# **Exhibit L** Wetland and Waterbody Delineation Report



WETLAND AND WATERBODY DELINEATION REPORT FOR THE CADENCE SOLAR ENERGY CENTER, UNION COUNTY, OHIO

JANUARY 2021

PREPARED FOR

**Cadence Solar Energy LLC** 

PREPARED BY

**SWCA Environmental Consultants** 

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## **1 INTRODUCTION**

On behalf of Cadence Solar Energy LLC (Cadence Solar), SWCA Environmental Consultants (SWCA) has prepared this Wetland and Waterbody Delineation Report for the Cadence Solar Energy Center (Project) located in Union County, Ohio (Figures 1 and 2). The Project is situated within approximately 4,943 acres of primarily cultivated, rotational cropland (Project Area). The land is privately owned and is located approximately 7.8 miles northwest of Marysville in Union County, Ohio (Figure 1).

The objectives of this survey were to identify and evaluate jurisdictional wetlands and other waters within the Project Area that may be subject to U.S. Army Corps of Engineers (USACE) and Ohio Environmental Protection Agency (OEPA) jurisdiction under Sections 404 and 401 of the Clean Water Act (CWA) and the Ohio Revised Code 6111 Water Pollution Control, which regulates fill in waters that are not under federal jurisdiction.

A delineation Survey Area was developed to encompass all land where field surveys were requested by Cadence Solar, and where field delineations were conducted (Figure 1). The Project Area includes parcels under consideration for development. Land that was not surveyed is not under consideration for development. The Survey Area is approximately 5,377 acres.

This report provides the methods, results, and conclusions of a wetland and waterbody delineation that SWCA conducted within the Project Area on December 10-16 and 26-27, 2019; January 8-10 and 14-15, and November 5-6 and 23, 2020. Fieldwork was performed and supervised by SWCA wetland ecologists, both trained and practicing delineators of the Midwest regional supplement.

## 2 METHODOLOGY

In accordance with USACE methodology outlined in the *Corps of Engineers Wetlands Delineation Manual* (USACE 1987) and the *Regional Supplement to the Corps of Engineers Wetlands Delineation Manual: Midwest Region* (USACE 2010), wetlands and other jurisdictional waters were identified and delineated through the combined use of existing publicly available baseline data (desktop analysis) and field investigations.

## 2.1 Desktop Analysis Methodology

The following publicly available data sources were used to complete a desktop analysis of the Project Area to assess the likelihood of wetlands and other jurisdictional waters to occur within the Project Area:

- Current and historical aerial imagery
- Federal Emergency Management Agency (FEMA) National Flood Hazard mapping
- U.S. Department of Agriculture (USDA) Natural Resources Conservation Service (NRCS) Web Soil Survey (NRCS 2020)
- U.S. Fish and Wildlife Service (USFWS) National Wetlands Inventory (NWI; USFWS 2015) mapping
- U.S. Geological Survey (USGS) National Hydrography Dataset (NHD; USGS 2013)

The results of the desktop analysis were used to identify the likely locations of wetlands and waterbodies for field verification described below.

Wetland and Waterbody Delineation Report for the Cadence Solar Energy Center January 2021

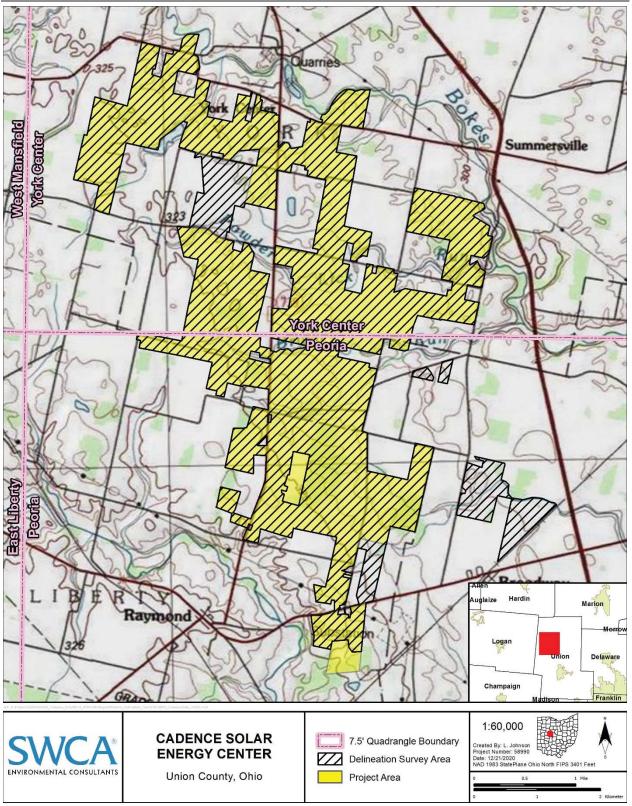


Figure 1. Location of the Cadence Solar Energy Center, Union County, Ohio, 2020.

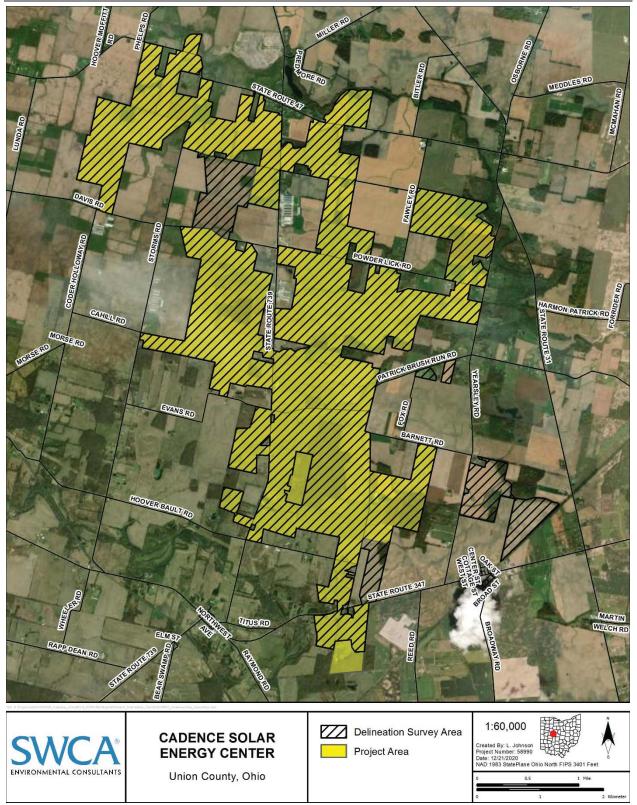


Figure 2. Aerial Location Map, Cadence Solar Energy Center, Union County, Ohio, 2020.

## 2.2 Field Methodology

Desktop data were synthesized and reviewed by field biologists. They were used to identify areas with higher likelihood of wetland and stream features in order to focus survey effort in those areas. The entire Survey Area was reviewed in the field, though the desktop data were used to prioritize areas that required more thorough analyses in the field.

SWCA conducted a field investigation to determine the likely presence or absence of wetlands and other jurisdictional waters in accordance with guidance and information available from the following sources:

- Corps of Engineers Wetlands Delineation Manual (USACE 1987)
- Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Midwest Region (Version 2.0) (USACE 2010)
- Field Indicators of Hydric Soils in the United States, Version 8.0 (NRCS 2016a)
- Revised (December 2, 2008) Guidance on Clean Water Act Jurisdiction following the Supreme Court Decision in Rapanos v. U.S. and Carabell v. U.S. (revision to the joint memorandum issued by the USACE and the U.S. Environmental Protection Agency [EPA] on June 5, 2007) (EPA 2008)
- Ohio Rapid Assessment Method for Wetlands, ORAM Version 5.0 (OEPA, 2001)
- Field Evaluation Manual for Ohio's Primary Headwater Habitat Streams (HHEI) (OEPA, 2012)
- Methods for Assessing Habitat in Flowing Waters: Using the Qualitative Habitat Evaluation Index (QHEI) (Midwestern Biodiversity Institute (MBI) 2006)

### 2.2.1 Wetlands

The presence or absence of wetlands was determined in the field using routine determination methods outlined in the Corps of Engineers Wetlands Delineation Manual and Regional Supplement (USACE 1987, 2010). Wetlands were identified by positive indicators of hydrology, hydrophytic vegetation, and hydric soils. Under normal conditions, all three parameters must be present for an area to be considered a wetland in accordance with Section 404 of the CWA. Data collected at each feature were recorded on USACE Midwest wetland determination data forms. Wetland boundaries were recorded using GPS units with sub-meter accuracy.

Wetlands were then classified according to the Cowardin System, as described in *Classification of Wetlands and Deepwater Habitats of the United States* (Cowardin et al. 1979). This is a hierarchical system based on the topographic position and vegetation type of a wetland, which aids resource managers and others by providing uniformity of concepts and terms used to define wetlands according to hydrologic, geomorphologic, chemical, and biological factors.

Wetland hydrology was primarily determined in the field by considering the frequency and duration of inundation, visual observation of saturation in the upper 16 inches of the soil profile, and the presence of primary wetland hydrologic indicators (such as oxidized rhizospheres on living roots, water-stained leaves, water marks, sediment deposits, or algal matting). Secondary indicators used to determine wetland hydrology include, but are not limited to, surface soil cracks, crayfish burrows, geomorphic position, and drainage patterns. Evidence of these secondary indicators is present even during dry periods, and therefore they are useful indicators of a wetland. If the area sampled displayed one or more primary hydrologic indicators or two or more secondary hydrologic indicators as listed in the appropriate wetland delineation manual/supplement, a positive wetland hydrology determination was made.

Rainfall has the most substantial influence on maintaining wetland hydrology. During the summer months, evapotranspiration rates are at their highest, which often results in receding water tables. Therefore, it is important to accurately evaluate the normality of rainfall with respect to its influence on wetland hydrology. This was done by employing the Direct Antecedent Rainfall Evaluation Method (DAREM) (Sprecher and Warne 2000). Using the NRCS Wetland Evaluation Tables (WETs; NRCS 2016b) as a baseline of normal rainfall for a given month, the DAREM method assesses normal rainfall for each month by considering the 3-month period prior to the month being evaluated. Evaluation under these methods classifies the condition of the site at the time of the delineation as either drier than normal, normal, or wetter than normal.

Vegetation within each sampling plot was identified to the species level when possible to identify the plant communities present. Hydrophytic vegetation, which is one parameter of a jurisdictional wetland, is defined as a plant community with over 50 percent of the dominant plant species ranked as obligate wetland (OBL), facultative wetland (FACW), or facultative (FAC). The appropriate wetland indicator status, as recorded in the National Wetland Plant List: 2016 Wetland Ratings (Lichvar et al 2016), was assigned to each plant species. The absolute cover of each plant species within the plot area (2-m radius plot for herbaceous vegetation, 5-m radius for shrub/vine strata, 15-m radius for tree stratum) was visually estimated, and then the absolute percent cover (e.g., each species may be rated up to 100% and the total can be over 100% cover) was calculated. Then, either the rapid test (i.e., all dominant species across all strata are OBL or FACW), the dominance test (i.e., 50/20 test; > 50% of the total cover represented by plant species combined and including any species >20% of cover by itself, across all strata rated OBL, FACW, or FAC), or the prevalence index (i.e., average value of wetland indicator statuses [OBL=1...UPL=5] of all species in the plot, weighted by percent cover  $\leq 3.0$ ) was used to determine the presence or absence of hydrophytic vegetation.

The requirement for meeting all three parameters may be waived in "problematic sites" or if "normal circumstances" are not met, a common scenario in an agricultural landscape where natural vegetation communities have been cleared for row-crop production. The USACE provides that "…wetland determinations on difficult or problematic sites must be based on the best information available to the field inspector, interpreted in light of his or her professional experience and knowledge of the ecology of wetlands in the region" (USACE 2014). In situations where one or more of the three criteria were deemed problematic, atypical, or disturbed, SWCA applied their professional judgement and on-site experience to extrapolate the presumed conditions under normal circumstances.

For each data point recorded, a soil test pit was dug to determine the presence or absence of hydric conditions. As defined by the National Technical Committee of Hydric Soils, a hydric soil is a "soil that formed under the conditions of saturation, flooding, or ponding long enough during the growing season to develop anaerobic conditions in the upper part" (NRCS 2015). Common indicators for these non-sandy soils as per the USACE's manuals (1987, 2010) include the presence of organic soils, histic epipedon, hydrogen sulfide odor, reduced soil conditions, gleyed soils, or listing on the hydric soils lists. Hydric soil determinations were made according to criteria listed in the appropriate wetland delineation manual/supplement and *Field Indicators of Hydric Soils in the United States: A Guide for Identifying and Delineating Hydric Soils, Version 7.0* (NRCS 2016a).

An assessment of wetland function and quality was performed for each wetland feature identified. The methodology followed the Ohio Rapid Assessment Method (ORAM) developed by the OEPA (Mack 2001). Wetlands were scored based on hydrology, upland buffer, habitat alteration, special wetland communities, and vegetation communities. Each of these subject areas is further divided into subcategories resulting in a score that describes the wetland using a range from 0 (low quality and high disturbance) to 100 (high quality and low disturbance). The wetlands are then grouped into the following categories.

- Category 1: wetlands scoring from 0 to 29.9
- Modified Category 2: wetlands scoring from 35 to 44.9
- Category 2: wetlands scoring from 45 to 59.9
- Category 3: wetlands scoring from 60 to 100

Transitional zones exist between Categories 1 and 2 from 30 to 34.9 and between Categories 2 and 3 from 60 to 64.9. However, according to the OEPA, if the wetland score falls into the transitional range, it must be given the higher Category unless scientific data can prove it should be in a lower Category (Mack 2001).

### 2.2.2 Streams

Streams were identified by the presence of a bed, bank, and ordinary high-water mark (OHWM), which is usually identifiable by indicators such as the level of water present, scouring of the channel, or a vegetation line within the channel. The OHWM is a defining element for identifying the lateral limits of non-wetland waters. SWCA biologists recorded the OHWMs or center line of water bodies encountered during the wetland delineation using GPS units capable of sub-meter accuracy. The OHWM was used to delineate both banks for streams greater than 6 feet in width. The centerline was used to delineate streams less than 6 feet in width. Streams were further classified as perennial, intermittent, or ephemeral based on field observations.

The OEPA has developed a method for categorizing Primary Headwater Habitat (PHWH) streams in Ohio. PHWH streams, as defined by Ohio Administrative Code (OAC) 3745-1, are streams with drainage areas less than 1 square mile. The Headwater Habitat Evaluation Index is a method for quantifying such streams by examining three principal metrics: substrate (type and quality), maximum pool depth, and bank full width (OEPA 2012). The sum of these metrics will preliminarily classify a PHWH stream as Class I, II, or III. Class I streams are typically ephemeral streams; they have little or no aquatic life potential, except seasonally when flowing water is present for short time periods following precipitation or snow melt. Class II streams are generally intermittent but may have perennial flow. They exhibit moderate community diversity of warm water adapted native fauna present either seasonally or yearround. Class III PHWH streams are perennial streams in which the prevailing flow and temperature conditions are influenced by groundwater. They exhibit moderately diverse to highly diverse communities of cold water adapted native fauna present year-round.

The Qualitative Habitat Evaluation Index (QHEI) methodology is used to categorize larger streams in Ohio; those streams with a drainage area greater than 1 square mile or the predominant pools are greater than 40 cm in depth, regardless of watershed size (Midwest Biodiversity Institute 2006). The QHEI evaluates a stream based on six metrics: substrate, instream cover, channel morphology, bank erosion and riparian zone, pool/glide and riffle/run quality, and gradient/drainage area. The sum of these metrics will assign the stream into a narrative range that is used to communicate habitat quality to the general public. These narrative ranges are very poor, poor, fair, good, and excellent.

### 2.2.3 Assessment of Jurisdictional Status

The 2020 Navigable Waters Protection Rule (NWPR) dictates which waters are under the jurisdiction of USACE (i.e., waters of the U.S.) under section 404 of the CWA (Federal Register 2020). The NWPR provides for four categories of waters of the U.S.: territorial seas and traditional navigable waters (TNW); tributaries; lakes and ponds, and impoundments of jurisdictional waters; and adjacent wetlands. TNW

include waters that have been or can be used for interstate commerce. Tributaries include perennial and intermittent naturally occurring surface water channels that contribute surface flow to a territorial sea or TNW directly or via another tributary. Ephemeral tributaries are not considered a water of the U.S. under the NWPR. Lakes and ponds, and impoundments of jurisdictional waters include standing bodies of open water that contribute surface water flow to TNW in a typical year either directly or through one or more tributary(ies). A lake, pond, or impoundment is also a water of the U.S. if it is inundated by flooding from another jurisdictional water; are inundated by flooding from another jurisdictional, non-wetland water; are physically separated from another jurisdictional, non-wetland water; or are physically separated from other jurisdictional non-wetland waters only by a natural berm, bank, dune, or similar natural feature; or are physically separated from other jurisdictional non-wetland waters only by an artificial dike, barrier, or similar structure so long as that structure allows for a direct hydrologic surface connection in a typical year through an artificial feature (e.g., culvert).

ORC 6111 claims jurisdiction over all waters in the state that do not fall under the jurisdiction of USACE. The OEPA administers section 401 of the CWA in addition to ORC 6111, and in that capacity has jurisdiction over all waters of the U.S. and state.

SWCA biologists reviewed the requirements for jurisdiction under USACE and/or OEPA and made an assessment of status using data collected during desktop and field review. Final determination of jurisdictional status is under the purview of the USACE and OEPA.

## **3 RESULTS**

SWCA wetland ecologists performed delineations of potentially jurisdictional waters in the Project Area on December 10-16 and 26-27, 2019; January 8-10 and 14-15, and November 5-6 and 23, 2020. The following sections summarize the vegetative communities, soils, wetlands, and water bodies within the Project Area. The following sections summarize the vegetative communities, soils, wetlands, and water bodies within the Project Area; results for the field studies on adjacent parcels are briefly summarized, where relevant.

## 3.1 Desktop Analysis

### 3.1.1 Landscape Setting

Topography within the Project Area is relatively flat, with the elevation ranging from approximately 989 to 1,087 feet above mean sea level. A review of the FEMA National Flood Hazard Layer (Figure 4) showed that 60.28 acres of the Project Area is located within Zone A (areas subject to inundation by the 1-percent-annual-chance flood event) of the 100-year floodplain (FEMA 2020).

### 3.1.2 Vegetation

Land cover types within the Project Area were field verified to confirm National Land Cover Database data (Yang et al. 2018). Land cover within the Project Area consisted primarily of cultivated crops, with the predominant crops being soybeans (*Glycine max*) and corn (*Zea mays*). The next most dominant land cover type is deciduous forest; however, this accounts for less than 10 percent of the Project Area.

### 3.1.3 Soils

Thirty mapped soil types are present within the Project Area according to the USDA NRCS (2020; Table 1). Figure 4 shows geographic extent of hydric soil map units. Hydric soils are those that formed under conditions of flooding, saturation, or ponding for a long enough period during the growing season, developing anaerobic conditions (Federal Register 1994). These soils are saturated long enough during the growing season to support the growth and reproduction of hydrophytic vegetation and have distinctive color patterns within the upper layers. Presence of hydric soils is one of the three parameters required to make a wetland determination in a given location. However, the designation of "hydric" for a given soil map unit assigned by NRCS (Table 1) does not satisfy the hydric soil parameter requirement under the routine USACE wetland determination methods; documentation of hydric soil indicators in the field is necessary to confirm hydric soils for the purposes of wetland delineation.

Soil Name (Map Unit)	Hydric	Drainage Class	Frequency of Flooding/Ponding	Depth to Water Table (inches)	Acreage within Project Area	Percent within Project Area
Blount silt loam, ground moraine, 0 to 2 percent slopes (Blg1A1)	No	Somewhat poorly drained	None/None	6 to 12	1,384.2	28.00%
Blount silt loam, ground moraine, 2 to 4 percent slopes (Blg1B1)	No	Somewhat poorly drained	None/None	6 to 12	807.6	16.30%
Blount silt loam, end moraine, 2 to 4 percent slopes (Ble1B1)	No	Somewhat poorly drained	None/None	6 to 12	707.3	14.30%
Wetzel silty clay loam (We)	Yes	Poorly drained	None/Frequent	0 to 6	674.3	13.60%
Blount silt loam, end moraine, 0 to 2 percent slopes (Ble1A1)	No	Somewhat poorly drained	None/None	6 to 12	439.2	8.90%
Glynwood silt loam, ground moraine, 2 to 6 percent slopes (Gwg1B1)	No	Moderately well drained	None/None	12 to 24	357.9	7.20%
Pewamo silty clay loam, 0 to 1 percent slopes (Pk)	Yes	Very poorly drained	None/Frequent	0 to 12	147.0	3.00%
Glynwood silt loam, end moraine, 2 to 6 percent slopes (Gwe1B1)	No	Moderately well drained	None/None	12 to 24	98.5	2.00%
Glynwood clay loam, ground moraine, 6 to 12 percent slopes, eroded (Gwg5C2)	No	Moderately well drained	None/None	12 to 24	86.3	1.70%
Blount silt loam, 2 to 6 percent slopes, eroded (BoB2)	No	Somewhat poorly drained	None/None	6 to 12	28.6	0.60%
Glynwood clay loam, 6 to 12 percent slopes, eroded (Gwd5C2)	No	Moderately well drained	None/None	12 to 24	27.9	0.60%
Homer silt loam (Ho)	No	Somewhat poorly drained	None/None	6 to 18	24.7	0.50%
Genesee silt loam (Gn)	No	Well drained	Occasional/None	>80	19.0	0.40%
Fox silt loam, till plain, 0 to 2 percent slopes (FoA)	No	Well drained	None/None	>80	17.9	0.40%
Glynwood silt loam, end moraine, 2 to 6 percent slopes, eroded (Gwe1B2)	No	Moderately well drained	None/None	12 to 24	17.8	0.40%

#### Table 1. Mapped NRCS Soil Types within the Cadence Solar Energy Project Area, Union County, Ohio

#### Wetland and Waterbody Delineation Report for the Cadence Solar Energy Center January 2021

Soil Name (Map Unit)	Hydric	Drainage Class	Frequency of Flooding/Ponding	Depth to Water Table (inches)	Acreage within Project Area	Percent within Project Area
Shoals silt loam, 0 to 2 percent slopes, occasionally flooded (Sh)	No	Somewhat poorly drained	Occasional/None	6 to 18	15.5	0.30%
Glynwood silt loam, ground moraine, 2 to 6 percent slopes, eroded (Gwg1B2)	No	Moderately well drained	None/None	12 to 24	14.8	0.30%
Fox silt loam, till plain, 2 to 6 percent slopes (FoB)	No	Well drained	None/None	>80	13.4	0.30%
Glynwood silt loam, ground moraine, 6 to 12 percent slopes (Gwg1C1)	No	Moderately well drained	None/None	12 to 24	13.4	0.30%
Saranac silty clay loam, 0 to 1 percent slopes, frequently flooded (Sac3AF)	Yes	Very poorly drained	Frequent/Occasiona 1	0 to 12	12.5	0.30%
Morley silt loam, 12 to 18 percent slopes, eroded (MrD2)	No	Moderately well drained	None/None	24 to 42	9.4	0.20%
Eel silt loam (Ee)	No	Moderately well drained	Occasional/None	12 to 36	7.8	0.20%
Henshaw silt loam, 0 to 2 percent slopes (HeA)	No	Somewhat poorly drained	None/None	6 to 18	5.3	0.10%
Sloan silty clay loam, 0 to 1 percent slopes, frequently flooded (So)	Yes	Very poorly drained	Frequent/Occasiona 1	0 to 6	5.2	0.10%
Kendallville silt loam, 2 to 6 percent slopes (KeB)	No	Well drained	None/None	>80	4.9	0.10%
Westland silty clay loam (Wc)	Yes	Very poorly drained	None/Frequent	0 to 6	2.6	0.10%
Sleeth silt loam, 0 to 2 percent slopes (SlA)	No	Somewhat poorly drained	None/None	6 to 12	0.9	0.00%
Morley silt loam, 18 to 25 percent slopes, eroded (MrE2)	No	Moderately well drained	None/None	24 to 42	0.4	0.00%
Water (W)	N/A	N/A	N/A	N/A	0.2	0.00%
Lippincott silty clay loam, 0 to 2 percent slopes (Lc)	Yes	Very poorly drained	None/Frequent	0 to 6	<0.01	0.00%

Source: NRCS (2020)

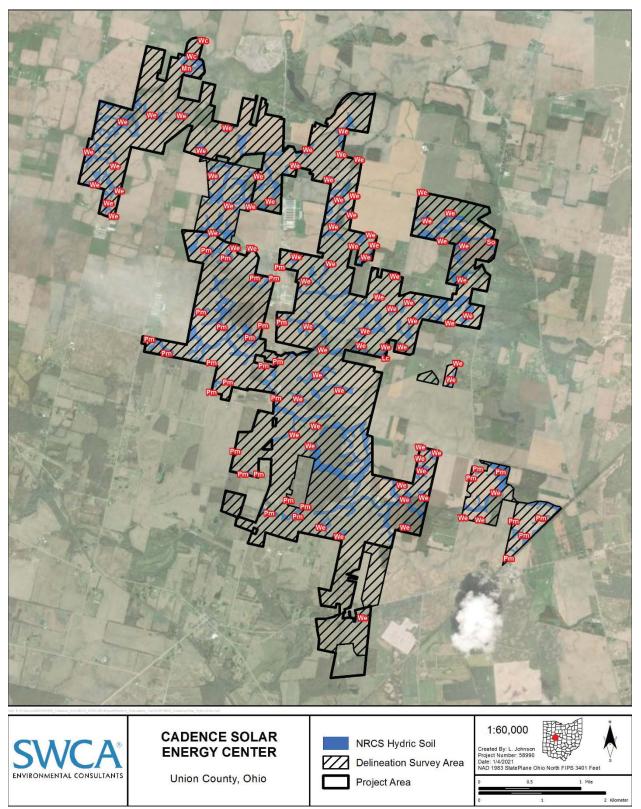


Figure 3. Soil Map Units within the Cadence Solar Energy Center, Union County, Ohio, 2020.

### 3.1.4 Hydrology

Precipitation data from the National Weather Service's Marysville, Ohio station, which is approximately 8 miles southeast of the Project Area, was used to determine the normality of rainfall over the Project Area (NRCS 2016b and Deters 2020). This was compared with the DAREM calculations data for Union County, Ohio, for the three months prior to field surveys. The DAREM calculations for the three months prior to each survey were calculated using observed rainfall data and comparative WETS data (Table 2). Based upon these calculations, conditions prior to survey were drier than normal during December 2019, and normal in January and November 2020.

Prior Month	WETS Rainfall Percentile (inches)		Measured Rainfall Condition <sup>a</sup>		Month Weight <sup>b</sup>	Score	
	30th	70th	— (inches)				
		Evalu	ation Month: December	2019			
November	1.88	3.59	1.63	1	3	3	
October	1.83	3.16	2.65	2	2	4	
September	1.76	3.77	1.43	1	1	1	
					Sum:	8	
				Description <sup>d</sup> :	Drier than Normal		
		Eval	luation Month: January 2	2020			
December	2.10	3.39	2.27	2	3	6	
November	1.88	3.59	1.63	1	2	2	
October	1.83	3.16	2.65	2	1	2	
					Sum:	10	
				Description <sup>d</sup> :	Normal		
		Evalu	ation Month: November	2020			
October	1.60	2.90	4.86	3	3	9	
September	1.65	4.36	4.30	2	2	4	
August	2.10	3.99	1.24	1	1	1	
					Sum:	14	
				Description <sup>d</sup> :	Normal		

#### Table 2. Rainfall Summary – Union County, Ohio (Marysville, Ohio)

<sup>a</sup> Condition values are 1 for <30th percentile, 2 for between 30th and 70th percentile, 3 for > 70th percentile

<sup>b</sup> Month weight is 3 for the most recent month, 2 for the previous month, and so on

° Score is the product of the condition and month weight

<sup>d</sup> Description: Drier than normal (sum is 6–9), normal (sum is 10–14), wetter than normal (sum is 15–18)

### 3.1.5 National Wetlands Inventory

SWCA reviewed the USFWS National Wetlands Inventory (NWI) mapping data to determine the potential presence of wetland features within the Project Area (Table 3; see Figure 4). NWI wetlands are classified according to the Cowardin System, as described in *Classification of Wetlands and Deepwater Habitats of the United States* (Cowardin et al. 1979). This is a hierarchical system based on the topographic position and vegetation type of a wetland, which aids resource managers and others by

providing uniformity of concepts and terms used to define wetlands according to hydrologic, geomorphologic, chemical, and biological factors. The locations of these wetlands within the Project Area are depicted in Figure 4.

Cowardin Classification	Wetland Type	Number	Acreage
R23, R4, R5	Riverine Upper Perennial, Riverine Intermittent	20	31.53
PFO/PSS	Freshwater Forested/Scrub-Shrub Wetland	27	23.75
PEM	Palustrine Emergent Wetland	33	9.86
PUB	Freshwater Pond	15	7.13
Total Wetland Acreage			72.27

 Table 3. NWI Wetlands by Cowardin Classification within the Cadence Solar Energy Center Project Area, Union County, Ohio

### 3.1.6 National Hydrography Dataset

SWCA reviewed USGS National Hydrography Dataset (NHD) mapping to determine the potential presence of streams and waterbodies within the Project Area (see Table 4, Figure 4). NHD suggests the presence of 27 stream reaches totaling 70,702 linear feet and 8 waterbodies totaling 0.02 acres within the Project area. The NHD defines their Canal/Ditch category as an artificial open waterway constructed to transport water, to irrigate or drain land, to connect two or more bodies of water, or to serve as a waterway for watercraft. This may include natural features that have been modified, and/or named waterways. The NHD defines their Stream/River category as a stream that normally has water in its channel at all times.

# Table 4. National Hydrology Dataset watercourses within the Cadence Solar Energy Center Project Area, Union County, Ohio

Feature Type	Length (feet)	Acreage		
Stream/River Perennial	70,709	NA		
Canal/Ditch	568	NA		
Waterbody	N/A	0.02		
Total	71,277	0.02		

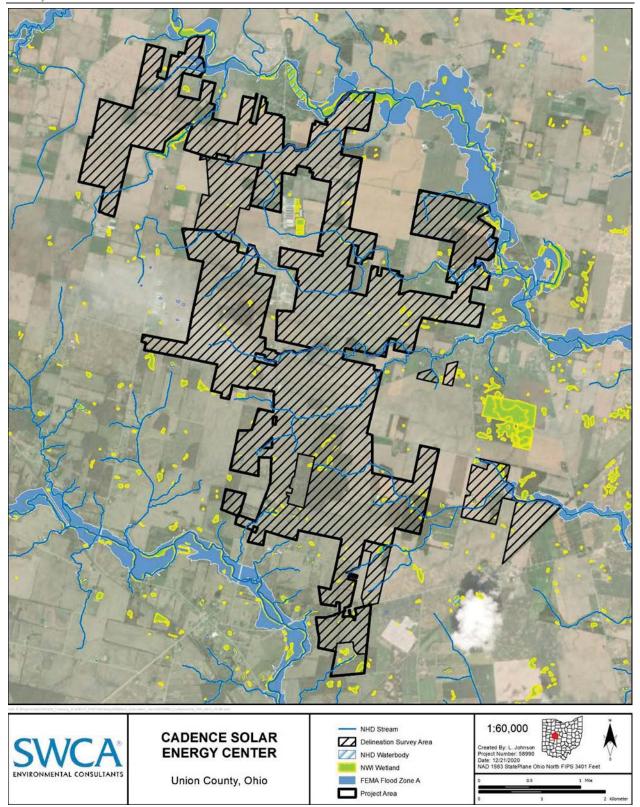


Figure 4. National Wetlands Inventory, National Hydrography Dataset, and Flood Zone map of the Cadence Solar Energy Center, Union County, Ohio, 2020.

## **3.2** Field Investigations

SWCA conducted a field investigation on December 10-16 and 26-27, 2019; January 8-10 and 14-15, and November 5-6 and 23, 2020, to assess the general site characteristics, ground-truth any mapped features identified during the desktop analysis and delineate the boundaries of all features determined to be present based on the field survey (Appendix A; Tables 5 and 6). The maps in Appendix A show the Delineation Survey Area and the delineated aquatic features. Data point data sheets are provided in Appendix B. Photographs for delineated aquatic feature types are provided in Appendix C.

### 3.2.1 Wetlands

SWCA delineated 87 distinct wetland areas totaling 65.41 acres within the Project Area. Of these 87 wetlands, 43 were palustrine emergent (PEM), 1 were palustrine scrub/shrub (PSS), 23 were palustrine forested (PFO), 18 were palustrine unconsolidated bottom (PUB), 1 was PEM/PSS, and 1 was PEM/PFO. All features are depicted in Appendix A and detailed below in Table 5.

Feature ID	Survey Date	Lo	cation	Jurisdictional Status <sup>*</sup>	Classification	Acreage within Project Area	Map Book Page
WA01	12/10/2019	40.404600	-83.472530	USACE, OEPA	PEM/PSS	0.1	1
WA02	12/10/2019	40.406230	-83.468290	USACE, OEPA	PFO	3.64	1
WA03	12/10/2019	40.414490	-83.477700	OEPA	PEM	0.59	1
WA04	12/10/2019	40.413030	-83.469970	OEPA	PEM	0.36	1
WA05	12/11/2019	40.364330	-83.455430	OEPA	PEM	0.03	3
WA06	12/11/2019	40.361300	-83.460310	OEPA	PFO	0.18	3
WA07	12/27/2019	40.394230	-83.456210	OEPA	PEM	0.64	1
WA08	12/27/2019	40.396530	-83.458130	OEPA	PEM	0.06	1
WA09	12/27/2019	40.361290	-83.442640	OEPA	PFO	0.57	4
WA10	12/27/2019	40.361960	-83.444450	OEPA	PFO	1.20	4
WA11	12/27/2019	40.360250	-83.444390	OEPA	PFO	1.14	4
WA12	12/27/2019	40.360080	-83.442820	OEPA	PFO	0.49	4
WA13	12/27/2019	40.358100	-83.446390	OEPA	PFO	1.42	4
WA14	12/27/2019	40.356530	-83.443930	USACE, OEPA	PFO	9.67	4, 7
WA15	12/27/2019	40.352450	-83.444660	USACE, OEPA	PFO	4.28	4, 7
WA16	12/27/2019	40.352720	-83.446760	OEPA	PFO	1.47	1
WA17	1/14/2020	40.393820	-83.463100	OEPA	PEM	0.36	1
WA18	1/14/2020	40.394680	-83.462580	OEPA	PEM	0.05	1
WA19	1/14/2020	40.395210	-83.462940	OEPA	PEM	0.08	1
WA20	1/14/2020	40.395760	-83.462680	OEPA	PEM	0.22	1
WA21	1/14/2020	40.392620	-83.461610	OEPA	PEM	0.15	1
WA22	1/14/2020	40.393980	-83.459530	OEPA	PEM	0.21	1
WA23	1/14/2020	40.394990	-83.459460	OEPA	PEM	0.16	1
WA24	1/14/2020	40.396270	-83.458990	OEPA	PFO	0.57	1

Table 5. Wetlands Identified during Field Survey for the Cadence Solar Energy Center, Union County, Ohio

#### Wetland and Waterbody Delineation Report for the Cadence Solar Energy Center January 2021

Feature ID	Survey Date	Lo	ocation	Jurisdictional Status <sup>*</sup>	Classification	Acreage within Project Area	Map Book Page
WA25	1/14/2020	40.397220	-83.460240	OEPA	PFO	0.92	1
WA26	1/14/2020	40.395160	-83.466190	OEPA	PEM	0.59	1
WA27	1/14/2020	40.394090	-83.466700	OEPA	PEM	0.03	2
WA28	1/15/2020	40.393900	-83.420620	OEPA	PEM	0.02	2
WA29	1/15/2020	40.392980	-83.421980	OEPA	PEM	0.02	2
WA30	1/15/2020	40.389660	-83.424350	OEPA	PEM	0.30	2
WA31	1/15/2020	40.390020	-83.426110	OEPA	PEM	0.13	2
WA32	1/15/2020	40.389960	-83.427290	OEPA	PEM	0.10	2
WA33	1/15/2020	40.393310	-83.444520	OEPA	PEM	0.55	2
WA34	1/15/2020	40.395210	-83.443380	OEPA	PEM	0.19	2
WA35	11/5/2020	40.349127	-83.457124	OEPA	PEM	1.43	6
WA36	11/23/2020	40.348686	-83.454536	OEPA	PEM	0.30	6
WA37	11/23/2020	40.348558	-83.451274	OEPA	PFO	0.13	7
WA38	11/5/2020	40.347913	-83.450610	OEPA	PEM	0.04	7
WA39	11/5/2020	40.340338	-83.442041	OEPA	PFO	0.16	7
WA40	11/5/2020	40.340460	-83.440524	OEPA	PEM	0.05	7
WA41	11/6/2020	40.340212	-83.439723	OEPA	PFO	0.15	7
WA42	11/6/2020	40.338200	-83.439495	OEPA	PEM	0.21	7
WA43	11/5/2020	40.338081	-83.441277	OEPA	PEM	0.05	7
WA44	11/6/2020	40.336706	-83.439890	OEPA	PEM	0.03	7
WA45	11/6/2020	40.334856	-83.443911	OEPA	PUB	0.21	7
WA46	11/23/2020	40.336583	-83.441674	OEPA	PEM	0.08	7
WA47	11/6/2020	40.334480	-83.441996	OEPA	PUB	0.77	7
WA48	11/23/2020	40.334622	-83.439479	OEPA	PEM	0.18	7
WA49	11/23/2020	40.335182	-83.437463	USACE, OEPA	PEM	0.28	7
PNDA01	12/11/2019	40.384420	-83.415570	USACE, OEPA	PUB	1.36	1
PNDA02	12/26/2019	40.397170	-83.454310	OEPA	PUB	0.19	1
WB02	12/12/2019	40.409179	-83.442191	USACE, OEPA	PFO	4.94	2
WB03	12/13/2019	40.394487	-83.417086	USACE, OEPA	PFO	0.30	2
WB04	12/13/2019	40.393443	-83.415446	OEPA	PEM	0.37	2
WB05	12/13/2019	40.394521	-83.441616	OEPA	PEM	1.30	4
WB06	12/13/2019	40.384051	-83.432392	USACE, OEPA	PEM	0.08	2
WB07	12/14/2019	40.387661	-83.436337	USACE, OEPA	PFO	0.16	4
WB08	12/14/2019	40.381601	-83.448159	USACE, OEPA	PEM	3.05	4
WB09	12/15/2019	40.369015	-83.438529	OEPA	PEM	0.14	8
PNDB01	12/13/2019	40.383487	-83.432521	OEPA	PUB	0.54	1
PNDB02	12/15/2019	40.362750	-83.449236	OEPA	PUB	0.73	1
WC01	1/8/2020	40.351990	-83.411830	OEPA	PUB	0.05	8
WC02	1/8/2020	40.347860	-83.409770	OEPA	PEM	0.14	8

#### Wetland and Waterbody Delineation Report for the Cadence Solar Energy Center January 2021

Feature ID	Survey Date	Lo	cation	Jurisdictional Status <sup>*</sup>	Classification	Acreage within Project Area	Map Book Page
WC03	1/8/2020	40.345350	-83.410530	OEPA	PEM	0.54	8
WC04	1/8/2020	40.343500	-83.410870	OEPA	PEM	0.31	5
WC05	1/9/2020	40.356310	-83.411640	USACE, OEPA	PFO	1.92	3
WC06	1/9/2020	40.357620	-83.454040	OEPA	PFO	0.41	6
WC07	1/9/2020	40.351690	-83.452300	OEPA	PUB	0.29	7
WC08	1/9/2020	40.350690	-83.451440	OEPA	PUB	0.87	7
WC09	1/9/2020	40.350280	-83.449780	OEPA	PUB	0.75	6
WC10	1/9/2020	40.350830	-83.452640	OEPA	PEM	0.48	6
WC11	1/9/2020	40.350160	-83.454060	OEPA	PSS	0.47	3
WC12	1/9/2020	40.358350	-83.458340	USACE, OEPA	PEM	0.98	3
WC13	1/9/2020	40.356900	-83.461480	OEPA	PEM	0.15	7
WC14	1/10/2020	40.344990	-83.433420	OEPA	PFO	0.73	7
WC15	1/10/2020	40.349380	-83.426720	USACE, OEPA	PFO	0.18	3
WC16	1/10/2020	40.378500	-83.462160	OEPA	PEM	0.09	3
WC17	1/10/2020	40.378600	-83.463780	OEPA	PFO	2.39	3
WC18	1/10/2020	40.377990	-83.461910	OEPA	PEM/PFO	0.38	1
PNDC01	1/8/2020	40.351888	-83.416771	OEPA	PUB	0.46	4
PNDC02	1/9/2020	40.352210	-83.451650	OEPA	PUB	0.21	2
PNDC03	1/9/2020	40.350140	-83.454320	OEPA	PUB	0.10	1, 3
PNDC04	1/9/2020	40.351350	-83.455180	OEPA	PUB	1.90	1
PNDC05	1/9/2020	40.357680	-83.460410	OEPA	PUB	0.66	1
PNDC06	1/9/2020	40.337320	-83.435980	OEPA	PUB	0.58	1, 2
PNDC07	1/10/2020	40.351840	-83.433480	OEPA	PUB	0.88	1
PNDC08	1/10/2020	40.379590	-83.462020	OEPA	PUB	1.77	2
Total PEM	-	-	-	-	PEM	15.12	-
Total PSS	-	-	-	-	PSS	0.47	-
Total PFO	-	-	-	-	PFO	37.02	-
Total PEM/PSS	-	-	-	-	PEM/PSS	0.10	-
Total PEM/PFO	-	-	-	-	PEM/PFO	0.38	-
Total PUB	-	-	-	-	PUB	12.32	-
Total	-	-	-	-	-	65.41	-

\* This determination is SWCA's professional opinion of USACE and OEPA jurisdictional status of each feature under Section 404 of the CWA.

### **3.2.1.1 FEATURE DESCRIPTIONS**

#### Wetland WA01

WA01 is a depressional wetland with portions dominated by scrub/shrub vegetation stratum and portions dominated by herbaceous vegetation stratum. This wetland is along the fringe of a large lake that is outside of the Project Area. The lake was formed by impounding stream SA01. SWCA has determined, using the ORAM methodology, that WA01 is a Category 2 wetland.

#### Wetland WA02

WA02 is a forested wetland that sits on the terrace of stream SA01. The surrounding forest is primarily young and disturbed, with individual large, mature trees scattered throughout. SWCA has determined, using the ORAM methodology, that WA02 is a Category 2 wetland.

#### Wetland WA03

WA03 is a linear depressional wetland along a swale in an agricultural field. It was unclear if it was subtended by a drain tile system. WA02 drains into a culvert onto an inaccessible property, though topographic mapping indicates that it ultimately flows into stream SA04, which connects to a drain tile system. Because it is dominated by invasive reed canary grass (*Phalaris arundinacea*), WA03 is a Category 1 wetland.

#### Wetland WA04

WA04 is a linear, depressional wetland along a swale in an agricultural field. A small channel has formed in portions of it; however, the channel does not have a continuous OHWM. This wetland receives hydrology from overland sheet flow and the outflow of a drain tile system which is fed by stream SA02. This wetland drains into a roadside ditch which ultimately flows to Bokes Creek. SWCA has determined, using the ORAM methodology, that WA05 is a Category 1 wetland.

#### Wetland WA05

WA05 is a depressional wetland at the confluence of a drainage swale and a roadside ditch. It appears that a broken drain tile system provides the hydrology for this wetland. SWCA has determined, using the ORAM methodology, that WA05 is a Category 1 wetland.

#### Wetland WA06

WA06 is a depressional wetland in an isolated woodlot. Portions of the isolated woodlot are on an inaccessible property; however, aerial imagery suggests that there is connectivity between this wetland and a roadside ditch to the north. SWCA has determined, using the ORAM methodology, that WA05 is a Category 2 wetland.

#### Wetland WA07

WA07 is a linear, depressional wetland along a swale in an agricultural field. A small channel has formed in portions of it; however, the channel does not have a continuous OHWM. There was evidence that this swale receives regular maintenance and dredging. This wetland receives hydrology from overland sheet flow and the outflow of a drain tile system. Water drains south to north through this wetland, but ultimately into a drain tile system. SWCA has determined, using the ORAM methodology, that WA07 is a Category 1 wetland.

#### Wetland WA08

WA08 is a linear, depressional wetland that receives hydrology from a nearby forested wetland. Water is collected from the forested wetland and funneled towards a drain tile system. SWCA has determined, using the ORAM methodology, that WA08 is a Category 1 wetland.

#### Wetlands WA09 – WA12

WA09, WA10, WA11, and WA12 are four mature, forested wetlands located in a large (i.e. > 100 acre) woodlot. These wetlands present similar characteristics, including hydrology, dominant plant species, and soil types. All four wetlands appear to be isolated. The surrounding upland forest is mature and limited invasive species were observed, indicating that it serves as a high-quality buffer around these wetlands. SWCA has determined, using the ORAM methodology, that these wetlands fall in the Category 2 - 3 "gray zone", and thus default to Category 3.

#### Wetland WA13

WA13 is a forested wetland in the same woodlot as WA09 – WA12. It shares similar characteristics with WA09 – WA12, with the exception that a portion of this wetland is dominated by buttonbush (*Cephalanthus occidentalis*), indicating that this area likely stays inundated for longer periods of time during the growing season. SWCA has determined, using the ORAM methodology, that this wetland qualifies as a Category 3 wetland.

#### Wetland WA14

WA14 is forested wetland complex that includes portions of the terrace of stream SB16 and other lowlying areas upslope. This wetland is in the same woodlot as wetlands WA09 – WA13 There is a discontinuous channel within the lowest areas in the middle of WA14 which eventually becomes incised and continuous, forming the headwaters of stream SB16, an unnamed tributary to Blues Creek. SWCA has determined, using the ORAM methodology, that this wetland qualifies as a Category 3 wetland.

#### Wetland WA15

WA15 is a linear, depressional wetland within the same woodlot as Wetlands WA09 – WA14. However, the portions of the woodlot that are south of WA14 and SB16 appeared to be younger, with a denser understory. Field crews observed evidence that a drain tile system, likely in disrepair, subtends this wetland, likely altering natural hydrology. A discontinuous channel runs through the center of this wetland as well. This wetland drains into Streams SB16 and SB18. SWCA has determined, using the ORAM methodology, that this wetland qualifies as a Category 2 wetland.

#### Wetland WA16

WA16 is a depressional wetland in the same woodlot as Wetlands WA09 – WA15. The surrounding upland forest appeared to be younger with a denser understory. SWCA has determined, using the ORAM methodology, that this wetland qualifies as Category 2 wetland.

#### Wetlands WA17 – WA23, WA26 – WA 27

Wetlands WA17 – WA23 and WA26 – WA27 are all located within the same actively cultivated agricultural field. Aerial imagery suggests that this field has a less robust drain tile system than surrounding fields within the Project Area. Further, evidence in the field indicated that the drain tile system has fallen into disrepair in some areas. This may have led to altered and unnatural hydrologic conditions. These nine wetlands share vegetation, soil, and hydrologic characteristics. SWCA has determined, using the ORAM methodology, that these wetlands qualify as Category 1 wetlands.

#### Wetlands WA24 and WA25

WA24 and WA25 are two forested wetlands located in a woodlot surrounded by the agricultural field that contains Wetlands WA17 – WA23 and WA26 – WA27. At the time of survey, it appeared that the upland portions of the woodlot had been selectively cut for timber. However, cutting within the wetlands was limited or avoided. SWCA has determined, using the ORAM methodology, that these wetlands qualify as Category 2 wetlands.

Wetlands WA28 – WA32

Wetlands WA28 – WA32 are all located within the same actively cultivated agricultural field. These five wetlands all share similar vegetation, soil, and hydrologic characteristics. They are actively farmed depressions that appear to hold water during the growing season. SWCA has determined, using the ORAM methodology, that these wetlands qualify as Category 1 wetlands.

#### Wetlands WA33 and WA34

WA33 and WA34 are located within the same actively cultivated agricultural field, and share the same vegetation, soil, and hydrologic characteristics. There was evidence that a drain tile system has been installed, however it is either in disrepair or insufficient to remove hydrology from these areas. SWCA has determined, using the ORAM methodology, that these wetlands qualify as Category 1 wetlands. *Wetland WA35* 

Wetland WA35 is a depressional PEM wetland surrounded by a fallow field and agricultural land. It is bisected by an upland farm access road OH 739, though there are culverts that connect the wetland under each road. SWCA has determined, using the ORAM methodology, that WA35 is a Category 1 wetland.

#### Wetland WA36

Wetland WA36 is depressional PEM wetland located within an actively cultivated agricultural field. SWCA has determined, using the ORAM methodology, that WA36 is a Category 1 wetland.

#### Wetland WA37

Wetland WA37 is a forested, depressional wetland located in a woodlot surrounded by the agricultural field that contains Wetlands WA36 and WA38. SWCA has determined, using the ORAM methodology, that WA37 is a Category 2 wetland.

#### Wetland WA38

Wetland WA38 is a depressional PEM wetland located within the same actively cultivated agricultural field that also contains wetlands WA36 an WA37. SWCA has determined, using the ORAM methodology, that WA38 is a Category 1 wetland.

#### Wetland WA39

Wetland WA39 is a forested wetland located in a woodlot surrounded by the agricultural field that contains Wetlands WA40 and WA41. SWCA has determined, using the ORAM methodology, that WA39 is a Category 2 wetland.

#### Wetland WA40

Wetland WA40 is a depressional PEM wetland located an actively cultivated agricultural field. SWCA has determined, using the ORAM methodology, that WA40 is a Category 1 wetland.

#### Wetland WA41

Wetland WA41 is a forested wetland located in a woodlot surrounded by the agricultural field that contains Wetlands WA39. SWCA has determined, using the ORAM methodology, that WA39 is a Category 2 wetland.

#### Wetland WA42 – WA44

Wetlands WA42-WA44 are depressional PEM wetlands located within an actively cultivated agricultural field. SWCA has determined, using the ORAM methodology, that these wetlands are Category 1 wetlands.

#### Wetland WA45

Wetland WA45 is a PUB and appears to have been constructed in an upland area. A historic use was not evident, though remnants of barbed wire fence surrounding it were observed. Understory surrounding the wetland was thick, restricting access. SWCA has determined, using the ORAM methodology, that WA45 is a Category 1 wetland.

#### Wetland WA46

Wetland WA46 is a depressional PEM wetland located within the same actively cultivated agricultural field that also contains wetlands WA42-WA44. SWCA has determined, using the ORAM methodology, that WA46 is a Category 1 wetland.

#### Wetland WA47

Wetland WA47 is primarily a PUB that appears to have been constructed in an upland area. A narrow depression connects the PUB component with what appears to have been a constructed PUB to the northwest, though this area is now dominated by emergent and young, early successional woody vegetation. This wetland does not appear to be an impoundment. SWCA has determined, using the ORAM methodology, that WA47 is a Category 2 wetland.

#### Wetland WA48

Wetland WA48 is a depressional PEM wetland located within the same actively cultivated agricultural field that also contains wetland WA49. SWCA has determined, using the ORAM methodology, that WA48 is a Category 1 wetland.

#### Wetland WA49

Wetland WA49 is a linear depressional PEM wetland located within a relict stream channel that discharges directly into Stream SA15. This feature is connected to Stream SA15. SWCA has determined, using the ORAM methodology, that WA493 is a Category 1 wetland.

#### Wetlands PNDA01 and PNDA02

These wetlands are PUBs that have been evidently constructed in upland areas, likely for recreational purposes. SWCA has determined, using the ORAM methodology, that these wetlands are Category 1 wetlands.

#### Wetland WB02

Wetland WB02 is a depressional PFO wetland located within the floodplain of Stream SB04 (Bokes Creek). This feature is connected to Stream SB04. This wetland is buffered by upland deciduous forest. SWCA has determined, using the ORAM methodology, that WB02 is a Modified Category 2 wetland.

#### Wetland WB03

Wetland WB03 is a linear depressional PFO wetland located within a relict stream channel that discharges directly into Stream SB04 (Bokes Creek). This feature is connected to Stream SB04. This wetland is buffered by upland deciduous forest. SWCA has determined, using the ORAM methodology, that WB03 is a Modified Category 2 wetland.

#### Wetland WB04

Wetland WB04 is a depressional PEM wetland connected to SB04 (Bokes Creek) via ephemeral stream SB07. This feature is connected to SB04. This wetland is buffered by upland deciduous forest and pasture. SWCA has determined, using the ORAM methodology, that WB04 is a Category 1 wetland.

#### Wetland WB05

Wetland WB05 is a depressional PEM wetland located within an agricultural field. This wetland was recently modified by agricultural (mowing) activities; therefore, the grass species had no identifiable characteristics. SWCA has determined, using the ORAM methodology, that WB05 is a Category 1 wetland.

#### Wetland WB06

Wetland WB06 is a depressional PEM wetland located along SB08. This feature is likely to be considered under USACE and OEPA jurisdiction due to its proximity to SB08. This wetland is buffered by old field/scrub-shrub. SWCA has determined, using the ORAM methodology, that WB06 is a Modified Category 2 wetland.

#### Wetland WB07

Wetland WB07 is a depressional PFO wetland located near SB08. This feature is likely to be considered under USACE and OEPA jurisdiction due to its proximity to SB08. This feature is buffered by upland deciduous forest and row crop. SWCA has determined, using the ORAM methodology, that WB07 is a Modified Category 2 wetland.

#### Wetland WB08

Wetland WB08 is a depressional linear wetland in a non-flowing stretch of Powder Lick Run. This feature is buffered on either side by row crop. SWCA has determined, using the ORAM methodology, that WB08 is a Category 1 wetland.

#### Wetland WB09

Wetland WB09 is a depressional PEM wetland located within an agricultural field. This wetland was recently modified by agricultural (mowing) activities; therefore, the grass species had no identifiable characteristics. SWCA has determined, using the ORAM methodology, that WB09 is a Category 1 wetland.

#### Wetlands PNDB01 and PNDB02

Wetland PNDB01 is a PUB and appears to have been constructed in an upland area, likely for recreational purposes. SWCA has determined, using the ORAM methodology, that these wetlands are Category 1 wetlands.

#### Wetland WC01

Wetland WC01 is a depressional PUB wetland located within a disturbed, fallow field. Historical imagery suggests the field was used as a motorsport track. This wetland is buffered by upland herbaceous field and a hedge row. SWCA has determined, using the ORAM methodology, that WC01 is a Category 1 wetland.

#### Wetland WC02

Wetland WC02 is a depressional PEM wetland located within an actively cultivated agricultural field. This wetland is buffered by upland agricultural fields and a hedgerow. SWCA has determined, using the ORAM methodology, that WC02 is a Category 1 wetland.

#### Wetland WC03

Wetland WC03 is a depressional PEM wetland located within the same actively cultivated agricultural field as wetland WC02. This wetland is buffered by upland agricultural fields and a hedgerow. SWCA has determined, using the ORAM methodology, that WC03 is a Category 1 wetland.

#### Wetland WC04

Wetland WC04 is a depressional PEM wetland located within the same actively cultivated agricultural field as Wetlands WC02 and WC03. This wetland is buffered by upland agricultural fields and hedgerow. SWCA has determined, using the ORAM methodology, that WC04 is a Category 1 wetland.

#### Wetland WC05

Wetland WC05 is depressional PFO wetland located within a disturbed, though recovering woodlot adjacent to SB17. While no discreet surface channel was observed, this feature is likely to be considered jurisdictional due to connectivity to SB17. This wetland is buffered by upland deciduous forest and stream bank. SWCA has determined, using the ORAM methodology, that WC05 falls within the "gray zone" for Category 1 or 2 and thus defaults to Category 2.

#### Wetland WC06

Wetland WC06 is a depressional PFO wetland surrounded by an agricultural field. This wetland is buffered by upland agricultural fields. Aerial imagery suggests that during some years or precipitation events a channel is scoured between this wetland and other waters, however this appears to change each year. SWCA has determined, using the ORAM methodology, that WC06 is a Category 1 wetland, mainly due to its size and lack of upland buffer.

#### Wetland WC07

Wetland WC07 is a depressional PUB wetland located within a fallow field. Historic aerial imagery indicates that this feature developed between August of 2015 and August of 2016 and was likely human made for hunting purposes. This wetland is buffered by upland fallow fields and managed forest. SWCA has determined, using the ORAM methodology, that WC07 is a Category 1 wetland, mainly due to disturbance in surrounding upland buffers.

#### Wetland WC08

Wetland WC08 is a series of connected, depressional PUB wetlands located within the same fallow field as WC07. Historic aerial imagery indicates that this feature developed between August of 2015 and August of 2016 and was likely human made for hunting purposes. This wetland is buffered by upland fallow fields and managed forest. SWCA has determined, using the ORAM methodology, that WC08 is a Category 1 wetland, mainly due to disturbance in surrounding upland buffers.

#### Wetland WC09

Wetland WC09 is a depressional PUB wetland located within the same fallow field as Wetlands WC07 and WC08. Historic aerial imagery indicates that this feature developed between August of 2015 and August of 2016 and was likely human made for hunting purposes. This wetland is buffered by upland fallow fields and managed forest. SWCA has determined, using the ORAM methodology, that WC09 is a Category 1 wetland, mainly due to disturbance in surrounding upland buffers.

#### Wetland WC10

Wetland WC10 is a depressional PEM wetland located within the same fallow field as Wetlands WC07 – WC09. This wetland is buffered by upland fallow fields. SWCA has determined, using the ORAM methodology, that WC10 is a Category 1 wetland, mainly due to disturbance in surrounding upland buffers and within the boundaries of the wetland itself.

#### Wetland WC11

Wetland WC11 is a depressional PSS wetland surrounding a perennial pond (PNDC03). This wetland is buffered by upland deciduous forest. SWCA has determined, using the ORAM methodology, that WC11 is a Modified Category 2 wetland.

#### Wetland WC12

Wetland WC12 is a linear depressional PEM wetland located within an actively grazed pasture, which is connected to SC03 by a culvert. The vegetation, hydrology, and soil are significantly affected by the livestock within this field. Further, a drain tile system had been installed in low-lying areas, however there was evidence that the system had failed, further altering hydrology. This wetland is buffered by upland pastures. SWCA has determined, using the ORAM methodology, that WC12 is a Category 1 wetland.

#### Wetland WC13

Wetland WC13 is a depressional PEM wetland located within the same actively grazed pasture as Wetland WC12. It appears that this wetland may be a silted-in, constructed pond. This wetland is buffered by upland herbaceous pasture. SWCA has determined, using the ORAM methodology, that WC13 is a Category 1 wetland.

#### Wetland WC14

Wetland WC14 is a depressional PFO wetland located in a low-lying area at the confluence of Streams SC05 and SC06. This wetland is buffered by upland deciduous forest. SWCA has determined, using the ORAM methodology, that WC14 is a Modified Category 2 wetland.

#### Wetland WC15

Wetland WC15 is a depressional PFO wetland located adjacent to two streams, SC07 and SB16. This wetland is buffered by upland deciduous forest and managed field. SWCA has determined, using the ORAM methodology, that WC15 is a Modified Category 2 wetland.

#### Wetland WC16

Wetland WC16 is a depressional PEM wetland located within a young, though recovering forest. This wetland is buffered by upland forest. SWCA has determined, using the ORAM methodology, that WC16 is a Modified Category 2 wetland.

#### Wetland WC17

Wetland WC17 is a depressional PFO wetland located within the same young, recovering forest as Wetland WC16. This wetland is buffered by upland deciduous forest. SWCA has determined, using the ORAM methodology, that WC17 is a Modified Category 2 wetland.

#### Wetland WC18

Wetland WC18 is a depressional PEM/PFO wetland located within the same young, recovering forest as Wetlands WC16 and WC17. This wetland is buffered by upland deciduous forest. SWCA has determined, using the ORAM methodology, that WC18 is a Modified Category 2 wetland.

Wetlands PNDC01, PNDC02, PNDC04, PNDC05, PNDC06, PNDC07, PNDC08

These wetlands are PUBs and appear to have been constructed in uplands. SWCA has determined, using the ORAM methodology, that these wetlands are Category 1 wetlands.

#### Wetland PNDC03

Wetland PNDC03 is a PUB and appears to be a naturally occurring pond that developed within a wetland. SWCA has determined, using the ORAM methodology, that PNDC03 is a Category 1 wetland.

#### 3.2.2 Waterbodies

SWCA recorded 37 separate streams, totaling 72,556 linear feet of stream within the Project Area (Table 6). Please refer to Appendix A for the location of each waterbody within the Project Area. Photographs of all features are provided in Appendix A.

# Table 6. Waterbodies Identified during Field Survey for the Cadence Solar Energy Center, Union County, Ohio

Feature ID	Survey Date	Lo	ocation	Jurisdictional Status <sup>*</sup>	Classification	Linear Feet within Project Area	Map Book Page
SA01	12/10/2019	40.405929	-83.468184	USACE, OEPA	Intermittent	2,154 lf	1

#### Wetland and Waterbody Delineation Report for the Cadence Solar Energy Center January 2021

Feature ID SA02	Survey Date	Location		Jurisdictional Status <sup>*</sup>	Classification	Linear Feet within Project Area	Map Book Page
	12/10/2019	40.410294	-83.478470	USACE, OEPA	Ephemeral	1,761 lf	1
SA03	12/10/2019	40.410355	-83.476181	USACE, OEPA	Ephemeral	287 lf	1
SA04	12/10/2019	40.414868	-83.472628	USACE, OEPA	Ephemeral	663 lf	1
SA05	12/27/2019	40.355018	-83.444996	USACE, OEPA	Ephemeral	965 lf	4
SA08	1/14/2020	40.395260	-83.425556	USACE, OEPA	Ephemeral	1,071 lf	2
SA09	1/14/2020	40.386385	-83.459586	USACE, OEPA	Ephemeral	1,310 lf	1, 3
SA10	1/15/2020	40.390623	-83.467263	USACE, OEPA	Ephemeral	1,457 lf	1
SA11	11/23/2020	40.350322	-83.463335	OEPA	Ephemeral	132 lf	6
SA12	11/23/2020	40.341198	-83.441482	OEPA	Ephemeral	245 lf	6
SA13	11/23/2020	40.335616	-83.436297	OEPA	Ephemeral	450 lf	7
SA14	11/23/2020	40.346847	-83.451155	OEPA	Ephemeral	767 lf	7
SA15	11/23/2020	40.347058	-83.453459	USACE, OEPA	Intermittent	170 lf	7
SB01	12/11/2019	40.405661	-83.466968	USACE, OEPA	Ephemeral	621 lf	1
SB02	12/11/2019	40.401324	-83.455371	USACE, OEPA	Perennial	4,573 lf	1, 2
SB03	12/11/2019	40.407188	-83.457737	USACE, OEPA	Ephemeral	74 lf	1
SB04	12/12/2019	40.408632	-83.442806	USACE, OEPA	Perennial	2,792 lf	2
SB06	12/12/2019	40.400193	-83.439930	USACE, OEPA	Intermittent	821 lf	2
SB07	12/13/2019	40.393273	-83.415092	USACE, OEPA	Ephemeral	133 lf	1, 2, 4
SB08	12/13/2019	40.383599	-83.419275	USACE, OEPA	Ephemeral, Perennial	8,831 lf	2
SB09	12/14/2019	40.386492	-83.438700	USACE, OEPA	Ephemeral, Perennial	1,772 lf	3,4
SB10	12/14/2019	40.373915	-83.430270	USACE, OEPA	Ephemeral, Intermittent, Perennial	11,104 lf	4
SB11	12/15/2019	40.364590	-83.452551	USACE, OEPA	Perennial	7,488 lf	7
SB12	12/15/2019	40.367829	-83.437401	USACE, OEPA	Intermittent	330 lf	7
SB13	12/15/2019	40.370757	-83.439815	OEPA	Ephemeral	655 lf	7
SB15	12/15/2019	40.361072	-83.451550	USACE, OEPA	Intermittent	1,998 lf	4
SB16	12/16/2019	40.350927	-83.428198	USACE, OEPA	Intermittent, Perennial	8,281 lf	1
SB17	12/16/2019	40.351484	-83.401735	USACE, OEPA	Perennial	5,003 lf	4
SB18	12/16/2019	40.355198	-83.441801	USACE, OEPA	Ephemeral	190 lf	4
SB19	12/16/2019	40.351248	-83.434000	USACE, OEPA	Intermittent	1,885 lf	7
SC01	1/8/2020	40.349114	-83.415539	USACE, OEPA	Ephemeral	612 lf	7
SC02	1/9/2020	40.369491	-83.423977	USACE, OEPA	Intermittent	485 lf	6
SC03	1/9/2020	40.358786	-83.456931	USACE, OEPA	Ephemeral	476 lf	6
SC04	1/9/2020	40.342549	-83.433343	USACE, OEPA	Ephemeral	263 lf	3
SC05	1/9/2020	40.344694	-83.433224	USACE, OEPA	Ephemeral	1,354 lf	7
SC06	1/9/2020	40.341550	-83.433573	USACE, OEPA	Intermittent	351 lf	7
SC07	1/10/2020	40.349252	-83.427212	USACE, OEPA	Ephemeral	1,033 lf	3

#### **3.2.2.1 FEATURE DESCRIPTIONS**

#### Stream SA01

Stream SA01 is an intermittent unnamed tributary (UNT) to Bokes Creek flowing south to north through the Project Area. Wetland WA02 sits on the terrace of stream SA01. No macrobenthos or fish were observed within the stream reach. Upstream of the reach within the Project Area stream SA01 is impounded to form a lake. WA01 is on the perimeter of that lake.

#### Stream SA02

Stream SA02 is an ephemeral UNT to Bokes Creek flowing southwest to northeast through the Project Area. It is subtended by a drain tile system that appears to have been damaged or is incomplete, resulting in irregular channel continuity. The stream disappears into a tile system at the downstream terminus as depicted on mapping provided in Appendix A. The stream appears to daylight into wetland WA04 further downslope. This stream is supported by outflow from tile systems in adjoining agricultural fields. No macrobenthos or fish were observed within the stream reach.

#### Stream SA03

Stream SA03 is an ephemeral UNT to Bokes Creek flowing southeast to northwest through the Project Area. Its hydrology appears to have been severely impacted by a drain tile system that has fallen into disrepair, resulting in an irregular and inconsistent channel. No macrobenthos or fish were observed within the stream reach.

#### Stream SA04

Stream SA04 is an ephemeral UNT to Bokes Creek flowing west to east through the Project Area. Hydrology appears to be supported by the upslope PEM wetland WA03, which is piped into a drain tile system and daylights at the western terminus of Stream SA04 within the Project Area. The channel is well formed, and consistent between termini, but disappears into a drain tile system downslope. No macrobenthos or fish were observed within the stream reach.

#### Stream SA05

Stream SA05 is an ephemeral UNT to the headwaters of Blues Creek flowing from south to north through the Project Area. No macrobenthos or fish were observed within the stream reach. Hydrology appears to be natural, consisting of overland sheet flow.

#### Stream SA08

SA08 is an ephemeral UNT to Bokes Creek flowing from west to east through the Project Area. This stream is supported by hydrology provided from drain tile systems in adjoining fields. An erosional feature with an inconsistent channel that appears to have been scoured by heavy rains prior to survey also supports this stream. The stream ends in a drain tile system on the eastern terminus of the reach as depicted in mapping provided in Appendix A. No macrobenthos or fish were observed within the stream reach.

#### Stream SA09

SA09 is an ephemeral UNT to Powder Lick Run (SB08) that flows from south to north through the Project Area. This stream is supported by hydrology provided from drain tile systems in the adjoining field. No macrobenthos or fish were observed within the stream reach.

#### Stream SA10

SA10 is an ephemeral UNT to Powder Lick Run (SB08) that flows from west to east through the Project Area. This stream is supported by hydrology provided from drain tile systems in the adjoining field. No macrobenthos or fish were observed within the stream reach.

#### Stream SA11

SA11 is an ephemeral UNT that flows from north to south through the Project Area. This stream continues to flow south outside of the Project Area into a woodlot. This stream is supported by hydrology from drain tile systems in the adjoining field. No macrobenthos or fish were observed within the stream reach.

#### Stream SA12

SA12 is an ephemeral ditch that flows from north to south through the Project Area. This stream continues to flow south outside of the Project Area. This stream is supported by hydrology from drain tile systems in the adjoining field. No macrobenthos or fish were observed within the stream reach.

#### Stream SA13

SA13 is an ephemeral UNT that flows from north to south through the Project Area. This stream continues to flow south outside of the Project Area. This stream is supported by hydrology from drain tile systems in the adjoining field. No macrobenthos or fish were observed within the stream reach.

#### Stream SA14

SA14 is an ephemeral UNT that flows from west to east through the Project Area. This stream continues to flow east outside of the Project Area. This stream is supported by hydrology from surface flow of the adjoining woodlot and drain tile system in the fields to the west. No macrobenthos or fish were observed within the stream reach.

#### Stream SA15

SA15 is an intermittent UNT that flows from west to east through the Project Area. This stream is supported by hydrology from a drain tile system in the surrounding fields and surface flow of the adjoining woodlot and fields. No macrobenthos or fish were observed within the stream reach.

#### Stream SB01

Stream SB01 is an ephemeral UNT to Bokes Creek flowing south to north through the Project Area. No macrobenthos or fish were observed within the stream reach. Hydrology input appeared to be tile drainage from adjacent agricultural fields.

#### Stream SB02

Stream SB02 is a perennial UNT to Bokes Creek flowing southwest to northeast through the Project Area. The stream is primarily buffered by agricultural fields. Much of the stream reach within the Project Area has been modified by agricultural activities. No macrobenthos or fish were observed within the stream reach.

#### Stream SB03

Stream SB03 is an ephemeral ditch located entirely within the Project Area. The stream was buffered by agricultural fields. No macrobenthos or fish were observed within the stream reach.

#### Stream SB04

Stream SB04 is the perennial stream Bokes Creek. SB04 flows west to east along portions of the northern Project Area boundary. The stream is buffered by both upland deciduous forest, forested wetland, and agricultural fields. No macrobenthos or fish were observed within the stream reach.

#### Stream SB06

Stream SB06 is an intermittent UNT to Bokes Creek flowing south to north through the Project Area. The stream reach is buffered by a narrow, forested corridor followed by agricultural fields. No macrobenthos or fish were observed within the stream reach.

#### Stream SB07

Stream SB07 is an ephemeral stream flowing southwest to northeast into Bokes Creek. The stream is buffered by upland deciduous forest and forested wetland. The stream was dry at the time of site investigations. This stream is the outflow of wetland WB04. No macrobenthos or fish were observed within the stream reach.

#### Stream SB08

Stream SB08, Powder Lick Run, flows through multiple portions of the Project Area, and includes reaches that are ephemeral as well as reaches that are perennial. The stream is buffered in places by old field, upland deciduous forest, and emergent wetland. No macrobenthos or fish were observed within the stream reach.

#### Stream SB09

Stream SB09 is a perennial UNT of Powder Lick Run generally flowing west to east through multiple tracts within the Project Area, and includes reaches that are ephemeral, as well as reaches that are perennial. The stream has been modified by, and is buffered by, agricultural activities. No macrobenthos or fish were observed within the stream reach.

#### Stream SB10

Stream SB10, Brush Run, generally flows west to east through multiple parcels within the Project Area. There are ephemeral, intermittent, and perennial reaches within the Project Area. The stream is buffered in places by old field, agriculture, and upland deciduous forest. No macrobenthos or fish were observed within the stream reach.

#### Stream SB11

Stream SB11 is a perennial UNT of Brush Run, generally flowing west to east through multiple parcels within the Project Area. The stream is buffered primarily by agricultural fields with some forested upland areas. No macrobenthos or fish were observed within the stream reach.

#### Stream SB12

Stream SB12 is an intermittent stream flowing west to east into SB11. The stream is buffered by agricultural fields. No macrobenthos or fish were observed within the stream reach.

#### Stream SB13

Stream SB13 is an ephemeral channel contained entirely within the Project Area ending in diffuse flow prior to connectivity to a water of the U.S. It appears natural hydrology is impacted by a drain tile system, perhaps one in disrepair. The stream is within an agricultural field and was dry at the time of site investigations. No macrobenthos or fish were observed within the stream reach.

#### Stream SB15

Stream SB15 is an intermittent stream generally flowing southwest to northeast into SB11, Brush Run. The stream has been channelized and is buffered by agricultural activities. No macrobenthos or fish were observed within the stream reach.

#### Stream SB16

Stream SB16, an UNT to Blues Creek, generally flowing west to east through multiple parcels within the Project Area. There are intermittent and perennial reaches of this stream within the Project Area. The stream is buffered primarily by agricultural fields with some forested upland areas. No macrobenthos or fish were observed within the stream reach.

#### Stream SB17

Stream SB17, Blues Creek, is a perennial stream generally flowing west to east through multiple parcels within the Project Area. The stream is buffered primarily by agricultural fields with some forested upland areas. No macrobenthos or fish were observed within the stream reach.

#### Stream SB18

Stream SB18 is an ephemeral UNT to Blues Creek flowing southwest to northeast into SB16. The stream is buffered by upland and wetland forest. No macrobenthos or fish were observed within the stream reach.

#### Stream SB19

Stream SB19 is an intermittent UNT to Blues Creek flowing west to east into SB16. The stream has been modified by, and is buffered by, agricultural activities. No macrobenthos or fish were observed within the stream reach.

#### Stream SC01

Stream SC01 is an ephemeral UNT to SB16 flowing north/northwest through the Project Area without flow at the time of survey. The stream is bisected by an area with no bed and bank, most likely due to

reduced flow due to human activities. No macrobenthos or fish were observed within the stream reach. Hydrology input appeared to be tile drainage from adjacent agricultural fields and off the Project Area.

#### Stream SC02

Stream SC02 is an intermittent UNT to Brush Run Creek flowing south to north through the Project Area with low flow at the time of survey. No macrobenthos or fish were observed within the stream reach. Hydrology input appeared to be tile drainage from adjacent agricultural fields.

#### Stream SC03

Stream SC03 is an ephemeral UNT to SB15 flowing southwest to northeast through the Project Area with no flow at the time of survey. No macrobenthos or fish were observed within the stream reach. Hydrology input appeared to be tile drainage and surface flow from adjacent agricultural fields.

#### Stream SC04

Stream SC04 is an ephemeral UNT to Blues Creek flowing southwest to northeast through the Project Area with no flow at the time of survey. No macrobenthos or fish were observed within the stream reach. Hydrology input appeared to be tile drainage from adjacent agricultural fields.

#### Stream SC05

Stream SC05 is an ephemeral UNT to Blues Creek flowing southwest to northeast through the Project Area with moderate flow at the time of survey. No macrobenthos or fish were observed within the stream reach. Hydrology input appeared to be tile drainage from adjacent agricultural fields.

#### Stream SC06

Stream SC06 is an ephemeral UNT to SC05 flowing west to east through the Project Area with low flow at the time of survey. No macrobenthos or fish were observed within the stream reach. Hydrology input appeared to be tile drainage from adjacent agricultural fields.

#### Stream SC07

Stream SC07 is an ephemeral UNT to Blues Creek flowing south to north through the Project Area with no flow at the time of survey. No macrobenthos or fish were observed within the stream reach. Hydrology input appeared to be surface flow from the surrounding forested area.

## 4 CONCLUSIONS

SWCA conducted a field investigation of the Project Area on December 10-16 and 26-27, 2019; January 8-10 and 14-15, and November 5-6 and 23, 2020. SWCA biologists identified 87 wetlands and 37 streams in the Project Area. Wetlands and waterbodies are regulated in Ohio by the USACE, who has authority under Section 404 of the CWA; U.S. EPA, who enforces Section 404; and OEPA, who issue Section 401 Water Quality Certifications for all Section 404 Permits and Isolated Wetlands Permits.

The conclusions provided in this report represent SWCA's professional opinion based on SWCA's knowledge and experience with the USACE, including the USACE's regulatory guidance documents and manuals. The USACE and OEPA have final authority in determining the jurisdictional status of waters of the U.S. and State and the extent of their boundaries.

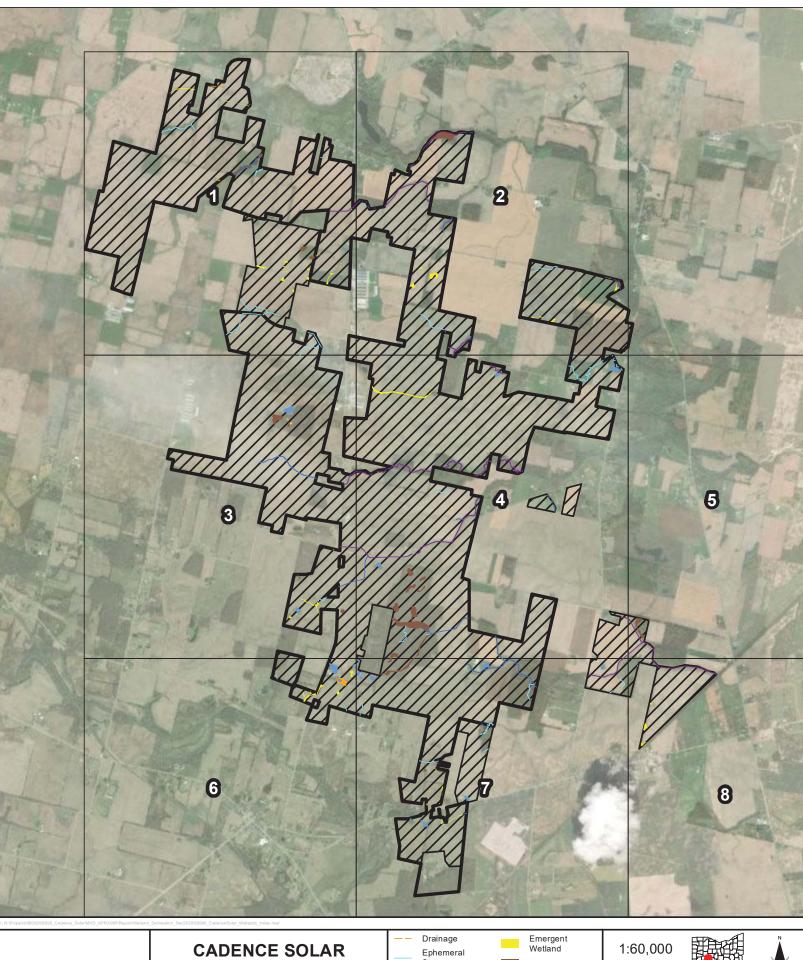
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## **APPENDIX A**

Wetland and Waterbody Delineation Maps



ENVIRONMENTAL CONSULTANTS

# **ENERGY CENTER**

Union County, Ohio

Page Index

Stream Intermittent Stream Perennial Stream Delineation Survey Area Project Area

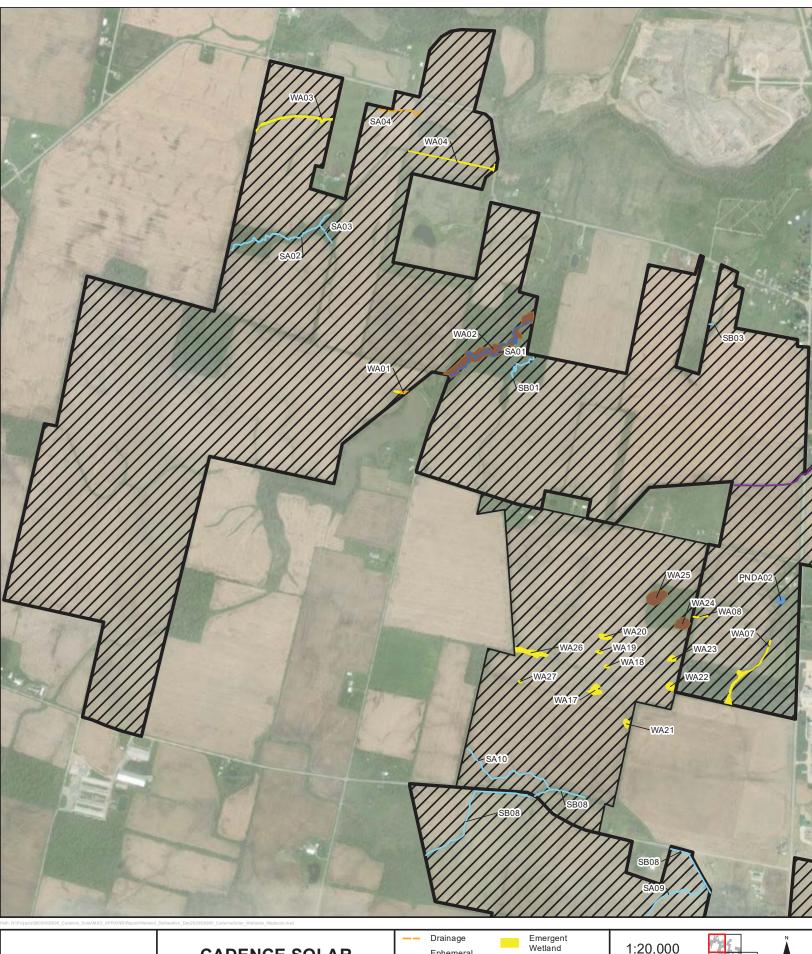
Forested Wetland Scrub-Shrub Wetland Unconsolidated Bottom Wetland



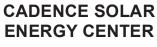
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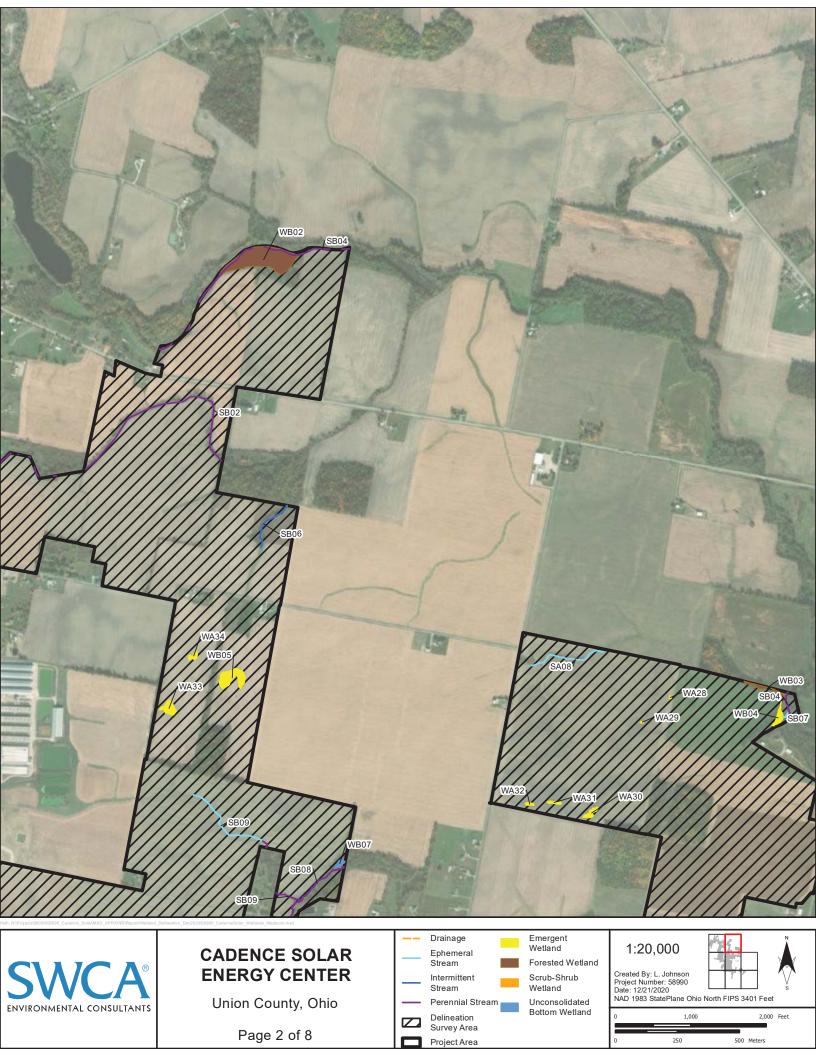
Union County, Ohio

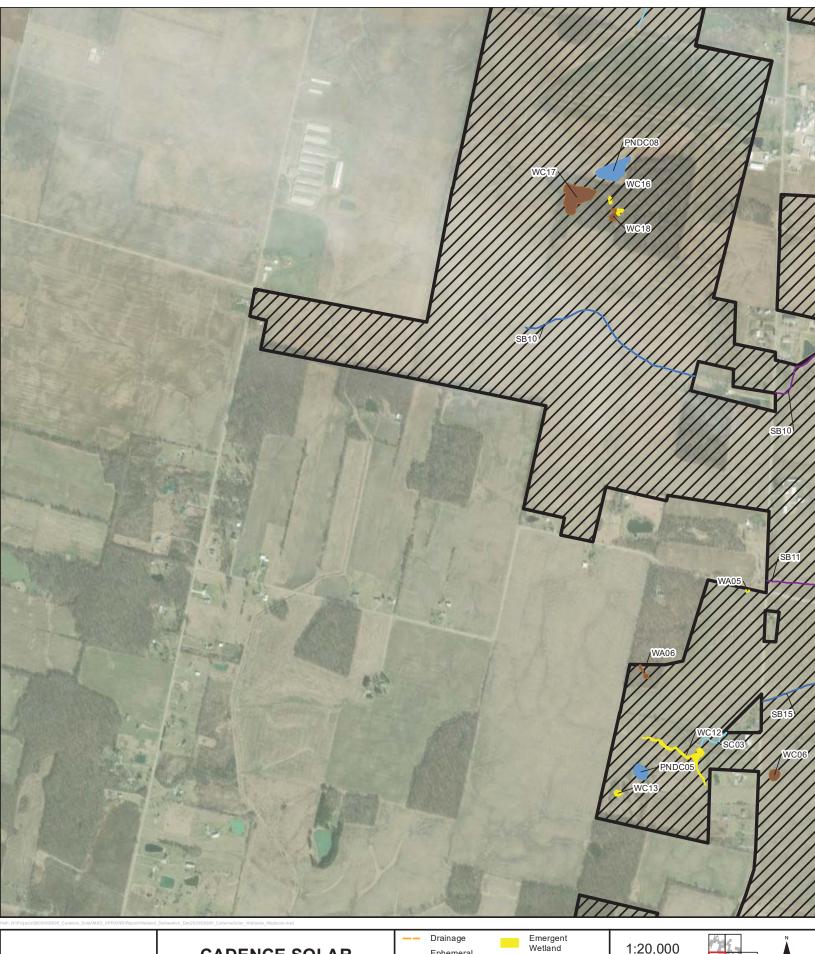
Page 1 of 8

 Ephemeral Stream
 Intermittent Stream
 Perennial Stream
 Delineation Survey Area
 Project Area

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## CADENCE SOLAR ENERGY CENTER

Union County, Ohio

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 Delineation Survey Area
 Project Area

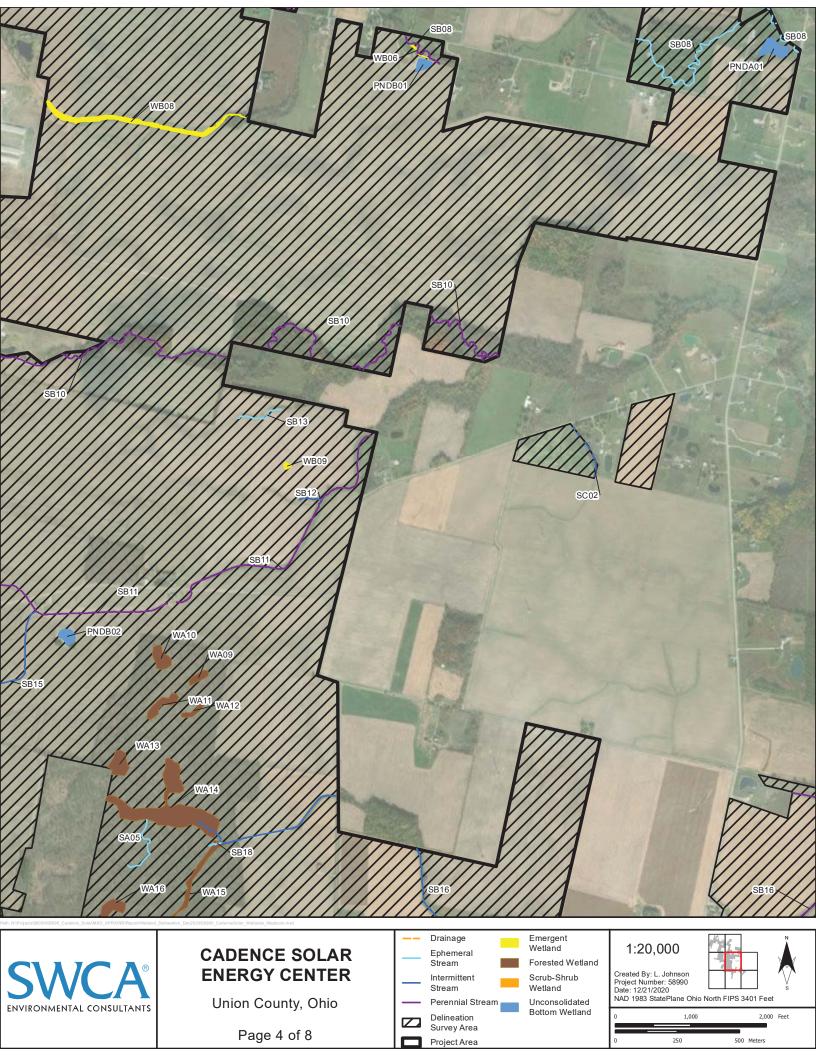
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ENVIRONMENTAL CONSULTANTS

## CADENCE SOLAR ENERGY CENTER

Union County, Ohio

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Union County, Ohio

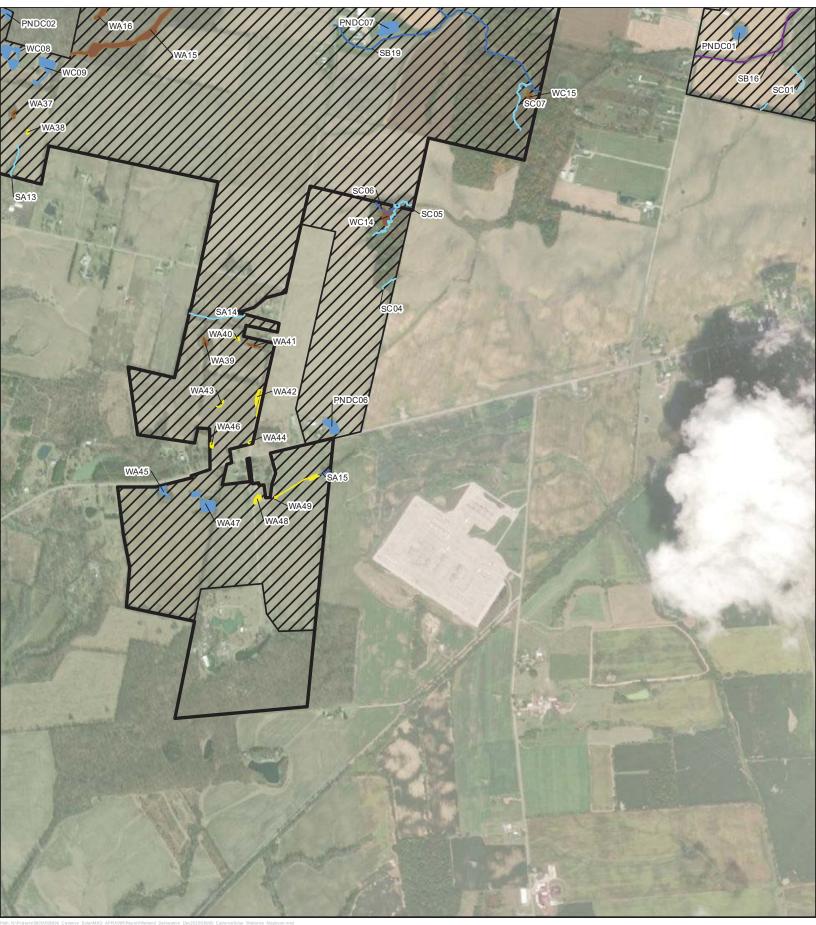
Page 6 of 8

 Drainage
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 Project Area Emergent Wetland Forested Wetland Scrub-Shrub Wetland Unconsolidated Bottom Wetland

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Union County, Ohio

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Ephemeral Stream Intermittent Stream Perennial Stream Delineation Survey Area Project Area

Drainage

Emergent Wetland Forested Wetland Scrub-Shrub Wetland Unconsolidated Bottom Wetland

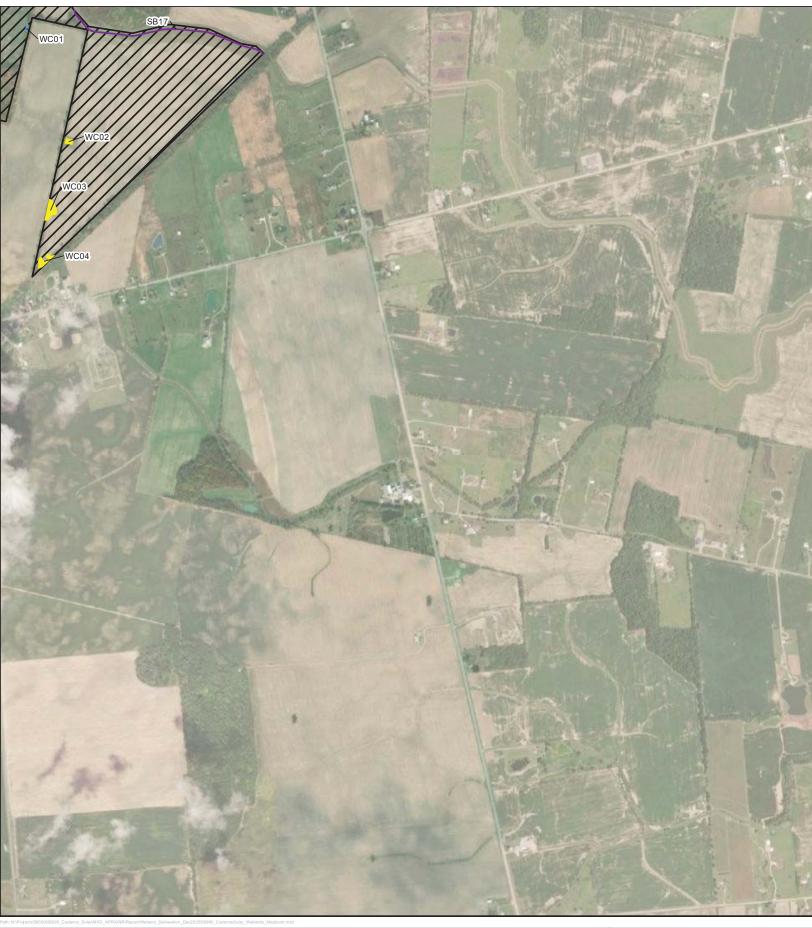
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## CADENCE SOLAR ENERGY CENTER

Union County, Ohio

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 Drainage
 Ephemeral Stream
 Intermittent Stream
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 Project Area Emergent Wetland Forested Wetland Scrub-Shrub Wetland Unconsolidated Bottom Wetland

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## **APPENDIX B**

**USACE Wetland Determination Data Forms** 

Project/Site:	Cade	nce Solar	Energy Project	Co	ounty:	Uni	on	Sampling Date:	December 10, 2019	
Applicant/Owner:			Cadence Sola	ar		State:	ОН	Sampling Point:	DPA01-WA01	
Investigator(s):	DC		and	DC	Section, Tov	wnship, R	ange:	Yo	rk	
Landform (hillslope	e, terrace, etc.)		Dep	pression		Local reli	ef (concave, co	onvex, none):	Concave	
Slope (%):	00-09	5	Lat:	40.40460	Long:		-83.47253	Datum:	NAD83	
Soil Map Unit Nam	e:	Blg1B1	- Blount silt loam	, ground morain	e, 2 to 4 percei	nt slopes	N	WI classification:	PSS/PEM	
Are climatic / hydro	ologic conditior	s on the s	ite typical for this	time of year?	Yes X	No	(lf no,	explain in Remarks.)		
Are Vegetation	No_,Sc	il <u>No</u>	,or Hydrology	No significa	intly disturbed?		Are "Normal	Circumstances" present?	Yes X No	
Are Vegetation	No_,So	il <b>No</b>	,or Hydrology	No naturally	/ problematic?		(If needed, e	xplain any answers in Rer	marks.)	

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

Hydrophytic Vegetation Present? Hydric Soil Present? Wetland Hydrology Present?	Yes _ Yes _ Yes _	x x x	No No No	Is the Sampled Area within a Wetland?	Yes	x	No
Remarks: This point was determined to be	within a v	wetland du	ie to the presence of a	ll 3 wetland criteria.			

#### **VEGETATION - Use scientific names of plants.**

	Absolute	Dominant	Indicator	Dominance Test wo	rksheet:			
Tree Stratum (Plot size: 30 ft. )	% cover	Species?	Status	Number of Dominant	Species			
1. Populus deltoides	10	Yes	FAC	That Are OBL, FACW			4	(A)
2				,		-		_ ` `
3.				Total Number of Dom	inant			
4.				Species Across All St			4	(B)
5.							-	(=)
	10 = T	otal Cover		Percent of Dominant	Snecies			
Sapling/Shrub Stratum (Plot size: 15 ft.	)			That Are OBL, FACW			100%	(A/B)
<u></u>	2	No	FACU		, 0117.0.		10070	(/(D)
0 // /		Yes	OBL	Prevalence Index We	orksheet:			
0 1///		Yes	FACW	Total % Cov		N.4.	ultiply by:	
		Tes	FACW	OBL species	7 r	x 1 =		
4					110			
5		-		FACW species		X 2 =		
	12 = 1	otal Cover		FAC species	10	x 3 =	30	
Herb Stratum (Plot size: 5 ft. )	_			FACU species	2	x 4 =	8	
1. Persicaria pensylvanica	5	No	FACW	UPL species	0	x 5 =	0	
2. Phalaris arundinacea	100	Yes	FACW	Column Totals:	129	(A)	265	(B)
3. Juncus effusus	2	No	OBL	Prevalence Index = B/	A =	2.05		
4								
5				Hydrophytic Vegetat	tion Indicate	ors:		
6				1 - Rapid Test fo	r Hydrophytio	c Vegetat	ion	
7				X 2 - Dominance T	est is >50%			
8				X 3 - Prevalence In	dex is ≤3.0 <sup>1</sup>			
9				4 - Morphologica	Adaptations	s <sup>1</sup> (Provid	e supporti	ng
10				data in Remar	ks or on a se	eparate sł	neet)	
	107 = T	otal Cover		Problematic Hydr	rophytic Veg	etation <sup>1</sup> (I	Explain)	
Woody Vine Stratum (Plot size: 30 ft.	)			<sup>1</sup> Indicators of hydric s	oil and wetla	nd hydrol	ogy must	
1. None Observed				be present, unless dis	sturbed or pr	oblematic		
2.								
	= T	otal Cover		Hydrophytic				
				Vegetation Present?	Y	es X	No	
Remarks:				1				

A positive indication of hydrophytic vegetation was observed (>50% of dominant species indexed as OBL, FACW, or FAC).

Depth	Matrix			Redox	Features						
inches)	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>	Texture	Remarks			
0-6	10YR 4/1	90	10YR 4/4	10	С	М	Clay				
6-16	10YR 4/1	80	10YR 4/4	20	С	М	Clay				
					<u> </u>						
						2		NA NA 41			
	Concentration, D=Dep s Indicators:	letion, RN	I=Reduced Matrix, I	NS=Maske	d Sand Grains.	-L	ocation: PL=Pore Lining Indicators for Proble				
			Sandy	Gleyed Ma	triv (SA)		Coast Prairie Rec	,			
Histosol (A1) Histic Epipedon (A2)				-			Dark Surface (S7				
Black Histic (A3)				Sandy Redox (S5) Stripped Matrix (S6)			Iron-Manganese I	,			
Hydrogen Sulfide (A4) Loamy Mucky Mi				,	Very Shallow Dark Surface (TF12)						
_ ′ ′	Stratified Layers (A5) Loamy Gleved Matrix (F2)				Other (Explain in	· · · ·					
	luck (A10)		X Deplete		. ,			, , , , , , , , , , , , , , , , , , , ,			
_	ed Below Dark Surfac	e (A11)	·	Dark Surfa	,						
Thick E	Dark Surface (A12)	. ,	Deplete	ed Dark Su	Irface (F7)						
Sandy	Mucky Mineral (S1)		Redox	Depressio	ns (F8)		<sup>3</sup> Indicators of hydrophy	ytic vegetation and			
5 cm N	lucky Peat or Peat (S	3)				wetland hydrology must be present,					
							unless disturbed or p	problematic.			
estrictive	Layer (if present):										
Type:											
Depth(i	inches):					Hydri	c Soil Present?	Yes X No			
narks:											
	dication of hydric soi	l was obse	erved.								
	,										
ROLO	CV.										
	rology Indicators:										
land Hyde											
-	icators (minimum of c						O a second and the disc of	(minimum of two required)			

Surface Water (A1)	vv ater-Stained Leaves (B9)	Surface Soll Cracks (B6)				
High Water Table (A2)	Aquatic Fauna (B13)	X Drainage Patterns (B10)				
Saturation (A3)	True Aquatic Plants (B14)	Dry-Season Water Table (C2)				
Water Marks (B1)	Hydrogen Sulfide Odor (C1)	Crayfish Burrows (C8)				
Sediment Deposits (B2)	Oxidized Rhizospheres on Living Roots (C3)	X Saturation Visible on Aerial Imagery (C9)				
Drift Deposits (B3)	Presence of Reduced Iron (C4)	Stunted or Stressed Plants (D1)				
Algal Mat or Crust (B4)	Recent Iron Reduction in Tilled Soils (C6)	X Geomorphic Position (D2)				
Iron Deposits (B5)	Thin Muck Surface (C7)	X FAC-Neutral Test (D5)				
Inundation Visible on Aerial Imagery (B7)	Gauge or Well Data (D9)					
 Sparsely Vegetated Concave Surface (B8)	Other (Explain in Remarks)					
Field Observations:						
Surface Water Present? Yes No X	Depth (inches): <b>N/A</b>					
Water Table Present? Yes No X	Depth (inches): >20					
Saturation Present? Yes No X	Depth (inches): >20 Wetlan	d Hydrology Present? Yes X No				
(includes capillary fringe)						
Describe Recorded Data (stream gauge, monitoring w	ell, aerial photos, previous inspections), if available:					
Remarks:						
A positive indication of wetland hydrology was obse	rved (at least two secondary indicators).					
Wetland situated on fringe of lake						

Project/Site:	Caden	Cadence Solar Energy Project County: Union Sampling Date:					Sampling Date:	December 10, 2019		
Applicant/Owner:		Cadence	Solar		State:	OH	Sampling Point:	DPA03-WA02		
Investigator(s):	DC	and	DC	Section, Tov	vnship, Ra	ange:	Yo	rk		
Landform (hillslope	e, terrace, etc.):		Terrace		Local relie	ef (concave, c	onvex, none):	Concave		
Slope (%):	00-05	Lat:	40.40623	Long:		-83.46829	Datum:	NAD83		
Soil Map Unit Nam	ie:	Sh - Shoals silt loam,	0 to 2 percent slope	es, occasionall	y flooded	N	IWI classification:	PFO		
Are climatic / hydro	ologic conditions	on the site typical for	this time of year?	Yes X	No	(lf no,	explain in Remarks.)			
Are Vegetation	No_,Soil	No ,or Hydrolog	y <b>No</b> significa	intly disturbed?		Are "Normal	Circumstances" present?	Yes X No		
Are Vegetation	No ,Soil	No ,or Hydrolog	y <b>No</b> naturally	/ problematic?		(If needed, e	explain any answers in Ren	narks.)		

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

Hydrophytic Vegetation Present? Hydric Soil Present? Wetland Hydrology Present?	Yes _ Yes _ Yes _	x x x	No No No	Is the Sampled Area within a Wetland?	Yes	x	No
Remarks: This point was determined to be	within a v	wetland du	e to the presence of al	I 3 wetland criteria.			

#### **VEGETATION - Use scientific names of plants.**

	Absolute Do	minant Indicator	Dominance Test wor	ksheet:			
Tree Stratum (Plot size: 30 ft. )		ecies? Status	Number of Dominant S	Snecies			
1 Bapulua daltaidaa	50	Yes FAC	That Are OBL, FACW			4	(A)
		103 1710	That Are Obe, TAOW	, 0117.0.		-	(/ ()
2			Tatal Number of Dama				
3			Total Number of Domi				
4			Species Across All Str	rata:		4	(B)
5							
	<u>50</u> = Total	Cover	Percent of Dominant S				
Sapling/Shrub Stratum (Plot size: 15 ft.	_)		That Are OBL, FACW	, or FAC:		100%	(A/B)
1. Fraxinus pennsylvanica	50	Yes FACW					
2			Prevalence Index Wo	orksheet:			
3			Total % Cov	er of:	Mu	ultiply by:	
4.			OBL species	0	x 1 =	0	
5.			FACW species	80	x 2 =	160	
	50 = Total	Cover	FAC species	50	x 3 =	150	
Herb Stratum (Plot size: 5 ft. )			FACU species	0	x 4 =	0	
1 0	10	Yes FACW	UPL species	0	x 5 =	0	
1. Carex sp 2. Phalaris arundinacea	20	Yes FACW	Column Totals:	130	(A)	-	(B)
			Prevalence Index = B/		2.38	510	(D)
•••			Frevalence index – D/	~ <u> </u>	2.30		
4			Hydrophytic Vegetat	ion Indicate	nrs'		
5			, , , ,				
6			1 - Rapid Test for		c vegetat	ion	
7			X 2 - Dominance Te				
8			X 3 - Prevalence Ind				
9			4 - Morphological				ng
10			data in Remark		•	,	
	<u>30</u> = Total	Cover	Problematic Hydr	ophytic Veg	etation <sup>1</sup> (I	Explain)	
Woody Vine Stratum (Plot size: 30 ft.	_)		<sup>1</sup> Indicators of hydric so				
1. None Observed			be present, unless dis	turbed or pr	oblematic		
2.							
	= Total	Cover	Hydrophytic				
			Vegetation Present?	Y	es X	No	
Remarks:			I				

A positive indication of hydrophytic vegetation was observed (>50% of dominant species indexed as OBL, FACW, or FAC).

Profile Des	scription: (Describe	to the de	pth needed to doc	ument the	e indicator or confi	rm the abse	nce of indicators.)	
Depth	Matrix			Redox	Features			
(inches)	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>	Texture	Remarks
0-16	10YR 4/1	90	10YR 4/4	10	C	М	Clay loam	
							<u> </u>	
							<u> </u>	
							<u> </u>	
<u> </u>								
	Concentration, D=Dep	letion, RM	/I=Reduced Matrix, I	MS=Maske	ed Sand Grains.	<sup>2</sup> l	Location: PL=Pore Lining,	
	Is Indicators:						Indicators for Probler	-
Histos				Gleyed Ma			Coast Prairie Red	
	Epipedon (A2)			Redox (S5			Dark Surface (S7)	
	Histic (A3)			d Matrix (S	,		Iron-Manganese M	
	gen Sulfide (A4)			Mucky Mir			Very Shallow Dark	( ),
	ed Layers (A5)			Gleyed Ma			Other (Explain in F	Remarks)
	Muck (A10)	( )	X Deplete	`	,			
·	ed Below Dark Surfac	e (A11)		Dark Surfa	( )			
	Dark Surface (A12)		·		urface (F7)		<sup>3</sup> Indicators of hydrophy	tio vogotation and
	Mucky Mineral (S1)	2)	Redox	Depressio	ns (F8)		wetland hydrology mu	0
5 cm k	/lucky Peat or Peat (S	5)					unless disturbed or p	•
Restrictive	Layer (if present):							
Type:	• • • •							
	(inches):		,			Hydr	ic Soil Present?	Yes X No
Depuil						riyan		
Remarks:						1		
A positive i	ndication of hydric soi	was obs	erved.					

#### Primary Indicators (minimum of one required; check all that apply) Secondary Indicators (minimum of two required) Surface Water (A1) X Water-Stained Leaves (B9) Surface Soil Cracks (B6) High Water Table (A2) X Drainage Patterns (B10) Aquatic Fauna (B13) Saturation (A3) True Aquatic Plants (B14) Dry-Season Water Table (C2) Water Marks (B1) Hydrogen Sulfide Odor (C1) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (C9) 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) X FAC-Neutral Test (D5) Thin Muck Surface (C7) Inundation Visible on Aerial Imagery (B7) Gauge or Well Data (D9) \_\_\_\_Other (Explain in Remarks) Sparsely Vegetated Concave Surface (B8) Field Observations: Surface Water Present? Yes No X Depth (inches): N/A х Water Table Present? Yes No Depth (inches): >20 No Yes X No Saturation Present? Yes Х Depth (inches): >20 Wetland Hydrology Present? (includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available: Remarks: A positive indication of wetland hydrology was observed (at least one primary indicator). A positive indication of wetland hydrology was observed (at least two secondary indicators). Wetland is situated on stream terrace

HYDROLOGY

Wetland Hydrology Indicators:

Project/Site:	Ca	Cadence Solar Energy Project Con				Union Sampling Date:			December 10, 20	19
Applicant/Owner:			Cadence So	lar		State:	ОН	Sampling Point:	DPA05-WA03	
Investigator(s):		DC	and	DC	Section, To	wnship, R	lange:	Yo	ork	
Landform (hillslope	e, terrace, e	tc.):		Swale		Local rel	ief (concave, co	onvex, none):	Concave	
Slope (%):	00	0-05	Lat:	40.41449	Long:		-83.47770	Datum:	NAD83	
Soil Map Unit Nam	ne: G	wg5C2 -G	ynwood clay loam,	ground moraine	e, 6 to 12 percer	nt slopes,	eroded N	WI classification:	PEM	
Are climatic / hydro	ologic condi	tions on th	e site typical for this	s time of year?	Yes X	No	(lf no,	explain in Remarks.)		
Are Vegetation	No	,Soil No	,or Hydrology	No signific	antly disturbed?	?	Are "Normal	Circumstances" present?	Yes X N	0
Are Vegetation	No	,Soil No	,or Hydrology	No natural	ly problematic?		(If needed, e	xplain any answers in Rei	marks.)	

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

Hydrophytic Vegetation Present? Hydric Soil Present? Wetland Hydrology Present?	Yes _ Yes _ Yes _	X X X	No No No	Is the Sampled Area within a Wetland?	Yes	<u>x</u>	No
Remarks: This point was determined to be	within a v	vetland due	e to the presence of al	II 3 wetland criteria.			

#### **VEGETATION - Use scientific names of plants.**

3.		Total Number of Dom Species Across All St			1	
5 = Total Cover <u>Sapling/Shrub Stratum</u> (Plot size: 15 ft. ) 1. <u>None Observed</u>		Percent of Dominant S That Are OBL, FACW	, or FAC:		100%	(A/B)
2		Prevalence Index Wo	orksheet:			
3		Total % Cov	er of:		Itiply by:	_
4		OBL species	0	x 1 =	0	_
5		FACW species	100	x 2 =	200	
= Total Cover		FAC species	5	x 3 =	15	
Herb Stratum (Plot size: 5 ft. )		FACU species	0	x 4 =	0	_
1. Phalaris arundinacea 100 Yes	FACW	UPL species	0	x 5 =	0	
2. Apocynum cannabinum 5 No	FAC	Column Totals:	105	(A)	215	(B)
3		Prevalence Index = B/	A =	2.05		
4.		Hydrophytic Vegetat 1 - Rapid Test for X 2 - Dominance To X 3 - Prevalence Im 4 - Morphological data in Remark Problematic Hydr <sup>1</sup> Indicators of hydric so be present, unless dis Hydrophytic Vegetation Present?	r Hydrophytic est is >50% dex is ≤3.0 <sup>1</sup> Adaptations (s or on a se rophytic Vege bil and wetta turbed or pro	<sup>1</sup> (Provide parate sh etation <sup>1</sup> (E	e supportin eet) Explain) ogy must	

A positive indication of hydrophytic vegetation was observed (>50% of dominant species indexed as OBL, FACW, or FAC).

|--|

ofile Des								
pth	Matrix				Features			
iches)	Color (moist)	%	Color (moist)	%	Туре	Loc <sup>2</sup>	Texture	Remarks
0-4	10YR 4/1	100	None				Loam	
4-16	10YR 4/1	90	10YR 4/4	10	C	M	Clay loam	
<u> </u>		—						
		—						
							·	
	Concentration D-Den	Lation DN			Cand Crains	2		. M-Motrix
	Concentration, D=Dep Is Indicators:	letion, Riv	=Reduced Matrix,	IVIS=IVIASKed	Sand Grains.		Location: PL=Pore Lining Indicators for Proble	
Histos			Sandy	Gleyed Mat	rix (S4)		Coast Prairie Re	•
	Epipedon (A2)			Redox (S5)			Dark Surface (S7	
	Histic (A3)			ed Matrix (Se			Iron-Manganese	,
	gen Sulfide (A4)			/ Mucky Mine				rk Surface (TF12)
	ed Layers (A5)			/ Gleyed Mat			Other (Explain in	
	/uck (A10)			ted Matrix (F				rionanoj
	ed Below Dark Surfac	e (A11)		Dark Surfac	,			
	Dark Surface (A12)	- (****)		ted Dark Sur				
	Mucky Mineral (S1)			Depression			<sup>3</sup> Indicators of hydroph	vtic vegetation and
_ `	/ucky Peat or Peat (S	3)		Depression	3 (1 0)		wetland hydrology m	
		-,					unless disturbed or	
estrictive	Layer (if present):							
Type:								
• •	inches):					Hydr	ic Soil Present?	Yes X No
narks: positive ir	ndication of hydric soi	was obse	erved.					
	ndication of hydric soi	was obse	erved.					
positive ir	GY	was obse	erved.					
PROLO	GY rology Indicators:							
PROLO Iand Hyd	GY rology Indicators: icators (minimum of c		ed; check all that a					(minimum of two required)
PROLO IROLO land Hyd rimary Ind Surfac	GY rology Indicators: icators (minimum of c e Water (A1)		ed; check all that a Water	-Stained Lea			Surface Soil Crac	cks (B6)
PROLO Iand Hyd Surfac High W	GY rology Indicators: icators (minimum of c e Water (A1) Vater Table (A2)		ed; check all that a Water Aquati	-Stained Lea c Fauna (B1	3)		Surface Soil Crac X Drainage Pattern	cks (B6) is (B10)
PROLO Iand Hyd Surfac High W Satura	GY rology Indicators: icators (minimum of c e Water (A1) Vater Table (A2) tion (A3)		ed; check all that a Water Aquati True A	-Stained Lea c Fauna (B1 Aquatic Plant	3) s (B14)		Surface Soil Crad X Drainage Pattern Dry-Season Wat	cks (B6) is (B10) er Table (C2)
PROLO PROLO Iand Hyd Surfac High W Satura Water	<b>GY</b> rology Indicators: icators (minimum of o e Water (A1) Vater Table (A2) tion (A3) Marks (B1)		ed; check all that a Water Aquati True A True A	-Stained Lea c Fauna (B1 Aquatic Plant gen Sulfide (	3) s (B14) Ddor (C1)		Surface Soil Crac X Drainage Pattern Dry-Season Wate Crayfish Burrows	cks (B6) is (B10) er Table (C2) 5 (C8)
PROLO Iand Hyd Surfac High W Satura Water Sedim	GY rology Indicators: icators (minimum of o e Water (A1) Vater Table (A2) tion (A3) Marks (B1) ent Deposits (B2)		ed; check all that a Water Aquati True A Hydrog Oxidiz	-Stained Lea c Fauna (B1 Aquatic Plant gen Sulfide ( ed Rhizosph	3) s (B14) Ddor (C1) leres on Living Ro	uots (C3)	Surface Soil Crac X Drainage Pattern Dry-Season Wat Crayfish Burrows Saturation Visible	cks (B6) is (B10) er Table (C2) 5 (C8) e on Aerial Imagery (C9)
PROLO Iand Hyd Surfac Surfac High W Satura Satura Sedim Drift D	GY rology Indicators: icators (minimum of o e Water (A1) Vater Table (A2) tion (A3) Marks (B1) ent Deposits (B2) eposits (B3)		ed; check all that a Water True A True A Hydrog Oxidiz Preser	-Stained Lea c Fauna (B1 Aquatic Plant gen Sulfide ( ed Rhizosph nce of Reduc	3) s (B14) Ddor (C1) ieres on Living Ro ced Iron (C4)		Surface Soil Crac X Drainage Pattern Dry-Season Wat Crayfish Burrows Saturation Visible Stunted or Stress	cks (B6) is (B10) er Table (C2) s (C8) e on Aerial Imagery (C9) sed Plants (D1)
PROLO Iand Hyd Surfac High W Satura Satura Sedim Drift D Algal M	GY rology Indicators: icators (minimum of of e Water (A1) Vater Table (A2) tion (A3) Marks (B1) ent Deposits (B2) eposits (B3) <i>M</i> at or Crust (B4)		ed; check all that a Water Aquati True A Oxidiz Presei Recen	-Stained Lea c Fauna (B1 Aquatic Plant gen Sulfide ( ed Rhizosph nce of Reduc it Iron Reduc	3) s (B14) Ddor (C1) ieres on Living Ro ced Iron (C4) ction in Tilled Soils		Surface Soil Crac X Drainage Pattern Dry-Season Wat Crayfish Burrows Saturation Visible Stunted or Stress X Geomorphic Pos	cks (B6) is (B10) er Table (C2) ; (C8) e on Aerial Imagery (C9) sed Plants (D1) ition (D2)
PROLO land Hyd fimary Ind Surfac High V Satura Satura Water Sedim Drift D Algal N Iron De	GY rology Indicators: icators (minimum of c e Water (A1) Vater Table (A2) tion (A3) Marks (B1) ent Deposits (B2) eposits (B3) Mat or Crust (B4) eposits (B5)	one require	ed; check all that a Water Aquati True A Hydrog Oxidiz Presei Recen Thin M	-Stained Lea c Fauna (B1 Aquatic Plant gen Sulfide ( ed Rhizosph nce of Reduc It Iron Reduc fluck Surface	3) s (B14) Odor (C1) eres on Living Ro ced Iron (C4) tion in Tilled Soils e (C7)		Surface Soil Crac X Drainage Pattern Dry-Season Wat Crayfish Burrows Saturation Visible Stunted or Stress	cks (B6) is (B10) er Table (C2) ; (C8) e on Aerial Imagery (C9) sed Plants (D1) ition (D2)
PROLO and Hyd imary Ind Surfac High V Satura Satura Water Satura Drift D Algal N Iron De Inunda	GY rology Indicators: icators (minimum of c e Water (A1) Vater Table (A2) tion (A3) Marks (B1) ent Deposits (B2) eposits (B3) Mat or Crust (B4) eposits (B5) tion Visible on Aerial	one require	ed; check all that a Water Aquati True A Hydrog Oxidiz Preset Recen Thin M 37)Gauge	-Stained Lea c Fauna (B1 Aquatic Plant gen Sulfide ( ed Rhizosph nce of Reduc ti Iron Reduc /luck Surface e or Well Dat	3) s (B14) Odor (C1) ueres on Living Ro ced Iron (C4) tion in Tilled Soils e (C7) ta (D9)		Surface Soil Crac X Drainage Pattern Dry-Season Wat Crayfish Burrows Saturation Visible Stunted or Stress X Geomorphic Pos	cks (B6) is (B10) er Table (C2) ; (C8) e on Aerial Imagery (C9) sed Plants (D1) ition (D2)
PROLO Iand Hyd imary Ind Surfac High V Satura Satura Water Sedim Algal N Iron De Inunda	GY rology Indicators: icators (minimum of c e Water (A1) Vater Table (A2) tion (A3) Marks (B1) ent Deposits (B2) eposits (B3) Mat or Crust (B4) eposits (B5)	one require	ed; check all that a Water Aquati True A Hydrog Oxidiz Preset Recen Thin M 37)Gauge	-Stained Lea c Fauna (B1 Aquatic Plant gen Sulfide ( ed Rhizosph nce of Reduc It Iron Reduc fluck Surface	3) s (B14) Odor (C1) ueres on Living Ro ced Iron (C4) tion in Tilled Soils e (C7) ta (D9)		Surface Soil Crac X Drainage Pattern Dry-Season Wat Crayfish Burrows Saturation Visible Stunted or Stress X Geomorphic Pos	cks (B6) is (B10) er Table (C2) ; (C8) e on Aerial Imagery (C9) sed Plants (D1) ition (D2)
PROLO Iand Hyd imary Ind Surfac High V Satura Water Sedim Drift D Algal N Iron De Inunda Sparse	GY rology Indicators: icators (minimum of c e Water (A1) Vater Table (A2) tion (A3) Marks (B1) ent Deposits (B2) eposits (B3) Mat or Crust (B4) eposits (B5) tion Visible on Aerial	one require	ed; check all that a Water Aquati True A Hydrog Oxidiz Preset Recen Thin M 37)Gauge	-Stained Lea c Fauna (B1 Aquatic Plant gen Sulfide ( ed Rhizosph nce of Reduc ti Iron Reduc /luck Surface e or Well Dat	3) s (B14) Odor (C1) ueres on Living Ro ced Iron (C4) tion in Tilled Soils e (C7) ta (D9)		Surface Soil Crac X Drainage Pattern Dry-Season Wat Crayfish Burrows Saturation Visible Stunted or Stress X Geomorphic Pos	cks (B6) is (B10) er Table (C2) ; (C8) e on Aerial Imagery (C9) sed Plants (D1) ition (D2)
PROLO land Hyd rimary Ind Surfac High V Satura Water Sedim Drift Du Algal N Iron De Inunda Sparse	GY rology Indicators: icators (minimum of c e Water (A1) Vater Table (A2) tion (A3) Marks (B1) ent Deposits (B2) eposits (B3) Mat or Crust (B4) eposits (B5) tion Visible on Aerial ely Vegetated Concave	one require	ed; check all that a Water Aquati True A Hydrog Oxidiz Preser Recen Thin M 37)Gauge (B8)Other	-Stained Lea c Fauna (B1 Aquatic Plant gen Sulfide ( ed Rhizosph nce of Reduc fuck Surface e or Well Dat (Explain in R	3) s (B14) Odor (C1) ueres on Living Ro ced Iron (C4) tion in Tilled Soils e (C7) ta (D9)		Surface Soil Crac X Drainage Pattern Dry-Season Wat Crayfish Burrows Saturation Visible Stunted or Stress X Geomorphic Pos	cks (B6) is (B10) er Table (C2) ; (C8) e on Aerial Imagery (C9) sed Plants (D1) ition (D2)
PROLO land Hyd imary Ind Surfac High W Satura Water Sedim Drift Dr Algal N Iron De Inunda Sparse ield Obse	GY rology Indicators: icators (minimum of co e Water (A1) Vater Table (A2) tion (A3) Marks (B1) ent Deposits (B2) eposits (B3) Mat or Crust (B4) eposits (B5) tion Visible on Aerial ely Vegetated Concave rvations: ater Present? Yes	Imagery (F	ed; check all that a Water Aquati True A Hydrog Oxidiz Preser Recen Thin N 37)Gauge (B8)Other 0	-Stained Lea c Fauna (B1 Aquatic Plant gen Sulfide ( ed Rhizosph nce of Reduc ti Iron Reduc Auck Surface e or Well Dat (Explain in R	3) is (B14) Odor (C1) ieres on Living Ro ced Iron (C4) ition in Tilled Soils (C7) ita (D9) Remarks)		Surface Soil Crac X Drainage Pattern Dry-Season Wat Crayfish Burrows Saturation Visible Stunted or Stress X Geomorphic Pos	cks (B6) is (B10) er Table (C2) ; (C8) e on Aerial Imagery (C9) sed Plants (D1) ition (D2)
PROLO land Hyd imary Ind Surfac High W Satura Water Sedim Drift Dr Satura Mater Algal M Iron De Inunda Sparse ield Obse wrface Wa (ater Tabl	GY rology Indicators: icators (minimum of c e Water (A1) Vater Table (A2) tion (A3) Marks (B1) ent Deposits (B2) eposits (B3) Mat or Crust (B4) eposits (B5) tion Visible on Aerial ely Vegetated Concave rvations: ater Present? Yes e Present? Yes	Imagery (E e Surface	ed; check all that a Water Aquati True A Hydrog Oxidiz Preser Thin M 37)Gauge (B8)Other oX Dep oX Dep	-Stained Lea c Fauna (B1 Aquatic Plant gen Sulfide ( ed Rhizosph nce of Reduc tt Iron Reduc Auck Surface e or Well Dat (Explain in R oth (inches):	3) is (B14) Ddor (C1) ieres on Living Ro ced Iron (C4) ition in Tilled Soils (C7) ita (D9) Remarks) N/A >20	s (C6)	Surface Soil Crac X Drainage Pattern Dry-Season Wat Crayfish Burrows Saturation Visible Stunted or Stress X Geomorphic Pos X FAC-Neutral Tes	cks (B6) is (B10) er Table (C2) ; (C8) e on Aerial Imagery (C9) sed Plants (D1) ition (D2) it (D5)
PROLO land Hyd imary Ind Surfac High W Satura Water Sedim Drift D Satura Inunda Sparse ield Obse urface Wa /ater Tabl aturation F	GY rology Indicators: icators (minimum of c e Water (A1) Vater Table (A2) tion (A3) Marks (B1) ent Deposits (B2) eposits (B3) Mat or Crust (B4) eposits (B5) tion Visible on Aerial ely Vegetated Concave rvations: ater Present? Yes e Present? Yes	Imagery (E e Surface	ed; check all that a Water Aquati True A Hydrog Oxidiz Preser Thin M 37)Gauge (B8)Other oX Dep oX Dep	-Stained Lea c Fauna (B1 Aquatic Plant gen Sulfide ( ed Rhizosph nce of Reduc ti Iron Reduc Auck Surface e or Well Dat (Explain in R	3) is (B14) Ddor (C1) ieres on Living Ro ced Iron (C4) ition in Tilled Soils (C7) ita (D9) Remarks) N/A >20	s (C6)	Surface Soil Crac X Drainage Pattern Dry-Season Wat Crayfish Burrows Saturation Visible Stunted or Stress X Geomorphic Pos	cks (B6) is (B10) er Table (C2) ; (C8) e on Aerial Imagery (C9) sed Plants (D1) ition (D2) it (D5)
PROLO land Hyd rimary Ind Surfac High W Satura Water Sedim Drift Du Stura Nalgal N Iron De Inunda Sparse reld Obse urface Wa /ater Tabl aturation R	GY rology Indicators: icators (minimum of co e Water (A1) Vater Table (A2) tion (A3) Marks (B1) ent Deposits (B2) eposits (B3) Mat or Crust (B4) eposits (B5) tion Visible on Aerial ely Vegetated Concave rvations: ater Present? Yes e Present? Yes Present? Yes	Imagery (F	ed; check all that a Water Aquati True A Hydrog Oxidiz Preser Recen Thin M 37)Gauge (B8)Other oXDep oXDep	-Stained Lea c Fauna (B1 Aquatic Plant gen Sulfide ( ed Rhizosph nce of Reduc fuck Surface e or Well Dat (Explain in R oth (inches): oth (inches):	3) s (B14) Odor (C1) teres on Living Ro ced Iron (C4) tion in Tilled Soils e (C7) ta (D9) Remarks) N/A >20 >20	s (C6) Wetla	Surface Soil Crac X Drainage Pattern Dry-Season Wat Crayfish Burrows Saturation Visible Stunted or Stress X Geomorphic Pos X FAC-Neutral Tes	cks (B6) is (B10) er Table (C2) ; (C8) e on Aerial Imagery (C9) sed Plants (D1) ition (D2) it (D5)
PROLO land Hyd rimary Ind Surfac High W Satura Water Sedim Drift Du Stura Nalgal N Iron De Inunda Sparse reld Obse urface Wa /ater Tabl aturation R	GY rology Indicators: icators (minimum of c e Water (A1) Vater Table (A2) tion (A3) Marks (B1) ent Deposits (B2) eposits (B3) Mat or Crust (B4) eposits (B5) tion Visible on Aerial ely Vegetated Concave rvations: ater Present? Yes Present? Yes Present? Yes apillary fringe)	Imagery (F	ed; check all that a Water Aquati True A Hydrog Oxidiz Preser Recen Thin M 37)Gauge (B8)Other oXDep oXDep	-Stained Lea c Fauna (B1 Aquatic Plant gen Sulfide ( ed Rhizosph nce of Reduc fuck Surface e or Well Dat (Explain in R oth (inches): oth (inches):	3) s (B14) Odor (C1) teres on Living Ro ced Iron (C4) tion in Tilled Soils e (C7) ta (D9) Remarks) N/A >20 >20	s (C6) Wetla	Surface Soil Crac X Drainage Pattern Dry-Season Wat Crayfish Burrows Saturation Visible Stunted or Stress X Geomorphic Pos X FAC-Neutral Tes	cks (B6) is (B10) er Table (C2) e (C8) e on Aerial Imagery (C9) sed Plants (D1) ition (D2) it (D5)
PROLO land Hyd rimary Ind Surfac High W Satura Water Sedim Drift Du Stura Nalgal N Iron De Inunda Sparse reld Obse urface Wa /ater Tabl aturation R	GY rology Indicators: icators (minimum of c e Water (A1) Vater Table (A2) tion (A3) Marks (B1) ent Deposits (B2) eposits (B3) Mat or Crust (B4) eposits (B5) tion Visible on Aerial ely Vegetated Concave rvations: ater Present? Yes Present? Yes Present? Yes apillary fringe)	Imagery (F	ed; check all that a Water Aquati True A Hydrog Oxidiz Preser Recen Thin M 37)Gauge (B8)Other oXDep oXDep	-Stained Lea c Fauna (B1 Aquatic Plant gen Sulfide ( ed Rhizosph nce of Reduc fuck Surface e or Well Dat (Explain in R oth (inches): oth (inches):	3) s (B14) Odor (C1) teres on Living Ro ced Iron (C4) tion in Tilled Soils e (C7) ta (D9) Remarks) N/A >20 >20	s (C6) Wetla	Surface Soil Crac X Drainage Pattern Dry-Season Wat Crayfish Burrows Saturation Visible Stunted or Stress X Geomorphic Pos X FAC-Neutral Tes	cks (B6) is (B10) er Table (C2) ; (C8) e on Aerial Imagery (C9) sed Plants (D1) ition (D2) it (D5)
PROLO land Hyd rimary Ind Surfac High W Satura Water Sedim Drift Du Stura Nalgal N Iron De Inunda Sparse reld Obse urface Wa /ater Tabl aturation R	GY rology Indicators: icators (minimum of c e Water (A1) Vater Table (A2) tion (A3) Marks (B1) ent Deposits (B2) eposits (B3) Mat or Crust (B4) eposits (B5) tion Visible on Aerial ely Vegetated Concave rvations: ater Present? Yes Present? Yes Present? Yes apillary fringe)	Imagery (F	ed; check all that a Water Aquati True A Hydrog Oxidiz Preser Recen Thin M 37)Gauge (B8)Other oXDep oXDep	-Stained Lea c Fauna (B1 Aquatic Plant gen Sulfide ( ed Rhizosph nce of Reduc fuck Surface e or Well Dat (Explain in R oth (inches): oth (inches):	3) s (B14) Odor (C1) teres on Living Ro ced Iron (C4) tion in Tilled Soils e (C7) ta (D9) Remarks) N/A >20 >20	s (C6) Wetla	Surface Soil Crac X Drainage Pattern Dry-Season Wat Crayfish Burrows Saturation Visible Stunted or Stress X Geomorphic Pos X FAC-Neutral Tes	cks (B6) is (B10) er Table (C2) ; (C8) e on Aerial Imagery (C9) sed Plants (D1) ition (D2) it (D5)
PROLO Iand Hyd imary Ind Surfac High W Satura Water Sedim Drift Du Algal N Iron De Inunda Sparse urface Wa dater Tabl aturation F acludes ca cribe Rec	GY rology Indicators: icators (minimum of c e Water (A1) Vater Table (A2) tion (A3) Marks (B1) ent Deposits (B2) eposits (B3) Mat or Crust (B4) eposits (B5) tion Visible on Aerial ely Vegetated Concave rvations: ater Present? Yes Present? Yes Present? Yes apillary fringe)	Imagery (f e Surface	ed; check all that a Water Aquati True A Hydrog Oxidiz Preser Recen Thin M 37) Gauge (B8) Other o X Dep o X Dep o X Dep o X Dep	-Stained Lea c Fauna (B1 Aquatic Plant gen Sulfide ( ed Rhizosph nce of Reduc thron Reduc Auck Surface e or Well Dat (Explain in R oth (inches): oth (inches): photos, prev	3) s (B14) Dodor (C1) teres on Living Ro ced Iron (C4) tion in Tilled Soils (C7) ta (D9) Remarks) N/A >20 >20 vious inspections)	wetla , if available:	Surface Soil Crac X Drainage Pattern Dry-Season Wat Crayfish Burrows Saturation Visible Stunted or Stress X Geomorphic Pos X FAC-Neutral Tes	cks (B6) is (B10) er Table (C2) ; (C8) e on Aerial Imagery (C9) sed Plants (D1) ition (D2) it (D5)

Project/Site:	Cad	ence Solar	Energy Project		County:	U	nion	Sampling Date:	December 11, 2019		
Applicant/Owner:		Cadence Solar State: OH Sampling Poir				Sampling Point:	DPA06-WA04				
Investigator(s):	DC	)	and	DC	Section	n, Township,	Range:	Ye	ork		
Landform (hillslope	e, terrace, etc.	):		Swale		Local re	elief (concav	e, convex, none):	Concave		
Slope (%):	00-0	)5	Lat:	40.4130	) <u>3</u> Lo	ong:	-83.46997	Datum:	NAD83		
Soil Map Unit Nam	e: <u>S</u>	ac3AF - Sa	ranac silty clay l	oam, 0 to 1 p	percent slopes	, frequently fl	ooded	NWI classification:	PEM		
Are climatic / hydro	ologic conditio	ns on the s	ite typical for this	s time of yea	r? Yes	X No	(If	no, explain in Remarks.)			
Are Vegetation	<u>No</u> ,S	oil No	or Hydrology	No sigr	nificantly distu	rbed?	Are "Nor	mal Circumstances" present	? Yes X No		
Are Vegetation	No_,S	oil <b>No</b>	,or Hydrology	No nati	urally problem	atic?	(If neede	d, explain any answers in Re	marks.)		

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

Hydrophytic Vegetation Present? Hydric Soil Present? Wetland Hydrology Present?	Yes _ Yes _ Yes _	x x x	No No No	Is the Sampled Area within a Wetland?	Yes	x	No
Remarks: This point was determined to be	within a v	wetland du	e to the presence of al	I 3 wetland criteria.			

#### **VEGETATION - Use scientific names of plants.**

	Absolute Dominal		Dominance Test wo				
Tree Stratum (Plot size: <u>30 ft.</u> )	% cover Species	? Status	Number of Dominant				( • )
1. None Observed			That Are OBL, FACW	V, or FAC:		1	(A)
2	<u> </u>						
3			Total Number of Dom				
4.			Species Across All S	trata:		1	(B)
5							
	= Total Cove	r	Percent of Dominant	Species			
Sapling/Shrub Stratum (Plot size: 15 ft.	)		That Are OBL, FACW	V, or FAC:		100%	(A/B)
1. None Observed							
2.			Prevalence Index W	orksheet:			
3.			Total % Co	ver of:	M	ultiply by:	
4			OBL species	0	x 1 =	0	_
5.			FACW species	100	x 2 =	200	_
	= Total Cove	r	FAC species	2	x 3 =	6	
Herb Stratum (Plot size: 5 ft. )			FACU species	0	x 4 =	0	_
1. Phalaris arundinacea	100 Yes	FACW	UPL species	0	x 5 =	0	_
2. Apocynum cannabinum	2 No	FAC	Column Totals:	102	(A)	206	(B)
			Prevalence Index = B		2.02	200	_ (D)
					2.02		
4			Hydrophytic Vegeta	tion Indicate	ors:		
5			, , , ,				
6			1 - Rapid Test fo	, , ,	c vegetat	ion	
7			X 2 - Dominance T				
8			X 3 - Prevalence Ir		4		
9			4 - Morphologica		•		g
10			data in Rema			,	
	102 = Total Cove	r	Problematic Hyd	Irophytic Veg	etation <sup>1</sup> (	Explain)	
Woody Vine Stratum (Plot size: 30 ft.	)		<sup>1</sup> Indicators of hydric s	soil and wetla	nd hydrol	ogy must	
1. None Observed			be present, unless di	sturbed or pr	oblematio		
2							
	= Total Cove		Hydrophytic				
			Vegetation Present	? Y	es X	No	
				-			
Remarks:			1				

A positive indication of hydrophytic vegetation was observed (>50% of dominant species indexed as OBL, FACW, or FAC).

DPA06-WA04

SOIL							Sam	ping Point. <b>DFA06-WA04</b>
Profile Des	cription: (Describe	to the dept	h needed to do	cument the	indicator or conf	firm the abser	nce of indicators.)	
Depth	Matrix			Redox I	- eatures			
(inches)	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>	Texture	Remarks
0-6	10YR 4/2	100	None	_		_	Loam	
6-16	10YR 4/1	90	10YR 4/1	10	С	М	Clay loam	
	oncentration, D=Dep	letion, RM=	Reduced Matrix,	MS=Masked	Sand Grains.	<sup>2</sup> L	ocation: PL=Pore Linin	
Hydric Soil	s Indicators:						Indicators for Prob	lematic Hydric Soils <sup>3</sup> :
Histosc				Gleyed Matr	ix (S4)		Coast Prairie R	
	pipedon (A2)			Redox (S5)			Dark Surface (S	,
	listic (A3)			ed Matrix (S6			Iron-Manganese	
	en Sulfide (A4)			/ Mucky Mine				ark Surface (TF12)
	d Layers (A5)			/ Gleyed Mat			Other (Explain i	n Remarks)
	uck (A10)	( )		ted Matrix (F				
	ed Below Dark Surfac	e (A11)		Dark Surfac				
	ark Surface (A12)			ted Dark Sur			<sup>3</sup> Indicators of hydrop	butic vegetation and
	Mucky Mineral (S1) ucky Peat or Peat (S	2)	Redo	Depression	S(FO)		wetland hydrology	
5 CIII M	ucky real of real (3	5)					unless disturbed of	-
Restrictive	Layer (if present):							
Type:								
	nches):					Hvdri	c Soil Present?	Yes X No
Remarks:								
A positive in	dication of hydric soi	was obser	ved.					
HYDROLOG	θY							
	ology Indicators:							
	cators (minimum of c	one required						s (minimum of two required)
	Water (A1)			-Stained Lea			Surface Soil Cra	
	ater Table (A2)			ic Fauna (B1	-		X Drainage Patter	
	ion (A3)			Aquatic Plant	. ,		Dry-Season Wa	( )
	Marks (B1)			gen Sulfide (		. (00)	Crayfish Burrow	
	ent Deposits (B2)			-	eres on Living Ro	ots (C3)		le on Aerial Imagery (C9)
	posits (B3)				ed Iron (C4)	(00)		ssed Plants (D1)
	at or Crust (B4)				tion in Tilled Soils	s (C6)	X Geomorphic Po	( ),
	posits (B5)	Imagany (PT		Auck Surface			X FAC-Neutral Te	st (D5)
	ion Visible on Aerial		·	e or Well Dat				
oparse	ly Vegetated Concave			(Explain in R	emarks)			
Field Obser	vations:							
Surface Wa	ter Present? Yes	No	X Dei	oth (inches):	N/A			
Water Table		No		oth (inches):	>20			
Saturation F				oth (inches):	>20	Wetla	nd Hydrology Present	? Yes X No
(includes ca	pillary fringe)		· ·	· · · ·			, ,,	
Describe Reco	orded Data (stream g	auge, monit	oring well, aerial	photos, prev	ious inspections)	, if available:		
Remarks:								
A positive in	dication of wetland h	ydrology wa	s observed (at le	ast two seco	ndary indicators).			

Project/Site:	Cade	ence Solar	Energy Project		County:	Ur	iion	Sampling Date:	December 11, 2019	
Applicant/Owner:			Cadence Sol	ar		State:	ОН	Sampling Point:	DPA08-WA05	
Investigator(s):	DC	;	and	DC	Section, To	wnship, F	Range:	Y	ork	
Landform (hillslope	e, terrace, etc.	):	De	pression		Local re	lief (concave, co	onvex, none):	Concave	
Slope (%):	00-0	5	Lat:	40.36433	Long:		-83.45543	Datum:	NAD83	
Soil Map Unit Nam	e:	Ble1A	1 - Blount silt loa	m, end moraine	e, 0 to 2 percer	t slopes	N	WI classification:	PEM	
Are climatic / hydro	ologic conditio	ns on the s	ite typical for this	time of year?	Yes X	No	(lf no,	explain in Remarks.)		
Are Vegetation	No ,S	oil No	or Hydrology	No signific	antly disturbed	?	Are "Normal	Circumstances" present	? Yes X No	
Are Vegetation	No ,Se	oil No	,or Hydrology	No natural	ly problematic?	•	(If needed, e	xplain any answers in Re	emarks.)	

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

Hydrophytic Vegetation Present? Hydric Soil Present? Wetland Hydrology Present?	Yes _ Yes _ Yes _	X X X	No No No	Is the Sampled Area within a Wetland?	Yes	x	No
Remarks: This point was determined to be	within a v	vetland du	ie to the presence of a	II 3 wetland criteria.			

#### **VEGETATION - Use scientific names of plants.**

	Absolute Domina	ant Indicator	Dominance Test wor	rksheet:			
Tree Stratum (Plot size: 30 ft. )	% cover Specie		Number of Dominant	Species			
1. None Observed			That Are OBL, FACW			1	(A)
2				,			_ (**)
			Total Number of Dom	inant			
			Species Across All St			2	(B)
4 5.			Species Across Air St	i ala.		2	_ (D)
5.				<b>_</b> .			
	= Total Cov	er	Percent of Dominant S				
Sapling/Shrub Stratum (Plot size: 15 ft.	)		That Are OBL, FACW	, or FAC:		50%	(A/B)
1. None Observed			Prevalence Index Wo	wheels a stu			
2	<u></u>						
3			Total % Cov	er of:	M	ultiply by:	_
4.			OBL species	5	x 1 =	5	
5			FACW species	55	x 2 =	110	_
	= Total Cov	er	FAC species	0	x 3 =	0	_
Herb Stratum (Plot size: 5 ft. )			FACU species	40	x 4 =	160	
1. Phalaris arundinacea	50 Yes	FACW	UPL species	0	x 5 =	0	
2. Sorghum halepense	40 Yes	FACU	Column Totals:	100	(A)	275	(B)
3. Carex sp.	5 No	FACW	Prevalence Index = B/	A =	2.75		_
4. Scirpus atrovirens	5 No	OBL					
5			Hydrophytic Vegetat	ion Indicat	ors:		
6.			1 - Rapid Test for	r Hvdrophvti	c Vegetat	ion	
7.			2 - Dominance T		•		
8.			X 3 - Prevalence In				
			4 - Morphological		s <sup>1</sup> (Provic	le sunnortir	a
			data in Remark				9
10	100 = Total Cov		Problematic Hydr			,	
March Mine Charter (District) 20 ft		ei			· ·	. ,	
Woody Vine Stratum (Plot size: 30 ft.	)		<sup>1</sup> Indicators of hydric so be present, unless dis				
1. None Observed	<u> </u>				obiemati		
2							
	= Total Cov	er	Hydrophytic				
			Vegetation Present?	Y	'es X	No	
Remarks:							

DPA08-WA05

SOIL							Samp	Bing Folint. DFA00-WA05
Profile Des	cription: (Describe	to the dep	oth needed to do	cument th	e indicator or confi	irm the abse	nce of indicators.)	
Depth	Matrix				x Features		,	
(inches)	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>	Texture	Remarks
0-4	10YR 4/1	100	None				Loam	Kemano
4-16	10YR 4/1	90	10YR4/4 10	10	C	M	Clay	
	1011(4/1		1011(4)4 10	10			Oldy	·
								·
$^{1}$ Type: C=C	Concentration, D=Dep	letion RM	=Reduced Matrix	MS=Mask	ed Sand Grains	2	Location: PL=Pore Lining	n M=Matrix
	s Indicators:							ematic Hydric Soils <sup>3</sup> :
Histoso	ol (A1)		Sandv	Gleyed M	atrix (S4)		Coast Prairie Re	
	Epipedon (A2)			Redox (S			Dark Surface (S	
	Histic (A3)			ed Matrix (			Iron-Manganese	
	jen Sulfide (A4)				neral (F1)			irk Surface (TF12)
	ed Layers (A5)			Gleyed N			Other (Explain ir	
	luck (A10)		X Deplet		. ,			, , , , , , , , , , , , , , , , , , , ,
	ed Below Dark Surfac	e (A11)		Dark Surf				
	Dark Surface (A12)				urface (F7)			
	Mucky Mineral (S1)		·	Depressio	. ,		<sup>3</sup> Indicators of hydroph	nytic vegetation and
	lucky Peat or Peat (S	3)		·			wetland hydrology r	
							unless disturbed or	problematic.
Restrictive	Layer (if present):							
Type:								
	inches):					Hydri	ic Soil Present?	Yes X No
Remarks:								
A positive ir	ndication of hydric soi	l was obse	erved.					
HYDROLO	GY							
Wetland Hyd	rology Indicators:							
Primary Ind	icators (minimum of o	one require	ed; check all that a	oply)				(minimum of two required)
	e Water (A1)				eaves (B9)		Surface Soil Cra	
High W	/ater Table (A2)			c Fauna (B			X Drainage Pattern	
Satura	tion (A3)		True A	quatic Pla	ints (B14)		Dry-Season Wat	· · /
Water	Marks (B1)		Hydrog	gen Sulfide	e Odor (C1)		Crayfish Burrow	
	ent Deposits (B2)				pheres on Living Roo	ots (C3)		e on Aerial Imagery (C9)
Drift De	eposits (B3)		Preser	nce of Red	luced Iron (C4)		Stunted or Stres	sed Plants (D1)
Algal N	lat or Crust (B4)		Recen	t Iron Red	uction in Tilled Soils	(C6)	X Geomorphic Pos	sition (D2)
Iron De	eposits (B5)		Thin M	luck Surfa	ce (C7)		FAC-Neutral Te	st (D5)
Inunda	tion Visible on Aerial	Imagery (E	37)Gauge	or Well D	)ata (D9)			
Sparse	ely Vegetated Concav	e Surface	(B8) Other	(Explain in	n Remarks)			
Field Obse								
		N		oth (inches				
Water Tabl				oth (inches				
Saturation F		N	o X Dep	oth (inches	s): <b>&gt;20</b>	Wetla	and Hydrology Present	? Yes <u>X</u> No
	apillary fringe) arded Data (atroom a	01100 000	itoring well peri-	nhoton	ovious increation - 1	if available:		
Describe Rec	orded Data (stream g	auge, mon	moring well, aerial	photos, pr	evious inspections),	II available:		
Pomorka								
Remarks:	diantian of water	vdrologiu	ion observed (at )-	oot ture a -	oondon/indiastor-\			
-	ndication of wetland h rology disturbed by di		-		condary indicators).			
i vatural Hyū	i ology alotai nea ny al	an ne sys	ne marmay be iff (	narchall.				

Project/Site:	Cade	nce Solar	Energy Project		County:	Ur	nion	Sampling Date:	December 26, 2	2019
Applicant/Owner:			Cadence So	ar		State:	ОН	Sampling Point:	DPA10-WA0	6
Investigator(s):	DC		and	DC	Section, To	wnship, I	Range:	Y	ork	
Landform (hillslope	e, terrace, etc.)	:	De	pression		_Local re	lief (concave, c	onvex, none):	Concave	
Slope (%):	00-0	5	Lat:	40.36130	Long:		-83.46031	Datum:	NAD83	
Soil Map Unit Nam	e:	Ble1A	1 - Blount silt loa	ım, end morain	e, 0 to 2 percer	nt slopes	N	IWI classification:	PFO	
Are climatic / hydro	ologic conditio	ns on the s	ite typical for this	time of year?	Yes X	No	(lf no,	explain in Remarks.)		
Are Vegetation	No ,So	oil No	,or Hydrology	No signific	cantly disturbed	?	Are "Normal	Circumstances" present	? Yes X	No
Are Vegetation	No ,So	oil No	,or Hydrology	No natura	lly problematic?	2	(If needed, e	explain any answers in Re	emarks.)	

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

Hydrophytic Vegetation Present? Hydric Soil Present? Wetland Hydrology Present?	Yes X Yes X Yes X	No No No	Is the Sampled Area within a Wetland?	Yes	<u>x</u>	No
Remarks: This point was determined to be	within a wetlan	d due to the presence of a	all 3 wetland criteria.			

#### **VEGETATION - Use scientific names of plants.**

	Absolute	Dominant	Indicator	Dominance Test wor	rksheet:			
Tree Stratum (Plot size: 30 ft.)	% cover	Species?	Status	Number of Dominant	Species			
1. Fraxinus pennsylvanica	40	Yes	FACW	That Are OBL, FACW			6	(A)
2. Ulmus rubra	10	Yes	FAC	,				_ ` '
3.				Total Number of Dom	inant			
4.				Species Across All St	rata:		6	(B)
5.								_ ` `
	50 =	Total Cover		Percent of Dominant S	Species			
Sapling/Shrub Stratum (Plot size: 15 ft.	)			That Are OBL, FACW	, or FAC:		100%	(A/B)
1. Ulmus rubra	40	Yes	FAC					_ ` ´
2. Carpinus caroliniana	10	Yes	FAC	Prevalence Index Wo	orksheet:			
3				Total % Cov	er of:	М	ultiply by:	
4.				OBL species	0	x 1 =		_
5.				FACW species	120	x 2 =	240	_
		Total Cover		FAC species	60	x 3 =	180	_
Herb Stratum (Plot size: 5 ft. )				FACU species	0	x 4 =	0	_
1. Persicaria pensylvanica	5	No	FACW	UPL species	0	x 5 =	0	_
2. Carex sp	50	Yes	FACW	Column Totals:	180	(A)	420	(B)
3. Onoclea sensibilis	5	No	FACW	Prevalence Index = B/	A =	2.33		
4. Phalaris arundinacea	20	Yes	FACW					
5				Hydrophytic Vegetat	ion Indicate	ors:		
6.				1 - Rapid Test for	r Hydrophyti	c Vegetati	ion	
7.				X 2 - Dominance T	est is >50%			
8.				X 3 - Prevalence In	dex is ≤3.0 <sup>1</sup>			
9.				4 - Morphologica	Adaptation	s <sup>1</sup> (Provid	e supportii	ng
10				data in Remar	ks or on a se	eparate sh	neet)	
	80 =	Total Cover		Problematic Hydr	ophytic Veg	etation <sup>1</sup> (I	Explain)	
Woody Vine Stratum (Plot size: 30 ft.	)			<sup>1</sup> Indicators of hydric so	oil and wetla	ind hydrol	ogy must	
1. None Observed	/			be present, unless dis	turbed or pr	oblematic		
2.								
	=	Total Cover		Hydrophytic				
				Vegetation Present?	Y	es X	No	
Remarks:				·				

A positive indication of hydrophytic vegetation was observed (>50% of dominant species indexed as OBL, FACW, or FAC).

Depth	Matrix			Redox	Features			
inches)	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>	Texture	Remarks
0-2	10YR 3/3	100	None				Loam	
2-8	10YR 4/1	95	10YR 4/4	5	С	Μ	Clay loam	
8-16	10YR 4/1	80	10YR 4/4	20	C	M	Clay	
	oncentration, D=Dep	oletion, RM	Reduced Matrix, I	MS=Maske	d Sand Grains.	2L	ocation: PL=Pore Lining,	
	s Indicators:		_				Indicators for Problem	•
Histoso	. ,			Gleyed Ma			Coast Prairie Redo	ox (A16)
	pipedon (A2)			Redox (S5)			Dark Surface (S7)	
	listic (A3)			ed Matrix (S			Iron-Manganese M	
_	en Sulfide (A4)			Mucky Min			Very Shallow Dark	· · · ·
	ed Layers (A5)			Gleyed Ma	. ,		Other (Explain in R	lemarks)
2 cm M	uck (A10)		X Deplet	ed Matrix (F	-3)			
Deplete	ed Below Dark Surfac	ce (A11)	Redox	Dark Surfa	ce (F6)			
Thick D	ark Surface (A12)		Deplet	ed Dark Su	rface (F7)			
Sandy I	Mucky Mineral (S1)		Redox	Depression	ns (F8)		<sup>3</sup> Indicators of hydrophyt	ic vegetation and
5 cm M	ucky Peat or Peat (S	3)					wetland hydrology mu unless disturbed or pr	
estrictive	Layer (if present):							
Type:								
Depth(i	nches):					Hydri	c Soil Present?	Yes <u>X</u> No
narks:								
positive in	dication of hydric soi	l was obse	erved.					
	GY							

Primary Indicators (minimum of one requ	ired; check all that apply)	Secondary Indicators (minimum of two required)
Surface Water (A1)	X Water-Stained Leaves (B9)	Surface Soil Cracks (B6)
High Water Table (A2)	Aquatic Fauna (B13)	X Drainage Patterns (B10)
Saturation (A3)	True Aquatic Plants (B14)	Dry-Season Water Table (C2)
Water Marks (B1)	Hydrogen Sulfide Odor (C1)	Crayfish Burrows (C8)
Sediment Deposits (B2)	Oxidized Rhizospheres on Living Roots (	C3) Saturation Visible on Aerial Imagery (C9)
Drift Deposits (B3)	Presence of Reduced Iron (C4)	Stunted or Stressed Plants (D1)
Algal Mat or Crust (B4)	Recent Iron Reduction in Tilled Soils (C6	i) X Geomorphic Position (D2)
Iron Deposits (B5)	Thin Muck Surface (C7)	X FAC-Neutral Test (D5)
Inundation Visible on Aerial Imagery	(B7) Gauge or Well Data (D9)	
Sparsely Vegetated Concave Surfac	e (B8) Other (Explain in Remarks)	
Field Observations:		
Surface Water Present? Yes	No X Depth (inches): N/A	
Water Table Present? Yes	No X Depth (inches): >20	
Saturation Present? Yes	No X Depth (inches): >20	Wetland Hydrology Present? Yes X No
(includes capillary fringe)		
Describe Recorded Data (stream gauge, m	onitoring well, aerial photos, previous inspections), if a	vailable:
Remarks:		
A positive indication of wetland hydrology	v was observed (at least one primary indicator).	
A positive indication of wetland hydrology	was observed (at least two secondary indicators).	

Project/Site:	Cadence	e Solar Energy Proje	ect C	County:	Un	ion	Sampling Date:	December 26, 2019	
Applicant/Owner:		Cadence	Solar		State:	OH	Sampling Point:	DPA14-WA07	
Investigator(s):	DC	and	DC	Section, To	wnship, F	Range:	Yor	k	
Landform (hillslope	e, terrace, etc.):		Swale		Local rel	ief (concave, c	onvex, none):	Concave	
Slope (%):	00-05	Lat:	40.39423	Long:		-83.45621	Datum:	NAD83	
Soil Map Unit Nam	e:	W	e - Wetzel silty clay	/ loam		N	IWI classification:	PEM	
Are climatic / hydro	ologic conditions o	on the site typical for	this time of year?	Yes X	No	(lf no,	explain in Remarks.)		
Are Vegetation	No ,Soil	No ,or Hydrolog	gy <b>No</b> significa	antly disturbed?	>	Are "Normal	Circumstances" present?	Yes X No	
Are Vegetation	No ,Soil	No ,or Hydrolog	gy <b>No</b> naturall	y problematic?		(If needed, e	explain any answers in Rem	narks.)	

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

Hydrophytic Vegetation Present? Hydric Soil Present? Wetland Hydrology Present?	Yes _ Yes _ Yes _	x x x	No No No	Is the Sampled Area within a Wetland?	Yes	x	No
Remarks: This point was determined to be	within a v	wetland du	e to the presence of al	I 3 wetland criteria.			

#### **VEGETATION - Use scientific names of plants.**

	Absolute	Dominant	Indicator	Dominance Test wor	ksheet:			
Tree Stratum (Plot size: 30 ft.)	% cover	Species?	Status	Number of Dominant S	Snecies			
	10	Yes	FAC	That Are OBL, FACW			4	(A)
					, 011710.		-	_ (/ ()
2 3.				Total Number of Domi	inant			
				Species Across All St			4	(B)
				Species Across Air St	dld.		4	_ (D)
5								
	10 = 1	otal Cover		Percent of Dominant S				( . ( . )
Sapling/Shrub Stratum (Plot size: 15 ft.	)			That Are OBL, FACW	, or FAC:		100%	(A/B)
1. None Observed				Durana la dan Wa				
2				Prevalence Index Wo				
3				Total % Cov	er of:	Mu	ultiply by:	
4				OBL species	40	x 1 =	40	
5				FACW species	50	x 2 =	100	
	= T	otal Cover		FAC species	10	x 3 =	30	
Herb Stratum (Plot size: 5 ft. )				FACU species	10	x 4 =	40	
1. Scirpus atrovirens	40	Yes	OBL	UPL species	0	x 5 =	0	
2. Carex sp	20	Yes	FACW	Column Totals:	110	(A)	210	(B)
3. Phalaris arundinacea	30	Yes	FACW	Prevalence Index = B/	A =	1.91		
4. Symphyotrichum pilosum	10	No	FACU					
5				Hydrophytic Vegetat	ion Indicat	ors:		
6.				1 - Rapid Test for	r Hvdrophvti	c Vegetat	ion	
7.				X 2 - Dominance Te		•		
8.				X 3 - Prevalence Inc				
				4 - Morphological		s <sup>1</sup> (Provid	e supportin	a
				data in Remark		`		9
10	100 = T	otal Cover		Problematic Hydr		•	,	
Mandu Mina Charles (Distations 20 ft	<u>100</u> – 1	olai Covei		<sup>1</sup> Indicators of hydric so				
Woody Vine Stratum (Plot size: 30 ft.	)			be present, unless dis				
1. None Observed	<u> </u>					obioinatio		
2								
	= T	otal Cover		Hydrophytic				
				Vegetation Present?	Y	es <u>X</u>	No	
Remarks:								

A positive indication of hydrophytic vegetation was observed (>50% of dominant species indexed as OBL, FACW, or FAC).

Depth	Matrix			Redo	x Features			
inches)	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>	Texture	Remarks
0-3	10YR 4/1	100	None	_		_	Clay	
3-6	10YR 4/1	90	10YR 4/4	10	С	М	Clay	
6-16	10YR 4/1	70	10YR 4/4	30	С	М	Clay	
	Concentration, D=Dep	letion, RM	I=Reduced Matrix, I	NS=Maske	ed Sand Grains.	²L	_ocation: PL=Pore Lining	
	s Indicators:						Indicators for Proble	•
Histoso	( )			Gleyed Ma			Coast Prairie Rec	· · · ·
	Epipedon (A2)			Redox (S5	,		Dark Surface (S7	,
	listic (A3)			d Matrix (S	,		Iron-Manganese	
_ ′ °	en Sulfide (A4)			Mucky Mir	. ,		Very Shallow Dar	· · · ·
	ed Layers (A5)			Gleyed M			Other (Explain in	Remarks)
_	luck (A10)		X Deplete	,	,			
	ed Below Dark Surfac	e (A11)		Dark Surfa	( )			
	Dark Surface (A12)		·		urface (F7)			
Sandy M	Mucky Mineral (S1)		Redox	Depressio	ns (F8)		<sup>3</sup> Indicators of hydroph	
5 cm M	lucky Peat or Peat (S	3)					wetland hydrology m unless disturbed or p	
estrictive	Layer (if present):							
Type:								
Depth(i	inches):					Hydri	ic Soil Present?	Yes X No
narks:						1		
positive in	dication of hydric soi	l was obse	erved.					
ROLOG	GY							
land Hydr	ology Indicators:							
rimary Indi	cators (minimum of o	one reauir	ed; check all that an	(vlq			Secondary Indicators	(minimum of two required)

High Water Table (A2)	Aquatic Fauna (B13)	X Drainage Patterns (B10)
X Saturation (A3)	True Aquatic Plants (B14)	Dry-Season Water Table (C2)
Water Marks (B1)	Hydrogen Sulfide Odor (C1)	Crayfish Burrows (C8)
Sediment Deposits (B2)	Oxidized Rhizospheres on Living Roots (C3)	X Saturation Visible on Aerial Imagery (C9)
Drift Deposits (B3)	Presence of Reduced Iron (C4)	X 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)	X FAC-Neutral Test (D5)
Inundation Visible on Aerial Imagery (B7)	Gauge or Well Data (D9)	
Sparsely Vegetated Concave Surface (B8)	Other (Explain in Remarks)	
Field Observations:		
Surface Water Present? Yes No X	Depth (inches): <b>N/A</b>	
Water Table Present? Yes No X	Depth (inches): >20	
Saturation Present? Yes X No	Depth (inches): 6 Wetl	and Hydrology Present? Yes X No
(includes capillary fringe)		
Describe Recorded Data (stream gauge, monitoring	well, aerial photos, previous inspections), if available:	
Remarks:		
A positive indication of wetland hydrology was obse	erved (at least one primary indicator).	
A positive indication of wetland hydrology was obse	erved (at least two secondary indicators).	

Project/Site:	Cadence	e Solar Energy Proje	ect C	County:	Un	ion	Sampling Date:	December 27, 2019	
Applicant/Owner:		Cadence	e Solar		State:	OH	Sampling Point:	DPA15-WA08	
Investigator(s):	DC	and	DC	Section, To	wnship, F	Range:	Yo	ork	
Landform (hillslope	e, terrace, etc.): _		Swale		Local re	lief (concave, c	onvex, none):	Concave	
Slope (%):	00-05	Lat:	40.39653	Long:		-83.45813	Datum:	NAD83	
Soil Map Unit Nam	e:	V	/e - Wetzel silty clay	y loam		N	IWI classification:	PEM	
Are climatic / hydro	ologic conditions of	on the site typical fo	this time of year?	Yes X	No	(lf no,	explain in Remarks.)		
Are Vegetation	No ,Soil	No ,or Hydrolo	gy <b>No</b> signific	antly disturbed?	?	Are "Normal	Circumstances" present?	Yes X No	
Are Vegetation	No ,Soil	No ,or Hydrolo	gy <b>No</b> natural	ly problematic?		(If needed, e	explain any answers in Rei	marks.)	

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

Hydrophytic Vegetation Present? Hydric Soil Present? Wetland Hydrology Present?	Yes _ Yes _ Yes _	x x x	No No No	Is the Sampled Area within a Wetland?	Yes	x	No
Remarks: This point was determined to be	within a v	wetland du	e to the presence of a	l 3 wetland criteria.			

#### **VEGETATION - Use scientific names of plants.**

	Absolute Domir	nant Indicator	Dominance Test wo	rksheet:			
Tree Stratum (Plot size: 30 ft. )	% cover Speci		Number of Dominant	Snecies			
1. None Observed			That Are OBL, FACW			3	(A)
			That Are ODE, I AOW	, or i Ao.		5	_ (~)
2			T ( INI I (D				
3			Total Number of Dom				(5)
4	<u> </u>		Species Across All St	rata:		3	(B)
5	<u> </u>						
	= Total Co	ver	Percent of Dominant	Species			
Sapling/Shrub Stratum (Plot size: 15 ft.	)		That Are OBL, FACW	, or FAC:		100%	(A/B)
1. <u>Cornus alba</u>	10 Ye	s FACW					
2			Prevalence Index We	orksheet:			
3.			Total % Cov	er of:	Mu	ultiply by:	
4.			OBL species	20	x 1 =	20	
5.			FACW species	90	x 2 =	180	
· · ·	10 = Total Co	ver	FAC species	0	x 3 =	0	
Herb Stratum (Plot size: 5 ft. )			FACU species	0	x 4 =	0	
1 0	30 Ye	s FACW	UPL species	0	x 5 =	0	_
	10 No		Column Totals:	110		-	(P)
2. Juncus effusus					`/	200	(D)
3. Scirpus atrovirens	<u>10 No</u>		Prevalence Index = B/	A =	1.82		
4. Phalaris arundinacea		s FACW	Undrankutia Variatet	len Indiaat			
5			Hydrophytic Vegetat				
6	<u> </u>		1 - Rapid Test fo		•	ion	
7			X 2 - Dominance T				
8			X 3 - Prevalence In	dex is ≤3.0 <sup>1</sup>			
9			4 - Morphologica	Adaptation:	s <sup>1</sup> (Provid	e supportii	ng
10			data in Remar	ks or on a se	eparate sh	neet)	
	100 = Total Co	ver	Problematic Hydr	rophytic Veg	etation <sup>1</sup> (I	Explain)	
Woody Vine Stratum (Plot size: 30 ft.			<sup>1</sup> Indicators of hydric s				
			be present, unless dis				
2	= Total Co						
	= i otal Co	VEI	Hydrophytic	. v		Na	
			Vegetation Present?	Ŷ	es <u>X</u>	No	
Remarks:							
Nellans.							

A positive indication of hydrophytic vegetation was observed (>50% of dominant species indexed as OBL, FACW, or FAC).

DPA15-WA08

SOIL							Oamp	Brais-WA00
Profile Des	cription: (Describe	to the der	oth needed to doo	ument th	e indicator or conf	irm the abser	nce of indicators )	
		to the dep						
Depth (inches)	Matrix		<u> </u>		x Features	. 2	-	5
(inches)	Color (moist)	<u>%</u>	Color (moist)	%	Туре	Loc <sup>2</sup>	Texture	Remarks
0-6	10YR 4/1	100	None				Clay	
6-16	10YR 4/1	90	10YR 4/4	10	C	M	Clay	
			·					
			·					
			·					
<u> </u>								
	oncentration, D=Dep	letion, RM	=Reduced Matrix,	MS=Maske	ed Sand Grains.	<sup>2</sup> L	ocation: PL=Pore Lining	g, M=Matrix.
Hydric Soll	s Indicators:							ematic Hydric Soils <sup>3</sup> :
Histoso				Gleyed Ma			Coast Prairie Re	
Histic E	pipedon (A2)		Sandy	Redox (S5	5)		Dark Surface (S	
Black H	listic (A3)		Strippe	ed Matrix (S	S6)		Iron-Manganese	Masses (F12)
Hydrog	en Sulfide (A4)		Loamy	Mucky Mi	neral (F1)			rk Surface (TF12)
Stratifie	ed Layers (A5)		Loamy	Gleyed M	atrix (F2)		Other (Explain in	n Remarks)
2 cm N	uck (A10)		X Deplet	ed Matrix (	(F3)			
Deplete	ed Below Dark Surfac	e (A11)	Redox	Dark Surfa	ace (F6)			
Thick E	ark Surface (A12)		Deplet	ed Dark Si	urface (F7)			
Sandy	Mucky Mineral (S1)		Redox	Depressio	ons (F8)		<sup>3</sup> Indicators of hydroph	nytic vegetation and
5 cm N	ucky Peat or Peat (S	3)					wetland hydrology n	nust be present,
							unless disturbed or	problematic.
Restrictive	Layer (if present):							
Type:								
Depth(i	nches):					Hydri	c Soil Present?	Yes X No
A positive in	dication of hydric soi	i was ubse	iveu.					
HYDROLO Wetland Hydr	GY ology Indicators:							
Primary Indi	cators (minimum of c	no roquire	d: check all that a	(vlac			Secondary Indicators	(minimum of two required)
	e Water (A1)	ne require			eaves (B9)		Surface Soil Cra	
	ater Table (A2)			c Fauna (E			X Drainage Patterr	
X Saturat	· · · ·			quatic Pla			Dry-Season Wat	
	Marks (B1)				e Odor (C1)		Crayfish Burrows	
						ata (C2)		
	ent Deposits (B2)			-	oheres on Living Roo uced Iron (C4)	ois (C3)		e on Aerial Imagery (C9)
	eposits (B3)				. ,	(00)	Stunted or Stres	
	lat or Crust (B4)				uction in Tilled Soils	(C6)	X Geomorphic Pos	
	posits (B5)			luck Surfac			X FAC-Neutral Tes	st (D5)
	ion Visible on Aerial		·	or Well D				
Sparse	ly Vegetated Concave	e Surface (	(B8) Other	Explain in	Remarks)			
Field Obse	vations:							
		V N	- Dan	th (inchoo	\. <b>4</b>			
	ter Present? Yes			th (inches	·			
Water Table				th (inches				
Saturation F	pillary fringe)	X N	o Dep	th (inches	): <u>       0                             </u>	wetla	ind Hydrology Present	? Yes <u>X</u> No
	orded Data (stream g		itoring well oprial	nhotoo nr		if ovoilable:		
Describe Reco	nueu Dala (sireani y	auge, mon	itoring well, aeriai	priotos, pr	evious inspections),	li avaliable.		
Pomorka								
Remarks:	disation of a large							
-	dication of wetland h							
A positive in	dication of wetland h	ydrology w	as observed (at lea	ast two see	condary indicators).			

Project/Site:	Cadeno	e Solar Energy Project		County:	Un	ion	Sampling Date:	December 27, 2019	
Applicant/Owner:		Cadence S	olar		State:	ОН	Sampling Point:	DPA17-WA09	
Investigator(s):	DC	and	DC	Section, Tov	wnship, F	Range:		York	
Landform (hillslope	e, terrace, etc.): _	[	Depression		Local rel	lief (concave, c	onvex, none):	Concave	
Slope (%):	00-05	Lat:	40.36129	Long:		-83.44264	Datum:	NAD83	
Soil Map Unit Nam	e:	Ble1A1 - Blount silt l	oam, end moraine	e, 0 to 2 percent	slopes	N	WI classification:	PFO	
Are climatic / hydro	ologic conditions	on the site typical for th	nis time of year?	Yes X	No	(lf no,	explain in Remarks.)		
Are Vegetation	No ,Soil	No ,or Hydrology	No signific	antly disturbed?	,	Are "Normal	Circumstances" prese	ent? Yes X No	
Are Vegetation	No ,Soil	No ,or Hydrology	No natural	ly problematic?		(If needed, e	explain any answers in	Remarks.)	

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

Hydrophytic Vegetation Present? Hydric Soil Present? Wetland Hydrology Present?	Yes X Yes X Yes X	( No ( No ( No	Is the Sampled Area within a Wetland?	Yes	x	No
Remarks: This point was determined to be	within a wetla	and due to the presence	of all 3 wetland criteria.			

#### **VEGETATION - Use scientific names of plants.**

	Absolute	Dominant	Indicator	Dominance Test works	sheet:			
Tree Stratum (Plot size: 30 ft.)	% cover	Species?	Status	Number of Dominant Sp	ecies			
1. Acer rubrum	40	Yes	FAC	That Are OBL, FACW, o			4	(A)
2. Ulmus rubra	10	No	FAC					
3. Fraxinus pennsylvanica	10	No	FACW	Total Number of Domina	ant			
4.				Species Across All Strat	a:		4	(B)
5.								_
	60 =	Total Cover		Percent of Dominant Spe	ecies			
Sapling/Shrub Stratum (Plot size: 15 ft.	)			That Are OBL, FACW, o	or FAC:		100%	(A/B)
1. Lindera benzoin	15	Yes	FACW					
2. Acer rubrum	10	Yes	FAC	Prevalence Index Work	sheet:			
3. Ulmus rubra	5	No	FAC	Total % Cover	of:	Mu	Itiply by:	
4.				OBL species	0			_
5.				FACW species	30	x 2 =	60	_
		Total Cover		FAC species	65	x 3 =	195	_
Herb Stratum (Plot size: 5 ft. )				FACU species	0	x 4 =	0	_
1. Carex sp	5	Yes	FACW	UPL species	0	x 5 =	0	_
2.				Column Totals:	95	(A)	255	(B)
3.		·		Prevalence Index = B/A :	=	2.68		
4.								
5				Hydrophytic Vegetatio	n Indicate	ors:		
6		······		1 - Rapid Test for H	lvdrophvti	c Vegetati	on	
7.		······		X 2 - Dominance Test		5		
8				X 3 - Prevalence Inde				
				4 - Morphological A		s <sup>1</sup> (Provide	e supportir	na
		·		data in Remarks				.9
10	5 =	Total Cover		Problematic Hydrop			,	
Woody Vine Stratum (Plot size: 30 ft.				<sup>1</sup> Indicators of hydric soil				
				be present, unless distu				
2		Total Cover						
	=	I Utal Cover		Hydrophytic	v	V	No	
				Vegetation Present?	T	es <u>X</u>	No	
Remarks:				1				

A positive indication of hydrophytic vegetation was observed (>50% of dominant species indexed as OBL, FACW, or FAC).

DPA17-WA09

	Depth		to the dec	oth needed to doc	ument the	e indicator or con	firm the abse	nce of indicators.)	
inchemy       Subject       Concent (mast)       %       Type       Load       Texture       Remarks         4-16       1978 421       90       None       -       -       Load       Load       Remarks         4-16       1978 421       90       None       -       -       M       City/Lam       -       -       Load       -       Load       - </th <th>Dopai</th> <th></th> <th></th> <th></th> <th></th> <th></th> <th></th> <th></th> <th></th>	Dopai								
14-10         1078.43         00         None	(inches)		%	Color (moist)		4	L oc <sup>2</sup>	Texture	Remarks
4-16       10YR 4/1       00       10YR 4/2       20       C       M       Clay loam         **       Constant PL-Pore Lining, M-Matrix       Indicators for Postematic Myric Solis*:       Indicators for Postematic Myric Solis*:         **       Fridic Spieodon (A2)       Sandy Redox (S5)       Dark Surface (F7)         **       Users (A3)       Stipped Matrix (S9)       Dork Surface (F7)         **       Users (A3)       Supped Matrix (S9)       Dork Surface (F7)         **       Users (A4)       Larray Mucky Mineral (F1)       Other (Explain in Remarks)         **       Cost Protect Parts       Other (Explain in Remarks)         **       Cost Protect Parts       Other (Explain in Remarks)         **       Cost Parts       Parts       No         **       Depleted Dark Surface (F7)       Secondary indicators (minimum of hor required)         **       Sandro Mark Surface (A1)       Redox Dark Surface (F7)       No         **       Depleted Dark Surface (F7)       Secondary indicators (minimum of hor required)       Surface Wares (A1)       Parts Wares (A1) </td <td><u> </u></td> <td></td> <td></td> <td></td> <td></td> <td><u> </u></td> <td></td> <td></td> <td></td>	<u> </u>					<u> </u>			
Top::       Constraintion, D=Depletion, RM=Reduced Matrix, MS=Musked Sand Grains.       **Location:       FL=Ports Linko, M=Matrix, MS=Musked Sand Grains.         "Indicators for Problematic Hydric Solis":					20	С	M		
typic: Soils Indicators:       Indicators for Problematic Hydric Soils':         Histosei (A1)       Sandy Gleyed Matrix (S4)         Histosei (A2)       Sandy Redox (S5)         Biack Histic (A3)       Sintped Matrix (S6)         Biack Histic (A3)       Sintped Matrix (S6)         Biack Histic (A3)       Learny Gleyed Matrix (F2)         2 orn Mack (A10)       Learny Gleyed Matrix (F2)         2 orn Mack (A10)       Depleted Matrix (F2)         Biack Marca (A11)       Redox Depressions (F8)         Sandy Macky Marca (A12)       Depleted Dark Surface (F7)         Sandy Macky Marca (A12)       Depleted Dark Surface (F7)         Sandy Macky Marca (A12)       Redox Depressions (F8)         * orn Macky Peat or Peat (S3)       "unliceators of hydrophytic vegetation and wetland hydrology must be present, unliess disturbed or problematic.         Type:									
typicite Soils Indicators in Indicators for Problematic Hydric Soils?:       Indicators for Problematic Hydric Soils?:         Histosol (A2)       Sandy Gleyed Matrix (S6)       Coast Praine Redox (A16)         Histosol (A2)       Sandy Redox (S5)       Dark Surface (S7)         Block Histic (A3)       Learny Gleyed Matrix (F2)       Dark Surface (S7)         Stratified Layers (A5)       Learny Gleyed Matrix (F2)       Other (Explain in Remarks)         2 or Muck (A10)       Depleted Matrix (F2)       Other (Explain in Remarks)         2 or Muck (A10)       Depleted Matrix (F2)       Other (Explain in Remarks)         2 or Muck (A10)       Depleted Dark Surface (F6)									
typicite Soils Indicators in Indicators for Problematic Hydric Soils?:       Indicators for Problematic Hydric Soils?:         Histosol (A2)       Sandy Gleyed Matrix (S6)       Coast Praine Redox (A16)         Histosol (A2)       Sandy Redox (S5)       Dark Surface (S7)         Block Histic (A3)       Learny Gleyed Matrix (F2)       Dark Surface (S7)         Stratified Layers (A5)       Learny Gleyed Matrix (F2)       Other (Explain in Remarks)         2 or Muck (A10)       Depleted Matrix (F2)       Other (Explain in Remarks)         2 or Muck (A10)       Depleted Matrix (F2)       Other (Explain in Remarks)         2 or Muck (A10)       Depleted Dark Surface (F6)									
typicite Soils Indicators in Indicators for Problematic Hydric Soils?:       Indicators for Problematic Hydric Soils?:         Histosol (A2)       Sandy Gleyed Matrix (S6)       Coast Praine Redox (A16)         Histosol (A2)       Sandy Redox (S5)       Dark Surface (S7)         Block Histic (A3)       Learny Gleyed Matrix (F2)       Dark Surface (S7)         Stratified Layers (A5)       Learny Gleyed Matrix (F2)       Other (Explain in Remarks)         2 or Muck (A10)       Depleted Matrix (F2)       Other (Explain in Remarks)         2 or Muck (A10)       Depleted Matrix (F2)       Other (Explain in Remarks)         2 or Muck (A10)       Depleted Dark Surface (F6)									
typic: Soils Indicators:       Indicators for Problematic Hydric Soils':         Histosei (A1)       Sandy Gleyed Matrix (S4)         Histosei (A2)       Sandy Redox (S5)         Biack Histic (A3)       Sintped Matrix (S6)         Biack Histic (A3)       Sintped Matrix (S6)         Biack Histic (A3)       Learny Gleyed Matrix (F2)         2 orn Mack (A10)       Learny Gleyed Matrix (F2)         2 orn Mack (A10)       Depleted Matrix (F2)         Biack Marca (A11)       Redox Depressions (F8)         Sandy Macky Marca (A12)       Depleted Dark Surface (F7)         Sandy Macky Marca (A12)       Depleted Dark Surface (F7)         Sandy Macky Marca (A12)       Redox Depressions (F8)         * orn Macky Peat or Peat (S3)       "unliceators of hydrophytic vegetation and wetland hydrology must be present, unliess disturbed or problematic.         Type:									
	Type: C=C	Concentration, D=Depl	letion, RM	=Reduced Matrix, I	NS=Maske	d Sand Grains.	2	Location: PL=Pore Linir	ng, M=Matrix.
Histic Exploredon (A2)       Sandy Redox (S5)       Dark Surface (S7)         Black Histic (A3)       Stipped Matrix (S6)       Iton-Manganese Masses (F12)         Yetrogen Sulfide (A4)       Learny Muckly Mineral (F1)       Very Shallow Dark Surface (T12)         Strattled Layers (A5)       Learny Gleyed Matrix (F2)       Other (Explain in Remarks)         2 orn Muck (A10)       X       Depleted Matrix (F3)         Depleted Batow Dark Surface (A11)       Redox Dark Surface (F7)         Sandy Mucky Mineral (S1)       Redox Depressions (F8)       *Indicators of hydrophytic vegetation and wetland hydrophytic vegetation and wetland hydrophytic vegetation and wetland hydrophytic vagetation and wetland hydrophytic vegetation and wetland hydrophytic vagetation and vagetation and wetland hydro	ydric Soi	Is Indicators:						Indicators for Prob	lematic Hydric Soils <sup>3</sup> :
Biok Histic (3)       Gropped Matrix (56)       Iron-Magnarese Masses (F12)         Hydrogen Suffide (A4)       Loamy Mucky Minaral (F1)       Very Shallow Dark Surface (TF12)         Stratified Layers (A5)       Loamy Gleyd Matrix (F2)       Other (Explain in Remarks)         2 or Muck (A10)       X       Depleted Matrix (F3)       Depleted Matrix (F3)         Depleted Boark Surface (A11)       Redx Dark Surface (F7)       Sandy Mucky Minaral (S1)       Perpendentiation of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.         estrictive Layer (If present):       Type:       Perpendentiation of hydric soil was observed.       Hydric Soil Present?       Yes_X_No_         Stratified Layers (A3)       True Aquatic Phane (B1)       Secondary Indicators (minimum of two required)         Stratice Water (A1)       X       Water-Stained Lawers (B9)       Surface Water (A1)       Drainage Patterns (B10)         Sufface Water (A1)       Aquatic Fauna (B13)       Dury Season Water Table (C2)       Crayfish Burrows (C8)         Sufface Water (A1)       Hydrogen Sufface Odr (C1)       Crayfish Burrows (C8)       Suturated or Nerseal Imagery (C3)         Secondary Indicators       Oxid Cray (B1)       Hydrogen Sufface Odr (C1)       Secondary Indicators (B6)         Hydrogen Sufface (B2)       Oxid Craw (B1)       Oxid Craw (B1)       Dury Season Water Table (C2) <td>Histos</td> <td>ol (A1)</td> <td></td> <td>Sandy</td> <td>Gleyed Ma</td> <td>trix (S4)</td> <td></td> <td>Coast Prairie R</td> <td>edox (A16)</td>	Histos	ol (A1)		Sandy	Gleyed Ma	trix (S4)		Coast Prairie R	edox (A16)
Hydrogen Sulfde (A)	Histic I	Epipedon (A2)						Dark Surface (S	67)
Stratified Layers (A5)	Black I	Histic (A3)		Strippe	d Matrix (S	6)		Iron-Manganese	e Masses (F12)
	Hydrog	gen Sulfide (A4)		Loamy	Mucky Min	ieral (F1)		Very Shallow D	ark Surface (TF12)
Papieted Below Dark Surface (A11)	Stratifi	ed Layers (A5)		Loamy	Gleyed Ma	atrix (F2)		Other (Explain i	n Remarks)
	2 cm N	/luck (A10)		X Deplete	ed Matrix (I	F3)			
Sandy Mucky Mineral (S1)       Redox Depressions (F8) <sup>3</sup> Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.         Set mice (If present):       Type:	·		e (A11)	Redox	Dark Surfa	ice (F6)			
S cm Mucky Peat or Peat (S3)     wetland hydrology must be present,     unless disturbed or problematic.      Sectrictive Layer (If present):     Type:     Depth(inches):     Mydric Soil Present? Yes X No     Model Present? Yes X No     Secondary Indicators (minimum of two required)     Surface Soil Cracks (B8)     Dry-Seasor Son Water Table (C2)     Crayfish Burrows (C3)     Surface Soil Cracks (B8)     Dift Deposits (B2)     Oxidzed Rhizospheres on Living Roots (C3)     Sufface Soil Stresed Plants (C1)     Sufface Soil Stresed Plants (C1)     Sufface Soil Cracks (B8)     Oxidzed Rhizospheres on Living Roots (C3)     Sufface Soil Cracks (B8)     Dift Deposits (B2)     Oxidzed Rhizospheres on Living Roots (C3)     Sufface Soil Stresed Plants (C1)     Sufface Soil Stresed Plants (C1)     Sufface Soil Stresed Plants (C1)     Sufface Soil Cracks (B8)     Other (Explain in Reduction in Titled Soils (C6)     X Geomorphic Position (D2)     X FAC-Neutral Test (D5)     Sufface Soil Stresed Plants (C1)     X Mater Table Present?     Yes X No     Depth (inches): <u>VA</u> Nater Table Present? Yes X No     Depth (inches): <u>6     Wetland Hydrology Present?     Yes X No     scribe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:     marks:     Apositive indication of welland hydrology was observed (at least one primary indicator). </u>	Thick I	Dark Surface (A12)		Deplete	ed Dark Su	ırface (F7)		<u>^</u>	
Restrictive Layer (If present):				Redox	Depressio	ns (F8)			
Restrictive Layer (if present):       Type::	5 cm N	lucky Peat or Peat (S3	3)					, ,,	
Type:	Pootriotivo	Lover (if present)						unless disturbed o	r problematic.
Depth(inches):       Yes       X       No         marks:       Apositive indication of hydric soil was observed.       Imarks:       Imarks:<		Layer (ii present).							
marks: A positive indication of hydric soil was observed.		inches):					Hydr	ic Soil Present?	Vos X No
Appositive indication of hydric soil was observed.         DROLOGY         tand Hydrology Indicators:         Primary Indicators (minimum of one required; check all that apply)       Secondary Indicators (minimum of two required)         Sufface Water (A1)       X Water-Stained Leaves (B9)       Surface Soil Cracks (B6)         High Water Table (A2)       Aquatic Plants (B14)       Dry-Season Water Table (C2)         Water Marks (B1)       Hydrogen Sulfide Odor (C1)       Crayfish Burrows (C8)         Sediment Deposits (B2)       Oxidized Rhizospheres on Living Roots (C3)       Saturation Visible on Aerial Imagery (C9)         Drift Deposits (B3)       Presence of Reduced Iron (C4)       Stunted or Stressed Plants (D1)         Agal Mat or Crust (B4)       Recent Iron Reduced Iron (C4)       Stunted or Stressed Plants (D1)         Inundation Visible on Aerial Imagery (D7)       Gauge or Well Data (D9)       Sparsely Vegetated Concave Surface (B8)       Other (Explain in Remarks)         Field Observations:       No       X       Depth (inches): <u>220</u> Wetland Hydrology Present? Yes X No       No         Saturation Present? Yes       No       X       Depth (inches): <u>220</u> Wetland Hydrology Present? Yes X No       Mo         Saturation Present? Yes       No       X       Depth (inches): <u>220</u> Wetland Hydrology Present? Yes X No       Mo	Depuil						ilyai	ie don't resent!	
Secondary Indicators (minimum of one required; check all that apply)       Secondary Indicators (minimum of two required)         Surface Water (A1)       X       Water-Stained Leaves (B9)       Drainage Patterns (B10)         Year       Aquatic Fauna (B13)       Dry-Season Water Table (C2)       Dry-Season Water Table (C2)         Water Marks (B1)       Hydrogen Sulfide Odor (C1)       Crayfish Burrows (C8)       Saturation Visible on Aerial Imagery (C9)         Drift Deposits (B3)       Presence of Reduced Iron (C4)       Stunted or Stressed Plants (D1)         Algal Mat or Crust (B4)       Recent Iron Reduction in Tilled Soils (C6)       X       Geomorphic Position (D2)         Iron Deposits (B5)       Thin Muck Surface (C7)       X       FAC-Neutral Test (D5)         Inundation Visible on Aerial Imagery (B7)       Gauge or Well Data (D9)       Saturation Present? Yes       No       X       Depth (inches): <u>N/A</u> Saturation Present? Yes       No       X       Depth (inches): <u>&gt; 20</u> Wetland Hydrology Present? Yes X       No         Saturation Present? Yes       No       X       Depth (inches): <u>6</u> Wetland Hydrology Present? Yes X       No         Saturation Present? Yes       No       Depth (inches): <u>6</u> Wetland Hydrology Present? Yes X       No         Saturation Present? Yes       No       Depth (inches): <u>6</u> Wet									
Surface Water (A1)       X       Water-Stained Leaves (B9)	DROLO	GY							
High Water Table (A2)       Aquatic Fauna (B13)       Drainage Patterns (B10)         X Saturation (A3)       True Aquatic Plants (B14)       Dry-Season Water Table (C2)         Water Marks (B1)       Hydrogen Sulfide Odor (C1)       Crayfish Burrows (C8)         Sediment Deposits (B2)       Oxidized Rhizospheres on Living Roots (C3)       Saturation Visible on Aerial Imagery (C9)         Drift Deposits (B3)       Presence of Reduced Iron (C4)       Stunted or Stressed Plants (D1)         Algal Mat or Crust (B4)       Recent Iron Reduction in Tilled Soils (C6)       X Geomorphic Position (D2)         Iron Deposits (B5)       Thin Muck Surface (C7)       X FAC-Neutral Test (D5)         Inundation Visible on Aerial Imagery (B7)       Gauge or Well Data (D9)         Sparsely Vegetated Concave Surface (B8)       Other (Explain in Remarks)         Saturation Present?       Yes       No         Saturation Present?       Yes									
X       Saturation (A3)       True Aquatic Plants (B14)       Dry-Season Water Table (C2)         Water Marks (B1)       Hydrogen Sulfide Odor (C1)       Crayfish Burrows (C8)         Sediment Deposits (B2)       Oxidized Rhizospheres on Living Roots (C3)       Saturation Visible on Aerial Imagery (C9)         Drift Deposits (B3)       Presence of Reduced Iron (C4)       Stunted or Stressed Plants (D1)         Algal Mat or Crust (B4)       Recent Iron Reduction in Tilled Soils (C6)       X         Iron Deposits (B5)       Thin Muck Surface (C7)       X       FAC-Neutral Test (D5)         Inundation Visible on Aerial Imagery (B7)       Gauge or Well Data (D9)       Sparsely Vegetated Concave Surface (B8)       Other (Explain in Remarks)         Sufface Water Present?       Yes       No       X       Depth (inches):       >20         Saturation Present?       Yes       No       X       Depth (inches):       >20         Saturation Present?       Yes       X       No       Depth (inches):       >20         Saturation Present?       Yes       X       Depth (inches):       >20       Wetland Hydrology Present?       Yes       X       No         Saturation Present?       Yes       X       No       Depth (inches):       >20       Wetland Hydrology Present?       Yes       X	tland Hyd	rology Indicators:	ne require	d; check all that ap	oply)			Secondary Indicators	s (minimum of two required)
Water Marks (B1)       Hydrogen Sulfide Odor (C1)       Crayfish Burrows (C8)         Sediment Deposits (B2)       Oxidized Rhizospheres on Living Roots (C3)       Saturation Visible on Aerial Imagery (C9)         Drift Deposits (B3)       Presence of Reduced Iron (C4)       Stunted or Stressed Plants (D1)         Algal Mat or Crust (B4)       Recent Iron Reduction in Tilled Soils (C6)       X Geomorphic Position (D2)         Iron Deposits (B5)       Thin Muck Surface (C7)       X FAC-Neutral Test (D5)         Inundation Visible on Aerial Imagery (B7)       Gauge or Well Data (D9)         Sparsely Vegetated Concave Surface (B8)       Other (Explain in Remarks)         Field Observations:       No       X       Depth (inches):       N/A         Water Table Present? Yes       No       X       Depth (inches):       >20         Sourface capillary fringe)       Scribe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:       Wetland Hydrology Was observed (at least one primary indicator).	<b>tland Hyd</b> Primary Ind	rology Indicators: icators (minimum of o	ne require			paves (B9)			
Sediment Deposits (B2)       Oxidized Rhizospheres on Living Roots (C3)       Saturation Visible on Aerial Imagery (C9)         Drift Deposits (B3)       Presence of Reduced Iron (C4)       Stunted or Stressed Plants (D1)         Algal Mat or Crust (B4)       Recent Iron Reduction in Tilled Soils (C6)       X Geomorphic Position (D2)         Iron Deposits (B5)       Thin Muck Surface (C7)       X FAC-Neutral Test (D5)         Inundation Visible on Aerial Imagery (B7)       Gauge or Well Data (D9)         Sparsely Vegetated Concave Surface (B8)       Other (Explain in Remarks)         Field Observations:       No       X       Depth (inches):       N/A         Saturation Present? Yes       No       X       Depth (inches):       >20         Saturation Present? Yes       No       X       Depth (inches):       >20         Saturation Present? Yes       No       X       Depth (inches):       >20         Saturation Present? Yes       No       X       Depth (inches):       *20         Scribe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:       wetland Hydrology Present? Yes       X       No	tland Hyd Primary Ind Surfac	rology Indicators: icators (minimum of o e Water (A1)	ne require	X Water-	Stained Le			Surface Soil Cr	acks (B6)
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)       X FAC-Neutral Test (D5)         Inundation Visible on Aerial Imagery (B7)       Gauge or Well Data (D9)       X FAC-Neutral Test (D5)         Sparsely Vegetated Concave Surface (B8)       Other (Explain in Remarks)       Yes         Field Observations:       No       X       Depth (inches):       N/A         Nater Table Present? Yes       No       X       Depth (inches):       >20         Saturation Present? Yes       X No       Depth (inches):       >20       Wetland Hydrology Present? Yes       X No         Scribe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:       Maxilable:	etland Hyd Primary Ind Surfac High W	rology Indicators: icators (minimum of o e Water (A1) Vater Table (A2)	ne require	X Water-	Stained Le c Fauna (B	13)		Surface Soil Cr. Drainage Patter Dry-Season Wa	acks (B6) ms (B10) ater Table (C2)
Algal Mat or Crust (B4)       Recent Iron Reduction in Tilled Soils (C6)       X       Geomorphic Position (D2)         Iron Deposits (B5)       Thin Muck Surface (C7)       X       FAC-Neutral Test (D5)         Inundation Visible on Aerial Imagery (B7)       Gauge or Well Data (D9)       X       FAC-Neutral Test (D5)         Sparsely Vegetated Concave Surface (B8)       Other (Explain in Remarks)       M/A         Field Observations:       No       X       Depth (inches):       >20         Saturation Present?       Yes       No       X       Depth (inches):       >20         Saturation Present?       Yes       X       No       Depth (inches):       >20         Scribe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:       marks:       A positive indication of wetland hydrology was observed (at least one primary indicator).	etland Hyd Primary Ind Surfac High W X Satura	rology Indicators: icators (minimum of o e Water (A1) Vater Table (A2) tion (A3)	ne require	X Water- Aquatio True A	Stained Le c Fauna (B quatic Plar	13) nts (B14)		Surface Soil Cr. Drainage Patter Dry-Season Wa	acks (B6) ms (B10) ater Table (C2)
Iron Deposits (B5)       Thin Muck Surface (C7)       X FAC-Neutral Test (D5)         Inundation Visible on Aerial Imagery (B7)       Gauge or Well Data (D9)         Sparsely Vegetated Concave Surface (B8)       Other (Explain in Remarks)         Field Observations:       Surface Water Present? Yes       No         Saturation Present? Yes       No       X       Depth (inches):         Saturation Present? Yes       No       X       Depth (inches):         Saturation Present? Yes       X       No       Depth (inches):         Saturation Present? Yes       X       No       Depth (inches):         scribe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:       marks:	Primary Ind Surfac High W X Satura Water	rology Indicators: icators (minimum of o e Water (A1) Vater Table (A2) tion (A3) Marks (B1)	ne require	X Water- Aquatio True A Hydrog	Stained Le c Fauna (B quatic Plar en Sulfide	13) hts (B14) Odor (C1)	pots (C3)	Surface Soil Cr. Drainage Patter Dry-Season Wa Crayfish Burrow	acks (B6) ns (B10) ater Table (C2) /s (C8)
Inundation Visible on Aerial Imagery (B7)       Gauge or Well Data (D9)         Sparsely Vegetated Concave Surface (B8)       Other (Explain in Remarks)         Field Observations:       Surface Water Present? Yes       No       X       Depth (inches):       N/A         Water Table Present? Yes       No       X       Depth (inches):       >20       Wetland Hydrology Present? Yes       X       No         Saturation Present? Yes       X       No       Depth (inches):       6       Wetland Hydrology Present? Yes       X       No         scribe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:       marks:       A positive indication of wetland hydrology was observed (at least one primary indicator).	Primary Ind Surfac High W X Satura Water Sedim	rology Indicators: icators (minimum of o e Water (A1) Vater Table (A2) tion (A3) Marks (B1) ent Deposits (B2)	ne require	X Water- Aquatio True A Hydrog	Stained Le c Fauna (B quatic Plar len Sulfide ed Rhizosp	13) nts (B14) Odor (C1) heres on Living Re	pots (C3)	Surface Soil Cr. Drainage Patter Dry-Season Wa Crayfish Burrov Saturation Visit	acks (B6) ns (B10) tter Table (C2) /s (C8) le on Aerial Imagery (C9)
Sparsely Vegetated Concave Surface (B8)       Other (Explain in Remarks)         Field Observations:       Surface Water Present? Yes No Depth (inches): N/A         Water Table Present? Yes No Depth (inches): >20       Wetland Hydrology Present? Yes No         Saturation Present? Yes No Depth (inches): >20       Wetland Hydrology Present? Yes No         Sciller Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:       marks:         Mapsitive indication of wetland hydrology was observed (at least one primary indicator).       Ketland Hydrology Mass observed (at least one primary indicator).	Primary Ind Surfac High W X Satura Water Sedim Drift D	rology Indicators: icators (minimum of o e Water (A1) Vater Table (A2) tion (A3) Marks (B1) ent Deposits (B2) eposits (B3)	ne require	X Water- Aquatio True A Hydrog Oxidize Presen	Stained Le Fauna (B quatic Plar len Sulfide ed Rhizosp lice of Redu	13) nts (B14) Odor (C1) heres on Living Ro uced Iron (C4)		Surface Soil Cr. Drainage Patter Dry-Season Wa Crayfish Burrow Saturation Visit Stunted or Stree	acks (B6) ns (B10) tter Table (C2) /s (C8) ile on Aerial Imagery (C9) ssed Plants (D1)
Field Observations:         Surface Water Present? Yes       No       X       Depth (inches):       N/A         Water Table Present? Yes       No       X       Depth (inches):       >20         Saturation Present? Yes       X       No       Depth (inches):       >20         Saturation Present? Yes       X       No       Depth (inches):       6       Wetland Hydrology Present? Yes       X       No         Saturation Present? Yes       X       No       Depth (inches):       6       Wetland Hydrology Present? Yes       X       No         scribe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:       marks:         A positive indication of wetland hydrology was observed (at least one primary indicator).       K	tland Hyd Primary Ind Surfac High W X Satura Water Sedim Drift D Algal N	rology Indicators: icators (minimum of o e Water (A1) Vater Table (A2) tion (A3) Marks (B1) ent Deposits (B2) eposits (B3) <i>M</i> at or Crust (B4)	ne require	X Water- Aquatio True A Hydrog Oxidize Presen Recent	Stained Le Fauna (B quatic Plar len Sulfide ed Rhizosp ice of Redu t Iron Redu	13) nts (B14) Odor (C1) heres on Living Ro uced Iron (C4) ction in Tilled Soil		Surface Soil Cr. Drainage Patter Dry-Season Wa Crayfish Burrow Saturation Visit Stunted or Stree X Geomorphic Po	acks (B6) rns (B10) tter Table (C2) /s (C8) ile on Aerial Imagery (C9) ssed Plants (D1) /sition (D2)
Surface Water Present?       Yes       No       X       Depth (inches):       N/A         Water Table Present?       Yes       No       X       Depth (inches):       >20         Saturation Present?       Yes       X       No       Depth (inches):       >20         Saturation Present?       Yes       X       No       Depth (inches):       6       Wetland Hydrology Present?       Yes       X       No         scribe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:       marks:         A positive indication of wetland hydrology was observed (at least one primary indicator).       Ketland Hydrology Present?       Yes       X       No	tland Hyd Primary Ind Surfac High W X Satura Water Sedim Drift D Algal M Iron De	rology Indicators: icators (minimum of o e Water (A1) Vater Table (A2) tion (A3) Marks (B1) ent Deposits (B2) eposits (B3) Mat or Crust (B4) eposits (B5)		X Water- Aquatio True A Hydrog Oxidize Presen Recent Thin M	Stained Le Fauna (B quatic Plar len Sulfide ed Rhizosp lee of Redu lon Redu uck Surfac	13) odor (C1) heres on Living Re- uced Iron (C4) ction in Tilled Soil e (C7)		Surface Soil Cr. Drainage Patter Dry-Season Wa Crayfish Burrow Saturation Visit Stunted or Stree X Geomorphic Po	acks (B6) rns (B10) tter Table (C2) /s (C8) ile on Aerial Imagery (C9) ssed Plants (D1) /sition (D2)
Surface Water Present?       Yes       No       X       Depth (inches):       N/A         Vater Table Present?       Yes       No       X       Depth (inches):       >20         Saturation Present?       Yes       X       No       Depth (inches):       >20         Saturation Present?       Yes       X       No       Depth (inches):       6       Wetland Hydrology Present?       Yes       X       No         Scribe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:       marks:       No	tland Hyd Primary Ind Surfac High W X Satura Water Sedim Drift D Algal M Iron De Inunda	rology Indicators: icators (minimum of o e Water (A1) Vater Table (A2) tion (A3) Marks (B1) ent Deposits (B2) eposits (B3) Mat or Crust (B4) eposits (B5) tion Visible on Aerial I	magery (B	X Water- Aquatio True A Hydrog Oxidize Presen Recent Thin M	Stained Le c Fauna (B quatic Plar len Sulfide ed Rhizosp ice of Redu c Iron Redu uck Surfac or Well Da	13) Odor (C1) heres on Living Re uced Iron (C4) ction in Tilled Soil e (C7) ata (D9)		Surface Soil Cr. Drainage Patter Dry-Season Wa Crayfish Burrow Saturation Visit Stunted or Stree X Geomorphic Po	acks (B6) rns (B10) tter Table (C2) /s (C8) ile on Aerial Imagery (C9) ssed Plants (D1) /sition (D2)
Water Table Present?       Yes       No       X       Depth (inches):       >20         Saturation Present?       Yes       X       No       Depth (inches):       6       Wetland Hydrology Present?       Yes       X       No         includes capillary fringe)       scribe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:       Wetland Hydrology Present?       Yes       X       No         marks:       A positive indication of wetland hydrology was observed (at least one primary indicator).       Image: No       Image: No       Image: No	tland Hyd Primary Ind Surfac High W X Satura Water Sedim Drift D Algal M Iron De Inunda Sparse	rology Indicators: icators (minimum of o e Water (A1) Vater Table (A2) tion (A3) Marks (B1) ent Deposits (B2) eposits (B3) Mat or Crust (B4) eposits (B5) tion Visible on Aerial I ely Vegetated Concave	magery (B	X Water- Aquatio True A Hydrog Oxidize Presen Recent Thin M	Stained Le c Fauna (B quatic Plar len Sulfide ed Rhizosp ice of Redu c Iron Redu uck Surfac or Well Da	13) Odor (C1) heres on Living Re uced Iron (C4) ction in Tilled Soil e (C7) ata (D9)		Surface Soil Cr. Drainage Patter Dry-Season Wa Crayfish Burrow Saturation Visit Stunted or Stree X Geomorphic Po	acks (B6) rns (B10) tter Table (C2) /s (C8) ile on Aerial Imagery (C9) ssed Plants (D1) /sition (D2)
Saturation Present?       Yes X       No       Depth (inches):       6       Wetland Hydrology Present?       Yes X       No         includes capillary fringe)       scribe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:       wetland Hydrology Present?       Yes X       No         marks:       A positive indication of wetland hydrology was observed (at least one primary indicator).       wetland hydrology was observed (at least one primary indicator).	tland Hyd Primary Ind Surfac High W X Satura Water Sedim Drift D Algal M Iron De Inunda Sparse	rology Indicators: icators (minimum of o e Water (A1) Vater Table (A2) tion (A3) Marks (B1) ent Deposits (B2) eposits (B3) Mat or Crust (B4) eposits (B5) tion Visible on Aerial I ely Vegetated Concave	magery (B e Surface (	X Water- Aquatio True A Hydrog Oxidize Presen Recent Thin M 7) Gauge B8) Other (	Stained Le Fauna (B quatic Plar en Sulfide d Rhizosp ice of Redu t Iron Redu uck Surfac or Well Da Explain in	13) Odor (C1) heres on Living Re Joed Iron (C4) action in Tilled Soil de (C7) ata (D9) Remarks)		Surface Soil Cr. Drainage Patter Dry-Season Wa Crayfish Burrow Saturation Visit Stunted or Stree X Geomorphic Po	acks (B6) rns (B10) tter Table (C2) /s (C8) ile on Aerial Imagery (C9) ssed Plants (D1) /sition (D2)
(includes capillary fringe) scribe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available: marks: A positive indication of wetland hydrology was observed (at least one primary indicator).	etland Hyd Primary Ind Surfac High W X Satura Water Sedime Drift De Algal M Iron De Inunda Sparse Field Obsee Surface Wa	rology Indicators: icators (minimum of o e Water (A1) Vater Table (A2) tion (A3) Marks (B1) ent Deposits (B2) eposits (B3) Mat or Crust (B4) eposits (B5) tion Visible on Aerial I ely Vegetated Concave rvations: ater Present? Yes	magery (B ≥ Surface ( No	X Water- Aquatio True A Hydrog Oxidize Presen Recent Thin M 7) Gauge B8) Other (	Stained Le Fauna (B quatic Plar len Sulfide ed Rhizosp lice of Redu t Iron Redu uck Surfac or Well Da Explain in	13) ots (B14) Odor (C1) heres on Living Re uced Iron (C4) iction in Tilled Soil e (C7) ata (D9) Remarks) : <u>N/A</u>		Surface Soil Cr. Drainage Patter Dry-Season Wa Crayfish Burrow Saturation Visit Stunted or Stree X Geomorphic Po	acks (B6) rns (B10) tter Table (C2) /s (C8) ile on Aerial Imagery (C9) ssed Plants (D1) /sition (D2)
scribe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available: marks: A positive indication of wetland hydrology was observed (at least one primary indicator).	etland Hyd Primary Ind Surfac High W X Satura Water Sedim Drift Du Algal N Inunda Sparse Field Obsee Surface Wa Water Tabl	rology Indicators: icators (minimum of o e Water (A1) Vater Table (A2) tion (A3) Marks (B1) ent Deposits (B2) eposits (B3) Mat or Crust (B4) eposits (B5) tion Visible on Aerial I ely Vegetated Concave rvations: ater Present? Yes e Present? Yes	magery (B e Surface ( No	X Water- Aquation True A Hydrog Oxidize Presen Recent Thin M 7) Gauge B8) Other ( 0 X Dep	Stained Le Fauna (B quatic Plar len Sulfide ed Rhizosp ice of Redu thron Redu uck Surfac or Well Da Explain in th (inches) th (inches)	13) odor (C1) heres on Living Re- uced Iron (C4) iction in Tilled Soil de (C7) ata (D9) Remarks) : <u>N/A</u> : <u>&gt;20</u>	s (C6)	Surface Soil Cr. Drainage Patter Dry-Season Wa Crayfish Burrow Saturation Visit Stunted or Stree X Geomorphic Po X FAC-Neutral Te	acks (B6) ns (B10) tter Table (C2) /s (C8) ele on Aerial Imagery (C9) ssed Plants (D1) (D2) est (D5)
marks: A positive indication of wetland hydrology was observed (at least one primary indicator).	etland Hyd Primary Ind Surfac High W X Satura Water Sedim Drift D Algal M Iron De Inunda Sparse Field Obse Surface Wa Water Tabl Saturation F	rology Indicators: icators (minimum of o e Water (A1) Vater Table (A2) tion (A3) Marks (B1) ent Deposits (B2) eposits (B3) Mat or Crust (B4) eposits (B5) tion Visible on Aerial I ely Vegetated Concave rvations: ater Present? Yes e Present? Yes Present? Yes	magery (B e Surface ( No	X Water- Aquation True A Hydrog Oxidize Presen Recent Thin M 7) Gauge B8) Other ( 0 X Dep	Stained Le Fauna (B quatic Plar len Sulfide ed Rhizosp ice of Redu thron Redu uck Surfac or Well Da Explain in th (inches) th (inches)	13) odor (C1) heres on Living Re- uced Iron (C4) iction in Tilled Soil de (C7) ata (D9) Remarks) : <u>N/A</u> : <u>&gt;20</u>	s (C6)	Surface Soil Cr. Drainage Patter Dry-Season Wa Crayfish Burrow Saturation Visit Stunted or Stree X Geomorphic Po X FAC-Neutral Te	acks (B6) ns (B10) tter Table (C2) /s (C8) ele on Aerial Imagery (C9) ssed Plants (D1) (D2) est (D5)
A positive indication of wetland hydrology was observed (at least one primary indicator).	etland Hyd Primary Ind Surfac High W X Satura Water Sedim- Drift Dr Algal M Iron De Inunda Sparse Field Obse Surface Wa Water Tabl Saturation R (includes c	rology Indicators: icators (minimum of o e Water (A1) Vater Table (A2) tion (A3) Marks (B1) ent Deposits (B2) eposits (B3) Mat or Crust (B4) eposits (B5) tion Visible on Aerial I ely Vegetated Concave rvations: ater Present? Yes e Present? Yes Present? Yes present? Yes apillary fringe)	magery (B e Surface ( No No X No	X Water- Aquation True A Hydrog Oxidize Presen Recent Thin M 7) Gauge B8) Other ( 0 X Dep 0 X Dep 0 Dep	Stained Le c Fauna (B quatic Plar len Sulfide ed Rhizosp ice of Redu thron Redu uck Surfac or Well Da Explain in th (inches) th (inches)	13) hts (B14) Odor (C1) heres on Living Re uced Iron (C4) iction in Tilled Soil e (C7) ata (D9) Remarks) : <u>N/A</u> : <u>&gt;20</u> : <u>6</u>	s (C6) Wetl	Surface Soil Cr. Drainage Patter Dry-Season Wa Crayfish Burrow Saturation Visit Stunted or Stree X Geomorphic Po X FAC-Neutral Te	acks (B6) ns (B10) tter Table (C2) /s (C8) ele on Aerial Imagery (C9) ssed Plants (D1) sition (D2) est (D5)
A positive indication of wetland hydrology was observed (at least one primary indicator).	etland Hyd Primary Ind Surfac High W X Satura Water Sedim- Drift Dr Algal M Iron De Inunda Sparse Field Obse Surface Wa Water Tabl Saturation R (includes c	rology Indicators: icators (minimum of o e Water (A1) Vater Table (A2) tion (A3) Marks (B1) ent Deposits (B2) eposits (B3) Mat or Crust (B4) eposits (B5) tion Visible on Aerial I ely Vegetated Concave rvations: ater Present? Yes e Present? Yes Present? Yes present? Yes apillary fringe)	magery (B e Surface ( No No X No	X Water- Aquation True A Hydrog Oxidize Presen Recent Thin M 7) Gauge B8) Other ( 0 X Dep 0 X Dep 0 Dep	Stained Le c Fauna (B quatic Plar len Sulfide ed Rhizosp ice of Redu thron Redu uck Surfac or Well Da Explain in th (inches) th (inches)	13) hts (B14) Odor (C1) heres on Living Re uced Iron (C4) iction in Tilled Soil e (C7) ata (D9) Remarks) : <u>N/A</u> : <u>&gt;20</u> : <u>6</u>	s (C6) Wetl	Surface Soil Cr. Drainage Patter Dry-Season Wa Crayfish Burrow Saturation Visit Stunted or Stree X Geomorphic Po X FAC-Neutral Te	acks (B6) ns (B10) tter Table (C2) /s (C8) ele on Aerial Imagery (C9) ssed Plants (D1) sition (D2) est (D5)
	etland Hyd Primary Ind Surfac High W X Satura Water Sedim Drift D Algal M Iron De Inunda Sparse Field Obse Surface Wa Water Tabl Saturation R	rology Indicators: icators (minimum of o e Water (A1) Vater Table (A2) tion (A3) Marks (B1) ent Deposits (B2) eposits (B3) Mat or Crust (B4) eposits (B5) tion Visible on Aerial I ely Vegetated Concave rvations: ater Present? Yes e Present? Yes Present? Yes present? Yes apillary fringe)	magery (B e Surface ( No No X No	X Water- Aquation True A Hydrog Oxidize Presen Recent Thin M 7) Gauge B8) Other ( 0 X Dep 0 X Dep 0 Dep	Stained Le c Fauna (B quatic Plar len Sulfide ed Rhizosp ice of Redu thron Redu uck Surfac or Well Da Explain in th (inches) th (inches)	13) hts (B14) Odor (C1) heres on Living Re uced Iron (C4) iction in Tilled Soil e (C7) ata (D9) Remarks) : <u>N/A</u> : <u>&gt;20</u> : <u>6</u>	s (C6) Wetl	Surface Soil Cr. Drainage Patter Dry-Season Wa Crayfish Burrow Saturation Visit Stunted or Stree X Geomorphic Po X FAC-Neutral Te	acks (B6) ns (B10) tter Table (C2) /s (C8) ele on Aerial Imagery (C9) ssed Plants (D1) sition (D2) est (D5)
A positive indication of wetland hydrology was observed (at least two secondary indicators).	etland Hyd Primary Ind Surfac High W X Satura Water Sedim Drift D Algal M Iron De Inunda Sparse Surface Wa Water Tabl Saturation F (includes ca scribe Rec	rology Indicators: icators (minimum of o e Water (A1) Vater Table (A2) tion (A3) Marks (B1) ent Deposits (B2) eposits (B3) Mat or Crust (B4) eposits (B5) tion Visible on Aerial I ely Vegetated Concave rvations: ater Present? Yes e Present? Yes Present? Yes present? Yes apillary fringe)	magery (B e Surface ( No No X No	X Water- Aquation True A Hydrog Oxidize Presen Recent Thin M 7) Gauge B8) Other ( 0 X Dep 0 X Dep 0 Dep	Stained Le c Fauna (B quatic Plar len Sulfide ed Rhizosp ice of Redu thron Redu uck Surfac or Well Da Explain in th (inches) th (inches)	13) hts (B14) Odor (C1) heres on Living Re uced Iron (C4) iction in Tilled Soil e (C7) ata (D9) Remarks) : <u>N/A</u> : <u>&gt;20</u> : <u>6</u>	s (C6) Wetl	Surface Soil Cr. Drainage Patter Dry-Season Wa Crayfish Burrow Saturation Visit Stunted or Stree X Geomorphic Po X FAC-Neutral Te	acks (B6) ns (B10) tter Table (C2) /s (C8) ele on Aerial Imagery (C9) ssed Plants (D1) sition (D2) est (D5)
	etland Hyd Primary Ind Surfac High W X Satura Water Sedim Drift Du Algal M Iron De Inunda Sparse Field Obsee Surface Wa Water Tabl Saturation F (includes ca scribe Rec	rology Indicators: icators (minimum of o e Water (A1) Vater Table (A2) tion (A3) Marks (B1) ent Deposits (B2) eposits (B3) Mat or Crust (B4) eposits (B5) tion Visible on Aerial I ely Vegetated Concave rvations: a ter Present? Yes Present? Yes apillary fringe) orded Data (stream ga	magery (B e Surface ( No No X No auge, mon	X Water- Aquation True A Hydrog Oxidize Presen Recent Thin M (7) Gauge B8) Other ( De X Dep De X Dep De Dep itoring well, aerial	Stained Le Fauna (B quatic Plar len Sulfide ed Rhizosp ice of Redu ichon Redu uck Surfac or Well Da Explain in th (inches) th (inches) th (inches)	13) nts (B14) Odor (C1) heres on Living Re- uced Iron (C4) ction in Tilled Soil le (C7) ata (D9) Remarks) <b>N/A</b> <b>N/A</b> <b>Solution</b> <b>Solution</b> <b>Solution</b> <b>Solution</b> <b>Solution</b> <b>Solution</b> <b>Solution</b> <b>Solution</b> <b>Solution</b> <b>Solution</b> <b>Solution</b> <b>Solution</b> <b>Solution</b> <b>Solution</b> <b>Solution</b> <b>Solution</b> <b>Solution</b> <b>Solution</b> <b>Solution</b> <b>Solution</b> <b>Solution</b> <b>Solution</b> <b>Solution</b> <b>Solution</b> <b>Solution</b> <b>Solution</b> <b>Solution</b> <b>Solution</b> <b>Solution</b> <b>Solution</b> <b>Solution</b> <b>Solution</b> <b>Solution</b> <b>Solution</b> <b>Solution</b> <b>Solution</b> <b>Solution</b> <b>Solution</b> <b>Solution</b> <b>Solution</b> <b>Solution</b> <b>Solution</b> <b>Solution</b> <b>Solution</b> <b>Solution</b> <b>Solution</b> <b>Solution</b> <b>Solution</b> <b>Solution</b> <b>Solution</b> <b>Solution</b> <b>Solution</b> <b>Solution</b> <b>Solution</b> <b>Solution</b> <b>Solution</b> <b>Solution</b> <b>Solution</b> <b>Solution</b> <b>Solution</b> <b>Solution</b> <b>Solution</b> <b>Solution</b> <b>Solution</b> <b>Solution</b> <b>Solution</b> <b>Solution</b> <b>Solution</b> <b>Solution</b> <b>Solution</b> <b>Solution</b> <b>Solution</b> <b>Solution</b> <b>Solution</b> <b>Solution</b> <b>Solution</b> <b>Solution</b> <b>Solution</b> <b>Solution</b> <b>Solution</b> <b>Solution</b> <b>Solution</b> <b>Solution</b> <b>Solution</b> <b>Solution</b> <b>Solution</b> <b>Solution</b> <b>Solution</b> <b>Solution</b> <b>Solution</b> <b>Solution</b> <b>Solution</b> <b>Solution</b> <b>Solution</b> <b>Solution</b> <b>Solution</b> <b>Solution</b> <b>Solution</b> <b>Solution</b> <b>Solution</b> <b>Solution</b> <b>Solution</b> <b>Solution</b> <b>Solution</b> <b>Solution</b> <b>Solution</b> <b>Solution</b> <b>Solution</b> <b>Solution</b> <b>Solution</b> <b>Solution</b> <b>Solution</b> <b>Solution</b> <b>Solution</b> <b>Solution</b> <b>Solution</b> <b>Solution</b> <b>Solution</b> <b>Solution</b> <b>Solution</b> <b>Solution</b> <b>Solution</b> <b>Solution</b> <b>Solution</b> <b>Solution</b> <b>Solution</b> <b>Solution</b> <b>Solution</b> <b>Solution</b> <b>Solution</b> <b>Solution</b> <b>Solution</b> <b>Solution</b> <b>Solution</b> <b>Solution</b> <b>Solution</b> <b>Solution</b> <b>Solution</b> <b>Solution</b> <b>Solution</b> <b>Solution</b> <b>Solution</b> <b>Solution</b> <b>Solution</b> <b>Solution</b> <b>Solution</b> <b>Solution</b> <b>Solution</b> <b>Solution</b> <b>Solution</b> <b>Solution</b> <b>Solution</b> <b>Solution</b> <b>Solution</b> <b>Solution</b> <b>Solution</b> <b>Solution</b> <b>Solution</b> <b>Solution</b> <b>Soluti</b>	s (C6) Wetl	Surface Soil Cr. Drainage Patter Dry-Season Wa Crayfish Burrow Saturation Visit Stunted or Stree X Geomorphic Po X FAC-Neutral Te	acks (B6) ns (B10) tter Table (C2) /s (C8) ele on Aerial Imagery (C9) ssed Plants (D1) sition (D2) est (D5)
	tland Hyd Primary Ind Surfac High W X Satura Water Sedim Drift Du Algal M Iron De Inunda Sparse Surface Wa Saturation F includes ca scribe Rec marks: A positive in	rology Indicators: icators (minimum of o e Water (A1) Vater Table (A2) tion (A3) Marks (B1) ent Deposits (B2) eposits (B3) Mat or Crust (B4) eposits (B5) tion Visible on Aerial I ely Vegetated Concave rvations: ater Present? Yes Present? Yes Present? Yes apillary fringe) orded Data (stream gates)	magery (B ≥ Surface ( No No No No No No No No No No No No No	X Water- Aquation True A Hydrog Oxidize Presen Recent Thin M 7) Gauge B8) Other ( 0 X Dep 0 X Dep 0 X Dep 10 Dep 10 Dep	Stained Le Fauna (B quatic Plar len Sulfide ed Rhizosp ice of Redu ice of Redu uck Surfac or Well Da Explain in th (inches) th (inches) th (inches) photos, pre	13) nts (B14) Odor (C1) heres on Living Re- iced Iron (C4) ction in Tilled Soil e (C7) ata (D9) Remarks) : <u>N/A</u> : <u>&gt;20</u> : <u>6</u> evious inspections mary indicator).	s (C6) Wetl	Surface Soil Cr. Drainage Patter Dry-Season Wa Crayfish Burrow Saturation Visit Stunted or Stree X Geomorphic Po X FAC-Neutral Te	acks (B6) ns (B10) tter Table (C2) /s (C8) ele on Aerial Imagery (C9) ssed Plants (D1) sition (D2) est (D5)
	and Hyd imary Ind Surfac High W Satura Water Sedim Drift D Algal N Iron De Inunda Sparse eld Obse aturation F acludes ca cribe Rec	rology Indicators: icators (minimum of o e Water (A1) Vater Table (A2) tion (A3) Marks (B1) ent Deposits (B2) eposits (B3) Mat or Crust (B4) eposits (B5) tion Visible on Aerial I ely Vegetated Concave rvations: ater Present? Yes Present? Yes Present? Yes apillary fringe) orded Data (stream gates)	magery (B ≥ Surface ( No No No No No No No No No No No No No	X Water- Aquation True A Hydrog Oxidize Presen Recent Thin M 7) Gauge B8) Other ( 0 X Dep 0 X Dep 0 X Dep 10 Dep 10 Dep	Stained Le Fauna (B quatic Plar len Sulfide ed Rhizosp ice of Redu ice of Redu uck Surfac or Well Da Explain in th (inches) th (inches) th (inches) photos, pre	13) nts (B14) Odor (C1) heres on Living Re- iced Iron (C4) ction in Tilled Soil e (C7) ata (D9) Remarks) : <u>N/A</u> : <u>&gt;20</u> : <u>6</u> evious inspections mary indicator).	s (C6) Wetl	Surface Soil Cr. Drainage Patter Dry-Season Wa Crayfish Burrow Saturation Visit Stunted or Stree X Geomorphic Po X FAC-Neutral Te	acks (B6) ns (B10) ater Table (C2) /s (C8) ele on Aerial Imagery (C9) ssed Plants (D1) (D2) est (D5)

Project/Site:	Cadence	e Solar Energy Proje	ct C	ounty:	Un	ion	Sampling Date:	December 27, 2019	
Applicant/Owner:		Cadence	Solar		State:	OH	Sampling Point:	DPA19-WA10	
Investigator(s):	DC	and	DC	Section, To	wnship, Range: York			rk	
Landform (hillslope	e, terrace, etc.):		Depression		Local re	lief (concave, c	onvex, none):	Concave	
Slope (%):	00-05	Lat:	40.36196	Long:		-83.44445	Datum:	NAD83	
Soil Map Unit Nam	e:	W	e - Wetzel silty clay	loam		N	IWI classification:	PFO	
Are climatic / hydro	ologic conditions of	on the site typical for	this time of year?	Yes X	No	(lf no,	explain in Remarks.)		
Are Vegetation	No ,Soil	No ,or Hydrolog	y <b>No</b> significa	antly disturbed?	?	Are "Normal	Circumstances" present?	Yes X No	
Are Vegetation	<b>No</b> ,Soil	No ,or Hydrolog	y <b>No</b> naturally	y problematic?		(If needed, e	explain any answers in Rer	narks.)	

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

Hydrophytic Vegetation Present? Hydric Soil Present? Wetland Hydrology Present?	Yes _ Yes _ Yes _	x x x	No No No	Is the Sampled Area within a Wetland?	Yes_	<u>x</u>	No
Remarks: This point was determined to be	within a	wetland du	ie to the presence of al	ll 3 wetland criteria.			

#### **VEGETATION - Use scientific names of plants.**

	Absolute Dominant	Indicator	Dominance Test wor	ksheet:			
Tree Stratum (Plot size: 30 ft.)	% cover Species?	Status	Number of Dominant S	Snecies			
	40 Yes	FACW	That Are OBL, FACW.			3	(A)
	20 Yes	FAC		, 011710.	-	•	
			Total Number of Domi	nant			
			Species Across All Str			3	(B)
4 5			Species Across Air Sti	ala.		5	(D)
5	<b>_</b>						
	60 = Total Cover		Percent of Dominant S				( <b>.</b> ( <b>-</b> )
<u>Sapling/Shrub Stratum</u> (Plot size: 15 ft.	)		That Are OBL, FACW	, or FAC:		100%	(A/B)
1. Ulmus rubra	10 Yes	FAC					
2			Prevalence Index Wo	orksheet:			
3			Total % Cove	er of:	Mu	ultiply by:	_
4			OBL species	0	x 1 =	0	_
5			FACW species	40	x 2 =	80	_
	10 = Total Cover		FAC species	30	x 3 =	90	
Herb Stratum (Plot size: 5 ft. )			FACU species	0	x 4 =	0	_
1. None Observed			UPL species	0	x 5 =	0	_
2.			Column Totals:	70	(A)	170	(B)
3.			Prevalence Index = B//	A =		-	_ ( )
				·			
			Hydrophytic Vegetat	ion Indicat	ors:		
5			1 - Rapid Test for	Hydrophyti	c Vegetati	ion	
•••			X 2 - Dominance Te	, , ,	0		
7			X 3 - Prevalence Inc				
8					-1 (Duras dal		
9			4 - Morphological				ig
10			data in Remark				
	= Total Cover		Problematic Hydr	., .		• •	
Woody Vine Stratum (Plot size: 30 ft.	)		<sup>1</sup> Indicators of hydric so				
1. None Observed			be present, unless dis	turbed or pr	oblematic		
2							
	= Total Cover		Hydrophytic				
			Vegetation Present?	Y	es X	No	
Remarks <sup>.</sup>							

A positive indication of hydrophytic vegetation was observed (>50% of dominant species indexed as OBL, FACW, or FAC).

epth	Matrix			Redox	Features					
inches)	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>	Texture	Remarks		
0-7	10YR 3/3	100	None	_		_	Clay loam			
7-16	10YR 4/1	90	10YR 4/4	10	C	M	Clay			
		_		_						
	Concentration, D=Dep	letion, RM	I=Reduced Matrix, I	NS=Maske	d Sand Grains.	²l	_ocation: PL=Pore Lining,			
Hydric Soil	Is Indicators:						Indicators for Probler	natic Hydric Soils <sup>3</sup> :		
Histos	ol (A1)		Sandy	Gleyed Ma	trix (S4)		Coast Prairie Red	ox (A16)		
Histic Epipedon (A2)Sandy Redox (S5)				,		Dark Surface (S7)				
Black Histic (A3)			Strippe	d Matrix (S	6)		Iron-Manganese M	lasses (F12)		
Hydrog	gen Sulfide (A4)		Loamy	Mucky Mir	neral (F1)		Very Shallow Dark	s Surface (TF12)		
Stratifi	ed Layers (A5)		Loamy	Gleyed Ma	atrix (F2)		Other (Explain in F	Remarks)		
2 cm N	/luck (A10)		X Deplete	ed Matrix (I	F3)					
Deplet	ed Below Dark Surfac	e (A11)	Redox	Dark Surfa	ace (F6)					
Thick [	Dark Surface (A12)		Deplete	ed Dark Su	ırface (F7)					
Sandy	Mucky Mineral (S1)		Redox	Depressio	ns (F8)	<sup>3</sup> Indicators of hydrophytic vegetation and				
5 cm N	/lucky Peat or Peat (S	3)					wetland hydrology mu unless disturbed or p			
Restrictive	Layer (if present):									
Type:										
Depth(	inches):		<u> </u>			Hydri	ic Soil Present?	Yes X No		
marks:										
A positive ir	ndication of hydric soil	was obse	erved.							

### HYDROLOGY

Wetland Hydrology Indicators:						
Primary Indicators (minimum of one required; che	ck all that apply)	Secondary Indicators (minimum of two required)				
Surface Water (A1)	X Water-Stained Leaves (B9)	Surface Soil Cracks (B6)				
High Water Table (A2)	Aquatic Fauna (B13)	Drainage Patterns (B10)				
Saturation (A3)	True Aquatic Plants (B14)	Dry-Season Water Table (C2)				
Water Marks (B1)	Hydrogen Sulfide Odor (C1)	Crayfish Burrows (C8)				
Sediment Deposits (B2)	Oxidized Rhizospheres on Living Roots (C3)	X Saturation Visible on Aerial Imagery (C9)				
Drift Deposits (B3)	Presence of Reduced Iron (C4)	Stunted or Stressed Plants (D1)				
Algal Mat or Crust (B4)	Recent Iron Reduction in Tilled Soils (C6)	X Geomorphic Position (D2)				
Iron Deposits (B5)	Thin Muck Surface (C7)	X FAC-Neutral Test (D5)				
Inundation Visible on Aerial Imagery (B7)	Gauge or Well Data (D9)					
Sparsely Vegetated Concave Surface (B8)	Other (Explain in Remarks)					
	—					
Field Observations:						
Surface Water Present? Yes No	C Depth (inches): N/A					
Water Table Present? Yes No	K Depth (inches): >20					
Saturation Present? Yes No	C Depth (inches): >20 Wetlar	nd Hydrology Present? Yes X No				
(includes capillary fringe)						
Describe Recorded Data (stream gauge, monitoring	well, aerial photos, previous inspections), if available:					
Remarks:						
A positive indication of wetland hydrology was obs	served (at least one primary indicator).					
A positive indication of wetland hydrology was obs	served (at least two secondary indicators).					

Project/Site:	Cadeno	e Solar Energy Project	C	ounty:	Un	ion	Sampling Date:	December 27, 2019	
Applicant/Owner:		Cadence S	olar		State:	ОН	Sampling Point:	DPA20-WA11	
Investigator(s):	DC	and	DC	Section, To	wnship, F	Range:	Y	′ork	
Landform (hillslope	e, terrace, etc.):	D	epression		Local re	lief (concave, co	onvex, none):	Concave	
Slope (%):	00-05	Lat:	40.36025	Long:		-83.44439	Datum:	NAD83	
Soil Map Unit Nam	e:	Ble1A1 - Blount silt lo	am, end moraine	, 0 to 2 percent	slopes	N	WI classification:	PFO	
Are climatic / hydro	ologic conditions	on the site typical for th	is time of year?	Yes X	No	(If no,	explain in Remarks.)		
Are Vegetation	No ,Soil	No ,or Hydrology	No significa	ntly disturbed?	,	Are "Normal	Circumstances" present	? Yes X No	
Are Vegetation	No ,Soil	No ,or Hydrology	No naturally	/ problematic?		(If needed, e	xplain any answers in Re	emarks.)	

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

Hydrophytic Vegetation Present? Hydric Soil Present? Wetland Hydrology Present?	Yes _ Yes _ Yes _	x x x	No No No	Is the Sampled Area within a Wetland?	Yes	<u>x</u>	No
Remarks: This point was determined to be	within a v	wetland du	e to the presence of a	II 3 wetland criteria.			

#### **VEGETATION - Use scientific names of plants.**

	Absolute Do	minant Indicator	Dominance Test wor	ksheet:			
Tree Stratum (Plot size: 30 ft.)		ecies? Status	Number of Dominant S	Species			
1. Ulmus rubra		Yes FAC	That Are OBL, FACW			4	(A)
2. Fraxinus pennsylvanica	30	Yes FACW	,				_ ( )
3			Total Number of Domi	inant			
4.			Species Across All St	rata:		4	(B)
5.							
	50 = Total	Cover	Percent of Dominant S	Species			
Sapling/Shrub Stratum (Plot size: 15 ft.	)		That Are OBL, FACW			100%	(A/B)
1. Lindera benzoin		Yes FACW	,				_ ( )
2			Prevalence Index Wo	orksheet:			
3			Total % Cov	er of:	Mu	Itiply by:	
4.			OBL species	0	x 1 =	0	
5			FACW species	45	x 2 =	90	
	10 = Total	Cover	FAC species	100	x 3 =	300	_
Herb Stratum (Plot size: 5 ft. )			FACU species	0	x 4 =	0	_
1. Persicaria virginiana	80	Yes FAC	UPL species	0	x 5 =	0	_
2. Carex sp	5	No FACW	Column Totals:	145	(A)	390	(B)
			Prevalence Index = B/		2.69		(2)
3. 4.							
-			Hydrophytic Vegetat	ion Indicate	ors:		
·			1 - Rapid Test for	Hydrophyti	: Vegetati	on	
			X 2 - Dominance Te		o vogotati		
7			X 3 - Prevalence Inc				
			4 - Morphological		<sup>1</sup> (Provid	- sunnorti	na
			data in Remark				19
10	85 = Total	Covor	Problematic Hydr			'	
Woody Vine Stratum (Plot size: 30 ft.		Cover	<sup>1</sup> Indicators of hydric so	., .	`	• /	
			be present, unless dis				
						-	
2							
	= Total	Cover	Hydrophytic	v	~~ ¥	No	
			Vegetation Present?	Ť	es <u>X</u>	No	

A positive indication of hydrophytic vegetation was observed (>50% of dominant species indexed as OBL, FACW, or FAC).

	scription: (Describe	to the de	pth needed to doc			irm the abser	ce of indicators.)				
Depth	Matrix			Redox	Features						
(inches)	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>	Texture	Remarks			
0-2	10YR 3/3	100	None				Loam				
2-16	10YR 4/1	90	10YR 4/4	10	С	Μ	Clay				
	Concentration, D=Dep	letion, RM	I=Reduced Matrix, N	//S=Maske	d Sand Grains.	<sup>2</sup> L	ocation: PL=Pore Linii				
•	Is Indicators:							elematic Hydric Soils <sup>3</sup> :			
	ol (A1)			Gleyed Ma			Coast Prairie R				
	Epipedon (A2)			Redox (S5			Dark Surface (S	/			
	Histic (A3)			d Matrix (S	,			e Masses (F12)			
Hydrog	Hydrogen Sulfide (A4)			Mucky Mir	eral (F1)			ark Surface (TF12)			
Stratifi	ed Layers (A5)		Loamy	Gleyed Ma	atrix (F2)	Other (Explain in Remarks)					
2 cm M	/luck (A10)		X Deplete	ed Matrix (I	F3)						
Deplet	ed Below Dark Surfac	ce (A11)	Redox	Dark Surfa	ice (F6)						
Thick	Dark Surface (A12)		Deplete	ed Dark Su	ırface (F7)						
Sandy	Mucky Mineral (S1)		Redox	Depressio	ns (F8)		<sup>3</sup> Indicators of hydrop	phytic vegetation and			
5 cm M	Mucky Peat or Peat (S	3)				wetland hydrology must be present,					
							unless disturbed o	r problematic.			
Restrictive	e Layer (if present):										
Type:											
Depth	(inches):					Hydrid	c Soil Present?	Yes X No			
Remarks:											
A positive i	ndication of hydric soi	I was obse	erved.								
HYDROLO	GY										

Wetland Hydrology Indicators:		
Primary Indicators (minimum of one required; che	eck all that apply)	Secondary Indicators (minimum of two required)
Surface Water (A1)	X Water-Stained Leaves (B9)	Surface Soil Cracks (B6)
High Water Table (A2)	Aquatic Fauna (B13)	Drainage Patterns (B10)
Saturation (A3)	True Aquatic Plants (B14)	Dry-Season Water Table (C2)
Water Marks (B1)	Hydrogen Sulfide Odor (C1)	Crayfish Burrows (C8)
Sediment Deposits (B2)	Oxidized Rhizospheres on Living Roots (C3)	X Saturation Visible on Aerial Imagery (C9)
Drift Deposits (B3)	Presence of Reduced Iron (C4)	Stunted or Stressed Plants (D1)
Algal Mat or Crust (B4)	Recent Iron Reduction in Tilled Soils (C6)	X Geomorphic Position (D2)
Iron Deposits (B5)	Thin Muck Surface (C7)	X FAC-Neutral Test (D5)
Inundation Visible on Aerial Imagery (B7)	Gauge or Well Data (D9)	
Sparsely Vegetated Concave Surface (B8)	Other (Explain in Remarks)	
Field Observations:		
Surface Water Present? Yes No	X Depth (inches): N/A	
Water Table Present? Yes No	X Depth (inches): >20	
Saturation Present? Yes No	X Depth (inches): >20 Wetlar	nd Hydrology Present? Yes X No
(includes capillary fringe)		
Describe Recorded Data (stream gauge, monitoring	well, aerial photos, previous inspections), if available:	
Remarks:		
A positive indication of wetland hydrology was ob	served (at least one primary indicator).	
A positive indication of wetland hydrology was ob-	served (at least two secondary indicators).	

Project/Site:	Cadenc	e Solar Energy Project	C	County:	Un	ion	Sampling Date:	December 27, 2019	
Applicant/Owner:		Cadence S	olar		State:	ОН	Sampling Point:	DPA22-WA12	
Investigator(s):	DC	and	DC	Section, Tov	wnship, F	Range:		York	
Landform (hillslope	e, terrace, etc.):	D	epression		Local rel	ief (concave, co	onvex, none):	Concave	
Slope (%):	00-05	Lat:	40.36008	Long:		-83.44282	Datum:	NAD83	
Soil Map Unit Nam	e:	Ble1A1 - Blount silt lo	am, end moraine	e, 0 to 2 percent	slopes	N	WI classification:	PFO	
Are climatic / hydro	ologic conditions	on the site typical for th	is time of year?	Yes X	No	(If no,	explain in Remarks.)		
Are Vegetation	No ,Soil	No ,or Hydrology	No significa	antly disturbed?		Are "Normal	Circumstances" preser	nt? Yes X No	
Are Vegetation	No ,Soil	No ,or Hydrology	No naturall	y problematic?		(If needed, e	xplain any answers in F	Remarks.)	

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

Hydrophytic Vegetation Present? Hydric Soil Present? Wetland Hydrology Present?	Yes X Yes X Yes X	No No No	Is the Sampled Area within a Wetland?	Yes	<u>x</u>	No
Remarks: This point was determined to be	within a wetlan	d due to the presence of a	all 3 wetland criteria.			

#### **VEGETATION - Use scientific names of plants.**

	Absolute Don	inant Indicator	Dominance Test wo	rksheet:			
Tree Stratum (Plot size: 30 ft. )	% cover Spe	cies? Status	Number of Dominant	Species			
1. Populus deltoides		lo FAC	That Are OBL, FACW			4	(A)
2. Ulmus rubra	50 Y	es FAC	,				_ ` '
3.			Total Number of Dom	inant			
4.			Species Across All St	rata:		4	(B)
5.							_ ` `
	60 = Total 0	Cover	Percent of Dominant	Species			
Sapling/Shrub Stratum (Plot size: 15 ft.	)		That Are OBL, FACW			100%	(A/B)
1. Lindera benzoin		es FACW					_ ` ´
2. ulmus rubra	10 Y	es FAC	Prevalence Index We	orksheet:			
3.			Total % Cov	er of:	Mu	Itiply by:	
4.			OBL species	0	x 1 =	0	_
5.			FACW species	70	x 2 =	140	_
	20 = Total 0	Cover	FAC species	70	x 3 =	210	_
Herb Stratum (Plot size: 5 ft. )			FACU species	0	x 4 =	0	_
1. Onoclea sensibilis	40 Y	es FACW	UPL species	0	x 5 =	0	_
2. Carex sp	10 1	lo FACW	Column Totals:	140	(A)	350	(B)
3. Phalaris arundinacea	10	lo FACW	Prevalence Index = B/	A =	2.50		_ ` `
4.							
5.			Hydrophytic Vegetat	tion Indicate	ors:		
6			1 - Rapid Test fo	r Hydrophytio	c Vegetati	on	
7.			X 2 - Dominance T	est is >50%	0		
8.			X 3 - Prevalence In	dex is ≤3.0 <sup>1</sup>			
9.			4 - Morphologica	Adaptations	s <sup>1</sup> (Provide	e supportir	ng
10.			data in Remar	ks or on a se	parate sh	eet)	•
	60 = Total 0	Cover	Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)				
Woody Vine Stratum (Plot size: 30 ft. )			<sup>1</sup> Indicators of hydric soil and wetland hydrology must				
1. None Observed	/		be present, unless dis				
2.							
	= Total (	Cover	Hydrophytic				
			Vegetation Present?	Y	es X	No	
Remarks:			1				

A positive indication of hydrophytic vegetation was observed (>50% of dominant species indexed as OBL, FACW, or FAC).

Color (moist)         %           0-6         10YR 4/2         100	Color (moist)		<pre>K Features</pre>				
0-6 10YR 4/2 100		%	Type <sup>1</sup>	Loc <sup>2</sup>	Texture	Remarks	
	None				Loam		
6-16 10YR 4/1 90	10YR 4/4	10	C	M	Clay loam		
				2			
Type: C=Concentration, D=Depletion, R lydric Soils Indicators:	M=Reduced Matrix, I	VIS=IVIaske	a Sand Grains.	-1	_ocation: PL=Pore Lining	g, M=Matrix. ematic Hydric Soils <sup>3</sup> :	
Histosol (A1) Sandy Gleyed Matrix (S4)		Coast Prairie Redox (A16)					
Histic Epipedon (A2) Sandy Redox (S5)			Dark Surface (S7)				
Black Histic (A3)	Stripped Matrix (S6)			Iron-Manganese Masses (F12)			
Hydrogen Sulfide (A4)	Loamy Mucky Mineral (F1)			Very Shallow Dark Surface (TF12)			
Stratified Layers (A5)			Other (Explain in Remarks)				
2 cm Muck (A10)	X Deplete		. ,		(	,	
Depleted Below Dark Surface (A11)		Dark Surfa					
Thick Dark Surface (A12)	Depleted Dark Surface (F7)						
Sandy Mucky Mineral (S1) Redox Depressions (F8)		<sup>3</sup> Indicators of hydrophytic vegetation and					
5 cm Mucky Peat or Peat (S3)			wetland hydrology must be present, unless disturbed or problematic.				
Restrictive Layer (if present):							
Туре:							
Depth(inches):				Hydri	ic Soil Present?	Yes X No	
narks:				1			
positive indication of hydric soil was obs	served.						
DROLOGY							

Primary Indicators (minimum of one required; che	eck all that apply)	Secondary Indicators (minimum of two required)		
Surface Water (A1)	X Water-Stained Leaves (B9)	Surface Soil Cracks (B6)		
High Water Table (A2)	Aquatic Fauna (B13)	X Drainage Patterns (B10)		
Saturation (A3)	True Aquatic Plants (B14)	Dry-Season Water Table (C2)		
Water Marks (B1)	Hydrogen Sulfide Odor (C1)	Crayfish Burrows (C8)		
Sediment Deposits (B2)	Oxidized Rhizospheres on Living Roots (C3)	X Saturation Visible on Aerial Imagery (C9)		
Drift Deposits (B3)	Presence of Reduced Iron (C4)	Stunted or Stressed Plants (D1)		
Algal Mat or Crust (B4)	Recent Iron Reduction in Tilled Soils (C6)	X Geomorphic Position (D2)		
Iron Deposits (B5)	Thin Muck Surface (C7)	X FAC-Neutral Test (D5)		
Inundation Visible on Aerial Imagery (B7)	Gauge or Well Data (D9)			
Sparsely Vegetated Concave Surface (B8)	Other (Explain in Remarks)			
—				
Field Observations:				
Surface Water Present? Yes No	X Depth (inches): N/A			
Nater Table Present? Yes No	X Depth (inches): >20			
Saturation Present? Yes No	X Depth (inches): >20 Wet	tland Hydrology Present? Yes X No		
(includes capillary fringe)				
scribe Recorded Data (stream gauge, monitorinç	well, aerial photos, previous inspections), if available	:		
marks:				
A positive indication of wetland hydrology was ob	served (at least one primary indicator).			
A positive indication of wetland hydrology was ob	served (at least two secondary indicators).			
	· · · /			

Project/Site:	Cadence	e Solar Energy Proje	ct Co	ounty:	Un	ion	Sampling Date:	December 27, 2019	
Applicant/Owner:		Cadence	Solar		State:	ОН	Sampling Point:	DPA23-WA13	
Investigator(s):	DC	and	DC	Section, To	wnship, F	Range:	Yo	vrk	
Landform (hillslope	e, terrace, etc.):		Depression		Local rel	ief (concave, c	onvex, none):	Concave	
Slope (%):	00-05	Lat:	40.35810	Long:		-83.44639	Datum:	NAD83	
Soil Map Unit Nam	e:	W	e - Wetzel silty clay	loam		N	IWI classification:	PFO	
Are climatic / hydro	ologic conditions of	on the site typical for	this time of year?	Yes X	No	(lf no,	explain in Remarks.)		
Are Vegetation	No ,Soil	No ,or Hydrolog	y <b>No</b> significa	intly disturbed?	?	Are "Normal	Circumstances" present?	Yes X No	
Are Vegetation	No ,Soil	No ,or Hydrolog	y <b>No</b> naturally	/ problematic?		(If needed, e	explain any answers in Rer	narks.)	

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

Hydrophytic Vegetation Present? Hydric Soil Present? Wetland Hydrology Present?	Yes _ Yes _ Yes _	x x x	No No No	Is the Sampled Area within a Wetland?	Yes	x	No
Remarks: This point was determined to be	within a v	wetland du	e to the presence of a	l 3 wetland criteria.			

# **VEGETATION - Use scientific names of plants.**

	Absolute	Dominant	Indicator	Dominance Test wor	ksheet:			
Tree Stratum (Plot size: 30 ft.)	% cover	Species?	Status	Number of Dominant S	Species			
1. Populus deltoides	40	Yes	FAC	That Are OBL, FACW			4	(A)
2. Ulmus americana	10	No	FACW					_ ` ´
3. Acer rubrum	10	No	FAC	Total Number of Domi	inant			
4.				Species Across All Str	rata:		4	(B)
5.								
	60 =	Total Cover		Percent of Dominant S	Species			
Sapling/Shrub Stratum (Plot size: 15 ft.	)			That Are OBL, FACW	, or FAC:		100%	(A/B)
1. Cephalanthus occidentalis	40	Yes	OBL					
2. Lindera benzoin	10	Yes	FACW	Prevalence Index Wo	orksheet:			
3.				Total % Cove	er of:	Mu	Itiply by:	
4.				OBL species	45	x 1 =	45	
5.				FACW species	45	x 2 =	90	
		Total Cover		FAC species	50	x 3 =	150	
Herb Stratum (Plot size: 5 ft. )				FACU species	0	x 4 =	0	
1. Phalaris arundinacea	20	Yes	FACW	UPL species	0	x 5 =	0	
2. Scirpus atrovirens	5	No	OBL	Column Totals:	140	(A)	285	(B)
3. Carex sp.	5	No	FACW	Prevalence Index = B/	A =	2.04		
4					-			
5.				Hydrophytic Vegetat	ion Indicate	ors:		
6.				1 - Rapid Test for	Hydrophytic	c Vegetati	on	
7.				X 2 - Dominance Te	est is >50%			
8.		·		X 3 - Prevalence Inc	dex is $\leq 3.0^1$			
9.		·		4 - Morphological	Adaptations	s <sup>1</sup> (Provid	e supportii	ng
10				data in Remark				0
· · · · · · · · · · · · · · · · · · ·	30 =	Total Cover		Problematic Hydr	ophytic Veg	etation <sup>1</sup> (E	Explain)	
Woody Vine Stratum (Plot size: 30 ft.	)			<sup>1</sup> Indicators of hydric so	oil and wetla	nd hydrol	oav must	
1. None Observed	/			be present, unless dis				
2								
L		Total Cover						
				Hydrophytic Vegetation Present?	v	es X	No	
				vegetation Fresellt?		<u> </u>		
Remarks:				1				

A positive indication of hydrophytic vegetation was observed (>50% of dominant species indexed as OBL, FACW, or FAC).

Depth	Matrix			Redox	Features			
(inches)	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>	Texture	Remarks
0-2	10YR 3/1	100	None	_		_	Loam	
2-16	10YR 4/1	80	10YR 4/4	20	C	М	Clay	
	Concentration, D=Dep	letion, RM	I=Reduced Matrix, I	MS=Maske	d Sand Grains.	²L	ocation: PL=Pore Linin	
Hydric Soil	Is Indicators:						Indicators for Prob	lematic Hydric Soils <sup>3</sup> :
Histoso	ol (A1)		Sandy	Gleyed Ma	trix (S4)		Coast Prairie R	( )
Histic E	Epipedon (A2)		Sandy	Redox (S5)	)		Dark Surface (S	57)
Black H	Histic (A3)		Strippe	d Matrix (S	.6)		Iron-Manganese	e Masses (F12)
	gen Sulfide (A4)		Loamy	Mucky Min	eral (F1)		Very Shallow Da	ark Surface (TF12)
Stratifie	ed Layers (A5)		Loamy	Gleyed Ma	atrix (F2)		Other (Explain i	n Remarks)
2 cm N	/luck (A10)		X Deplete	ed Matrix (F	-3)			
Deplete	ed Below Dark Surfac	e (A11)	Redox	Dark Surfa	ce (F6)			
Thick [	Dark Surface (A12)		Deplete	ed Dark Su	rface (F7)			
Sandy	Mucky Mineral (S1)		Redox	Depression	ns (F8)		<sup>3</sup> Indicators of hydrop	hytic vegetation and
5 cm N	/lucky Peat or Peat (S	3)					wetland hydrology	must be present,
							unless disturbed or	r problematic.
Restrictive	Layer (if present):							
Type:								
Depth(	inches):					Hydri	ic Soil Present?	Yes X No
emarks:								
A positive ir	ndication of hydric soil	was obs	erved.					
	,							
DROLO	GY							
	rology Indicators:							

High Water Table (A2)       Aqu         X       Saturation (A3)       True         Water Marks (B1)       Hyd         Sediment Deposits (B2)       Oxid         Drift Deposits (B3)       Pree         Algal Mat or Crust (B4)       Rec         Iron Deposits (B5)       Third	tter-Stained Leaves (B9) uatic Fauna (B13) le Aquatic Plants (B14) drogen Sulfide Odor (C1) dized Rhizospheres on Living Roots (C3) sence of Reduced Iron (C4) cent Iron Reduction in Tilled Soils (C6) n Muck Surface (C7)	Surface Soil Cracks (B6) X Drainage Patterns (B10) Dry-Season Water Table (C2) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (C9) Stunted or Stressed Plants (D1) X Geomorphic Position (D2)
X       Saturation (A3)       True         Water Marks (B1)       Hyd         Sediment Deposits (B2)       Oxia         Drift Deposits (B3)       Pree         Algal Mat or Crust (B4)       Rec         Iron Deposits (B5)       Thin	e Aquatic Plants (B14) drogen Sulfide Odor (C1) dized Rhizospheres on Living Roots (C3) sence of Reduced Iron (C4) cent Iron Reduction in Tilled Soils (C6)	Dry-Season Water Table (C2) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (C9) Stunted or Stressed Plants (D1) X Geomorphic Position (D2)
Water Marks (B1)       Hyd         Sediment Deposits (B2)       Oxid         Drift Deposits (B3)       Pre         Algal Mat or Crust (B4)       Rec         Iron Deposits (B5)       Third	drogen Sulfide Odor (C1) dized Rhizospheres on Living Roots (C3) sence of Reduced Iron (C4) cent Iron Reduction in Tilled Soils (C6)	Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (C9) Stunted or Stressed Plants (D1) X Geomorphic Position (D2)
Sediment Deposits (B2)       Oxio         Drift Deposits (B3)       Pre         Algal Mat or Crust (B4)       Rec         Iron Deposits (B5)       Thin	dized Rhizospheres on Living Roots (C3) sence of Reduced Iron (C4) cent Iron Reduction in Tilled Soils (C6)	Saturation Visible on Aerial Imagery (C9) Stunted or Stressed Plants (D1) X Geomorphic Position (D2)
Drift Deposits (B3)       Press         Algal Mat or Crust (B4)       Rec         Iron Deposits (B5)       Third	sence of Reduced Iron (C4) cent Iron Reduction in Tilled Soils (C6)	Stunted or Stressed Plants (D1) X Geomorphic Position (D2)
Algal Mat or Crust (B4) Rec Iron Deposits (B5) This	cent Iron Reduction in Tilled Soils (C6)	X Geomorphic Position (D2)
Iron Deposits (B5)	( )	
	n Muck Surface (C7)	
	· · ·	X FAC-Neutral Test (D5)
	uge or Well Data (D9)	、 、 、
Sparsely Vegetated Concave Surface (B8) Oth	er (Explain in Remarks)	
	, ,	
Field Observations:		
Surface Water Present? Yes X No E	Depth (inches): 8	
Water Table Present? Yes No X	Depth (inches): >20	
	· · · · · · · · · · · · · · · · · · ·	land Hydrology Present? Yes X No
(includes capillary fringe)	· · · · · · · · · · · · · · · · · · ·	
Describe Recorded Data (stream gauge, monitoring well, aer	rial photos, previous inspections), if available:	
Remarks:		
A positive indication of wetland hydrology was observed (at	t least one primary indicator)	
	,	
A positive indication of wetland hydrology was observed (at	t laget two secondary indicators)	

Project/Site:	Cadence	e Solar Energy Proje	ct C	ounty:	Un	ion	Sampling Date:	December 27, 2019	
Applicant/Owner:		Cadence	Solar		State:	ОН	Sampling Point:	DPA24-WA14	
Investigator(s):	DC	and	DC	Section, To	wnship, F	Range:	Yo	rk	
Landform (hillslope	e, terrace, etc.):		Depression		Local rel	lief (concave, c	onvex, none):	Concave	
Slope (%):	00-05	Lat:	40.35653	Long:		-83.44393	Datum:	NAD83	
Soil Map Unit Nam	e:	W	e - Wetzel silty clay	loam		N	IWI classification:	PFO	
Are climatic / hydro	ologic conditions of	on the site typical for	this time of year?	Yes X	No	(lf no,	explain in Remarks.)		
Are Vegetation	No ,Soil	No ,or Hydrolog	y <b>No</b> significa	antly disturbed?	>	Are "Normal	Circumstances" present?	Yes X No	
Are Vegetation	<b>No</b> ,Soil	No ,or Hydrolog	y <b>No</b> naturally	y problematic?		(If needed, e	explain any answers in Rer	narks.)	

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

Hydrophytic Vegetation Present? Hydric Soil Present? Wetland Hydrology Present?	Yes X Yes X Yes X	( No ( No ( No	Is the Sampled Area within a Wetland?	Yes	x	No
Remarks: This point was determined to be	within a wetla	and due to the presence	of all 3 wetland criteria.			

### **VEGETATION - Use scientific names of plants.**

	Absolute	Dominant	Indicator	Dominance Test wor	ksheet:			
Tree Stratum (Plot size: 30 ft. )	% cover	Species?	Status	Number of Dominant	Species			
1. Acer saccharinum	40	Yes	FACW	That Are OBL, FACW	•		7	(A)
2. Ulmus americana	10	Yes	FACW					
3				Total Number of Dom	inant			
4.				Species Across All St	rata:		7	(B)
5.								
	50 =	Total Cover		Percent of Dominant S	Species			
Sapling/Shrub Stratum (Plot size: 15 ft.	)			That Are OBL, FACW	, or FAC:		100%	(A/B)
1. Fraxinus pennsylvanica	15	Yes	FACW					
2. Acer rubrum	5	Yes	FAC	Prevalence Index Wo	orksheet:			
3. Lindera benzoin	5	Yes	FACW	Total % Cov	er of:	Mu	ultiply by:	
4.				OBL species	50	x 1 =	50	
5.				FACW species	95	x 2 =	190	
	25 =	Total Cover		FAC species	5	x 3 =	15	
Herb Stratum (Plot size: 5 ft. )				FACU species	0	x 4 =	0	
1. Phalaris arundinacea	20	Yes	FACW	UPL species	0	x 5 =	0	
2. Scirpus atrovirens	50	Yes	OBL	Column Totals:	150	(A)	255	(B)
3. Carex sp	5	No	FACW	Prevalence Index = B/	A =	1.70		
4.								
5				Hydrophytic Vegetat	ion Indicate	ors:		
6.				1 - Rapid Test for	r Hydrophyti	c Vegetati	ion	
7.				X 2 - Dominance T	est is >50%			
8.				X 3 - Prevalence In	dex is ≤3.0 <sup>1</sup>			
9.				4 - Morphological	Adaptation	s <sup>1</sup> (Provid	e supportii	ng
10.				data in Remark	ks or on a se	eparate sh	neet)	
	75 =	Total Cover		Problematic Hydr	ophytic Veg	etation <sup>1</sup> (I	Explain)	
Woody Vine Stratum (Plot size: 30 ft.	)			<sup>1</sup> Indicators of hydric so	oil and wetla	nd hvdrol	oav must	
1. None Observed				be present, unless dis				
2.								
	=	Total Cover		Hydrophytic				
				Vegetation Present?	Y	es X	No	
Remarks:				•				

A positive indication of hydrophytic vegetation was observed (>50% of dominant species indexed as OBL, FACW, or FAC).

Depth	Matrix			Redox	Features					
(inches)	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>	Texture	Remarks		
0-1	10YR 3/2	100	None	_		_	Organic Layer			
1-16	10YR 4/1	80	10YR 4/4	20	С	М	Clay loam			
	Concentration, D=Dep	letion, RM	I=Reduced Matrix, I	MS=Maske	d Sand Grains.	2	Location: PL=Pore Lining	, M=Matrix.		
Hydric Soi	s Indicators:						Indicators for Proble	ematic Hydric Soils <sup>3</sup> :		
Histos	ol (A1)		Sandy	Gleyed Ma	trix (S4)		Coast Prairie Re	dox (A16)		
Histic I	Epipedon (A2)		Sandy	Redox (S5	)		Dark Surface (S	7)		
Black I	Histic (A3)		Strippe	ed Matrix (S	6)		Iron-Manganese	Masses (F12)		
Hydrog	gen Sulfide (A4)		Loamy	Mucky Min	ieral (F1)		Very Shallow Da	rk Surface (TF12)		
Stratifi	ed Layers (A5)		Loamy	Gleyed Ma	atrix (F2)		Other (Explain ir	Remarks)		
2 cm N	/uck (A10)		X Deplete	ed Matrix (F	=3)					
Deplet	ed Below Dark Surfac	e (A11)	Redox	Dark Surfa	ce (F6)					
Thick I	Dark Surface (A12)		Deplete	ed Dark Su	rface (F7)					
Sandy	Mucky Mineral (S1)		Redox	Depressio	ns (F8)		<sup>3</sup> Indicators of hydroph	ytic vegetation and		
5 cm N	lucky Peat or Peat (S	3)		-		wetland hydrology must be present, unless disturbed or problematic.				
Restrictive	Layer (if present):									
Type:										
Depth(	inches):					Hydr	ic Soil Present?	Yes X No		
emarks:						1				
A positive ir	ndication of hydric soil	was obse	erved.							

Surface Water Present?       Yes       No       X       Depth (inches):       N/A         Water Table Present?       Yes       No       X       Depth (inches):       >20         Saturation Present?       Yes       No       X       Depth (inches):       >20         Wetland Hydrology Present?       Yes       X       No	Primary Indicators (minimum of one required; ch	neck all that apply)	Secondary Indicators (minimum of two required)
Saturation (A3)       True Aquatic Plants (B14)       Dry-Season Water Table (C2)         Water Marks (B1)       Hydrogen Sulfide Odor (C1)       Crayfish Burrows (C8)         Sediment Deposits (B2)       Oxidized Rhizospheres on Living Roots (C3)       X Saturation Visible on Aerial Imagery (C9)         Drift Deposits (B3)       Presence of Reduced Iron (C4)       Stunted or Stressed Plants (D1)         Algal Mat or Crust (B4)       Recent Iron Reduction in Tilled Soils (C6)       X Geomorphic Position (D2)         Iron Deposits (B5)       Thin Muck Surface (C7)       X FAC-Neutral Test (D5)         Inundation Visible on Aerial Imagery (B7)       Gauge or Well Data (D9)       X FAC-Neutral Test (D5)         Sparsely Vegetated Concave Surface (B8)       Other (Explain in Remarks)       N/A         Surface Water Present? Yes       No       X       Depth (inches):20_         Water Table Present? Yes       No       X       Depth (inches):20_	Surface Water (A1)	X Water-Stained Leaves (B9)	Surface Soil Cracks (B6)
Water Marks (B1)       Hydrogen Sulfide Odor (C1)       Crayfish Burrows (C8)         Sediment Deposits (B2)       Oxidized Rhizospheres on Living Roots (C3)       X Saturation Visible on Aerial Imagery (C9)         Drift Deposits (B3)       Presence of Reduced Iron (C4)       Stunted or Stressed Plants (D1)         Algal Mat or Crust (B4)       Recent Iron Reduction in Tilled Soils (C6)       X Geomorphic Position (D2)         Iron Deposits (B5)       Thin Muck Surface (C7)       X FAC-Neutral Test (D5)         Inundation Visible on Aerial Imagery (B7)       Gauge or Well Data (D9)         Sparsely Vegetated Concave Surface (B8)       Other (Explain in Remarks)         Field Observations:       No       X       Depth (inches):       N/A         Water Table Present?       Yes       No       X       Depth (inches):       >20         Saturation Present?       Yes       No       X       Depth (inches):       >20	High Water Table (A2)	Aquatic Fauna (B13)	X Drainage Patterns (B10)
Sediment Deposits (B2)       Oxidized Rhizospheres on Living Roots (C3)       X       Saturation Visible on Aerial Imagery (C9)         Drift Deposits (B3)       Presence of Reduced Iron (C4)       Stunted or Stressed Plants (D1)         Algal Mat or Crust (B4)       Recent Iron Reduction in Tilled Soils (C6)       X       Geomorphic Position (D2)         Iron Deposits (B5)       Thin Muck Surface (C7)       X       FAC-Neutral Test (D5)         Inundation Visible on Aerial Imagery (B7)       Gauge or Well Data (D9)       FAC-Neutral Test (D5)         Sparsely Vegetated Concave Surface (B8)       Other (Explain in Remarks)       N/A         Field Observations:       Surface Water Present? Yes       No       X       Depth (inches):       >20         Saturation Present? Yes       No       X       Depth (inches):       >20       Wetland Hydrology Present? Yes       Yes       X       No	Saturation (A3)	True Aquatic Plants (B14)	Dry-Season Water Table (C2)
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)       X       FAC-Neutral Test (D5)         Inundation Visible on Aerial Imagery (B7)       Gauge or Well Data (D9)       Sparsely Vegetated Concave Surface (B8)       Other (Explain in Remarks)         Field Observations:       Surface Water Present? Yes       No       X       Depth (inches):       N/A         Water Table Present? Yes       No       X       Depth (inches):       >20       Wetland Hydrology Present? Yes       Yes       X       No	Water Marks (B1)	Hydrogen Sulfide Odor (C1)	Crayfish Burrows (C8)
Algal Mat or Crust (B4)       Recent Iron Reduction in Tilled Soils (C6)       X       Geomorphic Position (D2)         Iron Deposits (B5)       Thin Muck Surface (C7)       X       FAC-Neutral Test (D5)         Inundation Visible on Aerial Imagery (B7)       Gauge or Well Data (D9)       FAC-Neutral Test (D5)         Sparsely Vegetated Concave Surface (B8)       Other (Explain in Remarks)       Other (Explain in Remarks)         Field Observations:       Surface Water Present? Yes       No       X       Depth (inches):       >20         Saturation Present?       Yes       No       X       Depth (inches):       >20       Wetland Hydrology Present?       Yes       X       No	Sediment Deposits (B2)	Oxidized Rhizospheres on Living Roots (C3)	X Saturation Visible on Aerial Imagery (C9)
Iron Deposits (B5)       Thin Muck Surface (C7)         Inundation Visible on Aerial Imagery (B7)       Gauge or Well Data (D9)         Sparsely Vegetated Concave Surface (B8)       Other (Explain in Remarks)         Field Observations:       Surface Water Present? Yes       No         X       Depth (inches):       N/A         Water Table Present? Yes       No       X       Depth (inches):       >20         Saturation Present? Yes       No       X       Depth (inches):       >20	Drift Deposits (B3)	Presence of Reduced Iron (C4)	Stunted or Stressed Plants (D1)
Inundation Visible on Aerial Imagery (B7)       Gauge or Well Data (D9)         Sparsely Vegetated Concave Surface (B8)       Other (Explain in Remarks)         Field Observations:       Surface Water Present? Yes         No       X       Depth (inches):         No       X       Depth (inches):         Saturation Present?       Yes       No         X       Depth (inches):       >20         Wetland Hydrology Present?       Yes       X	Algal Mat or Crust (B4)	Recent Iron Reduction in Tilled Soils (C6)	X Geomorphic Position (D2)
Sparsely Vegetated Concave Surface (B8)       Other (Explain in Remarks)         Field Observations:       Surface Water Present? Yes       No       X       Depth (inches):       N/A         Water Table Present?       Yes       No       X       Depth (inches):       >20         Saturation Present?       Yes       No       X       Depth (inches):       >20         Saturation Present?       Yes       No       X       Depth (inches):       >20	Iron Deposits (B5)	Thin Muck Surface (C7)	X FAC-Neutral Test (D5)
Field Observations:         Surface Water Present? Yes       No       X       Depth (inches):       N/A         Water Table Present? Yes       No       X       Depth (inches):       >20         Saturation Present? Yes       No       X       Depth (inches):       >20         Wetland Hydrology Present? Yes       No       X       No	Inundation Visible on Aerial Imagery (B7)	Gauge or Well Data (D9)	
Surface Water Present?       Yes       No       X       Depth (inches):       N/A         Water Table Present?       Yes       No       X       Depth (inches):       >20         Saturation Present?       Yes       No       X       Depth (inches):       >20         Wetland Hydrology Present?       Yes       X       No       X	Sparsely Vegetated Concave Surface (B8)	Other (Explain in Remarks)	
escribe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:	Surface Water Present?       Yes       No         Water Table Present?       Yes       No         Saturation Present?       Yes       No         includes capillary fringe)       Includes       No	X         Depth (inches):         >20           X         Depth (inches):         >20         We	
	marks:		
emarks:	a positive indication of wetland hydrology was o	bserved (at least one primary indicator).	
emarks: A positive indication of wetland hydrology was observed (at least one primary indicator).	a positive indication of wettand hydrology was o		

Project/Site:	Cadenc	e Solar Energy Project	C	County:	Un	ion	Sampling Date:	December 27, 2019
Applicant/Owner:		Cadence S	olar		State:	ОН	Sampling Point:	DPA25-WA15
Investigator(s):	DC	and	DC	Section, To	wnship, F	Range:		York
Landform (hillslope	e, terrace, etc.): _	[	Depression		Local rel	lief (concave, c	onvex, none):	Concave
Slope (%):	00-05	Lat:	40.35245	Long:	-	-83.44466	Datum:	NAD83
Soil Map Unit Nam	e:	Ble1A1 - Blount silt l	oam, end moraine	e, 0 to 2 percent	slopes	N	WI classification:	PFO
Are climatic / hydro	ologic conditions	on the site typical for th	nis time of year?	Yes X	No	(lf no,	explain in Remarks.)	
Are Vegetation	No ,Soil	No ,or Hydrology	No significa	antly disturbed?		Are "Normal	Circumstances" prese	ent? Yes X No
Are Vegetation	No ,Soil	No ,or Hydrology	<b>No</b> naturall	y problematic?		(If needed, e	explain any answers in I	Remarks.)

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

Hydrophytic Vegetation Present? Hydric Soil Present? Wetland Hydrology Present?	Yes _ Yes _ Yes _	x x x	No No No	Is the Sampled Area within a Wetland?	Yes	<u>x</u>	No
Remarks: This point was determined to be	within a v	wetland du	e to the presence of a	II 3 wetland criteria.			

# **VEGETATION - Use scientific names of plants.**

	Absolute	Dominant	Indicator	Dominance Test wor	ksheet:			
Tree Stratum (Plot size: 30 ft.)	% cover	Species?	Status	Number of Dominant S	Species			
1. Ulmus americana	30	Yes	FACW	That Are OBL, FACW	•		6	(A)
2. Acer rubrum	25	Yes	FAC					_ ` ´
3				Total Number of Domi	inant			
4.				Species Across All Str	rata:		6	(B)
5.								
		Total Cover		Percent of Dominant S	Species			
Sapling/Shrub Stratum (Plot size: 15 ft.	)			That Are OBL, FACW	, or FAC:		100%	(A/B)
1. Lindera benzoin	25	Yes	FACW					
2. Ulmus rubra		Yes	FAC	Prevalence Index Wo	orksheet:			
3.				Total % Cov	er of:	Mu	Itiply by:	
4.				OBL species	0	x 1 =	0	
5.				FACW species	70	x 2 =	140	
		Total Cover		FAC species	35	x 3 =	105	
Herb Stratum (Plot size: 5 ft. )				FACU species	0	x 4 =	0	
1. Phalaris arundinacea	10	Yes	FACW	UPL species	0	x 5 =	0	
2. Carex sp.	5	Yes	FACW	Column Totals:	105	(A)	245	(B)
3.				Prevalence Index = B/	A =	2.33		
4.								
5				Hydrophytic Vegetat	ion Indicate	ors:		
6.				1 - Rapid Test for	r Hydrophyti	c Vegetati	on	
7.				X 2 - Dominance Te	est is >50%			
8.				X 3 - Prevalence Inc	dex is ≤3.0 <sup>1</sup>			
9.				4 - Morphological	Adaptation	s <sup>1</sup> (Provid	e supportii	ng
10.	·			data in Remark	ks or on a se	eparate sh	neet)	
	15 =	Total Cover		Problematic Hydr	ophytic Veg	etation <sup>1</sup> (I	Explain)	
Woody Vine Stratum (Plot size: 30 ft.	)			<sup>1</sup> Indicators of hydric so	oil and wetla	ind hydrol	ogy must	
1. None Observed				be present, unless dis				
2.								
	=	Total Cover		Hydrophytic				
				Vegetation Present?	Y	es X	No	
Remarks:				÷				

A positive indication of hydrophytic vegetation was observed (>50% of dominant species indexed as OBL, FACW, or FAC).

Depth	Matrix			Redox	Features				
(inches)	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>	Texture	Remarks	
0-8	10YR 3/2	100	None				Loam		
8-16	10YR 4/1	95	10YR 4/4	5	C	M	Clay loam		
		_							
<sup>1</sup> Type: C=0	Concentration, D=Dep	letion, RM	=Reduced Matrix, N	MS=Maske	d Sand Grains.	2	Location: PL=Pore Lining,	M=Matrix.	
Hydric Soi	Is Indicators:						Indicators for Proble	matic Hydric Soils <sup>3</sup> :	
Histos	ol (A1)		Sandy	Gleyed Ma	ıtrix (S4)		Coast Prairie Red	ox (A16)	
Histic	Epipedon (A2)		Sandy	Redox (S5	)		Dark Surface (S7)	)	
Black I	Histic (A3)		Strippe	d Matrix (S	6)		Iron-Manganese N	<i>l</i> asses (F12)	
Hydrog	gen Sulfide (A4)		Loamy	Mucky Mir	neral (F1)		Very Shallow Dar	< Surface (TF12)	
Stratifi	Stratified Layers (A5) Loamy Gleyed Matrix (F2)					Other (Explain in	Remarks)		
2 cm M	/luck (A10)	X Depleted Matrix (F3)							
Deplet	ed Below Dark Surfac	e (A11)	Redox	Dark Surfa	ace (F6)				
Thick I	Dark Surface (A12)		Deplete	ed Dark Su	ırface (F7)				
Sandy	Mucky Mineral (S1)		Redox	Depressio	ns (F8)	<sup>3</sup> Indicators of hydrophytic vegetation and			
5 cm N	Aucky Peat or Peat (S	3)		·			wetland hydrology m unless disturbed or p		
Restrictive	Layer (if present):								
Туре:									
Depth(	(inches):					Hydr	ric Soil Present?	Yes X No	
emarks:									
A positive in	ndication of hydric soi	was obse	erved.						

Surface Water (A1)       X       Water-Stained Leaves (B9)	rimary Indicators (minimum of one r	equired; check all tha	t apply)		Secondary Indicators (minimum of two required)
Saturation (A3)       True Aquatic Plants (B14)       Dry-Season Water Table (C2)         Water Marks (B1)       Hydrogen Sulfide Odor (C1)       Crayfish Burrows (C8)         Sediment Deposits (B2)       Oxidized Rhizospheres on Living Roots (C3)       X Saturation Visible on Aerial Imagery (C9)         Drift Deposits (B3)       Presence of Reduced Iron (C4)       Stunted or Stressed Plants (D1)         Algal Mat or Crust (B4)       Recent Iron Reduction in Tilled Soils (C6)       X Geomorphic Position (D2)         Iron Deposits (B5)       Thin Muck Surface (C7)       X FAC-Neutral Test (D5)         Inundation Visible on Aerial Imagery (B7)       Gauge or Well Data (D9)       Sparsely Vegetated Concave Surface (B8)         Other (Explain in Remarks)       Other (Explain in Remarks)       N/A         Vater Table Present?       Yes       No       X         Vater Table Present?       Yes       No       X         water Table Present?       Yes       No       X         water Table Present?       Yes       No       X       Depth (inches):       >20         Water Table Present?       Yes       No       X       Depth (inches):       >20         Water Table Present?       Yes       No       X       Depth (inches):       >20	Surface Water (A1)	X Wa	ter-Stained Leav	es (B9)	Surface Soil Cracks (B6)
Water Marks (B1)       Hydrogen Sulfide Odor (C1)       Crayfish Burrows (C8)         Sediment Deposits (B2)       Oxidized Rhizospheres on Living Roots (C3)       X Saturation Visible on Aerial Imagery (C9)         Drift Deposits (B3)       Presence of Reduced Iron (C4)       Stunted or Stressed Plants (D1)         Algal Mat or Crust (B4)       Recent Iron Reduction in Tilled Soils (C6)       X Geomorphic Position (D2)         Iron Deposits (B5)       Thin Muck Surface (C7)       X FAC-Neutral Test (D5)         Inundation Visible on Aerial Imagery (B7)       Gauge or Well Data (D9)       FAC-Neutral Test (D5)         Sparsely Vegetated Concave Surface (B8)       Other (Explain in Remarks)       Other (Explain in Remarks)         Tield Observations:       No       X       Depth (inches):       >20         Water Table Present?       Yes       No       X       Depth (inches):       >20         Water Table Present?       Yes       No       X       Depth (inches):       >20	High Water Table (A2)	Aqu	atic Fauna (B13)	)	Drainage Patterns (B10)
Sediment Deposits (B2)       Oxidized Rhizospheres on Living Roots (C3)       X       Saturation Visible on Aerial Imagery (C9)         Drift Deposits (B3)       Presence of Reduced Iron (C4)       Stunted or Stressed Plants (D1)         Algal Mat or Crust (B4)       Recent Iron Reduction in Tilled Soils (C6)       X       Geomorphic Position (D2)         Iron Deposits (B5)       Thin Muck Surface (C7)       X       FAC-Neutral Test (D5)         Inundation Visible on Aerial Imagery (B7)       Gauge or Well Data (D9)       FAC-Neutral Test (D5)         Sparsely Vegetated Concave Surface (B8)       Other (Explain in Remarks)       Vater Table Present? Yes       No         X       Depth (inches):       >20       Wetland Hydrology Present? Yes       X       No         waturation Present?       Yes       No       X       Depth (inches):       >20	Saturation (A3)	Tru	e Aquatic Plants	(B14)	Dry-Season Water Table (C2)
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)       X FAC-Neutral Test (D5)         Inundation Visible on Aerial Imagery (B7)       Gauge or Well Data (D9)       Sparsely Vegetated Concave Surface (B8)         Other (Explain in Remarks)       Other (Explain in Remarks)         ield Observations:       No       X         Vater Table Present?       Yes       No       X         Vater Table Present?       Yes       No       X         isturation Present?       Yes       No       X         isturation Present?       Yes       No       X	Water Marks (B1)	Hyd	rogen Sulfide Oc	dor (C1)	Crayfish Burrows (C8)
Algal Mat or Crust (B4)       Recent Iron Reduction in Tilled Soils (C6)       X       Geomorphic Position (D2)         Iron Deposits (B5)       Thin Muck Surface (C7)       X       FAC-Neutral Test (D5)         Inundation Visible on Aerial Imagery (B7)       Gauge or Well Data (D9)       FAC-Neutral Test (D5)         Sparsely Vegetated Concave Surface (B8)       Other (Explain in Remarks)         ield Observations:       No       X       Depth (inches):       N/A         Vater Table Present?       Yes       No       X       Depth (inches):       >20         waturation Present?       Yes       No       X       Depth (inches):       >20	Sediment Deposits (B2)	Oxic	dized Rhizospher	res on Living Roots	ts (C3) X Saturation Visible on Aerial Imagery (C9)
Iron Deposits (B5)       Thin Muck Surface (C7)         Inundation Visible on Aerial Imagery (B7)       Gauge or Well Data (D9)         Sparsely Vegetated Concave Surface (B8)       Other (Explain in Remarks)         ield Observations:       Other (Explain in Remarks)         Surface Water Present?       Yes         No       X         Depth (inches):       >20         Water Table Present?       Yes         No       X         Depth (inches):       >20         Waterant?       Yes         No       X         Depth (inches):       >20	Drift Deposits (B3)	Pre	sence of Reduce	ed Iron (C4)	Stunted or Stressed Plants (D1)
Inundation Visible on Aerial Imagery (B7)       Gauge or Well Data (D9)         Sparsely Vegetated Concave Surface (B8)       Other (Explain in Remarks)         ield Observations:	Algal Mat or Crust (B4)	Rec	ent Iron Reduction	on in Tilled Soils (C	C6) X Geomorphic Position (D2)
Sparsely Vegetated Concave Surface (B8)       Other (Explain in Remarks)         ield Observations:	Iron Deposits (B5)	Thir	n Muck Surface (	C7)	X FAC-Neutral Test (D5)
ield Observations:         Surface Water Present? Yes       No       X       Depth (inches):       N/A         Vater Table Present? Yes       No       X       Depth (inches):       >20         Vaturation Present? Yes       No       X       Depth (inches):       >20         Vaturation Present? Yes       No       X       Depth (inches):       >20	Inundation Visible on Aerial Imag	ery (B7) Gau	uge or Well Data	(D9)	
Water Present?       Yes       No       X       Depth (inches):       N/A         Vater Table Present?       Yes       No       X       Depth (inches):       >20         Vaturation Present?       Yes       No       X       Depth (inches):       >20         Vaturation Present?       Yes       No       X       Depth (inches):       >20	Sparsely Vegetated Concave Su	face (B8) Oth	er (Explain in Re	marks)	
Water Present?       Yes       No       X       Depth (inches):       N/A         Vater Table Present?       Yes       No       X       Depth (inches):       >20         Vaturation Present?       Yes       No       X       Depth (inches):       >20         Vaturation Present?       Yes       No       X       Depth (inches):       >20					
Vater Table Present?       Yes       No       X       Depth (inches):       >20         vaturation Present?       Yes       No       X       Depth (inches):       >20         Vaturation Present?       Yes       No       X       Depth (inches):       >20	ield Observations:				
aturation Present? Yes No X Depth (inches): >20 Wetland Hydrology Present? Yes X No	urface Water Present? Yes	No [	Depth (inches):	N/A	
	Vater Table Present? Yes	No [	Depth (inches):	>20	
ncludes capillary fringe)	aturation Present? Yes	No [	Depth (inches):	>20	Wetland Hydrology Present? Yes X No
	ncludes capillary fringe)				
	narks:				
narks:	positive indication of wetland hydrol	onv was observed (at	least one prima	ry indicator)	
	,	0,		, ,	
positive indication of wetland hydrology was observed (at least one primary indicator).				· ·	
		srepair attecting the r	avarology of this	teature	

Project/Site:	Cadenc	e Solar Energy Project	C	County:	Un	ion	Sampling Date:	January 14, 2020	
Applicant/Owner:		Cadence S	olar		State:	ОН	Sampling Point:	DPA26-WA16	
Investigator(s):	DC	and	DC	Section, Tov	wnship, F	Range:	Y	′ork	
Landform (hillslope	e, terrace, etc.): _	D	epression		Local rel	ief (concave, co	onvex, none):	Concave	
Slope (%):	00-05	Lat:	40.35272	Long:		-83.44676	Datum:	NAD83	
Soil Map Unit Nam	e:	Ble1A1 - Blount silt lo	am, end moraine	e, 0 to 2 percent	slopes	N	WI classification:	PFO	
Are climatic / hydro	ologic conditions	on the site typical for th	is time of year?	Yes X	No	(If no,	explain in Remarks.)		
Are Vegetation	No ,Soil	No ,or Hydrology	No significa	antly disturbed?		Are "Normal	Circumstances" present	? Yes X No	
Are Vegetation	No ,Soil	No ,or Hydrology	No naturall	y problematic?		(If needed, e	xplain any answers in Re	emarks.)	

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

Hydrophytic Vegetation Present? Hydric Soil Present? Wetland Hydrology Present?	Yes _ Yes _ Yes _	x x x	No No No	Is the Sampled Area within a Wetland?	Yes	x	No			
Remarks: This point was determined to be within a wetland due to the presence of all 3 wetland criteria.										

### **VEGETATION - Use scientific names of plants.**

	Absolute Domi	nant Indicator	Dominance Test wor	ksheet:			
Tree Stratum (Plot size: 30 ft.)	% cover Spec	ies? Status	Number of Dominant S	Species			
1. Fagus grandifolia	30 Ye		That Are OBL, FACW			3	(A)
2			- , -	, -		-	_ ( )
3.			Total Number of Domi	inant			
4.			Species Across All Str			4	(B)
5							(2)
5	30 = Total Co		Percent of Dominant S	Province			
Sapling/Shrub Stratum (Plot size: 15 ft.	<u> </u>	Jvei	That Are OBL, FACW	•		75%	(A/B)
· · · · · · · · · · · · · · · · · · ·	)	EAON/	That Ale OBL, FACW	, OF FAG.		13%	(A/B)
1. <u>Ulmus americana</u>		es FACW	Prevalence Index Wo	rkshoot.			
2							
3			Total % Cove			ultiply by:	_
4			OBL species	10	x 1 =		
5			FACW species	35	x 2 =	70	
	10 = Total Co	over	FAC species	0	x 3 =	0	
Herb Stratum (Plot size: 5 ft. )			FACU species	30	x 4 =	120	
1. Carex sp	20 Ye	es FACW	UPL species	0	x 5 =	0	_
2. Onoclea sensibilis	5 N	o FACW	Column Totals:	75	(A)	200	(B)
3. Scirpus atrovirens	10 Ye	es OBL	Prevalence Index = B/	A =	2.67		
4.							
5			Hydrophytic Vegetat	ion Indicat	ors:		
6.			1 - Rapid Test for	- Hydrophyti	c Vegetat	ion	
7.			X 2 - Dominance Te		•		
8			X 3 - Prevalence Inc				
			4 - Morphological			le sunnortii	na
			data in Remark				.9
10	35 = Total Co		Problematic Hydr			,	
Woody Vine Stratum (Plot size: 30 ft.	<u></u>	JVEI	<sup>1</sup> Indicators of hydric so		· · ·	. ,	
	)		be present, unless dis				
1. None Observed	<u> </u>				obioinati		
2							
	= Total Co	over	Hydrophytic				
			Vegetation Present?	Y	'es <u>X</u>	No	
Dementer							
Remarks:							

A positive indication of hydrophytic vegetation was observed (>50% of dominant species indexed as OBL, FACW, or FAC).

nches) 0-7 7-16	Color (moist) 10YR 4/2	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>	Tautura			
	10YR 4/2	100				LOC	Texture	Remarks		
7-16		100	None			_	Loam			
	10YR 4/1	95	10YR 4/4	5	С	Μ	Clay loam			
	contration D-Don		=Reduced Matrix, N		d Sand Grains	2	Location: PL=Pore Lining	M-Matrix		
Hydric Soils Ir				VIO-IVIdSKC	u Gailu Grailis.			ematic Hydric Soils <sup>3</sup> :		
- Histosol (A	A1)		Sandv	Gleyed Ma	trix (S4)		Coast Prairie Re	-		
	pedon (A2)			Redox (S5)	( )		Dark Surface (S	( )		
Black Hist				d Matrix (S			Iron-Manganese	,		
	Sulfide (A4)			Mucky Min	,			rk Surface (TF12)		
	Layers (A5)	Loamy Gleyed Matrix (F2)					Other (Explain in	( )		
2 cm Mucl	,				. ,		、	,		
	Below Dark Surfac	e (A11)	·	X Depleted Matrix (F3) Redox Dark Surface (F6)						
	k Surface (A12)	( )		ed Dark Su	. ,					
	cky Mineral (S1)			Depressio	. ,	<sup>3</sup> Indicators of hydrophytic vegetation and				
	ky Peat or Peat (S	3)		·	( -)	wetland hydrology must be present, unless disturbed or problematic.				
Restrictive La	yer (if present):									
Type:										
Depth(incl	hes):					Hydr	ic Soil Present?	Yes X No		
marks:						1				
A positive indic	ation of hydric soil	was obse	erved.							

Wetland Hydrology Indicators:		
Primary Indicators (minimum of one required; chec	k all that apply)	Secondary Indicators (minimum of two required)
Surface Water (A1)	Water-Stained Leaves (B9)	Surface Soil Cracks (B6)
High Water Table (A2)	Aquatic Fauna (B13)	X Drainage Patterns (B10)
Saturation (A3)	True Aquatic Plants (B14)	Dry-Season Water Table (C2)
Water Marks (B1)	Hydrogen Sulfide Odor (C1)	Crayfish Burrows (C8)
Sediment Deposits (B2)	Oxidized Rhizospheres on Living Roots (C3)	X Saturation Visible on Aerial Imagery (C9)
Drift Deposits (B3)	Presence of Reduced Iron (C4)	Stunted or Stressed Plants (D1)
Algal Mat or Crust (B4)	Recent Iron Reduction in Tilled Soils (C6)	X Geomorphic Position (D2)
Iron Deposits (B5)	Thin Muck Surface (C7)	X FAC-Neutral Test (D5)
Inundation Visible on Aerial Imagery (B7)	Gauge or Well Data (D9)	
Sparsely Vegetated Concave Surface (B8)	Other (Explain in Remarks)	
Field Observations:		
Surface Water Present? Yes No X	Depth (inches): N/A	
Water Table Present? Yes No X	Depth (inches): >20	
Saturation Present? Yes No X	Depth (inches): >20 W	etland Hydrology Present? Yes X No
(includes capillary fringe)		
Describe Recorded Data (stream gauge, monitoring v	vell, aerial photos, previous inspections), if availabl	e:
Remarks:		
A positive indication of wetland hydrology was obse	erved (at least two secondary indicators).	

Project/Site:	Cader	ce Solar	Energy Project		County:		Un	ion	Sampling Date:	January 1	4, 2020	
Applicant/Owner:			Cadence Sc	blar			State:	ОН	Sampling Point:	DPA27-	NA17	
Investigator(s):	DC		and	DC	Sectio	on, Tow	/nship, F	Range:	Yoi	rk		
Landform (hillslope	e, terrace, etc.):		A	griculture			Local re	lief (concave, co	onvex, none):	Concav	9	
Slope (%):	00-05		Lat:	40.3938	32 L	_ong:		-83.46310	Datum:	NAD83		
Soil Map Unit Nam	e:		We-	Wetzel silty	clay loam			N	WI classification:	PEI	N	
Are climatic / hydro	ologic condition	s on the s	ite typical for thi	s time of yea	ar? Yes	Х	No	(If no,	explain in Remarks.)			
Are Vegetation	Yes ,Soi	No	,or Hydrology	No sig	nificantly dist	urbed?		Are "Normal	Circumstances" present?	Yes X	No	
Are Vegetation	<b>No</b> ,Soi	No	,or Hydrology	No nat	urally problen	natic?		(If needed, e	xplain any answers in Ren	narks.)		

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

Hydrophytic Vegetation Present?     Yes     No     X       Hydric Soil Present?     Yes     X     No   Is the Sampled Area									
Hydric Soil Present?     Yes     X     No     Is the Sampled Area	Hydrophytic Vegetation Present?	Yes		No	Х				
	Hydric Soil Present?	Yes	х	No		Is the Sampled Area			
Wetland Hydrology Present?         Yes         X         No         within a Wetland?         Yes         X         No	Wetland Hydrology Present?	Yes	Х	No		within a Wetland?	Yes	Х	No

Remarks:

This point was determined to be within a wetland despite the lack of dominance of hydrophitic vegetation due to the significant disturbance to the natural vegetation

This is a wetland within an actively cultivated agricultural field. Portions of this feature appear to be inundated for too long or at too great of depth for cultivation, whereas the fringes appear to have been planted. Natural vegeation community removed for cultivation.

#### **VEGETATION - Use scientific names of plants.**

Tree Stratum         (Plot size:		Indicator Status	Dominance Test work Number of Dominant S That Are OBL, FACW, Total Number of Domin Species Across All Stra Percent of Dominant S	Species or FAC: nant ata:		1	_ (A) _ (B)
Sapling/Shrub Stratum (Plot size: 15 ft.	_)		That Are OBL, FACW,	or FAC:		50%	(A/B)
<u>None Observed  </u>			Prevalence Index Wo	rksheet:			
3.			Total % Cove	er of:	Mu	ultiply by:	
4.			OBL species	0			_
5.			FACW species	15	x 2 =	30	_
	= Total Cover		FAC species	0	x 3 =	0	
Herb Stratum (Plot size: 5 ft. )			FACU species	0	x 4 =	0	
1. Phalaris arundinacea	15 Yes	FACW	UPL species	40	x 5 =	200	_
2. Glycine max	40 Yes	UPL	Column Totals:	55	(A)	230	(B)
3			Prevalence Index = B/A	\ =	4.18		
4			Hydrophytic Vegetati	on Indicat	ors:		
5 6			1 - Rapid Test for	Hydrophyti	c Vegetat	ion	
7			2 - Dominance Te		•		
8.			3 - Prevalence Ind				
9.			4 - Morphological	Adaptation	s <sup>1</sup> (Provid	e supportin	g
10.			data in Remark	-	-		
	55 = Total Cover		Problematic Hydro	ophytic Veg	etation <sup>1</sup> (I	Explain)	
<u>Woody Vine Stratum</u> (Plot size: <u>30 ft.</u> 1. <u>None Observed</u>			<sup>1</sup> Indicators of hydric so be present, unless dist				
2.			Hydrophytic Vegetation Present?	Y	es	No	x

Profile Des	cription: (Describe	to the de	pth needed to doc	ument the	e indicator or con	firm the abse	nce of indicators.)			
Depth	Matrix			Redox	x Features					
(inches)	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>	Texture	Remarks		
0-16	10YR 4/1	90	10YR 4/6	10	С	М	Silty Clay		_	
									_	
									_	
									_	
									_	
	Concentration, D=Dep	etion, RM	I=Reduced Matrix, N	/IS=Maske	ed Sand Grains.	<sup>2</sup> L	ocation: PL=Pore Linin	ng, M=Matrix.		
Hydric Soil	s Indicators:						Indicators for Prob	lematic Hydric Soils <sup>3</sup> :		
Histoso	ol (A1)		Sandy (	Gleyed Ma	atrix (S4)		Coast Prairie R	edox (A16)		
Histic E	Epipedon (A2)		Sandy I	Redox (S5	5)		Dark Surface (S	57)		
Black H	Histic (A3)		Strippe	d Matrix (S	36)		Iron-Manganese	e Masses (F12)		
Hydrog	en Sulfide (A4)		Loamy	Mucky Mir	neral (F1)		Very Shallow Da	ark Surface (TF12)		
Stratifie	ed Layers (A5)		Loamy	Gleyed Ma	atrix (F2)		Other (Explain i	n Remarks)		
2 cm M	luck (A10)		X Deplete	ed Matrix (	F3)					
Deplete	ed Below Dark Surfac	e (A11)	Redox	Dark Surfa	ace (F6)					
Thick E	Dark Surface (A12)		Deplete	ed Dark Su	urface (F7)					
Sandy	Mucky Mineral (S1)		Redox	Depressio	ns (F8)	<sup>3</sup> Indicators of hydrophytic vegetation and				
5 cm M	lucky Peat or Peat (S	3)					wetland hydrology	1 /		
							unless disturbed or	r problematic.		
Restrictive	Layer (if present):									
Type:										
Depth(i	Depth(inches):					Hydri	c Soil Present?	Yes X No		
Remarks:										
A positive in	ndication of hydric soil	was obse	erved.							

# HYDROLOGY

Wetland Hydrology Indicators:						
Primary Indicators (minimum of one required; check	all that apply)	Secondary Indicators (minimum of two required)				
X Surface Water (A1)	Water-Stained Leaves (B9)	Surface Soil Cracks (B6)				
High Water Table (A2)	Aquatic Fauna (B13)	Drainage Patterns (B10)				
X Saturation (A3)	True Aquatic Plants (B14)	Dry-Season Water Table (C2)				
Water Marks (B1)	Hydrogen Sulfide Odor (C1)	Crayfish Burrows (C8)				
Sediment Deposits (B2)	Oxidized Rhizospheres on Living Roots (C3)	X Saturation Visible on Aerial Imagery (C9)				
Drift Deposits (B3)	Presence of Reduced Iron (C4)	X 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)	FAC-Neutral Test (D5)				
X Inundation Visible on Aerial Imagery (B7)	Gauge or Well Data (D9)					
Sparsely Vegetated Concave Surface (B8)	Other (Explain in Remarks)					
Field Observations:						
Surface Water Present? Yes X No	Depth (inches): 4					
Water Table Present? Yes No X	Depth (inches): >20					
Saturation Present? Yes X No	Depth (inches): 0 Wetla	and Hydrology Present? Yes X No				
(includes capillary fringe)						
Describe Recorded Data (stream gauge, monitoring w	ell, aerial photos, previous inspections), if available:					
Remarks:						
A positive indication of wetland hydrology was obser	ved (at least one primary indicator).					
A positive indication of wetland hydrology was obser	ved (at least two secondary indicators).					

Project/Site:	Cade	nce Solar	Energy Project		County:	U	ion	Sampling Date:	January 14,	2020
Applicant/Owner:			Cadence Sc	lar		State:	ОН	Sampling Point:	DPA29-W	A18
Investigator(s):	DC		and	DC	Section,	Township, I	Range:	k		
Landform (hillslope	e, terrace, etc.):		A	griculture		Local re	lief (concave, c	convex, none):	Concave	
Slope (%):	00-05		Lat:	40.39468	<u>Lor</u>	ng:	-83.46258	Datum:	NAD83	
Soil Map Unit Name	e:		We-	Wetzel silty c	lay loam		N	WI classification:	PEM	
Are climatic / hydro	logic condition	s on the s	site typical for thi	s time of year	? Yes	X No	(If no	, explain in Remarks.)		
Are Vegetation	Yes ,Soi	No	,or Hydrology	No signi	ficantly disturb	bed?	Are "Norma	I Circumstances" present?	Yes X	No
Are Vegetation	No ,Soi	No	,or Hydrology	No natu	rally problema	tic?	(If needed, e	explain any answers in Rem	arks.)	

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

Hydrophytic Vegetation Present? Hydric Soil Present? Wetland Hydrology Present?	Yes _ Yes _ Yes	x	No _ No _ No	<u>x</u>	Is the Sampled Area	Yes	No	x	
Wetland Hydrology Present?	Yes	х	No		within a Wetland?	Yes	No	х	
	_		_						
Remarks:									

Remarks

This location was determined to be within a wetland despite the lack of dominance of hydrophytic vegetation due to the significant disturbance to the natural

This feature is within an actively cultivated agricultural field. The natural vegetation community has been eliminated by cultivation.

#### **VEGETATION - Use scientific names of plants.**

Tree Stratum         (Plot size:)           1.         None Observed           2.			Dominance Test wor Number of Dominant That Are OBL, FACW Total Number of Dom Species Across All St	Species /, or FAC: iinant		0	(A) (B)
5 <u>Sapling/Shrub Stratum</u> (Plot size: <u>15 ft.</u> 1. <u>None Observed</u>	= Total Cove )	r	Percent of Dominant S That Are OBL, FACW			0	(A/B)
2			Prevalence Index Wo	orksheet:			
3			Total % Cov	er of:	М	ultiply by:	
4			OBL species	0	x 1 =	0	_
5			FACW species	0	x 2 =	0	_
	= Total Cove	r	FAC species	0	x 3 =	0	
Herb Stratum (Plot size: 5 ft. )			FACU species	0	x 4 =	0	
1. Glycine max	100 Yes	UPL	UPL species	100	x 5 =	500	
2			Column Totals:	100	(A)	500	(B)
3			Prevalence Index = B/	'A =	5.00		
4 5.			Hydrophytic Vegetat	tion Indicat	ors:		
			1 - Rapid Test for			ion	
			2 - Dominance T		•		
7			3 - Prevalence In				
-			4 - Morphological		o <sup>1</sup> (Drovid	o oupportiv	
			data in Remark		•		ig
10			Problematic Hydr			,	
	<u>100</u> = Total Cove	ſ				• •	
<u>Woody Vine Stratum</u> (Plot size: <u>30 ft.</u> 1. <u>None Observed</u>			<sup>1</sup> Indicators of hydric so be present, unless dis				
2.							
	= Total Cove	r	Hydrophytic Vegetation Present?	y Y	'es	No	x
Remarks:			<u> </u>				

1

th	Matrix			Redox	Features			
nes) Color (	moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>	Texture	Remarks
16 10	YR 4/1	90	10YR 4/6	10	С	М	Silty Clay	
e: C=Concentratio	on D=Dep	etion RM=	Reduced Matrix	MS=Maske	d Sand Grains	2	ocation: PL=Pore Lining	n M=Matrix
ric Soils Indicato		<u>ouon, run</u>	rioddood maini,	ine maene				ematic Hydric Soils <sup>3</sup> :
Histosol (A1)			Sandy	Gleyed Ma	trix (S4)		Coast Prairie Re	edox (A16)
Histic Epipedon (A	42)		Sandy	Redox (S5	)		Dark Surface (S	7)
Black Histic (A3)			Strippe	ed Matrix (S	6)		Iron-Manganese	Masses (F12)
Hydrogen Sulfide	(A4)		Loamy	/ Mucky Mir	ieral (F1)		Very Shallow Da	rk Surface (TF12)
Stratified Layers (	45)		Loamy	Gleyed Ma	atrix (F2)		Other (Explain in	n Remarks)
2 cm Muck (A10)			X Deplet	-	-			
Depleted Below D		ə (A11)		Dark Surfa	. ,			
Thick Dark Surfac				ed Dark Su			<sup>3</sup> Indicators of hydropl	autic vocatation and
Sandy Mucky Mine 5 cm Mucky Peat	. ,	2)	Redox	Depressio	ns (Fo)		wetland hydrology r	
5 CHI MUCKy Feat	JI Feat (S	')					unless disturbed or	
	resent).							
trictive Layer (if p	resenty.							
	-							
Type: Depth(inches): ks:						Hydri	c Soil Present?	Yes <u>X</u> No
Туре:						Hydri	c Soil Present?	Yes <u>X</u> No
Type: Depth(inches): ks:						Hydri	c Soil Present?	Yes <u>X</u> No
Type: Depth(inches): ks: sitive indication of	hydric soil					Hydri	c Soil Present?	Yes <u>X</u> No
Type: Depth(inches): ks: sitive indication of COLOGY nd Hydrology Indi ary Indicators (min	hydric soil cators:	was observ	ved.			Hydri	Secondary Indicators	(minimum of two required)
Type: Depth(inches): ks: sitive indication of COLOGY nd Hydrology Indi nary Indicators (min Surface Water (A	hydric soil cators: nimum of c	was observ	ved. l; check all that a Water-	-Stained Le	. ,	Hydri	Secondary Indicators	(minimum of two required) ccks (B6)
Type: Depth(inches): ks: sitive indication of OLOGY of Hydrology Indi aary Indicators (min Surface Water (A High Water Table	hydric soil cators: nimum of c	was observ	ved. d; check all that aj Water- Aquati	-Stained Le c Fauna (B	13)	Hydri	Secondary Indicators Surface Soil Cra Drainage Pattern	(minimum of two required) icks (B6) ns (B10)
Type: Depth(inches): ks: sitive indication of OLOGY of Hydrology Indi arry Indicators (min Surface Water (A High Water Table Saturation (A3)	hydric soil cators: nimum of c	was observ	ved. d; check all that a Water- Aquati True A	-Stained Le c Fauna (B Aquatic Plar	13) nts (B14)	Hydri	Secondary Indicators Surface Soil Cra Drainage Pattern Dry-Season Wa	(minimum of two required) ticks (B6) ns (B10) ter Table (C2)
Type: Depth(inches): ks: bisitive indication of <b>OLOGY</b> <b>Ind Hydrology Indi</b> hary Indicators (min Surface Water (A High Water Table Saturation (A3) Water Marks (B1)	hydric soil cators: nimum of c 1) (A2)	was observ	ved. <u>d; check all that a</u> <u> </u>	-Stained Le c Fauna (B Aquatic Plar gen Sulfide	13) nts (B14) Odor (C1)		Secondary Indicators Surface Soil Cra Drainage Pattern Dry-Season Wa Crayfish Burrow	(minimum of two required) icks (B6) is (B10) ter Table (C2) s (C8)
Type: Depth(inches): ks: bsitive indication of COLOGY nd Hydrology Indi arry Indicators (min Surface Water (A High Water Table Saturation (A3) Water Marks (B1) Sediment Deposit	hydric soil cators: nimum of c 1) (A2) s (B2)	was observ	ved. d; check all that a Water Aquation True A Hydrog Oxidize	-Stained Le c Fauna (B Aquatic Plar gen Sulfide ed Rhizosp	13) hts (B14) Odor (C1) heres on Living Re		Secondary Indicators Surface Soil Cra Drainage Pattern Dry-Season Wa Crayfish Burrow X Saturation Visibl	(minimum of two required) icks (B6) ns (B10) ter Table (C2) s (C8) e on Aerial Imagery (C9)
Type: Depth(inches): ks: sitive indication of <b>OLOGY</b> <b>nd Hydrology Indi</b> arry Indicators (min Surface Water (A High Water Table Saturation (A3) Water Marks (B1) Sediment Deposits Drift Deposits (B3)	hydric soil cators: nimum of c 1) (A2) s (B2)	was observ	ved. d; check all that a Water Aquati True A Hydrog Oxidiz Preser	-Stained Le c Fauna (B Aquatic Plar gen Sulfide ed Rhizosp nce of Redu	13) hts (B14) Odor (C1) heres on Living Ro iced Iron (C4)	bots (C3)	Secondary Indicators Surface Soil Cra Drainage Pattern Dry-Season Wa Crayfish Burrow X Saturation Visibl X Stunted or Stres	(minimum of two required) icks (B6) ns (B10) ter Table (C2) s (C8) le on Aerial Imagery (C9) sed Plants (D1)
Type: Depth(inches): ks: bsitive indication of COLOGY nd Hydrology Indi arry Indicators (min Surface Water (A High Water Table Saturation (A3) Water Marks (B1) Sediment Deposit	hydric soil cators: nimum of c 1) (A2) s (B2) ) (B4)	was observ	ved. d; check all that a Water- Aquatir True A United Aquatir Aquatir Preser Recen	-Stained Le c Fauna (B Aquatic Plar gen Sulfide ed Rhizosp nce of Redu t Iron Redu	13) hts (B14) Odor (C1) heres on Living Ro iced Iron (C4) ction in Tilled Soil	bots (C3)	Secondary Indicators Surface Soil Cra Drainage Pattern Dry-Season Wa Crayfish Burrow X Saturation Visibl	(minimum of two required) tocks (B6) ns (B10) ter Table (C2) s (C8) le on Aerial Imagery (C9) sed Plants (D1) sition (D2)
Type: Depth(inches): ks: sitive indication of OLOGY nd Hydrology Indi arry Indicators (min Surface Water (A High Water Table Saturation (A3) Water Marks (B1) Sediment Deposits Drift Deposits (B3 Algal Mat or Crust	hydric soil cators: nimum of c 1) (A2) s (B2) ) (B4)	was observ	ved. d; check all that a Water- Aquatir True A Hydrog Oxidize Preser Recen Thin M	-Stained Le c Fauna (B Aquatic Plar gen Sulfide ed Rhizosp nce of Redu	13) hts (B14) Odor (C1) heres on Living Re- iced Iron (C4) ction in Tilled Soil e (C7)	bots (C3)	Secondary Indicators Surface Soil Cra Drainage Patter Dry-Season Wa Crayfish Burrow X Saturation Visibl X Stunted or Stres X Geomorphic Pos	(minimum of two required) tocks (B6) ns (B10) ter Table (C2) s (C8) le on Aerial Imagery (C9) sed Plants (D1) sition (D2)
Type: Depth(inches): ks: sitive indication of OLOGY nd Hydrology Indi arry Indicators (min Surface Water (A High Water Table Saturation (A3) Water Marks (B1) Sediment Deposit Drift Deposits (B3 Algal Mat or Crust Iron Deposits (B5)	hydric soil cators: nimum of c I) (A2) s (B2) ) (B4) on Aerial	was observ	ved. d; check all that a Water- Aquati True A Hydrog Oxidize Preser Recen Thin M 7) Gauge	-Stained Le c Fauna (B vquatic Plar gen Sulfide ed Rhizosp nce of Redu t Iron Redu fuck Surfac	13) Odor (C1) heres on Living Re iced Iron (C4) ction in Tilled Soil e (C7) ata (D9)	bots (C3)	Secondary Indicators Surface Soil Cra Drainage Patter Dry-Season Wa Crayfish Burrow X Saturation Visibl X Stunted or Stres X Geomorphic Pos	(minimum of two required) tocks (B6) ns (B10) ter Table (C2) s (C8) le on Aerial Imagery (C9) sed Plants (D1) sition (D2)
Type: Depth(inches): ks: sitive indication of COLOGY ad Hydrology Indi arry Indicators (min Surface Water (A High Water Table Saturation (A3) Water Marks (B1) Sediment Deposit Drift Deposits (B3 Algal Mat or Crust Iron Deposits (B5) Inundation Visible	hydric soil cators: nimum of c I) (A2) s (B2) ) (B4) on Aerial	was observ	ved. d; check all that a Water- Aquati True A Hydrog Oxidize Preser Recen Thin M 7) Gauge	-Stained Le c Fauna (B vquatic Plar gen Sulfide ed Rhizosp nce of Redu t Iron Redu Muck Surfac e or Well Da	13) Odor (C1) heres on Living Re iced Iron (C4) ction in Tilled Soil e (C7) ata (D9)	bots (C3)	Secondary Indicators Surface Soil Cra Drainage Patter Dry-Season Wa Crayfish Burrow X Saturation Visibl X Stunted or Stres X Geomorphic Pos	(minimum of two required) tocks (B6) ns (B10) ter Table (C2) s (C8) le on Aerial Imagery (C9) sed Plants (D1) sition (D2)
Type: Depth(inches): ks: ositive indication of <b>OLOGY</b> <b>Ind Hydrology Indi</b> arry Indicators (min Surface Water (A High Water Table Saturation (A3) Water Marks (B1) Sediment Deposit Drift Deposits (B3) Algal Mat or Crust Iron Deposits (B5) Inundation Visible Sparsely Vegetate	hydric soil cators: nimum of c 1) (A2) s (B2) ) (B4) on Aerial d Concave	was observ	ved. d; check all that a Water- Aquation True A Hydrog Oxidizon Preser Recen Thin M 7) Gauge 38) Other	-Stained Le c Fauna (B vquatic Plar gen Sulfide ed Rhizosp nce of Redu t Iron Redu Muck Surfac e or Well Da	13) Odor (C1) heres on Living Ro iced Iron (C4) ction in Tilled Soil e (C7) ata (D9) Remarks)	bots (C3)	Secondary Indicators Surface Soil Cra Drainage Patter Dry-Season Wa Crayfish Burrow X Saturation Visibl X Stunted or Stres X Geomorphic Pos	(minimum of two required) tocks (B6) ns (B10) ter Table (C2) s (C8) le on Aerial Imagery (C9) sed Plants (D1) sition (D2)
Type: Depth(inches): ks: sitive indication of COLOGY ad Hydrology India arry Indicators (min Surface Water (A High Water Table Saturation (A3) Water Marks (B1) Sediment Deposit Drift Deposits (B3) Algal Mat or Crust Iron Deposits (B5) Inundation Visible Sparsely Vegetate d Observations:	hydric soil cators: nimum of c 1) (A2) s (B2) ) (B4) on Aerial d Concave	was observ ne required magery (B7 e Surface (E	ved. d; check all that a Water- Aquation True A Hydrog Oxidizon Preser Recen Thin M 7) Gauge 38) Other of X Dep	-Stained Le c Fauna (B aquatic Plar gen Sulfide ed Rhizosp nce of Redu t Iron Redu fuck Surfac e or Well Da (Explain in	13) Odor (C1) heres on Living Re- iced Iron (C4) ction in Tilled Soil e (C7) ata (D9) Remarks) : <u>N/A</u>	bots (C3)	Secondary Indicators Surface Soil Cra Drainage Patter Dry-Season Wa Crayfish Burrow X Saturation Visibl X Stunted or Stres X Geomorphic Pos	(minimum of two required) tocks (B6) ns (B10) ter Table (C2) s (C8) le on Aerial Imagery (C9) sed Plants (D1) sition (D2)
Type: Depth(inches): ks: sitive indication of COLOGY ad Hydrology India arry Indicators (min Surface Water (A High Water Table Saturation (A3) Water Marks (B1) Sediment Deposit Drift Deposits (B3) Algal Mat or Crust Iron Deposits (B5) Inundation Visible Sparsely Vegetate d Observations: ace Water Presen	hydric soil cators: nimum of c 1) (A2) s (B2) ) (B4) on Aerial I d Concave Yes Yes Yes	was observ ne required magery (B7 e Surface (E	ved. d; check all that aj Water- Aquation True A Hydrog Oxidizon Preser Recen Thin M 7) Gauge 38) Other of X Dep X Dep	-Stained Le c Fauna (B aquatic Plar gen Sulfide ed Rhizosp nce of Redu t Iron Redu fuck Surfac e or Well Da (Explain in	13) Odor (C1) heres on Living Re- uced Iron (C4) ction in Tilled Soil e (C7) ata (D9) Remarks) : <u>N/A</u> : <u>&gt;20</u>	bots (C3) s (C6)	Secondary Indicators Surface Soil Cra Drainage Patter Dry-Season Wa Crayfish Burrow X Saturation Visibl X Stunted or Stres X Geomorphic Pos	(minimum of two required) icks (B6) ns (B10) ter Table (C2) s (C8) le on Aerial Imagery (C9) sed Plants (D1) sition (D2) st (D5)

A positive indication of wetland hydrology was observed (at least one primary indicator).

A positive indication of wetland hydrology was observed (at least two secondary indicators).

Project/Site:	Cadence Solar Energy Project County: Union Sampling Date:					Sampling Date:	Janu	uary 14,	2020						
Applicant/Owner:	Cadence Solar								State:	ОН	Sampling Point:	DF	A30-W	A19	
Investigator(s):		DC and DC Section, Township, Range: Yor						k							
Landform (hillslope	, terrace, e	etc.):		A	gricultur	re			Local re	lief (concave, co	onvex, none):	Co	ncave		
Slope (%):	0	0-05		Lat:	40.	.39521		Long:		-83.46294	Datum:	Ν	IAD83		
Soil Map Unit Name	e:			We-	Wetzel	silty clay	y loam			N	WI classification:		PEM		
Are climatic / hydrol	logic cond	itions c	n the s	ite typical for thi	s time c	of year?	Yes	Х	No	(If no,	explain in Remarks.)				
Are Vegetation	Yes	,Soil	No	or Hydrology	No	signific	antly dist	urbed?		Are "Normal	Circumstances" present?	Yes	Х	No	
Are Vegetation	No	,Soil	No	or Hydrology.	No	natural	ly problei	matic?		(If needed, e	xplain any answers in Rem	arks.)			

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

Hydrophytic Vegetation Present? Hydric Soil Present?	Yes Yes	X	No _ No _	x	Is the Sampled Area			
Hydric Soil Present?	Yes	Х	No		Is the Sampled Area			
Wetland Hydrology Present?	Yes	Х	No		within a Wetland?	Yes	Х	No
	_		_					

Remarks:

This point was determined to be within a wetland despite the lack of dominance of hydrophitic vegetation due to the significant disturbance to the natural vegetation

This feature is within an actively cultivated agricultural field. The natural vegeation community has been removed.

### **VEGETATION - Use scientific names of plants.**

Tree Stratum (Plot size:30 ft)         1.       None Observed         2.		Indicator Status	Dominance Test wor Number of Dominant S That Are OBL, FACW Total Number of Domi Species Across All Str Percent of Dominant S	Species , or FAC: inant rata:		01	(A) (B)
<u>Sapling/Shrub Stratum</u> (Plot size <u>: 15 ft.</u> 1. <u>None Observed</u>	)		That Are OBL, FACW			0	(A/B)
2.			Prevalence Index Wo	orksheet:			
3			Total % Cov	er of:	Μι	ultiply by:	
4			OBL species	0	x 1 =	0	
5			FACW species	0	x 2 =	0	
	= Total Cover		FAC species	0	x 3 =	0	
Herb Stratum (Plot size: 5 ft. )			FACU species	0	x 4 =	0	
1. Glycine max	100 Yes	UPL	UPL species	100	x 5 =	500	
2			Column Totals:	100	(A)	500	(B)
3			Prevalence Index = B/	A =	5.00		
4 5			Hydrophytic Vegetat	ion Indicat	ors:		
6.			1 - Rapid Test for	r Hydrophyti	c Vegetati	ion	
7.			2 - Dominance Te	est is >50%			
8.			3 - Prevalence Inc	dex is ≤3.0 <sup>1</sup>			
9			4 - Morphological	Adaptation	s <sup>1</sup> (Provid	e supporti	ng
10.			data in Remark	ks or on a se	eparate sh	neet)	
	100 = Total Cover		Problematic Hydr	ophytic Veg	etation <sup>1</sup> (I	Explain)	
<u>Woody Vine Stratum</u> (Plot size: <u>30 ft.</u> 1. None Observed	)		<sup>1</sup> Indicators of hydric so be present, unless dis				
2.	= Total Cover		Hydrophytic Vegetation Present?	Y	es	No	x
Remarks:							

Depth	Matrix			Redox	k Features							
(inches)	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>	Texture	Remarks				
0-16	10YR 4/1	90	10YR 4/6	10	C	М	Silty Clay					
		—					<u> </u>					
							·					
Type: C=0	Concentration, D=Dep	letion, RM	/=Reduced Matrix, N	MS=Maske	ed Sand Grains.	2	Location: PL=Pore Lining,	M=Matrix.				
Hydric Soi	Is Indicators:						Indicators for Problem					
Histos	ol (A1)		Sandy	Gleyed Ma	atrix (S4)		Coast Prairie Redo	ox (A16)				
Histic	Epipedon (A2)		Sandy	Redox (S5	5)		Dark Surface (S7)					
Black	Black Histic (A3) Stripped Matrix (S6)						Iron-Manganese Masses (F12)					
Hydrog	gen Sulfide (A4)		Loamy	Mucky Mir	neral (F1)		Very Shallow Dark	Surface (TF12)				
Stratifi	ied Layers (A5)		Loamy	Gleyed Ma	atrix (F2)		Other (Explain in R	temarks)				
2 cm N	Muck (A10)		X Deplete	ed Matrix (	F3)							
Deplet	ted Below Dark Surfac	e (A11)	Redox	Dark Surfa	ace (F6)							
Thick	Dark Surface (A12)		Deplete	ed Dark Su	urface (F7)							
Sandy	Mucky Mineral (S1)		Redox	Depressio	ns (F8)	<sup>3</sup> Indicators of hydrophytic vegetation and						
5 cm M	Mucky Peat or Peat (S	3)					wetland hydrology mu	st be present,				
							unless disturbed or pr	oblematic.				
Restrictive	e Layer (if present):											
Type:												
Depth	(inches):					Hydr	ic Soil Present?	Yes X No				
marks:												
	ndication of hydric soil	was obs	onvod									
	nuication of nyuric soli	was obs										

# HYDROLOGY

eck all that apply)	Secondary Indicators (minimum of two required)
Water-Stained Leaves (B9)	Surface Soil Cracks (B6)
Aquatic Fauna (B13)	X Drainage Patterns (B10)
True Aquatic Plants (B14)	Dry-Season Water Table (C2)
Hydrogen Sulfide Odor (C1)	Crayfish Burrows (C8)
Oxidized Rhizospheres on Living Roots (C3)	X Saturation Visible on Aerial Imagery (C9)
Presence of Reduced Iron (C4)	X Stunted or Stressed Plants (D1)
Recent Iron Reduction in Tilled Soils (C6)	X Geomorphic Position (D2)
Thin Muck Surface (C7)	FAC-Neutral Test (D5)
Gauge or Well Data (D9)	
Other (Explain in Remarks)	
X Depth (inches): N/A	
X Depth (inches): >20	
X Depth (inches): >20 W	Vetland Hydrology Present? Yes X No
well, aerial photos, previous inspections), if availab	le:
served (at least two secondary indicators).	
	Aquatic Fauna (B13)  True Aquatic Plants (B14) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres on Living Roots (C3) Presence of Reduced Iron (C4) Recent Iron Reduction in Tilled Soils (C6) Thin Muck Surface (C7) Gauge or Well Data (D9) Other (Explain in Remarks)  X Depth (inches): N/A Depth (inches): >20 X Depth (inches): >20 Y

Project/Site:	Cadeno	ce Solar Energ	gy Project	County:		Uni	on	Sampling Date:	January	14, 2020	
Applicant/Owner:		C	Cadence Solar			State:	ОН	Sampling Point:	DPA3	1-WA20	
Investigator(s):	DC	and	and DC Section, Township, Range: Yor					k			
Landform (hillslope	, terrace, etc.):		Agricultu	re		Local reli	ef (concave, co	nvex, none):	Conca	ave	
Slope (%):	00-05		Lat: 40	.39576	Long:		-83.46268	Datum:	NAD8	33	
Soil Map Unit Name	e:		We - Wetze	l silty clay loam			N	WI classification:	Р	EM	
Are climatic / hydro	logic conditions	on the site typ	pical for this time	of year? Ye	s X	No	(If no,	explain in Remarks.)			
Are Vegetation	Yes ,Soil	No_,or H	Hydrology No	significantly di	sturbed?		Are "Normal	Circumstances" present?	Yes	X No	
Are Vegetation	No ,Soil	No _,or ⊦	Hydrology No	naturally probl	ematic?		(If needed, ex	plain any answers in Rem	arks.)		

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

Hydrophytic Vegetation Present? Hydric Soil Present? Wetland Hydrology Present?	Yes Yes Yes	X X	No _ No _ No _	<u>x</u>	Is the Sampled Area within a Wetland?	Yes	x	No	
Remarks:									

This location was determined to be within a wetland despite the lack of dominance of hydrophytic vegetation due to the significant disturbance to the natural

This feature is within an actively cultivated agricultural field. The natural vegetation community has been removed through cultivation.

### **VEGETATION - Use scientific names of plants.**

Tree Stratum         (Plot size:)           1.         None Observed           2.		Indicator Status	Dominance Test wor Number of Dominant S That Are OBL, FACW Total Number of Domi Species Across All Str	Species , or FAC: inant		0	(A) (B)
Sapling/Shrub Stratum (Plot size: 15 ft. 1. <u>None Observed</u>	/		Percent of Dominant S That Are OBL, FACW			0	(A/B)
2			Prevalence Index Wo	vrksheet:			
3			Total % Cove	er of:	Μι	ultiply by:	
4			OBL species	0	x 1 =	0	
5			FACW species	0	x 2 =	0	
	= Total Cover		FAC species	0	x 3 =	0	
Herb Stratum (Plot size: 5 ft. )			FACU species	0	x 4 =	0	
1. Glycine max	100 Yes	UPL	UPL species	100	x 5 =	500	
2.			Column Totals:	100	(A)	500	(B)
3			Prevalence Index = B/	A =	5.00		
4			Hydrophytic Vegetat	ion Indicat	ors:		
5		·					
		······	1 - Rapid Test for 2 - Dominance Te		•		
7		·	3 - Prevalence Inc				
···		·			-1 (Duras dal		
9			4 - Morphological data in Remark				ig
10					•	'	
	<u>100</u> = Total Cover		Problematic Hydr			• •	
<u>Woody Vine Stratum</u> (Plot size: <u>30 ft.</u> 1. <u>None Observed</u>	)		<sup>1</sup> Indicators of hydric so be present, unless dis				
2.							
	= Total Cover		Hydrophytic Vegetation Present?	Y	es	No	x
Remarks:			<u>I</u>				

Depth	Matrix			Redox	Features						
(inches)	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>	Texture	Remarks			
0-16	10YR 4/1	90	10YR 4/6	10	С	Μ	Silty Clay				
<sup>1</sup> Type: C=C	oncentration, D=Dep	lotion PA	A-Roducod Matrix N	19-Maska	d Sand Grains	2	_ocation: PL=Pore Lining,	M-Matrix			
	s Indicators:			vio-iviaske	u Sanu Grains.	L	Indicators for Proble				
Histoso	l (A1)		Sandy	Gleyed Ma	trix (S4)		Coast Prairie Red				
	pipedon (A2)			Redox (S5)			Dark Surface (S7)				
	listic (A3)			d Matrix (S			Iron-Manganese N				
	en Sulfide (A4)			Mucky Min	,		Very Shallow Darl	· · · ·			
	d Layers (A5)			Gleyed Ma	( )		Other (Explain in				
	uck (A10)		X Deplete					(enality)			
	ed Below Dark Surfac	o (A11)	·	Dark Surfa	,						
	ark Surface (A12)	e (ATT)		ed Dark Suna	( )						
	. ,		·		. ,		31	dia ang sa dadi ang ang d			
	Mucky Mineral (S1)	2)	Redox	Depressio	ns (F8)	<sup>3</sup> Indicators of hydrophytic vegetation and wetland hydrology must be present,					
5 cm M	ucky Peat or Peat (S3	3)				wetland hydrology must be present, unless disturbed or problematic.					
Restrictive	Layer (if present):										
Type:											
	nches):					Hydri	ic Soil Present?	Yes X No			
Remarks:											
	dication of hydric soil	was obs	erved.								
YDROLOG	Υ.										

Wetland Hydrology Indicators:						
Primary Indicators (minimum of one required; check	all that apply)	Secondary Indicators (minimum of two required)				
Surface Water (A1)	Surface Soil Cracks (B6)					
High Water Table (A2)	Aquatic Fauna (B13)	Drainage Patterns (B10)				
Saturation (A3)	True Aquatic Plants (B14)	Dry-Season Water Table (C2)				
Water Marks (B1)	Hydrogen Sulfide Odor (C1)	Crayfish Burrows (C8)				
Sediment Deposits (B2)	Oxidized Rhizospheres on Living Roots (C3)	X Saturation Visible on Aerial Imagery (C9)				
Drift Deposits (B3)	Presence of Reduced Iron (C4)	X 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)	FAC-Neutral Test (D5)				
Inundation Visible on Aerial Imagery (B7)	Gauge or Well Data (D9)					
Sparsely Vegetated Concave Surface (B8)	Other (Explain in Remarks)					
Field Observations:						
Surface Water Present? Yes No X	Depth (inches): N/A					
Water Table Present? Yes NoX	Depth (inches): >20					
Saturation Present? Yes No X	Depth (inches): >20 Wet	land Hydrology Present? Yes X No				
(includes capillary fringe)						
Describe Recorded Data (stream gauge, monitoring w	ell, aerial photos, previous inspections), if available:					
Remarks:						
A positive indication of wetland hydrology was obser	rved (at least two secondary indicators).					

Project/Site:	С	adence	e Solar	Energy Project		(	County:		Un	ion	Sampling Date:	Janu	uary 14,	2020	
Applicant/Owner:	Cadence Solar						State:	ОН	Sampling Point:	DF	A32-W	A21			
Investigator(s):		DC		and	DC		Secti	tion, Township, Range: York							
Landform (hillslope,	, terrace, e	etc.):		A	gricultu	re			Local re	lief (concave, co	onvex, none):	Co	oncave		
Slope (%):	0	0-05		Lat:	40	.39262		Long:		-83.46161	Datum:	Ν	IAD83		
Soil Map Unit Name	e:			We-	Wetzel	silty cla	y loam			N	WI classification:		PEM		
Are climatic / hydrol	logic cond	litions c	on the s	ite typical for thi	s time c	of year?	Yes	Х	No	(If no,	explain in Remarks.)				
Are Vegetation	Yes	,Soil	No	or Hydrology	No	signific	antly dist	urbed?		Are "Normal	Circumstances" present?	Yes	Х	No	
Are Vegetation	No	,Soil	No	,or Hydrology	No	_natural	ly problei	matic?		(If needed, e	xplain any answers in Rem	arks.)			

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

Hydrophytic Vegetation Present? Hydric Soil Present? Wetland Hydrology Present?	Yes Yes Yes	X X	No _ No _ No _	<u>x</u>	Is the Sampled Area within a Wetland?	Yes	x	No	
Remarks:									

This location was determined to be within a wetland despite the lack of dominance of hydrophytic vegetation due to the significant disturbance to the natural

This feature is within an actively cultivated agricultural field. The natural vegetation community has been removed through cultivation.

#### **VEGETATION - Use scientific names of plants.**

Tree Stratum         (Plot size:)           1.         None Observed           2.	<u>% cover</u>	Dominant Species?	Indicator Status	Dominance Test word Number of Dominant S That Are OBL, FACW, Total Number of Domi	Species or FAC: nant		0	_ (A)
4				Species Across All Str	ata:		1	(B)
5	= Tot	al Cover		Percent of Dominant S That Are OBL, FACW,	or FAC:		0	(A/B)
2				Prevalence Index Wo	rksheet:			
3				Total % Cove			Itiply by:	_
4				OBL species		x 1 =		
5				FACW species	0	x 2 =		_
	= Tot	al Cover		FAC species	0	x 3 =	0	_
Herb Stratum (Plot size: 5 ft. )				FACU species	0	x 4 =	0	_
1. Glycine max	100	Yes	UPL	UPL species	100	x 5 =	500	_
2				Column Totals:	100	(A)	500	(B)
3				Prevalence Index = B/A	4 =	5.00		
4 5.				Hydrophytic Vegetati	ion Indicate	ors:		
				1 - Rapid Test for			on	
6 7				2 - Dominance Te		•	011	
				3 - Prevalence Inc				
•••				4 - Morphological		s <sup>1</sup> (Provid	e sunnortir	n
				data in Remark				9
10	100 = Tot	al Cover		Problematic Hydro		•	'	
<u>Woody Vine Stratum</u> (Plot size: <u>30 ft.</u> 1. <u>None Observed</u>	)			<sup>1</sup> Indicators of hydric so be present, unless dist	il and wetla	and hydrol	ogy must	
2		al Cover		Hydrophytic Vegetation Present?	Y	es	No	<u>x</u>
Remarks:								

ype:       C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.         /dric Soils Indicators:         Histosol (A1)       Sandy Gleyed Matrix (S4)         Histic Epipedon (A2)       Sandy Redox (S5)         Black Histic (A3)       Stripped Matrix (S6)         Hydrogen Sulfide (A4)       Loamy Mucky Mineral (F1)         Stratified Layers (A5)       Loamy Gleyed Matrix (F2)         2 cm Muck (A10)       X       Depleted Matrix (F3)         Depleted Below Dark Surface (A11)       Redox Dark Surface (F6)         Thick Dark Surface (A12)       Depleted Dark Surface (F7)         Sandy Mucky Mineral (S1)       Redox Depressions (F8)         5 cm Mucky Peat or Peat (S3)       Strippeat Surface (S1)	Loc <sup>2</sup> Texture       Remarks         M       Silty Clay
Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.         Iydric Soils Indicators:         Histosol (A1)       Sandy Gleyed Matrix (S4)         Histic Epipedon (A2)       Sandy Redox (S5)         Black Histic (A3)       Stripped Matrix (S6)         Hydrogen Sulfide (A4)       Loarny Mucky Mineral (F1)         Stratified Layers (A5)       Loarny Gleyed Matrix (F2)         2 cm Muck (A10)       X       Depleted Matrix (F3)         Depleted Below Dark Surface (A11)       Redox Dark Surface (F6)         Thick Dark Surface (A12)       Depleted Dark Surface (F7)         Sandy Mucky Mineral (S1)       Redox Depressions (F8)         5 cm Mucky Peat or Peat (S3)       Restrictive Layer (if present):         Type:	<sup>2</sup> Location: PL=Pore Lining, M=Matrix. Indicators for Problematic Hydric Soils <sup>3</sup> : Coast Prairie Redox (A16) Dark Surface (S7) Iron-Manganese Masses (F12) Very Shallow Dark Surface (TF12)
Hydric Soils Indicators:	Indicators for Problematic Hydric Soils <sup>3</sup> : Coast Prairie Redox (A16) Dark Surface (S7) Iron-Manganese Masses (F12) Very Shallow Dark Surface (TF12)
Histic Epipedon (A2)       Sandy Redox (S5)         Black Histic (A3)       Stripped Matrix (S6)         Hydrogen Sulfide (A4)       Loamy Mucky Mineral (F1)         Stratified Layers (A5)       Loamy Gleyed Matrix (F2)         2 cm Muck (A10)       X Depleted Matrix (F3)         Depleted Below Dark Surface (A11)       Redox Dark Surface (F6)         Thick Dark Surface (A12)       Depleted Dark Surface (F7)         Sandy Mucky Mineral (S1)       Redox Depressions (F8)         5 cm Mucky Peat or Peat (S3)       Type:	Indicators for Problematic Hydric Soils <sup>3</sup> : Coast Prairie Redox (A16) Dark Surface (S7) Iron-Manganese Masses (F12) Very Shallow Dark Surface (TF12)
Histic Epipedon (A2)       Sandy Redox (S5)         Black Histic (A3)       Stripped Matrix (S6)         Hydrogen Sulfide (A4)       Loamy Mucky Mineral (F1)         Stratified Layers (A5)       Loamy Gleyed Matrix (F2)         2 cm Muck (A10)       X         Depleted Below Dark Surface (A11)       Redox Dark Surface (F6)         Thick Dark Surface (A12)       Depleted Dark Surface (F7)         Sandy Mucky Mineral (S1)       Redox Depressions (F8)         5 cm Mucky Peat or Peat (S3)       Type:	Coast Prairie Redox (A16) Dark Surface (S7) Iron-Manganese Masses (F12) Very Shallow Dark Surface (TF12)
Histic Epipedon (A2)       Sandy Redox (S5)         Black Histic (A3)       Stripped Matrix (S6)         Hydrogen Sulfide (A4)       Loamy Mucky Mineral (F1)         Stratified Layers (A5)       Loamy Gleyed Matrix (F2)         2 cm Muck (A10)       X Depleted Matrix (F3)         Depleted Below Dark Surface (A11)       Redox Dark Surface (F6)         Thick Dark Surface (A12)       Depleted Dark Surface (F7)         Sandy Mucky Mineral (S1)       Redox Depressions (F8)         5 cm Mucky Peat or Peat (S3)       Type:	Dark Surface (S7) Iron-Manganese Masses (F12) Very Shallow Dark Surface (TF12)
Black Histic (A3)       Stripped Matrix (S6)         Hydrogen Sulfide (A4)       Loamy Mucky Mineral (F1)         Stratified Layers (A5)       Loamy Gleyed Matrix (F2)         2 cm Muck (A10)       X Depleted Matrix (F3)         Depleted Below Dark Surface (A11)       Redox Dark Surface (F6)         Thick Dark Surface (A12)       Depleted Dark Surface (F7)         Sandy Mucky Mineral (S1)       Redox Depressions (F8)         5 cm Mucky Peat or Peat (S3)       Type:	Iron-Manganese Masses (F12) Very Shallow Dark Surface (TF12)
Hydrogen Sulfide (A4)       Loamy Mucky Mineral (F1)         Stratified Layers (A5)       Loamy Gleyed Matrix (F2)         2 cm Muck (A10)       X         Depleted Below Dark Surface (A11)       Redox Dark Surface (F6)         Thick Dark Surface (A12)       Depleted Dark Surface (F7)         Sandy Mucky Peat or Peat (S3)       Redox Depressions (F8)         Restrictive Layer (if present):       Type:	Very Shallow Dark Surface (TF12)
Stratified Layers (A5)       Loamy Gleyed Matrix (F2)         2 cm Muck (A10)       X         Depleted Below Dark Surface (A11)       Redox Dark Surface (F6)         Thick Dark Surface (A12)       Depleted Dark Surface (F7)         Sandy Mucky Mineral (S1)       Redox Depressions (F8)         5 cm Mucky Peat or Peat (S3)       Restrictive Layer (if present):         Type:	
2 cm Muck (A10)       X       Depleted Matrix (F3)         Depleted Below Dark Surface (A11)       Redox Dark Surface (F6)         Thick Dark Surface (A12)       Depleted Dark Surface (F7)         Sandy Mucky Mineral (S1)       Redox Depressions (F8)         5 cm Mucky Peat or Peat (S3)       Restrictive Layer (if present):         Type:	
Depleted Below Dark Surface (A11)       Redox Dark Surface (F6)         Thick Dark Surface (A12)       Depleted Dark Surface (F7)         Sandy Mucky Mineral (S1)       Redox Depressions (F8)         5 cm Mucky Peat or Peat (S3)       Restrictive Layer (if present):         Type:	
Sandy Mucky Mineral (S1) Redox Depressions (F8) 5 cm Mucky Peat or Peat (S3) Restrictive Layer (if present): Type:	
5 cm Mucky Peat or Peat (S3) Restrictive Layer (if present): Type:	
Restrictive Layer (if present): Type:	<sup>3</sup> Indicators of hydrophytic vegetation and
Туре:	wetland hydrology must be present, unless disturbed or problematic.
Depth(inches):	
	Hydric Soil Present? Yes X No
marks:	
A positive indication of hydric soil was observed.	
/DROLOGY	

Primary Indicators (minimum of one required; che	ck all that apply)	Secondary Indicators (minimum of two required)				
Surface Water (A1)	Surface Soil Cracks (B6)					
High Water Table (A2)	Aquatic Fauna (B13)	Drainage Patterns (B10)				
Saturation (A3)	True Aquatic Plants (B14)	Dry-Season Water Table (C2)				
Water Marks (B1)	Crayfish Burrows (C8)					
Sediment Deposits (B2)	X Saturation Visible on Aerial Imagery (C9)					
Drift Deposits (B3)	X Stunted or Stressed Plants (D1)					
Algal Mat or Crust (B4)	X Geomorphic Position (D2)					
Iron Deposits (B5)	Thin Muck Surface (C7)	FAC-Neutral Test (D5)				
Inundation Visible on Aerial Imagery (B7)	Gauge or Well Data (D9)					
Sparsely Vegetated Concave Surface (B8)	Other (Explain in Remarks)					
Field Observations:						
Surface Water Present? Yes No )	Depth (inches): <b>N/A</b>					
Water Table Present? Yes No	Depth (inches): >20					
Saturation Present? Yes No	C Depth (inches): >20 We	etland Hydrology Present? Yes X No				
Describe Recorded Data (stream gauge, monitoring	well, aerial photos, previous inspections), if available	e:				
Remarks:						
A positive indication of wetland hydrology was obs	erved (at least two secondary indicators).					

Project/Site:	Cadence	e Solar Energy Projec	t (	County:	Un	ion	Sampling Date:	January 14, 20	20
Applicant/Owner:		Cadence	Solar		State:	ОН	Sampling Point:	DPA33-WA2	2
Investigator(s):	DC	and	DC	Section, To	wnship, F	Range:	ĸ		
Landform (hillslope	e, terrace, etc.): _		Agriculture		Local re	lief (concave, co	onvex, none):	Concave	
Slope (%):	00-05	Lat:	40.39398	Long:		-83.45953	Datum:	NAD83	
Soil Map Unit Nam	e:	We	e - Wetzel silty cla	y loam		N	WI classification:	PEM	
Are climatic / hydro	ologic conditions of	on the site typical for	his time of year?	Yes X	No	(If no,	explain in Remarks.)		
Are Vegetation	Yes ,Soil	No ,or Hydrolog	y No signific	antly disturbed	?	Are "Normal	Circumstances" present?	Yes X I	No
Are Vegetation	No ,Soil	No ,or Hydrolog	y <u>No</u> natural	ly problematic?		(If needed, e	xplain any answers in Rem	arks.)	

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

Hydrophytic Vegetation Present? Hydric Soil Present? Wetland Hydrology Present?	Yes Yes Yes	X X X	No No No	Is the Sampled Area within a Wetland?	Yes	<u>x</u>	No
Remarks:	within a v	wetland d	ue to the presenc	e of all 3 wetland criteria			

I his point was determined to be within a wetland due to the presence of all 3 wetland criteria.

This feature is within an actively cultivated agricultural field. The natural vegetation has been significantly disturbed through cultivation.

# **VEGETATION - Use scientific names of plants.**

	Absolute Dominant	Indicator	Dominance Test wor	ksheet:			
Tree Stratum (Plot size: 30 ft.)	% cover Species?	Status	Number of Dominant S	Species			
1. None Observed			That Are OBL, FACW	, or FAC:		1	(A)
2.							_ ( )
3.			Total Number of Domi	nant			
4			Species Across All Str			2	(B)
5.							_ ( )
	= Total Cover		Percent of Dominant S	Inecies			
Sapling/Shrub Stratum (Plot size: 15 ft.	)		That Are OBL, FACW			50%	(A/B)
1 None Observed	/						_ (/ / 2 /
2			Prevalence Index Wo	rksheet:			
3.			Total % Cove	er of	М	ultiply by:	
4			OBL species	0	x 1 =	0	_
-			FACW species	40	x 2 =	80	_
5	= Total Cover		FAC species	10	x 3 =	30	
Herb Stratum (Plot size: 5 ft. )			FACU species	20	x 4 =	80	_
1. Phalaris arundinacea	40 Yes	FACW	UPL species	0	x 5 =		_
2 Carebum balananaa	20 Yes	FACU	Column Totals:	70	(A)	-	(B)
3. Setaria pumila	10 No	FAC	Prevalence Index = B/		` ´	130	_ (D)
		140			2.71		
4 5.			Hydrophytic Vegetat	ion Indicat	ors:		
· · · · · · · · · · · · · · · · · · ·			1 - Rapid Test for			ion	
···			2 - Dominance Te		•		
7 8			X 3 - Prevalence Inc				
8 9.	<u> </u>		4 - Morphological		o <sup>1</sup> (Drovid	o oupportir	a
			data in Remark		`		g
10	70 = Total Cover		Problematic Hydro		•	'	
						• •	
Woody Vine Stratum (Plot size: 30 ft.	)		<sup>1</sup> Indicators of hydric so be present, unless dis				
1. None Observed					obiematic		
2							
	= Total Cover		Hydrophytic			N	
			Vegetation Present?	Y	es X	No	

Remarks:

Depth	Matrix			Redox	Features					
inches)	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>	Texture	Remarks		
0-16	10YR 4/1	90	10YR 4/6	10	С	М	Silty Clay			
	. <u> </u>				<u> </u>					
	. <u> </u>				<u> </u>					
	Concentration, D=Dep	letion, RN	/I=Reduced Matrix, I	NS=Maske	d Sand Grains.	2	Location: PL=Pore Lining			
lydric Soil	Is Indicators:						Indicators for Proble			
Histoso	( )			Gleyed Ma			Coast Prairie Rec	( )		
Histic E	Epipedon (A2)		Sandy	Redox (S5	)		Dark Surface (S7	)		
Black H	Histic (A3)		Strippe	d Matrix (S	6)	Iron-Manganese Masses (F12)				
Hydrog	gen Sulfide (A4)		Loamy	Mucky Mir	ieral (F1)		Very Shallow Dar	k Surface (TF12)		
Stratifie	ed Layers (A5)		Loamy	Gleyed Ma	atrix (F2)		Other (Explain in	Remarks)		
	/luck (A10)		X Deplete	ed Matrix (I	F3)					
Deplete	ed Below Dark Surfac	e (A11)	Redox	Dark Surfa	ice (F6)					
Thick [	Dark Surface (A12)		Deplete	ed Dark Su	ırface (F7)					
Sandy	Mucky Mineral (S1)		Redox	Depressio	ns (F8)		<sup>3</sup> Indicators of hydrophy			
5 cm N	lucky Peat or Peat (S	3)					wetland hydrology m			
							unless disturbed or p	problematic.		
lestrictive	Layer (if present):									
Type:										
Depth(	inches):					Hydr	ic Soil Present?	Yes X No		
marks:										
A positive in	ndication of hydric soil	was obs	erved.							
DROLO	GY									

Primary Indicators (minimum of one	required;	check a	l that apply)			Secondary Indicators (minimum of two required)		
Surface Water (A1)			Water-Stained Leav	res (B9)		Surface Soil Cracks (B6)		
High Water Table (A2)			Aquatic Fauna (B13	)		Drainage Patterns (B10)		
Saturation (A3)			True Aquatic Plants	(B14)		Dry-Season Water Table (C2)		
Water Marks (B1)			Hydrogen Sulfide Od	dor (C1)		Crayfish Burrows (C8)		
Sediment Deposits (B2)			Oxidized Rhizosphe	res on Living Ro	oots (C3)	X Saturation Visible on Aerial Imagery (C9)		
Drift Deposits (B3)			Presence of Reduce	ed Iron (C4)		X Stunted or Stressed Plants (D1)		
Algal Mat or Crust (B4)			Recent Iron Reducti	on in Tilled Soil	s (C6)	X Geomorphic Position (D2)		
Iron Deposits (B5)			- Thin Muck Surface (	(C7)	. ,	FAC-Neutral Test (D5)		
Inundation Visible on Aerial Ima	gery (B7)		Gauge or Well Data	(D9)				
Sparsely Vegetated Concave S	urface (B8	)	Other (Explain in Re	emarks)				
	( -	, <u> </u>		,				
Field Observations:								
Surface Water Present? Yes	No	х	Depth (inches):	N/A				
Water Table Present? Yes	No	Х	Depth (inches):	>20				
Saturation Present? Yes	No	Х	Depth (inches):	>20	Wetlar	nd Hydrology Present? Yes X No		
(includes capillary fringe)								
Describe Recorded Data (stream gaug	e, monitor	ing well	, aerial photos, previo	ous inspections	), if available:			
Remarks:								
A positive indication of wetland hydro	ology was	observe	d (at least two secon	dary indicators)	I.			

Project/Site:	Cade	nce Sola	r Energy Project		County:	U	nion	Sampling Date:	January 14	, 2020
Applicant/Owner:			Cadence Sc	olar		State:	ОН	Sampling Point:	DPA35-W	/A23
Investigator(s):	DC		and	DC	Section, Township, Range:			Yor		
Landform (hillslope	, terrace, etc.)		A	griculture		Local r	elief (concave, o	convex, none):	Concave	
Slope (%):	00-08	5	Lat:	40.3949	19 Lo	ng:	-83.45946	Datum:	NAD83	
Soil Map Unit Name	e:		We-	Wetzel silty	clay loam		I	NWI classification:	PEM	
Are climatic / hydrol	logic conditior	s on the	site typical for thi	s time of yea	r? Yes	X No	(If no	, explain in Remarks.)		
Are Vegetation	Yes ,So	il No	or Hydrology	No sigr	nificantly distur	bed?	Are "Norma	I Circumstances" present?	Yes X	No
Are Vegetation	<u>No</u> ,So	il <u>No</u>	or Hydrology_	<u>No</u> nati	urally problema	itic?	(If needed,	explain any answers in Rem	arks.)	

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

Hydrophytic Vegetation Present? Hydric Soil Present? Wetland Hydrology Present?	Yes Yes Yes	x x x	No No No	Is the Sampled Area within a Wetland? Yes X No
i i osana nyalology i looonti				
Remarks:				

This point was determined to be within a wetland due to the presence of all 3 wetland criteria.

This feature is within an actively cultivated agricultural field. The natural vegetation community has been significantly disturbed through cultivation.

### **VEGETATION - Use scientific names of plants.**

	Absolute Dominant	Indicator	Dominance Test wor	ksheet:			
Tree Stratum (Plot size: 30 ft.)	% cover Species?	Status	Number of Dominant S	Species			
1. None Observed			That Are OBL, FACW			1	(A)
2.							_ ` `
3			Total Number of Domi	inant			
4			Species Across All Str			2	(B)
<b>F</b>							_ (= /
5	= Total Cover		Percent of Dominant S	Shecies			
Sapling/Shrub Stratum (Plot size: 15 ft.			That Are OBL, FACW			50%	(A/B)
1 None Observed	)		That Are Obe, TAOW	, 0117.0.		0070	_ (////)
			Prevalence Index Wo	orksheet:			
2			Total % Cov	er of	Mu	Itiply by:	
3			OBL species	0	x 1 =	0	_
4 5.			FACW species	40	x 2 =	80	_
5	= Total Cover		FAC species	10	x 2 =	30	_
Herb Stratum (Plot size: 5 ft. )			FACU species	0	x 4 =	0	_
1. Phalaris arundinacea	40 Yoo	FACW	UPL species	20	x 4 = x 5 =	•	_
	40 Yes						(D)
2. Glycine max	20 Yes	UPL	Column Totals:	70	(A)	210	(B)
3. Setaria pumila	10 No	FAC	Prevalence Index = B/	A =	3.00		
4	<u> </u>		Hydrophytic Vegetat	ion Indiaat			
5							
6			1 - Rapid Test for		c Vegetati	on	
7			2 - Dominance Te				
8			X 3 - Prevalence Inc				
9			4 - Morphological				g
10			data in Remark		•	'	
	70 = Total Cover		Problematic Hydr	ophytic Veg	etation <sup>1</sup> (E	xplain)	
Woody Vine Stratum (Plot size: 30 ft.	_)		<sup>1</sup> Indicators of hydric so				
1. None Observed			be present, unless dis	turbed or pr	oblematic		
2							
	= Total Cover		Hydrophytic				
			Vegetation Present?	Y	es X	No	

Remarks:

L										
Profile Description: (De	scribe t	to the der	oth needed	to docum	ent the in	dicator or cor	firm the abser	ce of indicators.	1	
	latrix				Redox Fe					
inches) Color (m		%	Color (mo	nist)	%	Type <sup>1</sup>	Loc <sup>2</sup>	Texture		Remarks
0-16 10YF		90	10YR 4		10	C	M	Silty Clay		Remarks
	4/1	90	10111	+/0	10	0		Silly Clay		
							·			
							·			
							·			
							·			
Type: C=Concentration	D-Dopl	otion PM	-Roducod N	Antrix MS:	-Mackod S	Sand Grains	21	ocation: PL=Pore	Lipipa M-Ma	trix
lydric Soils Indicators:	D-Depi			iau 1X, 1VIO-	-iviaskeu c	Sanu Grains.	L	Indicators for I		
Histosol (A1)			1	Sandy Gle	yed Matrix	((\$4)			ie Redox (A16	
Histic Epipedon (A2				Sandy Red		((04)		Dark Surfa		0)
Black Histic (A3)				-	Aatrix (S6)				inese Masses	(E12)
	1)				icky Minera					
Hydrogen Sulfide (A						. ,			w Dark Surfa	
Stratified Layers (A5	)				eyed Matrix				lain in Remarl	no j
2 cm Muck (A10)	Curfa	0 ( 1 1 1			Matrix (F3)					
Depleted Below Dar		e (A11)			rk Surface	. ,				
Thick Dark Surface				-	Dark Surfa			<sup>3</sup> Indicators of hy		- <b>t</b>
Sandy Mucky Minera			r	Redox Dep	pressions	(F8)		wetland hydro	., .	
5 cm Mucky Peat or	Peat (53	<i>i</i> )						unless disturb		
Depth(inches): marks: A positive indication of hy							Hydrid	c Soil Present?	Ye	es <u>X</u> No
marks:							Hydrid	c Soil Present?	Y	es <u>X</u> No
marks:							Hydrid	c Soil Present?	Y(	es <u>X</u> No
marks: A positive indication of hy DROLOGY tland Hydrology Indica	dric soil	was obse	erved.				Hydrid	c Soil Present?	Y(	es <u>X</u> No
marks: A positive indication of hy DROLOGY tland Hydrology Indica Primary Indicators (minin	dric soil	was obse	rved. ed; check all	that apply			Hydrid	Secondary Indic	ators (minimu	um of two required)
marks: A positive indication of hy DROLOGY tland Hydrology Indica Primary Indicators (minin Surface Water (A1)	dric soil tors:	was obse	rved. <u>ed; check all</u>	that apply Water-Sta	ined Leave	( )	Hydrid	Secondary Indic	ators (minimu il Cracks (B6)	um of two required)
marks: A positive indication of hy DROLOGY tland Hydrology Indica Primary Indicators (minin Surface Water (A1) High Water Table (A	dric soil tors:	was obse	rved. 2d; check all	that apply Water-Sta Aquatic F <i>a</i>	iined Leav auna (B13)	)	Hydrid	Secondary Indic Surface So Drainage F	ators (minimu il Cracks (B6) atterns (B10)	um of two required)
marks: A positive indication of hy DROLOGY tland Hydrology Indicators Primary Indicators (minin Surface Water (A1) High Water Table (A Saturation (A3)	dric soil tors:	was obse	erved.	that apply Water-Sta Aquatic F <i>a</i> True Aqua	iined Leav auna (B13) atic Plants	) (B14)	Hydrid	Secondary Indic Surface So Drainage P Dry-Season	ators (minimu il Cracks (B6) atterns (B10) n Water Table	um of two required)
marks: A positive indication of hy DROLOGY tland Hydrology Indicators Primary Indicators (minin Surface Water (A1) High Water Table (A Saturation (A3) Water Marks (B1)	dric soil tors: num of o 2)	was obse	erved.	that apply Water-Sta Aquatic F <i>ɛ</i> True Aqua	ined Leave auna (B13) atic Plants Sulfide Oc	) (B14) dor (C1)		Secondary India Surface So Drainage P Dry-Seaso Crayfish Bu	ators (minimu il Cracks (B6) atterns (B10) n Water Table urrows (C8)	um of two required)
DROLOGY tland Hydrology Indica Primary Indicators (minin Surface Water (A1) High Water Table (A Saturation (A3) Water Marks (B1) Sediment Deposits (	dric soil tors: num of o 2)	was obse	ed; check all	that apply Water-Sta Aquatic Fa True Aqua Hydrogen Dxidized F	ined Leave auna (B13) atic Plants Sulfide Oc Rhizospher	) (B14) dor (C1) res on Living R		Secondary Indic Surface So Drainage F Dry-Season Crayfish Bu X Saturation	ators (minimu il Cracks (B6) 'atterns (B10) n Water Table urrows (C8) Visible on Aer	um of two required) (C2) ial Imagery (C9)
marks: A positive indication of hy DROLOGY tland Hydrology Indica Primary Indicators (minin Surface Water (A1) High Water Table (A Saturation (A3) Water Marks (B1) Sediment Deposits (B3)	dric soil tors: num of o 2) B2)	was obse	erved.	that apply Water-Sta Aquatic Fa True Aqua Hydrogen Dxidized F Presence	ined Leave auna (B13) atic Plants Sulfide Oc Rhizospher of Reduce	) (B14) dor (C1) res on Living R ed Iron (C4)	oots (C3)	Secondary Indic Surface So Drainage F Dry-Season Crayfish Bu X Saturation X Stunted or	ators (minimu il Cracks (B6) atterns (B10) n Water Table urrows (C8) Visible on Aer Stressed Plar	um of two required) e (C2) rial Imagery (C9) ots (D1)
marks: A positive indication of hy DROLOGY tland Hydrology Indica Primary Indicators (minin Surface Water (A1) High Water Table (A Saturation (A3) Water Marks (B1) Sediment Deposits (B3) Algal Mat or Crust (B	dric soil tors: num of o 2) B2)	was obse	ed; check all	that apply Water-Sta Aquatic Fa True Aqua Hydrogen Oxidized F Presence Recent Iro	ined Leave auna (B13) atic Plants Sulfide Oc Rhizospher of Reduce on Reductio	) (B14) dor (C1) res on Living R ed Iron (C4) on in Tilled Soil	oots (C3)	Secondary Indic Surface So Drainage F Dry-Season Crayfish Bu X Saturation X Stunted or X Geomorph	ators (minimu il Cracks (B6) atterns (B10) n Water Table urrows (C8) Visible on Aer Stressed Plar c Position (D2	um of two required) e (C2) rial Imagery (C9) ots (D1)
marks: A positive indication of hy DROLOGY tland Hydrology Indica Primary Indicators (minin Surface Water (A1) High Water Table (A Saturation (A3) Water Marks (B1) Sediment Deposits ( Drift Deposits (B3) Algal Mat or Crust (B Iron Deposits (B5)	dric soil tors: num of o 2) B2) B2)	was obse	ed; check all	that apply Water-Sta Aquatic Fa True Aqua Hydrogen Dxidized F Presence Recent Iro Thin Muck	ined Leave auna (B13) atic Plants Sulfide Oc Rhizospher of Reduce on Reduction sufface (	) (B14) dor (C1) res on Living R ed Iron (C4) on in Tilled Soil C7)	oots (C3)	Secondary Indic Surface So Drainage F Dry-Season Crayfish Bu X Saturation X Stunted or X Geomorph	ators (minimu il Cracks (B6) atterns (B10) n Water Table urrows (C8) Visible on Aer Stressed Plar	um of two required) e (C2) rial Imagery (C9) ots (D1)
marks: A positive indication of hy DROLOGY tland Hydrology Indica Primary Indicators (minin Surface Water (A1) High Water Table (A Saturation (A3) Water Marks (B1) Sediment Deposits (B3) Algal Mat or Crust (B Iron Deposits (B5) Inundation Visible or	dric soil tors: hum of o 2) B2) B2) 4)	was obse	erved.	that apply Water-Sta Aquatic Fa True Aqua Hydrogen Oxidized F Presence Recent Iro Thin Muck Gauge or	ined Leaw auna (B13) atic Plants Sulfide Oc Rhizospher of Reduce on Reduction a Surface ( Well Data	) (B14) dor (C1) res on Living R ed Iron (C4) on in Tilled Soil (C7) (D9)	oots (C3)	Secondary Indic Surface So Drainage F Dry-Season Crayfish Bu X Saturation X Stunted or X Geomorph	ators (minimu il Cracks (B6) atterns (B10) n Water Table urrows (C8) Visible on Aer Stressed Plar c Position (D2	um of two required) e (C2) rial Imagery (C9) ots (D1)
marks: A positive indication of hy DROLOGY tland Hydrology Indica Primary Indicators (minin Surface Water (A1) High Water Table (A Saturation (A3) Water Marks (B1) Sediment Deposits ( Drift Deposits (B3) Algal Mat or Crust (B Iron Deposits (B5)	dric soil tors: hum of o 2) B2) B2) 4)	was obse	erved.	that apply Water-Sta Aquatic Fa True Aqua Hydrogen Oxidized F Presence Recent Iro Thin Muck Gauge or	ined Leave auna (B13) atic Plants Sulfide Oc Rhizospher of Reduce on Reduction sufface (	) (B14) dor (C1) res on Living R ed Iron (C4) on in Tilled Soil (C7) (D9)	oots (C3)	Secondary Indic Surface So Drainage F Dry-Season Crayfish Bu X Saturation X Stunted or X Geomorph	ators (minimu il Cracks (B6) atterns (B10) n Water Table urrows (C8) Visible on Aer Stressed Plar c Position (D2	um of two required) e (C2) rial Imagery (C9) ots (D1)
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Marks: A positive indication of hy DROLOGY tland Hydrology Indicators Primary Indicators (minin Surface Water (A1) High Water Table (A Saturation (A3) Water Marks (B1) Sediment Deposits (B3) Algal Mat or Crust (E Iron Deposits (B5) Inundation Visible or Sparsely Vegetated	dric soil tors: num of o 2) B2) 44) Aerial II Concave	was obse	erved.	that apply Water-Sta Aquatic Fa True Aqua Hydrogen Dxidized F Presence - Recent Iro Thin Muck Gauge or <sup>1</sup> Other (Exp	ined Leaw auna (B13) atic Plants Sulfide Oc Rhizospher of Reduce on Reduction a Surface ( Well Data	) (B14) dor (C1) res on Living R ed Iron (C4) on in Tilled Soil (C7) (D9)	oots (C3)	Secondary Indic Surface So Drainage F Dry-Season Crayfish Bu X Saturation X Stunted or X Geomorph	ators (minimu il Cracks (B6) atterns (B10) n Water Table urrows (C8) Visible on Aer Stressed Plar c Position (D2	um of two required) e (C2) rial Imagery (C9) ots (D1)
DROLOGY tland Hydrology Indica Primary Indicators (minin Surface Water (A1) High Water Table (A Saturation (A3) Water Marks (B1) Sediment Deposits (B3) Algal Mat or Crust (E Iron Deposits (B5) Inundation Visible on Sparsely Vegetated Field Observations:	dric soil tors: num of o 2) B2) 44) Aerial II Concave	was obse	erved.	that apply Water-Sta Aquatic Fa True Aqua Hydrogen Oxidized F Presence Recent Iro Thin Muck Gauge or ' Other (Exp Depth (	ined Leave auna (B13) atic Plants Sulfide Oc Rhizospher of Reduce in Reduction c Surface ( Well Data olain in Re	) (B14) dor (C1) res on Living R ed Iron (C4) on in Tilled Soil C7) (D9) marks)	oots (C3)	Secondary Indic Surface So Drainage F Dry-Season Crayfish Bu X Saturation X Stunted or X Geomorph	ators (minimu il Cracks (B6) atterns (B10) n Water Table urrows (C8) Visible on Aer Stressed Plar c Position (D2	um of two required) e (C2) rial Imagery (C9) ots (D1)
Marks: A positive indication of hy DROLOGY tland Hydrology Indica Primary Indicators (minin Surface Water (A1) High Water Table (A Saturation (A3) Water Marks (B1) Sediment Deposits (B3) Algal Mat or Crust (E Iron Deposits (B5) Inundation Visible or Sparsely Vegetated Field Observations: Surface Water Present?	dric soil tors: num of o 2) B2) Aerial In Concave	magery (B	erved. ed; check all 	that apply Water-Sta Aquatic Fa True Aqua Hydrogen Oxidized F Presence Recent Iro Thin Muck Gauge or ' Other (Exp Depth ( Depth (	ined Leaw auna (B13) stiic Plants Sulfide Oc Rhizospher of Reduce in Reduction surface ( Well Data plain in Re	) (B14) dor (C1) res on Living R d Iron (C4) on in Tilled Soil C7) (D9) marks) N/A	oots (C3)	Secondary Indic Surface So Drainage F Dry-Season Crayfish Bu X Saturation X Stunted or X Geomorph	ators (minimu il Cracks (B6) atterns (B10) n Water Table urrows (C8) Visible on Aer Stressed Plar c Position (D2 al Test (D5)	um of two required) e (C2) rial Imagery (C9) ots (D1)
marks:         A positive indication of hy         A positive indication of hy         DROLOGY         tland Hydrology Indicators (mining         Surface Water (A1)         High Water Table (A         Saturation (A3)         Water Marks (B1)         Sediment Deposits (B3)         Algal Mat or Crust (B         Iron Deposits (B5)         Inundation Visible or         Sparsely Vegetated         Field Observations:         Surface Water Present?	dric soil tors: tum of o 2) B2) Aerial II Concave Yes Yes	magery (B	arved. ad; check all ad; check all	that apply Water-Sta Aquatic Fa True Aqua Hydrogen Oxidized F Presence Recent Iro Thin Muck Gauge or ' Other (Exp Depth ( Depth (	ined Leaw auna (B13) sulfide Oc Rhizospher of Reduce on Reduce n Reduction surface ( Well Data plain in Re inches):	) (B14) dor (C1) res on Living R d Iron (C4) on in Tilled Soil C7) (D9) marks) <u>N/A</u> >20	oots (C3)	Secondary Indic Surface So Drainage F Dry-Season Crayfish Bu X Saturation X Stunted or X Geomorph FAC-Neutr	ators (minimu il Cracks (B6) atterns (B10) n Water Table urrows (C8) Visible on Aer Stressed Plar c Position (D2 al Test (D5)	um of two required) (C2) rial Imagery (C9) hts (D1) 2)
DROLOGY  tland Hydrology Indica  primary Indicators (mininSurface Water (A1)High Water Table (ASaturation (A3)Water Marks (B1)Sediment Deposits (B3)Algal Mat or Crust (EIron Deposits (B5)Inundation Visible orSparsely Vegetated  Field Observations: Surface Water Present? Vater Table Present? Saturation Present?	dric soil tors: num of o 2) B2) Aerial II Concave Yes Yes Yes	magery (B	arved. ad; check all ad; check all	that apply Water-Sta Aquatic Fa True Aqua Hydrogen Oxidized F Presence - Recent Iro Thin Muck Gauge or ' Other (Exp Depth ( Depth (	ined Leave auna (B13) atic Plants Sulfide Oc Rhizospher of Reduce in Reduction s Surface ( Well Data olain in Re inches): inches):	) (B14) dor (C1) res on Living R ed Iron (C4) on in Tilled Soil C7) (D9) (marks) <u>N/A</u> >20 >20	oots (C3) Is (C6) Wetla	Secondary Indic Surface So Drainage F Dry-Season Crayfish Bu X Saturation X Stunted or X Geomorph FAC-Neutr	ators (minimu il Cracks (B6) atterns (B10) n Water Table urrows (C8) Visible on Aer Stressed Plar c Position (D2 al Test (D5)	um of two required) (C2) rial Imagery (C9) hts (D1) 2)
DROLOGY tland Hydrology Indica Primary Indicators (minin Surface Water (A1) High Water Table (A Saturation (A3) Water Marks (B1) Sediment Deposits (B3) Algal Mat or Crust (E Iron Deposits (B3) Algal Mat or Crust (E Iron Deposits (B5) Inundation Visible or Sparsely Vegetated Field Observations: Surface Water Present? Vater Table Present? Saturation Present? includes capillary fringe)	dric soil tors: num of o 2) B2) Aerial II Concave Yes Yes Yes	magery (B	arved. ad; check all ad; check all	that apply Water-Sta Aquatic Fa True Aqua Hydrogen Oxidized F Presence - Recent Iro Thin Muck Gauge or ' Other (Exp Depth ( Depth (	ined Leave auna (B13) atic Plants Sulfide Oc Rhizospher of Reduce in Reduction s Surface ( Well Data olain in Re inches): inches):	) (B14) dor (C1) res on Living R ed Iron (C4) on in Tilled Soil C7) (D9) (marks) <u>N/A</u> >20 >20	oots (C3) Is (C6) Wetla	Secondary Indic Surface So Drainage F Dry-Season Crayfish Bu X Saturation X Stunted or X Geomorph FAC-Neutr	ators (minimu il Cracks (B6) atterns (B10) n Water Table urrows (C8) Visible on Aer Stressed Plar c Position (D2 al Test (D5)	um of two required) (C2) rial Imagery (C9) hts (D1) 2)
DROLOGY tland Hydrology Indica Primary Indicators (minin Surface Water (A1) High Water Table (A Saturation (A3) Water Marks (B1) Sediment Deposits (B3) Algal Mat or Crust (E Iron Deposits (B3) Algal Mat or Crust (E Iron Deposits (B5) Inundation Visible or Sparsely Vegetated Field Observations: Surface Water Present? Vater Table Present? Saturation Present? includes capillary fringe)	dric soil tors: num of o 2) B2) Aerial II Concave Yes Yes Yes	magery (B	arved. ad; check all ad; check all	that apply Water-Sta Aquatic Fa True Aqua Hydrogen Oxidized F Presence - Recent Iro Thin Muck Gauge or ' Other (Exp Depth ( Depth (	ined Leave auna (B13) atic Plants Sulfide Oc Rhizospher of Reduce in Reduction s Surface ( Well Data olain in Re inches): inches):	) (B14) dor (C1) res on Living R ed Iron (C4) on in Tilled Soil C7) (D9) (marks) <u>N/A</u> >20 >20	oots (C3) Is (C6) Wetla	Secondary Indic Surface So Drainage F Dry-Season Crayfish Bu X Saturation X Stunted or X Geomorph FAC-Neutr	ators (minimu il Cracks (B6) atterns (B10) n Water Table urrows (C8) Visible on Aer Stressed Plar c Position (D2 al Test (D5)	um of two required) (C2) rial Imagery (C9) hts (D1) 2)

Project/Site:	Cadence	e Solar Energy Projec	t C	County:	Un	ion	Sampling Date:	January 14, 2020
Applicant/Owner:		Cadence	Solar		State:	OH	_ Sampling Point:	DPA36-WA24
Investigator(s):	DC	and	DC	Section, To	wnship, R	lange:	Y	ork
Landform (hillslope	e, terrace, etc.):		Depression		Local rel	ief (concave, c	onvex, none):	Concave
Slope (%):	00-05	Lat:	40.39627	Long:		-83.45899	Datum:	NAD83
Soil Map Unit Nam	e:	We	e - Wetzel silty clay	/ loam		N	IWI classification:	PFO
Are climatic / hydro	ologic conditions o	on the site typical for t	his time of year?	Yes X	No	(lf no,	explain in Remarks.)	
Are Vegetation	No ,Soil	No ,or Hydrology	/ <b>No</b> significa	antly disturbed?	,	Are "Normal	Circumstances" present	? Yes X No
Are Vegetation	No_,Soil	No ,or Hydrology	/ <b>No</b> naturall	y problematic?		(If needed, e	explain any answers in Re	emarks.)

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

Hydrophytic Vegetation Present? Hydric Soil Present? Wetland Hydrology Present?	Yes _ Yes _ Yes _	X X X	No No No	Is the Sampled Area within a Wetland?	Yes	x	No
Remarks: This point was determined to be	within a	wetland d	ue to the presence of a	ll 3 wetland criteria.			

# **VEGETATION - Use scientific names of plants.**

	Absolute	Dominant	Indicator	Dominance Test wor	rksheet:			
Tree Stratum (Plot size: 30 ft. )	% cover	Species?	Status	Number of Dominant	Species			
1. Fraxinus pennsylvanica	30	Yes	FACW	That Are OBL, FACW			7	(A)
2. Ulmus americana	20	Yes	FACW					
3. Quercus palustris	20	Yes	FACW	Total Number of Dom	inant			
4.				Species Across All St	rata:		7	(B)
5.								
	70 =	Total Cover		Percent of Dominant S	Species			
Sapling/Shrub Stratum (Plot size: 15 ft.	)			That Are OBL, FACW	, or FAC:		100%	(A/B)
1. Fraxinus pennsylvanica	15	Yes	FACW					
2. Acer rubrum	15	Yes	FAC	Prevalence Index Wo	orksheet:			
3				Total % Cov	er of:	Mu	Itiply by:	
4.				OBL species	5	x 1 =	5	
5.				FACW species	115	x 2 =	230	
		Total Cover		FAC species	15	x 3 =	45	_
Herb Stratum (Plot size: 5 ft. )				FACU species	0	x 4 =	0	_
1. Scirpus atrovirens	5	No	OBL	UPL species	0	x 5 =	0	_
2. Carex sp	15	Yes	FACW	Column Totals:	135	(A)	280	(B)
3. Phalaris arundinacea	15	Yes	FACW	Prevalence Index = B/	/A =	2.07		
4.								
5				Hydrophytic Vegetat	tion Indicate	ors:		
6.				1 - Rapid Test for	r Hydrophyti	c Vegetati	on	
7.				X 2 - Dominance T	est is >50%			
8.		·		X 3 - Prevalence In	dex is ≤3.0 <sup>1</sup>			
9.		·		4 - Morphological	Adaptation	s <sup>1</sup> (Provid	e supportir	ng
10.		·		data in Remark				
	35 =	Total Cover		Problematic Hydr	rophytic Veg	etation <sup>1</sup> (F	Explain)	
Woody Vine Stratum (Plot size: 30 ft.	)			<sup>1</sup> Indicators of hydric so	oil and wetla	nd hvdrol	oav must	
1. None Observed				be present, unless dis				
2.		·						
	=	Total Cover		Hydrophytic				
				Vegetation Present?	Y	es X	No	
Remarks:								

A positive indication of hydrophytic vegetation was observed (>50% of dominant species indexed as OBL, FACW, or FAC).

nches)				Redox	Features			
	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>	Texture	Remarks
0-8	10YR 4/2	100	None	_		_	Clay loam	
8-16	10YR 4/1	80	10YR 4/6	20	С	Μ	Clay	
	oncentration, D=Dep	letion, RN	Reduced Matrix, I	NS=Maske	d Sand Grains.	2	_ocation: PL=Pore Linir	-
	Indicators:							lematic Hydric Soils <sup>3</sup> :
Histosol	( )			Gleyed Ma	( )		Coast Prairie R	( )
	pipedon (A2)			Redox (S5)			Dark Surface (S	,
Black Hi	istic (A3)		Strippe	ed Matrix (S		Iron-Manganes	e Masses (F12)	
Hydroge	en Sulfide (A4)		Loamy	Mucky Min	eral (F1)		Very Shallow D	ark Surface (TF12)
Stratified	d Layers (A5)		Loamy	Gleyed Ma	atrix (F2)		Other (Explain	in Remarks)
_2 cm Mu	uck (A10)		X Deplete	ed Matrix (F	-3)			
Depleted	d Below Dark Surfac	e (A11)	Redox	Dark Surfa	ce (F6)			
Thick Da	ark Surface (A12)		Deplete	ed Dark Su	rface (F7)			
Sandy N	/ucky Mineral (S1)		Redox	Depression	ns (F8)		<sup>3</sup> Indicators of hydrop	phytic vegetation and
	ucky Peat or Peat (S3	3)		•	- /		wetland hydrology	must be present,
_	-	-					unless disturbed o	r problematic.
strictive L	Layer (if present):							
Type:								
Depth(in						Hydri	ic Soil Present?	Yes X No
arks:								
positive ind	dication of hydric soil	was obse	rved.					

eck all that apply)	Secondary Indicators (minimum of two required)
X Water-Stained Leaves (B9)	Surface Soil Cracks (B6)
Aquatic Fauna (B13)	X Drainage Patterns (B10)
True Aquatic Plants (B14)	Dry-Season Water Table (C2)
Hydrogen Sulfide Odor (C1)	Crayfish Burrows (C8)
Oxidized Rhizospheres on Living Roots (C3)	Saturation Visible on Aerial Imagery (C9)
Presence of Reduced Iron (C4)	Stunted or Stressed Plants (D1)
Recent Iron Reduction in Tilled Soils (C6)	X Geomorphic Position (D2)
Thin Muck Surface (C7)	X FAC-Neutral Test (D5)
Gauge or Well Data (D9)	
Other (Explain in Remarks)	
X Depth (inches): N/A	
X Depth (inches): >20	
X Depth (inches): >20	Wetland Hydrology Present? Yes X No
g well, aerial photos, previous inspections), if availa	ble:
oserved (at least one primary indicator).	
oserved (at least two secondary indicators).	
	X       Water-Stained Leaves (B9)         Aquatic Fauna (B13)         True Aquatic Plants (B14)         Hydrogen Sulfide Odor (C1)         Oxidized Rhizospheres on Living Roots (C3)         Presence of Reduced Iron (C4)         Recent Iron Reduction in Tilled Soils (C6)         Thin Muck Surface (C7)         Gauge or Well Data (D9)         Other (Explain in Remarks)         X       Depth (inches): <u>&gt;20</u> X       Depth (inches): <u>&gt;20</u> g well, aerial photos, previous inspections), if availa         pserved (at least one primary indicator).

Project/Site:	Cadence	e Solar Energy Projec	t C	ounty:	Un	ion	Sampling Date:	January 14, 2020	
Applicant/Owner:		Cadence	Solar		State:	OH	Sampling Point:	DPA38-WA25	
Investigator(s):	DC	and	DC	Section, To	wnship, F	Range:		York	
Landform (hillslope	e, terrace, etc.): _		Depression		Local rel	lief (concave, c	onvex, none):	Concave	
Slope (%):	00-05	Lat:	40.39722	Long:		-83.46024	Datum:	NAD83	
Soil Map Unit Nam	e:	We	e - Wetzel silty clay	loam		Ν	WI classification:	PFO	
Are climatic / hydro	ologic conditions of	on the site typical for t	his time of year?	Yes X	No	(If no,	explain in Remarks.)		
Are Vegetation	No ,Soil	No ,or Hydrolog	/ <b>No</b> significa	antly disturbed?	,	Are "Normal	Circumstances" presen	nt? Yes X No	
Are Vegetation	No ,Soil	No ,or Hydrolog	No naturally	y problematic?		(If needed, e	explain any answers in R	lemarks.)	

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

Hydrophytic Vegetation Present? Hydric Soil Present? Wetland Hydrology Present?	Yes _ Yes _ Yes _	x x x	No No No	Is the Sampled Area within a Wetland?	Yes_	x	No
Remarks: This point was determined to be	within a v	wetland du	e to the presence of al	ll 3 wetland criteria.			

### **VEGETATION - Use scientific names of plants.**

	Absolute	Dominant	Indicator	Dominance Test wor	ksheet:			
Tree Stratum (Plot size: 30 ft.)	% cover	Species?	Status	Number of Dominant S	Species			
1. Acer rubrum	40	Yes	FAC	That Are OBL, FACW			5	(A)
2. Ulmus rubra	20	Yes	FAC	,	,			
3.				Total Number of Domi	inant			
4.				Species Across All Str	rata:		5	(B)
5.								_ ( )
		Total Cover		Percent of Dominant S	Species			
Sapling/Shrub Stratum (Plot size: 15 ft.	)			That Are OBL, FACW			100%	(A/B)
1. Ulmus rubra		Yes	FAC	,	,			_ ` ` `
2.				Prevalence Index Wo	orksheet:			
3				Total % Cove	er of:	Mu	Itiply by:	
4.				OBL species	20	x 1 =	20	
5.				FACW species	30	x 2 =	60	
		Total Cover		FAC species	80	x 3 =	240	
Herb Stratum (Plot size: 5 ft. )				FACU species	0	x 4 =	0	
1. Phalaris arundinacea	30	Yes	FACW	UPL species	0	x 5 =	0	
2. Scirpus atrovirens	20	Yes	OBL	Column Totals:	130	(A)	320	(B)
· · · · ·				Prevalence Index = B/		2.46	010	(D)
						2.40		
				Hydrophytic Vegetat	ion Indicate	ors:		
·				1 - Rapid Test for	Hvdrophyti	c Vegetati	on	
6 7				X 2 - Dominance Te		o vogotati	011	
8.				X 3 - Prevalence Inc				
				4 - Morphological		s <sup>1</sup> (Provid	e sunnortii	na
				data in Remark				19
10	50 =	Total Cover		Problematic Hydr			,	
Woody Vine Stratum (Plot size: 30 ft.				<sup>1</sup> Indicators of hydric so		`	. ,	
				be present, unless dis				
							-	
2		Tatal Qaura						
	=	Total Cover		Hydrophytic	v	~~ V	Ne	
				Vegetation Present?	T	es <u>X</u>	No	

A positive indication of hydrophytic vegetation was observed (>50% of dominant species indexed as OBL, FACW, or FAC).

oth ches) )-4	Matrix	to the dep	th heenon to not	ument the	indicator or cor	firm the abee	nce of indicators.)	
hes) )-4	Iviatrix		th needed to doo			firm the abse	nce of indicators.)	
)-4	Color (moist)	%	Color (moist)	%	Features Type <sup>1</sup>	Loc <sup>2</sup>	Texture	Remarks
- <u>16</u>	10YR 4/2	100	None				Clay loam	Reindiks
  	10YR 4/1	80	10YR 4/6	20	C	M	Clay	
= =	101111 41							
		letion, RM	=Reduced Matrix, I	MS=Masked	I Sand Grains.	<sup>2</sup> l	_ocation: PL=Pore Linin	
ric Soils Ind	dicators:						Indicators for Probl	ematic Hydric Soils <sup>3</sup> :
Histosol (A				Gleyed Mat			Coast Prairie Re	
Histic Epipe				Redox (S5)			Dark Surface (S	
Black Histic				ed Matrix (Se			Iron-Manganese	
Hydrogen S				Mucky Mine				rk Surface (TF12)
Stratified La	,			Gleyed Mat			Other (Explain in	n Remarks)
2 cm Muck		(		ed Matrix (F				
-	elow Dark Surfac	e (A11)		Dark Surfac	. ,			
-	Surface (A12)		·	ed Dark Sur	. ,		<sup>3</sup> Indicators of hydropl	wtic vegetation and
	ky Mineral (S1) y Peat or Peat (S	3)	Keaox	Depression	S (FO)		wetland hydrology r	
	yı cal UI Feal (Ə	~/					unless disturbed or	
trictive Lay	ver (if present):							
Туре:								
Depth(inche						Hydri	ic Soil Present?	Yes X No
ROLOGY								
nd Hydrolog	gy Indicators:							
nary Indicato	ors (minimum of c	one require	d; check all that ap	oply)			Secondary Indicators	(minimum of two required)
Surface Wa	ater (A1)		X Water-	Stained Lea	aves (B9)		Surface Soil Cra	icks (B6)
High Water	r Table (A2)		Aquatio	c Fauna (B1	3)		Drainage Patter	ns (B10)
Saturation (	(A3)		True A	quatic Plant	is (B14)		Dry-Season Wa	ter Table (C2)
Water Mark	ks (B1)		Hydrog	gen Sulfide (	Odor (C1)		Crayfish Burrow	s (C8)
0 1	Deposits (B2)		Oxidize	ed Rhizosph	neres on Living Ro	oots (C3)	X Saturation Visibl	e on Aerial Imagery (C9)
_Sediment E	sits (B3)		Preser	ice of Reduc	ced Iron (C4)	000		
_Sediment D _Drift Depos	or Crust (B4)			t la sur Dis de s	( )	000		sed Plants (D1)
Drift Depos	ito (DE)		Recen	t Iron Reduc	ction in Tilled Soil	. ,	X Geomorphic Pos	
Drift Depos	lis (D0)			luck Surface	ction in Tilled Soil	. ,		sition (D2)
Drift Depos Algal Mat of Iron Deposi Inundation V	Visible on Aerial		Thin M 7) Gauge	luck Surface or Well Dat	ction in Tilled Soil e (C7) ta (D9)	. ,	X Geomorphic Pos	sition (D2)
Drift Depos Algal Mat of Iron Deposi Inundation V			Thin M 7) Gauge	luck Surface	ction in Tilled Soil e (C7) ta (D9)	. ,	X Geomorphic Pos	sition (D2)
Drift Depos Algal Mat of Iron Deposi Inundation V	Visible on Aerial egetated Concave		Thin M 7) Gauge	luck Surface or Well Dat	ction in Tilled Soil e (C7) ta (D9)	. ,	X Geomorphic Pos	sition (D2)
_ Drift Depos _ Algal Mat o _ Iron Deposi _ Inundation \ _ Sparsely Ve	Visible on Aerial egetated Concave ions:	e Surface (	Thin M 7) Gauge B8) Other (	luck Surface or Well Dat (Explain in F	ction in Tilled Soil ∋ (C7) ta (D9) Remarks)	. ,	X Geomorphic Pos	sition (D2)
Drift Depos Algal Mat o Iron Deposi Inundation \ Sparsely Ve Id Observati face Water F	Visible on Aerial egetated Concave ions: Present? Yes	e Surface (I	Thin M 7)Gauge B8)Other ( 0Dep	luck Surface or Well Dat (Explain in F oth (inches):	ction in Tilled Soil e (C7) ta (D9) Remarks)	. ,	X Geomorphic Pos	sition (D2)
_ Drift Depos _Algal Mat o _Iron Deposi _Inundation \ _Sparsely Ve Id Observati face Water F ter Table Pre	Visible on Aerial egetated Concave ions: Present? Yes esent? Yes	× Nc	— Thin M 7) Gauge B8) Other (  p Dep Dep	luck Surface or Well Dat (Explain in F oth (inches): oth (inches):	ction in Tilled Soil e (C7) ta (D9) Remarks) 2 >20	s (C6)	X Geomorphic Pos	sition (D2) st (D5)
_ Drift Depos _Algal Mat or _Iron Deposi _Inundation \ _Sparsely Ve Id Observati face Water F ter Table Pre- uration Prese	Visible on Aerial egetated Concave ions: Present? Yes esent? Yes ent? Yes	× Nc	— Thin M 7) Gauge B8) Other (  p Dep Dep	luck Surface or Well Dat (Explain in F oth (inches):	ction in Tilled Soil e (C7) ta (D9) Remarks) 2 >20	s (C6)	X Geomorphic Pos	sition (D2) st (D5)
Drift Depos Algal Mat ou Iron Deposi Inundation <sup>1</sup> Sparsely Ve Id Observati face Water F ter Table Pre uration Prese	Visible on Aerial egetated Concave ions: Present? Yes esent? Yes ent? Yes ary fringe)	X No X No X No	— Thin M 7) Gauge B8) Other (  p Dep Dep	luck Surface or Well Dat (Explain in F oth (inches): th (inches): th (inches):	tion in Tilled Soil ⇒ (C7) ta (D9) Remarks) 2 >20 0	s (C6) Wetla	X Geomorphic Pos	sition (D2) st (D5)
Drift Depos Algal Mat ou Iron Deposi Inundation <sup>1</sup> Sparsely Ve Id Observati face Water F ter Table Pre uration Prese	Visible on Aerial egetated Concave ions: Present? Yes esent? Yes ent? Yes ary fringe)	X No X No X No	Thin M 7)Gauge B8)Other ( 0Dep 0Dep 0Dep	luck Surface or Well Dat (Explain in F oth (inches): th (inches): th (inches):	tion in Tilled Soil ⇒ (C7) ta (D9) Remarks) 2 >20 0	s (C6) Wetla	X Geomorphic Pos	sition (D2) st (D5)
Drift Depos Algal Mat o Iron Deposi Inundation V Sparsely Ve Id Observati face Water F ter Table Pre uration Prese cludes capilla ibe Recorded	Visible on Aerial egetated Concave ions: Present? Yes esent? Yes ent? Yes ary fringe)	X No X No X No	Thin M 7)Gauge B8)Other ( 0Dep 0Dep 0Dep	luck Surface or Well Dat (Explain in F oth (inches): th (inches): th (inches):	tion in Tilled Soil ⇒ (C7) ta (D9) Remarks) 2 >20 0	s (C6) Wetla	X Geomorphic Pos	sition (D2) st (D5)
_ Drift Depos _Algal Mat o _Iron Deposi _Inundation \ _Sparsely Ve Id Observati face Water F ter Table Pre uration Press cludes capilla ibe Recorded	Visible on Aerial egetated Concave ions: Present? Yes esent? Yes ent? Yes ary fringe) d Data (stream g	X No X No X No auge, moni	Thin M     Gauge     B8)Other (     Dep     XDep     Dep     XDep     Dep     toring well, aerial	luck Surface or Well Dat (Explain in F oth (inches): oth (inches): oth (inches): photos, prev	tion in Tilled Soil (C7) (C7	s (C6) Wetla	X Geomorphic Pos	sition (D2) st (D5)
_ Drift Depos _ Algal Mat o _ Iron Deposi _ Inundation \ _ Sparsely Ve Id Observati face Water F ter Table Pre uration Prese ludes capilla ibe Recorded 	Visible on Aerial egetated Concave ions: Present? Yes esent? Yes ent? Yes ary fringe) d Data (stream generation of wetland h	X No X No X No auge, moni	Thin M     Gauge     B8)     Other (     Dep     X     Dep     Dep     toring well, aerial	luck Surface or Well Dat (Explain in F oth (inches): oth (inches): oth (inches): photos, prev ast one prim	tion in Tilled Soil (C7) (C7) (C7) Remarks) 2 2 20 0 vious inspections hary indicator).	s (C6) Wetla ), if available:	X Geomorphic Pos	sition (D2) st (D5)
_ Drift Depos _ Algal Mat o _ Iron Deposi _ Inundation \ _ Sparsely Ve Id Observati face Water F ter Table Pre uration Prese cludes capilla ibe Recorded rks: ositive indica	Visible on Aerial egetated Concave ions: Present? Yes esent? Yes ent? Yes ary fringe) d Data (stream generation of wetland h	X No X No X No auge, moni	Thin M     Gauge     B8)Other (     Dep     XDep     Dep     XDep     Dep     toring well, aerial	luck Surface or Well Dat (Explain in F oth (inches): oth (inches): oth (inches): photos, prev ast one prim	tion in Tilled Soil (C7) (C7) (C7) Remarks) 2 2 20 0 vious inspections hary indicator).	s (C6) Wetla ), if available:	X Geomorphic Pos	sition (D2) st (D5)
Drift Depos Algal Mat o Iron Deposi Inundation Sparsely Ve d Observati face Water F ter Table Pre uration Prese ludes capilla ibe Recorded	Visible on Aerial egetated Concave ions: Present? Yes esent? Yes ent? Yes ary fringe) d Data (stream generation of wetland h	X No X No X No auge, moni	Thin M     Gauge     B8)     Other (     Dep     X     Dep     Dep     toring well, aerial	luck Surface or Well Dat (Explain in F oth (inches): oth (inches): oth (inches): photos, prev ast one prim	tion in Tilled Soil (C7) (C7) (C7) Remarks) 2 2 20 0 vious inspections hary indicator).	s (C6) Wetla ), if available:	X Geomorphic Pos	sition (D2) st (D5)
Drift Depos Algal Mat o Iron Deposi Inundation Sparsely Ve d Observati face Water F ter Table Pre- uration Prese ludes capilla be Recorded	Visible on Aerial egetated Concave ions: Present? Yes esent? Yes ent? Yes ary fringe) d Data (stream generation of wetland h	X No X No X No auge, moni	Thin M     Gauge     B8)     Other (     Dep     X     Dep     Dep     toring well, aerial	luck Surface or Well Dat (Explain in F oth (inches): oth (inches): oth (inches): photos, prev ast one prim	tion in Tilled Soil (C7) (C7) (C7) Remarks) 2 2 20 0 vious inspections hary indicator).	s (C6) Wetla ), if available:	X Geomorphic Pos	sition (D2) st (D5)

Project/Site:	Cade	ence Sola	r Energy Project		County:	U	nion	Sampling Date:	January 14,	2020
Applicant/Owner:			Cadence Sc	olar		State:	OH	Sampling Point:	DPA39-W	A26
Investigator(s):	DC	;	and	DC	Section, T	ownship,	Range:	York	k	
Landform (hillslope	, terrace, etc.	):	A	griculture		_Local re	lief (concave, c	onvex, none):	Concave	
Slope (%):	00-0	5	Lat:	40.39516	5 Long	:	-83.46619	Datum:	NAD83	
Soil Map Unit Name	e:		We-	Wetzel silty c	lay loam		N	IWI classification:	PEM	
Are climatic / hydro	logic conditio	ns on the	site typical for thi	s time of year	? Yes X	No	(lf no,	explain in Remarks.)		
Are Vegetation	Yes ,So	oil No	or Hydrology	No signi	ficantly disturbe	d?	Are "Normal	Circumstances" present?	Yes X	No
Are Vegetation	No ,So	oil <b>No</b>	,or Hydrology	No natu	rally problematic	?	(If needed, e	xplain any answers in Rem	arks.)	

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

Hydrophytic Vegetation Present? Hydric Soil Present? Wetland Hydrology Present?	Yes _ Yes _ Yes _	X X	No _ No _ No _	x	Is the Sampled Area within a Wetland?	Yes	x	No	
Remarks:					ļ				

This location was determined to be within a wetland despite the lack of dominance of hydrophytic vegetation due to the significant disturbance to the natural

This feature is within an actively cultivated agricultural field. The natural vegetation community has been eliminated via cultivation.

### **VEGETATION - Use scientific names of plants.**

Tree Stratum         (Plot size:)           1.         None Observed           2.	<u>% cover</u>	Dominant Species?	Indicator Status	Dominance Test word Number of Dominant S That Are OBL, FACW, Total Number of Domi	Species or FAC: nant		0	_ (A)
4				Species Across All Str	ata:		1	(B)
5	= Tot	al Cover		Percent of Dominant S That Are OBL, FACW,	or FAC:		0	(A/B)
2				Prevalence Index Wo	rksheet:			
3				Total % Cove			Itiply by:	_
4				OBL species		x 1 =		
5				FACW species	0	x 2 =		_
	= Tot	al Cover		FAC species	0	x 3 =	0	_
Herb Stratum (Plot size: 5 ft. )				FACU species	0	x 4 =	0	_
1. Glycine max	100	Yes	UPL	UPL species	100	x 5 =	500	_
2				Column Totals:	100	(A)	500	(B)
3				Prevalence Index = B/A	4 =	5.00		
4 5.				Hydrophytic Vegetati	ion Indicate	ors:		
				1 - Rapid Test for			on	
6 7				2 - Dominance Te		•	011	
				3 - Prevalence Inc				
•••				4 - Morphological		s <sup>1</sup> (Provid	e sunnortir	n
				data in Remark				9
10	100 = Tot	al Cover		Problematic Hydro		•	'	
<u>Woody Vine Stratum</u> (Plot size: <u>30 ft.</u> 1. <u>None Observed</u>	)			<sup>1</sup> Indicators of hydric so be present, unless dist	il and wetla	and hydrol	ogy must	
2		al Cover		Hydrophytic Vegetation Present?	Y	es	No	<u>x</u>
Remarks:								

Profile Desc	ription: (Describe	to the de	pth needed to doc	ument th	e indicator or conf	irm the absen	ce of indicators.)				
Depth	Matrix			Redo	x Features						
(inches)	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>	Texture	Remarks			
0-16	10YR 4/1	90	10YR 4/6	10	С	M	Silty Clay				
			. <u></u>								
			. <u> </u>								
<sup>1</sup> Type: C=Co	ncentration, D=Dep	letion RM	Reduced Matrix	//S=Mask	ed Sand Grains	<sup>2</sup> l (	ocation: PL=Pore Linin	m M=Matrix			
Hydric Soils		iouon, i ui	i i toddood inading i	ne maon				lematic Hydric Soils <sup>3</sup> :			
Histosol	(A1)		Sandy	Gleyed M	atrix (S4)		Coast Prairie Re	edox (A16)			
Histic Ep	pipedon (A2)		Sandy	Redox (S	5)		Dark Surface (S	57)			
Black Hi	stic (A3)		Strippe	d Matrix (	S6)		Iron-Manganese	e Masses (F12)			
Hydroge	n Sulfide (A4)		Loamy	Mucky Mi	neral (F1)	Very Shallow Dark Surface (TF12)					
Stratified	l Layers (A5)		Loamy	Gleyed N	latrix (F2)		Other (Explain i	n Remarks)			
2 cm Mu	ick (A10)		X Deplete	ed Matrix	(F3)						
Depleted	d Below Dark Surfac	e (A11)	Redox	Dark Surf	ace (F6)						
Thick Da	ark Surface (A12)		Deplete	ed Dark S	urface (F7)						
	lucky Mineral (S1)		Redox	Depressio	ons (F8)		<sup>3</sup> Indicators of hydrop	, ,			
5 cm Mu	icky Peat or Peat (S	3)					wetland hydrology	, ,			
De stristive I							unless disturbed or	r problematic.			
	.ayer (if present):										
Type:											
Depth(in	ches):					Hydric	: Soil Present?	Yes <u>X</u> No			

Remarks:

A positive indication of hydric soil was observed.

# HYDROLOGY

Wetland Hydrology Indicators:		
Primary Indicators (minimum of one required; chec	k all that apply)	Secondary Indicators (minimum of two required)
Surface Water (A1)	Water-Stained Leaves (B9)	Surface Soil Cracks (B6)
High Water Table (A2)	Aquatic Fauna (B13)	Drainage Patterns (B10)
Saturation (A3)	True Aquatic Plants (B14)	Dry-Season Water Table (C2)
Water Marks (B1)	Hydrogen Sulfide Odor (C1)	Crayfish Burrows (C8)
Sediment Deposits (B2)	Oxidized Rhizospheres on Living Roots (C3)	X Saturation Visible on Aerial Imagery (C9)
Drift Deposits (B3)	Presence of Reduced Iron (C4)	Stunted or Stressed Plants (D1)
Algal Mat or Crust (B4)	Recent Iron Reduction in Tilled Soils (C6)	X Geomorphic Position (D2)
Iron Deposits (B5)	Thin Muck Surface (C7)	FAC-Neutral Test (D5)
Inundation Visible on Aerial Imagery (B7)	Gauge or Well Data (D9)	
Sparsely Vegetated Concave Surface (B8)	Other (Explain in Remarks)	
Field Observations:		
Surface Water Present? Yes No X	Depth (inches): N/A	
Water Table Present? Yes No X	Depth (inches): >20	
Saturation Present? Yes No X	Depth (inches): >20 Wetla	nd Hydrology Present? Yes X No
(includes capillary fringe)		
Describe Recorded Data (stream gauge, monitoring	well, aerial photos, previous inspections), if available:	
Remarks:		
A positive indication of wetland hydrology was obse	erved (at least two secondary indicators).	

Project/Site:	Caden	ce Solar I	Energy Project		County:	U	nion	Sampling Date:	Januar	ry 15, 1	2020	
Applicant/Owner:			Cadence So	lar		State:	ОН	Sampling Point:	DPA	41-WA	427	
Investigator(s):	DC		and	DC	Section	n, Township,	Range:	Yor	k			
Landform (hillslope	e, terrace, etc.):		Ag	griculture		Local r	elief (concave, o	convex, none):	Cond	cave		
Slope (%):	00-05		Lat:	40.39409	Lo	ong:	-83.46670	Datum:	NAE	083		
Soil Map Unit Name	e:		We-	Wetzel silty c	lay loam			NWI classification:		PEM		
Are climatic / hydro	logic conditions	on the si	te typical for this	s time of year?	? Yes	X No	(If no	, explain in Remarks.)				
Are Vegetation	Yes ,Soil	No	,or Hydrology	No signi	ficantly distur	bed?	Are "Norma	I Circumstances" present?	Yes	Х	No	
Are Vegetation	No ,Soil	No	,or Hydrology	<u>No</u> natur	ally problem	atic?	(If needed,	explain any answers in Rem	arks.)			

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

Hydrophytic Vegetation Present? Hydric Soil Present? Wetland Hydrology Present?	Yes _ Yes _ Yes _	X X	No _ No _ No _	x	Is the Sampled Area within a Wetland?	Yes	x	No	
Remarks:					ļ				

This location was determined to be within a wetland despite the lack of dominance of hydrophytic vegetation due to the significant disturbance to the natural

This feature is within an actively cultivated agricultural field. The natural vegetation community has been eliminated via cultivation.

#### **VEGETATION - Use scientific names of plants.**

Tree Stratum         (Plot size:	<u>% cover</u>	Dominant Species?	Indicator Status	Dominance Test word Number of Dominant S That Are OBL, FACW, Total Number of Domi	Species or FAC: nant		0	_ (A)
4				Species Across All Str	ata:		1	(B)
5	= Tot	al Cover		Percent of Dominant S That Are OBL, FACW,	or FAC:		0	(A/B)
2				Prevalence Index Wo	rksheet:			
3				Total % Cove			Itiply by:	_
4				OBL species		x 1 =		
5				FACW species	0	x 2 =		_
	= Tot	al Cover		FAC species	0	x 3 =	0	_
Herb Stratum (Plot size: 5 ft. )				FACU species	0	x 4 =	0	_
1. Glycine max	100	Yes	UPL	UPL species	100	x 5 =	500	_
2				Column Totals:	100	(A)	500	(B)
3				Prevalence Index = B/A	4 =	5.00		
4 5.				Hydrophytic Vegetati	ion Indicate	ors:		
				1 - Rapid Test for			on	
6 7				2 - Dominance Te		•	011	
				3 - Prevalence Inc				
•••				4 - Morphological		s <sup>1</sup> (Provid	e sunnortir	n
				data in Remark				9
10	100 = Tot	al Cover		Problematic Hydro		•	'	
<u>Woody Vine Stratum</u> (Plot size: <u>30 ft.</u> 1. <u>None Observed</u>	)			<sup>1</sup> Indicators of hydric so be present, unless dist	il and wetla	and hydrol	ogy must	
2		al Cover		Hydrophytic Vegetation Present?	Y	es	No	<u>x</u>
Remarks:								

Depth	Matrix			Redox	Features					
(inches)	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>	Texture	Remarks		
0-16	10YR 4/1	90	10YR 4/6	10	С	М	Silty Clay			
	Concentration, D=Dep	letion, RI	M=Reduced Matrix, I	NS=Maske	d Sand Grains.	2	_ocation: PL=Pore Linin	g, M=Matrix.		
Hydric Soil	s Indicators:						Indicators for Probl	ematic Hydric Soils <sup>3</sup> :		
Histoso	ol (A1)		Sandy	Gleyed Ma	trix (S4)		Coast Prairie Re	edox (A16)		
Histic E	Epipedon (A2)		Sandy	Redox (S5	)		Dark Surface (S	7)		
Black H	listic (A3)		Strippe	d Matrix (S	6)	Iron-Manganese Masses (F12)				
Hydrog	en Sulfide (A4)		Loamy	Mucky Min	neral (F1)	Very Shallow Dark Surface (TF12)				
Stratifie	ed Layers (A5)		Loamy	Gleyed Ma	atrix (F2)		Other (Explain i	n Remarks)		
2 cm M	luck (A10)		X Deplete	ed Matrix (I	F3)					
Deplete	ed Below Dark Surfac	e (A11)	Redox	Dark Surfa	ice (F6)					
Thick D	Dark Surface (A12)	. ,	Deplete	ed Dark Su	Irface (F7)					
Sandy	Mucky Mineral (S1)		 Redox	Depressio	ns (F8)		<sup>3</sup> Indicators of hydrop	hytic vegetation and		
	lucky Peat or Peat (S	3)			( - )		wetland hydrology			
	, ,	- /					unless disturbed or	problematic.		
Restrictive	Layer (if present):									
Type:										
Depth(i	inches):					Hydr	ic Soil Present?	Yes X No		
emarks:										
A positive in	dication of hydric soi	l was obs	erved.							

Wetland Hydrology Indicators:		
Primary Indicators (minimum of one required; check	all that apply)	Secondary Indicators (minimum of two required)
X Surface Water (A1)	Water-Stained Leaves (B9)	Surface Soil Cracks (B6)
High Water Table (A2)	Aquatic Fauna (B13)	Drainage Patterns (B10)
X Saturation (A3)	True Aquatic Plants (B14)	Dry-Season Water Table (C2)
Water Marks (B1)	Hydrogen Sulfide Odor (C1)	Crayfish Burrows (C8)
Sediment Deposits (B2)	Oxidized Rhizospheres on Living Roots (C3)	X Saturation Visible on Aerial Imagery (C9)
Drift Deposits (B3)	Presence of Reduced Iron (C4)	Stunted or Stressed Plants (D1)
Algal Mat or Crust (B4)	Recent Iron Reduction in Tilled Soils (C6)	X Geomorphic Position (D2)
Iron Deposits (B5)	Thin Muck Surface (C7)	FAC-Neutral Test (D5)
Inundation Visible on Aerial Imagery (B7)	Gauge or Well Data (D9)	
Sparsely Vegetated Concave Surface (B8)	Other (Explain in Remarks)	
Field Observations:		
Surface Water Present? Yes X No	Depth (inches): 2	
Water Table Present? Yes No X	Depth (inches): >20	
Saturation Present? Yes X No		Wetland Hydrology Present? Yes X No
(includes capillary fringe)		
Describe Recorded Data (stream gauge, monitoring we	ell, aerial photos, previous inspections), if availa	able:
Remarks:		
A positive indication of wetland hydrology was obser	ved (at least one primary indicator).	
A positive indication of wetland hydrology was obser	ved (at least two secondary indicators).	

Project/Site:	Cader	ce Solar l	Energy Project		County:	U	nion	Sampling Date:	January 1	5, 2020		
Applicant/Owner:			Cadence So	lar		State:	ОН	Sampling Point:	DPA42-	WA28		
Investigator(s):	DC		and	DC	Section,	, Township, I	Range:	York				
Landform (hillslope	e, terrace, etc.):		Ag	griculture		Local re	lief (concave, c	onvex, none):	Concav	e		
Slope (%):	00-05		Lat:	40.39390	Lor	ng:	-83.42062	Datum:	NAD83			
Soil Map Unit Name	e:		We-	Wetzel silty cl	ay loam		Ν	IWI classification:	PE	М		
Are climatic / hydro	logic conditions	s on the si	te typical for this	s time of year?	Yes Yes	X No	(If no,	, explain in Remarks.)				
Are Vegetation	Yes ,Soi	No	,or Hydrology	No signif	ficantly disturb	bed?	Are "Normal	Circumstances" present?	Yes X	No		
Are Vegetation	<b>No</b> ,Soi	No	,or Hydrology	<u>No</u> natur	ally problema	tic?	(If needed, e	explain any answers in Rem	arks.)			

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

Hydrophytic Vegetation Present? Hydric Soil Present? Wetland Hydrology Present?	Yes _ Yes _ Yes _	X X	No _ No _ No _	x	Is the Sampled Area within a Wetland?	Yes	x	No	
Remarks:					ļ				

This location was determined to be within a wetland despite the lack of dominance of hydrophytic vegetation due to the significant disturbance to the natural

This feature is within an actively cultivated agricultural field. The natural vegetation community has been eliminated via cultivation.

### **VEGETATION - Use scientific names of plants.**

Tree Stratum         (Plot size:	<u>% cover</u>	Dominant Species?	Indicator Status	Dominance Test word Number of Dominant S That Are OBL, FACW, Total Number of Domi	Species or FAC: nant		0	_ (A)
4				Species Across All Str	ata:		1	(B)
5	= Tot	al Cover		Percent of Dominant S That Are OBL, FACW,	or FAC:		0	(A/B)
2				Prevalence Index Wo	rksheet:			
3				Total % Cove			Itiply by:	_
4				OBL species		x 1 =		
5				FACW species	0	x 2 =		_
	= Tot	al Cover		FAC species	0	x 3 =	0	_
Herb Stratum (Plot size: 5 ft. )				FACU species	0	x 4 =	0	_
1. Glycine max	100	Yes	UPL	UPL species	100	x 5 =	500	_
2				Column Totals:	100	(A)	500	(B)
3				Prevalence Index = B/A	4 =	5.00		
4 5.				Hydrophytic Vegetati	ion Indicate	ors:		
				1 - Rapid Test for			on	
6 7				2 - Dominance Te		•	011	
				3 - Prevalence Inc				
•••				4 - Morphological		s <sup>1</sup> (Provid	e sunnortir	n
				data in Remark				9
10	100 = Tot	al Cover		Problematic Hydro		•	'	
<u>Woody Vine Stratum</u> (Plot size: <u>30 ft.</u> 1. <u>None Observed</u>	)			<sup>1</sup> Indicators of hydric so be present, unless dist	il and wetla	and hydrol	ogy must	
2		al Cover		Hydrophytic Vegetation Present?	Y	es	No	<u>x</u>
Remarks:								

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.) Depth Matrix **Redox Features** (inches) Loc<sup>2</sup> Color (moist) % Color (moist) % Texture Type<sup>1</sup> Remarks 10Y<u>R 4/2</u> 0-4 100 10YR 4/1 10YR 4/6 10 С Silty Clay 4-16 90 Μ <sup>1</sup>Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains <sup>2</sup>Location: PL=Pore Lining, M=Matrix. Hydric Soils Indicators: Indicators for Problematic Hydric Soils<sup>3</sup>: Histosol (A1) Sandy Gleyed Matrix (S4) Coast Prairie Redox (A16) Dark Surface (S7) Histic Epipedon (A2) Sandy Redox (S5) Stripped Matrix (S6) Black Histic (A3) Iron-Manganese Masses (F12) Very Shallow Dark Surface (TF12) Hydrogen Sulfide (A4) Loamy Mucky Mineral (F1) Loamy Gleyed Matrix (F2) Other (Explain in Remarks) Stratified Layers (A5) 2 cm Muck (A10) X Depleted Matrix (F3) Depleted Below Dark Surface (A11) Redox Dark Surface (F6) Thick Dark Surface (A12) Depleted Dark Surface (F7) Sandy Mucky Mineral (S1) Redox Depressions (F8) <sup>3</sup>Indicators of hydrophytic vegetation and wetland hydrology must be present, 5 cm Mucky Peat or Peat (S3) unless disturbed or problematic. Restrictive Layer (if present): Type: Depth(inches): Hydric Soil Present? Yes X No Remarks: A positive indication of hydric soil was observed.

## HYDROLOGY

Wetland Hydrology Indicators:				
Primary Indicators (minimum of one required; check	ck all that apply)	Secondary Indicators (minimum of two required)		
Surface Water (A1)	Water-Stained Leaves (B9)	Surface Soil Cracks (B6)		
High Water Table (A2)	Aquatic Fauna (B13)	Drainage Patterns (B10)		
X Saturation (A3)	True Aquatic Plants (B14)	Dry-Season Water Table (C2)		
Water Marks (B1)	Hydrogen Sulfide Odor (C1)	Crayfish Burrows (C8)		
Sediment Deposits (B2)	Oxidized Rhizospheres on Living Roots (C3)	X Saturation Visible on Aerial Imagery (C9)		
Drift Deposits (B3)	Presence of Reduced Iron (C4)	X 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)	FAC-Neutral Test (D5)		
Inundation Visible on Aerial Imagery (B7)	Gauge or Well Data (D9)			
Sparsely Vegetated Concave Surface (B8)	Other (Explain in Remarks)			
Field Observations:				
Surface Water Present? Yes NoX	Depth (inches): N/A			
Water Table Present? Yes NoX	Depth (inches): >20			
Saturation Present? Yes X No	Depth (inches): 0 Wetlan	nd Hydrology Present? Yes X No		
(includes capillary fringe)				
Describe Recorded Data (stream gauge, monitoring	well, aerial photos, previous inspections), if available:			
Remarks:				
A positive indication of wetland hydrology was obs				
A positive indication of wetland hydrology was obs	erved (at least two secondary indicators).			

Project/Site:	Caden	ce Solar Er	nergy Project		County:	Ur	ion	Sampling Date:	January	/ 15, 2020	
Applicant/Owner:			Cadence Sol	ar		State:	OH	Sampling Point:	DPA4	4-W A29	
Investigator(s):	DC	a	and	DC	Section,	Township, I	Range:	Yor			
Landform (hillslope	e, terrace, etc.):		Ag	riculture		Local re	lief (concave, c	onvex, none):	Conca	ave	
Slope (%):	00-05		Lat:	40.39298	Lon	ig:	-83.42198	Datum:	NAD	83	
Soil Map Unit Name	e:		We-	Wetzel silty cl	ay loam		N	IWI classification:	Р	ΈM	
Are climatic / hydro	logic conditions	on the site	e typical for this	time of year?	Yes Y	No	(lf no,	explain in Remarks.)			
Are Vegetation	Yes ,Soil	No,	or Hydrology	No signif	icantly disturb	ed?	Are "Normal	Circumstances" present?	Yes	X No	
Are Vegetation	No_,Soil	No ,	or Hydrology	No natura	ally problemat	ic?	(If needed, e	explain any answers in Rem	arks.)		

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

Hydrophytic Vegetation Present? Hydric Soil Present? Wetland Hydrology Present?	Yes _ Yes _ Yes _	X X	No _ No _ No _	x	Is the Sampled Area within a Wetland?	Yes	x	No	
Remarks:					ļ				

This location was determined to be within a wetland despite the lack of dominance of hydrophytic vegetation due to the significant disturbance to the natural

This feature is within an actively cultivated agricultural field. The natural vegetation community has been eliminated via cultivation.

### **VEGETATION - Use scientific names of plants.**

Tree Stratum         (Plot size:	<u>% cover</u>	Dominant Species?	Indicator Status	Dominance Test word Number of Dominant S That Are OBL, FACW, Total Number of Domi	Species or FAC: nant		0	_ (A)
4				Species Across All Str	ata:		1	(B)
5	= Tot	al Cover		Percent of Dominant S That Are OBL, FACW,	or FAC:		0	(A/B)
2				Prevalence Index Wo	rksheet:			
3				Total % Cove			Itiply by:	_
4				OBL species		x 1 =		
5				FACW species	0	x 2 =		_
	= Tot	al Cover		FAC species	0	x 3 =	0	_
Herb Stratum (Plot size: 5 ft. )				FACU species	0	x 4 =	0	_
1. Glycine max	100	Yes	UPL	UPL species	100	x 5 =	500	_
2				Column Totals:	100	(A)	500	(B)
3				Prevalence Index = B/A	4 =	5.00		
4 5.				Hydrophytic Vegetati	ion Indicate	ors:		
				1 - Rapid Test for			on	
6 7				2 - Dominance Te		•	011	
				3 - Prevalence Inc				
•••				4 - Morphological		s <sup>1</sup> (Provid	e sunnortir	n
				data in Remark				9
10	100 = Tot	al Cover		Problematic Hydro		•	'	
<u>Woody Vine Stratum</u> (Plot size: <u>30 ft.</u> 1. <u>None Observed</u>	)			<sup>1</sup> Indicators of hydric so be present, unless dist	il and wetla	and hydrol	ogy must	
2		al Cover		Hydrophytic Vegetation Present?	Y	es	No	<u>x</u>
Remarks:								

Depth Matrix		Redox	Features					
inches) Color (moist) %	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>	Texture	Remarks		
0-4 10YR 4/2 100	-	-	-	-	-			
4-16 10YR 4/1 90	10YR 4/6	10	С	М	Silty Clay			
					<u> </u>			
		_						
		_						
Type: C=Concentration, D=Depletion, RM=I	Reduced Matrix, I	//S=Maske	d Sand Grains.	²L	_ocation: PL=Pore Lining	, M=Matrix.		
Hydric Soils Indicators:					Indicators for Proble	matic Hydric Soils <sup>3</sup> :		
Histosol (A1)	Sandy	Gleyed Mat	trix (S4)		Coast Prairie Rec	dox (A16)		
Histic Epipedon (A2)	Sandy	Redox (S5)	)		Dark Surface (S7	)		
Black Histic (A3)	Strippe	d Matrix (S	6)		Iron-Manganese I	Masses (F12)		
Hydrogen Sulfide (A4)Loamy Mucky Mineral (F1)Very Shallow Darl					k Surface (TF12)			
Stratified Layers (A5)	Loamy	Gleyed Ma	ıtrix (F2)	Other (Explain in Remarks)				
2 cm Muck (A10)	X Deplete	ed Matrix (F	-3)					
Depleted Below Dark Surface (A11)	Redox	Dark Surfa	ce (F6)					
Thick Dark Surface (A12)	Deplete	ed Dark Su	rface (F7)					
Sandy Mucky Mineral (S1)	Redox	Depressior	ns (F8)		<sup>3</sup> Indicators of hydrophy	ytic vegetation and		
5 cm Mucky Peat or Peat (S3)					wetland hydrology m	ust be present,		
					unless disturbed or p	problematic.		
Restrictive Layer (if present):								
Туре:								
Depth(inches):				Hydri	ic Soil Present?	Yes X No		
marks:								
A positive indication of hydric soil was observ	ved.							
DROLOGY								
etland Hydrology Indicators:								

Primary Indicators (minimum of one required; chec	k all that apply)	Secondary Indicators (minimum of two required)
Surface Water (A1)	Water-Stained Leaves (B9)	Surface Soil Cracks (B6)
High Water Table (A2)	Aquatic Fauna (B13)	Drainage Patterns (B10)
X Saturation (A3)	True Aquatic Plants (B14)	Dry-Season Water Table (C2)
Water Marks (B1)	Hydrogen Sulfide Odor (C1)	Crayfish Burrows (C8)
Sediment Deposits (B2)	Oxidized Rhizospheres on Living Roots (C3)	X Saturation Visible on Aerial Imagery (C9)
Drift Deposits (B3)	Presence of Reduced Iron (C4)	X 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)	FAC-Neutral Test (D5)
Inundation Visible on Aerial Imagery (B7)	Gauge or Well Data (D9)	
Sparsely Vegetated Concave Surface (B8)	Other (Explain in Remarks)	
Field Observations:		
Surface Water Present? Yes No X	Depth (inches): N/A	
Water Table Present? Yes No X	Depth (inches): >20	
Saturation Present? Yes X No	Depth (inches): 0 Wetla	and Hydrology Present? Yes X No
(includes capillary fringe)		
Describe Recorded Data (stream gauge, monitoring v	vell, aerial photos, previous inspections), if available:	
Remarks:		
A positive indication of wetland hydrology was obse	erved (at least one primary indicator).	
A positive indication of wetland hydrology was obse	erved (at least two secondary indicators).	

Project/Site:	Ca	dence S	Solar Energy Project		County:	U	nion	Sampling Date:	January 15,	2020
Applicant/Owner:			Cadence S	olar		State:	ОН	Sampling Point:	DPA45-W	A30
Investigator(s):	C	C	and	DC	Section, T	ownship,	Range:	York		
Landform (hillslope	e, terrace, et	c.):	A	griculture		Local re	lief (concave, c	onvex, none):	Concave	
Slope (%):	00	-05	Lat:	40.38966	Long	:	-83.42435	Datum:	NAD83	
Soil Map Unit Name	e:		We	- Wetzel silty c	lay loam		N	IWI classification:	PEM	
Are climatic / hydro	ologic condit	ions on	the site typical for th	is time of year	Yes X	No	(If no,	explain in Remarks.)		
Are Vegetation	Yes ,	Soil I	or Hydrology	No signi	ficantly disturbe	d?	Are "Normal	Circumstances" present?	Yes X	No
Are Vegetation	<u>No</u> ,	Soil I	No, or Hydrology	No natu	ally problematic	?	(If needed, e	explain any answers in Rem	arks.)	

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

Hydrophytic Vegetation Present? Hydric Soil Present?	Yes Yes	x	No _ No _	<u>x</u>	Is the Sampled Area		¥.		
Wetland Hydrology Present?	Yes	Х	No		within a Wetland?	Yes	X	No	
Remarks:									

This location was determined to be within a wetland despite the lack of dominance of hydrophytic vegetation due to the significant disturbance to the natural

This feature is within an actively cultivated agricultural field. The natural vegetation communicty has been eliminated via cultivation.

### **VEGETATION - Use scientific names of plants.**

Tree Stratum         (Plot size:	<u>% cover</u>	Dominant Species?	Indicator Status	Dominance Test word Number of Dominant S That Are OBL, FACW, Total Number of Domi	Species or FAC: nant		0	_ (A)
4				Species Across All Str	ata:		1	(B)
5	= Tot	al Cover		Percent of Dominant S That Are OBL, FACW,	or FAC:		0	(A/B)
2				Prevalence Index Wo	rksheet:			
3				Total % Cove	er of:	Mu	Iltiply by:	_
4.				OBL species	0	x1=		
5				FACW species	0	x 2 =	0	_
	= Tot	al Cover		FAC species	0	x 3 =	0	_
Herb Stratum (Plot size: 5 ft. )				FACU species	0	x 4 =	0	_
1. Glycine max	100	Yes	UPL	UPL species	100	x 5 =	500	_
2				Column Totals:	100	(A)	500	(B)
3				Prevalence Index = B/A	4 =	5.00		
4				Hydrophytic Vegetati	ion Indicat	ors:		
5				1 - Rapid Test for			<b>~</b>	
···				2 - Dominance Te		•	on	
7				3 - Prevalence Inc				
				4 - Morphological				~
9				data in Remark				iy
10		-1.0		Problematic Hydro		•	'	
Woody Vine Stratum         (Plot size:30 ft30 ft	<u>100</u> = Tot )	al Cover		<sup>1</sup> Indicators of hydric so be present, unless dist	il and wetla	and hydrol	ogy must	
2		al Cover		Hydrophytic Vegetation Present?	Y	es	No	<u>x</u>
Remarks:								

Depth	Matrix			Redox	Features				
inches)	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>	Texture	Remarks	
0-4	10YR 4/2	100		_		-	-		
4-16	10YR 4/1	90	10YR 4/6	10	С	M	Silty Clay		
Type: C=0	Concentration, D=Dep	letion, RN	/=Reduced Matrix, I	//S=Maske	d Sand Grains.	²L	.ocation: PL=Pore Lining,	M=Matrix.	
lydric Soi	Is Indicators:						Indicators for Problem		
Histos	ol (A1)		Sandy	Gleyed Ma	trix (S4)		Coast Prairie Red	ox (A16)	
Histic I	Epipedon (A2)		Sandy	Redox (S5	)		Dark Surface (S7)	)	
Black Histic (A3)		Stripped Matrix (S6)				Iron-Manganese Masses (F12)			
Hydrogen Sulfide (A4)		Loamy Mucky Mineral (F1)			Very Shallow Dark Surface (TF12)				
Stratifi	ed Layers (A5)		Loamy	Gleyed Ma	atrix (F2)		Other (Explain in I	Remarks)	
2 cm N	/luck (A10)		X Deplete	ed Matrix (I	F3)				
Deplet	ed Below Dark Surfac	e (A11)	Redox	Dark Surfa	ice (F6)				
Thick I	Dark Surface (A12)		Deplete	ed Dark Su	ırface (F7)				
Sandy	Mucky Mineral (S1)		Redox	Depressio	ns (F8)		<sup>3</sup> Indicators of hydrophy	tic vegetation and	
5 cm Mucky Peat or Peat (S3)						wetland hydrology mu	ust be present,		
							unless disturbed or p	roblematic.	
lestrictive	Layer (if present):								
Type:									
Depth(	inches):					Hydri	c Soil Present?	Yes X No	
marks:						1			
ositive ir	ndication of hydric soil	l was obs	erved.						
DROLO	GY								
tland Hvd	rology Indicators:								

Primary Indicators (minimum of one required; chee	k all that apply)	Secondary Indicators (minimum of two required)		
Surface Water (A1)	Water-Stained Leaves (B9)	Surface Soil Cracks (B6)		
High Water Table (A2)	Aquatic Fauna (B13)	Drainage Patterns (B10)		
X Saturation (A3)	True Aquatic Plants (B14)	Dry-Season Water Table (C2)		
Water Marks (B1)	Hydrogen Sulfide Odor (C1)	Crayfish Burrows (C8)		
Sediment Deposits (B2)	Oxidized Rhizospheres on Living Roots (C3)	X Saturation Visible on Aerial Imagery (C9)		
Drift Deposits (B3)	Presence of Reduced Iron (C4)	X 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)	FAC-Neutral Test (D5)		
Inundation Visible on Aerial Imagery (B7)	Gauge or Well Data (D9)			
Sparsely Vegetated Concave Surface (B8)	Other (Explain in Remarks)			
Field Observations:				
Surface Water Present? Yes No	Depth (inches): N/A			
Water Table Present? Yes No	Depth (inches): >20			
Saturation Present? Yes X No	Depth (inches): 0 Wet	tland Hydrology Present? Yes X No		
(includes capillary fringe)				
Describe Recorded Data (stream gauge, monitoring	well, aerial photos, previous inspections), if available:	:		
Remarks:				
A positive indication of wetland hydrology was obs	erved (at least one primary indicator).			
A positive indication of wetland hydrology was obs				

Project/Site:	Cade	nce Solar	Energy Project		County:	U	nion	Sampling Date:	January 15	, 2020
Applicant/Owner:			Cadence So	lar		State:	ОН	Sampling Point:	DPA47-W	/A31
Investigator(s):	DC		and	DC	Section,	Township, I	Range:	York	k	
Landform (hillslope	, terrace, etc.)		Ag	griculture		Local re	lief (concave, c	onvex, none):	Concave	
Slope (%):	00-05	5	Lat:	40.39002	Long	g:	-83.42611	Datum:	NAD83	
Soil Map Unit Name	e:		We-	Wetzel silty c	lay loam		N	IWI classification:	PEM	
Are climatic / hydro	logic condition	s on the	site typical for this	s time of year	? Yes X	No	(If no,	, explain in Remarks.)		
Are Vegetation	Yes ,So	il No	,or Hydrology	No signi	ficantly disturbe	ed?	Are "Normal	Circumstances" present?	Yes X	No
Are Vegetation	No ,So	il No	,or Hydrology	<u>No</u> natur	ally problemati	c?	(If needed, e	explain any answers in Rem	arks.)	

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

Hydrophytic Vegetation Present? Hydric Soil Present? Wetland Hydrology Present?	Yes _ Yes _ Yes _	X X	No _ No _ No _	x	Is the Sampled Area within a Wetland?	Yes	x	No	
Remarks:					ļ				

This location was determined to be within a wetland despite the lack of dominance of hydrophytic vegetation due to the significant disturbance to the natural

This feature is within an actively cultivated agricultural field. The natural vegetation community has been eliminated via cultivation.

#### **VEGETATION - Use scientific names of plants.**

	Absolute Dominant	Indicator	Dominance Test wor	rksheet:			
Tree Stratum (Plot size: 30 ft. )	% cover Species?	Status	Number of Dominant	Species			
1. None Observed			That Are OBL, FACW			0	(A)
2.			,				
3			Total Number of Dom	inant			
4			Species Across All St			1	(B)
F							(2)
5	= Total Cover		Percent of Dominant S	Province			
Sapling/Shrub Stratum (Plot size: 15 ft.			That Are OBL, FACW			0	(A/B)
			That Are Obl, FACW	, OFFAC.		U	(AVD)
			Prevalence Index Wo	orkshoot.			
2							
3		. <u> </u>	Total % Cov			ultiply by:	
4		·	OBL species	0			
5			FACW species	0	x 2 =	0	
	= Total Cover		FAC species	0	x 3 =		
Herb Stratum (Plot size: 5 ft. )			FACU species	0	x 4 =	0	
1. Glycine max	100 Yes	UPL	UPL species	100	x 5 =	500	
2			Column Totals:	100	(A)	500	(B)
3			Prevalence Index = B/	A =	5.00		
4							
5			Hydrophytic Vegetat	ion Indicat	ors:		
6			1 - Rapid Test for	r Hydrophyti	c Vegetat	ion	
7			2 - Dominance T	est is >50%			
8			3 - Prevalence In	dex is ≤3.0 <sup>1</sup>			
9.			4 - Morphological	Adaptation	s <sup>1</sup> (Provid	e supporti	ng
10.			data in Remark	ks or on a se	eparate sł	neet)	
	100 = Total Cover		Problematic Hydr	ophytic Veg	etation <sup>1</sup> (I	Explain)	
Woody Vine Stratum (Plot size: 30 ft.			<sup>1</sup> Indicators of hydric so				
1. None Observed			be present, unless dis				
2.							
	= Total Cover		Hydrophytic				
			Vegetation Present?	Y	es	No	x
			regetation riesent?				~
Remarks:			1				

pth	Matrix			Redox	x Features			
ches)	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>	Texture	Remarks
0-4	10YR 4/2	100				-		
-16	10YR 4/1	90	10YR 4/6	10	C	M	Silty Clay	
	Concentration, D=Dep Is Indicators:	letion, RIVI	=Reduced Matrix, I	VIS=IVIaske	ed Sand Grains.		Location: PL=Pore Lining Indicators for Proble	
Histos			Sandy	Gloved Mr	riv(94)		Coast Prairie Rec	•
-	Epipedon (A2)			Gleyed Ma Redox (S5			Dark Surface (S7	
-	Histic (A3)			d Matrix (S	-		Iron-Manganese I	
_	jen Sulfide (A4)			Mucky Mir			Very Shallow Dar	
	ed Layers (A5)			Gleyed Ma			Other (Explain in	
_	/uck (A10)		X Deplete	-				(indite)
	ed Below Dark Surfac	e (A11)		Dark Surfa	-			
_	Dark Surface (A12)	( )			urface (F7)			
_	Mucky Mineral (S1)			Depressio			<sup>3</sup> Indicators of hydrophy	/tic vegetation and
5 cm N	lucky Peat or Peat (S	3)		-			wetland hydrology m	ust be present,
							unless disturbed or p	problematic.
strictive	Layer (if present):							
Type:								
21								
• •	inches):					Hydr	ic Soil Present?	Yes <u>X</u> No
Depth(						Hydr	ic Soil Present?	Yes X No
Depth(	inches):	l was obse	erved.			Hydr	ic Soil Present?	Yes <u>X</u> No
Depth( narks:		l was obse	erved.			Hydr	ic Soil Present?	Yes <u>X</u> No
Depth(		l was obse	erved.			Hydr	ic Soil Present?	Yes <u>X</u> No
Depth( narks: positive ir	ndication of hydric soi	I was obse	erved.			Hydr	ic Soil Present?	Yes <u>X</u> No
Depth( narks: positive ir	ndication of hydric soi	l was obse	erved.			Hydr	ic Soil Present?	Yes <u>X</u> No
Depth( aarks: positive ir	ndication of hydric soi	l was obse	erved.			Hydr	ic Soil Present?	Yes <u>X</u> No
Depth( narks: positive in DROLO	ndication of hydric soi					Hydr		Yes X No
Depth( narks: positive ir DROLO land Hydr rimary Ind	ndication of hydric soi GY rology Indicators:		ed; check all that ap		eaves (B9)	Hydr		(minimum of two required)
Depth( narks: positive ir DROLO land Hydr rimary Ind Surface	ndication of hydric soi GY rology Indicators: icators (minimum of c		ed; check all that ap Water-		. ,	Hydr	Secondary Indicators (	(minimum of two required) ks (B6)
Depth( narks: positive ir DROLO land Hyd rimary Ind Surfac High W	GY rology Indicators: icators (minimum of c e Water (A1) /ater Table (A2)		ed; check all that ap Water- Aquatio	Stained Le	313)	Hydr	Secondary Indicators (	(minimum of two required) (ks (B6) s (B10)
Depth( narks: positive ir DROLO land Hydi rimary Ind Surfac High W X Satura	GY rology Indicators: icators (minimum of c e Water (A1) /ater Table (A2)		ed; check all that ap Water- Aquatio True A	Stained Le c Fauna (B quatic Plai	313)	Hydr	Secondary Indicators ( Surface Soil Crac Drainage Patterns	(minimum of two required) iks (B6) s (B10) pr Table (C2)
Depth( narks: positive ir DROLO land Hydi rimary Ind Surfac: High W X Satura Water	GY rology Indicators: icators (minimum of c e Water (A1) /ater Table (A2) tion (A3)		ed; check all that ap Water- Aquatio True A Hydrog	Stained Le Fauna (B quatic Plai en Sulfide	313) nts (B14)		Secondary Indicators ( Surface Soil Crac Drainage Patterns Dry-Season Wate Crayfish Burrows	(minimum of two required) iks (B6) s (B10) pr Table (C2)
Depth( narks: positive ir DROLO land Hydi rimary Ind Surface High W X Satura Water Sedimo	GY rology Indicators: icators (minimum of c e Water (A1) /ater Table (A2) tion (A3) Marks (B1)		ed; check all that ap Water- Aquatio True A Hydrog Oxidize	Stained Le c Fauna (B quatic Plai en Sulfide ed Rhizosp	313) nts (B14) 9 Odor (C1)		Secondary Indicators ( Surface Soil Crac Drainage Patterns Dry-Season Wate Crayfish Burrows	(minimum of two required) ks (B6) s (B10) er Table (C2) (C8) e on Aerial Imagery (C9)
Depth( narks: positive ir DROLOO Iland Hydu rimary Ind Surfaco Surfaco High W X Satura Water Sedimu Drift Do	GY rology Indicators: icators (minimum of c e Water (A1) /ater Table (A2) tion (A3) Marks (B1) ent Deposits (B2)		ed; check all that ap Water- Aquatio True A Hydrog Oxidize Preser	Stained Le Fauna (B quatic Plai en Sulfide ed Rhizosp ce of Redi	313) nts (B14) 9 Odor (C1) 9 oheres on Living Ro	pots (C3)	Secondary Indicators ( Surface Soil Crac Drainage Patterns Dry-Season Wate Crayfish Burrows X Saturation Visible X Stunted or Stress X Geomorphic Posi	(minimum of two required) ks (B6) s (B10) er Table (C2) (C8) e on Aerial Imagery (C9) ed Plants (D1) tion (D2)
Depth( narks: positive ir DROLO Iland Hydr rimary Ind Surfac Urifac High W X Satura Water Sedimo Drift Do Algal M Iron De	GY rology Indicators: icators (minimum of of e Water (A1) /ater Table (A2) tion (A3) Marks (B1) ent Deposits (B2) eposits (B3) /at or Crust (B4) eposits (B5)	one require	ed; check all that ag Water- Aquatic True A Hydrog Oxidize Preser Recen Thin M	Stained Le Fauna (B quatic Plai en Sulfide ed Rhizosp ce of Redu Iron Redu uck Surfac	813) nts (B14) o Odor (C1) oheres on Living Rouced Iron (C4) uction in Tilled Soil ce (C7)	pots (C3)	Secondary Indicators ( Surface Soil Crac Drainage Patterns Dry-Season Wate Crayfish Burrows X Saturation Visible X Stunted or Stress	(minimum of two required) ks (B6) s (B10) er Table (C2) (C8) e on Aerial Imagery (C9) ed Plants (D1) tion (D2)
Depth( narks: . positive ir DROLO CROLO Itland Hydr trimary Ind Surfac Surfac Urifac Water Sedime Drift De Algal M Iron De Inunda	GY rology Indicators: icators (minimum of of e Water (A1) /ater Table (A2) tion (A3) Marks (B1) ent Deposits (B2) eposits (B3) /at or Crust (B4) eposits (B5) tion Visible on Aerial	one require	ed; check all that ag Water- Aquatic True A Hydrog Oxidize Preser Recen Thin M 87)Gauge	Stained Le Fauna (B quatic Plai en Sulfide ed Rhizosp ce of Redi i Iron Redu	813) nts (B14) o Odor (C1) oheres on Living Rouced Iron (C4) uction in Tilled Soil ce (C7)	pots (C3)	Secondary Indicators ( Surface Soil Crac Drainage Patterns Dry-Season Wate Crayfish Burrows X Saturation Visible X Stunted or Stress X Geomorphic Posi	(minimum of two required) ks (B6) s (B10) er Table (C2) (C8) e on Aerial Imagery (C9) ed Plants (D1) tion (D2)
Depth( narks: . positive ir DROLO CROLO Itland Hydr trimary Ind Surfac Surfac Urifac Water Sedime Drift De Algal M Iron De Inunda	GY rology Indicators: icators (minimum of of e Water (A1) /ater Table (A2) tion (A3) Marks (B1) ent Deposits (B2) eposits (B3) /at or Crust (B4) eposits (B5)	one require	ed; check all that ag Water- Aquatic True A Hydrog Oxidize Preser Recen Thin M 87)Gauge	Stained Le Fauna (B quatic Plan en Sulfide ed Rhizosp ce of Redu I Iron Redu uck Surfac or Well D	813) nts (B14) o Odor (C1) oheres on Living Rouced Iron (C4) uction in Tilled Soil ce (C7)	pots (C3)	Secondary Indicators ( Surface Soil Crac Drainage Patterns Dry-Season Wate Crayfish Burrows X Saturation Visible X Stunted or Stress X Geomorphic Posi	(minimum of two required) ks (B6) s (B10) er Table (C2) (C8) e on Aerial Imagery (C9) ed Plants (D1) tion (D2)
Depth( narks: positive ir positive ir DROLO CROLO CROLO CROLO CROLO CROLO Surfac Surfac Urany Ind Surfac Sedimo Drift Do Algal M Iron De Inunda Sparse	GY rology Indicators: icators (minimum of c e Water (A1) /ater Table (A2) tion (A3) Marks (B1) ent Deposits (B2) eposits (B3) /lat or Crust (B4) eposits (B5) tion Visible on Aerial ely Vegetated Concave	one require	ed; check all that ag Water- Aquatic True A Hydrog Oxidize Preser Recen Thin M 87)Gauge	Stained Le Fauna (B quatic Plan en Sulfide ed Rhizosp ce of Redu I Iron Redu uck Surfac or Well D	813) nts (B14) o Odor (C1) oheres on Living Rouced Iron (C4) uction in Tilled Soil ce (C7) ata (D9)	pots (C3)	Secondary Indicators ( Surface Soil Crac Drainage Patterns Dry-Season Wate Crayfish Burrows X Saturation Visible X Stunted or Stress X Geomorphic Posi	(minimum of two required) ks (B6) s (B10) er Table (C2) (C8) e on Aerial Imagery (C9) ed Plants (D1) tion (D2)
Depth( narks: .positive ir DROLOO tland Hyd tiand Hyd Surfac 	GY rology Indicators: icators (minimum of c e Water (A1) / ater Table (A2) tion (A3) Marks (B1) ent Deposits (B2) eposits (B3) Mat or Crust (B4) eposits (B5) tion Visible on Aerial ely Vegetated Concave rvations:	one require Imagery (E e Surface (	ed; check all that ap Water- Aquatio True A Hydrog Oxidize Preser Recent Thin M 37) Gauge (B8) Other (	Stained Le Fauna (E quatic Plan en Sulfide ed Rhizosp ce of Redu Iron Redu uck Surfac or Well D Explain in	313) ints (B14) codor (C1) oheres on Living Ro uced Iron (C4) uction in Tilled Soil ce (C7) ata (D9) Remarks)	pots (C3)	Secondary Indicators ( Surface Soil Crac Drainage Patterns Dry-Season Wate Crayfish Burrows X Saturation Visible X Stunted or Stress X Geomorphic Posi	(minimum of two required) ks (B6) s (B10) er Table (C2) (C8) e on Aerial Imagery (C9) ed Plants (D1) tion (D2)
Depth( narks: .positive ir .positive ir .positive ir .positive ir .positive ir .positive ir .sedimu 	GY rology Indicators: icators (minimum of c e Water (A1) /ater Table (A2) tion (A3) Marks (B1) ent Deposits (B2) eposits (B3) /lat or Crust (B4) eposits (B5) tion Visible on Aerial ely Vegetated Concave	one require Imagery (E e Surface (	ed; check all that ap Water- Aquatio True A Tydrog Oxidize Preser Receni Thin M 37)Gauge (B8)Other ( 	Stained Le Fauna (B quatic Plan en Sulfide ed Rhizosp ce of Redu I Iron Redu uck Surfac or Well D	313) onts (B14) odor (C1) oheres on Living Rouced Iron (C4) uction in Tilled Soil ce (C7) ata (D9) Remarks) ): <u>N/A</u>	pots (C3)	Secondary Indicators ( Surface Soil Crac Drainage Patterns Dry-Season Wate Crayfish Burrows X Saturation Visible X Stunted or Stress X Geomorphic Posi	(minimum of two required) ks (B6) s (B10) er Table (C2) (C8) e on Aerial Imagery (C9) ed Plants (D1) tion (D2)

Remarks:

A positive indication of wetland hydrology was observed (at least one primary indicator).

A positive indication of wetland hydrology was observed (at least two secondary indicators).

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

(includes capillary fringe)

Project/Site:	Cader	ice Solar	Energy Project		County:	U	nion	Sampling Date:	Janua	ary 15,	2020	
Applicant/Owner:			Cadence So	lar		State:	ОН	Sampling Point:	DPA	49-WA	A32	
Investigator(s):	DC		and	DC	Section,	Township, I	Range:	Yorl	ĸ			
Landform (hillslope	e, terrace, etc.):		Ag	griculture		Local re	lief (concave, c	onvex, none):	Cor	ncave		
Slope (%):	00-05		Lat:	40.38996	Lon	g:	-83.42729	Datum:	NA	D83		
Soil Map Unit Name	e:		We-	Wetzel silty c	lay loam		N	IWI classification:		PEM		
Are climatic / hydro	logic condition	s on the s	ite typical for this	s time of year?	Yes X	No	(lf no,	explain in Remarks.)				
Are Vegetation	Yes ,Soi	No	or Hydrology	No signi	ficantly disturb	ed?	Are "Normal	Circumstances" present?	Yes	Х	No	
Are Vegetation	<b>No</b> ,Soi	No	,or Hydrology	<u>No</u> natur	ally problemat	c?	(If needed, e	explain any answers in Rem	arks.)			

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

Hydrophytic Vegetation Present? Hydric Soil Present? Wetland Hydrology Present?	Yes _ Yes _ Yes _	X X	No _ No _ No _	x	Is the Sampled Area within a Wetland?	Yes	x	No	
Remarks:					ļ				

This location was determined to be within a wetland despite the lack of dominance of hydrophytic vegetation due to the significant disturbance to the natural

This feature is within an actively cultivated agricultural field. The natural vegetation community has been eliminated via cultivation.

### **VEGETATION - Use scientific names of plants.**

Tree Stratum         (Plot size:	<u>% cover</u>	Dominant Species?	Indicator Status	Dominance Test word Number of Dominant S That Are OBL, FACW, Total Number of Domi	Species or FAC: nant		0	_ (A)
4				Species Across All Str	ata:		1	(B)
5	= Tot	al Cover		Percent of Dominant S That Are OBL, FACW,	or FAC:		0	(A/B)
2				Prevalence Index Wo	rksheet:			
3				Total % Cove			Itiply by:	_
4				OBL species		x 1 =		
5				FACW species	0	x 2 =		_
	= Tot	al Cover		FAC species	0	x 3 =	0	_
Herb Stratum (Plot size: 5 ft. )				FACU species	0	x 4 =	0	_
1. Glycine max	100	Yes	UPL	UPL species	100	x 5 =	500	_
2				Column Totals:	100	(A)	500	(B)
3				Prevalence Index = B/A	4 =	5.00		
4 5.				Hydrophytic Vegetati	ion Indicate	ors:		
				1 - Rapid Test for			on	
6 7				2 - Dominance Te		•	011	
				3 - Prevalence Inc				
•••				4 - Morphological		s <sup>1</sup> (Provid	e sunnortir	n
				data in Remark				9
10	100 = Tot	al Cover		Problematic Hydro		•	'	
<u>Woody Vine Stratum</u> (Plot size: <u>30 ft.</u> 1. <u>None Observed</u>	)			<sup>1</sup> Indicators of hydric so be present, unless dist	il and wetla	and hydrol	ogy must	
2		al Cover		Hydrophytic Vegetation Present?	Y	es	No	<u>x</u>
Remarks:								

Depth	Matrix			Redox	Features							
(inches)	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>	Texture	Remarks				
0-4	10YR 4/2	100	-	-	-	-	-					
4-16	10YR 4/1	90	10YR 4/6	10	С	М	Silty Clay					
	Concentration, D=Dep	letion, RN	I=Reduced Matrix, N	//S=Maske	d Sand Grains.	<sup>2</sup> L	ocation: PL=Pore Lining,					
Hydric Soil	Is Indicators:						Indicators for Problem	•				
Histos	ol (A1)		Sandy	Gleyed Ma	trix (S4)		Coast Prairie Red	ox (A16)				
Histic I	Epipedon (A2)		Sandy	Redox (S5)	)	Dark Surface (S7)						
Black H	Black Histic (A3)Stripped Matrix (S6)						Iron-Manganese N	lasses (F12)				
Hydrog	Hydrogen Sulfide (A4) Loamy Mucky Mineral (F1)						Very Shallow Dark	Surface (TF12)				
Stratifi	ed Layers (A5)		Loamy	Gleyed Ma	atrix (F2)		Other (Explain in F	Remarks)				
2 cm M	/luck (A10)		X Deplete	ed Matrix (F	=3)							
Deplet	ed Below Dark Surfac	e (A11)	Redox	Dark Surfa	ce (F6)							
Thick [	Dark Surface (A12)		Deplete	ed Dark Su	rface (F7)							
Sandy	Mucky Mineral (S1)		Redox	Depression	ns (F8)		<sup>3</sup> Indicators of hydrophy	tic vegetation and				
5 cm N	lucky Peat or Peat (S	3)				wetland hydrology must be present,						
							unless disturbed or p	roblematic.				
Restrictive	Layer (if present):											
Туре:												
Depth(	inches):					Hydri	c Soil Present?	Yes X No				
Remarks:												
A positive ir	ndication of hydric soi	was obse	erved.									

Primary Indicators (minimum of one required; check all that apply)       Secondary Indicators (minimum of two required)         Surface Water (A1)       Water-Stained Leaves (B9)       Surface Soil Cracks (B6)         High Water Table (A2)       Aquatic Fauna (B13)       Drainage Patterns (B10)         X Saturation (A3)       True Aquatic Plants (B14)       Dry-Season Water Table (C2)         Water Marks (B1)       Hydrogen Sulfide Odor (C1)       Crayfish Burrows (C8)         Sediment Deposits (B2)       Oxidized Rhizospheres on Living Roots (C3)       Saturation Visible on Aerial Imagery (C9)
High Water Table (A2)       Aquatic Fauna (B13)       Drainage Patterns (B10)         X Saturation (A3)       True Aquatic Plants (B14)       Dry-Season Water Table (C2)         Water Marks (B1)       Hydrogen Sulfide Odor (C1)       Crayfish Burrows (C8)         Sediment Deposits (B2)       Oxidized Rhizospheres on Living Roots (C3)       Saturation Visible on Aerial Imagery (C9)
X       Saturation (A3)       True Aquatic Plants (B14)       Dry-Season Water Table (C2)         Water Marks (B1)       Hydrogen Sulfide Odor (C1)       Crayfish Burrows (C8)         Sediment Deposits (B2)       Oxidized Rhizospheres on Living Roots (C3)       Saturation Visible on Aerial Imagery (C9)
Water Marks (B1)       Hydrogen Sulfide Odor (C1)       Crayfish Burrows (C8)         Sediment Deposits (B2)       Oxidized Rhizospheres on Living Roots (C3)       Saturation Visible on Aerial Imagery (C9)
Sediment Deposits (B2) Oxidized Rhizospheres on Living Roots (C3) Saturation Visible on Aerial Imagery (C9)
Drift Deposits (B3) Presence of Reduced Iron (C4) Stunted or Stressed Plants (D1)
Algal Mat or Crust (B4) Recent Iron Reduction in Tilled Soils (C6) Geomorphic Position (D2)
Iron Deposits (B5) Thin Muck Surface (C7) FAC-Neutral Test (D5)
Inundation Visible on Aerial Imagery (B7) Gauge or Well Data (D9)
Sparsely Vegetated Concave Surface (B8) Other (Explain in Remarks)
Field Observations:
Surface Water Present? Yes No _ X Depth (inches):N/A
Water Table Present? Yes No _ X Depth (inches): <b>&gt;20</b>
Saturation Present? Yes X No Depth (inches): 0 Wetland Hydrology Present? Yes X No
(includes capillary fringe)
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:
Remarks:
A positive indication of wetland hydrology was observed (at least one primary indicator).

Project/Site:	Caden	ce Solar En	ergy Project		County:	Ur	ion	Sampling Date:	January	/ 15, 2020	0
Applicant/Owner:			Cadence Sol	ar		State:	ОН	Sampling Point:	DPA5	0-WA33	
Investigator(s):	DC	ar	nd	DC	Section,	Township, F	Range:	Yor			
Landform (hillslope	e, terrace, etc.):		Ag	riculture		Local re	lief (concave, c	onvex, none):	Conc	ave	
Slope (%):	00-05		Lat:	40.39331	Lor	ng:	-83.44452	Datum:	NAD	83	
Soil Map Unit Name	e:		We-V	Vetzel silty cla	ay loam		N	IWI classification:	F	ΈM	
Are climatic / hydro	logic conditions	on the site	typical for this	time of year?	Yes	K No	(lf no,	explain in Remarks.)			
Are Vegetation	Yes ,Soil	<b>No</b> ,o	r Hydrology	No signifi	cantly disturb	ed?	Are "Normal	Circumstances" present?	Yes	X No	)
Are Vegetation	No_,Soil	<b>No</b> ,0	or Hydrology	No natura	ally problemat	tic?	(If needed, e	xplain any answers in Rem	arks.)		

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

Hydrophytic Vegetation Present? Hydric Soil Present? Wetland Hydrology Present?	Yes _ Yes _ Yes _	X X	No _ No _ No _	x	Is the Sampled Area within a Wetland?	Yes	x	No	
Remarks:					ļ				

This location was determined to be within a wetland despite the lack of dominance of hydrophytic vegetation due to the significant disturbance to the natural

This feature is within an actively cultivated agricultural field. The natural vegetation community has been eliminated via cultivation.

#### **VEGETATION - Use scientific names of plants.**

Tree Stratum         (Plot size:	<u>% cover</u>	Dominant Species?	Indicator Status	Dominance Test word Number of Dominant S That Are OBL, FACW, Total Number of Domi	Species or FAC: nant		0	_ (A)
4				Species Across All Str	ata:		1	(B)
5	= Tot	al Cover		Percent of Dominant S That Are OBL, FACW,	or FAC:		0	(A/B)
2				Prevalence Index Wo	rksheet:			
3				Total % Cove			Itiply by:	_
4				OBL species		x 1 =		
5				FACW species	0	x 2 =		_
	= Tot	al Cover		FAC species	0	x 3 =	0	_
Herb Stratum (Plot size: 5 ft. )				FACU species	0	x 4 =	0	_
1. Glycine max	100	Yes	UPL	UPL species	100	x 5 =	500	_
2				Column Totals:	100	(A)	500	(B)
3				Prevalence Index = B/A	4 =	5.00		
4 5.				Hydrophytic Vegetati	ion Indicate	ors:		
				1 - Rapid Test for			on	
6 7				2 - Dominance Te		•	011	
				3 - Prevalence Inc				
•••				4 - Morphological		s <sup>1</sup> (Provid	e sunnortir	n
				data in Remark				9
10	100 = Tot	al Cover		Problematic Hydro		•	'	
<u>Woody Vine Stratum</u> (Plot size: <u>30 ft.</u> 1. <u>None Observed</u>	)			<sup>1</sup> Indicators of hydric so be present, unless dist	il and wetla	and hydrol	ogy must	
2		al Cover		Hydrophytic Vegetation Present?	Y	es	No	<u>x</u>
Remarks:								

Profile Description: (Describe to the depth	needed to docum	ent the indicator o	r confirm the abser	nce of indicators.)					
Depth Matrix		Redox Features							
(inches) Color (moist) %	Color (moist)	% Type <sup>1</sup>	Loc <sup>2</sup>	Texture	Remarks				
0-6 10YR 4/1 100	None			Silty clay					
6-16 10YR 4/1 90	10YR 4/6	10 C	M	M Clay					
<sup>1</sup> Type: C=Concentration, D=Depletion, RM=Re	educed Matrix, MS=	Masked Sand Grain	s. 2L	ocation: PL=Pore Linin	g, M=Matrix.				
Hydric Soils Indicators:					lematic Hydric Soils <sup>3</sup> :				
Histosol (A1)	Sandy Gle		Coast Prairie Re	edox (A16)					
Histic Epipedon (A2)	Sandy Red		Dark Surface (S7)						
Black Histic (A3)	Stripped M		Iron-Manganese	e Masses (F12)					
Hydrogen Sulfide (A4)	Hydrogen Sulfide (A4) Loamy Mucky Mineral (F1)				ark Surface (TF12)				
Stratified Layers (A5)	Loamy Gle	yed Matrix (F2)		Other (Explain in Remarks)					
2 cm Muck (A10)	X Depleted N	/atrix (F3)							
Depleted Below Dark Surface (A11)	Redox Dar	k Surface (F6)							
Thick Dark Surface (A12)	Depleted D	ark Surface (F7)							
Sandy Mucky Mineral (S1)	Redox Dep	pressions (F8)		<sup>3</sup> Indicators of hydrophytic vegetation and					
5 cm Mucky Peat or Peat (S3)				wetland hydrology must be present,					
				unless disturbed or	problematic.				
Restrictive Layer (if present):									
Туре:									
Depth(inches):			Hydrid	c Soil Present?	Yes X No				
Remarks:									
A positive indication of hydric soil was observed	d.								
HYDROLOGY									

Wetland Hydrology Indicators:						
Primary Indicators (minimum of one required; check	all that apply)	Secondary Indicators (minimum of two required)				
Surface Water (A1)	Water-Stained Leaves (B9)	Surface Soil Cracks (B6)				
High Water Table (A2)	Aquatic Fauna (B13)	Drainage Patterns (B10)				
X Saturation (A3)	True Aquatic Plants (B14)	Dry-Season Water Table (C2)				
Water Marks (B1)	Hydrogen Sulfide Odor (C1)	Crayfish Burrows (C8)				
Sediment Deposits (B2)	Oxidized Rhizospheres on Living Roots (C3)	X Saturation Visible on Aerial Imagery (C9)				
Drift Deposits (B3)	Presence of Reduced Iron (C4)	X Stunted or Stressed Plants (D1)				
Algal Mat or Crust (B4)	Algal Mat or Crust (B4) Recent Iron Reduction in Tilled Soils (C6)					
Iron Deposits (B5)	Thin Muck Surface (C7)	FAC-Neutral Test (D5)				
Inundation Visible on Aerial Imagery (B7)	Gauge or Well Data (D9)					
 Sparsely Vegetated Concave Surface (B8)	Other (Explain in Remarks)					
Field Observations:						
Surface Water Present? Yes No X	Depth (inches): N/A					
Water Table Present? Yes No X	Depth (inches): >20					
Saturation Present? Yes X No	Depth (inches): 0 Wet	tland Hydrology Present? Yes X No				
(includes capillary fringe)						
Describe Recorded Data (stream gauge, monitoring w	ell, aerial photos, previous inspections), if available:					
Remarks:						
A positive indication of wetland hydrology was observed	rved (at least one primary indicator).					
A positive indication of wetland hydrology was observed						

Project/Site:	Cade	nce Sola	Energy Project		County:		Un	ion	Sampling Date:	Janu	ary 15,	2020	
Applicant/Owner:			Cadence Sc	olar		S	tate:	ОН	Sampling Point:	DF	A52-W	A34	
Investigator(s):	DC		and	DC	Sectio	n, Towr	nship, R	ange:	York	k			
Landform (hillslope	, terrace, etc.):		A	griculture		L	ocal rel	ief (concave, co	onvex, none):	Co	ncave		
Slope (%):	00-05		Lat:	40.395	21 Lo	ong:		-83.44338	Datum:	Ν	AD83		
Soil Map Unit Name	e:		We-	Wetzel silty	/ clay loam			N	WI classification:		PEM		
Are climatic / hydrol	logic condition	s on the	site typical for thi	s time of ye	ar? Yes_	Х	No	(If no,	explain in Remarks.)				
Are Vegetation	Yes ,So	No	or Hydrology	No sig	nificantly distu	rbed?		Are "Normal	Circumstances" present?	Yes	Х	No	
Are Vegetation	No_,So	No	or Hydrology	<u>No</u> na	turally problem	atic?		(If needed, e	xplain any answers in Rem	arks.)			

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

Hydrophytic Vegetation Present? Hydric Soil Present? Wetland Hydrology Present?	Yes Yes Yes	X X	No _ No _ No _	<u>x</u>	Is the Sampled Area within a Wetland?	Yes	x	No	
Remarks:									

This location was determined to be within a wetland despite the lack of dominance of hydrophytic vegetation due to the significant disturbance to the natural

This feature is wthin an actively cultivated agricultural field. The natural vegetation community has been eliminated via cultivation.

#### **VEGETATION - Use scientific names of plants.**

Tree Stratum         (Plot size:			Dominance Test wor Number of Dominant That Are OBL, FACW Total Number of Dom Species Across All St	Species /, or FAC: iinant		0	(A)
5 <u>Sapling/Shrub Stratum</u> (Plot size: 15 ft. 1. <u>None Observed</u>		er	Percent of Dominant That Are OBL, FACW			0	(A/B)
2			Prevalence Index We	orksheet:			
3			Total % Cov	er of:	Mu	ultiply by:	
4.	<u></u>		OBL species	10		-	
5			FACW species	0	x 2 =	0	
	= Total Cove	er	FAC species	0	x 3 =	0	
Herb Stratum (Plot size: 5 ft. )			FACU species	0	x 4 =	0	
1. Glycine max	90 Yes	UPL	UPL species	90	x 5 =	450	
2. Scirpus atrovirens	10 No	OBL	Column Totals:	100	(A)	460	(B)
3			Prevalence Index = B/	A =	4.60		
4.	= Total Cove		Hydrophytic Vegetat 1 - Rapid Test fo 2 - Dominance T 3 - Prevalence In 4 - Morphologica data in Remar Problematic Hydr <sup>1</sup> Indicators of hydric s be present, unless dis Hydrophytic Vegetation Present?	r Hydrophytii fest is >50% dex is ≤3.0 <sup>1</sup> I Adaptations ks or on a se rophytic Veg oil and wetla sturbed or pr	c Vegetati s <sup>1</sup> (Provid eparate sh letation <sup>1</sup> (f and hydrol roblematic	e supportii neet) Explain) ogy must	
Remarks:							

Profile Description: (Describe to the d	epth needed to doci	ument the	indicator or conf	irm the abser	nce of indicators.)		-				
Depth Matrix		Redox	Features								
(inches) Color (moist) %	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>	Texture	Remarks					
0-7 10YR 4/1 100	None				Silty clay						
7-16 10YR 4/1 90	10YR 4/6	10	С	М	Clay						
<sup>1</sup> Type: C=Concentration, D=Depletion, R	M=Reduced Matrix, N	IS=Maske	d Sand Grains.	<sup>2</sup> L	ocation: PL=Pore Lining						
Hydric Soils Indicators:						ematic Hydric Soils <sup>3</sup> :					
Histosol (A1) Sandy Gleyed Matrix (S4)					Coast Prairie Re						
	Histic Epipedon (A2) Sandy Redox (S5)					Dark Surface (S7)					
	Black Histic (A3) Stripped Matrix (S6)					Masses (F12)					
Hydrogen Sulfide (A4)		Mucky Min	( )	Very Shallow Dark Surface (TF12)							
Stratified Layers (A5)		Gleyed Ma	( )	Other (Explain in Remarks)							
2 cm Muck (A10)	X Deplete										
Depleted Below Dark Surface (A11)		Dark Surfa	. ,								
Thick Dark Surface (A12)	·		rface (F7)								
Sandy Mucky Mineral (S1)	Redox [	Depressio	ns (F8)		<sup>3</sup> Indicators of hydroph						
5 cm Mucky Peat or Peat (S3)					wetland hydrology r	,					
					unless disturbed or	problematic.					
Restrictive Layer (if present):											
Туре:											
Depth(inches):				Hydri	c Soil Present?	Yes X No					
Remarks:							-				
A positive indication of hydric soil was ob	served.										
HYDROLOGY											

Wetland Hydrology Indicators:						
Primary Indicators (minimum of one required; check	all that apply)	Secondary Indicators (minimum of two required)				
Surface Water (A1)	Water-Stained Leaves (B9)	Surface Soil Cracks (B6)				
High Water Table (A2)	Aquatic Fauna (B13)	Drainage Patterns (B10)				
X Saturation (A3)	True Aquatic Plants (B14)	Dry-Season Water Table (C2)				
Water Marks (B1)	Hydrogen Sulfide Odor (C1)	Crayfish Burrows (C8)				
Sediment Deposits (B2)	Oxidized Rhizospheres on Living Roots (C3)	X Saturation Visible on Aerial Imagery (C9)				
Drift Deposits (B3)	Presence of Reduced Iron (C4)	X Stunted or Stressed Plants (D1)				
Algal Mat or Crust (B4)	Algal Mat or Crust (B4) Recent Iron Reduction in Tilled Soils (C6)					
Iron Deposits (B5)	Thin Muck Surface (C7)	FAC-Neutral Test (D5)				
Inundation Visible on Aerial Imagery (B7)	Gauge or Well Data (D9)					
 Sparsely Vegetated Concave Surface (B8)	Other (Explain in Remarks)					
Field Observations:						
Surface Water Present? Yes No X	Depth (inches): N/A					
Water Table Present? Yes No X	Depth (inches): >20					
Saturation Present? Yes X No	Depth (inches): 0 Wet	tland Hydrology Present? Yes X No				
(includes capillary fringe)						
Describe Recorded Data (stream gauge, monitoring w	ell, aerial photos, previous inspections), if available:					
Remarks:						
A positive indication of wetland hydrology was observed	rved (at least one primary indicator).					
A positive indication of wetland hydrology was observed						

Project/Site:		Cadence Solar		County:	Un	ion	Sampling Date:	November 23, 2020	
Applicant/Owner:		C	adence		State:	ОН	Sampling Point:	DPA53_WA35	
Investigator(s):	DC	and	-	Section, To	wnship, R	ange:	Libterty To	ownship	
Landform (hillslope,	terrace, etc.):		Depression		Local reli	ef (concave, cor	nvex, none):	Concave	
Slope (%):	10-15	5 La	40.3481	2 Long:		-83.45920	Datum:	NAD83	
Soil Map Unit Name	e:	Morle	silt loam, 6-12 perc	ent slopes, eroded		N	WI classification:	NA	
Are climatic / hydrol	logic conditions	on the site typical f	r this time of year?	Yes X	No	(If no,	explain in Remarks.)		
Are Vegetation	No_,So	il <b>No</b> ,or Hyd	ology <b>No</b> sigr	nificantly disturbed?		Are "Normal	Circumstances" present?	Yes X No	
Are Vegetation	No ,So	il <b>No</b> ,or Hyd	ology <u>No</u> nati	urally problematic?		(If needed, ex	xplain any answers in Rema	irks.)	

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

Hydrophytic Vegetation Present? Hydric Soil Present? Wetland Hydrology Present?	Yes X Yes X Yes X	No No No	Is the Sampled Area within a Wetland?	Yes X	No	
Remarks: This point was determined to be within a wetland due to the presence of all 3 wetland criteria.						

This wetland is divided by a farm access road and a Co hwy, though connected under each via a culvert.

# **VEGETATION - Use scientific names of plants.**

Tree Stratum (Plot size: <u>30 ft.</u> ) 1. <u>None Observed</u>	Absolute % cover	Dominant Species?	Indicator Status	Dominance Test work Number of Dominant S That Are OBL, FACW, (	pecies		1	(A)
2 3 4				Total Number of Domin Species Across All Stra			1	(B)
5 Sapling/Shrub Stratum (Plot size: 15 ft 1. None Observed	)	Total Cover		Percent of Dominant Sp That Are OBL, FACW, o			100%	(A/B)
2.				Prevalence Index Wor	ksheet:			
3				Total % Cove	er of:	M	ultiply by:	
4.				OBL species	15	x 1 =	15	
5.				FACW species	90	x 2 =	180	
		Total Cover		FAC species	0	x 3 =	0	
Herb Stratum (Plot size: 5 ft. )				FACU species	0	x 4 =	0	_
1. Phalaris arundinacea	90	Yes	FACW	UPL species	0	x 5 =	0	
2. Typha latifolia	10	No	OBL	Column Totals:	105	(A)	195	(B)
3. Scirpus atrovirens	5	No	OBL	Prevalence Index = B/A	=	1.86		
4 5				Hydrophytic Vegetatio				
6				1 - Rapid Test for I		Vegetatio	n	
7				X 2 - Dominance Tes X 3 - Prevalence Inde				
8 9.				4 - Morphological A		Dravida	ournerting	
•••	·			data in Remarks				
10	105 =	Total Cover		Problematic Hydro			,	
<u>Woody Vine Stratum</u> (Plot size: <u>30 ft.</u> 1. <u>None Observed</u>				<sup>1</sup> Indicators of hydric soil be present, unless distu	and wetlan	d hydrolog	. ,	
2	=	Total Cover		Hydrophytic Vegetation Present?	Y	es <u>X</u>	No	

A positive indication of hydrophytic vegetation was observed (>50% of dominant species indexed as OBL, FACW, or FAC).

Depth Matrix		Redox	Features						
nches) Color (moist) %	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>	Texture	Remarks			
0-3 10YR 4/1 100	None				Silt loam				
<u>3-18 10YR 4/1 95</u>	7.5YR	5	C	M	Silt loam				
		_							
Type: C=Concentration, D=Depletion, RM=I Ivdric Soils Indicators:	Reduced Matrix, MS	=Masked S	and Grains.	²L	ocation: PL=Pore Lining,				
					Indicators for Problem	,			
Histosol (A1)		Gleyed Mat	. ,		Coast Prairie Red				
Histic Epipedon (A2)					Dark Surface (S7)				
Black Histic (A3)			,		Iron-Manganese M				
Hydrogen Sulfide (A4)					Very Shallow Dark	( )			
Stratified Layers (A5)	Loamy Gleyed Matrix (F2) X Depleted Matrix (F3)			Other (Explain in F	Remarks)				
2 cm Muck (A10)	·		,						
Depleted Below Dark Surface (A11)		Dark Surfac	. ,						
Thick Dark Surface (A12) Sandy Mucky Mineral (S1)	·	ed Dark Sur	. ,		<sup>3</sup> Indicators of hydrophytic vegetation and				
5 cm Mucky Peat or Peat (S3)	Redox	Depression	S (FO)	<sup>3</sup> Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.					
Restrictive Layer (if present):									
Туре:									
Depth(inches):				Hydri	c Soil Present?	Yes X No			
narks:									
positive indication of hydric soil was observ	ed.								
DROLOGY									

Primary Indicators (minimum of one required; check a	all that apply)	Secondary Indicators (minimum of two required)			
Surface Water (A1)	Water-Stained Leaves (B9)	Surface Soil Cracks (B6)			
High Water Table (A2)	Aquatic Fauna (B13)	Drainage Patterns (B10)			
X Saturation (A3)	True Aquatic Plants (B14)	Dry-Season Water Table (C2)			
Water Marks (B1)	Hydrogen Sulfide Odor (C1)	Crayfish Burrows (C8)			
Sediment Deposits (B2)	Oxidized Rhizospheres on Living Roots (C3)	X Saturation Visible on Aerial Imagery (C9)			
Drift Deposits (B3)	Presence of Reduced Iron (C4)	Stunted or Stressed Plants (D1)			
Algal Mat or Crust (B4)	Recent Iron Reduction in Tilled Soils (C6)	X Geomorphic Position (D2)			
Iron Deposits (B5)	Thin Muck Surface (C7)	FAC-Neutral Test (D5)			
Inundation Visible on Aerial Imagery (B7)					
Sparsely Vegetated Concave Surface (B8)	Other (Explain in Remarks)				
Field Observations:					
Surface Water Present? Yes NoX	Depth (inches): N/A				
Water Table Present? Yes No X	Depth (inches): >20				
Saturation Present? Yes X No	Depth (inches): 3 Wet	tland Hydrology Present? Yes X No			
(includes capillary fringe)					
Describe Recorded Data (stream gauge, monitoring wel	I, aerial photos, previous inspections), if available:				
Remarks:					
A positive indication of wetland hydrology was observ	ed (at least one primary indicator).				
A positive indication of wetland hydrology was observ					

Project/Site:		Co	ounty:	Uni	ion	Sampling Date:	November 23, 2020			
Applicant/Owner:		Cade	nce		State:	ОН	Sampling Point:	DPA55_WA35b		
Investigator(s):	DC	and	-	Section, Township, Range:			Libterty -	Libterty Township		
Landform (hillslope	, terrace, etc.):		Depression		Local reli	ef (concave, cor	nvex, none):	Concave		
Slope (%):	00-05	Lat:	40.34854	Long:		-83.45750	Datum:	NAD83		
Soil Map Unit Name	e:	Blour	it silt loam, 2-4 percer	nt slopes		N	WI classification:	PEM		
Are climatic / hydro	logic conditions or	the site typical for thi	s time of year?	Yes X	No	(If no,	explain in Remarks.)			
Are Vegetation	No ,Soil	No ,or Hydrolog	y <u>No</u> significar	ntly disturbed?		Are "Normal	Circumstances" present?	Yes <u>X</u> No		
Are Vegetation	No ,Soil	No ,or Hydrolog	y <b>No</b> naturally	problematic?		(If needed, ex	xplain any answers in Rem	arks.)		

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

Hydrophytic Vegetation Present? Hydric Soil Present? Wetland Hydrology Present?	Yes X Yes X Yes X	No No No	Is the Sampled Area within a Wetland?	Yes	<u>x</u>	No			
Remarks: This point was determined to be within a wetland due to the presence of all 3 wetland criteria.									

## **VEGETATION - Use scientific names of plants.**

	Absolute	Dominant	Indicator	Dominance Test work	sheet:			
Tree Stratum (Plot size: 30 ft. )	% cover	Species?	Status	Number of Dominant S	pecies			
1. None Observed				That Are OBL, FACW,			1	(A)
2				,,			-	
				Total Number of Domir	ont			
•				Species Across All Stra			1	(B)
4 5.					ata.			(D)
5		1.0						
	<u>0</u> = Tot	al Cover		Percent of Dominant S				
Sapling/Shrub Stratum (Plot size: 15 ft.	)			That Are OBL, FACW,	or FAC:		100%	(A/B)
1. None Observed		<u> </u>		Prevalence Index Wor	rkahaati			
2								
3				Total % Cove	er of:	Mu	ultiply by:	
4.				OBL species	5	x 1 =	5	
5				FACW species	95	x 2 =	190	
	<u>0</u> = Tot	al Cover		FAC species	5	x 3 =	15	
Herb Stratum (Plot size: 5 ft. )				FACU species	0	x 4 =	0	
1. Phalaris arundinacea	95	Yes	FACW	UPL species	0	x 5 =	0	
2. Typha latifolia	5	No	OBL	Column Totals:	105	(A)	210	(B)
3. Poa pratensis	5	No	FAC	Prevalence Index = B/A	4 =	2.00		
4								
5				Hydrophytic Vegetation	on Indicator	s:		
6.				1 - Rapid Test for	Hydrophytic	Venetation	n	
7				X 2 - Dominance Te		, ogetatio		
				X 3 - Prevalence Ind				
8 9.				4 - Morphological		(Drovido	ourporting	
				data in Remark				
10	105 = Tot						,	
		al Cover		Problematic Hydro			. ,	
Woody Vine Stratum (Plot size: 30 ft.	)			<sup>1</sup> Indicators of hydric soi be present, unless dist			y must	
1. None Observed	<u> </u>					Jemaic.		
2								
	<u>    0    </u> = Tot	al Cover		Hydrophytic				
				Vegetation Present?	Y	es <u>X</u>	No	
Remarks:								

A positive indication of hydrophytic vegetation was observed (>50% of dominant species indexed as OBL, FACW, or FAC).

Depth	Matrix			Redo	x Features						
(inches)	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>	Texture	Remarks			
0-3	10YR 4/1	100	None	_			Silt loam				
3-18	10YR 4/1	95	7.5YR	5	С	Μ	Silt loam				
1											
	oncentration, D=Depl s Indicators:	etion, RM=	Reduced Matrix, MS	=Masked S	Sand Grains.	-Lo	ocation: PL=Pore Lining, N Indicators for Problem				
•			Sandy		triv (SA)		Coast Prairie Redo	-			
	Histosol (A1) Sandy Gleyed Matrix (S4) Histic Epipedon (A2) Sandy Redox (S5)						Dark Surface (S7)	x (A10)			
Black Histic (A3) Stripped Matrix (S6)							Iron-Manganese Ma	25565 (F12)			
	en Sulfide (A4)			Mucky Min	•		Surface (TF12)				
	ed Layers (A5)			Gleyed Ma		Other (Explain in Remarks)					
	uck (A10)		X Deplete					,			
	Depleted Below Dark Surface (A11)				ice (F6)						
	ark Surface (A12)	. ,		ed Dark Su							
	Mucky Mineral (S1)		·	Depression	( )		<sup>3</sup> Indicators of hydrophyti	c vegetation and			
5 cm M	ucky Peat or Peat (S3	3)					wetland hydrology must be present,				
							unless disturbed or pro	blematic.			
Restrictive	Layer (if present):										
Type:											
Depth(i	nches):					Hydric	Soil Present?	Yes X No			
marks:	diantian of hydrin and	waa ahaam	and a second								
A positive in	dication of hydric soil	was observ	/eu.								
DROLOG	θY										
etland Hydro	ology Indicators:										
Primary India	cators (minimum of or	ne required	; check all that apply	()			Secondary Indicators (m	iinimum of two required)			
Surface	Water (A1)		Water-	Stained Le	aves (B9)		Surface Soil Crack				
High W	ater Table (A2)		Aquatio	Fauna (B	13)		Drainage Patterns	(B10)			
	ion(A3)			nuatic Plan	(D11)	Drainage Fallenis (BT0)					

Wetland Hydrology Indicators:		
Primary Indicators (minimum of one required; check a	all that apply)	Secondary Indicators (minimum of two required)
Surface Water (A1)	Water-Stained Leaves (B9)	Surface Soil Cracks (B6)
High Water Table (A2)	Aquatic Fauna (B13)	Drainage Patterns (B10)
X Saturation (A3)	True Aquatic Plants (B14)	Dry-Season Water Table (C2)
Water Marks (B1)	Hydrogen Sulfide Odor (C1)	Crayfish Burrows (C8)
Sediment Deposits (B2)	Oxidized Rhizospheres on Living Roots (C3)	X Saturation Visible on Aerial Imagery (C9)
Drift Deposits (B3)	Presence of Reduced Iron (C4)	Stunted or Stressed Plants (D1)
Algal Mat or Crust (B4)	Recent Iron Reduction in Tilled Soils (C6)	X Geomorphic Position (D2)
Iron Deposits (B5)	Thin Muck Surface (C7)	FAC-Neutral Test (D5)
Inundation Visible on Aerial Imagery (B7)	Gauge or Well Data (D9)	
Sparsely Vegetated Concave Surface (B8)	Other (Explain in Remarks)	
Field Observations:		
Surface Water Present? Yes NoX	Depth (inches): N/A	
Water Table Present? Yes No X	Depth (inches): >20	
Saturation Present? Yes X No	Depth (inches): 5	Netland Hydrology Present? Yes X No
(includes capillary fringe)		
Describe Recorded Data (stream gauge, monitoring well	I, aerial photos, previous inspections), if available:	
Remarks:		
A positive indication of wetland hydrology was observ	ed (at least one primary indicator).	
A positive indication of wetland hydrology was observ	ed (at least two secondary indicators).	

Project/Site:		Cadence Solar	Co	ounty:	Uni	on	Sampling Date:	November 23, 2020		
Applicant/Owner:		Cader	ice		State:	ОН	Sampling Point:	DPA56_WA36		
Investigator(s):	DC	and	-	Section, Township, Range: Libter			Libterty T	rty Township		
Landform (hillslope	, terrace, etc.):		Depression		Local reli	ef (concave, co	nvex, none):	Concave		
Slope (%):	00-05	Lat:	40.34846	Long:		-83.45447	Datum:	NAD83		
Soil Map Unit Name	t silt loam, 0-2 percer	nt slopes			WI classification:	PEM				
Are climatic / hydro	logic conditions on	the site typical for thi	s time of year?	Yes X	No	(If no,	explain in Remarks.)			
Are Vegetation	Yes ,Soil	No ,or Hydrolog	y <b>No</b> significar	ntly disturbed?		Are "Normal	Circumstances" present?	Yes X No		
Are Vegetation	No ,Soil	No ,or Hydrolog	y <b>No</b> naturally	problematic?		(If needed, e	xplain any answers in Rema	arks.)		

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

Hudrophytic Vegetation Present?	Yes	No	v				
Hydrophytic Vegetation Present?	res	No	<u> </u>				
Hydric Soil Present?	Yes X	No		Is the Sampled Area			
Wetland Hydrology Present?	Yes X	No		within a Wetland?	Yes	Х	No

Remarks:

This point was determined not to be within a wetland due to the lack of hydrophytic vegetation.

Vegetation community eliminated by agricultural practices. Other indicators indicate a wetland, and historic imagery shows regular soil saturation or stressed/stunted crops.

#### **VEGETATION - Use scientific names of plants.**

	Absolute Dominant	Indicator	Dominance Test work	sheet:			
Tree Stratum (Plot size: 30 ft. )	% cover Species?	Status	Number of Dominant S	pecies			
1. None Observed			That Are OBL, FACW,	or FAC:		0	(A)
2.			, ,				
3			Total Number of Domin	ant			
4		·	Species Across All Stra			1	(B)
5		·					(=)
· · · · · · · · · · · · · · · · · · ·	0 = Total Cover	·	Percent of Dominant S	necies			
Sapling/Shrub Stratum (Plot size: 15 ft.			That Are OBL, FACW,			0	(A/B)
1. None Observed	/					·	()
2			Prevalence Index Wor	ksheet:			
3.			Total % Cove	er of:	M	ultiply by:	
			OBL species		x 1 =		—
4 5		·			x 2 =		
0.	0 = Total Cover	·	FAC species	0	x 2 =		
Herb Stratum (Plot size: 5 ft. )			FACU species	0			
1. Zea mays	100 Yes	UPL	UPL species		x 5 =		
			Column Totals:	100			(B)
2		·	Prevalence Index = B/A			000	(D)
		·		. –	0.00		
4 5		·	Hydrophytic Vegetatio	on Indicator	5:		
		·	1 - Rapid Test for	Hydrophytic	Vegetatio	n	
6		·	2 - Dominance Te		vegetatio		
7.       8.		·	3 - Prevalence Ind				
		·	4 - Morphological		(Provide	supporting	r.
10	·	·	data in Remark				J
10	100 = Total Cover	·	Problematic Hydro			,	
Woody Vine Stratum (Plot size: 30 ft.			<sup>1</sup> Indicators of hydric soi			• •	
1 Nama Observad			be present, unless dist			y musi	
	<u> </u>	·					
2	0 = Total Cover	·					
			Hydrophytic	v		No	v
			Vegetation Present?	Y	es	No	

Veg community eliminated by agricultural practices

Depth Matrix	Redox Features		
inches) Color (moist) %		.oc <sup>2</sup> Texture	Remarks
0-16 10YR 4/1 90		M Clay	
	Reduced Matrix, MS=Masked Sand Grains.	<sup>2</sup> Location: PL=Pore Linin	g, M=Matrix.
lydric Soils Indicators:		Indicators for Prob	lematic Hydric Soils <sup>3</sup> :
Histosol (A1)	Sandy Gleyed Matrix (S4)	Coast Prairie R	edox (A16)
Histic Epipedon (A2)	Sandy Redox (S5)	Dark Surface (S	57)
Black Histic (A3)	Stripped Matrix (S6)	Iron-Manganes	e Masses (F12)
Hydrogen Sulfide (A4)	Loamy Mucky Mineral (F1)	Very Shallow D	ark Surface (TF12)
Stratified Layers (A5)	Loamy Gleyed Matrix (F2)	Other (Explain i	n Remarks)
2 cm Muck (A10)	X Depleted Matrix (F3)		
Depleted Below Dark Surface (A11)	Redox Dark Surface (F6)		
Thick Dark Surface (A12)	Depleted Dark Surface (F7)		
Sandy Mucky Mineral (S1)	Redox Depressions (F8)	<sup>3</sup> Indicators of hydrop	hytic vegetation and
5 cm Mucky Peat or Peat (S3)		wetland hydrology	must be present,
		unless disturbed or	problematic.
Restrictive Layer (if present):			
Туре:			
Depth(inches):		Hydric Soil Present?	Yes X No
marks:			
marks:	ved.		
marks:	ved.		
marks: A positive indication of hydric soil was obser	ved.		
marks: A positive indication of hydric soil was obser	ved.		
marks: A positive indication of hydric soil was obser DROLOGY	ved.		
marks: A positive indication of hydric soil was obser DROLOGY Itland Hydrology Indicators:		Secondary Indicator	s (minimum of two required)
marks: A positive indication of hydric soil was obser DROLOGY tland Hydrology Indicators: Primary Indicators (minimum of one required	l; check all that apply)		s (minimum of two required)
marks: A positive indication of hydric soil was obser DROLOGY tland Hydrology Indicators: Primary Indicators (minimum of one required X_Surface Water (A1)	l; check all that apply) Water-Stained Leaves (B9)	Surface Soil Cr	acks (B6)
marks: A positive indication of hydric soil was obser DROLOGY tland Hydrology Indicators: Primary Indicators (minimum of one required X_Surface Water (A1) High Water Table (A2)	d; check all that apply) Water-Stained Leaves (B9) Aquatic Fauna (B13)	Surface Soil Cr. Drainage Patter	acks (B6) ms (B10)
marks: A positive indication of hydric soil was obser DROLOGY ttland Hydrology Indicators: Primary Indicators (minimum of one required X Surface Water (A1) High Water Table (A2) X Saturation (A3)	t; check all that apply) Water-Stained Leaves (B9) Aquatic Fauna (B13) True Aquatic Plants (B14)	Surface Soil Cr. Drainage Patter Dry-Season Wa	acks (B6) ms (B10) ater Table (C2)
marks: A positive indication of hydric soil was obser DROLOGY tland Hydrology Indicators: Primary Indicators (minimum of one required X_Surface Water (A1) High Water Table (A2) X_Saturation (A3) Water Marks (B1)	t; check all that apply) Water-Stained Leaves (B9) Aquatic Fauna (B13) True Aquatic Plants (B14) Hydrogen Sulfide Odor (C1)	Surface Soil Cr Drainage Patter Dry-Season Wa Crayfish Burrow	acks (B6) rms (B10) ater Table (C2) vs (C8)
marks: A positive indication of hydric soil was obser DROLOGY tland Hydrology Indicators: Primary Indicators (minimum of one required X Surface Water (A1) High Water Table (A2) X Saturation (A3)	t; check all that apply) Water-Stained Leaves (B9) Aquatic Fauna (B13) True Aquatic Plants (B14)	Surface Soil Cr Drainage Patter Dry-Season Wa Crayfish Burrow	acks (B6) ms (B10) ater Table (C2) /s (C8) ble on Aerial Imagery (C9)

•	Stun	lea c	13	sue	SSE

- X Geomorphic Position (D2)
- FAC-Neutral Test (D5)

Field Observations:

Iron Deposits (B5)

X Inundation Visible on Aerial Imagery (B7)

X Sparsely Vegetated Concave Surface (B8)

Surface Water Present? Water Table Present? Saturation Present? (includes capillary fringe)	Yes Yes Yes		No No No	<u>x</u>	Depth (inches): Depth (inches): Depth (inches):	4 >20 0	Wetland Hydrology Present?	Yes_	x	No	
Describe Recorded Data (str	eam gau	uge, mo	nitoring	j well, aeri	ial photos, previous in	nspections), if av	ailable:				
Remarks:											
A positive indication of we	tland hy	drology	was ob	served (a	t least one primary in	dicator).					
A positive indication of we	tland hy	drology	was ob	served (a	t least two secondary	indicators).					
Corn within the wetland b	oundary	was stre	essed a	and less d	ense than that planted	d outside.					

Τ

Thin Muck Surface (C7)

Gauge or Well Data (D9)

Other (Explain in Remarks)

Project/Site:		Cadence Solar	Co	ounty:	Uni	on	Sampling Date:	November 23, 2020	
Applicant/Owner:		Caden	ce		State:	ОН	Sampling Point:	DPA58_WA37	
Investigator(s):	DC	-	Section, Township, Range: Libte			Libterty T	terty Township		
Landform (hillslope	, terrace, etc.):		Depression		Local relie	ef (concave, co	nvex, none):	Concave	
Slope (%):	00-05	Lat:	40.34860	Long:		-83.45132	Datum:	NAD83	
Soil Map Unit Name	Soil Map Unit Name: Blount silt loam, 2-4 perc					1	WI classification:	PFO	
Are climatic / hydro	logic conditions on	the site typical for this	time of year?	Yes X	No	(If no,	explain in Remarks.)		
Are Vegetation	No ,Soil	No ,or Hydrology	No significar	ntly disturbed?		Are "Normal	Circumstances" present?	Yes X No	
Are Vegetation	No ,Soil	No ,or Hydrology	<b>No</b> naturally	problematic?		(If needed, e	xplain any answers in Rema	arks.)	

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

Hydrophytic Vegetation Present? Hydric Soil Present? Wetland Hydrology Present?	Yes X Yes X Yes X	No No No	Is the Sampled Area within a Wetland?	Yes	<u>x</u>	No					
Remarks: This point was determined to be within a wetland due to the presence of all 3 wetland criteria.											

## **VEGETATION - Use scientific names of plants.**

	Absolute	Dominant	Indicator	Dominance Test wor	ksheet:			
Tree Stratum (Plot size: 30 ft. )	% cover	Species?	Status	Number of Dominant S	Species			
1. Quercus palustris	30	Yes	FACW	That Are OBL, FACW,	or FAC:		6	(A)
2. Acer saccharinum	20	Yes	FACW					
3.				Total Number of Domi	nant			
4.				Species Across All Str	ata:		6	(B)
5.								
	50 =	Total Cover		Percent of Dominant S	Species			
Sapling/Shrub Stratum (Plot size: 15 ft.	)			That Are OBL, FACW,	or FAC:		100%	(A/B)
1. Acer rubrum	20	Yes	FAC					
2. Acer saccharinum	10	Yes	FACW	Prevalence Index Wo	rksheet:			
3. Fraxinus pennsylvanica	5	No	FACW	Total % Cov	ver of:	Mu	Iltiply by:	
4.				OBL species	0	x 1 =	0	_
5.				FACW species	115	x 2 =	230	_
	35 =	Total Cover		FAC species	20	x 3 =	60	_
Herb Stratum (Plot size: 5 ft. )				FACU species	0	x 4 =	0	_
1. Carex vulpinoidea	40	Yes	FACW	UPL species	0	x 5 =	0	_
2. Phalaris arundinacea	10	Yes	FACW	Column Totals:	135	(A)	290	(B)
3.				Prevalence Index = B/	A =	2.15		_ ` `
4.								
5.				Hydrophytic Vegetati	on Indicator	s:		
6.				1 - Rapid Test for	Hydrophytic	Vegetatior	n	
7				X 2 - Dominance Te		0		
8				X 3 - Prevalence Inc				
9				4 - Morphological		(Provide	supporting	
10.				data in Remark				
		Total Cover		Problematic Hydr	ophytic Vege	tation <sup>1</sup> (Ex	plain)	
Woody Vine Stratum (Plot size: 30 ft.	)			<sup>1</sup> Indicators of hydric so	1, 0	`	. ,	
1. None Observed	/			be present, unless dist			<i>j</i>	
2		······						
L	0 =	Total Cover		l hadasa ka ti s				
				Hydrophytic Vegetation Present?	Y	es X	No	
				, egetation , soontr		<u></u>		
Remarks:				1				

A positive indication of hydrophytic vegetation was observed (>50% of dominant species indexed as OBL, FACW, or FAC).

Depth	Matrix			Redox	Features			
(inches)	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>	Texture	Remarks
0-5	10YR 3/2	100	None				Clay loam	
5-16	10YR 4/1	90	5YR4/5	10	C	M	Clay	
Type: C=Cc	oncentration, D=Deple		Reduced Matrix MS		and Grains	2		M=Matrix
	Indicators:			- Macked C		L. L.	Indicators for Problem	
Histosol	l (A1)		Sandy	Gleyed Mat	rix (S4)		Coast Prairie Red	ox (A16)
	pipedon (A2)			Redox (S5)	. ,		Dark Surface (S7)	
	listic (A3)			d Matrix (Se			Iron-Manganese M	
	en Sulfide (A4)		Loamy	Mucky Mine	eral (F1)		Very Shallow Dark	Surface (TF12)
Stratifie	d Layers (A5)		Loamy	Gleyed Mat	rix (F2)		Other (Explain in F	Remarks)
2 cm Mi	uck (A10)		X Deplet	ed Matrix (F	3)			
X Deplete	d Below Dark Surface	e (A11)	Redox	Dark Surfac	ce (F6)			
Thick D	ark Surface (A12)		Deplet	ed Dark Sur	face (F7)			
Sandy N	Mucky Mineral (S1)		Redox	Depression	s (F8)		<sup>3</sup> Indicators of hydrophy	tic vegetation and
5 cm Mu	ucky Peat or Peat (S3	3)					wetland hydrology mu unless disturbed or pr	
Restrictive L	_ayer (if present):							
Type:								
Depth(ir	nches):					Hydri	c Soil Present?	Yes X No
marks:						1		
A positive ind	dication of hydric soil	was observ	red.					

Wetland Hydrology Indicators:		
Primary Indicators (minimum of one required; check	( all that apply)	Secondary Indicators (minimum of two required)
Surface Water (A1)	X Water-Stained Leaves (B9)	Surface Soil Cracks (B6)
High Water Table (A2)	Aquatic Fauna (B13)	Drainage Patterns (B10)
X Saturation (A3)	True Aquatic Plants (B14)	Dry-Season Water Table (C2)
Water Marks (B1)	Hydrogen Sulfide Odor (C1)	Crayfish Burrows (C8)
Sediment Deposits (B2)	Oxidized Rhizospheres on Living Roots (C3)	X Saturation Visible on Aerial Imagery (C9)
Drift Deposits (B3)	Presence of Reduced Iron (C4)	X 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)	FAC-Neutral Test (D5)
Inundation Visible on Aerial Imagery (B7)	Gauge or Well Data (D9)	
Sparsely Vegetated Concave Surface (B8)	Other (Explain in Remarks)	
Field Observations:		
Surface Water Present? Yes No	X Depth (inches): N/A	
Water Table Present? Yes No	X Depth (inches): >20	
Saturation Present? Yes X No	Depth (inches): 1	Wetland Hydrology Present? Yes X No
(includes capillary fringe)		
Describe Recorded Data (stream gauge, monitoring w	ell, aerial photos, previous inspections), if available:	
Remarks:		
A positive indication of wetland hydrology was obse	rved (at least one primary indicator).	
A positive indication of wetland hydrology was obse	rved (at least two secondary indicators).	

Project/Site:		Co	ounty:	Union		Sampling Date:	November 23, 2020		
Applicant/Owner:		Cader	nce		State:	ОН	Sampling Point:	DPA60_WA38	
Investigator(s):	DC	and	-	Section, To	wnship, R	ange:	Libterty T	ownship	
Landform (hillslope	, terrace, etc.):		Depression		Local reli	ef (concave, co	nvex, none):	Concave	
Slope (%):	00-05	Lat:	40.34783	Long:		-83.45059	Datum:	NAD83	
Soil Map Unit Name	e:	Blour	t silt loam, 2-4 percer	nt slopes		1	WI classification:	PEM	
Are climatic / hydro	logic conditions or	the site typical for thi	s time of year?	Yes X	No	(If no,	explain in Remarks.)		
Are Vegetation	Yes ,Soil	No ,or Hydrolog	y <u>No</u> significar	ntly disturbed?		Are "Normal	Circumstances" present?	Yes X No	
Are Vegetation	No ,Soil	No ,or Hydrolog	y <b>No</b> naturally	problematic?		(If needed, e	xplain any answers in Rema	arks.)	

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

Hydrophytic Vegetation Present?	Yes	No <u>X</u>				
Hydric Soil Present?	Yes X	No	Is the Sampled Area			
Wetland Hydrology Present?	Yes X	No	within a Wetland?	Yes X	<u>(</u> N	No

Remarks:

This point was determined not to be within a wetland due to the lack of hydrophytic vegetation.

Vegetation community eliminated by agricultural practices. Other indicators indicate a wetland, and historic imagery shows regular soil saturation or stressed/stunted crops.

#### **VEGETATION - Use scientific names of plants.**

	Absolute Dominant	Indicator	Dominance Test works	sheet:			
Tree Stratum (Plot size: 30 ft. )	% cover Species?	Status	Number of Dominant Sp	pecies			
1. None Observed			That Are OBL, FACW, o	or FAC:		0	(A)
2.							
3.			Total Number of Domina	ant			
4.			Species Across All Stra			1	(B)
5.							
·	0 = Total Cover		Percent of Dominant Sp	ecies			
Sapling/Shrub Stratum (Plot size: 15 ft.			That Are OBL, FACW, o			0	(A/B)
1. None Observed			,,			-	( )
2			Prevalence Index Wor	ksheet:			
3			Total % Cove	r of	M	ultiply by:	
4			OBL species	0			_
-		. <u></u>	FACW species	0			
5	0 = Total Cover		FAC species	0			
Herb Stratum (Plot size: 5 ft. )			FACU species	0	x 4 =		
1. Zea mays	100 Yes	UPL	UPL species	100	x 5 =		
			Column Totals:	100	(A)		(B)
2			Prevalence Index = B/A		` ´	500	(D)
3			T Tevalence Index - D/A		5.00		
4			Hydrophytic Vegetatio	n Indicator	s:		
5			1 - Rapid Test for I			2	
6			2 - Dominance Tes		vegetatio		
7			3 - Prevalence Inde				
8			4 - Morphological A		Dravida	ourserting	
9			data in Remarks	•			
10	100 = Total Cover					,	
			Problematic Hydro			• •	
Woody Vine Stratum (Plot size: 30 ft.	)		<sup>1</sup> Indicators of hydric soil be present, unless distu			ly must	
1. None Observed					Siemade.		
2							
	0 = Total Cover		Hydrophytic				
			Vegetation Present?	Y	es	No	X

Depth	Matrix			Redox Fe	eatures			
(inches)	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>	Texture	Remarks
0-16	10YR 4/1	90	5YR 4/6	10	С	M	Clay	
Type: C=C	concentration, D=Deple	etion, RM=	Reduced Matrix, MS	=Masked San	nd Grains.	²L	ocation: PL=Pore Lining	
lydric Soils	s Indicators:						Indicators for Proble	matic Hydric Soils <sup>3</sup> :
Histoso	. ,			Gleyed Matrix	(S4)		Coast Prairie Re	( )
Histic E	Epipedon (A2)		Sandy	Redox (S5)			Dark Surface (S7	7)
	Histic (A3)			d Matrix (S6)			Iron-Manganese	
	en Sulfide (A4)			Mucky Minera	. ,			rk Surface (TF12)
	ed Layers (A5)			Gleyed Matrix	: (F2)		Other (Explain in	Remarks)
	luck (A10)			ed Matrix (F3)	()			
	ed Below Dark Surface	(A11)		Dark Surface				
	Dark Surface (A12)			ed Dark Surfac			<sup>3</sup> Indicators of hydroph	tio varatation and
	Mucky Mineral (S1)	<b>`</b>	Redox	Depressions (	F8)		wetland hydrology m	
5 CH1 W	lucky Peat or Peat (S3	)					unless disturbed or p	
Restrictive	Layer (if present):							
Type:								
Depth(i	inches):					Hydrid	c Soil Present?	Yes X No
marks:								
A positive in	dication of hydric soil v	vas observ	/ed.					
DROLOG	GY							
tland Hydro	ology Indicators:							
Primary Indi	cators (minimum of on	e required	; check all that apply	()			Secondary Indicators	(minimum of two required)
X Surface	e Water (A1)		Water-	Stained Leave	es (B9)		Surface Soil Cra	cks (B6)
High W	/ater Table (A2)		Aquatio	Fauna (B13)			Drainage Pattern	s (B10)
X Saturat	tion (A3)		True A	quatic Plants (	(B14)		Dry-Season Wat	er Table (C2)
Water I	Marks (B1)		Hydrog	en Sulfide Od	or (C1)		Crayfish Burrows	; (C8)

- X Saturation Visible on Aerial Imagery (C9)
- X Stunted or Stressed Plants (D1)
- Geomorphic Position (D2)
  - FAC-Neutral Test (D5)

Field	Observations:	
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Sediment Deposits (B2)

Algal Mat or Crust (B4)

X Inundation Visible on Aerial Imagery (B7) Sparsely Vegetated Concave Surface (B8)

Drift Deposits (B3)

Iron Deposits (B5)

Surface Water Present? Water Table Present? Saturation Present? (includes capillary fringe)	Yes Yes Yes	 X	No No No	X	Depth (inches): _ Depth (inches): _ Depth (inches): _	4 >20 2	Wetland Hydrology Present?	Yes	x	_ No
Describe Recorded Data (str	eam ga	uge, mo	onitoring	y well, aer	ial photos, previous i	nspections), if ava	ilable:			
Remarks:										
A positive indication of we	tland hy	drology	was ob	served (a	at least one primary in	dicator).				
A positive indication of we	etland hy	drology	was ob	served (a	at least two secondary	indicators).				

Oxidized Rhizospheres on Living Roots (C3)

Recent Iron Reduction in Tilled Soils (C6)

Presence of Reduced Iron (C4)

Thin Muck Surface (C7)

Gauge or Well Data (D9)

Other (Explain in Remarks)

US Army Corps of Engineers

Project/Site:	Cadence Solar				County:	Union		Sampling Date:	November 23, 2020	
Applicant/Owner:	Cadence					State: OH		Sampling Point:	DPA62_WA39	
Investigator(s):	[	C	and	-	Section, To	wnship, R	ange:	Libterty T	ownship	
Landform (hillslope,	, terrace, etc.	):	Dep	pression		Local reli	ef (concave, cor	ivex, none):	Concave	
Slope (%):	00	-05	Lat:	40.34033	Long:		-83.44211	Datum:	NAD83	
Soil Map Unit Name	e:		Blount silt	loam, 0-2 perc	ent slopes		N	IWI classification:	PFO	
Are climatic / hydrol	logic conditio	ns on the si	te typical for this time	e of year?	Yes X	No	(lf no,	explain in Remarks.)		
Are Vegetation	No ,	Soil No	,or Hydrology	No signific	antly disturbed?		Are "Normal	Circumstances" present?	Yes X No	
Are Vegetation	No ,	Soil No	,or Hydrology	No natura	lly problematic?		(If needed, ex	plain any answers in Rema	arks.)	

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

Hydrophytic Vegetation Present? Hydric Soil Present? Wetland Hydrology Present?	Yes X Yes X Yes X	No No No	Is the Sampled Area within a Wetland?	Yes	x	No					
Remarks: This point was determined to be within a wetland due to the presence of all 3 wetland criteria.											

## **VEGETATION - Use scientific names of plants.**

	Absolute	Dominant	Indicator	Dominance Test work	(sheet:			
Tree Stratum (Plot size: 30 ft. )	% cover	Species?	Status	Number of Dominant S	pecies			
1. Quercus palustris	20	Yes	FACW	That Are OBL, FACW,			4	(A)
2. Ulmus rubra	10	Yes	FAC	, ,				
3				Total Number of Domin	nant			
4.				Species Across All Stra	ata:		4	(B)
5.								
	30 =	Total Cover		Percent of Dominant S	pecies			
Sapling/Shrub Stratum (Plot size: 15 ft.	)			That Are OBL, FACW,	or FAC:		100%	(A/B)
1. Ulmus rubra		Yes	FAC					
2. Acer rubrum	20	Yes	FAC	Prevalence Index Wo	rksheet:			
3.				Total % Cov	er of:	Mu	Itiply by:	
4.				OBL species	0	x 1 =	0	_
5.				FACW species	20	x 2 =	40	_
		Total Cover		FAC species	50	x 3 =	150	_
Herb Stratum (Plot size: 5 ft. )				FACU species	0	x 4 =	0	
1. None Observed				UPL species	0	x 5 =	0	
2.				Column Totals:	70	(A)	190	(B)
3.				Prevalence Index = B//	4 =	2.71		
4.								
5				Hydrophytic Vegetati	on Indicator	s:		
6.				1 - Rapid Test for	Hydrophytic	Vegetatio	ı	
7.				X 2 - Dominance Te	st is >50%			
8.				X 3 - Prevalence Inc	lex is ≤3.0 <sup>1</sup>			
9.				4 - Morphological	Adaptations <sup>1</sup>	(Provide	supporting	
10				data in Remark	s or on a sep	parate she	et)	
	0 =	Total Cover		Problematic Hydro	ophytic Vege	tation <sup>1</sup> (Ex	plain)	
Woody Vine Stratum (Plot size: 30 ft.	)			<sup>1</sup> Indicators of hydric so	il and wetlan	d hydrolog	y must	
1. None Observed				be present, unless dist	urbed or prol	olematic.		
2.								
	0 =	Total Cover		Hydrophytic				
				Vegetation Present?	Y	es <u>X</u>	No	
Remarks:								

A positive indication of hydrophytic vegetation was observed (>50% of dominant species indexed as OBL, FACW, or FAC).

Depth	Matrix			Redox	k Features						
inches)	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	_Loc <sup>2</sup>	Texture	Remarks			
0-2	10YR 3/2	100	None				Clay loam				
2-18	10YR 4/1	90	5YR4/5	10	C	M	Clay				
				_							
	oncentration, D=Deple	etion, RM=	Reduced Matrix, MS	S=Masked S	Sand Grains.	2	ocation: PL=Pore Lining, N				
-							Indicators for Problem	•			
Histosol	. ,			Gleyed Mat			Coast Prairie Redo	x (A16)			
	pipedon (A2)			Redox (S5)		Dark Surface (S7)					
	listic (A3)		Strippe	,	Iron-Manganese Masses (F12)						
_ ` `	en Sulfide (A4)			Mucky Min	. ,		Very Shallow Dark	( )			
Stratified Layers (A5)Loamy Gleyed Matrix (F2)							Other (Explain in R	emarks)			
	uck (A10)		·	ed Matrix (F	,						
	d Below Dark Surface	e (A11)		Dark Surfa	( )						
	ark Surface (A12)			ed Dark Su							
	Mucky Mineral (S1)		Redox	Depression	ıs (F8)	<sup>3</sup> Indicators of hydrophytic vegetation and					
5 cm Mu	ucky Peat or Peat (S3	3)				wetland hydrology must be present, unless disturbed or problematic.					
estrictive l	Layer (if present):										
Type:											
Depth(ir						Hydri	c Soil Present?	Yes <u>X</u> No			
narks: positive inc	dication of hydric soil v	was observ	ved.			I					
	,										
OROLOG	βY										
land Hydro	ology Indicators:										
rimary Indic	cators (minimum of on	ne required	; check all that apply	y)			Secondary Indicators (m	inimum of two required)			

 Drainage Patterns (B10)

- Dry-Season Water Table (C2)
- Crayfish Burrows (C8)
- X Saturation Visible on Aerial Imagery (C9)
- X Stunted or Stressed Plants (D1)
- X Geomorphic Position (D2)
- FAC-Neutral Test (D5)

Field Observations:

High Water Table (A2)

Sediment Deposits (B2)

Algal Mat or Crust (B4)

Inundation Visible on Aerial Imagery (B7) X Sparsely Vegetated Concave Surface (B8)

Water Marks (B1)

Drift Deposits (B3)

Iron Deposits (B5)

X Saturation (A3)

Surface Water Present? Water Table Present? Saturation Present? (includes capillary fringe)	Yes Yes Yes	x x	No No No	x	Depth (inches): _ Depth (inches): _ Depth (inches): _	6 >20 0	Wetland Hydrology Present?	Yes_	x	_ No
Describe Recorded Data (str	eam gau	uge, mo	nitoring	g well, aei	rial photos, previous ir	nspections), if ava	lable:			
Remarks:										
A positive indication of we	tland hyd	drology	was ob	served (a	at least one primary in	dicator).				
A positive indication of we				`		,				

Aquatic Fauna (B13)

True Aquatic Plants (B14)

Thin Muck Surface (C7)

Gauge or Well Data (D9)

Other (Explain in Remarks)

Hydrogen Sulfide Odor (C1)

Presence of Reduced Iron (C4)

Oxidized Rhizospheres on Living Roots (C3)

Recent Iron Reduction in Tilled Soils (C6)

Project/Site:	(	Cadence Solar	Co	ounty:	Uni	on	Sampling Date:	November 23, 2020		
Applicant/Owner:		Cadene	e		State:	ОН	Sampling Point:	DPA64_WA40		
Investigator(s):	DC	and	-	Section, Township, Range:			Libterty T	Libterty Township		
Landform (hillslope	, terrace, etc.):		Depression		Local relie	ef (concave, co	nvex, none):	Concave		
Slope (%):	00-05	Lat:	40.34048	Long:		-83.44047	Datum:	NAD83		
Soil Map Unit Name	e:	Blount	silt loam, 0-2 percer	nt slopes		1	WI classification:	PEM		
Are climatic / hydro	logic conditions on	the site typical for this	time of year?	Yes X	No	(If no,	explain in Remarks.)			
Are Vegetation	Yes ,Soil	No ,or Hydrology	No significar	ntly disturbed?		Are "Normal	Circumstances" present?	Yes X No		
Are Vegetation	No ,Soil	No ,or Hydrology	<b>No</b> naturally	problematic?		(If needed, e	xplain any answers in Rema	arks.)		

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

Hydrophytic Vegetation Present? Hydric Soil Present? Wetland Hydrology Present?	Yes Yes Yes	No No No	Is the Sampled Area within a Wetland?	Yes X	No
Remarks: This point was determined not to b	be within a wetland du	e to the lack of hydrop	hytic vegetation.		

Vegetation community significantly altered due to agricultural practices.

# **VEGETATION - Use scientific names of plants.**

	Absolute	Dominant	Indicator	Dominance Test work	sneet:			
Tree Stratum (Plot size:30 ft)	% cover	Species?	Status	Number of Dominant S	pecies			
1. None Observed		<u> </u>		That Are OBL, FACW,	or FAC:		0	(A)
2								
3				Total Number of Domir	nant			
4.				Species Across All Stra	ata:		1	(B)
5								. ,
		Total Cover		Percent of Dominant S	pecies			
Sapling/Shrub Stratum (Plot size: 15 ft.	)			That Are OBL, FACW,			0	(A/B
1. None Observed	/			, ,				
2.				Prevalence Index Wo	rksheet:			
3				Total % Cov	er of:	Mu	Itiply by:	
4.				OBL species	0	x 1 =		
5.				FACW species	0		0	
		Total Cover		FAC species	10			
lerb Stratum (Plot size: 5 ft. )				FACU species	0			
1. Barbarea vulgaris	5	No	FAC	UPL species	25			
2. Juncus tenuis	5	No	FAC	Column Totals:	35	(A)	155	(B)
3. Glycine max	25	Yes	UPL	Prevalence Index = B/A	\ =	· /		
4.								
5.				Hydrophytic Vegetation	on Indicato	rs:		
6.				1 - Rapid Test for	Hydrophytic	Vegetatior	ı	
7.				2 - Dominance Te	st is >50%	Ū		
8				3 - Prevalence Inc	lex is ≤3.0 <sup>1</sup>			
9.				4 - Morphological		<sup>1</sup> (Provide s	supporting	
10				data in Remark				
		Total Cover		Problematic Hydro	phytic Vege	etation <sup>1</sup> (Ex	plain)	
Voody Vine Stratum (Plot size: 30 ft.				<sup>1</sup> Indicators of hydric so	I and wetlar	nd hydrolog	v must	
1. None Observed				be present, unless dist			, ,	
2.		Total Cover		Hydrophytic				
Z	0 =							
2	=			Vegetation Present?	,	/es_	No	х

Depth	Matrix			Redox	Features						
(inches)	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>	Texture	Remarks			
0-16	10YR 4/1	90	5YR 5/4	10	С	М	Clay				
					. <u> </u>						
							·	. <u> </u>			
	·		·		·						
	oncentration, D=Depl	etion, RM=	Reduced Matrix, MS	=Masked S	and Grains.	2	Location: PL=Pore Lining	g, M=Matrix.			
ydric Soils	s Indicators:					Indicators for Problematic Hydric Soils <sup>3</sup> :					
Histoso	. ,			Gleyed Mat	rix (S4)		Coast Prairie Re	( )			
	Epipedon (A2)			Redox (S5)			Dark Surface (S	,			
	Histic (A3)			d Matrix (S6	-		Iron-Manganese				
	en Sulfide (A4)			Mucky Mine		Very Shallow Dark Surface (TF12) Other (Explain in Remarks)					
Stratified Layers (A5)       Loamy Gleyed Matrix (F2)         2 cm Muck (A10)       X         Depleted Below Dark Surface (A11)       Redox Dark Surface (F6)							Other (Explain Ir	Remarks)			
					-						
	ark Surface (A12)	e (ATT)		ed Dark Surfac							
_	Mucky Mineral (S1)		·	Depression:	. ,	<sup>3</sup> Indicators of hydrophytic vegetation and wetland hydrology must be present,					
_ `	lucky Peat or Peat (St)	3)		Depression	s (1 0)						
	lucky rear of rear (0)	5)				unless disturbed or problematic.					
estrictive	Layer (if present):										
Type:											
Depth(i	inches):					Hydri	ic Soil Present?	Yes X No			
narks:											
positive in	dication of hydric soil	was observ	ved.								
ROLOG	37										
-	ology Indicators:			`				/ · · · · · · · · · · ·			
	cators (minimum of or	ne required			(P0)			(minimum of two required)			
	e Water (A1) (ater Table (A2)			Stained Lea	. ,		Surface Soil Cra				
High W X Saturat	/ater Table (A2) tion (A3)			: Fauna (B1 quatic Plant			Drainage Pattern Dry-Season Wa				

Crayfish Burrows (C8)
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х	Saturation	Visible	on Aerial	Imagerv	(C9)
~	Saturation	VISIDIE	UII Achai	innayery	(09

- **X** Stunted or Stressed Plants (D1)
- X Geomorphic Position (D2)
- FAC-Neutral Test (D5)

Field Observations:

Water Marks (B1)

Drift Deposits (B3)

Iron Deposits (B5)

Sediment Deposits (B2)

Algal Mat or Crust (B4)

Inundation Visible on Aerial Imagery (B7) Sparsely Vegetated Concave Surface (B8)

Surface Water Present? Water Table Present? Saturation Present? (includes capillary fringe)	Yes Yes Yes	X	No No No	X X	Depth (inches): _ Depth (inches): _ Depth (inches): _	N/A >20 6	Wetland Hydrology Present?	Yes_	x	_ No	
Describe Recorded Data (str	eam gai	uge, mor	nitoring	g well, ae	rial photos, previous i	nspections), if avai	lable:				
Remarks:											
Remarks.											
A positive indication of we	tland hy	drology	was ob	served (	at least one primary in	dicator).					
A positive indication of we	A positive indication of wetland hydrology was observed (at least two secondary indicators).										

Hydrogen Sulfide Odor (C1)

Thin Muck Surface (C7)

Gauge or Well Data (D9)

Other (Explain in Remarks)

Presence of Reduced Iron (C4)

Oxidized Rhizospheres on Living Roots (C3)

Recent Iron Reduction in Tilled Soils (C6)

Project/Site:		Cadence Solar	Co	ounty:	Uni	on	Sampling Date:	November 23, 2020	
Applicant/Owner:		Caden	се		State:	ОН	Sampling Point:	DPA66_WA41	
Investigator(s):	DC	and	-	Section, To	wnship, Ra	ange:	Libterty T	ownship	
Landform (hillslope	, terrace, etc.):		Depression		Local relie	ef (concave, co	nvex, none):	Concave	
Slope (%):	00-05	Lat:	40.34018	Long:		-83.43972	Datum:	NAD83	
Soil Map Unit Name	e:	Blount	silt loam, 0-2 percer	nt slopes		1	WI classification:	PFO	
Are climatic / hydro	logic conditions on	the site typical for this	time of year?	Yes X	No	(If no,	explain in Remarks.)		
Are Vegetation	No ,Soil	No ,or Hydrology	<b>No</b> significar	ntly disturbed?		Are "Normal	Circumstances" present?	Yes X No	
Are Vegetation	No ,Soil	No ,or Hydrology	<b>No</b> naturally	problematic?		(If needed, e	xplain any answers in Rema	arks.)	

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

Hydrophytic Vegetation Present? Hydric Soil Present? Wetland Hydrology Present?	Yes X Yes X Yes X	No No No	Is the Sampled Area within a Wetland?	Yes	<u>x</u>	No
Remarks: This point was determined to be w	vithin a wetland due to	o the presence of all 3 v	wetland criteria.			

## **VEGETATION - Use scientific names of plants.**

	Absolute	Dominant	Indicator	Dominance Test work	(sheet:			
Tree Stratum (Plot size: 30 ft.)	% cover	Species?	Status	Number of Dominant S	pecies			
1. Acer saccharinum	25	Yes	FACW	That Are OBL, FACW,	or FAC:		4	(A)
2. Ulmus rubra	35	Yes	FAC					_ ` `
3. Populus deltoides	15	No	FAC	Total Number of Domin	nant			
4. Quercus palustris	10	No	FACW	Species Across All Stra	ata:		4	(B)
5.								/
	85 =	Total Cover		Percent of Dominant S	pecies			
Sapling/Shrub Stratum (Plot size: 15 ft.	)			That Are OBL, FACW,			100%	(A/B)
1. Acer saccharinum		Yes	FACW					
2. Fraxinus pennsylvanica	5	No	FACW	Prevalence Index Wo	rksheet:			
3. Ulmus rubra	5	No	FAC	Total % Cov	er of:	Mu	Iltiply by:	
4.				OBL species	0	x 1 =	0	_
5.				FACW species	65	x 2 =	130	_
	30 =	Total Cover		FAC species	55	x 3 =	165	_
Herb Stratum (Plot size: 5 ft. )				FACU species	0	x 4 =	0	
1. Phalaris arundinacea	5	Yes	FACW	UPL species	0	x 5 =	0	_
2.				Column Totals:	120	(A)	295	(B)
3.				Prevalence Index = B//	4 =	2.46		
4								
5				Hydrophytic Vegetati	on Indicator	s:		
6.				1 - Rapid Test for	Hydrophytic	Vegetatior	ı	
7.				X 2 - Dominance Te		0		
8.				X 3 - Prevalence Inc	lex is ≤3.0 <sup>1</sup>			
9.				4 - Morphological	Adaptations <sup>1</sup>	(Provide	supporting	
10				data in Remark				
·		Total Cover		Problematic Hydro	ophytic Vege	tation <sup>1</sup> (Ex	plain)	
Woody Vine Stratum (Plot size: 30 ft.	)			<sup>1</sup> Indicators of hydric so	il and wetlan	d hvdroloa	v must	
1. None Observed	/			be present, unless dist			,	
2.								
	0 =	Total Cover		Hydrophytic				
				Vegetation Present?	Y	es X	No	

A positive indication of hydrophytic vegetation was observed (>50% of dominant species indexed as OBL, FACW, or FAC).

Depth	Matrix			Redox	Features						
(inches) C	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>	Texture	Remarks			
0-18	10YR 4/2	80	2.5YR 4/8	20	С	<u> </u>	m Silt loam				
	tration D=Deple	etion RM=	Reduced Matrix, MS	=Masked S	and Grains	 	Location: PL=Pore Lining				
ydric Soils Indic	ators:	ouon, run	roudood maand, me	indoned e		-		ematic Hydric Soils <sup>3</sup> :			
Histosol (A1)			Sandy	Gleyed Matr	ix (S4)		Coast Prairie Re				
Histic Epipede	on (A2)		Sandy	Redox (S5)			Dark Surface (S	7)			
Black Histic (A3) Stripped Matrix (S6)							Iron-Manganese	Masses (F12)			
Hydrogen Sulfide (A4) Loamy Mucky Mineral (F1)							Very Shallow Da	rk Surface (TF12)			
Stratified Layers (A5) Loamy Gleyed Matrix (F2)						Other (Explain in Remarks)					
2 cm Muck (A	2 cm Muck (A10) X Depleted Matrix (F3)										
Depleted Belo	ow Dark Surface	e (A11)	Redox	Dark Surfac	e (F6)						
Thick Dark Su	urface (A12)		Deplete	ed Dark Sur	ace (F7)						
Sandy Mucky	. ,		Redox	Depression	s (F8)		<sup>3</sup> Indicators of hydroph	, ,			
5 cm Mucky F	Peat or Peat (S3	3)				wetland hydrology must be present, unless disturbed or problematic.					
Restrictive Layer	(if present):										
Туре:											
Depth(inches						Hydri	c Soil Present?	Yes X No			
narks:											
A positive indicatio	on of hydric soil	was observ	ved.								
DROLOGY											
tland Hydrology	Indicators:										
Primary Indicators	(minimum of or	ne required	; check all that apply	r)			Secondary Indicators	(minimum of two required)			
X Surface Wate	er (A1)		X Water-	Stained Lea	ves (B9)		Surface Soil Cra	cks (B6)			
High Water T	able (A2)		Aquatio	Fauna (B1	3)		Drainage Patterr	ns (B10)			
X Saturation (A	_Saturation (A3)True Aquatic Plants (B14)						Dry-Season Water Table (C2)				
Water Marks	Water Marks (B1) Hydrogen Sulfide Odor (C1)						Crayfish Burrows (C8)				

- Saturation Visible on Aerial Imagery (C9)
- X Stunted or Stressed Plants (D1)
- X Geomorphic Position (D2)
- FAC-Neutral Test (D5)

#### Field Observations:

Sediment Deposits (B2)

Algal Mat or Crust (B4) Iron Deposits (B5)

Inundation Visible on Aerial Imagery (B7) Sparsely Vegetated Concave Surface (B8)

Drift Deposits (B3)

Surface Water Present?	Yes	х	No		Depth (inches):	6					
Water Table Present?	Yes		No	Х	Depth (inches):	>20					
Saturation Present? (includes capillary fringe)	Yes	X	_ No		Depth (inches):	0	Wetland Hydrology Present?	Yes_	X	No	
Describe Recorded Data (str	eam gau	uge, mc	onitoring	well, aer	ial photos, previous ir	nspections), if ava	ilable:				
Remarks:											
A positive indication of we	tland hy	drology	was ob	served (a	at least one primary in	dicator).					
A positive indication of we	tland hy	drology	was ob	served (a	at least two secondary	indicators).					
There appears to be a sm	all const	tructed	soil dan	າ in the m	iddle of the wetland,	though water per	neates through most of it.				

Oxidized Rhizospheres on Living Roots (C3)

Recent Iron Reduction in Tilled Soils (C6)

Presence of Reduced Iron (C4)

Thin Muck Surface (C7)

Gauge or Well Data (D9)

Other (Explain in Remarks)

Project/Site:		Cadence	e Solar		County:	Uni	on	Sampling Date:	November 23, 2020	
Applicant/Owner:			Cadence			State:	ОН	Sampling Point:	DPA68_WA42	
Investigator(s):	DC		and	-	Section, To	wnship, Ra	ange:	Libterty T	ownship	
Landform (hillslope	, terrace, etc.):		Dep	pression		Local relie	ef (concave, cor	nvex, none):	Concave	
Slope (%):	00-0	5	Lat:	40.33853	Long:		-83.43950	Datum:	NAD83	
Soil Map Unit Name	e:		Blount silt	loam, 0-2 perce	ent slopes		N	WI classification:	PEM	
Are climatic / hydro	logic conditions	on the site	typical for this tim	e of year?	Yes X	No	(lf no,	explain in Remarks.)		
Are Vegetation	No ,So	oil <b>No</b>	,or Hydrology	No signific	antly disturbed?		Are "Normal	Circumstances" present?	Yes X No	
Are Vegetation	No ,So	oil No	,or Hydrology	No natural	ly problematic?		(If needed, ex	xplain any answers in Rema	arks.)	

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

Hydrophytic Vegetation Present? Hydric Soil Present? Wetland Hydrology Present?	Yes X Yes X Yes X	No No No	Is the Sampled Area within a Wetland?	Yes	<u>x</u>	No
Remarks: This point was determined to be v	vithin a wetland due to	) the presence of all 3 v	wetland criteria.			

## **VEGETATION - Use scientific names of plants.**

	Absolute	Dominant	Indicator	Dominance Test work	sheet:			
Tree Stratum (Plot size: 30 ft. )	% cover	Species?	Status	Number of Dominant S	necies			
1. None Observed		000000		That Are OBL, FACW,			3	(A)
					0117.0.		•	(/ ()
2				T ( ) N ( ) ( )				
3.				Total Number of Domir				
4				Species Across All Stra	ata:		4	(B)
5								
	= Tot	al Cover		Percent of Dominant S	pecies			
Sapling/Shrub Stratum (Plot size: 15 ft.	_)			That Are OBL, FACW,	or FAC:		75%	(A/B)
1. None Observed	·		·					
2				Prevalence Index Wo	rksheet:			
3				Total % Cov	er of:	Mu	Itiply by:	
4				OBL species	20	x 1 =	20	
5.				FACW species	20	x 2 =	40	
	0 = Tot	al Cover		FAC species	40	x 3 =	120	_
Herb Stratum (Plot size: 5 ft. )				FACU species	0	x 4 =	0	
1	40	Yes	FAC	UPL species	20	x 5 =	100	
<ol> <li>Barbarea vulgaris</li> <li>Phalaris arundinacea</li> </ol>	20	Yes	FACW	Column Totals:	100	(A)		(B)
2 Juneuro offuerre	20	<u> </u>		-		(A) 2.80	200	(D)
		Yes	OBL	Prevalence Index = B/A	<i>i</i> =	2.80		
4. <u>Glycine max</u>	20	Yes	UPL	Hydrophytic Vegetation	on Indicator			
5								
6				1 - Rapid Test for		Vegetatio	ı	
7				X 2 - Dominance Te				
8				X 3 - Prevalence Inc				
9				4 - Morphological				
10				data in Remark	s or on a sep	parate she	et)	
	100 = Tot	al Cover		Problematic Hydro	ophytic Vege	tation <sup>1</sup> (Ex	plain)	
Woody Vine Stratum (Plot size: 30 ft.	)			<sup>1</sup> Indicators of hydric so	il and wetlan	d hydrolog	y must	
1. None Observed				be present, unless dist	urbed or prob	plematic.		
2.								
L	0 = Tot	al Cover		11 1				
				Hydrophytic Vegetation Present?	v	06 V	No	
				vegetation Fresent?	T	<u> </u>		
Remarks:				1				

A positive indication of hydrophytic vegetation was observed (>50% of dominant species indexed as OBL, FACW, or FAC).

0-18       10YR 4/1       95       7.5YR 4/6       5       C       M       Silty clay	Depth	Matrix			Redo	x Features			
Type:       C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. <sup>2</sup> Location:       PL=Pore Lining, M=Matrix.         Hydric Soils Indicators:       Indicators for Problematic Hydric Soils <sup>3</sup> :       Indicators for Problematic Hydric Soils <sup>3</sup> :         Histic Epipedon (A2)	(inches)	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>	Texture	Remarks
tydric Soils Indicators:       Indicators for Problematic Hydric Soils <sup>3</sup> :	0-18	10YR 4/1	95	7.5YR 4/6	5	C	M	Silty clay	
lydric Soils Indicators:       Indicators for Problematic Hydric Soils <sup>3</sup> :									
Histosol (A1)       Sandy Gleyed Matrix (S4)       Coast Prairie Redox (A16)         Histic Epipedon (A2)       Sandy Redox (S5)       Dark Surface (S7)         Black Histic (A3)       Stripped Matrix (S6)       Iron-Manganese Masses (F12)         Hydrogen Sulfide (A4)       Loamy Mucky Mineral (F1)       Very Shallow Dark Surface (TF12)         Stratified Layers (A5)       Loamy Gleyed Matrix (F2)       Other (Explain in Remarks)         2 cm Muck (A10)       X       Depleted Matrix (F3)         Depleted Below Dark Surface (A11)       Redox Dark Surface (F7)         Sandy Mucky Mineral (S1)       Depleted Dark Surface (F7)         Sandy Mucky Peat or Peat (S3)       Brave and the present):         Type:			etion, RM=	Reduced Matrix, MS	=Masked S	Sand Grains.	2		
Histic Epipedon (A2)       Sandy Redox (S5)       Dark Surface (S7)         Black Histic (A3)       Stripped Matrix (S6)       Iron-Manganese Masses (F12)         Hydrogen Sulfide (A4)       Loamy Mucky Mineral (F1)       Very Shallow Dark Surface (TF12)         Stratified Layers (A5)       Loamy Gleyed Matrix (F2)       Other (Explain in Remarks)         2 cm Muck (A10)       X       Depleted Matrix (F3)         Depleted Below Dark Surface (A11)       Redox Dark Surface (F6)         Thick Dark Surface (A12)       Depleted Dark Surface (F7)         Sandy Mucky Mineral (S1)       Redox Depressions (F8)         5 cm Mucky Peat or Peat (S3)       3 <sup>1</sup> Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.         Restrictive Layer (if present):         Type:	•			Sandy	Gloved Ma	triv (SA)			
Black Histic (A3)       Stripped Matrix (S6)       Iron-Manganese Masses (F12)         Hydrogen Sulfide (A4)       Loamy Mucky Mineral (F1)       Very Shallow Dark Surface (TF12)         Stratified Layers (A5)       Loamy Gleyed Matrix (F2)       Other (Explain in Remarks)         2 cm Muck (A10)       X       Depleted Matrix (F3)         Depleted Below Dark Surface (A11)       Redox Dark Surface (F6)         Thick Dark Surface (A12)       Depleted Dark Surface (F7)         Sandy Mucky Peat or Peat (S3)       Redox Depressions (F8)         astrictive Layer (if present):       Type:         Type:       Depth(inches):         Depth(inches):       Hydric Soil Present?         Yes       X		. ,				. ,			
Hydrogen Sulfide (A4)       Loamy Mucky Mineral (F1)       Very Shallow Dark Surface (TF12)         Stratified Layers (A5)       Loamy Gleyed Matrix (F2)       Other (Explain in Remarks)         2 cm Muck (A10)       X       Depleted Matrix (F3)         Depleted Below Dark Surface (A11)       Redox Dark Surface (F6)         Thick Dark Surface (A12)       Depleted Dark Surface (F7)         Sandy Mucky Mineral (S1)       Redox Depressions (F8)         5 cm Mucky Peat or Peat (S3)       wetland hydrology must be present, unless disturbed or problematic.         Restrictive Layer (if present):       Type:         Depth(inches):       Hydric Soil Present?       Yes X         A positive indication of hydric soil was observed.		,							
Stratified Layers (A5)       Loamy Gleved Matrix (F2)       Other (Explain in Remarks)         2 cm Muck (A10)       X       Depleted Matrix (F3)         Depleted Below Dark Surface (A11)       Redox Dark Surface (F6)         Thick Dark Surface (A12)       Depleted Dark Surface (F7)         Sandy Mucky Mineral (S1)       Redox Depressions (F8)         5 cm Mucky Peat or Peat (S3)       alndicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.         Restrictive Layer (if present):       Type:         Depth(inches):       Hydric Soil Present?         Yes       X         narks:       N positive indication of hydric soil was observed.		( )			`	,			
Depleted Below Dark Surface (A11)       Redox Dark Surface (F6)         Thick Dark Surface (A12)       Depleted Dark Surface (F7)         Sandy Mucky Mineral (S1)       Redox Depressions (F8)         5 cm Mucky Peat or Peat (S3)       wetland hydrology must be present, unless disturbed or problematic.         testrictive Layer (if present):       Type:         Depth(inches):       Hydric Soil Present?         Yes       X         narks:       positive indication of hydric soil was observed.					-				
Thick Dark Surface (A12)Depleted Dark Surface (F7)Sandy Mucky Mineral (S1)Redox Depressions (F8)^3Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.					-			、 .	
Sandy Mucky Mineral (S1)       Redox Depressions (F8) <sup>3</sup> Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.         Sestrictive Layer (if present):       unless disturbed or problematic.         Type:       Hydric Soil Present?         Depth(inches):       Yes         A positive indication of hydric soil was observed.	Deplete	d Below Dark Surface	e (A11)	Redox	Dark Surfa	ace (F6)			
5 cm Mucky Peat or Peat (S3) wetland hydrology must be present, unless disturbed or problematic.   testrictive Layer (if present):      Depth(inches):  narks: positive indication of hydric soil was observed.	Thick Da	ark Surface (A12)		Deplet	ed Dark Su	Irface (F7)			
Image: Sestrictive Layer (if present):       Image: Sestrictite (if presen):       Image: Sestrictive Layer	Sandy N	lucky Mineral (S1)		Redox	Depressio	ns (F8)		<sup>3</sup> Indicators of hydrop	hytic vegetation and
Type:			3)						-
Depth(inches):     Hydric Soil Present?     Yes X N       narks:     N       A positive indication of hydric soil was observed.	lestrictive L	ayer (if present):							
positive indication of hydric soil was observed.							Hydri	c Soil Present?	Yes X No
		lication of hydric soil y	was observ	ved			1		
DROLOGY									
	DROLOG	Y							
tland Hydrology Indicators:	tland Hydro	logy Indicators:							

Surface Water (A1)	Water-Stained Leaves (B9)	Surface Soil Cracks (B6)			
High Water Table (A2)	Aquatic Fauna (B13)	Drainage Patterns (B10)			
X Saturation (A3)	True Aquatic Plants (B14)	Dry-Season Water Table (C2)			
Water Marks (B1)	Hydrogen Sulfide Odor (C1)	Crayfish Burrows (C8)			
Sediment Deposits (B2)	Oxidized Rhizospheres on Living Roots (C3)	Saturation Visible on Aerial Imagery (C9)			
Drift Deposits (B3)	Presence of Reduced Iron (C4)	X 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)	FAC-Neutral Test (D5)			
Inundation Visible on Aerial Imagery (B7)	Gauge or Well Data (D9)				
Sparsely Vegetated Concave Surface (B8)	Other (Explain in Remarks)				
Field Observations:					
Surface Water Present? Yes No	X Depth (inches): N/A				
Water Table Present? Yes No	X Depth (inches): >20				
Saturation Present? Yes X No	Depth (inches): <u>6</u> V	Netland Hydrology Present? Yes X No			
(includes capillary fringe)					
Describe Recorded Data (stream gauge, monitoring w	vell, aerial photos, previous inspections), if available:				
Remarks:					
A positive indication of wetland hydrology was obse	erved (at least one primary indicator).				
A positive indication of wetland hydrology was obse	erved (at least two secondary indicators).				

Project/Site:	(	Cadence Solar	Co	ounty:	Unio	on	Sampling Date:	November 23, 2020	
Applicant/Owner:		Cadence	9		State:	ОН	Sampling Point:	DPA70_WA43	
Investigator(s):	DC	and	-	Section, To	wnship, Ra	inge:	Libterty T	ownship	
Landform (hillslope	, terrace, etc.):	C	epression		Local relie	ef (concave, co	nvex, none):	Concave	
Slope (%):	00-05	Lat:	40.33798	Long:		-83.44132	Datum:	NAD83	
Soil Map Unit Name	e:	Morley silt lo	am, 2-6 percent slo	opes, eroded		1	WI classification:	PEM	
Are climatic / hydro	logic conditions on	the site typical for this t	ime of year?	Yes X	No	(If no,	explain in Remarks.)		
Are Vegetation	Yes ,Soil	No ,or Hydrology	No significar	ntly disturbed?		Are "Normal	Circumstances" present?	Yes X No	
Are Vegetation	No ,Soil	No ,or Hydrology	<b>No</b> naturally	problematic?		(If needed, ex	xplain any answers in Rema	arks.)	

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

Hydrophytic Vegetation Present? Hydric Soil Present? Wetland Hydrology Present?	Yes YesX YesX	No No No	Is the Sampled Area within a Wetland?	Yes X	No
Remarks: This point was determined not to l	pe within a wetland du	e to the lack of hydrop	hytic vegetation.		

Vegetation community eliminated by agricultural practices.

# **VEGETATION - Use scientific names of plants.**

	Absolute Dominant	Indicator	Dominance Test works	heet:			
Tree Stratum (Plot size: 30 ft. )	% cover Species?	Status	Number of Dominant Sp	ecies			
1. None Observed	<u> </u>		That Are OBL, FACW, o			0	(A)
2		. <u> </u>	- , - ,			-	
-			Total Number of Domina	int			
			Species Across All Strat			1	(B)
		<u> </u>		и.			(D)
5	0 = Total Cover		Percent of Dominant Sp	- aia a			
Carling/Ohmite Other (Distained)						•	
Sapling/Shrub Stratum (Plot size: 15 ft.	)		That Are OBL, FACW, o	r fac:		0	(A/B)
1. None Observed			Prevalence Index Work	shoot.			
2							
3			Total % Cover			ultiply by:	
4	<u></u>		OBL species	0			
5			FACW species	0			
	0 = Total Cover		FAC species	0	x 3 =	0	
Herb Stratum (Plot size: 5 ft. )			FACU species	0	x 4 =	0	
1. Glycine max	20 Yes	UPL	UPL species	20	x 5 =	100	
2			Column Totals:	20	(A)	100	(B)
3.			Prevalence Index = B/A	=	5.00		
4.							
5			Hydrophytic Vegetation	n Indicator	s:		
6		. <u> </u>	1 - Rapid Test for H	vdrophytic	Vegetatio	n	
7			2 - Dominance Tes		5		
-			3 - Prevalence Inde				
· · · · · · · · · · · · · · · · · · ·			4 - Morphological A		<sup>1</sup> (Provide	supporting	
			data in Remarks				9
10	20 = Total Cover		Problematic Hydror			,	
						• •	
Woody Vine Stratum (Plot size: 30 ft.			<sup>1</sup> Indicators of hydric soil be present, unless distu			ly must	
1. None Observed				bed of pro	biematic.		
2							
	0 = Total Cover		Hydrophytic				
			Vegetation Present?	Y	'es	No	Х

Depth Matrix		Redox Features			
(inches) Color (moist) %	Color (moist)	% Type <sup>1</sup>	Loc <sup>2</sup>	Texture	Remarks
0-18 10YR 4/1 95	7.5YR 4/6	<u>5</u> C	M	Silty clay	
			- <u> </u>		
Type: C=Concentration, D=Depletion, RN Hydric Soils Indicators:	I=Reduced Matrix, MS=	Masked Sand Grains.	²L	ocation: PL=Pore Lining,	
•				Indicators for Problem	
Histosol (A1)		leyed Matrix (S4)		Coast Prairie Red	
Histic Epipedon (A2)		edox (S5)		Dark Surface (S7	,
Black Histic (A3)	Stripped	Matrix (S6)		Iron-Manganese	Masses (F12)
Hydrogen Sulfide (A4)	Loamy N	lucky Mineral (F1)		Very Shallow Dar	k Surface (TF12)
Stratified Layers (A5)	Loamy C	Gleyed Matrix (F2)		Other (Explain in	Remarks)
2 cm Muck (A10)	X Depleted	l Matrix (F3)			
Depleted Below Dark Surface (A11)	Redox D	ark Surface (F6)			
Thick Dark Surface (A12)	Depleted	I Dark Surface (F7)			
Sandy Mucky Mineral (S1)	Redox D	epressions (F8)		<sup>3</sup> Indicators of hydrophy	/tic vegetation and
5 cm Mucky Peat or Peat (S3)				wetland hydrology mu unless disturbed or p	
Restrictive Layer (if present):					
Туре:					
Depth(inches):			Hydrid	c Soil Present?	Yes X No
marks:					
A positive indication of hydric soil was obse	erved.				
DROLOGY					
tland Hydrology Indicators:					

Primary Indicators (minimum of one required; chec	k all that apply)	Secondary Indicators (minimum of two required)			
Surface Water (A1)	Water-Stained Leaves (B9)	Surface Soil Cracks (B6)			
High Water Table (A2)	Aquatic Fauna (B13)	X Drainage Patterns (B10)			
X Saturation (A3)	True Aquatic Plants (B14)	Dry-Season Water Table (C2)			
Water Marks (B1)	Hydrogen Sulfide Odor (C1)	Crayfish Burrows (C8)			
Sediment Deposits (B2)	Oxidized Rhizospheres on Living Roots (C3)	Saturation Visible on Aerial Imagery (C9)			
Drift Deposits (B3)	Presence of Reduced Iron (C4)	Stunted or Stressed Plants (D1)			
Algal Mat or Crust (B4)	Recent Iron Reduction in Tilled Soils (C6)	X Geomorphic Position (D2)			
Iron Deposits (B5)	Thin Muck Surface (C7)	FAC-Neutral Test (D5)			
Inundation Visible on Aerial Imagery (B7)	Gauge or Well Data (D9)				
Sparsely Vegetated Concave Surface (B8)	Other (Explain in Remarks)				
Field Observations:					
Surface Water Present? Yes No	X Depth (inches): N/A				
Water Table Present? Yes No	X Depth (inches): >20				
Saturation Present? Yes X No	Depth (inches): 0 W	etland Hydrology Present? Yes X No			
(includes capillary fringe)					
escribe Recorded Data (stream gauge, monitoring v	vell, aerial photos, previous inspections), if available:				
emarks:					
A positive indication of wetland hydrology was obse	erved (at least one primary indicator).				
A positive indication of wetland hydrology was obse	erved (at least two secondary indicators).				

Project/Site:		ounty:	Union		Sampling Date:	November 23, 2020		
Applicant/Owner:			State:	ОН	Sampling Point:	DPA72_WA44		
Investigator(s):	DC	and	Section, Township, Range: Libterty			Libterty	Township	
Landform (hillslope	, terrace, etc.):		Depression		Local reli	ef (concave, cor	nvex, none):	Concave
Slope (%):	00-05	Lat:	40.33669	Long:		-83.43989	Datum:	NAD83
Soil Map Unit Name	e:	Blour	t silt loam, 2-4 percer	nt slopes		N	WI classification:	PEM
Are climatic / hydro	logic conditions or	the site typical for thi	s time of year?	Yes X	No	(If no,	explain in Remarks.)	
Are Vegetation	Yes ,Soil	No ,or Hydrolog	y <u>No</u> significar	ntly disturbed?		Are "Normal	Circumstances" present?	Yes X No
Are Vegetation	No ,Soil	No ,or Hydrolog	y <b>No</b> naturally	problematic?		(If needed, ex	xplain any answers in Rem	arks.)

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

Hydrophytic Vegetation Present? Hydric Soil Present? Wetland Hydrology Present?	Yes YesX YesX	No No No	Is the Sampled Area within a Wetland?	Yes X	No	
Remarks: This point was determined not to	be within a wetland dι	ie to the lack of hydror	phytic vegetation.			

Vegetation community significantly impacted by agricultural practices.

# **VEGETATION - Use scientific names of plants.**

	Absolute	Dominant	Indicator	Dominance Test work	sheet:			
Tree Stratum (Plot size: 30 ft. )	% cover	Species?	Status	Number of Dominant S	pecies			
1. None Observed				That Are OBL, FACW,	or FAC:		1	(A)
2.								
3				Total Number of Domin	ant			
4.				Species Across All Stra	ta:		2	(B)
5.								
		Total Cover		Percent of Dominant Sp	ecies			
Sapling/Shrub Stratum (Plot size: 15 ft.	)			That Are OBL, FACW,	or FAC:		50%	(A/B
1. None Observed								
2.				Prevalence Index Wor	ksheet:			
3				Total % Cove	er of:	M	ultiply by:	
4				OBL species	0	x 1 =	0	
5.				FACW species	0	x 2 =	0	
	0 =	Total Cover		FAC species	20	x 3 =	60	
lerb Stratum (Plot size: 5 ft. )				FACU species	0	x 4 =	0	
1. Barbarea vulgaris	20	Yes	FAC	UPL species	60	x 5 =	300	
2. Glycine max	60	Yes	UPL	Column Totals:	80	(A)	360	(B)
3.				Prevalence Index = B/A	=	4.50		
4								
5.				Hydrophytic Vegetatio	n Indicato	rs:		
6.				1 - Rapid Test for	Hydrophytic	Vegetatio	n	
7				2 - Dominance Tes	st is >50%			
8				3 - Prevalence Ind	ex is ≤3.0 <sup>1</sup>			
9.				4 - Morphological	Adaptations	<sup>1</sup> (Provide	supporting	J
10				data in Remarks	or on a se	parate she	et)	
		Total Cover		Problematic Hydro	phytic Vege	etation <sup>1</sup> (Ex	vplain)	
Voody Vine Stratum (Plot size: 30 ft.	)			<sup>1</sup> Indicators of hydric soi	and wetlar	d hydrolog	y must	
1. None Observed				be present, unless distu	rbed or pro	blematic.		
2								
	0 =	Total Cover		Hydrophytic Vegetation Present?	``	<b>/es</b>	No	x
marks:								

Depth	Matrix			Redox	Features			
inches)	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>	Texture	Remarks
0-18	10YR 4/1	95	7.5YR 4/6	5	C	M	Silty clay	
	concentration, D=Depl	etion, RM=	Reduced Matrix, MS	=Masked S	and Grains.	2	<sup>2</sup> Location: PL=Pore Lining, N	
lydric Soils	s Indicators:						Indicators for Problem	atic Hydric Soils <sup>3</sup> :
Histoso	. ,			Gleyed Mat	. ,		Coast Prairie Redo	x (A16)
	Epipedon (A2)			Redox (S5)			Dark Surface (S7)	
	Histic (A3)			d Matrix (Se			Iron-Manganese Ma	
	en Sulfide (A4)			Mucky Mine			Very Shallow Dark	
	ed Layers (A5)			Gleyed Mat			Other (Explain in R	emarks)
	luck (A10)		X Deplete	,	,			
	ed Below Dark Surfac	e (A11)		Dark Surfac	. ,			
	Dark Surface (A12)		·	ed Dark Sur	. ,			
Sandy	Mucky Mineral (S1)		Redox	Depression	s (F8)		<sup>3</sup> Indicators of hydrophyti	•
5 cm M	lucky Peat or Peat (S	3)					wetland hydrology mus unless disturbed or pro	•
Restrictive	Layer (if present):							
Type:								
Depth(i						Hydr	ric Soil Present?	Yes X No
narks: A positive in	dication of hydric soil	was obser	ved.					
DROLOG	GY							
land Hydro	ology Indicators:							
rimary Indi	cators (minimum of or	ne required	l; check all that apply	/)			Secondary Indicators (m	iinimum of two required)
	e Water (A1)			Stained Lea	aves (B9)		Surface Soil Cracks	

Surface	Soil	Cracks	(B6)	

- Drainage Patterns (B10)
- Dry-Season Water Table (C2)
  - Crayfish Burrows (C8)
- X Saturation Visible on Aerial Imagery (C9)
- X Stunted or Stressed Plants (D1)
- X Geomorphic Position (D2)
- FAC-Neutral Test (D5)

#### Field Observations:

High Water Table (A2)

Sediment Deposits (B2)

Algal Mat or Crust (B4)

Inundation Visible on Aerial Imagery (B7) Sparsely Vegetated Concave Surface (B8)

Water Marks (B1)

Drift Deposits (B3)

Iron Deposits (B5)

X Saturation (A3)

Surface Water Present? Water Table Present? Saturation Present? (includes capillary fringe)	Yes Yes Yes	X	No No No	X X	Depth (inches): _ Depth (inches): _ Depth (inches): _	N/A >20 6	Wetland Hydrology Present?	Yes_	x	No
Describe Recorded Data (str	ream gai	uge, mo	nitoring	well, aer	ial photos, previous i	nspections), if avai	able:			
Damardua										
Remarks:										
A positive indication of we	etland hy	drology	was ob	served (a	at least one primary in	dicator).				
A positive indication of we	etland hy	drology	was ob	served (a	at least two secondary	indicators).				

Aquatic Fauna (B13)

True Aquatic Plants (B14)

Thin Muck Surface (C7)

Gauge or Well Data (D9)

Other (Explain in Remarks)

Hydrogen Sulfide Odor (C1)

Presence of Reduced Iron (C4)

Oxidized Rhizospheres on Living Roots (C3)

Recent Iron Reduction in Tilled Soils (C6)

US Army Corps of Engineers

Project/Site:		ounty:	Uni	ion	Sampling Date:	November 23, 2020		
Applicant/Owner:		Cade	nce		State:	ОН	Sampling Point:	DPA74_WA45
Investigator(s):	DC	and	-	Section, To	wnship, R	ange:	Libterty -	Township
Landform (hillslope	, terrace, etc.):		Depression		Local reli	ef (concave, co	nvex, none):	Concave
Slope (%):	00-05	Lat:	40.33481	Long:		-83.44412	Datum:	NAD83
Soil Map Unit Name	e:	Blour	nt silt loam, 2-4 perce	nt slopes		1	WI classification:	NA
Are climatic / hydro	logic conditions on	the site typical for thi	s time of year?	Yes X	No	(If no,	explain in Remarks.)	
Are Vegetation	No ,Soil	No ,or Hydrolog	y <u>No</u> significa	ntly disturbed?		Are "Normal	Circumstances" present?	Yes X No
Are Vegetation	No ,Soil	No ,or Hydrolog	y <b>No</b> naturally	problematic?		(If needed, ex	xplain any answers in Rem	arks.)

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

Hydrophytic Vegetation Present? Hydric Soil Present? Wetland Hydrology Present?	Yes X Yes X Yes X	No No No	Is the Sampled Area within a Wetland?	Yes	X	No						
Remarks:	Remarks:											
This point was determined to be w	This point was determined to be within a wetland due to the presence of all 3 wetland criteria.											

## **VEGETATION - Use scientific names of plants.**

	Absolute	Dominant	Indicator	Dominance Test worl	ksheet:			
Tree Stratum (Plot size: 30 ft. )	% cover	Species?	Status	Number of Dominant S	Species			
1. Acer saccharinum	25	Yes	FACW	That Are OBL, FACW,			6	(A)
2. Quercus palustris	20	Yes	FACW					_ ` `
3. Ulmus rubra	20	Yes	FAC	Total Number of Domi	nant			
4.				Species Across All Str	ata:		6	(B)
5.								
	65 =	Total Cover		Percent of Dominant S	pecies			
Sapling/Shrub Stratum (Plot size: 15 ft.	)			That Are OBL, FACW,	•		100%	(A/B)
1. Ulmus rubra		Yes	FAC					_ ` `
2. Acer saccharinum		Yes	FACW	Prevalence Index Wo	rksheet:			
3.				Total % Cov	er of:	Mu	Iltiply by:	
4.				OBL species	0			_
5.				FACW species	55	x 2 =	110	_
		Total Cover		FAC species	40	x 3 =	120	_
Herb Stratum (Plot size: 5 ft. )				FACU species	0	x 4 =	0	_
1. Phalaris arundinacea	5	Yes	FACW	UPL species	0	x 5 =	0	_
2.				Column Totals:	95	(A)	230	(B)
3.				Prevalence Index = B/	A =			_ ` ´
4								
5				Hydrophytic Vegetati	on Indicator	s:		
6.				1 - Rapid Test for	Hydrophytic	Vegetatior	ı	
7.				X 2 - Dominance Te		0		
8				X 3 - Prevalence Inc	dex is ≤3.0 <sup>1</sup>			
9.				4 - Morphological	Adaptations	<sup>I</sup> (Provide :	supporting	
10				data in Remark				
		Total Cover		Problematic Hydro	ophytic Veae	tation <sup>1</sup> (Ex	plain)	
Woody Vine Stratum (Plot size: 30 ft.	)			<sup>1</sup> Indicators of hydric so			. ,	
1. None Observed	/			be present, unless dist			<b>,</b>	
2				<u> </u>				
	0 =	Total Cover		Hydrophytic				
				Vegetation Present?	Y	′es X	No	
Remarks:				<del>.</del>				

A positive indication of hydrophytic vegetation was observed (>50% of dominant species indexed as OBL, FACW, or FAC).

Depth	Matrix			Redo	x Features					
(inches)	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>	Texture	Remarks		
0-3	10YR 3/3	100	None				Loam			
3-18	10YR 4/2	90	10R 5/6	10	C	M	Clay loam			
	oncentration, D=Depl	etion, RM=	Reduced Matrix, MS	=Masked \$	Sand Grains.	2	ocation: PL=Pore Lining,			
	Indicators:						Indicators for Problem	•		
Histoso	. ,			Gleyed Ma			Coast Prairie Red			
Histic Epipedon (A2) Sandy Redox (S5)					,		Dark Surface (S7)			
Black Histic (A3) Stripped Matrix (S6)						Iron-Manganese Masses (F12) Very Shallow Dark Surface (TF12)				
Hydrogen Sulfide (A4)     Loamy Mucky Mineral (F1)       Stratified Layers (A5)     Loamy Gleyed Matrix (F2)					Other (Explain in F	· ,				
	,							Remarks)		
2 cm Muck (A10) Depleted Below Dark Surface (A11)		·	X Depleted Matrix (F3) Redox Dark Surface (F6)							
-	ark Surface (A12)	5 (ATT)		ed Dark Suna	( )					
	Mucky Mineral (S1)			Depression		<sup>3</sup> Indicators of hydrophytic vegetation and wetland hydrology must be present,				
	ucky Peat or Peat (S3	3)		D op: 000.01						
		- /				unless disturbed or problematic.				
estrictive I	_ayer (if present):									
Type:										
Depth(ii	nches):					Hydric Soil Present? Yes X No				
narks:										
positive ind	dication of hydric soil	was observ	ved.							
OROLOG	βY									
land Hydro	ology Indicators:									
Primary Indicators (minimum of one required; check all that apply)						Secondary Indicators (minimum of two required)				
X Surface Water (A1) X Water-Stained Leaves (B9)					Surface Soil Cracks (B6)					

High Water Table (A2)	Aquatic Fauna (B13)	Drainage Patterns (B10)		
X Saturation (A3)	True Aquatic Plants (B14)	Dry-Season Water Table (C2)		
Water Marks (B1)	Hydrogen Sulfide Odor (C1)	Crayfish Burrows (C8)		
Sediment Deposits (B2)	Oxidized Rhizospheres on Living Roots (C3)	X Saturation Visible on Aerial Imagery (C9)		
Drift Deposits (B3)	Presence of Reduced Iron (C4)	Stunted or Stressed Plants (D1)		
Algal Mat or Crust (B4)	Recent Iron Reduction in Tilled Soils (C6)	X Geomorphic Position (D2)		
Iron Deposits (B5)	Thin Muck Surface (C7)	FAC-Neutral Test (D5)		
Inundation Visible on Aerial Imagery (B7)	Gauge or Well Data (D9)			
X Sparsely Vegetated Concave Surface (B8)	Other (Explain in Remarks)			
Field Observations:				
Surface Water Present? Yes X No	Depth (inches): >20			
Water Table Present? Yes No	X Depth (inches): >20			
Saturation Present? Yes X No		Wetland Hydrology Present? Yes X No		
(includes capillary fringe)	Deput (inches)			
	well, aerial photos, previous inspections), if available:			
Boosino Roosidou Bata (Stroam gaugo, montoring				
Remarks:				
A positive indication of wetland hydrology was obs	erved (at least one primary indicator).			
A positive indication of wetland hydrology was obs	erved (at least two secondary indicators).			
Appears to have been a pond either constructed of	r created by the nearby roadway.			

Project/Site:		Cadeno	e Solar	(	County:	Uni	on	Sampling Date:	November 23, 2020	
Applicant/Owner:			Cadence			State:	OH	Sampling Point:	DPA76_WA46	
Investigator(s):	D	C	and	- Section, Township, Range: Libterty				Libterty T	ownship	
Landform (hillslope,	, terrace, etc.	):	Depr	ression		Local reli	ef (concave, cor	ivex, none):	Concave	
Slope (%):	00-	-05	Lat:	40.33651	Long:		-83.44161	Datum:	NAD83	
Soil Map Unit Name	e:		Blount silt lo	oam, 0-2 perce	ent slopes		N	IWI classification:	PEM	
Are climatic / hydrol	logic conditio	ns on the site	e typical for this time	of year?	Yes X	No	(lf no,	explain in Remarks.)		
Are Vegetation	No ,	Soil No	,or Hydrology	No signific	antly disturbed?		Are "Normal (	Circumstances" present?	Yes X No	
Are Vegetation	No ,	Soil No	,or Hydrology	No natural	y problematic?		(If needed, ex	plain any answers in Rema	arks.)	

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

Hydrophytic Vegetation Present? Hydric Soil Present? Wetland Hydrology Present?	Yes X Yes X Yes X	No No No	Is the Sampled Area within a Wetland?	Yes	<u>x</u>	No		
Remarks: This point was determined to be within a wetland due to the presence of all 3 wetland criteria.								

## **VEGETATION - Use scientific names of plants.**

	Absolute D	ominant	Indicator	Dominance Test work	sheet:			
Tree Stratum (Plot size: 30 ft. )	% cover S	pecies?	Status	Number of Dominant S	pecies			
1. None Observed				That Are OBL, FACW,			1	(A)
2				,,			-	( )
				Total Number of Domin	ont			
•				Species Across All Stra			1	(B)
4				Species Across Air Stra	la.		1	(D)
5			<u> </u>					
	0 = Total	Cover		Percent of Dominant Sp				
Sapling/Shrub Stratum (Plot size: 15 ft.	)			That Are OBL, FACW,	or FAC:		100%	(A/B)
1. None Observed				Prevalence Index Wor	kabaati			
2								
3				Total % Cove	er of:	Mu	Iltiply by:	_
4.				OBL species	5	x 1 =	5	
5				FACW species	80	x 2 =	160	_
	0 = Total	Cover		FAC species	0	x 3 =	0	_
Herb Stratum (Plot size: 5 ft. )				FACU species	0	x 4 =	0	
1. Phalaris arundinacea	80	Yes	FACW	UPL species	20	x 5 =	100	
2. Typha latifolia	5	No	OBL	Column Totals:	105	(A)	265	(B)
3. Glycine max	20	No	UPL	Prevalence Index = B/A	. =	2.52		
4								
5				Hydrophytic Vegetatio	n Indicator	s:		
6.				1 - Rapid Test for	Hydrophytic	Vegetation	h	
· · · · · · · · · · · · · · · · · · ·				X 2 - Dominance Tes		vogotatioi		
			·	X 3 - Prevalence Ind				
8				4 - Morphological /				
				data in Remarks				
10							,	
	<u>105</u> = Total	Cover		Problematic Hydro	. , .		• •	
Woody Vine Stratum (Plot size: 30 ft.	)			<sup>1</sup> Indicators of hydric soil be present, unless distu			y must	
1. None Observed						nematic.		
2								
	0 = Total	Cover		Hydrophytic				
				Vegetation Present?	Y	es <u>X</u>	No	
Remarks:								

A positive indication of hydrophytic vegetation was observed (>50% of dominant species indexed as OBL, FACW, or FAC).

Depth	Matrix			Redox	Features						
(inches)	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>	Texture	Remarks			
0-18	10YR 4/1	95	7.5YR 4/6	5	C	M	Silty clay				
	oncentration, D=Depl	etion, RM=F	Reduced Matrix, MS	=Masked S	Sand Grains.	²L	ocation: PL=Pore Linin	g, M=Matrix.			
Hydric Soils Indicators:								lematic Hydric Soils <sup>3</sup> :			
Histoso	I (A1)		Sandy	Gleyed Mat	rix (S4)		Coast Prairie Re	edox (A16)			
Histic E	pipedon (A2)		Sandy	Redox (S5)			Dark Surface (S	57)			
Black H	istic (A3)		Strippe	d Matrix (S	6)		Iron-Manganese Masses (F12)				
Hydrogen Sulfide (A4)			Loamy	Mucky Min	eral (F1)		Very Shallow Da	ark Surface (TF12)			
Stratifie	d Layers (A5)		Loamy	Gleyed Ma	trix (F2)		Other (Explain i	n Remarks)			
2 cm M	uck (A10)		X Deplete	ed Matrix (F	3)						
Deplete	d Below Dark Surface	e (A11)	Redox	Dark Surfa	ce (F6)						
Thick D	ark Surface (A12)		Deplete	ed Dark Su	face (F7)						
Sandy N	Mucky Mineral (S1)		Redox	Depression	is (F8)	<sup>3</sup> Indicators of hydrophytic vegetation and					
	ucky Peat or Peat (S3	3)				wetland hydrology must be present, unless disturbed or problematic.					
Restrictive I	_ayer (if present):										
Type:											
Depth(ii	nches):					Hydrid	Soil Present?	Yes X No			
marks:						1					
A positive ind	dication of hydric soil	was observ	red.								
DROLOG	Ϋ́										
DROLOG	BY										

Primary Indicators (minimum of one required; chec	k all that apply)	Secondary Indicators (minimum of two required)							
Surface Water (A1)	Water-Stained Leaves (B9)	Surface Soil Cracks (B6)							
High Water Table (A2)	Aquatic Fauna (B13)	Drainage Patterns (B10)							
X Saturation (A3)	True Aquatic Plants (B14)	Dry-Season Water Table (C2)							
Water Marks (B1)	Hydrogen Sulfide Odor (C1)	Crayfish Burrows (C8)							
Sediment Deposits (B2)	Oxidized Rhizospheres on Living Roots (C3)	X Saturation Visible on Aerial Imagery (C9)							
Drift Deposits (B3)	Presence of Reduced Iron (C4)	Stunted or Stressed Plants (D1)							
Algal Mat or Crust (B4)	Recent Iron Reduction in Tilled Soils (C6)	X Geomorphic Position (D2)							
Iron Deposits (B5)	Thin Muck Surface (C7)	FAC-Neutral Test (D5)							
Inundation Visible on Aerial Imagery (B7)	Gauge or Well Data (D9)								
Sparsely Vegetated Concave Surface (B8)	Other (Explain in Remarks)								
<u> </u>									
Field Observations:									
Surface Water Present? Yes No	X Depth (inches): N/A								
Water Table Present? Yes No									
Saturation Present? Yes X No		etland Hydrology Present? Yes X No							
(includes capillary fringe)		· · · · ·							
Describe Recorded Data (stream gauge, monitoring v	vell, aerial photos, previous inspections), if available:								
Remarks:									
A positive indication of wetland hydrology was obse	erved (at least one primary indicator).								
A positive indication of wetland hydrology was obse	erved (at least two secondary indicators).								

Project/Site:		Cadence Solar	Co	ounty:	Uni	on	Sampling Date:	November 23, 2020	
Applicant/Owner:		Caden	се		State:	ОН	Sampling Point:	DPA78_WA47	
Investigator(s):	DC	DC and -			Section, Township, Range: Libterty			ownship	
Landform (hillslope	, terrace, etc.):		Depression		Local relie	ef (concave, co	nvex, none):	Concave	
Slope (%):	00-05	Lat:	40.33452	Long:		-83.44209	Datum:	NAD83	
Soil Map Unit Name	e:	Blount	silt loam, 2-4 percer	nt slopes		1	WI classification:	PUB	
Are climatic / hydro	logic conditions on	the site typical for this	time of year?	Yes X	No	(If no,	explain in Remarks.)		
Are Vegetation	No_,Soil	No ,or Hydrology	<b>No</b> significar	ntly disturbed?		Are "Normal	Circumstances" present?	Yes X No	
Are Vegetation	No ,Soil	No ,or Hydrology	<b>No</b> naturally	problematic?		(If needed, e	xplain any answers in Rema	arks.)	

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

Hydrophytic Vegetation Present? Hydric Soil Present? Wetland Hydrology Present?	Yes X Yes X Yes X	No No No	Is the Sampled Area within a Wetland?	Yes	<u>x</u>	No		
Remarks: This point was determined to be within a wetland due to the presence of all 3 wetland criteria.								

## **VEGETATION - Use scientific names of plants.**

Tree Stratum         (Plot size:		Dominant Species?	Indicator Status	Dominance Test work Number of Dominant S That Are OBL, FACW, Total Number of Domin	pecies or FAC: nant		2	
4				Species Across All Stra	ata:		2	(B)
5		Total Cover		Percent of Dominant Sp That Are OBL, FACW,	or FAC:		100%	(A/B)
2. <u>Salix nigra</u>	20	Yes	OBL	Prevalence Index Wor	rksheet:			
3				Total % Cove	er of:	Mu	Itiply by:	
4				OBL species	20	x 1 =		
5				FACW species	55	x 2 =		
	=	Total Cover		FAC species	0	x 3 =		
Herb Stratum (Plot size: 5 ft. )				FACU species	0	x 4 =	-	
1. Phalaris arundinacea	50	Yes	FACW	UPL species	0		0	_
2. Persicaria pensylvanica	5	No	FACW	Column Totals:	75		130	(B)
3 4				Prevalence Index = B/A	\ =	1.73		
5.				Hydrophytic Vegetatio	on Indicator	's:		
6.				1 - Rapid Test for	Hydrophytic	Vegetation	ı	
7.				X 2 - Dominance Te	st is >50%	0		
8				X 3 - Prevalence Ind	lex is ≤3.0 <sup>1</sup>			
9				4 - Morphological data in Remarks				
·		Total Cover		Problematic Hydro	phytic Vege	tation <sup>1</sup> (Ex	plain)	
<u>Woody Vine Stratum</u> (Plot size: <u>30 ft.</u> 1. <u>None Observed</u>	)			<sup>1</sup> Indicators of hydric soi be present, unless distu			y must	
2	=	Total Cover		Hydrophytic Vegetation Present?	Ŷ	/es <u>X</u>	No	

A positive indication of hydrophytic vegetation was observed (>50% of dominant species indexed as OBL, FACW, or FAC).

Depth	Matrix			Redox	Features					
(inches)	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>	Texture	Remarks		
0-18	10YR 4/2	90	2.5yr 4/4	10	C	M	Clay			
	ncentration, D=Deple	ation DM-	Deduced Metrix MC		Cand Oraina	2	ocation: PL=Pore Lining,	A-Natvis		
Hydric Soils		ellon, Rivi-	Reduced Matrix, Mo	-wasked a	Sanu Grains.	L	Indicators for Problen			
Histosol (A1) Sandy Gleyed Matrix (S4)							Coast Prairie Redo	x (A16)		
Histic Epipedon (A2) Sandy Redox (S5)							Dark Surface (S7)			
Black His	,			d Matrix (S			Iron-Manganese M			
	n Sulfide (A4)			Mucky Min		Very Shallow Dark Surface (TF12)				
Stratified Layers (A5) Loamy Gleyed Matrix (F2)							Other (Explain in F	( )		
	n Muck (A10) X Depleted Matrix (F3)					、 .	,			
Depleted	Below Dark Surface	e (A11)	Redox	Dark Surfa	ce (F6)					
 Thick Da	ark Surface (A12)	. ,	Deplete	ed Dark Su	rface (F7)					
	lucky Mineral (S1)			Depressior		<sup>3</sup> Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.				
5 cm Mu	cky Peat or Peat (S3	3)								
Restrictive La	ayer (if present):									
Type:										
Depth(ind	ches):					Hydrid	Soil Present?	Yes X No		
marks:										
A positive indi	ication of hydric soil	was obser	ved.							
DROLOG	v									
-	logy Indicators:									
	ators (minimum of or	ne required						ninimum of two required)		
X Surface Water (A1) Water-Stained Leaves (B9)					Surface Soil Cracks (B6)					
	iter Table (A2)			: Fauna (B <sup>2</sup>	( )		Drainage Patterns			

Wetland Hydrology Indicators:		
Primary Indicators (minimum of one required; check a	ill that apply)	Secondary Indicators (minimum of two required)
X Surface Water (A1)	Water-Stained Leaves (B9)	Surface Soil Cracks (B6)
High Water Table (A2)	Aquatic Fauna (B13)	Drainage Patterns (B10)
X Saturation (A3)	True Aquatic Plants (B14)	Dry-Season Water Table (C2)
Water Marks (B1)	Hydrogen Sulfide Odor (C1)	Crayfish Burrows (C8)
Sediment Deposits (B2)	Oxidized Rhizospheres on Living Roots (C3)	X Saturation Visible on Aerial Imagery (C9)
Drift Deposits (B3)	Presence of Reduced Iron (C4)	X 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)	FAC-Neutral Test (D5)
X Inundation Visible on Aerial Imagery (B7)	Gauge or Well Data (D9)	
X Sparsely Vegetated Concave Surface (B8)	Other (Explain in Remarks)	
Field Observations:		
Surface Water Present? Yes X No	Depth (inches): >20	
Water Table Present? Yes No X	Depth (inches): >20	
Saturation Present? Yes X No	Depth (inches): 0	Wetland Hydrology Present? Yes X No
(includes capillary fringe)		
Describe Recorded Data (stream gauge, monitoring well	l, aerial photos, previous inspections), if available:	
Remarks:		
A positive indication of wetland hydrology was observe	ed (at least one primary indicator).	
A positive indication of wetland hydrology was observe	ed (at least two secondary indicators).	

Project/Site:		Cadence Solar		County:	Uni	on	Sampling Date:	November 23, 2020	
Applicant/Owner:		Cad	ence		State:	ОН	Sampling Point:	DPA80_WA48	
Investigator(s):	DC	Section, Township, Range: Libte			Libterty T	erty Township			
Landform (hillslope,	, terrace, etc.):		Pond		Local reli	ef (concave, co	nvex, none):	Concave	
Slope (%):	00-05	Lat:	40.33444	Long:		-83.43958	Datum:	NAD83	
Soil Map Unit Name	e:	Blou	unt silt loam, 0-2 per	cent slopes		1	WI classification:	PEM	
Are climatic / hydrol	logic conditions o	n the site typical for t	his time of year?	Yes X	No	(If no,	explain in Remarks.)		
Are Vegetation	No ,Soil	No ,or Hydrold	gy <u>No</u> signifi	cantly disturbed?		Are "Normal	Circumstances" present?	Yes X No	
Are Vegetation	No ,Soil	No ,or Hydrold	gy <b>No</b> natura	ally problematic?		(If needed, e	xplain any answers in Rema	arks.)	

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

Hydrophytic Vegetation Present? Hydric Soil Present? Wetland Hydrology Present?	Yes X Yes X Yes X	No No No	Is the Sampled Area within a Wetland?	Yes	x	No
Remarks: This point was determined to be v	vithin a wetland due to	the presence of all 3 v	wetland criteria.			

### **VEGETATION - Use scientific names of plants.**

	Absolute Do	ominant	Indicator	Dominance Test works	heet:			
Tree Stratum (Plot size: 30 ft. )		pecies?	Status	Number of Dominant Sp	ecies			
1. None Observed				That Are OBL, FACW, o			2	(A)
							-	(,,,)
2				Total Number of Domina	nt			
•••							2	
4				Species Across All Strat	a.		2	(B)
5								
	0 = Total	Cover		Percent of Dominant Sp				
Sapling/Shrub Stratum (Plot size: 15 ft.	)			That Are OBL, FACW, o	r FAC:		100%	(A/B)
1. None Observed				<b></b>				
2				Prevalence Index Work	sheet:			
3				Total % Cover	r of:	Mu	Iltiply by:	
4				OBL species	25	x 1 =	25	
5				FACW species	15	x 2 =	30	
	0 = Total	Cover		FAC species	0	x 3 =	0	
Herb Stratum (Plot size: 5 ft. )				FACU species	0	x 4 =	0	
1. Typha latifolia	25	Yes	OBL	UPL species	0	x 5 =	0	
2. Phalaris arundinacea	15	Yes	FACW	Column Totals:	40	(A)	55	(B)
3.				Prevalence Index = B/A	=			(-)
4 5				Hydrophytic Vegetation	n Indicator	's:		
6.				1 - Rapid Test for H	lydrophytic	Vegetation	'n	
7				X 2 - Dominance Tes		vogotatioi		
8.				X 3 - Prevalence Inde				
				4 - Morphological A		<sup>1</sup> (Provide	supporting	
9 10				data in Remarks	-			
	40 = Total	Cover		Problematic Hydror	hvtic Veae	etation <sup>1</sup> (Ex	plain)	
Woody Vine Stratum (Plot size: 30 ft.		0010.		<sup>1</sup> Indicators of hydric soil		`	• •	
1. None Observed	)			be present, unless distu			ymusi	
				······································	F			
2								
	· · · ·							
	0= Total	Cover		Hydrophytic				
	0 = Total	Cover		Hydrophytic Vegetation Present?	Y	′es <u>X</u>	No	

A positive indication of hydrophytic vegetation was observed (>50% of dominant species indexed as OBL, FACW, or FAC).

oth <u>Matrix</u>	Redox Features	2
Color (moist)     %       Add     Add     Add	Color (moist) % Type <sup>1</sup> Lo	
10YR 4/2 90	2.5yr 4/4 10 C M	1 Clay
		<u> </u>
		<sup>2</sup> Location: PL=Pore Lining, M=Matrix.
pe: C=Concentration, D=Depletion, RM=Re dric Soils Indicators:		Indicators for Problematic Hydric Soils <sup>3</sup> :
Histosol (A1)	Sandy Gleyed Matrix (S4)	Coast Prairie Redox (A16)
Histic Epipedon (A2)	Sandy Redox (S5)	Dark Surface (S7)
Black Histic (A3)	Stripped Matrix (S6)	Iron-Manganese Masses (F12)
Hydrogen Sulfide (A4)	Loamy Mucky Mineral (F1)	Very Shallow Dark Surface (TF12)
Stratified Layers (A5)	Loamy Gleyed Matrix (F2)	Other (Explain in Remarks)
2 cm Muck (A10)	X Depleted Matrix (F3)	
Depleted Below Dark Surface (A11)	Redox Dark Surface (F6)	
Thick Dark Surface (A12)	Depleted Dark Surface (F7)	
Sandy Mucky Mineral (S1)	Redox Depressions (F8)	<sup>3</sup> Indicators of hydrophytic vegetation and
5 cm Mucky Peat or Peat (S3)		wetland hydrology must be present,
_3 cm Mucky Feat of Feat (33)		unless disturbed or problematic.
strictive Layer (if present):		
-		
l ype:		Hydric Soil Present? Yes X No
Depth(inches):		
Depth(inches):		
Depth(inches):		·····
rks:	I.	
rks:	<u>.</u> 1.	
rks:	1.	
rks:	<u>.</u>	
rks: ositive indication of hydric soil was observed		
rks: ositive indication of hydric soil was observed		
rks: ositive indication of hydric soil was observed		
rks: ositive indication of hydric soil was observed ROLOGY nd Hydrology Indicators:		
rks: ositive indication of hydric soil was observed ROLOGY nd Hydrology Indicators: nary Indicators (minimum of one required; c	heck all that apply)	Secondary Indicators (minimum of two required)
rks: ositive indication of hydric soil was observed ROLOGY nd Hydrology Indicators: nary Indicators (minimum of one required; c		
rks: ositive indication of hydric soil was observed ROLOGY nd Hydrology Indicators: nary Indicators (minimum of one required; c _Surface Water (A1) _High Water Table (A2)	heck all that apply) Water-Stained Leaves (B9)	Secondary Indicators (minimum of two required)
rks: ositive indication of hydric soil was observed ROLOGY nd Hydrology Indicators: nary Indicators (minimum of one required; c _Surface Water (A1) _High Water Table (A2)	heck all that apply) Water-Stained Leaves (B9) Aquatic Fauna (B13)	Secondary Indicators (minimum of two required) Surface Soil Cracks (B6) Drainage Patterns (B10) Dry-Season Water Table (C2)
rks: ositive indication of hydric soil was observed ROLOGY nd Hydrology Indicators: mary Indicators (minimum of one required; c _Surface Water (A1) _High Water Table (A2) _Saturation (A3) _Water Marks (B1)	heck all that apply) Water-Stained Leaves (B9) Aquatic Fauna (B13) True Aquatic Plants (B14) Hydrogen Sulfide Odor (C1)	Secondary Indicators (minimum of two required) Surface Soil Cracks (B6) Drainage Patterns (B10) Dry-Season Water Table (C2) Crayfish Burrows (C8)
rks: ositive indication of hydric soil was observed ROLOGY nd Hydrology Indicators: 	heck all that apply) Water-Stained Leaves (B9) Aquatic Fauna (B13) True Aquatic Plants (B14) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres on Living Roots (C3)	Secondary Indicators (minimum of two required) Surface Soil Cracks (B6) Drainage Patterns (B10) Dry-Season Water Table (C2) Crayfish Burrows (C8) X Saturation Visible on Aerial Imagery (C9)
rks: ositive indication of hydric soil was observed ROLOGY nd Hydrology Indicators: mary Indicators (minimum of one required; c _Surface Water (A1) _High Water Table (A2) _Saturation (A3) _Water Marks (B1) _Sediment Deposits (B2) _Drift Deposits (B3)	heck all that apply) Water-Stained Leaves (B9) Aquatic Fauna (B13) True Aquatic Plants (B14) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres on Living Roots (C3) Presence of Reduced Iron (C4)	Secondary Indicators (minimum of two required) Surface Soil Cracks (B6) Drainage Patterns (B10) Dry-Season Water Table (C2) Crayfish Burrows (C8) X Saturation Visible on Aerial Imagery (C9) X Stunted or Stressed Plants (D1)
rks: ositive indication of hydric soil was observed ROLOGY nd Hydrology Indicators: mary Indicators (minimum of one required; c _Surface Water (A1) _High Water Table (A2) _Saturation (A3) _Water Marks (B1) _Sediment Deposits (B2) _Drift Deposits (B3) _Algal Mat or Crust (B4)	heck all that apply) Water-Stained Leaves (B9) Aquatic Fauna (B13) True Aquatic Plants (B14) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres on Living Roots (C3) Presence of Reduced Iron (C4) Recent Iron Reduction in Tilled Soils (C6)	Secondary Indicators (minimum of two required) Surface Soil Cracks (B6) Drainage Patterns (B10) Dry-Season Water Table (C2) Crayfish Burrows (C8) X Saturation Visible on Aerial Imagery (C9) X Stunted or Stressed Plants (D1) X Geomorphic Position (D2)
rks: ositive indication of hydric soil was observed ROLOGY nd Hydrology Indicators: mary Indicators (minimum of one required; c _Surface Water (A1) _High Water Table (A2) _Saturation (A3) _Water Marks (B1) _Sediment Deposits (B2) _Drift Deposits (B3)	heck all that apply) Water-Stained Leaves (B9) Aquatic Fauna (B13) True Aquatic Plants (B14) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres on Living Roots (C3) Presence of Reduced Iron (C4)	Secondary Indicators (minimum of two required) Surface Soil Cracks (B6) Drainage Patterns (B10) Dry-Season Water Table (C2) Crayfish Burrows (C8) X Saturation Visible on Aerial Imagery (C9) X Stunted or Stressed Plants (D1)

Surface Water Present?	Yes	х	No		Depth (inches):	>20					
Water Table Present?	Yes		No	Х	Depth (inches):	>20					
Saturation Present? (includes capillary fringe)	Yes _	Х	No		Depth (inches):	0	Wetland Hydrology Present?	Yes_	X	_ No	
Describe Recorded Data (str	eam ga	uge, mo	nitoring	ı well, aeria	l photos, previous i	nspections), if a	ailable:				
Remarks:											
A positive indication of we	tland hy	/drology	was ob	served (at l	least one primary ir	ndicator).					
A positive indication of we	tland hy	drology	waa ah		looot two oo oondom						

Project/Site:	(	Cadence Solar	Co	unty:	Uni	on	Sampling Date:	November 23, 2020		
Applicant/Owner:		Cadenc	е		State:	ОН	Sampling Point:	DPA82_WA49		
Investigator(s):	DC	and	-	Section, Township, Range: Libt				terty Township		
Landform (hillslope	, terrace, etc.):	C	rainageway		Local relie	ef (concave, co	nvex, none):	Concave		
Slope (%):	00-05	Lat:	40.33549	Long:		-83.43675	Datum:	NAD83		
Soil Map Unit Name	e:		Netzel silty clay loan	n		1	WI classification:	PEM		
Are climatic / hydro	logic conditions on	the site typical for this	time of year?	Yes X	No	(If no,	explain in Remarks.)			
Are Vegetation	No_,Soil	No ,or Hydrology	No significan	tly disturbed?		Are "Normal	Circumstances" present?	Yes X No		
Are Vegetation	No ,Soil	No ,or Hydrology	<b>No</b> naturally	problematic?		(If needed, e	xplain any answers in Rema	arks.)		

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

Hydrophytic Vegetation Present? Hydric Soil Present? Wetland Hydrology Present?	Yes X Yes Yes X	No No No	Is the Sampled Area within a Wetland?	Yes	No <u>X</u>					
Remarks: This point was determined not to be within a wetland due to the lack of hydric soils.										

### **VEGETATION - Use scientific names of plants.**

<u>Tree Stratum</u> (Plot size: <u>30 ft.</u> ) 1. <u>None Observed</u> 2.		Indicator Status	Dominance Test work Number of Dominant S That Are OBL, FACW,	Species or FAC:		1	(A)
3 4 5			Total Number of Domin Species Across All Str			1	(B)
Sapling/Shrub Stratum (Plot size: 15 ft. 1. None Observed			Percent of Dominant S That Are OBL, FACW,			100%	(A/B)
2			Prevalence Index Wo				
3			Total % Cov			Itiply by:	
4 5.			OBL species FACW species	0	x 1 = x 2 =	-	
5	0 = Total Cover		FAC species	0	x 2 =		_
Herb Stratum (Plot size: 5 ft. )			FACU species	0	x 4 =	-	_
1. Phalaris arundinacea	100 Yes	FACW	UPL species	0	x 5 =	0	
2.			Column Totals:	100	(A)	200	(B)
3			Prevalence Index = B/	A =	2.00		
4 5			Hydrophytic Vegetati	on Indicator	s:		
6			1 - Rapid Test for X 2 - Dominance Te		Vegetatior	ו	
7 8		. <u></u> .	X 3 - Prevalence Inc				
9 10			4 - Morphological data in Remark	Adaptations <sup>1</sup>			
	100 = Total Cover		Problematic Hydr	ophytic Veget	tation <sup>1</sup> (Ex	plain)	
Woody Vine Stratum         (Plot size: 30 ft.)           1. None Observed	_)		<sup>1</sup> Indicators of hydric so be present, unless dist			y must	
2	0= Total Cover		Hydrophytic Vegetation Present?	Y	es <u>X</u>	No	

A positive indication of hydrophytic vegetation was observed (>50% of dominant species indexed as OBL, FACW, or FAC).

Profile Des	cription: (Describe t	o the dept	h needed to docum	ent the inc	licator or confirn	n the absence	of indicators.)	
Depth	Matrix			Redox	Features			
(inches)	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>	Texture	Remarks
0-3	10YR 3/3	100	None				Clay	
3-18	10YR 4/2	95	2.5YR 4/8	5	С	М	Clay	
	concentration, D=Depl	etion, RM=	Reduced Matrix, MS	=Masked S	and Grains.	2	Location: PL=Pore Lining	, M=Matrix.
Hydric Soil	s Indicators:						Indicators for Proble	ematic Hydric Soils <sup>3</sup> :
Histoso	ol (A1)		Sandy (	Gleyed Mat	rix (S4)		Coast Prairie Re	dox (A16)
Histic E	Epipedon (A2)		Sandy I	Redox (S5)			Dark Surface (S	7)
Black H	Histic (A3)		Strippe	d Matrix (Se	6)		Iron-Manganese	Masses (F12)
Hydrog	jen Sulfide (A4)		Loamy	Mucky Mine	eral (F1)		Very Shallow Da	rk Surface (TF12)
Stratifie	ed Layers (A5)		Loamy	Gleyed Mat	trix (F2)		Other (Explain in	Remarks)
2 cm M	luck (A10)		Deplete	ed Matrix (F	3)			
Deplete	ed Below Dark Surfac	e (A11)	Redox	Dark Surfac	ce (F6)			
Thick E	Dark Surface (A12)		Deplete	ed Dark Sur	face (F7)			
Sandy	Mucky Mineral (S1)		Redox	Depression	s (F8)		<sup>3</sup> Indicators of hydroph	ytic vegetation and
5 cm M	lucky Peat or Peat (S	3)					wetland hydrology m	nust be present,
							unless disturbed or	problematic.
Restrictive	Layer (if present):							
Type:								
Depth(i	inches):					Hydr	ic Soil Present?	Yes NoX
Remarks:								
No positive	indication of hydric so	ils was obs	erved.					
IYDROLOG	2V							
-	ology Indicators:							
-	cators (minimum of or	ne required						(minimum of two required)
	e Water (A1)			Stained Lea	. ,		Surface Soil Cra	( )
0	/ater Table (A2)			Fauna (B1	,		Drainage Patterr	( ),
X Saturat				quatic Plant			Dry-Season Wat	
	Marks (B1)			en Sulfide (			Crayfish Burrows	
	ent Deposits (B2)				eres on Living Ro	ots (C3)		e on Aerial Imagery (C9)
Drift De	eposits (B3)		Presen	ce of Reduc	ced Iron (C4)		Stunted or Stres	sed Plants (D1)

Recent Iron Reduction in Tilled Soils (C6)

N/A

>20

0

\_\_\_Thin Muck Surface (C7) \_\_Gauge or Well Data (D9)

No X Depth (inches):

Yes No X Depth (inches):

Other (Explain in Remarks)

Depth (inches):

Remarks:

A positive indication of wetland hydrology was observed (at least one primary indicator).

A positive indication of wetland hydrology was observed (at least two secondary indicators).

X No

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Algal Mat or Crust (B4)

Inundation Visible on Aerial Imagery (B7) Sparsely Vegetated Concave Surface (B8)

Yes

Yes

Iron Deposits (B5)

Field Observations:

Surface Water Present?

(includes capillary fringe)

Water Table Present?

Saturation Present?

Yes X No

X Geomorphic Position (D2)

FAC-Neutral Test (D5)

Wetland Hydrology Present?

Project/Site:	(	Cadence	e Solar I	Energy Project		Cou	nty:		Uni	on	Sampling Date:	Dec	ember 11	, 2019	
Applicant/Owner:				Cadence S	olar				State:	OH	Sampling Point:	D	PB01_W	B01	
Investigator(s):	H. N	/IcFeete	rs	and	S. Schrat	chratz Section, Township, Range: Yo					York				
Landform (hillslope	, terrace, e	etc.):			Depressor	า			Local relie	ef (concave, c	convex, none):	(	Concave		
Slope (%):	(	00-05		Lat:	40.4	40667	L	_ong:		-83.46704	Datum:		NAD83		
Soil Map Unit Name	e:		Sh - Sh	oals silt loam, (	) to 2 perc	cent slopes	occas	sionally	/ flooded		NWI classification:		PFO		
Are climatic / hydro	logic condi	itions or	n the site	e typical for this	time of y	ear?	Yes	Х	No	(If no	, explain in Remarks.)				
Are Vegetation	No	,Soil	No	or Hydrology,	No	significant	y distu	irbed?		Are "Norma	I Circumstances" prese	ent? Yes	Х	No	
Are Vegetation	No	,Soil	No	,or Hydrology	No	naturally p	roblen	natic?		(If needed,	explain any answers in	Remarks.)			

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

Hydrophytic Vegetation Present? Hydric Soil Present? Wetland Hydrology Present?	Yes _ Yes _ Yes _	x x x	No No No	Is the Sampled Area within a Wetland?	Yes	x	No	
Remarks: This point was determined to be w	within a w	vetland d	ue to the presence o	of all 3 wetland criteria.				

#### **VEGETATION - Use scientific names of plants.**

	Absolute	Dominant	Indicator	Dominance Test worksheet	t:	
Tree Stratum (Plot size: 30 ft. )	% cover	Species?	Status	Number of Dominant Species	3	
1. Ulmus americana	25	Yes	FACW	That Are OBL, FACW, or FAC	C: 5	(A)
2. Quercus rubra	15	Yes	FACU			_ ` `
3.				Total Number of Dominant		
4.				Species Across All Strata:	7	(B)
5.						-
	40 =	Total Cover		Percent of Dominant Species	3	
Sapling/Shrub Stratum (Plot size: 15 ft.	)			That Are OBL, FACW, or FAC	C: 71%	(A/B)
1. Ulmus americana	15	Yes	FACW			
2. Rosa multiflora	10	Yes	FACU	Prevalence Index Workshee	et:	
3.				Total % Cover of:	Multiply by:	
4.				OBL species	0 x1= 0	-
5.				FACW species	<b>50</b> x 2 = <b>100</b>	-
	25 =	Total Cover		· · · ·	<b>10</b> x 3 = <b>30</b>	-
Herb Stratum (Plot size: 5 ft. )				· · · · · · · · · · · · · · · · · · ·	<b>25</b> x 4 = <b>100</b>	-
1. <u>Carex sp.</u>	10	Yes	FACW	UPL species	<b>0</b> x 5 = <b>0</b>	-
2				· · · · · · · · · · · · · · · · · · ·	85 (A) 230	(B)
3				Prevalence Index = B/A =		_ (- /
4						
-		·		Hydrophytic Vegetation Ind	licators:	
5 6				1 - Rapid Test for Hydro	phytic Vegetation	
7.				X 2 - Dominance Test is >		
8.				X 3 - Prevalence Index is s		
-					ations <sup>1</sup> (Provide supporting	
10				data in Remarks or or	· · · · ·	
10	10 =	Total Cover		Problematic Hydrophytic	,	
Woody Vine Stratum (Plot size: 30 ft.	)			<sup>1</sup> Indicators of hydric soil and	0 (1)	
1. Toxicodendron radicans	5	Yes	FAC	be present, unless disturbed	, 0,	
2. Vitis sp.	5	Yes	FAC	, ,		
2. <u>Wus sp.</u>		Total Cover	170			
				Hydrophytic Vegetation Present?	Yes X No	
				vegetation Fresent?	169 <u>v</u> 110	
Remarks:				1		

A positive indication of hydrophytic vegetation was observed (>50% of dominant species indexed as OBL, FACW, or FAC).

DPB01\_WB01

epth	Matrix		Redo	x Features			
ches)	Color (moist)	% Color (mois	st) %	Type <sup>1</sup>	Loc <sup>2</sup>	Texture	Remarks
0-6	10YR 4/1	30 10YR 4/	4 20	С	Μ	Clay Loam	
6-16	10YR 4/1	65 10YR 4/	4 35	С	Μ	Clay	
	<u> </u>			. <u> </u>		·	
	<u> </u>			. <u> </u>		·	
						·	
				<u> </u>		·	
/pe: C=C	oncentration, D=Depletion	, RM=Reduced Mat	ix, MS=Masked	d Sand Grains.	2 <sup>2</sup>	Location: PL=Pore Lining,	M=Matrix.
dric Soil	s Indicators:					Indicators for Problem	natic Hydric Soils <sup>3</sup> :
Histoso	bl (A1)	S	andy Gleyed Ma	atrix (S4)		Coast Prairie Red	ox (A16)
Histic E	Epipedon (A2)	S	andy Redox (S5	5)		Dark Surface (S7)	
Black H	listic (A3)	S	ripped Matrix (	S6)		Iron-Manganese N	lasses (F12)
_ ` `	en Sulfide (A4)	Lo	amy Mucky Mi	neral (F1)		Very Shallow Dark	Surface (TF12)
	ed Layers (A5)		amy Gleyed M			Other (Explain in F	Remarks)
_	luck (A10)		epleted Matrix (				
	ed Below Dark Surface (A	·	edox Dark Surfa	. ,			
_	Dark Surface (A12)		epleted Dark Su			3	
_ `	Mucky Mineral (S1)	R	edox Depressio	ons (F8)		<sup>3</sup> Indicators of hydrophy	•
5 cm IV	lucky Peat or Peat (S3)					wetland hydrology m unless disturbed or p	
estrictive	Layer (if present):						
	-ujo: ( p. coc).						
Type: Depth(i	inches):				Hydri	c Soil Present?	Yes X No
	inches):				Hydri	c Soil Present?	Yes X No
Depth(i	inches):		_		Hydri	ic Soil Present?	Yes X No
Depth(i marks:	inches):	observed.			Hydri	c Soil Present?	Yes <u>X</u> No
Depth(i marks:		observed.			Hydri	ic Soil Present?	Yes <u>X</u> No
Depth(i marks:		observed.			Hydri	ic Soil Present?	Yes <u>X</u> No
Depth(i marks:		observed.			Hydri	ic Soil Present?	Yes <u>X</u> No
Depth(i marks: positive in	dication of hydric soil was	observed.			Hydri	ic Soil Present?	Yes <u>X</u> No
Depth(i marks: positive in	dication of hydric soil was	observed.			Hydri	ic Soil Present?	Yes <u>X</u> No
Depth(i marks: positive in DROLOC	dication of hydric soil was				Hydri		
Depth(i marks: positive in DROLOC etland Hyd	dication of hydric soil was	equired; check all the			Hydri	Secondary Indicators (r	ninimum of two required)
Depth(i marks: positive in DROLOC etland Hyd rimary Indi Surface	dication of hydric soil was	equired; check all the	ater-Stained Le		Hydri	Secondary Indicators (r	ninimum of two required) (s (B6)
Depth(i marks: positive in PROLOC tiland Hyd rimary Indi Surface High W	dication of hydric soil was GY rology Indicators: cators (minimum of one re Water (A1) 'ater Table (A2)	equired; check all that	ater-Stained Le quatic Fauna (B	313)	Hydri	Secondary Indicators (r Surface Soil Crack Drainage Patterns	ninimum of two required) ks (B6) (B10)
Depth(i marks: positive in PROLOC tiland Hyd rimary Indi Surface High W Saturat	dication of hydric soil was GY rology Indicators: cators (minimum of one re Water (A1) /ater Table (A2) ion (A3)	equired; check all tha W A Ti	ater-Stained Le quatic Fauna (B ue Aquatic Pla	313) nts (B14)	Hydri	Secondary Indicators (r Surface Soil Crack Drainage Patterns Dry-Season Water	ninimum of two required) ks (B6) (B10) Table (C2)
Depth(i marks: positive in DROLOC etland Hyd rimary Indi Surface High W Saturat Water	dication of hydric soil was GY rology Indicators: cators (minimum of one re water (A1) 'ater Table (A2) ion (A3) Marks (B1)	equired; check all tha X W A Ti H	ater-Stained Le quatic Fauna (B ue Aquatic Plar ydrogen Sulfide	313) nts (B14) 9 Odor (C1)		Secondary Indicators (r Surface Soil Crack Drainage Patterns Dry-Season Water Crayfish Burrows (	minimum of two required) ks (B6) (B10) Table (C2) C8)
Depth(i marks: positive in DROLOC etland Hyd rimary Indi Surface High W Saturat Water I Sedime	dication of hydric soil was GY rology Indicators: cators (minimum of one re water (A1) fater Table (A2) ion (A3) Marks (B1) ent Deposits (B2)	equired; check all tha X W A A T H O	ater-Stained Le quatic Fauna (B ue Aquatic Plan ydrogen Sulfide xidized Rhizosp	813) nts (B14) e Odor (C1) oheres on Living Ro		Secondary Indicators (r Surface Soil Crack Drainage Patterns Dry-Season Water Crayfish Burrows ( Saturation Visible	minimum of two required) ks (B6) (B10) Table (C2) (C8) on Aerial Imagery (C9)
Depth(i marks: positive in DROLOC etland Hyd rimary Indi Surface High W Saturat Saturat Sedime Drift De	dication of hydric soil was GY rology Indicators: cators (minimum of one re a Water (A1) fater Table (A2) ition (A3) Marks (B1) ent Deposits (B2) aposits (B3)	equired; check all tha <u>X</u> W A A Th M O P	rater-Stained Le quatic Fauna (B ue Aquatic Plai ydrogen Sulfide xidized Rhizosp resence of Redi	813) nts (B14) Odor (C1) oheres on Living Ro uced Iron (C4)	ots (C3)	Secondary Indicators (r Surface Soil Crach Drainage Patterns Dry-Season Water Crayfish Burrows ( Saturation Visible Stunted or Stresse	ninimum of two required) (s (B6) (B10) Table (C2) (C8) on Aerial Imagery (C9) ed Plants (D1)
Depth(i emarks: positive in positive in DROLOO Etland Hyd Primary Indi Surface High W Saturat Saturat Usedime Drift De Algal M	Adication of hydric soil was <b>GY</b> <b>rology Indicators:</b> cators (minimum of one re water (A1) 'ater Table (A2) ion (A3) Marks (B1) ent Deposits (B2) eposits (B3) lat or Crust (B4)	equired; check all tha <u>X</u> W A Ti P P R	ater-Stained Le quatic Fauna (E ue Aquatic Plau ydrogen Sulfide xidized Rhizosp resence of Red ecent Iron Redu	313) nts (B14) o Odor (C1) oheres on Living Ro uced Iron (C4) uction in Tilled Soils	ots (C3)	Secondary Indicators (r Surface Soil Crack Drainage Patterns Dry-Season Water Crayfish Burrows ( Saturation Visible Stunted or Stresse X Geomorphic Posit	minimum of two required) (s (B6) (B10) Table (C2) (C8) on Aerial Imagery (C9) ed Plants (D1) ion (D2)
Depth(i emarks: A positive in DROLOO etland Hyd Primary Indi Surface High W Saturat Water I Sedime Drift De Algal M Iron De	dication of hydric soil was GY rology Indicators: cators (minimum of one re a Water (A1) fater Table (A2) ition (A3) Marks (B1) ent Deposits (B2) aposits (B3)	equired; check all tha <u>X</u> W A A M A P R T T T T T T T	rater-Stained Le quatic Fauna (B ue Aquatic Plai ydrogen Sulfide xidized Rhizosp resence of Redi	813) nts (B14) o Odor (C1) oheres on Living Ro uced Iron (C4) uction in Tilled Soils ce (C7)	ots (C3)	Secondary Indicators (r Surface Soil Crach Drainage Patterns Dry-Season Water Crayfish Burrows ( Saturation Visible Stunted or Stresse	minimum of two required) (s (B6) (B10) Table (C2) (C8) on Aerial Imagery (C9) ed Plants (D1) ion (D2)

Field Observations: Surface Water Present? Yes \_\_\_\_ No \_\_\_ Х Depth (inches): N/A 
 Water Table Present?
 Yes
 No
 X
 Depth (inches): >20 Saturation Present? Yes No х Depth (inches): >20 Wetland Hydrology Present? Yes X No (includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

A positive indication of wetland hydrology was observed (at least one primary indicator).

Project/Site:	Cadence S	olar Energy Project	(	County:	Un	ion	Sampling Date:	December 12, 2019	
Applicant/Owner:		Cadence So	lar		State:	ОН	Sampling Point:	DPB05_WB02	
Investigator(s):	H. McFeeters	and B	Rogness	Section, Tov	vnship, R	ange:	Y	′ork	
Landform (hillslope,	, terrace, etc.):	De	epresson		Local rel	ief (concave, co	nvex, none):	Concave	
Slope (%):	00-05	Lat:	40.40918	Long:		-83.44219	Datum:	NAD83	
Soil Map Unit Name	e:	Gn	- Genesee silt lo	bam		N	IWI classification:	PFO	
Are climatic / hydrol	logic conditions on th	e site typical for this	time of year?	Yes X	No	(If no,	explain in Remarks.)		
Are Vegetation	No_,Soil_N	or Hydrology	No signific	antly disturbed?		Are "Normal	Circumstances" present?	Yes X No	
Are Vegetation	No ,Soil N	or Hydrology	No natural	ly problematic?		(If needed, e	xplain any answers in Re	marks.)	

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

Hydrophytic Vegetation Present? Hydric Soil Present? Wetland Hydrology Present?	Yes _ Yes _ Yes _	x x x	No No No	Is the Sampled Area within a Wetland?	Yes	x	No	
Remarks: This point was determined to be w	within a w	vetland d	ue to the presence o	of all 3 wetland criteria.				

#### **VEGETATION - Use scientific names of plants.**

	Absolute	Dominant	Indicator	Dominance Test work	sheet:		
Tree Stratum (Plot size: 30 ft. )	% cover	Species?	Status	Number of Dominant S	pecies		
1. Fraxinus pennsylvanica	15	Yes	FACW	That Are OBL, FACW,	or FAC:	6	(A)
2. Platanus occidentalis	10	Yes	FACW				
3. Acer saccharum	10	Yes	FACU	Total Number of Domin	nant		
4. Acer rubrum	10	Yes	FAC	Species Across All Stra	ata:	7	(B)
5.							
	45 =	Total Cover		Percent of Dominant S	pecies		
Sapling/Shrub Stratum (Plot size: 15 ft.	)			That Are OBL, FACW,	or FAC:	86%	(A/B)
1. Fraxinus pennsylvanica	10	Yes	FACW				
2. Acer rubrum	10	Yes	FAC	Prevalence Index Wor	rksheet:		
3.				Total % Cove	er of:	Multiply by:	
4.				OBL species	0	x 1 = <b>0</b>	
5.				FACW species	55	x 2 = <b>110</b>	
	20 =	Total Cover		FAC species	20	x 3 = <b>60</b>	
Herb Stratum (Plot size: 5 ft. )				FACU species	10	x 4 = <b>40</b>	
1. Carex sp.	20	Yes	FACW	UPL species	0	x 5 = <b>0</b>	
2.				Column Totals:	85	(A) <b>210</b>	(B)
3.				Prevalence Index = B/A	\ =	2.47	
4.							
5.				Hydrophytic Vegetatio	on Indicato	ors:	
6.				1 - Rapid Test for	Hydrophytic	c Vegetation	
7.				X 2 - Dominance Te	st is >50%		
8.				X 3 - Prevalence Ind	lex is ≤3.0 <sup>1</sup>		
9.				4 - Morphological	Adaptations	s <sup>1</sup> (Provide supporti	ng
10.				data in Remarks	s or on a se	eparate sheet)	
	20 =	Total Cover		Problematic Hydro	phytic Vege	etation <sup>1</sup> (Explain)	
Woody Vine Stratum (Plot size: 30 ft.	)			<sup>1</sup> Indicators of hydric soi			
1. None Observed	/			be present, unless dist	urbed or pro	oblematic.	
2		<u> </u>					
		Total Cover		Hydrophytic			
				Vegetation Present?	Y	es X No	
						<u> </u>	
Remarks:							

A positive indication of hydrophytic vegetation was observed (>50% of dominant species indexed as OBL, FACW, or FAC).

DPB05\_WB02

	ription: (Describe to	o the dept	h needed to docu			the absenc	e of indicators.)	
Depth (in the table)	Matrix		<u> </u>	Redox F	4	. 2	- /	
(inches)	Color (moist)	<u>%</u>	Color (moist)	<u>%</u>	Type	Loc <sup>2</sup>	Texture	Remarks
0-7	10YR 4/1	95	10YR 4/4	5	<u>с</u>	PL	Clay Loam	
7-20	10YR 4/2	98	10YR 4/4	2	U	M	Clay Loam	
			·					
			·					
			·					
			·					
<sup>1</sup> Type: C=Cc	oncentration, D=Deple	etion, RM=	Reduced Matrix, M	S=Masked S	and Grains.	2	ocation: PL=Pore Linir	ng, M=Matrix.
Hydric Soils	Indicators:						Indicators for Prob	lematic Hydric Soils <sup>3</sup> :
Histosol	(A1)		Sandy	Gleyed Matri	x (S4)		Coast Prairie R	ledox (A16)
Histic Ep	pipedon (A2)		Sandy	Redox (S5)			Dark Surface (	S7)
Black Hi	istic (A3)		Strippe	d Matrix (S6)	)		Iron-Manganes	e Masses (F12)
	en Sulfide (A4)			Mucky Mine				Park Surface (TF12)
	d Layers (A5)			Gleyed Matr			Other (Explain	in Remarks)
	uck (A10)			ed Matrix (F3				
	d Below Dark Surface	e (A11)		Dark Surface				
	ark Surface (A12)		·	ed Dark Surfa	. ,		<sup>3</sup> Indicators of hydror	phytic vegetation and
	/lucky Mineral (S1) ucky Peat or Peat (S3		Redox	Depressions	(го)			y must be present,
0 0111100		')					unless disturbed	
Restrictive L	ayer (if present):							-
Type:								
Depth(in	nches):					Hydr	c Soil Present?	Yes X No
emarks: A positive ind	dication of hydric soil	was observ	ved.					
	dication of hydric soil	was obser	ved.					
A positive ind	dication of hydric soil	was observ	/ed.					
A positive ind DROLOG	dication of hydric soil						Secondary Indicator	s (minimum of two required)
A positive ind DROLOG /etland Hydr Primary Indic	dication of hydric soil		; check all that app	oly) Stained Leav	ves (B9)		Secondary Indicator Surface Soil Cr	s (minimum of two required)
A positive ind DROLOG Jetland Hydr Primary IndicSurface	dication of hydric soil TY Pology Indicators: eators (minimum of or		; check all that app X_Water-	••				acks (B6)
A positive ind DROLOG Jetland Hydr Primary IndicSurface	dication of hydric soil ators (minimum of or Water (A1) ator Table (A2)		; check all that app Water- Aquatic	Stained Leav	3)		Surface Soil Cr	acks (B6) rns (B10)
A positive ind DROLOG Ietland Hydr Primary Indic Surface High Wa Saturatio	dication of hydric soil ators (minimum of or Water (A1) ator Table (A2)		; check all that app Water- Aquatic True Ac	Stained Leav c Fauna (B13	3) 5 (B14)		Surface Soil Cr X Drainage Patte	acks (B6) rns (B10) ater Table (C2)
A positive ind DROLOG Vetland Hydr Primary Indic Surface High Wa Saturatic Water M Sedimer	dication of hydric soil <b>SY</b> <b>rology Indicators:</b> eators (minimum of or Water (A1) ater Table (A2) on (A3) farks (B1) nt Deposits (B2)		; check all that app X Water Aquatic True Ac Hydrog Oxidize	Stained Leav c Fauna (B13 quatic Plants len Sulfide O ed Rhizosphe	3) 6 (B14) dor (C1) eres on Living Roo	ts (C3)	Surface Soil Cr X Drainage Patte Dry-Season Wa Crayfish Burrov Saturation Visit	acks (B6) rns (B10) ater Table (C2) vs (C8) ole on Aerial Imagery (C9)
A positive ind DROLOG Vetland Hydr Primary Indic Surface High Wa Saturatio Water M Sedimer Drift Dep	dication of hydric soil <b>ology Indicators:</b> eators (minimum of or Water (A1) ater Table (A2) on (A3) farks (B1) nt Deposits (B2) posits (B3)		; check all that app X Water Aquation True Ad Hydrog Oxidize Presen	Stained Leav c Fauna (B13 quatic Plants gen Sulfide O ed Rhizosphe ce of Reduce	8) (B14) dor (C1) eres on Living Roo ed Iron (C4)		Surface Soil Cr X Drainage Patte Dry-Season Wa Crayfish Burrov Saturation Visit Stunted or Stre	acks (B6) rns (B10) ater Table (C2) vs (C8) ole on Aerial Imagery (C9) ssed Plants (D1)
A positive ind DROLOG Vetland Hydr Primary Indic Surface High Wa Saturatid Water M Sedimer Drift Dep Algal Ma	dication of hydric soil <b>SY</b> <b>rology Indicators:</b> eators (minimum of or Water (A1) ater Table (A2) on (A3) farks (B1) nt Deposits (B2) posits (B3) at or Crust (B4)		; check all that app X Water Aquatic True Ar Hydrog Oxidize Presen Recent	Stained Leav c Fauna (B13 quatic Plants len Sulfide O ed Rhizosphe ice of Reduce : Iron Reduct	3) dor (C1) eres on Living Roo ed Iron (C4) ion in Tilled Soils (		Surface Soil Cr X Drainage Patte Dry-Season Wa Crayfish Burrov Saturation Visit Stunted or Stre X Geomorphic Po	acks (B6) rns (B10) ater Table (C2) vs (C8) ole on Aerial Imagery (C9) ssed Plants (D1) osition (D2)
A positive ind DROLOG /etland Hydr Primary Indic Surface High Wa Saturatid Water M Sedimer Drift Dep Algal Ma Iron Dep	dication of hydric soil <b>SY</b> <b>ology Indicators:</b> eators (minimum of or Water (A1) ater Table (A2) on (A3) Marks (B1) nt Deposits (B2) posits (B3) at or Crust (B4) posits (B5)	ne required	; check all that app X Water Aquatic True Ac Hydrog Oxidize Presen Recent Thin M	Stained Leav C Fauna (B13 quatic Plants len Sulfide O ed Rhizosphe ice of Reduct C Iron Reduct uck Surface	3) 6 (B14) dor (C1) bres on Living Roo ed Iron (C4) ion in Tilled Soils ( (C7)		Surface Soil Cr X Drainage Patte Dry-Season Wa Crayfish Burrov Saturation Visit Stunted or Stre	acks (B6) rns (B10) ater Table (C2) vs (C8) ole on Aerial Imagery (C9) ssed Plants (D1) osition (D2)
A positive ind DROLOG /etland Hydr Primary Indic Surface High Wa Saturatid Water M Sedimer Drift Deg Algal Ma Iron Dep Inundatid	dication of hydric soil dication of hydric soil <b>SY</b> <b>rology Indicators:</b> eators (minimum of or Water (A1) ater Table (A2) on (A3) Marks (B1) nt Deposits (B2) posits (B3) at or Crust (B4) posits (B5) on Visible on Aerial Ir	ne required	; check all that app X Water Aquatic True Ac Hydrog Oxidize Presen Recent Thin Mi Gauge	Stained Leav Fauna (B13 quatic Plants len Sulfide O ad Rhizosphe ice of Reduce i Iron Reduct uck Surface or Well Data	3) 6 (B14) dor (C1) eres on Living Roo ed Iron (C4) ion in Tilled Soils ( (C7) a (D9)		Surface Soil Cr X Drainage Patte Dry-Season Wa Crayfish Burrov Saturation Visit Stunted or Stre X Geomorphic Po	acks (B6) rns (B10) ater Table (C2) vs (C8) ole on Aerial Imagery (C9) ssed Plants (D1) osition (D2)
A positive ind DROLOG /etland Hydr Primary Indic Surface High Wa Saturatid Water M Sedimer Drift Deg Algal Ma Iron Dep Inundatid	dication of hydric soil <b>SY</b> <b>ology Indicators:</b> eators (minimum of or Water (A1) ater Table (A2) on (A3) Marks (B1) nt Deposits (B2) posits (B3) at or Crust (B4) posits (B5)	ne required	; check all that app X Water Aquatic True Ac Hydrog Oxidize Presen Recent Thin Mi Gauge	Stained Leav C Fauna (B13 quatic Plants len Sulfide O ed Rhizosphe ice of Reduct C Iron Reduct uck Surface	3) 6 (B14) dor (C1) eres on Living Roo ed Iron (C4) ion in Tilled Soils ( (C7) a (D9)		Surface Soil Cr X Drainage Patte Dry-Season Wa Crayfish Burrov Saturation Visit Stunted or Stre X Geomorphic Po	acks (B6) rns (B10) ater Table (C2) vs (C8) ole on Aerial Imagery (C9) ssed Plants (D1) osition (D2)
A positive ind DROLOG /etland Hydr Primary Indic Surface High Wa Saturatid Water M Sedimer Drift Deg Algal Ma Iron Dep Inundatid	dication of hydric soil <b>SY</b> <b>ology Indicators:</b> eators (minimum of or Water (A1) ater Table (A2) on (A3) Marks (B1) nt Deposits (B2) posits (B3) at or Crust (B4) posits (B5) on Visible on Aerial Ir y Vegetated Concave	ne required	; check all that app X Water Aquatic True Ac Hydrog Oxidize Presen Recent Thin Mi Gauge	Stained Leav Fauna (B13 quatic Plants len Sulfide O ad Rhizosphe ice of Reduce i Iron Reduct uck Surface or Well Data	3) 6 (B14) dor (C1) eres on Living Roo ed Iron (C4) ion in Tilled Soils ( (C7) a (D9)		Surface Soil Cr X Drainage Patte Dry-Season Wa Crayfish Burrov Saturation Visit Stunted or Stre X Geomorphic Po	acks (B6) rns (B10) ater Table (C2) vs (C8) ole on Aerial Imagery (C9) ssed Plants (D1) osition (D2)
A positive ind DROLOG /etland Hydr Primary Indic Surface High Wa Saturatid Water M Sedimer Drift Deg Algal Ma Iron Dep Inundatid Sparsely	dication of hydric soil <b>SY</b> <b>rology Indicators:</b> eators (minimum of or Water (A1) ater Table (A2) on (A3) Marks (B1) nt Deposits (B2) posits (B3) at or Crust (B4) posits (B5) on Visible on Aerial Ir y Vegetated Concave <b>vations:</b>	ne required	; check all that app X Water Aquatic True Ac Hydrog Oxidize Presen Recent Thin Mi Sala Other (	Stained Leav Fauna (B13 quatic Plants len Sulfide O ad Rhizosphe ice of Reduce i Iron Reduct uck Surface or Well Data	3) 6 (B14) dor (C1) eres on Living Roo ed Iron (C4) ion in Tilled Soils ( (C7) a (D9)		Surface Soil Cr X Drainage Patte Dry-Season Wa Crayfish Burrov Saturation Visit Stunted or Stre X Geomorphic Po	acks (B6) rns (B10) ater Table (C2) vs (C8) ole on Aerial Imagery (C9) ssed Plants (D1) osition (D2)
A positive ind DROLOG /etland Hydr Primary Indic Surface High Wa Saturatic Water M Sedimer Drift Dep Algal Ma Iron Dep Inundatic Sparsely Field Observ	dication of hydric soil dication of hydric soil ators (minimum of or Water (A1) ater Table (A2) on (A3) Marks (B1) nt Deposits (B2) posits (B3) at or Crust (B4) posits (B5) on Visible on Aerial Ir y Vegetated Concave vations: er Present? Yes	ne required magery (B7 Surface (E	; check all that app X Water-1 Aquatic True Ad Hydrog Oxidize Presen Recent Thin M 38) Other (	Stained Leav Fauna (B13 quatic Plants en Sulfide O ed Rhizosphe ice of Reduct i Iron Reduct uck Surface or Well Data Explain in Re	3) dor (C1) eres on Living Roo ed Iron (C4) ion in Tilled Soils ( (C7) a (D9) emarks)		Surface Soil Cr X Drainage Patte Dry-Season Wa Crayfish Burrov Saturation Visit Stunted or Stre X Geomorphic Po	acks (B6) rns (B10) ater Table (C2) vs (C8) ole on Aerial Imagery (C9) ssed Plants (D1) osition (D2)
A positive ind DROLOG /etland Hydr Primary Indic Surface High Wa Saturatic Water M Sedimer Drift Dep Algal Ma Iron Dep Inundatic Sparsely Field Observ Surface Wate	dication of hydric soil dication of hydric soil ators (minimum of or Water (A1) ater Table (A2) on (A3) Marks (B1) nt Deposits (B2) posits (B3) at or Crust (B4) posits (B5) on Visible on Aerial Ir y Vegetated Concave vations: er Present? Yes Present? Yes	ne required magery (B7 Surface (E	; check all that app X Water-1 Aquatic True Ad Hydrog Oxidize Presen Recent Thin Mr Gauge 38) Other ( X Dep Dep	Stained Leav Fauna (B13 quatic Plants en Sulfide O ed Rhizosphe ice of Reduce : Iron Reduct uck Surface or Well Data Explain in Re	(C7) (C7) (C7) (C7) (C7) (D9) (N/A	(C6)	Surface Soil Cr X Drainage Patte Dry-Season Wa Crayfish Burrov Saturation Visit Stunted or Stre X Geomorphic Po	acks (B6) rns (B10) ater Table (C2) vs (C8) ole on Aerial Imagery (C9) issed Plants (D1) osition (D2) est (D5)
A positive ind DROLOG /etland Hydr Primary Indic Surface High Wa Saturatio Water M Sedimer Drift Dep Algal Ma Iron Dep Inundatio Sparsely Field Observ Surface Wate Water Table Saturation Pr (includes cap	dication of hydric soil dication of hydric soil ators (minimum of or Water (A1) ater Table (A2) on (A3) Marks (B1) nt Deposits (B2) posits (B3) at or Crust (B4) posits (B5) on Visible on Aerial Ir y Vegetated Concave vations: er Present? Yes Present? Yes resent? Yes illary fringe)	ne required magery (B7 Surface (E	; check all that app X Water-1 Aquatic True Ad Hydrog Oxidize Presen Recent Thin M Oxidize Presen Recent Thin M Other ( X Dep X Dep X Dep	Stained Leav Fauna (B13 quatic Plants len Sulfide O ed Rhizosphe ice of Reduce i Iron Reduct uck Surface or Well Data Explain in Re th (inches): th (inches):	8)         6 (B14)         (dor (C1))         eres on Living Rooged         ed Iron (C4)         ion in Tilled Soils (C7)         a (D9)         emarks)	(C6) Wetla	Surface Soil Cr X Drainage Patte Dry-Season Wa Crayfish Burrov Saturation Visit Stunted or Stre X Geomorphic Po X FAC-Neutral Te	acks (B6) rns (B10) ater Table (C2) vs (C8) ble on Aerial Imagery (C9) ssed Plants (D1) bsition (D2) est (D5)
A positive ind DROLOG /etland Hydr Primary Indic Surface High Wa Saturatio Water M Sedimer Drift Dep Algal Ma Iron Dep Inundatio Sparsely Field Observ Surface Wate Water Table Saturation Pr (includes cap	dication of hydric soil dication of hydric soil ators (minimum of or Water (A1) ater Table (A2) on (A3) Marks (B1) nt Deposits (B2) posits (B3) at or Crust (B4) posits (B5) on Visible on Aerial Ir y Vegetated Concave vations: er Present? Yes present? Yes	ne required magery (B7 Surface (E	; check all that app X Water-1 Aquatic True Ad Hydrog Oxidize Presen Recent Thin M Oxidize Presen Recent Thin M Other ( X Dep X Dep X Dep	Stained Leav Fauna (B13 quatic Plants len Sulfide O ed Rhizosphe ice of Reduce i Iron Reduct uck Surface or Well Data Explain in Re th (inches): th (inches):	8)         6 (B14)         (dor (C1))         eres on Living Rooged         ed Iron (C4)         ion in Tilled Soils (C7)         a (D9)         emarks)	(C6) Wetla	Surface Soil Cr X Drainage Patte Dry-Season Wa Crayfish Burrov Saturation Visit Stunted or Stre X Geomorphic Po X FAC-Neutral Te	acks (B6) rns (B10) ater Table (C2) vs (C8) ble on Aerial Imagery (C9) ssed Plants (D1) bsition (D2) est (D5)
A positive ind DROLOG Vetland Hydr Primary Indic Surface High Wa Saturatio Water M Sedimer Drift Dep Algal Ma Iron Dep Inundatio Sparsely Field Observ Surface Water Water Table Saturation Pr (includes cap escribe Reco	dication of hydric soil dication of hydric soil ators (minimum of or Water (A1) ater Table (A2) on (A3) Marks (B1) nt Deposits (B2) posits (B3) at or Crust (B4) posits (B5) on Visible on Aerial Ir y Vegetated Concave vations: er Present? Yes Present? Yes resent? Yes illary fringe)	ne required magery (B7 Surface (E	; check all that app X Water-1 Aquatic True Ad Hydrog Oxidize Presen Recent Thin M Oxidize Presen Recent Thin M Other ( X Dep X Dep X Dep	Stained Leav Fauna (B13 quatic Plants len Sulfide O ed Rhizosphe ice of Reduce i Iron Reduct uck Surface or Well Data Explain in Re th (inches): th (inches):	8)         6 (B14)         (dor (C1))         eres on Living Rooged         ed Iron (C4)         ion in Tilled Soils (C7)         a (D9)         emarks)	(C6) Wetla	Surface Soil Cr X Drainage Patte Dry-Season Wa Crayfish Burrov Saturation Visit Stunted or Stre X Geomorphic Po X FAC-Neutral Te	acks (B6) rns (B10) ater Table (C2) vs (C8) ble on Aerial Imagery (C9) ssed Plants (D1) bsition (D2) est (D5)
A positive ind DROLOG Vetland Hydr Primary Indic Surface High Wa Saturatio Water M Sedimer Drift Dep Algal Ma Iron Dep Inundatio Sparsely Field Observ Surface Water Table Saturation Pr (includes cap escribe Reco	dication of hydric soil dication of hydric soil ators (minimum of or Water (A1) ater Table (A2) on (A3) Marks (B1) nt Deposits (B2) posits (B3) at or Crust (B4) posits (B5) on Visible on Aerial Ir y Vegetated Concave vations: er Present? Yes Present? Yes resent? Yes illary fringe)	magery (B7 Surface (E No No auge, moni	; check all that app X Water Aquatic True Ad Hydrog Oxidize Presen Recent Thin Mi Gauge 38) Other ( X Dep X Dep X Dep toring well, aerial p	Stained Leav Fauna (B13 quatic Plants len Sulfide O ed Rhizosphe ice of Reduce i Iron Reduct uck Surface or Well Data Explain in Re th (inches): th (inches):	8)         6 (B14)         (dor (C1))         eres on Living Rooged         ed Iron (C4)         ion in Tilled Soils (C7)         a (D9)         emarks)	(C6) Wetla	Surface Soil Cr X Drainage Patte Dry-Season Wa Crayfish Burrov Saturation Visit Stunted or Stre X Geomorphic Po X FAC-Neutral Te	acks (B6) rns (B10) ater Table (C2) vs (C8) ble on Aerial Imagery (C9) ssed Plants (D1) bsition (D2) est (D5)

Project/Site:	(	Cadence	Solar	Energy Project		County:		Uni	on	Sampling Date:	Dec	ember 13	, 2019	
Applicant/Owner:				Cadence S	olar			State:	OH	Sampling Point:	DPB09_WB03			
Investigator(s):	H. McFeeters and B. Rogness				B. Rogness	Sec	tion, To	wnship, Ra	ange:		York			
Landform (hillslope	slope, terrace, etc.): Depresson						Local relief (concave, convex, none):				C	oncave		
Slope (%):	(	00-05		Lat:	40.3944	19	Long:		-83.41709	Datum:		NAD83		
Soil Map Unit Name	e:	Gw	/g1B1 ·	Glynwood silt	loam, ground	moraine, 2 t	o 6 perc	ent slope	s N	WI classification:		PFO		
Are climatic / hydro	logic condi	itions on	the sit	e typical for this	s time of year?	Yes	Х	No	(lf no,	explain in Remarks.)				
Are Vegetation	No	,Soil	No	or Hydrology,	No sigr	nificantly dis	turbed?		Are "Normal	Circumstances" pres	ent? Yes	х	No	
Are Vegetation	ation <b>No</b> ,Soil <b>No</b> ,or Hydrology <b>No</b> na				urally proble	matic?		(If needed, ex	xplain any answers in	n Remarks.)				

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

Hydrophytic Vegetation Present? Hydric Soil Present? Wetland Hydrology Present?	Yes _ Yes _ Yes _	x x x	No No No	Is the Sampled Area within a Wetland?	Yes	x	No	
Remarks: This point was determined to be v	within a w	vetland d	ue to the presence o	of all 3 wetland criteria.				

#### **VEGETATION - Use scientific names of plants.**

	Absolute	Dominant	Indicator	Dominance Test work	sheet:			
Tree Stratum (Plot size: 30 ft. )	% cover	Species?	Status	Number of Dominant S	pecies			
1. Quercus bicolor	25	Yes	FACW	That Are OBL, FACW,	or FAC:		3	(A)
2. Quercus rubra	10	Yes	FACU					-
3.				Total Number of Domir	nant			
4.				Species Across All Stra	ata:		4	(B)
5.								-
	35 =	Total Cover		Percent of Dominant S	pecies			
Sapling/Shrub Stratum (Plot size: 15 ft.	)			That Are OBL, FACW,	or FAC:	7	5%	(A/B)
1. None Observed								
2.				Prevalence Index Wor	rksheet:			
3.				Total % Cove	er of:	Mult	iply by:	
4.				OBL species	0	x 1 =	0	-
5.				FACW species	85	x 2 =	170	-
	=	Total Cover		FAC species	5	x 3 =	15	-
Herb Stratum (Plot size: 5 ft. )				FACU species	10	x 4 =	40	-
1. <u>Carex sp.</u>	60	Yes	FACW	UPL species	0	x 5 =	0	-
2.				Column Totals:	100	(A)	225	(B)
3.				Prevalence Index = B/A	A =	_ ` ′		_ ( )
4		······································						
5.				Hydrophytic Vegetatio	on Indicator	rs:		
6.				1 - Rapid Test for	Hvdrophytic	Vegetation		
7.				X 2 - Dominance Te		5		
8.		······································		X 3 - Prevalence Ind	lex is ≤3.0 <sup>1</sup>			
9.				4 - Morphological	Adaptations	<sup>1</sup> (Provide s	upporting	
10.				data in Remark				
	60 =	Total Cover		Problematic Hydro	phytic Veae	etation <sup>1</sup> (Exc	, plain)	
Woody Vine Stratum (Plot size: 30 ft.	)			<sup>1</sup> Indicators of hydric soi			-	
1. Toxicodendron radicans		Yes	FAC	be present, unless dist		, 0,	,	
0				-				
2	5 =	Total Cover		Hydrophytic				
				Vegetation Present?	Ye	es X	No	
				- ogetation i roboliti				
Remarks:				1				

A positive indication of hydrophytic vegetation was observed (>50% of dominant species indexed as OBL, FACW, or FAC).

epth	Matrix			Redox	x Features			
iches)	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>	Texture	Remarks
0-5	10YR 4/1	100	None				Clay Loam	
5-16	10YR 3/1	90	10YR 4/4	10	С	Μ	Clay Loam	
	oncentration, D=Deple	tion, RM=I	Reduced Matrix, M	S=Masked	Sand Grains.	2	_ocation: PL=Pore Lining, M	
	Indicators:						Indicators for Problema	•
Histoso	. ,			Gleyed Ma			Coast Prairie Redox	: (A16)
_	pipedon (A2)			Redox (S5			Dark Surface (S7)	
Black H	istic (A3)		Strippe	d Matrix (S	56)		Iron-Manganese Ma	sses (F12)
	en Sulfide (A4)			Mucky Mir			Very Shallow Dark S	
_	d Layers (A5)			Gleyed Ma			Other (Explain in Re	emarks)
	uck (A10)		X Deplet		-			
	d Below Dark Surface	(A11)		Dark Surfa				
_	ark Surface (A12)		·	ed Dark Su	. ,		0	
_	Mucky Mineral (S1)		Redox	Depressio	ns (F8)		<sup>3</sup> Indicators of hydrophytic	-
5 cm M	ucky Peat or Peat (S3	)					wetland hydrology mu unless disturbed or pro	
strictive l	Layer (if present):						· ·	
Type:								
Depth(ii	nches):					Hydri	c Soil Present?	Yes X No
narks:								
	dication of hydric soil	vas observ	red.					
	-							
ROLOG								
tland Hydi	rology Indicators:							
imary India	cators (minimum of or	e required	; check all that app	oly)			Secondary Indicators (mi	
Surface	Water (A1)		X Water-	Stained Le	aves (B9)		Surface Soil Cracks	(B6)
_ `	ater Table (A2)			c Fauna (B	,		Drainage Patterns (I	,
Saturati				quatic Plar			Dry-Season Water 1	
_	/larks (B1)				Odor (C1)		Crayfish Burrows (C	
	nt Deposits (B2)				heres on Living Ro	ots (C3)		n Aerial Imagery (C9)
_	posits (B3)				uced Iron (C4)		Stunted or Stressed	
_ `	at or Crust (B4)				ction in Tilled Soils	(C6)	Geomorphic Positio	· · /
	posits (B5)			uck Surfac	. ,		X FAC-Neutral Test (E	05)
	ion Viciblo on Aorial Ir	aggany (P7	\					
	ion Visible on Aerial Ir y Vegetated Concave			or Well Da Explain in				

Field Observations: 
 Surface Water Present?
 Yes
 No
 X
 Depth (inches):
 N/A

 Water Table Present?
 Yes
 No
 X
 Depth (inches):
 >20

 Saturation Present?
 Yes
 No
 X
 Depth (inches):
 >20

 (includes capillary fringe)
 Yes
 No
 X
 Depth (inches):
 >20
 (includes capillary fringe)

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

A positive indication of wetland hydrology was observed (at least one primary indicator).

Yes X No

Wetland Hydrology Present?

Project/Site:	Cadence Solar Energy Project					Cou	nty:		Uni	on	Sampling Date:	Dece	mber 13	, 2019	
Applicant/Owner:	Cadence Solar								State:	OH	Sampling Point:	DPB11_WB04			
Investigator(s):	r(s): H. McFeeters and			and I	3. Rognes	s	Secti	on, Tov	wnship, Ra	ange:		York			
andform (hillslope, terrace, etc.):					Depressor	า		Local relief (concave, convex, none):				Concave			
Slope (%):	(	00-05		Lat:	40.3	39344	L	_ong:		-83.41545	Datum:		NAD83		
Soil Map Unit Name	e:		Sh - Sh	oals silt loam, (	) to 2 perc	cent slopes	, occas	sionally	/ flooded		NWI classification:		PEM		
Are climatic / hydro	logic condi	itions or	the site	e typical for this	time of y	ear?	Yes	Х	No	(If no	, explain in Remarks.)				
Are Vegetation	No	,Soil	No	,or Hydrology	No	significant	ly distu	irbed?		Are "Norma	I Circumstances" prese	ent? Yes	х	No	
Are Vegetation No ,Soil No ,or Hydrolog			,or Hydrology	No	naturally p	roblen	natic?		(If needed,	explain any answers in	Remarks.)				

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

Hydrophytic Vegetation Present? Hydric Soil Present? Wetland Hydrology Present?	Yes _ Yes _ Yes _	x x x	No No No	Is the Sampled Area within a Wetland?	Yes	x	No	
Remarks: This point was determined to be v	vithin a w	etland d	ue to the presence of	all 3 wetland criteria.				

#### **VEGETATION - Use scientific names of plants.**

	Absolute	Dominant	Indicator	Dominance Test wor	ksheet:		
Tree Stratum (Plot size: 30 ft. )	% cover	Species?	Status	Number of Dominant S	Species		
1. None Observed	·			That Are OBL, FACW,	or FAC:	1	(A)
2.							
3.				Total Number of Domi	nant		
4				Species Across All Str	ata.	2	(B)
5.	·						(2)
0		Total Cover		Percent of Dominant S	Snecies		
Sapling/Shrub Stratum (Plot size: 15 ft.	)			That Are OBL, FACW,	•	50	% (A/B)
	5	Yes	FACU	That file ODE, I flow,	0117(0.		///////////////////////////////////////
		165	FACO	Prevalence Index Wo	orksheet:		
2	·			Total % Cov		Multim	h c la su
		·				Multip	
4.				OBL species	15	x1=	15
5				FACW species	80		160
	5 =	Total Cover		FAC species	0	x 3 =	0
Herb Stratum (Plot size: 5 ft. )				FACU species	5	x 4 =	20
1. Carex sp.	80	Yes	FACW	UPL species	0	x 5 =	0
2. Leersia oryzoides	15	No	OBL	Column Totals:	100	(A)	<b>195</b> (B)
3				Prevalence Index = B/	A =	1.95	
4							
5				Hydrophytic Vegetati	ion Indicator	rs:	
6				1 - Rapid Test for	- Hydrophytic	Vegetation	
7.				2 - Dominance Te	est is >50%		
8.				X 3 - Prevalence In	dex is ≤3.0 <sup>1</sup>		
9.				4 - Morphological	Adaptations	<sup>1</sup> (Provide su	pporting
10.				data in Remark	s or on a se	parate sheet)	
· · · · · · · · · · · · · · · · · · ·	95 =	Total Cover		Problematic Hydr	ophytic Veae	tation <sup>1</sup> (Expl	ain)
Woody Vine Stratum (Plot size: 30 ft.	)			<sup>1</sup> Indicators of hydric so	1 2 0	· · ·	,
1. None Observed	/			be present, unless dis			
	·			· · ·			
2		Total Cover					
				Hydrophytic Vegetation Present?	v.		No
				vegetation Present?	Ye	es X	
Remarks:				1			

DPB11 WB04

Depth	Matrix			Redox	Features			
(inches)	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>	Texture	Remarks
0-6	10YR 4/1	80	10YR 4/6	20	C	 M	Silty Clay Loam	Romanio
6-16	10YR 3/1	80	10YR 4/4	20	C	 M	Silty Clay	
							·	
							·	
							<u> </u>	
<sup>1</sup> Type: C=Co	ncentration, D=Deple	etion, RM=	Reduced Matrix,	MS=Masked S	Sand Grains.	2L	_ocation: PL=Pore Lining, I	M=Matrix.
Hydric Soils	Indicators:						Indicators for Problem	natic Hydric Soils <sup>3</sup> :
Histosol	(A1)		Sano	dy Gleyed Matr	ix (S4)		Coast Prairie Redo	ox (A16)
Histic Ep	ipedon (A2)			dy Redox (S5)			Dark Surface (S7)	
Black Hi	stic (A3)		Strip	ped Matrix (S6	)		Iron-Manganese M	lasses (F12)
Hydroge	n Sulfide (A4)		Loar	ny Mucky Mine	eral (F1)		Very Shallow Dark	Surface (TF12)
Stratified	Layers (A5)		Loar	ny Gleyed Mat	rix (F2)		Other (Explain in R	Remarks)
2 cm Mu	ck (A10)		X Depl	eted Matrix (F3	3)			
	Below Dark Surface	e (A11)	Rede	ox Dark Surfac	e (F6)			
Thick Da	rk Surface (A12)		Depl	eted Dark Surf	ace (F7)			
Sandy M	ucky Mineral (S1)		Rede	ox Depressions	s (F8)		<sup>3</sup> Indicators of hydrophyt	ic vegetation and
5 cm Mu	cky Peat or Peat (S3	3)					wetland hydrology m	ust be present,
							unless disturbed or p	roblematic.
emarks:	ches):					Hydri	c Soil Present?	Yes X No
Depth(in emarks:						Hydri	c Soil Present?	Yes <u>X</u> No
Depth(in emarks: A positive ind DROLOG	ication of hydric soil Y					Hydri	c Soil Present?	Yes <u>X</u> No
Depth(in emarks: A positive ind DROLOG /etland Hydro	ication of hydric soil Y plogy Indicators:	was obser	ved.			Hydri		
Depth(in emarks: A positive ind DROLOG Jetland Hydre Primary Indica	ication of hydric soil Y blogy Indicators: ators (minimum of or	was obser	ved. d; check all that a	pply)		Hydri	Secondary Indicators (n	ninimum of two required)
Depth(in emarks: A positive ind DROLOG Vetland Hydro Primary Indic Surface	ication of hydric soil Y blogy Indicators: ators (minimum of or Water (A1)	was obser	ved. d; check all that a 	pply) er-Stained Lea		Hydri	Secondary Indicators (n Surface Soil Crack	ninimum of two required) s (B6)
Depth(in emarks: A positive ind DROLOG Vetland Hydro Primary Indic: Surface High Wa	Y Plogy Indicators: ators (minimum of or Water (A1) ter Table (A2)	was obser	ved. d; check all that a X Wate Aqua	pply) er-Stained Lea atic Fauna (B13	3)	Hydri	Secondary Indicators (n Surface Soil Crack Drainage Patterns	ninimum of two required) s (B6) (B10)
Depth(in emarks: A positive ind DROLOG Vetland Hydro Primary Indic: Surface High Wa Saturatic	ication of hydric soil Y Dology Indicators: ators (minimum of or Water (A1) ter Table (A2) on (A3)	was obser	ved. d; check all that a X Wate Aqua True	pply) er-Stained Lea atic Fauna (B13 Aquatic Plante	3) s (B14)	Hydri	Secondary Indicators (n Surface Soil Crack Drainage Patterns Dry-Season Water	ninimum of two required) s (B6) (B10) Table (C2)
Depth(in emarks: A positive ind DROLOG Vetland Hydro Primary Indic: Surface High Wa Saturatic Water M	Y Plogy Indicators: ators (minimum of or Water (A1) ter Table (A2) on (A3) arks (B1)	was obser	ved. d; check all that a X Wate Aqua True Hydr	pply) er-Stained Lea atic Fauna (B1: Aquatic Plants ogen Sulfide C	3) s (B14) 0dor (C1)		Secondary Indicators (n Surface Soil Crack Drainage Patterns Dry-Season Water Crayfish Burrows (	ninimum of two required) s (B6) (B10) Table (C2) C8)
Depth(in emarks: A positive ind DROLOG Vetland Hydro Primary Indic: Surface High Wa Saturatic Water M Sedimer	Y Plogy Indicators: ators (minimum of or Water (A1) ter Table (A2) on (A3) arks (B1) tt Deposits (B2)	was obser	ved. d; check all that a X Wate Aqua True Hydr Oxid	pply) er-Stained Lea atic Fauna (B1 Aquatic Plants ogen Sulfide C ized Rhizospho	3) s (B14) Odor (C1) eres on Living Roo		Secondary Indicators (n Surface Soil Crack Drainage Patterns Dry-Season Water Crayfish Burrows ( Saturation Visible of	ninimum of two required) s (B6) (B10) Table (C2) C8) on Aerial Imagery (C9)
Depth(in emarks: A positive ind DROLOG Vetland Hydro Primary Indic: Surface High Wa Saturatic Water M Sedimer Drift Dep	Y Plogy Indicators: ators (minimum of or Water (A1) ter Table (A2) on (A3) arks (B1) tt Deposits (B2) osits (B3)	was obser	ved. d; check all that a X Wate Aqua Aqua True Hydr Qxid Pres	pply) er-Stained Lea atic Fauna (B1 Aquatic Plants ogen Sulfide C ized Rhizospho ence of Reduc	3) s (B14) odor (C1) eres on Living Roo ed Iron (C4)	ots (C3)	Secondary Indicators (n Surface Soil Crack Drainage Patterns Dry-Season Water Crayfish Burrows ( Saturation Visible of Stunted or Stresse	ninimum of two required) s (B6) (B10) Table (C2) C8) on Aerial Imagery (C9) d Plants (D1)
Depth(in emarks: A positive ind DROLOG Vetland Hydro Primary Indic: Surface High Wa Saturatic Saturatic Water M Sedimer Drift Dep Algal Ma	Y Plogy Indicators: ators (minimum of or Water (A1) ter Table (A2) on (A3) arks (B1) it Deposits (B2) oosits (B3) t or Crust (B4)	was obser	ved. d; check all that a X Wate Aqua True Hydr Oxid Pres Rece	pply) er-Stained Lea atic Fauna (B1 Aquatic Plants ogen Sulfide C ized Rhizosph ence of Reduc ent Iron Reduc	3) s (B14) Odor (C1) eres on Living Roc ed Iron (C4) tion in Tilled Soils	ots (C3)	Secondary Indicators (n Surface Soil Crack Drainage Patterns Dry-Season Water Crayfish Burrows ( Saturation Visible Stunted or Stresse Geomorphic Positi	ninimum of two required) s (B6) (B10) Table (C2) C8) on Aerial Imagery (C9) d Plants (D1) on (D2)
Depth(in emarks: A positive ind DROLOG Vetland Hydro Primary Indic: Surface High Wa Saturatic Water M Sedimer Drift Dep Algal Ma Iron Dep	Y Plogy Indicators: ators (minimum of or Water (A1) ter Table (A2) on (A3) arks (B1) it Deposits (B2) osits (B3) t or Crust (B4) osits (B5)	was obser	t; check all that a X Wate Aqua True Hydr Oxid Pres Recc Thin	pply) er-Stained Lea atic Fauna (B1 Aquatic Plants ogen Sulfide C ized Rhizosphe ence of Reduc ent Iron Reduct Muck Surface	3) s (B14) Odor (C1) eres on Living Roo ed Iron (C4) tion in Tilled Soils (C7)	ots (C3)	Secondary Indicators (n Surface Soil Crack Drainage Patterns Dry-Season Water Crayfish Burrows ( Saturation Visible of Stunted or Stresse	ninimum of two required) s (B6) (B10) Table (C2) C8) on Aerial Imagery (C9) d Plants (D1) on (D2)
Depth(in emarks: A positive ind DROLOG /etland Hydre Primary Indica Surface High Wa Saturatic Water M Sedimer Drift Dep Algal Ma Iron Dep Inundatic	Y blogy Indicators: ators (minimum of or Water (A1) ter Table (A2) on (A3) arks (B1) It Deposits (B2) osits (B3) t or Crust (B4) osits (B5) on Visible on Aerial In	was obser	t; check all that a x Wate Aqua True Hydr Oxid Pres Reca Thin 7) Gau	pply) er-Stained Lea atic Fauna (B1 Aquatic Plants ogen Sulfide C ized Rhizospho ence of Reduc ent Iron Reducl Muck Surface ge or Well Data	3) s (B14) odor (C1) eres on Living Roo ed Iron (C4) tion in Tilled Soils (C7) a (D9)	ots (C3)	Secondary Indicators (n Surface Soil Crack Drainage Patterns Dry-Season Water Crayfish Burrows ( Saturation Visible Stunted or Stresse Geomorphic Positi	ninimum of two required) s (B6) (B10) Table (C2) C8) on Aerial Imagery (C9) d Plants (D1) on (D2)
Depth(in emarks: A positive ind DROLOG /etland Hydre Primary Indica Surface High Wa Saturatic Water M Sedimer Drift Dep Algal Ma Iron Dep Inundatic	Y Plogy Indicators: ators (minimum of or Water (A1) ter Table (A2) on (A3) arks (B1) it Deposits (B2) osits (B3) t or Crust (B4) osits (B5)	was obser	t; check all that a x Wate Aqua True Hydr Oxid Pres Reca Thin 7) Gau	pply) er-Stained Lea atic Fauna (B1 Aquatic Plants ogen Sulfide C ized Rhizosphe ence of Reduc ent Iron Reduct Muck Surface	3) s (B14) odor (C1) eres on Living Roo ed Iron (C4) tion in Tilled Soils (C7) a (D9)	ots (C3)	Secondary Indicators (n Surface Soil Crack Drainage Patterns Dry-Season Water Crayfish Burrows ( Saturation Visible Stunted or Stresse Geomorphic Positi	ninimum of two required) s (B6) (B10) Table (C2) C8) on Aerial Imagery (C9) d Plants (D1) on (D2)
Depth(in emarks: A positive ind DROLOG /etland Hydre Primary Indica Surface High Wa Saturatic Water M Sedimer Drift Dep Algal Ma Iron Dep Inundatic	Y Plogy Indicators: ators (minimum of or Water (A1) ter Table (A2) on (A3) arks (B1) it Deposits (B2) oosits (B3) t or Crust (B4) osits (B5) on Visible on Aerial In Vegetated Concave	was obser	t; check all that a x Wate Aqua True Hydr Oxid Pres Reca Thin 7) Gau	pply) er-Stained Lea atic Fauna (B1 Aquatic Plants ogen Sulfide C ized Rhizospho ence of Reduc ent Iron Reducl Muck Surface ge or Well Data	3) s (B14) odor (C1) eres on Living Roo ed Iron (C4) tion in Tilled Soils (C7) a (D9)	ots (C3)	Secondary Indicators (n Surface Soil Crack Drainage Patterns Dry-Season Water Crayfish Burrows ( Saturation Visible Stunted or Stresse Geomorphic Positi	ninimum of two required) s (B6) (B10) Table (C2) C8) on Aerial Imagery (C9) d Plants (D1) on (D2)
Depth(in emarks: A positive ind DROLOG Vetland Hydre Primary Indica Surface High Wa Saturatic Water M Sedimer Drift Dep Algal Ma Iron Dep Inundatic Sparsely Field Observ	Y blogy Indicators: ators (minimum of or Water (A1) ter Table (A2) on (A3) arks (B1) it Deposits (B2) oosits (B3) t or Crust (B4) oosits (B5) on Visible on Aerial In Vegetated Concave ations:	magery (B'	t; check all that a X Wate X Vate Aqua True Hydr Oxid Pres Recc Thin 7) Gau B8) Othe	pply) er-Stained Lea atic Fauna (B13 Aquatic Plants ogen Sulfide C ized Rhizosphe ence of Reduc ent Iron Reduct Muck Surface ge or Well Data er (Explain in R	3) s (B14) odor (C1) eres on Living Roo ed Iron (C4) tion in Tilled Soils (C7) a (D9) emarks)	ots (C3)	Secondary Indicators (n Surface Soil Crack Drainage Patterns Dry-Season Water Crayfish Burrows ( Saturation Visible Stunted or Stresse Geomorphic Positi	ninimum of two required) s (B6) (B10) Table (C2) C8) on Aerial Imagery (C9) d Plants (D1) on (D2)
Depth(in emarks: A positive ind DROLOG /etland Hydre Primary Indica Surface High Wa Saturatic Water M Sedimer Drift Dep Algal Ma Iron Dep Inundatic Sparsely	ication of hydric soil Y Dogy Indicators: ators (minimum of or Water (A1) ter Table (A2) on (A3) arks (B1) it Deposits (B2) oosits (B3) t or Crust (B4) oosits (B5) on Visible on Aerial In Vegetated Concave ations: r Present? Yes	magery (B Surface (I	ved. d; check all that a X Wate Aqua Aqua True Hydr Oxid Pres Recc Thin 7) Gau B8) Othe 0 X D	pply) er-Stained Lea atic Fauna (B1 Aquatic Plants ogen Sulfide C ized Rhizospho ence of Reduc ent Iron Reducl Muck Surface ge or Well Data	3) s (B14) odor (C1) eres on Living Roo ed Iron (C4) tion in Tilled Soils (C7) a (D9) emarks)	ots (C3)	Secondary Indicators (n Surface Soil Crack Drainage Patterns Dry-Season Water Crayfish Burrows ( Saturation Visible Stunted or Stresse Geomorphic Positi	ninimum of two required) s (B6) (B10) Table (C2) C8) on Aerial Imagery (C9) d Plants (D1) on (D2)
Depth(in emarks: A positive ind DROLOG Vetland Hydri Primary Indica Surface High Wa Saturatic Water M Sedimer Drift Dep Algal Ma Iron Dep Inundatic Sparsely Field Observ Surface Wate	ication of hydric soil Y blogy Indicators: ators (minimum of or Water (A1) ter Table (A2) on (A3) arks (B1) It Deposits (B2) losits (B3) It or Crust (B4) losits (B5) on Visible on Aerial II Vegetated Concave ations: Ir Present? Yes Present? Yes	magery (B'	ved. t; check all that a X Wate Aqua True Hydr Oxid Press Reco Code Thin 7) Gaue B8) Othe o X D o X D	pply) er-Stained Lea atic Fauna (B13 Aquatic Plants ogen Sulfide C ized Rhizosphe ence of Reduc ent Iron Reducd Muck Surface ge or Well Data er (Explain in R	3) s (B14) bdor (C1) eres on Living Roo ed Iron (C4) tion in Tilled Soils (C7) a (D9) emarks) <u>N/A</u>	ots (C3) (C6)	Secondary Indicators (n Surface Soil Crack Drainage Patterns Dry-Season Water Crayfish Burrows ( Saturation Visible Stunted or Stresse Geomorphic Positi	ninimum of two required) s (B6) (B10) Table (C2) C8) on Aerial Imagery (C9) d Plants (D1) on (D2) (D5)
Depth(in emarks: A positive ind DROLOG Vetland Hydro Primary Indica Surface High Wa Saturatic Water M Sedimer Drift Dep Algal Ma Iron Dep Inundatic Sparsely Field Observ Surface Wate Water Table I	ication of hydric soil Y blogy Indicators: ators (minimum of or Water (A1) ter Table (A2) on (A3) arks (B1) t Deposits (B2) osits (B3) t or Crust (B4) osits (B5) on Visible on Aerial In Vegetated Concave ations: r Present? Yes pesent? Yes asent? Yes	magery (B Surface (I	ved. t; check all that a X Wate Aqua True Hydr Oxid Press Reco Code Thin 7) Gaue B8) Othe o X D o X D	pply) er-Stained Lea atic Fauna (B13 Aquatic Plants ogen Sulfide C ized Rhizosphe ence of Reduc ent Iron Reduct Muck Surface ge or Well Data er (Explain in R	3) s (B14) bdor (C1) eres on Living Roo ed Iron (C4) tion in Tilled Soils (C7) a (D9) emarks) <u>N/A</u> >20	ots (C3) (C6)	Secondary Indicators (n 	ninimum of two required) s (B6) (B10) Table (C2) C8) on Aerial Imagery (C9) d Plants (D1) on (D2) (D5)

A positive indication of wetland hydrology was observed (at least one primary indicator).

Project/Site:	Cadenc	e Solar Energy F	roject	County:		Un	ion	Sampling Date:	Dece	mber 13,	2019
Applicant/Owner:		Cade	ence Solar			State:	ОН	Sampling Point:	DF	PB13_WB	805
Investigator(s):	H. McFeete	ers and	B. Rogness	Sectio	on, Tov	wnship, R	lange:	Y	/ork		
Landform (hillslope,	terrace, etc.):		Agriculture			Local rel	ief (concave, co	nvex, none):	Co	oncave	
Slope (%):	00-05	Lat	40.3945	52 L	.ong:		-83.44162	Datum:	1	NAD83	
Soil Map Unit Name	: <u> </u>		We - Wetzel silty	clay loam			N	IWI classification:		PEM	
Are climatic / hydrole	ogic conditions o	n the site typical	for this time of year?	Yes	Х	No	(If no,	explain in Remarks.)			
Are Vegetation	No ,Soil	No ,or Hydi	ology <u>No</u> sigi	nificantly distu	irbed?		Are "Normal	Circumstances" present	? Yes	Х	No
Are Vegetation	n No ,Soil No ,or Hydrology No natu				ally problematic? (If needed,		(If needed, e	xplain any answers in Re	emarks.)		

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

Hydrophytic Vegetation Present? Hydric Soil Present? Wetland Hydrology Present?	Yes _ Yes _ Yes _	x x x	No No No	Is the Sampled Area within a Wetland?	Yes	x	No	
Remarks: This point was determined to be v	within a w	vetland d	ue to the presence o	of all 3 wetland criteria.				

#### **VEGETATION - Use scientific names of plants.**

	Absolute	Dominant	Indicator	Dominance Test wo	rksheet:			
Tree Stratum (Plot size: 30 ft. )	% cover	Species?	Status	Number of Dominant	Species			
1. None Observed				That Are OBL, FACW	, or FAC:		1	(A)
2.				,				,
3.				Total Number of Dom	inant			
				Species Across All St			1	(B)
					idid.		•	_ (0)
5		Total Cover		Percent of Dominant	Snecies			
Sapling/Shrub Stratum (Plot size: 15 ft.				That Are OBL, FACW			100%	(A/B)
· · · · · · · · · · · · · · · · · · ·				That Are ODE, I AOW	, or i Ao.		100 /8	_ (/\/D)
				Prevalence Index We	orksheet:			
				Total % Cov		N.4	ltiply by:	
A					0 0	x 1 =	Itiply by: 0	_
4			<u> </u>	OBL species				_
5				FACW species	0	x 2 =		_
	=	Total Cover		FAC species	100	x 3 =		_
Herb Stratum (Plot size: 5 ft. )				FACU species	0	x 4 =	0	_
1. Dactylis sp.	100	Yes	FAC	UPL species	0	x 5 =	-	_
2				Column Totals:	100	(A)	300	(B)
3				Prevalence Index = B	/A =	3.00		
4								
5				Hydrophytic Vegetat	tion Indicator	rs:		
6				1 - Rapid Test fo	r Hydrophytic	Vegetatio	n	
7				X 2 - Dominance T	est is >50%			
8.				X 3 - Prevalence Ir	ndex is ≤3.0 <sup>1</sup>			
9.				4 - Morphologica	I Adaptations	<sup>1</sup> (Provide	supporting	
10				data in Remar	ks or on a se	parate she	et)	
	100 =	Total Cover		Problematic Hyd	rophytic Vege	tation <sup>1</sup> (E)	(plain)	
Woody Vine Stratum (Plot size: 30 ft.	)			<sup>1</sup> Indicators of hydric s	oil and wetlar	d hvdroloo	v must	
1. None Observed	/			be present, unless dis			,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	
2		Total Cover						
	=			Hydrophytic	v.	×	Na	
				Vegetation Present?	Ye Ye	es X	No	

A positive indication of hydrophytic vegetation was observed (>50% of dominant species indexed as OBL, FACW, or FAC).

DPB13\_WB05

epth Matrix			Redox	Features			
nches) Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>	Texture	Remarks
0-8 10YR 4/1	70	10YR 4/6	30	С	PL	Clay Loam	
ype: C=Concentration, D=Deple	etion, RM=R	Reduced Matrix, M	S=Masked	Sand Grains.	<sup>2</sup> L	ocation: PL=Pore Lining	g, M=Matrix.
dric Soils Indicators:							ematic Hydric Soils <sup>3</sup> :
Histosol (A1)			Gleyed Ma			Coast Prairie Re	
Histic Epipedon (A2)			Redox (S5			Dark Surface (S	
Black Histic (A3)			ed Matrix (S	-		Iron-Manganese	
Hydrogen Sulfide (A4)			Mucky Mir				ark Surface (TF12)
Stratified Layers (A5)			Gleyed Ma			Other (Explain i	n Remarks)
2 cm Muck (A10)		X Deplete	-				
Depleted Below Dark Surface	e (A11)		Dark Surfa				
Thick Dark Surface (A12)			ed Dark Su			<sup>3</sup> Indiactors of humb	hutin vingetation and
Sandy Mucky Mineral (S1)	2)	Kedox	Depression	15 (FO)		<sup>3</sup> Indicators of hydrop wetland hydrology	
5 cm Mucky Peat or Peat (S3	"					unless disturbed c	
estrictive Layer (if present):							
Type: Compaction							
Depth(inches): 8					Hydri	c Soil Present?	Yes X No
positive indication of hydric soil	was observe	ea.					
DROLOGY	was observe	ea.					
· · ·						Secondary Indicators	; (minimum of two required)
PROLOGY Itland Hydrology Indicators: rimary Indicators (minimum of or		check all that app	oly) Stained Le	aves (B9)			: (minimum of two required) acks (B6)
ROLOGY		check all that app	.,			Secondary Indicators Surface Soil Cra Drainage Patter	acks (B6)
DROLOGY etland Hydrology Indicators: rimary Indicators (minimum of or X_Surface Water (A1)		check all that app Water- Aquatic	Stained Le	13)		Surface Soil Cra	acks (B6) ns (B10)
PROLOGY Itland Hydrology Indicators: rimary Indicators (minimum of or X Surface Water (A1) X High Water Table (A2)		check all that app Water- Aquatic True Ar	Stained Le c Fauna (B	13) its (B14)		Surface Soil Cra	acks (B6) ns (B10) ter Table (C2)
PROLOGY Itland Hydrology Indicators: rimary Indicators (minimum of or X Surface Water (A1) X High Water Table (A2) X Saturation (A3)		check all that app Water- Aquatio True Av Hydrog	Stained Le c Fauna (B quatic Plan jen Sulfide	13) its (B14) Odor (C1)		Surface Soil Cra Drainage Patter Dry-Season Wa Crayfish Burrow	acks (B6) ns (B10) ter Table (C2)
PROLOGY         itland Hydrology Indicators:         rimary Indicators (minimum of or         X         Surface Water (A1)         X         High Water Table (A2)         X         Saturation (A3)         Water Marks (B1)		check all that app Water- Aquatio True A Hydrog Oxidize	Stained Le c Fauna (B quatic Plan jen Sulfide ed Rhizospl	13) its (B14)	ots (C3)	Surface Soil Cra Drainage Patter Dry-Season Wa Crayfish Burrow Saturation Visib	acks (B6) ns (B10) ter Table (C2) s (C8)
PROLOGY         ttland Hydrology Indicators:         rimary Indicators (minimum of or         X       Surface Water (A1)         X       High Water Table (A2)         X       Saturation (A3)         Water Marks (B1)       Sediment Deposits (B2)		check all that app Water- Aquatic True A Hydrog Oxidize	Stained Le c Fauna (B quatic Plan gen Sulfide ed Rhizospl ace of Redu	13) its (B14) Odor (C1) heres on Living Ro		Surface Soil Cra Drainage Patter Dry-Season Wa Crayfish Burrow Saturation Visib	acks (B6) ns (B10) ter Table (C2) s (C8) le on Aerial Imagery (C9) ssed Plants (D1)
PROLOGY         stland Hydrology Indicators:         rimary Indicators (minimum of or         X       Surface Water (A1)         X       High Water Table (A2)         X       Saturation (A3)         Water Marks (B1)       Sediment Deposits (B2)         Drift Deposits (B3)		check all that app Water- Aquatic True A Oxidize Presen Recent	Stained Le c Fauna (B quatic Plan gen Sulfide ed Rhizospl ace of Redu	13) Its (B14) Odor (C1) heres on Living Ro iced Iron (C4) ction in Tilled Soils		Surface Soil Cra Drainage Patter Dry-Season Wa Crayfish Burrow Saturation Visib Stunted or Stres	acks (B6) ns (B10) ter Table (C2) s (C8) le on Aerial Imagery (C9) ssed Plants (D1) sition (D2)
<b>PROLOGY</b> tland Hydrology Indicators:         rimary Indicators (minimum of or         X         Surface Water (A1)         X         High Water Table (A2)         X         Saturation (A3)         Water Marks (B1)         Sediment Deposits (B2)         Drift Deposits (B3)         Algal Mat or Crust (B4)	ne required;	check all that app Water- Aquatio True Ar  Hydrog Oxidize Presen  Recent Thin M	Stained Le c Fauna (B quatic Plan gen Sulfide ed Rhizospl ace of Redu t Iron Redu	13) Odor (C1) heres on Living Ro iced Iron (C4) ction in Tilled Soils e (C7)		Surface Soil Cra Drainage Patter Dry-Season Wa Crayfish Burrow Saturation Visib Stunted or Stres Geomorphic Po	acks (B6) ns (B10) ter Table (C2) s (C8) le on Aerial Imagery (C9) ssed Plants (D1) sition (D2)
ROLOGY tland Hydrology Indicators: imary Indicators (minimum of or Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5)	ne required; magery (B7)	check all that app Water- Aquatio True A Hydrog Oxidize Presen Recent Thin M	Stained Le c Fauna (B quatic Plan gen Sulfide ed Rhizospi nce of Redu t Iron Redu uck Surfac	13) Odor (C1) heres on Living Ro- iced Iron (C4) ction in Tilled Soils e (C7) ita (D9)		Surface Soil Cra Drainage Patter Dry-Season Wa Crayfish Burrow Saturation Visib Stunted or Stres Geomorphic Po	acks (B6) ns (B10) ter Table (C2) s (C8) le on Aerial Imagery (C9) ssed Plants (D1) sition (D2)
PROLOGY         stland Hydrology Indicators:         rimary Indicators (minimum of or         X         Surface Water (A1)         X         High Water Table (A2)         X         Saturation (A3)         Water Marks (B1)         Sediment Deposits (B2)         Drift Deposits (B3)         Algal Mat or Crust (B4)         Iron Deposits (B5)         Inundation Visible on Aerial In	ne required; magery (B7)	check all that app Water- Aquatio True A Hydrog Oxidize Presen Recent Thin M	Stained Le c Fauna (B quatic Plan jen Sulfide ed Rhizospi ace of Redu t Iron Redu uck Surfac or Well Da	13) Odor (C1) heres on Living Ro- iced Iron (C4) ction in Tilled Soils e (C7) ita (D9)		Surface Soil Cra Drainage Patter Dry-Season Wa Crayfish Burrow Saturation Visib Stunted or Stres Geomorphic Po	acks (B6) ns (B10) ter Table (C2) s (C8) le on Aerial Imagery (C9) ssed Plants (D1) sition (D2)
PROLOGY         stland Hydrology Indicators:         rimary Indicators (minimum of or         X         Surface Water (A1)         X         High Water Table (A2)         X         Saturation (A3)         Water Marks (B1)         Sediment Deposits (B2)         Drift Deposits (B3)         Algal Mat or Crust (B4)         Iron Deposits (B5)         Inundation Visible on Aerial In         Sparsely Vegetated Concave         ield Observations:	ne required; magery (B7)	check all that app Water- Aquatic True A Hydrog Oxidize Presen Recent Thin M Gauge 8) Other (	Stained Le c Fauna (B quatic Plan jen Sulfide ed Rhizospi ace of Redu t Iron Redu uck Surfac or Well Da	13) odor (C1) heres on Living Ro- iced Iron (C4) ction in Tilled Soils e (C7) ita (D9) Remarks)		Surface Soil Cra Drainage Patter Dry-Season Wa Crayfish Burrow Saturation Visib Stunted or Stres Geomorphic Po	acks (B6) ns (B10) ter Table (C2) s (C8) le on Aerial Imagery (C9) ssed Plants (D1) sition (D2)
PROLOGY         stland Hydrology Indicators:         rimary Indicators (minimum of or         X         Surface Water (A1)         X         High Water Table (A2)         X         Saturation (A3)         Water Marks (B1)         Sediment Deposits (B2)         Drift Deposits (B3)         Algal Mat or Crust (B4)         Iron Deposits (B5)         Inundation Visible on Aerial In         Sparsely Vegetated Concave         ield Observations:	magery (B7) Surface (B X No	check all that app Water- Aquatio True A Hydrog Oxidize Presen Recent Thin M Gauge 8) Other (	Stained Le c Fauna (B quatic Plan gen Sulfide ed Rhizospl ace of Redu t Iron Redu uck Surfac or Well Da Explain in I	13) tts (B14) Odor (C1) heres on Living Ro- iced Iron (C4) ction in Tilled Soils e (C7) tta (D9) Remarks) :1		Surface Soil Cra Drainage Patter Dry-Season Wa Crayfish Burrow Saturation Visib Stunted or Stres Geomorphic Po	acks (B6) ns (B10) ter Table (C2) s (C8) le on Aerial Imagery (C9) ssed Plants (D1) sition (D2)
PROLOGY         stland Hydrology Indicators:         rimary Indicators (minimum of or         X         Surface Water (A1)         X         High Water Table (A2)         X         Saturation (A3)         Water Marks (B1)         Sediment Deposits (B2)         Drift Deposits (B3)         Algal Mat or Crust (B4)         Iron Deposits (B5)         Inundation Visible on Aerial In         Sparsely Vegetated Concave         ield Observations:         urface Water Present?	magery (B7) s Surface (B X No X No	check all that app Water- Aquatic True A Hydrog Oxidize Presen Recent Thin M Gauge 8) Other (	Stained Le c Fauna (B quatic Plan gen Sulfide ed Rhizospi ace of Redu t Iron Redu uck Surfac or Well Da Explain in I	13) tts (B14) Odor (C1) heres on Living Ro- iced Iron (C4) ction in Tilled Soils e (C7) tta (D9) Remarks)	(C6)	Surface Soil Cra Drainage Patter Dry-Season Wa Crayfish Burrow Saturation Visib Stunted or Stres Geomorphic Po	acks (B6) ns (B10) ter Table (C2) s (C8) le on Aerial Imagery (C9) ssed Plants (D1) sition (D2) st (D5)
PROLOGY         stland Hydrology Indicators:         rimary Indicators (minimum of or         X         Surface Water (A1)         X         High Water Table (A2)         X         Saturation (A3)         Water Marks (B1)         Sediment Deposits (B2)         Drift Deposits (B3)         Algal Mat or Crust (B4)         Iron Deposits (B5)         Inundation Visible on Aerial In         Sparsely Vegetated Concave         ield Observations:         urface Water Present?         Yes	magery (B7) s Surface (B X No X No X No	check all that app Water- Aquatic True A Hydrog Oxidize Presen Recent Thin M Gauge 8) Other ( Dep Dep	Stained Le c Fauna (B quatic Plan gen Sulfide ed Rhizospl ace of Redu t Iron Redu uck Surfac or Well Da Explain in I explain in I oth (inches)	13) tts (B14) Odor (C1) heres on Living Ro- iced Iron (C4) ction in Tilled Soils e (C7) tta (D9) Remarks)	(C6) Wetla	Surface Soil Cra Drainage Patter Dry-Season Wa Crayfish Burrow Saturation Visib Stunted or Stres Geomorphic Po FAC-Neutral Te	acks (B6) ns (B10) ter Table (C2) s (C8) le on Aerial Imagery (C9) ssed Plants (D1) sition (D2) st (D5)
PROLOGY         stland Hydrology Indicators:         rimary Indicators (minimum of or         X         Surface Water (A1)         X         High Water Table (A2)         X         Saturation (A3)         Water Marks (B1)         Sediment Deposits (B2)         Drift Deposits (B3)         Algal Mat or Crust (B4)         Iron Deposits (B5)         Inundation Visible on Aerial In         Sparsely Vegetated Concave         ield Observations:         urface Water Present?         Yes         /ater Table Present?         yes         aturation Present?	magery (B7) s Surface (B X No X No X No	check all that app Water- Aquatic True A Hydrog Oxidize Presen Recent Thin M Gauge 8) Other ( Dep Dep	Stained Le c Fauna (B quatic Plan gen Sulfide ed Rhizospl ace of Redu t Iron Redu uck Surfac or Well Da Explain in I explain in I oth (inches)	13) tts (B14) Odor (C1) heres on Living Ro- iced Iron (C4) ction in Tilled Soils e (C7) tta (D9) Remarks)	(C6) Wetla	Surface Soil Cra Drainage Patter Dry-Season Wa Crayfish Burrow Saturation Visib Stunted or Stres Geomorphic Po FAC-Neutral Te	acks (B6) ns (B10) ter Table (C2) s (C8) le on Aerial Imagery (C9) ssed Plants (D1) sition (D2) st (D5)
PROLOGY         stland Hydrology Indicators:         rimary Indicators (minimum of or         X         Surface Water (A1)         X         High Water Table (A2)         X         Saturation (A3)         Water Marks (B1)         Sediment Deposits (B2)         Drift Deposits (B3)         Algal Mat or Crust (B4)         Iron Deposits (B5)         Inundation Visible on Aerial In         Sparsely Vegetated Concave         ield Observations:         urface Water Present?         Yes	magery (B7) s Surface (B X No X No X No	check all that app Water- Aquatic True A Hydrog Oxidize Presen Recent Thin M Gauge 8) Other ( Dep Dep	Stained Le c Fauna (B quatic Plan gen Sulfide ed Rhizospl ace of Redu t Iron Redu uck Surfac or Well Da Explain in I explain in I oth (inches)	13) tts (B14) Odor (C1) heres on Living Ro- iced Iron (C4) ction in Tilled Soils e (C7) tta (D9) Remarks)	(C6) Wetla	Surface Soil Cra Drainage Patter Dry-Season Wa Crayfish Burrow Saturation Visib Stunted or Stres Geomorphic Po FAC-Neutral Te	acks (B6) ns (B10) ter Table (C2) s (C8) le on Aerial Imagery (C9) ssed Plants (D1) sition (D2) st (D5)
PROLOGY         etland Hydrology Indicators:         rimary Indicators (minimum of or         X         Surface Water (A1)         X         High Water Table (A2)         X         Saturation (A3)         Water Marks (B1)         Sediment Deposits (B2)         Drift Deposits (B3)         Algal Mat or Crust (B4)         Iron Deposits (B5)         Inundation Visible on Aerial In         Sparsely Vegetated Concave         ield Observations:         urface Water Present?         Ves         aturation Present?         Yes         ncludes capillary fringe)         scribe Recorded Data (stream gate)	magery (B7) s Surface (B X No X No X No	check all that app Water- Aquatic True A Hydrog Oxidize Presen Recent Thin M Gauge 8) Other ( Dep Dep	Stained Le c Fauna (B quatic Plan gen Sulfide ed Rhizospl ace of Redu t Iron Redu uck Surfac or Well Da Explain in I explain in I oth (inches)	13) tts (B14) Odor (C1) heres on Living Ro- iced Iron (C4) ction in Tilled Soils e (C7) tta (D9) Remarks)	(C6) Wetla	Surface Soil Cra Drainage Patter Dry-Season Wa Crayfish Burrow Saturation Visib Stunted or Stres Geomorphic Po FAC-Neutral Te	acks (B6) ns (B10) ter Table (C2) s (C8) le on Aerial Imagery (C9) ssed Plants (D1) sition (D2) st (D5)
PROLOGY         etland Hydrology Indicators:         rimary Indicators (minimum of or         X         Surface Water (A1)         X         High Water Table (A2)         X         Saturation (A3)         Water Marks (B1)         Sediment Deposits (B2)         Drift Deposits (B3)         Algal Mat or Crust (B4)         Iron Deposits (B5)         Inundation Visible on Aerial In         Sparsely Vegetated Concave         ield Observations:         urface Water Present?         Yes         aturation Present?         Yes         ncludes capillary fringe)         scribe Recorded Data (stream gamarks:	magery (B7) s Surface (B X No X No X No auge, monit	check all that app Water- Aquatio True Au Hydrog Oxidize Presen Recent Thin M Gauge 8) Other ( Dep Dep Dep	Stained Le c Fauna (B quatic Plan gen Sulfide ed Rhizospl ace of Redu t Iron Redu uck Surfac or Well Da Explain in I explain in I oth (inches) oth (inches)	13) its (B14) Odor (C1) heres on Living Ro- iced Iron (C4) ction in Tilled Soils e (C7) ita (D9) Remarks) : <u>1</u> : <u>0</u> vious inspections),	(C6) Wetla	Surface Soil Cra Drainage Patter Dry-Season Wa Crayfish Burrow Saturation Visib Stunted or Stres Geomorphic Po FAC-Neutral Te	acks (B6) ns (B10) ter Table (C2) s (C8) le on Aerial Imagery (C9) ssed Plants (D1) sition (D2) st (D5)
PROLOGY         etland Hydrology Indicators:         rimary Indicators (minimum of or         X         Surface Water (A1)         X         High Water Table (A2)         X         Saturation (A3)         Water Marks (B1)         Sediment Deposits (B2)         Drift Deposits (B3)         Algal Mat or Crust (B4)         Iron Deposits (B5)         Inundation Visible on Aerial In         Sparsely Vegetated Concave         ield Observations:         urface Water Present?         Ves         aturation Present?         Yes         ncludes capillary fringe)         scribe Recorded Data (stream gate)	magery (B7) s Surface (B X No X No X No auge, monit	check all that app Water- Aquatio True Au Hydrog Oxidize Presen Recent Thin M Gauge 8) Other ( Dep Dep Dep	Stained Le c Fauna (B quatic Plan gen Sulfide ed Rhizospl ace of Redu t Iron Redu uck Surfac or Well Da Explain in I explain in I oth (inches) oth (inches)	13) its (B14) Odor (C1) heres on Living Ro- iced Iron (C4) ction in Tilled Soils e (C7) ita (D9) Remarks) : <u>1</u> : <u>0</u> vious inspections),	(C6) Wetla	Surface Soil Cra Drainage Patter Dry-Season Wa Crayfish Burrow Saturation Visib Stunted or Stres Geomorphic Po FAC-Neutral Te	acks (B6) ns (B10) ter Table (C2) s (C8) le on Aerial Imagery (C9) ssed Plants (D1) sition (D2) st (D5)
PROLOGY         etland Hydrology Indicators:         rimary Indicators (minimum of or         X         Surface Water (A1)         X         High Water Table (A2)         X         Saturation (A3)         Water Marks (B1)         Sediment Deposits (B2)         Drift Deposits (B3)         Algal Mat or Crust (B4)         Iron Deposits (B5)         Inundation Visible on Aerial In         Sparsely Vegetated Concave         ield Observations:         urface Water Present?         Yes         aturation Present?         Yes         ncludes capillary fringe)         scribe Recorded Data (stream gamarks:	magery (B7) s Surface (B X No X No X No auge, monit	check all that app Water- Aquatio True Au Hydrog Oxidize Presen Recent Thin M Gauge 8) Other ( Dep Dep Dep	Stained Le c Fauna (B quatic Plan gen Sulfide ed Rhizospl ace of Redu t Iron Redu uck Surfac or Well Da Explain in I explain in I oth (inches) oth (inches)	13) its (B14) Odor (C1) heres on Living Ro- iced Iron (C4) ction in Tilled Soils e (C7) ita (D9) Remarks) : <u>1</u> : <u>0</u> vious inspections),	(C6) Wetla	Surface Soil Cra Drainage Patter Dry-Season Wa Crayfish Burrow Saturation Visib Stunted or Stres Geomorphic Po FAC-Neutral Te	acks (B6) ns (B10) ter Table (C2) s (C8) le on Aerial Imagery (C9) ssed Plants (D1) sition (D2) st (D5)
PROLOGY         Interpretation         rimary Indicators (minimum of or         X         Surface Water (A1)         X         High Water Table (A2)         X         Saturation (A3)         Water Marks (B1)         Sediment Deposits (B2)         Drift Deposits (B3)         Algal Mat or Crust (B4)         Iron Deposits (B5)         Inundation Visible on Aerial In         Sparsely Vegetated Concave         ield Observations:         urface Water Present?         Yes         aturation Present?         Yes         acturation Present?         Yes         acturation Present?         Scribe Recorded Data (stream game)         scribe Rescorded Data (stream game)	magery (B7) s Surface (B X No X No X No auge, monit	check all that app Water- Aquatio True Au Hydrog Oxidize Presen Recent Thin M Gauge 8) Other ( Dep Dep Dep	Stained Le c Fauna (B quatic Plan gen Sulfide ed Rhizospl ace of Redu t Iron Redu uck Surfac or Well Da Explain in I explain in I oth (inches) oth (inches)	13) its (B14) Odor (C1) heres on Living Ro- iced Iron (C4) ction in Tilled Soils e (C7) ita (D9) Remarks) : <u>1</u> : <u>0</u> vious inspections),	(C6) Wetla	Surface Soil Cra Drainage Patter Dry-Season Wa Crayfish Burrow Saturation Visib Stunted or Stres Geomorphic Po FAC-Neutral Te	acks (B6) ns (B10) ter Table (C2) s (C8) le on Aerial Imagery (C9) ssed Plants (D1) sition (D2) st (D5)

Project/Site:	Cadence Solar Energy Project					County	:	Ur	ion	Sampling Date:	Dece	mber 13	3, 2019
Applicant/Owner:	Cadence Solar							State:	ОН	Sampling Point:	DF	B06	
Investigator(s):	H. McFeeters and B. Rogness					Se	ection, To	wnship, F	lange:		York		
Landform (hillslope,	terrace, e	etc.):		F	loodplain			Local rel	ief (concave, co	nvex, none):	С	oncave	
Slope (%):	C	00-05		Lat:	40.38	3405	Long:		-83.43239	Datum:		NAD83	
Soil Map Unit Name	: <u> </u>			We	- Wetzel si	Ity clay loam			N	WI classification:		PEM	
Are climatic / hydrole	ogic condi	itions on	the site	e typical for this	time of ye	ar? Ye	es X	No	(If no,	explain in Remarks.)			
Are Vegetation	No	,Soil	No	or Hydrology,	No s	significantly d	isturbed?		Are "Normal	Circumstances" prese	ent? Yes	х	No
Are Vegetation	ation <u>No</u> ,Soil <u>No</u> ,or Hydrology <u>No</u> natu				naturally prob	lematic?		(If needed, ex	xplain any answers in	Remarks.)			

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

Hydrophytic Vegetation Present? Hydric Soil Present? Wetland Hydrology Present?	Yes _ Yes _ Yes _	x x x	No No No	Is the Sampled Area within a Wetland?	Yes	x	No	
Remarks: This point was determined to be v	within a w	vetland d	ue to the presence o	of all 3 wetland criteria.				

#### **VEGETATION - Use scientific names of plants.**

	Absolute	Dominant	Indicator	Dominance Test wor	rksheet:			
Tree Stratum (Plot size: 30 ft. )	% cover	Species?	Status	Number of Dominant	Species			
1. None Observed				That Are OBL, FACW	, or FAC:		2	(A)
2.								/
3.				Total Number of Dom	inant			
4.				Species Across All St	rata:		2	(B)
5.								_ ( )
	=	Total Cover		Percent of Dominant	Species			
Sapling/Shrub Stratum (Plot size: 15 ft.	)			That Are OBL, FACW	•		00%	(A/B)
1. <u>Salix nigra</u>		Yes	OBL	,	,			()
		103		Prevalence Index Wo	orksheet:	-		
2				Total % Cov	ver of:	Mu	tiply by:	
				OBL species	20	x 1 =		_
4 5.				FACW species	90	x 2 =		_
5	10 -	Total Cover		FAC species	0	x 2 =		_
Llauk Stratum (Distaire) 5 ft		Total Cover			0	x 3 =		_
Herb Stratum (Plot size: 5 ft. )	00	N	54.014/	FACU species	0		0	_
1. Phalaris arundinacea	90	Yes	FACW	UPL species		x 5 =	•	-
2. Solidago ohioensis	10	No	OBL	Column Totals:	110		200	(B)
3				Prevalence Index = B	/A =	1.82		
4				I hadron hadde Manadad				
5				Hydrophytic Vegetat				
6				1 - Rapid Test fo		Vegetatio	n	
7				X 2 - Dominance T				
8				X 3 - Prevalence In				
9				4 - Morphologica		-		
10				data in Remar			,	
	100 =	Total Cover		Problematic Hyd	1 2 0	·	. ,	
Woody Vine Stratum (Plot size: 30 ft.	)			<sup>1</sup> Indicators of hydric set	oil and wetlar	nd hydrolog	gy must	
1. None Observed				be present, unless dis	sturbed or pro	blematic.		
2.								
	=	Total Cover		Hydrophytic				
				Vegetation Present?	Ye	es X	No	
Remarks:				1				

#### A positive indication of hydrophytic vegetation was observed (>50% of dominant species indexed as OBL, FACW, or FAC).

X Geomorphic Position (D2)

X FAC-Neutral Test (D5)

DPB15\_WB06

Depth	Matrix			Redox	Features			
inches)	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>	Texture	Remarks
0-5	10YR 3/1	100					Silty Clay	
5-16	10YR 4/1	85	10YR 4/4	15	С	Μ	Clay	
	concentration, D=Depl	etion RM:	Reduced Matrix M	S=Masked	Sand Grains	2	Location: PL=Pore Lining, M	=Matrix
51	s Indicators:			J-INASKEU	Sand Grains.		Indicators for Problema	
Histoso			Sandy	Gleyed Ma	triv (SA)		Coast Prairie Redox	•
_	Epipedon (A2)			Redox (S5			Dark Surface (S7)	(A10)
	Histic (A3)			d Matrix (S			Iron-Manganese Ma	sses (F12)
	jen Sulfide (A4)			Mucky Mir			Very Shallow Dark S	
	ed Layers (A5)			Gleyed Ma			Other (Explain in Re	
	luck (A10)		X Deplete	-				,
_	ed Below Dark Surfac	e (A11)		Dark Surfa				
	Dark Surface (A12)	( )			Irface (F7)			
Sandy	Mucky Mineral (S1)		Redox	Depressio	ns (F8)		<sup>3</sup> Indicators of hydrophytic	vegetation and
5 cm N	lucky Peat or Peat (S	3)					wetland hydrology mus unless disturbed or pro	
estrictive	Layer (if present):							
Type:								
Depth(	inches):					Hydr	ic Soil Present?	Yes X No
marks:								
positive ir	ndication of hydric soil	was obse	rved.					
OROLO	GY							
etland Hyd	Irology Indicators:							
rimary Ind	icators (minimum of o	ne require	d; check all that app	ly)			Secondary Indicators (mi	nimum of two required)
Surfac	e Water (A1)		Water-	Stained Le	aves (B9)		Surface Soil Cracks	(B6)
High W	/ater Table (A2)		Aquatio	Fauna (B	13)		Drainage Patterns (I	310)
Satura	tion (A3)		True A	quatic Plar	nts (B14)		Dry-Season Water T	able (C2)
Water	Marks (B1)		Hydrog	en Sulfide	Odor (C1)		Crayfish Burrows (C	8)
Sedime	ent Deposits (B2)		Oxidize	d Rhizosp	heres on Living Ro	ots (C3)	Saturation Visible or	n Aerial Imagery (C9)
Drift D	eposits (B3)		Presen	ce of Redu	uced Iron (C4)		Stunted or Stressed	Plants (D1)

Field Observations: Surface Water Present? Yes N

Inundation Visible on Aerial Imagery (B7)

Sparsely Vegetated Concave Surface (B8)

Algal Mat or Crust (B4)

Iron Deposits (B5)

Surface Water Present?	Yes	No	Х	Depth (inches):	N/A				
Water Table Present?	Yes	No	Х	Depth (inches):	>20				
Saturation Present?	Yes	No	Х	Depth (inches):	>20		Wetland Hydrology Present?	Yes	)
(includes capillary fringe)									
Describe Recorded Data (s	stream (	gauge, monito	ring we	ll, aerial photos, previo	us inspection	s), if a	vailable:		

Recent Iron Reduction in Tilled Soils (C6)

Thin Muck Surface (C7)

Gauge or Well Data (D9)

Other (Explain in Remarks)

Remarks:

A positive indication of wetland hydrology was observed (at least two secondary indicators).

No

Project/Site:	Cadence Solar Energy Project					County:		Un	ion	Sampling Date:	Dece	mber 14	1, 2019	
Applicant/Owner:	Cadence Solar							State:	ОН	Sampling Point:	: DPB20_WB07			
Investigator(s):	H. McFeeters and B. Rogness					Se	ction, To	wnship, F	lange:		York			
Landform (hillslope, terrace, etc.): Depresson							Local rel	ief (concave, co	nvex, none):	С	oncave			
Slope (%):	00-05 Lat: 40.3876				3766	Long:		-83.43634	Datum:		VAD83			
Soil Map Unit Name	: <u> </u>			We	Wetzel sil	lty clay loam			N	WI classification:		PFO		
Are climatic / hydrole	ogic condi	tions on	the site	e typical for this	time of yea	ar? Ye	s <u>X</u>	No	(If no,	explain in Remarks.)				
Are Vegetation	No	,Soil	No	,or Hydrology	No s	ignificantly di	sturbed?		Are "Normal	Circumstances" prese	ent? Yes	х	No	
Are Vegetation	on <u>No</u> ,Soil <u>No</u> ,or Hydrology <u>No</u> natu				aturally probl	roblematic? (If needed, exp		xplain any answers in	Remarks.)					

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

Hydrophytic Vegetation Present? Hydric Soil Present? Wetland Hydrology Present?	Yes _ Yes _ Yes _	x x x	No No No	Is the Sampled Area within a Wetland?	Yes	x	No	
Remarks: This point was determined to be w	within a w	vetland d	ue to the presence o	of all 3 wetland criteria.				

#### **VEGETATION - Use scientific names of plants.**

	Absolute	Dominant	Indicator	Dominance Test wor	ksheet:			
Tree Stratum (Plot size: 30 ft. )	% cover	Species?	Status	Number of Dominant	Species			
1. Fraxinus pennsylvanica	60	Yes	FACW	That Are OBL, FACW	, or FAC:		3	(A)
2.		······						
3.		······		Total Number of Dom	inant			
4.				Species Across All St	rata:		3	(B)
5.								/
	60 =	Total Cover		Percent of Dominant S	Species			
Sapling/Shrub Stratum (Plot size: 15 ft.	)			That Are OBL, FACW	, or FAC:	10	00%	(A/B)
1. Fraxinus pennsylvanica	40	Yes	FACW					_ ` `
2		·	·	Prevalence Index Wo	orksheet:			
3.				Total % Cov	er of:	Mult	iply by:	
4.				OBL species	0	x 1 =		-
5.		·	<u> </u>	FACW species	115	x 2 =	230	-
	40 =	Total Cover		FAC species	0	x 3 =		-
Herb Stratum (Plot size: 5 ft. )				FACU species	0	x 4 =	0	-
1. Phalaris arundinacea	15	Yes	FACW	UPL species	0	x 5 =	0	-
2		·	<u> </u>	Column Totals:	115	(A)	230	(B)
3.				Prevalence Index = B/	A =	2.00		_ ( )
4								
5.		·	<u> </u>	Hydrophytic Vegetat	ion Indicato	rs:		
6.		·	<u> </u>	X 1 - Rapid Test for	r Hydrophytic	Vegetation		
7.				X 2 - Dominance T	est is >50%	Ū		
8				X 3 - Prevalence In				
9.		·	<u> </u>	4 - Morphologica	Adaptations	<sup>1</sup> (Provide s	upporting	
10.				data in Remar	ks or on a se	parate shee	et)	
	15 =	Total Cover		Problematic Hydr	rophytic Vege	etation <sup>1</sup> (Exp	olain)	
Woody Vine Stratum (Plot size: 30 ft.	)			<sup>1</sup> Indicators of hydric so	oil and wetlar	nd hydrology	/ must	
1. None Observed				be present, unless dis				
2.								
	=	Total Cover	<u> </u>	Hydrophytic				
				Vegetation Present?	Y	es X	No	
Remarks:				•				

A positive indication of hydrophytic vegetation was observed (>50% of dominant species indexed as OBL, FACW, or FAC).

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SOIL							Gamping	
Profile Des	cription: (Describe t	o the depth	h needed to doo	ument the in	dicator or confir	m the absend	ce of indicators.)	
Depth	 Matrix				Features		,	
(inches)	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>	Texture	Remarks
0-5	10YR 4/1	80	10YR 4/4	20	<u> </u>	M	Silt Loam	
5-17	10YR 5/1	90	10YR 4/4	10	C	M	Silty Clay Loam	
	1011110/1						Only Only Louin	
		—						
		—						
<sup>1</sup> Type: C=C	oncentration, D=Deple	etion RM=F	Reduced Matrix	MS=Masked S	Sand Grains		<sup>2</sup> Location: PL=Pore Lining, M	=Matrix
,,	s Indicators:						Indicators for Problema	
Histoso			Sand	y Gleyed Matı	iv (S4)		Coast Prairie Redox	
	Epipedon (A2)			y Redox (S5)	IX (04)		Dark Surface (S7)	(A10)
	listic (A3)			ped Matrix (S6	3)		Iron-Manganese Ma	sses (F12)
	en Sulfide (A4)			ny Mucky Mine	-		Very Shallow Dark S	
	ed Layers (A5)			iy Gleyed Mat			Other (Explain in Re	
	luck (A10)			eted Matrix (F:				marks
	ed Below Dark Surface	(11)		x Dark Surfac				
	ark Surface (A12)	= (ATT)		eted Dark Surface	. ,			
	Mucky Mineral (S1)			x Depression:			<sup>3</sup> Indicators of hydrophytic	vegetation and
	lucky Peat or Peat (S3	2)		v Debression	5 (10)		wetland hydrology mus	5
0 cm M	lucky reactor reac (00					unless disturbed or pro		
Restrictive	Layer (if present):						1	
Type:	<b>,</b>							
	nches):					Hvd	ric Soil Present?	Yes X No
Dopuil						iiya		
Remarks:								
A positive in	dication of hydric soil	was observ	ved.					
	NV.							
HYDROLOG	<b>7</b> T							
Wetland Hyd	rology Indicators:							
Primary Indi	cators (minimum of or	ne required;	; check all that a	oply)			Secondary Indicators (mi	nimum of two required)
Surface	e Water (A1)		X Wate	r-Stained Lea	ves (B9)		Surface Soil Cracks	(B6)
High W	ater Table (A2)		Aqua	tic Fauna (B1	3)		Drainage Patterns (B	310)
Saturat	ion (A3)		True	Aquatic Plant	s (B14)		Dry-Season Water T	able (C2)
Water I	Marks (B1)		Hydro	ogen Sulfide C	Ddor (C1)		Crayfish Burrows (C	8)
	ent Deposits (B2)				eres on Living Ro	ots (C3)	Saturation Visible or	n Aerial Imagery (C9)
	eposits (B3)			ence of Reduc			Stunted or Stressed	
	lat or Crust (B4)		Rece	nt Iron Reduc	tion in Tilled Soils	s (C6)	X Geomorphic Position	n (D2)
Iron De	posits (B5)		Thin	Muck Surface	(C7)		X FAC-Neutral Test (D	5)
Inundat	tion Visible on Aerial Ir	magery (B7	) Gaug	e or Well Dat	a (D9)			
	ly Vegetated Concave			r (Explain in R				
·		,	·		•			
Field Obser	vations:							
Surface Wa	ter Present? Yes	No	<b>X</b> De	epth (inches):	N/A			
Water Table		No		epth (inches):				
Saturation F		No		epth (inches):		Wet	land Hydrology Present?	Yes X No
(includes ca	pillary fringe)			-				

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

No positive indication of wetland hydrology was observed.

A positive indication of wetland hydrology was observed (at least two secondary indicators).

Project/Site:	Cadence Solar Energy Project				County		Ur	ion	Sampling Date:	Dece	mber 14	1, 2019		
Applicant/Owner:				Cadence So	olar			State:	ОН	Sampling Point:	DI	PB22_W	B08	
Investigator(s):	H. Mo	Feeters	3	and E	8. Rogness	Se	ection, To	wnship, F	lange:		York			
Landform (hillslope,	terrace, et	c.):		D	epresson			Local re	ief (concave, co	nvex, none):	С	oncave		
Slope (%):	00	0-05		Lat:	40.38	160	Long:		-83.44816	Datum:		VAD83		
Soil Map Unit Name	: <u> </u>			We	- Wetzel sil	ty clay loam			N	IWI classification:		PEM		
Are climatic / hydrole	ogic condit	ions on	the site	e typical for this	time of yea	ar? Ye	s X	No	(If no,	explain in Remarks.)				
Are Vegetation	No	,Soil	No	,or Hydrology	No s	ignificantly d	isturbed?		Are "Normal	Circumstances" prese	ent? Yes	х	No	
Are Vegetation	ation <u>No</u> ,Soil <u>No</u> ,or Hydrology <u>No</u> natu			aturally prob	lematic?		(If needed, e	xplain any answers in	Remarks.)					

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

Hydrophytic Vegetation Present? Hydric Soil Present? Wetland Hydrology Present?	Yes _ Yes _ Yes _	x x x	No No No	Is the Sampled Area within a Wetland?	Yes	x	No	
Remarks: This point was determined to be v	within a w	vetland d	ue to the presence o	of all 3 wetland criteria.				

#### **VEGETATION - Use scientific names of plants.**

	Absolute	Dominant	Indicator	Dominance Test wor	ksheet:			
Tree Stratum (Plot size: 30 ft. )	% cover	Species?	Status	Number of Dominant	Species			
1. None Observed				That Are OBL, FACW,	, or FAC:		1	(A)
2.								-
3.				Total Number of Domi	inant			
4.				Species Across All Str	ata:		1	(B)
5.								-
	= To	tal Cover		Percent of Dominant S	Species			
Sapling/Shrub Stratum (Plot size: 15 ft.	)			That Are OBL, FACW,	, or FAC:	1	00%	(A/B)
1. None Observed								-
2.				Prevalence Index Wo	orksheet:			
3.				Total % Cov	er of:	Mult	iply by:	
4				OBL species	15	x 1 =	15	-
5.				FACW species	100	x 2 =	200	-
	= To	tal Cover		FAC species	0	x 3 =	0	-
Herb Stratum (Plot size: 5 ft. )				FACU species	0	x 4 =	0	-
1. Phalaris arundinacea	100	Yes	FACW	UPL species	0	x 5 =	0	-
2. Typha angustifolia	15	No	OBL	Column Totals:	115	(A)	215	(B)
3				Prevalence Index = B/	A =	1.87		,
4.								
5				Hydrophytic Vegetat	ion Indicator	rs:		
6.				X 1 - Rapid Test for	r Hydrophytic	Vegetation		
7.				X 2 - Dominance Te		0		
8.				X 3 - Prevalence In	dex is ≤3.0 <sup>1</sup>			
9.				4 - Morphological	Adaptations	<sup>1</sup> (Provide s	supporting	
10.	·			data in Remark	ks or on a se	parate shee	et)	
· · · · · · · · · · · · · · · · · · ·	115 = To	tal Cover		Problematic Hydr	ophytic Vege	tation <sup>1</sup> (Ex	olain)	
Woody Vine Stratum (Plot size: 30 ft.	)			<sup>1</sup> Indicators of hydric so	oil and wetlar	nd hydrolog	y must	
1. None Observed	/			be present, unless dis			, ,	
2.								
	= To	tal Cover		Hydrophytic				
		-		Vegetation Present?	Ye	es X	No	
Remarks:				1				

A positive indication of hydrophytic vegetation was observed (>50% of dominant species indexed as OBL, FACW, or FAC).

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	-	needed to docu			the absence	e of indicators.)	
pth Matrix		Color (maint)		Features	Loc <sup>2</sup>	Texture	Demerika
ches)         Color (moist)           0-8         10YR 4/1	90	Color (moist) 10YR 4/4	<u>%</u> 10	Type <sup>1</sup> C	M	Texture Silty Clay	Remarks
B-16 10YR 5/1	70	10YR 4/6	30	C	M	Clay	
	10	1011( 4/0			101	Clay	
				·			
ype: C=Concentration, D=De	pletion, RM=R	educed Matrix, M	S=Masked	Sand Grains.	2	ocation: PL=Pore Linin	g, M=Matrix.
dric Soils Indicators:							ematic Hydric Soils <sup>3</sup> :
Histosol (A1)		Sandy	Gleyed Mat	trix (S4)		Coast Prairie Re	edox (A16)
Histic Epipedon (A2)		Sandy	Redox (S5)			Dark Surface (S	57)
Black Histic (A3)		Strippe	ed Matrix (S	6)		Iron-Manganese	Masses (F12)
Hydrogen Sulfide (A4)		Loamy	Mucky Min	eral (F1)		Very Shallow Da	ark Surface (TF12)
Stratified Layers (A5)		Loamy	Gleyed Ma	trix (F2)		Other (Explain i	n Remarks)
2 cm Muck (A10)			ed Matrix (F			<u> </u>	
Depleted Below Dark Surf	ace (A11)		Dark Surfa	-			
Thick Dark Surface (A12)			ed Dark Su				
Sandy Mucky Mineral (S1)	1		Depression			<sup>3</sup> Indicators of hydrop	hytic vegetation and
5 cm Mucky Peat or Peat	(S3)					wetland hydrology	must be present,
						unless disturbed of	or problematic.
estrictive Layer (if present):							
Туре:							
Depth(inches):					Hydri	c Soil Present?	Yes X No
ROLOGY							
ROLOGY							
						Secondary Indicators	s (minimum of two required)
land Hydrology Indicators:			oly) Stained Lea	aves (B9)		Surface Soil Cra	acks (B6)
tland Hydrology Indicators: imary Indicators (minimum o Surface Water (A1)		Water- Aquatio	Stained Lea c Fauna (B1	13)		Surface Soil Cra X Drainage Patter	acks (B6) ns (B10)
Iland Hydrology Indicators: imary Indicators (minimum o Surface Water (A1)		Water- Aquatio True A	Stained Lea c Fauna (B1 quatic Plant	13) ts (B14)		Surface Soil Cra X Drainage Patter Dry-Season Wa	acks (B6) ns (B10) ter Table (C2)
tland Hydrology Indicators: imary Indicators (minimum o Surface Water (A1)		Water- Aquatio True A Hydrog	Stained Lea c Fauna (B1 quatic Plan gen Sulfide (	13) ts (B14) Odor (C1)		Surface Soil Cra X Drainage Patter Dry-Season Wa Crayfish Burrow	acks (B6) ns (B10) ter Table (C2) s (C8)
<ul> <li>Iand Hydrology Indicators:</li> <li>imary Indicators (minimum of Surface Water (A1)</li> <li>High Water Table (A2)</li> <li>Saturation (A3)</li> <li>Water Marks (B1)</li> <li>Sediment Deposits (B2)</li> </ul>		Water- Aquatio True A Hydrog	Stained Lea c Fauna (B1 quatic Plant gen Sulfide ( ed Rhizosph	l3) ts (B14) Odor (C1) neres on Living Roots		Surface Soil Cra X Drainage Patter Dry-Season Wa Crayfish Burrow Saturation Visib	acks (B6) ns (B10) ter Table (C2) rs (C8) le on Aerial Imagery (C9)
<ul> <li>Iand Hydrology Indicators:</li> <li>imary Indicators (minimum of Surface Water (A1)</li> <li>High Water Table (A2)</li> <li>Saturation (A3)</li> <li>Water Marks (B1)</li> <li>Sediment Deposits (B2)</li> <li>Drift Deposits (B3)</li> </ul>		Water- Aquation True A Hydrog Oxidize Presen	Stained Lea c Fauna (B1 quatic Plan gen Sulfide ( ed Rhizosph nce of Redu	13) ts (B14) Odor (C1) neres on Living Roots ced Iron (C4)		Surface Soil Cra Drainage Patter Dry-Season Wa Crayfish Burrow Saturation Visib Stunted or Stres	acks (B6) ns (B10) ter Table (C2) rs (C8) le on Aerial Imagery (C9) ssed Plants (D1)
cland Hydrology Indicators:         imary Indicators (minimum of         Surface Water (A1)         High Water Table (A2)         Saturation (A3)         Water Marks (B1)         Sediment Deposits (B2)         Drift Deposits (B3)         Algal Mat or Crust (B4)		Water- Aquation True A Hydrog Oxidize Preser Recent	Stained Lea c Fauna (B1 quatic Plani gen Sulfide ( ed Rhizosph nce of Redu t Iron Reduc	13) ts (B14) Odor (C1) neres on Living Root ced Iron (C4) ction in Tilled Soils (C		Surface Soil Cra Drainage Patter Dry-Season Wa Crayfish Burrow Saturation Visib Stunted or Stree Geomorphic Po	acks (B6) ns (B10) ter Table (C2) rs (C8) le on Aerial Imagery (C9) ssed Plants (D1) sition (D2)
<ul> <li>Iland Hydrology Indicators:</li> <li>imary Indicators (minimum o</li> <li>Surface Water (A1)</li> <li>High Water Table (A2)</li> <li>Saturation (A3)</li> <li>Water Marks (B1)</li> <li>Sediment Deposits (B2)</li> <li>Drift Deposits (B3)</li> <li>Algal Mat or Crust (B4)</li> <li>Iron Deposits (B5)</li> </ul>	f one required;	Water- Aquation True A Hydrog Oxidize Presen Recent Thin M	Stained Lea c Fauna (B1 quatic Plani gen Sulfide ( ed Rhizosph nce of Redu t Iron Reduc luck Surface	13) ts (B14) Odor (C1) neres on Living Root ced Iron (C4) ction in Tilled Soils (C e (C7)		Surface Soil Cra Drainage Patter Dry-Season Wa Crayfish Burrow Saturation Visib Stunted or Stres	acks (B6) ns (B10) ter Table (C2) rs (C8) le on Aerial Imagery (C9) ssed Plants (D1) sition (D2)
<ul> <li>Iland Hydrology Indicators:</li> <li>imary Indicators (minimum o</li> <li>Surface Water (A1)</li> <li>High Water Table (A2)</li> <li>Saturation (A3)</li> <li>Water Marks (B1)</li> <li>Sediment Deposits (B2)</li> <li>Drift Deposits (B3)</li> <li>Algal Mat or Crust (B4)</li> <li>Iron Deposits (B5)</li> <li>Inundation Visible on Aeria</li> </ul>	f one required; al Imagery (B7)	Water- Aquation True A Hydrog Oxidize Presen Recent Thin M Gauge	Stained Lea c Fauna (B1 quatic Plan gen Sulfide ( ed Rhizosph nce of Redu t Iron Reduc luck Surface or Well Da	13) ts (B14) Odor (C1) neres on Living Root ced Iron (C4) ction in Tilled Soils (C e (C7) ta (D9)		Surface Soil Cra Drainage Patter Dry-Season Wa Crayfish Burrow Saturation Visib Stunted or Stree Geomorphic Po	acks (B6) ns (B10) ter Table (C2) rs (C8) le on Aerial Imagery (C9) ssed Plants (D1) sition (D2)
<ul> <li>Iland Hydrology Indicators:</li> <li>imary Indicators (minimum o</li> <li>Surface Water (A1)</li> <li>High Water Table (A2)</li> <li>Saturation (A3)</li> <li>Water Marks (B1)</li> <li>Sediment Deposits (B2)</li> <li>Drift Deposits (B3)</li> <li>Algal Mat or Crust (B4)</li> <li>Iron Deposits (B5)</li> </ul>	f one required; al Imagery (B7)	Water- Aquation True A Hydrog Oxidize Presen Recent Thin M Gauge	Stained Lea c Fauna (B1 quatic Plani gen Sulfide ( ed Rhizosph nce of Redu t Iron Reduc luck Surface	13) ts (B14) Odor (C1) neres on Living Root ced Iron (C4) ction in Tilled Soils (C e (C7) ta (D9)		Surface Soil Cra Drainage Patter Dry-Season Wa Crayfish Burrow Saturation Visib Stunted or Stree Geomorphic Po	acks (B6) ns (B10) ter Table (C2) rs (C8) le on Aerial Imagery (C9) ssed Plants (D1) sition (D2)
<ul> <li>Iland Hydrology Indicators:</li> <li>imary Indicators (minimum o</li> <li>Surface Water (A1)</li> <li>High Water Table (A2)</li> <li>Saturation (A3)</li> <li>Water Marks (B1)</li> <li>Sediment Deposits (B2)</li> <li>Drift Deposits (B3)</li> <li>Algal Mat or Crust (B4)</li> <li>Iron Deposits (B5)</li> <li>Inundation Visible on Aeria</li> <li>Sparsely Vegetated Conca</li> </ul>	f one required; al Imagery (B7)	Water- Aquation True A Hydrog Oxidize Presen Recent Thin M Gauge	Stained Lea c Fauna (B1 quatic Plan gen Sulfide ( ed Rhizosph nce of Redu t Iron Reduc luck Surface or Well Da	13) ts (B14) Odor (C1) neres on Living Root ced Iron (C4) ction in Tilled Soils (C e (C7) ta (D9)		Surface Soil Cra Drainage Patter Dry-Season Wa Crayfish Burrow Saturation Visib Stunted or Stree Geomorphic Po	acks (B6) ns (B10) ter Table (C2) rs (C8) le on Aerial Imagery (C9) ssed Plants (D1) sition (D2)
<ul> <li>Iand Hydrology Indicators:</li> <li>imary Indicators (minimum o</li> <li>Surface Water (A1)</li> <li>High Water Table (A2)</li> <li>Saturation (A3)</li> <li>Water Marks (B1)</li> <li>Sediment Deposits (B2)</li> <li>Drift Deposits (B3)</li> <li>Algal Mat or Crust (B4)</li> <li>Iron Deposits (B5)</li> <li>Inundation Visible on Aeria</li> <li>Sparsely Vegetated Conca</li> </ul>	f one required; al Imagery (B7) ave Surface (B8	Water- Aquatio True A Hydrog Oxidize Presen Recent Thin M Gauge 3) Other (	Stained Lee c Fauna (B1 quatic Plani gen Sulfide ( ed Rhizosph nce of Redu t Iron Reduc uck Surface or Well Dai (Explain in F	13) ts (B14) Odor (C1) neres on Living Roots ced Iron (C4) ction in Tilled Soils (C e (C7) ta (D9) Remarks)		Surface Soil Cra Drainage Patter Dry-Season Wa Crayfish Burrow Saturation Visib Stunted or Stree Geomorphic Po	acks (B6) ns (B10) ter Table (C2) rs (C8) le on Aerial Imagery (C9) ssed Plants (D1) sition (D2)
tland Hydrology Indicators: imary Indicators (minimum o Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5) Inundation Visible on Aeria Sparsely Vegetated Conca Eld Observations: Inface Water Present? Yes	f one required; al Imagery (B7) ave Surface (B8 No	Water- Aquation True A Hydrog Oxidize Presen Recent Thin M Gauge B) Other (	Stained Lee c Fauna (B1 quatic Plani gen Sulfide ( ed Rhizosph nce of Redu t Iron Reduc or Well Dai (Explain in F	13) ts (B14) Odor (C1) heres on Living Root: ced Iron (C4) ction in Tilled Soils (C e (C7) ta (D9) Remarks) 		Surface Soil Cra Drainage Patter Dry-Season Wa Crayfish Burrow Saturation Visib Stunted or Stree Geomorphic Po	acks (B6) ns (B10) ter Table (C2) rs (C8) le on Aerial Imagery (C9) ssed Plants (D1) sition (D2)
tland Hydrology Indicators: imary Indicators (minimum o Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5) Inundation Visible on Aeria Sparsely Vegetated Conca Hobservations: Inface Water Present? Yes ater Table Present? Yes	f one required; al Imagery (B7) ave Surface (B8 <u>X</u> No <u>X</u> No	Water- Aquatio True A Hydrog Oxidize Presen Recent Chin M Gauge B) Other (	Stained Lee c Fauna (B1 quatic Plani gen Sulfide ( ed Rhizosph nce of Redu luck Surface or Well Dai (Explain in F coth (inches):	13) ts (B14) Odor (C1) heres on Living Root: ced Iron (C4) ction in Tilled Soils (C e (C7) ta (D9) Remarks) : <u>1</u> : <u>6</u>	26)	Surface Soil Cra X Drainage Patter Dry-Season Wa Crayfish Burrow Saturation Visib Stunted or Stres Geomorphic Po X FAC-Neutral Te	acks (B6) ns (B10) ter Table (C2) 's (C8) le on Aerial Imagery (C9) ssed Plants (D1) sition (D2) st (D5)
tland Hydrology Indicators: imary Indicators (minimum o Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5) Inundation Visible on Aeria Sparsely Vegetated Conca	f one required; al Imagery (B7) ave Surface (B8 X No X No	Water- Aquatio True A Hydrog Oxidize Presen Recent Chin M Gauge B) Other (	Stained Lee c Fauna (B1 quatic Plani gen Sulfide ( ed Rhizosph nce of Redu t Iron Reduc or Well Dai (Explain in F	13) ts (B14) Odor (C1) heres on Living Root: ced Iron (C4) ction in Tilled Soils (C e (C7) ta (D9) Remarks) : <u>1</u> : <u>6</u>	26)	Surface Soil Cra Drainage Patter Dry-Season Wa Crayfish Burrow Saturation Visib Stunted or Stree Geomorphic Po	acks (B6) ns (B10) ter Table (C2) rs (C8) le on Aerial Imagery (C9) ssed Plants (D1) sition (D2) st (D5)
Itand Hydrology Indicators:         imary Indicators (minimum of         Surface Water (A1)         High Water Table (A2)         Saturation (A3)         Water Marks (B1)         Sediment Deposits (B2)         Drift Deposits (B3)         Algal Mat or Crust (B4)         Iron Deposits (B5)         Inundation Visible on Aeria         Sparsely Vegetated Conca         eld Observations:         Irface Water Present?       Yes         ater Table Present?       Yes         aturation Present?       Yes	f one required; al Imagery (B7) ave Surface (B8 X No X No X No	Water- Aquatio True A Hydrog Oxidize Presen Recent Thin M Gauge 3) Other ( Dep Dep	Stained Lec c Fauna (B1 quatic Plani gen Sulfide ( ed Rhizosph nce of Redu t Iron Reduc or Well Dai (Explain in F cth (inches): oth (inches):	13) ts (B14) Odor (C1) heres on Living Root: ced Iron (C4) ction in Tilled Soils (C e (C7) ta (D9) Remarks) : <u>1</u> : <u>6</u> : <u>0</u>	C6) Wetla	Surface Soil Cra X Drainage Patter Dry-Season Wa Crayfish Burrow Saturation Visib Stunted or Stres Geomorphic Po X FAC-Neutral Te	acks (B6) ns (B10) ter Table (C2) 's (C8) le on Aerial Imagery (C9) ssed Plants (D1) sition (D2) st (D5)
Idand Hydrology Indicators:         imary Indicators (minimum of Surface Water (A1)	f one required; al Imagery (B7) ave Surface (B8 X No X No X No	Water- Aquatio True A Hydrog Oxidize Presen Recent Thin M Gauge 3) Other ( Dep Dep	Stained Lec c Fauna (B1 quatic Plani gen Sulfide ( ed Rhizosph nce of Redu t Iron Reduc or Well Dai (Explain in F cth (inches): oth (inches):	13) ts (B14) Odor (C1) heres on Living Root: ced Iron (C4) ction in Tilled Soils (C e (C7) ta (D9) Remarks) : <u>1</u> : <u>6</u> : <u>0</u>	C6) Wetla	Surface Soil Cra X Drainage Patter Dry-Season Wa Crayfish Burrow Saturation Visib Stunted or Stres Geomorphic Po X FAC-Neutral Te	acks (B6) ns (B10) ter Table (C2) 's (C8) le on Aerial Imagery (C9) ssed Plants (D1) sition (D2) st (D5)
Idand Hydrology Indicators:         imary Indicators (minimum of Surface Water (A1)	f one required; al Imagery (B7) ave Surface (B8 X No X No X No	Water- Aquatio True A Hydrog Oxidize Presen Recent Thin M Gauge 3) Other ( Dep Dep	Stained Lec c Fauna (B1 quatic Plani gen Sulfide ( ed Rhizosph nce of Redu t Iron Reduc or Well Dai (Explain in F cth (inches): oth (inches):	13) ts (B14) Odor (C1) heres on Living Root: ced Iron (C4) ction in Tilled Soils (C e (C7) ta (D9) Remarks) : <u>1</u> : <u>6</u> : <u>0</u>	C6) Wetla	Surface Soil Cra X Drainage Patter Dry-Season Wa Crayfish Burrow Saturation Visib Stunted or Stres Geomorphic Po X FAC-Neutral Te	acks (B6) ns (B10) ter Table (C2) 's (C8) le on Aerial Imagery (C9) ssed Plants (D1) sition (D2) st (D5)
Idand Hydrology Indicators:         imary Indicators (minimum of Surface Water (A1)	f one required; al Imagery (B7) ave Surface (B8 X No X No X No	Water- Aquatio True A Hydrog Oxidize Presen Recent Thin M Gauge 3) Other ( Dep Dep	Stained Lec c Fauna (B1 quatic Plani gen Sulfide ( ed Rhizosph nce of Redu t Iron Reduc or Well Dai (Explain in F cth (inches): oth (inches):	13) ts (B14) Odor (C1) heres on Living Root: ced Iron (C4) ction in Tilled Soils (C e (C7) ta (D9) Remarks) : <u>1</u> : <u>6</u> : <u>0</u>	C6) Wetla	Surface Soil Cra X Drainage Patter Dry-Season Wa Crayfish Burrow Saturation Visib Stunted or Stres Geomorphic Po X FAC-Neutral Te	acks (B6) ns (B10) ter Table (C2) 's (C8) le on Aerial Imagery (C9) ssed Plants (D1) sition (D2) st (D5)
tland Hydrology Indicators: imary Indicators (minimum o Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5) Inundation Visible on Aeria Sparsely Vegetated Conca eld Observations: Irface Water Present? Yes ater Table Present? Yes Ituration Present? Yes Ituration Present? Yes Cludes capillary fringe) Cribe Recorded Data (stream	f one required; al Imagery (B7) ave Surface (B8 X No X No n gauge, monito	Water- Aquatio True A Hydrog Oxidize Presen Recent Thin M Gauge B) Other ( Dep Dep Dep	Stained Lee c Fauna (B1 quatic Plani gen Sulfide ( ed Rhizosph ince of Redu t Iron Reduc uck Surface or Well Dai (Explain in F oth (inches): oth (inches): oth (inches):	13) ts (B14) Odor (C1) heres on Living Root: ced Iron (C4) ction in Tilled Soils (C e (C7) ta (D9) Remarks) :	C6) Wetla	Surface Soil Cra X Drainage Patter Dry-Season Wa Crayfish Burrow Saturation Visib Stunted or Stres Geomorphic Po X FAC-Neutral Te	acks (B6) ns (B10) ter Table (C2) 's (C8) le on Aerial Imagery (C9) ssed Plants (D1) sition (D2) st (D5)

Project/Site:	(	Cadence Solar Energy Project				County:		Union		Sampling Date:	Dece	ember 15,	2019	
Applicant/Owner:				Cadence S	olar			State:	OH	Sampling Point:	DI	PB25_WE	309	
Investigator(s):	H. N	IcFeete	rs	and I	3. Rogness	Sec	tion, To	wnship, R	ange:	_	York			
Landform (hillslope	, terrace, e	etc.):			epresson			Local reli	ef (concave, co	nvex, none):	С	oncave		
Slope (%):	(	00-05		Lat:	40.3690	02	Long:	-	-83.43853	Datum:		NAD83		
Soil Map Unit Name	e:		Blg1A1	- Blount silt loa	m, ground m	oraine, 0 to 2	2 percer	nt slopes	N	IWI classification:		PEM		
Are climatic / hydro	logic condi	itions or	n the site	e typical for this	time of year	? Yes	Х	No	(If no,	explain in Remarks.)				
Are Vegetation	Yes	,Soil	No	,or Hydrology	No sig	nificantly dist	turbed?		Are "Normal	Circumstances" pres	ent? Yes	х	No	
Are Vegetation	Yes	,Soil	No	,or Hydrology	No nat	turally proble	matic?		(If needed, e	xplain any answers in	Remarks.)			

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

Hydrophytic Vegetation Present? Hydric Soil Present? Wetland Hydrology Present?	Yes Yes Yes	x x x	No No No	Is the Sampled Area within a Wetland?	Yes	x	No
Remarks: This point was determined to be w	vithin a wetl	and due to	the presence of all	3 wetland criteria.			
Vegetation was mowed and could	not be ider	ntified.					

### **VEGETATION - Use scientific names of plants.**

	Absolute Dominant	Indicator	Dominance Test work	(sheet:			
Tree Stratum (Plot size: 30 ft. )	% cover Species?	Status	Number of Dominant S	pecies			
1. None Observed			That Are OBL, FACW,	or FAC:		0	(A)
2.							/
3.			Total Number of Domir	nant			
4.			Species Across All Stra	ata:		1	(B)
5.							_ ( )
· · · · · · · · · · · · · · · · · · ·	= Total Cover		Percent of Dominant S	pecies			
Sapling/Shrub Stratum (Plot size: 15 ft.	)		That Are OBL, FACW,			0	(A/B)
1. None Observed	/		- , - ,				
2.			Prevalence Index Wor	rksheet:			
2			Total % Cove	er of:	Mu	tiply by:	
4.			OBL species	0			_
5.			FACW species	0	x 2 =		_
	= Total Cover		FAC species	0	x 3 =		_
Herb Stratum (Plot size: 5 ft. )			FACU species	0	x 4 =		_
1. Glycine max	10 Yes	UPL	UPL species	10	x 5 =	-	_
2			Column Totals:	10	(A)		(B)
			Prevalence Index = B/A		5.00		_ (8)
· · · · · · · · · · · · · · · · · · ·					0.00		
			Hydrophytic Vegetatio	on Indicato	rs:		
			1 - Rapid Test for	Hydrophytic	Venetatio	n	
-			2 - Dominance Te		vogotatio		
			3 - Prevalence Ind				
			4 - Morphological		<sup>1</sup> (Provide	supporting	1
			data in Remark		<b>`</b>		
10	10 = Total Cover		X Problematic Hydro			'	
Woody Vine Stratum (Plot size: 30 ft.			<sup>1</sup> Indicators of hydric so				
1. None Observed	)		be present, unless dist		, ,	y maor	
2	= Total Cover						
	= Total Cover		Hydrophytic	v	V	Na	
			Vegetation Present?	ř	es <u>X</u>	No	
Remarks:							

70% mowed, unidentifiable grass species

DPB25\_WB09

Profile Desc	ription: (Describe t	o the depth	needed to docu	ment the in	dicator or confir	m the absence	of indicators.)	
Depth	Matrix			Redox	Features			
(inches)	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>	Texture	Remarks
0-10	10YR 4/1	80	10YR 4/6	20	С	М	Clay Loam	
10-16	10YR 5/1	75	10YR 4/6	25	С	М	Clay	
<sup>1</sup> Type: C=C	oncentration, D=Deple	etion, RM=R	Reduced Matrix, M	S=Masked	Sand Grains.	<sup>2</sup> L	ocation: PL=Pore Lining	g, M=Matrix.
Hydric Soils	Indicators:						Indicators for Proble	ematic Hydric Soils <sup>3</sup> :
Histoso	(A1)		Sandy	Gleyed Mat	rix (S4)		Coast Prairie Re	dox (A16)
Histic E	pipedon (A2)		Sandy	Redox (S5)			Dark Surface (S	7)
Black H	istic (A3)		Strippe	d Matrix (Se	6)		Iron-Manganese	Masses (F12)
Hydrog	en Sulfide (A4)		Loamy	Mucky Mine	eral (F1)		Very Shallow Da	rk Surface (TF12)
Stratifie	d Layers (A5)		Loamy	Gleyed Mat	rix (F2)		Other (Explain in	n Remarks)
2 cm M	uck (A10)		X Deplete	ed Matrix (F	3)			
Deplete	d Below Dark Surface	e (A11)	Redox	Dark Surfac	e (F6)			
	ark Surface (A12)		Deplete	ed Dark Sur	face (F7)			
Sandy I	/lucky Mineral (S1)		Redox	Depression	s (F8)		<sup>3</sup> Indicators of hydroph	
5 cm M	ucky Peat or Peat (S3	3)					wetland hydrology	
							unless disturbed o	r problematic.
Restrictive	_ayer (if present):							
Type:								
Depth(i	nches):					Hydric	Soil Present?	Yes X No
Remarks:								
	dication of hydric soil	waa ahaany	ad					
A positive in	alcation of flydric soli		eu.					
HYDROLOG	iΥ							
Wetland Hvd	ology Indicators:							
-	ators (minimum of or	ne required:	check all that ann	alv)			Secondary Indicators	(minimum of two required)
	Water (A1)	io roquirou,		Stained Lea	ves (B9)		Surface Soil Cra	
	ater Table (A2)			c Fauna (B1			Drainage Patterr	· · /
X Saturat				quatic Plant			Dry-Season Wat	
	/arks (B1)			en Sulfide (			Crayfish Burrows	
	nt Deposits (B2)				eres on Living Ro	ots $(C3)$		e on Aerial Imagery (C9)
	posits (B3)				ced Iron (C4)	010 (00)	Stunted or Stres	
	at or Crust (B4)				tion in Tilled Soils	(C6)	Geomorphic Pos	
	posits (B5)			uck Surface		()	FAC-Neutral Tes	
	on Visible on Aerial I	magery (B7)		or Well Dat				
	y Vegetated Concave			Explain in F				
	, , ,		,		,			
Field Obser	vations:							
Surface Wat	er Present? Yes	X No	Dep	oth (inches):	1			
Water Table		No		oth (inches):				
Saturation P				oth (inches):		Wetlar	nd Hydrology Present?	Yes X No
(includes ca	oillary fringe)			, ,				
Describe Rec	orded Data (stream g	auge, monit	oring well, aerial p	hotos, prev	ious inspections),	if available:		
Remarks:								
A positive in	dication of wetland hy	drology was	observed (at leas	st one prima	ry indicator).			

Project/Site:	Cadence Solar				County:	Un	ion	Sampling Date:	January 8, 2020			
Applicant/Owner:				Invenergy			State:	ОН	Sampling Point:	DPC003_WC01		
Investigator(s):	(s): K. Barnett and S. Schratz				5. Schratz	Section, To	wnship, R	ange:	C	)		
Landform (hillslope,	dform (hillslope, terrace, etc.): Depression				epression	Local relief (concave, convex, none):				Concave		
Slope (%):				40.35213	Long:	-83.41180 Datum:			NAD83			
Soil Map Unit Name	e:				0				NWI classification:	0		
Are climatic / hydrol	logic cond	itions or	the site	e typical for this t	me of year?	Yes	No	(lf no	, explain in Remarks.)			
Are Vegetation	No	,Soil	No	,or Hydrology	No signifi	cantly disturbed?		Are "Norma	I Circumstances" present?	Yes X No		
Are Vegetation <b>No</b> ,Soil <b>Yes</b> ,or Hydrology <b>No</b> nat			No natura	ally problematic?	lematic? (If needed, explain any answers in Re		explain any answers in Rema	arks.)				

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

Hydrophytic Vegetation Present? Hydric Soil Present? Wetland Hydrology Present?	Yes X Yes X Yes X	No No No	Is the Sampled Area within a Wetland?	Yes	x	No	_
Remarks: This point was determined to be w	vithin a wetland due	to the presence of all 3	wetland criteria.				
	The s	urvey area has been pr	reviously disturbed from agricultural	activities.			

## **VEGETATION - Use scientific names of plants.**

	Absolute Dominant	Indicator	Dominance Test worksheet:
Tree Stratum (Plot size: 30 ft.)	% cover Species?	Status	Number of Dominant Species
1. None Observed			That Are OBL, FACW, or FAC: 1 (A)
2.			
3.			Total Number of Dominant
4.			Species Across All Strata: 1 (B)
5.			(-)
	0 = Total Cover		Percent of Dominant Species
Sapling/Shrub Stratum (Plot size: 15			That Are OBL, FACW, or FAC: <b>100%</b> (A/B)
1. None Observed	<u></u> )		
2.			Prevalence Index Worksheet:
3.			Total % Cover of: Multiply by:
			OBL species         40         x1 =         40
			FACW species $0$ x 2 = $0$
5	0 = Total Cover		FAC species $0$ x 2 = $0$
Herb Stratum (Plot size: 5 ft.)			FACU species $0 \times 4 = 0$
1. Typha X glauca	40 Yes	OBL	$\frac{1}{\text{UPL species}} \qquad \frac{1}{\text{UPL species}}$
			Column Totals: <b>40</b> (A) <b>40</b> (B)
2			Prevalence Index = $B/A = 1.00$
3			
			Hydrophytic Vegetation Indicators:
0			X 1 - Rapid Test for Hydrophytic Vegetation
7			X 2 - Dominance Test is >50%
			<b>X</b> 3 - Prevalence Index is $\leq 3.0^{1}$
0			4 - Morphological Adaptations <sup>1</sup> (Provide supporting
10			data in Remarks or on a separate sheet)
10	40 = Total Cover		Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)
Woody Vine Stratum (Plot size: 30			<sup>1</sup> Indicators of hydric soil and wetland hydrology must
1. None Observed	<u>it.</u> )		be present, unless disturbed or problematic.
2	0 = Total Cover		
			Hydrophytic Vegetation Present? Yes X No
			Vegetation Present? Yes X No
Remarks:			
A positive indication of hydrophytic vegetation wa	as observed (>50% of dominant	species indexed as (	OBL, FACW, or FAC).
	ve indication of hydrophytic vege	•	

Depth	Matrix			Redox	x Features						
nches)	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>	Texture	Remarks			
0-18	10 YR 5/6	80	5 YR 4/6	2	С	Μ	Clay	Disturbed			
	5 Y 5/8	18						Mixed matrix			
<u> </u>						. <u> </u>					
<u></u>			De duce el Metrico M			2		-i			
	Concentration, D=Deple Is Indicators:	etion, Rivi	-Reduced Matrix, Mi	S=IVIasked	Sand Grains.	LC	Discation: PL=Pore Lin	oblematic Hydric Soils <sup>3</sup> :			
Histosol (A1) Sandy Gleyed Matrix (S4)								Redox (A16)			
Histic Epipedon (A2) Sandy Redox (S5)				Dark Surface (S7)							
				•	,		Iron-Manganese Masses (F12)				
	gen Sulfide (A4)	Stripped Matrix (S6) Loamy Mucky Mineral (F1)					Dark Surface (TF12)				
	ed Layers (A5)		Loamy Gleyed Matrix (F2)			X Other (Explain in Remarks)					
	/luck (A10)			ed Matrix (F	( )						
Deplet	ed Below Dark Surface	(A11)	Redox	Dark Surfa	ice (F6)						
Thick [	Dark Surface (A12)		Deplete	ed Dark Su	rface (F7)						
Sandy	Mucky Mineral (S1)		Redox	Depression	ns (F8)	<sup>3</sup> Indicators of hydrophytic vegetation and					
5 cm N	/lucky Peat or Peat (S3	)					,	ogy must be present,			
							unless disturbe	d or problematic.			
Restrictive	Layer (if present):										
Type:											
Depth(	(inches):					Hydric	Soil Present?	Yes X No			
marks:											
	ndication of hydric soil v	vas obsei	ved								
	likely present.	103 0030	vou.								
minaterial	intery present.										

### HYDROLOGY

Wetland Hydrology Indicators:				
Primary Indicators (minimum of one required; check	all that apply)	Secondary Indicators (minimum of two required)		
X Surface Water (A1)	Water-Stained Leaves (B9)	Surface Soil Cracks (B6)		
X High Water Table (A2)	Aquatic Fauna (B13)	Drainage Patterns (B10)		
X Saturation (A3)	True Aquatic Plants (B14)	Dry-Season Water Table (C2)		
Water Marks (B1)	Hydrogen Sulfide Odor (C1)	Crayfish Burrows (C8)		
Sediment Deposits (B2)	Oxidized Rhizospheres on Living Roots (C3)	Saturation Visible on Aerial Imagery (C9)		
Drift Deposits (B3)	Presence of Reduced Iron (C4)	Stunted or Stressed Plants (D1)		
Algal Mat or Crust (B4)	Recent Iron Reduction in Tilled Soils (C6)	X Geomorphic Position (D2)		
Iron Deposits (B5)	Thin Muck Surface (C7)	FAC-Neutral Test (D5)		
Inundation Visible on Aerial Imagery (B7)	Gauge or Well Data (D9)			
Sparsely Vegetated Concave Surface (B8)	Other (Explain in Remarks)			
Field Observations:				
Surface Water Present? Yes X No	Depth (inches): <u>12</u>			
Water Table Present? Yes X No	Depth (inches): 0			
Saturation Present? Yes X No	Depth (inches): 0 Wetla	nd Hydrology Present? Yes X No		
(includes capillary fringe)				
Describe Recorded Data (stream gauge, monitoring v	vell, aerial photos, previous inspections), if available:			
Remarks:				
A positive indication of wetland hydrology was obser	ved (at least one primary indicator).			

Project/Site:		(	Cadence	e Solar		County:	Un	ion	Sampling Date:	January 8, 20	20
Applicant/Owner:				Invenergy			State:	ОН	Sampling Point:	DPC006_WC	02
Investigator(s):	K.	Barnett		and S	5. Schratz	Section, To	wnship, R	ange:	0	)	
Landform (hillslope,	, terrace, e	etc.):		De	epression		Local rel	ief (concave, co	onvex, none):	Concave	
Slope (%):		00-05		Lat:	40.34788	Long:		-83.40989	Datum:	NAD83	
Soil Map Unit Name	e:				0				NWI classification:	PEM	
Are climatic / hydrol	logic cond	itions on	the site	typical for this ti	me of year?	Yes	No	(If no	, explain in Remarks.)		
Are Vegetation	No	,Soil	No	,or Hydrology	No signifi	cantly disturbed?		Are "Norma	Circumstances" present?	Yes X N	10
Are Vegetation	No	,Soil	No	,or Hydrology	No natura	ally problematic?		(If needed, e	explain any answers in Rema	arks.)	

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

Hydrophytic Vegetation Present? Hydric Soil Present? Wetland Hydrology Present?	Yes _ Yes _ Yes _	Х	No No No	Is the Sampled Area within a Wetland?	Yes	<u>x</u>	No	
Remarks: This point was determined to be v	vithin a we	etland due	e to the presence of all 3	3 wetland criteria.				

## **VEGETATION - Use scientific names of plants.**

	Absolute Dominant	Indicator	Dominance Test worksheet:
Tree Stratum (Plot size: 30 ft.)	% cover Species?	Status	Number of Dominant Species
1. None Observed			That Are OBL, FACW, or FAC: 1 (A)
2.			
3.			Total Number of Dominant
4.			Species Across All Strata: 1 (B)
5.			· · · · · · · · · · · · · · · · · · ·
	0 = Total Cover		Percent of Dominant Species
Sapling/Shrub Stratum (Plot size: 15 f			That Are OBL, FACW, or FAC: <b>100%</b> (A/B)
1. None Observed			
2.			Prevalence Index Worksheet:
3.			Total % Cover of: Multiply by:
4.			OBL species <b>0</b> x 1 = <b>0</b>
5.			FACW species <b>100</b> x 2 = <b>200</b>
	0 = Total Cover		FAC species <b>0</b> x 3 = <b>0</b>
Herb Stratum (Plot size: 5 ft.)			FACU species <b>0</b> x 4 = <b>0</b>
1. Panicum dichotomiflorum	100 Yes	FACW	UPL species $0$ x 5 = $0$
2			Column Totals: <b>100</b> (A) <b>200</b> (B)
3.			Prevalence Index = $B/A = 2.00$
4			
5			Hydrophytic Vegetation Indicators:
6.			X 1 - Rapid Test for Hydrophytic Vegetation
7			X 2 - Dominance Test is >50%
8.			<b>X</b> 3 - Prevalence Index is $\leq 3.0^1$
9.			4 - Morphological Adaptations <sup>1</sup> (Provide supporting
10			data in Remarks or on a separate sheet)
	100 = Total Cover		Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)
Woody Vine Stratum (Plot size: 30 ft.			<sup>1</sup> Indicators of hydric soil and wetland hydrology must
1. None Observed			be present, unless disturbed or problematic.
2.			
	0 = Total Cover		Hydrophytic
			Vegetation Present? Yes X No
Remarks:		I	
A positive indication of hydrophytic vegetation was	observed (>50% of dominant spec	cies indexed as O	BL, FACW, or FAC).
A positive	indication of hydrophytic vegetatio	n was observed (	(Prevalence Index is ≤ 3.0).
		·	

	scription: (Describe t	o the dep	th needed to docur	ment the ir	ndicator or confirm	n the absence o	f indicators.)				
Depth	Matrix			Redo	k Features						
(inches)	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>	Texture	Remarks			
0-18	10 YR 4/1	90	2.5 YR 4/6	10	С	M	Clay				
					. <u> </u>						
	Concentration, D=Depl	etion, RM	Reduced Matrix, M	S=Masked	Sand Grains.	<sup>2</sup> Lo	cation: PL=Pore Lining,				
Hydric Soi	Is Indicators:						Indicators for Probler	,			
	Histosol (A1) Sandy Gleyed Matrix (S4)					Coast Prairie Red					
Histic				Redox (S5			Dark Surface (S7)				
	Black Histic (A3) Stripped Matrix (S6)			,		Iron-Manganese N					
	gen Sulfide (A4)			Mucky Min	. ,	Very Shallow Dark Surface (TF12)					
Stratif	ied Layers (A5)		Loamy	Gleyed Ma	atrix (F2)	Other (Explain in Remarks)					
2 cm I	Muck (A10)		X Deplete	ed Matrix (F	=3)						
·	ted Below Dark Surface	e (A11)		Dark Surfa	. ,						
	Dark Surface (A12)			ed Dark Su	. ,						
	Mucky Mineral (S1)		Redox	Depressio	ns (F8)		<sup>3</sup> Indicators of hydrophy	0			
5 cm I	Mucky Peat or Peat (S3	3)				wetland hydrology must be present,					
							unless disturbed or	problematic.			
Restrictive	e Layer (if present):										
Type:											
Depth	(inches):					Hydric	Soil Present?	Yes X No			
Remarks:											
	ndication of hydric soil	waa ahaa	aved								
A positive I	nuicatori or nyunc soli	was upsel	veu.								

## HYDROLOGY

Wetland Hydrology Indicators:				
Primary Indicators (minimum of one required; check	all that apply)	Secondary Indicators (minimum of two required)		
Surface Water (A1)	Water-Stained Leaves (B9)	Surface Soil Cracks (B6)		
High Water Table (A2)	Aquatic Fauna (B13)	Drainage Patterns (B10)		
X Saturation (A3)	True Aquatic Plants (B14)	Dry-Season Water Table (C2)		
Water Marks (B1)	Hydrogen Sulfide Odor (C1)	Crayfish Burrows (C8)		
Sediment Deposits (B2)	Oxidized Rhizospheres on Living Roots (C3)	Saturation Visible on Aerial Imagery (C9)		
Drift Deposits (B3)	Presence of Reduced Iron (C4)	Stunted or Stressed Plants (D1)		
Algal Mat or Crust (B4)	Recent Iron Reduction in Tilled Soils (C6)	X Geomorphic Position (D2)		
Iron Deposits (B5)	Thin Muck Surface (C7)	X FAC-Neutral Test (D5)		
Inundation Visible on Aerial Imagery (B7)	Gauge or Well Data (D9)			
Sparsely Vegetated Concave Surface (B8)	Other (Explain in Remarks)			
Field Observations:				
Surface Water Present? Yes NoX	Depth (inches): N/A			
Water Table Present? Yes NoX	Depth (inches): >20			
Saturation Present? Yes X No	Depth (inches): 5 Wetla	and Hydrology Present? Yes X No		
(includes capillary fringe)				
Describe Recorded Data (stream gauge, monitoring w	ell, aerial photos, previous inspections), if available:			
Remarks:				
A positive indication of wetland hydrology was obser	ved (at least one primary indicator).			
A positive indication of wetland hydrology was observed	ved (at least two secondary indicators).			

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Project/Site:	Cade	ence Solar		County:	Un	ion	Sampling Date:	January 8, 2020	
Applicant/Owner:		Invenerg	ay		State:	OH	Sampling Point:	DPC008_WC03	
Investigator(s):	K. Barnett	and	S. Schratz	Section, Tov	vnship, R	ange:	0	)	
Landform (hillslope	, terrace, etc.):		Depression		Local reli	ef (concave, co	onvex, none):	Concave	
Slope (%):	00-05	Lat:	40.34550	Long:		-83.41061	Datum:	NAD83	
Soil Map Unit Name	e:		0				NWI classification:	PEM	
Are climatic / hydro	logic conditions on the	site typical for this	s time of year?	Yes	No	(If no	, explain in Remarks.)		
Are Vegetation	No ,Soil No	,or Hydrology	No signifi	cantly disturbed?		Are "Norma	Circumstances" present?	Yes X No	
Are Vegetation	No ,Soil No	, or Hydrology	No natura	ally problematic?		(If needed, e	explain any answers in Rema	arks.)	

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

Hydrophytic Vegetation Present? Hydric Soil Present? Wetland Hydrology Present?	Yes _ Yes _ Yes _	Х	No No No	Is the Sampled Area within a Wetland?	Yes	x	No	-
Remarks: This point was determined to be v	vithin a we	etland due	e to the presence of all 3	3 wetland criteria.				

## **VEGETATION - Use scientific names of plants.**

	Absolute	Dominant	Indicator	Dominance Test wo	rksheet:		
Tree Stratum (Plot size: 30 ft.)	% cover	Species?	Status	Number of Dominant	Species		
1. None Observed				That Are OBL, FACW	. or FAC:	2	(A)
2.				- , -	, -		_ ( )
3.				Total Number of Dom	inant		
				Species Across All St		2	(B)
4 5		·		0000037101033711101	idid.	-	_ (B)
J		otal Cover		Percent of Dominant	0		
Sapling/Shrub Stratum (Plot size: 15 f		otal Cover		That Are OBL, FACW		100%	
				That Are Obl., FACW	, of FAC:	100%	(A/B)
1. <u>Cornus alba</u>		Yes	FACW	Prevalence Index W	orkehoot:		
2		·					
3				Total % Co		Multiply by:	-
4		·		OBL species		x 1 = <b>15</b>	_
5		. <u> </u>		FACW species		x 2 = <b>190</b>	-
	10 = 1	otal Cover		FAC species	0	x 3 = <b>0</b>	_
Herb Stratum (Plot size: 5 ft.)				FACU species	0	x 4 = <b>0</b>	_
1. Phalaris arundinacea	80	Yes	FACW	UPL species	0	x 5 = <b>0</b>	_
2. Typha X glauca	15	No	OBL	Column Totals:	110	(A) <b>205</b>	(B)
3. Cyperus sp.	5	No	FACW	Prevalence Index = B	/A =	1.86	
4							
5				Hydrophytic Vegetat	ion Indicators:		
6				X 1 - Rapid Test fo	r Hydrophytic Ve	egetation	
7.				X 2 - Dominance T	est is >50%		
8.				X 3 - Prevalence Ir	ldex is ≤3.0 <sup>1</sup>		
				X 3 - Prevalence Ir		Provide supporting	
9.				X 3 - Prevalence Ir 4 - Morphologica			
		otal Cover		X 3 - Prevalence Ir 4 - Morphologica data in Remar	l Adaptations <sup>1</sup> (F ks or on a separ	ate sheet)	
9 10	 = T	otal Cover		X 3 - Prevalence Ir 4 - Morphologica data in Remar Problematic Hyd	l Adaptations <sup>1</sup> (F ks or on a separ rophytic Vegetat	rate sheet) ion <sup>1</sup> (Explain)	
9 10 <u>Woody Vine Stratum</u> (Plot size: <u>30 ft.</u>	 = T	otal Cover		X 3 - Prevalence Ir 4 - Morphologica data in Remar	l Adaptations <sup>1</sup> (F ks or on a separ rophytic Vegetat oil and wetland h	rate sheet) ion <sup>1</sup> (Explain) nydrology must	
9 10 <u>Woody Vine Stratum</u> (Plot size: <u>30 ft.</u> 1. <u>None Observed</u>	 = T	otal Cover		X 3 - Prevalence Ir 4 - Morphologica data in Remar Problematic Hyd	l Adaptations <sup>1</sup> (F ks or on a separ rophytic Vegetat oil and wetland h	rate sheet) ion <sup>1</sup> (Explain) nydrology must	
9 10 <u>Woody Vine Stratum</u> (Plot size: <u>30 ft.</u>	= T			X 3 - Prevalence Ir 4 - Morphologica data in Remar Problematic Hyd <sup>1</sup> Indicators of hydric s be present, unless dis	l Adaptations <sup>1</sup> (F ks or on a separ rophytic Vegetat oil and wetland h	rate sheet) ion <sup>1</sup> (Explain) nydrology must	
9 10 <u>Woody Vine Stratum</u> (Plot size: <u>30 ft.</u> 1. <u>None Observed</u>	= T	otal Cover		X 3 - Prevalence Ir 4 - Morphologica data in Remar Problematic Hyd <sup>1</sup> Indicators of hydric s be present, unless dis	I Adaptations <sup>1</sup> (F ks or on a separ rophytic Vegetat oil and wetland F sturbed or proble	ate sheet) ion <sup>1</sup> (Explain) nydrology must matic.	
9 10 <u>Woody Vine Stratum</u> (Plot size: <u>30 ft.</u> 1. <u>None Observed</u>	= T			X 3 - Prevalence Ir 4 - Morphologica data in Remar Problematic Hyd <sup>1</sup> Indicators of hydric s be present, unless dis	I Adaptations <sup>1</sup> (F ks or on a separ rophytic Vegetat oil and wetland F sturbed or proble	rate sheet) ion <sup>1</sup> (Explain) nydrology must	
9 10 <u>Woody Vine Stratum</u> (Plot size: <u>30 ft.</u> 1. <u>None Observed</u>	= T			X 3 - Prevalence Ir 4 - Morphologica data in Remar Problematic Hyd <sup>1</sup> Indicators of hydric s be present, unless dis	I Adaptations <sup>1</sup> (F ks or on a separ rophytic Vegetat oil and wetland F sturbed or proble	ate sheet) ion <sup>1</sup> (Explain) nydrology must matic.	
9 10 <u>Woody Vine Stratum</u> (Plot size: <u>30 ft.</u> 1. <u>None Observed</u> 2	= 1 = 1 = 0 = 1	otal Cover		X 3 - Prevalence Ir 4 - Morphologica data in Remar Problematic Hyd <sup>1</sup> Indicators of hydric s be present, unless dis Hydrophytic Vegetation Present?	I Adaptations <sup>1</sup> (F ks or on a separ rophytic Vegetat oil and wetland F sturbed or proble	ate sheet) ion <sup>1</sup> (Explain) nydrology must matic.	
9	<u>100</u> = 1 <u>0</u> = 1	otal Cover	species indexed as (	X 3 - Prevalence Ir 4 - Morphologica data in Remar Problematic Hyd <sup>1</sup> Indicators of hydric s be present, unless dis Hydrophytic Vegetation Present?	I Adaptations <sup>1</sup> (F ks or on a separ rophytic Vegetat oil and wetland h sturbed or proble	ate sheet) ion <sup>1</sup> (Explain) nydrology must matic.	

Depth	Matrix			Redox	Features					
inches)	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>	Texture	Remarks		
0-18	10 YR 4/1	80	5 YR 5/8	20	C	М	Clay Loam			
	Concentration, D=Depl	etion RM	-Reduced Matrix M	S=Masked	Sand Grains	21	ocation: PL=Pore Lining	M=Matrix		
	Is Indicators:			0-maskeu		L	Indicators for Proble	-		
Histos	Histosol (A1) Sandy Gleyed Matrix (S4)					Coast Prairie Redox (A16)				
	Epipedon (A2)	Sandy Redox (S5)			Dark Surface (S7)					
Black I	Histic (A3)		Stripped Matrix (S6)				Iron-Manganese	Masses (F12)		
Hydrog	gen Sulfide (A4)		Loamy Mucky Mineral (F1)			Very Shallow Dark Surface (TF12)				
Stratifi	ed Layers (A5)		Loamy	Gleyed Ma	trix (F2)	Other (Explain in Remarks)				
2 cm N	/luck (A10)		X Deplete	ed Matrix (F	3)					
Deplet	ed Below Dark Surface	e (A11)		Dark Surfa	. ,					
	Dark Surface (A12)			ed Dark Su	. ,		_			
	Mucky Mineral (S1)		Redox	Depressior	ns (F8)		<sup>3</sup> Indicators of hydrophy	, ,		
5 cm N	Aucky Peat or Peat (S3	3)					wetland hydrology r	•		
	Layer (if present):						unless disturbed or	problematic.		
Type:						الم الم	c Soil Present?	Yes X No		
Depin	(inches):					Hydric	: Son Present?	Yes X No		
emarks:						I				
A positive ir	ndication of hydric soil	was obsei	ved.							
	-									

## HYDROLOGY

Wetland Hydrology Indicators:		
Primary Indicators (minimum of one required; check	all that apply)	Secondary Indicators (minimum of two required)
X Surface Water (A1)	Water-Stained Leaves (B9)	Surface Soil Cracks (B6)
High Water Table (A2)	Aquatic Fauna (B13)	Drainage Patterns (B10)
X Saturation (A3)	True Aquatic Plants (B14)	Dry-Season Water Table (C2)
Water Marks (B1)	Hydrogen Sulfide Odor (C1)	Crayfish Burrows (C8)
Sediment Deposits (B2)	Oxidized Rhizospheres on Living Roots (C3)	Saturation Visible on Aerial Imagery (C9)
Drift Deposits (B3)	Presence of Reduced Iron (C4)	Stunted or Stressed Plants (D1)
Algal Mat or Crust (B4)	Recent Iron Reduction in Tilled Soils (C6)	Geomorphic Position (D2)
Iron Deposits (B5)	Thin Muck Surface (C7)	X FAC-Neutral Test (D5)
Inundation Visible on Aerial Imagery (B7)	Gauge or Well Data (D9)	
Sparsely Vegetated Concave Surface (B8)	Other (Explain in Remarks)	
Field Observations:		
Surface Water Present? Yes X No	Depth (inches): 2	
Water Table Present? Yes NoX	Depth (inches): >20	
Saturation Present? Yes X No	Depth (inches): 4 Wet	and Hydrology Present? Yes X No
(includes capillary fringe)		
Describe Recorded Data (stream gauge, monitoring w	ell, aerial photos, previous inspections), if available:	
Remarks:		
A positive indication of wetland hydrology was obser	ved (at least one primary indicator).	

Project/Site:	Cadence Solar			County:	Un	ion	Sampling Date:	January 8, 2020	
Applicant/Owner:		Invenerg	gy		State:	ОН	Sampling Point:	DPC010_WC04	
Investigator(s):	K. Barnett	K. Barnett and S. Schratz Section, Township, Range:							
Landform (hillslope	, terrace, etc.):		Depression		Local reli	ief (concave, c	onvex, none):	Concave	
Slope (%):	00-05	Lat:	40.34331	Long:		-83.41111	Datum:	NAD83	
Soil Map Unit Name	e:		0				NWI classification:	PEM	
Are climatic / hydro	logic conditions on the	site typical for this	s time of year?	Yes	No	(lf no	, explain in Remarks.)		
Are Vegetation	No ,Soil No	,or Hydrology	No signifi	icantly disturbed?		Are "Norma	I Circumstances" present?	Yes X No	
Are Vegetation	No ,Soil No	, or Hydrology	No natura	ally problematic?		(If needed, e	explain any answers in Rema	arks.)	

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

Hydrophytic Vegetation Present? Hydric Soil Present? Wetland Hydrology Present?	Yes X Yes X Yes X	No No No	Is the Sampled Area within a Wetland?	Yes	<u>x</u>	No
Remarks: This point was determined to be w	vithin a wetland due	to the presence of all 3	3 wetland criteria.			

## **VEGETATION - Use scientific names of plants.**

	Absolute Domi	inant Indicator	Dominance Test worksheet:	
Tree Stratum (Plot size: 30 ft.)	% cover Spec	ies? Status	Number of Dominant Species	
1. None Observed			That Are OBL, FACW, or FAC: 1	(A)
2.	·			. ( )
3.			Total Number of Dominant	
4.			Species Across All Strata: 1	(B)
5.				(-)
	0 = Total Co	)ver	Percent of Dominant Species	
Sapling/Shrub Stratum (Plot size: 15				(A/B)
1. None Observed				(,,,_)
2.			Prevalence Index Worksheet:	
			Total % Cover of: Multiply by:	
3 4			OBL species $0$ x1 = $0$	•
5.			FACW species 105 x 2 = 210	•
···	0 = Total Co	)ver	FAC species $0$ x 3 = $0$	•
Herb Stratum (Plot size: 5 ft.)	1000100		FACU species $0$ x 4 = $0$	•
1. Panicum dichotomiflorum	90 Ye	es FACW	UPL species $0 \times 5 = 0$	
2. Symphyotrichum lateriflorum	10 N		· · · · · · · · · · · · · · · · · · ·	(B)
	<u> </u>		Prevalence Index = $B/A = 2.00$	(0)
			Hydrophytic Vegetation Indicators:	
			X 1 - Rapid Test for Hydrophytic Vegetation	
			$\mathbf{X}$ 2 - Dominance Test is >50%	
7			<b>X</b> 3 - Prevalence Index is $\leq 3.0^{1}$	
			4 - Morphological Adaptations <sup>1</sup> (Provide supporting	
	·		data in Remarks or on a separate sheet)	
10	105 = Total Co		Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)	
		over		
Woody Vine Stratum (Plot size: 30	<u>π.</u> )		<sup>1</sup> Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.	
1. None Observed	·		be present, unless disturbed of problematic.	
2				
	0 = Total Co	over	Hydrophytic	
			Vegetation Present? Yes X No	
Demodes				
Remarks:	as absorved (SEOP) of d	aminant anadaa inda		
A positive indication of hydrophytic vegetation w				
A positi	ve indication of hydroph	ylic vegetation was observed	d (Prevalence Index is ≤ 3.0).	

)epth	Matrix			Redox	Features						
nches)	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>	Texture	Remarks			
0-18	10 YR 4/1	85	5 YR 4/4	15	С	Μ	Silty Clay Loam				
					. <u> </u>						
		_		_							
							<u> </u>				
ype: C=0	Concentration, D=Depl	etion, RM=	=Reduced Matrix, M	S=Masked	Sand Grains.	2	_ocation: PL=Pore Lining, M	=Matrix.			
ydric Soi	Is Indicators:						Indicators for Problema	atic Hydric Soils <sup>3</sup> :			
Histosol (A1) Sandy Gleyed Matrix (S4)						Coast Prairie Redox (A16)					
Histic Epipedon (A2) Sandy Redox (S5)					Dark Surface (S7)						
Black	Histic (A3)		Strippe	d Matrix (S	6)	Iron-Manganese Masses (F12)					
Hydrog	gen Sulfide (A4)		Loamy Mucky Mineral (F1)			Very Shallow Dark Surface (TF12)					
Stratifi	ied Layers (A5)		Loamy	Gleyed Ma	trix (F2)	Other (Explain in Remarks)					
2 cm M	Muck (A10)		X Deplete	ed Matrix (F	3)						
Deplet	ted Below Dark Surface	e (A11)	Redox	Dark Surfa	ce (F6)						
Thick I	Dark Surface (A12)		Deplete	ed Dark Su	rface (F7)						
Sandy	Mucky Mineral (S1)		Redox	Depression	is (F8)	<sup>3</sup> Indicators of hydrophytic vegetation and					
5 cm N	Mucky Peat or Peat (S3	3)				wetland hydrology must be present,					
							unless disturbed or pro	oblematic.			
estrictive	e Layer (if present):										
Type:											
Depth(	(inches):					Hydri	c Soil Present?	Yes X No			
marks:											
positive i	ndication of hydric soil	was obser	ved.								
	,										

## HYDROLOGY

Wetland Hydrology Indicators:		
Primary Indicators (minimum of one required; check	all that apply)	Secondary Indicators (minimum of two required)
X Surface Water (A1)	Water-Stained Leaves (B9)	Surface Soil Cracks (B6)
High Water Table (A2)	Aquatic Fauna (B13)	Drainage Patterns (B10)
X Saturation (A3)	True Aquatic Plants (B14)	Dry-Season Water Table (C2)
Water Marks (B1)	Hydrogen Sulfide Odor (C1)	Crayfish Burrows (C8)
Sediment Deposits (B2)	Oxidized Rhizospheres on Living Roots (C3)	Saturation Visible on Aerial Imagery (C9)
Drift Deposits (B3)	Presence of Reduced Iron (C4)	Stunted or Stressed Plants (D1)
Algal Mat or Crust (B4)	Recent Iron Reduction in Tilled Soils (C6)	Geomorphic Position (D2)
Iron Deposits (B5)	Thin Muck Surface (C7)	X FAC-Neutral Test (D5)
Inundation Visible on Aerial Imagery (B7)	Gauge or Well Data (D9)	
Sparsely Vegetated Concave Surface (B8)	Other (Explain in Remarks)	
Field Observations:		
Surface Water Present? Yes X No	Depth (inches): 2	
Water Table Present? Yes NoX	Depth (inches): >20	
Saturation Present? Yes X No	Depth (inches): 4 Wet	and Hydrology Present? Yes X No
(includes capillary fringe)		
Describe Recorded Data (stream gauge, monitoring w	ell, aerial photos, previous inspections), if available:	
Remarks:		
A positive indication of wetland hydrology was obser	ved (at least one primary indicator).	

Project/Site:		(	Cadence	e Solar		County:	Un	ion	Sampling Date:	January 8, 20	)20
Applicant/Owner:				Invenergy			State:	ОН	Sampling Point:	DPC012_WC	05
Investigator(s):	K.	K. Barnett and S. Schratz Section, Township, Range:				)					
Landform (hillslope,	, terrace, e	etc.):		Bot	tom Forest		Local rel	ief (concave, c	onvex, none):	Concave	
Slope (%):		00-05		Lat:	40.35515	Long:		-83.41121	Datum:	NAD83	
Soil Map Unit Name	e:				0				NWI classification:	PFO	
Are climatic / hydrol	logic cond	itions on	the site	typical for this t	me of year?	Yes	No	(lf no	, explain in Remarks.)		
Are Vegetation	No	,Soil	No	,or Hydrology	No signifi	cantly disturbed?		Are "Norma	I Circumstances" present?	Yes X	No
Are Vegetation	No	,Soil	No	,or Hydrology	No natura	ally problematic?		(If needed, e	explain any answers in Rema	arks.)	

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

Hydrophytic Vegetation Present? Hydric Soil Present? Wetland Hydrology Present?	Yes Yes Yes		No No No	Is the Sampled Area within a Wetland?	Yes	<u>x</u>	No	
Remarks: This point was determined to be v	<i>i</i> ithin a wet	tland due t	o the presence of all 3	3 wetland criteria.				

### **VEGETATION - Use scientific names of plants.**

Tree Stratum (Plot size:30ft.% coverSpecies?StatusNumber of Dominant Species1.Quercus palustris70YesFACWThat Are OBL, FACW, or FAC:52.Populus deltoides30YesFACTotal Number of Dominant3.Quercus rubra10NoFACUTotal Number of Dominant4555	(A) (B)
1. Quercus palustris     70     Yes     FACW     That Are OBL, FACW, or FAC:     5       2. Populus deltoides     30     Yes     FAC     That Are OBL, FACW, or FAC:     5       3. Quercus rubra     10     No     FACU     Total Number of Dominant       4.     Species Across All Strata:     5	
2. Populus deltoides     30     Yes     FAC       3. Quercus rubra     10     No     FACU       4.     Species Across All Strata:     5	(B)
4. Species Across All Strata: 5	(B)
	(B)
_	. ,
110 = Total Cover Percent of Dominant Species	
Sapling/Shrub Stratum (Plot size: 15 ft.) That Are OBL, FACW, or FAC: 100%	(A/B)
1. Acer rubrum 10 Yes FAC	
2. Prevalence Index Worksheet:	
3. Total % Cover of: Multiply by:	
4. OBL species <b>0</b> x 1 = <b>0</b>	
5. FACW species 90 x 2 = 180	
10         = Total Cover         FAC species         50         x 3 =         150	
Herb Stratum         (Plot size:         5         ft.         FACU species         10         x 4 =         40	
1. Cyperus sp.         20         Yes         FACW         UPL species         0         x 5 =         0	
2. Microstegium vimineum 10 Yes FAC Column Totals: 150 (A) 370	(B)
3. Prevalence Index = B/A = 2.47	
4.	
5. Hydrophytic Vegetation Indicators:	
61 - Rapid Test for Hydrophytic Vegetation	
7 2 - Dominance Test is >50%	
8 3 - Prevalence Index is ≤3.0 <sup>1</sup>	
9. 4 - Morphological Adaptations <sup>1</sup> (Provide supporting	
10.	
30 = Total Cover Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)	
Woody Vine Stratum (Plot size: 30 ft.)	
1. None Observed be present, unless disturbed or problematic.	
2.	·
0 = Total Cover Hydrophytic	
Vegetation Present? Yes X No	
Remarks:	
A positive indication of hydrophytic vegetation was observed (>50% of dominant species indexed as OBL, FACW, or FAC).	
A positive indication of hydrophytic vegetation was observed (Prevalence Index is $\leq$ 3.0).	

Depth	Matrix			Redox	Features						
inches)	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>	Texture	Remarks			
0-18	10 YR 4/1	60	5 YR 4/6	40	С	М	Silty Clay Loam				
					. <u></u>		<u> </u>				
					. <u></u>						
					. <u></u>						
Type: C=C	Concentration, D=Deple	tion, RM	=Reduced Matrix, M	S=Masked	Sand Grains.	²L	Location: PL=Pore Lining, M	=Matrix.			
Hydric Soils Indicators:							Indicators for Problema				
Histos	ol (A1)		Sandy	Gleyed Mat	trix (S4)	Coast Prairie Redox (A16)					
Histic Epipedon (A2) Sandy Redox (S5)				)		Dark Surface (S7)					
Black Histic (A3)			Strippe	d Matrix (S	6)	Iron-Manganese Masses (F12)					
Hydrog	gen Sulfide (A4)		Loamy	Mucky Min	eral (F1)	Very Shallow Dark Surface (TF12)					
Stratifi	ed Layers (A5)		Loamy	Gleyed Ma	trix (F2)	Other (Explain in Remarks)					
2 cm N	Muck (A10)		X Deplete	ed Matrix (F	-3)						
Deplet	ted Below Dark Surface	(A11)	Redox	Dark Surfa	ce (F6)						
Thick I	Dark Surface (A12)		Deplete	ed Dark Su	rface (F7)						
Sandy	Mucky Mineral (S1)		Redox	Depressior	ns (F8)	<sup>3</sup> Indicators of hydrophytic vegetation and					
5 cm N	Mucky Peat or Peat (S3	)				wetland hydrology must be present,					
							unless disturbed or pro	blematic.			
estrictive	e Layer (if present):										
Type:											
Depth(	(inches):					Hydri	c Soil Present?	Yes X No			
marks:											
positive in	ndication of hydric soil v	vas obsei	rved.								

## HYDROLOGY

Wetland Hydrology Indicators:				
Primary Indicators (minimum of one required; cheo	ck all that apply)	Secondary Indicators (minimum of two required)		
Surface Water (A1)	X Water-Stained Leaves (B9)	Surface Soil Cracks (B6)		
High Water Table (A2)	Aquatic Fauna (B13)	Drainage Patterns (B10)		
X Saturation (A3)	True Aquatic Plants (B14)	Dry-Season Water Table (C2)		
Water Marks (B1)	Hydrogen Sulfide Odor (C1)	Crayfish Burrows (C8)		
Sediment Deposits (B2)	Oxidized Rhizospheres on Living Roots (C3)	Saturation Visible on Aerial Imagery (C9)		
Drift Deposits (B3)	Presence of Reduced Iron (C4)	Stunted or Stressed Plants (D1)		
Algal Mat or Crust (B4)	Recent Iron Reduction in Tilled Soils (C6)	X Geomorphic Position (D2)		
Iron Deposits (B5)	Thin Muck Surface (C7)	X FAC-Neutral Test (D5)		
Inundation Visible on Aerial Imagery (B7)	Gauge or Well Data (D9)			
Sparsely Vegetated Concave Surface (B8)	Other (Explain in Remarks)			
Field Observations:				
Surface Water Present? Yes No	X Depth (inches): N/A			
Water Table Present? Yes No	X Depth (inches): >20			
Saturation Present? Yes X No	Depth (inches): 6 Wetla	nd Hydrology Present? Yes X No		
(includes capillary fringe)				
Describe Recorded Data (stream gauge, monitoring	well, aerial photos, previous inspections), if available:			
Remarks:				
A positive indication of wetland hydrology was obs				
A positive indication of wetland hydrology was obs	erved (at least two secondary indicators).			

Project/Site:	Cadence Solar			County:	Un	ion	Sampling Date:	January 9, 2020	
Applicant/Owner:		Invenerg	У		State:	OH	Sampling Point:	DPC016_WC06	
Investigator(s):	Kirk Barnett	Kirk Barnett and Samuel Schratz			Section, Township, Range:			)	
Landform (hillslope	, terrace, etc.):	B	ottom Forest		Local reli	ef (concave, co	onvex, none):	Concave	
Slope (%):	00-05	Lat:	40.35761	Long:		-83.45409	Datum:	NAD83	
Soil Map Unit Name	e:		0				NWI classification:	PFO	
Are climatic / hydro	logic conditions on the	site typical for this	time of year?	Yes	No	(If no	, explain in Remarks.)		
Are Vegetation	No ,Soil No	or Hydrology,	No signifi	cantly disturbed?		Are "Normal	Circumstances" present?	Yes X No	
Are Vegetation	No ,Soil No	or Hydrology,	No natura	ally problematic?		(If needed, e	explain any answers in Rema	arks.)	

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

Hydrophytic Vegetation Present? Hydric Soil Present? Wetland Hydrology Present?	Yes X Yes X Yes X	No No No	Is the Sampled Area within a Wetland?	Yes <u>X</u>	No		
Remarks: This point was determined to be within a wetland due to the presence of all 3 wetland criteria.							

# **VEGETATION - Use scientific names of plants.**

	Absolute	Dominant	Indicator	Dominance Test wo	ksheet:		
Tree Stratum (Plot size: 30 ft.)	% cover	Species?	Status	Number of Dominant	Species		
1. Populus deltoides	30	Yes	FAC	That Are OBL, FACW	, or FAC:	4	(A)
2. Quercus palustris	10	Yes	FACW				_
3.				Total Number of Dom	inant		
4.				Species Across All St	rata:	4	(B)
5.							_ ` `
	40 =	Total Cover		Percent of Dominant	Species		
Sapling/Shrub Stratum (Plot size: 15				That Are OBL, FACW		100%	(A/B)
1. None Observed				,,	,		(
2.				Prevalence Index W	orksheet:		
2				Total % Co	/er.of:	Multiply by:	
3				OBL species	45	x1= <b>45</b>	-
5				FACW species	55	x 2 = <b>110</b>	-
5	0 =	Total Cover		FAC species	45	x 3 = <b>135</b>	_
Herb Stratum (Plot size: 5 ft.)				FACU species		x 4 = 0	-
1. Phalaris arundinacea	45	Yes	FACW	UPL species	0	x 5 = 0	-
2. Typha X glauca	45	Yes	OBL	Column Totals:	145	(A) <b>290</b>	(B)
3. Xanthium strumarium	15	No	FAC	Prevalence Index = B	-	2.00	_ (D)
	15	NO	TAC	Flevalence index - D	A -	2.00	
				Hydrophytic Vegetat	ion Indicato	re'	
				1 - Rapid Test fo			
				X 2 - Dominance T		vegetation	
				X 3 - Prevalence Ir			
						<sup>1</sup> (Provide supporting	
10				data in Remar			
10	405 -	Tatal Osuan		Problematic Hyd		, ,	
		Total Cover			1 2 0	( 1 )	
Woody Vine Stratum (Plot size: 30 f	<u>π.</u> )			<sup>1</sup> Indicators of hydric so be present, unless dis			
1. None Observed				be present, unless dis	aubeu or pro	biematic.	
2							
	=	Total Cover		Hydrophytic		×	
				Vegetation Present?	Y	es <u>X</u> No	
				1			
)emerica:							
Remarks:	an observed (>	50% of dominant	oposion indexed as (				
A positive indication of hydrophytic vegetation wa							
A positive indication of hydrophytic vegetation wa				⊔ OBL, FACW, or FAC). I (Prevalence Index is ≤ 3.0).			

Depth	Matrix		Redox Features							
inches)	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>	Texture	Remarks		
0-18	10YR 5/1	60	5YR 4/6	40	С	PL	Clay Loam			
	<u> </u>									
							<u> </u>			
	Concentration, D=Depl	etion, RM=	Reduced Matrix, M	S=Masked	Sand Grains.	<sup>2</sup> L	ocation: PL=Pore Lining, N	-		
-	Is Indicators:						Indicators for Problema			
	ol (A1)			Gleyed Mat			Coast Prairie Redox (A16)			
	Epipedon (A2)		Sandy Redox (S5)			Dark Surface (S7)				
	Histic (A3)		Stripped Matrix (S6)				Iron-Manganese Masses (F12)			
Hydrog	gen Sulfide (A4)			Mucky Min	. ,		Very Shallow Dark Surface (TF12)			
Stratifi	ied Layers (A5)		Loamy Gleyed Matrix (F2)			Other (Explain in Remarks)				
2 cm M	Muck (A10)		X Deplete	ed Matrix (F	3)					
Deplet	ted Below Dark Surface	e (A11)	Redox	Dark Surfa	ce (F6)					
Thick	Dark Surface (A12)		Deplete	ed Dark Su	rface (F7)					
Sandy	Mucky Mineral (S1)		Redox	Depressior	ns (F8)	<sup>3</sup> Indicators of hydrophytic vegetation and				
5 cm 1	Mucky Peat or Peat (S3	3)				wetland hydrology must be present,				
						unless disturbed or problematic.				
estrictive	Layer (if present):									
Type:										
Depth	(inches):					Hydrid	c Soil Present?	Yes X No		
marks:										
positive i	ndication of hydric soil	was obser	ved.							

## HYDROLOGY

Wetland Hydrology Indicators:						
Primary Indicators (minimum of one required; check	all that apply)	Secondary Indicators (minimum of two required)				
Surface Water (A1)	Water-Stained Leaves (B9)	Surface Soil Cracks (B6)				
X High Water Table (A2)	Aquatic Fauna (B13)	Drainage Patterns (B10)				
X Saturation (A3)	True Aquatic Plants (B14)	Dry-Season Water Table (C2)				
Water Marks (B1)	Hydrogen Sulfide Odor (C1)	Crayfish Burrows (C8)				
Sediment Deposits (B2)	Saturation Visible on Aerial Imagery (C9)					
Drift Deposits (B3)	Drift Deposits (B3) Presence of Reduced Iron (C4)					
Algal Mat or Crust (B4)	Recent Iron Reduction in Tilled Soils (C6)	X Geomorphic Position (D2)				
Iron Deposits (B5)	Thin Muck Surface (C7)	X FAC-Neutral Test (D5)				
Inundation Visible on Aerial Imagery (B7)	Gauge or Well Data (D9)					
Sparsely Vegetated Concave Surface (B8)	Other (Explain in Remarks)					
	T					
Field Observations:						
Surface Water Present? Yes No	C Depth (inches): N/A					
Water Table Present? Yes X No	Depth (inches): 4					
Saturation Present? Yes X No	Depth (inches): 4 Wetla	nd Hydrology Present? Yes X No				
(includes capillary fringe)						
Describe Recorded Data (stream gauge, monitoring v	vell, aerial photos, previous inspections), if available:					
Remarks:						
A positive indication of wetland hydrology was observed	rved (at least one primary indicator).					
A positive indication of wetland hydrology was observed	rved (at least two secondary indicators).					

Project/Site:	Cade	nce Solar		County:	Un	ion	Sampling Date:	January 9, 2020	
Applicant/Owner:		Inven	ergy		State:	ОН	Sampling Point:	DPC018_WC07	
Investigator(s):	Kirk Barnett	and	Samuel Schratz	Section, Tov	vnship, R	ange:	0	)	
Landform (hillslope,	terrace, etc.):		Depression		Local reli	ief (concave, co	onvex, none):	Concave	
Slope (%):	00-05	Lat:	40.35181	Long:		-83.45207	Datum:	NAD83	
Soil Map Unit Name	9:		0				NWI classification:	PUB	
Are climatic / hydrol	logic conditions on the	site typical for t	his time of year?	Yes	No	(If no	, explain in Remarks.)		
Are Vegetation	No ,Soil No	or Hydrolo,	gy <u>No</u> signif	icantly disturbed?		Are "Norma	Circumstances" present?	Yes X No	
Are Vegetation	No ,Soil No	or Hydrolo	gy <b>No</b> natur	ally problematic?		(If needed, e	explain any answers in Rema	arks.)	

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

Hydrophytic Vegetation Present? Hydric Soil Present? Wetland Hydrology Present?	Yes X Yes Yes X	No No No	Is the Sampled Area within a Wetland?	Yes	NoX	
Remarks: This point was determined not to	be within a wetland o	lue to the lack of hydric	c soils.			

## **VEGETATION - Use scientific names of plants.**

	Absolute Dominant	Indicator	Dominance Test worksheet:	
Tree Stratum (Plot size: 30 ft.)	% cover Species?	Status	Number of Dominant Species	
1. None Observed			That Are OBL, FACW, or FAC:	<b>1</b> (A)
2.				( )
3.			Total Number of Dominant	
4.			Species Across All Strata:	<b>1</b> (B)
				(0)
5	0 = Total Cover		Percent of Dominant Species	
Sapling/Shrub Stratum (Plot size: 15			That Are OBL, FACW, or FAC:	<b>100%</b> (A/B)
1. None Observed				
2.			Prevalence Index Worksheet:	
			Total % Cover of:	Multiply by:
4			OBL species 100	x 1 = <b>100</b>
4 5.			FACW species 0	x 2 = <b>0</b>
5	0 = Total Cover		FAC species 0	$x_3 = 0$
Herb Stratum (Plot size: 5 ft. )			FACU species 0	x 4 = 0
1. Typha X glauca	100 Yes	OBL	UPL species 0	x5= 0
			Column Totals: 100	
			Prevalence Index = B/A =	1.00
· · · · · · · · · · · · · · · · · · ·				1.00
-			Hydrophytic Vegetation Indicat	ors:
			1 - Rapid Test for Hydrophy	
7			X 2 - Dominance Test is >50%	5
			X 3 - Prevalence Index is ≤3.0	
0			4 - Morphological Adaptation	
9				is (i tovide supporting
10			data in Remarks or on a s	senarate sheet)
10			data in Remarks or on a s	. ,
	100 = Total Cover		Problematic Hydrophytic Ve	getation <sup>1</sup> (Explain)
Woody Vine Stratum (Plot size: 30	<u>100</u> = Total Cover ft)		Problematic Hydrophytic Ve	getation <sup>1</sup> (Explain) and hydrology must
<u>Woody Vine Stratum</u> (Plot size: <u>30</u> 1. <u>None Observed</u>	<u>100</u> = Total Cover ft)		Problematic Hydrophytic Ve	getation <sup>1</sup> (Explain) and hydrology must
Woody Vine Stratum (Plot size: 30	<u>100</u> = Total Cover <u>ft.</u> )		Problematic Hydrophytic Ve <sup>1</sup> Indicators of hydric soil and wetl be present, unless disturbed or p	getation <sup>1</sup> (Explain) and hydrology must
<u>Woody Vine Stratum</u> (Plot size: <u>30</u> 1. <u>None Observed</u>	<u>100</u> = Total Cover ft)		Problematic Hydrophytic Ve <sup>1</sup> Indicators of hydric soil and wetl be present, unless disturbed or p <b>Hydrophytic</b>	getation <sup>1</sup> (Explain) and hydrology must roblematic.
<u>Woody Vine Stratum</u> (Plot size: <u>30</u> 1. <u>None Observed</u>	<u>100</u> = Total Cover <u>ft.</u> )		Problematic Hydrophytic Ve <sup>1</sup> Indicators of hydric soil and wetl be present, unless disturbed or p <b>Hydrophytic</b>	getation <sup>1</sup> (Explain) and hydrology must
<u>Woody Vine Stratum</u> (Plot size: <u>30</u> 1. <u>None Observed</u> 2.	<u>100</u> = Total Cover <u>ft.</u> )		Problematic Hydrophytic Ve <sup>1</sup> Indicators of hydric soil and wetl be present, unless disturbed or p <b>Hydrophytic</b>	getation <sup>1</sup> (Explain) and hydrology must roblematic.
Woody Vine Stratum       (Plot size:30         1.       None Observed         2.	<u>100</u> = Total Cover <u>ft.</u> ) <u>0</u> = Total Cover		Problematic Hydrophytic Ve <sup>1</sup> Indicators of hydric soil and wetl be present, unless disturbed or p Hydrophytic Vegetation Present?	getation <sup>1</sup> (Explain) and hydrology must roblematic.
Woody Vine Stratum       (Plot size:30	<u>ft.</u> ) <u> </u>		Problematic Hydrophytic Ve <sup>1</sup> Indicators of hydric soil and wetl be present, unless disturbed or p Hydrophytic Vegetation Present? OBL, FACW, or FAC).	getation <sup>1</sup> (Explain) and hydrology must roblematic.
Woody Vine Stratum       (Plot size:30	<u>100</u> = Total Cover <u>ft.</u> ) <u>0</u> = Total Cover		Problematic Hydrophytic Ve <sup>1</sup> Indicators of hydric soil and wetl be present, unless disturbed or p Hydrophytic Vegetation Present? OBL, FACW, or FAC).	getation <sup>1</sup> (Explain) and hydrology must roblematic.

Depth	Matrix			Redox	Features						
inches)	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>	Texture	Remarks			
0-18	10YR 4/1	60	5YR 4/6	40	С	М	Clay Loam				
				- <del></del> .							
	Concentration, D=Depl Is Indicators:	etion, RM	Reduced Matrix, M	S=Masked	Sand Grains.	-L	ocation: PL=Pore Lining Indicators for Proble				
	ol (A1)		Sandy	Cloved Met	triv (SA)						
	Epipedon (A2)		Sandy Gleyed Matrix (S4)				Coast Prairie Redox (A16) Dark Surface (S7)				
	Histic (A3)		Sandy Redox (S5)			Iron-Manganese Masses (F12)					
	gen Sulfide (A4)		Stripped Matrix (S6)			Very Shallow Dark Surface (TF12)					
_ ` `	ied Layers (A5)		Loamy Mucky Mineral (F1) Loamy Gleyed Matrix (F2)				Other (Explain in Remarks)				
	Muck (A10)			ed Matrix (F	( )			itemarks)			
	ted Below Dark Surface	· (A11)		Dark Surfa	,						
	Dark Surface (A12)	= (ATT)		ed Dark Sulla	. ,						
_	Mucky Mineral (S1)			Depression	( )	<sup>3</sup> Indicators of hydrophytic vegetation and					
	Mucky Peat or Peat (S		Redux	Depression	IS (FO)	wetland hydrology must be present,					
	NUCKY FEAL OF FEAL (S	<i>''</i>				unless disturbed or problematic.					
estrictive	e Layer (if present):										
Type:											
Depth(	(inches):					Hydric	Soil Present?	Yes No X			
marks:											
	indication of hydric oc	la waa ah	a a m (a d								
5 positive	indication of hydric so	is was ob	served.								

## HYDROLOGY

Wetland Hydrology Indicators:								
Primary Indicators (minimum of one required; check	Primary Indicators (minimum of one required; check all that apply)							
X Surface Water (A1)	Water-Stained Leaves (B9)	Surface Soil Cracks (B6)						
X High Water Table (A2)	Aquatic Fauna (B13)	Drainage Patterns (B10)						
Saturation (A3)	True Aquatic Plants (B14)	Dry-Season Water Table (C2)						
Water Marks (B1)	Hydrogen Sulfide Odor (C1)	Crayfish Burrows (C8)						
Sediment Deposits (B2)	Saturation Visible on Aerial Imagery (C9)							
Drift Deposits (B3)	Presence of Reduced Iron (C4)	Stunted or Stressed Plants (D1)						
Algal Mat or Crust (B4)	Recent Iron Reduction in Tilled Soils (C6)	X Geomorphic Position (D2)						
Iron Deposits (B5)	Thin Muck Surface (C7)	X FAC-Neutral Test (D5)						
Inundation Visible on Aerial Imagery (B7)	Gauge or Well Data (D9)							
Sparsely Vegetated Concave Surface (B8)	Other (Explain in Remarks)							
Field Observations:								
Surface Water Present? Yes X No	Depth (inches): <b>24</b>							
Water Table Present? Yes X No	Depth (inches):							
Saturation Present? Yes No X	Depth (inches): >20 Wetla	nd Hydrology Present? Yes X No						
(includes capillary fringe)								
Describe Recorded Data (stream gauge, monitoring w	ell, aerial photos, previous inspections), if available:							
Remarks:								
A positive indication of wetland hydrology was observ	ved (at least one primary indicator).							
A positive indication of wetland hydrology was observ	ved (at least two secondary indicators).							

Project/Site:	Cadence Solar					County: Union			Sampling Date:	January 9,	2020
Applicant/Owner:	Invenergy						State:	OH Sampling Point:		DPC020_V	VC08
Investigator(s):	Kirk	Barnett	and	Sam	Samuel Schratz Section, Towns			ange:	C	)	
Landform (hillslope, terrace, etc.):				De	pression	Local relief (concave, co		onvex, none):	Concave		
Slope (%):	0	0-05		Lat:	40.35063	Long:		-83.45161	Datum:	NAD83	
Soil Map Unit Name	:				0				NWI classification:	PUB	
Are climatic / hydrol	ogic condit	ions on th	ne site typic	al for this ti	me of year?	Yes	No	(lf no	, explain in Remarks.)		
Are Vegetation	No	,Soil I	No_,or H	lydrology	No signifi	cantly disturbed?		Are "Norma	I Circumstances" present?	Yes X	No
Are Vegetation No ,Soil No			No ,or H	lydrology	No natura	ally problematic? (If needed, ex		explain any answers in Rema	arks.)		

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

Hydrophytic Vegetation Present? Hydric Soil Present? Wetland Hydrology Present?	Yes _ Yes _ Yes _		No No No	Is the Sampled Area within a Wetland?	Yes	x	No	
Remarks: This point was determined to be v	<i>v</i> ithin a w	etland due	to the presence of all 3	3 wetland criteria.				

	Absolute Dominant	Indicator	Dominance Test worksheet:
Tree Stratum (Plot size:30 ft. )	% cover Species?	Status	Number of Dominant Species
1. None Observed	<u> </u>		That Are OBL, FACW, or FAC: 1 (A)
2.			
3.			Total Number of Dominant
4.			Species Across All Strata: 1 (B)
5	0 = Total Cover		Percent of Dominant Species
Sapling/Shrub Stratum (Plot size: 15			That Are OBL, FACW, or FAC: <b>100%</b> (A/B)
			Prevalence Index Worksheet:
2			
3			
4			OBL species         100         x 1 =         100
5			FACW species $0$ x 2 = $0$
	0 = Total Cover		FAC species 0 x 3 = 0
Herb Stratum (Plot size: 5 ft.)			FACU species x 4 =
1. Typha X glauca	100 Yes	OBL	UPL species 0 x 5 = 0
2			Column Totals: <b>100</b> (A) <b>100</b> (B)
3			Prevalence Index = B/A = 1.00
4			
5			Hydrophytic Vegetation Indicators:
6			1 - Rapid Test for Hydrophytic Vegetation
7			X 2 - Dominance Test is >50%
8			X_3 - Prevalence Index is ≤3.0 <sup>1</sup>
9			4 - Morphological Adaptations <sup>1</sup> (Provide supporting
10.			data in Remarks or on a separate sheet)
	100 = Total Cover		Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)
Woody Vine Stratum (Plot size: 30 f	t. )		<sup>1</sup> Indicators of hydric soil and wetland hydrology must
1. None Observed			be present, unless disturbed or problematic.
2.			
	0 = Total Cover	·	Hydrophytic
			Vegetation Present? Yes X No
Remarks:			
A positive indication of hydrophytic vegetation wa	s observed (>50% of dominant s	pecies indexed as (	OBL, FACW, or FAC).
A positiv	e indication of hydrophytic veget	ation was observed	l (Prevalence Index is ≤ 3.0).
	, , , ,		· · · ·

Depth	Matrix			Redox	Features							
inches)	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>	Texture	Remarks				
0-18	10YR 5/1	60	5YR 4/6	40	С	PL	Clay Loam					
			. <u> </u>									
						·						
	Concentration, D=Deple	tion PM	-Roducod Matrix M	S-Maskad	Sand Grains	2	ocation: PL=Pore Lining	M=Matrix				
	Is Indicators:			J-IVIASKeu	Gand Glains.	L		ematic Hydric Soils <sup>3</sup> :				
Histos			Sandv	Gleyed Ma	trix (S4)		Coast Prairie Re					
	Epipedon (A2)			Redox (S5)		Dark Surface (S7)						
	Histic (A3)			d Matrix (S			Iron-Manganese Masses (F12)					
	gen Sulfide (A4)			Mucky Min	,			rk Surface (TF12)				
	ed Layers (A5)			Gleyed Ma		Other (Explain in Remarks)						
	/uck (A10)		X Deplete		. ,			, , , , , , , , , , , , , , , , , , , ,				
	ed Below Dark Surface	e (A11)		Dark Surfa	,							
	Dark Surface (A12)	( )		ed Dark Su	. ,							
	Mucky Mineral (S1)			Depressior	· ,		<sup>3</sup> Indicators of hydroph	vtic vegetation and				
	/ucky Peat or Peat (S3	5)		1	( - /		wetland hydrology	, ,				
	,	,					unless disturbed or	problematic.				
Restrictive	Layer (if present):											
Type:												
Depth(	(inches):					Hydric	Soil Present?	Yes X No				
emarks:												
opositive ir	ndication of hydric soil	was obsei	rved.									

Wetland Hydrology Indicators:								
Primary Indicators (minimum of one required; check	all that apply)	Secondary Indicators (minimum of two required)						
X Surface Water (A1)	Water-Stained Leaves (B9)	Surface Soil Cracks (B6)						
High Water Table (A2)	Aquatic Fauna (B13)	Drainage Patterns (B10)						
X Saturation (A3)	True Aquatic Plants (B14)	Dry-Season Water Table (C2)						
Water Marks (B1)	Hydrogen Sulfide Odor (C1)	Crayfish Burrows (C8)						
Sediment Deposits (B2)	Oxidized Rhizospheres on Living Roots (C3)	Saturation Visible on Aerial Imagery (C9)						
Drift Deposits (B3)	Presence of Reduced Iron (C4)	Stunted or Stressed Plants (D1)						
Algal Mat or Crust (B4)	Recent Iron Reduction in Tilled Soils (C6)	X Geomorphic Position (D2)						
Iron Deposits (B5)	Thin Muck Surface (C7)	X FAC-Neutral Test (D5)						
Inundation Visible on Aerial Imagery (B7)	Gauge or Well Data (D9)							
Sparsely Vegetated Concave Surface (B8)	Other (Explain in Remarks)							
Field Observations:								
Surface Water Present? Yes X No	Depth (inches): 30							
Water Table Present? Yes No No	C Depth (inches): >20							
Saturation Present? Yes X No	Depth (inches): 4 Wetla	Ind Hydrology Present? Yes X No						
(includes capillary fringe)								
Describe Recorded Data (stream gauge, monitoring v	vell, aerial photos, previous inspections), if available:							
Remarks:								
A positive indication of wetland hydrology was obse	rved (at least one primary indicator).							
A positive indication of wetland hydrology was observed (at least two secondary indicators).								

Project/Site:	Cadence Solar					County:	Un	ion	Sampling Date:	January 9, 2	020
Applicant/Owner:	Invenergy						State:	OH Sampling Point:		DPC022_W	C09
Investigator(s):	Kirk Barnett and				muel Schratz	Section, Township, Range:			C	)	
Landform (hillslope, terrace, etc.):				[	epression	Local relief (concave,		ief (concave, c	onvex, none):	Concave	
Slope (%):	0	0-05		Lat:	40.35020	Long:	_	-83.44964	Datum:	NAD83	
Soil Map Unit Name	e:				0				NWI classification:	PFO	
Are climatic / hydrol	logic condit	tions on t	he site	typical for this	time of year?	Yes	No	(lf no	, explain in Remarks.)		
Are Vegetation	No	,Soil	No	or Hydrology,	No signif	icantly disturbed?		Are "Norma	I Circumstances" present?	Yes X	No
Are Vegetation No ,Soil No			or Hydrology,	No natur	ally problematic?	ly problematic? (If needed, explain a		explain any answers in Rema	arks.)		

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

Hydrophytic Vegetation Present? Hydric Soil Present? Wetland Hydrology Present?	Yes _ Yes _ Yes _		No No No	Is the Sampled Area within a Wetland?	Yes	x	No	
Remarks: This point was determined to be v	<i>v</i> ithin a w	etland due	to the presence of all 3	3 wetland criteria.				

	Absolute Dominant	Indicator	Dominance Test worksheet:
Tree Stratum (Plot size: <u>30 ft.</u> )	% cover Species?	Status	Number of Dominant Species
1. None Observed			That Are OBL, FACW, or FAC: 1 (A)
2.			
3.			Total Number of Dominant
4.			Species Across All Strata: 1 (B)
5.			
	0 = Total Cover		Percent of Dominant Species
Sapling/Shrub Stratum (Plot size: 15 f			That Are OBL, FACW, or FAC: <b>100%</b> (A/B)
1. None Observed	<u>.</u> )		
			Prevalence Index Worksheet:
			Total % Cover of:         Multiply by:           OBL species         100         x 1 =         100
			•
5			FACW species         0         x 2 =         0           FAC species         0         x 3 =         0
	0 = Total Cover		
Herb Stratum (Plot size: 5 ft.)		0.01	FACU species 0 x 4 = 0
1. <u>Typha X glauca</u>	100 Yes	OBL	UPL species $0 \times 5 = 0$
2			Column Totals: <u>100</u> (A) <u>100</u> (B)
3			Prevalence Index = B/A = 1.00
4			
5			Hydrophytic Vegetation Indicators:
6			X 1 - Rapid Test for Hydrophytic Vegetation
7			X 2 - Dominance Test is >50%
8			<b>X</b> 3 - Prevalence Index is $\leq 3.0^{1}$
9			4 - Morphological Adaptations <sup>1</sup> (Provide supporting
10			data in Remarks or on a separate sheet)
	100 = Total Cover		Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)
Woody Vine Stratum (Plot size: 30 ft	)		<sup>1</sup> Indicators of hydric soil and wetland hydrology must
1. None Observed			be present, unless disturbed or problematic.
2.			
	0 = Total Cover		Hydrophytic
			Vegetation Present? Yes X No
Remarks:			
A positive indication of hydrophytic vegetation was	s observed (>50% of dominant spec	ies indexed as OE	BL, FACW, or FAC).
A positive	e indication of hydrophytic vegetation	n was observed (F	Prevalence Index is ≤ 3.0).

Profile Des	cription: (Describe te	o the dep	th needed to docur	nent the in	dicator or confirm	n the absence	of indicators.)					
Depth	Matrix			Redox	Features							
(inches)	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>	Texture	Remarks				
0-4	10YR 4/1	70	5YR 4/6	30	С	Μ	Clay Loam					
4-18	10YR 5/1	60	5YR 4/6	40	С	PL	Clay Loam					
					<u> </u>							
					<u> </u>							
1				. <del></del> .		2						
	oncentration, D=Deple s Indicators:	etion, RM=	Reduced Matrix, M	S=Masked	Sand Grains.	-	ocation: PL=Pore Lining. Indicators for Proble					
•			Q = = = d + .		win (0.4)			,				
Histoso	Epipedon (A2)			Gleyed Mat Redox (S5)		Coast Prairie Redox (A16) Dark Surface (S7)						
	Histic (A3)			d Matrix (S			Iron-Manganese Masses (F12)					
	en Sulfide (A4)			Mucky Min			Very Shallow Dark Surface (TF12)					
,	ed Layers (A5)			Gleyed Ma		Other (Explain in Remarks)						
	luck (A10)		X Deplete		· ,			romanoy				
	ed Below Dark Surface	e (A11)	·	Dark Surfa	,							
	Dark Surface (A12)	()		ed Dark Su	. ,							
	Mucky Mineral (S1)		·	Depressior	( )	<sup>3</sup> Indicators of hydrophytic vegetation and						
	lucky Peat or Peat (S3	5)				wetland hydrology must be present,						
						unless disturbed or problematic.						
Restrictive	Layer (if present):											
Type:												
Depth(i	inches):					Hydrid	c Soil Present?	Yes X No				
Remarks:												
A positive in	dication of hydric soil	was obser	ved.									

Wetland Hydrology Indicators:				
Primary Indicators (minimum of one required; check	all that apply)	Secondary Indicators (minimum of two required)		
X Surface Water (A1)	Water-Stained Leaves (B9)	Surface Soil Cracks (B6)		
High Water Table (A2)	Aquatic Fauna (B13)	Drainage Patterns (B10)		
X Saturation (A3)	True Aquatic Plants (B14)	Dry-Season Water Table (C2)		
Water Marks (B1)	Hydrogen Sulfide Odor (C1)	Crayfish Burrows (C8)		
Sediment Deposits (B2)	Oxidized Rhizospheres on Living Roots (C3)	Saturation Visible on Aerial Imagery (C9)		
Drift Deposits (B3)	Presence of Reduced Iron (C4)	Stunted or Stressed Plants (D1)		
Algal Mat or Crust (B4)	Recent Iron Reduction in Tilled Soils (C6)	X Geomorphic Position (D2)		
Iron Deposits (B5)	Thin Muck Surface (C7)	X FAC-Neutral Test (D5)		
Inundation Visible on Aerial Imagery (B7)	Gauge or Well Data (D9)			
Sparsely Vegetated Concave Surface (B8)	Other (Explain in Remarks)			
Field Observations:				
Surface Water Present? Yes X No	Depth (inches): >24			
Water Table Present? Yes No X	Depth (inches): >20			
Saturation Present? Yes X No	Depth (inches): 8 Wetla	nd Hydrology Present? Yes X No		
(includes capillary fringe)				
Describe Recorded Data (stream gauge, monitoring w	ell, aerial photos, previous inspections), if available:			
Remarks:				
A positive indication of wetland hydrology was obser	ved (at least one primary indicator).			
A positive indication of wetland hydrology was obser	ved (at least two secondary indicators).			

Project/Site:	Cadence Solar					County:	Un	ion	Sampling Date:	January 9, 2	020
Applicant/Owner:	Invenergy						State:	ОН	Sampling Point:	DPC024_W	C10
Investigator(s):	Kirl	k Barnett		and <u>Sa</u>	muel Schratz	Section, Township, Range:			0	)	
Landform (hillslope, terrace, etc.):				Во	ttom Forest	Local relief (concave, c		onvex, none):	Concave		
Slope (%):	(	00-05		Lat:	40.35111	Long:	-	-83.45259	Datum:	NAD83	
Soil Map Unit Name	e:				0				NWI classification:	PEM	
Are climatic / hydrol	logic condi	itions on	the site	typical for this	time of year?	Yes	No	(lf no	, explain in Remarks.)		
Are Vegetation	No	,Soil	No	,or Hydrology	No signif	icantly disturbed?		Are "Norma	I Circumstances" present?	Yes X	No
Are Vegetation No ,Soil No ,			,or Hydrology	No natur	lly problematic? (If needed, explain a		explain any answers in Rema	arks.)			

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

Hydrophytic Vegetation Present? Hydric Soil Present? Wetland Hydrology Present?	Yes _ Yes _ Yes _	Х	No No No	Is the Sampled Area within a Wetland?	Yes	<u>x</u>	No	
Remarks: This point was determined to be v	vithin a we	etland due	e to the presence of all 3	3 wetland criteria.				

	Absolute Dominant	Indicator	Dominance Test worksheet:
Tree Stratum (Plot size: 30 ft.)	% cover Species?	Status	Number of Dominant Species
1. None Observed	·		That Are OBL, FACW, or FAC: 1 (A)
2.			
3.			Total Number of Dominant
4.			Species Across All Strata: 1 (B)
5.			(-)
	0 = Total Cover		Percent of Dominant Species
Sapling/Shrub Stratum (Plot size: 15 f			That Are OBL, FACW, or FAC: <b>100%</b> (A/B)
1. None Observed			
2			Prevalence Index Worksheet:
3.			Total % Cover of: Multiply by:
4			$\frac{1}{\text{OBL species}}  0 \qquad \text{x1} = 0$
5			FACW species 100 x 2 = 200
0.	0 = Total Cover		FAC species $0$ x 3 = $0$
Herb Stratum (Plot size: 5 ft.)			FACU species $0$ $\mathbf{x} 3 = 0$
1. Phalaris arundinacea	100 Yes	FACW	$\frac{1}{1000} \frac{1}{1000} \frac{1}{1000$
		171011	Column Totals: 100 (A) 200 (B)
			Prevalence Index = $B/A = 2.00$
			Hydrophytic Vegetation Indicators:
			X 1 - Rapid Test for Hydrophytic Vegetation
•••			X 2 - Dominance Test is >50%
			<b>X</b> 3 - Prevalence Index is $\leq 3.0^{1}$
			4 - Morphological Adaptations <sup>1</sup> (Provide supporting
			data in Remarks or on a separate sheet)
10	100 = Total Cover		Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)
Woody Vine Stratum (Plot size: <u>30 ft.</u>	_)		<sup>1</sup> Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
1. <u>None Observed</u>		<u> </u>	
2			
	0 = Total Cover		Hydrophytic
			Vegetation Present? Yes X No
Remarks:			
A positive indication of hydrophytic vegetation was	observed (>50% of dominants	species indexed as (	OBL FACW or FAC)
, , , , , ,	indication of hydrophytic veget		
A positive	analoadon or nydropnydd vegel		(1  Totalehoo mood is 2 0.0).

epth	Matrix			Redox	Features						
nches)	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>	Texture	Remarks			
0-18	10YR 5/1	70	5YR 4/6	30	С	М	Clay Loam				
	Concentration, D=Deple	etion, RM	=Reduced Matrix, M	S=Masked	Sand Grains.	²L	ocation: PL=Pore Lining				
	Is Indicators:							ematic Hydric Soils <sup>3</sup> :			
	stosol (A1) Sandy Gleyed Matrix (S4)					Coast Prairie Redox (A16)					
Histic I	Epipedon (A2)			Redox (S5)			Dark Surface (S	,			
Black I	Histic (A3)		Strippe	d Matrix (S	6)		Iron-Manganese	e Masses (F12)			
Hydrog	gen Sulfide (A4)		Loamy Mucky Mineral (F				Very Shallow Dark Surface (TF12)				
Stratifi	ed Layers (A5)		Loamy	Gleyed Ma	trix (F2)		Other (Explain in Remarks)				
2 cm N	/luck (A10)		X Depleted Matrix (F3)								
Deplet	ed Below Dark Surface	e (A11)	Redox	Dark Surfa	ce (F6)						
Thick [	Dark Surface (A12)		Deplete	ed Dark Su	rface (F7)						
Sandy	Mucky Mineral (S1)		Redox	Depressior	ns (F8)	<sup>3</sup> Indicators of hydrophytic vegetation and					
5 cm N	/lucky Peat or Peat (S3	5)					wetland hydrology must be present, unless disturbed or problematic.				
astrictiva	Layer (if present):										
Type:	Lafor (in procont).										
51	(inches):					Hydrid	c Soil Present?	Yes X No			
Depui	(inches).					Tryan	c our resent:				
marks:						1					
positive ir	ndication of hydric soil	was obse	rved.								

## HYDROLOGY

Wetland Hydrology Indicators:				
Primary Indicators (minimum of one required; check	all that apply)	Secondary Indicators (minimum of two required)		
X Surface Water (A1)	Water-Stained Leaves (B9)	Surface Soil Cracks (B6)		
High Water Table (A2)	Aquatic Fauna (B13)	Drainage Patterns (B10)		
X Saturation (A3)	True Aquatic Plants (B14)	Dry-Season Water Table (C2)		
Water Marks (B1)	Hydrogen Sulfide Odor (C1)	Crayfish Burrows (C8)		
Sediment Deposits (B2)	Oxidized Rhizospheres on Living Roots (C3)	Saturation Visible on Aerial Imagery (C9)		
Drift Deposits (B3)	Presence of Reduced Iron (C4)	Stunted or Stressed Plants (D1)		
Algal Mat or Crust (B4)	Recent Iron Reduction in Tilled Soils (C6)	X Geomorphic Position (D2)		
Iron Deposits (B5)	Thin Muck Surface (C7)	X FAC-Neutral Test (D5)		
Inundation Visible on Aerial Imagery (B7)	Gauge or Well Data (D9)			
Sparsely Vegetated Concave Surface (B8)	Other (Explain in Remarks)			
Field Observations:				
Surface Water Present? Yes X No	Depth (inches): 2			
Water Table Present? Yes No	C Depth (inches): >20			
Saturation Present? Yes X No	Depth (inches): 0 Wetla	nd Hydrology Present? Yes X No		
(includes capillary fringe)				
Describe Recorded Data (stream gauge, monitoring v	vell, aerial photos, previous inspections), if available:			
Remarks:				
A positive indication of wetland hydrology was obse	rved (at least one primary indicator).			
A positive indication of wetland hydrology was obse	rved (at least two secondary indicators).			

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Project/Site:	Cade	nce Solar		County:	Un	ion	Sampling Date:	January 9, 2020	
Applicant/Owner:		Invener	gy		State:	ОН	Sampling Point:	DPC026_WC11	
Investigator(s):	Kirk Barnett	andS	amuel Schratz	Section, Tov	vnship, R	ange:	C	)	
Landform (hillslope	, terrace, etc.):	В	ottom Forest		Local reli	ief (concave, c	onvex, none):	Concave	
Slope (%):	00-05	Lat:	40.35009	Long:		-83.45363	Datum:	NAD83	
Soil Map Unit Name	e:		0				NWI classification:	PSS	
Are climatic / hydro	logic conditions on the	site typical for thi	s time of year?	Yes	No	(lf no	, explain in Remarks.)		
Are Vegetation	No ,Soil No	or Hydrology,	No signif	icantly disturbed?		Are "Norma	Circumstances" present?	Yes X No	
Are Vegetation	No ,Soil No	or Hydrology,	No natura	ally problematic?		(If needed, e	explain any answers in Rema	arks.)	

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

Hydrophytic Vegetation Present? Hydric Soil Present? Wetland Hydrology Present?	Yes Yes Yes		No No No	Is the Sampled Area within a Wetland?	Yes	<u>x</u>	No	
Remarks: This point was determined to be v	<i>i</i> ithin a wet	tland due t	o the presence of all 3	3 wetland criteria.				

	Absolute	Dominant	Indicator	Dominance Test worksheet:	
Tree Stratum (Plot size: 30 ft.)	% cover	Species?	Status	Number of Dominant Species	
1. Quercus palustris	30	Yes	FACW	That Are OBL, FACW, or FAC: 4 (A)	
2					
3				Total Number of Dominant	
4				Species Across All Strata: 4 (B)	
5.		·			
	30 =	Total Cover		Percent of Dominant Species	
Sapling/Shrub Stratum (Plot size: 15 1	ft. )			That Are OBL, FACW, or FAC: 100% (A/B	3)
1. Ulmus americana	30	Yes	FACW		
2. Acer rubrum	20	Yes	FAC	Prevalence Index Worksheet:	
3. Populus deltoides	5	No	FAC	Total % Cover of: Multiply by:	
4.	······			OBL species <b>0</b> x 1 = <b>0</b>	
5.	······			FACW species <b>70</b> x 2 = <b>140</b>	
	55 =	Total Cover		FAC species <b>25</b> x 3 = <b>75</b>	
Herb Stratum (Plot size: 5 ft.)	······			FACU species <b>0</b> x 4 = <b>0</b>	
1. Phalaris arundinacea	10	Yes	FACW	UPL species <b>0</b> x 5 = <b>0</b>	
2.				Column Totals: 95 (A) 215 (B)	
3.				Prevalence Index = B/A = 2.26	
4.					
5.				Hydrophytic Vegetation Indicators:	
6.				X 1 - Rapid Test for Hydrophytic Vegetation	
7				X 2 - Dominance Test is >50%	
8.				X 3 - Prevalence Index is ≤3.0 <sup>1</sup>	
9.				4 - Morphological Adaptations <sup>1</sup> (Provide supporting	
10.		·		data in Remarks or on a separate sheet)	
		Total Cover		Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)	
Woody Vine Stratum (Plot size: 30 ft				<sup>1</sup> Indicators of hydric soil and wetland hydrology must	
1. None Observed				be present, unless disturbed or problematic.	
2.		·			
	0 =	Total Cover		Hydrophytic	
				Vegetation Present? Yes X No	
Remarks:					
A positive indication of hydrophytic vegetation was	s observed (>	50% of dominant	species indexed as (	OBL, FACW, or FAC).	
A positiv	e indication of	hydrophytic vege	tation was observed	d (Prevalence Index is ≤ 3.0).	
A positiv	e indication of	nyaropnytic vege	etation was observed	I (Prevalence Index Is ≤ 3.0).	

Depth	Matrix			Redox	Features					
(inches)	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>	Texture	Remarks		
0-18	10YR 4/1	85	5YR 5/8	15	С	Μ	Clay Loam			
						·	·			
	Concentration, D=Deple	etion, RM=	Reduced Matrix, M	S=Masked	Sand Grains.	<sup>2</sup> Lo	ocation: PL=Pore Lining, I	M=Matrix.		
ydric Soil	s Indicators:						Indicators for Problem	natic Hydric Soils <sup>3</sup> :		
Histoso	ol (A1)		Sandy	Gleyed Mat	trix (S4)	Coast Prairie Redox (A16)				
Histic E	Epipedon (A2)		Sandy	Redox (S5)	)		Dark Surface (S7)			
Black Histic (A3)			Strippe	d Matrix (S	6)		Iron-Manganese M	lasses (F12)		
Hydrogen Sulfide (A4)			Loamy	Mucky Min	eral (F1)		Very Shallow Dark	Surface (TF12)		
Stratifie	ed Layers (A5)		Loamy	Gleyed Ma	trix (F2)	Other (Explain in Remarks)				
2 cm N	luck (A10)		X Deplete	ed Matrix (F	-3)					
Deplete	ed Below Dark Surface	e (A11)	Redox	Dark Surfa	ce (F6)					
Thick D	Dark Surface (A12)		Deplete	ed Dark Su	rface (F7)					
Sandy	Mucky Mineral (S1)		Redox	Depressior	ns (F8)	<sup>3</sup> Indicators of hydrophytic vegetation and				
5 cm N	lucky Peat or Peat (S3	3)				wetland hydrology must be present,				
_	2					unless disturbed or problematic.				
estrictive	Layer (if present):									
Type:										
Depth(	inches):					Hydric	Soil Present?	Yes X No		
marks:										
	dication of hydric soil	was obser	ved							
Positive II	aloadon of figure SOI	1103 00301	vou.							

## HYDROLOGY

Wetland Hydrology Indicators:		
Primary Indicators (minimum of one required; che	eck all that apply)	Secondary Indicators (minimum of two required)
Surface Water (A1)	Water-Stained Leaves (B9)	Surface Soil Cracks (B6)
High Water Table (A2)	Aquatic Fauna (B13)	Drainage Patterns (B10)
Saturation (A3)	True Aquatic Plants (B14)	Dry-Season Water Table (C2)
Water Marks (B1)	Hydrogen Sulfide Odor (C1)	Crayfish Burrows (C8)
Sediment Deposits (B2)	Oxidized Rhizospheres on Living Roots (C3)	Saturation Visible on Aerial Imagery (C9)
Drift Deposits (B3)	Presence of Reduced Iron (C4)	Stunted or Stressed Plants (D1)
Algal Mat or Crust (B4)	Recent Iron Reduction in Tilled Soils (C6)	X Geomorphic Position (D2)
Iron Deposits (B5)	Thin Muck Surface (C7)	X FAC-Neutral Test (D5)
Inundation Visible on Aerial Imagery (B7)	Gauge or Well Data (D9)	
Sparsely Vegetated Concave Surface (B8)	Other (Explain in Remarks)	
Field Observations:		
Surface Water Present? Yes No	X Depth (inches): N/A	
Water Table Present? Yes No	X Depth (inches): >20	
Saturation Present? Yes No	X Depth (inches): >20	Wetland Hydrology Present? Yes X No
(includes capillary fringe)		
Describe Recorded Data (stream gauge, monitorin	ng well, aerial photos, previous inspections), if available	2
Remarks:		
A positive indication of wetland hydrology was ob	served (at least two secondary indicators).	

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Project/Site:		Ca	adence	Solar		County:	Un	ion	Sampling Date:	January 9, 20	020
Applicant/Owner:				Invenerg	y		State:	ОН	Sampling Point:	DPC028_W0	C12
Investigator(s):	Kirk	Barnett		and <u>Sa</u>	muel Schratz	Section, To	wnship, R	ange:	0	)	
Landform (hillslope,	, terrace, et	.c.):		D	epression		Local reli	ief (concave, c	onvex, none):	Concave	
Slope (%):	0	0-05		Lat:	40.35808	Long:	-	-83.45774	Datum:	NAD83	
Soil Map Unit Name	e:				0				NWI classification:	PEM	
Are climatic / hydrol	logic condit	ions on t	he site	typical for this	time of year?	Yes	No	(lf no	, explain in Remarks.)		
Are Vegetation	No	,Soil	No ,	or Hydrology	No signif	cantly disturbed?		Are "Norma	I Circumstances" present?	Yes X	No
Are Vegetation	No	,Soil	No ,	or Hydrology	No natur	ally problematic?		(If needed, e	explain any answers in Rema	arks.)	

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

Hydrophytic Vegetation Present? Hydric Soil Present? Wetland Hydrology Present?	Yes _ Yes _ Yes _	Х	No No No	Is the Sampled Area within a Wetland?	Yes	<u>x</u>	No	
Remarks: This point was determined to be v	vithin a we	etland due	e to the presence of all 3	3 wetland criteria.				

	Absolute Dominant	t Indicator	Dominance Test worksheet:
Tree Stratum (Plot size: 30 ft.)	% cover Species?	? Status	Number of Dominant Species
1. None Observed			That Are OBL, FACW, or FAC: 2 (A)
2.			
3.			Total Number of Dominant
			Species Across All Strata: 2 (B)
F			
5.			
	0 = Total Cover		Percent of Dominant Species
Sapling/Shrub Stratum (Plot size: 15	<u>π.</u> )		That Are OBL, FACW, or FAC: 100% (A/B)
1. None Observed			Prevalence Index Worksheet:
2			
3			Total % Cover of: Multiply by:
4	<u> </u>		OBL species 0 x 1 = 0
5			FACW species <b>100</b> x 2 = <b>200</b>
	0 = Total Cover		FAC species <b>0</b> x 3 = <b>0</b>
Herb Stratum (Plot size: 5 ft.)			FACU species <b>10</b> x 4 = <b>40</b>
1. Persicaria sp.	40 Yes	FACW	UPL species 0 x 5 = 0
2. Cyperus sp.	60 Yes	FACW	Column Totals: <b>110</b> (A) <b>240</b> (B)
3. Dipsacus fullonum	5 No	FACU	Prevalence Index = B/A = 2.18
4. Tradescantia ohiensis	5 No	FACU	
5.		_	Hydrophytic Vegetation Indicators:
6.			X 1 - Rapid Test for Hydrophytic Vegetation
7			X 2 - Dominance Test is >50%
8.			<b>X</b> 3 - Prevalence Index is $\leq 3.0^1$
0			4 - Morphological Adaptations <sup>1</sup> (Provide supporting
10			data in Remarks or on a separate sheet)
10	110 = Total Cover		Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)
Woody Vine Stratum (Plot size: 30 f			<sup>1</sup> Indicators of hydric soil and wetland hydrology must
1 Name Observed	<u>.    </u> )		be present, unless disturbed or problematic.
	<u> </u>		
2			
	0 = Total Cover		Hydrophytic
			Vegetation Present? Yes X No
Remarks:			
A positive indication of hydrophytic vegetation wa	as observed (>50% of domin	nant species indexed as	OBI = FACW or $FAC$
	•		d (Prevalence Index is $\leq 3.0$ ).
A positiv		vegetation was upselved	$\alpha$ (1 revalence index is $\simeq 0.0$ ).

Depth	Matrix			Redox	<pre>K Features</pre>					
inches)	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>	Texture	Remarks		
0-18	10YR 4/2	75	5YR 6/6	25	С	PL	Clay			
		etion RM	=Reduced Matrix M	S=Masked	Sand Grains	2Lo	cation: PL=Pore Lining, N	/=Matrix		
<sup>1</sup> Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. Hydric Soils Indicators:							Indicators for Problem			
Histos	ol (A1)		Sandy	Gleyed Ma	trix (S4)	Coast Prairie Redox (A16)				
Histic	Epipedon (A2)			Redox (S5)			Dark Surface (S7)			
Black	Histic (A3)						Iron-Manganese Ma	asses (F12)		
Hydrogen Sulfide (A4)			Loamy	Mucky Min	eral (F1)		Very Shallow Dark	Surface (TF12)		
Stratifi	ed Layers (A5)		Loamy	Gleyed Ma	trix (F2)	Other (Explain in Remarks)				
2 cm M	Muck (A10)		X Deplete	ed Matrix (F	-3)					
Deplet	ted Below Dark Surface	e (A11)	Redox	Dark Surfa	ce (F6)					
Thick	Dark Surface (A12)		Deplete	ed Dark Su	rface (F7)					
Sandy	Mucky Mineral (S1)		Redox	Depressior	ns (F8)	<sup>3</sup> Indicators of hydrophytic vegetation and				
5 cm M	Mucky Peat or Peat (S3	5)					ist be present,			
						unless disturbed or problematic.				
estrictive	e Layer (if present):									
Type:										
Depth	(inches):					Hydric	Soil Present?	Yes X No		
emarks:										
, positive i	ndication of hydric soil	was obsei	rved.							

## HYDROLOGY

Wetland Hydrology Indicators:				
Primary Indicators (minimum of one required; che	ck all that apply)	Secondary Indicators (minimum of two required)		
Surface Water (A1)	Water-Stained Leaves (B9)	Surface Soil Cracks (B6)		
High Water Table (A2)	Aquatic Fauna (B13)	Drainage Patterns (B10)		
Saturation (A3)	True Aquatic Plants (B14)	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 on Aerial Imagery (C9)		
Drift Deposits (B3)	Presence of Reduced Iron (C4)	Stunted or Stressed Plants (D1)		
Algal Mat or Crust (B4)	Recent Iron Reduction in Tilled Soils (C6)	X Geomorphic Position (D2)		
Iron Deposits (B5)	Thin Muck Surface (C7)	X FAC-Neutral Test (D5)		
Inundation Visible on Aerial Imagery (B7)	Gauge or Well Data (D9)			
Sparsely Vegetated Concave Surface (B8)	Other (Explain in Remarks)			
Field Observations:				
Surface Water Present? Yes No	X Depth (inches): N/A			
Water Table Present? Yes No	X Depth (inches): >20			
Saturation Present? Yes No	X Depth (inches): >20 Wetl	land Hydrology Present? Yes X No		
(includes capillary fringe)				
Describe Recorded Data (stream gauge, monitoring	g well, aerial photos, previous inspections), if available:			
Remarks:				
A positive indication of wetland hydrology was obs				
A positive indication of wetland hydrology was obs	served (at least two secondary indicators).			

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Project/Site:		Ca	dence Solar		County:	Un	ion	Sampling Date:	January 9, 202	0
Applicant/Owner:			Inver	nergy		State:	ОН	Sampling Point:	DPC030_WC1	3
Investigator(s):	Kirk	Barnett	and	Samuel Schratz	Section, To	wnship, R	lange:	C	)	
Landform (hillslope,	, terrace, etc	c.):		Depression		Local rel	ief (concave, c	onvex, none):	Concave	
Slope (%):	00	0-05	Lat:	40.35683	Long:	-	-83.46145	Datum:	NAD83	
Soil Map Unit Name	e:			0				NWI classification:	PEM	
Are climatic / hydrol	logic conditi	ions on th	e site typical for	this time of year?	Yes	No	(lf no	, explain in Remarks.)		
Are Vegetation	No	,Soil N	lo,or Hydrold	ogy <u>No</u> signi	ficantly disturbed?		Are "Norma	I Circumstances" present?	Yes X No	o c
Are Vegetation	No	,Soil N	or Hydrolo	ogy <b>No</b> natur	ally problematic?		(If needed, e	explain any answers in Rema	arks.)	

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

Hydrophytic Vegetation Present? Hydric Soil Present? Wetland Hydrology Present?	Yes _ Yes _ Yes _	Х	No No No	Is the Sampled Area within a Wetland?	Yes	<u>x</u>	No	
Remarks: This point was determined to be v	vithin a we	etland due	e to the presence of all 3	3 wetland criteria.				

# **VEGETATION - Use scientific names of plants.**

	Absolute Dominant	Indicator	Dominance Test workshe	et:		
Tree Stratum (Plot size: 30 ft.)	% cover Species?	Status	Number of Dominant Speci	es		
1. None Observed			That Are OBL, FACW, or F		(A)	
2.			,			
			Total Number of Dominant			
4			Species Across All Strata:	1	(B)	
			Species Across Air Strata.		(D)	
5		·				
	0 = Total Cover		Percent of Dominant Speci			
Sapling/Shrub Stratum (Plot size: 15	<u></u> )		That Are OBL, FACW, or F	AC: 100%	(A/B)	
1. None Observed		·				
2			Prevalence Index Worksh			
3			Total % Cover of	: Multiply by:	_	
4			OBL species	<b>0</b> x 1 = <b>0</b>		
5			FACW species	<b>90</b> x 2 = <b>180</b>		
	0 = Total Cover		FAC species	<b>0</b> x 3 = <b>0</b>		
Herb Stratum (Plot size: 5 ft.)			FACU species	<b>0</b> x 4 = <b>0</b>		
1. Cyperus sp.	90 Yes	FACW	UPL species	<b>0</b> x 5 = <b>0</b>		
2.			Column Totals:	90 (A) 180	(B)	
3.			Prevalence Index = B/A =	2.00		
4.						
5.			Hydrophytic Vegetation Indicators:			
6			X 1 - Rapid Test for Hydrophytic Vegetation			
7			X 2 - Dominance Test is			
8			X 3 - Prevalence Index is			
				ptations <sup>1</sup> (Provide supporting	r	
		·		on a separate sheet)	2	
10	90 = Total Cover			tic Vegetation <sup>1</sup> (Explain)		
Weeder Vine Stratum (Plat size: 20			<sup>1</sup> Indicators of hydric soil and			
<u>Woody Vine Stratum</u> (Plot size: <u>30</u> 1. None Observed			be present, unless disturbe			
2		·				
	0 = Total Cover		Hydrophytic			
			Vegetation Present?	Yes X No		
Demedia						
Remarks:						
A positive indication of hydrophytic vegetation w						
A posit	ive indication of hydrophytic vege	tation was observed	(Prevalence index is $\leq 3.0$ ).			

Grazed pasture

Histosol (A1)       Sandy Gleyed Matrix (S4)       Coast Prail         Histic Epipedon (A2)       Sandy Redox (S5)       Dark Surfa         Black Histic (A3)       Stripped Matrix (S6)       Iron-Mang         Hydrogen Sulfide (A4)       Loamy Mucky Mineral (F1)       Very Shall	Remarks Broken tiles in soil				
0-18       10YR 3/1       70       5YR 4/6       30       C       PL       Clay					
<sup>1</sup> Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. <sup>2</sup> Location: PL=Pore         Hydric Soils Indicators:       Indicators for         Histosol (A1)       Sandy Gleyed Matrix (S4)       Coast Prai         Histic Epipedon (A2)       Sandy Redox (S5)       Dark Surfac         Black Histic (A3)       Stripped Matrix (S6)       Iron-Mang         Hydrogen Sulfide (A4)       Loamy Mucky Mineral (F1)       Very Shall         Stratified Layers (A5)       Loamy Gleyed Matrix (F3)       Other (Exp         2 cm Muck (A10)       Depleted Matrix (F3)       Cother (Exp         Depleted Below Dark Surface (A11)       X       Redox Dark Surface (F6)	Broken tiles in soil				
Hydric Soils Indicators:       Indicators for         Histosol (A1)       Sandy Gleyed Matrix (S4)       Coast Prail         Histic Epipedon (A2)       Sandy Redox (S5)       Dark Surfa         Black Histic (A3)       Stripped Matrix (S6)       Iron-Mang         Hydrogen Sulfide (A4)       Loamy Mucky Mineral (F1)       Very Shall         Stratified Layers (A5)       Loamy Gleyed Matrix (F2)       Other (Exp         2 cm Muck (A10)       Depleted Matrix (F3)       Depleted Below Dark Surface (A11)					
Hydric Soils Indicators:       Indicators for         Histosol (A1)       Sandy Gleyed Matrix (S4)       Coast Prail         Histic Epipedon (A2)       Sandy Redox (S5)       Dark Surfa         Black Histic (A3)       Stripped Matrix (S6)       Iron-Mang         Hydrogen Sulfide (A4)       Loamy Mucky Mineral (F1)       Very Shall         Stratified Layers (A5)       Loamy Gleyed Matrix (F2)       Other (Exp         2 cm Muck (A10)       Depleted Matrix (F3)       Depleted Below Dark Surface (A11)					
Hydric Soils Indicators:       Indicators for         Histosol (A1)       Sandy Gleyed Matrix (S4)       Coast Prail         Histic Epipedon (A2)       Sandy Redox (S5)       Dark Surfa         Black Histic (A3)       Stripped Matrix (S6)       Iron-Mang         Hydrogen Sulfide (A4)       Loamy Mucky Mineral (F1)       Very Shall         Stratified Layers (A5)       Loamy Gleyed Matrix (F2)       Other (Exp         2 cm Muck (A10)       Depleted Matrix (F3)       Depleted Below Dark Surface (A11)					
Hydric Soils Indicators:       Indicators for         Histosol (A1)       Sandy Gleyed Matrix (S4)       Coast Prail         Histic Epipedon (A2)       Sandy Redox (S5)       Dark Surfa         Black Histic (A3)       Stripped Matrix (S6)       Iron-Mang         Hydrogen Sulfide (A4)       Loamy Mucky Mineral (F1)       Very Shall         Stratified Layers (A5)       Loamy Gleyed Matrix (F2)       Other (Exp         2 cm Muck (A10)       Depleted Matrix (F3)       Depleted Below Dark Surface (A11)					
Hydric Soils Indicators:       Indicators for         Histosol (A1)       Sandy Gleyed Matrix (S4)       Coast Prail         Histic Epipedon (A2)       Sandy Redox (S5)       Dark Surfa         Black Histic (A3)       Stripped Matrix (S6)       Iron-Mang         Hydrogen Sulfide (A4)       Loamy Mucky Mineral (F1)       Very Shall         Stratified Layers (A5)       Loamy Gleyed Matrix (F2)       Other (Exp         2 cm Muck (A10)       Depleted Matrix (F3)       Depleted Below Dark Surface (A11)					
Hydric Soils Indicators:       Indicators for         Histosol (A1)       Sandy Gleyed Matrix (S4)       Coast Prail         Histic Epipedon (A2)       Sandy Redox (S5)       Dark Surfa         Black Histic (A3)       Stripped Matrix (S6)       Iron-Mang         Hydrogen Sulfide (A4)       Loamy Mucky Mineral (F1)       Very Shall         Stratified Layers (A5)       Loamy Gleyed Matrix (F2)       Other (Exp         2 cm Muck (A10)       Depleted Matrix (F3)       Depleted Below Dark Surface (A11)					
Histosol (A1)       Sandy Gleyed Matrix (S4)       Coast Prail         Histic Epipedon (A2)       Sandy Redox (S5)       Dark Surfa         Black Histic (A3)       Stripped Matrix (S6)       Iron-Mang         Hydrogen Sulfide (A4)       Loamy Mucky Mineral (F1)       Very Shall         Stratified Layers (A5)       Loamy Gleyed Matrix (F2)       Other (Exp         2 cm Muck (A10)       Depleted Matrix (F3)       Depleted Below Dark Surface (A11)	Lining, M=Matrix.				
Histic Epipedon (A2)       Sandy Redox (S5)       Dark Surfa         Black Histic (A3)       Stripped Matrix (S6)       Iron-Mang         Hydrogen Sulfide (A4)       Loamy Mucky Mineral (F1)       Very Shall         Stratified Layers (A5)       Loamy Gleyed Matrix (F2)       Other (Exp         2 cm Muck (A10)       Depleted Matrix (F3)       Depleted Below Dark Surface (A11)	Problematic Hydric Soils <sup>3</sup> :				
Black Histic (A3)       Stripped Matrix (S6)       Iron-Mang         Hydrogen Sulfide (A4)       Loamy Mucky Mineral (F1)       Very Shall         Stratified Layers (A5)       Loamy Gleyed Matrix (F2)       Other (Exp         2 cm Muck (A10)       Depleted Matrix (F3)       Depleted Below Dark Surface (A11)         X       Redox Dark Surface (F6)       Kedox Dark Surface (F6)	Coast Prairie Redox (A16)				
Hydrogen Sulfide (A4)       Loamy Mucky Mineral (F1)       Very Shall         Stratified Layers (A5)       Loamy Gleyed Matrix (F2)       Other (Exp         2 cm Muck (A10)       Depleted Matrix (F3)         Depleted Below Dark Surface (A11)       X Redox Dark Surface (F6)	Dark Surface (S7)				
Stratified Layers (A5)       Loamy Gleyed Matrix (F2)       Other (Exp         2 cm Muck (A10)       Depleted Matrix (F3)       Other (Exp         Depleted Below Dark Surface (A11)       X Redox Dark Surface (F6)       K	Iron-Manganese Masses (F12)				
2 cm Muck (A10)     Depleted Matrix (F3)       Depleted Below Dark Surface (A11)     X	Very Shallow Dark Surface (TF12)				
Depleted Below Dark Surface (A11)	Other (Explain in Remarks)				
Thick Dark Surface (A12) Depleted Dark Surface (F7)					
	ydrophytic vegetation and				
	wetland hydrology must be present,				
	bed or problematic.				
Restrictive Layer (if present):					
Туре:					
Depth(inches): Hydric Soil Present?	Hydric Soil Present? Yes X No				
Remarks:					
A positive indication of hydric soil was observed.					

Wetland Hydrology Indicators:				
Primary Indicators (minimum of one required; check	ck all that apply)	Secondary Indicators (minimum of two required)		
Surface Water (A1)	Water-Stained Leaves (B9)	Surface Soil Cracks (B6)		
X High Water Table (A2)	Aquatic Fauna (B13)	Drainage Patterns (B10)		
Saturation (A3)	True Aquatic Plants (B14)	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 on Aerial Imagery (C9)		
Drift Deposits (B3)	Presence of Reduced Iron (C4)	Stunted or Stressed Plants (D1)		
Algal Mat or Crust (B4)	Recent Iron Reduction in Tilled Soils (C6)	X Geomorphic Position (D2)		
Iron Deposits (B5)	Thin Muck Surface (C7)	X FAC-Neutral Test (D5)		
Inundation Visible on Aerial Imagery (B7)	Gauge or Well Data (D9)			
Sparsely Vegetated Concave Surface (B8)	Other (Explain in Remarks)			
Field Observations:				
Surface Water Present? Yes No	X Depth (inches): N/A			
Water Table Present? Yes X No	Depth (inches): 6			
Saturation Present? Yes No	X Depth (inches): >20 Wetla	nd Hydrology Present? Yes X No		
(includes capillary fringe)				
Describe Recorded Data (stream gauge, monitoring	g well, aerial photos, previous inspections), if available:			
Remarks:				
A positive indication of wetland hydrology was obs				
A positive indication of wetland hydrology was obs	served (at least two secondary indicators).			

Project/Site:	Cade	ence Solar		County:	Uni	ion	Sampling Date:	January 10, 2020	
Applicant/Owner:		Invenerg	У		State:	OH	Sampling Point:	DPC034_WC14	
Investigator(s):	K. Barnett	and	S. Schratz	Section, Tov	vnship, R	ange:	C	)	
Landform (hillslope	, terrace, etc.):	B	ottom Forest		Local reli	ef (concave, co	onvex, none):	Concave	
Slope (%):	00-05	Lat:	40.34512	Long:		-83.43339	Datum:	NAD83	
Soil Map Unit Name	e:		0				NWI classification:	PFO	
Are climatic / hydro	logic conditions on the	site typical for this	time of year?	Yes	No	(If no	, explain in Remarks.)		
Are Vegetation	No ,Soil No	,or Hydrology	<u>No</u> signifi	cantly disturbed?		Are "Normal	Circumstances" present?	Yes X No	
Are Vegetation	No ,Soil No	, or Hydrology	No natura	ally problematic?		(If needed, e	explain any answers in Rema	arks.)	

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

Hydrophytic Vegetation Present? Hydric Soil Present? Wetland Hydrology Present?	Yes _ Yes _ Yes _	Х	No No No	Is the Sampled Area within a Wetland?	Yes	x	No	
Remarks: This point was determined to be v	vithin a we	etland due	e to the presence of all 3	3 wetland criteria.				

	Absolute Dominant	Indicator	Dominance Test worksheet:				
Tree Stratum (Plot size: 30 ft.)	% cover Species?	Status	Number of Dominant Species				
1. Ulmus americana	60 Yes	FACW	That Are OBL, FACW, or FAC:	<b>2</b> (A)			
2. Quercus palustris	40 Yes	FACW					
3. Acer saccharinum	20 No	FACW	Total Number of Dominant				
4. Quercus rubra	10 No	FACU	Species Across All Strata:	<b>2</b> (B)			
5. Carya ovata	5 No	FACU					
	135 = Total Cover		Percent of Dominant Species				
Sapling/Shrub Stratum (Plot size: 15	ft. )			<b>)0%</b> (A/B)			
1. None Observed							
2.			Prevalence Index Worksheet:				
3.			Total % Cover of: Multi	ply by:			
4.			OBL species <b>0</b> x 1 =	0			
5.			FACW species 120 x 2 =	240			
·	0 = Total Cover		FAC species <b>0</b> x 3 =	0			
Herb Stratum (Plot size: 5 ft.)			FACU species 15 x 4 =	60			
1. None Observed			UPL species <b>0</b> x 5 =	0			
2.			Column Totals: 135 (A)	<b>300</b> (B)			
3.			Prevalence Index = B/A = 2.22	()			
4.							
5.			Hydrophytic Vegetation Indicators:				
6.			X 1 - Rapid Test for Hydrophytic Vegetation				
7.			X 2 - Dominance Test is >50%				
8.			<b>X</b> 3 - Prevalence Index is $\leq 3.0^1$				
9.			4 - Morphological Adaptations <sup>1</sup> (Provide su	upporting			
10.			data in Remarks or on a separate sheet				
	0 = Total Cover		Problematic Hydrophytic Vegetation <sup>1</sup> (Exp				
Woody Vine Stratum (Plot size: 30			<sup>1</sup> Indicators of hydric soil and wetland hydrology				
1. None Observed			be present, unless disturbed or problematic.	indot			
2.							
L	0 = Total Cover		Undrankutia				
			Hydrophytic Vegetation Present? Yes X	No			
Remarks:							
A positive indication of hydrophytic vegetation w	vas observed (>50% of dominant	species indexed as (	DBL, FACW, or FAC).				
	ive indication of hydrophytic vege	•					
	, , ,		· · · · · · · · · · · · · · · · · · ·				

Profile Desc	cription: (Describe t	o the dept	th needed to docun	nent the in	ndicator or confirm	n the absence	of indicators.)					
Depth	Matrix			Redox	Features							
(inches)	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>	Texture	Remarks	_			
0-4	10YR 3/1	100				Silty Clay Loam						
4-18	10YR 3/1	90	2.5YR 3/6	10	С	M Silty Clay Loam						
	oncentration, D=Deple	etion, RM=	Reduced Matrix, MS	S=Masked	Sand Grains.	<sup>2</sup> L	ocation: PL=Pore Lining	_				
Hydric Soils							Indicators for Proble	•				
	Histosol (A1) Sandy Gleyed Matrix (S4)					Coast Prairie Redox (A16)						
	Histic Epipedon (A2) Sandy Redox (S5)					Dark Surface (S7)						
	Black Histic (A3)			d Matrix (S	,		Iron-Manganese Masses (F12)					
	en Sulfide (A4)			Mucky Min	( )	Very Shallow Dark Surface (TF12)						
	d Layers (A5)			Gleyed Ma			Other (Explain in Remarks)					
	uck (A10) d Below Dark Surface	(111)	X Redox I	d Matrix (F	,							
	ark Surface (A12)	e (ATT)		d Dark Suna	. ,							
	Mucky Mineral (S1)			Depressior	( )		<sup>3</sup> Indicators of hydroph	vtic vogotation and				
	ucky Peat or Peat (S3	2)		Depression	15 (1 0)		wetland hydrology r					
0 cm w		,)					unless disturbed or					
Restrictive	Layer (if present):							•				
Type:												
	nches):					Hydrid	c Soil Present?	Yes X No				
	/											
Remarks:						•						
A positive in	dication of hydric soil	was obser	ved.									

Wetland Hydrology Indicators:					
Primary Indicators (minimum of one required; chee	ck all that apply)		Secondary Indicators (minimum of two required)		
Surface Water (A1)	Water-Stained Leaves (	B9)	Surface Soil Cracks (B6)		
High Water Table (A2)	Aquatic Fauna (B13)		Drainage Patterns (B10)		
Saturation (A3)	True Aquatic Plants (B14	4)	Dry-Season Water Table (C2)		
Water Marks (B1)	Hydrogen Sulfide Odor (	C1)	Crayfish Burrows (C8)		
Sediment Deposits (B2)	Oxidized Rhizospheres of	on Living Roots (C3)	Saturation Visible on Aerial Imagery (C9)		
Drift Deposits (B3)	Presence of Reduced Irc	on (C4)	Stunted or Stressed Plants (D1)		
Algal Mat or Crust (B4)	Recent Iron Reduction in	n Tilled Soils (C6)	X Geomorphic Position (D2)		
Iron Deposits (B5)	Thin Muck Surface (C7)		X FAC-Neutral Test (D5)		
Inundation Visible on Aerial Imagery (B7)	Gauge or Well Data (D9	)			
Sparsely Vegetated Concave Surface (B8)	Other (Explain in Remar	ks)			
Field Observations:					
Surface Water Present? Yes No	X Depth (inches):	N/A			
Water Table Present? Yes No	X Depth (inches):	>20			
Saturation Present? Yes No	X Depth (inches):	>20 Wetlar	nd Hydrology Present? Yes X No		
(includes capillary fringe)					
Describe Recorded Data (stream gauge, monitoring	well, aerial photos, previous in	spections), if available:			
Remarks:					
A positive indication of wetland hydrology was obs	erved (at least two secondary in	ndicators).			
Stream bank terrace					

Project/Site:	Cade	ence Solar		County:	Uni	ion	Sampling Date:	January 10, 2020	
Applicant/Owner:		Invenerg	у		State:	OH	Sampling Point:	DPC036_WC15	
Investigator(s):	K. Barnett	and	S. Schratz	Section, Tov	vnship, R	ange:	0	)	
Landform (hillslope	, terrace, etc.):	B	ottom Forest		Local reli	ef (concave, co	onvex, none):	Concave	
Slope (%):	00-05	Lat:	40.34930	Long:		-83.42669	Datum:	NAD83	
Soil Map Unit Name	e:		0				NWI classification:	PFO	
Are climatic / hydro	logic conditions on the	site typical for this	time of year?	Yes	No	(If no	explain in Remarks.)		
Are Vegetation	No ,Soil No	,or Hydrology	No signifi	cantly disturbed?		Are "Normal	Circumstances" present?	Yes X No	
Are Vegetation	No ,Soil No	, or Hydrology	No natura	ally problematic?		(If needed, e	explain any answers in Rema	arks.)	

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

Hydrophytic Vegetation Present? Hydric Soil Present? Wetland Hydrology Present?	Yes Yes Yes		No No No	Is the Sampled Area within a Wetland?	Yes	X	No
Remarks: This point was determined to be v	<i>i</i> ithin a we	etland due t	to the presence of all 3	3 wetland criteria.			

Al	osolute Dominant	Indicator	Dominance Test worksheet:	
Tree Stratum (Plot size: 30 ft.) %	cover Species?	Status	Number of Dominant Species	
1. Ulmus americana	65 Yes	FACW	That Are OBL, FACW, or FAC: 4 (A	.)
2. Acer saccharinum	35 Yes	FACW		
3. Quercus palustris	20 No	FACW	Total Number of Dominant	
4. Quercus rubra	5 No	FACU	Species Across All Strata: 4 (B	)
5. Carya ovata	5 No	FACU		-
	130 = Total Cover		Percent of Dominant Species	
<u>Sapling/Shrub Stratum</u> (Plot size: 15 ft. )			That Are OBL, FACW, or FAC: 100% (A	/B)
1. None Observed				
0			Prevalence Index Worksheet:	
3			Total % Cover of: Multiply by:	
4	·		OBL species <b>0</b> x 1 = <b>0</b>	
5			FACW species <b>135</b> x 2 = <b>270</b>	
·	0 = Total Cover		FAC species <b>30</b> x 3 = <b>90</b>	
Herb Stratum (Plot size: 5 ft.)			FACU species <b>10</b> x 4 = <b>40</b>	
1. Microstegium vimineum	30 Yes	FAC	UPL species $0$ x 5 = $0$	
0. 0	15 Yes	FACW	Column Totals: <b>175</b> (A) <b>400</b> (B	)
			Prevalence Index = B/A = 2.29	/
3				
4			Hydrophytic Vegetation Indicators:	
5			X 1 - Rapid Test for Hydrophytic Vegetation	
6			X 2 - Dominance Test is >50%	
7			<b>X</b> 3 - Prevalence Index is $\leq 3.0^{1}$	
8 9.			4 - Morphological Adaptations <sup>1</sup> (Provide supporting	
			data in Remarks or on a separate sheet)	
10	45 = Total Cover		Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)	
			<sup>1</sup> Indicators of hydric soil and wetland hydrology must	
<u>Woody Vine Stratum</u> (Plot size: <u>30 ft.</u> ) 1. None Observed			be present, unless disturbed or problematic.	
2				
	0 = Total Cover		Hydrophytic	
			Vegetation Present? Yes X No	_
Remarks:				
A positive indication of hydrophytic vegetation was obs	served (>50% of dominant sr	pecies indexed as ORI	FACW or FAC)	
	ication of hydrophytic vegeta			
A positive ind	ication of hydrophytic vegeta	alon was observed (Pr	Evalution index is $\geq 3.0$ .	

Depth	Matrix			Redox	Features						
inches)	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>	Texture	Remarks			
0-18	7.5YR 4/1	90	2.5YR 4/6	10	С	PL	Clay Loam				
	Concentration, D=Depl	etion, RM	=Reduced Matrix, M	S=Masked	Sand Grains.	2	ocation: PL=Pore Lining,	M=Matrix.			
Hydric Soils Indicators:							Indicators for Proble	matic Hydric Soils <sup>3</sup> :			
Histos	ol (A1)		Sandy	Gleyed Mat	trix (S4)		Coast Prairie Redox (A16)				
Histic I	Epipedon (A2)			Redox (S5)			Dark Surface (S7)				
Black	Histic (A3)		Strippe	d Matrix (S	6)		Iron-Manganese I	Masses (F12)			
Hydrog	_ Hydrogen Sulfide (A4) Loamy Mucky Mineral (F1)						Very Shallow Dar	k Surface (TF12)			
Stratifi	ed Layers (A5)		Loamy	Gleyed Ma	trix (F2)	Other (Explain in Remarks)					
2 cm N	/luck (A10)		X Deplete	ed Matrix (F	-3)						
Deplet	ed Below Dark Surface	e (A11)	Redox	Dark Surfa	ce (F6)						
Thick I	Dark Surface (A12)		Deplete	ed Dark Su	rface (F7)						
Sandy	Mucky Mineral (S1)		Redox	Depression	ns (F8)	<sup>3</sup> Indicators of hydrophytic vegetation and					
_5 cm N	Aucky Peat or Peat (S3	3)					wetland hydrology n unless disturbed or				
estrictive	Layer (if present):										
Type:											
Depth(	(inches):					Hydric	c Soil Present?	Yes X No			
marks:											
positive in	ndication of hydric soil	was obse	rved.								

Wetland Hydrology Indicators:				
Primary Indicators (minimum of one required; check	all that apply)	Secondary Indicators (minimum of two required)		
Surface Water (A1)	Water-Stained Leaves (B9)	Surface Soil Cracks (B6)		
High Water Table (A2)	Aquatic Fauna (B13)	Drainage Patterns (B10)		
Saturation (A3)	True Aquatic Plants (B14)	Dry-Season Water Table (C2)		
Water Marks (B1)	Hydrogen Sulfide Odor (C1)	Crayfish Burrows (C8)		
Sediment Deposits (B2)	Oxidized Rhizospheres on Living Roots (C3)	Saturation Visible on Aerial Imagery (C9)		
Drift Deposits (B3)	Presence of Reduced Iron (C4)	Stunted or Stressed Plants (D1)		
Algal Mat or Crust (B4)	Recent Iron Reduction in Tilled Soils (C6)	X Geomorphic Position (D2)		
Iron Deposits (B5)	X FAC-Neutral Test (D5)			
Inundation Visible on Aerial Imagery (B7)	Gauge or Well Data (D9)			
Sparsely Vegetated Concave Surface (B8)	Other (Explain in Remarks)			
Field Observations:				
Surface Water Present? Yes No	C Depth (inches): N/A			
Water Table Present? Yes No	C Depth (inches): >20			
Saturation Present? Yes No	C Depth (inches): >20 Wetlan	nd Hydrology Present? Yes X No		
(includes capillary fringe)				
Describe Recorded Data (stream gauge, monitoring	well, aerial photos, previous inspections), if available:			
Remarks:				
A positive indication of wetland hydrology was obse	rved (at least two secondary indicators).			

Project/Site:	Cadence Solar				County:	Un	ion	Sampling Date:	January 10	0, 2020	
Applicant/Owner:		Invenergy					State:	ОН	Sampling Point:	DPC042	WC16
Investigator(s):	K. Barnett and S. Schratz				Section, Township, Range:			(	0		
Landform (hillslope, terrace, etc.): Bottomland Forest					Local relief (concave, convex, none):			Concave	9		
Slope (%):		00-05		Lat:	40.37854	Long:		-83.46216	Datum:	NAD83	
Soil Map Unit Name: 0						NWI classification: PF			)		
Are climatic / hydrol	logic cond	litions on	the site	e typical for this t	ime of year?	Yes	No	(If no	, explain in Remarks.)		
Are Vegetation	No	,Soil	No	,or Hydrology	No signif	icantly disturbed?		Are "Normal	Circumstances" present?	Yes X	No
Are Vegetation	No	,Soil	No	or Hydrology	No natur	ally problematic?		(If needed, e	explain any answers in Rema	arks.)	

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

Hydrophytic Vegetation Present? Hydric Soil Present? Wetland Hydrology Present?	Yes _ Yes _ Yes _		No No No	Is the Sampled Area within a Wetland?	Yes	x	No	
Remarks: This point was determined to be v	<i>v</i> ithin a w	etland due	to the presence of all 3	3 wetland criteria.				

	Absolute Dominant	Indicator	Dominance Test worksheet:
Tree Stratum (Plot size: 30 ft.)	% cover Species?	Status	Number of Dominant Species
1. None Observed			That Are OBL, FACW, or FAC: <b>1</b> (A)
2.			()
3.			Total Number of Dominant
••			Species Across All Strata: 1 (B)
	· ·		
5			
	0 = Total Cover		Percent of Dominant Species
Sapling/Shrub Stratum (Plot size: 15 ft	<u>.</u> )		That Are OBL, FACW, or FAC:(A/B)
1. None Observed			
2	·		Prevalence Index Worksheet:
3			Total % Cover of: Multiply by:
4.			OBL species 0 x 1 = 0
5			FACW species 90 x 2 = 180
	0 = Total Cover		FAC species <b>0</b> x 3 = <b>0</b>
Herb Stratum (Plot size: 5 ft.)			FACU species <b>0</b> x 4 = <b>0</b>
1. Cyperus sp.	90 Yes	FACW	UPL species <b>0</b> x 5 = <b>0</b>
2			Column Totals: 90 (A) 180 (B)
3.			Prevalence Index = B/A = 2.00
4.			
5.			Hydrophytic Vegetation Indicators:
6.			X 1 - Rapid Test for Hydrophytic Vegetation
			$\mathbf{X}$ 2 - Dominance Test is >50%
			<b>X</b> 3 - Prevalence Index is $\leq 3.0^{1}$
			4 - Morphological Adaptations <sup>1</sup> (Provide supporting
			data in Remarks or on a separate sheet)
10	90 = Total Cover		Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)
<u>Woody Vine Stratum</u> (Plot size: <u>30 ft.</u> 1. None Observed	_)		<sup>1</sup> Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
			be present, unless disturbed of problematic.
	·		
2			
	0 = Total Cover		Hydrophytic
	0 = Total Cover		Hydrophytic Vegetation Present? Yes X No
2.	0 = Total Cover		
2			Vegetation Present? Yes X No
2 Remarks: A positive indication of hydrophytic vegetation was	observed (>50% of dominant sp		Vegetation Present? Yes X No DBL, FACW, or FAC).
2 Remarks: A positive indication of hydrophytic vegetation was			Vegetation Present? Yes X No DBL, FACW, or FAC).

Depth	Matrix			Redox	Features						
inches)	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>	Texture	Remarks			
0-18	10YR 6/1	80	5YR 6/6	20	С	М	Silty Clay Loam				
		_		_							
	·										
	Concentration, D=Depl Is Indicators:	etion, RM=	Reduced Matrix, M	S=Masked	Sand Grains.	2	_ocation: PL=Pore Lining, M	-			
-			0	~		Indicators for Problematic Hydric Soils <sup>3</sup> :					
Histos	( )			Gleyed Mat	. ,	Coast Prairie Redox (A16)					
_	Epipedon (A2)			Redox (S5)			Dark Surface (S7) Iron-Manganese Masses (F12)				
Black Histic (A3)Stripped Matrix (					,		v	. ,			
_ ` `	Hydrogen Sulfide (A4) Loamy Mucky Mineral (F1)				. ,		Very Shallow Dark S				
	ed Layers (A5)			Gleyed Ma		Other (Explain in Remarks)					
	/luck (A10)		X Deplete		,						
Deplet	ed Below Dark Surface	e (A11)	Redox	Dark Surfa	ce (F6)						
Thick I	Dark Surface (A12)		Deplete	ed Dark Su	rface (F7)						
Sandy	Mucky Mineral (S1)		Redox	Depressior	ns (F8)	<sup>3</sup> Indicators of hydrophytic vegetation and					
5 cm N	Mucky Peat or Peat (S3	3)				wetland hydrology must be present,					
							unless disturbed or pro	blematic.			
estrictive	Layer (if present):										
Type:											
Depth(	(inches):					Hydri	c Soil Present?	Yes X No			
marks:											
	ndiantian of hydria anil	waa ahaay	n in d								
positive in	ndication of hydric soil	was obser	veu.								

Wetland Hydrology Indicators:				
Primary Indicators (minimum of one required; check	all that apply)	Secondary Indicators (minimum of two required)		
X Surface Water (A1)	Water-Stained Leaves (B9)	Surface Soil Cracks (B6)		
High Water Table (A2)	Aquatic Fauna (B13)	Drainage Patterns (B10)		
Saturation (A3)	True Aquatic Plants (B14)	Dry-Season Water Table (C2)		
Water Marks (B1)	Hydrogen Sulfide Odor (C1)	Crayfish Burrows (C8)		
Sediment Deposits (B2)	Oxidized Rhizospheres on Living Roots (C3)	Saturation Visible on Aerial Imagery (C9)		
Drift Deposits (B3)	Presence of Reduced Iron (C4)	Stunted or Stressed Plants (D1)		
Algal Mat or Crust (B4)	Recent Iron Reduction in Tilled Soils (C6)	Geomorphic Position (D2)		
Iron Deposits (B5)	X FAC-Neutral Test (D5)			
Inundation Visible on Aerial Imagery (B7)				
Sparsely Vegetated Concave Surface (B8)	Other (Explain in Remarks)			
Field Observations:				
Surface Water Present? Yes X No	Depth (inches): 3			
Water Table Present? Yes NoX	Depth (inches): >20			
Saturation Present? Yes No X	Depth (inches): >20 Wetla	and Hydrology Present? Yes X No		
(includes capillary fringe)				
Describe Recorded Data (stream gauge, monitoring w	ell, aerial photos, previous inspections), if available:			
Remarks:				
A positive indication of wetland hydrology was obser	ved (at least one primary indicator).			

Project/Site:	Cade		County:	Un	ion	Sampling Date:	January 10, 2020		
Applicant/Owner:			State:	OH	Sampling Point:	DPC044_WC17			
Investigator(s):	K. Barnett	Section, Township, Range:			0	)			
Landform (hillslope	Local relief (concave, convex, none):			Concave					
Slope (%):	00-05	Lat:	40.37853	Long:		-83.46391	Datum:	NAD83	
Soil Map Unit Name: 0					NWI classification:			PFO	
Are climatic / hydro	logic conditions on the	site typical for this	time of year?	Yes	No	(If no	, explain in Remarks.)		
Are Vegetation	No ,Soil No	or Hydrology	<u>No</u> signifi	cantly disturbed?		Are "Norma	Circumstances" present?	Yes X No	
Are Vegetation	No ,Soil No	ally problematic?	? (If needed, explain any answers in Remarks.)			arks.)			

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

Hydrophytic Vegetation Present? Hydric Soil Present? Wetland Hydrology Present?	Yes _ Yes _ Yes _		No No No	Is the Sampled Area within a Wetland?	Yes	x	No	_
Remarks: This point was determined to be v	vithin a w	etland due	to the presence of all 3	3 wetland criteria.				

Tree Stratum (Plot size:       30 ft.       % cover       Species?       Status       Number of Dominant Species         1.       Acer saccharinum       30       Yes       FACW       That Are OBL, FACW, or FAC:       4         2.       Quercus palustris       20       Yes       FACW       Total Number of Dominant         3.       Ulmus americana       10       No       FACW       Total Number of Dominant	A)
1. Acer saccharinum       30       Yes       FACW       That Are OBL, FACW, or FAC:       4         2. Quercus palustris       20       Yes       FACW       Total Number of Dominant         3. Ulmus americana       10       No       FACW       Total Number of Dominant	A)
3. Ulmus americana 10 No FACW Total Number of Dominant	
4. <i>Quercus rubra</i> 10 No FACU Species Across All Strata: 4	B)
5.	
70 = Total Cover Percent of Dominant Species	
Sapling/Shrub Stratum (Plot size: 15 ft.) That Are OBL, FACW, or FAC: 100%	A/B)
1. Salix sp. 30 Yes FACW	
2. Prevalence Index Worksheet:	
3. Total % Cover of: Multiply by:	
4 OBL species X 1 =	
5. FACW species 90 x 2 = 180	
30         = Total Cover         FAC species         10         x 3 =         30	
Herb Stratum         (Plot size:         5         ft.         FACU species         10         x 4 =         40	
1. Microstegium vimineum         10         Yes         FAC         UPL species         0         x 5 =         0	
	B)
3. Prevalence Index = B/A = 2.27	
4	
5. Hydrophytic Vegetation Indicators:	
6. X 1 - Rapid Test for Hydrophytic Vegetation	
7 2 - Dominance Test is >50%	
8 3 - Prevalence Index is ≤3.0 <sup>1</sup>	
9. 4 - Morphological Adaptations <sup>1</sup> (Provide supporting	
10. data in Remarks or on a separate sheet)	
10 = Total Cover Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)	
Woody Vine Stratum (Plot size: 30 ft.)	
1. None Observed be present, unless disturbed or problematic.	
2.	
0 = Total Cover Hydrophytic	
Vegetation Present? Yes X No	
Remarks:	
A positive indication of hydrophytic vegetation was observed (>50% of dominant species indexed as OBL, FACW, or FAC).	
A positive indication of hydrophytic vegetation was observed (Prevalence Index is $\leq$ 3.0).	

epth	Matrix Redox Features										
nches)	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>	Texture	Remarks			
0-18	10YR 3/1	70	2.5YR 4/8	30 C		М	Clay Loam				
	<u> </u>						<u> </u>				
		_									
							<u> </u>				
	Concentration, D=Deple	etion, RM	Reduced Matrix, M	S=Masked	Sand Grains.	<sup>2</sup> L	ocation: PL=Pore Lining,	M=Matrix.			
ydric Soil	s Indicators:						Indicators for Problem	atic Hydric Soils <sup>3</sup> :			
Histoso	ol (A1)		Sandy	Gleyed Mat	trix (S4)	Coast Prairie Redox (A16)					
Histic Epipedon (A2)			Sandy	Redox (S5)	)	Dark Surface (S7)					
Black Histic (A3)			Strippe	d Matrix (S	6)		Iron-Manganese M	asses (F12)			
Hydrog	jen Sulfide (A4)		Loamy	Loamy Mucky Mineral (F1)			Very Shallow Dark Surface (TF12)				
Stratifie	ed Layers (A5)		Loamy Gleyed Matrix (F2)			Other (Explain in Remarks)					
2 cm N	luck (A10)		Deplete	eted Matrix (F3)							
Deplete	ed Below Dark Surface	e (A11)	X Redox	Dark Surfa	ce (F6)						
Thick E	Dark Surface (A12)		Deplete	ed Dark Su	rface (F7)						
Sandy	Mucky Mineral (S1)		Redox Depressions (F8)			<sup>3</sup> Indicators of hydrophytic vegetation and					
5 cm N	lucky Peat or Peat (S3	5)				wetland hydrology must be present,					
	, ,	,				unless disturbed or problematic.					
estrictive	Layer (if present):										
Type:											
Depth(inches):						Hydrid	c Soil Present?	Yes X No			
marks:											
positive ir	dication of hydric soil	was obse	ved.								
	,										

## HYDROLOGY

Wetland Hydrology Indicators:			
Primary Indicators (minimum of one required; che	ck all that apply)	Secondary Indicators (minimum of two required)	
Surface Water (A1)	Water-Stained Leaves (B9)	Surface Soil Cracks (B6)	
High Water Table (A2)	Aquatic Fauna (B13)	Drainage Patterns (B10)	
Saturation (A3)	True Aquatic Plants (B14)	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 on Aerial Imagery (C9)	
Drift Deposits (B3)	Presence of Reduced Iron (C4)	Stunted or Stressed Plants (D1)	
Algal Mat or Crust (B4)	Recent Iron Reduction in Tilled Soils (C6)	X Geomorphic Position (D2)	
Iron Deposits (B5)	Thin Muck Surface (C7)	X FAC-Neutral Test (D5)	
Inundation Visible on Aerial Imagery (B7)	Gauge or Well Data (D9)		
Sparsely Vegetated Concave Surface (B8)	Other (Explain in Remarks)		
Field Observations:			
Surface Water Present? Yes No	X Depth (inches): N/A		
Water Table Present? Yes No	X Depth (inches): >20		
Saturation Present? Yes No	X Depth (inches): >20 Wetl	and Hydrology Present? Yes X No	
(includes capillary fringe)			
Describe Recorded Data (stream gauge, monitoring	g well, aerial photos, previous inspections), if available:		
Remarks:			
A positive indication of wetland hydrology was obs			
A positive indication of wetland hydrology was obs	served (at least two secondary indicators).		

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Project/Site:	Cade	ence Solar		County:	Un	ion	Sampling Date:	January 10, 2020	
Applicant/Owner:		Invenerg	У		State:	OH	Sampling Point:	DPC046_WC18	
Investigator(s):	K. Barnett	and	S. Schratz	Section, Tov	vnship, R	ange:	0	)	
Landform (hillslope	, terrace, etc.):	B	ottom Forest		Local reli	ef (concave, co	onvex, none):	Concave	
Slope (%):	00-05	Lat:	40.37788	Long:		-83.46208	Datum:	NAD83	
Soil Map Unit Name	e:		0				NWI classification:	PFO	
Are climatic / hydro	logic conditions on the	site typical for this	time of year?	Yes	No	(If no	, explain in Remarks.)		
Are Vegetation	No ,Soil No	,or Hydrology	No signifi	cantly disturbed?		Are "Norma	Circumstances" present?	Yes X No	
Are Vegetation	No ,Soil No	, or Hydrology	No natura	ally problematic?		(If needed, e	explain any answers in Rema	arks.)	

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

Hydrophytic Vegetation Present? Hydric Soil Present? Wetland Hydrology Present?	Yes Yes Yes		No No No	Is the Sampled Area within a Wetland?	Yes	X	No
Remarks: This point was determined to be v	<i>i</i> ithin a we	etland due t	to the presence of all 3	3 wetland criteria.			

	Absolute Dominant	Indicator	Dominance Test worksheet:
Tree Stratum (Plot size: 30 ft.)	% cover Species?	Status	Number of Dominant Species
1. Ulmus americana	70 Yes	FACW	That Are OBL, FACW, or FAC: 2 (A)
2. Acer saccharinum	15 No	FACW	
3. acer rubrum	15 No	FAC	Total Number of Dominant
4. Quercus rubra	5 No	FACU	Species Across All Strata: 2 (B)
5. Carya ovata	5 No	FACU	
	110 = Total Cover		Percent of Dominant Species
Sapling/Shrub Stratum (Plot size: 15	ft. )		That Are OBL, FACW, or FAC: <b>100%</b> (A/B)
1. <u>Salix sp.</u>		FACW	
2.			Prevalence Index Worksheet:
3.			Total % Cover of: Multiply by:
4.			OBL species <b>0</b> x 1 = <b>0</b>
5.			FACW species <b>125</b> x 2 = <b>250</b>
	40 = Total Cover		FAC species <b>15</b> x 3 = <b>45</b>
Herb Stratum (Plot size: 5 ft.)			FACU species <b>10</b> x 4 = <b>40</b>
1. None Observed			UPL species <b>0</b> x 5 = <b>0</b>
2.			Column Totals: <b>150</b> (A) <b>335</b> (B)
3.			Prevalence Index = B/A = 2.23
4.			
5.			Hydrophytic Vegetation Indicators:
6.			X 1 - Rapid Test for Hydrophytic Vegetation
7.			X 2 - Dominance Test is >50%
8.			<b>X</b> 3 - Prevalence Index is $\leq 3.0^{1}$
9.			4 - Morphological Adaptations <sup>1</sup> (Provide supporting
10			data in Remarks or on a separate sheet)
	0 = Total Cover		Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)
Woody Vine Stratum (Plot size: 30 f	t. )		<sup>1</sup> Indicators of hydric soil and wetland hydrology must
1. None Observed	,		be present, unless disturbed or problematic.
2.			
	0 = Total Cover		Hydrophytic
			Vegetation Present? Yes X No
Remarks:			
A positive indication of hydrophytic vegetation wa			
A positiv	e indication of hydrophytic veg	getation was observed	(Prevalence Index is ≤ 3.0).

epth	Matrix			Redox	Features						
nches)	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>	Texture	Remarks			
0-18	10YR 3/1	70	2.5YR 4/8	30	С	М	Clay Loam				
							·				
	concentration, D=Deple	etion, RM	Reduced Matrix, M	S=Masked	Sand Grains.	2L	ocation: PL=Pore Lining,	M=Matrix.			
ydric Soil	s Indicators:						Indicators for Problem	natic Hydric Soils <sup>3</sup> :			
Histoso	ol (A1)		Sandy	Gleyed Mat	trix (S4)	Coast Prairie Redox (A16)					
Histic Epipedon (A2)			Sandy	Redox (S5)	)	Dark Surface (S7)					
Black Histic (A3)			Stripped Matrix (S6)				Iron-Manganese M	lasses (F12)			
Hydrogen Sulfide (A4)			Loamy	Mucky Min	eral (F1)		Very Shallow Dark	Surface (TF12)			
Stratifie	ed Layers (A5)		Loamy Gleyed Matrix (F2)				Other (Explain in Remarks)				
2 cm N	luck (A10)		Deplete	ed Matrix (F	-3)						
Deplete	ed Below Dark Surface	e (A11)	Redox	Dark Surfa	ce (F6)						
Thick D	Dark Surface (A12)		X Deplete	ed Dark Su	rface (F7)						
Sandy	Mucky Mineral (S1)		Redox Depressions (F8)			<sup>3</sup> Indicators of hydrophytic vegetation and					
5 cm N	lucky Peat or Peat (S3	5)				wetland hydrology must be present,					
							problematic.				
estrictive	Layer (if present):										
Type:											
Depth(i	inches):					Hydric	c Soil Present?	Yes X No			
marks:											
positive in	dication of hydric soil	was obse	rved.								

Wetland Hydrology Indicators:				
Primary Indicators (minimum of one required; check	all that apply)	Secondary Indicators (minimum of two required)		
X Surface Water (A1)	Water-Stained Leaves (B9)	Surface Soil Cracks (B6)		
High Water Table (A2)	Aquatic Fauna (B13)	Drainage Patterns (B10)		
X Saturation (A3)	True Aquatic Plants (B14)	Dry-Season Water Table (C2)		
Water Marks (B1)	Hydrogen Sulfide Odor (C1)	Crayfish Burrows (C8)		
Sediment Deposits (B2)	Oxidized Rhizospheres on Living Roots (C3)	Saturation Visible on Aerial Imagery (C9)		
Drift Deposits (B3)	Presence of Reduced Iron (C4)	Stunted or Stressed Plants (D1)		
Algal Mat or Crust (B4)	Recent Iron Reduction in Tilled Soils (C6)	Geomorphic Position (D2)		
Iron Deposits (B5)	Thin Muck Surface (C7)	X FAC-Neutral Test (D5)		
Inundation Visible on Aerial Imagery (B7)	Gauge or Well Data (D9)			
Sparsely Vegetated Concave Surface (B8)	Other (Explain in Remarks)			
Field Observations:				
Surface Water Present? Yes X No	Depth (inches): 2			
Water Table Present? Yes NoX	Depth (inches): >20			
Saturation Present? Yes X No	Depth (inches): 0 Wetl	land Hydrology Present? Yes X No		
(includes capillary fringe)				
Describe Recorded Data (stream gauge, monitoring w	ell, aerial photos, previous inspections), if available:			
Remarks:				
A positive indication of wetland hydrology was obser	ved (at least one primary indicator).			

Project/Site:		(	Cadence	e Solar		County:	Un	ion	Sampling Date:	January 10, 2	2020
Applicant/Owner:				Invenergy			State:	ОН	Sampling Point:	DPC047_W0	C18
Investigator(s):	K.	Barnett		and S	5. Schratz	Section, To	wnship, R	lange:	C	)	
Landform (hillslope,	, terrace, e	etc.):		De	epression		Local rel	ief (concave, co	onvex, none):	Concave	
Slope (%):		00-05		Lat:	40.37802	Long:		-83.46179	Datum:	NAD83	
Soil Map Unit Name	e:				0				NWI classification:	PEM	
Are climatic / hydrol	logic cond	litions or	the site	e typical for this t	me of year?	Yes	No	(lf no	, explain in Remarks.)		
Are Vegetation	No	,Soil	No	,or Hydrology	No signifi	cantly disturbed?		Are "Norma	Circumstances" present?	Yes X	No
Are Vegetation	No	,Soil	No	,or Hydrology	No natura	ally problematic?		(If needed, e	explain any answers in Rema	arks.)	

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

Hydrophytic Vegetation Present? Hydric Soil Present? Wetland Hydrology Present?	Yes X Yes X Yes X	No No No	Is the Sampled Area within a Wetland?	Yes <u>X</u>	 No
Remarks: This point was determined to be w	vithin a wetland due	to the presence of all 3	e wetland criteria.		

	Absolute	Dominant	Indicator	Dominance Test worksheet:	
Tree Stratum (Plot size: 30 ft.)	% cover	Species?	Status	Number of Dominant Species	
1. None Observed		<b>_</b>		That Are OBL, FACW, or FAC: 1 (	A)
2.		·			. /
3.				Total Number of Dominant	
4.				Species Across All Strata: 1 (	B)
5.		·			
0		Total Cover		Percent of Dominant Species	
Sapling/Shrub Stratum (Plot size: 15 ft.		Total Cover		That Are OBL, FACW, or FAC: 100% (	A/B)
	)				,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,
				Prevalence Index Worksheet:	
				Total % Cover of: Multiply by:	
···		······		OBL species         5         x1 =         5	
				·	
5	0 =	Total Cover		FACW species         100         x 2 =         200           FAC species         0         x 3 =         0	
	=	Total Cover			
Herb Stratum (Plot size: 5 ft.)	100		54.014/	FACU species 0 x 4 = 0	
1. <u>Cyperus sp.</u>	100	Yes	FACW	UPL species $0 \times 5 = 0$	
2. Juncus sp.	5	No	OBL		B)
3				Prevalence Index = B/A = 1.95	
4		·			
5				Hydrophytic Vegetation Indicators:	
6				X 1 - Rapid Test for Hydrophytic Vegetation	
7				X 2 - Dominance Test is >50%	
8				X_3 - Prevalence Index is ≤3.0 <sup>1</sup>	
9				4 - Morphological Adaptations <sup>1</sup> (Provide supporting	
10				data in Remarks or on a separate sheet)	
	105 =	Total Cover		Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)	
Woody Vine Stratum (Plot size: 30 ft.	)			<sup>1</sup> Indicators of hydric soil and wetland hydrology must	
1. None Observed				be present, unless disturbed or problematic.	
2					
	0 =	Total Cover		Hydrophytic	
				Vegetation Present? Yes X No	
Remarks:					
A positive indication of hydrophytic vegetation was			•		
A positive i	indication of	hydrophytic vegeta	ation was observed (F	Prevalence Index is ≤ 3.0).	

Depth	Matrix			Redox	Features						
inches)	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>	Texture	Remarks			
0-18	10YR 4/1	80	5YR 5/8	20	С	М	Clay Loam				
							·				
	Concentration, D=Deple	etion, RM	Reduced Matrix, M	S=Masked	Sand Grains.	<sup>2</sup> L	ocation: PL=Pore Lining,				
	Is Indicators:						Indicators for Problem	•			
Histos	( )			Gleyed Mat		Coast Prairie Redox (A16)					
Histic Epipedon (A2)				Redox (S5)		Dark Surface (S7)					
Black Histic (A3)				d Matrix (S			Iron-Manganese M	· · ·			
_ ` `	gen Sulfide (A4)		Loamy Mucky Mineral (F1)				Very Shallow Dark	( )			
Stratifi	ed Layers (A5)		Loamy Gleyed Matrix (F2)				Other (Explain in Remarks)				
2 cm N	/luck (A10)		X Deplete	ed Matrix (F	-3)						
Deplet	ed Below Dark Surface	e (A11)	Redox	Dark Surfa	ce (F6)						
Thick I	Dark Surface (A12)		Deplete	ed Dark Su	rface (F7)						
Sandy	Mucky Mineral (S1)		Redox Depressions (F8)			<sup>3</sup> Indicators of hydrophytic vegetation and					
5 cm N	Aucky Peat or Peat (S3	3)					wetland hydrology must be present, unless disturbed or problematic.				
estrictive	Layer (if present):										
Type:											
Depth(inches):						Hydrid	c Soil Present?	Yes X No			
marks:											
positive ir	ndication of hydric soil	was obse	ved.								

Wetland Hydrology Indicators:								
Primary Indicators (minimum of one required; check	all that apply)	Secondary Indicators (minimum of two required)						
X Surface Water (A1)	Water-Stained Leaves (B9)	Surface Soil Cracks (B6)						
High Water Table (A2)	Aquatic Fauna (B13)	Drainage Patterns (B10)						
X Saturation (A3)	True Aquatic Plants (B14)	Dry-Season Water Table (C2)						
Water Marks (B1)	Hydrogen Sulfide Odor (C1)	Crayfish Burrows (C8)						
Sediment Deposits (B2)	Oxidized Rhizospheres on Living Roots (C3)	Saturation Visible on Aerial Imagery (C9)						
Drift Deposits (B3)	Presence of Reduced Iron (C4)	Stunted or Stressed Plants (D1)						
Algal Mat or Crust (B4)	Recent Iron Reduction in Tilled Soils (C6)	Geomorphic Position (D2)						
Iron Deposits (B5)	Thin Muck Surface (C7)	X FAC-Neutral Test (D5)						
Inundation Visible on Aerial Imagery (B7)	Gauge or Well Data (D9)							
Sparsely Vegetated Concave Surface (B8)	Other (Explain in Remarks)							
Field Observations:								
Surface Water Present? Yes X No	Depth (inches): 3							
Water Table Present? Yes No X	Depth (inches): >20							
Saturation Present? Yes X No	Depth (inches): 3 Wetl	and Hydrology Present? Yes X No						
(includes capillary fringe)								
Describe Recorded Data (stream gauge, monitoring w	ell, aerial photos, previous inspections), if available:							
Remarks:								
A positive indication of wetland hydrology was obser	ved (at least one primary indicator).							

# **APPENDIX C**

Photographs



Photograph 1. Scrub Shrub Wetland (PSS) WA01, view facing west (December 10, 2019 by D. Carson).



Photograph 2. Forested Wetland (PFO) WA02, view facing north (December 10, 2019 by D. Carson).



Photograph 3. Palustrine Emergent Wetland (PEM) WA03, view facing west (December 10, 2019 by D. Carson).



Photograph 4. PEM Wetland WA04, view facing south (December 10, 2019 by D. Carson).



Photograph 5. PEM Wetland WA05, view facing north (December 11, 2019 by D. Carson).



Photograph 6. PFO Wetland WA06, view facing north (December 11, 2019 by D. Carson).



Photograph 7. PEM Wetland WA07, view facing west (December 27, 2019 by D. Carson).



Photograph 8. PEM Wetland WA08, view facing west (December 27, 2019 by D. Carson).

January 2021



Photograph 9. PFO Wetland WA09, view facing east (December 27, 2019 by D. Carson).



Photograph 10. PFO Wetland WA10, view facing east (December 27, 2019 by D. Carson).



Photograph 11. PFO Wetland WA11, view facing east (December 27, 2019 by D. Carson).



Photograph 12. PFO Wetland WA12, view facing south (December 27, 2019 by D. Carson).



Photograph 13. PFO Wetland WA13, view facing west (December 27, 2019 by D. Carson).



Photograph 14. PFO Wetland WA14, view facing south (December 27, 2019 by D. Carson).



Photograph 15. PFO Wetland 15, view facing east (December 27, 2019 by D. Carson).



Photograph 16. PFO Wetland WA16, view facing east (December 27, 2019 by D. Carson).



Photograph 17. PEM Wetland WA17, view facing south (January 14, 2020 by D. Carson).



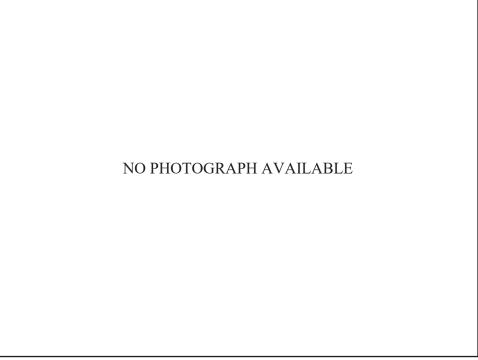
Photograph 18. PEM Wetland WA18, view facing south (January 14, 2020 by D. Carson).



Photograph 19. PEM Wetland WA19, view facing north (January 14, 2020 by D. Carson).

NO PHOTOGRAPH AVAILABLE

Photograph 20. PEM Wetland WA20.



Photograph 21. PEM Wetland WA21.



Photograph 22. PEM Wetland WA22, view facing south (January 14, 2020 by D. Carson).



Photograph 23. PEM Wetland WA23, view facing west (January 14, 2020 by D. Carson).



Photograph 24. PFO Wetland WA24, view facing east (January 14, 2020 by D. Carson).



Photograph 25. PFO Wetland WA25, view facing south (January 14, 2020 by D. Carson).



Photograph 26. PEM Wetland WA26, view facing south (January 14, 2020 by D. Carson).



Photograph 27. PEM Wetland WA27, view facing west (January 14, 2020 by D. Carson).



Photograph 28. PEM Wetland WA28, view facing east (January 15, 2020 by D. Carson).



Photograph 29. PEM Wetland WA29, view facing east (January 15, 2020 by D. Carson).



Photograph 30. PEM Wetland WA30, view facing north (January 15, 2020 by D. Carson).



Photograph 31. PEM Wetland WA31, view facing east (January 15, 2020 by D. Carson).



Photograph 32. PEM Wetland WA32, view facing north (January 15, 2020 by D. Carson).



Photograph 33. PEM Wetland WA33, view facing north (January 15, 2020 by D. Carson).



Photograph 34. PEM Wetland WA34, view facing east (January 15, 2020 by D. Carson).



Photograph 35. PEM Wetland WA35, view facing south (November 5, 2020 by D. Carson).



Photograph 36. PEM Wetland WA36, view facing north (November 23, 2020 by D. Carson).



Photograph 37. PFO Wetland WA37, view facing north (November 23, 2020 by D. Carson).



Photograph 38. PEM Wetland WA38, view facing west (November 5, 2020 by D. Carson).



Photograph 39. PFO Wetland WA39, view facing east (November 5, 2020 by D. Carson).



Photograph 40. PFO Wetland WA40, view facing east (November 5, 2020 by D. Carson).



Photograph 41. PFO Wetland WA41, view facing east (November 6, 2020 by D. Carson).



Photograph 42. PEM Wetland WA42, view facing north (November 6, 2020 by D. Carson).



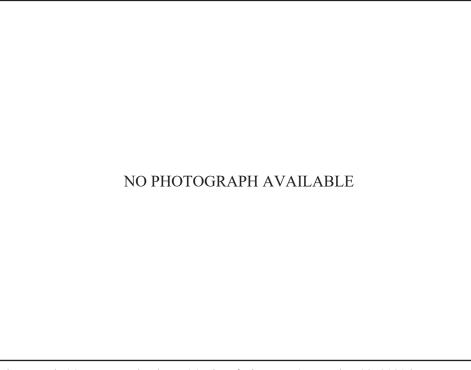
Photograph 43. PEM Wetland WA43, view facing west (November 5, 2020 by D. Carson).



Photograph 44. PEM Wetland WA44, view facing south (November 6, 2020 by D. Carson).



Photograph 45.PUB Wetland WA45, view facing east (November 6, 2020 by D. Carson).



Photograph 46. PEM Wetland WA46, view facing east (November 23, 2020 by D. Carson).



Photograph 47. PUB Wetland WA47, view facing east (November 6, 2020 by D. Carson).



Photograph 48. PEM Wetland WA48, view facing east (November 23, 2020 by D. Carson).



Photograph 49. PEM Wetland WA49, view facing east (November 23, 2020 by D. Carson).



Photograph 50. PFO Wetland WB03, view facing north (December 13, 2019 by H. McFeeters).



Photograph 51. PEM Wetland WB04, view facing north (December 13, 2019 by H. McFeeters).



Photograph 52. PEM Wetland WB05, view facing west (December 13, 2019 by H. McFeeters).



Photograph 53. PEM Wetland WB06, view facing east (December 13, 2019 by H. McFeeters).



Photograph 54. PFO Wetland WB07, view facing south (December 14, 2019 by H. McFeeters).



Photograph 55. PEM Wetland WB08, view facing west (December 14, 2019 by H. McFeeters).



Photograph 56. PEM Wetland WB09, view facing south (December 14, 2019 by H. McFeeters).



Photograph 57. PEM Wetland WC01, view facing south (January 8, 2020 by K. Barnett).



Photograph 58. PEM Wetland WC02, view facing east (January 8, 2020 by K. Barnett).



Photograph 59. PEM Wetland WC03, view facing south (January 8, 2020 by K. Barnett).



Photograph 60. PEM Wetland WC04, view facing south (January 8, 2020 by K. Barnett).



Photograph 61. PFO Wetland WC05, view facing north (January 8, 2020 by K. Barnett.



Photograph 62. PFO Wetland WC06, view facing south (January 9, 2020 by K. Barnett).



Photograph 63. PUB Wetland WC07, view facing south (January 9, 2020 by K. Barnett).



Photograph 64. PUB Wetland WC08, view facing south (January 9, 2020 by K. Barnett).



Photograph 65. PUB Wetland WC09, view facing west (January 9, 2020 by K. Barnett).



Photograph 66. PEM Wetland WC10, view facing south (January 10, 2020 by K. Barnett).



Photograph 67. PSS Wetland WC11, view facing south (January 9, 2020 by K. Barnett).



Photograph 68. PEM Wetland WC12, view facing south (January 9, 2020 by K. Barnett).



Photograph 69. PEM Wetland WC13, view facing south (January 9, 2020 by K. Barnett).



Photograph 70. PFO Wetland WC14, view facing west (January 10, 2020 by K. Barnett).



Photograph 71. PFO Wetland WC15, view facing west (January 10, 2020 by K. Barnett).



Photograph 72. Upstream view of SA01 (December 10, 2019 by S. Schratz).



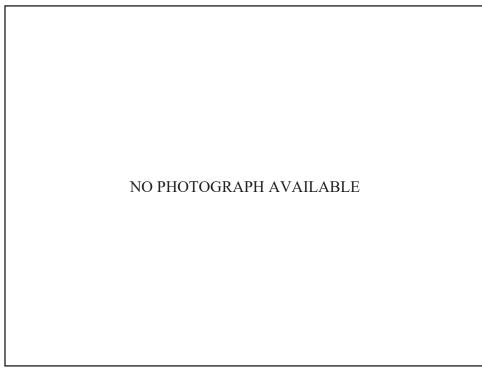
Photograph 73. Upstream view of SA02, (December 10, 2019 by D. Carson).



Photograph 74. Downstream view of SA03, (December 10, 2019 by D. Carson).



Photograph 75. Upstream view of SA04 (December 10, 2019 by S. Schratz).



Photograph 76. SA05, (December 10, 2019).

## NO PHOTOGRAPH AVAILABLE

Photograph 77. SA06, (December 10, 2019).

NO PHOTOGRAPH AVAILABLE

Photograph 78. SA07, (December 10, 2019).



Photograph 79. Upstream view of SA08, (January 16, 2020 by D. Carson).



Photograph 80. Downstream view of SA09, (January 14, 2020 by D. Carson).



Photograph 81. Upstream view of SA10, (January 14, 2020 by D. Carson).



Photograph 82. Upstream view of SA11, (November 23, 2020 by D. Carson).



Photograph 83. Downstream view of SA12, (November 23, 2020 by D. Carson).



Photograph 84. Upstream view of SA13, (November 23, 2020 by D. Carson).



Photograph 85. Downstream view of SA14, (November 23, 2020 by D. Carson).



Photograph 86. Upstream view of SA15, (November 23, 2020 by D. Carson).



Photograph 87. Downstream view of SB01, (December 11, 2019 by H. McFeeters).



Photograph 88. Downstream view of SB02, (December 11, 2019 by H. McFeeters).



Photograph 89. Upstream view of SB03, (December 11, 2019 by H. McFeeters).



Photograph 90. Downstream view of SB04, (December 12, 2019 by H. McFeeters).



Photograph 91. Downstream view of SB05, (December 12, 2019 by H. McFeeters).



Photograph 92. Upstream view of SB06, (December 12, 2019 by H. McFeeters).



Photograph 93. Downstream view of SB07, (December 13, 2019 by H. McFeeters).



Photograph 94. Upstream view of SB08, (December 13, 2019 by H. McFeeters).



Photograph 95. Upstream view of SB09, (December 14, 2019 by H. McFeeters).



Photograph 96. Upstream view of SB10, (December 14, 2019 by H. McFeeters).



Photograph 97. Downstream view of SB11, (December 14, 2019 by H. McFeeters).



Photograph 98. Downstream view of SB12, (December 15, 2019 by H. McFeeters).



Photograph 99. Downstream view of SB13, (December 15, 2019 by H. McFeeters).



Photograph 100. Downstream view of SB14, (December 15, 2019 by H. McFeeters).



Photograph 101. Upstream view of SB15, (December 15, 2019 by H. McFeeters).



Photograph 102. Downstream view of SB16, (December 16, 2019 by H. McFeeters).



Photograph 103. Downstream view of SB17, (December 16, 2019 by H. McFeeters).



Photograph 104. Downstream view of SB18, (December 16, 2019 by H. McFeeters).



Photograph 105. Upstream view of SB19, (December 16, 2019 by H. McFeeters).



Photograph 106. Downstream view of SC01, (January 8, 2020 by K. Barnett).



Photograph 107. Downstream view of SC02, (January 9, 2020 by K. Barnett).



Photograph 108. Downstream view of SC03, (January 9, 2020 by K. Barnett).



Photograph 109. Upstream view of SC04, (January 9, 2020 by K. Barnett).



Photograph 110. Downstream view of SC05, (January 9, 2020 by K. Barnett).



Photograph 111. Upstream view of SC06, (January 9, 2020 by K. Barnett).



Photograph 112. PUB PNDA01, view facing east (December 11, 2019 by D. Carson).



Photograph 113. PUB PNDA02, view facing east (December 27, 2019 by D. Carson).



Photograph 114. PUB PNDB01, view facing southeast (December 13, 2019 by H. McFeeters).



Photograph 115. PUB of PNDC01, view facing northeast (January 8, 2020 by K. Barnett).



Photograph 116. PUB PNDC02, view facing north (January 9, 2020 by K. Barnett).



Photograph 117. PUB PNDC03, view facing southwest (January 9, 2020 by K. Barnett).



Photograph 118. PUB PNDC04, view facing north (January 9, 2020 by K. Barnett).



Photograph 119. PUB PNDC05, view facing north (January 9, 2020 by K. Barnett).



Photograph 120. View of PNDC06, view facing north (January 9, 2020 by K. Barnett).



Photograph 121. PNDC07, view facing east (January 10, 2020 by K. Barnett).



Photograph 122. PNDC08, view facing south (January 10, 2020 by S. Schratz).

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in

Case No(s). 21-1003-EL-BLN

Summary: Application - 14 of 14 (Exhibit L – Wetland and Waterbody Delineation Report) electronically filed by Christine M.T. Pirik on behalf of CADENCE SOLAR ENERGY LLC