosol (A1)	(42)			-		Surface (B15)	2 cm Muck (A10)			
	tic Epipedon (ck Histic (A3)				Thin Dar		e (59) ineral (F1)	Coast Prarie Redox (A16) 5 cm Mucky Peat or Peat (S3)			
	drogen Sulfide					•	atric (F2)	Dark Surface (S7)			
	atified Layers			Y	Depleted	-		Polyvalue Below Surface (S8)			
	pleted Below		rface (Δ11)		Redox D			Thin Dark Surface (S9)			
	ck Dark Surfa				-		urface (F7)	Iron-Manganese Masses (F12)			
	ndy Mucky Mi				Redox D			Piedmont Floodplain Soils (F19)			
	ndy Gleyed Ma				· · · · · · · · · · · · · · · · · · ·	срісээіо	113 (1 3)	Mesic Spodic (TA6)			
	ndy Redox (S5	-	,					Red Parent Material (F21)			
	ipped Matrix (Very Shallow Dark Surface (TF12)			
	rk Surface (S7							Other (Explain in Remarks)			
	•	,									
Restrictiv	ve Layer (if obs	erved):									
		Type:					Hydric	Soil Present? Yes X No			
	Depth (ir	_					Tryanc	3011 Teserit. Tes <u>X</u> No			
Remark	s:										

Project/Site: Cider Solar Project	City/County: Oakfield/Gen	essee Sampling Date: 9/24/2020				
Applicant/Owner: Hecate		State: NY Sampling Point:				
Investigator(s): Andrew Sorci	Section, Township, Range:	1_20200924_WL29_U				
Landform (hillslope, terrace,etc.): Rise	Local relief (concave, convex, r	none): <u>None</u> Slope (%) <u>2 - 5</u>				
Subregion (LRR or MLRA): LRR L	Lat: 43.098373 Long:7	78.228308 Datum: <u>NAD83</u>				
Soil Map Unit Name: <u>LmA</u>		NWI Classification: UPL				
Are climatic / hyrologic conditions on the site t	ypical for this time of year? Yes X No	(if no, explain in Remarks.)				
Are Vegetation, Soil, or Hydrology	significantly disturbed? Are "Normal of the control	Circumstances" present? Yes X No				
Are Vegetation, Soil, or Hydrology	naturally problematic? (if needed, exp	lain any answers in Remarks.)				
SUMMARY OF FINDINGS - Attach site map	showing sampling point locations, tran	sects, important features, etc.				
Hydrophytic Vegetation Present? Yes X		-				
	within a Wetland?	Yes No X				
Hydric Soil Present? Yes	No X					
Wetland Hydrology Present? Yes	No X if yes, optional Wetl	and site ib.				
Remarks: (Explain alternative procedures here or in a sep	parate report.)					
HYDROLOGY						
Wetland Hydrology Indicators:		Secondary Indicators (minimum of two required)				
Primary Indicators (minimum of one is required: cl	neck all that apply)	Surface Soil Cracks (B6)				
Surface Water (A1)	Water-Stained Leaves (B9)	Drainage Patterns (B10)				
High Water Table (A2)	Aquatic Fauna (B13)	Moss Trim Lines (B16)				
Saturation (A3)	Marl Deposits (B15)	Dry-Season Water Table (C2)				
Water Marks (B1)	Hydrogen Sulfide Odor (C1)	Crayfish Burrows (C8)				
Sediment Deposits (B2)	Oxidized Rhizospheres on Living Roots (C3)	Saturation Visible in Aerial Imagery (C9)				
Drift Deposits (B3)	Presence of Reduced Iron (C4)	Stunted or Stressed Plants (D1)				
Algal Mat or Crust (B4)	Recent Iron Reduction in Tilled Soils (C6)	Geomorphic Position (D2)				
Iron Deposits (B5)	Thin Muck Surface (C7)	Shallow Aquitard (D3)				
Inundation Visible on Aerial Imagery (B7)	Other (Explain in Remarks)	Microtopographic Relief (D4)				
Sparsley Vegetated Concave Surface (B8)	Other (Explain in Nemarks)	FAC-Neutral Test (D5)				
		FAC-Neutral Test (D5)				
Surface Water Present? Yes No X	Depth (inches)					
Water Table Present? Yes No X	Depth (inches) Wetland F	Hydrology Present? Yes No X				
Saturation Present? Yes NoX	Depth (inches)					
Describe Recorded Data (stream gauge, monit	toring well, aerial photos, previous inspection	ns), if available:				
, ,		"				
Remarks:						

VEGETATION - Use scientific names of plants Sampling Point: 1_20200924_WL29_U Absolute Dominant Indicator **Dominance Test Worksheet:** (Plot Size: 30'radius) % Cover Species? Status **Tree Stratum Number of Dominant Species** That Are OBL, FACW, or FAC: (A) = Total Cover **Total Number of Dominant** Species Across All Strata: (B) 6 Percent of Dominant Species That Are OBL, FACW, or FAC: 66.7% (A/B) **Prevalence Index Worksheet:** 0 x 1 **OBL** species Absolute Dominant Indicator **FACW** species 70 140 (Plot Size: 15'radius) % Cover Species? x 2 **Shrub Stratum Status** FAC species 57 19 х3 Lonicera morrowii Χ FACU 75 Fraxinus pennsylvanica 60 Х **FACW FACU** species 80 x 4 320 10 FAC Cornus racemosa **UPL** species 0 x 5 0 145 = Total Cover Column Totals 169 (A) 517 (B) Prevalence Index = B/A = 3.06 **Hydrophytic Vegetation Indicators:** Absolute Dominant Indicator 1- Rapid Test For Hydrophytic Vegetation **Herb Stratum** (Plot Size: 5'radius) % Cover Species? Status X 2- Dominance Test is > 50% 10 Symphyotrichum lanceolatum Χ **FACW** 3- Prevalence Index is =< 3.0 10 = Total Cover 4- Morphological Adaptations 5- Problematic Hydrophytic Vegetation **Definitions of Vegetation Strata:** Tree- Woody plants 3 in. (7.6cm) or more in diameter at breast height (DBH), regardless of height. Sapling/Shrub- Woody plants less than 3 in. DBH and greater than or equal to 3.28ft (1m) tall. Herb- All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28ft tall. Absolute Dominant Indicator Woody Vines- All woody vines greater than 3.28ft in (Plot Size: 30'radius) % Cover Species? **Woody Vine Stratum** Status height. Toxicodendron radicans **FAC** Parthenocissus quinquefolia 5 Х **FACU** Hydrophytic Vitis riparia 4 Χ FAC Vegetation 14 = Total Cover Present? Yes X No ___

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

SOIL Sampling Point: 1_20200924_WL29_U

Depth	Matrix				Redo	x Featu	res				
(inches	Color	%	Color	%	Type	Loc	Texture	Remarks			
0-14	10YR 3/2	100					Sandy Loam				
14-20	10YR 4/2	80	10YR 4/6	20	С	М	Clay				
	·		•				,				
Hydric Sc	oil Indicators:							Indicators for Problematic Soils:			
His	tosol (A1)				Polyvalu	e Below	Surface (B15)	2 cm Muck (A10)			
His	tic Epipedon (A2)			Thin Dar	k Surface	e (S9)	Coast Prarie Redox (A16)			
Bla	ck Histic (A3)				Loamy N	1ucky Mi	neral (F1)	5 cm Mucky Peat or Peat (S3)			
Нус	drogen Sulfide	e (A4)			Loamy G	leyed Ma	atric (F2)	Dark Surface (S7)			
Stratified Layers (A5)					Depleted	d Matrix	(F3)	Polyvalue Below Surface (S8)			
Depleted Below Dark Surface (A11)				Redox D	ark Surfa	ce (F6)	Thin Dark Surface (S9)				
Thi	ck Dark Surfac	ce (A12)			Depleted	d Dark Su	ırface (F7)	Iron-Manganese Masses (F12)			
Sar	ndy Mucky Mi	neral (S:	1)		Redox D	epressio	ns (F8)	Piedmont Floodplain Soils (F19)			
Sar	ndy Gleyed Ma	atrix (S4)					Mesic Spodic (TA6)			
Sar	ndy Redox (S5))						Red Parent Material (F21)			
	ipped Matrix (Very Shallow Dark Surface (TF12)			
Dai	rk Surface (S7))						Other (Explain in Remarks)			
Restricti	ve Layer (if obs	erved):									
		Type:					Hydric	Soil Present? Yes No X			
	Depth (in	nches):									
Remark	S:										

Project/Site: Cider Solar Project	City/County: Elba/Genese	e Sampling Date: 7/23/2020			
Applicant/Owner: Hecate		State: NY Sampling Point:			
Investigator(s): Justin Ahn	Section, Township, Range:	02-20200723-WL-48-48W			
Landform (hillslope, terrace,etc.): Depression	Local relief (concave, convex,	none): <u>Concave</u> Slope (%) <u>0 - 1</u>			
Subregion (LRR or MLRA): LRR L	Lat: 43.092695 Long: -7	8.205165 Datum: NAD83			
Soil Map Unit Name: CaA		NWI Classification: PFO			
Are climatic / hyrologic conditions on the site t	ypical for this time of year? Yes X No	(if no, explain in Remarks.)			
Are Vegetation $___$, Soil $___$, or Hydrology	significantly disturbed? Are "Normal	Circumstances" present? Yes X No			
Are Vegetation, Soil, or Hydrology	naturally problematic? (if needed, exp	plain any answers in Remarks.)			
SUMMARY OF FINDINGS - Attach site map	showing sampling point locations, tran	nsects, important features, etc.			
Hydrophytic Vegetation Present? Yes X	No Is the Sampled Are.				
Hydric Soil Present? Yes X	No within a Wetland?	Yes X No			
Wetland Hydrology Present? Yes X	_	land Site ID: WL96			
		<u> </u>			
Remarks: (Explain alternative procedures here or in a sep	parate report.)				
HYDROLOGY					
Wetland Hydrology Indicators:		Secondary Indicators (minimum of two required)			
Primary Indicators (minimum of one is required: ch		Surface Soil Cracks (B6)			
Surface Water (A1)	X Water-Stained Leaves (B9)	Drainage Patterns (B10)			
High Water Table (A2)	Aquatic Fauna (B13)	X Moss Trim Lines (B16)			
Saturation (A3)	Marl Deposits (B15)	Dry-Season Water Table (C2)			
Water Marks (B1)	Hydrogen Sulfide Odor (C1)	Crayfish Burrows (C8)			
Sediment Deposits (B2)	Oxidized Rhizospheres on Living Roots (C3)	Saturation Visible in Aerial Imagery (C9)			
Drift Deposits (B3)	Presence of Reduced Iron (C4)	Stunted or Stressed Plants (D1)			
Algal Mat or Crust (B4)	Recent Iron Reduction in Tilled Soils (C6)	X Geomorphic Position (D2)			
Iron Deposits (B5)	Thin Muck Surface (C7)	Shallow Aquitard (D3)			
Inundation Visible on Aerial Imagery (B7)	Other (Explain in Remarks)	Microtopographic Relief (D4)			
Sparsley Vegetated Concave Surface (B8)		FAC-Neutral Test (D5)			
Surface Water Present? Yes No X	Depth (inches)				
	= ' ' 	Hydrology Present? Yes X No			
	- ' ' 	Tyurology Fresent: Tes X No			
Saturation Present? Yes No X	Depth (inches)				
Describe Recorded Data (stream gauge, monit	coring well, aerial photos, previous inspection	ns), if available:			
Remarks:					
nemarks.					

VEGETATION - Use scientific names of plants Sampling Point: 02-20200723-WL-48-48W

VEGETATION - Use scier	itific names	s or plants				Sampi	ing i Oiiii	l. UZ-ZU	200723-W	L-48-48
Tree Stratum	(Plot Size:	30'radius)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test V				
Fraxinus pennsylvanic	a		40	Х	FACW	That Are OBL, FA	•		8	(A)
Crataegus phaenopyru			30 70	X = Total Cov	FAC /er	Total Number of Dominant Species Across All Strata			8	_ _(B)
						Percent of Dor That Are OBL,	•		100%	(A/B)
						Prevalence Index \	Workshe	et:		
			Absoluto	Dominant	Indicator	OBL species	50	x 1	50	
Shrub Stratum	(Plot Size:	15'radius)	% Cover	Species?	Status	FACW species	85	x 2	170	
Fraxinus pennsylvanio	a		30	Χ	FACW	FAC species	30	x 3	90	
			30	= Total Cov	/er	FACU species	0	x 4	0	
						UPL species	0	x 5	0	
						Column Totals	165	(A)	310	(E
						Prevalenc	e Index =	B/A =	1.88	
						Hydrophytic Vege	tation In	dicator	s:	
			Absolute	Dominant	Indicator	1- Rapid Tes	t For Hyd	drophyt	ic Vegeta	tion
Herb Stratum	(Plot Size:	5'radius)	% Cover	Species?	Status	X 2- Dominan	•		J	
Carex tuckermanii			20	Х	OBL	X 3- Prevalence				
Carex lupuliformis			10	Х	OBL					
Agrostis gigantea			10	Х	FACW	4- Morpholo	ogical Ada	aptatior	ıs	
Carex striata			10	Х	OBL	5- Problema	tic Hydro	phytic	Vegetatio	n
Carex crinita			10	Х	OBL					
Symphyotrichum lanc	eolatum		5	- Total Cov	FACW	Definitions of Vegeta	ation Stra	ta:		
			65	_= Total Cov	er/er	Tree- Woody plants 3 breast height (DBH),				eter at
						Sapling/Shrub- Wood greater than or equa				and
						Herb- All herbaceous size, and woody plan				less of
Woody Vine Stratum	(Plot Size:	30'radius)	Absolute % Cover	Dominant Species?	Indicator Status	Woody Vines- All wo height.	ody vines	greater	than 3.28f	t in
				_= Total Cov	/er	Hydropl Vegeta	-			

SOIL

Sampling Point: 02-20200723-WL-48-48W

Depth	Matrix				Redo	x Featu	res	
(inches	Color	%	Color	%	Type	Loc	Texture	Remarks
0-10	2.5Y 4/3	90	7.5YR 4/6	10	С	PL	Silty Clay Loam	
10-20	2.5Y 4/2	80	10YR 5/4	20	С	M	Silty Clay Loam	

Hydric Soil Indicators:		Indicators for Problematic Soils:
Histosol (A1)	Polyvalue Below Surface (B15)	2 cm Muck (A10)
Histic Epipedon (A2)	Thin Dark Surface (S9)	Coast Prarie Redox (A16)
Black Histic (A3)	Loamy Mucky Mineral (F1)	5 cm Mucky Peat or Peat (S3)
Hydrogen Sulfide (A4)	Loamy Gleyed Matric (F2)	Dark Surface (S7)
Stratified Layers (A5)	X Depleted Matrix (F3)	Polyvalue Below Surface (S8)
Depleted Below Dark Surface (A11)	Redox Dark Surface (F6)	Thin Dark Surface (S9)
Thick Dark Surface (A12)	Depleted Dark Surface (F7)	Iron-Manganese Masses (F12)
Sandy Mucky Mineral (S1)	Redox Depressions (F8)	Piedmont Floodplain Soils (F19)
Sandy Gleyed Matrix (S4)		Mesic Spodic (TA6)
Sandy Redox (S5)		Red Parent Material (F21)
Stripped Matrix (S6)		Very Shallow Dark Surface (TF12)
Dark Surface (S7)		Other (Explain in Remarks)
Restrictive Layer (if observed):		
Туре:	Hyc	dric Soil Present? Yes X No
Depth (inches):		

Project/Site: Cider Solar Project	City/County: Elba/Genese	e Sampling Date: 7/23/2020
Applicant/Owner: Hecate		State: NY Sampling Point:02-20200723
Investigator(s): Justin Ahn	Section, Township, Range:	WL-48-48U
Landform (hillslope, terrace,etc.): <u>Toeslope</u>	Local relief (concave, convex,	none): <u>Linear</u> Slope (%) <u>1 - 5</u>
Subregion (LRR or MLRA): LRR L	Lat: 43.092798 Long: -7	78.20523 Datum: NAD83
Soil Map Unit Name: CaA		NWI Classification: UPL
Are climatic / hyrologic conditions on the site t	cypical for this time of year? Yes X No	(if no, explain in Remarks.)
Are Vegetation, Soil, or Hydrology	significantly disturbed? Are "Normal	Circumstances" present? Yes X No
Are Vegetation, Soil, or Hydrology	naturally problematic? (if needed, exp	plain any answers in Remarks.)
SUMMARY OF FINDINGS - Attach site ma	showing sampling point locations, trai	nsects, important features, etc.
Hydrophytic Vegetation Present? Yes X		
Hydric Soil Present? Yes	No X within a Wetland?	Yes No X
Wetland Hydrology Present? Yes	No X if yes, optional Wet	land Site ID:
Remarks: (Explain alternative procedures here or in a se		
HYDROLOGY Wetland Hydrology Indicators:		Secondary Indicators (minimum of two required)
Primary Indicators (minimum of one is required: c	heck all that apply)	Surface Soil Cracks (B6)
Surface Water (A1)	Water-Stained Leaves (B9)	Drainage Patterns (B10)
High Water Table (A2)	Aquatic Fauna (B13)	Moss Trim Lines (B16)
Saturation (A3)	Marl Deposits (B15)	Dry-Season Water Table (C2)
Water Marks (B1)	Hydrogen Sulfide Odor (C1)	Crayfish Burrows (C8)
Sediment Deposits (B2)	Oxidized Rhizospheres on Living Roots (C3)	Saturation Visible in Aerial Imagery (C9)
Drift Deposits (B3)	Presence of Reduced Iron (C4)	Stunted or Stressed Plants (D1)
Algal Mat or Crust (B4)	Recent Iron Reduction in Tilled Soils (C6)	Geomorphic Position (D2)
Iron Deposits (B5)	Thin Muck Surface (C7)	Shallow Aquitard (D3)
Inundation Visible on Aerial Imagery (B7)	Other (Explain in Remarks)	Microtopographic Relief (D4)
Sparsley Vegetated Concave Surface (B8)		FAC-Neutral Test (D5)
Surface Water Present? Yes No X	Depth (inches)	
Water Table Present? Yes No X	= · · · · 	Hydrology Present? Yes No X
Saturation Present? Yes No X	Depth (inches)	119 119 119 119 119 119 119 119 119 119
Describe Recorded Data (stream gauge, moni		ns), if available:
Remarks:		

/EGETATION - Use scie	nunc names	oi piants				Janipii	ing i onit	. 02-20	200723-W	L-48-48
Tree Stratum	(Plot Size:	30'radius)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test V		-		
	•		40	X	FACW	Number of Domi That Are OBL, FA	•		6	(A)
Fraxinus pennsylvanio Crataegus phaenopyr			30	X	FACVV		•		0	_(^)
Fagus grandifolia	um		20	X	FACU	Total Numbe Species Ac			8	(B)
			90	= Total Cov		·			0	_(5)
				_		Percent of Dor That Are OBL,	-		75%	(A/B)
						Prevalence Index \	Norkshee	et:		
			مدر با محاد .	Daminant	la disaban	OBL species	0	x 1	0	
Shrub Stratum	(Plot Size:	15'radius)	% Cover	Dominant Species?	Status	FACW species	40	x 2	80	
Rhamnus cathartica			40	Χ	FAC	FAC species	105	x 3	315	
			40	= Total Cov	er	FACU species	30	x 4	120	
						UPL species	0	x 5	0	
						Column Totals	175	(A)	515	(B
						_				
						Prevalenc	e index =	B/A = _	2.94	
						Hydrophytic Vege	tation In	dicator	5:	
			Absolute	Dominant	Indicator	1- Rapid Tes	t For Hyd	ronhyti	c Vegetat	tion
Herb Stratum	(Plot Size:	5'radius)	% Cover	Species?	Status		•		o vegeta	
Toxicodendron radica	ans		20	Χ	FAC	X 2- Dominan				
Geum aleppicum			5	Х	FAC	X 3- Prevalenc	e Index is	s =< 3.0		
			25	_= Total Cov	er	4- Morpholo	ogical Ada	ptation	ıs	
						5- Problema	tic Hydro	phytic '	√egetatio	n
						Definitions of Vegeta	ation Strat	a:		
						Tree- Woody plants 3 breast height (DBH),				eter at
						Sapling/Shrub- Wood greater than or equa				and
						Herb- All herbaceous size, and woody plan				less of
			Absolute	Dominant	Indicator					
Woody Vine Stratum	(Plot Size:	30'radius)	% Cover	Species?	Status	Woody Vines- All wo height.	ody vines	greater t	:han 3.28f	t in
Parthenocissus quing	uefolia		10	X	FACU					
Vitis riparia			10 20	X _= Total Cov	rer	Hydropl Vegeta	-			

altered, farm land

SOIL Sampling Point: 02-20200723-WL-48-48U

	Matrix Color 10YR 4/6	%			Redo	x Feature	<u></u>				
0-12		%				x i catule	:5				
	10YR 4/6		Color	%	Type	Loc	Texture	Remarks			
12-20		95	7.5YR 5/8	5	С	PL	Silt Loam				
	10YR 4/6	80	7.5YR 5/8	20	С	PL	Silt Loam				
-	Indicators:				Dahasaha	- Palau Cu		Indicators for Problematic Soils:			
Histosol (A1)					=	е веюw Su k Surface (:	rface (B15)	2 cm Muck (A10) Coast Prarie Redox (A16)			
Histic Epipedon (A2) Black Histic (A3)					lucky Mine	•	5 cm Mucky Peat or Peat (S3)				
Hydrogen Sulfide (A4)				-	leyed Mati		Dark Surface (S7)				
	itified Layers (A5)			Depleted Matrix (F3)				Polyvalue Below Surface (S8)			
	eted Below [-	ırface (A11)		-	ark Surface		Thin Dark Surface (S9)			
	CDark Surfac					d Dark Surf		Iron-Manganese Masses (F12)			
	y Mucky Mir	-	•		-	epressions		Piedmont Floodplain Soils (F19)			
	y Gleyed Ma						(- /	Mesic Spodic (TA6)			
	, ly Redox (S5)	-	,					Red Parent Material (F21)			
	ped Matrix (Very Shallow Dark Surface (TF12)			
	Surface (S7)							Other (Explain in Remarks)			
Restrictive	Layer (if obse	erved):									
		Туре:					Hydric	Soil Present? Yes No X			
	Depth (in	ches):					,				
Remarks:											

Project/Site: Cider Solar Project	City/County: Elba/Genese	e Sampling Date: 7/23/2020		
Applicant/Owner: Hecate		State: NY Sampling Point:		
Investigator(s): Justin Ahn	Section, Township, Range:	02-20200723-WL-47-47W		
Landform (hillslope, terrace,etc.): Depression	Local relief (concave, convex, r	none): <u>Concave</u> Slope (%) <u>0 - 1</u>		
Subregion (LRR or MLRA): LRR L	Lat: 43.092053 Long: -78	3.203939 Datum: <u>NAD83</u>		
Soil Map Unit Name: ApA		NWI Classification: PEM		
Are climatic / hyrologic conditions on the site t	ypical for this time of year? Yes X No	(if no, explain in Remarks.)		
Are Vegetation, Soil, or Hydrology	significantly disturbed? Are "Normal of the control	Circumstances" present? Yes X No		
Are Vegetation, Soil, or Hydrology	naturally problematic? (if needed, exp	lain any answers in Remarks.)		
SUMMARY OF FINDINGS - Attach site map	showing sampling point locations, tran	sects, important features, etc.		
Hydrophytic Vegetation Present? Yes X	No Is the Sampled Area	-		
	within a Wetland?	Yes X No		
Hydric Soil Present? Yes X	Noif yes, entired West			
Wetland Hydrology Present? Yes X	No if yes, optional weti	and Site ID: WL97		
Remarks: (Explain alternative procedures here or in a sep	parate report.)			
HYDROLOGY				
Wetland Hydrology Indicators:		Secondary Indicators (minimum of two required)		
Primary Indicators (minimum of one is required: cl	neck all that apply)	Surface Soil Cracks (B6)		
X Surface Water (A1)	Water-Stained Leaves (B9)	Drainage Patterns (B10)		
High Water Table (A2)	Aquatic Fauna (B13)	Moss Trim Lines (B16)		
Saturation (A3)	Marl Deposits (B15)	Dry-Season Water Table (C2)		
Water Marks (B1)	Hydrogen Sulfide Odor (C1)	Crayfish Burrows (C8)		
Sediment Deposits (B2)	X Oxidized Rhizospheres on Living Roots (C3)	Saturation Visible in Aerial Imagery (C9)		
Drift Deposits (B3)	Presence of Reduced Iron (C4)	Stunted or Stressed Plants (D1)		
Algal Mat or Crust (B4)	Recent Iron Reduction in Tilled Soils (C6)	Geomorphic Position (D2)		
Iron Deposits (B5)	Thin Muck Surface (C7)	Shallow Aquitard (D3)		
Inundation Visible on Aerial Imagery (B7)	Other (Explain in Remarks)			
	Other (Explain in Remarks)	Microtopographic Relief (D4)		
Sparsley Vegetated Concave Surface (B8)		FAC-Neutral Test (D5)		
Surface Water Present? Yes X No	Depth (inches) 2			
Water Table Present? Yes No X	Depth (inches) Wetland F	Hydrology Present? Yes X No		
Saturation Present? Yes No X	Depth (inches)			
Describe Recorded Data (stream gauge, monit	oring well, aerial photos, previous inspection	ns). if available:		
5	0			
Remarks:				

VEGETATION - Use scientific names of plants Sampling Point: 02-20200723-WL-47-47W Absolute Dominant Indicator **Dominance Test Worksheet:** (Plot Size: 30'radius) % Cover Species? Status **Tree Stratum Number of Dominant Species** That Are OBL, FACW, or FAC: (A) = Total Cover **Total Number of Dominant** Species Across All Strata: (B) 1 Percent of Dominant Species That Are OBL, FACW, or FAC: (A/B) 100% **Prevalence Index Worksheet:** 30 x 1 30 **OBL** species Absolute Dominant Indicator **FACW** species 80 160 (Plot Size: 15'radius) Status x 2 **Shrub Stratum** % Cover Species? FAC species 0 х3 = Total Cover 5 **FACU** species x 4 20 **UPL** species 0 x 5 0 Column Totals 115 (A) 210 (B) Prevalence Index = B/A = 1.83 **Hydrophytic Vegetation Indicators:** Absolute Dominant Indicator X 1- Rapid Test For Hydrophytic Vegetation **Herb Stratum** (Plot Size: 5'radius) % Cover Species? Status X 2- Dominance Test is > 50% 60 Phalaris arundinacea Х **FACW** X 3- Prevalence Index is =< 3.0 Carex alopecoidea 20 **FACW** 4- Morphological Adaptations Carex lupuliformis 10 OBL Asclepias incarnata 10 OBL 5- Problematic Hydrophytic Vegetation Alisma subcordatum 5 OBL Ambrosia artemisiifolia 5 **FACU Definitions of Vegetation Strata:** Typha angustifolia 5 OBL Tree- Woody plants 3 in. (7.6cm) or more in diameter at 115 = Total Cover breast height (DBH), regardless of height. Sapling/Shrub- Woody plants less than 3 in. DBH and greater than or equal to 3.28ft (1m) tall. Herb- All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28ft tall. Absolute Dominant Indicator Woody Vines- All woody vines greater than 3.28ft in (Plot Size: 30'radius) **Woody Vine Stratum** % Cover Species? Status height. = Total Cover Hydrophytic Vegetation Present? Yes X No ____ Remarks: (Include photo numbers here or on a separate sheet.)

SOIL

Sampling Point: 02-20200723-WL-47-47W

Depth	Matrix				trix Redox Features				
nches	Color	%	Color	%	Type	Loc	Texture	Remarks	
0-12	10YR 4/2	90	7.5YR 4/6	10	С	PL	Silty Clay Loam		
12-24	10YR 4/2	80	7.5YR 4/6	20	С	М	Clay		
	oil Indicators:				Dobazalu	o Polow S	Surface (B15)	Indicators for Problematic Soils:	
Histosol (A1)				Polyvalu	e Below S	ourrace (BIS)	2 cm Muck (A10)		
Hic	tic Enimodes /	۸ ۵ ۱			Thin Dar	l Curfoso	(50)	Coast Dravia Raday (A16)	
	tic Epipedon (A2)				k Surface	• ,	Coast Prarie Redox (A16)	
Bla	ck Histic (A3)				Loamy N	lucky Mir	neral (F1)	5 cm Mucky Peat or Peat (S3)	
Bla Hyd	ck Histic (A3) drogen Sulfide	(A4)			Loamy M Loamy G	Mucky Mir ileyed Ma	neral (F1) tric (F2)	5 cm Mucky Peat or Peat (S3) Dark Surface (S7)	
Bla Hyd Stra	ck Histic (A3) drogen Sulfide atified Layers ((A4) (A5)		X	Loamy M Loamy G Depleted	Mucky Mir ileyed Ma d Matrix (neral (F1) tric (F2) F3)	5 cm Mucky Peat or Peat (S3) Dark Surface (S7) Polyvalue Below Surface (S8)	
Bla Hyd Stra De	ck Histic (A3) drogen Sulfide atified Layers (pleted Below [(A4) (A5) Dark Su		X	Loamy M Loamy G Depleted Redox Da	Mucky Mir ileyed Ma d Matrix (ark Surfac	neral (F1) tric (F2) F3) ce (F6)	5 cm Mucky Peat or Peat (S3) Dark Surface (S7) Polyvalue Below Surface (S8) Thin Dark Surface (S9)	
Bla Hyd Stra De Thi	ck Histic (A3) drogen Sulfide atified Layers (pleted Below I ck Dark Surfac	(A4) (A5) Dark Su ce (A12))	X	Loamy M Loamy G Depleted Redox D Depleted	Aucky Mir ileyed Ma d Matrix (ark Surfac d Dark Su	neral (F1) tric (F2) F3) ce (F6) rface (F7)	5 cm Mucky Peat or Peat (S3) Dark Surface (S7) Polyvalue Below Surface (S8) Thin Dark Surface (S9) Iron-Manganese Masses (F12)	
Bla Hyd Stra De Thi	ck Histic (A3) drogen Sulfide atified Layers (pleted Below [(A4) (A5) Dark Su ce (A12))	X	Loamy M Loamy G Depleted Redox D Depleted	Mucky Mir ileyed Ma d Matrix (ark Surfac	neral (F1) tric (F2) F3) ce (F6) rface (F7)	5 cm Mucky Peat or Peat (S3) Dark Surface (S7) Polyvalue Below Surface (S8) Thin Dark Surface (S9)	
Bla Hyd Stra De Thi Sar	ck Histic (A3) drogen Sulfide atified Layers (pleted Below I ck Dark Surfac	(A4) (A5) Dark Su ce (A12) neral (S)	X	Loamy M Loamy G Depleted Redox D Depleted	Aucky Mir ileyed Ma d Matrix (ark Surfac d Dark Su	neral (F1) tric (F2) F3) ce (F6) rface (F7)	5 cm Mucky Peat or Peat (S3) Dark Surface (S7) Polyvalue Below Surface (S8) Thin Dark Surface (S9) Iron-Manganese Masses (F12)	
Bla Hyd Stra De Thi Sar	ck Histic (A3) drogen Sulfide atified Layers (pleted Below E ck Dark Surfac ndy Mucky Mir	(A4) (A5) Dark Su ce (A12) neral (Satrix (S4)	X	Loamy M Loamy G Depleted Redox D Depleted	Aucky Mir ileyed Ma d Matrix (ark Surfac d Dark Su	neral (F1) tric (F2) F3) ce (F6) rface (F7)	5 cm Mucky Peat or Peat (S3) Dark Surface (S7) Polyvalue Below Surface (S8) Thin Dark Surface (S9) Iron-Manganese Masses (F12) Piedmont Floodplain Soils (F19)	
Bla Hyv Str: Dep Thi Sar Sar	ck Histic (A3) drogen Sulfide atified Layers (pleted Below I ck Dark Surfac ndy Mucky Mir ndy Gleyed Ma	(A4) (A5) Dark Su ce (A12) neral (S atrix (S4)	X	Loamy M Loamy G Depleted Redox D Depleted	Aucky Mir ileyed Ma d Matrix (ark Surfac d Dark Su	neral (F1) tric (F2) F3) ce (F6) rface (F7)	5 cm Mucky Peat or Peat (S3) Dark Surface (S7) Polyvalue Below Surface (S8) Thin Dark Surface (S9) Iron-Manganese Masses (F12) Piedmont Floodplain Soils (F19) Mesic Spodic (TA6)	

Remarks:

Type:

Depth (inches):

Hydric Soil Present? Yes X No

Project/Site: Cider Solar Project	City/County: Elba/Genese	e Sampling Date: 7/23/2020			
Applicant/Owner: Hecate	State: NY Sampling Point:02-2020				
Investigator(s): Justin Ahn	Section, Township, Range: WL-47-47U				
Landform (hillslope, terrace,etc.): <u>Toeslope</u>	Local relief (concave, convex, ı	none): <u>Linear</u> Slope (%) <u>1 - 5</u>			
Subregion (LRR or MLRA): LRR L	Lat: 43.091983 Long: <u>-</u> 7	8.203803 Datum: NAD83			
Soil Map Unit Name: ApA		NWI Classification: UPL			
Are climatic / hyrologic conditions on the site t	typical for this time of year? Yes X No	(if no, explain in Remarks.)			
Are Vegetation, Soil, or Hydrology	significantly disturbed? Are "Normal	Circumstances" present? Yes X No			
Are Vegetation, Soil, or Hydrology	naturally problematic? (if needed, exp	lain any answers in Remarks.)			
SUMMARY OF FINDINGS - Attach site ma	p showing sampling point locations, trar	sects, important features, etc.			
Hydrophytic Vegetation Present? Yes	No X Is the Sampled Area				
Hydric Soil Present? Yes	No X within a Wetland?	Yes No X			
Wetland Hydrology Present? Yes	No X if yes, optional Wet	land Site ID:			
Remarks: (Explain alternative procedures here or in a se					
HYDROLOGY					
Wetland Hydrology Indicators:		Secondary Indicators (minimum of two required)			
Primary Indicators (minimum of one is required: c	heck all that apply)	Surface Soil Cracks (B6)			
Surface Water (A1)	Water-Stained Leaves (B9)	Drainage Patterns (B10)			
High Water Table (A2)	Aquatic Fauna (B13)	Moss Trim Lines (B16)			
Saturation (A3)	Marl Deposits (B15)	Dry-Season Water Table (C2)			
Water Marks (B1)	Hydrogen Sulfide Odor (C1)	Crayfish Burrows (C8)			
Sediment Deposits (B2)	Oxidized Rhizospheres on Living Roots (C3)	Saturation Visible in Aerial Imagery (C9)			
Drift Deposits (B3)	Presence of Reduced Iron (C4)	Stunted or Stressed Plants (D1)			
Algal Mat or Crust (B4)	Recent Iron Reduction in Tilled Soils (C6)	Geomorphic Position (D2)			
Iron Deposits (B5)	Thin Muck Surface (C7)	Shallow Aquitard (D3)			
Inundation Visible on Aerial Imagery (B7)	Other (Explain in Remarks)	Microtopographic Relief (D4)			
Sparsley Vegetated Concave Surface (B8)		FAC-Neutral Test (D5)			
Surface Water Present? Yes No X	Depth (inches)				
Water Table Present? Yes No X	Depth (inches) Wetland H	Hydrology Present? Yes No X			
Saturation Present? Yes No X	Depth (inches)	 -			
Describe Recorded Data (stream gauge, moni	toring well, aerial photos, previous inspection	ns), if available:			
·					
Remarks:					

VEGETATION - Use scientific names of plants Sampling Point: 02-20200723-WL-47-47U Absolute Dominant Indicator **Dominance Test Worksheet:** (Plot Size: 30'radius) % Cover Species? Status **Tree Stratum Number of Dominant Species** That Are OBL, FACW, or FAC: (A) = Total Cover **Total Number of Dominant** Species Across All Strata: (B) 2 Percent of Dominant Species 50% (A/B) That Are OBL, FACW, or FAC: **Prevalence Index Worksheet:** x 1 0 **OBL** species Absolute Dominant Indicator **FACW** species 30 60 (Plot Size: 15'radius) % Cover Species? Status x 2 **Shrub Stratum** FAC species 0 х3 = Total Cover **FACU** species 15 x 4 60 **UPL** species 50 x 5 250 Column Totals 95 (A) 370 (B) Prevalence Index = B/A = 3.89 **Hydrophytic Vegetation Indicators:** Absolute Dominant Indicator 1- Rapid Test For Hydrophytic Vegetation **Herb Stratum** (Plot Size: 5'radius) % Cover Species? Status 2- Dominance Test is > 50% 50 UPL Zea mays 3- Prevalence Index is =< 3.0 Χ Phalaris arundinacea 30 **FACW** 4- Morphological Adaptations Ambrosia artemisiifolia 10 **FACU** Abutilon theophrasti 5 **FACU** 5- Problematic Hydrophytic Vegetation 95 = Total Cover **Definitions of Vegetation Strata:** Tree- Woody plants 3 in. (7.6cm) or more in diameter at breast height (DBH), regardless of height. Sapling/Shrub- Woody plants less than 3 in. DBH and greater than or equal to 3.28ft (1m) tall. Herb- All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28ft tall. Absolute Dominant Indicator Woody Vines- All woody vines greater than 3.28ft in (Plot Size: 30'radius) **Woody Vine Stratum** % Cover Species? Status height. = Total Cover Hydrophytic Vegetation Present? Yes ____ No _ X Remarks: (Include photo numbers here or on a separate sheet.)

SOIL Sampling Point: 02-20200723-WL-47-47U Depth Matrix **Redox Features** (inches Color % Color Texture Remarks % Type Loc 0-20 10YR 3/4 95 10YR 6/8 C PΙ Silt Loam 5 **Hydric Soil Indicators:** Indicators for Problematic Soils: Histosol (A1) Polyvalue Below Surface (B15) 2 cm Muck (A10) Histic Epipedon (A2) Thin Dark Surface (S9) Coast Prarie Redox (A16) Black Histic (A3) Loamy Mucky Mineral (F1) 5 cm Mucky Peat or Peat (S3) Hydrogen Sulfide (A4) Loamy Gleyed Matric (F2) Dark Surface (S7) Stratified Layers (A5) Depleted Matrix (F3) Polyvalue Below Surface (S8) Depleted Below Dark Surface (A11) Redox Dark Surface (F6) Thin Dark Surface (S9) Thick Dark Surface (A12) Depleted Dark Surface (F7) Iron-Manganese Masses (F12) Sandy Mucky Mineral (S1) Redox Depressions (F8) Piedmont Floodplain Soils (F19) Sandy Gleyed Matrix (S4) Mesic Spodic (TA6) Sandy Redox (S5) Red Parent Material (F21) Stripped Matrix (S6) Very Shallow Dark Surface (TF12) Dark Surface (S7) Other (Explain in Remarks) Restrictive Layer (if observed): Type: Hydric Soil Present? Yes No Χ Depth (inches): Remarks:

Project/Site: Cider Solar Project	City/Co	ounty: Oakfield/Gen	nesee	Sampling Date: <u>9/23/2020</u>	
Applicant/Owner: Hecate	State: NY Sampling Point:				
Investigator(s): Andrew Sorci	Section, Township, Range: 1_20200923_WL109_W1				
Landform (hillslope, terrace,etc.): Depression	Local relief (concave, convex, none): Concave Slope (%) 0 - 1				
Subregion (LRR or MLRA): LRR L	Lat: 43.099829	Long:7	8.260751	Datum: NAD83	
Soil Map Unit Name: Wy			NWI Classifi	cation: PUB	
Are climatic / hyrologic conditions on the site ty	pical for this time of ye	ar? Yes <u>X</u> No	(if no, e	xplain in Remarks.)	
Are Vegetation , Soil , or Hydrology	significantly distur	bed? Are "Normal (Circumstances"	present? Yes X No	
Are Vegetation , Soil , or Hydrology	naturally problema	atic? (if needed, expl	ain any answers	in Remarks.)	
SUMMARY OF FINDINGS - Attach site map	showing sampling po	oint locations, tran	sects, import	ant features, etc.	
Hydrophytic Vegetation Present? Yes X	No	Is the Sampled Area	I		
Hydric Soil Present? Yes X	No	within a Wetland?	Y	es X No	
Wetland Hydrology Present? Yes X	No	if yes, optional Wetl	and Site ID:	WL98	
Remarks: (Explain alternative procedures here or in a sep	arate report.)				
Pond					
HYDROLOGY					
Wetland Hydrology Indicators:				ators (minimum of two required)	
Primary Indicators (minimum of one is required: ch	eck all that apply)		Surface Soil Cracks (B6)		
X Surface Water (A1)	Water-Stained Leaves	s (B9)	Drainage Patterns (B10)		
High Water Table (A2)	Aquatic Fauna (B13)		Moss Trim Lines (B16)		
Saturation (A3)	Marl Deposits (B15)		Dry-Season Water Table (C2)		
Water Marks (B1)	Hydrogen Sulfide Odo	or (C1)	Crayfish Burrows (C8)		
Sediment Deposits (B2)	Oxidized Rhizosphere	s on Living Roots (C3)	X Saturation	Visible in Aerial Imagery (C9)	
Drift Deposits (B3)	Presence of Reduced			Stressed Plants (D1)	
Algal Mat or Crust (B4)	Recent Iron Reduction			nic Position (D2)	
 -		` ,			
Iron Deposits (B5)	Thin Muck Surface (C7			quitard (D3)	
Inundation Visible on Aerial Imagery (B7)	Other (Explain in Rem	arks)		ographic Relief (D4)	
Sparsley Vegetated Concave Surface (B8)			FAC-Neutr	al Test (D5)	
Surface Water Present? Yes X No	Depth (inches) 36				
Water Table Present? Yes No X	Depth (inches)	- Wetland H	ydrology Prese	nt? Yes X No	
Saturation Present? Yes No X	Depth (inches)	_			
		_			
Describe Recorded Data (stream gauge, monitor	oring well, aerial photos	, previous inspection	s), if available:		
Remarks:					
Remarks.					

tific names of plants				Sampling Point: 1_20200923_WL109_W1		
(Plot Size: 30'radius)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test Worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: 2 (A)		
		= Total Cov	/er	Total Number of Dominant Species Across All Strata: 2 (B) Percent of Dominant Species		
				That Are OBL, FACW, or FAC: 100% (A/B)		
				Prevalence Index Worksheet:		
	Absolute	Dominant	Indicator	OBL species 30 x 1 30		
(Plot Size: 15'radius)	% Cover	Species?	Status	FACW species 30 x 2 60		
				FAC species 0 x 3 0		
		_= Total Cov	ver	FACU species 0 x 4 0		
				UPL species 0 x 5 0		
				Column Totals 60 (A) 90 (B)		
				Prevalence Index = B/A = 1.5		
				Hydrophytic Vegetation Indicators:		
	Absolute	Dominant	Indicator	X 1- Rapid Test For Hydrophytic Vegetation		
(Plot Size:5'radius)	% Cover	Species?	Status	X 2- Dominance Test is > 50%		
	30	Х	OBL	X 3- Prevalence Index is =< 3.0		
			FACW	4- Morphological Adaptations		
	60	_= 10tal Co\	er/er	5- Problematic Hydrophytic Vegetation		
				Definitions of Vegetation Strata:		
				Tree- Woody plants 3 in. (7.6cm) or more in diameter at breast height (DBH), regardless of height.		
				Sapling/Shrub- Woody plants less than 3 in. DBH and greater than or equal to 3.28ft (1m) tall.		
				Herb- All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28ft tall.		
(Plot Size: 30'radius)	Absolute % Cover	Dominant Species?	Indicator Status	Woody Vines- All woody vines greater than 3.28ft in height.		
		= Total Cov	ver .	Hydrophytic Vegetation		
	(Plot Size: 30'radius) (Plot Size: 15'radius)	(Plot Size: 30'radius) Absolute % Cover (Plot Size: 15'radius) Absolute % Cover (Plot Size: 5'radius) Absolute % Cover 30 30 60 Absolute	(Plot Size: 30'radius) Absolute Species? Absolute Dominant Species? Absolute Dominant Species? Total Cov Absolute Dominant Species? Total Cov Absolute Dominant Species? Total Cov Absolute Dominant Species? 30 X 30 X 60 = Total Cov Absolute Dominant Species?	(Plot Size: 30'radius) Absolute Species? Status Absolute Dominant Indicator Species? Status Absolute Dominant Species? Status ———————————————————————————————————		

DIL			Sampling Point: 1_20200923_WL109_
Hydric Soil Indicators:			Indicators for Problematic Soils:
Histosol (A1)	Polyvalue Below Surface (B	15)	2 cm Muck (A10)
Histic Epipedon (A2)	Thin Dark Surface (S9)		Coast Prarie Redox (A16)
Black Histic (A3)	Loamy Mucky Mineral (F1)		5 cm Mucky Peat or Peat (S3)
Hydrogen Sulfide (A4)	Loamy Gleyed Matric (F2)		Dark Surface (S7)
Stratified Layers (A5)	Depleted Matrix (F3)		Polyvalue Below Surface (S8)
Depleted Below Dark Surface (A11)	Redox Dark Surface (F6)		Thin Dark Surface (S9)
Thick Dark Surface (A12)	Depleted Dark Surface (F7)		Iron-Manganese Masses (F12)
Sandy Mucky Mineral (S1)	Redox Depressions (F8)		Piedmont Floodplain Soils (F19)
Sandy Gleyed Matrix (S4)			Mesic Spodic (TA6)
Sandy Redox (S5)			Red Parent Material (F21)
Stripped Matrix (S6)			Very Shallow Dark Surface (TF12)
Dark Surface (S7)			X Other (Explain in Remarks)
Restrictive Layer (if observed):			
Туре:		Hydri	c Soil Present? Yes X No
Depth (inches):		•	
Remarks:			

Project/Site: Cider Solar Project City	//County: Oakfield/Gennesee Sampling Date: 10/1/2020				
Applicant/Owner: Hecate	State: NY Sampling				
Investigator(s): Andrew Sorci Sec	Section, Township, Range: Point:1_20200923_WL109_L				
Landform (hillslope, terrace,etc.): Rise Local r	elief (concave, convex, none): <u>Convex</u> Slope (%) <u>2 - 5</u>				
Subregion (LRR or MLRA): LRR L Lat: 43.09981	.6 Long: <u>-78.260801</u> Datum: <u>NAD83</u>				
Soil Map Unit Name: La	NWI Classification: UPL				
Are climatic / hyrologic conditions on the site typical for this time of	year? Yes X No (if no, explain in Remarks.)				
Are Vegetation, Soil, or Hydrologysignificantly dis	turbed? Are "Normal Circumstances" present? Yes X No				
Are Vegetation, Soil, or Hydrologynaturally proble	ematic? (if needed, explain any answers in Remarks.)				
SUMMARY OF FINDINGS - Attach site map showing sampling	point locations, transects, important features, etc.				
Hydrophytic Vegetation Present? Yes No X	Is the Sampled Area				
Hydric Soil Present? Yes No X	within a Wetland? Yes No X				
Wetland Hydrology Present? Yes No X	if yes, optional Wetland Site ID:				
Remarks: (Explain alternative procedures here or in a separate report.)					
Remarks. (Explain alternative procedures here of in a separate report.)					
HYDROLOGY Westernd Understand	Cocondary Indicators (minimum of two required)				
Wetland Hydrology Indicators:	Secondary Indicators (minimum of two required)				
Primary Indicators (minimum of one is required: check all that apply)	Surface Soil Cracks (B6)				
Surface Water (A1) Water-Stained Lea					
High Water Table (A2) Aquatic Fauna (B1					
Saturation (A3) Marl Deposits (B1)					
Water Marks (B1) Hydrogen Sulfide (
	eres on Living Roots (C3) Saturation Visible in Aerial Imagery (C9)				
Drift Deposits (B3)Presence of Reduc					
	ction in Tilled Soils (C6) Geomorphic Position (D2)				
Iron Deposits (B5)Thin Muck Surface					
Inundation Visible on Aerial Imagery (B7)Other (Explain in F	Remarks) Microtopographic Relief (D4)				
Sparsley Vegetated Concave Surface (B8)	FAC-Neutral Test (D5)				
Surface Water Present? Yes No X Depth (inches)					
Water Table Present? Yes No X Depth (inches)	Wetland Hydrology Present? Yes No X				
Saturation Present? Yes No X Depth (inches)					
Describe Recorded Data (stream gauge, monitoring well, aerial pho	tos provious inspections) if available:				
Describe Recorded Data (stream gauge, monitoring well, aerial pho	itos, previous inspections), ir available.				
Remarks:					

VEGETATION - Use scientific names of plants Sampling Point: 1_20200923_WL109_U1 Absolute Dominant Indicator **Dominance Test Worksheet:** (Plot Size: 30'radius) % Cover Species? Status **Tree Stratum Number of Dominant Species** That Are OBL, FACW, or FAC: (A) = Total Cover **Total Number of Dominant** Species Across All Strata: (B) 4 Percent of Dominant Species (A/B) That Are OBL, FACW, or FAC: 25% **Prevalence Index Worksheet:** x 1 0 **OBL** species Absolute Dominant Indicator **FACW** species 15 30 (Plot Size: 15'radius) % Cover Species? x 2 **Shrub Stratum** Status FAC species 0 UPL х3 Rhus aromatica 20 Χ Salix interior 15 Χ **FACW FACU** species 20 x 4 80 35 = Total Cover **UPL** species 70 x 5 350 Column Totals 105 (A) 460 (B) Prevalence Index = B/A = 4.38 **Hydrophytic Vegetation Indicators:** Absolute Dominant Indicator 1- Rapid Test For Hydrophytic Vegetation **Herb Stratum** (Plot Size: 5'radius) % Cover Species? Status 2- Dominance Test is > 50% 50 UPL Artemisia vulgaris 3- Prevalence Index is =< 3.0 Solidago canadensis 15 Χ **FACU** 4- Morphological Adaptations Plantago major 5 **FACU** 70 = Total Cover 5- Problematic Hydrophytic Vegetation **Definitions of Vegetation Strata:** Tree- Woody plants 3 in. (7.6cm) or more in diameter at breast height (DBH), regardless of height. Sapling/Shrub- Woody plants less than 3 in. DBH and greater than or equal to 3.28ft (1m) tall. Herb- All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28ft tall. Absolute Dominant Indicator Woody Vines- All woody vines greater than 3.28ft in (Plot Size: 30'radius) **Woody Vine Stratum** % Cover Species? Status height. = Total Cover Hydrophytic Vegetation Present? Yes ____ No _ X Remarks: (Include photo numbers here or on a separate sheet.)

SOIL Sampling Point: 1_20200923_WL109_U1 Depth Matrix **Redox Features** (inches % Color Color % Type Texture Remarks Loc 0-12 10YR 3/2 100 Sandy Clay Loam **Hydric Soil Indicators:** Indicators for Problematic Soils: Histosol (A1) Polyvalue Below Surface (B15) 2 cm Muck (A10) Histic Epipedon (A2) Thin Dark Surface (S9) Coast Prarie Redox (A16) Black Histic (A3) Loamy Mucky Mineral (F1) 5 cm Mucky Peat or Peat (S3) Hydrogen Sulfide (A4) Loamy Gleyed Matric (F2) Dark Surface (S7) Stratified Layers (A5) Depleted Matrix (F3) Polyvalue Below Surface (S8) Depleted Below Dark Surface (A11) Redox Dark Surface (F6) Thin Dark Surface (S9) Thick Dark Surface (A12) Depleted Dark Surface (F7) Iron-Manganese Masses (F12) Sandy Mucky Mineral (S1) Redox Depressions (F8) Piedmont Floodplain Soils (F19) Sandy Gleyed Matrix (S4) Mesic Spodic (TA6) Sandy Redox (S5) Red Parent Material (F21) Stripped Matrix (S6) Very Shallow Dark Surface (TF12) Dark Surface (S7) Other (Explain in Remarks) Restrictive Layer (if observed): Type: Rock/Till Hydric Soil Present? Yes No Χ Depth (inches): 12 Remarks:

Project/Site: Cider Solar Project	City/County: Elba/Genese	e Sampling Date: 7/23/2020		
Applicant/Owner: Hecate		State: NY Sampling Point:		
Investigator(s): Justin Ahn	Section, Township, Range: 02-20200723-WL-50-50W			
Landform (hillslope, terrace,etc.): Depression	on Local relief (concave, convex, r	none): <u>Concave</u> Slope (%) <u>0 - 1</u>		
Subregion (LRR or MLRA): LRR L	Lat: 43.090767 Long: -78	3.202383 Datum: NAD83		
Soil Map Unit Name: NgA		NWI Classification: PFO		
Are climatic / hyrologic conditions on the site	typical for this time of year? Yes X No	(if no, explain in Remarks.)		
Are Vegetation $\underline{\hspace{1cm}}$, Soil $\underline{\hspace{1cm}}$, or Hydrolog	ysignificantly disturbed? Are "Normal	Circumstances" present? Yes X No		
Are Vegetation, Soil, or Hydrolog	y naturally problematic? (if needed, exp	lain any answers in Remarks.)		
SUMMARY OF FINDINGS - Attach site ma	ap showing sampling point locations, tran	sects, important features, etc.		
Hydrophytic Vegetation Present? Yes	X No Is the Sampled Area	1		
Hydric Soil Present? Yes	X No within a Wetland?	Yes X No		
<u> </u>		and Site ID: WL99		
	·····			
Remarks: (Explain alternative procedures here or in a s	ерагате герогт.)			
HYDROLOGY Wetland Hydrology Indicators:		Secondary Indicators (minimum of two required)		
	chook all that apply)	Surface Soil Cracks (B6)		
Primary Indicators (minimum of one is required:				
Surface Water (A1)	X Water-Stained Leaves (B9)	Drainage Patterns (B10)		
High Water Table (A2)	Aquatic Fauna (B13)	X Moss Trim Lines (B16)		
Saturation (A3)	Marl Deposits (B15)	Dry-Season Water Table (C2)		
Water Marks (B1)	Hydrogen Sulfide Odor (C1)	Crayfish Burrows (C8)		
Sediment Deposits (B2)	Oxidized Rhizospheres on Living Roots (C3)	Saturation Visible in Aerial Imagery (C9)		
Drift Deposits (B3)	Presence of Reduced Iron (C4)	Stunted or Stressed Plants (D1)		
Algal Mat or Crust (B4)	Recent Iron Reduction in Tilled Soils (C6)	Geomorphic Position (D2)		
Iron Deposits (B5)	Thin Muck Surface (C7)	Shallow Aquitard (D3)		
Inundation Visible on Aerial Imagery (B7)	Other (Explain in Remarks)	Microtopographic Relief (D4)		
X Sparsley Vegetated Concave Surface (B8)		FAC-Neutral Test (D5)		
Surface Water Present? Yes No X	Depth (inches)			
Water Table Present? Yes No X	Depth (inches) Wetland F	Hydrology Present? Yes X No		
Saturation Present? Yes No X	Depth (inches)			
Describe Recorded Data (stream gauge, mor	nitoring well, aerial photos, previous inspection	s), if available:		
Remarks:				

VEGETATION - Use scientific names of plants Sampling Point: 02-20200723-WL-50-50W Absolute Dominant Indicator **Dominance Test Worksheet:** (Plot Size: 30'radius) % Cover Species? Status **Tree Stratum Number of Dominant Species** 30 Χ **FACW** That Are OBL, FACW, or FAC: (A) Fraxinus pennsylvanica 30 = Total Cover **Total Number of Dominant** (B) Species Across All Strata: 3 Percent of Dominant Species That Are OBL, FACW, or FAC: (A/B) 100% **Prevalence Index Worksheet:** x 1 15 **OBL** species 15 Absolute Dominant Indicator **FACW** species 90 180 (Plot Size: 15'radius) % Cover Species? Status x 2 **Shrub Stratum FAC** species 0 х3 = Total Cover **FACU** species 0 x 4 0 **UPL** species 0 x 5 0 Column Totals 105 (A) 195 (B) Prevalence Index = B/A = 1.86 **Hydrophytic Vegetation Indicators:** Absolute Dominant Indicator X 1- Rapid Test For Hydrophytic Vegetation **Herb Stratum** (Plot Size: 5'radius) % Cover Species? Status X 2- Dominance Test is > 50% 20 Carex cristatella Χ **FACW** X 3- Prevalence Index is =< 3.0 Χ Symphyotrichum lanceolatum 20 **FACW** 4- Morphological Adaptations Fraxinus pennsylvanica 10 **FACW** Carex alopecoidea 10 **FACW** 5- Problematic Hydrophytic Vegetation Glyceria striata 10 OBL Carex tuckermanii 5 OBL **Definitions of Vegetation Strata:** 75 = Total Cover Tree- Woody plants 3 in. (7.6cm) or more in diameter at breast height (DBH), regardless of height. Sapling/Shrub- Woody plants less than 3 in. DBH and greater than or equal to 3.28ft (1m) tall. Herb- All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28ft tall. Absolute Dominant Indicator Woody Vines- All woody vines greater than 3.28ft in (Plot Size: 30'radius) **Woody Vine Stratum** % Cover Species? Status height. = Total Cover Hydrophytic Vegetation Present? Yes X No ___ Remarks: (Include photo numbers here or on a separate sheet.)

SOIL Sampling Point: 02-20200723-WL-50-50W

Depth	Depth <u>Matrix</u>				Redo	x Featu		
(inches	Color	%	Color	%	Type	Loc	Texture	Remarks
8-0	10YR 2/2	100					Clay Loam	
8-20	2.5Y 6/4	90	7.5YR 6/8	10	С	PL	Clay	
•	oil Indicators:				.	D 1 (. (/D45)	Indicators for Problematic Soils:
	tosol (A1)	'A 2\			•		Surface (B15)	2 cm Muck (A10)
	tic Epipedon ((AZ)				k Surface		Coast Prarie Redox (A16) 5 cm Mucky Peat or Peat (S3)
	ck Histic (A3) drogen Sulfide	. (\		Loamy Mucky Mineral (F1)				Dark Surface (S7)
	atified Layers			Loamy Gleyed Matric (F2) X Depleted Matrix (F3)				Polyvalue Below Surface (S8)
	pleted Below		rface (Δ11)	Redox Dark Surface (F6)				Thin Dark Surface (S9)
	ck Dark Surfac			Depleted Dark Surface (F7)				Iron-Manganese Masses (F12)
	ndy Mucky Mi			Redox Depressions (F8)				Piedmont Floodplain Soils (F19)
	ndy Gleyed Ma						()	Mesic Spodic (TA6)
	ndy Redox (S5	-	,					Red Parent Material (F21)
	ipped Matrix (Very Shallow Dark Surface (TF12)
	rk Surface (S7)							Other (Explain in Remarks)
Restrictiv	ve Layer (if obs	erved):						
		Type:					Hydric	Soil Present? Yes X No
	Depth (ir	- nches):					,	<u> </u>
		_						
Remark	s:							

Project/Site: Cider Solar Project	City/County: Elba/Genes	ee Sampling Date: 7/23/2020			
Applicant/Owner: Hecate	State: NY Sampling Point:02-2020				
Investigator(s): Justin Ahn	Section, Township, Range: WL-50-50U				
Landform (hillslope, terrace,etc.): Toeslope	Local relief (concave, convex	none): Linear Slope (%) 1 - 5			
Subregion (LRR or MLRA): LRR L	Lat: <u>43.089373</u> Long:	-78.199224 Datum: NAD83			
Soil Map Unit Name: RsA		NWI Classification: UPL			
Are climatic / hyrologic conditions on the site	typical for this time of year? Yes X N	o (if no, explain in Remarks.)			
Are Vegetation, Soil, or Hydrology	/significantly disturbed? Are "Norma	l Circumstances" present? Yes X No			
Are Vegetation, Soil, or Hydrology	naturally problematic? (if needed, ex	plain any answers in Remarks.)			
SUMMARY OF FINDINGS - Attach site ma	n showing sampling point locations, tra	insects, important features, etc.			
Hydrophytic Vegetation Present? Yes					
Hydric Soil Present? Yes	No X within a Wetland?	Yes No X			
Wetland Hydrology Present? Yes	No X if yes, optional We	etland Site ID:			
Remarks: (Explain alternative procedures here or in a se	eparate report.)				
HYDROLOGY					
Wetland Hydrology Indicators:		Secondary Indicators (minimum of two required)			
Primary Indicators (minimum of one is required:	check all that apply)	Surface Soil Cracks (B6)			
Surface Water (A1)	Water-Stained Leaves (B9)	Drainage Patterns (B10)			
High Water Table (A2)	Aquatic Fauna (B13)	Moss Trim Lines (B16)			
Saturation (A3)	Marl Deposits (B15)	Dry-Season Water Table (C2)			
Water Marks (B1)	Hydrogen Sulfide Odor (C1)	Crayfish Burrows (C8)			
Sediment Deposits (B2)	Oxidized Rhizospheres on Living Roots (C3)	Saturation Visible in Aerial Imagery (C9)			
Drift Deposits (B3)	Presence of Reduced Iron (C4)	Stunted or Stressed Plants (D1)			
Algal Mat or Crust (B4)	Recent Iron Reduction in Tilled Soils (C6)	Geomorphic Position (D2)			
Iron Deposits (B5)	Thin Muck Surface (C7)	Shallow Aquitard (D3)			
Inundation Visible on Aerial Imagery (B7)	Other (Explain in Remarks)	Microtopographic Relief (D4)			
Sparsley Vegetated Concave Surface (B8)	Other (Explain in Remarks)	FAC-Neutral Test (D5)			
Surface Water Present? Yes No _ X	Depth (inches)				
Water Table Present? Yes NoX	Depth (inches) Wetland	Hydrology Present? Yes No X			
Saturation Present? Yes NoX	Depth (inches)				
Describe Recorded Data (stream gauge, mon	itoring well, aerial photos, previous inspection	ons), if available:			
, , , , , , , , , , , , , , , , , , ,	5 - ,	•			
Remarks:					

VEGETATION - Use scientific names of plants Sampling Point: 02-20200723-WL-50-50U Absolute Dominant Indicator **Dominance Test Worksheet:** (Plot Size: 30'radius) % Cover Species? Status **Tree Stratum Number of Dominant Species** Populus deltoides Χ FAC That Are OBL, FACW, or FAC: (A) 40 = Total Cover **Total Number of Dominant** (B) Species Across All Strata: 6 Percent of Dominant Species That Are OBL, FACW, or FAC: 66.7% (A/B) **Prevalence Index Worksheet:** 0 x 1 **OBL** species Absolute Dominant Indicator **FACW** species 5 10 (Plot Size: 15'radius) % Cover Species? Status x 2 **Shrub Stratum** FAC species 75 225 х3 Rhamnus cathartica 30 Χ **FAC** Rosa multiflora 20 Χ **FACU FACU** species 35 x 4 140 50 = Total Cover **UPL** species 0 x 5 0 Column Totals 115 (A) 375 (B) Prevalence Index = B/A = 3.26 **Hydrophytic Vegetation Indicators:** Absolute Dominant Indicator 1- Rapid Test For Hydrophytic Vegetation **Herb Stratum** (Plot Size: 5'radius) % Cover Species? Status X 2- Dominance Test is > 50% **FACU** Alliaria petiolata 15 3- Prevalence Index is =< 3.0 Χ Geum aleppicum **FAC** 4- Morphological Adaptations Symphyotrichum lanceolatum 5 Χ **FACW** 25 = Total Cover 5- Problematic Hydrophytic Vegetation **Definitions of Vegetation Strata:** Tree- Woody plants 3 in. (7.6cm) or more in diameter at breast height (DBH), regardless of height. Sapling/Shrub- Woody plants less than 3 in. DBH and greater than or equal to 3.28ft (1m) tall. Herb- All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28ft tall. Absolute Dominant Indicator Woody Vines- All woody vines greater than 3.28ft in (Plot Size: 30'radius) **Woody Vine Stratum** % Cover Species? Status height. = Total Cover Hydrophytic Vegetation Present? Yes X No ___

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

SOIL Sampling Point: 02-20200723-WL-50-50U Depth Matrix **Redox Features** (inches % Color Color % Type Texture Remarks Loc 0-18 10YR 4/6 100 Silt Loam **Hydric Soil Indicators:** Indicators for Problematic Soils: Histosol (A1) Polyvalue Below Surface (B15) 2 cm Muck (A10) Histic Epipedon (A2) Thin Dark Surface (S9) Coast Prarie Redox (A16) Black Histic (A3) Loamy Mucky Mineral (F1) 5 cm Mucky Peat or Peat (S3) Hydrogen Sulfide (A4) Loamy Gleyed Matric (F2) Dark Surface (S7) Stratified Layers (A5) Depleted Matrix (F3) Polyvalue Below Surface (S8) Depleted Below Dark Surface (A11) Redox Dark Surface (F6) Thin Dark Surface (S9) Thick Dark Surface (A12) Depleted Dark Surface (F7) Iron-Manganese Masses (F12) Sandy Mucky Mineral (S1) Redox Depressions (F8) Piedmont Floodplain Soils (F19) Sandy Gleyed Matrix (S4) Mesic Spodic (TA6) Sandy Redox (S5) Red Parent Material (F21) Stripped Matrix (S6) Very Shallow Dark Surface (TF12) Dark Surface (S7) Other (Explain in Remarks) Restrictive Layer (if observed): Type: Hydric Soil Present? Yes No Χ Depth (inches): Remarks:

Project/Site: Cider Solar Project	City/County: Elba/Genese	e Sampling Date: 7/23/2020		
Applicant/Owner: Hecate		State: NY Sampling Point:		
Investigator(s): Justin Ahn	Section, Township, Range: 02-20200723-WL49-49W			
Landform (hillslope, terrace,etc.): Depression	Local relief (concave, convex,	none): <u>Concave</u> Slope (%) <u>0 - 1</u>		
Subregion (LRR or MLRA): LRR L	Lat: <u>43.089586</u> Long: <u>-</u> 7	8.198131 Datum: <u>NAD83</u>		
Soil Map Unit Name: Wy		NWI Classification: PEM		
Are climatic / hyrologic conditions on the site	typical for this time of year? Yes X No	(if no, explain in Remarks.)		
Are Vegetation, Soil, or Hydrology		·		
Are Vegetation, Soil, or Hydrology	naturally problematic? (if needed, exp	plain any answers in Remarks.)		
SUMMARY OF FINDINGS - Attach site ma	p showing sampling point locations, trai	nsects, important features, etc.		
Hydrophytic Vegetation Present? Yes X				
Hydric Soil Present? Yes X	within a Wetland?	Yes X No		
·		land Site ID: WL100		
Wetland Hydrology Present? Yes X		WE100		
Remarks: (Explain alternative procedures here or in a se	parate report.)			
HYDROLOGY				
Wetland Hydrology Indicators:		Secondary Indicators (minimum of two required)		
Primary Indicators (minimum of one is required: c	heck all that apply)	Surface Soil Cracks (B6)		
Surface Water (A1)	Water-Stained Leaves (B9)	X Drainage Patterns (B10)		
High Water Table (A2)	Aquatic Fauna (B13)	Moss Trim Lines (B16)		
Saturation (A3)	Marl Deposits (B15)	Dry-Season Water Table (C2)		
Water Marks (B1)	Hydrogen Sulfide Odor (C1)	Crayfish Burrows (C8)		
Sediment Deposits (B2)	Oxidized Rhizospheres on Living Roots (C3)	Saturation Visible in Aerial Imagery (C9)		
Drift Deposits (B3)	Presence of Reduced Iron (C4)	Stunted or Stressed Plants (D1)		
Algal Mat or Crust (B4)	Recent Iron Reduction in Tilled Soils (C6)	X Geomorphic Position (D2)		
Iron Deposits (B5)	Thin Muck Surface (C7)	Shallow Aquitard (D3)		
Inundation Visible on Aerial Imagery (B7)	Other (Explain in Remarks)	Microtopographic Relief (D4)		
Sparsley Vegetated Concave Surface (B8)	Other (Explain in Remarks)	FAC-Neutral Test (D5)		
		TAC-Neutral Test (D3)		
Surface Water Present? Yes NoX	Depth (inches)			
Water Table Present? Yes No X	Depth (inches) Wetland	Hydrology Present? Yes X No		
Saturation Present? Yes No X	Depth (inches)			
Describe Recorded Data (stream gauge, moni	toring well aerial photos previous inspection	ns) if available:		
Describe Recorded Data (Stream Badge, morn	toring well, derial priotos) previous inspection	noj) ii avaliabie.		
Remarks:				

VEGETATION - Use scientific names of plants Sampling Point: 02-20200723-WL49-49W Absolute Dominant Indicator **Dominance Test Worksheet:** (Plot Size: 30'radius) % Cover Species? Status **Tree Stratum Number of Dominant Species** That Are OBL, FACW, or FAC: (A) = Total Cover **Total Number of Dominant** Species Across All Strata: (B) 3 Percent of Dominant Species That Are OBL, FACW, or FAC: (A/B) 100% **Prevalence Index Worksheet:** x 1 25 **OBL** species 25 Absolute Dominant Indicator **FACW** species 95 190 (Plot Size: 15'radius) Status x 2 **Shrub Stratum** % Cover Species? **FAC** species 20 х3 60 = Total Cover **FACU** species 0 x 4 0 5 **UPL** species x 5 25 Column Totals 145 300 (B) (A) Prevalence Index = B/A = 2.07 **Hydrophytic Vegetation Indicators:** Absolute Dominant Indicator X 1- Rapid Test For Hydrophytic Vegetation **Herb Stratum** (Plot Size: 5'radius) % Cover Species? Status X 2- Dominance Test is > 50% 40 Phalaris arundinacea Χ **FACW** X 3- Prevalence Index is =< 3.0 20 Χ Carex alopecoidea **FACW** 4- Morphological Adaptations 20 Χ **FACW** Solidago gigantea Carex cristatella 15 **FACW** 5- Problematic Hydrophytic Vegetation 10 OBL Asclepias incarnata Apocynum cannabinum 10 FAC **Definitions of Vegetation Strata:** OBL Glyceria striata 10 Tree- Woody plants 3 in. (7.6cm) or more in diameter at Juncus tenuis 10 FAC breast height (DBH), regardless of height. UPL Asclepias syriaca 5 5 Carex lupuliformis OBL Sapling/Shrub- Woody plants less than 3 in. DBH and 145 = Total Cover greater than or equal to 3.28ft (1m) tall. Herb- All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28ft tall. Absolute Dominant Indicator Woody Vines- All woody vines greater than 3.28ft in (Plot Size: 30'radius) **Woody Vine Stratum** % Cover Species? Status height. = Total Cover Hydrophytic Vegetation Present? Yes X No ___ Remarks: (Include photo numbers here or on a separate sheet.)

SOIL Sampling Point: 02-20200723-WL49-49W

Depth _	Matrix				Redo	x Featu	res	
(inches	Color	%	Color	%	Type	Loc	Texture	Rem
0-10	10YR 3/2	90	5YR 4/6	10	С	PL	Silty Clay Loam	
10-20	10YR 5/4	90	7.5YR 6/8	10	С	PL	Clay	

Hydric Soil Indicators:		Indicators for Problematic Soils:
Histosol (A1)	Polyvalue Below Surface ((B15)2 cm Muck (A10)
Histic Epipedon (A2)	Thin Dark Surface (S9)	Coast Prarie Redox (A16)
Black Histic (A3)	Loamy Mucky Mineral (F1	L)5 cm Mucky Peat or Peat (S3)
Hydrogen Sulfide (A4)	Loamy Gleyed Matric (F2)	Dark Surface (S7)
Stratified Layers (A5)	Depleted Matrix (F3)	Polyvalue Below Surface (S8)
Depleted Below Dark Surface (A11)	X Redox Dark Surface (F6)	Thin Dark Surface (S9)
Thick Dark Surface (A12)	Depleted Dark Surface (F7	7) Iron-Manganese Masses (F12)
Sandy Mucky Mineral (S1)	Redox Depressions (F8)	Piedmont Floodplain Soils (F19)
Sandy Gleyed Matrix (S4)		Mesic Spodic (TA6)
Sandy Redox (S5)		Red Parent Material (F21)
Stripped Matrix (S6)		Very Shallow Dark Surface (TF12)
Dark Surface (S7)		Other (Explain in Remarks)
Restrictive Layer (if observed):		
Type		
Type:		Hydric Soil Present? Yes X No
Depth (inches):		

Remarks:

Project/Site: Cider Solar Project	City/County: Elba/Genese	e Sampling Date: 7/23/2020	
Applicant/Owner: Hecate		State: NY Sampling Point:02-20200723	
Investigator(s): Justin Ahn	Section, Township, Range:	WL-49-49U	
Landform (hillslope, terrace,etc.): Toeslope	Local relief (concave, convex, ı	none): <u>Linear</u> Slope (%) <u>1 - 5</u>	
Subregion (LRR or MLRA): LRR L	Lat: 43.089936 Long: -7	78.198003 Datum: NAD83	
Soil Map Unit Name: RsA		NWI Classification: UPL	
Are climatic / hyrologic conditions on the site t	ypical for this time of year? Yes X No	(if no, explain in Remarks.)	
Are Vegetation, Soil, or Hydrology		· · · · · · · · · · · · · · · · · · ·	
Are Vegetation, Soil, or Hydrology	naturally problematic? (if needed, exp	lain any answers in Remarks.)	
SUMMARY OF FINDINGS - Attach site maj	showing sampling point locations, trar	sects, important features, etc.	
Hydrophytic Vegetation Present? Yes	No X Is the Sampled Area	a	
Hydric Soil Present? Yes	No X within a Wetland?	Yes No X	
Wetland Hydrology Present? Yes	No X if yes, optional Wet	land Site ID:	
Remarks: (Explain alternative procedures here or in a se	parate report.)		
HYDROLOGY			
Wetland Hydrology Indicators:		Secondary Indicators (minimum of two required)	
Primary Indicators (minimum of one is required: cl	neck all that apply)	Surface Soil Cracks (B6)	
Surface Water (A1)	Water-Stained Leaves (B9)	Drainage Patterns (B10)	
High Water Table (A2)	Aquatic Fauna (B13)	Moss Trim Lines (B16)	
Saturation (A3)	Marl Deposits (B15)	Dry-Season Water Table (C2)	
Water Marks (B1)	Hydrogen Sulfide Odor (C1)	Crayfish Burrows (C8)	
Sediment Deposits (B2)	Oxidized Rhizospheres on Living Roots (C3)	Saturation Visible in Aerial Imagery (C9)	
Drift Deposits (B3)	Presence of Reduced Iron (C4)	Stunted or Stressed Plants (D1)	
Algal Mat or Crust (B4)	Recent Iron Reduction in Tilled Soils (C6)	Geomorphic Position (D2)	
Iron Deposits (B5)	Thin Muck Surface (C7)	Shallow Aquitard (D3)	
Inundation Visible on Aerial Imagery (B7)	Other (Explain in Remarks)	Microtopographic Relief (D4)	
Sparsley Vegetated Concave Surface (B8)	 :	FAC-Neutral Test (D5)	
Surface Water Present? Yes No X	Depth (inches)		
Water Table Present? Yes No X	Depth (inches) Wetland H	Hydrology Present? Yes No X	
Saturation Present? Yes No X	Depth (inches)	 	
Describe Recorded Data (stream gauge, monit	toring well, aerial photos, previous inspection	ns), if available:	
Remarks:			

VEGETATION - Use scientific names of plants Sampling Point: 02-20200723-WL-49-49U Absolute Dominant Indicator **Dominance Test Worksheet:** (Plot Size: 30'radius) % Cover Species? Status **Tree Stratum Number of Dominant Species** That Are OBL, FACW, or FAC: (A) = Total Cover **Total Number of Dominant** Species Across All Strata: (B) 3 Percent of Dominant Species That Are OBL, FACW, or FAC: 33.3% (A/B) **Prevalence Index Worksheet:** x 1 0 **OBL** species Absolute Dominant Indicator **FACW** species 25 50 (Plot Size: 15'radius) Status x 2 **Shrub Stratum** % Cover Species? FAC species 0 х3 = Total Cover FACU species 60 x 4 240 **UPL** species 0 x 5 0 Column Totals 85 (A) 290 (B) Prevalence Index = B/A = 3.41 **Hydrophytic Vegetation Indicators:** Absolute Dominant Indicator 1- Rapid Test For Hydrophytic Vegetation **Herb Stratum** (Plot Size: 5'radius) % Cover Species? Status 2- Dominance Test is > 50% 20 Ambrosia artemisiifolia Χ FACU 3- Prevalence Index is =< 3.0 Χ Phalaris arundinacea 20 **FACW** 4- Morphological Adaptations 15 Χ FACU Cirsium arvense Trifolium pratense 10 **FACU** 5- Problematic Hydrophytic Vegetation Trifolium repens 10 **FACU** Inula helenium 5 **FACU Definitions of Vegetation Strata:** Agrostis gigantea 5 **FACW** Tree- Woody plants 3 in. (7.6cm) or more in diameter at Solidago canadensis **FACU** breast height (DBH), regardless of height. 85 = Total Cover Sapling/Shrub- Woody plants less than 3 in. DBH and greater than or equal to 3.28ft (1m) tall. Herb- All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28ft tall. Absolute Dominant Indicator Woody Vines- All woody vines greater than 3.28ft in (Plot Size: 30'radius) **Woody Vine Stratum** % Cover Species? Status height. = Total Cover Hydrophytic Vegetation Present? Yes ____ No __X Remarks: (Include photo numbers here or on a separate sheet.)

SOIL Sampling Point: 02-20200723-WL-49-49U Depth Matrix **Redox Features** (inches % Color Color % Type Texture Remarks Loc 0-20 10YR 4/3 100 Silt Loam **Hydric Soil Indicators:** Indicators for Problematic Soils: Histosol (A1) Polyvalue Below Surface (B15) 2 cm Muck (A10) Histic Epipedon (A2) Thin Dark Surface (S9) Coast Prarie Redox (A16) Black Histic (A3) Loamy Mucky Mineral (F1) 5 cm Mucky Peat or Peat (S3) Hydrogen Sulfide (A4) Loamy Gleyed Matric (F2) Dark Surface (S7) Stratified Layers (A5) Depleted Matrix (F3) Polyvalue Below Surface (S8) Depleted Below Dark Surface (A11) Redox Dark Surface (F6) Thin Dark Surface (S9) Thick Dark Surface (A12) Depleted Dark Surface (F7) Iron-Manganese Masses (F12) Sandy Mucky Mineral (S1) Redox Depressions (F8) Piedmont Floodplain Soils (F19) Sandy Gleyed Matrix (S4) Mesic Spodic (TA6) Sandy Redox (S5) Red Parent Material (F21) Stripped Matrix (S6) Very Shallow Dark Surface (TF12) Dark Surface (S7) Other (Explain in Remarks) Restrictive Layer (if observed): Type: Hydric Soil Present? Yes No Χ Depth (inches): Remarks:

Project/Site: Cider Solar Project	City/County: Elba/Genesee	Sampling Date: 7/24/2020					
Applicant/Owner: Hecate	e State: NY Sampling Point:						
Investigator(s): Justin Ahn Section, Township, Range: 02-20200724							
Landform (hillslope, terrace,etc.): Depression	Local relief (concave, convex, r	none): <u>Concave</u> Slope (%) <u>0 - 1</u>					
Subregion (LRR or MLRA): LRR L	Lat: 43.085881 Long:7	8.211188 Datum: <u>NAD83</u>					
Soil Map Unit Name: Ld		NWI Classification: PSS					
Are climatic / hyrologic conditions on the site t	ypical for this time of year? Yes X No	(if no, explain in Remarks.)					
Are Vegetation, Soil, or Hydrology	significantly disturbed? Are "Normal of	Circumstances" present? Yes X No					
Are Vegetation, Soil, or Hydrology	naturally problematic? (if needed, exp	lain any answers in Remarks.)					
SUMMARY OF FINDINGS - Attach site map	showing sampling point locations, tran	sects. important features. etc.					
Hydrophytic Vegetation Present? Yes X	No Is the Sampled Area	-					
Hydric Soil Present? Yes X	No within a Wetland?	Yes X No					
· —		and Site ID: WL101					
Wetland Hydrology Present? Yes X		and site ib. WETOT					
Remarks: (Explain alternative procedures here or in a sep	parate report.)						
HYDROLOGY							
Wetland Hydrology Indicators:		Secondary Indicators (minimum of two required)					
Primary Indicators (minimum of one is required: cl	neck all that apply)	Surface Soil Cracks (B6)					
X Surface Water (A1)	X Water-Stained Leaves (B9)	Drainage Patterns (B10)					
High Water Table (A2)	Aquatic Fauna (B13)	Moss Trim Lines (B16)					
X Saturation (A3)	Marl Deposits (B15)	Dry-Season Water Table (C2)					
Water Marks (B1)	Hydrogen Sulfide Odor (C1)	Crayfish Burrows (C8)					
Sediment Deposits (B2)	Oxidized Rhizospheres on Living Roots (C3)	Saturation Visible in Aerial Imagery (C9)					
Drift Deposits (B3)	Presence of Reduced Iron (C4)	Stunted or Stressed Plants (D1)					
Algal Mat or Crust (B4)	Recent Iron Reduction in Tilled Soils (C6)	Geomorphic Position (D2)					
Iron Deposits (B5)	Thin Muck Surface (C7)	Shallow Aquitard (D3)					
Inundation Visible on Aerial Imagery (B7)	Other (Explain in Remarks)	Microtopographic Relief (D4)					
	Other (Explain in Kemarks)						
Sparsley Vegetated Concave Surface (B8)		FAC-Neutral Test (D5)					
Surface Water Present? Yes X No	Depth (inches) 2						
Water Table Present? Yes No X	Depth (inches) Wetland H	lydrology Present? Yes X No					
Saturation Present? Yes X No	Depth (inches) 0						
Describe Recorded Data (stream gauge, monit	coring well, aerial photos, previous inspection	s), if available:					
, ,							
Remarks:							

VEGETATION - Use scientific names of plants Sampling Point: 02-20200724-WL-51-51W Absolute Dominant Indicator **Dominance Test Worksheet:** (Plot Size: 30'radius) % Cover Species? Status **Tree Stratum Number of Dominant Species** That Are OBL, FACW, or FAC: (A) = Total Cover **Total Number of Dominant** Species Across All Strata: (B) 3 Percent of Dominant Species That Are OBL, FACW, or FAC: (A/B) 100% **Prevalence Index Worksheet:** 40 x 1 40 **OBL** species Absolute Dominant Indicator **FACW** species 90 180 (Plot Size: 15'radius) % Cover Species? Status x 2 **Shrub Stratum FAC** species х3 0 20 Χ **FACW** Fraxinus pennsylvanica 20 = Total Cover **FACU** species 0 x 4 0 **UPL** species 0 x 5 0 Column Totals 130 (A) 220 (B) Prevalence Index = B/A = 1.69 **Hydrophytic Vegetation Indicators:** Absolute Dominant Indicator X 1- Rapid Test For Hydrophytic Vegetation **Herb Stratum** (Plot Size: 5'radius) % Cover Species? Status X 2- Dominance Test is > 50% 40 Phalaris arundinacea **FACW** X 3- Prevalence Index is =< 3.0 Χ OBL Typha angustifolia 30 4- Morphological Adaptations Carex alopecoidea 20 **FACW** Fraxinus pennsylvanica 10 **FACW** 5- Problematic Hydrophytic Vegetation Carex tuckermanii 10 OBL 110 = Total Cover **Definitions of Vegetation Strata:** Tree- Woody plants 3 in. (7.6cm) or more in diameter at breast height (DBH), regardless of height. Sapling/Shrub- Woody plants less than 3 in. DBH and greater than or equal to 3.28ft (1m) tall. Herb- All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28ft tall. Absolute Dominant Indicator Woody Vines- All woody vines greater than 3.28ft in (Plot Size: 30'radius) **Woody Vine Stratum** % Cover Species? Status height. = Total Cover Hydrophytic Vegetation Present? Yes X No ___ Remarks: (Include photo numbers here or on a separate sheet.)

SOIL Sampling Point: 02-20200724-WL-51-51W

JOIL								Jamping 1 ont. 02-20200724-WE-31-31		
Depth Matrix					Redo	ox Feature				
(inches	Color	%	Color	%	Type	Loc	Texture	Remarks		
0-20	10YR 3/1	90	10YR 3/3	10	С	PL	Clay			
-	oil Indicators:							Indicators for Problematic Soils:		
	stosol (A1)				=		urface (B15)	2 cm Muck (A10)		
	stic Epipedon (A2)				k Surface (•	Coast Prarie Redox (A16)		
Black Histic (A3)					-	Aucky Min		5 cm Mucky Peat or Peat (S3)		
	drogen Sulfide					ileyed Mat		Dark Surface (S7)		
Stratified Layers (A5)				Depleted Matrix (F3)				Polyvalue Below Surface (S8)		
Depleted Below Dark Surface (A11)			X Redox Dark Surface (F6)				Thin Dark Surface (S9)			
Thick Dark Surface (A12)			Depleted Dark Surface (F7)				Iron-Manganese Masses (F12)			
Sandy Mucky Mineral (S1)				Redox Depressions (F8)			Piedmont Floodplain Soils (F19) Mosis Spedis (TA6)			
Sandy Gleyed Matrix (S4)							Mesic Spodic (TA6)			
	ndy Redox (S5)							Red Parent Material (F21)		
	ipped Matrix (Very Shallow Dark Surface (TF12)			
	rk Surface (S7)							Other (Explain in Remarks)		
Restricti	ve Layer (if obs	erved):								
		Type:								
	Depth (in	_					Hydric	Soil Present? Yes X No		
	Deptii (iii	- -								
Remark	s:									

Project/Site: Cider Solar Project	City/County: Elba	/Genesee Sampling Date: _7/24/2020
Applicant/Owner: Hecate		State: NY Sampling Point:02-2020072
Investigator(s): Justin Ahn	Section, Township	, Range: WL-51-51U
Landform (hillslope, terrace,etc.): <u>Toeslope</u>	Local relief (concave,	convex, none): Linear Slope (%) 1 - 5
Subregion (LRR or MLRA): LRR L	Lat: 43.086005	Long: -78.211208 Datum: NAD83
Soil Map Unit Name: Ld		NWI Classification: UPL
Are climatic / hyrologic conditions on the site	typical for this time of year? Yes	X No (if no, explain in Remarks.)
Are Vegetation, Soil, or Hydrolog	y significantly disturbed? Are "	Normal Circumstances" present? Yes X No
Are Vegetation, Soil, or Hydrolog	ynaturally problematic? (if ne	eded, explain any answers in Remarks.)
SUMMARY OF FINDINGS - Attach site ma	an showing sampling point location	ns transects important features etc
	No Is the Samp	
Hydric Soil Present? Yes	No X within a W	
· —		nal Wetland Site ID:
Wetland Hydrology Present? Yes		Tial Wetland Site ID.
Remarks: (Explain alternative procedures here or in a s	eparate report.)	
HYDROLOGY		
Wetland Hydrology Indicators:		Secondary Indicators (minimum of two required)
Primary Indicators (minimum of one is required:	check all that apply)	Surface Soil Cracks (B6)
Surface Water (A1)	Water-Stained Leaves (B9)	Drainage Patterns (B10)
High Water Table (A2)	Aquatic Fauna (B13)	Moss Trim Lines (B16)
Saturation (A3)	Marl Deposits (B15)	Dry-Season Water Table (C2)
Water Marks (B1)	Hydrogen Sulfide Odor (C1)	Crayfish Burrows (C8)
Sediment Deposits (B2)	Oxidized Rhizospheres on Living Ro	ots (C3) Saturation Visible in Aerial Imagery (C9)
Drift Deposits (B3)	Presence of Reduced Iron (C4)	Stunted or Stressed Plants (D1)
Algal Mat or Crust (B4)	Recent Iron Reduction in Tilled Soil	
Iron Deposits (B5)	Thin Muck Surface (C7)	Shallow Aquitard (D3)
Inundation Visible on Aerial Imagery (B7)	Other (Explain in Remarks)	Microtopographic Relief (D4)
Sparsley Vegetated Concave Surface (B8)	Other (Explain III Nemarks)	
Sparsiey vegetated Concave Surrace (B8)		FAC-Neutral Test (D5)
Surface Water Present? Yes No X	Depth (inches)	
Water Table Present? Yes NoX	Depth (inches) W	/etland Hydrology Present? Yes NoX
Saturation Present? Yes NoX	Depth (inches)	
Describe Recorded Data (stream gauge, mor	uitoring well, aerial photos, previous ir	spections), if available:
5.15 1.1 1.1 (1.1 1.1 6 .1 6.1)	6 1,11 1 p 1111, p 1	
Remarks:		

VEGETATION - Use scientific names of plants Sampling Point: 02-20200724-WL-51-51U Absolute Dominant Indicator **Dominance Test Worksheet:** (Plot Size: 30'radius) % Cover Species? Status **Tree Stratum Number of Dominant Species** 40 Х FAC That Are OBL, FACW, or FAC: (A) Crataegus phaenopyrum Populus deltoides 30 Χ **FAC Total Number of Dominant** 70 = Total Cover (B) Species Across All Strata: 6 Percent of Dominant Species That Are OBL, FACW, or FAC: 66.7% (A/B) **Prevalence Index Worksheet:** 0 x 1 **OBL** species Absolute Dominant Indicator **FACW** species 0 x 2 0 (Plot Size: 15'radius) % Cover Species? Status **Shrub Stratum FAC** species 105 х3 315 = Total Cover **FACU** species 30 x 4 120 **UPL** species 0 x 5 0 Column Totals 135 (A) 435 (B) Prevalence Index = B/A = 3.22 **Hydrophytic Vegetation Indicators:** Absolute Dominant Indicator 1- Rapid Test For Hydrophytic Vegetation **Herb Stratum** (Plot Size: 5'radius) % Cover Species? Status X 2- Dominance Test is > 50% 20 Toxicodendron radicans FAC 3- Prevalence Index is =< 3.0 Χ Alliaria petiolata 20 **FACU** 4- Morphological Adaptations Geum aleppicum 5 FAC = Total Cover 45 5- Problematic Hydrophytic Vegetation **Definitions of Vegetation Strata:** Tree- Woody plants 3 in. (7.6cm) or more in diameter at breast height (DBH), regardless of height. Sapling/Shrub- Woody plants less than 3 in. DBH and greater than or equal to 3.28ft (1m) tall. Herb- All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28ft tall. Absolute Dominant Indicator Woody Vines- All woody vines greater than 3.28ft in (Plot Size: 30'radius) % Cover Species? **Woody Vine Stratum** Status height. **FACU** Parthenocissus quinquefolia Χ 10 Vitis riparia 10 Χ FAC Hydrophytic 20 = Total Cover Vegetation

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

Present? Yes X No ___

SOIL Sampling Point: 02-20200724-WL-51-51U

Depth	Depth Matrix					x Featu	res		
(inches	Color	%	Color	%	Type	Loc	Texture	Remarks	
0-12	10YR 4/6	100					Silt Loam		
12-20	10YR 4/6	95	7.5YR 5/8	5	С	PL	Silt Loam		
•	oil Indicators:						- 4	Indicators for Problematic Soils:	
	tosol (A1)				-		Surface (B15)	2 cm Muck (A10)	
	tic Epipedon (A2)			Thin Dar			Coast Prarie Redox (A16)	
Black Histic (A3)					•	•	neral (F1)	5 cm Mucky Peat or Peat (S3)	
Hydrogen Sulfide (A4)					-	-	atric (F2)	Dark Surface (S7)	
Stratified Layers (A5)					Depleted Redox Da			Polyvalue Below Surface (S8) Thin Dark Surface (S9)	
Depleted Below Dark Surface (A11) Thick Dark Surface (A12)								Iron-Manganese Masses (F12)	
Thick Dark Surface (A12) Sandy Mucky Mineral (S1)					Depleted Dark Surface (F7) Redox Depressions (F8)			Piedmont Floodplain Soils (F19)	
Sandy Mucky Milleral (31) Sandy Gleyed Matrix (S4)					Nedox D	срі сэзіоі	13 (10)	Mesic Spodic (TA6)	
Sandy Gleyed Matrix (S4) Sandy Redox (S5)						Red Parent Material (F21)			
Stripped Matrix (S6)							Very Shallow Dark Surface (TF12)		
	rk Surface (S7)							Other (Explain in Remarks)	
	` ,								
Restrictiv	ve Layer (if obs	erved):							
		Type:					11 doi:	Cail Barrant2 - Van - Na - V	
	Depth (in	_					Hydric	Soil Present? Yes No X	
	Deptii (iii								
Remarks	S:						1		

Project/Site: Cider Solar Project	City/County: Elba/Genese	e Sampling Date: 7/24/2020				
Applicant/Owner: Hecate	:/Owner: Hecate					
Investigator(s): Justin Ahn	Section, Township, Range:	02-20200724-WL-52-52W				
Landform (hillslope, terrace,etc.): Depression		none): <u>Concave</u> Slope (%) <u>0 - 1</u>				
Subregion (LRR or MLRA): LRR L	Lat: 43.098699 Long:	78.217219 Datum: NAD83				
Soil Map Unit Name: LoA		NWI Classification: PEM				
Are climatic / hyrologic conditions on the site		`` ' ' '				
Are Vegetation, Soil, or Hydrology		· · · · · · · · · · · · · · · · · · ·				
Are Vegetation, Soil, or Hydrology	naturally problematic? (if needed, exp	plain any answers in Remarks.)				
SUMMARY OF FINDINGS - Attach site ma	p showing sampling point locations, trar	nsects, important features, etc.				
Hydrophytic Vegetation Present? Yes X						
Hydric Soil Present? Yes X	No within a Wetland?	Yes X No				
Wetland Hydrology Present? Yes X		land Site ID: WL102				
Remarks: (Explain alternative procedures here or in a se						
HYDROLOGY Wetland Hydrology Indicators:		Secondary Indicators (minimum of two required)				
Primary Indicators (minimum of one is required: c	heck all that apply)	Surface Soil Cracks (B6)				
Surface Water (A1)	Water-Stained Leaves (B9)	Drainage Patterns (B10)				
High Water Table (A2)	Aquatic Fauna (B13)	Moss Trim Lines (B16)				
Saturation (A3)	Marl Deposits (B15)	Dry-Season Water Table (C2)				
Water Marks (B1)	Hydrogen Sulfide Odor (C1)	Crayfish Burrows (C8)				
Sediment Deposits (B2)	X Oxidized Rhizospheres on Living Roots (C3)	Saturation Visible in Aerial Imagery (C9)				
Drift Deposits (B3)	Presence of Reduced Iron (C4)	Stunted or Stressed Plants (D1)				
Algal Mat or Crust (B4)	Recent Iron Reduction in Tilled Soils (C6)	Geomorphic Position (D2)				
Iron Deposits (B5)	Thin Muck Surface (C7)	Shallow Aquitard (D3)				
Inundation Visible on Aerial Imagery (B7)	Other (Explain in Remarks)	Microtopographic Relief (D4)				
Sparsley Vegetated Concave Surface (B8)		FAC-Neutral Test (D5)				
Surface Water Present? Yes No X	Depth (inches)					
Water Table Present? Yes No X	= ' ' 	Hydrology Present? Yes X No				
Saturation Present? Yes No X	Depth (inches)					
Describe Recorded Data (stream gauge, moni	itoring well, aerial photos, previous inspection	ns), if available:				
Remarks:						

VEGETATION - Use scientific names of plants Sampling Point: 02-20200724-WL-52-52W Absolute Dominant Indicator **Dominance Test Worksheet:** (Plot Size: 30'radius) % Cover Species? Status **Tree Stratum Number of Dominant Species** That Are OBL, FACW, or FAC: (A) = Total Cover **Total Number of Dominant** Species Across All Strata: (B) 2 Percent of Dominant Species That Are OBL, FACW, or FAC: (A/B) 100% **Prevalence Index Worksheet:** 10 x 1 10 **OBL** species Absolute Dominant Indicator **FACW** species 80 160 (Plot Size: 15'radius) Status x 2 **Shrub Stratum** % Cover Species? **FAC** species 20 60 х3 = Total Cover **FACU** species 0 x 4 0 **UPL** species 0 x 5 0 Column Totals 110 (A) 230 (B) Prevalence Index = B/A = 2.09 **Hydrophytic Vegetation Indicators:** Absolute Dominant Indicator X 1- Rapid Test For Hydrophytic Vegetation **Herb Stratum** (Plot Size: 5'radius) % Cover Species? Status X 2- Dominance Test is > 50% 40 Phragmites australis **FACW** X 3- Prevalence Index is =< 3.0 Χ Phalaris arundinacea 40 **FACW** 4- Morphological Adaptations Apocynum cannabinum 20 FAC 10 OBL Asclepias incarnata 5- Problematic Hydrophytic Vegetation 110 = Total Cover **Definitions of Vegetation Strata:** Tree- Woody plants 3 in. (7.6cm) or more in diameter at breast height (DBH), regardless of height. Sapling/Shrub- Woody plants less than 3 in. DBH and greater than or equal to 3.28ft (1m) tall. Herb- All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28ft tall. Absolute Dominant Indicator Woody Vines- All woody vines greater than 3.28ft in (Plot Size: 30'radius) **Woody Vine Stratum** % Cover Species? Status height. = Total Cover Hydrophytic Vegetation Present? Yes X No ___ Remarks: (Include photo numbers here or on a separate sheet.)

SOIL

Sampling Point: 02-20200724-WL-52-52W

Depth	Matrix				Redo	x Featur	es			
(inches	Color	%	Color	%	Type	Loc	Texture	Remarks		
0-18	10YR 4/2	90	10YR 4/6	10	С	PL	Clay Loam			
18-24	10YR 4/2	80	10YR 4/6	20	С	PL	Clay			
Hydric Sc	il Indicators:							Indicators for Problematic Soils:		
His	tosol (A1)				Polyvalu	e Below Si	urface (B15)	2 cm Muck (A10)		
His	tic Epipedon (A2)			Thin Dar	k Surface	(S9)	Coast Prarie Redox (A16)		
Bla	ck Histic (A3)				Loamy N	lucky Min	eral (F1)	5 cm Mucky Peat or Peat (S3)		
Нус	drogen Sulfide	(A4)			Loamy G	leyed Mat	ric (F2)	Dark Surface (S7)		
Stratified Layers (A5) X Deplete					Depleted	d Matrix (F	3)	Polyvalue Below Surface (S8)		
Depleted Below Dark Surface (A11)				Redox Dark Surface (F6)				Thin Dark Surface (S9)		
Thi	Thick Dark Surface (A12) Depleted Dark Surface (F7)				face (F7)	Iron-Manganese Masses (F12)				
San	dy Mucky Mir	neral (S	1)	Redox Depressions (F8)			s (F8)	Piedmont Floodplain Soils (F19)		
San	Sandy Gleyed Matrix (S4)							Mesic Spodic (TA6)		
San	dy Redox (S5)							Red Parent Material (F21)		
Stri	pped Matrix (S6)						Very Shallow Dark Surface (TF12)		
Dar	k Surface (S7)							Other (Explain in Remarks)		
Restrictiv	ve Layer (if obs	erved):								
		Type:					Hydric	Soil Present? Yes X No		
	Depth (in	_					Trydric	3336		
		_								
Remarks	5:									

Project/Site: Cider Solar Project	City/County: Elba/Genese	e Sampling Date: 7/24/2020		
Applicant/Owner: Hecate	State: NY Sampling Point:02-202			
Investigator(s): Justin Ahn	Section, Township, Range: WL-52-52U			
Landform (hillslope, terrace,etc.): <u>Toeslope</u>	Local relief (concave, convex, r	none): <u>Linear</u> Slope (%) <u>1 - 5</u>		
Subregion (LRR or MLRA): LRR L	Lat: 43.098615 Long: -7	8.217214 Datum: NAD83		
Soil Map Unit Name: LoA		NWI Classification: UPL		
Are climatic / hyrologic conditions on the site	typical for this time of year? Yes X No	(if no, explain in Remarks.)		
Are Vegetation, Soil, or Hydrology	significantly disturbed? Are "Normal	Circumstances" present? Yes X No		
Are Vegetation, Soil, or Hydrology	naturally problematic? (if needed, exp	lain any answers in Remarks.)		
SUMMARY OF FINDINGS - Attach site ma	n showing sampling point locations tran	sects important features etc.		
Hydrophytic Vegetation Present? Yes	No X Is the Sampled Area	-		
<u> </u>	No X within a Wetland?	Yes No X		
Wetland Hydrology Present? Yes		idilu Site iD.		
Remarks: (Explain alternative procedures here or in a se	parate report.)			
HYDROLOGY				
Wetland Hydrology Indicators:		Secondary Indicators (minimum of two required)		
Primary Indicators (minimum of one is required: c	heck all that apply)	Surface Soil Cracks (B6)		
Surface Water (A1)	Water-Stained Leaves (B9)	Drainage Patterns (B10)		
High Water Table (A2)	Aquatic Fauna (B13)	Moss Trim Lines (B16)		
Saturation (A3)	Marl Deposits (B15)	Dry-Season Water Table (C2)		
Water Marks (B1)	Hydrogen Sulfide Odor (C1)	Crayfish Burrows (C8)		
Sediment Deposits (B2)	Oxidized Rhizospheres on Living Roots (C3)	Saturation Visible in Aerial Imagery (C9)		
Drift Deposits (B3)	Presence of Reduced Iron (C4)	Stunted or Stressed Plants (D1)		
Algal Mat or Crust (B4)	Recent Iron Reduction in Tilled Soils (C6)	Geomorphic Position (D2)		
Iron Deposits (B5)	Thin Muck Surface (C7)	Shallow Aquitard (D3)		
Inundation Visible on Aerial Imagery (B7)	Other (Explain in Remarks)	Microtopographic Relief (D4)		
Sparsley Vegetated Concave Surface (B8)		FAC-Neutral Test (D5)		
Surface Water Present? Yes No X	Depth (inches)			
Water Table Present? Yes No X	Depth (inches) Wetland H	Hydrology Present? Yes No X		
Saturation Present? Yes No X	Depth (inches)			
Describe Recorded Data (stream gauge, moni	toring well aerial photos previous inspection	ns) if available:		
Describe Recorded Data (stream gauge, mom	toring wen, derial prioces, previous inspection	is), ii dvalidsie.		
Remarks:				

VEGETATION - Use scientific names of plants Sampling Point: 02-20200724-WL-52-52U Absolute Dominant Indicator **Dominance Test Worksheet:** (Plot Size: 30'radius) % Cover Species? Status **Tree Stratum Number of Dominant Species** That Are OBL, FACW, or FAC: (A) = Total Cover **Total Number of Dominant** (B) Species Across All Strata: 2 Percent of Dominant Species (A/B) That Are OBL, FACW, or FAC: 0% **Prevalence Index Worksheet:** x 1 0 **OBL** species Absolute Dominant Indicator **FACW** species 10 20 (Plot Size: 15'radius) % Cover Status x 2 **Shrub Stratum** Species? FAC species 5 х3 15 = Total Cover **FACU** species 27 x 4 108 **UPL** species 40 x 5 200 Column Totals 82 (A) 343 (B) Prevalence Index = B/A = 4.18 **Hydrophytic Vegetation Indicators:** Absolute Dominant Indicator 1- Rapid Test For Hydrophytic Vegetation **Herb Stratum** (Plot Size: 5'radius) % Cover Species? Status 2- Dominance Test is > 50% 40 UPL Medicago sativa 3- Prevalence Index is =< 3.0 20 Χ Trifolium repens **FACU** 4- Morphological Adaptations Phalaris arundinacea 10 **FACW** Apocynum cannabinum 5 FAC 5- Problematic Hydrophytic Vegetation Trifolium pratense **FACU** Verbascum blattaria 2 **FACU Definitions of Vegetation Strata:** 82 = Total Cover Tree- Woody plants 3 in. (7.6cm) or more in diameter at breast height (DBH), regardless of height. Sapling/Shrub- Woody plants less than 3 in. DBH and greater than or equal to 3.28ft (1m) tall. Herb- All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28ft tall. Absolute Dominant Indicator Woody Vines- All woody vines greater than 3.28ft in (Plot Size: 30'radius) **Woody Vine Stratum** % Cover Species? Status height. = Total Cover Hydrophytic Vegetation Present? Yes ____ No _ X Remarks: (Include photo numbers here or on a separate sheet.)

SOIL Sampling Point: 02-20200724-WL-52-52U Depth Matrix **Redox Features** (inches Color % Color Texture Remarks % Type Loc 0-18 10YR 3/3 95 5YR 5/6 C PLSilty Clay Loam 5 **Hydric Soil Indicators:** Indicators for Problematic Soils: Histosol (A1) Polyvalue Below Surface (B15) 2 cm Muck (A10) Histic Epipedon (A2) Thin Dark Surface (S9) Coast Prarie Redox (A16) Black Histic (A3) Loamy Mucky Mineral (F1) 5 cm Mucky Peat or Peat (S3) Hydrogen Sulfide (A4) Loamy Gleyed Matric (F2) Dark Surface (S7) Stratified Layers (A5) Depleted Matrix (F3) Polyvalue Below Surface (S8) Depleted Below Dark Surface (A11) Redox Dark Surface (F6) Thin Dark Surface (S9) Thick Dark Surface (A12) Depleted Dark Surface (F7) Iron-Manganese Masses (F12) Sandy Mucky Mineral (S1) Redox Depressions (F8) Piedmont Floodplain Soils (F19) Sandy Gleyed Matrix (S4) Mesic Spodic (TA6) Sandy Redox (S5) Red Parent Material (F21) Stripped Matrix (S6) Very Shallow Dark Surface (TF12) Dark Surface (S7) Other (Explain in Remarks) Restrictive Layer (if observed): Type: Hydric Soil Present? Yes No Χ

Remarks:

Depth (inches):

Project/Site: Cider Solar Project	City/Cou	nty: Oakfield/Genes	ssee Sam	pling Date: 9/21/2020	
Applicant/Owner: Hecate	State: NY Sampling Point:				
Investigator(s): Andrew Sorci	Section,	Section, Township, Range: 1_20200921_WL103_U1			
Landform (hillslope, terrace,etc.): Dip	Local relief	(concave, convex, no	ne): <u>Concave</u>	Slope (%) <u>0 - 1</u>	
Subregion (LRR or MLRA): LRR L	Lat: 43.090623	Long:78	.270445	Datum: NAD83	
Soil Map Unit Name: Pd			NWI Classificati	on: PEM	
Are climatic / hyrologic conditions on the site	typical for this time of year	? Yes X No	(if no, expla	ain in Remarks.)	
Are Vegetation, Soil, or Hydrolog	y significantly disturbe	ed? Are "Normal Ci	rcumstances" pre	sent? Yes X No	
Are Vegetation, Soil, or Hydrolog	ynaturally problemat	c? (if needed, explai	in any answers in Re	emarks.)	
SUMMARY OF FINDINGS - Attach site ma	an showing sampling poi	nt locations, transc	ects imnortant	features etc.	
		the Sampled Area	oto, important		
		ithin a Wetland?	Yes	X No	
		yes, optional Wetlar	_	WL103	
Wetland Hydrology Present? Yes	KNo	yes, optional wetial	iu site ib.	WL102	
Remarks: (Explain alternative procedures here or in a s	eparate report.)				
HYDROLOGY					
Wetland Hydrology Indicators:		<u></u>	econdary Indicator	s (minimum of two required)	
Primary Indicators (minimum of one is required:	check all that apply)		Surface Soil Cr	acks (B6)	
Surface Water (A1)	Water-Stained Leaves (I	39)	Drainage Patterns (B10)		
High Water Table (A2)	Aquatic Fauna (B13)		Moss Trim Lines (B16)		
Saturation (A3)	Marl Deposits (B15)	_	Dry-Season Wa	ater Table (C2)	
Water Marks (B1)	Hydrogen Sulfide Odor	(C1)	Crayfish Burro	ws (C8)	
Sediment Deposits (B2)	Oxidized Rhizospheres of	_		ble in Aerial Imagery (C9)	
Drift Deposits (B3)	Presence of Reduced Iro	_		essed Plants (D1)	
Algal Mat or Crust (B4)	Recent Iron Reduction i	-	X Geomorphic Po		
Iron Deposits (B5)	Thin Muck Surface (C7)		Shallow Aquita		
Inundation Visible on Aerial Imagery (B7)	Other (Explain in Remar		Microtopograp		
	Other (Explain in Kemai				
Sparsley Vegetated Concave Surface (B8)			X FAC-Neutral Te	!St (D5)	
Surface Water Present? Yes NoX	Depth (inches)				
Water Table Present? Yes No X	Depth (inches)	Wetland Hy	drology Present?	Yes X No	
Saturation Present? Yes No X	Depth (inches)				
Describe Recorded Data (stream gauge, mor	nitoring well, aerial photos, i	orevious inspections)	. if available:		
5.15 to 1.15 to (1.1 to 6.15t)	6		,		
Remarks:					

VEGETATION - Use scientific names of plants Sampling Point: 1_20200921_WL103_U1 Absolute Dominant Indicator **Dominance Test Worksheet:** (Plot Size: 30'radius) % Cover Species? Status **Tree Stratum Number of Dominant Species** That Are OBL, FACW, or FAC: (A) = Total Cover **Total Number of Dominant** Species Across All Strata: (B) 2 Percent of Dominant Species That Are OBL, FACW, or FAC: (A/B) 100% **Prevalence Index Worksheet:** 3 x 1 3 **OBL** species Absolute Dominant Indicator **FACW** species 112 224 (Plot Size: 15'radius) % Cover Species? Status x 2 **Shrub Stratum** FAC species 6 х3 18 20 Χ **FACW** Fraxinus pennsylvanica 20 = Total Cover FACU species 0 x 4 0 **UPL** species 0 x 5 0 Column Totals 121 (A) 245 (B) Prevalence Index = B/A = 2.02 **Hydrophytic Vegetation Indicators:** Absolute Dominant Indicator X 1- Rapid Test For Hydrophytic Vegetation **Herb Stratum** (Plot Size: 5'radius) % Cover Species? Status X 2- Dominance Test is > 50% 90 Phalaris arundinacea **FACW** X 3- Prevalence Index is =< 3.0 Symphyotrichum lateriflorum 5 FAC 4- Morphological Adaptations Juncus effusus 2 OBL 2 **FACW** Agrostis gigantea 5- Problematic Hydrophytic Vegetation Scirpus cyperinus 1 OBL Juncus tenuis 1 FAC **Definitions of Vegetation Strata:** 101 = Total Cover Tree- Woody plants 3 in. (7.6cm) or more in diameter at breast height (DBH), regardless of height. Sapling/Shrub- Woody plants less than 3 in. DBH and greater than or equal to 3.28ft (1m) tall. Herb- All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28ft tall. Absolute Dominant Indicator Woody Vines- All woody vines greater than 3.28ft in (Plot Size: 30'radius) **Woody Vine Stratum** % Cover Species? Status height. = Total Cover Hydrophytic Vegetation Present? Yes X No ___ Remarks: (Include photo numbers here or on a separate sheet.)

SOIL Sampling Point: 1_20200921_WL103_U1

Depth	Matrix				Redo	ox Featu				
(inches	Color	%	Color	%	Type	Loc	Texture	Remarks		
0-5	10YR 3/2	100					Loam			
5-8	10YR 3/2	98	10YR 4/6	2	С	M	Clay Loam			
8-16	7.5YR 5/2	90	10YR 4/6	10	С	M	Clay Loam			

Hydric Soil Indicators:		Indicators for Problematic Soils:				
Histosol (A1)	Polyvalue Below Surface (B1	5)2 cm Muck (A10)				
Histic Epipedon (A2)	Thin Dark Surface (S9)	Coast Prarie Redox (A16)				
Black Histic (A3)	Loamy Mucky Mineral (F1)	5 cm Mucky Peat or Peat (S3)				
Hydrogen Sulfide (A4)	Loamy Gleyed Matric (F2)	Dark Surface (S7)				
Stratified Layers (A5)	X Depleted Matrix (F3)	Polyvalue Below Surface (S8)				
Depleted Below Dark Surface (A11)	Redox Dark Surface (F6)	Thin Dark Surface (S9)				
Thick Dark Surface (A12)	Depleted Dark Surface (F7)	Iron-Manganese Masses (F12)				
Sandy Mucky Mineral (S1)	Redox Depressions (F8)	Piedmont Floodplain Soils (F19)				
Sandy Gleyed Matrix (S4)		Mesic Spodic (TA6)				
Sandy Redox (S5)		Red Parent Material (F21)				
Stripped Matrix (S6)		Very Shallow Dark Surface (TF12)				
Dark Surface (S7)		Other (Explain in Remarks)				
Restrictive Layer (if observed):						
Туре:		Hydric Soil Present? Yes X No				
Depth (inches):						
	_					

Remarks:

Project/Site: Cider Solar Project	City/County: Oakfield/Ger	nessee Sampling Date: 9/21/2020			
Applicant/Owner: Hecate		State: NY Sampling Point:			
Investigator(s): Andrew Sorci	Section, Township, Range:	1_20200921_WL103_W2			
Landform (hillslope, terrace,etc.): Dip	Local relief (concave, convex,	none): <u>Concave</u> Slope (%) <u>0 - 3</u>			
Subregion (LRR or MLRA): LRR L	Lat: <u>43.089686</u> Long:	78.270731 Datum: NAD83			
Soil Map Unit Name: CbA		NWI Classification: PFO			
Are climatic / hyrologic conditions on the site	typical for this time of year? Yes X No	(if no, explain in Remarks.)			
Are Vegetation, Soil, or Hydrology	significantly disturbed? Are "Normal	Circumstances" present? Yes X No			
Are Vegetation, Soil, or Hydrology	naturally problematic? (if needed, exp	plain any answers in Remarks.)			
SUMMARY OF FINDINGS - Attach site ma	p showing sampling point locations, trai	nsects, important features, etc.			
Hydrophytic Vegetation Present? Yes X					
Hydric Soil Present? Yes X	within a Wetland?	Yes X No			
Wetland Hydrology Present? Yes X		land Site ID: WL103			
Remarks: (Explain alternative procedures here or in a se					
HYDROLOGY					
Wetland Hydrology Indicators:		Secondary Indicators (minimum of two required)			
Primary Indicators (minimum of one is required: c	heck all that apply)	Surface Soil Cracks (B6)			
Surface Water (A1)	Water-Stained Leaves (B9)	Drainage Patterns (B10)			
High Water Table (A2)	Aquatic Fauna (B13)	X Moss Trim Lines (B16)			
Saturation (A3)	Marl Deposits (B15)	Dry-Season Water Table (C2)			
Water Marks (B1)	Hydrogen Sulfide Odor (C1)	Crayfish Burrows (C8)			
Sediment Deposits (B2)	Oxidized Rhizospheres on Living Roots (C3)	Saturation Visible in Aerial Imagery (C9)			
Drift Deposits (B3)	Presence of Reduced Iron (C4)	Stunted or Stressed Plants (D1)			
Algal Mat or Crust (B4)	Recent Iron Reduction in Tilled Soils (C6)	X Geomorphic Position (D2)			
Iron Deposits (B5)	Thin Muck Surface (C7)	Shallow Aquitard (D3)			
Inundation Visible on Aerial Imagery (B7)	Other (Explain in Remarks)	Microtopographic Relief (D4)			
Sparsley Vegetated Concave Surface (B8)		X FAC-Neutral Test (D5)			
Surface Water Present? Yes No X	Depth (inches)	- 			
Water Table Present? Yes No X	_ · · · · · · 	Hydrology Present? Yes X No			
Saturation Present? Yes No X	Depth (inches)				
Describe Recorded Data (stream gauge, moni	toring well, aerial photos, previous inspection	ns), if available:			
Damandar					
Remarks:					

VEGETATION - Use scien	tific names	of plants				Sampli	ng Point:	1_202	00921_W	L103_W
		"	Absolute			Dominance Test V	Vorksheet:			
Tree Stratum Populus deltoides	(Plot Size:	30'radius)	% Cover 60	Species? X	Status FAC	Number of Domi That Are OBL, FA	-		3	(A)
			60	_= Total Co	ver	Total Numbe Species Ac			3	(B)
						Percent of Don That Are OBL, I	•		100%	(A/B)
						Prevalence Index \	Worksheet:	:		
			Absolute	Dominant	Indicator	OBL species	0	x 1	0	
Shrub Stratum	(Plot Size:	15'radius)	% Cover	Species?	Status	FACW species	85	x 2	170	
Fraxinus pennsylvanica	a		85	Х	FACW	FAC species	65	x 3	195	
			85	_= Total Co	ver	FACU species	0	x 4	0	<u> </u>
						UPL species	0	x 5	0	
						Column Totals	150	(A)	365	(B)
						Prevalenc	e Index = B	/A =	2.43	
						Hydrophytic Vege	tation Indi	cators	i:	
	(51 . 5)	_, ,,		Dominant		1- Rapid Tes	t For Hydro	phyti	c Vegeta	tion
Herb Stratum	(Plot Size:		% Cover	Species?	Status	X 2- Dominano	ce Test is >	50%		
				= Total Co	ver	X 3- Prevalenc	e Index is =	< 3.0		
					vei	4- Morpholo	gical Adap	tation	S	
						5- Problema	tic Hydropl	hytic \	/egetatic	n
						Definitions of Vegeta	ation Strata:	1		
						Tree- Woody plants 3 breast height (DBH),				ieter at
						Sapling/Shrub- Wood greater than or equa				and
						Herb- All herbaceous size, and woody plan			_	less of
Woody Vine Stratum	(Plot Size:	30'radius)	Absolute % Cover	Dominant Species?	Indicator Status	Woody Vines- All wo height.	ody vines gre	eater t	han 3.28f	t in
Vitis riparia			<u>5</u>	= Total Co	FAC					
			5	_= 10tal Co	ver	Hydroph Vegeta Pres	-	Х	No	
Remarks: (Include photo nu	umbers here	or on a sep	arate shee	t.)						

SOIL Sampling Point: 1_20200921_wL103_w2

Depth	Matrix	(Redo	x Featu	res	
(inches	Color	%	Color	%	Туре	Loc	Texture	Remarks
0-5	10YR 2/2	100					Sandy Loam	
5-12	2.5Y 6/1	95	10YR 6/8	5	С	М	Sandy Clay Loam	
Hydric Soil Indicators:					Dala sala	- D-I		Indicators for Problematic Soils:
	tosol (A1)	'A 2 \			•		Surface (B15)	2 cm Muck (A10)
	tic Epipedon (ck Histis (A2)	A2)			Thin Dar		neral (F1)	Coast Prarie Redox (A16) 5 cm Mucky Peat or Peat (S3)
Black Histic (A3) Hydrogen Sulfide (A4)					•	-	atric (F2)	Dark Surface (S7)
Stratified Layers (A5)					Depleted	-		Polyvalue Below Surface (S8)
	oleted Below		rface (A11)		Redox D		•	Thin Dark Surface (S9)
	ck Dark Surfac						rface (F7)	Iron-Manganese Masses (F12)
	dy Mucky Mi				Redox D		•	Piedmont Floodplain Soils (F19)
	dy Gleyed Ma				•	•		Mesic Spodic (TA6)
San	dy Redox (S5)					•	Red Parent Material (F21)
Stri	pped Matrix ((S6)						Very Shallow Dark Surface (TF12)
Dar	k Surface (S7))						Other (Explain in Remarks)
Restrictiv	ve Layer (if obs	erved):						
		Type:					Hydric S	Soil Present? Yes X No
	Depth (ir	- nches):					, 3.110	··· ··· ··· ··· ··· ··· ··· ··· ··· ··
Remarks	s:							

Project/Site: Cider Solar Project		City/C	ounty: Oakfield/Gen	nnesee	Sampling Date: <u>9/22/2020</u>			
Applicant/Owner: Hecate				State: NY	Sampling Point:			
Investigator(s): Andrew Sorci		Section	on, Township, Range:		1_20200922_WL103			
Landform (hillslope, terrace,etc.): <u>Dip</u>		Local reli	ef (concave, convex, r	none): <u>Conca</u>	<u>ve</u> Slope (%) <u>0 - 2</u>			
Subregion (LRR or MLRA): LRR L		Lat: 43.090035	Long: <u>-</u> 7	78.274513	Datum: NAD83			
Soil Map Unit Name: La				NWI Classi	fication: PFO			
Are climatic / hyrologic conditions on the	site t	ypical for this time of ye	ear? Yes <u>X</u> No	(if no,	explain in Remarks.)			
Are Vegetation , Soil , or Hydi	ology	significantly disturbed? Are "Normal Circumstances" present? Yes X No						
Are Vegetation, Soil, or Hydi	ology	naturally problem	natic? (if needed, exp	lain any answer	s in Remarks.)			
SUMMARY OF FINDINGS - Attach sit	o mar	showing sampling n	oint locations tran	sects impor	tant features etc			
				•				
Hydrophytic Vegetation Present? Ye		No	Is the Sampled Area within a Wetland?		Yes X No			
Hydric Soil Present? Ye	-	No						
Wetland Hydrology Present? Ye		No	if yes, optional Wetl	iand site id:	WL104			
Remarks: (Explain alternative procedures here or	in a sep	parate report.)						
HYDROLOGY								
Wetland Hydrology Indicators:				Secondary Indi	cators (minimum of two required)			
Primary Indicators (minimum of one is requ	ired: ch	neck all that apply)		Surface S	oil Cracks (B6)			
Surface Water (A1)	_	Water-Stained Leave	s (B9)	Drainage	Patterns (B10)			
High Water Table (A2)		Aquatic Fauna (B13)		Moss Tri	m Lines (B16)			
Saturation (A3)	_	Marl Deposits (B15)		Dry-Seas	on Water Table (C2)			
Water Marks (B1)	_	Hydrogen Sulfide Od	or (C1)	Crayfish Burrows (C8)				
Sediment Deposits (B2)	=		es on Living Roots (C3)	Saturation Visible in Aerial Imagery (C9)				
Drift Deposits (B3)	_	Presence of Reduced		Stunted or Stressed Plants (D1)				
Algal Mat or Crust (B4)	_	Recent Iron Reductio		X Geomorphic Position (D2)				
Iron Deposits (B5)	_	Thin Muck Surface (C	• •		Aquitard (D3)			
	_ D7\				•			
Inundation Visible on Aerial Imagery (_	Other (Explain in Ren	narks)	Microtopographic Relief (D4)				
Sparsley Vegetated Concave Surface (38)			X FAC-Neur	trai lest (D5)			
Surface Water Present? Yes No	X	Depth (inches)	_					
Water Table Present? Yes No	X	Depth (inches)	Wetland H	Hydrology Pres	ent? Yes X No			
Saturation Present? Yes No	X	Depth (inches)						
Describe Recorded Data (stream gauge,	monit	coring well periol photo	s provious inspostion	nc) if available				
Describe Recorded Data (stream gauge,	IIIOIIII	ornig well, aerial photo.	s, previous inspection	is), ii available	•			
Remarks:								

VEGETATION - Use scientific names of plants Sampling Point: 1_20200922_WL103

/EGETATION - Use scientific na	nes or plants	•			Janipii		0200922_	_AAFT(
Tree Stratum (Plot S	ze: 30'radius)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test V Number of Domi				
Fraxinus pennsylvanica		15	Χ	FACW	That Are OBL, FA	CW, or FAC:	5	(A)	
Acer negundo		15	X	FAC	Total Numbe	r of Dominant			
		30	_= Total Cov	/er	Species Ac	ross All Strata:	6	(B)	
					Percent of Dor	ninant Species		_	
					That Are OBL,	•	83.3%	(A/B)	
					Prevalence Index \	Norksheet:			
		Ahsolute	Dominant	Indicator	OBL species	25 x 1	. 25		
Shrub Stratum (Plot S	ze: 15'radius)	% Cover	Species?	Status	FACW species	100 x 2	200		
Salix nigra		25	X	OBL	FAC species	x 3	165		
		25	_= Total Cov	/er	FACU species	0 x 4	0		
					UPL species	0 x 5	0		
					Column Totals	180 (A)	390	(B	
					Prevalenc	e Index = B/A =	2.17		
					Hydrophytic Vege	tation Indicato	ors:		
		Absolute	Dominant	Indicator	1- Rapid Tes	t For Hydrophy	tic Vegeta	tion	
Herb Stratum (Plot S	ze: 5'radius)	% Cover	Species?	Status	X 2- Dominan	ce Test is > 50%	,		
Impatiens capensis		70	X	FACW	X 3- Prevalence	ce Index is =< 3.	0		
Unknown species		30	Х	UNK					
Urtica dioica		15		FAC	4- Morpholo	ogical Adaptation	ons		
Bidens frondosa		15		FACW	5- Problema	tic Hydrophyti	c Vegetatio	n	
Symphyotrichum lateriflorum		<u>15</u>		FAC					
Ranunculus hispidus		5			Definitions of Vegetation Strata:				
		= Total Cover			Definitions of Vegeta	ation Strata:			
		150	_= Total Cov	<u>FAC</u> ver	Definitions of Vegeta Tree- Woody plants is breast height (DBH),	3 in. (7.6cm) or n		neter at	
		150	_= Total Cov		Tree- Woody plants 3	3 in. (7.6cm) or n regardless of hei dy plants less tha	ght. n 3 in. DBH		
		150	_= Total Cov		Tree- Woody plants 3 breast height (DBH),	3 in. (7.6cm) or n regardless of heidly plants less that I to 3.28ft (1m) to (non-woody) plants in the control of the control	ght. n 3 in. DBH all. ants, regard	and	
Woody Vine Stratum (Plot S	ze: <u>30'radius</u>)	Absolute	_= Total Cov Dominant Species?	ver	Tree- Woody plants is breast height (DBH), Sapling/Shrub- Wood greater than or equa Herb- All herbaceous size, and woody plan Woody Vines- All wo	3 in. (7.6cm) or n regardless of hei dy plants less tha I to 3.28ft (1m) t (non-woody) plats less than 3.28	ght. n 3 in. DBH all. ants, regard ft tall.	and less of	
Woody Vine Stratum (Plot S <u>Vitis riparia</u>	ze: <u>30'radius</u>)	Absolute % Cover 5	Dominant Species? X	Indicator Status FAC	Tree- Woody plants is breast height (DBH), Sapling/Shrub- Wood greater than or equa Herb- All herbaceous size, and woody plan	3 in. (7.6cm) or n regardless of hei dy plants less tha I to 3.28ft (1m) t (non-woody) plats less than 3.28	ght. n 3 in. DBH all. ants, regard ft tall.	and less of	
•	ze: <u>30'radius</u>)	Absolute % Cover	Dominant Species?	Indicator Status FAC	Tree- Woody plants is breast height (DBH), Sapling/Shrub- Wood greater than or equa Herb- All herbaceous size, and woody plan Woody Vines- All wo	3 in. (7.6cm) or n regardless of hei dy plants less tha I to 3.28ft (1m) t (non-woody) pla ts less than 3.28 ody vines greate	ght. n 3 in. DBH all. ants, regard ft tall.	and less of	
•	ze: <u>30'radius</u>)	Absolute % Cover 5	Dominant Species? X	Indicator Status FAC	Tree- Woody plants 3 breast height (DBH), Sapling/Shrub- Wood greater than or equal Herb- All herbaceous size, and woody plant Woody Vines- All woheight. Hydropl Vegeta	3 in. (7.6cm) or n regardless of hei dy plants less tha I to 3.28ft (1m) t (non-woody) plats less than 3.28 ody vines greate	ght. n 3 in. DBH all. ants, regard ft tall. r than 3.28f	and less of t in	

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

SOIL Sampling Point: 1_20200922_WL103

Depth	Matrix				Redo	x Featu	res	
(inches	Color	%	Color	%	Type	Loc	Texture	Remarks
0-12	10YR 2/1	98	10YR 3/6	2	С	М	Silt Loam	
12-20	10YR 4/1	80	10YR 4/6	20	С	М	Sandy Loam	

Hydric Soil Indicators:		Indicators for Problematic Soils:				
Histosol (A1)	Polyvalue Below Surface (B15)	2 cm Muck (A10)				
Histic Epipedon (A2)	Thin Dark Surface (S9)	Coast Prarie Redox (A16)				
Black Histic (A3)	Loamy Mucky Mineral (F1)	5 cm Mucky Peat or Peat (S3)				
Hydrogen Sulfide (A4)	Loamy Gleyed Matric (F2)	Dark Surface (S7)				
Stratified Layers (A5)	X Depleted Matrix (F3)	Polyvalue Below Surface (S8)				
Depleted Below Dark Surface (A11)	X Redox Dark Surface (F6)	Thin Dark Surface (S9)				
Thick Dark Surface (A12)	Depleted Dark Surface (F7)	Iron-Manganese Masses (F12)				
Sandy Mucky Mineral (S1)	Redox Depressions (F8)	Piedmont Floodplain Soils (F19)				
Sandy Gleyed Matrix (S4)		Mesic Spodic (TA6)				
Sandy Redox (S5)		Red Parent Material (F21)				
Stripped Matrix (S6)		Very Shallow Dark Surface (TF12)				
Dark Surface (S7)		Other (Explain in Remarks)				
Restrictive Layer (if observed):						
Туре:		Hydric Soil Present? Yes X No				
Depth (inches):						

Remarks:

Project/Site: Cider Solar Project City/C	County: Oakfield/Gennesee Sampling Date: 9/22/2020						
Applicant/Owner: Hecate	State: NY Sampling						
Investigator(s): Andrew Sorci Section	on, Township, Range: Point:1_20200922_WL103_U1						
Landform (hillslope, terrace,etc.): Rise Local relie	ef (concave, convex, none): <u>Convex</u> Slope (%) <u>2 - 5</u>						
Subregion (LRR or MLRA): LRR L Lat: 43.090142	Long:78.274341						
Soil Map Unit Name: La	NWI Classification: UPL						
Are climatic / hyrologic conditions on the site typical for this time of years $\frac{1}{2}$	ear? Yes X No (if no, explain in Remarks.)						
Are Vegetation, Soil, or Hydrologysignificantly disturbed.	rbed? Are "Normal Circumstances" present? Yes X No						
Are Vegetation, Soil, or Hydrologynaturally problem	natic? (if needed, explain any answers in Remarks.)						
SUMMARY OF FINDINGS - Attach site map showing sampling p	point locations, transects, important features, etc.						
Hydrophytic Vegetation Present? Yes X No	Is the Sampled Area						
Hydric Soil Present? Yes No X	within a Wetland? Yes No X						
Wetland Hydrology Present? Yes No X	if yes, optional Wetland Site ID:						
Remarks: (Explain alternative procedures here or in a separate report.)							
remarks. (Explain atternative procedures here of the a separate report)							
HYDROLOGY							
Wetland Hydrology Indicators:	Secondary Indicators (minimum of two required)						
Primary Indicators (minimum of one is required: check all that apply)	Surface Soil Cracks (B6)						
Surface Water (A1) Water-Stained Leave	es (B9) Drainage Patterns (B10)						
High Water Table (A2) Aquatic Fauna (B13)	Moss Trim Lines (B16)						
Saturation (A3) Marl Deposits (B15)	Dry-Season Water Table (C2)						
Water Marks (B1) Hydrogen Sulfide Ode							
	es on Living Roots (C3) Saturation Visible in Aerial Imagery (C9)						
Drift Deposits (B3) Presence of Reduced							
Algal Mat or Crust (B4) Recent Iron Reductio							
	·						
							
Inundation Visible on Aerial Imagery (B7) Other (Explain in Ren							
Sparsley Vegetated Concave Surface (B8)	FAC-Neutral Test (D5)						
Surface Water Present? Yes NoX Depth (inches)	_						
Water Table Present? Yes No _X _ Depth (inches)	Wetland Hydrology Present? Yes NoX						
Saturation Present? Yes NoX _ Depth (inches)	_						
Describe Recorded Data (stream gauge, monitoring well, aerial photo	s, previous inspections), if available:						
Remarks:							

VEGETATION - Use scientific names of plants Sampling Point: 1_20200922_WL103_U1

	tific names	o. p.aes				Jampii	<u>-</u>	200922_W	1103_0
Tree Stratum _Tilia americana	(Plot Size:	30'radius)	Absolute % Cover 25	Dominant Species?	Indicator Status FACU	Dominance Test V Number of Domi That Are OBL, FA	nant Species	6	(A)
			25	_= Total Cov	er er		r of Dominant ross All Strata:	9	(B)
						Percent of Don That Are OBL, I	•	66.7%	(A/B)
						Prevalence Index \	Worksheet:		
			Absolute	Dominant	Indicator	OBL species	0 x 1	0	
Shrub Stratum	(Plot Size:	15'radius)	% Cover	Species?	Status	FACW species	30 x 2	60	
Rhamnus cathartica			50	Χ	FAC	FAC species	78 x 3	234	
Fraxinus pennsylvanic	a		25	X	FACW	FACU species	40 x 4	160	
			75	_= Total Cov	er er	UPL species	0 x 5	0	
						Column Totals	148 (A)	454	(B)
						Prevalenc	e Index = B/A =	3.07	
						Hydrophytic Vege	tation Indicato	rs:	
			Absolute	Dominant	Indicator	1- Rapid Tes	t For Hydrophy	tic Vegeta	tion
Herb Stratum	(Plot Size:	5'radius)	% Cover	Species?	Status	· '		•	
Urtica dioica			15	X	FAC	X 2- Dominano	ce Test is > 50%		
Alliaria petiolata			5	X	FACU	3- Prevalenc	e Index is =< 3.0)	
Bidens frondosa			5	Χ	FACW	4- Morpholo	gical Adaptatio	ns	
Persicaria virginiana			5	Χ	FAC	5- Problema	tic Hydrophytic	Vegetatio	n
Ranunculus hispidus			3		FAC		,		
			33	= Total Cov					
				_	er	Definitions of Vegeta	ation Strata:		
				_	er	Definitions of Vegeta Tree- Woody plants 3 breast height (DBH),	3 in. (7.6cm) or m		neter at
					er	Tree- Woody plants 3	3 in. (7.6cm) or m regardless of heig ly plants less thar	ght. n 3 in. DBH	
				_	er	Tree- Woody plants 3 breast height (DBH), Sapling/Shrub- Wood	B in. (7.6cm) or m regardless of heig ly plants less thar I to 3.28ft (1m) ta (non-woody) pla	ght. n 3 in. DBH ill. nts, regard	and
Woody Vine Stratum	(Plot Size:	30'radius)		Dominant Species?		Tree- Woody plants 3 breast height (DBH), Sapling/Shrub- Wood greater than or equal Herb- All herbaceous size, and woody plan Woody Vines- All woody	B in. (7.6cm) or m regardless of heig ly plants less than I to 3.28ft (1m) ta (non-woody) pla ts less than 3.28f	ght. n 3 in. DBH ill. nts, regard t tall.	and less of
Woody Vine Stratum Parthenocissus quinqu		30'radius)	Absolute	Dominant	Indicator	Tree- Woody plants 3 breast height (DBH), Sapling/Shrub- Wood greater than or equal Herb- All herbaceous size, and woody plan	B in. (7.6cm) or m regardless of heig ly plants less than I to 3.28ft (1m) ta (non-woody) pla ts less than 3.28f	ght. n 3 in. DBH ill. nts, regard t tall.	and less of
Woody Vine Stratum Parthenocissus quinqu Toxicodendron radica	uefolia	30'radius)	Absolute % Cover	Dominant Species?	Indicator Status	Tree- Woody plants 3 breast height (DBH), Sapling/Shrub- Wood greater than or equal Herb- All herbaceous size, and woody plan Woody Vines- All woody	B in. (7.6cm) or m regardless of height plants less than I to 3.28ft (1m) to (non-woody) plats less than 3.28ft ody vines greater	ght. n 3 in. DBH ill. nts, regard t tall.	and less of

OIL								Sampling Point: 1_20200922_WL103_U1		
Depth	Matrix					ox Featui				
(inches	Color	%	Color	%	Type	Loc	Texture	Remarks		
0-12	10YR 2/2	100					Sandy Loam			
12-18	10YR 2/2	70	10YR 5/8	30	С	М	Clay Loam			
-	oil Indicators:				Dalumalu	a Dalaw (fo.co (D1E)	Indicators for Problematic Soils:		
Histosol (A1)					=	e веюw s k Surface	Surface (B15)	2 cm Muck (A10)		
Histic Epipedon (A2) Black Histic (A3)						Nucky Mir		Coast Prarie Redox (A16) 5 cm Mucky Peat or Peat (S3)		
Hydrogen Sulfide (A4)					•	ileyed Ma	, ,	Dark Surface (S7)		
Stratified Layers (A5)						d Matrix (Polyvalue Below Surface (S8)		
Depleted Below Dark Surface (A11)					-	ark Surfa	•	Thin Dark Surface (S9)		
Thick Dark Surface (A12)							rface (F7)	Iron-Manganese Masses (F12)		
	ndy Mucky Mi					epression	Piedmont Floodplain Soils (F19)			
	ndy Gleyed Ma	-				•	, ,	Mesic Spodic (TA6)		
	ndy Redox (S5)	-	•					Red Parent Material (F21)		
	ipped Matrix (Very Shallow Dark Surface (TF12)		
Dar	rk Surface (S7))						Other (Explain in Remarks)		
Restrictiv	ve Layer (if obs	erved):								
		Type:					Hydric	Soil Present? Yes No X		
	Depth (in	nches):								
Remarks	s:									

Project/Site: Cider Solar Project	City/Co	ounty: Oakfield/Gennesee	Sampling Date: 10/8/2020		
Applicant/Owner: Hecate		State: NY	Sampling Point:		
Investigator(s): Andrew Sorci	Sectio	n, Township, Range:	1_20200922_WL104		
Landform (hillslope, terrace,etc.): Depress	ion Local relie	ef (concave, convex, none): Concav	<u>ve</u> Slope (%) <u>0 - 3</u>		
Subregion (LRR or MLRA): LRR L	Lat: 43.089921	Long:78.273611	Datum: NAD83		
Soil Map Unit Name: OdA		NWI Classif	ication: PEM		
Are climatic / hyrologic conditions on the sit	te typical for this time of ye	ar? Yes X No (if no,	explain in Remarks.)		
Are Vegetation \underline{X} , Soil $\underline{\hspace{1cm}}$, or Hydrolo	ogysignificantly distur	bed? Are "Normal Circumstances"	present? Yes X No		
Are Vegetation, Soil, or Hydrolo	pgynaturally problem	atic? (if needed, explain any answers	in Remarks.)		
SUMMARY OF FINDINGS - Attach site m	nap showing sampling p	oint locations, transects, import	ant features, etc.		
Hydrophytic Vegetation Present? Yes	X No	Is the Sampled Area			
_		within a Watland?	os V No		
Hydric Soil Present? Yes	X No	'	'es X No		
Wetland Hydrology Present? Yes	X No	if yes, optional Wetland Site ID:	WL105		
Remarks: (Explain alternative procedures here or in a	a separate report.)				
vegetated, maintained ditch					
HYDROLOGY					
Wetland Hydrology Indicators:		Secondary Indi	cators (minimum of two required)		
Primary Indicators (minimum of one is required	d: check all that apply)	Surface S	oil Cracks (B6)		
Surface Water (A1)	Water-Stained Leaves	s (B9) Drainage	Drainage Patterns (B10)		
High Water Table (A2)	Aquatic Fauna (B13)	Moss Trin	Moss Trim Lines (B16)		
Saturation (A3)	Marl Deposits (B15)	Dry-Seaso	Dry-Season Water Table (C2)		
Water Marks (B1)	Hydrogen Sulfide Odd	or (C1) Crayfish E	Crayfish Burrows (C8)		
Sediment Deposits (B2)	X Oxidized Rhizosphere	s on Living Roots (C3) X Saturation	n Visible in Aerial Imagery (C9)		
Drift Deposits (B3)	Presence of Reduced		r Stressed Plants (D1)		
Algal Mat or Crust (B4)	Recent Iron Reduction	n in Tilled Soils (C6) X Geomorp	hic Position (D2)		
Iron Deposits (B5)	Thin Muck Surface (C	· · · —	Shallow Aquitard (D3)		
Inundation Visible on Aerial Imagery (B7)			ographic Relief (D4)		
Sparsley Vegetated Concave Surface (B8)	Other (Explain in Ken	X FAC-Neut			
			Tal Test (D5)		
Surface Water Present? Yes No	X Depth (inches)	_			
Water Table Present? Yes No	X Depth (inches)	Wetland Hydrology Pres	ent? Yes X No		
Saturation Present? Yes No	X Depth (inches)	_			
Describe Recorded Data (stream gauge, mo	onitoring well perial photos	nrevious inspections) if availables			
Describe Recorded Data (stream gauge, me	onitoring well, aerial photos	s, previous inspections,, it available.			
Remarks:					

VEGETATION - Use scientific names of plants Sampling Point: 1_20200922_WL104 Absolute Dominant Indicator **Dominance Test Worksheet:** (Plot Size: 30'radius) % Cover Species? Status **Tree Stratum Number of Dominant Species** That Are OBL, FACW, or FAC: (A) = Total Cover **Total Number of Dominant** Species Across All Strata: (B) 2 Percent of Dominant Species That Are OBL, FACW, or FAC: (A/B) 100% **Prevalence Index Worksheet:** 30 x 1 30 **OBL** species Absolute Dominant Indicator **FACW** species 45 90 (Plot Size: 15'radius) Status x 2 **Shrub Stratum** % Cover Species? **FAC** species 5 х3 15 = Total Cover **FACU** species 0 x 4 0 **UPL** species 0 x 5 0 Column Totals 80 (A) 135 (B) Prevalence Index = B/A = 1.69 **Hydrophytic Vegetation Indicators:** Absolute Dominant Indicator X 1- Rapid Test For Hydrophytic Vegetation **Herb Stratum** (Plot Size: 5'radius) % Cover Species? Status X 2- Dominance Test is > 50% 20 Agrostis stolonifera **FACW** X 3- Prevalence Index is =< 3.0 Χ Phalaris arundinacea 20 **FACW** 4- Morphological Adaptations Schoenoplectus tabernaemontani 10 OBL Juncus effusus 10 OBL 5- Problematic Hydrophytic Vegetation Lythrum salicaria 5 OBL Scirpus atrovirens 5 OBL **Definitions of Vegetation Strata:** FAC Ranunculus hispidus Tree- Woody plants 3 in. (7.6cm) or more in diameter at Symphyotrichum lanceolatum 5 **FACW** breast height (DBH), regardless of height. 80 = Total Cover Sapling/Shrub- Woody plants less than 3 in. DBH and greater than or equal to 3.28ft (1m) tall. Herb- All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28ft tall. Absolute Dominant Indicator Woody Vines- All woody vines greater than 3.28ft in (Plot Size: 30'radius) **Woody Vine Stratum** % Cover Species? Status height. = Total Cover Hydrophytic Vegetation Present? Yes X No ___ Remarks: (Include photo numbers here or on a separate sheet.)

SOIL Sampling Point: 1_20200922_WL104

(inches Color % Type Loc Texture Remarks 0-7 10YR 2/2 95 10YR 3/6 5 C PL Sandy Clay Loam 7-16 10YR 4/1 85 10YR 4/6 15 C M Sandy Loam	Depth	Matrix							
, , ,	(inches	Color	%	Color	%	Туре	Loc	Texture	Remarks
7-16 10YR 4/1 85 10YR 4/6 15 C M Sandy Loam	0-7	10YR 2/2	95	10YR 3/6	5	С	PL	Sandy Clay Loam	
	7-16	10YR 4/1	85	10YR 4/6	15	С	М	Sandy Loam	

Hydric Soil Indicators:		Indicators for Problematic Soils:
Histosol (A1)	Polyvalue Below Surface (B15)	2 cm Muck (A10)
Histic Epipedon (A2)	Thin Dark Surface (S9)	Coast Prarie Redox (A16)
Black Histic (A3)	Loamy Mucky Mineral (F1)	5 cm Mucky Peat or Peat (S3)
Hydrogen Sulfide (A4)	Loamy Gleyed Matric (F2)	Dark Surface (S7)
Stratified Layers (A5)	X Depleted Matrix (F3)	Polyvalue Below Surface (S8)
Depleted Below Dark Surface (A11)	Redox Dark Surface (F6)	Thin Dark Surface (S9)
Thick Dark Surface (A12)	Depleted Dark Surface (F7)	Iron-Manganese Masses (F12)
Sandy Mucky Mineral (S1)	Redox Depressions (F8)	Piedmont Floodplain Soils (F19)
Sandy Gleyed Matrix (S4)		Mesic Spodic (TA6)
Sandy Redox (S5)		Red Parent Material (F21)
Stripped Matrix (S6)		Very Shallow Dark Surface (TF12)
Dark Surface (S7)		Other (Explain in Remarks)
Restrictive Layer (if observed):		
Type:		Hydric Soil Present? Yes X No
Depth (inches):		Tryune son resent. Tes X 100
235 (333).		

Project/Site: Cider Solar Project City/C	County: Oakfield/Genessee Sampling Date: 9/22/2020
Applicant/Owner: Hecate	State: NY Sampling
Investigator(s): Andrew Sorci Section	on, Township, Range: Point:1_20200922_WL104_U1
Landform (hillslope, terrace,etc.): Rise Local reli	ief (concave, convex, none): None Slope (%) 2 - 5
Subregion (LRR or MLRA): LRR L Lat: 43.089914	Long:78.273536
Soil Map Unit Name: OdA	NWI Classification: UPL
Are climatic / hyrologic conditions on the site typical for this time of years $\frac{1}{2}$	ear? Yes X No (if no, explain in Remarks.)
Are Vegetation, Soil, or Hydrologysignificantly distu	rbed? Are "Normal Circumstances" present? Yes X No
Are Vegetation, Soil, or Hydrologynaturally problem	natic? (if needed, explain any answers in Remarks.)
SUMMARY OF FINDINGS - Attach site map showing sampling p	point locations, transects, important features, etc.
Hydrophytic Vegetation Present? Yes X No	Is the Sampled Area
Hydric Soil Present? Yes No X	within a Wetland? Yes No X
Wetland Hydrology Present? Yes No X	if yes, optional Wetland Site ID:
Remarks: (Explain alternative procedures here or in a separate report.)	
remains. (Explain attenuance procedures here of in a separate report,)	
HYDROLOGY	
Wetland Hydrology Indicators:	Secondary Indicators (minimum of two required)
Primary Indicators (minimum of one is required: check all that apply)	Surface Soil Cracks (B6)
Surface Water (A1) Water-Stained Leave	es (B9) Drainage Patterns (B10)
High Water Table (A2) Aquatic Fauna (B13)	
Saturation (A3) Marl Deposits (B15)	Dry-Season Water Table (C2)
Water Marks (B1) Hydrogen Sulfide Od	
	es on Living Roots (C3) Saturation Visible in Aerial Imagery (C9)
Drift Deposits (B3) Presence of Reduced	
	
· · · ·	
Iron Deposits (B5)Thin Muck Surface (C	
Inundation Visible on Aerial Imagery (B7) Other (Explain in Rer	
Sparsley Vegetated Concave Surface (B8)	FAC-Neutral Test (D5)
Surface Water Present? Yes NoX Depth (inches)	_
Water Table Present? Yes No _ X _ Depth (inches)	Wetland Hydrology Present? Yes No X
Saturation Present? Yes No X Depth (inches)	_
Describe Recorded Data (stream gauge, monitoring well, aerial photo	os, previous inspections), if available:
, , , , , , , , , , , , , , , , , , , ,	
Remarks:	

VEGETATION - Use scientific names of plants Sampling Point: 1_20200922_WL104_U1

/EGETATION - Use scientific	names	of plants				Samplir	ng Point: 1_20	200922_W	L104_U
Tree Stratum (Pl	lot Size:	30'radius)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test W Number of Domin			
Tilia americana			25	Х	FACU	That Are OBL, FA	•	6	(A)
Fraxinus pennsylvanica			25	Х	FACW	•	of Dominant		_ ` `
			50	= Total Cov	⁄er		oss All Strata:	9	(B)
						Percent of Dom	inant Species		_
						That Are OBL, F	•	66.7%	(A/B)
						Prevalence Index V	Vorksheet:		
						OBL species	0 x 1	0	
Shrub Stratum (Pl	lot Size:	15'radius)	Absolute % Cover	Dominant Species?	Indicator Status	FACW species	30 x 2	60	
Rhamnus cathartica			50	Х	FAC	FAC species	78 x 3	234	
			50	= Total Cov	/er	FACU species	40 x 4	160	
						UPL species	0 x 5	0	
						Column Totals	148 (A)	 454	(B
						-			(D
						Prevalence	e Index = B/A =	3.07	
						Hydrophytic Veget	ation Indicato	rs:	
			Absolute	Dominant	Indicator	1- Rapid Test	For Hydrophy	tic Vegeta	tion
Herb Stratum (Pl	lot Size:	5'radius)	% Cover	Species?	Status	X 2- Dominano	e Test is > 50%	J	
Urtica dioica			15	Х	FAC				
Alliaria petiolata			5	Χ	FACU	3- Prevalence	e Index is =< 3.	J	
Bidens frondosa			5	Х	FACW	4- Morpholo	gical Adaptatio	ns	
Persicaria virginiana			5	X	FAC	5- Problemat	tic Hydrophytic	Vegetatio	on
Ranunculus hispidus			3	= Total Cov	FAC				
			33	_= 10tal Cov	/er	Definitions of Vegeta	tion Strata:		
						Tree- Woody plants 3 breast height (DBH), r			neter at
						Sapling/Shrub- Wood greater than or equal			and
						Herb- All herbaceous size, and woody plant			less of
Woody Vine Stratum (Pl	lot Size:	30'radius)	Absolute % Cover	Dominant Species?	Indicator Status	Woody Vines- All woo			t in
Parthenocissus quinquefol	lia		10	Х	FACU	height.			
Toxicodendron radicans			5	Χ	FAC	Hydroph	vtic		
·······································			15	_= Total Cov	⁄er	Vegeta	•		

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

SOIL Sampling Point: 1_20200922_WL104_U1

Depth (inches	Matrix Color 10YR 2/2	% 100	Color	%	Redo Type	ox Featu Loc		Texture	Remarks		
12-18	10YR 4/1	50	10YR 5/8	50	С	М	С	ay Loam			
Hydric So	oil Indicators:								Indicators for Problematic Soils:		
Hist	tosol (A1)				Polyvalu	e Below	Surface (315)	2 cm Muck (A10)		
	tic Epipedon (A2)				k Surface			Coast Prarie Redox (A16)		
	ck Histic (A3)				-	-	ineral (F1)	5 cm Mucky Peat or Peat (S3)		
Hydrogen Sulfide (A4)					-	-	atric (F2)		Dark Surface (S7)		
Stratified Layers (A5)					Depleted Matrix (F3)				Polyvalue Below Surface (S8)		
Depleted Below Dark Surface (A11)				Redox Dark Surface (F6)			١	Thin Dark Surface (S9)			
	ck Dark Surfac Idy Mucky Mi				Depleted Dark Surface (F7) Redox Depressions (F8)				Iron-Manganese Masses (F12) Piedmont Floodplain Soils (F19)		
	idy Mucky ivii idy Gleyed Ma	-	-		Redox Depressions (F8)				Mesic Spodic (TA6)		
	idy Redox (S5)	-	1						Red Parent Material (F21)		
	pped Matrix (Very Shallow Dark Surface (TF12)		
	k Surface (S7)								Other (Explain in Remarks)		
Restrictiv	ve Layer (if obs	erved):									
		Type:						Hydri	ic Soil Present? Yes No X		
	Depth (ir	ches):						,			
Remarks	5:										

Project/Site: Cider Solar Project	City/County: Oakfield/Ger	nessee Sampling Date: 9/22/2020		
Applicant/Owner: Hecate		State: NY Sampling Point:		
Investigator(s): Andrew Sorci	Section, Township, Range:	1_20200922_WL105_W1		
Landform (hillslope, terrace,etc.): Depression	Local relief (concave, convex,	none): <u>Concave</u> Slope (%) <u>0 - 1</u>		
Subregion (LRR or MLRA): LRR L	Lat: _43.088693 Long:	78.270644 Datum: NAD83		
Soil Map Unit Name: CbA		NWI Classification: PEM		
Are climatic / hyrologic conditions on the site	cypical for this time of year? Yes X No	(if no, explain in Remarks.)		
Are Vegetation, Soil, or Hydrology	significantly disturbed? Are "Normal	Circumstances" present? Yes X No		
Are Vegetation, Soil, or Hydrology	naturally problematic? (if needed, exp	olain any answers in Remarks.)		
SUMMARY OF FINDINGS - Attach site ma	a showing sampling point locations tran	ososts important foatures etc		
Hydrophytic Vegetation Present? Yes X	within a Wetland?			
Hydric Soil Present? Yes X	NO	Yes X No		
Wetland Hydrology Present? Yes X	No if yes, optional Wet	land Site ID: WL106		
Remarks: (Explain alternative procedures here or in a se	parate report.)			
HYDROLOGY				
Wetland Hydrology Indicators:		Secondary Indicators (minimum of two required)		
Primary Indicators (minimum of one is required: c	heck all that apply)	Surface Soil Cracks (B6)		
Surface Water (A1)	Water-Stained Leaves (B9)	Drainage Patterns (B10)		
High Water Table (A2)	Aquatic Fauna (B13)	Moss Trim Lines (B16)		
Saturation (A3)	Marl Deposits (B15)	Dry-Season Water Table (C2)		
Water Marks (B1)	Hydrogen Sulfide Odor (C1)	Crayfish Burrows (C8)		
Sediment Deposits (B2)	Oxidized Rhizospheres on Living Roots (C3)	Saturation Visible in Aerial Imagery (C9)		
Drift Deposits (B3)	Presence of Reduced Iron (C4)	Stunted or Stressed Plants (D1)		
Algal Mat or Crust (B4)	Recent Iron Reduction in Tilled Soils (C6)			
Iron Deposits (B5)	Thin Muck Surface (C7)	Shallow Aquitard (D3)		
				
Inundation Visible on Aerial Imagery (B7)	Other (Explain in Remarks)	Microtopographic Relief (D4)		
Sparsley Vegetated Concave Surface (B8)		X FAC-Neutral Test (D5)		
Surface Water Present? Yes No _ X	Depth (inches)			
Water Table Present? Yes No X	Depth (inches) Wetland I	Hydrology Present? Yes X No		
Saturation Present? Yes No X	Depth (inches)			
Describe Recorded Data (stream gauge, moni	toring well parial photos provious inspection	as) if available:		
Describe Necorded Data (stream gauge, mon	tornig well, aerial photos, previous hispection	is), ii available.		
Remarks:				

VEGETATION - Use scientific names of plants Sampling Point: 1_20200922_WL105_W1 Absolute Dominant Indicator **Dominance Test Worksheet:** (Plot Size: 30'radius) % Cover Species? Status **Tree Stratum Number of Dominant Species** That Are OBL, FACW, or FAC: 6 (A) = Total Cover Total Number of Dominant Species Across All Strata: (B) 7 Percent of Dominant Species That Are OBL, FACW, or FAC: 85.7% (A/B) **Prevalence Index Worksheet:** 35 **OBL** species 35 x 1 Absolute Dominant Indicator (Plot Size: 15'radius) **FACW** species 41 82 % Cover Species? x 2 **Shrub Stratum** Status **FAC** species 8 24 х3 Lindera benzoin Χ **FACW** Cornus racemosa 3 Χ FAC **FACU** species 10 x 4 40 6 = Total Cover **UPL** species 0 x 5 0 Column Totals 94 (A) 181 (B) Prevalence Index = B/A = 1.93 **Hydrophytic Vegetation Indicators:** Absolute Dominant Indicator 1- Rapid Test For Hydrophytic Vegetation **Herb Stratum** (Plot Size: 5'radius) % Cover Species? Status X 2- Dominance Test is > 50% 25 Eutrochium maculatum Χ OBL X 3- Prevalence Index is =< 3.0 Χ Eupatorium perfoliatum 10 **FACW** 4- Morphological Adaptations Solidago canadensis 10 Χ **FACU** 10 Χ Scirpus atrovirens OBL 5- Problematic Hydrophytic Vegetation Symphyotrichum lanceolatum 10 Χ **FACW** Impatiens capensis 5 **FACW Definitions of Vegetation Strata:** Doellingeria umbellata 5 **FACW** Tree- Woody plants 3 in. (7.6cm) or more in diameter at Onoclea sensibilis **FACW** breast height (DBH), regardless of height. Amphicarpaea bracteata 5 FAC 3 Phragmites australis **FACW** Sapling/Shrub- Woody plants less than 3 in. DBH and 88 = Total Cover greater than or equal to 3.28ft (1m) tall. Herb- All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28ft tall. Absolute Dominant Indicator Woody Vines- All woody vines greater than 3.28ft in (Plot Size: 30'radius) Status **Woody Vine Stratum** % Cover Species? height. = Total Cover Hydrophytic Vegetation Present? Yes X No ____

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

SOIL Sampling Point: 1_20200922_WL105_W1

Depth	Matrix				Redo	x Featı		
(inches	Color	%	Color	%	Type	Loc	Texture	Remarks
0-2	10YR 2/2	100					Loam	
2-14	10YR 4/2	70	10YR 3/6	30	С	М	Sandy Loam	
14-18	7.5YR 5/3	70	7.5YR 5/6	30	С	М	Sandy Loam	

Hydric Soil Indicators:		Indicators for Problematic Soils:
Histosol (A1)	Polyvalue Below Surface (B15)	2 cm Muck (A10)
Histic Epipedon (A2)	Thin Dark Surface (S9)	Coast Prarie Redox (A16)
Black Histic (A3)	Loamy Mucky Mineral (F1)	5 cm Mucky Peat or Peat (S3)
Hydrogen Sulfide (A4)	Loamy Gleyed Matric (F2)	Dark Surface (S7)
Stratified Layers (A5)	X Depleted Matrix (F3)	Polyvalue Below Surface (S8)
Depleted Below Dark Surface (A11)	Redox Dark Surface (F6)	Thin Dark Surface (S9)
Thick Dark Surface (A12)	Depleted Dark Surface (F7)	Iron-Manganese Masses (F12)
Sandy Mucky Mineral (S1)	Redox Depressions (F8)	Piedmont Floodplain Soils (F19)
Sandy Gleyed Matrix (S4)		Mesic Spodic (TA6)
Sandy Redox (S5)		Red Parent Material (F21)
Stripped Matrix (S6)		Very Shallow Dark Surface (TF12)
Dark Surface (S7)		Other (Explain in Remarks)
Restrictive Layer (if observed):		
Туре:	Ну	/dric Soil Present? Yes X No
Depth (inches):		
-	_	

Project/Site: Cider Solar Project City/C	County: Oakfield/Genessee Sampling Date: 9/22/2020
Applicant/Owner: Hecate	State: NY Sampling
Investigator(s): Andrew Sorci Section	on, Township, Range: Point:1_20200922_WL105_U1
Landform (hillslope, terrace,etc.): Rise Local relie	ef (concave, convex, none): <u>Convex</u> Slope (%) <u>3 - 5</u>
Subregion (LRR or MLRA): LRR L Lat: 43.088826	Long:78.270683
Soil Map Unit Name: CbA	NWI Classification: UPL
Are climatic / hyrologic conditions on the site typical for this time of ye	ear? Yes X No (if no, explain in Remarks.)
Are Vegetation, Soil, or Hydrologysignificantly distur	rbed? Are "Normal Circumstances" present? Yes X No
Are Vegetation, Soil, or Hydrologynaturally problem	natic? (if needed, explain any answers in Remarks.)
SUMMARY OF FINDINGS - Attach site map showing sampling p	oint locations, transects, important features, etc.
Hydrophytic Vegetation Present? Yes X No	Is the Sampled Area
Hydric Soil Present? Yes No X	within a Wetland? Yes No X
Wetland Hydrology Present? Yes No X	if yes, optional Wetland Site ID:
Remarks: (Explain alternative procedures here or in a separate report.)	
remarks. (Explain alternative procedures here of the a separate report)	
HYDROLOGY	
Wetland Hydrology Indicators:	Secondary Indicators (minimum of two required)
Primary Indicators (minimum of one is required: check all that apply)	Surface Soil Cracks (B6)
Surface Water (A1) Water-Stained Leave	s (B9) Drainage Patterns (B10)
High Water Table (A2) Aquatic Fauna (B13)	Moss Trim Lines (B16)
Saturation (A3) Marl Deposits (B15)	Dry-Season Water Table (C2)
Water Marks (B1) Hydrogen Sulfide Odd	
	es on Living Roots (C3) Saturation Visible in Aerial Imagery (C9)
Drift Deposits (B3) Presence of Reduced	
Algal Mat or Crust (B4) Recent Iron Reductio	<u>—</u>
Iron Deposits (B5) Thin Muck Surface (C	
Inundation Visible on Aerial Imagery (B7)Other (Explain in Rem	
Sparsley Vegetated Concave Surface (B8)	X FAC-Neutral Test (D5)
Surface Water Present? Yes NoX Depth (inches)	_
Water Table Present? Yes No _ X _ Depth (inches)	Wetland Hydrology Present? Yes No X
Saturation Present? Yes No X Depth (inches)	_
Describe Recorded Data (stream gauge, monitoring well, aerial photo:	s, previous inspections), if available:
Remarks:	

VEGETATION - Use scientific names of plants

VEGETATION - Use scient	tific name:	of plants				Sampling Point: 1_20200922_WL105_I
				Dominant		Dominance Test Worksheet:
Tree Stratum	(Plot Size:	30'radius)	% Cover	Species?	Status	Number of Dominant Species
Ulmus americana			20	Χ	FACW	That Are OBL, FACW, or FAC: 6 (A)
Fraxinus pennsylvanica			20	Χ	FACW	Total Number of Dominant
Quercus macrocarpa			20	Χ	FACU	Species Across All Strata: 9 (B)
Tilia americana			15		FACU	Percent of Dominant Species
Acer saccharum			10		FACU	That Are OBL, FACW, or FAC: 66.7% (A/B
Populus deltoides			10		FAC	111de711e 052,171eV, 01171e. 00.770 (175
Carya cordiformis			3		FAC	
			98	= Total Cov	/er	Prevalence Index Worksheet:
			Absolute	Dominant	Indicator	OBL species 0 x 1 0
Shrub Stratum	(Plot Size:	15'radius)	% Cover	Species?	Status	FACW species x 2 140
Lindera benzoin			30	Χ	FACW	FAC species x 3 159
Rhamnus cathartica			20	X	FAC	FACU species 60 x 4 240
			50	_= Total Cov	/er	UPL species 0 x 5 0
						Column Totals 183 (A) 539 (E
						Prevalence Index = B/A = 2.95
						Hydrophytic Vegetation Indicators:
			Ahsolute	Dominant	Indicator	1- Rapid Test For Hydrophytic Vegetation
Herb Stratum	(Plot Size:	5'radius)	% Cover	Species?	Status	X 2- Dominance Test is > 50%
Persicaria virginiana			5	Х	FAC	
Solidago canadensis			5	X	FACU	X 3- Prevalence Index is =< 3.0
			10	_= Total Cov	/er	4- Morphological Adaptations
						5- Problematic Hydrophytic Vegetation
						Definitions of Vegetation Strata:
						Tree- Woody plants 3 in. (7.6cm) or more in diameter a breast height (DBH), regardless of height.
						Sapling/Shrub- Woody plants less than 3 in. DBH and
						greater than or equal to 3.28ft (1m) tall.
						Herb- All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28ft tall.
Woody Vine Stratum	(Plot Size:	30'radius)	Absolute % Cover	Dominant Species?	Indicator Status	Woody Vines- All woody vines greater than 3.28ft in height.
Toxicodendron radican	S		15	Х	FAC	neight.
Parthenocissus quinquefolia			10 25	X _= Total Cov	FACU	Hydrophytic Vegetation
						Present? Yes X No

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

SOIL Sampling Point: 1_20200922_wL105_U1

Depth	Matrix	(Redo	ox Featur		
(inches	Color	olor % Color % Type Loc Texture		% Color		Texture	Remarks	
0-3	10YR 3/2	100					Sandy Loam	
3-8	10YR 3/2	98	10YR 4/6	2	С	М	Sandy Loam	
8-20	10YR 5/3	99	10YR 4/6	1	С	М	Sand	

Hydric Soil Indicators:		Indicators for Problematic Soils:
Histosol (A1)	Polyvalue Below Surface (B15)	2 cm Muck (A10)
Histic Epipedon (A2)	Thin Dark Surface (S9)	Coast Prarie Redox (A16)
Black Histic (A3)	Loamy Mucky Mineral (F1)	5 cm Mucky Peat or Peat (S3)
Hydrogen Sulfide (A4)	Loamy Gleyed Matric (F2)	Dark Surface (S7)
Stratified Layers (A5)	Depleted Matrix (F3)	Polyvalue Below Surface (S8)
Depleted Below Dark Surface (A11)	Redox Dark Surface (F6)	Thin Dark Surface (S9)
Thick Dark Surface (A12)	Depleted Dark Surface (F7)	Iron-Manganese Masses (F12)
Sandy Mucky Mineral (S1)	Redox Depressions (F8)	Piedmont Floodplain Soils (F19)
Sandy Gleyed Matrix (S4)		Mesic Spodic (TA6)
Sandy Redox (S5)		Red Parent Material (F21)
Stripped Matrix (S6)		Very Shallow Dark Surface (TF12)
Dark Surface (S7)		Other (Explain in Remarks)
Restrictive Layer (if observed):		
Type:		Hydric Soil Present? Yes No X
Depth (inches):	-	
	_	

City/County: Oakfield/Ger	nessee Sampling Date: 9/22/2020								
Applicant/Owner: Hecate State: NY Sampling Point:									
Section, Township, Range:	1_20200922_WL106_W1								
Local relief (concave, convex, r	none): <u>Concave</u> Slope (%) <u>0 - 1</u>								
Lat: 43.088321 Long: -7	78.271403 Datum: NAD83								
	NWI Classification: PFO								
typical for this time of year? Yes X No	(if no, explain in Remarks.)								
significantly disturbed? Are "Normal	Circumstances" present? Yes X No								
naturally problematic? (if needed, exp	olain any answers in Remarks.)								
p showing sampling point locations, tran	nsects. important features. etc.								
within a Wetland?	Yes X No								
	land Site ID: WL107								
	Secondary Indicators (minimum of two required)								
heck all that apply)	Surface Soil Cracks (B6)								
	Drainage Patterns (B10)								
Aquatic Fauna (B13)	X Moss Trim Lines (B16)								
Marl Deposits (B15)	Dry-Season Water Table (C2)								
Hydrogen Sulfide Odor (C1)	Crayfish Burrows (C8)								
Oxidized Rhizospheres on Living Roots (C3)	Saturation Visible in Aerial Imagery (C9)								
	Stunted or Stressed Plants (D1)								
	X Geomorphic Position (D2)								
	Shallow Aquitard (D3)								
	Microtopographic Relief (D4)								
Other (Explain in Kelliarks)	X FAC-Neutral Test (D5)								
	A FAC-Neutral Test (D5)								
= · · · 									
Depth (inches) Wetland H	Hydrology Present? Yes X No								
Depth (inches)									
toring well, aerial photos, previous inspection	ns), if available:								
	ion in available.								
	Section, Township, Range: Local relief (concave, convex, conv								

VEGETATION - Use scientific names of plants Sampling Point: 1_20200922_wL106_w1

/EGETATION - Use scien	tific names	or plants				Sampii	ng Point: 1_20	200922_W	L106_V
Tree Stratum	(Plot Size:	30'radius)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test V Number of Domi			
Acer rubrum			20	Χ	FAC	That Are OBL, FA	•	4	(A)
Tilia americana			15	Χ	FACU	Total Numbe	r of Dominant		_
Ulmus americana			15	Χ	FACW		oss All Strata:	7	(B)
Fraxinus pennsylvanica]		5		FACW	Percent of Don	=		_``
			55	_= Total Cov	/er	That Are OBL, I	•	57.1%	_(A/B)
						Prevalence Index V	Vorksheet:		
			Ahsolute	Dominant	Indicator	OBL species	0 x 1	0	
Shrub Stratum	(Plot Size:	15'radius)	% Cover	Species?	Status	FACW species	52 x 2	104	
Lindera benzoin			30	Χ	FACW	FAC species	30 x 3	90	
Rhamnus cathartica			10	Χ	FAC	FACU species	30 x 4	120	
Aralia racemosa			10	Х	FACU	· —			
			50	_= Total Cov	/er	UPL species	0 x 5		
						Column Totals	112 (A)	314	(B
						Prevalenc	e Index = B/A =	2.8	
						Hydrophytic Vege	tation Indicato	rs:	
			Absolute	Dominant	Indicator	1- Rapid Tes	t For Hydrophy	tic Vegeta	ition
Herb Stratum	(Plot Size:	5'radius)	% Cover	Species?	Status	X 2- Dominano	ce Test is > 50%	_	
Bidens frondosa			2		FACW				
			2	= Total Cov	/er	X 3- Prevalenc			
						4- Morpholo	gical Adaptatio	ns	
						5- Problema	tic Hydrophytic	Vegetatio	on
						Definitions of Vegeta	ntion Strata:		
						Tree- Woody plants 3 breast height (DBH),			neter at
						Sapling/Shrub- Wood greater than or equal			and
						Herb- All herbaceous size, and woody plan		_	lless of
	(Plot Size:	30'radius)	Absolute % Cover	Dominant Species?	Indicator Status	Woody Vines- All wo	ody vines greater	than 3.28f	ft in
Woody Vine Stratum						1 - 3 -			
Woody Vine Stratum Parthenocissus quinqu	efolia		5	X	FACU				
•	efolia		<u>5</u> 5	X = Total Cov		Hydroph	nytic		
•	efolia					Vegeta	-		

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

buttressing on trees

SOIL Sampling Point: 1_20200922_WL106_W1

Depth	Matrix				Redo	ox Featı	ures	
(inches	Color	%	Color	%	Туре	Loc	Texture	Remarks
0-4	10YR 2/1	100					Sandy Loam	
4-16	2.5Y 6/1	75	10YR 5/6	25	С	М	Sandy Clay Loam	
Hydric So	oil Indicators:							Indicators for Problematic Soils:
-	tosol (A1)				Polvvalu	e Below	Surface (B15)	2 cm Muck (A10)
	tic Epipedon (A2)			Thin Dar			Coast Prarie Redox (A16)
Black Histic (A3)							ineral (F1)	5 cm Mucky Peat or Peat (S3)
Hydrogen Sulfide (A4)				Loamy G	ileyed M	latric (F2)	Dark Surface (S7)	
Stratified Layers (A5)			Х	Depleted	d Matrix	(F3)	Polyvalue Below Surface (S8)	
Dep	Depleted Below Dark Surface (A11)				Redox D	ark Surfa	ace (F6)	Thin Dark Surface (S9)
Thic	ck Dark Surfac	ce (A12)			Depleted	d Dark Si	urface (F7)	Iron-Manganese Masses (F12)
San	ndy Mucky Mi	neral (S	1)		Redox D	epressio	ons (F8)	Piedmont Floodplain Soils (F19)
San	ndy Gleyed Ma	atrix (S4)					Mesic Spodic (TA6)
San	ndy Redox (S5))						Red Parent Material (F21)
	pped Matrix (Very Shallow Dark Surface (TF12)
Dar	k Surface (S7))						Other (Explain in Remarks)
Restrictiv	ve Layer (if obs	erved):						
		Type:						5 115 12 W W W
	Depth (in	_					Hydric	Soil Present? Yes X No No
	Deptii (ii	- -						
Remarks	S:							

Project/Site: Cider Solar Project City/C	County: Oakfield/Genessee Sampling Date: 9/22/2020
Applicant/Owner: Hecate	State: NY Sampling
Investigator(s): Andrew Sorci Section	on, Township, Range: Point:1_20200922_WL106_U1
Landform (hillslope, terrace,etc.): Rise Local reli	ef (concave, convex, none): None Slope (%) 2 - 5
Subregion (LRR or MLRA): LRR L Lat: 43.088409	Long:78.271235
Soil Map Unit Name: Pd	NWI Classification: UPL
Are climatic / hyrologic conditions on the site typical for this time of years $\frac{1}{2}$	ear? Yes X No (if no, explain in Remarks.)
Are Vegetation, Soil, or Hydrologysignificantly distu	rbed? Are "Normal Circumstances" present? Yes X No
Are Vegetation, Soil, or Hydrologynaturally problem	natic? (if needed, explain any answers in Remarks.)
SUMMARY OF FINDINGS - Attach site map showing sampling p	point locations, transects, important features, etc.
Hydrophytic Vegetation Present? Yes X No	Is the Sampled Area
Hydric Soil Present? Yes No X	within a Wetland? Yes No X
Wetland Hydrology Present? Yes No X	if yes, optional Wetland Site ID:
Remarks: (Explain alternative procedures here or in a separate report.)	
remarks. (Explain atternative procedures here of the a separate report,)	
HYDROLOGY	
Wetland Hydrology Indicators:	Secondary Indicators (minimum of two required)
Primary Indicators (minimum of one is required: check all that apply)	Surface Soil Cracks (B6)
Surface Water (A1) Water-Stained Leave	
High Water Table (A2) Aquatic Fauna (B13)	
Saturation (A3) Marl Deposits (B15)	Dry-Season Water Table (C2)
Water Marks (B1) Hydrogen Sulfide Od	
	es on Living Roots (C3) Saturation Visible in Aerial Imagery (C9)
Drift Deposits (B3) Presence of Reduced	
Algal Mat or Crust (B4) Recent Iron Reduction	·
Iron Deposits (B5) Thin Muck Surface (C	
Inundation Visible on Aerial Imagery (B7) Other (Explain in Ren	
Sparsley Vegetated Concave Surface (B8)	FAC-Neutral Test (D5)
Surface Water Present? Yes No X Depth (inches)	
Water Table Present? Yes No X Depth (inches)	Wetland Hydrology Present? Yes No X
Saturation Present? Yes No X Depth (inches)	
Describe Recorded Data (stream gauge, monitoring well, aerial photo	s. previous inspections), if available:
6 6	
Remarks:	

VEGETATION - Use scientific names of plants

VEGETATION - Use scier	ntific name	s of plants				Sampl	ing Point:	1_202	200922_W	L106_U1
				Dominant		Dominance Test \	Worksheet	:		
Tree Stratum	(Plot Size:	30'radius)	% Cover	Species?	Status	Number of Dom	inant Speci	ies		
Tilia americana			30	X	FACU	That Are OBL, F	ACW, or FA	·C: _	7	(A)
Fraxinus pennsylvanic	a		15	Х	FACW	Total Numbe	er of Domir	nant		
Quercus macrocarpa			15	X	FACU	Species Ac	ross All Str	ata:	11	(B)
			60	_= Total Cov	er er	Percent of Doi	•			
						That Are OBL,	FACW, or F	AC:	63.6%	(A/B)
						Prevalence Index	Worksheet	t:		
						OBL species	0	x 1	0	
Shrub Stratum	(Plot Size:	15'radius)	% Cover	Dominant Species?	Indicator Status	FACW species	50	x 2	100	
Lindera benzoin			30	Х	FACW	FAC species	58	x 3	174	
Rhamnus cathartica			20	Х	FAC	FACU species	70	x 4	280	
			50	_= Total Cov	er	UPL species	0	x 5	0	
						Column Totals	178	(A)	554	(B)
						Prevalend	ce Index = E	B/A =	3.11	
						Hydrophytic Vege	etation Ind	icator	s:	
			Absolute	Dominant	Indicator	1- Rapid Te	st For Hydr	ophyt	ic Vegeta	tion
Herb Stratum	(Plot Size:	5'radius)	% Cover	Species?	Status	X 2- Dominan	ce Test is >	50%		
Ageratina altissima			20	Х	FACU	3- Prevalen	ce Index is	=< 3.0)	
Symphyotrichum late	riflorum		15	X	FAC					
Persicaria virginiana			<u>15</u>	X	FAC	4- Morphol	-			
Unknown species Solidago canadensis			<u>15</u> 5	Х	UNK FACU	5- Problema	atic Hydrop	hytic	Vegetatio	n
Onoclea sensibilis			5		FACW					
0110010000010110110			75	= Total Cov		Definitions of Veget	ation Strata	1:		
				=		Tree- Woody plants breast height (DBH),	•	-		eter at
						Sapling/Shrub- Woo				and
						greater than or equa	al to 3.28ft (:	1m) ta	II.	
						Herb- All herbaceous				ess of
			Absolute	Dominant	Indicator					
Woody Vine Stratum	(Plot Size:	30'radius)	% Cover	Species?	Status	Woody Vines- All wo height.	ody vines g	reater	than 3.28f	in
Toxicodendron radica	ns		5	Х	FAC					
Vitis riparia			3	Х	FAC	Hydrop	hytic			
			8	_= Total Cov	er er	Vegetation				
						Pres	sent? Yes	Χ	No	_

Remarks: (Include photo numbers here or on a separate sheet.) unknown grass species; unidentifiable in the field

SOIL Sampling Point: 1_20200922_WL106_U1

Depth	Matrix				Redo	x Featu	ıres				
(inches	Color	%	Color	%	Type	Loc	Textu	ure	Remarks		
0-11	10YR 2/2	100					Sandy L	Loam			
11-20	10YR 5/3	80	10YR 4/6	20	С	M	Sandy L	Loam			
Hydric So	oil Indicators:							Ind	icators for Problematic Soils:		
-	tosol (A1)				Polyvalu	e Below	Surface (B15)		2 cm Muck (A10)		
Hist	tic Epipedon (A2)			Thin Dar	k Surface	e (S9)		Coast Prarie Redox (A16)		
Blac	ck Histic (A3)				Loamy N	lucky Mi	ineral (F1)		5 cm Mucky Peat or Peat (S3)		
Нус	drogen Sulfide	(A4)			Loamy G	leyed M	atric (F2)		Dark Surface (S7)		
Stratified Layers (A5)					Depleted	l Matrix	(F3)		Polyvalue Below Surface (S8)		
Depleted Below Dark Surface (A11)					Redox D	ark Surfa	ice (F6)	Thin Dark Surface (S9)			
Thick Dark Surface (A12)			Depleted Dark Surface (F7)					Iron-Manganese Masses (F12)			
	idy Mucky Mii				Redox D	epressio	ns (F8)		_ Piedmont Floodplain Soils (F19)		
	idy Gleyed Ma)						Mesic Spodic (TA6)		
	idy Redox (S5)								Red Parent Material (F21)		
	pped Matrix (Very Shallow Dark Surface (TF12)		
Dar	k Surface (S7))							Other (Explain in Remarks)		
Restrictiv	ve Layer (if obs	erved):									
		Type:									
	Depth (in	_						Hydric Soil	Present? Yes No X		
	Deptii (iii										
Remarks	5:										

Project/Site: Cider Solar Project	City/County: Oakfield/Ger	nessee Sampling Date: 9/23/2020						
Applicant/Owner: Hecate	State: NY Sampling Point:							
Investigator(s): Andrew Sorci	Section, Township, Range: 1_20200923_W							
Landform (hillslope, terrace, etc.): Depression	none): <u>Concave</u> Slope (%) <u>0 - 1</u>							
Subregion (LRR or MLRA): LRR L	Lat: <u>43.106884</u> Long:	78.262692 Datum: NAD83						
Soil Map Unit Name: Fo		NWI Classification: PEM						
Are climatic / hyrologic conditions on the site $% \left(1\right) =\left(1\right) \left(1\right$	typical for this time of year? Yes X No	(if no, explain in Remarks.)						
Are Vegetation, Soil, or Hydrology	significantly disturbed? Are "Normal	Circumstances" present? Yes X No						
Are Vegetation, Soil, or Hydrology	naturally problematic? (if needed, exp	plain any answers in Remarks.)						
SUMMARY OF FINDINGS - Attach site ma	p showing sampling point locations, trar	nsects, important features, etc.						
Hydrophytic Vegetation Present? Yes X								
Hydric Soil Present? Yes X	No within a Wetland?	Yes X No						
Wetland Hydrology Present? Yes X	No if yes, optional Wet	land Site ID: WL108						
Remarks: (Explain alternative procedures here or in a se								
nemanos (Explain alternative procedures here of in a se	parate report,							
HYDROLOGY								
Wetland Hydrology Indicators:		Secondary Indicators (minimum of two required)						
Primary Indicators (minimum of one is required: o	check all that apply)	Surface Soil Cracks (B6)						
Surface Water (A1)	Water-Stained Leaves (B9)	Drainage Patterns (B10)						
High Water Table (A2)	Aquatic Fauna (B13)	Moss Trim Lines (B16)						
Saturation (A3)	Marl Deposits (B15)	Dry-Season Water Table (C2)						
Water Marks (B1)	Hydrogen Sulfide Odor (C1)	Crayfish Burrows (C8)						
Sediment Deposits (B2)	X Oxidized Rhizospheres on Living Roots (C3)	Saturation Visible in Aerial Imagery (C9)						
Drift Deposits (B3)	Presence of Reduced Iron (C4)	Stunted or Stressed Plants (D1)						
Algal Mat or Crust (B4)	Recent Iron Reduction in Tilled Soils (C6)	X Geomorphic Position (D2)						
Iron Deposits (B5)	Thin Muck Surface (C7)	Shallow Aquitard (D3)						
Inundation Visible on Aerial Imagery (B7)	Other (Explain in Remarks)	Microtopographic Relief (D4)						
Sparsley Vegetated Concave Surface (B8)		X FAC-Neutral Test (D5)						
Surface Water Present? Yes No X	Depth (inches)							
Water Table Present? Yes No X	_ · · · · 	Hydrology Present? Yes X No						
Saturation Present? Yes No X	Depth (inches)							
	— itoring well, aerial photos, previous inspection	as) if available:						
Describe Necorded Data (stream gauge, mon	ntorning went, aeriai priotos, previous inspection	is), ii available.						
Remarks:								

VEGETATION - Use scientific names of plants Sampling Point: 1_20200923_WL108 Absolute Dominant Indicator **Dominance Test Worksheet:** (Plot Size: 30'radius) % Cover Species? Status **Tree Stratum Number of Dominant Species** That Are OBL, FACW, or FAC: 5 (A) = Total Cover **Total Number of Dominant** Species Across All Strata: 5 (B) Percent of Dominant Species That Are OBL, FACW, or FAC: (A/B) 100% **Prevalence Index Worksheet:** x 1 0 **OBL** species Absolute Dominant Indicator **FACW** species 127 254 (Plot Size: 15'radius) % Cover Species? Status x 2 **Shrub Stratum FAC** species 30 90 х3 70 Χ **FACW** Fraxinus pennsylvanica 70 = Total Cover **FACU** species 16 x 4 64 **UPL** species 0 x 5 0 Column Totals 173 (A) 408 (B) Prevalence Index = B/A = 2.36 **Hydrophytic Vegetation Indicators:** Absolute Dominant Indicator 1- Rapid Test For Hydrophytic Vegetation **Herb Stratum** (Plot Size: 5'radius) % Cover Species? Status X 2- Dominance Test is > 50% 25 Phragmites australis Χ **FACW** X 3- Prevalence Index is =< 3.0 25 Χ Urtica dioica FAC 4- Morphological Adaptations Lysimachia nummularia 20 Χ **FACW** Ageratina altissima 8 **FACU** 5- Problematic Hydrophytic Vegetation 7 **FACW** Impatiens capensis Onoclea sensibilis 5 **FACW Definitions of Vegetation Strata:** Alliaria petiolata **FACU** 5 Tree- Woody plants 3 in. (7.6cm) or more in diameter at Solidago canadensis 3 **FACU** breast height (DBH), regardless of height. 98 = Total Cover Sapling/Shrub- Woody plants less than 3 in. DBH and greater than or equal to 3.28ft (1m) tall. Herb- All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28ft tall. Absolute Dominant Indicator Woody Vines- All woody vines greater than 3.28ft in (Plot Size: 30'radius) Species? **Woody Vine Stratum** % Cover Status height. **FAC** Vitis riparia Χ 5 = Total Cover Hydrophytic Vegetation Present? Yes X No ____

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

SOIL Sampling Point: 1_20200923_WL108

Depth	Matrix				Redo			
(inches	Color	%	Color	%	Type	Loc	Texture	Remarks
0-8	10YR 2/1	95	7.5YR 4/6	5	С	PL	Silty Clay Loam	
8-16	10YR 2/1	85	7.5YR 4/6	15	С	M	Silty Clay Loam	
16-20	2.5Y 6/2	90	2.5Y 5/6	10	С	M	Sand	

Hydric Soil Indicators:		Indicators for Problematic Soils:
Histosol (A1)	Polyvalue Below Surface (B15)	2 cm Muck (A10)
Histic Epipedon (A2)	Thin Dark Surface (S9)	Coast Prarie Redox (A16)
Black Histic (A3)	Loamy Mucky Mineral (F1)	5 cm Mucky Peat or Peat (S3)
Hydrogen Sulfide (A4)	Loamy Gleyed Matric (F2)	Dark Surface (S7)
Stratified Layers (A5)	Depleted Matrix (F3)	Polyvalue Below Surface (S8)
Depleted Below Dark Surface (A11)	X Redox Dark Surface (F6)	Thin Dark Surface (S9)
Thick Dark Surface (A12)	Depleted Dark Surface (F7)	Iron-Manganese Masses (F12)
Sandy Mucky Mineral (S1)	Redox Depressions (F8)	Piedmont Floodplain Soils (F19)
Sandy Gleyed Matrix (S4)		Mesic Spodic (TA6)
Sandy Redox (S5)		Red Parent Material (F21)
Stripped Matrix (S6)		Very Shallow Dark Surface (TF12)
Dark Surface (S7)		Other (Explain in Remarks)
Restrictive Layer (if observed):		
Type:		Hydric Soil Present? Yes X No
Depth (inches):		 -
-	_	

Project/Site: Cider Solar Project City	/County: Oakfield/Genessee Sampling Date: 9/23/2020
Applicant/Owner: Hecate	State: NY Sampling
Investigator(s): Andrew Sorci Sec	tion, Township, Range: Point:1_20200923_WL108_U1
Landform (hillslope, terrace,etc.): Rise Local re	elief (concave, convex, none): None Slope (%) 2 - 5
Subregion (LRR or MLRA): LRR L Lat: 43.10682	2 Long: <u>-78.262632</u> Datum: <u>NAD83</u>
Soil Map Unit Name: RoA	NWI Classification: UPL
Are climatic / hyrologic conditions on the site typical for this time of	year? Yes X No (if no, explain in Remarks.)
Are Vegetation, Soil, or Hydrologysignificantly dist	turbed? Are "Normal Circumstances" present? Yes X No
Are Vegetation, Soil, or Hydrologynaturally proble	ematic? (if needed, explain any answers in Remarks.)
SUMMARY OF FINDINGS - Attach site map showing sampling	point locations, transects, important features, etc.
Hydrophytic Vegetation Present? Yes No X	Is the Sampled Area
Hydric Soil Present? Yes No X	within a Wetland? Yes No X
Wetland Hydrology Present? Yes No X	if yes, optional Wetland Site ID:
Remarks: (Explain alternative procedures here or in a separate report.)	
HYDROLOGY	
Wetland Hydrology Indicators:	Secondary Indicators (minimum of two required)
Primary Indicators (minimum of one is required: check all that apply)	Surface Soil Cracks (B6)
Surface Water (A1) Water-Stained Lea	
High Water Table (A2) ——Aquatic Fauna (B1)	
Saturation (A3) Marl Deposits (B15	
Water Marks (B1) Hydrogen Sulfide C	
	eres on Living Roots (C3) Saturation Visible in Aerial Imagery (C9)
Drift Deposits (B3) Presence of Reduc	ed Iron (C4) Stunted or Stressed Plants (D1)
Algal Mat or Crust (B4) Recent Iron Reduc	tion in Tilled Soils (C6) Geomorphic Position (D2)
Iron Deposits (B5) Thin Muck Surface	(C7) Shallow Aquitard (D3)
Inundation Visible on Aerial Imagery (B7) Other (Explain in R	emarks) Microtopographic Relief (D4)
Sparsley Vegetated Concave Surface (B8)	FAC-Neutral Test (D5)
Surface Water Present? Yes No X Depth (inches)	
Water Table Present? Yes No X Depth (inches)	Wetland Hydrology Present? Yes No X
Saturation Present? Yes No X Depth (inches)	_
Describe Recorded Data (stream gauge, monitoring well, aerial pho	tos provious inspections) if availables
Describe Necorded Data (stream gauge, monitoring well, aerial pho	tos, previous inspections), ii available.
Remarks:	

VEGETATION - Use scientific names of plants Sampling Point: 1_20200923_WL108_U1 Absolute Dominant Indicator **Dominance Test Worksheet:** (Plot Size: 30'radius) % Cover Species? Status **Tree Stratum Number of Dominant Species** That Are OBL, FACW, or FAC: (A) = Total Cover **Total Number of Dominant** Species Across All Strata: (B) 2 Percent of Dominant Species (A/B) That Are OBL, FACW, or FAC: 50% **Prevalence Index Worksheet:** x 1 0 **OBL** species Absolute Dominant Indicator (Plot Size: 15'radius) **FACW** species 45 90 % Cover x 2 **Shrub Stratum** Species? Status **FAC** species 60 20 х3 **FAC** Apocynum cannabinum 3 = Total Cover **FACU** species 43 x 4 172 **UPL** species 0 x 5 0 Column Totals 108 (A) 322 (B) Prevalence Index = B/A = 2.98 **Hydrophytic Vegetation Indicators:** Absolute Dominant Indicator 1- Rapid Test For Hydrophytic Vegetation **Herb Stratum** (Plot Size: 5'radius) % Cover Species? Status 2- Dominance Test is > 50% Panicum dichotomiflorum 35 **FACW** X 3- Prevalence Index is =< 3.0 Solidago canadensis Χ 30 **FACU** 4- Morphological Adaptations Phragmites australis 10 **FACW** Physalis angulata 10 FAC 5- Problematic Hydrophytic Vegetation Cirsium arvense 5 **FACU** Amaranthus albus 5 **FACU Definitions of Vegetation Strata:** FAC Urtica dioica Tree- Woody plants 3 in. (7.6cm) or more in diameter at Xanthium spinosum 3 **FACU** breast height (DBH), regardless of height. 2 Echinochloa crus-galli FAC 105 = Total Cover Sapling/Shrub- Woody plants less than 3 in. DBH and greater than or equal to 3.28ft (1m) tall. Herb- All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28ft tall. Absolute Dominant Indicator Woody Vines- All woody vines greater than 3.28ft in (Plot Size: 30'radius) **Woody Vine Stratum** % Cover Species? Status height. = Total Cover Hydrophytic Vegetation Present? Yes ____ No _X Remarks: (Include photo numbers here or on a separate sheet.)

SOIL Sampling Point: 1_20200923_WL108_U1

Depth	Matrix	(Redo	x Featu	res				
(inches	Color	%	Color	%	% Type Loc Texture				Remarks		
0-10	10YR 2/2	100			Sandy Loam						
10-20	10YR 3/2	100					Sandy Lo	oam			
•	oil Indicators:								ors for Problematic Soils:		
	tosol (A1)				·-		Surface (B15)		cm Muck (A10)		
	tic Epipedon (Thin Dar			-	Coast Prarie Redox (A16)		
	ck Histic (A3)				•	•	neral (F1)	-	cm Mucky Peat or Peat (S3)		
	Hydrogen Sulfide (A4)				-	-	atric (F2)		Park Surface (S7)		
	Stratified Layers (A5)				Depleted				olyvalue Below Surface (S8)		
Depleted Below Dark Surface (A11)			Redox Dark Surface (F6)					Thin Dark Surface (S9)			
	Thick Dark Surface (A12)			Depleted Dark Surface (F7)					ron-Manganese Masses (F12)		
	ndy Mucky Mi			Redox Depressions (F8)					Piedmont Floodplain Soils (F19)		
	ndy Gleyed Ma	-)					·	Лesic Spodic (TA6)		
	ndy Redox (S5								led Parent Material (F21)		
	ipped Matrix (-	ery Shallow Dark Surface (TF12)		
Dai	rk Surface (S7))						C	Other (Explain in Remarks)		
Restrictiv	ve Layer (if obs	erved):									
		Type:						Hydric Soil Pre	esent? Yes No _X		
	Depth (ir	nches): _									
Remark	C :										
Remark	5.										

Project/Site: Cider Solar Project	City/Co	ounty: Oakfield/Gennesee Sampling Date: 10/8/2020			
Applicant/Owner: Hecate		State: NY Sampling Point:			
Investigator(s): Andrew Sorci	Sectio	on, Township, Range: 1_20200922_WL109_W1			
Landform (hillslope, terrace,etc.): Depression	Local relie	ef (concave, convex, none): Linear Slope (%) <u>0 - 15</u>			
Subregion (LRR or MLRA): LRR L Soil Map Unit Name: La	Lat: 43.096252	Lat: 43.096252 Long: -78.277469 Datum: NAD83 NWI Classification: PEM			
Are climatic / hyrologic conditions on the site t	ypical for this time of ye	ear? Yes X No (if no, explain in Remarks.)			
Are Vegetation , Soil , or Hydrology	significantly distur	bed? Are "Normal Circumstances" present? Yes X No			
Are Vegetation , Soil , or Hydrology	naturally problem	atic? (if needed, explain any answers in Remarks.)			
					
SUMMARY OF FINDINGS - Attach site map	showing sampling p	oint locations, transects, important features, etc.			
Hydrophytic Vegetation Present? Yes X	No	Is the Sampled Area			
Hydric Soil Present? Yes X	No	within a Wetland? Yes X No			
· —		if yes, optional Wetland Site ID: WL109			
Wetland Hydrology Present? Yes X	No				
Remarks: (Explain alternative procedures here or in a sep	parate report.)				
vegetated ditch					
HYDROLOGY					
Wetland Hydrology Indicators:		Secondary Indicators (minimum of two required)			
Primary Indicators (minimum of one is required: ch	neck all that apply)	Surface Soil Cracks (B6)			
X Surface Water (A1)	Water-Stained Leaves				
X High Water Table (A2)	Aquatic Fauna (B13)	Moss Trim Lines (B16)			
X Saturation (A3)	Marl Deposits (B15)	Dry-Season Water Table (C2)			
Water Marks (B1)	Hydrogen Sulfide Odor (C1) Crayfish Burrows (C8)				
Sediment Deposits (B2)	Oxidized Rhizospheres on Living Roots (C3) X Saturation Visible in Aerial Imagery (C9)				
Drift Deposits (B3)	Presence of Reduced Iron (C4) Stunted or Stressed Plants (D1)				
Algal Mat or Crust (B4)	Recent Iron Reduction	n in Tilled Soils (C6) X Geomorphic Position (D2)			
Iron Deposits (B5)	Thin Muck Surface (C	7) Shallow Aquitard (D3)			
Inundation Visible on Aerial Imagery (B7)	Other (Explain in Rem	narks) Microtopographic Relief (D4)			
Sparsley Vegetated Concave Surface (B8)		X FAC-Neutral Test (D5)			
Surface Water Present? Yes X No	Depth (inches) 4				
Water Table Present? Yes X No	Depth (inches) 0	 Wetland Hydrology Present? Yes X No 			
Saturation Present? Yes X No	Depth (inches) 0				
	<u> </u>	<u>- </u>			
Describe Recorded Data (stream gauge, monit	coring well, aerial photos	s, previous inspections), if available:			
Remarks:					
Nemarks.					

	tific names of plants				Sampling Point: 1_20200922_WL109_W1
Tree Stratum	(Plot Size: 30'radius)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test Worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: 2 (A)
			_= Total Cov	ver	Total Number of Dominant Species Across All Strata: 2 (B) Percent of Dominant Species That Are OBL, FACW, or FAC: 100% (A/B)
Shrub Stratum	(Plot Size: 15'radius)	Absolute % Cover	Dominant Species?	Indicator Status	Prevalence Index Worksheet: OBL species 40 x 1 40 FACW species 25 x 2 50
			_= Total Cov	ver	FAC species 0 x 3 0 FACU species 0 x 4 0 UPL species 0 x 5 0 Column Totals 65 (A) 90 (B) Prevalence Index = B/A = 1.38 Hydrophytic Vegetation Indicators:
Typha angustifolia Phalaris arundinacea	(Plot Size: <u>5'radius</u>)	Absolute % Cover 40 25 65	Dominant Species? X X = Total Cov	Status OBL FACW	 X 1- Rapid Test For Hydrophytic Vegetation X 2- Dominance Test is > 50% X 3- Prevalence Index is =< 3.0 4- Morphological Adaptations 5- Problematic Hydrophytic Vegetation
	(Plot Size: 30'radius)		Dominant Species?	Indicator Status	Definitions of Vegetation Strata: Tree- Woody plants 3 in. (7.6cm) or more in diameter at breast height (DBH), regardless of height. Sapling/Shrub- Woody plants less than 3 in. DBH and greater than or equal to 3.28ft (1m) tall. Herb- All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28ft tall. Woody Vines- All woody vines greater than 3.28ft in height.
			_= Total Cov	ver	Hydrophytic Vegetation Present? Yes X No

SOIL		Sampling Point: 1_20200922_wL109_w
Hydric Soil Indicators:	_	Indicators for Problematic Soils:
Histosol (A1)	Polyvalue Below Surface (B1	2 cm Muck (A10)
Histic Epipedon (A2)	Thin Dark Surface (S9)	Coast Prarie Redox (A16)
Black Histic (A3)	Loamy Mucky Mineral (F1)	5 cm Mucky Peat or Peat (S3)
Hydrogen Sulfide (A4)	Loamy Gleyed Matric (F2)	Dark Surface (S7)
Stratified Layers (A5)	Depleted Matrix (F3)	Polyvalue Below Surface (S8)
Depleted Below Dark Surface (A11)	Redox Dark Surface (F6)	Thin Dark Surface (S9)
Thick Dark Surface (A12)	Depleted Dark Surface (F7)	Iron-Manganese Masses (F12)
Sandy Mucky Mineral (S1)	Redox Depressions (F8)	Piedmont Floodplain Soils (F19)
Sandy Gleyed Matrix (S4)		Mesic Spodic (TA6)
Sandy Redox (S5)		Red Parent Material (F21)
Stripped Matrix (S6)		Very Shallow Dark Surface (TF12)
Dark Surface (S7)		Other (Explain in Remarks)
Restrictive Layer (if observed):		
Type:		Hydric Soil Present? Yes X No
Depth (inches):	_	11yune 3011 1 e 3 _ 1
Remarks:		

Project/Site: Cider Solar Project		City/Co	ounty: Oakfield/Gene	essee S	ampling Date:	9/22/2020
Applicant/Owner: Hecate				State: <u>NY</u>	_Sampling	
Investigator(s): Andrew Sorci		Sectio	n, Township, Range:		Point:1_2020	0922_WL105_U1
Landform (hillslope, terrace,etc.): Ri	se	Local relie	ef (concave, convex, n	one): <u>None</u>	Slope (%	6) <u>0 - 5</u>
Subregion (LRR or MLRA): LRR L		Lat: 43.096253	Long: -78		Datum:	NAD83
Soil Map Unit Name: CbA				NWI Classific	ation: <u>UPL</u>	
Are climatic / hyrologic conditions on	-				plain in Remarl	
Are Vegetation X, Soil , or H			bed? Are "Normal C	-	-	No
Are Vegetation, Soil, or H	ydrology	naturally problems	atic? (if needed, expl	ain any answers ir	n Remarks.)	
SUMMARY OF FINDINGS - Attach	site map	showing sampling po	oint locations. trans	sects. importa	nt features. e	tc.
Hydrophytic Vegetation Present?	Yes	No X	Is the Sampled Area		•	
	Yes	No X	within a Wetland?	Yes	s No	Х
	Yes	No X	if yes, optional Wetla	and Site ID:		
Remarks: (Explain alternative procedures her	-					
Recently mowed field	c or in a sept	arate report.				
necently mowed nera						
HYDROLOGY Wetland Hydrology Indicators:				Secondary Indica	tors (minimum o	f two required)
	oguirod: ch	ock all that apply	-	Surface Soil		<u>r two required)</u>
Primary Indicators (minimum of one is re	<u>equirea: cni</u>		- (BO)			
Surface Water (A1)		Water-Stained Leaves	5 (69)		itterns (B10)	
High Water Table (A2)	_	Aquatic Fauna (B13)		Moss Trim I		,
Saturation (A3)	_	Marl Deposits (B15)			Water Table (C2)
Water Marks (B1)	_	Hydrogen Sulfide Odo	· · · · · · · · · · · · · · · · · · ·	Crayfish Bu		
Sediment Deposits (B2)	_	Oxidized Rhizosphere			/isible in Aerial Ir	
Drift Deposits (B3)	_	Presence of Reduced	Iron (C4)	Stunted or S	Stressed Plants ([)1)
Algal Mat or Crust (B4)	_	Recent Iron Reduction	n in Tilled Soils (C6)	Geomorphi	c Position (D2)	
Iron Deposits (B5)	_	Thin Muck Surface (C	7)	Shallow Aqu	uitard (D3)	
Inundation Visible on Aerial Image	γ (B7)	Other (Explain in Rem	narks)	Microtopog	raphic Relief (D4	2)
Sparsley Vegetated Concave Surfac	:e (B8)			FAC-Neutra	l Test (D5)	
Surface Water Present? Yes	No X	Depth (inches)				
	No X	Depth (inches)	– Wetland H	ydrology Presen	t? Yes	No X
	No X	Depth (inches)	_	, 0,		
			_			
Describe Recorded Data (stream gau	ge, monito	oring well, aerial photos	s, previous inspections	s), if available:		
Remarks:						

VEGETATION - Use scientific names of plants Sampling Point: 1_20200922_WL105_U1 Absolute Dominant Indicator **Dominance Test Worksheet:** (Plot Size: 30'radius) % Cover Species? Status **Tree Stratum Number of Dominant Species** That Are OBL, FACW, or FAC: (A) = Total Cover **Total Number of Dominant** (B) Species Across All Strata: 2 Percent of Dominant Species (A/B) That Are OBL, FACW, or FAC: 0% **Prevalence Index Worksheet:** x 1 0 **OBL** species Absolute Dominant Indicator **FACW** species 0 (Plot Size: 15'radius) % Cover Status x 2 **Shrub Stratum** Species? 0 FAC species х3 = Total Cover FACU species 50 x 4 200 5 **UPL** species x 5 25 Column Totals 55 (A) 225 (B) Prevalence Index = B/A = 4.09 **Hydrophytic Vegetation Indicators:** Absolute Dominant Indicator 1- Rapid Test For Hydrophytic Vegetation **Herb Stratum** (Plot Size: 5'radius) % Cover Species? Status 2- Dominance Test is > 50% 40 Unknown species UNK 3- Prevalence Index is =< 3.0 Χ Cirsium arvense 15 **FACU** 4- Morphological Adaptations Taraxacum officinale 10 **FACU** Trifolium pratense 10 **FACU** 5- Problematic Hydrophytic Vegetation Lotus corniculatus 10 **FACU** Plantago major 5 **FACU Definitions of Vegetation Strata:** UPL Daucus carota 5 Tree- Woody plants 3 in. (7.6cm) or more in diameter at 95 = Total Cover breast height (DBH), regardless of height. Sapling/Shrub- Woody plants less than 3 in. DBH and greater than or equal to 3.28ft (1m) tall. Herb- All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28ft tall. Absolute Dominant Indicator Woody Vines- All woody vines greater than 3.28ft in (Plot Size: 30'radius) Status **Woody Vine Stratum** % Cover Species? height. = Total Cover Hydrophytic Vegetation Present? Yes ____ No __X Remarks: (Include photo numbers here or on a separate sheet.) unknown grass due to recent mowing

SOIL Sampling Point: 1_20200922_WL105_U1

SOIL								Sampling Point. 1_20200922_WL105_01
Depth	Matrix Redox Features							
(inches	Color	%	Color	%	Type	Loc	Texture	Remarks
0-13	10YR 3/2	99	10YR 3/6	1	С	М	Sandy Loam	
13-20	10YR 3/3	95	10YR 4/6	5	С	М	Sandy Loam	

Hydric Soil Indicators:		Indicators for Problematic Soils:
Histosol (A1)	Polyvalue Below Surface (B15)	2 cm Muck (A10)
Histic Epipedon (A2)	Thin Dark Surface (S9)	Coast Prarie Redox (A16)
Black Histic (A3)	Loamy Mucky Mineral (F1)	5 cm Mucky Peat or Peat (S3)
Hydrogen Sulfide (A4)	Loamy Gleyed Matric (F2)	Dark Surface (S7)
Stratified Layers (A5)	Depleted Matrix (F3)	Polyvalue Below Surface (S8)
Depleted Below Dark Surface (A11)	Redox Dark Surface (F6)	Thin Dark Surface (S9)
Thick Dark Surface (A12)	Depleted Dark Surface (F7)	Iron-Manganese Masses (F12)
Sandy Mucky Mineral (S1)	Redox Depressions (F8)	Piedmont Floodplain Soils (F19)
Sandy Gleyed Matrix (S4)		Mesic Spodic (TA6)
Sandy Redox (S5)		Red Parent Material (F21)
Stripped Matrix (S6)		Very Shallow Dark Surface (TF12)
Dark Surface (S7)		Other (Explain in Remarks)
Restrictive Layer (if observed):		
Type:	Ну	rdric Soil Present? Yes No X
Depth (inches):		<u>—</u>

Remarks:

Project/Site: Cider Solar Project	City/Co	ounty: Oakfield/Gen	nesee Sa	ampling Date: 10/8/2020		
Applicant/Owner: Hecate	-		State: NY	Sampling Point:		
Investigator(s): Andrew Sorci	Sectio	n, Township, Range:		1_20201008_WL110_W1		
Landform (hillslope, terrace,etc.): Depression	Local relie	f (concave, convex, n	one): <u>Concave</u>	Slope (%) <u>0 - 2</u>		
Subregion (LRR or MLRA): LRR L	Lat: <u>43.097739</u>	Long:7	8.240328	Datum: NAD83		
Soil Map Unit Name: La			NWI Classification: PFO			
Are climatic / hyrologic conditions on the site t	ypical for this time of ye	ar? Yes X No	(if no, ex	plain in Remarks.)		
Are Vegetation, Soil, or Hydrology	significantly distur	bed? Are "Normal C	Circumstances" p	resent? Yes X No		
Are Vegetation, Soil, or Hydrology	naturally problema	atic? (if needed, expl	ain any answers in	Remarks.)		
SUMMARY OF FINDINGS - Attach site map	o showing sampling po	oint locations, trans	sects, importa	nt features, etc.		
Hydrophytic Vegetation Present? Yes X		Is the Sampled Area				
Hydric Soil Present? Yes X		within a Wetland?	Yes	X No		
		if yes, optional Wetla		WL110		
Wetland Hydrology Present? Yes X		ii yes, optional wette		WLIIO		
Remarks: (Explain alternative procedures here or in a sep	parate report.)					
HYDROLOGY						
Wetland Hydrology Indicators:			Secondary Indicat	ors (minimum of two required)		
Primary Indicators (minimum of one is required: cl	neck all that apply)	_	Surface Soil	Cracks (B6)		
Surface Water (A1)	Water-Stained Leaves	(B9)	Drainage Pa	tterns (B10)		
High Water Table (A2)	Aquatic Fauna (B13)		Moss Trim L	ines (B16)		
Saturation (A3)	Marl Deposits (B15)		Dry-Season	Water Table (C2)		
Water Marks (B1)	Hydrogen Sulfide Odo	or (C1)	Crayfish Bur	rows (C8)		
Sediment Deposits (B2)	X Oxidized Rhizosphere	s on Living Roots (C3)	Saturation V	isible in Aerial Imagery (C9)		
Drift Deposits (B3)	Presence of Reduced	Iron (C4)	Stunted or S	itressed Plants (D1)		
Algal Mat or Crust (B4)	Recent Iron Reduction		X Geomorphic			
Iron Deposits (B5)	Thin Muck Surface (C	7)	 Shallow Aqu	• •		
Inundation Visible on Aerial Imagery (B7)	Other (Explain in Rem			raphic Relief (D4)		
Sparsley Vegetated Concave Surface (B8)	Other (Explain in Neili	urksj	X FAC-Neutral			
			TAC-Neutral	1631 (03)		
Surface Water Present? Yes NoX	Depth (inches)	_				
Water Table Present? Yes No X	Depth (inches)	Wetland H	ydrology Presen	t? Yes X No		
Saturation Present? Yes No _ X	Depth (inches)	_				
Describe Recorded Data (stream gauge, monit	toring well, aerial photos	, previous inspections	s), if available:			
Domorke						
Remarks:						

VEGETATION - Use scientific names of plants Sampling Point: 1_20201008_WL110_W1 Absolute Dominant Indicator **Dominance Test Worksheet:** (Plot Size: 30'radius) % Cover Species? Status **Tree Stratum Number of Dominant Species** 50 Χ **FACW** That Are OBL, FACW, or FAC: 6 (A) Fraxinus pennsylvanica Acer saccharinum 20 Х **FACW Total Number of Dominant** 70 = Total Cover (B) Species Across All Strata: 6 Percent of Dominant Species That Are OBL, FACW, or FAC: (A/B) 100% **Prevalence Index Worksheet:** 15 x 1 15 **OBL** species Absolute Dominant Indicator **FACW** species 165 330 (Plot Size: 15'radius) % Cover Species? Status x 2 **Shrub Stratum** FAC species 0 х3 Cornus amomum 50 Χ **FACW** 50 = Total Cover **FACU** species 0 x 4 0 **UPL** species 0 x 5 0 Column Totals 180 (A) 345 (B) Prevalence Index = B/A = 1.92 **Hydrophytic Vegetation Indicators:** Absolute Dominant Indicator X 1- Rapid Test For Hydrophytic Vegetation **Herb Stratum** (Plot Size: 5'radius) % Cover Species? Status X 2- Dominance Test is > 50% 20 Lysimachia nummularia Χ **FACW** X 3- Prevalence Index is =< 3.0 Х OBL Scirpus atrovirens 15 4- Morphological Adaptations Symphyotrichum lanceolatum 15 Χ **FACW** Bidens frondosa 10 **FACW**

= Total Cover

Absolute Dominant Indicator

Species?

= Total Cover

Status

Definitions of Vegetation Strata:

Tree- Woody plants 3 in. (7.6cm) or more in diameter at breast height (DBH), regardless of height.

5- Problematic Hydrophytic Vegetation

Sapling/Shrub- Woody plants less than 3 in. DBH and greater than or equal to 3.28ft (1m) tall.

Herb- All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28ft tall.

Woody Vines- All woody vines greater than 3.28ft in height.

> Hydrophytic Vegetation Present? Yes X No ___

> > eID: 20201015150503

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

Woody Vine Stratum

(Plot Size: 30'radius)

60

% Cover

SOIL

Sampling Point: 1_20201008_WL110_W1

Depth	Matrix								
(inches	Color	%	Color	%	Type	Loc	Texture	Remarks	
0-3	10YR 2/2	95	10YR 4/4	5	С	М	Sandy Clay Loam		
3-16	10YR 4/1	80	10YR 4/6	20	С	М	Sandy Clay Loam		

Hydric Soil Indicators:		Indicators for Problematic Soils:
Histosol (A1)	Polyvalue Below Surface (B15)	2 cm Muck (A10)
Histic Epipedon (A2)	Thin Dark Surface (S9)	Coast Prarie Redox (A16)
Black Histic (A3)	Loamy Mucky Mineral (F1)	5 cm Mucky Peat or Peat (S3)
Hydrogen Sulfide (A4)	Loamy Gleyed Matric (F2)	Dark Surface (S7)
Stratified Layers (A5)	X Depleted Matrix (F3)	Polyvalue Below Surface (S8)
Depleted Below Dark Surface (A11)	Redox Dark Surface (F6)	Thin Dark Surface (S9)
Thick Dark Surface (A12)	Depleted Dark Surface (F7)	Iron-Manganese Masses (F12)
Sandy Mucky Mineral (S1)	Redox Depressions (F8)	Piedmont Floodplain Soils (F19)
Sandy Gleyed Matrix (S4)		Mesic Spodic (TA6)
Sandy Redox (S5)		Red Parent Material (F21)
Stripped Matrix (S6)		Very Shallow Dark Surface (TF12)
Dark Surface (S7)		Other (Explain in Remarks)
Restrictive Layer (if observed):		
Туре:	Hyc	dric Soil Present? Yes X No
Depth (inches):		

Project/Site: Cider Solar Project	City/County: Oakfield/Gen	nesee Sampling Date: 10/1/2020			
Applicant/Owner: Hecate		State: <u>NY</u> Sampling Point:			
Investigator(s): Andrew Sorci	Section, Township, Range:	1_20201008_WL110_U1			
Landform (hillslope, terrace,etc.): Rise	Local relief (concave, convex, n	one): <u>Convex</u> Slope (%) <u>3 - 8</u>			
Subregion (LRR or MLRA): LRR L	Lat: <u>43.097691</u> Long: <u>-7</u>				
Soil Map Unit Name: La		NWI Classification: UPL			
Are climatic / hyrologic conditions on the site	typical for this time of year? Yes X No	(if no, explain in Remarks.)			
Are Vegetation, Soil, or Hydrolog	ysignificantly disturbed? Are "Normal C	Circumstances" present? Yes X No			
Are Vegetation, Soil, or Hydrolog	y naturally problematic? (if needed, expl	ain any answers in Remarks.)			
SUMMARY OF FINDINGS - Attach site ma	ap showing sampling point locations, trans	sects, important features, etc.			
Hydrophytic Vegetation Present? Yes	No X Is the Sampled Area				
Hydric Soil Present? Yes	No X within a Wetland?	Yes No X			
Wetland Hydrology Present? Yes	No X if yes, optional Wetla	and Site ID:			
Remarks: (Explain alternative procedures here or in a s	eparate report.)				
HYDROLOGY					
Wetland Hydrology Indicators:		Secondary Indicators (minimum of two required)			
Primary Indicators (minimum of one is required:	check all that apply)	Surface Soil Cracks (B6)			
Surface Water (A1)	Water-Stained Leaves (B9)	Drainage Patterns (B10)			
High Water Table (A2)	Aquatic Fauna (B13)	Moss Trim Lines (B16)			
Saturation (A3)	Marl Deposits (B15)	Dry-Season Water Table (C2)			
Water Marks (B1)	Hydrogen Sulfide Odor (C1)	Crayfish Burrows (C8)			
Sediment Deposits (B2)	Oxidized Rhizospheres on Living Roots (C3)	Saturation Visible in Aerial Imagery (C9)			
Drift Deposits (B3)	Presence of Reduced Iron (C4)	Stunted or Stressed Plants (D1)			
Algal Mat or Crust (B4)	Recent Iron Reduction in Tilled Soils (C6)	Geomorphic Position (D2)			
Iron Deposits (B5)	Thin Muck Surface (C7)	Shallow Aquitard (D3)			
	Other (Explain in Remarks)				
Inundation Visible on Aerial Imagery (B7)	Other (Explain in Kemarks)	Microtopographic Relief (D4)			
Sparsley Vegetated Concave Surface (B8)		FAC-Neutral Test (D5)			
Surface Water Present? Yes No X	Depth (inches)				
Water Table Present? Yes No X	Depth (inches) Wetland H	ydrology Present? Yes No X			
Saturation Present? Yes No X	Depth (inches)				
Describe Recorded Data (stream gauge, mor	nitoring well, aerial photos, previous inspection	s), if available:			
	,,,,,,,,,,	-,,			
Remarks:					

			Absolute	Dominant	Indicator	Dominance Test V	Vorkshee	et:		
Tree Stratum	(Plot Size:	30'radius)	% Cover	Species?	Status	Number of Domi				
Pinus strobus			75	Х	FACU	That Are OBL, FA	-		2	(A)
			75	_= Total Cov	/er	Total Numbe Species Ac			4	(B)
						Percent of Dor That Are OBL,	-		50%	(A/B)
						Prevalence Index \	Workshe	et:		
			Absoluto	Dominant	Indicator	OBL species	0	x 1	0	
Shrub Stratum	(Plot Size: 15'ra	15'radius)	% Cover	Species?	Status	FACW species	0	x 2	0	
Lonicera morrowii	•		50	X	FACU	FAC species	25	x 3	75	
			50	= Total Cov		FACU species	125	x 4	500	
						UPL species	0	x 5	0	
						Column Totals	150	(A)	575	(B)
						Prevalenc			3.83	(-/
						Hydrophytic Vege	tation In	dicators	:	
				Dominant		1- Rapid Tes	t For Hyd	lrophyti	c Vegeta	tion
Herb Stratum	(Plot Size:	5'radius)	% Cover	Species?	Status	2- Dominan	ce Test is	> 50%		
				= Total Cover		3- Prevalence Index is =< 3.0				
				_= 10tal Cov	/ei	4- Morpholo	ogical Ada	aptation	S	
						5- Problema	itic Hydro	phytic \	/egetatic	n
						Definitions of Veget	ation Stra	ta:		
						Tree- Woody plants 3 breast height (DBH),				ieter at
						Sapling/Shrub- Wood greater than or equa				and
						Herb- All herbaceous size, and woody plan	-			less of
Woody Vine Stratum	(Plot Size:	30'radius)	Absolute % Cover	Dominant Species?	Indicator Status	Woody Vines- All wo height.	ody vines	greater t	han 3.28f	t in
Vitis riparia			15	Х	FAC	Tiergitt.				
Toxicodendron radica	ns		10	X	FAC	Hydropl	nytic			
			25	_= Total Cov	ver .	Vegeta Pres	ition ent? Ye:	S	No X	

Sampling Point: SOIL

Depth	Depth Matrix				Redo	ox Featur	es	1_20201008_WL110_U1				
(inches	Color	%	Color	%	Туре	Loc	Texture	Remarks				
0-4	10YR 2/2	100					Sandy Loam					
4-15	10YR 3/2	100					Sandy Loam					
15-20	10YR 4/2	97	10YR 4/4	3	С	М	Loam					
Hydric Sc	oil Indicators:							Indicators for Problematic Soils:				
-	tosol (A1)				Polyvalu	e Below S	Surface (B15)	2 cm Muck (A10)				
His	tic Epipedon ((A2)			Thin Dar	k Surface	(S9)	Coast Prarie Redox (A16)				
Bla	ck Histic (A3)				Loamy N	/lucky Mir	neral (F1)	5 cm Mucky Peat or Peat (S3)				
Нус	drogen Sulfide	e (A4)			Loamy G	leyed Ma	tric (F2)	Dark Surface (S7)				
Stra	atified Layers	(A5)			Depleted	d Matrix (F3)	Polyvalue Below Surface (S8)				
Dep	oleted Below	Dark Su	rface (A11)		Redox D	ark Surfac	ce (F6)	Thin Dark Surface (S9)				
Thi	ck Dark Surfa	ce (A12)			Depleted	d Dark Sui	rface (F7)	Iron-Manganese Masses (F12)				
San	ndy Mucky Mi	neral (S	1)		Redox D	epression	s (F8)	Piedmont Floodplain Soils (F19)				
San	ndy Gleyed Ma	atrix (S4)					Mesic Spodic (TA6)				
San	ndy Redox (S5)						Red Parent Material (F21)				
	pped Matrix							Very Shallow Dark Surface (TF12)				
Dar	k Surface (S7)						Other (Explain in Remarks)				
Restrictiv	ve Layer (if obs	erved):										
		Type:					Hydric :	Soil Present? Yes No X				
	Depth (ir	nches):					·	 				
Remarks	·•											
Remarks	·											

1 20201008 WL110 U1

Project/Site: Cider Solar Project	City/County: Oakfield/Ger	nnesee Sampling Date: 10/8/2020			
Applicant/Owner: Hecate		State: NY Sampling Point:			
Investigator(s): Andrew Sorci	Section, Township, Range:	1_20201008_WL111_W1			
Landform (hillslope, terrace,etc.): Dip	Local relief (concave, convex,	none): <u>Concave</u> Slope (%) <u>1 - 3</u>			
Subregion (LRR or MLRA): LRR L	Lat: 43.098295 Long:	78.236684 Datum: NAD83			
Soil Map Unit Name: La		NWI Classification: PFO			
Are climatic / hyrologic conditions on the site t	cypical for this time of year? Yes X No	(if no, explain in Remarks.)			
Are Vegetation, Soil, or Hydrology	significantly disturbed? Are "Normal	Circumstances" present? Yes X No			
Are Vegetation, Soil, or Hydrology	naturally problematic? (if needed, exp	plain any answers in Remarks.)			
SUMMARY OF FINDINGS - Attach site map	o showing sampling point locations, trai	sects, important features, etc.			
Hydrophytic Vegetation Present? Yes X		-			
Hydric Soil Present? Yes X	within a Wetland?	Yes X No			
·					
Wetland Hydrology Present? Yes X		WEITI			
Remarks: (Explain alternative procedures here or in a se	parate report.)				
HYDROLOGY					
Wetland Hydrology Indicators:		Secondary Indicators (minimum of two required)			
Primary Indicators (minimum of one is required: cl	heck all that apply)	Surface Soil Cracks (B6)			
Surface Water (A1)	Water-Stained Leaves (B9)	Drainage Patterns (B10)			
High Water Table (A2)	Aquatic Fauna (B13)	Moss Trim Lines (B16)			
Saturation (A3)	Marl Deposits (B15)	Dry-Season Water Table (C2)			
Water Marks (B1)	Hydrogen Sulfide Odor (C1)	Crayfish Burrows (C8)			
Sediment Deposits (B2)	X Oxidized Rhizospheres on Living Roots (C3)	Saturation Visible in Aerial Imagery (C9)			
Drift Deposits (B3)	Presence of Reduced Iron (C4)	Stunted or Stressed Plants (D1)			
Algal Mat or Crust (B4)	Recent Iron Reduction in Tilled Soils (C6)	X Geomorphic Position (D2)			
Iron Deposits (B5)	Thin Muck Surface (C7)	Shallow Aquitard (D3)			
Inundation Visible on Aerial Imagery (B7)	Other (Explain in Remarks)	Microtopographic Relief (D4)			
Sparsley Vegetated Concave Surface (B8)	Other (Explain in Nemarks)	X FAC-Neutral Test (D5)			
		A PAC-Neutral Test (D5)			
Surface Water Present? Yes NoX	Depth (inches)				
Water Table Present? Yes No X	Depth (inches) Wetland I	Hydrology Present? Yes X No			
Saturation Present? Yes NoX	Depth (inches)				
Describe Recorded Data (stream gauge, moni	toring well, aerial photos, previous inspection	ns), if available:			
, 5 5	, , , , , , , , , , , , , , , , , , , ,				
Remarks:					

	ntific names	or plants				Sampii	ing i onit.	1_202	01008_W	L111_W
Tree Stratum	(Plot Size:	30'radius)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test V Number of Domi				
Fraxinus pennsylvanio	a		25	Χ	FACW	That Are OBL, FA			7	(A)
Acer saccharinum			20	Х	FACW	Total Numbe	– nant		_	
			45	= Total Cov	er	Species Ac			7	(B)
						Percent of Don		_		= ' '
						That Are OBL,	•		100%	(A/B)
						Prevalence Index \	Norkshee	t:		
			Absolute	Dominant	Indicator	OBL species	0	_ x 1	0	
Shrub Stratum	(Plot Size:	15'radius)	% Cover	Species?	Status	FACW species	110	x 2	220	
Cornus amomum			50	Х	FACW	FAC species	85	x 3	255	
Cornus racemosa			25	Х	FAC	FACU species	0	x 4	0	
Fraxinus pennsylvani	ca		15		FACW	UPL species	0	x 5	0	
Acer rubrum			<u>10</u>	= Total Cov	FAC	Column Totals	195	(A)	475	(B)
			100	_= Total Cov	ei	Prevalenc			2.44	(D
								=		
						Hydrophytic Vege	tation Inc	licator	s:	
	(D) . C:			Dominant		1- Rapid Tes	t For Hyd	rophyt	ic Vegeta	tion
Herb Stratum	(Plot Size:	5 radius)	% Cover	Species?	Status	X 2- Dominano	ce Test is	> 50%		
Symphyotrichum late			25	X	FAC	X 3- Prevalenc	e Index is	=< 3.0		
Eutrochium purpureu	ım		<u>15</u> 40	= Total Cov	FAC	4- Morpholo	ngical Ada	ntation	าร	
			40	10tai cov	Ci	5- Problema	_	-		n
							tic riyaro	priyeic	vegetatio	
						Definitions of Vegeta	ation Ctuat	a:		
						Deminitions of Vegeta	ation Strat			
						Tree- Woody plants 3 breast height (DBH),	3 in. (7.6cm	•		eter at
						Tree- Woody plants 3	3 in. (7.6cm regardless dy plants le	of heig	ht. 3 in. DBH a	
						Tree- Woody plants 3 breast height (DBH), Sapling/Shrub- Wood greater than or equa Herb- All herbaceous	3 in. (7.6cm regardless dy plants le l to 3.28ft in the lands of the l	of heig ss than (1m) tal	ht. 3 in. DBH i I. nts, regardi	and
Woody Vine Stratum	(Plot Size:	30'radius)	Absolute % Cover	Dominant Species?	Indicator Status	Tree- Woody plants 3 breast height (DBH), Sapling/Shrub- Wood greater than or equa Herb- All herbaceous size, and woody plan Woody Vines- All wo	3 in. (7.6cm regardless dy plants le I to 3.28ft ((non-woo ts less thar	of heig ss than (1m) tal dy) plar n 3.28ft	ht. 3 in. DBH a l. hts, regard tall.	and less of
Woody Vine Stratum Vitis riparia	(Plot Size:	30'radius)				Tree- Woody plants 3 breast height (DBH), Sapling/Shrub- Wood greater than or equa Herb- All herbaceous size, and woody plan	3 in. (7.6cm regardless dy plants le I to 3.28ft ((non-woo ts less thar	of heig ss than (1m) tal dy) plar n 3.28ft	ht. 3 in. DBH a l. hts, regard tall.	and less of

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

SOII

Sampling Point: 1 20201008 WL111 W1

SUIL								Sampling Point: 1_20201008_WL111_W1
Depth	Matrix				Redo	ox Featu		
(inches	Color	%	Color	%	Туре	Loc	Texture	Remarks
0-3	10YR 2/2	95	10YR 4/4	5	С	М	Sandy Clay Loam	
3-16	10YR 4/1	80	10YR 4/6	20	С	М	Sandy Clay Loam	

Hydric Soil Indicators:		Indicators for Problematic Soils:
Histosol (A1)	Polyvalue Below Surface ((B15)2 cm Muck (A10)
Histic Epipedon (A2)	Thin Dark Surface (S9)	Coast Prarie Redox (A16)
Black Histic (A3)	Loamy Mucky Mineral (F1	L)5 cm Mucky Peat or Peat (S3)
Hydrogen Sulfide (A4)	Loamy Gleyed Matric (F2)	Dark Surface (S7)
Stratified Layers (A5)	X Depleted Matrix (F3)	Polyvalue Below Surface (S8)
Depleted Below Dark Surface (A11)	Redox Dark Surface (F6)	Thin Dark Surface (S9)
Thick Dark Surface (A12)	Depleted Dark Surface (F7	7) Iron-Manganese Masses (F12)
Sandy Mucky Mineral (S1)	Redox Depressions (F8)	Piedmont Floodplain Soils (F19)
Sandy Gleyed Matrix (S4)		Mesic Spodic (TA6)
Sandy Redox (S5)		Red Parent Material (F21)
Stripped Matrix (S6)		Very Shallow Dark Surface (TF12)
Dark Surface (S7)		Other (Explain in Remarks)
Restrictive Layer (if observed):		
Type:		
Type:		Hydric Soil Present? Yes X No
Depth (inches):		

Project/Site: Cider Solar Project City/	/County: Oakfield/Gennesee Sampling Date: 10/8/2020
Applicant/Owner: Hecate	State: NY Sampling
Investigator(s): Andrew Sorci Sect	tion, Township, Range: Point:1_20201008_WL111_U1
Landform (hillslope, terrace,etc.): Shoulder Local re	elief (concave, convex, none): Convex Slope (%) 3 - 15
Subregion (LRR or MLRA): LRR L Lat: 43.098326	6 Long:78.236754 Datum: NAD83
Soil Map Unit Name: La	NWI Classification: UPL
Are climatic / hyrologic conditions on the site typical for this time of $\boldsymbol{\theta}$	year? Yes X No (if no, explain in Remarks.)
Are Vegetation, Soil, or Hydrology significantly dist	rurbed? Are "Normal Circumstances" present? Yes X No
Are Vegetation, Soil, or Hydrologynaturally proble	matic? (if needed, explain any answers in Remarks.)
SUMMARY OF FINDINGS - Attach site map showing sampling	point locations, transects, important features, etc.
Hydrophytic Vegetation Present? Yes No X	Is the Sampled Area
Hydric Soil Present? Yes No X	within a Wetland? Yes No X
Wetland Hydrology Present? Yes No X	if yes, optional Wetland Site ID:
Remarks: (Explain alternative procedures here or in a separate report.)	
LIVERGLOCY	
HYDROLOGY Wetland Hydrology Indicators:	Secondary Indicators (minimum of two required)
Primary Indicators (minimum of one is required: check all that apply)	Surface Soil Cracks (B6)
Surface Water (A1) Water-Stained Leav	
High Water Table (A2) Aquatic Fauna (B13	
Saturation (A3) Marl Deposits (B15	
Water Marks (B1) Hydrogen Sulfide O	odor (C1) Crayfish Burrows (C8)
Sediment Deposits (B2) Oxidized Rhizosphe	eres on Living Roots (C3) Saturation Visible in Aerial Imagery (C9)
Drift Deposits (B3) Presence of Reduce	ed Iron (C4) Stunted or Stressed Plants (D1)
Algal Mat or Crust (B4) Recent Iron Reduct	cion in Tilled Soils (C6) Geomorphic Position (D2)
Iron Deposits (B5) Thin Muck Surface	(C7) Shallow Aquitard (D3)
Inundation Visible on Aerial Imagery (B7)Other (Explain in Re	emarks) Microtopographic Relief (D4)
Sparsley Vegetated Concave Surface (B8)	FAC-Neutral Test (D5)
Surface Water Present? Yes No X Depth (inches)	
Water Table Present? Yes No X Depth (inches)	Wetland Hydrology Present? Yes No X
Saturation Present? Yes No X Depth (inches)	
	
Describe Recorded Data (stream gauge, monitoring well, aerial phot	cos, previous inspections), if available:
Remarks:	

VEGETATION - Use scier	ntific names of plants				Sampli	ng Point	: 1_2020)1008_W	L111_U1
			Dominant		Dominance Test V	Vorkshee	t:		
Tree Stratum	(Plot Size: 30'radius)	% Cover	Species?	Status	Number of Domi	nant Spe	cies		
-					That Are OBL, FA	CW, or F	AC:	0	(A)
		-	_= Total Cov	ver	Total Numbe				(5)
					Species Ac		-	3	(B)
					Percent of Dor			0%	(A/B)
					That Are OBL,	-ACW, OI	FAC:	U%	(A/ b)
					Prevalence Index \	Norkshee	et:		
		Absolute	Dominant	Indicator	OBL species	0	_ x 1	0	
Shrub Stratum	(Plot Size: 15'radius)	% Cover	Species?	Status	FACW species	0	x 2	0	
					FAC species	0	x 3	0	
			_= Total Cov	ver	FACU species	35	x 4	140	
					UPL species	35	x 5	175	
					Column Totals	70	(A)	315	(B)
					Prevalenc	e Index =	B/A =	4.5	
					Hydrophytic Vege	tation Inc	dicators	:	
		Absolute	Dominant	Indicator	1- Rapid Tes	t For Hyd	rophytic	: Vegeta	tion
Herb Stratum	(Plot Size:5'radius)	% Cover	Species?	Status	2- Dominan	ce Test is	> 50%		
Hieracium gronovii		35	X	UPL	3- Prevalenc	e Index is	s =< 3.0		
Unknown species Centaurea jacea		<u>25</u> 15	Х	<u>UNK</u> FACU	4- Morpholo	ngical Ada	ntation	ς	
Taraxacum officinale		10		FACU		_			
		85	= Total Cov		5- Problema	tic Hyaro	pnytic v	egetatic	on
					Definitions of Vegeta	ation Strat	a:		
					Tree- Woody plants 3 breast height (DBH),				neter at
					Sapling/Shrub- Wood greater than or equa				and
									. £
		Absolute	Dominant	Indicator	Herb- All herbaceous size, and woody plan	-			1622 01
Woody Vine Stratum	(Plot Size: 30'radius)	% Cover	Species?	Status	Woody Vines- All wo height.	ody vines į	greater th	าลท 3.28f	t in
Parthenocissus quinq	uefolia	10	X	FACU					
		10	_= Total Cov	ver	Hydropl	-			
					Vegeta	ition ent? Yes	_	No V	
					Fies	ent: Yes	·	NO X	_
Remarks: (Include photo n	umbers here or on a sep	arate shee	t.)		1				
unknown grass due to re			•						
	-								

SOIL Sampling Point: 1_20201008_WL111_U1 Depth Matrix **Redox Features** (inches % Color Color % Type Texture Remarks Loc 0-7 10YR 3/2 100 Sandy Loam Gravelly **Hydric Soil Indicators:** Indicators for Problematic Soils: Histosol (A1) Polyvalue Below Surface (B15) 2 cm Muck (A10) Histic Epipedon (A2) Thin Dark Surface (S9) Coast Prarie Redox (A16) Black Histic (A3) Loamy Mucky Mineral (F1) 5 cm Mucky Peat or Peat (S3) Hydrogen Sulfide (A4) Loamy Gleyed Matric (F2) Dark Surface (S7) Stratified Layers (A5) Depleted Matrix (F3) Polyvalue Below Surface (S8) Depleted Below Dark Surface (A11) Redox Dark Surface (F6) Thin Dark Surface (S9) Thick Dark Surface (A12) Depleted Dark Surface (F7) Iron-Manganese Masses (F12) Sandy Mucky Mineral (S1) Redox Depressions (F8) Piedmont Floodplain Soils (F19) Sandy Gleyed Matrix (S4) Mesic Spodic (TA6) Sandy Redox (S5) Red Parent Material (F21) Stripped Matrix (S6) Very Shallow Dark Surface (TF12) Dark Surface (S7) Other (Explain in Remarks) Restrictive Layer (if observed): Type: Rock/Till Hydric Soil Present? Yes No Χ Depth (inches): 7 Remarks:

Project/Site: Cider Solar Project	City/Co	ounty: Oakfield/Genn	essee San	npling Date: 7/15/2020		
Applicant/Owner: Hecate	State: NY Sampling Point:					
Investigator(s): Andrew Sorci	Sectio	on, Township, Range:	1	_20200715_WL22_U1		
Landform (hillslope, terrace,etc.): Shoulder	Local relie	ef (concave, convex, no	one): Convex	Slope (%) <u>5 - 10</u>		
Subregion (LRR or MLRA): LRR L	Lat: 43.092365	Long: -78	3.243538	Datum: NAD83		
Soil Map Unit Name: CaA			NWI Classificat	ion: UPL		
Are climatic / hyrologic conditions on the site ty	pical for this time of ye	ar? Yes X No	(if no, expl	ain in Remarks.)		
Are Vegetation \underline{X} , Soil \underline{X} , or Hydrology	significantly distur	bed? Are "Normal Ci	rcumstances" pre	esent? Yes X No		
Are Vegetation, Soil, or Hydrology	naturally problem	atic? (if needed, expla	in any answers in R	emarks.)		
SUMMARY OF FINDINGS - Attach site map	showing sampling po	oint locations, trans	ects, important	features, etc.		
Hydrophytic Vegetation Present? Yes	No X	Is the Sampled Area				
Hydric Soil Present? Yes	No X	within a Wetland?	Yes_	No X		
Wetland Hydrology Present? Yes	No X	if yes, optional Wetla	nd Site ID:			
Remarks: (Explain alternative procedures here or in a sepa	rate report.)					
Edge of agricultural field, recently tilled						
HYDROLOGY						
Wetland Hydrology Indicators:			econdary Indicator	s (minimum of two required)		
Primary Indicators (minimum of one is required: che	ck all that apply)		Surface Soil Cr	acks (B6)		
Surface Water (A1)	Water-Stained Leaves	s (B9)	Drainage Patterns (B10)			
High Water Table (A2)	Aquatic Fauna (B13)		Moss Trim Line	Trim Lines (B16)		
Saturation (A3)	Marl Deposits (B15)		Dry-Season Wa	ater Table (C2)		
Water Marks (B1)	Hydrogen Sulfide Odo	or (C1)	Crayfish Burro	ws (C8)		
Sediment Deposits (B2)	Oxidized Rhizosphere	s on Living Roots (C3)	Saturation Visi	ble in Aerial Imagery (C9)		
Drift Deposits (B3)	Presence of Reduced	Iron (C4)	Stunted or Stre	essed Plants (D1)		
Algal Mat or Crust (B4)	Recent Iron Reduction	n in Tilled Soils (C6) Geomorphic Position (D2)				
Iron Deposits (B5)	Thin Muck Surface (C	C7)Shallow Aquitard (D3)				
Inundation Visible on Aerial Imagery (B7)	Other (Explain in Rem	arks)	Microtopographic Relief (D4)			
Sparsley Vegetated Concave Surface (B8)		_	FAC-Neutral Te	est (D5)		
Surface Water Present? Yes No X	Depth (inches)	_				
Water Table Present? Yes No X	Depth (inches)	— Wetland Hy	drology Present?	Yes No X		
Saturation Present? Yes No X	Depth (inches)	_				
Describe Recorded Data (stream gauge, monito	ring well, aerial photos	s, previous inspections), if available:			
Damanda						
Remarks:						

VEGETATION - Use scientific names of plants Sampling Point: 1_20200715_WL22_U1 Absolute Dominant Indicator **Dominance Test Worksheet:** (Plot Size: 30'radius) % Cover Species? **Tree Stratum** Status **Number of Dominant Species** That Are OBL. FACW, or FAC: (A) 1 = Total Cover **Total Number of Dominant** Species Across All Strata: 6 (B) **Percent of Dominant Species** That Are OBL, FACW, or FAC: 16.7% Prevalence Index Worksheet: OBL species x 1 0 Absolute Dominant Indicator 0 (Plot Size: 15'radius) % Cover Species? Status **FACW** species 0 x 2 **Shrub Stratum FACU** 10 Χ Lonicera morrowii FAC species 5 х3 15 Cornus racemosa 5 Χ FAC 20 FACU species 80 x 4 15 = Total Cover **UPL** species 10 x 5 50 Column Totals 35 (A) 145 (B) Prevalence Index = B/A = 4.14 **Hydrophytic Vegetation Indicators:** Absolute Dominant Indicator 1- Rapid Test For Hydrophytic Vegetation **Herb Stratum** (Plot Size: 5'radius) % Cover Species? Status 2- Dominance Test is > 50% UPL Bromus inermis 3- Prevalence Index is =< 3.0 Х Daucus carota 5 UPL 4- Morphological Adaptations Erigeron annuus 5 Χ **FACU** 5 Χ **FACU** Poa compressa 5- Problematic Hydrophytic Vegetation 20 = Total Cover **Definitions of Vegetation Strata:** Tree- Woody plants 3 in. (7.6cm) or more in diameter at breast height (DBH), regardless of height. Sapling/Shrub- Woody plants less than 3 in. DBH and greater than or equal to 3.28ft (1m) tall. Herb- All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28ft tall. Absolute Dominant Indicator Woody Vines- All woody vines greater than 3.28ft in (Plot Size: 30'radius) **Woody Vine Stratum** % Cover Species? Status height. = Total Cover Hydrophytic Vegetation Present? Yes _____ No __X Remarks: (Include photo numbers here or on a separate sheet.)

eID: 20200811082825

SOIL Sampling Point: 1_20200715_WL22_U1

DepthMatrix				Redo	x Featu	res				
(inches	Color	%	Color	%	Type	Loc	Texture	Remarks		
0-10	10YR 3/2	100					Sandy Loam			
10-18	10YR 4/3	99	10YR 3/6	1	С	M	Sandy Loam			
							·			
-	oil Indicators:							Indicators for Problematic Soils:		
	tosol (A1)				•		Surface (B15)	2 cm Muck (A10)		
	tic Epipedon (A2)			Thin Dar		• •	Coast Prarie Redox (A16)		
	ck Histic (A3)	. (^ 4 \			-	-	neral (F1)	5 cm Mucky Peat or Peat (S3)		
	drogen Sulfide atified Layers				Loamy G Depleted	-		Dark Surface (S7) Polyvalue Below Surface (S8)		
	pleted Below		rface (Δ11)		-			Thin Dark Surface (S9)		
	ck Dark Surfac			Redox Dark Surface (F6) Depleted Dark Surface (F7)				Iron-Manganese Masses (F12)		
	ndy Mucky Mi			Redox Depressions (F8)				Piedmont Floodplain Soils (F19)		
	ndy Gleyed Ma	-	-					Mesic Spodic (TA6)		
	ndy Redox (S5		•					Red Parent Material (F21)		
Stri	ipped Matrix ((S6)						Very Shallow Dark Surface (TF12)		
Dai	rk Surface (S7))						Other (Explain in Remarks)		
D1-1-1-1										
Kestricti	ve Layer (if obs									
		Туре:					Hydrid	Soil Present? Yes NoX		
	Depth (in	ches):								
Remark	S:									

Project/Site: Cider Solar Project	City/County: Oakfield/Gen	essee Sampling Date: 7/17/2020			
Applicant/Owner: Hecate	State: NY Sampling Point:				
Investigator(s): Andrew Sorci	Section, Township, Range: 1_20200717_WL29_U1				
Landform (hillslope, terrace,etc.): Rise	Local relief (concave, convex, r	none): None Slope (%) 0 - 3			
Subregion (LRR or MLRA): LRR L	Lat: 43.095362 Long: -7	78.231783 Datum: NAD83			
Soil Map Unit Name: CaA		NWI Classification: UPL			
Are climatic / hyrologic conditions on the site t	ypical for this time of year? Yes X No	(if no, explain in Remarks.)			
Are Vegetation, Soil, or Hydrology	significantly disturbed? Are "Normal	Circumstances" present? Yes X No			
Are Vegetation, Soil, or Hydrology	naturally problematic? (if needed, exp	lain any answers in Remarks.)			
SUMMARY OF FINDINGS - Attach site map	showing sampling point locations, tran	sects. important features. etc.			
Hydrophytic Vegetation Present? Yes	No X Is the Sampled Area	-			
	within a Wetland?	Yes No X			
Hydric Soil Present? Yes	NOX				
Wetland Hydrology Present? Yes	No X if yes, optional Wetl	and Site ID:			
Remarks: (Explain alternative procedures here or in a sep	parate report.)				
HYDROLOGY					
Wetland Hydrology Indicators:		Secondary Indicators (minimum of two required)			
Primary Indicators (minimum of one is required: ch	neck all that apply)	Surface Soil Cracks (B6)			
Surface Water (A1)	Water-Stained Leaves (B9)	Drainage Patterns (B10)			
High Water Table (A2)	Aquatic Fauna (B13)	Moss Trim Lines (B16)			
Saturation (A3)	Marl Deposits (B15)	Dry-Season Water Table (C2)			
Water Marks (B1)	Hydrogen Sulfide Odor (C1)	Crayfish Burrows (C8)			
Sediment Deposits (B2)	Oxidized Rhizospheres on Living Roots (C3)	Saturation Visible in Aerial Imagery (C9)			
Drift Deposits (B3)	Presence of Reduced Iron (C4)	Stunted or Stressed Plants (D1)			
Algal Mat or Crust (B4)	Recent Iron Reduction in Tilled Soils (C6)	Geomorphic Position (D2)			
Iron Deposits (B5)	Thin Muck Surface (C7)				
		Shallow Aquitard (D3)			
Inundation Visible on Aerial Imagery (B7)	Other (Explain in Remarks)	Microtopographic Relief (D4)			
Sparsley Vegetated Concave Surface (B8)		FAC-Neutral Test (D5)			
Surface Water Present? Yes NoX	Depth (inches)				
Water Table Present? Yes No X	Depth (inches) Wetland H	Hydrology Present? Yes No X			
Saturation Present? Yes NoX	Depth (inches)				
Describe Recorded Data (stream gauge, monit	oring well, aerial photos, previous inspection	is), if available:			
, , ,		"			
Remarks:					

VEGETATION - Use scient	tific names	of plants				Sampli	ng Point:	1_2020	0717_W	L29_U1
_				Dominant		Dominance Test \	Vorkshee	t:		
Tree Stratum	(Plot Size:		% Cover	Species?	Status	Number of Dom That Are OBL, FA	•		0	(A)
				_= Total Cov	ver .	Total Numbe Species Ac			1	(B)
						Percent of Dor That Are OBL,			0%	(A/B)
						Prevalence Index	Workshee	et:		
			Absolute	Dominant	Indicator	OBL species	0	x 1	0	
Shrub Stratum	(Plot Size:	15'radius)	% Cover	Species?	Status	FACW species	4	x 2	8	
						FAC species	0	x 3	0	
				_= Total Cov	/er	FACU species	15	x 4	60	
						UPL species	85	x 5	425	
						Column Totals	104	(A)	493	(B
						Prevalenc	e Index =	B/A =	4.74	
						Hydrophytic Vege	tation Inc	dicators	:	
				Dominant		1- Rapid Tes	st For Hyd	rophytic	c Vegeta	tion
Herb Stratum	(Plot Size:	5'radius)	% Cover	Species?	Status	2- Dominan	ce Test is	> 50%		
Daucus carota Ambrosia artemisiifolia	<u> </u>		85 10	Х	UPL FACU	3- Prevalend	ce Index is	s =< 3.0		
Plantago major			5		FACU	4- Morphol	ogical Ada	ptation	S	
Cyperus strigosus			4		FACW	5- Problema	ntic Hydro	phytic V	egetatic	n
			104	_= Total Cov	/er	Definitions of Manage	-11 611			
						Definitions of Veget			ra in diam	
						Tree- Woody plants breast height (DBH),				ieter at
						Sapling/Shrub- Woo greater than or equa				and
						Herb- All herbaceous size, and woody plan			_	less of
Woody Vine Stratum	(Plot Size:	30'radius)	Absolute % Cover	Dominant Species?	Indicator Status	Woody Vines- All wo height.	ody vines į	greater t	han 3.28f	t in
				= Total Cov	/er	Hydropl	nytic			
						Vegeta			N V	
						Pres	ent? Yes		No X	

SOIL Sampling Point: 1_20200717_WL29_U1

Depth	Matrix	Matrix			Redo	x Featu	res			
(inches	Color	%	Color	%	Туре	Loc	Texture	Remarks		
0-16	10YR 2/2	100					Sandy Clay Loam			
16-20	10YR 5/2	70	10YR 5/8	30	С	M	Sand			
Hydric Sc	oil Indicators:							Indicators for Problematic Soils:		
His	tosol (A1)				Polyvalu	e Below S	Surface (B15)	2 cm Muck (A10)		
His	tic Epipedon ((A2)			Thin Dar	k Surface	(S9)	Coast Prarie Redox (A16)		
Bla	ck Histic (A3)				Loamy N	lucky Mi	neral (F1)	5 cm Mucky Peat or Peat (S3)		
Нус	Hydrogen Sulfide (A4) Loam			Loamy G	leyed Ma	atric (F2)	Dark Surface (S7)			
Str	atified Layers	(A5)		Depleted Matrix (F3)				Polyvalue Below Surface (S8)		
De	pleted Below	Dark Su	rface (A11)		Redox D	ark Surfa	ce (F6)	Thin Dark Surface (S9)		
Thi	ck Dark Surfac	ce (A12))	Depleted Dark Surface (F7)				Iron-Manganese Masses (F12)		
Sar	ndy Mucky Mi	neral (S	1)	Redox Depressions (F8)				Piedmont Floodplain Soils (F19)		
Sar	ndy Gleyed Ma	atrix (S4	.)					Mesic Spodic (TA6)		
Sar	ndy Redox (S5)						Red Parent Material (F21)		
Stri	ipped Matrix ((S6)						Very Shallow Dark Surface (TF12)		
Dai	rk Surface (S7)						Other (Explain in Remarks)		
Restricti	ve Layer (if obs	erved):								
		Type:					Hydric	Soil Present? Yes No X		
	Depth (in	iches):						<u> </u>		
Remarks	s:									

Project/Site: Cider Solar Project	City/County: Oakfield/Ger	nessee Sampling Date: 7/21/2020			
Applicant/Owner: Hecate	State: NY Sampling Point:				
Investigator(s): Andrew Sorci	Section, Township, Range: 1_20200720_WL42_U1				
Landform (hillslope, terrace,etc.): Rise	Local relief (concave, convex,	none): <u>Concave</u> Slope (%) <u>1 - 10</u>			
Subregion (LRR or MLRA): LRR L	Lat: 43.097375 Long:	78.219360 Datum: NAD83			
Soil Map Unit Name: CaA		NWI Classification: UPL			
Are climatic / hyrologic conditions on the site \ensuremath{t}	ypical for this time of year? Yes X No	(if no, explain in Remarks.)			
Are Vegetation $___$, Soil $___$, or Hydrology	significantly disturbed? Are "Normal	Circumstances" present? Yes X No			
Are Vegetation, Soil, or Hydrology	naturally problematic? (if needed, exp	lain any answers in Remarks.)			
SUMMARY OF FINDINGS - Attach site map	showing sampling point locations, tran	sects. important features, etc.			
Hydrophytic Vegetation Present? Yes	No X Is the Sampled Area	-			
	within a Wetland?	Yes No X			
Hydric Soil Present? Yes	No X if yes, optional Wet				
Wetland Hydrology Present? Yes					
Remarks: (Explain alternative procedures here or in a sep	arate report.)				
HYDROLOGY					
Wetland Hydrology Indicators:		Secondary Indicators (minimum of two required)			
Primary Indicators (minimum of one is required: ch	eck all that apply)	Surface Soil Cracks (B6)			
Surface Water (A1)	Water-Stained Leaves (B9)	Drainage Patterns (B10)			
High Water Table (A2)	Aquatic Fauna (B13)	Moss Trim Lines (B16)			
Saturation (A3)	Marl Deposits (B15)	Dry-Season Water Table (C2)			
Water Marks (B1)	Hydrogen Sulfide Odor (C1)	Crayfish Burrows (C8)			
Sediment Deposits (B2)	Oxidized Rhizospheres on Living Roots (C3)	Saturation Visible in Aerial Imagery (C9)			
Drift Deposits (B3)	Presence of Reduced Iron (C4)	Stunted or Stressed Plants (D1)			
Algal Mat or Crust (B4)	Recent Iron Reduction in Tilled Soils (C6)	Geomorphic Position (D2)			
Iron Deposits (B5)	Thin Muck Surface (C7)	Shallow Aguitard (D3)			
Inundation Visible on Aerial Imagery (B7)	Other (Explain in Remarks)	Microtopographic Relief (D4)			
Sparsley Vegetated Concave Surface (B8)	Other (Explain in Remarks)	FAC-Neutral Test (D5)			
Surface Water Present? Yes NoX	Depth (inches)				
Water Table Present? Yes No _ X	- ' ' ———	Hydrology Present? Yes NoX			
Saturation Present? Yes NoX	Depth (inches)				
Describe Recorded Data (stream gauge, monit	oring well, aerial photos, previous inspection	ns), if available:			
Remarks:					

VEGETATION - Use scientific names of plants Sampling Point: 1_20200720_WL42_U1 Absolute Dominant Indicator **Dominance Test Worksheet:** (Plot Size: 30'radius) % Cover Species? **Tree Stratum** Status **Number of Dominant Species** That Are OBL. FACW, or FAC: (A) = Total Cover **Total Number of Dominant** Species Across All Strata: 5 (B) **Percent of Dominant Species** That Are OBL, FACW, or FAC: 20% (A/B) Prevalence Index Worksheet: OBL species x 1 0 Absolute Dominant Indicator (Plot Size: 15'radius) 0 0 % Cover Species? Status **FACW** species x 2 **Shrub Stratum** 9 FAC species 3 х3 = Total Cover 42 FACU species x 4 168 **UPL** species 30 x 5 150 Column Totals 75 (A) 327 (B) Prevalence Index = B/A = 4.36 **Hydrophytic Vegetation Indicators:** Absolute Dominant Indicator 1- Rapid Test For Hydrophytic Vegetation **Herb Stratum** (Plot Size: 5'radius) % Cover Species? Status 2- Dominance Test is > 50% 25 UPL Daucus carota 3- Prevalence Index is =< 3.0 Lolium perenne 15 Χ **FACU** 4- Morphological Adaptations Trifolium pratense 5 **FACU** 5 Solidago canadensis **FACU** 5- Problematic Hydrophytic Vegetation Daucus carota 5 Χ UPL Plantago major 4 **FACU Definitions of Vegetation Strata:** Ambrosia artemisiifolia 3 **FACU** Tree- Woody plants 3 in. (7.6cm) or more in diameter at 62 = Total Cover breast height (DBH), regardless of height. Sapling/Shrub- Woody plants less than 3 in. DBH and greater than or equal to 3.28ft (1m) tall. Herb- All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28ft tall. Absolute Dominant Indicator Woody Vines- All woody vines greater than 3.28ft in (Plot Size: 30'radius) % Cover Species? **Woody Vine Stratum** Status height. Parthenocissus quinquefolia 10 **FACU** Χ Vitis riparia 3 Χ FAC Hydrophytic 13 = Total Cover Vegetation Present? Yes _____ No __X__ Remarks: (Include photo numbers here or on a separate sheet.)

SOIL Sampling Point: 1_20200720_WL42_U1

JOIL								Jamping 1 Jint. 1_20200720_WL42_01		
Depth	Depth Matrix				Redo	ox Featu	res			
(inches	Color	%	Color	%	Type	Loc	Texture	Remarks		
0-14	10YR 3/2	100					Sandy Loam			
14-20	10YR 3/2	95	10YR 5/6	5	С	М	Sandy Loam			
III. data Ca	-11 1124							In Product for Bookle words College		
-	oil Indicators: tosol (A1)				Dobaslu	o Polovi S	Surface (B15)	Indicators for Problematic Soils:		
	tic Epipedon ((42)			-	k Surface	• ,	2 cm Muck (A10) Coast Prarie Redox (A16)		
	ck Histic (A3)	(AZ)			-		neral (F1)	5 cm Mucky Peat or Peat (S3)		
	lydrogen Sulfide (A4)				-	ileyed Ma		Dark Surface (S7)		
	atified Layers				-	d Matrix (Polyvalue Below Surface (S8)		
	pleted Below		rface (A11)	Redox Dark Surface (F6)				Thin Dark Surface (S9)		
	ck Dark Surfac			Depleted Dark Surface (F7)				Iron-Manganese Masses (F12)		
	ndy Mucky Mi				Redox Depressions (F8)			Piedmont Floodplain Soils (F19)		
Sar	ndy Gleyed Ma	atrix (S4	.)		=			Mesic Spodic (TA6)		
Sar	ndy Redox (S5)						Red Parent Material (F21)		
Stri	ipped Matrix ((S6)						Very Shallow Dark Surface (TF12)		
Dai	rk Surface (S7)						Other (Explain in Remarks)		
D. statet										
Kestricti	ve Layer (if obs	servea):								
		Type:					Hydri	c Soil Present? Yes NoX		
	Depth (in	nches): _								
Remarks	s:									

Project/Site: Cider Solar Project	City/County: Oakfield/Genessee Sampling Date: 7/23/2020				
Applicant/Owner: Hecate State: NY Sampling Point:					
Investigator(s): Andrew Sorci	Section, Township, Range: 1_07232020_WL50_W1				
Landform (hillslope, terrace,etc.): Depression	Local relief (concave, convex, none): Linear Slope (%) 0 - 15				
	43.099379 Long: <u>-78.225187</u> Datum: <u>NAD83</u>				
Soil Map Unit Name: CIB	NWI Classification: PEM				
Are climatic / hyrologic conditions on the site typical for th	is time of year? Yes X No (if no, explain in Remarks.)				
	cantly disturbed? Are "Normal Circumstances" present? Yes X No				
Are Vegetation, Soil, or Hydrologynatura	ally problematic? (if needed, explain any answers in Remarks.)				
SUMMARY OF FINDINGS - Attach site map showing s	sampling point locations, transects, important features, etc.				
Hydrophytic Vegetation Present? Yes X No	Is the Sampled Area				
Hydric Soil Present? Yes X No	within a Wetland?				
	if yes, optional Wetland Site ID: WL50				
Remarks: (Explain alternative procedures here or in a separate report.) Associated with stream					
Associated with stream					
HYDROLOGY					
Wetland Hydrology Indicators:	Secondary Indicators (minimum of two required)				
Primary Indicators (minimum of one is required: check all that a	pply) Surface Soil Cracks (B6)				
X Surface Water (A1) Water-S	tained Leaves (B9) X Drainage Patterns (B10)				
High Water Table (A2) Aquatic	Fauna (B13) Moss Trim Lines (B16)				
X Saturation (A3) Marl De	posits (B15)				
Water Marks (B1) Hydroge	en Sulfide Odor (C1) Crayfish Burrows (C8)				
Sediment Deposits (B2) Oxidized	Rhizospheres on Living Roots (C3) Saturation Visible in Aerial Imagery (C9)				
	e of Reduced Iron (C4) Stunted or Stressed Plants (D1)				
	ron Reduction in Tilled Soils (C6) X Geomorphic Position (D2)				
	ck Surface (C7) Shallow Aquitard (D3)				
	Explain in Remarks) Microtopographic Relief (D4)				
					
Sparsley Vegetated Concave Surface (B8)	X FAC-Neutral Test (D5)				
Surface Water Present? Yes X No Depth (inc	ches)2				
Water Table Present? Yes No _ X _ Depth (inc	ches) Wetland Hydrology Present? Yes X No				
Saturation Present? Yes X No Depth (inc	ches) <u>0</u>				
Describe Recorded Data (stream gauge, monitoring well, a	perial photos previous inspections) if available:				
Besonde Necorded Bata (stream Badge) monitoring went	terial priocos, previous inspections,, il uvaliusiei				
Remarks:					

VEGETATION - Use scient		•	A I- 1 ·	D-: : :	La alt				32020_W	
Tree Stratum	(Plot Size:	30'radius)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test \				
Juglans cinerea	(000.20.		10	X	FACU	Number of Dom That Are OBL, FA	•		2	(A)
Jugario emerca			10	= Total Cov		Total Numbe	•	ant —	3	(B)
						Percent of Dor That Are OBL,	•		66.7%	(A/B)
						Prevalence Index	Worksheet	:		
			Ahsolute	Dominant	Indicator	OBL species	0	x 1	0	
Shrub Stratum	(Plot Size:	15'radius)	% Cover	Species?	Status	FACW species	130	x 2	260	
Fraxinus pennsylvanica			40	Х	FACW	FAC species	15	x 3	45	
			40	_= Total Cov	ver .	FACU species	10	x 4	40	
						UPL species	0	x 5	0	
						Column Totals	155	(A)	345	(B)
						Prevalend	ce Index = B	3/A =	2.23	
						Hydrophytic Vege	tation Indi	cator	s:	
			Absolute Dominant Indicator			1- Rapid Tes	st For Hydro	ophyti	ic Vegeta	tion
Herb Stratum	(Plot Size:	5'radius)	% Cover	Species?	Status	X 2- Dominan	ce Test is >	50%		
Phalaris arundinacea Euthamia graminifolia			90 15	X	FACW FAC	X 3- Prevalen	ce Index is :	=< 3.0		
Lutilailila graililililolla			105	= Total Cov		4- Morphol	ogical Adap	tatior	ıs	
				=		5- Problema	atic Hydrop	hytic '	Vegetatio	n
						Definitions of Veget	ation Strata	:		
						Tree- Woody plants breast height (DBH),				neter at
						Sapling/Shrub- Woo greater than or equa				and
						Herb- All herbaceous size, and woody plar			_	less of
Woody Vine Stratum	(Plot Size:	30'radius)		Dominant Species?	Indicator Status	Woody Vines- All wo	oody vines gr	eater	than 3.28f	t in
				_= Total Cov	/er	Hydropl Vegeta Pres	•	X	No	

eID: 20200909102716

SOIL Sampling Point: 1_07232020_WL50_W1

Depth _	Matrix				Redo	res		
(inches	Color	%	Color	%	Type	Loc	Texture	Remarks
0-4	10YR 4/2	95	10YR 4/4	5	С	PL	Loamy Sand	
4-9	7.5YR 5/3	80	7.5YR 5/8	20	С	M	Sandy Clay Loam	

Hydric Soil Indicators:		Indicators for Problematic Soils:
Histosol (A1)	Polyvalue Below Surface (B15)	2 cm Muck (A10)
Histic Epipedon (A2)	Thin Dark Surface (S9)	Coast Prarie Redox (A16)
Black Histic (A3)	Loamy Mucky Mineral (F1)	5 cm Mucky Peat or Peat (S3)
Hydrogen Sulfide (A4)	Loamy Gleyed Matric (F2)	Dark Surface (S7)
Stratified Layers (A5)	X Depleted Matrix (F3)	Polyvalue Below Surface (S8)
Depleted Below Dark Surface (A11)	Redox Dark Surface (F6)	Thin Dark Surface (S9)
Thick Dark Surface (A12)	Depleted Dark Surface (F7)	Iron-Manganese Masses (F12)
Sandy Mucky Mineral (S1)	Redox Depressions (F8)	Piedmont Floodplain Soils (F19)
Sandy Gleyed Matrix (S4)		Mesic Spodic (TA6)
Sandy Redox (S5)		Red Parent Material (F21)
Stripped Matrix (S6)		Very Shallow Dark Surface (TF12)
Dark Surface (S7)		Other (Explain in Remarks)
Restrictive Layer (if observed):		
Type: Rock	Нус	dric Soil Present? Yes X No
Depth (inches): 9		

Project/Site: Cider Solar Project	City/Cou	unty: Elba/Genessee	Sampling Date: 1/14/2021			
Applicant/Owner: Hecate	State: NY Sampling Point:					
Investigator(s): Andrew Sorci	Section, Township, Range: 1_20210114_WL57_57W					
Landform (hillslope, terrace,etc.): Depression	Local relief	(concave, convex, none): Line	ear Slope (%) <u>1 - 3</u>			
Subregion (LRR or MLRA): LRR R	Lat: 43.108912	Long: -78.192589	Datum: NAD83			
Soil Map Unit Name: ApA Appleton silt loam, 0 to	o 3 percent slopes	NWI Cla	ssification: PEM			
Are climatic / hyrologic conditions on the site typi	ical for this time of year	r? Yes <u>X</u> No (if n	o, explain in Remarks.)			
Are Vegetation, Soil, or Hydrology	significantly disturb	ed? Are "Normal Circumstand	es" present? Yes X No			
Are Vegetation, Soil, or Hydrology	naturally problemat	tic? (if needed, explain any answ	vers in Remarks.)			
SUMMARY OF FINDINGS - Attach site map sh	nowing sampling poi	int locations, transects, imp	ortant features, etc.			
		s the Sampled Area	•			
		within a Wetland?	Yes X No			
	No	fives, antional Watland Site ID:	WL58			
		f yes, optional Wetland Site ID:	VV L38			
Remarks: (Explain alternative procedures here or in a separation	te report.)					
Linear, roadside vegetated ditch						
HYDROLOGY						
Wetland Hydrology Indicators:		Secondary Ir	ndicators (minimum of two required)			
Primary Indicators (minimum of one is required: check	k all that apply)	Surface	e Soil Cracks (B6)			
X Surface Water (A1)	Water-Stained Leaves (B9)Draina	ge Patterns (B10)			
X High Water Table (A2)	Aquatic Fauna (B13)	Moss T	rim Lines (B16)			
Saturation (A3)	— Marl Deposits (B15)	Dry-Se	ason Water Table (C2)			
Water Marks (B1)	— Hydrogen Sulfide Odor	(C1) Crayfis	h Burrows (C8)			
Sediment Deposits (B2)	Oxidized Rhizospheres	on Living Roots (C3) Satura	tion Visible in Aerial Imagery (C9)			
Drift Deposits (B3)	Presence of Reduced Ire		d or Stressed Plants (D1)			
Algal Mat or Crust (B4)	 Recent Iron Reduction i 		orphic Position (D2)			
Iron Deposits (B5)	Thin Muck Surface (C7)	———	v Aquitard (D3)			
Inundation Visible on Aerial Imagery (B7)	Other (Explain in Rema		opographic Relief (D4)			
		· ——				
Sparsley Vegetated Concave Surface (B8)			eutral Test (D5)			
Surface Water Present? Yes X No D	Depth (inches) 1					
Water Table Present? Yes X No D	Depth (inches) 2	Wetland Hydrology Pr	resent? Yes X No			
Saturation Present? Yes No X D	Depth (inches)					
Describe Recorded Data (stream gauge, monitori	ng well, aerial photos.	previous inspections), if availab	ıle:			
(3 3 ,	3 , 1 ,	' ''				
Remarks:						

tific names	of plants				Sampling Point: 1_20210114_WL57_57W				
(Dlot Size:	30'radius \				Dominance Test V	Vorksheet	:		
(PIOL 3126.		76 COVE	species:	Status				1	(A)
		= Total Cover						1	(B)
						-		100%	(A/B)
					Prevalence Index	Workshee	t:		
		Absolute	Dominant	Indicator	OBL species	0	_ x 1	0	
(Plot Size:	15'radius)	% Cover	Species?	Status	FACW species	90	_ x 2	180	
					FAC species	10	x 3	30	
			_= Total Cov	ver .	FACU species	0	x 4	0	
					UPL species	0	x 5	0	
					Column Totals	100	(A)	210	(B)
					Prevalenc	e Index = I	B/A =	2.1	
					Hydrophytic Vege	tation Ind	icator	·s:	
		Absolute	Dominant	Indicator	X 1- Rapid Tes	st For Hydr	ophyt	ic Vegeta	tion
(Plot Size:	5'radius)	% Cover	Species?	Status	X 2- Dominan	ce Test is >	> 50%		
		90	Х	FACW	X 3- Prevalence	ce Index is	=< 3.0)	
			= Total Cov		4- Morpholo	ogical Ada	otatio	ns	
			_		5- Problema	ntic Hydrop	ohytic	Vegetatio	n
					Definitions of Veget	ation Strata	a:		
						•	-		neter at
									and
									less of
(Plot Size:	30'radius)	Absolute % Cover	Dominant Species?	Indicator Status	Woody Vines- All wo height.	ody vines g	reater	than 3.28f	t in
			= Total Cov	ver	Hydropl Vegeta	-			
	(Plot Size:	(Plot Size:	(Plot Size: 15'radius) % Cover (Plot Size: 15'radius) Absolute % Cover (Plot Size: 5'radius) 90 10 100 Absolute	(Plot Size: 30'radius) % Cover Species? (Plot Size: 15'radius) Absolute Species? (Plot Size: 5'radius) % Cover Species? 90 X 10 100 = Total Cov	Absolute Dominant Indicator Species? Status Plot Size: 15'radius Absolute Dominant Indicator Species? Status	Plot Size: 30'radius % Cover Species? Status Number of Dominat Indicator Species Ac Percent of Dominat Indicator Species Status Prevalence Index	Prevalence Index Workshee	(Plot Size: 30'radius) % Cover Species? Status Total Cover	Plot Size: 30'radius % Cover Species? Status

SOIL Sampling Point: 1_20210114_WL57_57W

Depth <u>Matrix</u>					Redo	ox Featu		
(inches	Color	%	Color	%	Type	Loc	Texture	Remarks
0-5	10YR 3/2	100					Sandy Loam	
5-18	10YR 5/2	90	10YR 5/6	10	С	M	Sandy Clay Loam	
I Ivaluia Ca	il Indicators.							Indicators for Droblematic Caile.
-	oil Indicators:				Polyvalu	a Ralow ⁹	Surface (R15)	Indicators for Problematic Soils:
Hist	tosol (A1)	Δ2)			•		Surface (B15)	2 cm Muck (A10)
Hist Hist	tosol (A1) tic Epipedon (A2)			Thin Dar	k Surface	(S9)	2 cm Muck (A10) Coast Prarie Redox (A16)
Hist Hist Blac	tosol (A1) tic Epipedon (ck Histic (A3)				Thin Dar Loamy N	k Surface Jucky Mi	(S9) neral (F1)	2 cm Muck (A10) Coast Prarie Redox (A16) 5 cm Mucky Peat or Peat (S3)
Hist Hist Blac Hyc	tosol (A1) tic Epipedon (ck Histic (A3) drogen Sulfide	(A4)			Thin Dar Loamy N Loamy G	k Surface Aucky Mi Gleyed Ma	e (S9) neral (F1) atric (F2)	2 cm Muck (A10) Coast Prarie Redox (A16) 5 cm Mucky Peat or Peat (S3) Dark Surface (S7)
Hist Hist Blac Hyc	tosol (A1) tic Epipedon (ck Histic (A3) drogen Sulfide atified Layers	(A4) (A5)	rface (A11)	X	Thin Dar Loamy M Loamy G Depleted	k Surface Aucky Mi Gleyed Ma d Matrix ((S9) neral (F1) atric (F2) F3)	2 cm Muck (A10) Coast Prarie Redox (A16) 5 cm Mucky Peat or Peat (S3) Dark Surface (S7) Polyvalue Below Surface (S8)
Hist Hist Blac Hyc Stra	tosol (A1) tic Epipedon (ck Histic (A3) drogen Sulfide atified Layers bleted Below I	(A4) (A5) Dark Sur	, ,	X	Thin Dar Loamy M Loamy G Depleted Redox D	k Surface Aucky Mir Gleyed Ma d Matrix (ark Surfa	(S9) neral (F1) atric (F2) (F3) ce (F6)	2 cm Muck (A10) Coast Prarie Redox (A16) 5 cm Mucky Peat or Peat (S3) Dark Surface (S7) Polyvalue Below Surface (S8) Thin Dark Surface (S9)
Hist Hist Blac Hyc Stra Dep Thic	tosol (A1) tic Epipedon (ck Histic (A3) drogen Sulfide atified Layers bleted Below I ck Dark Surfac	(A4) (A5) Dark Sur e (A12)	, ,	X	Thin Dar Loamy M Loamy G Depleted Redox D Depleted	k Surface Aucky Mil Ileyed Ma d Matrix (ark Surfa d Dark Su	(S9) neral (F1) atric (F2) (F3) ce (F6) rface (F7)	2 cm Muck (A10) Coast Prarie Redox (A16) 5 cm Mucky Peat or Peat (S3) Dark Surface (S7) Polyvalue Below Surface (S8) Thin Dark Surface (S9) Iron-Manganese Masses (F12)
Hist Hist Blac Hyc Stra Dep Thic	tosol (A1) tic Epipedon (ck Histic (A3) drogen Sulfide atified Layers bleted Below I ck Dark Surfac	(A4) (A5) Dark Sur e (A12) neral (S2	1)	X	Thin Dar Loamy M Loamy G Depleted Redox D Depleted	k Surface Aucky Mir Gleyed Ma d Matrix (ark Surfa	(S9) neral (F1) atric (F2) (F3) ce (F6) rface (F7)	2 cm Muck (A10) Coast Prarie Redox (A16) 5 cm Mucky Peat or Peat (S3) Dark Surface (S7) Polyvalue Below Surface (S8) Thin Dark Surface (S9) Iron-Manganese Masses (F12) Piedmont Floodplain Soils (F19)
Hist Hist Blac Hyc Stra Dep Thic San	tosol (A1) tic Epipedon (ck Histic (A3) drogen Sulfide atified Layers bleted Below I ck Dark Surfac idy Mucky Min	(A4) (A5) Dark Sur te (A12) neral (S2	1)	X	Thin Dar Loamy M Loamy G Depleted Redox D Depleted	k Surface Aucky Mil Ileyed Ma d Matrix (ark Surfa d Dark Su	(S9) neral (F1) atric (F2) (F3) ce (F6) rface (F7)	2 cm Muck (A10) Coast Prarie Redox (A16) 5 cm Mucky Peat or Peat (S3) Dark Surface (S7) Polyvalue Below Surface (S8) Thin Dark Surface (S9) Iron-Manganese Masses (F12) Piedmont Floodplain Soils (F19) Mesic Spodic (TA6)
Hist Hist Blace Hyce Strae Dep Thice San San	tosol (A1) tic Epipedon (ck Histic (A3) drogen Sulfide atified Layers bleted Below I ck Dark Surfac	(A4) (A5) Dark Sur te (A12) neral (S2 ntrix (S4	1)	X	Thin Dar Loamy M Loamy G Depleted Redox D Depleted	k Surface Aucky Mil Ileyed Ma d Matrix (ark Surfa d Dark Su	(S9) neral (F1) atric (F2) (F3) ce (F6) rface (F7)	2 cm Muck (A10) Coast Prarie Redox (A16) 5 cm Mucky Peat or Peat (S3) Dark Surface (S7) Polyvalue Below Surface (S8) Thin Dark Surface (S9) Iron-Manganese Masses (F12) Piedmont Floodplain Soils (F19)

Remarks:

Type:

Depth (inches):

Hydric Soil Present? Yes X No _____

Project/Site: Cider Solar Project City/C	County: Elba/Genessee Sampling Date: 1/14/2021					
Applicant/Owner: Hecate	State: NY Sampling Point:					
Investigator(s): Andrew Sorci Secti	on, Township, Range: 1_20210114_WL113_W1					
Landform (hillslope, terrace,etc.): Depression Local rel	ief (concave, convex, none): <u>Concave</u> Slope (%) <u>0 - 5</u>					
Subregion (LRR or MLRA): $\underline{\text{LRR R}}$ Lat: $\underline{\text{43.105387}}$						
Soil Map Unit Name: Ma Madalin silty clay loam, 0 to 3 percent slope	NWI Classification: PEM					
Are climatic / hyrologic conditions on the site typical for this time of \boldsymbol{y}	ear? Yes X No (if no, explain in Remarks.)					
Are Vegetation, Soil, or Hydrology significantly distu	urbed? Are "Normal Circumstances" present? Yes X No					
Are Vegetation, Soil, or Hydrology naturally problem	natic? (if needed, explain any answers in Remarks.)					
SUMMARY OF FINDINGS - Attach site map showing sampling p	point locations, transects, important features, etc.					
Hydrophytic Vegetation Present? Yes X No	Is the Sampled Area					
Hydric Soil Present? Yes X No	within a Wetland? Yes X No					
· — — —	if yes, optional Wetland Site ID: WL113					
Wetland Hydrology Present? Yes X No Remarks: (Explain alternative procedures here or in a separate report.)	WEITS					
HYDROLOGY						
Wetland Hydrology Indicators:	Secondary Indicators (minimum of two required)					
Primary Indicators (minimum of one is required: check all that apply)	Surface Soil Cracks (B6)					
X Surface Water (A1) Water-Stained Leave	es (B9) Drainage Patterns (B10)					
High Water Table (A2) Aquatic Fauna (B13)	Moss Trim Lines (B16)					
Saturation (A3) Marl Deposits (B15)	Dry-Season Water Table (C2)					
Water Marks (B1) Hydrogen Sulfide Od	lor (C1) Crayfish Burrows (C8)					
Sediment Deposits (B2) Oxidized Rhizospher	es on Living Roots (C3) Saturation Visible in Aerial Imagery (C9)					
Drift Deposits (B3) Presence of Reduced						
Algal Mat or Crust (B4) Recent Iron Reduction						
Iron Deposits (B5) Thin Muck Surface (0	· · · — · · · ·					
Inundation Visible on Aerial Imagery (B7) Other (Explain in Rer						
Sparsley Vegetated Concave Surface (B8)	FAC-Neutral Test (D5)					
	IACNeutiai lest (D3)					
Surface Water Present? Yes X No Depth (inches) 2	_					
Water Table Present? Yes NoX Depth (inches)	Wetland Hydrology Present? Yes X No					
Saturation Present? Yes No X Depth (inches)	_					
Describe Recorded Data (stream gauge, monitoring well, aerial photo	os, previous inspections), if available:					
Remarks:	ss, previous inspections), ii availuble.					

	tific names	of plants				Sampli	ng Point:	1_202	210114_W	L113_W1
Tree Stratum	(Plot Size:	30'radius)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test V Number of Domi That Are OBL, FA	nant Spec	ies	1	(A)
				= Total Cov	/er	Total Numbe Species Acı	r of Domi	nant	1	(B)
						Percent of Don That Are OBL, I	-		100%	_(A/B)
						Prevalence Index \	Workshee	t:		
			Absolute	Dominant	Indicator	OBL species	0	_ x 1	0	
Shrub Stratum	(Plot Size:	15'radius)	% Cover	Species?	Status	FACW species	95	x 2	190	
						FAC species	0	x 3	0	
				_= Total Cov	/er	FACU species	0	_ x 4	0	
						UPL species	0	x 5	0	
						Column Totals	95	(A)	190	(B)
						Prevalenc	e Index =	B/A =	2	
						Hydrophytic Vege	tation Ind	licator	·s:	
			Absolute	Dominant	Indicator	X 1- Rapid Tes	t For Hydi	rophyt	ic Vegeta	tion
Herb Stratum	(Plot Size:	5'radius)	% Cover	Species?	Status	X 2- Dominano	ce Test is :	> 50%		
Phalaris arundinacea			95	X	FACW	X 3- Prevalenc	e Index is	=< 3.0)	
			95	_= Total Cov	over	4- Morpholo	gical Ada	ptatio	ns	
						5- Problema	_	=		on
						Definitions of Vegeta	ation Strat	a:		
						Tree- Woody plants 3 breast height (DBH),				neter at
						Sapling/Shrub- Wood greater than or equa				and
						Herb- All herbaceous size, and woody plan				lless of
Woody Vine Stratum	(Plot Size:	30'radius)	Absolute % Cover	Dominant Species?	Indicator Status	Woody Vines- All wo height.	ody vines g	reater	than 3.28f	t in
				= Total Cov	/er	Hydroph Vegeta	tion		No	

eID: 20210202103406

SOIL Sampling Point: 1_20210114_WL113_W1

Depth Matrix					Redo	x Feature				
nches	Color	%	Color	%	Type	Loc	Texture	Remarks		
0-2	10YR 3/1	100					Clay Loam			
2-12	10YR 6/1	80	7.5YR 4/6	20	С	М	Clay Loam			
	oil Indicators:						5 (5.5)	Indicators for Problematic Soils:		
	tosol (A1)				•		urface (B15)	2 cm Muck (A10)		
	tic Epipedon (A2)				k Surface (· -	Coast Prarie Redox (A16)		
	ck Histic (A3)				•	lucky Mine		5 cm Mucky Peat or Peat (S3)		
	drogen Sulfide					leyed Mat	-	Dark Surface (S7)		
	atified Layers				•	d Matrix (F		Polyvalue Below Surface (S8)		
	pleted Below					ark Surface		Thin Dark Surface (S9)		
Thi	ck Dark Surfac	ce (A12)			Depleted	d Dark Surf	ace (F7)	Iron-Manganese Masses (F12)		
Sar	ndy Mucky Mi	neral (S	1)		Redox D	epressions	(F8)	Piedmont Floodplain Soils (F19)		
Sar	ndy Gleyed Ma	atrix (S4	.)				_	Mesic Spodic (TA6)		
	ndy Redox (S5))					_	Red Parent Material (F21)		
Sar		(S6)					_	Very Shallow Dark Surface (TF12)		
	ipped Matrix (_	Other (Explain in Remarks)		
Str	ipped Matrix (rk Surface (S7))								
Str Da										
Str Da	rk Surface (S7)						Hydric S	Soil Present? Yes X No		

Remarks:

Project/Site: Cider Solar Project	City/County: Elba/Genessee Sampling Date: 1/14/2021					
Applicant/Owner: Hecate	State: NY Sampling Point:					
Investigator(s): Andrew Sorci	Section, Township, Range: 1_20210114_WL113_W2					
Landform (hillslope, terrace,etc.): Dip	Local relief (concave, convex, none): Concave Slope (%) 0 - 2					
Subregion (LRR or MLRA): LRR R Lat	: <u>43.105521</u> Long: <u>-78.243403</u> Datum: <u>NAD83</u>					
Soil Map Unit Name: Ma Madalin silty clay loam, 0 to 3	percent slopes NWI Classification: PSS					
Are climatic / hyrologic conditions on the site typical for $% \left(1\right) =\left(1\right) \left(1\right) $	this time of year? Yes X No (if no, explain in Remarks.)					
Are Vegetation, Soil, or Hydrologysign	ificantly disturbed? Are "Normal Circumstances" present? Yes X No					
Are Vegetation, Soil, or Hydrologynati	urally problematic? (if needed, explain any answers in Remarks.)					
SUMMARY OF FINDINGS - Attach site map showing	g sampling point locations, transects, important features, etc.					
Hydrophytic Vegetation Present? Yes X No	Is the Sampled Area					
Hydric Soil Present? Yes X No	within a Wetland? Yes X No					
· — —	if yes, optional Wetland Site ID: WL113					
Wetland Hydrology Present? Yes X No Remarks: (Explain alternative procedures here or in a separate report						
HYDROLOGY						
Wetland Hydrology Indicators:	Secondary Indicators (minimum of two required)					
Primary Indicators (minimum of one is required: check all tha	t apply) Surface Soil Cracks (B6)					
X Surface Water (A1) Wate	r-Stained Leaves (B9) Drainage Patterns (B10)					
High Water Table (A2)	tic Fauna (B13) Moss Trim Lines (B16)					
Saturation (A3) Marl	Deposits (B15) Dry-Season Water Table (C2)					
Water Marks (B1)	ogen Sulfide Odor (C1) Crayfish Burrows (C8)					
Sediment Deposits (B2) Oxidiz	zed Rhizospheres on Living Roots (C3) Saturation Visible in Aerial Imagery (C9)					
Drift Deposits (B3) Prese	nce of Reduced Iron (C4) Stunted or Stressed Plants (D1)					
Algal Mat or Crust (B4) Recer	nt Iron Reduction in Tilled Soils (C6) X Geomorphic Position (D2)					
Iron Deposits (B5) Thin I	Muck Surface (C7) Shallow Aquitard (D3)					
Inundation Visible on Aerial Imagery (B7) Other	(Explain in Remarks) Microtopographic Relief (D4)					
Sparsley Vegetated Concave Surface (B8)	X FAC-Neutral Test (D5)					
Surface Water Present? Yes X No Depth (
Water Table Present? Yes No X Depth (inches) Wetland Hydrology Present? Yes X No					
Saturation Present? Yes No X Depth (·—— — — — — — — — — — — — — — — — — — —					
Describe Recorded Data (stream gauge, monitoring wel	l aerial photos previous inspections) if available:					
Describe Recorded Data (stream gauge, monitoring wer	i, derial priotos, previous inspections), il dvalidate.					
Remarks:						

VEGETATION - Use scie	ntific names of plants				Sampli	ing Point: 1	_202	10114_W	L113_W
			Dominant	Indicator	Dominance Test \	Worksheet:			
Tree Stratum	(Plot Size: 30'radius)	% Cover	Species?	Status	Number of Dom That Are OBL, F	•		4	(A)
			_= Total Cov	ver	Total Number	er of Domina cross All Strat		4	(B)
					Percent of Dor		_		_ (- /
					That Are OBL,	•		100%	(A/B)
					Prevalence Index	Worksheet:			
		Absoluto	Dominant	Indicator	OBL species	0	x 1	0	
Shrub Stratum	(Plot Size: 15'radius)	% Cover	Species?	Status	FACW species	80	x 2	160	
Cornus amomum		65	Χ	FACW	FAC species	50	x 3	150	
Populus deltoides	40	Χ	FAC	FACU species	0	x 4	0		
		105	_= Total Cov	ver	UPL species	0	x 5	0	
					Column Totals	130	(A)	310	(B)
					Prevalend	ce Index = B/	'A =	2.38	
					Hydrophytic Vege	etation Indic	ators	:	
		Absolute	Dominant	Indicator	1- Rapid Tes	st For Hydro	phyti	c Vegeta	tion
Herb Stratum	(Plot Size: 5'radius)	% Cover	Species?	Status	· ·	ce Test is > 5		J	
Agrostis stolonifera		15	Х	FACW		ce Index is =			
Symphyotrichum late	eriflorum	10	X Tatal Car	FAC		ogical Adapt		c	
		25	_= Total Cov	ver		atic Hydroph			n
					3 110010111		iyele v	regetatio	
					Definitions of Veget	ation Strata:			
					Tree- Woody plants breast height (DBH),				ieter at
					Sapling/Shrub- Woo greater than or equa				and
					Herb- All herbaceou size, and woody plai			_	less of
Woody Vine Stratum	(Plot Size: 30'radius)		Dominant Species?	Indicator Status	Woody Vines- All wo				t in
			= Total Cov	ver	Hvdron	hytic			
			_		Hydrophytic Vegetation				
					Pres	ent? Yes	X	No	_
Remarks: (Include photo r	numbers here or on a sep	arate shee	t.)						

SOIL Sampling Point: 1_20210114_WL113_W2

Depth	Matrix				Redo	x Featu	res	
(inches	Color	%	Color	%	Type	Loc	Texture	Remarks
0-3	10YR 2/1	100					Sandy Clay Loam	
3-8	7.5YR 6/1	75	7.5YR 4/6	25	С	M	Clay Loam	
	- 11 to - 12 4							Ladication for Building the Caller
•	oil Indicators: tosol (A1)				Polyvalu	a Ralow 9	Surface (B15)	Indicators for Problematic Soils: 2 cm Muck (A10)
	tic Epipedon (Δ2)				k Surface		Coast Prarie Redox (A16)
	ck Histic (A3)	, <u>(</u> 2)					neral (F1)	5 cm Mucky Peat or Peat (S3)
	drogen Sulfide	(A4)			•	leyed Ma		Dark Surface (S7)
	atified Layers	-				d Matrix (• •	Polyvalue Below Surface (S8)
	pleted Below I		rface (A11)			ark Surfa	•	Thin Dark Surface (S9)
	ck Dark Surfac				•		rface (F7)	Iron-Manganese Masses (F12)
Sar	ndy Mucky Mir	neral (S	1)		Redox D	epression	ns (F8)	Piedmont Floodplain Soils (F19)
Sar	ndy Gleyed Ma	atrix (S4	4)					Mesic Spodic (TA6)
Sar	ndy Redox (S5))						Red Parent Material (F21)
Stri	ipped Matrix (S6)						Very Shallow Dark Surface (TF12)
Daı	rk Surface (S7))						Other (Explain in Remarks)
Restricti	ve Layer (if obs	erved):						
	-	Type:					Hydric	Soil Present? Yes X No
	Depth (in	_					Tryunc	301111C3C11C1
	- (-						
Remarks	s:						,	

Project/Site: Cider Solar Project	City/County: Elba/Genesse	ee Sampling Date: 1/14/2021
Applicant/Owner: Hecate		State: NY Sampling Point:
Investigator(s): Andrew Sorci	Section, Township, Range:	1_20210114_WL113_U1
Landform (hillslope, terrace,etc.): Rise	Local relief (concave, convex, ı	none): <u>None</u> Slope (%) <u>1 - 3</u>
Subregion (LRR or MLRA): LRR R	at: 43.105436 Long: -	78.242227 Datum: NAD83
Soil Map Unit Name: Ma Madalin silty clay loam, 0 to	3 percent slopes	NWI Classification: UPL
Are climatic / hyrologic conditions on the site typical f	or this time of year? Yes X No	(if no, explain in Remarks.)
Are Vegetation , Soil , or Hydrology s	gnificantly disturbed? Are "Normal	Circumstances" present? Yes X No
Are Vegetation , Soil , or Hydrology n	aturally problematic? (if needed, exp	lain any answers in Remarks.)
SUMMARY OF FINDINGS - Attach site map show	ing sampling point locations, tran	sects, important features, etc.
Hydrophytic Vegetation Present? Yes No	X Is the Sampled Area	-
Hydric Soil Present? Yes No	X within a Wetland?	Yes No X
Wetland Hydrology Present? Yes No	χ if yes, optional Wet	land Site ID:
Remarks: (Explain alternative procedures here or in a separate re	<u> </u>	
nemarks. (Explain atternative procedures here of in a separate re	ort.,	
LIVERELECT		
HYDROLOGY Western Underland Indicators		Cocondan, Indicators (minimum of two required)
Wetland Hydrology Indicators:		Secondary Indicators (minimum of two required)
Primary Indicators (minimum of one is required: check all t		Surface Soil Cracks (B6)
	ter-Stained Leaves (B9)	Drainage Patterns (B10)
High Water Table (A2)	uatic Fauna (B13)	Moss Trim Lines (B16)
Saturation (A3)	rl Deposits (B15)	Dry-Season Water Table (C2)
Water Marks (B1) Hy	drogen Sulfide Odor (C1)	Crayfish Burrows (C8)
Sediment Deposits (B2) Ox	dized Rhizospheres on Living Roots (C3)	Saturation Visible in Aerial Imagery (C9)
Drift Deposits (B3)	sence of Reduced Iron (C4)	Stunted or Stressed Plants (D1)
Algal Mat or Crust (B4)	ent Iron Reduction in Tilled Soils (C6)	Geomorphic Position (D2)
Iron Deposits (B5) Th	n Muck Surface (C7)	Shallow Aquitard (D3)
Inundation Visible on Aerial Imagery (B7) Ot	ner (Explain in Remarks)	Microtopographic Relief (D4)
Sparsley Vegetated Concave Surface (B8)		FAC-Neutral Test (D5)
Surface Water Present? Yes No X Dept	n (inches)	
Water Table Present? Yes No X Dept	n (inches) Wetland H	Hydrology Present? Yes No X
Saturation Present? Yes No X Dept	n (inches)	
Describe Recorded Data (stream gauge, monitoring v	rell aerial photos previous inspection	ns) if available:
Describe Recorded Data (stream gauge, monitoring v	en, deriai priotos, previous inspectior	is), ii available.
Remarks:		

VEGETATION - Use scien	itific names	of plants				Sampli	ng Point	: 1_202	10114_W	L113_U1
Tree Stratum	(Plot Size:	30'radius)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test \ Number of Dom That Are OBL, FA	inant Spe	cies	1	(A)
				_= Total Cov	ver	Total Number	er of Dom	inant —	3	(, r,) (B)
						Percent of Dor That Are OBL,	•		33.3%	_(A/B)
						Prevalence Index	Workshe	et:		
			Absolute	Dominant	Indicator	OBL species	0	x 1	0	
Shrub Stratum	(Plot Size:	15'radius)	% Cover	Species?	Status	FACW species	50	x 2	100	
						FAC species	0	x 3	0	
				= Total Cov	ver	FACU species	30	x 4	120	
						UPL species	25	x 5	125	
						Column Totals	105	(A)	345	(B)
						Prevalenc	e Index =	B/A = _	3.29	
						Hydrophytic Vege	etation In	dicators	5:	
	(DL + C:	et. at . A		Dominant		1- Rapid Tes	st For Hyd	Irophyti	c Vegeta	tion
Herb Stratum	(Plot Size:		% Cover	Species?	Status	2- Dominan	ce Test is	> 50%		
Phalaris arundinacea Trifolium pratense			50 30	X	FACW FACU	3- Prevalend	ce Index i	s =< 3.0		
Daucus carota			25	X	UPL	4- Morphol	ogical Ada	aptation	ıS	
			105	= Total Cov	ver	5- Problema	atic Hydro	phytic \	/egetatio	n
						Definitions of Veget	ation Stra	ta:		
						Tree- Woody plants breast height (DBH),	•			neter at
						Sapling/Shrub- Woo greater than or equa				and
						Herb- All herbaceous				less of
Woody Vine Stratum	(Plot Size:	30'radius)		Dominant Species?	Indicator Status	Woody Vines- All wo height.	oody vines	greater t	:han 3.28f	t in
				= Total Cov	ver	Hydropi Vegeta	ation			
						Pres	ent? Yes	S	No X	_
Remarks: (Include photo nu	umbers here	or on a sep	arate shee	t.)						

SOIL

Sampling Point: 1_20210114_WL113_U1

Matrix				Redo	x Feature	es	
Color	%	Color	%	Type	Loc	Texture	Remarks
10YR 3/2	100					Clay Loam	
10YR 3/2	90	10YR 4/2	10	С	М	Clay Loam	
2.5Y 6/1	75	7.5YR 4/6	25	С	М	Clay	
oil Indicators:							Indicators for Problematic Soils:
tosol (A1)				Polyvalu	e Below Su	ırface (B15)	2 cm Muck (A10)
tic Epipedon (A2)			Thin Dar	k Surface (S9)	Coast Prarie Redox (A16)
ck Histic (A3)				Loamy N	lucky Mine	eral (F1)	5 cm Mucky Peat or Peat (S3)
drogen Sulfide	e (A4)			Loamy G	leyed Mat	ric (F2)	Dark Surface (S7)
atified Layers	(A5)			Depleted	Matrix (F	3)	Polyvalue Below Surface (S8)
pleted Below I	Dark Su	rface (A11)		Redox D	ark Surface	e (F6)	Thin Dark Surface (S9)
ck Dark Surfac	ce (A12)	ı		Depleted	l Dark Surf	ace (F7)	Iron-Manganese Masses (F12)
ndy Mucky Mii	neral (S	1)				=	Piedmont Floodplain Soils (F19)
ndy Gleyed Ma	atrix (S4	.)					Mesic Spodic (TA6)
ndy Redox (S5))	•				•	Red Parent Material (F21)
ipped Matrix ((S6)					-	Very Shallow Dark Surface (TF12)
rk Surface (S7))						Other (Explain in Remarks)
ve Laver (if obs	erved):						
ve Layer (if obs	erved):					l lood-si	Soil Present? Yes No X
	Color 10YR 3/2 10YR 3/2 2.5Y 6/1 oil Indicators: tosol (A1) tic Epipedon (ck Histic (A3) drogen Sulfide atified Layers pleted Below I ck Dark Surfac andy Mucky Min	Color % 10YR 3/2 100 10YR 3/2 90 2.5Y 6/1 75 Dil Indicators: tosol (A1) tic Epipedon (A2) ck Histic (A3) drogen Sulfide (A4) atified Layers (A5) pleted Below Dark Su ck Dark Surface (A12) ndy Mucky Mineral (S	Color % Color 10YR 3/2 100 10YR 3/2 90 10YR 4/2 2.5Y 6/1 75 7.5YR 4/6 Dil Indicators: tosol (A1) tic Epipedon (A2) ck Histic (A3) drogen Sulfide (A4) atified Layers (A5) pleted Below Dark Surface (A11) ck Dark Surface (A12) ndy Mucky Mineral (S1) ndy Gleyed Matrix (S4) ndy Redox (S5)	Color % Color % 10YR 3/2 100 10YR 3/2 90 10YR 4/2 10 2.5Y 6/1 75 7.5YR 4/6 25 bil Indicators: tosol (A1) tic Epipedon (A2) ck Histic (A3) drogen Sulfide (A4) atified Layers (A5) pleted Below Dark Surface (A11) ck Dark Surface (A12) ndy Mucky Mineral (S1) ndy Gleyed Matrix (S4) andy Redox (S5)	Color % Color % Type 10YR 3/2 100 10YR 3/2 90 10YR 4/2 10 C 2.5Y 6/1 75 7.5YR 4/6 25 C il Indicators: tosol (A1) tic Epipedon (A2) ck Histic (A3) drogen Sulfide (A4) atified Layers (A5) pleted Below Dark Surface (A11) ck Dark Surface (A12) ndy Mucky Mineral (S1) ndy Gleyed Matrix (S4) ndy Redox (S5)	Color % Color % Type Loc 10YR 3/2 100 10YR 3/2 90 10YR 4/2 10 C M 2.5Y 6/1 75 7.5YR 4/6 25 C M Dil Indicators: tosol (A1)	Color % Color % Type Loc Texture 10YR 3/2 100

Project/Site: Cider Solar Project		City/C	ounty: Elba/Genesse	ee	Sampling Date: 1/14/2021
Applicant/Owner: Hecate				State: NY	Sampling Point: WL114_W
Investigator(s): Andrew Sorci		Section	on, Township, Range:		
Landform (hillslope, terrace,etc.): Dip	1	Local reli	ef (concave, convex,	none): <u>Conca</u>	slope (%) <u>2 - 5</u>
Subregion (LRR or MLRA): LRR R		Lat: 43.110617	Long:	78.196939	Datum: NAD83
Soil Map Unit Name: Ld Lamson very f	ine sandy	y loam		NWI Class	ification: PEM
Are climatic / hyrologic conditions on t	he site ty	pical for this time of ye	ear? Yes <u>X</u> No	(if no,	explain in Remarks.)
Are Vegetation , Soil , or Hy	drology	significantly distu	rbed? Are "Normal	Circumstances	s" present? Yes X No
Are Vegetation, Soil, or Hy	drology	naturally problem	natic? (if needed, exp	olain any answei	rs in Remarks.)
SUMMARY OF FINDINGS - Attach s	ite map	showing sampling p	oint locations. tran	nsects. impor	tant features. etc.
	es X	No	Is the Sampled Area		•
Hydric Soil Present? Y	es X	 No	within a Wetland?	,	Yes X No
	es X	 No	if yes, optional Wet	land Site ID:	WL114
Remarks: (Explain alternative procedures here	-	<u> </u>		-	
HYDROLOGY Wetland Hydrology Indicators:				Secondary Indi	icators (minimum of two required)
Primary Indicators (minimum of one is rec	nuired: ch	eck all that annly)			Soil Cracks (B6)
Surface Water (A1)	quirea. em	Water-Stained Leaves	s (R9)		Patterns (B10)
High Water Table (A2)		Aquatic Fauna (B13)	3 (03)		m Lines (B16)
Saturation (A3)	_	Marl Deposits (B15)			on Water Table (C2)
Water Marks (B1)		Hydrogen Sulfide Odd	or (C1)	 '	Burrows (C8)
Sediment Deposits (B2)			es on Living Roots (C3)		on Visible in Aerial Imagery (C9)
Drift Deposits (B3)	_	Presence of Reduced			or Stressed Plants (D1)
Algal Mat or Crust (B4)		Recent Iron Reduction	` ,	 '	phic Position (D2)
Iron Deposits (B5)		Thin Muck Surface (C			Aquitard (D3)
Inundation Visible on Aerial Imagery	(B7)	Other (Explain in Rem	narks)	Microtop	oographic Relief (D4)
Sparsley Vegetated Concave Surface	(B8)			X FAC-Neu	tral Test (D5)
Surface Water Present? Yes N	No X	Depth (inches)			
Water Table Present? Yes N	lo X	Depth (inches)	Wetland I	Hydrology Pres	sent? Yes X No
Saturation Present? YesN	lo X	Depth (inches)	_		
Describe Recorded Data (stream gauge	e, monito	oring well, aerial photos	s, previous inspectior	ns), if available	::
Remarks:					
nemarks.					

	tific names	of plants				Sampli	ng Point	: WL1	14_W1	
Tree Stratum	(Plot Size:	30'radius)	Absolute % Cover	Dominant Species?	Indicator Status	Number of Dom	inant Spe	cies	1	(A)
				_= Total Cov	ver .	Total Number Species Ac	er of Dom ross All St	inant trata:	1	(B)
						Percent of Dor That Are OBL,	•		100%	_(A/B)
						Prevalence Index	Workshe	et:		
			Absolute	Dominant	Indicator	OBL species	0	x 1	0	
Shrub Stratum	(Plot Size:	15'radius)	% Cover	Species?	Status	FACW species	100	x 2	200	
						FAC species	0	x 3	0	
				_= Total Cov	ver .	FACU species	0	x 4	0	
						UPL species	0	x 5	0	
						Column Totals	100	(A)	200	(B)
						Prevalenc	ce Index =	B/A =	2	
						Hydrophytic Vege	tation In	dicator	·s:	
			Absolute	Dominant	Indicator	X 1- Rapid Tes				tion
Herb Stratum	(Plot Size:	5'radius)	% Cover	Species?	Status	X 2- Dominan	-		J	
Phalaris arundinacea			95	X	FACW	X 3- Prevalence)	
Symphyotrichum lance	eolatum		<u>5</u> 100	= Total Cov	FACW	4- Morphol				
			100	10tal cov	vei	5- Problema	_	=		n
						Definitions of Veget	ation Stra	ta:		
						Tree- Woody plants breast height (DBH),	•			neter at
						Sapling/Shrub- Woo greater than or equa				and
						Herb- All herbaceous				less of
Woody Vine Stratum	(Plot Size:	30'radius)		Dominant Species?	Indicator Status	Woody Vines- All wo height.	ody vines	greater	than 3.28f	t in
				_= Total Cov	ver	Hydropl Vegeta Pres	ation	. V	No	

eID: 20210202094641

SOIL Sampling Point: WL114_W1

Depth	Matrix	(Redo	x Featu	res	
(inches	Color	%	Color	%	Type	Loc	Texture	Remarks
0-3	10YR 3/2	100					Sandy Loam	
3-16	10YR 4/2	85	10YR 4/4	15	С	М	Sandy Clay Loam	
Hvdric So	oil Indicators:							Indicators for Problematic Soils:
•	tosol (A1)				Polyvalu	e Below S	Surface (B15)	2 cm Muck (A10)
His	tic Epipedon ((A2)			Thin Dar	k Surface	(S9)	Coast Prarie Redox (A16)
Bla	ck Histic (A3)				Loamy N	lucky Mii	neral (F1)	5 cm Mucky Peat or Peat (S3)
Нус	drogen Sulfide	e (A4)			Loamy G	leyed Ma	atric (F2)	Dark Surface (S7)
Stra	atified Layers	(A5)		Х	Depleted	l Matrix (F3)	Polyvalue Below Surface (S8)
Dep	oleted Below	Dark Sui	rface (A11)		Redox D	ark Surfa	ce (F6)	Thin Dark Surface (S9)
Thi	ck Dark Surfac	ce (A12)			Depleted	l Dark Su	rface (F7)	Iron-Manganese Masses (F12)
San	idy Mucky Mi	neral (S	1)		Redox D	epressior	ıs (F8)	Piedmont Floodplain Soils (F19)
San	idy Gleyed Ma	atrix (S4)					Mesic Spodic (TA6)
San	dy Redox (S5)						Red Parent Material (F21)
Stri	pped Matrix ((S6)						Very Shallow Dark Surface (TF12
Dar	k Surface (S7))						Other (Explain in Remarks)
Restrictiv	ve Layer (if obs	served):						
		Type:					Hydric	Soil Present? Yes X No
	Depth (in	- nches):					, , , , , , ,	
		_						
	s:							
Remarks								

Project/Site: Cider Solar Project		City/Co	ounty: Elba/Genesse	ee	Sam	pling Date: 1/14/2021
Applicant/Owner: Hecate				State		ampling Point:
Investigator(s): Andrew Sorci		Sectio	on, Township, Range:		1.	_20210114_WL114_W2
Landform (hillslope, terrace,etc.): <u>Dip</u>	1	Local relie	ef (concave, convex, r	none):	: Concave	Slope (%) <u>1 - 3</u>
Subregion (LRR or MLRA): LRR R		Lat: 43.110749	Long:7	78.197	7205	Datum: NAD83
Soil Map Unit Name: Ld Lamson very	fine sandy	loam		N\	WI Classification	on: PFO
Are climatic / hyrologic conditions on t	he site typ	ical for this time of ye	ar? Yes X No		(if no, expla	ain in Remarks.)
Are Vegetation, Soil, or Hy	drology _	significantly distur	bed? Are "Normal (Circun	nstances" pre	sent? Yes X No
Are Vegetation, Soil, or Hy	drology _	naturally problem	atic? (if needed, exp	lain an	ny answers in Re	emarks.)
SUMMARY OF FINDINGS - Attach si	ite map s	howing sampling po	oint locations, tran	sects	, important	features, etc.
Hydrophytic Vegetation Present? Y	'es X	No	Is the Sampled Area	a		
Hydric Soil Present? Y	'es X	No	within a Wetland?		Yes_	X No
Wetland Hydrology Present? Y	es X	No	if yes, optional Wetl	land S	ite ID:	WL114
Remarks: (Explain alternative procedures here	от пта зерага	ясе героп.)				
HYDROLOGY						
Wetland Hydrology Indicators:				Secor	ndary Indicators	s (minimum of two required)
Primary Indicators (minimum of one is rec	quired: chec	k all that apply)			Surface Soil Cra	acks (B6)
Surface Water (A1)		Water-Stained Leaves	s (B9)		Drainage Patte	rns (B10)
High Water Table (A2)		Aquatic Fauna (B13)	_	Х	Moss Trim Line	es (B16)
Saturation (A3)		Marl Deposits (B15)	_		Dry-Season Wa	iter Table (C2)
Water Marks (B1)		Hydrogen Sulfide Odo	or (C1)		Crayfish Burrov	vs (C8)
Sediment Deposits (B2)		Oxidized Rhizosphere	s on Living Roots (C3)		Saturation Visib	ble in Aerial Imagery (C9)
Drift Deposits (B3)		Presence of Reduced	Iron (C4)		Stunted or Stre	essed Plants (D1)
Algal Mat or Crust (B4)		Recent Iron Reduction	n in Tilled Soils (C6)	Х	Geomorphic Po	osition (D2)
Iron Deposits (B5)		Thin Muck Surface (C	7)		Shallow Aquita	rd (D3)
Inundation Visible on Aerial Imagery	(B7)	Other (Explain in Rem	arks)		Microtopograp	hic Relief (D4)
Sparsley Vegetated Concave Surface	(B8)		_	X	FAC-Neutral Te	est (D5)
Surface Water Present? Yes N	No X [Depth (inches)				
Water Table Present? Yes N	No X	Depth (inches)	Wetland H	Hydrol	logy Present?	Yes X No
Saturation Present? Yes N	No X	Depth (inches)				
Describe Recorded Data (stream gauge	e, monitor	ing well, aerial photos	s, previous inspection	ns), if a	available:	
Remarks:						

VEGETATION - Use scientific names of plants Sampling Point: 1_20210114_WL114_W2 Absolute Dominant Indicator **Dominance Test Worksheet:** (Plot Size: 30'radius) % Cover Species? Status **Tree Stratum Number of Dominant Species** Populus deltoides 75 FAC That Are OBL. FACW, or FAC: (A) Χ 3 Fraxinus pennsylvanica 15 **FACW Total Number of Dominant** 90 = Total Cover Species Across All Strata: 3 (B) Percent of Dominant Species That Are OBL, FACW, or FAC: 100% (A/B) Prevalence Index Worksheet: OBL species x 1 0 Absolute Dominant Indicator 35 70 (Plot Size: 15'radius) % Cover Species? Status **FACW** species x 2 **Shrub Stratum FACW** Cornus amomum 20 Χ FAC species 90 270 х3 Rhamnus cathartica 15 Χ FAC FACU species 0 0 x 4 35 = Total Cover **UPL** species O x 5 0 Column Totals 125 (A) 340 (B) Prevalence Index = B/A = 2.72 **Hydrophytic Vegetation Indicators:** Absolute Dominant Indicator 1- Rapid Test For Hydrophytic Vegetation (Plot Size: 5'radius) % Cover **Herb Stratum** Species? Status X 2- Dominance Test is > 50% X 3- Prevalence Index is =< 3.0 = Total Cover 4- Morphological Adaptations 5- Problematic Hydrophytic Vegetation **Definitions of Vegetation Strata:** Tree- Woody plants 3 in. (7.6cm) or more in diameter at breast height (DBH), regardless of height. Sapling/Shrub- Woody plants less than 3 in. DBH and greater than or equal to 3.28ft (1m) tall. Herb- All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28ft tall. Absolute Dominant Indicator Woody Vines- All woody vines greater than 3.28ft in (Plot Size: 30'radius) Status **Woody Vine Stratum** % Cover Species? height. = Total Cover Hydrophytic Vegetation Present? Yes X No ____ Remarks: (Include photo numbers here or on a separate sheet.)

eID: 20210202095953

SOIL Sampling Point: 1_20210114_WL114_W2

Depth	Matrix	<u> </u>			Redo	ox Featu	res	
inches	Color	%	Color	%	Type	Loc	Texture	Remarks
0-6	10YR 3/2	100					Sandy Loam	
6-18	10YR 4/1	90	10YR 4/6	10	С	М	Sandy Clay Loam	
Hydric Sc	oil Indicators:							Indicators for Problematic Soils:
His	tosol (A1)				Polyvalu	e Below	Surface (B15)	2 cm Muck (A10)
His	tic Epipedon ((A2)			Thin Dar	k Surface	e (S9)	Coast Prarie Redox (A16)
Bla	ck Histic (A3)				Loamy N	∕lucky Mi	neral (F1)	5 cm Mucky Peat or Peat (S3)
Нус	drogen Sulfide	e (A4)			Loamy G	leyed M	atric (F2)	Dark Surface (S7)
Stra	atified Layers	(A5)		Χ	Depleted	d Matrix	(F3)	Polyvalue Below Surface (S8)
De	pleted Below	Dark Su	rface (A11)		Redox D	ark Surfa	ce (F6)	Thin Dark Surface (S9)
Thi	ck Dark Surfac	ce (A12)			Depleted	d Dark Su	ırface (F7)	Iron-Manganese Masses (F12)
Sar	ndy Mucky Mi	neral (S	1)		Redox D	epressio	ns (F8)	Piedmont Floodplain Soils (F19)
Sar	ndy Gleyed Ma	atrix (S4)					Mesic Spodic (TA6)
Sar	ndy Redox (S5)						Red Parent Material (F21)
Stri	ipped Matrix ((S6)						Very Shallow Dark Surface (TF12)
Dar	rk Surface (S7))						Other (Explain in Remarks)
Restrictiv	ve Layer (if obs	erved):						
		Type:					Hydric	Soil Present? Yes X No
	Depth (in	ches):						

Remarks:

Project/Site: Cider Solar Project	City/County: Elba/Genessee	Sampling Date: 1/14/2021
Applicant/Owner: Hecate	Sta	te: NY Sampling Point:
Investigator(s): Andrew Sorci	Section, Township, Range:	1_20210114_WL114_W3
Landform (hillslope, terrace,etc.): Depression	Local relief (concave, convex, none	e): <u>Linear</u> Slope (%) <u>1 - 3</u>
Subregion (LRR or MLRA): LRR R	Lat: _43.111123 Long:78.1	.97929 Datum: NAD83
Soil Map Unit Name: HIB Hilton loam, 3 to 8 p	ercent slopes	NWI Classification: PSS
Are climatic / hyrologic conditions on the site t	ypical for this time of year? Yes X No	(if no, explain in Remarks.)
Are Vegetation $___$, Soil $___$, or Hydrology	significantly disturbed? Are "Normal Circ	umstances" present? Yes X No
Are Vegetation, Soil, or Hydrology	naturally problematic? (if needed, explain	any answers in Remarks.)
SUMMARY OF FINDINGS - Attach site map	showing sampling point locations, transec	ts. important features. etc.
Hydrophytic Vegetation Present? Yes X	No Is the Sampled Area	
Hydric Soil Present? Yes X	No within a Wetland?	Yes X No
Wetland Hydrology Present? Yes X	No if yes, optional Wetland	I Site ID: WL114
Remarks: (Explain alternative procedures here or in a sep		
	arate reports,	
HYDROLOGY		
Wetland Hydrology Indicators:	Sec	condary Indicators (minimum of two required)
Primary Indicators (minimum of one is required: ch		Surface Soil Cracks (B6)
Surface Water (A1)		Drainage Patterns (B10)
High Water Table (A2)	Aquatic Fauna (B13)	Moss Trim Lines (B16)
Saturation (A3)	Marl Deposits (B15)	Pry-Season Water Table (C2)
Water Marks (B1)	Hydrogen Sulfide Odor (C1)	Crayfish Burrows (C8)
Sediment Deposits (B2)	Oxidized Rhizospheres on Living Roots (C3)	Saturation Visible in Aerial Imagery (C9)
Drift Deposits (B3)	Presence of Reduced Iron (C4)	Stunted or Stressed Plants (D1)
Algal Mat or Crust (B4)	Recent Iron Reduction in Tilled Soils (C6) X	Geomorphic Position (D2)
Iron Deposits (B5)	Thin Muck Surface (C7)	Shallow Aquitard (D3)
Inundation Visible on Aerial Imagery (B7)	Other (Explain in Remarks)	— Microtopographic Relief (D4)
Sparsley Vegetated Concave Surface (B8)		FAC-Neutral Test (D5)
Surface Water Present? Yes No X	Depth (inches)	
Water Table Present? Yes No X	- · · · · · 	rology Present? Yes X No
Saturation Present? Yes No X	Depth (inches)	
Describe Recorded Data (stream gauge, monit	oring well, aerial photos, previous inspections), i	f available:
	, , , , , , , , , , , , , , , , , , , ,	
Remarks:		

VEGETATION - Use scie	ntific names of plants				Sampl	ing Point:	1_202	10114_W	L114_W
			Dominant		Dominance Test	Worksheet	t:		
Tree Stratum	(Plot Size: 30'radius)	% Cover	Species?	Status	Number of Dom That Are OBL, F			3	(A)
			_= Total Cov	ver	Total Number			4	(B)
					1			4	_ (5)
					Percent of Doi That Are OBL,	-		75%	_(A/B)
					Prevalence Index	Workshee	t:		
					OBL species	0	x 1	0	
Shrub Stratum	(Plot Size: 15'radius)	Absolute % Cover	Dominant Species?	Indicator Status	FACW species	65	x 2	130	
Cornus amomum		30	Х	FACW	FAC species	10	x 3	30	
Fraxinus pennsylvanio	ca	25	Х	FACW	FACU species	5	x 4	20	
Rhamnus cathartica		10	Total Co.	FAC	UPL species	0	^ x 5	0	
		65	_= Total Cov	ver	Column Totals	80	(A)	180	—— (B)
					_	ce Index =	_ ` ` -	2.25	`
					Hydrophytic Vege	etation Inc	licators	s:	
		Ahsolute	Dominant	Indicator	1- Rapid Te				tion
Herb Stratum	(Plot Size: 5'radius)	% Cover	Species?	Status	X 2- Dominan	•		c vegeta	LIOII
Symphyotrichum land	ceolatum	10	Х	FACW					
Solidago canadensis		5	Х	FACU	X 3- Prevalen				
		15	_= Total Cov	ver	4- Morphol	ogical Ada	ptation	IS	
					5- Problema	atic Hydro _l	phytic \	√egetatic	n
					Definitions of Veget	tation Strat	a:		
					Tree- Woody plants breast height (DBH),				ieter at
					Sapling/Shrub- Woo greater than or equa				and
					Herb- All herbaceou size, and woody plan	•		. •	less of
Woody Vine Stratum	(Plot Size: 30'radius)		Dominant Species?	Indicator Status	Woody Vines- All wo	oody vines g	greater t	:han 3.28f	t in
			= Total Cov	ver	Hydrop	hytic			
					Vegeta		.,		
					Pres	sent? Yes	X	NO	_
Remarks: (Include photo n	umbers here or on a sep	arate shee	t.)		ı				

SOIL

Sampling Point: 1_20210114_WL114_W3

Depth	Matrix				Redo	x Featu	ires	
(inches	Color	%	Color	%	Туре	Loc	Texture	Remarks
0-4	10YR 3/2	95	7.5YR 4/6	5	С	М	Sandy Clay Loam	
4-16	7.5YR 6/2	80	7.5YR 4/6	20	С	М	Sandy Clay Loam	

Hydric Soil Indicators:		Indicators for Problematic Soils:		
Histosol (A1)	Polyvalue Below Surface (B15)	2 cm Muck (A10)		
Histic Epipedon (A2)	Thin Dark Surface (S9)	Coast Prarie Redox (A16)		
Black Histic (A3)	Loamy Mucky Mineral (F1)	5 cm Mucky Peat or Peat (S3)		
Hydrogen Sulfide (A4)	Loamy Gleyed Matric (F2)	Dark Surface (S7)		
Stratified Layers (A5)	XDepleted Matrix (F3)	Polyvalue Below Surface (S8)		
Depleted Below Dark Surface (A11)	Redox Dark Surface (F6)	Thin Dark Surface (S9)		
Thick Dark Surface (A12)	Depleted Dark Surface (F7)	Iron-Manganese Masses (F12)		
Sandy Mucky Mineral (S1)	Redox Depressions (F8)	Piedmont Floodplain Soils (F19)		
Sandy Gleyed Matrix (S4)		Mesic Spodic (TA6)		
Sandy Redox (S5)		Red Parent Material (F21)		
Stripped Matrix (S6)		Very Shallow Dark Surface (TF12)		
Dark Surface (S7)		Other (Explain in Remarks)		
Restrictive Layer (if observed):				
Type:	Hyd	ric Soil Present? Yes X No		
Depth (inches):				

Remarks:

Project/Site: Cider Solar Project	City/Co	ounty: Elba/Genesse	eSam	pling Date: <u>1/14/2021</u>			
Applicant/Owner: Hecate			State: <u>NY</u> S	ampling Point: WL114_U1			
Investigator(s): Andrew Sorci							
Landform (hillslope, terrace,etc.): Rise	Local relie	cal relief (concave, convex, none): <u>Convex</u> Slope (%) <u>5 - 1</u>					
Subregion (LRR or MLRA): LRR R	Lat: 43.110560	Long: -7		Datum: NAD83			
Soil Map Unit Name: OnB Ontario loam, 3 to 8	percent slopes		NWI Classificati	on: UPL			
Are climatic / hyrologic conditions on the site t				ain in Remarks.)			
Are Vegetation, Soil, or Hydrology		bed? Are "Normal C	•				
Are Vegetation, Soil, or Hydrology	naturally problema	atic? (if needed, expl	ain any answers in R	emarks.)			
SUMMARY OF FINDINGS - Attach site maj	showing sampling po	oint locations, trans	sects, important	features, etc.			
Hydrophytic Vegetation Present? Yes X	No	Is the Sampled Area					
Hydric Soil Present? Yes	No X	within a Wetland?	Yes	No X			
Wetland Hydrology Present? Yes		if yes, optional Wetla					
Remarks: (Explain alternative procedures here or in a seg			·				
HYDROLOGY							
Wetland Hydrology Indicators:		<u>.</u>		s (minimum of two required)			
Primary Indicators (minimum of one is required: cl			Surface Soil Cra				
Surface Water (A1)	Water-Stained Leaves	(B9)	Drainage Patte	rns (B10)			
High Water Table (A2)	Aquatic Fauna (B13)	=	Moss Trim Line	es (B16)			
Saturation (A3)	Marl Deposits (B15)	Deposits (B15) Dry-Season Water Table (C2)					
Water Marks (B1)	Hydrogen Sulfide Odo	r (C1)	Crayfish Burrov	ws (C8)			
Sediment Deposits (B2)	Oxidized Rhizospheres	on Living Roots (C3)	ing Roots (C3)Saturation Visible in Aerial Imagery (C9)				
Drift Deposits (B3)	Presence of Reduced I	d Iron (C4) Stunted or Stressed Plants (D1)					
Algal Mat or Crust (B4)	Recent Iron Reduction	deduction in Tilled Soils (C6) Geomorphic Position (D2)					
Iron Deposits (B5)	Thin Muck Surface (C7	')	Shallow Aquitard (D3)				
Inundation Visible on Aerial Imagery (B7)	Other (Explain in Rema	arks)	Microtopographic Relief (D4)				
Sparsley Vegetated Concave Surface (B8)		_	FAC-Neutral Te	est (D5)			
Surface Water Present? Yes No X	Depth (inches)						
Water Table Present? Yes No X	Depth (inches)	Wetland H	ydrology Present?	Yes No X			
Saturation Present? Yes No X	Depth (inches)	_					
Describe Recorded Data (stream gauge, monit	toring well, aerial photos	previous inspections	s). if available:				
	,	, p	.,,				
Remarks:							

	tific names o	of plants				Sampli	ng Point	: WL1	14_U1	
Tree Stratum	(Plot Size:	30'radius)	Absolute % Cover	Dominant Species?	Indicator Status	Number of Dom	inant Spe	cies	1	(A)
				_= Total Cov	ver	Total Number	ross All St	rata:	1	(B)
						Percent of Dor That Are OBL,	•		100%	_(A/B)
						Prevalence Index	Workshe	et:		
			Absolute	Dominant	Indicator	OBL species	0	x 1	0	
Shrub Stratum	(Plot Size:	15'radius)	% Cover	Species?	Status	FACW species	85	x 2	170	
						FAC species	0	x 3	0	
				_= Total Cov	ver .	FACU species	15	x 4	60	
						UPL species	0	x 5	0	
						Column Totals	100	(A)	230	(B)
						Prevalend	e Index =	B/A =	2.3	
						Hydrophytic Vege	tation In	dicator	s:	
			Absolute	Dominant	Indicator	X 1- Rapid Tes				tion
Herb Stratum	(Plot Size: _	5'radius)	% Cover	Species?	Status	X 2- Dominan	-		_	
Phalaris arundinacea			85	Х	FACW	X 3- Prevalen)	
Solidago canadensis			<u>15</u> 100	= Total Cov	FACU	4- Morphol				
			100	_= 10tal Co	vei	5- Problema	_	-		on
						Definitions of Veget				
						Tree- Woody plants breast height (DBH),				ieter at
						Sapling/Shrub- Woo greater than or equa				and
						Herb- All herbaceou size, and woody plan				less of
Woody Vine Stratum	(Plot Size:	30'radius)		Dominant Species?	Status	Woody Vines- All wo height.	ody vines	greater	than 3.28f	t in
				= Total Cov	ver	Hydrop Vegeta Pres	ition	x X	No	

OIL								Sampling Point: WL114_U1		
Depth	pth Matrix			Redo	ox Featur					
(inches	Color	%	Color	%	Туре	Loc	Texture	Remarks		
0-20	10YR 3/2	98	10YR 4/4	2			Sandy Loam			
Hydric Sc	oil Indicators:							Indicators for Problematic Soils:		
	tosol (A1)				Polvvalu	e Below S	urface (B15)	2 cm Muck (A10)		
	Histic Epipedon (A2)				-	k Surface	• •	Coast Prarie Redox (A16)		
Black Histic (A3)				-	lucky Min		5 cm Mucky Peat or Peat (S3)			
Hydrogen Sulfide (A4)				-	ileyed Ma		Dark Surface (S7)			
Stratified Layers (A5)				-	d Matrix (I		Polyvalue Below Surface (S8)			
Depleted Below Dark Surface (A11)				Redox D	ark Surfac	e (F6)	Thin Dark Surface (S9)			
Thick Dark Surface (A12)				Depleted	d Dark Sur	face (F7)	Iron-Manganese Masses (F12)			
San	Sandy Mucky Mineral (S1)			Redox Depressions (F8)				Piedmont Floodplain Soils (F19)		
San	ndy Gleyed Ma	atrix (S4	1)	Mesic Spodic (TA6)				Mesic Spodic (TA6)		
San	ndy Redox (S5))						Red Parent Material (F21)		
Stri	ipped Matrix ((S6)						Very Shallow Dark Surface (TF12		
Dar	rk Surface (S7))						Other (Explain in Remarks)		
Restrictiv	ve Layer (if obs	erved):								
		Type:					Hydri	c Soil Present? Yes No X		
	Depth (in	iches):								
Remarks	s:									

Project/Site: Cider Solar Project	City/C	ounty: Elba/Genesse	Sampling Date: 1/1	5/2021				
Applicant/Owner: Hecate	State: NY Sampling Point:							
Investigator(s): Andrew Sorci	Section	on, Township, Range:	1_20210115_WL1	.15_W1				
Landform (hillslope, terrace,etc.): Dip	Local reli	ef (concave, convex, r	one): <u>Concave</u> Slope (%) <u>2</u>	<u> 2</u> - 5				
Subregion (LRR or MLRA): LRR R	Lat: 43.094836	Long:7	8.253690 Datum: <u>NAI</u>	283				
Soil Map Unit Name: Ma Madalin silty clay loa	am, 0 to 3 percent slope	S	NWI Classification: PEM					
Are climatic / hyrologic conditions on the site \ensuremath{t}	cypical for this time of ye	ear? Yes <u>X</u> No	(if no, explain in Remarks.)					
Are Vegetation \underline{X} , Soil $\underline{\hspace{1cm}}$, or Hydrology	significantly distu	rbed? Are "Normal (ircumstances" present? Yes X	No				
Are Vegetation, Soil, or Hydrology	naturally problem	atic? (if needed, exp	ain any answers in Remarks.)					
SUMMARY OF FINDINGS - Attach site map	showing sampling p	oint locations, tran	sects, important features, etc.					
Hydrophytic Vegetation Present? Yes	No X	Is the Sampled Area						
Hydric Soil Present? Yes X	No No	within a Wetland?	Yes X No					
•		if yes, optional Wetl		=				
Wetland Hydrology Present? Yes X Remarks: (Explain alternative procedures here or in a seg	No	ii yes, optional weti	WEII3					
nemana. (Explain alternative procedures nere of in a sep	sardie reporti							
HYDROLOGY								
Wetland Hydrology Indicators:			Secondary Indicators (minimum of two	required)				
Primary Indicators (minimum of one is required: cl	neck all that annly)		Surface Soil Cracks (B6)					
X Surface Water (A1)	Water-Stained Leaves	- (RQ)	Drainage Patterns (B10)					
		3 (03)	Moss Trim Lines (B16)					
X High Water Table (A2)	Aquatic Fauna (B13)							
X Saturation (A3)	Marl Deposits (B15)	(C4)	Dry-Season Water Table (C2)					
Water Marks (B1)		ydrogen Sulfide Odor (C1) Crayfish Burrows (C8)						
Sediment Deposits (B2)		res on Living Roots (C3) Saturation Visible in Aerial Imagery (C9)						
Drift Deposits (B3)	Presence of Reduced							
Algal Mat or Crust (B4)	Recent Iron Reduction	on in Tilled Soils (C6) X Geomorphic Position (D2)						
Iron Deposits (B5)	Thin Muck Surface (C	7)	Shallow Aquitard (D3)					
Inundation Visible on Aerial Imagery (B7)	Other (Explain in Rem	narks)	Microtopographic Relief (D4)					
Sparsley Vegetated Concave Surface (B8)			FAC-Neutral Test (D5)					
Surface Water Present? Yes X No	Depth (inches) 1	_						
Water Table Present? Yes X No	Depth (inches) 6	Wetland F	ydrology Present? Yes X No					
Saturation Present? Yes X No	Depth (inches) 0							
Describe Recorded Data (stream gauge, monit	toring well, aerial photos	s, previous inspection	s), if available:					
2								
Remarks:								

ntific names of plants				Sampling Point: 1_20210115_WL11	15_W
(Plot Size: 30'radius)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test Worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: 0 (/	A)
		= Total Cov	ver	Total Number of Dominant Species Across All Strata: 1 (Figure 1) Percent of Dominant Species	B) A/B)
				Prevalence Index Worksheet:	
	Absoluto	Dominant	Indicator	OBL species 0 x 1 0	
(Plot Size: 15'radius)	% Cover	Species?	Status	FACW species 0 x 2 0	_
				FAC species 0 x 3 0	_
		= Total Cov	ver	FACU species 0 x 4 0	_
				UPL species 0 x 5 0	_
				Column Totals 0 (A) 0	(B)
				Prevalence Index = B/A = 0	_
				Hydrophytic Vegetation Indicators:	
		Dominant	Indicator	1- Rapid Test For Hydrophytic Vegetatio	n
(Plot Size:5'radius)	% Cover	Species?	Status	2- Dominance Test is > 50%	
	5	X Tatal Car	UNK	3- Prevalence Index is =< 3.0	
	5	_= 10tal Cov	er	4- Morphological Adaptations	
				5- Problematic Hydrophytic Vegetation	
				Definitions of Vegetation Strata:	
				Tree- Woody plants 3 in. (7.6cm) or more in diameted breast height (DBH), regardless of height.	er at
				Sapling/Shrub- Woody plants less than 3 in. DBH and greater than or equal to 3.28ft (1m) tall.	d
				Herb- All herbaceous (non-woody) plants, regardles size, and woody plants less than 3.28ft tall.	s of
(Plot Size: 30'radius)			Indicator Status	Woody Vines- All woody vines greater than 3.28ft in height.	1
		= Total Cov	ver	Hydrophytic	
	(Plot Size: 15'radius)	(Plot Size: 30'radius) % Cover (Plot Size: 15'radius) Absolute (Plot Size: 5'radius) 5 5 5 Absolute	(Plot Size: 30'radius) % Cover Species? Absolute Dominant % Cover Species? (Plot Size: 15'radius) Absolute Species? Absolute Dominant % Cover Species? 5 X 5 Total Cover Species? Absolute Dominant Species? Absolute Dominant Species?	Absolute Dominant Indicator Species? Status	Prevalence Index Worksheet: Absolute Dominant Indicator

SOIL Sampling Point: 1_20210115_WL115_W1

Depth	Depth Matrix				Redo	ox Featu	res	
(inches	Color	%	Color	Color % Type Loc Texture		Remarks		
0-4	10YR 3/1	100					Sandy Loan	n
4-16	10YR 4/1	95	10YR 4/4	5	С	М	Sandy Clay Lo	pam
-	il Indicators:							Indicators for Problematic Soils:
	tosol (A1)			Polyvalue Below Surface (B15)				2 cm Muck (A10)
	tic Epipedon ((A2)			•	k Surface	• •	Coast Prarie Redox (A16)
Blac	ck Histic (A3)				Loamy N	lucky Mi	neral (F1)	5 cm Mucky Peat or Peat (S3)
Нус	lrogen Sulfide	e (A4)			Loamy G	ileyed Ma	atric (F2)	Dark Surface (S7)
Stra	atified Layers	(A5)		Х	Depleted	d Matrix	(F3)	Polyvalue Below Surface (S8)
Dep	oleted Below	Dark Sui	rface (A11)		Redox D	ark Surfa	ce (F6)	Thin Dark Surface (S9)
Thi	ck Dark Surfac	ce (A12)			Depleted	d Dark Su	ırface (F7)	Iron-Manganese Masses (F12)
San	dy Mucky Mi	neral (S:	1)		Redox D	epression	ns (F8)	Piedmont Floodplain Soils (F19)
San	dy Gleyed Ma	atrix (S4)					Mesic Spodic (TA6)
San	dy Redox (S5))						Red Parent Material (F21)
Stri	Stripped Matrix (S6)							Very Shallow Dark Surface (TF12)
Dar	k Surface (S7))						Other (Explain in Remarks)
Dootuicti.	/:f - b -							
Restrictiv	e Layer (if obs	erved):						
Restrictiv	e Layer (if obs	erved): Type:					Ну	dric Soil Present? Yes X No

Remarks:

Project/Site: Cider Solar Project	City/Co	ounty: Elba/Genessee	Sampling Date: 1/15/2021					
Applicant/Owner: Hecate	State: NY Sampling Point:							
Investigator(s): Andrew Sorci	Section	Section, Township, Range: 1_20210115_WL115_W2						
Landform (hillslope, terrace,etc.): Dip	Local relie	Local relief (concave, convex, none): None Slope (%) 2 - 5						
Subregion (LRR or MLRA): LRR R	Lat: 43.094665	Long:78.2	253044 Datum: NAD83					
Soil Map Unit Name: Ma Madalin silty clay	loam, 0 to 3 percent slopes	5	NWI Classification: PFO					
Are climatic / hyrologic conditions on the site	e typical for this time of ye	ar? Yes X No	(if no, explain in Remarks.)					
Are Vegetation, Soil, or Hydrolog	gy significantly distur	bed? Are "Normal Circ	cumstances" present? Yes X No					
Are Vegetation, Soil, or Hydrolog	gynaturally problem	atic? (if needed, explain	any answers in Remarks.)					
SUMMANDY OF FINIDINGS. Attack site was	an ahawina samulina n	aint lacations tuansa	oto improvedent footuvos etc					
SUMMARY OF FINDINGS - Attach site m		•	ets, important features, etc.					
	X No	Is the Sampled Area within a Wetland?						
Hydric Soil Present? Yes	X No		Yes X No					
Wetland Hydrology Present? Yes	X No	if yes, optional Wetland	d Site ID:					
Remarks: (Explain alternative procedures here or in a	separate report.)							
HYDROLOGY								
Wetland Hydrology Indicators:		Sec	condary Indicators (minimum of two required)					
Primary Indicators (minimum of one is required:	: check all that apply)		Surface Soil Cracks (B6)					
Surface Water (A1)	Water-Stained Leaves	G (B9)	Drainage Patterns (B10)					
X High Water Table (A2)	Aquatic Fauna (B13)		Moss Trim Lines (B16)					
X Saturation (A3)	Marl Deposits (B15)		- Dry-Season Water Table (C2)					
Water Marks (B1)	Hydrogen Sulfide Odd	or (C1)	Crayfish Burrows (C8)					
Sediment Deposits (B2)	Oxidized Rhizosphere		Saturation Visible in Aerial Imagery (C9)					
Drift Deposits (B3)	Presence of Reduced		Stunted or Stressed Plants (D1)					
Algal Mat or Crust (B4)	Recent Iron Reduction		Geomorphic Position (D2)					
Iron Deposits (B5)	Thin Muck Surface (C	` ' —	Shallow Aquitard (D3)					
		·						
Inundation Visible on Aerial Imagery (B7)	Other (Explain in Rem		Microtopographic Relief (D4)					
Sparsley Vegetated Concave Surface (B8)			FAC-Neutral Test (D5)					
Surface Water Present? Yes No	Depth (inches)	_						
Water Table Present? Yes X No	Depth (inches) 8	Wetland Hyd	rology Present? Yes X No					
Saturation Present? Yes X No	Depth (inches) 6	_						
Describe Recorded Data (stream gauge, mo	nitoring well aerial photos	nrevious inspections)	if available:					
zeeee neee. aea zata (en ea gaage,e		, p. c						
Remarks:								

VEGETATION - Use scien	tific names	of plants				Sampli	ng Point:	1_20	210115_W	L115_W
				Dominant		Dominance Test \	Norkshee	t:		
Tree Stratum	(Plot Size:	30'radius)	% Cover	Species?	Status	Number of Dom	inant Spec	cies		
Fraxinus pennsylvanica	1		80	X	FACW	That Are OBL, FA	ACW, or FA	۹C: _	1	(A)
			80	_= Total Cov	/er	Total Numbe Species Ac			3	(B)
						Percent of Dor That Are OBL,	•		33.3%	(A/B)
						Prevalence Index	Workshee	et:		
			Ahsoluta	Dominant	Indicator	OBL species	0	_ x 1	0	
Shrub Stratum	(Plot Size:	15'radius)	% Cover	Species?	Status	FACW species	92	x 2	184	
Lonicera morrowii			40	Х	FACU	FAC species	5	x 3	15	
			40	_= Total Cov	/er	FACU species	43	x 4	172	
						UPL species	0	x 5	0	
						Column Totals	140	(A)	371	(B)
						Prevalend	e Index =	B/A =	2.65	
						Hydrophytic Vege	etation Inc	dicato	rs:	
			Absolute	Dominant	Indicator	1- Rapid Tes	st For Hyd	rophyt	tic Vegeta	tion
Herb Stratum	(Plot Size:	5'radius)	% Cover	Species?	Status	2- Dominan	ce Test is	> 50%		
Unknown species			50	Χ	UNK	X 3- Prevalenc	sa Inday is	20	n	
Lysimachia nummulari	а		7		FACW	3- Prevalent	Le muex is	-< 5.0	J	
Heracleum maximum			5		FACW	4- Morphol	ogical Ada	ptatio	ns	
Ranunculus hispidus			5		FAC	5- Problema	atic Hydro	phytic	Vegetatio	on
Fragaria virginiana			3		FACU		-			

70 = Total Cover

Absolute Dominant Indicator

= Total Cover

Status

Definitions of Vegetation Strata:

Tree- Woody plants 3 in. (7.6cm) or more in diameter at breast height (DBH), regardless of height.

Sapling/Shrub- Woody plants less than 3 in. DBH and greater than or equal to 3.28ft (1m) tall.

Herb- All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28ft tall.

Woody Vines- All woody vines greater than 3.28ft in height.

Hydrophytic Vegetation

Present? Yes X No ____

eID: 20210202122655

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

Species of grass unidentifiable in field

Woody Vine Stratum

(Plot Size: 30'radius) % Cover Species?

SOIL

Sampling Point: 1_20210115_WL115_W2

Depth	Matrix				Redo	x Featur	es	
(inches	Color	%	Color	%	Type	Loc	Texture	Remarks
0-10	10YR 3/1	90	7.5YR 4/4	10	С	М	Clay Loam	
10-18	10YR 4/1	80	7.5YR 4/4	20	С	М	Clay Loam	

Hydric Soil Indicators:		Indicators for Problematic Soils:
Histosol (A1)	Polyvalue Below Surface (B1	2 cm Muck (A10)
Histic Epipedon (A2)	Thin Dark Surface (S9)	Coast Prarie Redox (A16)
Black Histic (A3)	Loamy Mucky Mineral (F1)	5 cm Mucky Peat or Peat (S3)
Hydrogen Sulfide (A4)	Loamy Gleyed Matric (F2)	Dark Surface (S7)
Stratified Layers (A5)	X Depleted Matrix (F3)	Polyvalue Below Surface (S8)
Depleted Below Dark Surface (A11)	Redox Dark Surface (F6)	Thin Dark Surface (S9)
Thick Dark Surface (A12)	Depleted Dark Surface (F7)	Iron-Manganese Masses (F12)
Sandy Mucky Mineral (S1)	Redox Depressions (F8)	Piedmont Floodplain Soils (F19)
Sandy Gleyed Matrix (S4)		Mesic Spodic (TA6)
Sandy Redox (S5)		Red Parent Material (F21)
Stripped Matrix (S6)		Very Shallow Dark Surface (TF12)
Dark Surface (S7)		Other (Explain in Remarks)
Restrictive Layer (if observed):		
Туре:		Undria Cail Duagant 2 Vac. V Na
		Hydric Soil Present? Yes X No
Depth (inches):		

Project/Site: Cider Solar Project	City/County: Elba/Genessee Sampling Date: 1/15/2021						
Applicant/Owner: Hecate	State: NY Sampling Point:						
Investigator(s): Andrew Sorci	Section, Township, Range: 1_20210115_WL115_U1						
Landform (hillslope, terrace,etc.): Rise	Local relief (concave, convex, none): Convex Slope (%) 3 - 8						
Subregion (LRR or MLRA): LRR R Lat: 43	.094482 Long:78.253655 Datum: NAD83						
Soil Map Unit Name: RoA Rhinebeck silt loam, 0 to 3 percent	Slopes NWI Classification: UPL						
Are climatic / hyrologic conditions on the site typical for this \boldsymbol{t}	ime of year? Yes X No (if no, explain in Remarks.)						
Are Vegetation X, Soil , or Hydrology significan	ntly disturbed? Are "Normal Circumstances" present? Yes X No						
Are Vegetation, Soil, or Hydrologynaturally	problematic? (if needed, explain any answers in Remarks.)						
SUMMARY OF FINDINGS - Attach site map showing sar	npling point locations, transects, important features, etc.						
Hydrophytic Vegetation Present? Yes No X	Is the Sampled Area						
Hydric Soil Present? Yes No X	within a Wetland? Yes NoX						
Wetland Hydrology Present? Yes No X	if yes, optional Wetland Site ID:						
Remarks: (Explain alternative procedures here or in a separate report.)							
HYDROLOGY							
Wetland Hydrology Indicators:	Secondary Indicators (minimum of two required)						
Primary Indicators (minimum of one is required: check all that appl	y) Surface Soil Cracks (B6)						
Surface Water (A1) Water-Stain	ned Leaves (B9) Drainage Patterns (B10)						
High Water Table (A2)	una (B13) Moss Trim Lines (B16)						
Saturation (A3)Marl Depos	its (B15) Dry-Season Water Table (C2)						
Water Marks (B1) Hydrogen S	culfide Odor (C1) Crayfish Burrows (C8)						
Sediment Deposits (B2)Oxidized Rh	nizospheres on Living Roots (C3) Saturation Visible in Aerial Imagery (C9)						
Drift Deposits (B3)Presence or	f Reduced Iron (C4) Stunted or Stressed Plants (D1)						
Algal Mat or Crust (B4)Recent Iron	Reduction in Tilled Soils (C6) Geomorphic Position (D2)						
Iron Deposits (B5)Thin Muck	Surface (C7)Shallow Aquitard (D3)						
Inundation Visible on Aerial Imagery (B7) Other (Expl	ain in Remarks) Microtopographic Relief (D4)						
Sparsley Vegetated Concave Surface (B8)	FAC-Neutral Test (D5)						
Surface Water Present? Yes No X Depth (inche	s)						
Water Table Present? Yes No X Depth (inche	s) Wetland Hydrology Present? Yes No X						
Saturation Present? Yes No X Depth (inche	s)						
Describe Recorded Data (stream gauge, monitoring well, aer	ial photos, previous inspections), if available:						
3. 3. 3. 3. 3. 3. 3. 3. 4. 3. 3. 3. 3. 3. 3. 3. 3. 3. 3. 3. 3. 3.	- p						
Remarks:							

	tific names of plants				Sampling Point: 1_20210115_WL115_
Tree Stratum	(Plot Size: 30'radius)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test Worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: 0 (A)
			= Total Cov	/er	Total Number of Dominant Species Across All Strata: 1 (B)
					Percent of Dominant Species That Are OBL, FACW, or FAC: 0% (A/I
					Prevalence Index Worksheet:
		Absolute	Dominant	Indicator	OBL species 0 x 1 0
Shrub Stratum	(Plot Size:15'radius_)	% Cover	Species?	Status	FACW species 0 x 2 0
					FAC species 0 x 3 0
			_= Total Cov	/er	FACU species 0 x 4 0
					UPL species 15 x 5 75
					Column Totals 15 (A) 75
					Prevalence Index = B/A = 5
					Hydrophytic Vegetation Indicators:
		Absolute	Dominant	Indicator	1- Rapid Test For Hydrophytic Vegetation
Herb Stratum	(Plot Size: 5'radius)	% Cover	Species?	Status	2- Dominance Test is > 50%
Zea mays		15	X	UPL	3- Prevalence Index is =< 3.0
		15	_= Total Cov	/er	4- Morphological Adaptations
					5- Problematic Hydrophytic Vegetation
					Definitions of Vegetation Strata:
					Tree- Woody plants 3 in. (7.6cm) or more in diameter breast height (DBH), regardless of height.
					Sapling/Shrub- Woody plants less than 3 in. DBH and greater than or equal to 3.28ft (1m) tall.
					Herb- All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28ft tall.
Woody Vine Stratum	(Plot Size: 30'radius)		Dominant Species?	Indicator Status	Woody Vines- All woody vines greater than 3.28ft in height.
			_= Total Cov	/er	Hydrophytic Vegetation Present? Yes NoX

eID: 20210202125859

SOIL

Sampling Point: 1_20210115_WL115_U1

Depth	Matrix			Redox Features			res	
inches	Color	%	Color	%	Туре	Loc	Texture	Remarks
0-12	10YR 4/3	99	10YR 4/6	1	С	М	Clay Loam	
12-20	2.5Y 5/3	60	10YR 4/6	40	С	M	Sandy Clay Loam	
Hydric So	oil Indicators:						ı	ndicators for Problematic Soils:
His	tosol (A1)				Polyvalu	e Below :	Surface (B15)	2 cm Muck (A10)
His	tic Epipedon (A2)		Thin Dark Surface (S9)				Coast Prarie Redox (A16)
Bla	ck Histic (A3)			Loamy Mucky Mineral (F1)				5 cm Mucky Peat or Peat (S3)
Нус	drogen Sulfide	(A4)		Loamy Gleyed Matric (F2)				Dark Surface (S7)
Stra	atified Layers	(A5)			Depleted	d Matrix	(F3)	Polyvalue Below Surface (S8)
Dep	oleted Below I	Dark Su	rface (A11)		Redox D	ark Surfa	ce (F6)	Thin Dark Surface (S9)
Thi	ck Dark Surfac	e (A12)			Depleted	d Dark Su	ırface (F7)	Iron-Manganese Masses (F12)
San	ndy Mucky Mir	neral (S	1)		Redox D	epression	ns (F8)	Piedmont Floodplain Soils (F19)
San	ndy Gleyed Ma	itrix (S4	!)				_	Mesic Spodic (TA6)
San	ndy Redox (S5))					_	Red Parent Material (F21)
Stri	pped Matrix (S6)					_	Very Shallow Dark Surface (TF12)
Dar	k Surface (S7)						_	Other (Explain in Remarks)
Restrictiv	ve Layer (if obs	erved):						
		Туре:					Hydric So	oil Present? Yes No X
	Depth (in	ches):						
	5:	_		 -				

Project/Site: Cider Solar Project	City/C	ounty: Elba/Genessee	Sampli	ng Date: <u>1/15/2021</u>		
Applicant/Owner: Hecate		Sta		pling Point:		
Investigator(s): Andrew Sorci	Section	on, Township, Range: _	1_20	0210115_WL116_W1		
Landform (hillslope, terrace,etc.): Depression	Local reli	ef (concave, convex, nor	ie): Concave	Slope (%) <u>2 - 5</u>		
Subregion (LRR or MLRA): LRR R	Lat: 43.092629	Long:78.		Datum: NAD83		
Soil Map Unit Name: <u>Te Teel silt loam</u>			NWI Classification	PEM		
Are climatic / hyrologic conditions on the site \ensuremath{t}	typical for this time of ye	ear? Yes <u>X</u> No	(if no, explain	in Remarks.)		
Are Vegetation, Soil, or Hydrology	significantly distu	rbed? Are "Normal Circ	cumstances" preser	nt? Yes X No		
Are Vegetation, Soil, or Hydrology	naturally problem	atic? (if needed, explain	any answers in Rem	arks.)		
SUMMARY OF FINDINGS - Attach site map	showing sampling p	oint locations, transe	cts, important fea	atures, etc.		
Hydrophytic Vegetation Present? Yes X	No	Is the Sampled Area	•			
Hydric Soil Present? Yes X	 No	within a Wetland?	Yes X	No		
Wetland Hydrology Present? Yes X	 No	if yes, optional Wetlan	d Site ID: V	 VL116		
Remarks: (Explain alternative procedures here or in a seg	<u> </u>					
	ourate reporting					
HADBOLOCA						
HYDROLOGY Wetland Hydrology Indicators:		Se	condary Indicators (m	ninimum of two required)		
Primary Indicators (minimum of one is required: cl	heck all that apply)		Surface Soil Cracks	<u> </u>		
X Surface Water (A1)	Water-Stained Leave	s (B9)	 Drainage Patterns	(B10)		
X High Water Table (A2)	Aquatic Fauna (B13)		Moss Trim Lines (E			
X Saturation (A3)	Marl Deposits (B15)		 Dry-Season Water			
Water Marks (B1)	Hydrogen Sulfide Odd	 or (C1)	Crayfish Burrows (` ,		
Sediment Deposits (B2)	X Oxidized Rhizosphere			in Aerial Imagery (C9)		
Drift Deposits (B3)	Presence of Reduced					
	Recent Iron Reductio		Stunted or Stressed Plants (D1)			
Algal Mat or Crust (B4)		` ′ =	Geomorphic Position (D2)			
Iron Deposits (B5)	Thin Muck Surface (C		Shallow Aquitard (
Inundation Visible on Aerial Imagery (B7)	Other (Explain in Rem	narks)	Microtopographic			
Sparsley Vegetated Concave Surface (B8)			FAC-Neutral Test (D5)		
Surface Water Present? Yes X No	Depth (inches) 2	_				
Water Table Present? Yes X No	Depth (inches) 8	Wetland Hyd	rology Present?	/es X No		
Saturation Present? Yes X No	Depth (inches) 6	_				
Describe Recorded Data (stream gauge, monit	toring well, aerial photo	s, previous inspections),	if available:			
Remarks:						
Remarks.						

	ific names	of plants				Sampli	ng Point:	1_202	210115_W	L116_W1
Tree Stratum	(Plot Size:	30'radius)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test V Number of Domi That Are OBL, FA	nant Spec	ies	1	(A)
				= Total Cov	ver	Total Numbe Species Ac			1	 _(B)
						Percent of Don That Are OBL,	-		100%	(A/B)
						Prevalence Index \	Workshee	t:		
			Absolute	Dominant	Indicator	OBL species	0	_ x 1	0	
Shrub Stratum	(Plot Size:	15'radius)	% Cover	Species?	Status	FACW species	100	_ x 2	200	
						FAC species	5	_ x 3	15	
				= Total Cov	ver	FACU species	0	_ x 4	0	
						UPL species	0	x 5	0	
						Column Totals	105	(A)	215	(B)
						Prevalenc	e Index = I	B/A =	2.05	
						Hydrophytic Vege	tation Ind	icator	s:	
			Absolute	Dominant	Indicator	X 1- Rapid Tes				tion
Herb Stratum	(Plot Size:	5'radius)	% Cover	Species?	Status	X 2- Dominan	-		J	
Phalaris arundinacea			100	Χ	FACW	X 3- Prevalenc)	
Xanthium strumarium			<u>5</u> 105	= Total Cov	FAC	4- Morpholo				
			103	_= 10tal cov	rei	5- Problema				on
						Definitions of Veget	ation Strata	a:		
						Tree- Woody plants breast height (DBH),	-	-		neter at
						Sapling/Shrub- Wood greater than or equa				and
						Herb- All herbaceous size, and woody plan	•			less of
Woody Vine Stratum	(Plot Size:	30'radius)	Absolute % Cover	Dominant Species?	Indicator Status	Woody Vines- All wo height.	ody vines g	reater	than 3.28f	t in
				_= Total Cov	ver	Hydroph Vegeta	-			

eID: 20210202130221

Matriy					DIL					
Depth Matrix (inches Color % Colo				Redo	x Feature					
Color	%	Color	%	Type	Loc	Texture	Remarks			
10YR 4/1	1 90 10YR 4/4 10 C PL Clay Loam									
oil Indicators:							Indicators for Problematic Soils:			
tosol (A1)				-			2 cm Muck (A10)			
	A2)				•	•	Coast Prarie Redox (A16)			
				-	=		5 cm Mucky Peat or Peat (S3)			
•	. ,						Dark Surface (S7)			
•		5 (2.4.1)					Polyvalue Below Surface (S8)			
							Thin Dark Surface (S9)			
				-			Iron-Manganese Masses (F12)			
				Redox D	epressions	(F8)	Piedmont Floodplain Soils (F19)			
	-	1)					Mesic Spodic (TA6)			
•							Red Parent Material (F21)			
							Very Shallow Dark Surface (TF12)			
k Surface (S7)	1						Other (Explain in Remarks)			
ve Layer (if obs	erved):									
	Type:					Hvdri	c Soil Present? Yes X No			
Depth (in	ches):									
s:										
t t c c c c c c c c c c c c c c c c c c	nil Indicators: tosol (A1) tic Epipedon (ck Histic (A3) drogen Sulfide atified Layers bleted Below I ck Dark Surfac dy Mucky Min dy Gleyed Ma dy Redox (S5) pped Matrix (ck Surface (S7) ve Layer (if obs	nil Indicators: tosol (A1) tic Epipedon (A2) ck Histic (A3) drogen Sulfide (A4) etified Layers (A5) cleted Below Dark Suck Dark Surface (A12) dry Mucky Mineral (Sady Mucky Mineral (Sady Redox (S5) dry Ped Matrix (S6) ck Surface (S7) ve Layer (if observed): Type: Depth (inches):	nil Indicators: tosol (A1) tic Epipedon (A2) ck Histic (A3) drogen Sulfide (A4) etified Layers (A5) cleted Below Dark Surface (A11) ck Dark Surface (A12) edy Mucky Mineral (S1) edy Gleyed Matrix (S4) edy Redox (S5) epped Matrix (S6) ek Surface (S7) ve Layer (if observed): Type: Depth (inches):	atil Indicators: tosol (A1) tic Epipedon (A2) ck Histic (A3) drogen Sulfide (A4) atified Layers (A5) Deleted Below Dark Surface (A11) ck Dark Surface (A12) ady Mucky Mineral (S1) ady Gleyed Matrix (S4) ady Redox (S5) pped Matrix (S6) ck Surface (S7) we Layer (if observed): Type: Depth (inches):	10YR 4/1 90 10YR 4/4 10 C Indicators: Itosol (A1)	10YR 4/1 90 10YR 4/4 10 C PL Polyvalue Below Summaria Polyvalue Polyvalue Below Summaria Polyvalue Poly	10YR 4/1 90 10YR 4/4 10 C PL Clay Loam Polyvalue Below Surface (B15) Thin Dark Surface (S9) Loamy Mucky Mineral (F1) Loamy Gleyed Matric (F2) Loamy Gleyed Matric (F2) Depleted Below Dark Surface (A11) Redox Dark Surface (F6) Depleted Dark Surface (F7) Redox Depressions (F8) Redox Depressions (F8)			

Project/Site: Cider Solar Project	City/Coι	unty: Elba/Genessee	Sampling Date: 1/15/2021			
Applicant/Owner: Hecate		State: NY	Sampling Point:			
Investigator(s): Andrew Sorci	Section	n, Township, Range:	1_20210115_WL116_W2			
Landform (hillslope, terrace,etc.): Depression	Local relief	(concave, convex, none): Con	ncave Slope (%) 1 - 3			
Subregion (LRR or MLRA): LRR R	Lat: 43.092738	Long: -78.255911	Datum: NAD83			
Soil Map Unit Name: Te Teel silt loam	<u> </u>	NWI Cla	assification: PFO			
Are climatic / hyrologic conditions on the site typi	ical for this time of yea	r? Yes X No (if i	no, explain in Remarks.)			
Are Vegetation , Soil , or Hydrology	significantly disturb	oed? Are "Normal Circumstan	ces" present? Yes X No			
Are Vegetation , Soil , or Hydrology	naturally problema	tic? (if needed, explain any ans	wers in Remarks.)			
SUMMARY OF FINDINGS - Attach site map sh	howing sampling poi	int locations, transects, imp	oortant features, etc.			
Hydrophytic Vegetation Present? Yes X	No I	Is the Sampled Area				
Hydric Soil Present? Yes X	No No	within a Wetland?	Yes X No			
Wetland Hydrology Present? Yes X	No i	if yes, optional Wetland Site ID	: WL116			
Remarks: (Explain alternative procedures here or in a separat	te report.)					
LIVERELECT						
HYDROLOGY Wetland Hydrology Indicators:		Secondary	Indicators (minimum of two required)			
	k all that apply)		ce Soil Cracks (B6)			
Primary Indicators (minimum of one is required: check						
X Surface Water (A1)	Water-Stained Leaves (———	age Patterns (B10)			
High Water Table (A2)	Aquatic Fauna (B13)		Trim Lines (B16)			
Saturation (A3)	Marl Deposits (B15)	·	eason Water Table (C2)			
Water Marks (B1)	Hydrogen Sulfide Odor	(C1)Crayfi	Crayfish Burrows (C8) Saturation Visible in Aerial Imagery (C9) Stunted or Stressed Plants (D1)			
Sediment Deposits (B2)	Oxidized Rhizospheres	on Living Roots (C3)Satura				
Drift Deposits (B3)	Presence of Reduced Ir	on (C4) Stunte				
Algal Mat or Crust (B4)	Recent Iron Reduction	in Tilled Soils (C6) Geom	orphic Position (D2)			
Iron Deposits (B5)	Thin Muck Surface (C7)	Shallo	w Aquitard (D3)			
Inundation Visible on Aerial Imagery (B7)	Other (Explain in Rema	rks)Micro	topographic Relief (D4)			
Sparsley Vegetated Concave Surface (B8)		FAC-N	leutral Test (D5)			
Surface Water Present? Yes X No D	Depth (inches) 4					
Water Table Present? Yes No X D	Depth (inches)	Wetland Hydrology P	Present? Yes X No			
	Depth (inches)					
Describe Recorded Data (stream gauge, monitori	ing well aerial photos	nrevious inspections) if availa	hle·			
Describe Nessi dea Data (Stream gauge) memeri	ing wen, dend process,	previous inspections), ii urunu				
Remarks:						

VEGETATION - Use scien		5 01 piaiits	Absolute	Dominant	Indicator	l ·	ing Point:			
Tree Stratum	(Plot Size:	30'radius)	% Cover	Species?	Status	Dominance Test \				
Fraxinus pennsylvanica	`		75	X	FACW	Number of Dom That Are OBL, FA			4	(A)
Traxinas permisyrvamed	•		75	= Total Cov				_		_ (, ,)
				10141 00	<i>/</i> C1	Total Number	er of Domin cross All Stra		4	(B)
						Percent of Dor		_		_ (= /
						That Are OBL,	•		100%	(A/B)
						Prevalence Index	Worksheet	:		
							0	x 1	0	
				Dominant		OBL species				
Shrub Stratum	(Plot Size:	15'radius)	% Cover	Species?	Status	FACW species	124	_ x 2	248	
						FAC species	3	x 3	9	
			-	_= Total Co	ver	FACU species	0	x 4	0	
						UPL species	0	x 5	0	
						Column Totals	127	(A)	257	(B)
						_	ce Index = B	_ ` `-	2.02	(-/
						Hydrophytic Vege		-		
			Absoluto	Dominant	Indicator					tion
Herb Stratum	(Plot Size:	5'radius)	% Cover	Species?	Status	X 1- Rapid Tes	-		ic vegeta	LIOII
Lysimachia nummulari	ia		15	Х	FACW	X 2- Dominan	ce Test is >	50%		
Symphyotrichum lance			10	X	FACW	X 3- Prevalen	ce Index is :	=< 3.0		
Phalaris arundinacea			10	X	FACW	4- Morphol	ogical Adap	tation	าร	
Cinna arundinacea			6		FACW	5- Problema	atic Hydron	hytic	Vegetatio	ın
Verbena hastata			5		FACW		atic Hydrop	riytic	vegetatio	/II
Ranunculus hispidus			3		FAC	Definitions of Veget	ation Strata	:		
Heracleum maximum			3		FACW	Tree- Woody plants			aro in diam	otor at
			52	_= Total Cov	ver	breast height (DBH),				ietei at
						Sapling/Shrub- Woo greater than or equa				and
						Herb- All herbaceou size, and woody plan			_	less of
Woody Vine Stratum	(Plot Size:	30'radius)		Dominant Species?	Indicator Status	Woody Vines- All wo height.	oody vines gr	reater	than 3.28f	t in
				_= Total Cov	ver	Hydrop Vegeta Pres	-	Х	No	_

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

SOIL

Sampling Point: 1_20210115_WL116_W2

Dept	n <u>Matri</u> x	(Redo	x Feat			
(inche	S Color	%	Color	%	Type	Loc	Texture	Remarks	
0-7	10YR 3/1	90	10YR 4/3	10	С	М	Clay Loam		
7-16	10YR 4/1	80	10YR 4/4	20	С	М	Sandy Clay Loam		

Hydric Soil Indicators:		Indicators for Problematic Soils:
Histosol (A1)	Polyvalue Below Surface (B15)	2 cm Muck (A10)
Histic Epipedon (A2)	Thin Dark Surface (S9)	Coast Prarie Redox (A16)
Black Histic (A3)	Loamy Mucky Mineral (F1)	5 cm Mucky Peat or Peat (S3)
Hydrogen Sulfide (A4)	Loamy Gleyed Matric (F2)	Dark Surface (S7)
Stratified Layers (A5)	X Depleted Matrix (F3)	Polyvalue Below Surface (S8)
Depleted Below Dark Surface (A11)	Redox Dark Surface (F6)	Thin Dark Surface (S9)
Thick Dark Surface (A12)	Depleted Dark Surface (F7)	Iron-Manganese Masses (F12)
Sandy Mucky Mineral (S1)	Redox Depressions (F8)	Piedmont Floodplain Soils (F19)
Sandy Gleyed Matrix (S4)		Mesic Spodic (TA6)
Sandy Redox (S5)		Red Parent Material (F21)
Stripped Matrix (S6)		Very Shallow Dark Surface (TF12)
Dark Surface (S7)		Other (Explain in Remarks)
Restrictive Layer (if observed): Type:		Hydric Soil Present? Yes X No
Depth (inches):		·

Project/Site: Cider Solar Project	City/County: Elba/Genessee Sampling Date: 1/15/2021
Applicant/Owner: Hecate	State: NY Sampling Point:
Investigator(s): Andrew Sorci	Section, Township, Range: 1_20210115_WL116_U1
Landform (hillslope, terrace,etc.): Rise Loc	cal relief (concave, convex, none): <u>Convex</u> Slope (%) <u>2 - 4</u>
Subregion (LRR or MLRA): LRR R Lat: 43.09	02854 Long:78.255870 Datum: NAD83
Soil Map Unit Name: NgA Niagara silt loam, 0 to 2 percent slop	es NWI Classification: UPL
Are climatic / hyrologic conditions on the site typical for this time	e of year? Yes X No (if no, explain in Remarks.)
Are Vegetation , Soil , or Hydrology significantly	y disturbed? Are "Normal Circumstances" present? Yes X No
Are Vegetation, Soil, or Hydrologynaturally pr	roblematic? (if needed, explain any answers in Remarks.)
SUMMARY OF FINDINGS - Attach site map showing samp	ling point locations, transects, important features, etc.
Hydrophytic Vegetation Present? Yes No X	Is the Sampled Area
Hydric Soil Present? Yes No X	within a Wetland? Yes No X
Wetland Hydrology Present? Yes No X	if yes, optional Wetland Site ID:
Remarks: (Explain alternative procedures here or in a separate report.)	
Field edge	
Tield edge	
HYDROLOGY	Considerated to the first of the first of the consideration of the consi
Wetland Hydrology Indicators:	Secondary Indicators (minimum of two required)
Primary Indicators (minimum of one is required: check all that apply)	Surface Soil Cracks (B6)
Surface Water (A1) Water-Stained	d Leaves (B9) Drainage Patterns (B10)
High Water Table (A2)Aquatic Fauna	(B13) Moss Trim Lines (B16)
Saturation (A3) Marl Deposits	(B15) Dry-Season Water Table (C2)
Water Marks (B1) Hydrogen Sulf	ride Odor (C1) Crayfish Burrows (C8)
Sediment Deposits (B2) Oxidized Rhizo	ospheres on Living Roots (C3) Saturation Visible in Aerial Imagery (C9)
Drift Deposits (B3)Presence of Ro	educed Iron (C4) Stunted or Stressed Plants (D1)
Algal Mat or Crust (B4) Recent Iron Re	eduction in Tilled Soils (C6) Geomorphic Position (D2)
Iron Deposits (B5) Thin Muck Sur	rface (C7) Shallow Aquitard (D3)
Inundation Visible on Aerial Imagery (B7) Other (Explain	n in Remarks) Microtopographic Relief (D4)
Sparsley Vegetated Concave Surface (B8)	FAC-Neutral Test (D5)
Surface Water Present? Yes No X Depth (inches)	
Water Table Present? Yes No X Depth (inches)	Wetland Hydrology Present? Yes No X
Saturation Present? Yes No X Depth (inches)	
Describe Recorded Data (stream gauge, monitoring well, aerial	nhotos previous inspections) if available:
bescribe Recorded bata (stream gauge, monitoring wen, denar	priotos, previous inspections), il uvuliusie.
Remarks:	

VEGETATION - Use scien		Absolute	Dominant	Indicator	Dominance Test V	ng Point:			
Tree Stratum	(Plot Size: 30'radius)	% Cover	Species?	Status	Number of Domi				
Acer saccharum		40	Х	FACU	That Are OBL, FA	•		2	(A)
		40	= Total Cov	ver	Total Numbe Species Ac Percent of Dor	ross All St	rata:	6	 _(B)
					That Are OBL,	FACW, or	FAC:	33.3%	(A/B)
					Prevalence Index	Workshee	et:		
		Absolute	Dominant	Indicator	OBL species	0	x 1	0	
Shrub Stratum	(Plot Size: 15'radius)	% Cover	Species?	Status	FACW species	10	x 2	20	
					FAC species	30	x 3	90	
			= Total Cov	ver	FACU species	70	x 4	280	
					_				
					UPL species	15	_ x 5	75	
					Column Totals	125	(A)	465	(B)
					Prevalenc	e Index =	B/A =	3.72	
					Hydrophytic Vege	tation Inc	licator	s:	
		Absolute	Dominant	Indicator	1- Rapid Tes	st For Hyd	rophyt	ic Vegeta	tion
Herb Stratum	(Plot Size: 5'radius)	% Cover	Species?	Status	2- Dominan	ce Test is :	> 50%		
Setaria pumila		20	Х	FAC	3- Prevalence			`	
Solidago canadensis		15	Х	FACU					
Daucus carota		10	X	UPL	4- Morpholo	ogical Ada	ptatio	ns	
Alliaria petiolata		10	Х	FACU	5- Problema	tic Hydro	phytic	Vegetatio	n
Taraxacum officinale Brassica rapa		<u>5</u> 5		FACU UPL					
Lysimachia nummulari	ia	5		FACW	Definitions of Veget	ation Strat	a:		
Symphyotrichum lance		5		FACW	Tree- Woody plants				eter at
<u> </u>		75	= Total Cov		breast height (DBH),	regardless	of heig	tht.	
			_		Sapling/Shrub- Wood greater than or equa				and
					Herb- All herbaceous size, and woody plar			_	less of
Woody Vine Stratum	(Plot Size: 30'radius)	% Cover	Dominant Species?	Status	Woody Vines- All wo height.	ody vines g	greater	than 3.28f	t in
Vitis riparia		10	X _= Total Cov	<u>FAC</u> ver	Hydroph Vegeta Pres	•		No X	

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

daucus carota = Zea mays

SOIL Sampling Point: 1_20210115_WL116_U1

Depth <u>Matrix</u> (inches Color % Color					x Featur	es			
Color	%	Color	%	Туре	Loc	Texture	Remarks		
10YR 4/3	100					Sandy Loam			
	98	10YR 5/6	2	C	М	•			
20111 1/0	30	10111 370	_	ŭ		Sandy Loann			
il Indicators:							Indicators for Problematic Soils:		
tosol (A1)				Polyvalu	e Below Su	urface (B15)	2 cm Muck (A10)		
tic Epipedon ((A2)			•		· · · · =	Coast Prarie Redox (A16)		
ck Histic (A3)							5 cm Mucky Peat or Peat (S3)		
drogen Sulfide	e (A4)		Loamy Gleyed Matric (F2)				Dark Surface (S7)		
atified Layers	(A5)		Depleted Matrix (F3)			·3)	Polyvalue Below Surface (S8)		
oleted Below	Dark Su	rface (A11)		Redox Da	ark Surfac	e (F6)	Thin Dark Surface (S9)		
ck Dark Surfac	ce (A12)			Depleted	l Dark Sur	face (F7)	Iron-Manganese Masses (F12)		
dy Mucky Mi	neral (S	1)		Redox Do	epressions	s (F8)	Piedmont Floodplain Soils (F19)		
dy Gleyed Ma	atrix (S4)				_	Mesic Spodic (TA6)		
dy Redox (S5)					_	Red Parent Material (F21)		
pped Matrix ((S6)					_	Very Shallow Dark Surface (TF12)		
k Surface (S7))					-	Other (Explain in Remarks)		
ve Layer (if obs	served):								
	Type:					Hvdric S	Soil Present? Yes No X		
Depth (in	nches):					,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	· · · · · · · · · · · · · · · · · · ·		
			 >						
5 :									
	Color 10YR 4/3 10YR 4/3 10YR 4/3 10YR 4/3 il Indicators: tosol (A1) tic Epipedon (ck Histic (A3) drogen Sulfide atified Layers bleted Below ck Dark Surface dy Mucky Mi dy Gleyed Ma dy Redox (S5 pped Matrix ck Surface (S7 ve Layer (if obs	Color % 10YR 4/3 100 10YR 4/3 98 Indicators: tosol (A1) tic Epipedon (A2) ck Histic (A3) Irogen Sulfide (A4) Indicators: tosol (A1) tic Epipedon (A2) ck Histic (A3) Irogen Sulfide (A4) Irogen Sulfide (A5) Irogen Sulfide (A6) Irogen Sulfide (A	Color % Color 10YR 4/3 100 10YR 4/3 98 10YR 5/6 iil Indicators: tosol (A1) tic Epipedon (A2) ck Histic (A3) drogen Sulfide (A4) atified Layers (A5) cleted Below Dark Surface (A11) ck Dark Surface (A12) dy Mucky Mineral (S1) dy Gleyed Matrix (S4) dy Redox (S5) pped Matrix (S6) k Surface (S7) ve Layer (if observed): Type: Depth (inches):	Color % Color % 10YR 4/3 100 10YR 4/3 98 10YR 5/6 2 Fill Indicators: tosol (A1) tic Epipedon (A2) ck Histic (A3) drogen Sulfide (A4) eitified Layers (A5) bleted Below Dark Surface (A11) ck Dark Surface (A12) dy Mucky Mineral (S1) dy Gleyed Matrix (S4) dy Redox (S5) pped Matrix (S6) ck Surface (S7) Fe Layer (if observed): Type: Depth (inches):	Color % Color % Type 10YR 4/3 100 10YR 4/3 98 10YR 5/6 2 C Indicators: tosol (A1)	Color % Type Loc 10YR 4/3 100 10YR 4/3 98 10YR 5/6 2 C M Polyvalue Below States (A11)	Color % Color % Type Loc Texture 10YR 4/3 100 Sandy Loam 10YR 4/3 98 10YR 5/6 2 C M Sandy Loam 10YR 4/3 98 10YR 5/6 2 C M Sandy Loam 10YR 4/3 98 10YR 5/6 2 C M Sandy Loam Polyvalue Below Surface (B15) Thin Dark Surface (S9) Loamy Mucky Mineral (F1) Loamy Gleyed Matric (F2) Depleted Matrix (F3) Redox Dark Surface (F6) Ck Dark Surface (A11) Redox Dark Surface (F6) Ck Dark Surface (A12) Depleted Dark Surface (F7) Redox Depressions (F8) My Gleyed Matrix (S4) My Redox (S5) Pped Matrix (S6) K Surface (S7) Pe Layer (if observed): Type: Depth (inches):		

Project/Site: Cider Solar Project	City/Co	ounty: Elba/Genessee	eSam	pling Date: <u>1/15/2021</u>
Applicant/Owner: Hecate	State: NY Sampling Point:			
Investigator(s): Andrew Sorci Section, Township, Range: 1_20200115_W				_20200115_WL117_W1
Landform (hillslope, terrace,etc.): Dip Local relief (concave,		ef (concave, convex, no	one): <u>Concave</u>	Slope (%) <u>1 - 3</u>
Subregion (LRR or MLRA): LRR R	Lat: 43.092216 Long:78.255353 Datum: NAD83			
Soil Map Unit Name: Te Teel silt loam			NWI Classification	on: PFO
Are climatic / hyrologic conditions on the site typical for this time of year? Yes X No (if no, explain in Remarks.)				
Are Vegetation, Soil, or Hydrology significantly disturbed? Are "Normal Circumstances" present? YesX _No				
Are Vegetation, Soil, or Hydrology naturally problematic? (if needed, explain any answers in Remarks.)				
SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.				
Hydrophytic Vegetation Present? Yes X	No	Is the Sampled Area	•	•
Hydric Soil Present? Yes X	 No	within a Wetland? Yes X No if yes, optional Wetland Site ID: WL117		
Wetland Hydrology Present? Yes X	 No			
Remarks: (Explain alternative procedures here or in a sepa		<u> </u>		
HYDROLOGY				
Wetland Hydrology Indicators:			Secondary Indicators	(minimum of two required)
Primary Indicators (minimum of one is required: check all that apply)			Surface Soil Cracks (B6)	
Surface Water (A1) Water-Stained Leaves (B		s (B9)	Drainage Patterns (B10)	
High Water Table (A2) Aquatic Fauna (B13)		=	Moss Trim Lines (B16)	
Saturation (A3)	Marl Deposits (B15)		Dry-Season Water Table (C2)	
Water Marks (B1) Hydrogen Sulfide Odor (C1		or (C1)	Crayfish Burrows (C8)	
Sediment Deposits (B2) Oxidized Rhizosphe		es on Living Roots (C3)Saturation Visible in Aerial Imagery (C9)		
Drift Deposits (B3)	Presence of Reduced Iron (C4)		Stunted or Stre	ssed Plants (D1)
Algal Mat or Crust (B4) Recent Iron Reduction in Tilled S		n in Tilled Soils (C6)	X Geomorphic Po	sition (D2)
Iron Deposits (B5)	Thin Muck Surface (C7)		Shallow Aquitar	⁻ d (D3)
Inundation Visible on Aerial Imagery (B7) Other (Explain in Remarks)		narks)	Microtopographic Relief (D4)	
Sparsley Vegetated Concave Surface (B8)		_	X FAC-Neutral Te	st (D5)
Surface Water Present? Yes No X	Depth (inches)	_		
Water Table Present? Yes No X	Depth (inches)	Wetland Hydrology Present? Yes X No		
Saturation Present? Yes No X	Depth (inches)	_		
Describe Recorded Data (stream gauge, monito	oring well, aerial photos	s, previous inspections), if available:	
Remarks:				

VEGETATION - Use scientific names of plants Sampling Point: 1_20200115_WL117_W1 Absolute Dominant Indicator **Dominance Test Worksheet:** (Plot Size: 30'radius) % Cover Species? Status **Tree Stratum Number of Dominant Species** Fraxinus pennsylvanica 50 Х **FACW** That Are OBL. FACW, or FAC: (A) 50 = Total Cover **Total Number of Dominant** Species Across All Strata: 4 (B) Percent of Dominant Species That Are OBL, FACW, or FAC: 100% (A/B) Prevalence Index Worksheet: OBL species x 1 0 Absolute Dominant Indicator 95 190 (Plot Size: 15'radius) % Cover Species? Status **FACW** species x 2 **Shrub Stratum** 5 FAC species х3 15 = Total Cover 13 FACU species x 4 52 **UPL** species O x 5 0 Column Totals 113 (A) 257 (B) Prevalence Index = B/A = 2.27 **Hydrophytic Vegetation Indicators:** Absolute Dominant Indicator X 1- Rapid Test For Hydrophytic Vegetation **Herb Stratum** (Plot Size: 5'radius) % Cover Species? Status X 2- Dominance Test is > 50% Lysimachia nummularia 15 **FACW** X 3- Prevalence Index is =< 3.0 Х Cinna arundinacea 15 **FACW** 4- Morphological Adaptations Symphyotrichum lanceolatum 15 Χ **FACW** Alliaria petiolata 10 **FACU** 5- Problematic Hydrophytic Vegetation Geum canadense 5 FAC 3 Galium mollugo **FACU Definitions of Vegetation Strata:** = Total Cover 63 Tree- Woody plants 3 in. (7.6cm) or more in diameter at breast height (DBH), regardless of height. Sapling/Shrub- Woody plants less than 3 in. DBH and greater than or equal to 3.28ft (1m) tall. Herb- All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28ft tall. Absolute Dominant Indicator Woody Vines- All woody vines greater than 3.28ft in (Plot Size: 30'radius) % Cover Species? Status **Woody Vine Stratum** height. = Total Cover Hydrophytic Vegetation Present? Yes X No ____

SOIL Sampling Point: 1_20200115_WL117_W1

Depth	Matrix				Redo	ox Featu				
(inches	Color	%	Color	%	Type	Loc	Texture	Remarks		
0-3	10YR 3/2	100					Sandy Clay Loam			
3-12	10YR 3/1	100					Sandy Clay Loam			
12-20	10YR 4/1	92	10YR 4/6	8	С	М	Clay Loam			

Hydric Soil Indicators:		Indicators for Problematic Soils:
Histosol (A1)	Polyvalue Below Surface (B15)	2 cm Muck (A10)
Histic Epipedon (A2)	Thin Dark Surface (S9)	Coast Prarie Redox (A16)
Black Histic (A3)	Loamy Mucky Mineral (F1)	5 cm Mucky Peat or Peat (S3)
Hydrogen Sulfide (A4)	Loamy Gleyed Matric (F2)	Dark Surface (S7)
Stratified Layers (A5)	Depleted Matrix (F3)	Polyvalue Below Surface (S8)
X Depleted Below Dark Surface (A11)	Redox Dark Surface (F6)	Thin Dark Surface (S9)
Thick Dark Surface (A12)	Depleted Dark Surface (F7)	Iron-Manganese Masses (F12)
Sandy Mucky Mineral (S1)	Redox Depressions (F8)	Piedmont Floodplain Soils (F19)
Sandy Gleyed Matrix (S4)		Mesic Spodic (TA6)
Sandy Redox (S5)		Red Parent Material (F21)
Stripped Matrix (S6)		Very Shallow Dark Surface (TF12)
Dark Surface (S7)		Other (Explain in Remarks)
Restrictive Layer (if observed):		
Туре:		Hydric Soil Present? Yes X No
Depth (inches):		

Project/Site: Cider Solar Project	City/County: Elba/Genessee Sampling Date: 1/15/2021
Applicant/Owner: Hecate	State: NY Sampling Point:
Investigator(s): Andrew Sorci	Section, Township, Range: 1_20210115_WL117_U1
Landform (hillslope, terrace,etc.): Rise	Local relief (concave, convex, none): Convex Slope (%) 3 - 8
Subregion (LRR or MLRA): LRR R Lat:	43.092320 Long: -78.255284 Datum: NAD83
Soil Map Unit Name: Te Teel silt loam	NWI Classification: UPL
Are climatic / hyrologic conditions on the site typical for \ensuremath{t}	his time of year? Yes X No (if no, explain in Remarks.)
Are Vegetation, Soil, or Hydrologysigni	ficantly disturbed? Are "Normal Circumstances" present? Yes X No
Are Vegetation, Soil, or Hydrologynatu	rally problematic? (if needed, explain any answers in Remarks.)
SUMMARY OF FINDINGS - Attach site map showing	sampling point locations, transects, important features, etc.
Hydrophytic Vegetation Present? Yes NoX	<u> </u>
Hydric Soil Present? Yes No X	within a Wetland? Yes NoX
Wetland Hydrology Present? Yes NoX	if yes, optional Wetland Site ID:
Remarks: (Explain alternative procedures here or in a separate report.	
raised berm between stream and PFO wetland to	south
HYDROLOGY	
Wetland Hydrology Indicators:	Secondary Indicators (minimum of two required)
Primary Indicators (minimum of one is required: check all that	apply) Surface Soil Cracks (B6)
Surface Water (A1) Water	-Stained Leaves (B9) Drainage Patterns (B10)
High Water Table (A2) Aquati	c Fauna (B13) Moss Trim Lines (B16)
Saturation (A3) Marl D	peposits (B15) Dry-Season Water Table (C2)
Water Marks (B1)Hydrog	gen Sulfide Odor (C1) Crayfish Burrows (C8)
Sediment Deposits (B2) Oxidize	ed Rhizospheres on Living Roots (C3)Saturation Visible in Aerial Imagery (C9)
Drift Deposits (B3)Presen	ice of Reduced Iron (C4) Stunted or Stressed Plants (D1)
Algal Mat or Crust (B4)Recent	t Iron Reduction in Tilled Soils (C6) Geomorphic Position (D2)
Iron Deposits (B5) Thin M	luck Surface (C7) Shallow Aquitard (D3)
Inundation Visible on Aerial Imagery (B7) Other	(Explain in Remarks) Microtopographic Relief (D4)
Sparsley Vegetated Concave Surface (B8)	FAC-Neutral Test (D5)
Surface Water Present? Yes No X Depth (ii	nches)
Water Table Present? Yes No X Depth (in	
Saturation Present? Yes No X Depth (ii	nches)
Describe Recorded Data (stream gauge, monitoring well,	aerial photos, previous inspections), if available:
, , ,	
Remarks:	

VEGETATION - Use scientific names of plants Sampling Point: 1_20210115_WL117_U1 Absolute Dominant Indicator **Dominance Test Worksheet:** (Plot Size: 30'radius) % Cover Species? Status **Tree Stratum Number of Dominant Species** Fraxinus pennsylvanica 50 Χ **FACW** That Are OBL. FACW. or FAC: (A) 2 50 = Total Cover **Total Number of Dominant** Species Across All Strata: 4 (B) Percent of Dominant Species That Are OBL, FACW, or FAC: 50% (A/B) Prevalence Index Worksheet: OBL species x 1 0 Absolute Dominant Indicator 54 108 (Plot Size: 15'radius) % Cover Species? Status **FACW** species x 2 **Shrub Stratum** FAC Crataegus douglasii 15 Χ **FAC** species 15 х3 45 15 = Total Cover 75 300 FACU species x 4 **UPL** species n x 5 0 Column Totals 144 (A) 453 (B) Prevalence Index = B/A = 3.15 **Hydrophytic Vegetation Indicators:** Absolute Dominant Indicator 1- Rapid Test For Hydrophytic Vegetation **Herb Stratum** (Plot Size: 5'radius) % Cover Species? Status 2- Dominance Test is > 50% 30 **FACU** Alliaria petiolata 3- Prevalence Index is =< 3.0 Galium mollugo 20 Χ **FACU** 4- Morphological Adaptations Ageratina altissima 15 **FACU** Hesperis matronalis 10 **FACU** 5- Problematic Hydrophytic Vegetation Lysimachia nummularia 4 **FACW** 79 = Total Cover **Definitions of Vegetation Strata:** Tree- Woody plants 3 in. (7.6cm) or more in diameter at breast height (DBH), regardless of height. Sapling/Shrub- Woody plants less than 3 in. DBH and greater than or equal to 3.28ft (1m) tall. Herb- All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28ft tall. Absolute Dominant Indicator Woody Vines- All woody vines greater than 3.28ft in (Plot Size: 30'radius) Species? Status **Woody Vine Stratum** % Cover height. = Total Cover Hydrophytic Vegetation Present? Yes _____ No __X

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

SOIL Sampling Point: 1_20210115_WL117_U1

Depth	Matrix	,			Redo	x Feati	ures	
(inches	Color	%	Color	%	Type	Loc	Texture	Remarks
0-11	10YR 3/2	100					Loam	
11-14	10YR 4/3	98	10YR 4/4	2	С	M	Sandy Loam	
14-20	10YR 5/2	90	7.5YR 4/6	10	С	M	Sandy Clay Loam	

Hydric Soil Indicators:		Indicators for Problematic Soils:
Histosol (A1)	Polyvalue Below Surface (B15)	2 cm Muck (A10)
Histic Epipedon (A2)	Thin Dark Surface (S9)	Coast Prarie Redox (A16)
Black Histic (A3)	Loamy Mucky Mineral (F1)	5 cm Mucky Peat or Peat (S3)
Hydrogen Sulfide (A4)	Loamy Gleyed Matric (F2)	Dark Surface (S7)
Stratified Layers (A5)	Depleted Matrix (F3)	Polyvalue Below Surface (S8)
Depleted Below Dark Surface (A11)	Redox Dark Surface (F6)	Thin Dark Surface (S9)
Thick Dark Surface (A12)	Depleted Dark Surface (F7)	Iron-Manganese Masses (F12)
Sandy Mucky Mineral (S1)	Redox Depressions (F8)	Piedmont Floodplain Soils (F19)
Sandy Gleyed Matrix (S4)		Mesic Spodic (TA6)
Sandy Redox (S5)		Red Parent Material (F21)
Stripped Matrix (S6)		Very Shallow Dark Surface (TF12)
Dark Surface (S7)		Other (Explain in Remarks)
Restrictive Layer (if observed):		
Type:		Hydric Soil Present? Yes No X
Depth (inches):	_	<u> </u>

Project/Site: Cider Solar Project City	//County: Elba/Genessee Sampling Date: 1/15/2021
Applicant/Owner: Hecate	State: NY Sampling Point:
Investigator(s): Andrew Sorci Sec	ction, Township, Range: 1_20210115_WL118_W1
Landform (hillslope, terrace,etc.): Floodplain Local r	relief (concave, convex, none): Concave Slope (%) 0 - 1
Subregion (LRR or MLRA): LRR R Lat: 43.09327	75 Long: -78.257054 Datum: NAD83
Soil Map Unit Name: Te Teel silt loam	NWI Classification: PEM
Are climatic / hyrologic conditions on the site typical for this time of	year? Yes X No (if no, explain in Remarks.)
Are Vegetation, Soil, or Hydrologysignificantly dis	sturbed? Are "Normal Circumstances" present? Yes X No
Are Vegetation, Soil, or Hydrologynaturally problem.	ematic? (if needed, explain any answers in Remarks.)
SUMMARY OF FINDINGS - Attach site map showing sampling	point locations, transects, important features, etc.
Hydrophytic Vegetation Present? Yes X No	Is the Sampled Area
Hydric Soil Present? Yes X No	within a Wetland? Yes X No No
Wetland Hydrology Present? Yes X No	if yes, optional Wetland Site ID: WL118
Remarks: (Explain alternative procedures here or in a separate report.)	
floodplain wetland, adjacent to stream	
HYDROLOGY	
Wetland Hydrology Indicators:	Secondary Indicators (minimum of two required)
Primary Indicators (minimum of one is required: check all that apply)	Surface Soil Cracks (B6)
Surface Water (A1) Water-Stained Lea	oves (B9) Drainage Patterns (B10)
X High Water Table (A2) Aquatic Fauna (B1	3) Moss Trim Lines (B16)
X Saturation (A3) Marl Deposits (B1	Dry-Season Water Table (C2)
Water Marks (B1) Hydrogen Sulfide (Odor (C1) Crayfish Burrows (C8)
Sediment Deposits (B2)Oxidized Rhizosph	eres on Living Roots (C3)Saturation Visible in Aerial Imagery (C9)
Drift Deposits (B3) Presence of Reduc	ced Iron (C4) Stunted or Stressed Plants (D1)
Algal Mat or Crust (B4) Recent Iron Reduc	tion in Tilled Soils (C6) X Geomorphic Position (D2)
Iron Deposits (B5) Thin Muck Surface	e (C7) Shallow Aquitard (D3)
Inundation Visible on Aerial Imagery (B7) Other (Explain in R	Remarks) Microtopographic Relief (D4)
Sparsley Vegetated Concave Surface (B8)	X FAC-Neutral Test (D5)
Surface Water Present? Yes No X Depth (inches)	
	Wetland Hydrology Present? Yes X No
	1
Describe Recorded Data (stream gauge, monitoring well, aerial pho	
	, , , , , , , , , , , , , , , , , , ,
Remarks:	

'EGETATION - Use scient	inc names	o piants				Janipii	ing i onit.	1_202.	10115_WI	L118_W
	(D) + C:	201		Dominant		Dominance Test V	Vorksheet	:		
Free Stratum	(Plot Size:	30 radius)	% Cover	Species?	Status	Number of Domi That Are OBL, FA	•		3	(A)
				_= Total Cov	er	Total Numbe Species Ac			3	(B)
						Percent of Dor That Are OBL,	•		100%	_(A/B)
						Prevalence Index	Worksheet	:		
			Ahsolute	Dominant	Indicator	OBL species	0	x 1	0	
Shrub Stratum	(Plot Size:	15'radius)	% Cover	Species?	Status	FACW species	85	x 2	170	
Fraxinus pennsylvanica			25	Х	FACW	FAC species	0	x 3	0	
			25	_= Total Cov	er er	FACU species	20	x 4	80	
						UPL species	0	x 5	0	
						Column Totals	105	(A)	250	(E
							e Index = E	- ' '-	2.38	`
						Hydrophytic Vege	tation Indi	icators	:	
				Dominant		X 1- Rapid Tes	t For Hydr	ophyti	c Vegeta	tion
erb Stratum	(Plot Size:	5'radius)	% Cover	Species?	Status	X 2- Dominan	ce Test is >	50%		
Phalaris arundinacea			25	X	FACW	X 3- Prevalenc	e Index is	=< 3.0		
Lysimachia nummularia Verbena hastata			20 15	X	FACW FACW	4- Morpholo	ogical Adap	tation	S	
Alliaria petiolata			10		FACU	5- Problema				vn.
Ageratina altissima			10		FACU	J- Problema	пис пуштор	TIYLIC V	regetatio	'11
			80	= Total Cov	er	Definitions of Veget	ation Strata	:		
						Tree- Woody plants breast height (DBH),	·			ieter at
						Sapling/Shrub- Wood greater than or equa				and
						Herb- All herbaceous size, and woody plar				less of
Voody Vine Stratum	(Plot Size:	30'radius)	Absolute % Cover	Dominant Species?	Indicator Status	Woody Vines- All wo height.	ody vines gi	eater t	han 3.28f	t in
				= Total Cov	ver	Hydroph Vegeta Pres	-	X	No	

eID: 20210202141932

SOIL

SOIL								Sampling Point: 1_20210115_WL118_W1		
Depth	Matrix	(Red	ox Featur	es			
(inches	Color	%	Color	%	Type	Loc	Texture	Remarks		
0-8	10YR 3/2	100					Sandy Loam			
8-16	10YR 4/1	95	10YR 4/4	5	С	М	Sandy Loam			
Hydric Sc	oil Indicators:							Indicators for Problematic Soils:		
	tosol (A1)				•		urface (B15)	2 cm Muck (A10)		
	tic Epipedon ((A2)			-	k Surface	, ,	Coast Prarie Redox (A16)		
	ck Histic (A3)				3	Лucky Min		5 cm Mucky Peat or Peat (S3)		
	drogen Sulfide				3	Sleyed Ma		Dark Surface (S7)		
	atified Layers			X	3	d Matrix (I		Polyvalue Below Surface (S8)		
	pleted Below					ark Surfac		Thin Dark Surface (S9)		
	ck Dark Surfa				3	d Dark Sur		Iron-Manganese Masses (F12)		
	ndy Mucky Mi	-	-		Redox D	epression	s (F8)	Piedmont Floodplain Soils (F19)		
	ndy Gleyed Ma		.)					Mesic Spodic (TA6)		
	ndy Redox (S5							Red Parent Material (F21)		
	ipped Matrix	` '						Very Shallow Dark Surface (TF12)		
Dar	rk Surface (S7)						Other (Explain in Remarks)		
Restrictiv	ve Layer (if obs	served):								
		Type:					Hydrid	Soil Present? Yes X No		
	Depth (ir	nches):						· · · · · · · · · · · · · · · · · · ·		
Remarks	s:									

Project/Site: Cider Solar Project	City/County: Elba/Geness	see Sampling Date: 1/15/2021
Applicant/Owner: Hecate		State: NY Sampling Point:
Investigator(s): Andrew Sorci	Section, Township, Range	:1_20210115_WL118_U1
Landform (hillslope, terrace,etc.): Rise	Local relief (concave, convex,	none): Convex Slope (%) 2 - 5
Subregion (LRR or MLRA): LRR R	Lat: _43.093315 Long:	78.257176 Datum: NAD83
Soil Map Unit Name: Te Teel silt loam		NWI Classification: UPL
Are climatic / hyrologic conditions on the site typical	for this time of year? Yes X No	(if no, explain in Remarks.)
Are Vegetation, Soil, or Hydrology	significantly disturbed? Are "Normal	Circumstances" present? Yes X No
Are Vegetation, Soil, or Hydrology	naturally problematic? (if needed, ex	plain any answers in Remarks.)
SUMMARY OF FINDINGS - Attach site map shov	ving sampling point locations, trai	nsects, important features, etc.
Hydrophytic Vegetation Present? Yes No	X Is the Sampled Are	a
Hydric Soil Present? Yes No	x within a Wetland?	Yes NoX
Wetland Hydrology Present? Yes No	χ if yes, optional Wet	tland Site ID:
Remarks: (Explain alternative procedures here or in a separate re	eport.)	
HYDROLOGY		
Wetland Hydrology Indicators:		Secondary Indicators (minimum of two required)
Primary Indicators (minimum of one is required: check all	that apply)	Surface Soil Cracks (B6)
Surface Water (A1)	ater-Stained Leaves (B9)	Drainage Patterns (B10)
High Water Table (A2)	quatic Fauna (B13)	Moss Trim Lines (B16)
Saturation (A3)	arl Deposits (B15)	Dry-Season Water Table (C2)
Water Marks (B1) H	ydrogen Sulfide Odor (C1)	Crayfish Burrows (C8)
Sediment Deposits (B2) O	xidized Rhizospheres on Living Roots (C3)	Saturation Visible in Aerial Imagery (C9)
Drift Deposits (B3)	resence of Reduced Iron (C4)	Stunted or Stressed Plants (D1)
Algal Mat or Crust (B4)	ecent Iron Reduction in Tilled Soils (C6)	Geomorphic Position (D2)
Iron Deposits (B5)	nin Muck Surface (C7)	Shallow Aquitard (D3)
Inundation Visible on Aerial Imagery (B7)	ther (Explain in Remarks)	Microtopographic Relief (D4)
Sparsley Vegetated Concave Surface (B8)		FAC-Neutral Test (D5)
Surface Water Present? Yes No X Depi	th (inches)	
Water Table Present? Yes No X Dep	th (inches) Wetland	Hydrology Present? Yes No X
Saturation Present? Yes No X Dep	th (inches)	
Describe Recorded Data (stream gauge, monitoring	well, aerial photos, previous inspectio	ns), if available:
8	, , , , , , , , , , , , , , , , , , ,	,
Para arthur		
Remarks:		

VEGETATION - Use scier	ntific name:	s of plants				Sampli	ng Point:	1_202	10115_W	L118_U
			Absolute	Dominant	Indicator	Dominance Test \	Norkshee	t:		
Tree Stratum	(Plot Size:	30'radius)	% Cover	Species?	Status	Number of Dom That Are OBL, FA	•		1	(A)
				_= Total Cov	ver	Total Number			4	- (D)
						Species Ac		_	4	_(B)
						Percent of Dor That Are OBL,	•		25%	(A/B)
						Prevalence Index	Workshee	et:		
			مدر را محاد ۸	Daminant	lus alianata u	OBL species	0	x 1	0	
Shrub Stratum	(Plot Size:	15'radius)	% Cover	Dominant Species?	Status	FACW species	65	x 2	130	
Fraxinus pennsylvanic	а		60	Х	FACW	FAC species	0	x 3	0	
			60	_= Total Cov	ver	FACU species	60	x 4	240	
						UPL species	0	x 5	0	
						Column Totals	125	(A)	370	(B)
						Prevalenc	e Index =	B/A =	2.96	
						Hydrophytic Vege	etation Inc	dicators	s:	
			Absolute	Dominant	Indicator	1- Rapid Tes	st For Hyd	rophyti	c Vegeta	tion
Herb Stratum	(Plot Size:	5'radius)	% Cover	Species?	Status	2- Dominan	ce Test is	> 50%		
Alliaria petiolata			30	Х	FACU	X 3- Prevalenc				
Hesperis matronalis			15	X	FACU					
Galium mollugo Lysimachia nummular	ia		<u>15</u> 5	Х	FACU FACW	4- Morphol	_	-		
Lysimacina numinuar	ıa		65	= Total Cov		5- Problema	atic Hydro	phytic \	√egetatic	'n
				_		Definitions of Veget	ation Strat	a:		
						Tree- Woody plants breast height (DBH),				ieter at
						Sapling/Shrub- Woo greater than or equa				and
						Herb- All herbaceous			_	less of
Woody Vine Stratum	(Plot Size:	30'radius)		Dominant Species?	Indicator Status	Woody Vines- All wo	ody vines g	greater t	than 3.28f	t in
				_= Total Cov	ver	Hydropl Vegeta Pres	-		No X	

SOIL Sampling Point: 1_20210115_WL118_U1 Depth Matrix **Redox Features** (inches Texture Color % Color % Type Loc Remarks 10YR 3/2 100 0-20 Sandy Loam **Hydric Soil Indicators: Indicators for Problematic Soils:** Polyvalue Below Surface (B15) Histosol (A1) 2 cm Muck (A10) Histic Epipedon (A2) Thin Dark Surface (S9) Coast Prarie Redox (A16) Black Histic (A3) Loamy Mucky Mineral (F1) 5 cm Mucky Peat or Peat (S3) Hydrogen Sulfide (A4) Loamy Gleyed Matric (F2) Dark Surface (S7) Stratified Layers (A5) Depleted Matrix (F3) Polyvalue Below Surface (S8) Depleted Below Dark Surface (A11) Redox Dark Surface (F6) Thin Dark Surface (S9) Thick Dark Surface (A12) Depleted Dark Surface (F7) Iron-Manganese Masses (F12) Sandy Mucky Mineral (S1) Redox Depressions (F8) Piedmont Floodplain Soils (F19) Sandy Gleyed Matrix (S4) Mesic Spodic (TA6) Sandy Redox (S5) Red Parent Material (F21) Stripped Matrix (S6) Very Shallow Dark Surface (TF12) Dark Surface (S7) Other (Explain in Remarks) Restrictive Layer (if observed): Type: Hydric Soil Present? Yes No X Depth (inches): Remarks:

eID: 20210202150254

Project/Site: Cider Solar Project	City/County: Elba/Genessee Sampling Date: 1/15/2021
Applicant/Owner: Hecate	State: NY Sampling Point:
Investigator(s): Andrew Sorci	Section, Township, Range: 1_20210115_WL119_W1
Landform (hillslope, terrace,etc.): Toeslope	Local relief (concave, convex, none): None Slope (%) 0 - 2
Subregion (LRR or MLRA): LRR R Lat: 43.	096530 Long: <u>-78.257159</u> Datum: <u>NAD83</u>
Soil Map Unit Name: CIB Collamer silt loam	NWI Classification: PEM
Are climatic / hyrologic conditions on the site typical for this ti	ime of year? Yes X No (if no, explain in Remarks.)
	tly disturbed? Are "Normal Circumstances" present? Yes X No
Are Vegetation, Soil, or Hydrologynaturally	problematic? (if needed, explain any answers in Remarks.)
CLINANA DV OF FINIDINGS. Attack site many showing a sur	
· · · · · · · · · · · · · · · · · · ·	npling point locations, transects, important features, etc.
Hydrophytic Vegetation Present? Yes X No	Is the Sampled Area within a Wetland? Ves X No
Hydric Soil Present? Yes X No	
Wetland Hydrology Present? Yes X No	if yes, optional Wetland Site ID: WL119
Remarks: (Explain alternative procedures here or in a separate report.)	
edge of agricultural field (corn)	
HYDROLOGY	
Wetland Hydrology Indicators:	Secondary Indicators (minimum of two required)
Primary Indicators (minimum of one is required: check all that apply	y) Surface Soil Cracks (B6)
	ned Leaves (B9) Drainage Patterns (B10)
High Water Table (A2) Aquatic Fau	
Saturation (A3) Marl Depos	
	ulfide Odor (C1) Crayfish Burrows (C8)
	izospheres on Living Roots (C3) Saturation Visible in Aerial Imagery (C9)
	
	Reduced Iron (C4) Stunted or Stressed Plants (D1) Conversable Residue (C6)
	Reduction in Tilled Soils (C6) Geomorphic Position (D2)
Iron Deposits (B5) Thin Muck S	
	ain in Remarks) Microtopographic Relief (D4)
Sparsley Vegetated Concave Surface (B8)	FAC-Neutral Test (D5)
Surface Water Present? Yes X No Depth (inches	s) <u>2</u>
Water Table Present? Yes NoX _ Depth (inches	s) Wetland Hydrology Present? Yes X No
Saturation Present? Yes No X Depth (inches	s)
Describe Recorded Data (stream gauge, monitoring well, aeri	al photos previous inspections) if available:
Describe Recorded Data (stream gauge, monitoring well, acri	ar priotos, previous inspections), ir available.
Remarks:	

	ntific names of pl	ants			Sampling Point: 1_20210115_WL119_V
Tree Stratum	(Plot Size: 30'rad			ant Indicator s? Status	Dominance Test Worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: 1 (A)
			= Total	Cover	Total Number of Dominant Species Across All Strata: 1 (B)
					Percent of Dominant Species That Are OBL, FACW, or FAC: 100% (A/B
					Prevalence Index Worksheet:
		Absolu	te Domina	ant Indicator	OBL species 0 x 1 0
Shrub Stratum	(Plot Size: 15'rad	ius) % Cove	er Specie	s? Status	FACW species 0 x 2 0
					FAC species x 3 60
			= Total	Cover	FACU species x 4 0
					UPL species x 5 0
					Column Totals (A) (B) (B)
					Prevalence Index = B/A =3
					Hydrophytic Vegetation Indicators:
		Absolu	te Domina	ant Indicator	1- Rapid Test For Hydrophytic Vegetation
Herb Stratum	(Plot Size: 5'radi	us_) % Cove	er Specie	s? Status	X 2- Dominance Test is > 50%
Panicum virgatum		20	X	FAC	X 3- Prevalence Index is =< 3.0
		20	0 = Total Co	Cover	4- Morphological Adaptations
					5- Problematic Hydrophytic Vegetation
					Definitions of Vegetation Strata:
					Tree- Woody plants 3 in. (7.6cm) or more in diameter a breast height (DBH), regardless of height.
					Sapling/Shrub- Woody plants less than 3 in. DBH and greater than or equal to 3.28ft (1m) tall.
					Herb- All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28ft tall.
Woody Vine Stratum	(Plot Size: 30'rad			ant Indicator s? Status	Woody Vines- All woody vines greater than 3.28ft in height.
			= Total	Cover	Hydrophytic Vegetation Present? Yes X No

eID: 20210202150949

SOIL Sampling Point: 1_20210115_WL119_W1

	Matrix Color DYR 4/1	% 85	Color 7.5YR 4/4	% 15	Type C	ox Featu Loc M	Texture Sandy Clay Loam	Remarks		
0-8 10	OYR 4/1	85	7.5YR 4/4	15	С	М	Sandy Clay Loam			
Hydric Soil In Histosc					Polyvalu	e Below S	Surface (B15)	Indicators for Problematic Soils: 2 cm Muck (A10)		
Histic E	Epipedon (42)			Thin Dar	k Surface	e (S9)	Coast Prarie Redox (A16)		
Black H	listic (A3)				Loamy N	lucky Mi	neral (F1)	5 cm Mucky Peat or Peat (S3)		
	gen Sulfide				-		atric (F2)	Dark Surface (S7)		
	ed Layers (Х	-	d Matrix (•	Polyvalue Below Surface (S8)		
Deplet	ed Below D	Dark Su	rface (A11)		Redox D	ark Surfa	ce (F6)	Thin Dark Surface (S9)		
	ark Surfac				-		rface (F7)	Iron-Manganese Masses (F12)		
Sandy I	Mucky Mir	neral (S	1)		Redox D	epressior	ns (F8)	Piedmont Floodplain Soils (F19)		
Sandy	Gleyed Ma	trix (S4	.)					Mesic Spodic (TA6)		
Sandy I	Redox (S5)							Red Parent Material (F21)		
Strippe	ed Matrix (S6)						Very Shallow Dark Surface (TF12		
Dark Su	urface (S7)							Other (Explain in Remarks)		
Restrictive La	ayer (if obse	erved):								
		Туре:					Hvdric 9	Soil Present? Yes X No		
	Depth (in	ches):					, 20			
Remarks:										

Project/Site: Cider Solar Project	City/County: Elba/Gen	essee Sampling Date: 1/15/2021
Applicant/Owner: Hecate		State: NY Sampling Point:
Investigator(s): Andrew Sorci	Section, Township, Rar	nge: 1_20210115_WL119_U1
Landform (hillslope, terrace,etc.): Side Slope	Local relief (concave, conv	ex, none): Convex Slope (%) 5 - 25
Subregion (LRR or MLRA): LRR R	Lat: 43.096595 Long	:78.257183
Soil Map Unit Name: CIB, Collamer silt loam		NWI Classification: UPL
Are climatic / hyrologic conditions on the site	cypical for this time of year? Yes X	No (if no, explain in Remarks.)
Are Vegetation X , Soil X , or Hydrology	significantly disturbed? Are "Nor	nal Circumstances" present? Yes X No
Are Vegetation, Soil, or Hydrology	naturally problematic? (if needed	explain any answers in Remarks.)
SUMMARY OF FINDINGS - Attach site ma	o showing sampling point locations, t	ransects, important features, etc.
Hydrophytic Vegetation Present? Yes	No X Is the Sampled	Area
Hydric Soil Present? Yes	No X within a Wetlar	d? Yes NoX
Wetland Hydrology Present? Yes	No X if yes, optional \	Vetland Site ID:
Remarks: (Explain alternative procedures here or in a se	parate report.)	
edge of ag field and highway		
HYDROLOGY		
Wetland Hydrology Indicators:		Secondary Indicators (minimum of two required)
Primary Indicators (minimum of one is required: c	heck all that apply)	Surface Soil Cracks (B6)
Surface Water (A1)	Water-Stained Leaves (B9)	Drainage Patterns (B10)
High Water Table (A2)	Aquatic Fauna (B13)	Moss Trim Lines (B16)
Saturation (A3)	Marl Deposits (B15)	Dry-Season Water Table (C2)
Water Marks (B1)	Hydrogen Sulfide Odor (C1)	Crayfish Burrows (C8)
Sediment Deposits (B2)	Oxidized Rhizospheres on Living Roots (0	
Drift Deposits (B3)	Presence of Reduced Iron (C4)	Stunted or Stressed Plants (D1)
-		
Algal Mat or Crust (B4)	Recent Iron Reduction in Tilled Soils (C6)	
Iron Deposits (B5)	Thin Muck Surface (C7)	Shallow Aquitard (D3)
Inundation Visible on Aerial Imagery (B7)	Other (Explain in Remarks)	Microtopographic Relief (D4)
Sparsley Vegetated Concave Surface (B8)		FAC-Neutral Test (D5)
Surface Water Present? Yes NoX	Depth (inches)	
Water Table Present? Yes NoX	Depth (inches) Wetla	nd Hydrology Present? Yes NoX
Saturation Present? Yes NoX	Depth (inches)	
Describe Recorded Data (stream gauge, moni	toring well, aerial photos, previous inspec	tions), if available:
Remarks:		

VEGETATION - Use scient	tific names of plants				Sampli	ng Point	: 1_202 1	L0115_W	L119_U1
Tree Stratum	(Plot Size: _30'radius_)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test V Number of Domi That Are OBL, FA	nant Spe	cies	0	(A)
			= Total Cov	/er	Total Numbe Species Aci	r of Dom	inant —	1	(A) (B)
					Percent of Don That Are OBL, I	•		0%	_(A/B)
					Prevalence Index \	Norkshe	et:		
		A la a a l ustic	Daminant	lo di satan	OBL species	0	x 1	0	
Shrub Stratum	(Plot Size: 15'radius)	% Cover	Dominant Species?	Status	FACW species	0	x 2	0	
					FAC species	0	x 3	0	
			= Total Cov	/er	FACU species	10	x 4	40	
					UPL species	0	^ x 5	0	
					Column Totals	10	— (A)	40	(B)
					Prevalenc			40	(b)
					Hydrophytic Vege	tation In	dicators	:	
		Absolute	Dominant	Indicator	1- Rapid Tes	t For Hyd	drophytic	: Vegeta	tion
Herb Stratum	(Plot Size: 5'radius)	% Cover	Species?	Status	2- Dominano	e Test is	> 50%		
Unknown species		100	Χ	UNK	3- Prevalenc				
Taraxacum officinale		<u>10</u> 110	= Total Cov	FACU (er	4- Morpholo			s	
			10tai cov	/EI	5- Problema	_	•		on
					Definitions of Vegeta	ation Stra	ta:		
					Tree- Woody plants 3 breast height (DBH),	3 in. (7.6cı	m) or mo		neter at
					Sapling/Shrub- Wood greater than or equa				and
					Herb- All herbaceous size, and woody plan			_	lless of
Woody Vine Stratum	(Plot Size: 30'radius)		Dominant Species?	Indicator Status	Woody Vines- All wo height.	ody vines	greater t	han 3.281	ft in
			_= Total Cov	/er	Hydroph Vegeta Prese	-	S	No X	_
Remarks: (Include photo nu unknown grass species -	•		-	۱)	1				

)IL								Sampling Point: 1_20210115_WL1:
Depth	Matrix				Redo	x Feature	es	
inches	Color	%	Color	%	Type	Loc	Texture	Remarks
0-5	10YR 2/2	100					Sandy Loam	
5-15	10YR 3/2	100					Loamy Sand	
	•						,	
Hydric So	oil Indicators:							Indicators for Problematic Soils:
His	tosol (A1)			•			ırface (B15)	2 cm Muck (A10)
	tic Epipedon (A2)		-		k Surface (•	Coast Prarie Redox (A16)
	ck Histic (A3)			-	•	lucky Mine		5 cm Mucky Peat or Peat (S3)
	drogen Sulfide					leyed Mat		Dark Surface (S7)
	atified Layers			-		l Matrix (F	•	Polyvalue Below Surface (S8)
	oleted Below			-		ark Surface		Thin Dark Surface (S9)
	ck Dark Surfac			-		l Dark Surf		Iron-Manganese Masses (F12)
	ndy Mucky Mi				Redox D	epressions	(F8)	Piedmont Floodplain Soils (F19)
	ndy Gleyed Ma)					Mesic Spodic (TA6)
	idy Redox (S5)							Red Parent Material (F21)
Stri	pped Matrix ((S6)						Very Shallow Dark Surface (TF12)
Dar	k Surface (S7))						Other (Explain in Remarks)
Restrictiv	ve Layer (if obs	erved):						
		Type: 0	Gravel Fill				Hydr	ic Soil Present? Yes No X
	Depth (in	ches): 1	15					
Remarks	5:							

Project/Site: Cider Solar Project	City/County: Oakfield/Ge	nessee Sampling Date: 9/29/2020
Applicant/Owner: Hecate		State: NY Sampling Point:
Investigator(s): Andrew Sorci	Section, Township, Range	: 02-20200721_WL40_W2
Landform (hillslope, terrace,etc.): Depression	Local relief (concave, convex,	none): Concave Slope (%) 0 - 5
Subregion (LRR or MLRA): LRR L	Lat: 43.098734 Long:	78.204117 Datum: NAD83
Soil Map Unit Name: Ld: Lamson very f	ine sandy loam	NWI Classification: PSS
Are climatic / hyrologic conditions on the site t	ypical for this time of year? Yes X No	o (if no, explain in Remarks.)
Are Vegetation $___$, Soil $___$, or Hydrology	significantly disturbed? Are "Normal	Circumstances" present? Yes X No
Are Vegetation, Soil, or Hydrology	naturally problematic? (if needed, ex	plain any answers in Remarks.)
SUMMARY OF FINDINGS - Attach site map	showing sampling point locations, tra	nsects. important features. etc.
Hydrophytic Vegetation Present? Yes X	No Is the Sampled Are	
Hydric Soil Present? Yes X	No within a Wetland?	
Wetland Hydrology Present? Yes X	No if yes, optional We	tland Site ID: WL92
Remarks: (Explain alternative procedures here or in a sep		
HYDROLOGY		
Wetland Hydrology Indicators:		Secondary Indicators (minimum of two required)
Primary Indicators (minimum of one is required: ch		Surface Soil Cracks (B6)
Surface Water (A1)	Water-Stained Leaves (B9)	Drainage Patterns (B10)
High Water Table (A2)	Aquatic Fauna (B13)	Moss Trim Lines (B16)
Saturation (A3)	Marl Deposits (B15)	Dry-Season Water Table (C2)
Water Marks (B1)	Hydrogen Sulfide Odor (C1)	Crayfish Burrows (C8)
Sediment Deposits (B2)	Oxidized Rhizospheres on Living Roots (C3)	Saturation Visible in Aerial Imagery (C9)
Drift Deposits (B3)	Presence of Reduced Iron (C4)	Stunted or Stressed Plants (D1)
Algal Mat or Crust (B4)	Recent Iron Reduction in Tilled Soils (C6)	X Geomorphic Position (D2)
Iron Deposits (B5)	Thin Muck Surface (C7)	Shallow Aquitard (D3)
Inundation Visible on Aerial Imagery (B7)	Other (Explain in Remarks)	Microtopographic Relief (D4)
Sparsley Vegetated Concave Surface (B8)		X FAC-Neutral Test (D5)
Surface Water Present? Yes No X	Depth (inches)	
Water Table Present? Yes No X	Depth (inches) Wetland	Hydrology Present? Yes X No
Saturation Present? Yes No X	Depth (inches)	
Describe Recorded Data (stream gauge, monit	coring well, aerial photos, previous inspectio	ns), if available:
(5 5 7		,
Remarks:		

VEGETATION - Use scientific names of plants Sampling Point: 02-20200721_WL40_W2 Absolute Dominant Indicator **Dominance Test Worksheet:** (Plot Size: 30'radius) % Cover Species? Status **Tree Stratum Number of Dominant Species** That Are OBL, FACW, or FAC: (A) = Total Cover **Total Number of Dominant** Species Across All Strata: (B) 6 Percent of Dominant Species That Are OBL, FACW, or FAC: 83.3% (A/B) **Prevalence Index Worksheet:** x 1 65 **OBL** species 65 Absolute Dominant Indicator **FACW** species 60 120 (Plot Size: 15'radius) Species? x 2 **Shrub Stratum** % Cover Status FAC species 5 **FACW** х3 15 Cornus amomum 40 Х Salix nigra 25 Χ OBL **FACU** species 10 x 4 40 20 Fraxinus pennsylvanica Χ **FACW UPL** species 0 x 5 0 85 = Total Cover Column Totals 140 (A) 240 (B) Prevalence Index = B/A = 1.71 **Hydrophytic Vegetation Indicators:** Absolute Dominant Indicator 1- Rapid Test For Hydrophytic Vegetation **Herb Stratum** (Plot Size: 5'radius) % Cover Species? Status X 2- Dominance Test is > 50% 40 Symphyotrichum puniceum OBL X 3- Prevalence Index is =< 3.0 Χ Unknown species 15 UNK 4- Morphological Adaptations Solidago canadensis 10 **FACU** 65 = Total Cover 5- Problematic Hydrophytic Vegetation **Definitions of Vegetation Strata:** Tree- Woody plants 3 in. (7.6cm) or more in diameter at breast height (DBH), regardless of height. Sapling/Shrub- Woody plants less than 3 in. DBH and greater than or equal to 3.28ft (1m) tall. Herb- All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28ft tall. Absolute Dominant Indicator Woody Vines- All woody vines greater than 3.28ft in (Plot Size: 30'radius) Species? **Woody Vine Stratum** % Cover Status height. **FAC** Vitis riparia Χ 5 = Total Cover Hydrophytic Vegetation Present? Yes X No ___

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

SOIL Sampling Point: 02-20200721_WL40_W2 Depth Matrix **Redox Features** (inches Color % Color % Texture Remarks Type Loc 0-20 10YR 3/1 90 10YR 4/6 C Μ Sandy Loam 10 **Hydric Soil Indicators:** Indicators for Problematic Soils: Histosol (A1) Polyvalue Below Surface (B15) 2 cm Muck (A10) Histic Epipedon (A2) Thin Dark Surface (S9) Coast Prarie Redox (A16) Black Histic (A3) Loamy Mucky Mineral (F1) 5 cm Mucky Peat or Peat (S3) Hydrogen Sulfide (A4) Loamy Gleyed Matric (F2) Dark Surface (S7) Stratified Layers (A5) Depleted Matrix (F3) Polyvalue Below Surface (S8) Depleted Below Dark Surface (A11) X Redox Dark Surface (F6) Thin Dark Surface (S9) Thick Dark Surface (A12) Depleted Dark Surface (F7) Iron-Manganese Masses (F12) Sandy Mucky Mineral (S1) Redox Depressions (F8) Piedmont Floodplain Soils (F19) Sandy Gleyed Matrix (S4) Mesic Spodic (TA6) Sandy Redox (S5) Red Parent Material (F21) Stripped Matrix (S6) Very Shallow Dark Surface (TF12) Dark Surface (S7) Other (Explain in Remarks) Restrictive Layer (if observed): Type: Hydric Soil Present? Yes No Depth (inches): Remarks:

Project/Site: Cider Solar Project	City/County: Elba/Genesee Sampling Date: 7/21/2020
Applicant/Owner: Hecate	State: NY Sampling Point:
Investigator(s): Justin Ahn	Section, Township, Range: 02-20200721-WL-40-40W
Landform (hillslope, terrace,etc.): Depression	Local relief (concave, convex, none): Concave Slope (%) 0 - 1
9 ,	43.095326 Long: -78.215260 Datum: NAD83
Soil Map Unit Name: HIA: Hilton loam, 0 to 3 percent slop	esNWI Classification: PEM
Are climatic / hyrologic conditions on the site typical for the	nis time of year? Yes X No (if no, explain in Remarks.)
Are Vegetation, Soil, or Hydrologysignif	icantly disturbed? Are "Normal Circumstances" present? Yes X No
Are Vegetation, Soil, or Hydrologynatur	ally problematic? (if needed, explain any answers in Remarks.)
SUMMARY OF FINDINGS - Attach site map showing	sampling point locations, transects, important features, etc.
Hydrophytic Vegetation Present? Yes X No	Is the Sampled Area
Hydric Soil Present? Yes X No	within a Wetland?
Wetland Hydrology Present? Yes X No	if yes, optional Wetland Site ID: WL92
Remarks: (Explain alternative procedures here or in a separate report.)	
HYDROLOGY	
Wetland Hydrology Indicators:	Secondary Indicators (minimum of two required)
Primary Indicators (minimum of one is required: check all that a	Surface Soil Cracks (B6)
X Surface Water (A1) X Water-	Stained Leaves (B9) Drainage Patterns (B10)
High Water Table (A2) Aquatic	Fauna (B13) Moss Trim Lines (B16)
X Saturation (A3) Marl De	eposits (B15) Dry-Season Water Table (C2)
Water Marks (B1) Hydrog	en Sulfide Odor (C1) Crayfish Burrows (C8)
Sediment Deposits (B2) Oxidize	d Rhizospheres on Living Roots (C3) Saturation Visible in Aerial Imagery (C9)
	te of Reduced Iron (C4) Stunted or Stressed Plants (D1)
	Iron Reduction in Tilled Soils (C6) Geomorphic Position (D2)
	uck Surface (C7) Shallow Aquitard (D3)
	Explain in Remarks) Microtopographic Relief (D4)
Sparsley Vegetated Concave Surface (B8)	FAC-Neutral Test (D5)
Surface Water Present? Yes X No Depth (in	· ——
Water Table Present? Yes No _X Depth (in	
Saturation Present? Yes X No Depth (in	ches)
Describe Recorded Data (stream gauge, monitoring well,	aerial photos, previous inspections), if available:
Remarks:	

VEGETATION - Use scientific names of plants Sampling Point: 02-20200721-WL-40-40W Absolute Dominant Indicator **Dominance Test Worksheet:** (Plot Size: 30'radius) % Cover Species? **Tree Stratum** Status **Number of Dominant Species** That Are OBL. FACW, or FAC: (A) 2 = Total Cover **Total Number of Dominant** Species Across All Strata: 2 (B) **Percent of Dominant Species** That Are OBL, FACW, or FAC: 100% (A/B) Prevalence Index Worksheet: OBL species 30 x 1 30 Absolute Dominant Indicator 32 (Plot Size: 15'radius) % Cover Species? Status **FACW** species x 2 64 **Shrub Stratum** 105 FAC species 35 х3 = Total Cover 2 FACU species 8 x 4 **UPL** species O x 5 0 Column Totals 99 (A) 207 (B) Prevalence Index = B/A = 2.09 **Hydrophytic Vegetation Indicators:** Absolute Dominant Indicator 1- Rapid Test For Hydrophytic Vegetation **Herb Stratum** (Plot Size: 5'radius) % Cover Species? Status X 2- Dominance Test is > 50% Bidens frondosa 30 **FACW** X 3- Prevalence Index is =< 3.0 Populus deltoides 30 Х FAC 4- Morphological Adaptations Sparganium americanum 15 OBL Alisma subcordatum 10 OBL 5- Problematic Hydrophytic Vegetation Ranunculus abortivus 5 FAC 5 Asclepias incarnata OBL **Definitions of Vegetation Strata:** 2 Abutilon theophrasti **FACU** Tree- Woody plants 3 in. (7.6cm) or more in diameter at 97 = Total Cover breast height (DBH), regardless of height. Sapling/Shrub- Woody plants less than 3 in. DBH and greater than or equal to 3.28ft (1m) tall. Herb- All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28ft tall. Absolute Dominant Indicator Woody Vines- All woody vines greater than 3.28ft in (Plot Size: 30'radius) Species? **Woody Vine Stratum** % Cover Status height. Echinocystis lobata **FACW** 2 = Total Cover Hydrophytic Vegetation Present? Yes X No ____ Remarks: (Include photo numbers here or on a separate sheet.)

SOIL Sampling Point: 02-20200721-WL-40-40W

Depth	Matrix	(Redo	x Feat			
(inche	s Color	%	Color	%	Туре	Loc	Texture	Remarks	
0-4	10YR 2/2	95	5Y 2.5/1	5	С	PL	Silt Loam		
4-18	10YR 5/2	95	5Y 2.5/1	5	С	PL	Sandy Loam		
18-24	10YR 5/2	60	10YR 6/8	40	С	PL	Sandy Loam		

Hydric Soil Indicators:		Indicators for Problematic Soils:
Histosol (A1)	Polyvalue Below Surface (B15)	2 cm Muck (A10)
Histic Epipedon (A2)	Thin Dark Surface (S9)	Coast Prarie Redox (A16)
Black Histic (A3)	X Loamy Mucky Mineral (F1)	5 cm Mucky Peat or Peat (S3)
Hydrogen Sulfide (A4)	Loamy Gleyed Matric (F2)	Dark Surface (S7)
Stratified Layers (A5)	X Depleted Matrix (F3)	Polyvalue Below Surface (S8)
Depleted Below Dark Surface (A11)	Redox Dark Surface (F6)	Thin Dark Surface (S9)
Thick Dark Surface (A12)	Depleted Dark Surface (F7)	Iron-Manganese Masses (F12)
Sandy Mucky Mineral (S1)	Redox Depressions (F8)	Piedmont Floodplain Soils (F19)
Sandy Gleyed Matrix (S4)		Mesic Spodic (TA6)
Sandy Redox (S5)		Red Parent Material (F21)
Stripped Matrix (S6)		Very Shallow Dark Surface (TF12)
Dark Surface (S7)		Other (Explain in Remarks)
Restrictive Layer (if observed): Type:		udria Cail Dragant 2 Vac. V Na
		ydric Soil Present? Yes X No
Depth (inches):		

Project/Site: Cider Solar Project	City/County: Elba/Genese	e Sampling Date: 7/22/2020
Applicant/Owner: Hecate		State: NY Sampling Point:
Investigator(s): Justin Ahn	Section, Township, Range:	02-20200722-WL-41-41W
Landform (hillslope, terrace,etc.): Toeslope	Local relief (concave, convex, r	none): <u>Linear</u> Slope (%) <u>1 - 5</u>
Subregion (LRR or MLRA): LRR L		78.215298 Datum: NAD83
Soil Map Unit Name: CaA Canandaigua	silt loam, 0 to 2 percent slopes	NWI Classification: UPL
Are climatic / hyrologic conditions on the site ${\bf t}$	ypical for this time of year? Yes X No	(if no, explain in Remarks.)
Are Vegetation, Soil, or Hydrology	significantly disturbed? Are "Normal of the control	Circumstances" present? Yes X No
Are Vegetation, Soil, or Hydrology	naturally problematic? (if needed, exp	lain any answers in Remarks.)
SUMMARY OF FINDINGS - Attach site map	showing sampling point locations, tran	sects, important features, etc.
Hydrophytic Vegetation Present? Yes X	No Is the Sampled Area	
Hydric Soil Present? Yes	No X within a Wetland?	Yes No X
· —		
Wetland Hydrology Present? Yes		
Remarks: (Explain alternative procedures here or in a sep	parate report.)	
HYDROLOGY		
Wetland Hydrology Indicators:		Secondary Indicators (minimum of two required)
Primary Indicators (minimum of one is required: ch	neck all that apply)	Surface Soil Cracks (B6)
Surface Water (A1)	Water-Stained Leaves (B9)	Drainage Patterns (B10)
High Water Table (A2)	Aquatic Fauna (B13)	Moss Trim Lines (B16)
Saturation (A3)	Marl Deposits (B15)	Dry-Season Water Table (C2)
Water Marks (B1)	Hydrogen Sulfide Odor (C1)	Crayfish Burrows (C8)
Sediment Deposits (B2)	Oxidized Rhizospheres on Living Roots (C3)	Saturation Visible in Aerial Imagery (C9)
Drift Deposits (B3)	Presence of Reduced Iron (C4)	Stunted or Stressed Plants (D1)
Algal Mat or Crust (B4)	Recent Iron Reduction in Tilled Soils (C6)	Geomorphic Position (D2)
Iron Deposits (B5)	Thin Muck Surface (C7)	Shallow Aquitard (D3)
Inundation Visible on Aerial Imagery (B7)	Other (Explain in Remarks)	Microtopographic Relief (D4)
Sparsley Vegetated Concave Surface (B8)		FAC-Neutral Test (D5)
	Double (inches)	
Surface Water Present? Yes No X	Depth (inches)	hadaalaaa Daaaaat2 Vaa Na V
Water Table Present? Yes NoX	- ' ' 	Hydrology Present? Yes No X
Saturation Present? Yes No X	Depth (inches)	
Describe Recorded Data (stream gauge, monit	oring well, aerial photos, previous inspection	ns), if available:
Remarks:		

VEGETATION - Use scientific names of plants Sampling Point: 02-20200722-WL-41-41W Absolute Dominant Indicator **Dominance Test Worksheet:** (Plot Size: 30'radius) % Cover Species? Status **Tree Stratum Number of Dominant Species** Populus deltoides 20 Χ FAC That Are OBL, FACW, or FAC: (A) 20 = Total Cover **Total Number of Dominant** (B) Species Across All Strata: 4 Percent of Dominant Species (A/B) That Are OBL, FACW, or FAC: 75% **Prevalence Index Worksheet:** 0 x 1 **OBL** species Absolute Dominant Indicator **FACW** species 30 60 (Plot Size: 15'radius) % Cover Species? Status x 2 **Shrub Stratum** FAC species 45 135 х3 = Total Cover **FACU** species 20 x 4 80 **UPL** species 0 x 5 0 Column Totals 95 (A) 275 (B) Prevalence Index = B/A = 2.89 **Hydrophytic Vegetation Indicators:** Absolute Dominant Indicator 1- Rapid Test For Hydrophytic Vegetation **Herb Stratum** (Plot Size: 5'radius) % Cover Species? Status X 2- Dominance Test is > 50% 20 Alliaria petiolata Χ **FACU** X 3- Prevalence Index is =< 3.0 Χ Phalaris arundinacea 20 **FACW** 4- Morphological Adaptations Toxicodendron radicans 15 Χ FAC Fraxinus pennsylvanica 10 **FACW** 5- Problematic Hydrophytic Vegetation Geum canadense 10 FAC 75 = Total Cover **Definitions of Vegetation Strata:** Tree- Woody plants 3 in. (7.6cm) or more in diameter at breast height (DBH), regardless of height. Sapling/Shrub- Woody plants less than 3 in. DBH and greater than or equal to 3.28ft (1m) tall. Herb- All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28ft tall. Absolute Dominant Indicator Woody Vines- All woody vines greater than 3.28ft in (Plot Size: 30'radius) **Woody Vine Stratum** % Cover Species? Status height. = Total Cover Hydrophytic Vegetation Present? Yes X No ___ Remarks: (Include photo numbers here or on a separate sheet.)

SOIL Sampling Point: 02-20200722-WL-41-41W Depth Matrix **Redox Features** (inches % Color Color % Type Texture Remarks Loc 0-20 10YR 4/3 100 Silt Loam **Hydric Soil Indicators:** Indicators for Problematic Soils: Histosol (A1) Polyvalue Below Surface (B15) 2 cm Muck (A10) Histic Epipedon (A2) Thin Dark Surface (S9) Coast Prarie Redox (A16) Black Histic (A3) Loamy Mucky Mineral (F1) 5 cm Mucky Peat or Peat (S3) Hydrogen Sulfide (A4) Loamy Gleyed Matric (F2) Dark Surface (S7) Stratified Layers (A5) Depleted Matrix (F3) Polyvalue Below Surface (S8) Depleted Below Dark Surface (A11) Redox Dark Surface (F6) Thin Dark Surface (S9) Thick Dark Surface (A12) Depleted Dark Surface (F7) Iron-Manganese Masses (F12) Sandy Mucky Mineral (S1) Redox Depressions (F8) Piedmont Floodplain Soils (F19) Sandy Gleyed Matrix (S4) Mesic Spodic (TA6) Sandy Redox (S5) Red Parent Material (F21) Stripped Matrix (S6) Very Shallow Dark Surface (TF12) Dark Surface (S7) Other (Explain in Remarks) Restrictive Layer (if observed): Type: Hydric Soil Present? Yes No Χ Depth (inches): Remarks:

CIDER SOLAR FARM WETLAND AND STREAM DELINEATION REPORT AND FUNCTION AND VALUE ASSESSMENT

Appendix F Wetland Function and Value Summary Table

Appendix F WETLAND FUNCTION AND VALUE SUMMARY TABLE





Appendix F. Wetlands Functions and Values

		Veget	ation Character	istics	H	ydrologic Cha	racteristics		Bu	ffer (within 10	0 feet)		
Feature ID	Size (acres) ¹	Forested Component	Multiple Cover Types	Invasive Species Observed	Associated Perennial Stream	Associated Intermittent Stream	Surface Water Other Than Potential Vernal Pool	Potential Vernal Pool	Forest/ Shrubland	Agriculture	Road/ Development	Functional Capacity ²	Principal Functions & Values
WL01	M	x	X	Х	-	-	х	-	X	X	-	М	floodflow alteration; sediment toxicant retention; sediment/shoreline stabilization
WL02	М	Х	-	Х	-	-	х	-	Х	Х	-	L	sediment/shoreline stabilization; floodflow alteration; nutrient removal/retention/transformation
WL03	S	Х	-	Х	-	-	Х	-	Х	Х	-	L	sediment/shoreline stabilization; floodflow alteration; nutrient removal/retention/transformation
WL04	М	×	X	X	-	-	X	-	X	X	-	М	floodflow alteration; sediment toxicant retention; nutrient removal/retention/transformation
WL05	S	Х	Х	Х	-	-	Х	-	Х	Х	-	М	floodflow alteration; sediment toxicant retention; nutrient removal/retention/transformation; sediment/shoreline stabilization
WL06	М	-	-	-	-	-	Х	-	X	х	Х	L	floodflow alteration
WL07	М	-	х	Х	-	х	-	-	х	Х	х	L	floodflow alteration; sediment toxicant retention; nutrient removal/retention/transformation; sediment/shoreline stabilization
WL08	S	-	-	Х	-	-	-	-	Х	Х	-	L	floodflow alteration; sediment toxicant retention; nutrient removal/retention/transformation
WL09	S	-	-	Х	-	-	-	-	Х	Х	-	М	floodflow alteration; sediment toxicant retention; nutrient removal/retention/transformation
WL10	S	-	-	-	-	-	-	1	Х	Х	-	L	floodflow alteration; sediment toxicant retention; nutrient removal/retention/transformation
WL11	S	-	-	Х	-	-	х	1	Х	Х	-	L	floodflow alteration; sediment toxicant retention; nutrient removal/retention/transformation
WL12	S	-	-	Х	-	-	х	-	Х	Х	-	L	floodflow alteration; sediment toxicant retention; nutrient removal/retention/transformation
WL13	M	Х	Х	Х	-	-	×	-	Х	Х	-	М	floodflow alteration; sediment toxicant retention



		Vegeta	ation Character	istics	Н	ydrologic Cha	racteristics		Bu	ffer (within 10	0 feet)		
Feature ID	Size (acres) ¹	Forested Component	Multiple Cover Types	Invasive Species Observed	Associated Perennial Stream	Associated Intermittent Stream	Surface Water Other Than Potential Vernal Pool	Potential Vernal Pool	Forest/ Shrubland	Agriculture	Road/ Development	Functional Capacity ²	Principal Functions & Values
WL14	S	-	-	-	-	-	X	-	Х	X	Х	М	floodflow alteration; sediment toxicant retention; nutrient removal/retention/transformation; wildlife habitat
WL15	S	Х	Х	Х	-	-	Х	-	Х	Х	-	М	floodflow alteration; sediment toxicant retention; nutrient removal/retention/transformation; sediment/shoreline stabilization; wildlife habitat
WL16	S	-	-	Х	-	-	-	-	X	Х	-	L	sediment toxicant retention;
WL17	М	Х	Х	Х	-	-	Х	Х	Х	Х	-	М	floodflow alteration; sediment toxicant retention; nutrient removal/retention/transformation; sediment/shoreline stabilization; wildlife habitat
WL18	M	X	Х	Х	-	-	-	-	Х	Х	Х	М	floodflow alteration; sediment toxicant retention; nutrient removal/retention/transformation
WL19	S	-	-	Х	-	-	-	-	Х	Х	-	L	sediment toxicant retention
WL20	М	Х	Х	Х	-	Х	Х	Х	Х	Х	-	Н	floodflow alteration; sediment toxicant retention; nutrient removal/retention/transformation; sediment/shoreline stabilization; wildlife habitat
WL21	S	-	Х	Х	-		х	-	Х	-	-	L	floodflow alteration; sediment toxicant retention; nutrient removal/retention/transformation; wildlife habitat
WL22	М	Х	-	Х	Х	Х	X	-	Х	Х	-	Н	floodflow alteration; sediment toxicant retention; nutrient removal/retention/transformation; sediment/shoreline stabilization; wildlife habitat
WL23	S	×	-	Х	-	-	-	-	X	X	-	М	sediment toxicant retention
WL24	М	Х	-	Х	Х	-	-	-	х	Х	-	М	floodflow alteration; sediment toxicant retention; nutrient removal/retention/transformation; sediment/shoreline stabilization
WL25	M	X	-	Х	-	-	-	-	Х	X	-	М	floodflow alteration; sediment toxicant retention; nutrient removal/retention/transformation
WL26	М	-	Х	Х	-	-	-	-	Х	Х	Х	М	floodflow alteration; sediment toxicant retention; nutrient removal/retention/transformation;



		Veget	ation Character	istics	H	ydrologic Cha	racteristics		Bu	ffer (within 10	0 feet)		
Feature ID	Size (acres) ¹	Forested Component	Multiple Cover Types	Invasive Species Observed	Associated Perennial Stream	Associated Intermittent Stream	Surface Water Other Than Potential Vernal Pool	Potential Vernal Pool	Forest/ Shrubland	Agriculture	Road/ Development	Functional Capacity ²	Principal Functions & Values
WL27	S	X	-	×	Х	-	Х	1	X	Х	X	M	sediment/shoreline stabilization; floodflow alteration; sediment toxicant retention; nutrient removal/retention/transformation; fish and shellfish habitat; wildlife habitat
WL28	M	Х	X	Х	Х	-	-	1	Х	Х	Х	М	floodflow alteration; sediment toxicant retention; nutrient removal/retention/transformation; wildlife habitat; sediment/shoreline stabilization
WL29	L	Х	Х	Х	Х	-	х	-	Х	Х	-	Н	floodflow alteration; sediment toxicant retention; nutrient removal/retention/transformation; sediment/shoreline stabilization; wildlife habitat; fish and shellfish habitat
WL30	S	-	-	X	-	-	x	-	Х	Х	X	М	floodflow alteration; sediment toxicant retention; nutrient removal/retention/transformation
WL31	М	Х	Х	х	Х	-	х	-	Х	Х	-	Н	floodflow alteration; sediment toxicant retention; nutrient removal/retention/transformation; sediment/shoreline stabilization; wildlife habitat; fish and shellfish habitat
WL32	S	Х	Х	X	Х	-	-	-	х	x	-	М	floodflow alteration; sediment toxicant retention; nutrient removal/retention/transformation; sediment/shoreline stabilization
WL33	М	Х	Х	Х	-	X	-	-	х	Х	Х	М	floodflow alteration; sediment toxicant retention; nutrient removal/retention/transformation; sediment/shoreline stabilization
WL34	M	X	-	X	-	X	х	1	Х	Х	X	М	floodflow alteration; sediment toxicant retention; nutrient removal/retention/transformation; sediment/shoreline stabilization
WL35	S	-	-	-	-	-	-	-	Х	X	-	L	sediment toxicant retention
WL36	М	Х	-	Х	-	-	-	Х	Х	Х	-	М	floodflow alteration; sediment toxicant retention; nutrient removal/retention/transformation; wildlife habitat
WL37	S	-	-	-	-	-	-	-	Х	Х	-	L	sediment toxicant retention
WL38	S	-	-	-	-	-	-	-	Х	Х	-	L	sediment toxicant retention



		Vegeta	ation Characteri	stics	H	ydrologic Cha	racteristics		Bu	ffer (within 10	0 feet)		
Feature ID	Size (acres) ¹	Forested Component	Multiple Cover Types	Invasive Species Observed	Associated Perennial Stream	Associated Intermittent Stream	Surface Water Other Than Potential Vernal Pool	Potential Vernal Pool	Forest/ Shrubland	Agriculture	Road/ Development	Functional Capacity ²	Principal Functions & Values
WL39	S	Х	Х	Х	-	-	-	Х	Х	Х	-	М	floodflow alteration; sediment toxicant retention; nutrient removal/retention/transformation; wildlife habitat
WL40	M	Х	-	Х	-	-	-	-	Х	Х	-	М	floodflow alteration; sediment toxicant retention; nutrient removal/retention/transformation
WL41	M	Х	-	Х	-	-	х	-	Х	Х	-	М	floodflow alteration; sediment toxicant retention; nutrient removal/retention/transformation; sediment/shoreline stabilization
WL42	M	X	-	Х	-	-	-	-	Х	X	-	L	floodflow alteration; sediment toxicant retention; nutrient removal/retention/transformation
WL43	S	Х	Х	Х	-	-	х	-	Х	Х	-	М	floodflow alteration; sediment toxicant retention; nutrient removal/retention/transformation; sediment/shoreline stabilization
WL44	M	-	-	X	-	-	-	-	х	X	X	L	floodflow alteration; sediment toxicant retention; nutrient removal/retention/transformation
WL45	М	-	-	Х	-	Х	-	-	Х	Х	Х	L	floodflow alteration; sediment toxicant retention; nutrient removal/retention/transformation; sediment/shoreline stabilization
WL46	М	Х	Х	Х	-	-	-	-	Х	Х	-	М	floodflow alteration; sediment toxicant retention; nutrient removal/retention/transformation
WL47	M	Х	Х	Х	-	-	-	-	Х	Х	-	М	floodflow alteration; sediment toxicant retention; nutrient removal/retention/transformation
WL48	S	-	-	Х	-	-	-	-	Х	X	-	L	floodflow alteration; sediment toxicant retention; nutrient removal/retention/transformation
WL49	М	Х	-	Х	-	-	-	Х	Х	Х	-	М	floodflow alteration; sediment toxicant retention; nutrient removal/retention/transformation; wildlife habitat
WL50	М	Х	Х	Х	Х	-	-	-	Х	Х	Х	L	floodflow alteration; sediment toxicant retention; nutrient removal/retention/transformation; sediment/shoreline stabilization
WL51	М	Х	Х	Х	-	-	-	-	Х	Х	-	М	floodflow alteration; sediment toxicant retention; nutrient removal/retention/transformation; sediment/shoreline stabilization



		Vegeta	ation Characteri	stics	Hy	ydrologic Cha	racteristics		But	ffer (within 10	0 feet)		
Feature ID	Size (acres) ¹	Forested Component	Multiple Cover Types	Invasive Species Observed	Associated Perennial Stream	Associated Intermittent Stream	Surface Water Other Than Potential Vernal Pool	Potential Vernal Pool	Forest/ Shrubland	Agriculture	Road/ Development	Functional Capacity ²	Principal Functions & Values
WL52	M	Х	Х	Х	-	Х	-	-	Х	Х	-	М	floodflow alteration; sediment toxicant retention; nutrient removal/retention/transformation; sediment/shoreline stabilization
WL53	M	-	Х	Х	-	X	х	-	Х	Х	-	М	floodflow alteration; sediment toxicant retention; nutrient removal/retention/transformation; sediment/shoreline stabilization
WL54	M	Х		Х	-	X	-	-	Х	Х	-	М	floodflow alteration; sediment toxicant retention; nutrient removal/retention/transformation; sediment/shoreline stabilization
WL55	M	Х	Х	Х	-	-	-	-	Х	Х	X	М	floodflow alteration; sediment toxicant retention; nutrient removal/retention/transformation; sediment/shoreline stabilization; wildlife habitat
WL56	М	Х	-	Х	X	-	-	-	х	X	-	М	sediment/shoreline stabilization; floodflow alteration; sediment toxicant retention; nutrient removal/retention/transformation; wildlife habitat; fish and shellfish habitat
WL57	М	Х	-	Х	-	-	-	Х	Х	Х	-	М	floodflow alteration; sediment toxicant retention; nutrient removal/retention/transformation; wildlife habitat
WL58	M		-	Х	Х	Х	-	-	Х	Х	-	М	floodflow alteration; sediment toxicant retention; nutrient removal/retention/transformation; sediment/shoreline stabilization
WL59	S	-	-	-	-	-	-	-	Х	Х	-	L	sediment toxicant retention
WL60	S	-	-	-	-	-	-	-	Х	Х	-	М	floodflow alteration; sediment toxicant retention; nutrient removal/retention/transformation
WL61	S	-	-	-	-	-	-	-	-	-	-	М	floodflow alteration; sediment toxicant retention; nutrient removal/retention/transformation
WL62	S	Х	-	-	-	-	-	-	Х	Х	-	М	floodflow alteration; sediment toxicant retention; nutrient removal/retention/transformation
WL63	S	-	-	-	-	-	-	-	Х	Х	-	L	floodflow alteration; sediment toxicant retention; nutrient removal/retention/transformation
WL64	М	Х	-	Х	-	-	Х	-	Х	Х	-	М	floodflow alteration; sediment toxicant retention; nutrient removal/retention/transformation



		Vegeta	ation Characteri	stics	H	ydrologic Cha	racteristics		Bu	ffer (within 10	0 feet)		
Feature ID	Size (acres) ¹	Forested Component	Multiple Cover Types	Invasive Species Observed	Associated Perennial Stream	Associated Intermittent Stream	Surface Water Other Than Potential Vernal Pool	Potential Vernal Pool	Forest/ Shrubland	Agriculture	Road/ Development	Functional Capacity ²	Principal Functions & Values
WL65	S	-	-	Х	-	-	-	Х	-	Х	-	L	floodflow alteration; sediment toxicant retention; nutrient removal/retention/transformation; wildlife habitat
WL66	М	Х	Х	-	-	-	-	-	Х	Х	-	М	floodflow alteration; sediment toxicant retention; nutrient removal/retention/transformation
WL67	M	-	-	-	-	-	-	-	Х	Х	X	L	sediment toxicant retention
WL68	M	X	-	-	-	-	X	-	X	Х	-	М	floodflow alteration; sediment toxicant retention; nutrient removal/retention/transformation
WL69	S	-	-	-	-	-		-	Х	Х	-	М	floodflow alteration; sediment toxicant retention; nutrient removal/retention/transformation
WL70	M	-	-	-	-	-	х	-	X	x	-	L	floodflow alteration; sediment toxicant retention; nutrient removal/retention/transformation
WL71	M	Х	-	Х	-	-	-	-	Х	х	-	М	floodflow alteration; sediment toxicant retention; nutrient removal/retention/transformation
WL72	S	Х	-		Х	-	-	-	х	Х	-	М	floodflow alteration; sediment toxicant retention; nutrient removal/retention/transformation; sediment/shoreline stabilization
WL73	L	X	Х	X	Х	X	-	-	Х	Х	Х	Н	floodflow alteration; sediment toxicant retention; nutrient removal/retention/transformation; sediment/shoreline stabilization; wildlife habitat
WL74	8	X	-	-	-	X	-	-	X	Х	-	L	floodflow alteration; sediment toxicant retention; nutrient removal/retention/transformation; sediment/shoreline stabilization
WL75	S	Х	-	-	-	-	-	Х	Х	Х	-	L	floodflow alteration; sediment toxicant retention; nutrient removal/retention/transformation; sediment/shoreline stabilization; wildlife habitat
WL76	S	-	-	Х	-	-	-	-	Х	Х	-	L	sediment toxicant retention
WL77	М	Х	-	-	-	-	-	-	Х	Х	-	М	floodflow alteration; sediment toxicant retention; nutrient removal/retention/transformation; sediment/shoreline stabilization



	Vegetation Characteristics		stics	Hy	ydrologic Cha	racteristics		Bu	ffer (within 10	0 feet)			
Feature ID	Size (acres) ¹	Forested Component	Multiple Cover Types	Invasive Species Observed	Associated Perennial Stream	Associated Intermittent Stream	Surface Water Other Than Potential Vernal Pool	Potential Vernal Pool	Forest/ Shrubland	Agriculture	Road/ Development	Functional Capacity ²	Principal Functions & Values
WL78	M	X	-	Χ	-	-	-	-	Х	X	-	М	floodflow alteration; sediment toxicant retention; nutrient removal/retention/transformation
WL79	S	Х	-	Х	-	-	-	-	-	Х	-	М	floodflow alteration; sediment toxicant retention; nutrient removal/retention/transformation
WL80	S	-	-	Х	-	-	-	-	Х	Х	-	L	floodflow alteration; sediment toxicant retention; nutrient removal/retention/transformation; sediment/shoreline stabilization
WL81	М	X	X	Х	-	-	x	-	х	х	Х	L	floodflow alteration; sediment toxicant retention; nutrient removal/retention/transformation
WL82	S	-	-	-	-	-	-	-	х	Х	-	L	sediment toxicant retention;
WL83	S	-	-	-	-	-	-	-	Х	Х	-	L	sediment toxicant retention
WL84	S	Х	-	Х	-	-	-	-	Х	Х	Х	М	floodflow alteration; sediment toxicant retention; nutrient removal/retention/transformation; sediment/shoreline stabilization
WL85	M	Х	-	Х	-	-	-	-	Х	Х	Х	М	floodflow alteration; sediment toxicant retention; nutrient removal/retention/transformation; sediment/shoreline stabilization
WL86	M	-	-	Х	-	-	-	-	Х	X	Х	L	sediment toxicant retention
WL87	М	X	-	X	-	-	-	-	х	Х	-	М	floodflow alteration; sediment toxicant retention; nutrient removal/retention/transformation
WL88	S	Х	-	Х	-	-	-	-	Х	х	-	L	sediment toxicant retention
WL89	М	Х	Х	Х	Х	-	-	-	Х	Х	-	М	floodflow alteration; sediment toxicant retention; nutrient removal/retention/transformation; sediment/shoreline stabilization
WL90	М	Х	-	Х	-	-	-	-	Х	Х	-	Н	floodflow alteration; sediment toxicant retention; nutrient removal/retention/transformation



		Veget	ation Character	istics	H	ydrologic Cha	racteristics		Bu	ffer (within 10	0 feet)		
Feature ID	Size (acres) ¹	Forested Component	Multiple Cover Types	Invasive Species Observed	Associated Perennial Stream	Associated Intermittent Stream	Surface Water Other Than Potential Vernal Pool	Potential Vernal Pool	Forest/ Shrubland	Agriculture	Road/ Development	Functional Capacity ²	Principal Functions & Values
WL91	M	Х	Х	Х	Х	-	-	Х	Х	X	-	М	floodflow alteration; sediment toxicant retention; nutrient removal/retention/transformation; wildlife habitat
WL92	L	Х	-	Х	-	X	-	ı	Х	Х	-	М	floodflow alteration; sediment toxicant retention; nutrient removal/retention/transformation; sediment/shoreline stabilization
WL93	S	-	-	Х	Х	-	-	ı	Х	Х	-	М	floodflow alteration; sediment toxicant retention; nutrient removal/retention/transformation; sediment/shoreline stabilization
WL94	S	Х	-	Х	-	-	-	-	X	х	-	М	floodflow alteration; sediment toxicant retention; nutrient removal/retention/transformation; sediment/shoreline stabilization
WL95	М	Х	-	Х	-	-	-	-	Х	Х	-	Н	floodflow alteration; sediment toxicant retention; nutrient removal/retention/transformation; wildlife habitat
WL96	M	Х	Х	Х	1	-	×	Х	Х	х	-	М	floodflow alteration; sediment toxicant retention; nutrient removal/retention/transformation; wildlife habitat
WL97	S	Х	-	Х	-	-	-	-	Х	X	-	L	sediment toxicant retention
WL98	S	-	-	Х	-	-	-	-	Х	Х	Х	М	floodflow alteration; sediment toxicant retention; nutrient removal/retention/transformation; wildlife habitat
WL99	М	Х	-	Х	-	-	-	Х	Х	Х	-	М	floodflow alteration; sediment toxicant retention; nutrient removal/retention/transformation; wildlife habitat
WL100	М	Х	-	Х	Х		-	-	Х	Х	-	М	floodflow alteration; sediment toxicant retention; nutrient removal/retention/transformation
WL101	М	Х	Х	Х	-	X	-	-	Х	Х	-	М	floodflow alteration; sediment toxicant retention; nutrient removal/retention/transformation
WL102	S	-	-	Х	-	-	-	-	-	Х	Х	L	floodflow alteration; sediment toxicant retention; nutrient removal/retention/transformation
WL103	М	Х	х	Х	-	Х	-	-	х	Х	-	М	floodflow alteration; sediment toxicant retention; nutrient removal/retention/transformation; sediment/shoreline stabilization



		Vegeta	ation Characteri	stics	Hy	ydrologic Cha	racteristics		Bu	ffer (within 10	0 feet)		
Feature ID	Size (acres) ¹	Forested Component	Multiple Cover Types	Invasive Species Observed	Associated Perennial Stream	Associated Intermittent Stream	Surface Water Other Than Potential Vernal Pool	Potential Vernal Pool	Forest/ Shrubland	Agriculture	Road/ Development	Functional Capacity ²	Principal Functions & Values
WL104	S	X	-	X	-	-	-	-	Х	Х	-	L	sediment toxicant retention
WL105	S	-	-	Х	-	-	-	-	Х	Х	-	L	floodflow alteration; sediment toxicant retention; nutrient removal/retention/transformation
WL106	S	-	-	Х	-	-	-	-	Х	Х	-	L	floodflow alteration; sediment toxicant retention; nutrient removal/retention/transformation
WL107	M	X	-	Х	-	-	-	-	х	Х	-	М	sediment toxicant retention
WL108	S	-	-	Х	-	-	-	-	Х	х	-	М	sediment toxicant retention
WL109	S	-	-	Х	х	-	Х	-	Х	Х	Х	М	floodflow alteration; sediment toxicant retention; nutrient removal/retention/transformation; sediment/shoreline stabilization
WL110	M	-	-	Х	-	-	-	-	Х	Х	Х	М	floodflow alteration; sediment toxicant retention
WL111	M	Х	-	Х	-	-	-	-	Х	Х	X	М	floodflow alteration; sediment toxicant retention
WL112	M	Х	-	Х	-	-	-	-	Х	Х	X	L	floodflow alteration; sediment toxicant retention
WL113	M	-	-	Х	-	-	-	-	Х	Х	-	М	floodflow alteration; sediment toxicant retention
WL114	S	Х	Х	Х	-	-	х	-	Х	Х	-	М	floodflow alteration; sediment toxicant retention;
WL115	M	Х	Х	Х	-	-	-	-	Х	Х	-	М	floodflow alteration; nutrient removal/retention/transformation
WL116	S	Х	Х	Х	Х	-	-	-	Х	Х	-	М	sediment/shoreline stabilization; floodflow alteration; nutrient removal/retention/transformation



		Vegetation Characteristics			H	Hydrologic Characteristics			Buffer (within 100 feet)				
Feature ID	Size (acres) ¹	Forested Component	Multiple Cover Types	Invasive Species Observed	Associated Perennial Stream	Associated Intermittent Stream	Surface Water Other Than Potential Vernal Pool	Potential Vernal Pool	Forest/ Shrubland	Agriculture	Road/ Development	Functional Capacity ²	Principal Functions & Values
WL117	M	Х	-	X	-	-	-	-	X	X	-	н	floodflow alteration; sediment toxicant retention; nutrient removal/retention/transformation
WL118	S	-	-	Х	Х	-	-	-	х	Х	-	Н	floodflow alteration; sediment toxicant retention; nutrient removal/retention/transformation; sediment/shoreline stabilization
WL119	8	-	-	-	-	-	-	-	X	X	Х	L	sediment toxicant retention

¹ Size categories: S = < 1 acres; M = 1 - 11 acres; $L = \ge 12$ acres based upon field delineated area

² Qualitative assessment of functional capacity based upon wetland and buffer characteristics, and wetland's opportunity to provide assessed functions and values. H= high; M = Medium; L = Low

CIDER SOLAR FARM WETLAND AND STREAM DELINEATION REPORT AND FUNCTION AND VALUE ASSESSMENT

Appendix G ORES Approved jurisdictional Jurisdiction

Appendix G ORES APPROVED JURISDICTIONAL JURISDICTION







Wetlands Jurisdictional Determination April 2, 2021

Pursuant to § 900-1.3(e)(2), Hecate Energy Cider Solar LLC provided a draft wetland delineation report entitled "Wetland and Stream Delineation Report and Function and Value Assessment," dated November 2020, as well as shapefiles dated submitted March 2021 for Hecate Energy Cider Solar Farm, Genesee County, New York.

Pursuant to § 900-1.3(e)(4), the Office of Renewable Energy Siting (the Office or ORES), in consultation with the New York State Department of Environmental Conservation (NYSDEC), hereby provides in Attachments A and B specific jurisdictional determinations for state regulated wetlands identified in the draft wetland delineation report and shapefiles. The information provided in Attachment A, with the three minor changes noted, together with Attachment B, will be necessary for developing Exhibit 14 (§900-2.15) in support of an application to the Office for a major renewable energy facility.

Please note that this determination only applies to major renewable energy facilities covered by Section 94-c of New York Executive Law and 19 NYCRR Part 900. This determination does not cover other projects, nor does it cover determinations under other applicable federal, state, or local jurisdictions, such as the Army Corps of Engineer's regulatory program under Section 404 of the Clean Water Act. Please contact those entities regarding their potential regulatory jurisdiction.

This determination is valid for a period of five years from the date of this letter. After five years, determinations and delineations will be considered expired and subject to change until a new determination or delineation is conducted and ORES extends this determination or issues a new jurisdictional determination.

CC: NYSDEC

Attachment A

Office of Renewable Energy Siting

Wetland specific jurisdictional determination for wetlands from draft wetland delineation report

Wetland Delineation ID ¹	Acreage	Category ²	State Wetland ID	Wetland Classification	Changes ³
01 20200930 WL112	0.522256	Mannad	BN-1	3	
		Mapped			
02_20200929_WL39	2.374389	Mapped	BN-4	2	
02_20200929_WL40	0.628514	Unmapped >12.4	NA	NA	
02-20200708-WL-01	2.891171	Mapped	BN-4	2	
02-20200708-WL-02	0.568202	Mapped	BN-4	2	
02-20200708-WL-02	2.582503	Mapped	BN-4	2	
02-20200709-WL-04	0.049311	Mapped	BN-6	2	
02-20200709-WL-05	0.049425	Mapped	BN-6	2	
02-20200709-WL-06	0.244138	Mapped	BN-6	2	
02-20200710-WL-07	0.290374	Mapped	BN-6	2	
02-20200710-WL-08	0.211065	Mapped	BN-7	2	
02-20200710-WL-08	5.59621	Mapped	BN-7	2	
02-20200710-WL-10	2.375764	Mapped	BN-9	2	
02-20200710-WL-11	0.222467	Mapped	BN-9	2	
02-20200713-WL-13	0.07388	Mapped	BN-4	2	
02-20200713-WL-13	0.385789	Mapped	BN-4	2	
02-20200714-WL-16	2.884057	Mapped	BN-9	2	
02-20200714-WL-17	0.219275	Mapped	BN-10	3	
02-20200715-WL-18	1.035823	Mapped	BN-11	3	

Wetland Delineation	Acreage	Category ²	State	Wetland	Changes ³
ID^1			Wetland ID	Classification	
02-20200715-WL-18	0.057326	Mapped	BN-11	3	
02-20200715-WL-18	0.461999	Mapped	BN-11	3	
02-20200715-WL-18	0.298356	Mapped	BN-11	3	
02-20200715-WL-18	0.52559	Mapped	BN-11	3	
02-20200715-WL-18	3.161286	Mapped	BN-11	3	
02-20200715-WL-19	0.037472	Mapped	BN-11	3	
02-20200716-WL-18	2.909715	Mapped	BN-11	3	
02-20200716-WL-22	0.140152	Mapped	BN-11	3	
02-20200716-WL-24	0.071792	Mapped	BN-10	3	
02-20200716-WL-24	0.085086	Mapped	BN-10	3	
02-20200716-WL-24	0.059409	Mapped	BN-10	3	
02-20200716-WL-24	1.643888	Mapped	BN-11	3	
02-20200720-WL-32	0.346523	Mapped	BN-2	2	
02-20200721-WL-35	1.787573	Mapped	BN-2	2	
02-20200721-WL-37	2.714504	Mapped	BN-4	2	
02-20200721-WL-37	0.371252	Mapped	BN-4	2	
02-20200721-WL-38	0.226776	Mapped	BN-4	2	
02-20200721-WL-39	0.361543	Mapped	BN-4	2	
02-20200721-WL-40	11.57416	Unmapped >12.4	NA	NA	
02-20200721-WL-41	1.321893	Unmapped >12.4	NA	NA	
02-20200723-WL-49	11.76145	Unmapped >12.4	NA	NA	
02-20200723-WL-50	0.173285	Unmapped >12.4	NA	NA	
02-20200723-WL-50	0.915839	Mapped	BN-12	2	
02-20200723-WL-50	0.109729	Mapped	BN-12	2	
02-20200723-WL-50	7.014872	Mapped	BN-12	2	
02-20200724-WL-51	1.61291	Mapped	BN-12	2	

Wetland Delineation	Acreage	Category ²	State	Wetland	Changes ³
ID ¹			Wetland ID	Classification	
02-20200930-WL-18	0.063739	Mapped	BN-11	3	
02-20201001-WL-08	3.28333	Mapped	BN-7	2	
1_07202020_WL31	1.197519	Mapped	BN-13	2	
1_07202020_WL31	5.400011	Mapped	BN-13	2	
1_07222020_WL45	1.684419	Mapped	BN-15	2	
1_07232020_WL51	2.418461	Mapped	BN-1	3	
1_07232020_WL52	0.500047	Mapped	BN-1	3	
1_07232020_WL52	0.061917	Mapped	BN-1	3	
1_07232020_WL52	1.390417	Mapped	BN-1	3	
1_202000925_WL52	2.582858	Mapped	BN-1	3	
1_20200706_WL01	0.636565	Mapped	OK-1	1	
1_20200706_WL01	1.523009	Mapped	OK-1	1	Removed ditch running East/West (±250
					feet)
1_20200706_WL01	0.383753	Mapped	OK-1	1	
1_20200709_WL09	0.504766	Mapped	OK-1	1	
1_20200714_WL20_01	0.079821	Unmapped >12.4	NA	NA	
1_20200714_WL20_02	1.950557	Unmapped >12.4	NA	NA	
1_20200714_WL20_03	0.144125	Unmapped >12.4	NA	NA	
1_20200714_WL20_04	0.146322	Unmapped >12.4	NA	NA	
1_20200714_WL20_05	0.192224	Unmapped >12.4	NA	NA	
1_20200714_WL20_06	0.409674	Unmapped >12.4	NA	NA	
1_20200714_WL20_07	0.501633	Unmapped >12.4	NA	NA	
1_20200714_WL20_08	7.861007	Unmapped >12.4	NA	NA	
1_20200715_WL15	0.147005	Mapped	BN-13	2	
1_20200715_WL15	0.087253	Mapped	BN-13	2	
1_20200715_WL20	0.271589	Unmapped >12.4	NA	NA	

Wetland Delineation	Acreage	Category ²	State	Wetland	Changes ³
ID^1			Wetland ID	Classification	
1_20200715_WL20	0.317891	Unmapped >12.4	NA	NA	
1_20200715_WL22	3.664682	Unmapped >12.4	NA	NA	
1_20200715_WL23	1.857745	Unmapped >12.4	NA	NA	
1_20200715_WL24	6.48859	Unmapped >12.4	NA	NA	
1_20200715_WL25	0.361122	Mapped	BN-13	2	
1_20200715_WL28	0.257459	Mapped	BN-13	2	
1_20200715_WL29	1.133875	Mapped	BN-13	2	
1_20200715_WL29	10.96659	Mapped	BN-13	2	
1_20200715_WL30	1.709685	Mapped	BN-13	2	
1_20200716_WL27	0.077126	Unmapped >12.4	NA	NA	
1_20200716_WL28	1.505004	Mapped	BN-13	2	
1_20200716_WL28	0.536321	Mapped	BN-13	2	
1_20200716_WL28	1.281625	Mapped	BN-13	2	
1_20200720_WL31	0.419222	Mapped	BN-13	2	
1_20200720_WL32	0.00011	Mapped	BN-13	2	
1_20200720_WL32	0.030991	Mapped	BN-13	2	
1_20200720_WL33	0.319437	Mapped	BN-14	3	
1_20200720_WL33	0.995117	Mapped	BN-14	3	
1_20200720_WL40	1.15791	Mapped	BN-13	2	
1_20200722_WL46	0.314998	Mapped	BN-15	2	
1_20200722_WL46	0.583963	Mapped	BN-15	2	
1_20200722_WL47	0.158779	Mapped	BN-1	3	
1_20200722_WL47	2.414519	Mapped	BN-1	3	
1_20200722_WL48	0.00824	Mapped	BN-1	3	
1_20200722_WL49	1.365022	Mapped	BN-1	3	
1_20200723_WL53	1.006466	Mapped	BN-1	3	Removed separated ditch (±170 feet)

Wetland Delineation	Acreage	Category ²	State	Wetland	Changes ³
ID ¹			Wetland ID	Classification	
1_20200723_WL53	0.594728	Mapped	BN-1	3	Removed portion of wetland under
					transmission line (±0.3 acres)
1_20200723_WL54	0.136549	Mapped	BN-14	3	
1_20200723_WL54	0.71108	Mapped	BN-14	3	
1_20200922_WL105	0.218765	Mapped	OK-11	2	
1_20200922_WL106	1.504988	Mapped	OK-11	2	
1_20200923_WL108	0.362071	Mapped	OK-1	1	
1_20200923_WL109	2.955281	Unmapped >12.4	NA	NA	
1_20200925_WL111	1.203939	Mapped	BN-2	2	
1_2020921_WL103	0.068705	Mapped	OK-11	2	
1_2020921_WL103	0.041197	Mapped	OK-11	2	
1_2020921_WL103	0.689733	Mapped	OK-11	2	
1_2020921_WL103	0.185157	Mapped	OK-11	2	
1_2020921_WL103	1.699459	Mapped	OK-11	2	
1_2020921_WL103	0.115932	Mapped	OK-11	2	
Off-Site Wetland	2.486078	Mapped	OK-11	2	

¹ ID assigned by applicant in draft wetland delineation report.

² Includes mapped wetlands and unmapped wetlands with a total area greater than 12.4 acres in size.

³Changes include any minor adjustments to features provided by the applicant

Attachment B
Hecate Energy Cider Solar Farm
Locations of Minor Changes to Draft Wetland Delineation Report

