

Summer Shade Solar Project Wetland and Waterbody Delineation Report

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Sign-off Sheet

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1.0 INTRODUCTION

1.1 PURPOSE

Summer Shade Solar LLC (the "Client") is proposing to develop the Summer Shade Solar Facility (the "Project") within Metcalfe and Monroe Counties, Kentucky (**Appendix A, Figure 1**). The Project includes approximately 1,468 acres of primarily upland and riparian forested areas and agricultural fields. Kentucky State Highway 90 (Summer Shade Road) runs west to east through the northern portion of the Project and Kentucky State Highway 163 (Tompkinsville Road) runs north to south to the east of the Project area. The Project is located between the towns of Summer Shade, which lies to the west of the Project, and Beaumont, which lies to the east, and is approximately 13 miles southeast of the city of Glasgow, Kentucky.

Stantec Consulting Services Inc. (Stantec) was retained by Summer Shade Solar LLC to conduct a delineation of potential waters of the United States (WOTUS), including wetlands, streams, waterbodies, and potentially isolated wetlands within the Project area. WOTUS features are subject to regulation under Section 404 of the Clean Water Act (CWA) and the jurisdictional regulatory authority lies with the U.S. Army Corps of Engineers (USACE).

Stantec completed the delineation of wetlands, streams, and waterbodies over three deployments which took place October 4-10, 2021, April 18-27, 2022, and February 26-29, 2024. The information contained in this report reflects the current site conditions that were observed during the field delineations and updated jurisdictional discussion to reflect Kentucky's transition from the pre-2015 regulatory regime to the now operative amended 2023 rule regulatory regime.

1.2 LOCATION OF PROJECT

The Project is located approximately 13 miles southeast of Glasgow, Kentucky and is predominantly located within Metcalfe County, with a small portion of the Project lying within Monroe County to the south. The Project is primarily contained within the Skaggs Creek watershed (HUC-10 0511000203), though a small portion in the northeast corner of the Project overlaps the Little Barren River watershed (HUC-10 0511000106). Additionally, the entire Project area lies within the Green watershed (HUC-6 051100). The Project is drained by Nobob Creek, which flows east to west through the central portion of the Project. Glover Creek and its tributaries are also located near the Project, with one tributary directly adjacent to the northwesternmost parcel in the Project area (**Appendix A**, **Figure 2**).

2.0 REGULATORY CONSIDERATIONS

The Federal Water Pollution Control Act Amendments of 1972 established a comprehensive program of regulations and permits to control water pollution within the United States. Section 404 of the Clean Water Act (CWA) was created as a part of the above-mentioned amendments and has become the principal regulatory mechanism to control discharges into wetlands and waters of the United States.

Both the U.S. Army Corps of Engineers (USACE) and the Environmental Protection Agency (EPA) have assigned authorities under Section 404 of the CWA. The USACE has the authority to issue permits for the discharge of fill materials after notice and an opportunity for comment. The EPA, in conjunction with USACE, has the authority to



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develop substantive water protection criteria as a part of the guidelines that individuals must meet when applying for a permit from the USACE. Enforcement authority with regard to Section 404 is divided between the two agencies.

Subsequently, Section 401 of the CWA was created to allocate certifying authority to states and tribes in relation to wetlands and waters of the United States. These certifying authorities may also oversee implementation of local state or tribal statutes and regulatory program implementations and/or hold enforcement authority of these complementary programs. Kentucky does not currently have its own regulatory program for wetlands and lacks water quality standards for ephemeral streams.

On September 8, 2023, the final rule was published by the EPA and USACE redefining the definition of "Waters of the United States" to conform to the 2023 Supreme Court decision. This conforming rule, also known as the Sackett Rule, amends the provisions of the agencies' definition of "Waters of the United States" that are invalid under the Supreme Court's interpretation of the Clean Water Act in the 2023 decision (EPA 2023), most notably the 'significant nexus' test.

On September 23, 2024, the Sixth Circuit issued a mandate lifting its stay order regarding pending litigations¹, and as of that date, the Amended 2023 Rule is operative in Kentucky which conforms its definitions of the "Waters of the United States" conforming with the Supreme Court's decision in Sackett v. EPA. Although limited formal written guidance has been released by EPA or USACE to date, the Jurisdictional Determinations presented in this report reflect what Stantec believes USACE will be considering going forward. The final authority regarding CWA jurisdiction remains with USACE and EPA. Following the Amended 2023 Rule in accordance with Sackett, a brief summary of the key points of that rule is outlined below.

The USACE and EPA will assert jurisdiction over the following categories of waters:

- Traditional navigable waters (TNW);
- Territorial Seas:
- Interstate waters excluding wetlands;
- Impoundments created from "Waters of the United States";
- Tributaries that are relatively permanent waters (RPW) and flow into a TNW;
- Wetlands adjacent (direct surface connection) to traditional navigable waters, interstate water, territorial seas or relatively permanent tributary or impoundment; and
- Other relatively permanent waters that could affect interstate or foreign commerce.

¹ Commonwealth of Kentucky v. EPA (No. 23-5343) and Kentucky Chamber of Commerce, et al. v. EPA (No. 23-5345)



The USACE and EPA generally will not assert jurisdiction over the following excluded features:

- · Waste treatment systems
- Prior converted cropland
- Certain ditches
- Artificially irrigated areas that would revert to dry land if irrigation ceased
- Certain artificial lakes and ponds
- Artificial reflecting or swimming pools or other small ornamental bodies of water
- Certain waterfilled depressions
- Swales and erosional features.

Based on these criteria, TNWs, RPWs, and their directly adjacent wetlands are by definition considered jurisdictional WOTUS. Non-directly adjacent wetlands and non-relatively permanent waters (NRPW) do not meet the current definition of a WOTUS under this rule.

RPW extent is often described or based on characteristics such as their flow regime or Strahler stream order. Flow regime classifications are defined as perennial, intermittent, or ephemeral. Strahler stream order is described below.

Perennial: Has flowing water year-round during a typical year. The water table is located above the stream

bed for most of the year. Groundwater is the primary source of water for stream flow. Runoff from

rainfall is a supplemental source of water for stream flow.

Intermittent: Has flowing water during certain times of the year when groundwater provides water for stream

flow. During dry periods, intermittent streams may not have flowing water. Runoff from rainfall is a

supplemental source of water for stream flow.

Ephemeral: Has flowing water only during, and for a short duration after, precipitation events in a typical year.

Ephemeral stream beds are located above the water table year-round. Groundwater is not a source

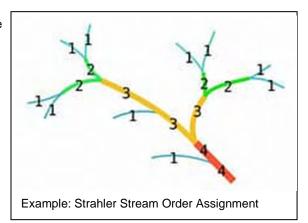
of water for the stream. Runoff from rainfall is the primary source of water for stream flow.

Strahler Stream Order: From the point of confluence, where

two lower order streams met to form the tributary, downstream to the point such tributary enters a

higher order stream.

Note that USACE will assess the flow characteristics of a particular tributary at the farthest downstream limit of such tributary (i.e. the point the tributary enters a higher order stream).





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Within this report, stream reach refers to a particular channel length of one singular Stahler stream order unit. A stream segment refers to each flow type where multiple flow types occur within the same stream reach.

Under the current Amended 2023 Rule regime stream, wetland, and open water resources are considered RPWs when they have a direct continuous surface connection (CSC) to waters that meet the requirements of paragraphs (a)(1) through (a)(5) of the Amended 2023 regulations. This connection can be through a stream of any flow type or a discrete feature like a non-jurisdictional ditch, upland swale, pipe, or culvert.

The Project may require authorization under the federal Clean Water Act (CWA) Section 404 for any proposed impacts to jurisdictional WOTUS. The USACE regulates the discharge of fill material in WOTUS, including wetlands, under Section 404 of the Clean Water Act (33 U.S.C. §1344), Section 10 of the Rivers and Harbors Act of 1899 (33 U.S.C. §403), and Section 103 of the Marine Protection Research and Sanctuaries Act of 1972 (33 U.S.C. §1413).

Discharge of fill material includes digging, trenching, or equipment crossing of a jurisdictional waterbody.

The Project is located in the USACE Louisville District and may be eligible for NWP 14, NWP 51, and/or NWP 57, provided that all required NWP conditions are met. Permanent loss of up to 0.5 acre of jurisdictional WOTUS is allowable by these NWP options. Compensatory mitigation would be required for permanent impacts exceeding 0.10 acre wetland or 0.03 acre stream bed should PreConstruction Notification (PCN) coordination be required. Dependent on conditions of the specific NWP used, a PCN may not be required if impacts are less than 0.10 acre. If no permanent impacts for the Project are assumed, and all impacts to jurisdictional WOTUS would be temporary in nature, compensatory mitigation would likely not be required. A project restoration plan would be required as part of the USACE NWP 51 and/or NWP 57 application. If the Project impacts cannot meet the conditions of NWP 14, NWP 51 and/or NWP 57, a CWA Section 404 Individual Standard Permit may be required from the USACE.

Stantec assumes a CWA Section 404 Individual Standard Permit will not be required from the USACE, as the Project is anticipated to meet all the conditions of NWP 14, NWP 51 and/or NWP 57. Typical timeframe for completing a draft of the PCN application would be approximately three (3) weeks. The review time by the USACE for this type of permit application is 45-60 days from when they receive a complete application. No fee is associated with this type of permit application.

Clean Water Act Section 401 Water Quality Certification

Clean Water Act Section 404 Permit

Section 401 of the CWA (33 U.S.C. §1344) mandates that a Water Quality Certification (WQC) be obtained from the certifying authorities (states, authorized tribes, and EPA) prior to any discharge of dredged or fill material into WOTUS. The Kentucky Division of Water (KDOW) administers the WQC program within Kentucky.

As indicated above, the Project may qualify for authorization by the USACE under NWP 14, NWP 51 and/or NWP 57, provided that the conditions of the permits are met and/or a waiver can be obtained. The KDOW has certified many of the USACE Section 404 NWPs by automatically granting state 401 WQC approval to activities covered under NWPs, provided that the project meets special limitations and conditions. If the Project impacts cannot meet the state conditions of NWP 14, NWP 51 and/or NWP 57, a Section 401 Individual WQC may be required from KDOW. Stantec assumes a Section 401 Individual WQC will not be required from the KDOW, as the Project is anticipated to meet all the state conditions of NWP 14, NWP 51 and/or NWP 57.



Clean Water Act Section 402 National Pollutant Discharge Elimination System (NPDES) Permit

For Section 402, construction sites with a disturbed area of one or more acres are required to either obtain individual NPDES permits for stormwater discharges or be covered by the Construction General Permit. In Kentucky, the Kentucky Energy and Environment Cabinet (KEEC) administers the National Pollutant Discharge Elimination System program [referred to as Kentucky Pollutant Discharge Elimination System (KPDES)], in compliance with NPDES guidelines, to issue a Construction General Permit (KYR10) which authorizes the discharge of stormwater associated with construction activity.

Each applicant under the Construction General Permit is required to prepare a Stormwater Pollution Prevention Plan (SWPPP) prior to the commencement of grading activities and implement the SWPPP during construction activities. The primary objective of the SWPPP is to identify, construct, implement, and maintain Best Management Practices (BMPs) to reduce or eliminate pollutants in stormwater discharges and authorized non-stormwater discharges from the construction site. BMPs may include programs, technologies, processes, practices, and devices that control, prevent, remove, or reduce pollution. The SWPPP would also address BMPs developed specifically to reduce pollutants in stormwater discharges following the completion of construction activities.

Submission of a NOI to KEEC is required and must be authorized prior to ground disturbing construction activities. The review time by the KEEC for the NOI permit is 21 days and application fees will vary depending upon the total acreage of ground disturbance.

Floodplain Permit

A floodplain development permit may be required when construction activities consisting of above ground facilities or any ground disturbance occurring within a mapped Federal Emergency Management Agency (FEMA) special flood hazard area. Coordination with county and local officials will be required to determine the extent of consultation and permits that will be required when working within their jurisdiction.

Stantec used the Federal Emergency Management Agency (FEMA) Flood Map Services Center website to identify floodplain boundaries within the Project area. FEMA regulates development within floodplains and requires permits for development within the 100-year flood zone, which are administered by the Kentucky Division of Water - Floodplain Section in Kentucky. Stantec downloaded preliminary floodplain data for Metcalfe County and Monroe County from the FEMA Flood Map Services Center. This map data is provided on **Figure 7** in **Appendix A**. 16.39 acres of the Project area is in the 100-year floodplain, the majority of which is concentrated around Nobob Creek and its various tributaries that intersect the center of the Project area. Summer Shade Solar LLC should consult with Kentucky Division of Water - Floodplain Section and the Metcalfe County and Monroe County floodplain coordinators if development is planned to take place within the 100-year flood zone to determine state and local requirements.

3.0 METHODS

3.1 WETLAND DELINEATION

Prior to completing the survey, a desktop review of the Project area was conducted using the Sulphur Lick, Kentucky and Summer Shade, Kentucky USGS 7.5 Minute Series topographic maps (**Appendix A, Figure 2**), U.S. Department



of Agriculture (USDA) Natural Resources Conservation Service (NRCS) Soil Survey of Metcalfe County and Monroe County, Kentucky (USDA 1972) (**Appendix A**, **Figures 3-6**), the National Wetlands Inventory database (NWI [USFWS 2023]), the National Hydrography Dataset (NHD [USGS 2023]), and the Federal Emergency Management Agency (FEMA) National Flood Hazard Layer (NFHL [FEMA 2023]) (**Appendix A**, **Figure 7**), and aerial imagery mapping to assess the likelihood of occurrence and probable location of wetlands and waterbodies within the Project area. Delineated features are presented in **Appendix A**, **Figures 8-49**.

Stantec conducted field surveys within the Project area during three deployments that took place October 4-10, 2021, April 18-27, 2022, and February 26-29, 2024. Wetland boundaries were assessed using the "Routine On-site Determination Method" as described in the USACE Wetland Delineation Manual (USACE Environmental Laboratory 1987) and the Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Eastern Mountain and Piedmont Region (Version 2.0) (USACE 2012). As of August 17, 1991, the USACE was directed to utilize the USACE Wetland Delineation Manual (USACE Environmental Laboratory 1987) to identify and delineate wetlands potentially subject to regulation under Section 404 of the CWA.

Wetlands were classified according to "Classification of Wetlands and Deepwater Habitats of the United States" (Cowardin et al. 1979). In this classification system, wetland habitats are divided into five major systems including: (1) Marine, (2) Estuarine, (3) Lacustrine, (4) Palustrine, and (5) Riverine. Each of these systems is further divided into subsystems, classes, and subclasses. Vegetative communities were inventoried to assess the dominant plant species in each of four vegetative layers: trees, saplings/shrubs, herbs, and woody vines. The wetland indicator status for each of the dominant species was obtained using the 2023 National Wetland Plant List (USACE 2023). The wetland soil indicators were obtained using the Munsell soil-color chart (Munsell Color 2009) and the hydric soil field indicators (USDA, NRCS 2010). The wetland boundary and sampling points were identified and surveyed using a handheld Global Positioning System (GPS) unit and mapped with Geographical Information System (GIS) software. Stantec collected data and completed relevant assessment forms, which included USACE Wetland Determination Forms (WDF). Datasheets are provided in **Appendix B**.

3.2 STREAM DELINEATION

Streams that demonstrated a continuously defined channel (bed and bank), ordinary high-water mark (OHWM), and the disturbance of terrestrial vegetation were delineated within the Project area, per the protocols outlined in the USACE's Guidance on Ordinary High Water Mark Identification (Regulatory Guidance Letter, No. 05-05; USACE 2005). Delineated streams were classified as ephemeral, intermittent, or perennial per definitions in the 85 Federal Register 22250 (effective June 22, 2020). The centerline of each waterway, or both banks for streams 15 feet or wider, was identified and surveyed using a sub-meter accurate handheld GPS unit and mapped with GIS software. Potential waterways without a continuously defined channel (bed and bank), OHWM, or disturbance of terrestrial vegetation were considered upland drainage features.

The Strahler stream order categorizes river and stream networks based on the hierarchical arrangement of their tributaries. The system assigns an order of 1 to the smallest headwater streams, with higher orders resulting from the confluence of streams of equal or lower order. This hierarchical organization facilitates the study of river morphology, watershed management, and ecological processes. As Strahler outlined in his work in "Quantitative Analysis of Watershed Geomorphology" (1952), the stream order classification enables a systematic understanding of drainage



patterns and basin characteristics essential for effective water resource management and environmental conservation.

4.0 OVERVIEW OF PROJECT AREA

4.1 GEOLOGY AND TOPOGRAPHY

The Project lies within the western portion of the Mississippi Embayment physiographic province of Kentucky. This region is relatively flat laying and contains numerous lakes, swamps, sloughs, and ponds. The Cretaceous, Tertiary, and Quaternary sediment consist of unconsolidated gravel, silt, sand, and clays that have been deposited by the Mississippi River. (KGS 2012). The Mississippi Embayment is part of the Western Mesophytic forest region described by Braun (1950). In the eastern section of the Mississippian Plateau where the Project is located, the slopes contain beech- (Fagus) dominated mixed mesophytic forest with oak (Quercus), oak-hickory (Q.-Carya), and oak-chestnut (Q.-Castanea) forest types on the drier slopes and ridges.

4.2 CLIMATE

The average February, April, and October high temperatures in Metcalfe and Monroe counties are 49 degrees, 69 degrees, and 71 degrees Fahrenheit (F), respectively. The average daily low temperatures are 29 degrees, 45 degrees, and 47 degrees F, respectively. The annual high temperature for the city of Glasgow is 70 degrees F and the annual low temperature is 47 degrees F. Precipitation in Glasgow averages 53.86 inches per year. Most of the precipitation falls from March through July, with another spike in precipitation amounts in December (U.S. Climate Data 2024). Glasgow experienced approximately 5.2 inches of precipitation during September 2021 in the month leading up to the October 2021 fieldwork and an additional 2.0 inches throughout the October 4-10, 2021, field effort (U.S. Climate Data 2024). During March 2022 in the month leading up to the April 2022 field effort, Glasgow experienced approximately 3.8 inches of precipitation and an additional 0.6 inches of precipitation during the April 18-27, 2022, field effort (U.S. Climate Data 2024). Glasgow experienced approximately 3.8 inches of precipitation during the month of February in 2024, with approximately 0.5 inches of this precipitation occurring during the February 26-29, 2024, survey period (U.S. Climate Data 2024).

4.3 SOILS

The Soil Survey of Metcalfe and Monroe counties, Kentucky (USDA 1972) and the NRCS Web Soil Survey were consulted to assess soil types within the Project area (USDA, NRCS 2010). A copy of the soil map is included in **Appendix A, Figures 3-6**. Soils within the Project area with respective acreages and percentages are included in **Appendix C, Table 1**. Three soil series listed within the Project area were considered hydric, as shown in **Appendix C, Table 1**.



5.0 RESULTS

5.1 EXISTING CONDITIONS

Upland habitat within the Project area consists of forested areas, agricultural fields including pastureland and some row crops, and existing farm roads. The agricultural fields appear to have been previously planted with soybeans (*Glycine max*) and corn (*Zea Mays*). Forest areas were dominated by southern red oak (*Quercus falcata*), red maple (*Acer rubrum*), tulip tree (*Liriodendron tulipifera*), and black cherry (*Prunus serotina*). Dominant herbaceous plants in the forested areas included common chickweed (*Stellaria media*), bristly buttercup (*Ranunculus hispidus*), Japanese honeysuckle (*Lonicera japonica*), and white clover (*Trifolium repens*).

5.2 WETLAND HABITAT

There were 66 wetlands identified within the Project area, totaling 28.34 acres (**Appendix A, Figures 8-49**). Of the 66 wetlands, 20 are considered RPWs, totaling 13.60 acres. The jurisdictional wetlands include a mixture of Cowardin classes: 6.71 acres of palustrine emergent (PEM), 4.83 acres of palustrine shrub-scrub (PSS), and 2.06 acres of palustrine forested (PFO). Of the 66 wetlands, 46 were considered NRPW, totaling 14.74 acres. These NRPW wetlands include a mixture of Cowardin classes: 13.56 acres of PEM and 1.18 acres of PFO. **Appendix B** contains the WDF for the wetlands identified within the Project area. NRPW wetland features on the site were typically found in upland forested areas and agricultural fields with no continuous surface connection to other jurisdictional features. Representative photographs of the wetlands are provided in **Appendix D**. The wetlands are summarized in **Appendix C**, **Table 2**.

5.2.1 RPWs

Of the 66 wetlands delineated within the Project, 20 are considered adjacent RPWs. Under the current amended 2023 rule regulatory regime, wetlands are considered to be adjacent RPWs when they have a direct continuous surface connection (CSC) to waters that meet the requirements of paragraphs (a)(1) through (a)(5) of the amended 2023 rule regulations. This connection can be through a stream of any flow type or a discrete feature like a non-jurisdictional ditch, upland swale, pipe, or culvert. The 20 wetlands considered to be RPWs within the Project all had direct CSCs to streams that are considered adjacent RPWs and meet one or more categories of WOTUS under the amended 2023 rule regulatory regime conforming with the Supreme Court's decision in *Sackett v. EPA*.

5.2.2 **NRPWs**

Of the 66 wetlands delineated within the Project, 46 are considered non-adjacent NRPWs. These wetlands are depressions surrounded entirely by uplands with no CSC to any downstream waters identified in paragraphs (a)(1) through (a)(5) of the amended 2023 rule regulations. These wetlands do not meet one or more categories of WOTUS under the amended 2023 rule regulatory regime conforming with the Supreme Court's decision in *Sackett v. EPA*. These wetlands also do not meet any of the interstate commerce factors in paragraph (a)(1)(iii) of the amended 2023 rule regulations. Therefore, these 46 wetlands are not considered to be WOTUS.



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5.3 STREAM HABITAT

362 stream segments were identified within the Project area, totaling 99,574.58 linear feet (**Appendix A, Figures 8-49**). Additionally, two segments of non-jurisdictional upland drainage features were also identified in the Project area, totaling 1,104.09 linear feet. These upland drainage features lacked the required features to be considered a stream and in general did not have a defined bed and bank and/or ordinary highwater mark throughout the reach but were mapped for siting purposes for solar panel placement. These features form on the landscape seasonally after crop harvest due to the slope of the landscape and bare soil after harvest. Of the 362 stream segments, 102 were considered to be RPWs and totaled 48,161.19 linear feet. The table of stream determination datasheets is found in **Appendix B**. The remaining 260 stream segments were considered to be NRPWs and totaled 51,413.39 linear feet. Representative photographs of the streams are provided in **Appendix D**. The streams are summarized in **Appendix C**, **Table 3**.

5.3.1 **RPWs**

Of the 362 stream segments identified within the Project area, 102 were considered to be RPW. Under the current regulatory regime stream features are considered to be RPWs when they have a direct CSC to waters that meet the requirements of paragraphs (a)(1) through (a)(5) of the amended 2023 rule regulations. This connection can be through a stream of any flow type or a discrete feature like a non-jurisdictional ditch, upland swale, pipe, or culvert.

35 perennial stream segments were delineated within the Project, totaling 33,391.63 linear feet. 31 of the delineated perennial stream segments, totaling 29,740.75 linear feet, are considered to be RPWs due to their direct CSC to streams that meet one or more categories of WOTUS under the amended 2023 rule regulatory regime conforming with the Supreme Court's decision in *Sackett v. EPA*.

99 intermittent stream segments were delineated within the Project, totaling 29,709.95 linear feet. Of these 99 intermittent stream segments, 60 are considered to be RPWs for a total length of 16,545.01 linear feet. These stream segments are considered to be RPWs due to their direct CSC to streams that meet one or more categories of WOTUS under the amended 2023 rule regulatory regime conforming with the Supreme Court's decision in *Sackett v. EPA*.

228 ephemeral stream segments were delineated within the Project, totaling 36,473.02 linear feet. Of these 228 ephemeral stream segments, 11 were considered RPW for a total length of 1,875.48 linear feet. Taking into account Strahler stream order across the site, each of these RPW ephemeral stream segments were less than 50% of the length of the total stream reach, with the remaining lengths of these streams having an intermittent flow that was greater than 50% of the length of the total reach. The ephemeral lengths were therefore considered to be absorbed as RPW due to being <50% of the length of the stream reach which was dominated by an intermittent flow regime that had a direct CSC to streams that meet one or more categories of WOTUS under the amended 2023 rule regulatory regime, conforming with the Supreme Court's decision in *Sackett v. EPA*.

5.3.2 NRPWs

Of the 35 perennial stream segments delineated within the Project, four are considered to be NRPW, for a total of 3,650.89 linear feet. Due to onsite karst topography these segments were considered to be NRPWs because they terminated into sinkholes, causing their flow to go subsurface with no obvious nearby outlet. Therefore, these



segments did not have any direct CSC to streams that meet one or more categories of WOTUS under the amended 2023 rule regulatory regime conforming with the Supreme Court's decision in *Sackett v. EPA* and were therefore considered to be isolated without any apparent surface connections.

Of the 99 intermittent stream segments delineated within the Project, 39 are considered to be NRPW, for a total length of 13,164.95 linear feet. All 39 of these stream segments are considered to be NRPW because they are isolated with no direct CSC to streams that meet one or more categories of WOTUS under the amended 2023 rule regulatory regime conforming with the Supreme Court's decision in *Sackett v. EPA*.

Of the 228 ephemeral stream segments delineated within the Project, 217 are considered to be NRPW, for a total length of 34,597.55 linear feet. These ephemeral segments are generally headwater streams or erosional features that are isolated with no direct CSC to streams that meet one or more categories of WOTUS under the amended 2023 rule regulatory regime conforming with the Supreme Court's decision in *Sackett v. EPA*.

Both of the upland drainage features delineated within the Project are considered to be NRPW, for a total length of 1,104.09 linear feet. These upland drainage features lacked the required features to be considered a stream and in general did not have a defined bed and bank and/or ordinary highwater mark throughout the reach. These upland drainage features are both isolated with no direct CSC to streams that meet one or more categories of WOTUS under the amended 2023 rule regulatory regime conforming with the Supreme Court's decision in *Sackett v. EPA*.

5.4 OPEN WATER HABITAT

22 open waters were identified within the Project, totaling 8.53 acres (**Appendix A, Figures 8-49**). Of the 22 open water features, five were considered to be RPW, for a total of 0.92 acres. The remaining 17 open water features were considered to be NRPW, totaling 7.61 acres. Representative photographs of the open waters are provided in **Appendix D**. The open waters are summarized in **Appendix C, Table 4**.

5.4.1 RPWs

Of the 22 open waters delineated within the Project, five are considered to be RPW. Under the current regulatory regime open water features are considered to be RPWs when they have a direct CSC to waters that meet the requirements of paragraphs (a)(1) through (a)(5) of the amended 2023 rule regulations. This connection can be through a stream of any flow type or a discrete feature like a non-jurisdictional ditch, upland swale, pipe, or culvert. The five open water features considered to be RPW within the Project have a direct CSC to streams that are considered RPWs and meet one or more categories of WOTUS under the amended 2023 rule regulatory regime conforming with the Supreme Court's decision in *Sackett v. EPA*.

5.4.2 NRPWs

Of the 22 open water features delineated within the Project, 17 are considered to be NRPWs. These open water features are likely man-made farm ponds surrounded entirely by uplands with no CSC to any downstream waters identified in paragraphs (a)(1) through (a)(5) of the amended 2023 rule regulations. These open water features do not meet one or more categories of WOTUS under the amended 2023 rule regulatory regime conforming with the Supreme Court's decision in *Sackett v. EPA*. These open waters also do not meet any of the interstate commerce



factors in paragraph (a)(1)(iii) of the amended 2023 rule regulations. Therefore, these 17 open water features are not considered to be WOTUS.

6.0 CONCLUSION

Stantec conducted a delineation of potential WOTUS within the Project area located in Metcalfe County and Monroe County, Kentucky. The purpose and objective of the wetland and waterbody delineation was to identify the extent and location of potential jurisdictional wetlands and waterbodies within the Project area.

20 RPW wetlands, totaling 13.60 acres, 102 RPW stream segments, totaling 48,161.19 linear feet, and 5 RPW open water features, totaling 0.92 acres, were identified.

Stantec's opinion regarding the presence/absence of jurisdictional WOTUS and isolated features is a preliminary determination. Only the USACE/EPA can provide an official determination of the presence and extent of jurisdictional WOTUS. Wetlands that are considered WOTUS are subject to regulation under Section 404 of the CWA and the jurisdictional regulatory authority lies with the USACE with confirmation by EPA. Stantec recommends that Summer Shade Solar LLC contact the USACE Louisville District for final jurisdictional review and concurrence with Stantec's opinion regarding the presence/absence of WOTUS within the Project area prior to construction activities associated with this Project.



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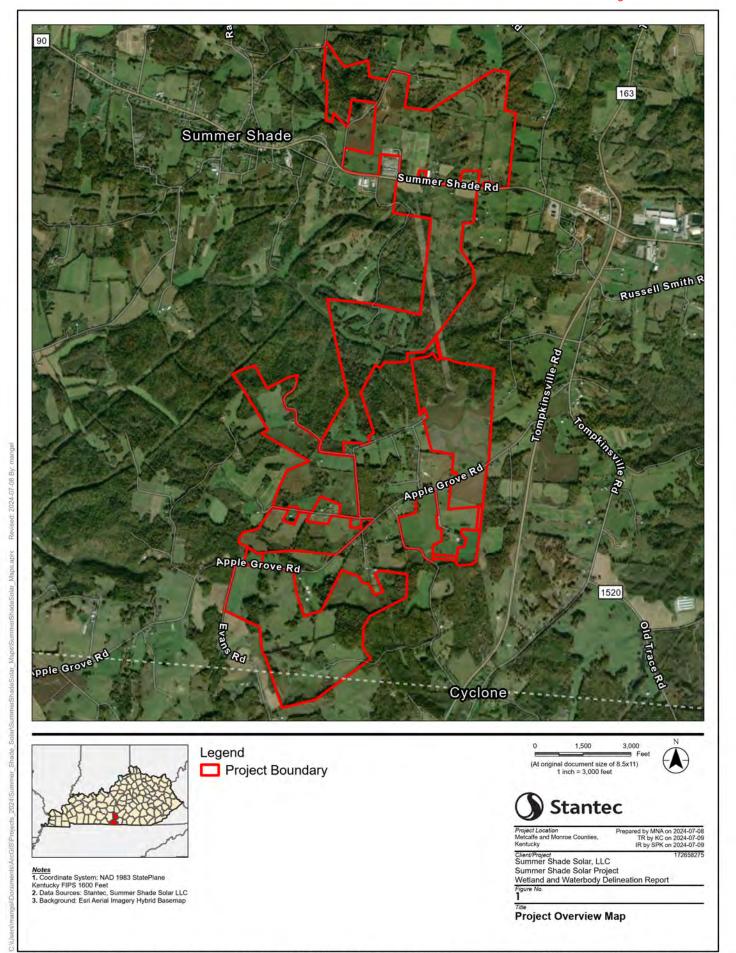
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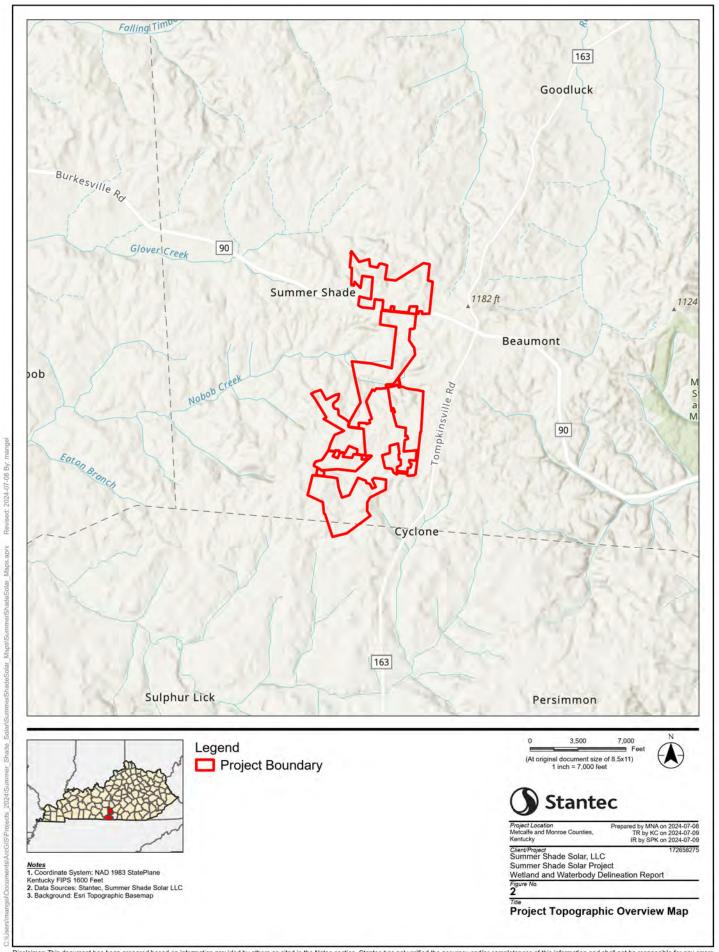


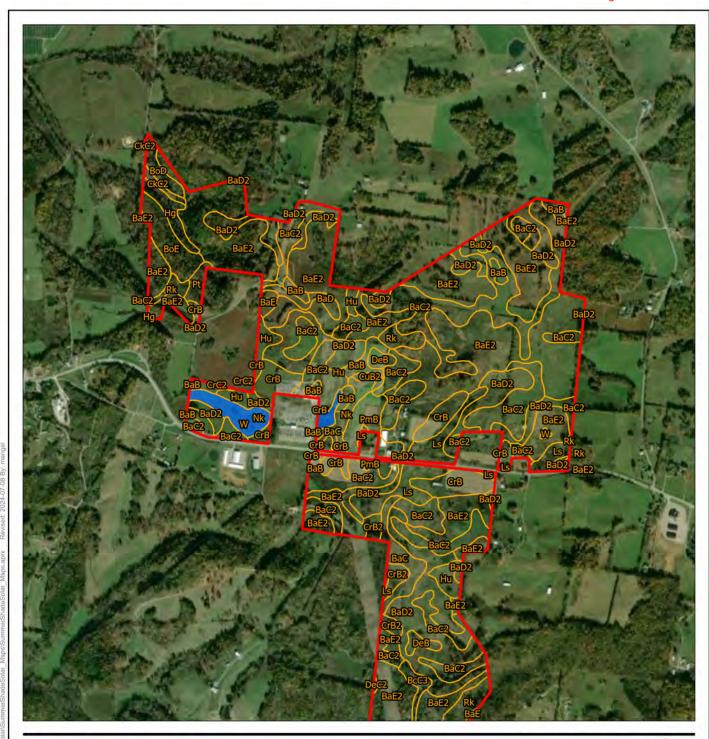
APPENDICES

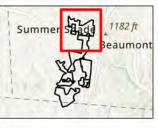
Appendix A FIGURES











Legend

Project Boundary

NRCS Soil Series

Hydric Soils

(At original document size of 8.5x11) 1 inch = 1,300 feet Stantec

Client/Project Summer Shade Solar, LLC

Summer Shade Solar Project Wetland and Waterbody Delineation Report

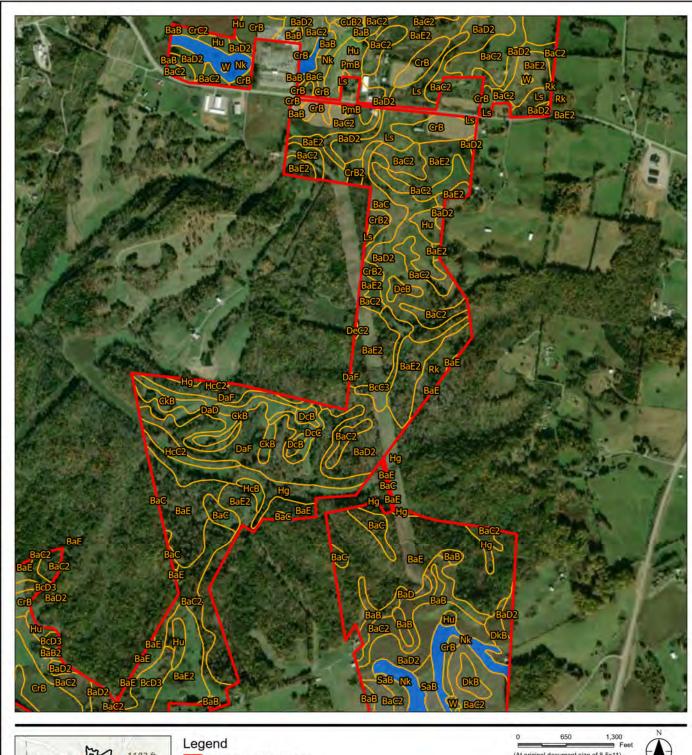
Natural Resources Conservation Service (NRCS) Soil Survey Data Map

1,300

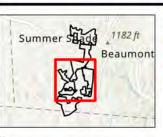
red by MNA on 2024-07-08 TR by KC on 2024-07-09 IR by SPK on 2024-07-09

Notes
1. Coordinate System: NAD 1983 StatePlane
Kentucky FIPS 1600 Feet
2. Data Sources: Stantec, Summer Shade Solar
LLC, NRCS
3. Background: Esri Aerial Imagery Basemap

red by MNA on 2024-07-08 TR by KC on 2024-07-09 IR by SPK on 2024-07-09







Legend

Project Boundary

NRCS Soil Series

Hydric Soils

1,300 (At original document size of 8.5x11) 1 inch = 1,300 feet





red by MNA on 2024-07-08 TR by KC on 2024-07-09 IR by SPK on 2024-07-09

Client/Project Summer Shade Solar, LLC

Summer Shade Solar Project Wetland and Waterbody Delineation Report

Natural Resources Conservation Service (NRCS) Soil Survey Data Map

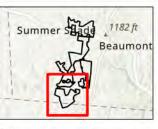
Notes

1. Coordinate System: NAD 1983 StatePlane
Kentucky FIPS 1600 Feet

2. Data Sources: Stantec, Summer Shade Solar
LLC, NRCS

3. Background: Esri Aerial Imagery Basemap





Legend

Project Boundary

NRCS Soil Series

Hydric Soils

(At original document size of 8.5x11) 1 inch = 1,300 feet



1,300



red by MNA on 2024-07-08 TR by KC on 2024-07-09 IR by SPK on 2024-07-09

Client/Project Summer Shade Solar, LLC

Summer Shade Solar Project Wetland and Waterbody Delineation Report

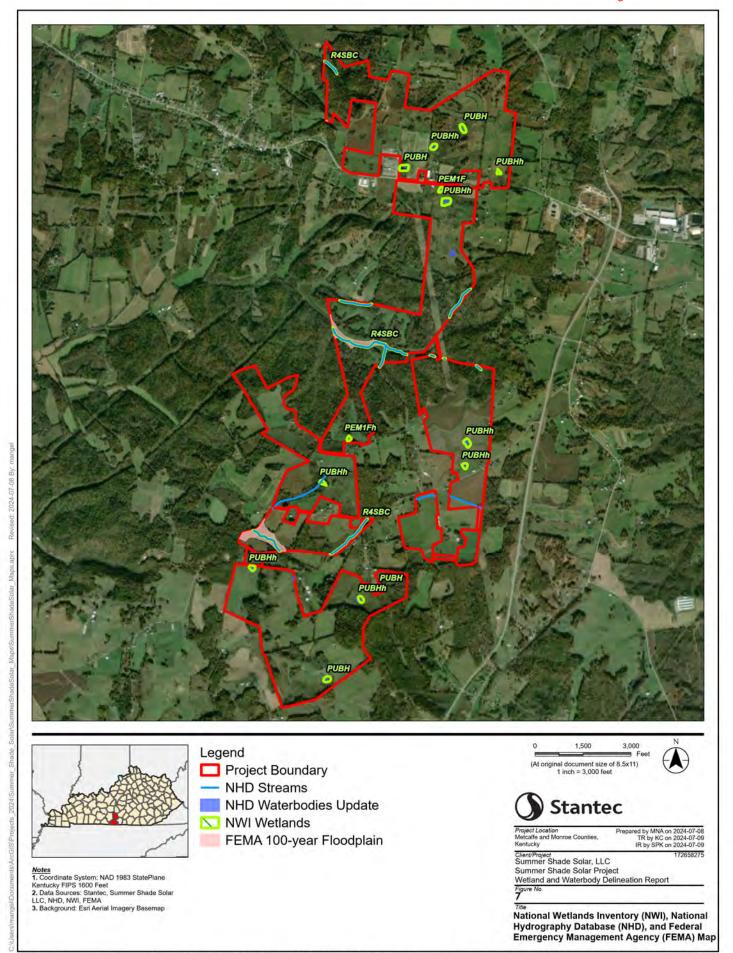
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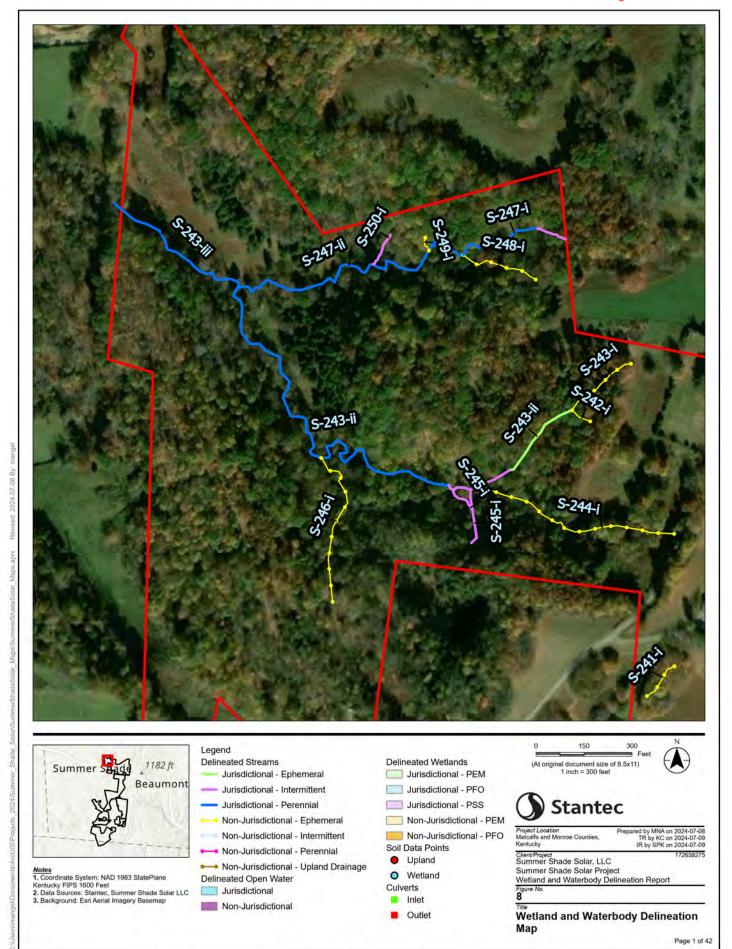
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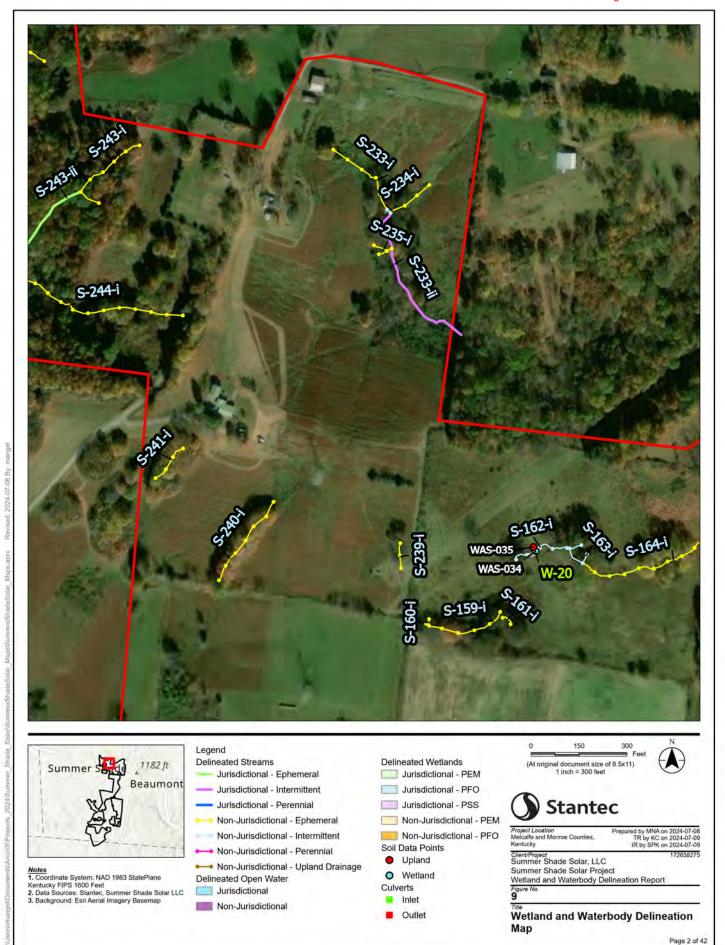
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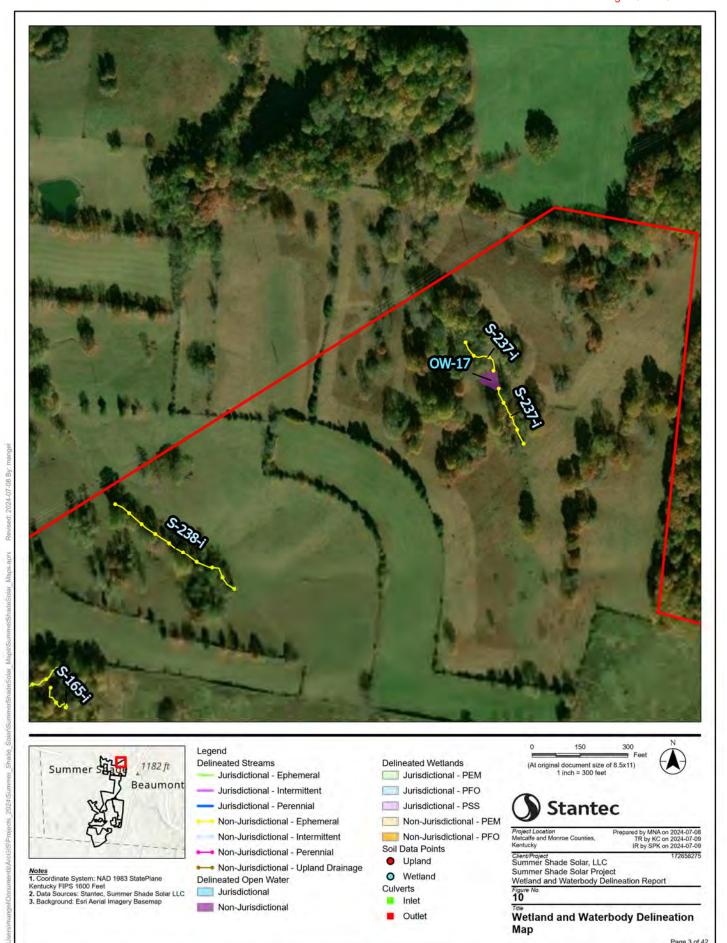
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LLC, NRCS

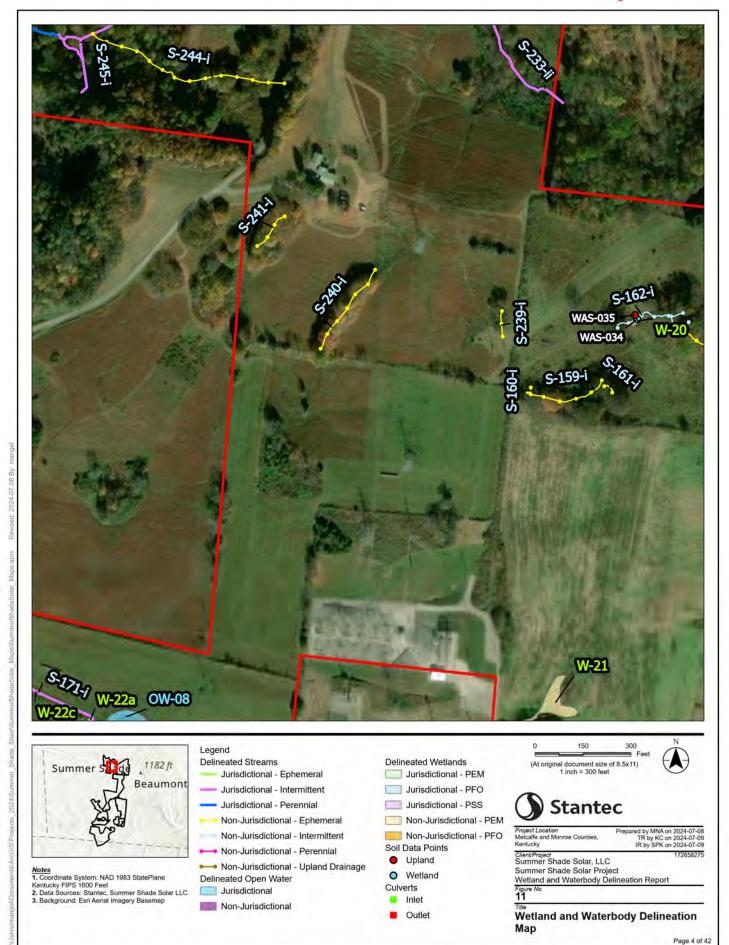
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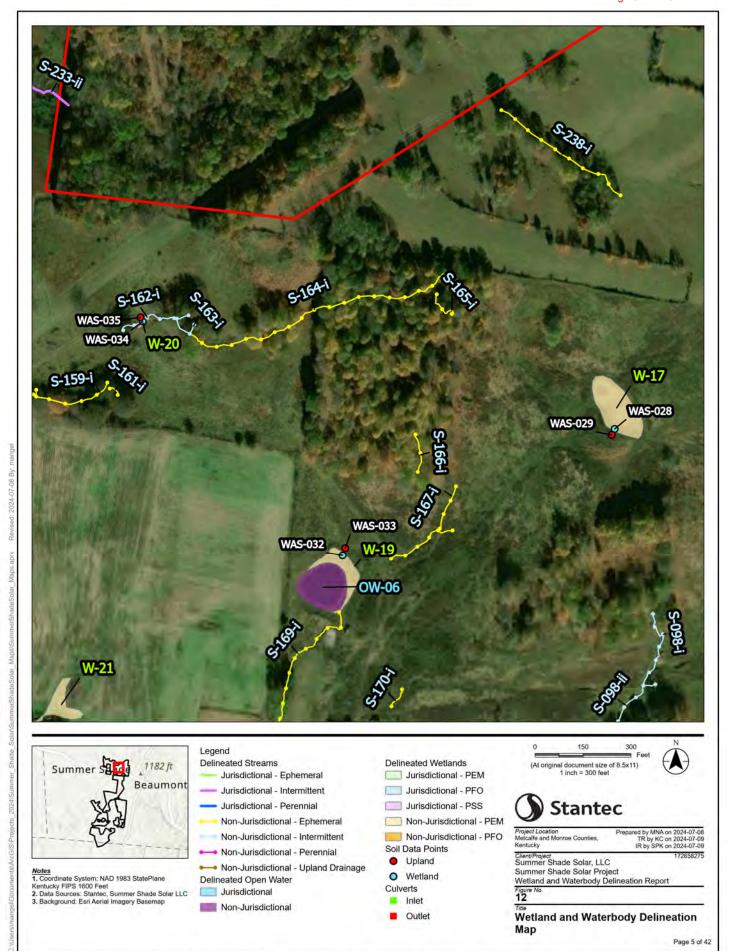


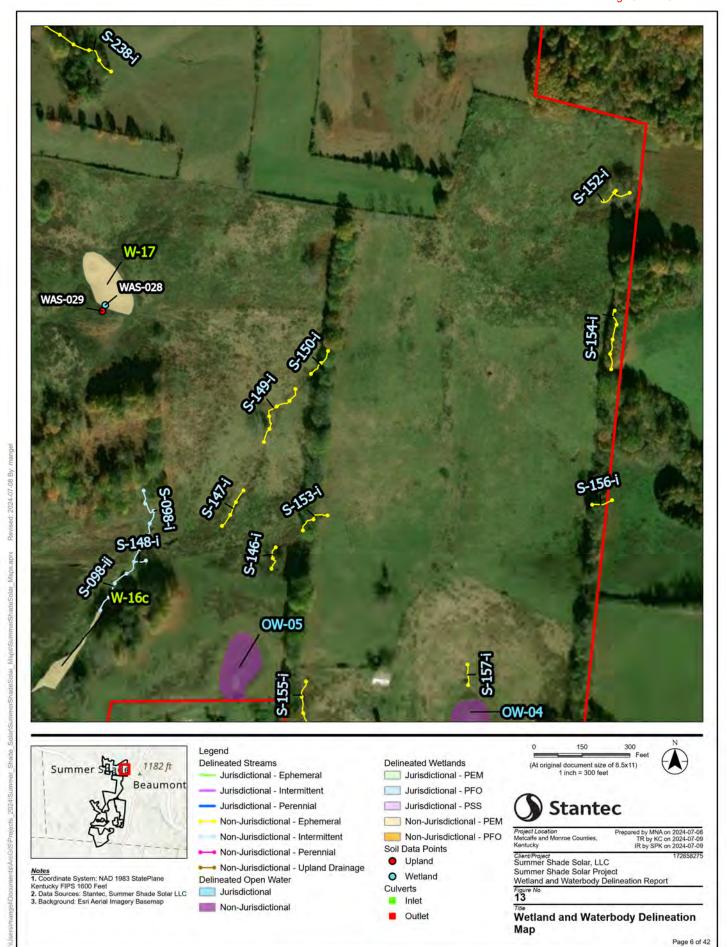


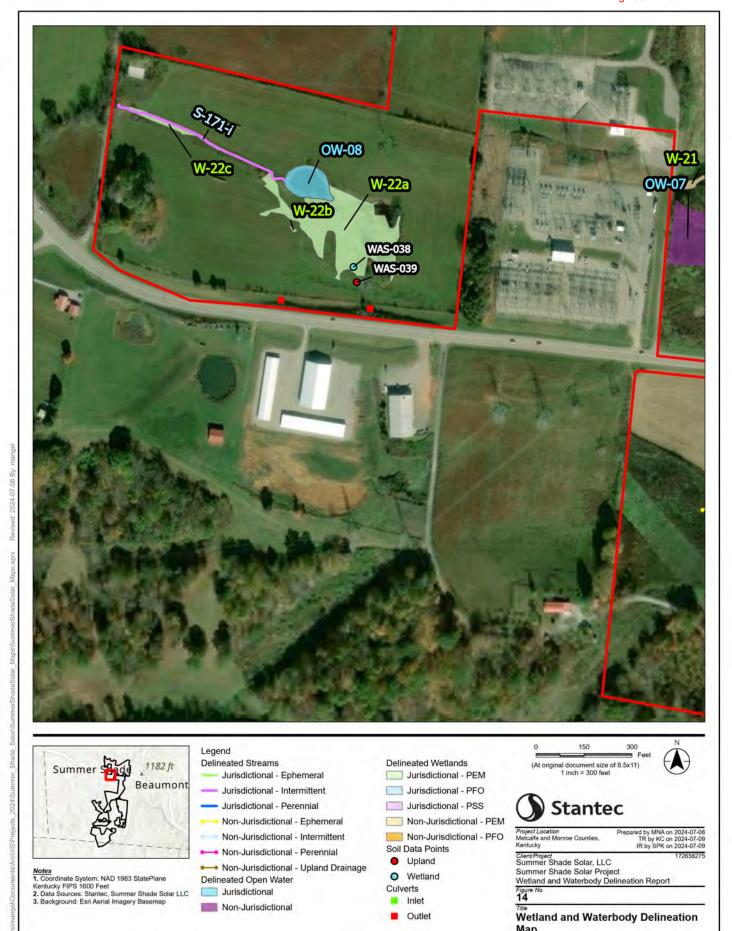




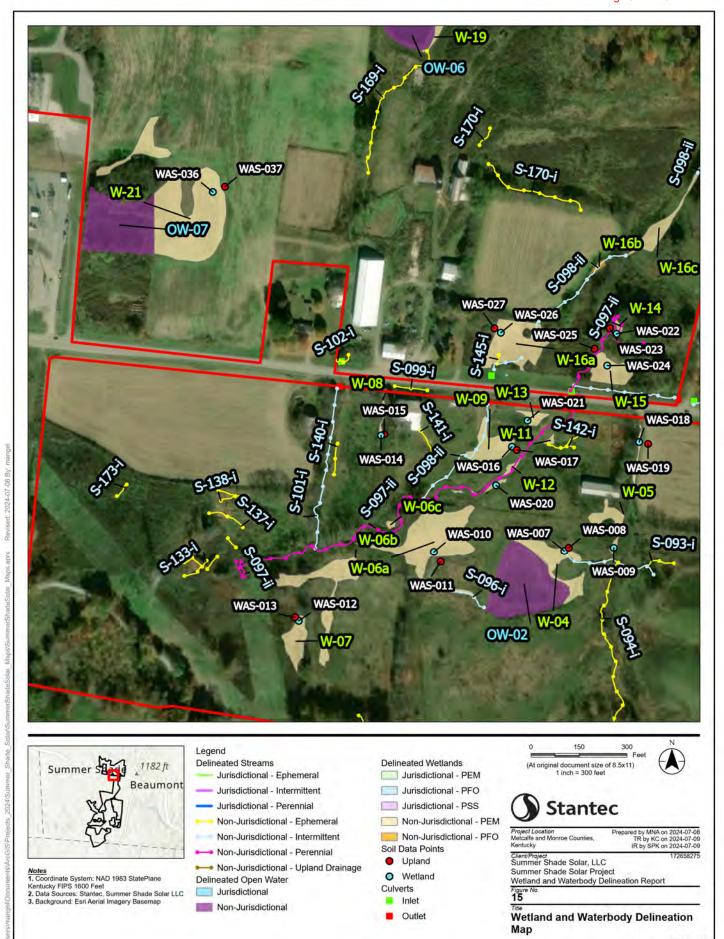


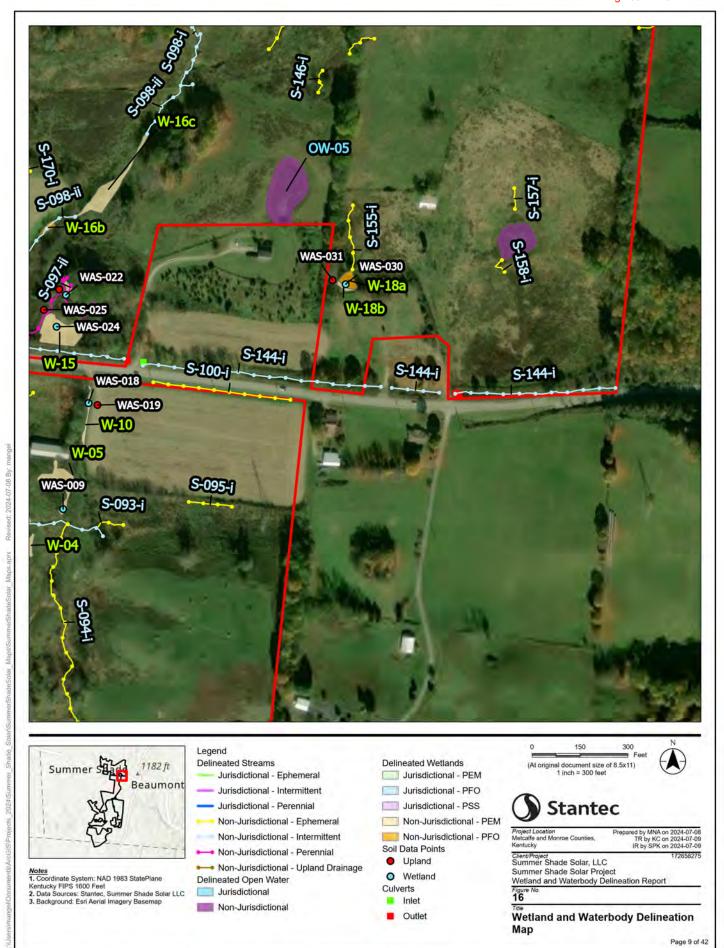


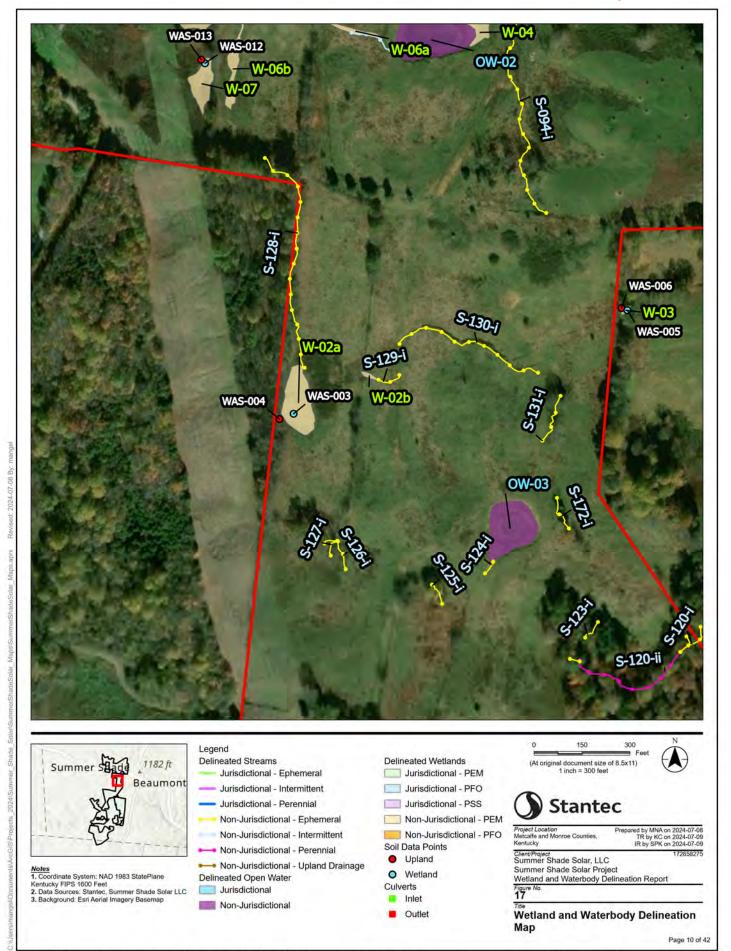


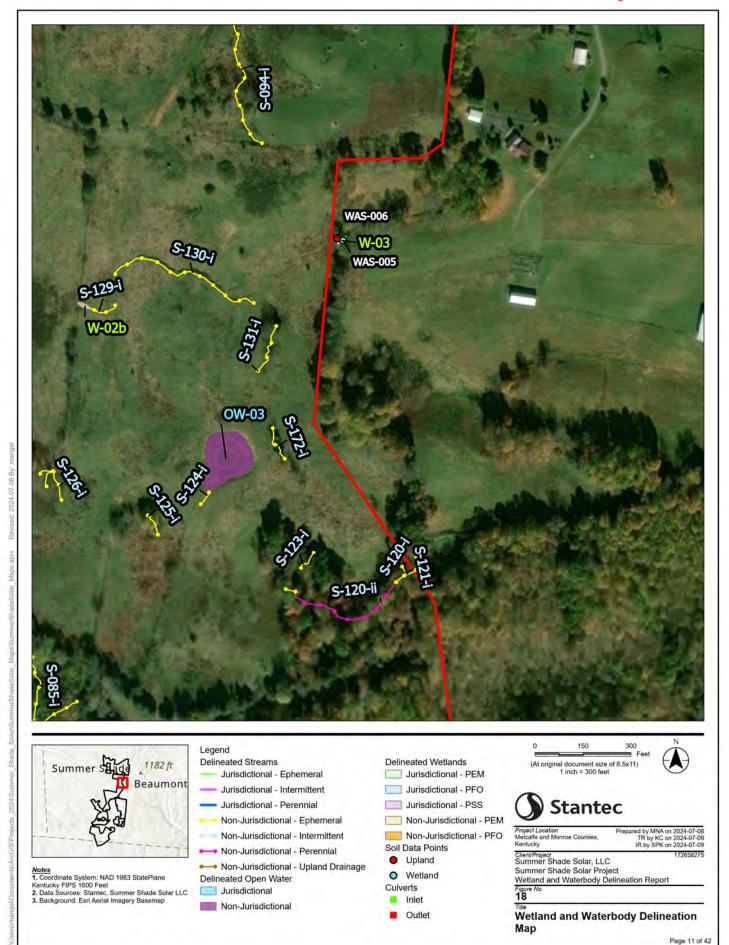


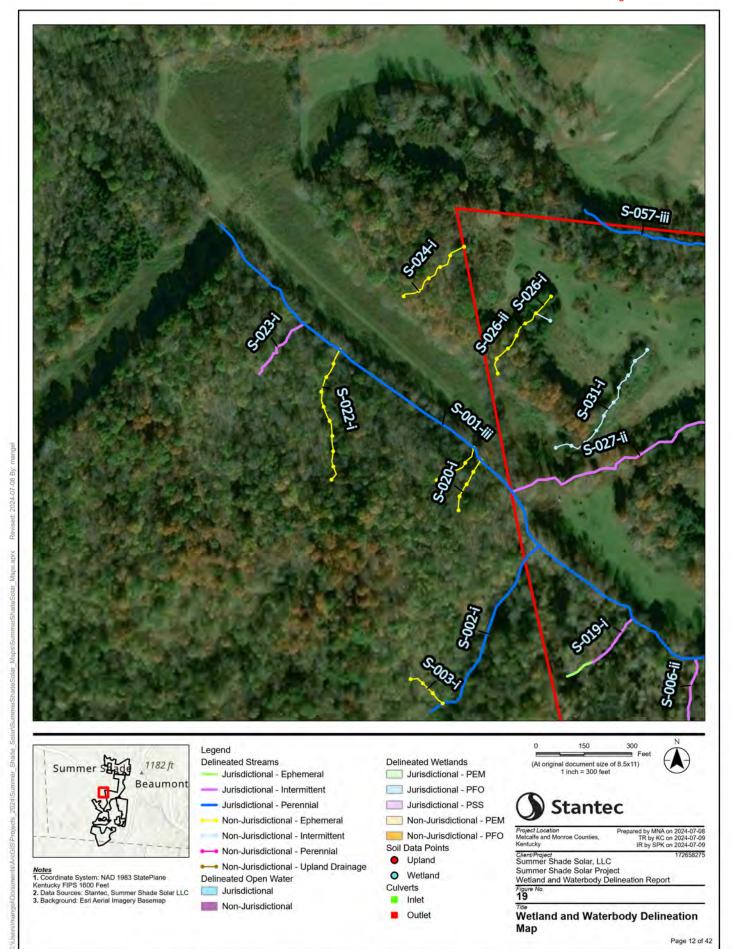
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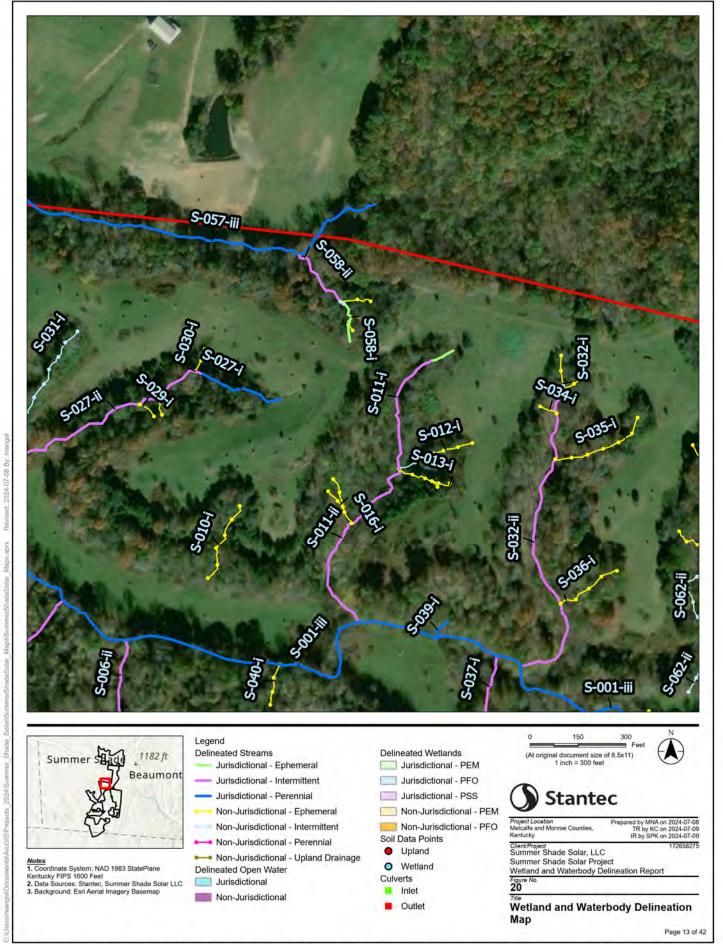


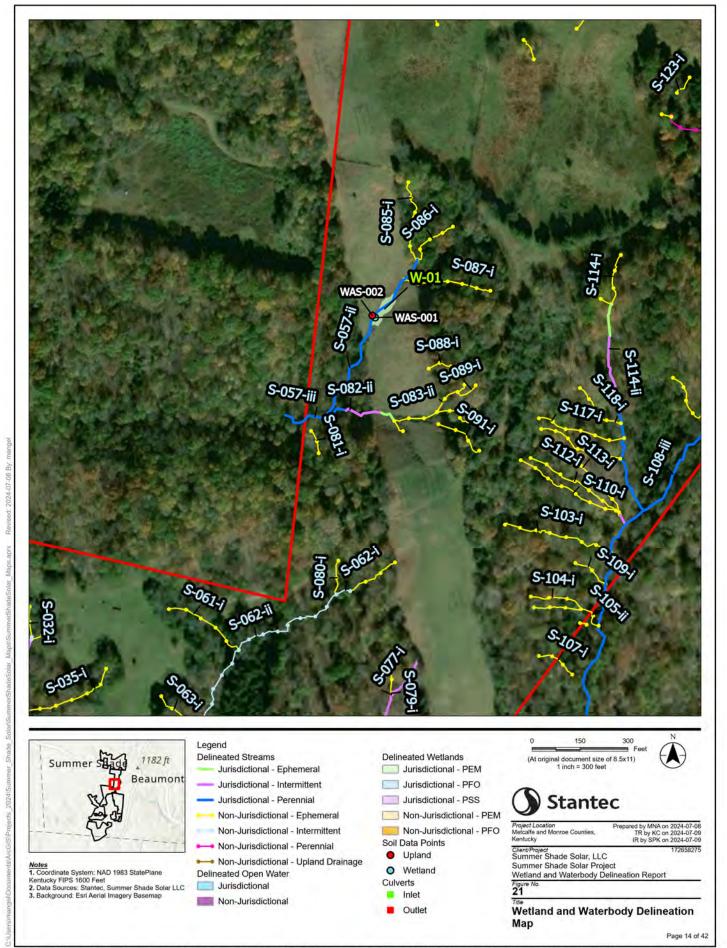


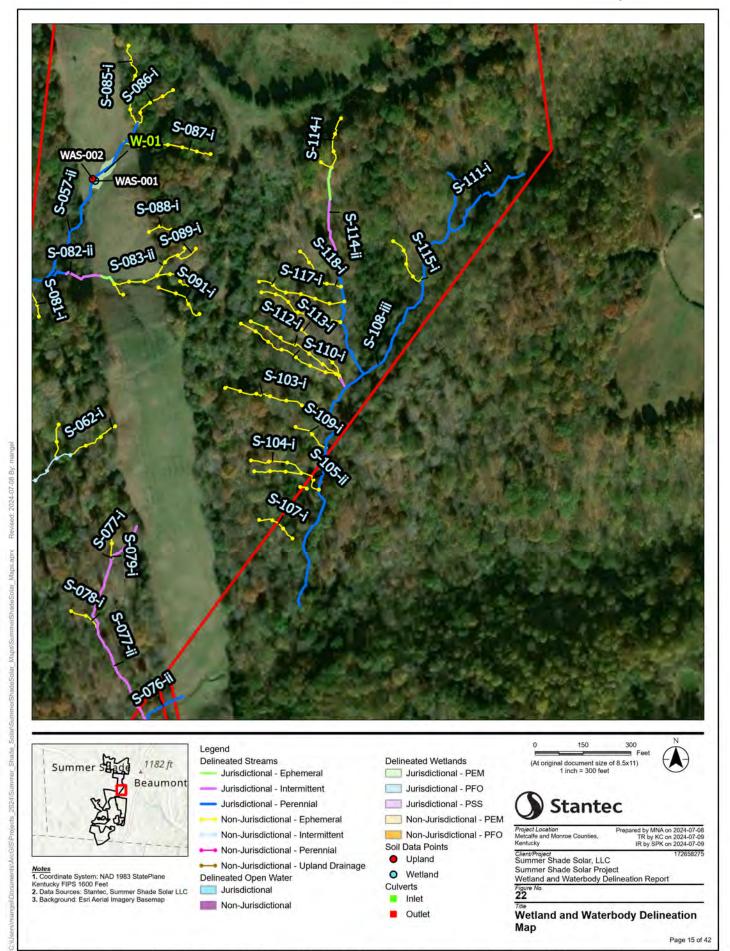


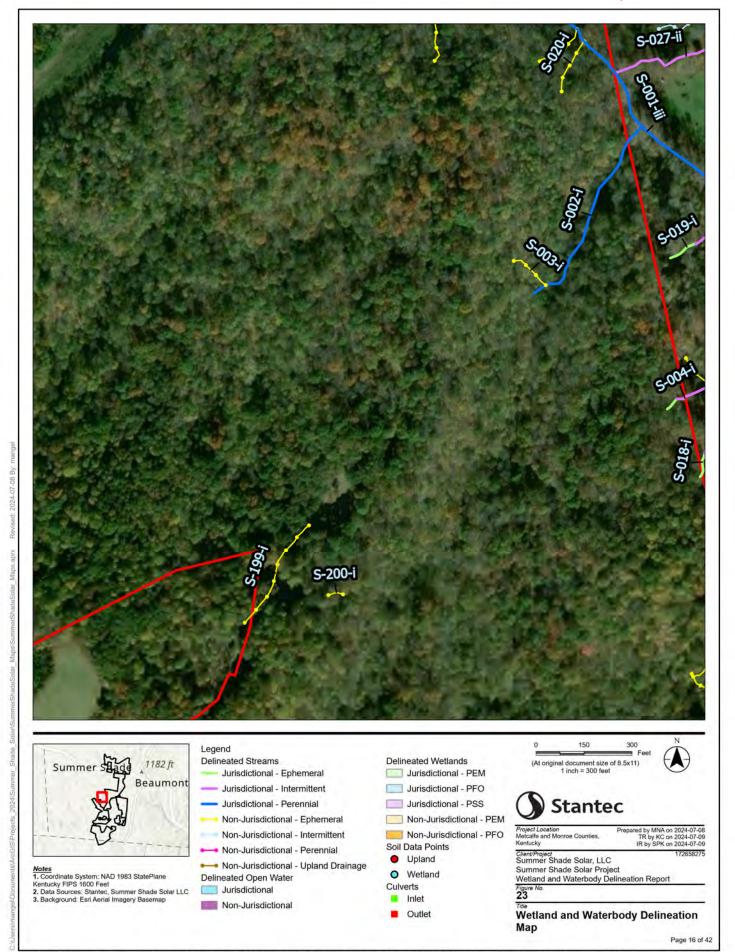


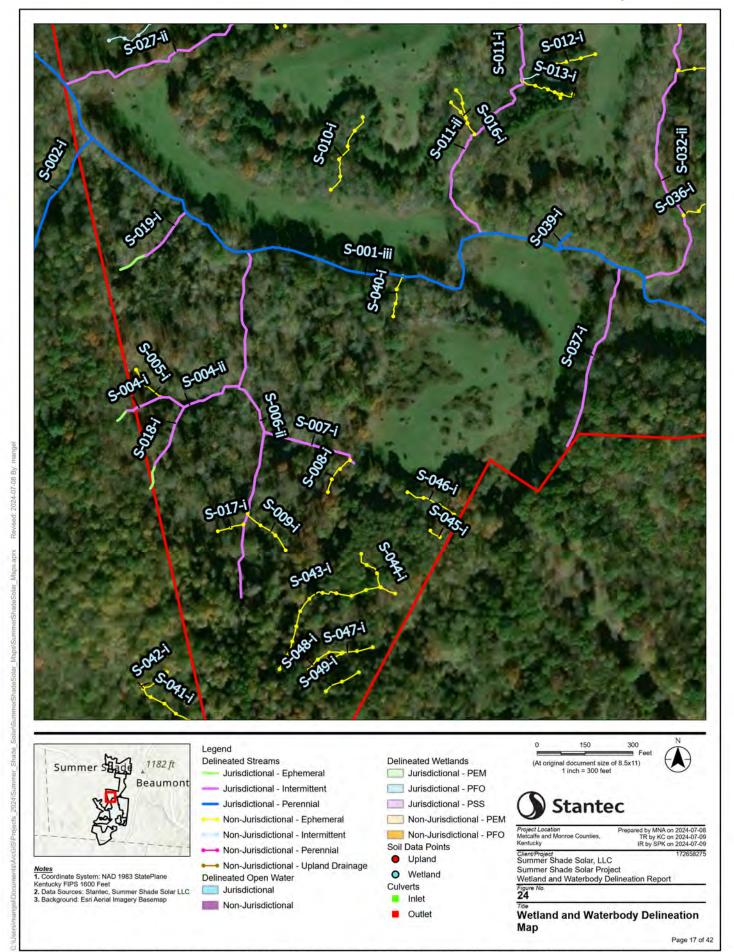


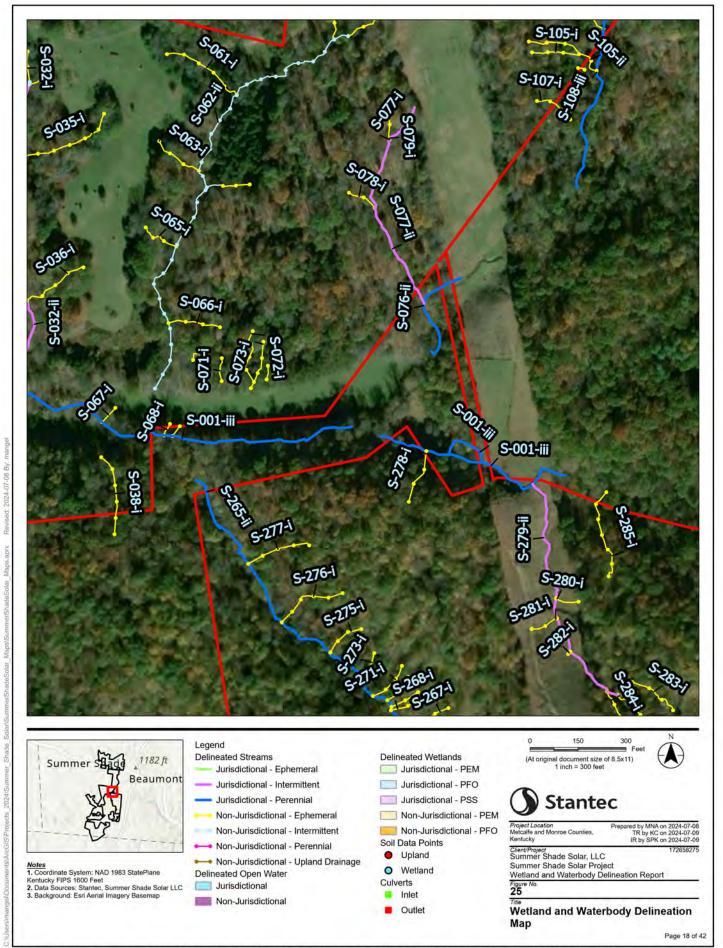


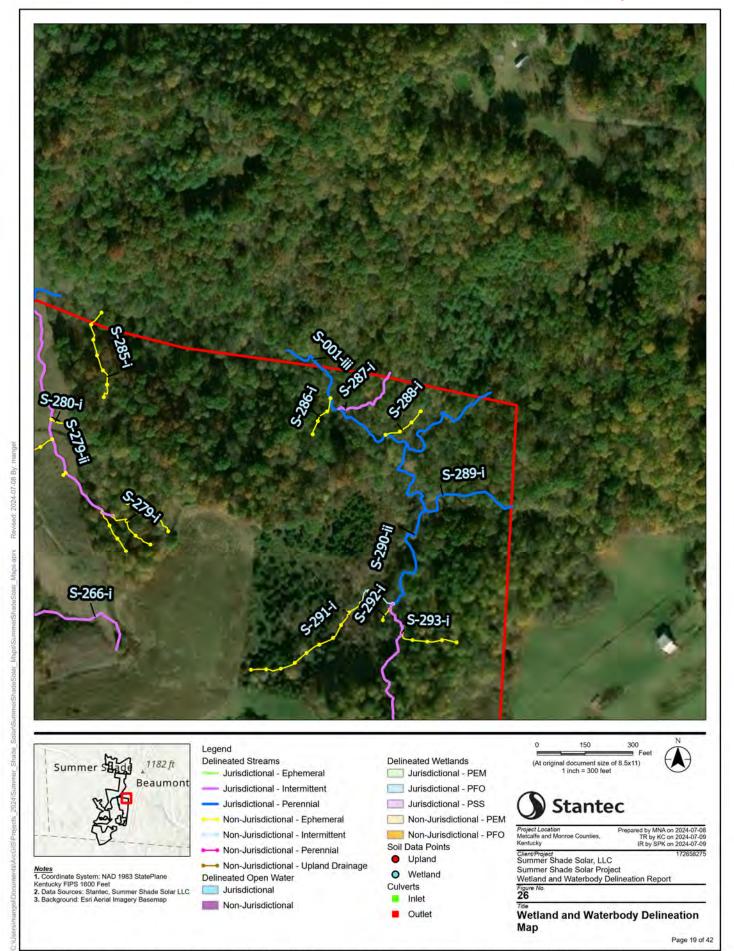


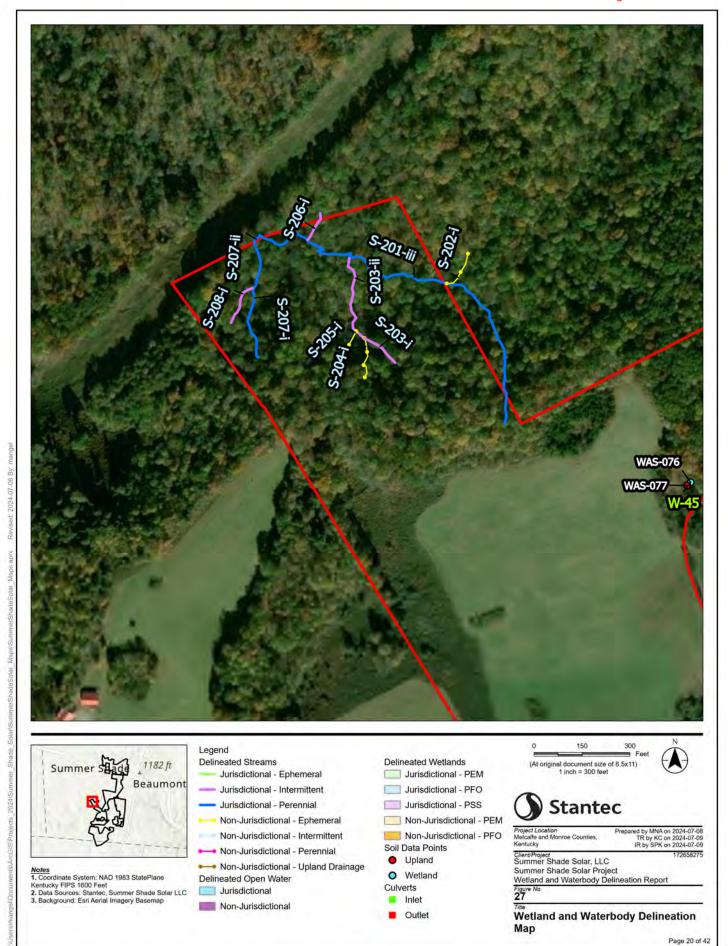


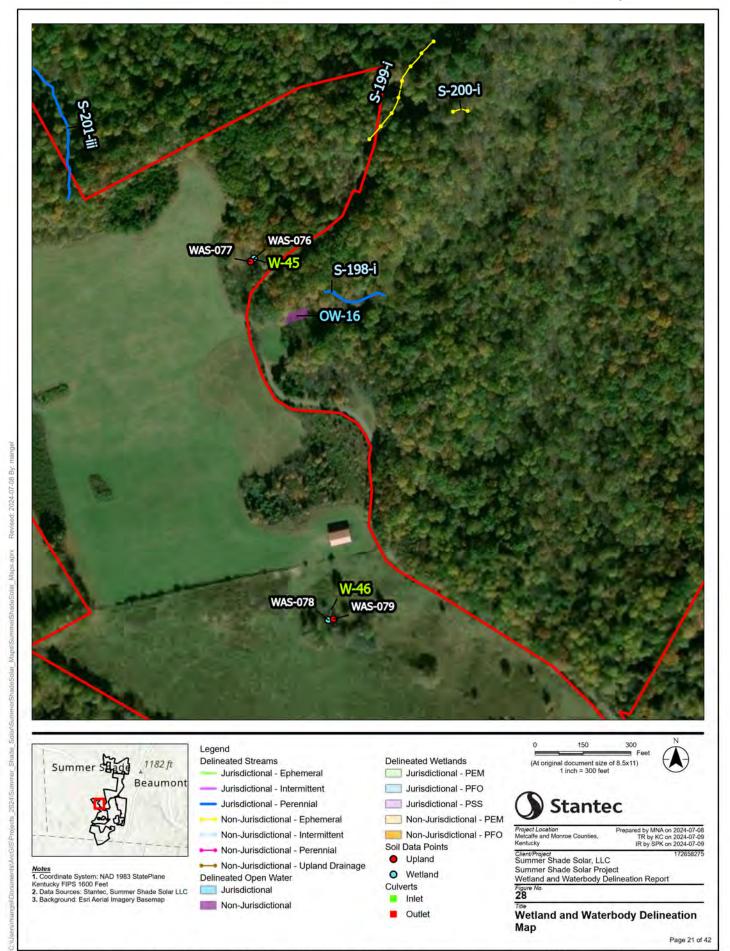


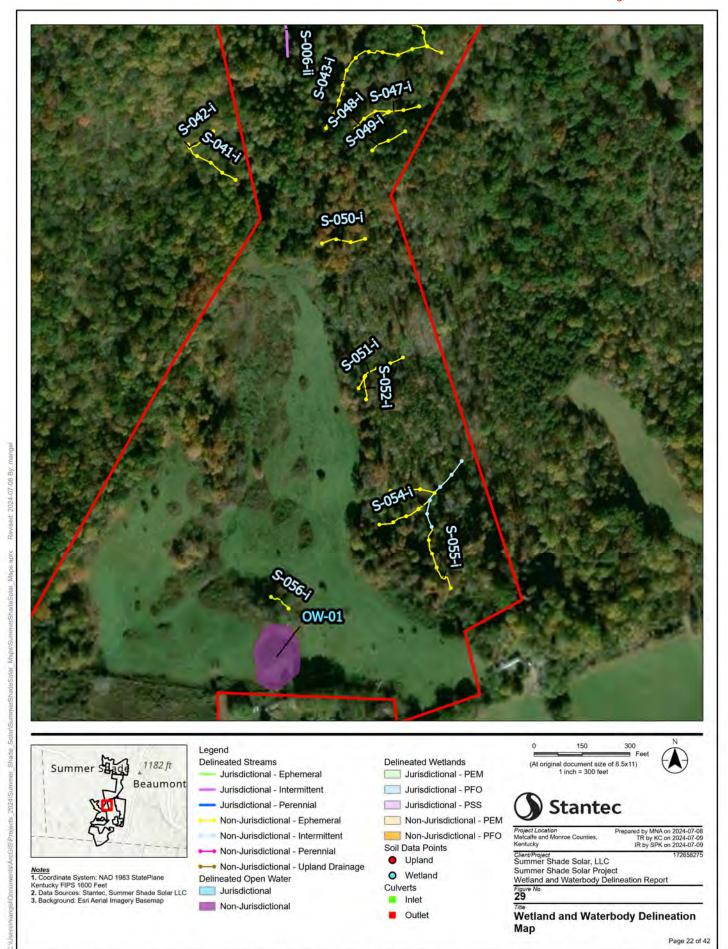


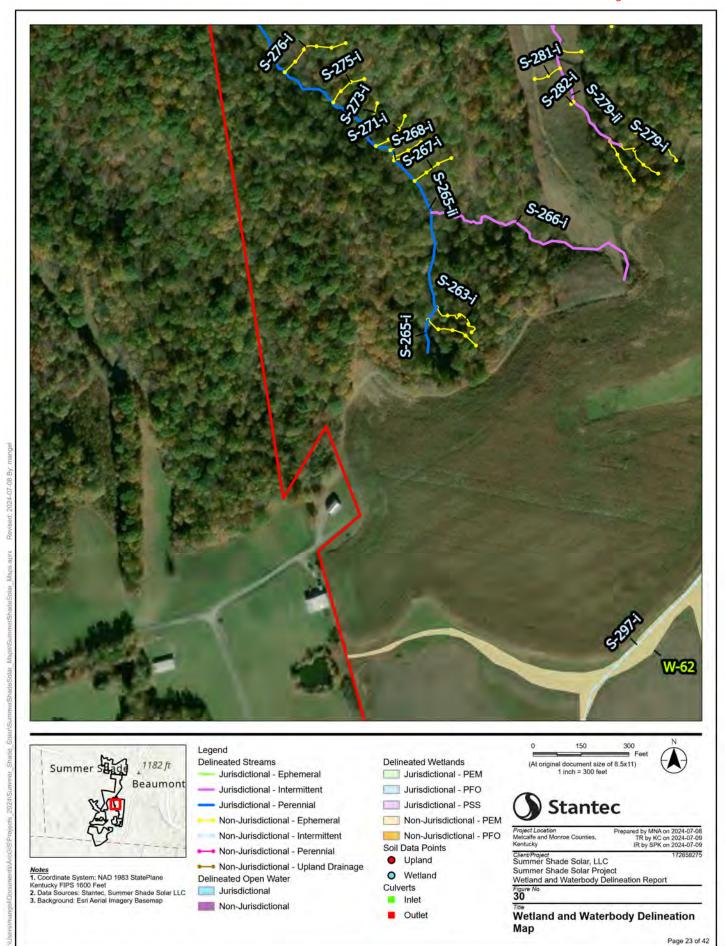


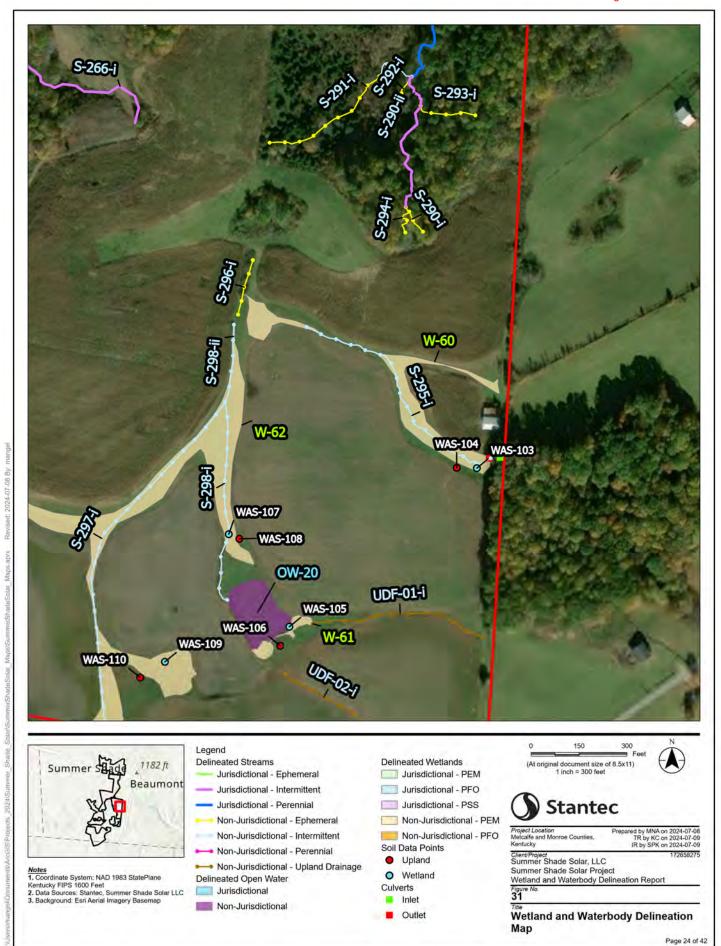


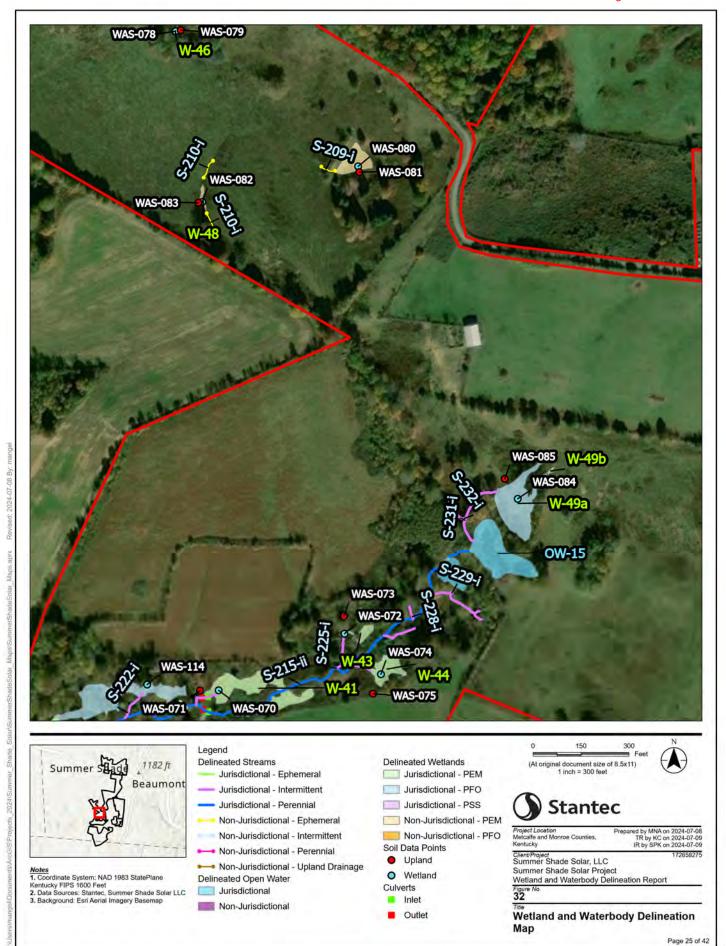


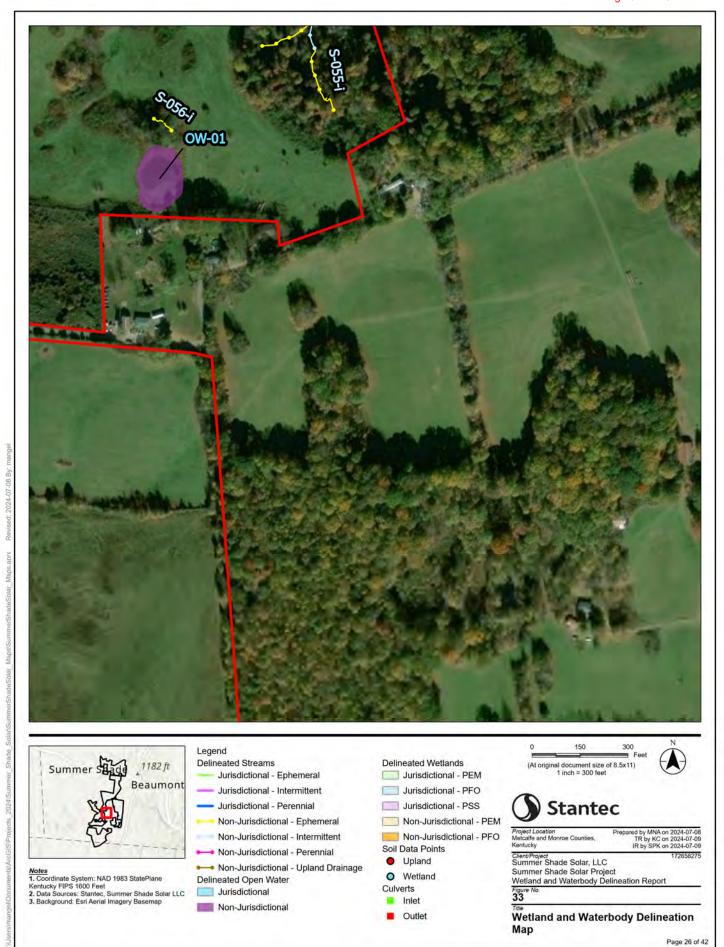




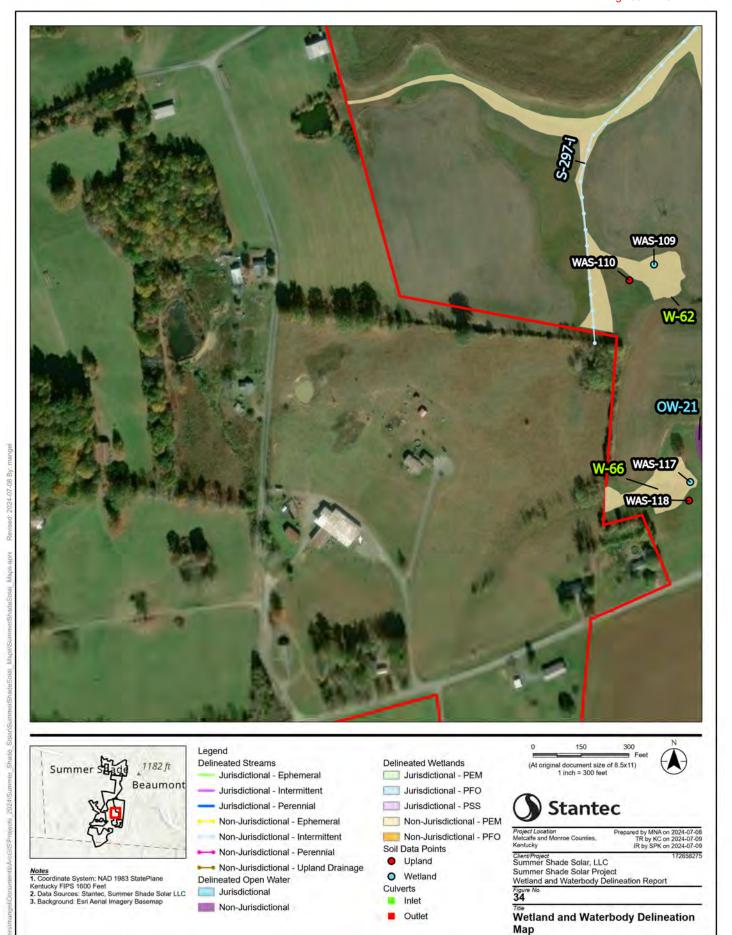


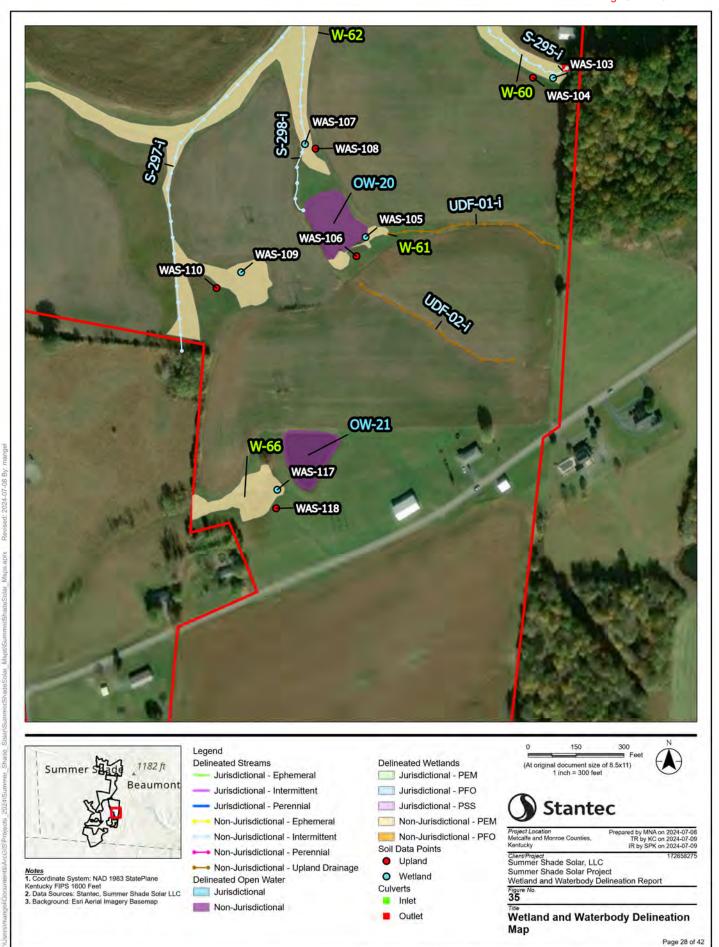


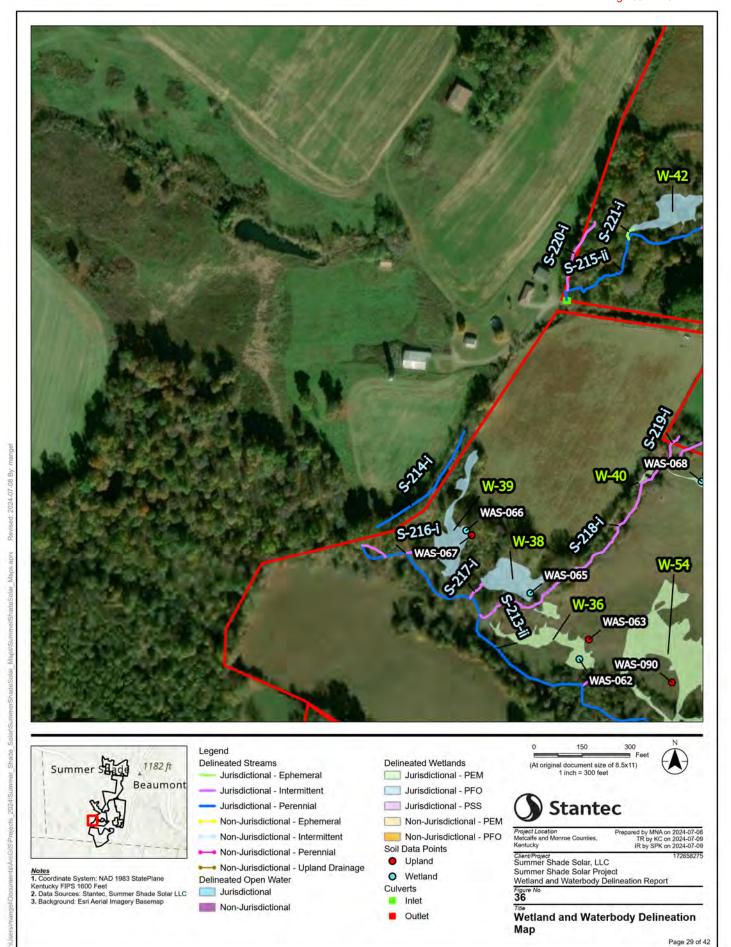


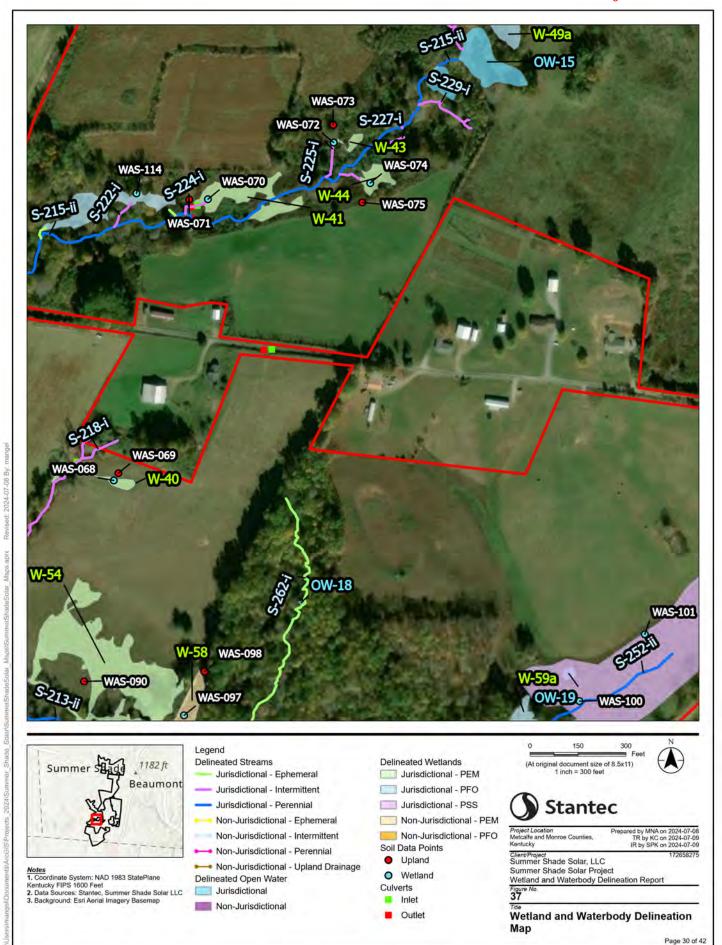


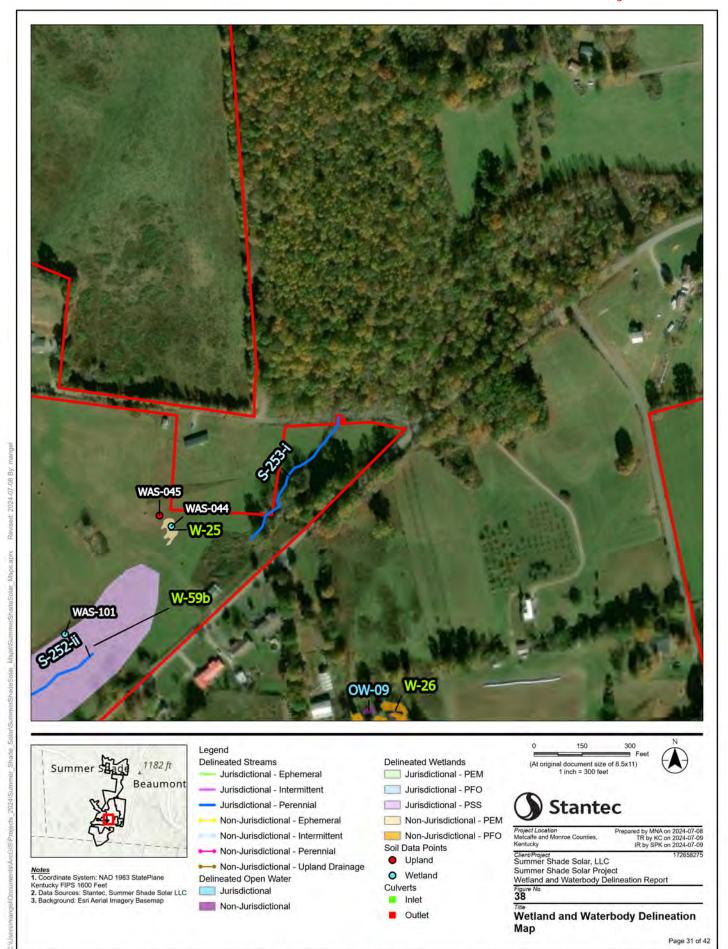
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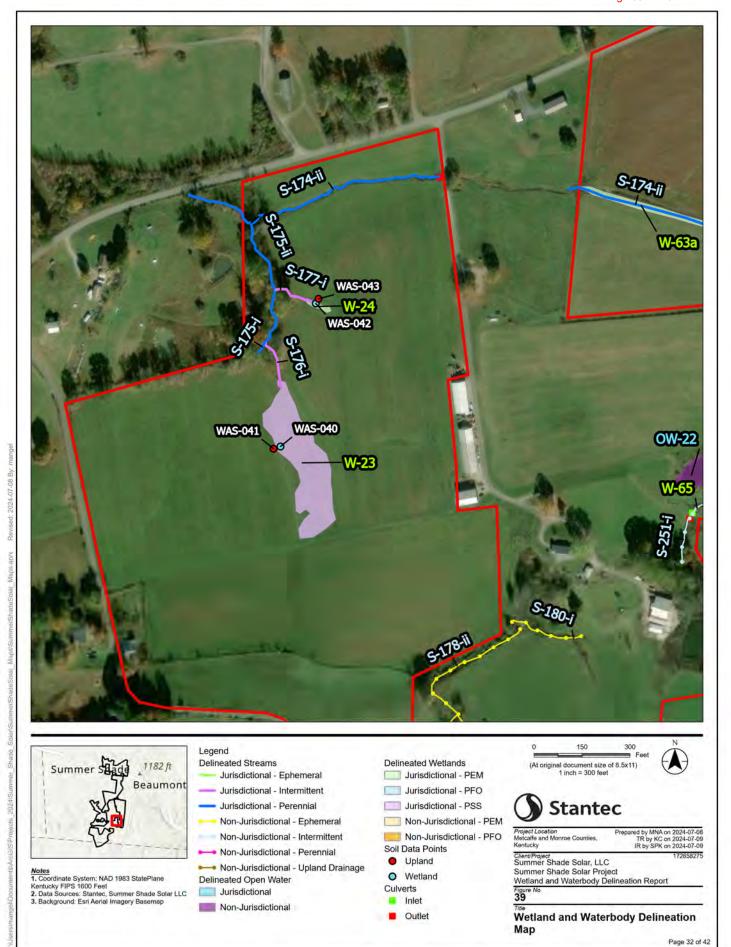


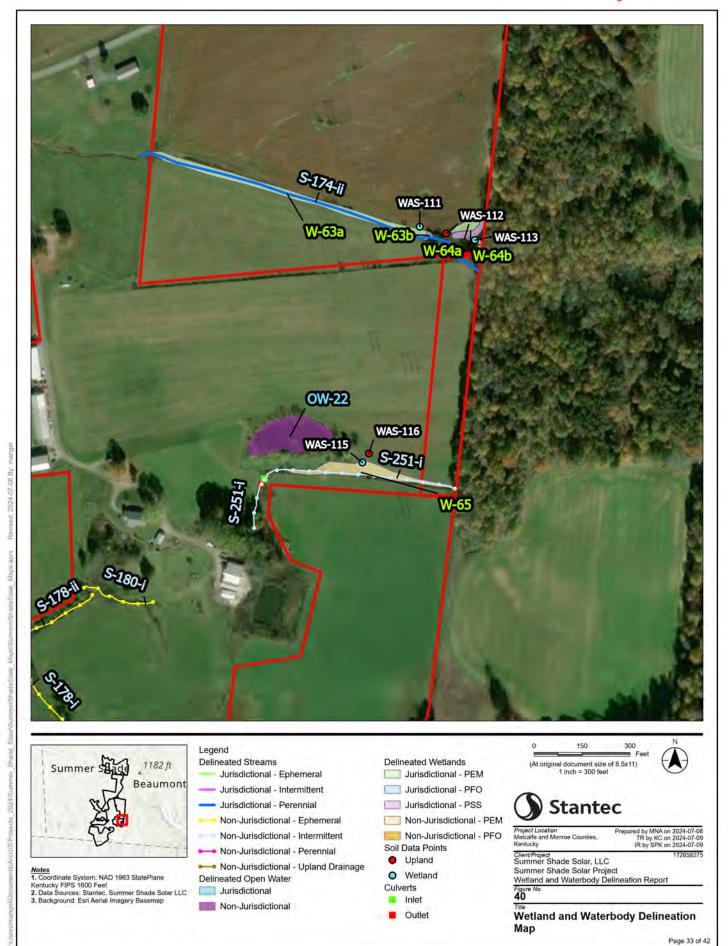


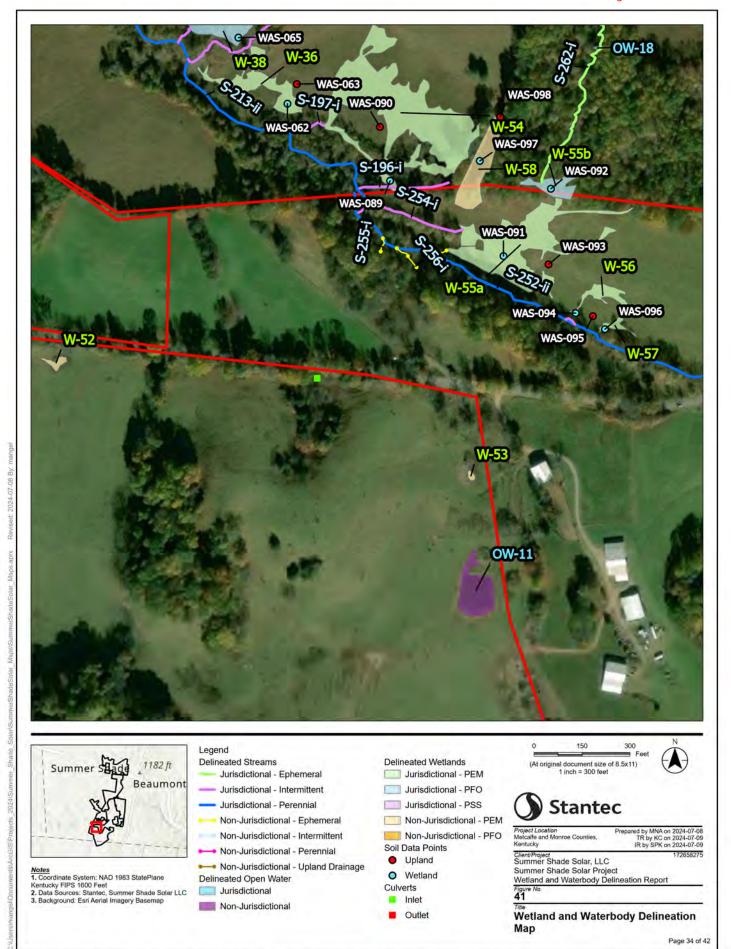


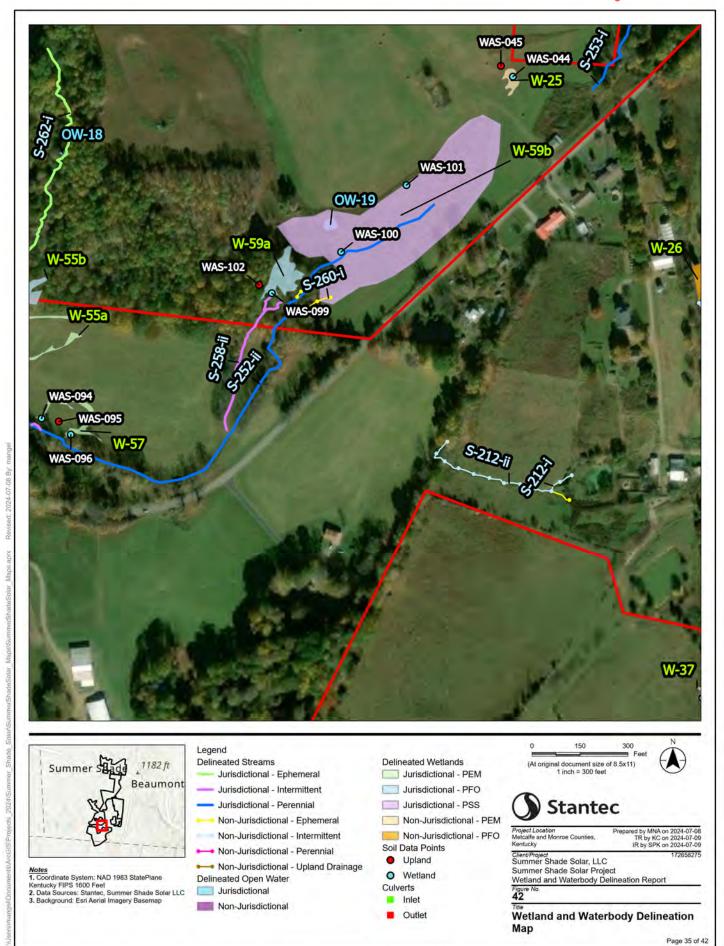


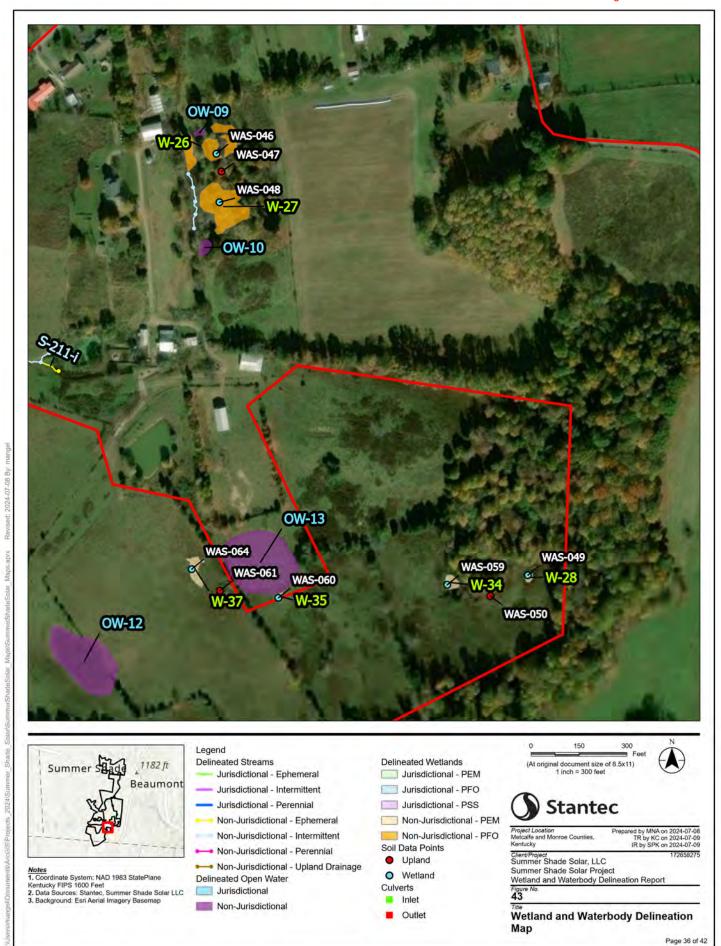


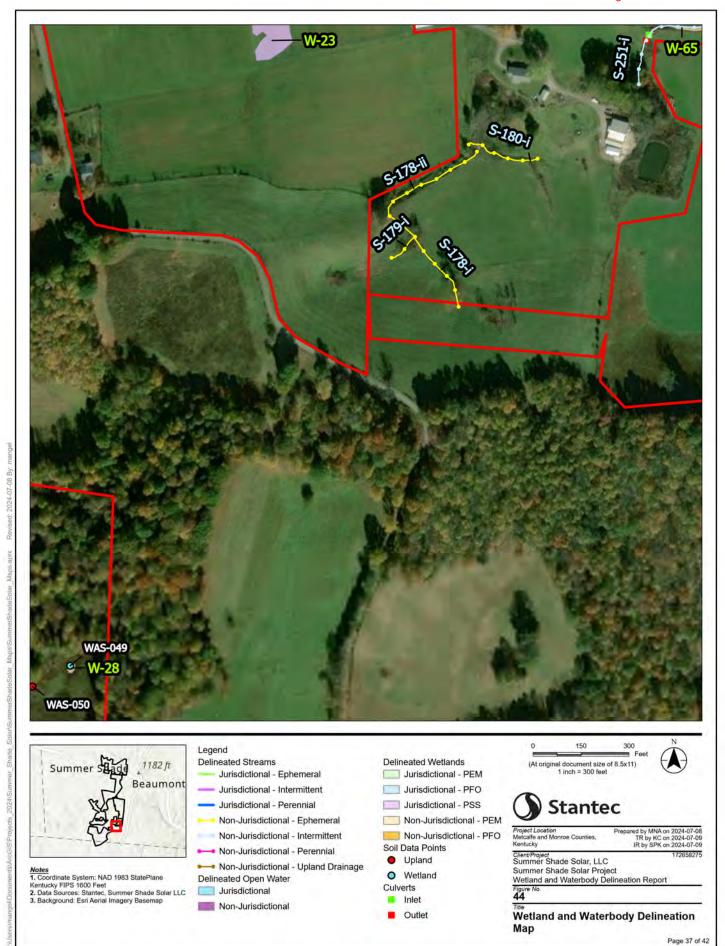


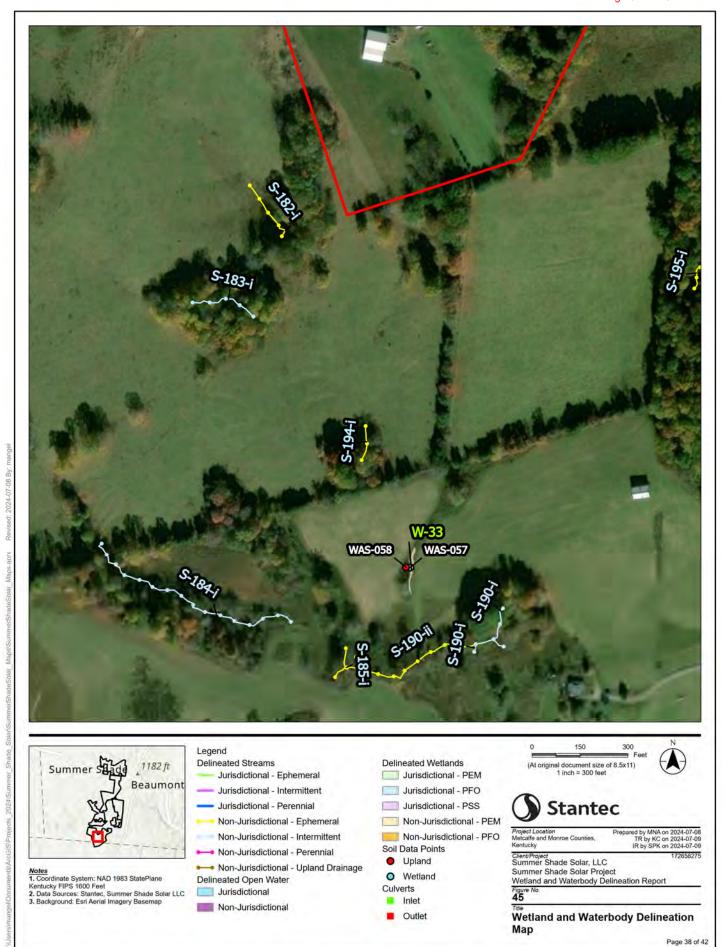


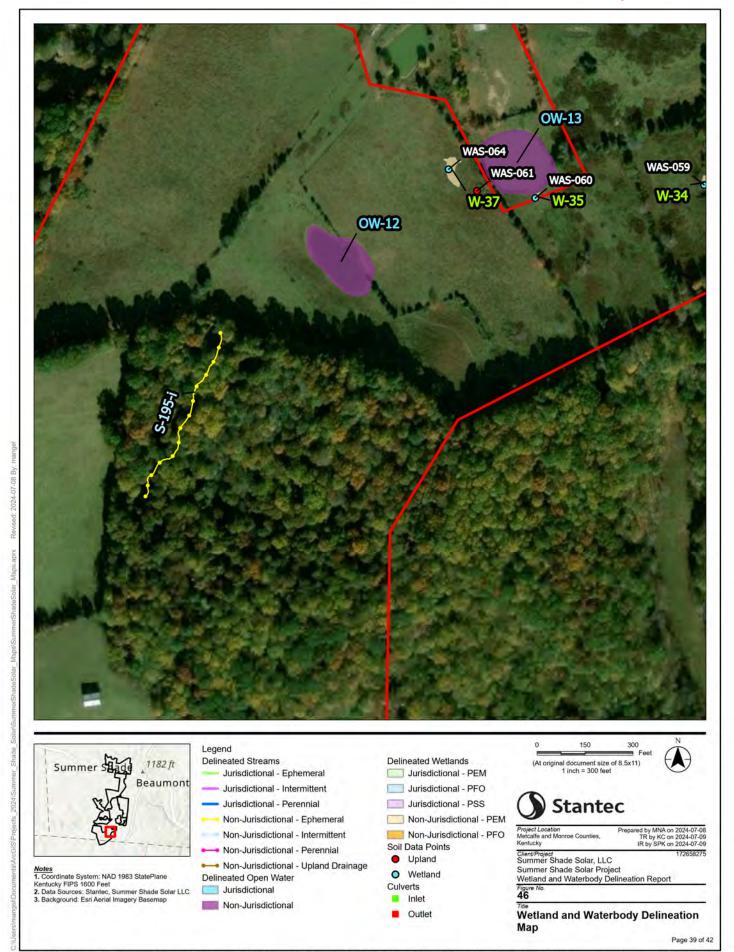


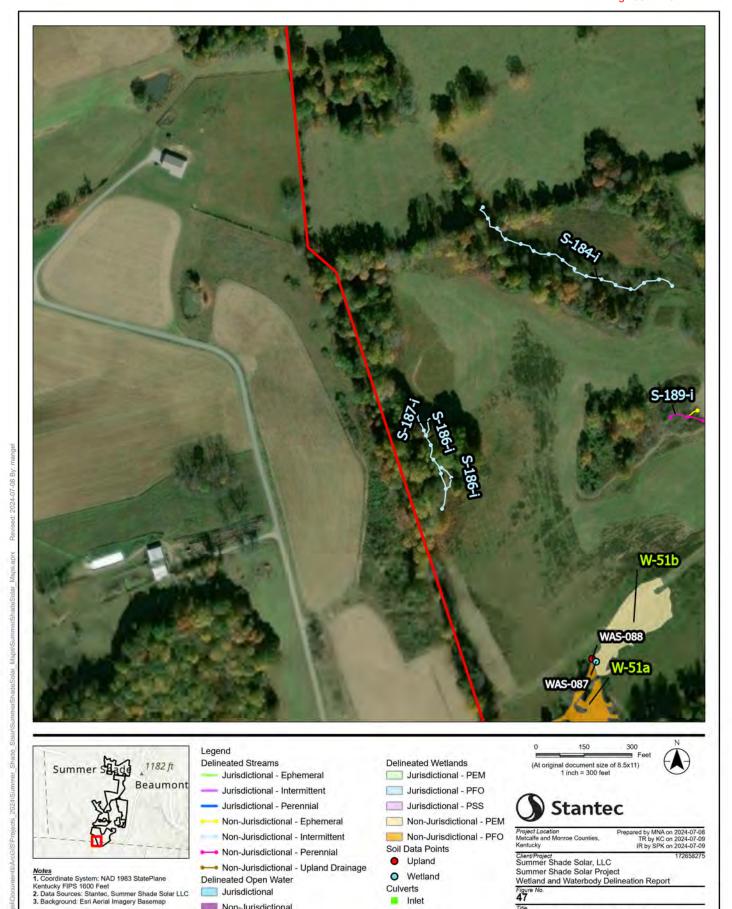












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Non-Jurisdictional

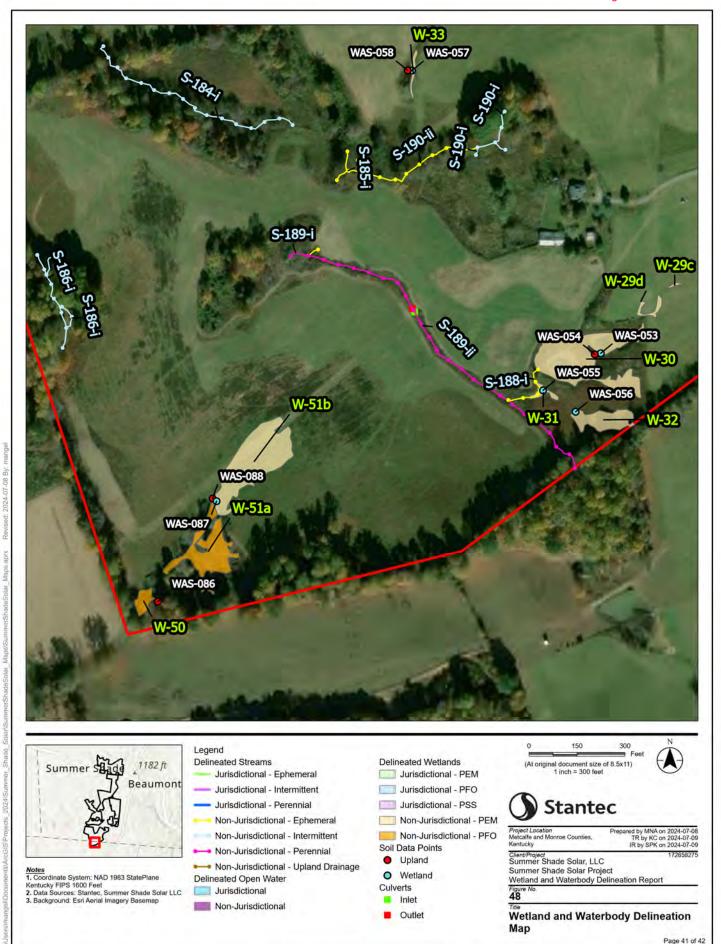
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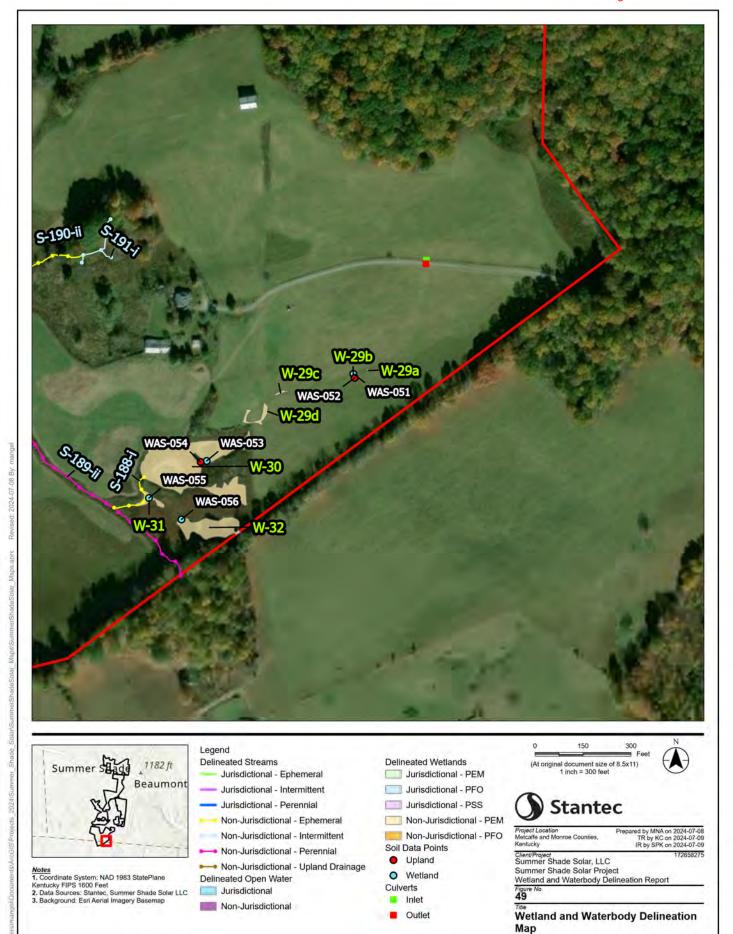
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Wetland and Waterbody Delineation

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Map





SUMMER SHADE SOLAR WETLAND AND WATERBODY DELINEATION REPORT

Appendix B WETLAND DETERMINATION DATA FORMS



WETLAND DETERMINATION DATA FORM – Eastern Mountains and Piedmont Region to 1-69 Page 70 of 794

Project/Site: Summer Shade Solar Site	City/County: Summer Shade, KY/Metcalf Sampling Date: October 7, 2021							
Applicant/Owner: Candela	State: KY Sampling Point: WAS-01							
Investigator(s): Mike Williams / Chris Golden Section, Township, Range: N/A								
Landform (hillslope, terrace, etc.): Valley	cal relief (concave, convex, none): Concave Slope (%): 2%							
Subregion (LRR or MLRA): LRR N Lat: 36.871969	Long: -85.684445 Datum: NAD 83 KY S							
Soil Map Unit Name: BaE2 - Baxter gravelly silt loam, 20 to 30	Long: -85.684445 Datum: NAD 83 KY S percent slopes, eroded NWI classification: N/A							
Are climatic / hydrologic conditions on the site typical for this time of year? Yes No (If no, explain in Remarks.)								
Are Vegetation, Soil, or Hydrology significantly								
Are Vegetation , Soil , or Hydrology naturally pro								
SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.								
Hydrophytic Vegetation Present? Yes Vegetation Present?	Is the Sampled Area							
Hydric Soil Present? Wetland Hydrology Present? Yes No No No No No No No N	within a Wetland? Yes No							
Remarks:								
Wetland 01 wet data point. Feature is located	under power line ROW and is fed by STR-55							
Wottand or wor data point. I dataro lo locatod	and power into reasy and to loa by a rive of							
HYDROLOGY								
Wetland Hydrology Indicators:	Secondary Indicators (minimum of two required)							
Primary Indicators (minimum of one is required; check all that apply)	Surface Soil Cracks (B6)							
Surface Water (A1) True Aquatic P								
Hydrogen Sulfi Hydrogen Sulfi Hydrogen Sulfi								
	ospheres on Living Roots (C3) Moss Trim Lines (B16)							
	educed Iron (C4) Dry-Season Water Table (C2)							
	eduction in Tilled Soils (C6) Crayfish Burrows (C8)							
Drift Deposits (B3) Algel Met es Crust (B4) Other (Fundamental County (B4))								
Algal Mat or Crust (B4) Other (Explain								
Iron Deposits (B5) Inundation Visible on Aerial Imagery (B7)	Geomorphic Position (D2) Shallow Aquitard (D3)							
Water-Stained Leaves (B9)	Microtopographic Relief (D4)							
Aquatic Fauna (B13)	FAC-Neutral Test (D5)							
Field Observations:								
Surface Water Present? Yes No Depth (inches); 2							
Water Table Present? Yes No Depth (inches								
Saturation Present? Yes No Depth (inches	·							
(includes capillary fringe)								
Describe Recorded Data (stream gauge, monitoring well, aerial photo	os, previous inspections), ir available:							
Remarks:								

Case No. 2025-00064
Reponse to 1-69
Page 71 of 794
Sampling Point: WAS-01

VEGETATION (Four Strata) – Use scientific names of plants.

7 20 (7) (7)	Absolute	Dominant Indicator	Dominance Test worksheet:			
<u>Tree Stratum</u> (Plot size: 30		Species? Status	Number of Dominant Species			
1			That Are OBL, FACW, or FAC: (A)			
2			Total Number of Dominant			
3		NA	Species Across All Strata:1 (B)			
4		NA	Demonstrat Demoiserat Occasion			
5		NA	Percent of Dominant Species That Are OBL, FACW, or FAC: 0.0 (A/B)			
6						
7		NA	Prevalence Index worksheet:			
··	0.0	= Total Cover	Total % Cover of: Multiply by:			
50% of total cover: 0.0			OBL species0 x 1 =0			
Sapling/Shrub Stratum (Plot size: 15)			FACW species0 x 2 =0			
1		NA	FAC species0 x 3 =0			
		A 1 A	FACU species0 x 4 =0			
2		N I A	UPL species 0 x 5 = 0			
3			Column Totals: 0 (A) 0 (B)			
4			(7)			
5			Prevalence Index = B/A =			
6			Hydrophytic Vegetation Indicators:			
7			1 - Rapid Test for Hydrophytic Vegetation			
8		NA	2 - Dominance Test is >50%			
9		NA	3 - Prevalence Index is ≤3.0 ¹			
	0.0	= Total Cover	4 - Morphological Adaptations ¹ (Provide supporting			
50% of total cover: 0.0	20% of	total cover: 0.0	data in Remarks or on a separate sheet)			
Herb Stratum (Plot size: 5						
1		NA	Problematic Hydrophytic Vegetation ¹ (Explain)			
2		NA				
3		N I A	¹Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.			
4		A 1 A				
5		A 1 A	Definitions of Four Vegetation Strata:			
6			Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of			
		N I A				
7		N I A	. height.			
8		NA NA	Sapling/Shrub – Woody plants, excluding vines, less			
9		NA NA	than 3 in. DBH and greater than or equal to 3.28 ft (1			
10	-	NA	m) tall.			
11			Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.			
		= Total Cover				
50% of total cover: 0.0	20% of	total cover: 0.0	Woody vine – All woody vines greater than 3.28 ft in			
Woody Vine Stratum (Plot size: 15)		NIA	height.			
1						
2		<u></u>				
3		NA				
4		NA	Hydrophytic			
5		NA	Vegetation			
	0.0	= Total Cover	Present? Yes No			
50% of total cover: 0.0	20% of	total cover: 0.0				
Remarks: (Include photo numbers here or on a separate s	heet.)					

Case No. 2025-00064
Reponse to 1-69
Page 72 of 794
Sampling Point: WAS-01

SOIL

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)										
Depth Matrix Redox Features										
(inches)	Color (moist)	<u>%</u>	Color (moist)	%	Type ¹	Loc ²	<u>Texture</u>	Remarks		
0-1	10YR 3/2	95	5YR 4/4	5	С	M	Silt Clay			
1-4	10YR 3/2	90	7.5YR 4/6	10	<u>C</u>	М	Silt Clay			
4-18	5Y 4/2	70	4.5YR 4/6	30	С	M	Clay			
	-					· ——		_		
				-		·				
1Tupo: C-C	anaontration D_Don	lotion DM			d Sand Cr		² Location: DI –Do	oro Lining M-Motrix		
¹ Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. Pl=Pore Lining, M=Matrix. Indicators for Problematic Hydric Soils ³ :										
Histosol			Dark Surface	(97)				Muck (A10) (MLRA 147)		
_	pipedon (A2)		Polyvalue Be		ice (S8) (N	/ILRA 147.		Prairie Redox (A16)		
Black Hi			Thin Dark Su					_RA 147, 148)		
	n Sulfide (A4)		Loamy Gleye					nont Floodplain Soils (F19)		
	d Layers (A5)		Depleted Ma	trix (F3)				_RA 136, 147)		
	ick (A10) (LRR N)		Redox Dark				1 1 1	Shallow Dark Surface (TF12)		
	Below Dark Surfac	e (A11)	✓ Depleted Dar				Other	(Explain in Remarks)		
	ark Surface (A12) lucky Mineral (S1) (I	DD N	Redox Depre			IDDN				
	147, 148)	LKK N,	MLRA 13		es (F12) (LKK N,				
	Gleyed Matrix (S4)		Umbric Surfa		(MLRA 13	36, 122)	³ Indicato	ors of hydrophytic vegetation and		
	ledox (S5)		Piedmont Flo					d hydrology must be present,		
Stripped	Matrix (S6)		Red Parent N	Material (F	21) (MLR	A 127, 147	7) unless	disturbed or problematic.		
Restrictive I	_ayer (if observed):									
Туре:										
Depth (inc	ches):						Hydric Soil Pres	sent? Yes No		
Remarks:							-			

WETLAND DETERMINATION DATA FORM – Eastern Mountains and Piedmont Region to 1-69
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Project/Site: Summer Shade Solar Site	City/County: Summer Shade, KY/Metcalf Sampling Date: October 7, 2021
Applicant/Owner: Candela	State: KY Sampling Point: WAS-02
Investigator(s): Mike Williams / Chris Golden	Section, Township, Range: N/A
Landform (hillslope, terrace, etc.): Hillslope Local	al relief (concave, convex, none): Convex Slope (%): 5%
Subregion (LRR or MLRA): LRR N Lat: 36.871986	Long: -85.684474 Datum: NAD 83 KY S
Soil Map Unit Name: BaE2 - Baxter gravelly silt loam, 20 to 30 pe	Section, Township, Range: N/A al relief (concave, convex, none): Convex Slope (%): 5% Long: -85.684474 Datum: NAD 83 KY S ercent slopes, eroded NWI classification: Upland
Are climatic / hydrologic conditions on the site typical for this time of yea	r? Yes No (If no, explain in Remarks.)
Are Vegetation, Soil, or Hydrology significantly d	
Are Vegetation, Soil, or Hydrology naturally prob	
	sampling point locations, transects, important features, etc.
Hydrophytic Vegetation Present? Yes No✓	
Hydric Soil Present? Yes No V	Is the Sampled Area within a Wetland? Yes No
Wetland Hydrology Present? Yes No V	within a Wetland? Yes No
Remarks:	
WTL-01 Upland Data Point	
HYDROLOGY	
Wetland Hydrology Indicators:	Secondary Indicators (minimum of two required)
Primary Indicators (minimum of one is required; check all that apply)	Surface Soil Cracks (B6)
Surface Water (A1) True Aquatic Pla	
High Water Table (A2) Hydrogen Sulfide	
	pheres on Living Roots (C3) Moss Trim Lines (B16)
Water Marks (B1) Presence of Red	luced Iron (C4) Dry-Season Water Table (C2)
Sediment Deposits (B2)	uction in Tilled Soils (C6) Crayfish Burrows (C8)
Drift Deposits (B3) Thin Muck Surface	ce (C7) Saturation Visible on Aerial Imagery (C9)
Algal Mat or Crust (B4) Other (Explain in	Remarks) Stunted or Stressed Plants (D1)
Iron Deposits (B5)	Geomorphic Position (D2)
Inundation Visible on Aerial Imagery (B7)	Shallow Aquitard (D3)
Water-Stained Leaves (B9)	Microtopographic Relief (D4)
Aquatic Fauna (B13)	FAC-Neutral Test (D5)
Field Observations:	
Surface Water Present? Yes No Depth (inches):	
Water Table Present? Yes No Depth (inches):	•
Saturation Present? Yes No Depth (inches):	Wetland Hydrology Present? Yes No
Describe Recorded Data (stream gauge, monitoring well, aerial photos	, previous inspections), if available:
Domorlas	
Remarks:	

Case No. 2025-00064
Reponse to 1-69
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Sampling Point: WAS-02

20	Absolute	Dominant Indicator	Dominance Test worksheet:		
<u>Tree Stratum</u> (Plot size: 30	% Cover	Species? Status	Number of Dominant Species		
1		✓ NA	That Are OBL, FACW, or FAC: (A)		
2		NA	Total Number of Dominant		
3		NA	Species Across All Strata: 2 (B)		
4		NA			
5		NA	Percent of Dominant Species That Are OBL, FACW, or FAC: 0.0 (A/B)		
6			That Are OBL, FACW, OF FAC.		
_		NA	Prevalence Index worksheet:		
7	0.0	·	Total % Cover of: Multiply by:		
50% of total cover: 0.0		= Total Cover	OBL species 0 x 1 = 0		
Sapling/Shrub Stratum (Plot size: 15)	20 /6 01	total cover	FACW species 5 x 2 = 10		
		NA	FAC species 20 x 3 = 60		
1,			FACU species 67 x 4 = 268		
2			17100 oposico x 1=		
3		NA			
4			Column Totals: 92 (A) 338 (B)		
5		NA	Prevalence Index = B/A = 3.7		
6		NA			
7		NA	Hydrophytic Vegetation Indicators:		
8		NA	1 - Rapid Test for Hydrophytic Vegetation		
0		NA	2 - Dominance Test is >50%		
9	0.0		3 - Prevalence Index is ≤3.0 ¹		
50% of total cover: 0.0		= Total Cover	4 - Morphological Adaptations ¹ (Provide supporting		
_	20% 01	total cover: 0.0	data in Remarks or on a separate sheet)		
Herb Stratum (Plot size: 5	15	FAC	Problematic Hydrophytic Vegetation ¹ (Explain)		
1. Symphiotricum pilosum	15				
2. Vernonia gigantea	5	FAC	¹ Indicators of hydric soil and wetland hydrology must		
3. Eupatorium perfoliatum	5	FACW	be present, unless disturbed or problematic.		
4. Solanum carolinense	2	FACU	Definitions of Four Vegetation Strata:		
5. Digitaria sanguinalis	60	√ FACU			
6. Ambrosia artemisiifolia	5	FACU	Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or		
7		NA	more in diameter at breast height (DBH), regardless of height.		
8.		NA			
9.		NA	Sapling/Shrub – Woody plants, excluding vines, less		
•		NA NA	than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.		
10		NA	·		
11	02.0		Herb – All herbaceous (non-woody) plants, regardless		
500% of total account 16.0	92.0	= Total Cover	of size, and woody plants less than 3.28 ft tall.		
50% of total cover: 46.0	<u>20% of</u>	total cover: 18.4	Woody vine – All woody vines greater than 3.28 ft in		
Woody Vine Stratum (Plot size: 15	40	NIA	height.		
1. Rubus sp.	10	NA NA			
2		NA			
3		NA			
4		NA	Hydrophytic		
5.		NA	Vegetation		
	10.0	= Total Cover	Present? Yes No		
50% of total cover:5.0		total cover: 2.0			
Remarks: (Include photo numbers here or on a separate s					
Tremaine. (morade priote frambore field of on a separate of	11001.)				

Case No. 2025-00064
Reponse to 1-69
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Sampling Point: WAS-02

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)								
Depth	Matrix		Redo	c Features	3			
(inches)	Color (moist)	<u>%</u>	Color (moist)	%	Type ¹	Loc ²	<u>Texture</u>	Remarks
0-3	10YR 5/6	100					Silt Clay	
3-18	10YR 5/8	100					Silt Clay	
								·
	-							
1Type: C-C	ncentration D-Der	letion PM-	Reduced Matrix, MS		Sand Gra		² l ocation: Pl	_=Pore Lining, M=Matrix.
Hydric Soil		neuon, Kivi=	Neduced Matrix, Mc	=iviaskeu	Sanu Gia	ııı ı5.		ntors for Problematic Hydric Soils ³ :
Histosol			Dark Surface	(97)				cm Muck (A10) (MLRA 147)
	oipedon (A2)		Polyvalue Be		ce (S8) (N	II RΔ 147		oast Prairie Redox (A16)
Black Hi			Thin Dark Su				140,	(MLRA 147, 148)
	n Sulfide (A4)		Loamy Gleye	, ,	•	, ,	ПР	iedmont Floodplain Soils (F19)
	Layers (A5)		Depleted Mat		,		<u> </u>	(MLRA 136, 147)
	ick (A10) (LRR N)		Redox Dark		6)		□v	ery Shallow Dark Surface (TF12)
Depleted	d Below Dark Surfac	e (A11)	Depleted Dar	k Surface	(F7)		<u></u>	ther (Explain in Remarks)
	ark Surface (A12)		Redox Depre					
	lucky Mineral (S1) (LRR N,	Iron-Mangan		es (F12) (I	_RR N,		
	147, 148)		MLRA 130	•			3	
	leyed Matrix (S4)		Umbric Surfa					cators of hydrophytic vegetation and
	edox (S5)		Piedmont Flo					tland hydrology must be present,
	Matrix (S6) _ayer (if observed)		Red Parent N	iateriai (F.	21) (WLR	A 127, 147	r) uni	ess disturbed or problematic.
	-ayer (ii observed)	•						
Type:			<u></u>				l	- · · · · · · · · · · · · · · · · · · ·
	ches):						Hydric Soil	Present? Yes No
Remarks:								

WETLAND DETERMINATION DATA FORM – Eastern Mountains and Piedmont Region to 1-69 Page 76 of 794

Project/Site: Summer Shade Solar Site	City/County: Summer Shade, KY/Metcalf Sampling Date: October 8, 2021
Applicant/Owner: Candela	State: KY Sampling Point: WAS-03
Investigator(s): Mike Williams / Chris Golden	· · ·
	al relief (concave, convex, none): Concave Slope (%): 2%
Subregion (LRR or MLRA): LRR N	Long: -85.684332 Datum: NAD 83 KY S
Soil Man Unit Name: CrB2 - Crider silt loam, 2 to 6 percent slope	Long: -85.684332 Datum: NAD 83 KY S es, eroded NWI classification: N/A
Are climatic / hydrologic conditions on the site typical for this time of year	
Are Vegetation, Soil, or Hydrology significantly of	
Are Vegetation, Soil, or Hydrology naturally prol	
SUMMARY OF FINDINGS – Attach site map showing	sampling point locations, transects, important features, etc.
Hydrophytic Vegetation Present? Yes No	
Hydric Soil Present? Yes No	Is the Sampled Area within a Wetland? Yes No
Wetland Hydrology Present? Yes No	Willim a Welland.
Remarks:	
Ponded water due to recent rains.	
HYDROLOGY	
Wetland Hydrology Indicators:	Secondary Indicators (minimum of two required)
Primary Indicators (minimum of one is required; check all that apply)	Surface Soil Cracks (B6)
✓ Surface Water (A1) True Aquatic Pla	
High Water Table (A2) Hydrogen Sulfid	
	spheres on Living Roots (C3) Moss Trim Lines (B16)
Water Marks (B1) Presence of Rec	
Sediment Deposits (B2)	duction in Tilled Soils (C6) Crayfish Burrows (C8)
Drift Deposits (B3)	ace (C7) Saturation Visible on Aerial Imagery (C9)
Algal Mat or Crust (B4) Other (Explain in	n Remarks) Stunted or Stressed Plants (D1)
Iron Deposits (B5)	Geomorphic Position (D2)
Inundation Visible on Aerial Imagery (B7)	Shallow Aquitard (D3)
Water-Stained Leaves (B9)	Microtopographic Relief (D4)
Aquatic Fauna (B13)	FAC-Neutral Test (D5)
Field Observations:	Surface
Surface Water Present? Yes No Depth (inches):	
Water Table Present? Yes No Depth (inches):	/
Saturation Present? Yes Vo No Depth (inches): (includes capillary fringe)	Surface Wetland Hydrology Present? Yes No
Describe Recorded Data (stream gauge, monitoring well, aerial photos	s, previous inspections), if available:
Remarks:	
Tomano.	
1	

Case No. 2025-00064
Reponse to 1-69
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Sampling Point: WAS-03

20	Absolute	Dominant Indicator	Dominance Test worksheet:
<u>Tree Stratum</u> (Plot size: 30	% Cover	Species? Status	Number of Dominant Species
1		NA	That Are OBL, FACW, or FAC: 2 (A)
2		NA	Total Number of Dominant
3		NA	Species Across All Strata: 2 (B)
4		NA	
5		NA	Percent of Dominant Species That Are OBL, FACW, or FAC: 100.0 (A/B)
6			That Ale OBE, I AOV, OI I AO.
7		NA	Prevalence Index worksheet:
	0.0	= Total Cover	Total % Cover of: Multiply by:
50% of total cover: 0.0			OBL species60 x 1 =60
Sapling/Shrub Stratum (Plot size: 15)			FACW species0 x 2 =0
1		NA	FAC species15 x 3 =45
		NA	FACU species0 x 4 =0
2		NA	UPL species 0 x 5 = 0
3		ΝΔ	Column Totals: 75 (A) 105 (B)
4		NA	(1)
5		NA	Prevalence Index = B/A =1.4
6			Hydrophytic Vegetation Indicators:
7		NA	1 - Rapid Test for Hydrophytic Vegetation
8		NA	2 - Dominance Test is >50%
9		NA	3 - Prevalence Index is ≤3.0 ¹
		= Total Cover	4 - Morphological Adaptations ¹ (Provide supporting
50% of total cover: 0.0	20% of	total cover: 0.0	data in Remarks or on a separate sheet)
Herb Stratum (Plot size: 5			-
1. Echinochloa crus-gali	15	FAC	Problematic Hydrophytic Vegetation ¹ (Explain)
2. Percicaria punctata	40	√ OBL	
3. Eleocharis obtusa	20	√ OBL	¹Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
4		NA	
5		NA	Definitions of Four Vegetation Strata:
		NA	Tree - Woody plants, excluding vines, 3 in. (7.6 cm) or
		NA	more in diameter at breast height (DBH), regardless of
7 8		NA	height.
<u> </u>		NA NA	Sapling/Shrub – Woody plants, excluding vines, less
9		NA NA	than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.
10		NA	iii) taii.
11	75.0		Herb – All herbaceous (non-woody) plants, regardless
700 ()	75.0	= Total Cover	of size, and woody plants less than 3.28 ft tall.
50% of total cover: 37.5	20% of	total cover: 13.0	Woody vine – All woody vines greater than 3.28 ft in
Woody Vine Stratum (Plot size: 15)		NIA	height.
1		NA	
2		NA	
3		NA	
4		NA	Hydrophytic
5		NA	Vegetation
	0.0	= Total Cover	Present? Yes No
50% of total cover: 0.0	20% of	total cover: 0.0	
Remarks: (Include photo numbers here or on a separate s	heet.)		

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Reponse to 1-69
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Sampling Point: WAS-03

SOIL

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.) Depth Matrix Redox Features Texture (inches) Color (moist) Color (moist) Type¹ Loc² 0-2 10YR 4/3 95 5YR 3/4 5 M/P Clay С 2-18 10YR 3/6 100 Clay ²Location: PL=Pore Lining, M=Matrix. ¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. **Hydric Soil Indicators:** Indicators for Problematic Hydric Soils³: Histosol (A1) 2 cm Muck (A10) (MLRA 147) Dark Surface (S7) Histic Epipedon (A2) Polyvalue Below Surface (S8) (MLRA 147, 148) Coast Prairie Redox (A16) Black Histic (A3) Thin Dark Surface (S9) (MLRA 147, 148) (MLRA 147, 148) Hydrogen Sulfide (A4) Loamy Gleyed Matrix (F2) Piedmont Floodplain Soils (F19) Stratified Layers (A5) Depleted Matrix (F3) (MLRA 136, 147) Very Shallow Dark Surface (TF12) 2 cm Muck (A10) (LRR N) Redox Dark Surface (F6) Depleted Below Dark Surface (A11) Depleted Dark Surface (F7) Other (Explain in Remarks) Thick Dark Surface (A12) Redox Depressions (F8) Sandy Mucky Mineral (S1) (LRR N, Iron-Manganese Masses (F12) (LRR N, MLRA 147, 148) MLRA 136) Sandy Gleyed Matrix (S4) Umbric Surface (F13) (MLRA 136, 122) ³Indicators of hydrophytic vegetation and Sandy Redox (S5) Piedmont Floodplain Soils (F19) (MLRA 148) wetland hydrology must be present, unless disturbed or problematic. Stripped Matrix (S6) Red Parent Material (F21) (MLRA 127, 147) Restrictive Layer (if observed): Type: **Hydric Soil Present?** Depth (inches): Remarks:

WETLAND DETERMINATION DATA FORM – Eastern Mountains and Piedmont Region to 1-69
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Project/Site: Summer Shade Solar Site	City/County: Summer Shade, KY/Meto	calf Sampling Date: 10-08-2021
Applicant/Owner: Candela	State: K	
Investigator(s): Mike Williams / Chris Golden		
Landform (hillslope, terrace, etc.): Slope	cal relief (concave, convex, none): None	Slope (%): 2%
Landform (hillslope, terrace, etc.): Slope Loc Subregion (LRR or MLRA): LRR N Lat: 36.875778	Long: -85.684485	Datum: NAD 83 KY S
Soil Map Unit Name: Ls - Lindside silt loam		lassification: Upland
Are climatic / hydrologic conditions on the site typical for this time of year	ar? Yes No [(If no, expla	ain in Remarks.)
Are Vegetation, Soil, or Hydrology significantly	disturbed? Are "Normal Circumstar	nces" present? Yes No
Are Vegetation , Soil , or Hydrology naturally pro		
SUMMARY OF FINDINGS – Attach site map showing	•	
Hadrodorfo Vanustina Brancotto		
Hydrophytic Vegetation Present? Hydric Soil Present? Yes No V No V	Is the Sampled Area	√
Wetland Hydrology Present?	within a Wetland? Yes	No
Remarks:		
WTL-02 Upland data point		
' '		
LIVERGLOOV		
HYDROLOGY	0	and the state of t
Wetland Hydrology Indicators:		/ Indicators (minimum of two required)
Primary Indicators (minimum of one is required; check all that apply)		ce Soil Cracks (B6)
Surface Water (A1) True Aquatic Pl		ely Vegetated Concave Surface (B8)
High Water Table (A2) Saturation (A3) Hydrogen Sulfic		age Patterns (B10) Trim Lines (B16)
Water Marks (B1) Presence of Re		eason Water Table (C2)
		sh Burrows (C8)
Drift Deposits (B3) Thin Muck Surfa		ation Visible on Aerial Imagery (C9)
Algal Mat or Crust (B4) Other (Explain i		ed or Stressed Plants (D1)
Iron Deposits (B5)		orphic Position (D2)
Inundation Visible on Aerial Imagery (B7)	Shallo	ow Aquitard (D3)
Water-Stained Leaves (B9)	Microt	opographic Relief (D4)
Aquatic Fauna (B13)	LFAC-N	Neutral Test (D5)
Field Observations:		
Surface Water Present? Yes No Depth (inches)		
Water Table Present? Yes No Depth (inches)		1
Saturation Present? Yes No Depth (inches) (includes capillary fringe)	: Wetland Hydrology F	Present? Yes No
Describe Recorded Data (stream gauge, monitoring well, aerial photo	s, previous inspections), if available:	
Remarks:		

Case No. 2025-00064
Reponse to 1-69
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Sampling Point: WAS-04

00	Absolute	Dominant Indicator	Dominance Test worksheet:
<u>Tree Stratum</u> (Plot size: 30		Species? Status	Number of Dominant Species
_{1.} Juglans nigra	25	√ FACU	That Are OBL, FACW, or FAC: 2 (A)
2. Pecan	10	FACU	Total Number of Dominant
3. Robinia pseudoacacia	5	FACU	Species Across All Strata: 5 (B)
4.		NA	
5		NA	Percent of Dominant Species That Are OBL, FACW, or FAC: 40.0 (A/B)
6			That Are OBE, FACW, OF FAC.
7.		NA	Prevalence Index worksheet:
·	40.0	= Total Cover	Total % Cover of: Multiply by:
50% of total cover: 20.0	20% of	total cover 8.0	OBL species0 x 1 =0
Sapling/Shrub Stratum (Plot size: 15)	2070 01	total 66VCI	FACW species0 x 2 =0
		NA	FAC species 25 x 3 = 75
1		NA	FACU species 45 x 4 = 180
2		NA	UPL species 25 x 5 = 125
3		ΝΔ	Column Totals: 95 (A) 380 (B)
4		NA	(7)
5		NA	Prevalence Index = $B/A = 4.0$
6			Hydrophytic Vegetation Indicators:
7		NA	1 - Rapid Test for Hydrophytic Vegetation
8		NA	2 - Dominance Test is >50%
9		NA	3 - Prevalence Index is ≤3.0 ¹
		= Total Cover	4 - Morphological Adaptations ¹ (Provide supporting
50% of total cover: 0.0	20% of	total cover: 0.0	data in Remarks or on a separate sheet)
Herb Stratum (Plot size: 5			-
1. Sida rhombifolia	25	√ UPL	Problematic Hydrophytic Vegetation ¹ (Explain)
2. Persicaria longiseta	15	√ FAC	
3. Verbesina occidentalis	5	FACU	¹Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
4. Microstegium vimineum	10	√ FAC	Definitions of Four Vegetation Strata:
5		NA	Definitions of Four Vegetation Strata.
6.		NA	Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or
7		NA	more in diameter at breast height (DBH), regardless of height.
8.		NA	. noight.
^		NA	Sapling/Shrub – Woody plants, excluding vines, less
9		NA	than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.
·		NA	· ′
11	55.0	= Total Cover	Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.
50% of total cover: _ 27.5	20% of	total cover: 11 0	of size, and woody plants less than 3.20 it tall.
Woody Vine Stratum (Plot size: 15)	2070 01		Woody vine – All woody vines greater than 3.28 ft in
4		NA	height.
1		NA NA	•
2		NA	
3		NA NA	•
4			Hydrophytic
5		NA	Vegetation ✓ Present? Yes No
		= Total Cover	rieseiit: iesivo
50% of total cover: 0.0		total cover: 0.0	
Remarks: (Include photo numbers here or on a separate s	heet.)		

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SOIL

Page 81 of 794
Sampling Point: WAS-04

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)							
Depth	Matrix	Redo	x Features				
(inches)	Color (moist) %	Color (moist)		Loc ²	<u>Texture</u>	Remarks	3
0-1	10YR 2/2				Clay loam		
1-4	10YR 3/4				Clay		
4-18	10YR 3/6				Clay		
4 -10	1011(3/0				Clay		
							
1=		DA Dada ad Matrica M	0 Market 0 1		21 1		
Hydric Soil I	oncentration, D=Depletion, F	RM=Reduced Matrix, M	S=Masked Sand	irains.	² Location: PL=Po	re Lining, M=Matri for Problematic I	
$\overline{}$			- (07)				-
Histosol		Dark Surface		/MI D A 4.47		luck (A10) (MLRA Prairie Redox (A16	
Black His	nipedon (A2)		elow Surface (S8) urface (S9) (MLR /			Prairie Redox (A16 RA 147, 148)	0)
	n Sulfide (A4)		ed Matrix (F2)	147, 140)		ont Floodplain Soil	c (E10)
	I Layers (A5)	Depleted Ma				RA 136, 147)	IS (F19)
	ck (A10) (LRR N)	Redox Dark				hallow Dark Surfa	ce (TF12)
	Below Dark Surface (A11)	1 1	rk Surface (F7)		1 1 .	Explain in Remark	, ,
	ark Surface (A12)	Redox Depre				Explain in Roman	(3)
	lucky Mineral (S1) (LRR N,		nese Masses (F12	(LRR N.			
	147, 148)	MLRA 13		, (=::::,			
	leyed Matrix (S4)		ace (F13) (MLRA	136. 122)	³ Indicator	s of hydrophytic ve	egetation and
	edox (S5)		podplain Soils (F1			hydrology must be	-
	Matrix (S6)		Material (F21) (MI			listurbed or proble	*
	_ayer (if observed):	<u> </u>	, ,,	<u> </u>			
Type:							
	ches):				Hydric Soil Pres	ent? Yes	No ✓
Remarks:					,		
Remarks.							

WETLAND DETERMINATION DATA FORM – Eastern Mountains and Piedmont Region to 1-69 Page 82 of 794

Project/Site: Summer Shade Solar Site	City/County: Summer Shade, KY/Metcalf Sampling Date: 10-08-2021
Applicant/Owner: Candela	State: KY Sampling Point: WAS-05
Investigator(s): Mike Williams / Chris Golden	
Landform (hillslope, terrace, etc.): Valley	cal relief (concave, convex, none): Concave Slope (%): 2%
Subregion (LRR or MLRA): LRR N Lat: 36.876705	Long: -85.680765 Patum: NAD 83 KY S
Soil Man Unit Name: BaD2 - Baxter gravelly silt loam, 12 to 20 r	Long: -85.680765 Datum: NAD 83 KY S Dercent slopes, eroded NWI classification: N/A
Are climatic / hydrologic conditions on the site typical for this time of ye	
Are Vegetation, Soil, or Hydrology significantly	
Are Vegetation, Soil, or Hydrology naturally pro	
SUMMARY OF FINDINGS – Attach site map showing	sampling point locations, transects, important features, etc.
Hydrophytic Vegetation Present? Yes ✓ No	
Hydric Soil Present? Yes No	Is the Sampled Area within a Wetland? Yes No
Wetland Hydrology Present? Yes No	Within a Wethand: 165 NO
Remarks:	
HYDROLOGY	
Wetland Hydrology Indicators:	Secondary Indicators (minimum of two required)
Primary Indicators (minimum of one is required; check all that apply)	Surface Soil Cracks (B6)
Surface Water (A1)	
High Water Table (A2) Hydrogen Sulfi	
	pspheres on Living Roots (C3) Moss Trim Lines (B16)
	educed Iron (C4) Dry-Season Water Table (C2) Crowtish Burrows (C9)
	crayfish Burrows (C8) Crayfish Burrows (C8) Saturation Visible on Aerial Imagen (C9)
Drift Deposits (B3) Algal Mat or Crust (B4) Thin Muck Surful Other (Explain	
Iron Deposits (B5)	Geomorphic Position (D2)
Inundation Visible on Aerial Imagery (B7)	Shallow Aquitard (D3)
Water-Stained Leaves (B9)	Microtopographic Relief (D4)
Aquatic Fauna (B13)	FAC-Neutral Test (D5)
Field Observations:	
Surface Water Present? Yes No Depth (inches): <u>2</u>
Water Table Present? Yes No Depth (inches):
Saturation Present? Yes Ves No Depth (inches): 2 Wetland Hydrology Present? Yes No
(includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photo	os previous inspections) if available:
gauge, memoring nen, achair process	no, promoto mopostano, in a ramazio.
Remarks:	

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Sampling Point: WAS-05

00	Absolute	Dominant Indicator	Dominance Test worksheet:
<u>Tree Stratum</u> (Plot size: <u>30</u>		Species? Status	Number of Dominant Species
1. Celtis laevigata	30	FACW	That Are OBL, FACW, or FAC: 2 (A)
2		NA	. Total Number of Deminerat
3			Total Number of Dominant Species Across All Strata: 2 (B)
4		NA	Openies / toress / tir etrata.
			Percent of Dominant Species
5			That Are OBL, FACW, or FAC:100.0 (A/B)
6			Prevalence Index worksheet:
7		NA	Total % Cover of: Multiply by:
		= Total Cover	
50% of total cover:15.0	<u>) </u>	total cover: 6.0	· — — — — — — — — — — — — — — — — — — —
Sapling/Shrub Stratum (Plot size: 15			FACW species 30 x 2 = 60
1		NA	FAC species5 x 3 =15
2		NA	FACU species0 x 4 =0
		A 1 A	UPL species0 x 5 =0
3		NΔ	Column Totals: 35 (A) 75 (B)
4		NA	(2)
5			Prevalence Index = B/A = 2.1
6		NA	Hydrophytic Vegetation Indicators:
7	-	NA	1 - Rapid Test for Hydrophytic Vegetation
8		NA	2 - Dominance Test is >50%
9		NA	
	0.0	= Total Cover	3 - Flevalefice flidex is ±3.0
50% of total cover: 0.0			4 - Morphological Adaptations ¹ (Provide supporting
.	2070 01	total 66761	data in Remarks or on a separate sheet)
. Parsicaria longisata	5	√ FAC	Problematic Hydrophytic Vegetation ¹ (Explain)
·· 			
2			¹ Indicators of hydric soil and wetland hydrology must
3		NA	be present, unless disturbed or problematic.
4		NA	Definitions of Four Vegetation Strata:
5		NA	
6		NA	Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or
		NA	more in diameter at breast height (DBH), regardless of height.
7		NA	. Height.
8		NA	Sapling/Shrub – Woody plants, excluding vines, less
9			than 3 in. DBH and greater than or equal to 3.28 ft (1
10		NA	m) tall.
11		NA	Herb – All herbaceous (non-woody) plants, regardless
	5.0	= Total Cover	of size, and woody plants less than 3.28 ft tall.
50% of total cover: <u>2.5</u>	20% of	total cover: 1.0	Was been also Allows the constant the constant
Woody Vine Stratum (Plot size: 15)			Woody vine – All woody vines greater than 3.28 ft in height.
1		NA	noight.
2.	-	NA	•
		NA	
3			•
4		NA	Hydrophytic
5		NA	Vegetation
	0.0	= Total Cover	Present? Yes No
50% of total cover:0.0	20% of	total cover: 0.0	
Remarks: (Include photo numbers here or on a separate s	heet.)		•
Sparsely vegetated concave wetland			
oparacity regulated conteave welland			
			l l

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Sampling Point: WAS-05

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)								
Depth Matrix Redox Features							_	
(inches)	Color (moist)	<u>%</u>	Color (moist)	%	Type ¹	Loc ²	<u>Texture</u>	Remarks
0-8	10YR 3/2	95	5YR 4/6	5	С	M	Silt. Lay	Refusal at 8 in - rock
			_				-	
		· <u></u>						
	-				-			-
	-	· ——						
¹Type: C=Co	oncentration, D=Dep	letion. RM=	Reduced Matrix. MS	S=Masked	d Sand Gr	ains.	² Location: P	L=Pore Lining, M=Matrix.
Hydric Soil		,	,					ators for Problematic Hydric Soils ³ :
Histosol	(A1)		Dark Surface	e (S7)			<u></u>	cm Muck (A10) (MLRA 147)
	pipedon (A2)		Polyvalue Be		ce (S8) (N	/ILRA 147,		Coast Prairie Redox (A16)
Black Hi	stic (A3)		Thin Dark Su	ırface (S9	(MLRA	147, 148)	_	(MLRA 147, 148)
	n Sulfide (A4)		Loamy Gleye		(F2)		P	riedmont Floodplain Soils (F19)
	d Layers (A5)		✓ Depleted Ma					(MLRA 136, 147)
	ick (A10) (LRR N)		Redox Dark					ery Shallow Dark Surface (TF12)
	Below Dark Surface	e (A11)	Depleted Dai					Other (Explain in Remarks)
	ark Surface (A12)	DD N	Redox Depre			I DD N		
	lucky Mineral (S1) (L \ 147, 148)	KK N,	Iron-Mangan MLRA 13		es (F12) (LKK N,		
	Gleyed Matrix (S4)		Umbric Surfa		(MIRA 13	86 122)	³ Ind	icators of hydrophytic vegetation and
	tedox (S5)		Piedmont Flo					etland hydrology must be present,
	Matrix (S6)		Red Parent N					less disturbed or problematic.
	_ayer (if observed):				, ,		ĺ	
Type: Ro								
Depth (inc							Hydric Soil	Present? Yes Vo No
Remarks:							1.,	
rtemarks.								

WETLAND DETERMINATION DATA FORM – Eastern Mountains and Piedmont Region to 1-69
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Project/Site: Summer Shade Solar Site	City/County: Summer Shade, KY/Metcalf Sampling Date: 10-08-2021
Applicant/Owner: Candela	State: KY Sampling Point: WAS-06
Investigator(s): Mike Williams / Chris Golden	Section, Township, Range: N/A
Landform (hillslope, terrace, etc.): Hillslope	cal relief (concave, convex, none): None Slope (%): 2%
Subregion (LRR or MLRA): LRR N Lat: 36.876726	Long: -85.680827 Datum: NAD 83 KY S
Soil Map Unit Name: BaD2 - Baxter gravelly silt loam, 12 to 20 p	percent slopes, eroded NWI classification: Upland
Are climatic / hydrologic conditions on the site typical for this time of year	
Are Vegetation, Soil, or Hydrology significantly	
Are Vegetation, Soil, or Hydrology naturally pro	
	sampling point locations, transects, important features, etc.
Hydrophytic Vegetation Present? Hydric Soil Present? Yes No No No No No No No No No N	Is the Sampled Area
Wetland Hydrology Present?	within a Wetland? Yes No
Remarks:	
Tromano.	
HYDROLOGY	
Wetland Hydrology Indicators:	Secondary Indicators (minimum of two required)
Primary Indicators (minimum of one is required; check all that apply)	Surface Soil Cracks (B6)
Surface Water (A1) True Aquatic Pl	` '
High Water Table (A2) Saturation (A3) Hydrogen Sulfic	de Odor (C1)
	duced Iron (C4) Dry-Season Water Table (C2)
	duction in Tilled Soils (C6) Crayfish Burrows (C8)
Drift Deposits (B3) Algel Med as Council (B4) Other (Fundamental Basics)	
Algal Mat or Crust (B4) Other (Explain i	
Iron Deposits (B5)	Geomorphic Position (D2)
Inundation Visible on Aerial Imagery (B7)	Shallow Aquitard (D3)
Water-Stained Leaves (B9) Aquatic Fauna (B13)	Microtopographic Relief (D4)
	FAC-Neutral Test (D5)
Field Observations: Surface Water Present? Yes No Depth (inches)	
Water Table Present? Yes No Depth (inches)	./
Saturation Present? Yes No Depth (inches) (includes capillary fringe)	: Wetland Hydrology Present? Yes No
Describe Recorded Data (stream gauge, monitoring well, aerial photo	s, previous inspections), if available:
Remarks:	

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Sampling Point: WAS-06

20	Absolute	Dominant Indicator	Dominance Test worksheet:
<u>Tree Stratum</u> (Plot size: 30		Species? Status	Number of Dominant Species
_{1.} Juglans nigra	20	√ FACU	That Are OBL, FACW, or FAC:1 (A)
2		NA	Total Number of Dominant
3		NA	Species Across All Strata: 2 (B)
4		NA	
5		NA NA	Percent of Dominant Species That Are OBL FACW or FAC: 50.0 (A/B)
			That Are OBL, FACW, or FAC: (A/B)
6	-	NA NA	Prevalence Index worksheet:
7	20.0		Total % Cover of: Multiply by:
500/ -(1-1-1 10.6	20.0	= Total Cover	OBL species $0 x 1 = 0$
50% of total cover: 15.	<u>J</u> 20% of	total cover: 4.0	FACW species 0 x 2 = 0
Sapling/Shrub Stratum (Plot size: 15		NA	1 ACW species
1			776 species x s =
2			17.66 species x ! =
3		NA	UPL species x 5 = 0
4		NA	Column Totals: 90 (A) 300 (B)
5		NA	Prevalence Index = B/A = 3.3
6		NA	
		NA NA	Hydrophytic Vegetation Indicators:
7		NA NA	1 - Rapid Test for Hydrophytic Vegetation
8		NA	2 - Dominance Test is >50%
9			3 - Prevalence Index is ≤3.0 ¹
0.0		= Total Cover	4 - Morphological Adaptations ¹ (Provide supporting
50% of total cover: 0.0	20% of	total cover: U.U	data in Remarks or on a separate sheet)
Herb Stratum (Plot size: 5		/ 540	Problematic Hydrophytic Vegetation ¹ (Explain)
1. Persicaria longiseta	60	✓ FAC	
2. Amaranthus palmeri	10	FACU	1 1 a d'antina a Charleta a a d'anada a d'harda da d
3		NA	¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
4		NA	Definitions of Four Vegetation Strata:
5		NA	Definitions of Four Vegetation Strata.
6		NA	Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or
		NA NA	more in diameter at breast height (DBH), regardless of
7		NA	height.
8		NA	Sapling/Shrub – Woody plants, excluding vines, less
9			than 3 in. DBH and greater than or equal to 3.28 ft (1
10	-	NA	m) tall.
11		NA	Herb – All herbaceous (non-woody) plants, regardless
		= Total Cover	of size, and woody plants less than 3.28 ft tall.
50% of total cover: <u>35.0</u>	<u>) </u>	total cover: 14.0	Woody vine – All woody vines greater than 3.28 ft in
Woody Vine Stratum (Plot size: 15)			height.
1		NA	
2		NA	
3		NA	
4		NA	
5.		NA NA	Hydrophytic Vegetation
<u> </u>	0.0	= Total Cover	Present? Yes No
50% of total cover: 0.0		total cover: 0.0	
Remarks: (Include photo numbers here or on a separate s		total 66761	
Remarks. (include prioto numbers here of on a separate s	neet.)		
			I

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Depth Matrix Redox Features	
(inches) Color (moist) % Color (moist) % Type¹ Loc² Texture Remarks	
0-18 10YR 4/4 100 7.5YR 4/6 Silt clay	
	-
	·
¹ Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. ² Location: PL=Pore Lining, M=Matrix.	
Hydric Soil Indicators: Indicators for Problematic Hyd	ric Soils³:
Histosol (A1) Dark Surface (S7) 2 cm Muck (A10) (MLRA 147)	')
Histic Epipedon (A2) Polyvalue Below Surface (S8) (MLRA 147, 148) Coast Prairie Redox (A16)	
Black Histic (A3) Thin Dark Surface (S9) (MLRA 147, 148) (MLRA 147, 148)	
Hydrogen Sulfide (A4) Loamy Gleyed Matrix (F2) Piedmont Floodplain Soils (F	19)
Stratified Layers (A5) Depleted Matrix (F3) (MLRA 136, 147)	
2 cm Muck (A10) (LRR N) Redox Dark Surface (F6) Very Shallow Dark Surface (ΓF12)
Depleted Below Dark Surface (A11) Depleted Dark Surface (F7) Depleted Dark Surface (F7) Other (Explain in Remarks)	
Thick Dark Surface (A12) Sandy Mucky Mineral (S1) (LRR N, Iron-Manganese Masses (F12) (LRR N,	
MLRA 147, 148) MLRA 136)	
Sandy Gleyed Matrix (S4) Umbric Surface (F13) (MLRA 136, 122) Jundicators of hydrophytic veget	ation and
Sandy Redox (S5) Piedmont Floodplain Soils (F19) (MLRA 148) wetland hydrology must be pre	
Stripped Matrix (S6) Red Parent Material (F21) (MLRA 127, 147) unless disturbed or problemat	
Restrictive Layer (if observed):	
Type:	
Depth (inches): Hydric Soil Present? Yes	No
Remarks:	·

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Project/Site: Summer Shade Solar Site	city/County: Summer Shade, KY/Metcalf Sampling Date: 10-08-2021
Applicant/Owner: Candela	State: KY Sampling Point: WAS-07
Investigator(s): Mike Williams / Chris Golden	Section, Township, Range: N/A
Landform (hillslope, terrace, etc.): Valley	Section, Township, Range: N/A al relief (concave, convex, none): Concave Slope (%): 2% Long: -85.682441 Datum: NAD 83 KY S
Subregion (LRR or MLRA); LRR N Lat: 36.879426	Long: -85.682441 Datum: NAD 83 KY S
Soil Map Unit Name: Ls - Lindside silt loam	NWI classification: PUBHh, Freshwater Pond
Are climatic / hydrologic conditions on the site typical for this time of yea	r? Yes No (If no, explain in Remarks.)
Are Vegetation, Soil, or Hydrology significantly d	
Are Vegetation, Soil, or Hydrology naturally prob	
	sampling point locations, transects, important features, etc.
Lhydrophytic Vagetation Dresent2	
Hydrophytic Vegetation Present? Hydric Soil Present? Yes No	Is the Sampled Area within a Wetland? Yes No
Wetland Hydrology Present? Yes V	within a Wetland? Yes No
Remarks:	
See WTL-04/WAS-07 for Upland Data Point	
·	
HYDROLOGY	
Wetland Hydrology Indicators:	Secondary Indicators (minimum of two required)
Primary Indicators (minimum of one is required; check all that apply)	Surface Soil Cracks (B6)
✓ Surface Water (A1) True Aquatic Pla	
High Water Table (A2) Hydrogen Sulfide	
	pheres on Living Roots (C3) Moss Trim Lines (B16)
Water Marks (B1) Presence of Red	
	uction in Tilled Soils (C6) Crayfish Burrows (C8)
Drift Deposits (B3)	
Algal Mat or Crust (B4) Other (Explain in	
Iron Deposits (B5)	Geomorphic Position (D2)
Inundation Visible on Aerial Imagery (B7)	Shallow Aquitard (D3)
Water-Stained Leaves (B9)	Microtopographic Relief (D4)
Aquatic Fauna (B13)	FAC-Neutral Test (D5)
Field Observations:	2
Surface Water Present? Yes V No Depth (inches):	
Water Table Present? Yes Vo Depth (inches):	
Saturation Present? Yes Ves No Depth (inches):	Surface Wetland Hydrology Present? Yes No
(includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos	;, previous inspections), if available:
Remarks:	

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20	Absolute	Dominant Indicator	Dominance Test worksheet:
<u>Tree Stratum</u> (Plot size: 30	% Cover	Species? Status	Number of Dominant Species
1		NA	That Are OBL, FACW, or FAC:1 (A)
2		NA	Total Number of Dominant
3		NA	Species Across All Strata: 1 (B)
4.		NA	
5		NA	Percent of Dominant Species That Are OBL, FACW, or FAC: 100.0 (A/B)
			That Are OBL, FACW, or FAC: 100.0 (A/B)
6		NA	Prevalence Index worksheet:
7	0.0	·	Total % Cover of: Multiply by:
50% of total cover: 0.0		= Total Cover	OBL species 20 x 1 = 20
	20% 01	total cover: 0.0	FACW species 0 x 2 = 0
Sapling/Shrub Stratum (Plot size: 15)		NA	FAC species 35 x 3 = 105
1			1710 species x 0 =
2			17.00 species x
3		NA	55 X 0 =
4		NA	Column Totals:55 (A)125 (B)
5		NA	Prevalence Index = B/A = 2.3
6		NA	
7		NA	Hydrophytic Vegetation Indicators:
		MA NA	1 - Rapid Test for Hydrophytic Vegetation
8		NA	2 - Dominance Test is >50%
9			3 - Prevalence Index is ≤3.0 ¹
500% of total account 0.00		= Total Cover	4 - Morphological Adaptations ¹ (Provide supporting
50% of total cover: 0.0	20% of	total cover: U.U	data in Remarks or on a separate sheet)
Herb Stratum (Plot size: 5	0.5	/	Problematic Hydrophytic Vegetation ¹ (Explain)
1. Echinochloa crus-galli	35	FAC	· resiemane · ryanepriyne v egetanem (_rpmim)
2. Eleocharis obtusa	10	OBL	¹Indicators of hydric soil and wetland hydrology must
3. Persicaria punctata	10	OBL	be present, unless disturbed or problematic.
4		NA	Definitions of Four Vegetation Strata:
5		NA	Definitions of Four Vegetation offata.
6.		NA	Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or
7		MA NA	more in diameter at breast height (DBH), regardless of height.
		NA	. Height.
0	-	NA	Sapling/Shrub – Woody plants, excluding vines, less
9		NA	than 3 in. DBH and greater than or equal to 3.28 ft (1
10			m) tall.
11		NA	Herb - All herbaceous (non-woody) plants, regardless
07.6	55.0;	= Total Cover	of size, and woody plants less than 3.28 ft tall.
50% of total cover: <u>27.5</u>	20% of	total cover: 11.0	Woody vine – All woody vines greater than 3.28 ft in
Woody Vine Stratum (Plot size: 15)			height.
1,		NA	
2		NA	
3		NA	
4		NA	
5.		NA	Hydrophytic Vegetation
· ·	0.0	= Total Cover	Present? Yes No
50% of total cover: 0.0		total cover: 0.0	
Remarks: (Include photo numbers here or on a separate s		total 00 vol	
Tremarks. (molude photo humbers here of on a separate s	noct.)		

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(inches)	Matrix		Red	ox Feature		. 2		
2.0	Color (moist)	%	Color (moist)		Type ¹	Loc ²	Texture	Remarks
)-2	10YR 4/2	97	7.5YR 3/4	3	<u>C</u>	<u>M</u>	Silt clay	
2-6	10YR 4/2	90	7.5 YR 4/4	10	<u>C</u>	<u>M</u>	Clay	
6-18	10YR 7/1	90	7.5 YR 4/6	10	<u>C</u>	M	Silt Clay	
			-					
	-		· -					
			<u> </u>					
_				_	_			
ype: C=Co	oncentration, D=D	epletion, RN	/=Reduced Matrix, N	/S=Maske	d Sand G	ains.	² Location: PL=F	ore Lining, M=Matrix.
	Indicators:	•	<u> </u>					s for Problematic Hydric Soils ³ :
Histosol	(A1)		Dark Surfac	e (S7)			2 cm	Muck (A10) (MLRA 147)
	pipedon (A2)		Polyvalue E					t Prairie Redox (A16)
Black His			Thin Dark S			147, 148)		LRA 147, 148)
	n Sulfide (A4)		Loamy Gley ✓ Depleted M		(F2)			mont Floodplain Soils (F19) LRA 136, 147)
	d Layers (A5) ick (A10) (LRR N)		Redox Dark	, ,	F6)		_ ,	Shallow Dark Surface (TF12)
	d Below Dark Surfa		Depleted Da	,	,			r (Explain in Remarks)
	ark Surface (A12)	,	Redox Dep					()
Sandy M	lucky Mineral (S1)	(LRR N,	Iron-Manga	nese Mas	ses (F12)	(LRR N,		
	A 147, 148)		MLRA 1	-			3	
	Sleyed Matrix (S4)		Umbric Sur					ors of hydrophytic vegetation and
	ledox (S5) Matrix (S6)		Piedmont F Red Parent					d hydrology must be present, disturbed or problematic.
	_ayer (if observe	d):	Ked Falelii	iviateriai (1721) (IVILI	A 121, 14	T) unless	disturbed of problematic.
Type:	-ayo. (obco. vo.	-,.						
	chas).						Hydric Soil Pre	esent? Yes No
Depth (inc							1.,,	······································
Depth (inc								
	intesy.							
	inus).							
	inus).							
	anca).							
	anca).							
	anca).							
	intos).							
	intos).							
Depth (inc	anca).							
	intos).							
	anca).							

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Project/Site: Summer Shade Solar Site City	//County: Summer Shade, KY/Metcalf Sampling Date: 10-08-2021
Applicant/Owner: Candela	State: KY Sampling Point: WAS-08
Investigator(s): Mike Williams / Chris Golden Se	relief (concave, convex, none): Concvex Slope (%): 2% Long: -85.682393 Datum: NAD 83 KY S
Landform (hillslope, terrace, etc.): Hillslope Local	relief (concave, convex, none): Concvex Slope (%): 2%
Subregion (LRR or MLRA): LRR N Lat: 36.879454	Long: -85.682393 Datum: NAD 83 KY S
Soil Map Unit Name: Ls - Lindside silt loam	NWI classification: Upland
Are climatic / hydrologic conditions on the site typical for this time of year?	Yes No lif no, explain in Remarks.)
Are Vegetation, Soil, or Hydrology significantly dis	turbed? Are "Normal Circumstances" present? Yes No
Are Vegetation, Soil, or Hydrology naturally proble	
	ampling point locations, transects, important features, etc.
Hydrophytic Vegetation Present? Yes No V	
Hydric Soil Present? Yes No V	Is the Sampled Area within a Wetland? Yes No
Wetland Hydrology Present? Yes No	within a Wetland? Yes No
Remarks:	
Upland point for WTL-04 & WTL-05 (WAS-07 & \	VAS-09)
HYDROLOGY	
Wetland Hydrology Indicators:	Secondary Indicators (minimum of two required)
Primary Indicators (minimum of one is required; check all that apply)	Surface Soil Cracks (B6)
Surface Water (A1)	s (B14) Sparsely Vegetated Concave Surface (B8)
High Water Table (A2) Hydrogen Sulfide (Odor (C1) Drainage Patterns (B10)
Saturation (A3) Oxidized Rhizosph	eres on Living Roots (C3) Moss Trim Lines (B16)
Water Marks (B1) Presence of Reduce	
	tion in Tilled Soils (C6) Crayfish Burrows (C8)
Drift Deposits (B3) Thin Muck Surface	
Algal Mat or Crust (B4) Other (Explain in F	
Iron Deposits (B5) Inundation Visible on Aerial Imagery (B7)	Geomorphic Position (D2) Shallow Aquitard (D3)
Water-Stained Leaves (B9)	Microtopographic Relief (D4)
Aquatic Fauna (B13)	FAC-Neutral Test (D5)
Field Observations:	
Surface Water Present? Yes No Depth (inches):	
Water Table Present? Yes No Depth (inches):	
Saturation Present? Yes No Depth (inches):	Wetland Hydrology Present? Yes No
(includes capillary fringe)	versions inspections) if availables
Describe Recorded Data (stream gauge, monitoring well, aerial photos, p	previous inspections), if available:
Remarks:	

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Sampling Point: WAS-08

- 20 (21) 20	Absolute	Dominant Indicator	Dominance Test worksheet:
<u>Tree Stratum</u> (Plot size: 30	% Cover	Species? Status	Number of Dominant Species
1			That Are OBL, FACW, or FAC: (A)
2		NA	Total Number of Dominant
3			Species Across All Strata: 2 (B)
4		NΙΔ	(,
5			Percent of Dominant Species That Are OBL FACW or FAC: 0.0 (A/B)
		NA	That Are OBL, FACW, or FAC: 0.0 (A/B)
6		NA	Prevalence Index worksheet:
7			Total % Cover of: Multiply by:
		= Total Cover	OBL species $0 \times 1 = 0$
50% of total cover: 0.0	20% of	total cover: 0.0	
Sapling/Shrub Stratum (Plot size: 15			1 AOV species
1		NA	FAC species 0 x 3 = 0
2		NA	FACU species
3		NA	UPL species15 x 5 =75
		NA	Column Totals: <u>85</u> (A) <u>355</u> (B)
4		NA	(-)
5			Prevalence Index = B/A = 4.2
6		NA	Hydrophytic Vegetation Indicators:
7		NA	1 - Rapid Test for Hydrophytic Vegetation
8		NA	2 - Dominance Test is >50%
9		NA	
	0.0	= Total Cover	3 - Prevalence Index is ≤3.0 ¹
50% of total cover: 0.0			4 - Morphological Adaptations ¹ (Provide supporting
Herb Stratum (Plot size: 5)			data in Remarks or on a separate sheet)
1. Trifolium repens	40	√ FACU	Problematic Hydrophytic Vegetation ¹ (Explain)
2. Digitaria sanguinalis	30	✓ FACU	
			¹ Indicators of hydric soil and wetland hydrology must
3. Sida rhombifolia	15	UPL	be present, unless disturbed or problematic.
4		NA	Definitions of Four Vegetation Strata:
5		NA	
6		NA	Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or
7		NA	more in diameter at breast height (DBH), regardless of height.
		NA	. 1101g11
8		NA	Sapling/Shrub - Woody plants, excluding vines, less
9		NA NA	than 3 in. DBH and greater than or equal to 3.28 ft (1
10			m) tall.
11		NA	Herb – All herbaceous (non-woody) plants, regardless
		= Total Cover	of size, and woody plants less than 3.28 ft tall.
50% of total cover: <u>42.5</u>	20% of	total cover: 17.0	Woody vine – All woody vines greater than 3.28 ft in
Woody Vine Stratum (Plot size: 15)			height.
1		NA	
2.		NIA	
0		NΔ	
		NA	•
4			Hydrophytic
5		NA	Vegetation ✓ Present? Yes No
		= Total Cover	Present? Yes No
50% of total cover: 0.0	20% of	total cover: 0.0	
Remarks: (Include photo numbers here or on a separate si	heet.)		

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Sampling Point: WAS-08

SOIL

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.) Depth Matrix Redox Features Color (moist) Texture (inches) 0-8 10YR 3/3 100 Silt Clay 8-16 7.5YR 4/6 100 Silt Clav ²Location: PL=Pore Lining, M=Matrix. ¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. **Hydric Soil Indicators:** Indicators for Problematic Hydric Soils³: Histosol (A1) 2 cm Muck (A10) (MLRA 147) Dark Surface (S7) Histic Epipedon (A2) Polyvalue Below Surface (S8) (MLRA 147, 148) Coast Prairie Redox (A16) Black Histic (A3) Thin Dark Surface (S9) (MLRA 147, 148) (MLRA 147, 148) Hydrogen Sulfide (A4) Loamy Gleyed Matrix (F2) Piedmont Floodplain Soils (F19) Stratified Layers (A5) Depleted Matrix (F3) (MLRA 136, 147) Very Shallow Dark Surface (TF12) 2 cm Muck (A10) (LRR N) Redox Dark Surface (F6) Depleted Below Dark Surface (A11) Depleted Dark Surface (F7) Other (Explain in Remarks) Thick Dark Surface (A12) Redox Depressions (F8) Sandy Mucky Mineral (S1) (LRR N, Iron-Manganese Masses (F12) (LRR N, MLRA 147, 148) MLRA 136) Sandy Gleyed Matrix (S4) Umbric Surface (F13) (MLRA 136, 122) ³Indicators of hydrophytic vegetation and Sandy Redox (S5) Piedmont Floodplain Soils (F19) (MLRA 148) wetland hydrology must be present, unless disturbed or problematic. Stripped Matrix (S6) Red Parent Material (F21) (MLRA 127, 147) Restrictive Layer (if observed): Type: **Hydric Soil Present?** Depth (inches): Remarks:

WETLAND DETERMINATION DATA FORM – Eastern Mountains and Piedmont Region to 1-69 Page 94 of 794

Project/Site: Summer Shade Solar Site	City/County: Summer Shade, KY/Metcalf Sampling Date: 10-08-2021
Applicant/Owner: Candela	State: KY Sampling Point: WAS-09
Investigator(s): Mike Williams / Chris Golden	
	ocal relief (concave, convex, none): Concave Slope (%): 2%
Subregion (LRR or MLRA): LRR N Lat: 36.87945	Long: -85.681915 Datum: NAD 83 KY S
Soil Map Unit Name: BaE2 - Baxter gravelly silt loam, 20 to 30 p	percent slopes, eroded NWI classification: N/A
Are climatic / hydrologic conditions on the site typical for this time of ye	
Are Vegetation, Soil, or Hydrology significantly	
Are Vegetation , Soil , or Hydrology naturally pro	
	g sampling point locations, transects, important features, etc.
	,
Hydrophytic Vegetation Present? Yes Veg No	Is the Sampled Area
Hydric Soil Present? Wetland Hydrology Present? Yes ✓ No No No No No No No	within a Wetland? Yes No
Remarks:	
See WTL-04/WAS-07 for Upland data point.(W	VAS-08)
Coo WIE O IV WITE OF FOI OPIGING GATE POINT.	Wite 66)
HYDROLOGY	
Wetland Hydrology Indicators:	Secondary Indicators (minimum of two required)
Primary Indicators (minimum of one is required; check all that apply)	Surface Soil Cracks (B6)
Surface Water (A1) True Aquatic P	
High Water Table (A2) Hydrogen Sulfi	
	ospheres on Living Roots (C3) Moss Trim Lines (B16)
	educed Iron (C4) Dry-Season Water Table (C2)
	eduction in Tilled Soils (C6) Crayfish Burrows (C8)
Drift Deposits (B3) Algel Met as Crust (B4) Other (Fundsia	
Algal Mat or Crust (B4) Other (Explain Iron Deposits (B5)	in Remarks) Stunted or Stressed Plants (D1) Geomorphic Position (D2)
Inundation Visible on Aerial Imagery (B7)	Shallow Aquitard (D3)
Water-Stained Leaves (B9)	Microtopographic Relief (D4)
Aquatic Fauna (B13)	FAC-Neutral Test (D5)
Field Observations:	
Surface Water Present? Yes No Depth (inches	3
Water Table Present? Yes Vo Depth (inches): Surface
Saturation Present? Yes Ve No Depth (inches	S): Surface Wetland Hydrology Present? Yes No
(includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photo	os pravious inspections) if available:
Describe Necorded Data (stream gauge, monitoring well, aeriai prioti	55, previous inspections), ii available.
Remarks:	

Case No. 2025-00064
Reponse to 1-69
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Sampling Point: WAS-09

	Absolute	Dominant Indicator	Dominance Test worksheet:
Tree Stratum (Plot size:)		Species? Status	Number of Dominant Species
1			That Are OBL, FACW, or FAC:3 (A)
2		NA	Total Number of Dominant
3		NA	Species Across All Strata:3 (B)
4.		NA	
5		MA NA	Percent of Dominant Species That Are OBL, FACW, or FAC: 100.0 (A/B)
			That Are OBL, FACW, or FAC: 100.0 (A/B)
6		NA NA	Prevalence Index worksheet:
7	0.0		Total % Cover of: Multiply by:
50% of total cover: 0.0		= Total Cover	OBL species 30 x 1 = 30
	20% 01	total cover: 0.0	FACW species 0 x 2 = 0
Sapling/Shrub Stratum (Plot size:)		NA	FAC species 20 x 3 = 60
1			770 Species x 0 =
2			1 AOO 3pccics
3		NA	61 E species x 6 =
4		NA	Column Totals:50 (A)90 (B)
5		NA	Prevalence Index = B/A = 1.8
6		NA	
7		NA	Hydrophytic Vegetation Indicators:
		NA NA	1 - Rapid Test for Hydrophytic Vegetation
8		NA	2 - Dominance Test is >50%
9			3 - Prevalence Index is ≤3.0 ¹
50% -(1)-1-1		= Total Cover	4 - Morphological Adaptations ¹ (Provide supporting
50% of total cover: 0.0	20% of	total cover: U.U	data in Remarks or on a separate sheet)
Herb Stratum (Plot size:)	00	/	Problematic Hydrophytic Vegetation ¹ (Explain)
1. Echinochloa crus-galli		FAC	resistant ryarophyne regetanen (_>pann)
2. Eleocharis obtusa	5	OBL	¹ Indicators of hydric soil and wetland hydrology must
3. Persicaria punctata	10	✓ OBL	be present, unless disturbed or problematic.
4. Hydrocotyle americana	15	√ OBL	Definitions of Four Vegetation Strata:
5		NA	. Definitions of Four Vegetation offata.
6		NA	Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or
7		MA NA	more in diameter at breast height (DBH), regardless of height.
		NA	. Holgin.
		NA	Sapling/Shrub – Woody plants, excluding vines, less
9		NA NA	than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.
10		NA	iii) taii.
11			Herb - All herbaceous (non-woody) plants, regardless
05.0		= Total Cover	of size, and woody plants less than 3.28 ft tall.
50% of total cover: <u>25.0</u>	20% of	total cover: 10.0	Woody vine – All woody vines greater than 3.28 ft in
Woody Vine Stratum (Plot size:)			height.
1		NA	
2		NA	
3		NA	
4		NA	Unidagahadia
5.		NA	Hydrophytic Vegetation
	0.0	= Total Cover	Present? Yes No
50% of total cover:0.0		total cover: 0.0	
Remarks: (Include photo numbers here or on a separate s			
Tromano. (molado prioto namboro noro di em a doparato d	11001.7		

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Reponse to 1-69
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Sampling Point: WAS-09

Profile Desc	cription: (Describe	to the de	pth needed to docur	nent the	indicator	or confirm	n the absence	of indicators.)
Depth	Matrix		Redo	x Feature	s			
(inches)	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²	Texture	Remarks
0-6	10YR 3/2	90	7.5YR 3/4	10	С	M	Clay	
	_		· -					
			·					
				·-	•	-		
	_	_	· -					
			<u> </u>	-		- ——		
			-				-	
			· -	-	· 			
		_						
¹ Type: C=Ce	oncentration, D=Dep	oletion, RM	M=Reduced Matrix, MS	S=Maske	d Sand Gr	ains.	² Location: PL	_=Pore Lining, M=Matrix.
Hydric Soil		,	•					tors for Problematic Hydric Soils ³ :
Histosol			Dark Surface	e (S7)				cm Muck (A10) (MLRA 147)
	pipedon (A2)		Polyvalue Be		ace (S8) (I	VILRA 147		past Prairie Redox (A16)
Black Hi			Thin Dark Su				, ,	(MLRA 147, 148)
	en Sulfide (A4)		Loamy Gleye			, -,	□Pi	edmont Floodplain Soils (F19)
	d Layers (A5)		✓ Depleted Ma		,		<u>—</u>	(MLRA 136, 147)
	uck (A10) (LRR N)		Redox Dark	. ,	F6)		V€	ery Shallow Dark Surface (TF12)
	d Below Dark Surfac	ce (A11)	Depleted Da	,	,		1 1	ther (Explain in Remarks)
Thick Da	ark Surface (A12)		Redox Depre	essions (F	8)			
Sandy M	Mucky Mineral (S1) (LRR N,	Iron-Mangan	ese Mass	es (F12) ((LRR N,		
MLRA	A 147, 148)		MLRA 13	6)				
Sandy G	Bleyed Matrix (S4)		Umbric Surfa	ce (F13)	(MLRA 13	36, 122)	³ Indi	cators of hydrophytic vegetation and
Sandy R	Redox (S5)		Piedmont Flo	odplain S	Soils (F19)	(MLRA 1	48) wet	tland hydrology must be present,
Stripped	l Matrix (S6)		Red Parent N	Material (F	21) (MLR	A 127, 14	7) unl	ess disturbed or problematic.
Restrictive I	Layer (if observed)):						
Type: Ro	ock							
Depth (in	ches): 6						Hydric Soil	Present? Yes ✓ No
Remarks:							,	
R	estrictions at	6 inche	es					

WETLAND DETERMINATION DATA FORM – Eastern Mountains and Piedmont Region to 1-69 Page 97 of 794

Project/Site: Summer Shade Solar Site	Sity/County: Summer Shade, KY/Metcalf Sampling Date: 10-08-2021
Applicant/Owner: Candela	State: KY Sampling Point: WAS-10
Investigator(s): Mike Williams / Chris Golden	
	al relief (concave, convex, none): Concave Slope (%): 2%
Subregion (LRR or MLRA): LRR N Lat: 36.879416	Long: -85.683838 Datum: NAD 83 KY S
Soil Man Unit Name: BaC - Baxter gravelly silt loam, 6 to 12 perc	Long: -85.683838 Datum: NAD 83 KY S eent slopes NWI classification: N/A
Are climatic / hydrologic conditions on the site typical for this time of year	r? Yes No (If no, explain in Remarks.)
Are Vegetation , Soil , or Hydrology significantly of	
Are Vegetation, Soil, or Hydrology naturally prob	
SUMMARY OF FINDINGS – Attach site map showing	sampling point locations, transects, important features, etc.
Hydrophytic Vegetation Present? Yes No	Is the Sampled Area
Hydric Soil Present? Yes V No No	within a Wetland? Yes No
Wetland Hydrology Present? Yes No	
Remarks:	
HYDROLOGY	
Wetland Hydrology Indicators:	Secondary Indicators (minimum of two required)
Primary Indicators (minimum of one is required; check all that apply)	Surface Soil Cracks (B6)
Surface Water (A1) True Aquatic Pla	
∀ High Water Table (A2) Hydrogen Sulfide Hydrogen Sulfide	
	pheres on Living Roots (C3) Moss Trim Lines (B16)
Water Marks (B1) Presence of Rec	
	uction in Tilled Soils (C6) Crayfish Burrows (C8)
Drift Deposits (B3)	ce (C7) Saturation Visible on Aerial Imagery (C9)
Algal Mat or Crust (B4) Other (Explain ir	n Remarks) Stunted or Stressed Plants (D1)
Iron Deposits (B5)	Geomorphic Position (D2)
Inundation Visible on Aerial Imagery (B7)	Shallow Aquitard (D3)
Water-Stained Leaves (B9)	Microtopographic Relief (D4)
Aquatic Fauna (B13)	✓ FAC-Neutral Test (D5)
Field Observations:	2
Surface Water Present? Yes V No Depth (inches):	·
Water Table Present? Yes V No Depth (inches):	
Saturation Present? Yes No Depth (inches):	0 Wetland Hydrology Present? Yes No
Describe Recorded Data (stream gauge, monitoring well, aerial photos	s, previous inspections), if available:
Remarks:	
Remarks.	

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Reponse to 1-69
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Sampling Point: WAS-10

T 0: (D) : 20	Absolute	Dominant Indicator	Dominance Test worksheet:
<u>Tree Stratum</u> (Plot size: 30	% Cover	Species? Status	Number of Dominant Species
1		NA	That Are OBL, FACW, or FAC:1 (A)
2			Total Number of Dominant
3		NA	Species Across All Strata:1 (B)
4		NA	Percent of Dominant Species
5		NA	That Are OBL, FACW, or FAC: 100.0 (A/B)
6		NA	
7		NA	Prevalence Index worksheet:
	0.0	= Total Cover	Total % Cover of: Multiply by:
50% of total cover: 0.0			OBL species x 1 = 80
Sapling/Shrub Stratum (Plot size: 15			FACW species
1		NA	FAC species 20 x 3 = 60
2		NA	FACU species0 x 4 =0
3		A I A	UPL species 0 x 5 = 0
4		N I A	Column Totals:100 (A)140 (B)
		NA	
5		NA	Prevalence Index = B/A =1.4
6		NA	Hydrophytic Vegetation Indicators:
7		NA NA	1 - Rapid Test for Hydrophytic Vegetation
8		NA	2 - Dominance Test is >50%
9			3 - Prevalence Index is ≤3.0 ¹
700 () ()		= Total Cover	4 - Morphological Adaptations ¹ (Provide supporting
50% of total cover: 0.0	20% of	total cover: U.U	data in Remarks or on a separate sheet)
Herb Stratum (Plot size: 5)	70	√ OBL	Problematic Hydrophytic Vegetation ¹ (Explain)
1. Leersia oryzoides	70		
2. Echinochloa crus-galli	15	FAC	¹ Indicators of hydric soil and wetland hydrology must
3. Persicaria punctata	10	OBL	be present, unless disturbed or problematic.
4. Persicaria longiseta	5	FAC	Definitions of Four Vegetation Strata:
5		NA	
6		NA	Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of
7		NA	height.
8		NA	
9.		NA	Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than or equal to 3.28 ft (1
10		NA	m) tall.
11.		MA NA	·
· · ·	100.0	= Total Cover	Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.
50% of total cover: 50.0			
Woody Vine Stratum (Plot size: 15)		<u> </u>	Woody vine – All woody vines greater than 3.28 ft in
1		NA	l_height.
2.		NΙΛ	•
		NA	
		NA	
4		NA	Hydrophytic
5			Vegetation
50% of total cover: 0.0		= Total Cover total cover: 0.0	100 100
		total cover: 0.0	
Remarks: (Include photo numbers here or on a separate si	neet.)		

Case No. 2025-00064
Reponse to 1-69
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Sampling Point: WAS-10

Profile Desc	ription: (Describe	to the de	pth needed to docur	nent the	indicator	or confirm	n the absence	of indicators.)
Depth	Matrix		Redo	x Feature	s 1	. 2		
(inches)	Color (moist)	<u>%</u>	Color (moist)	%	Type ¹	Loc ²	<u>Texture</u>	Remarks
0-18	10YR 4/2	90	7.5YR 4/6	10	С	M	Silt clay	
				-	· 			
		- ——						
				-	· 			
		· 						
¹Type: C=Cd	ncentration D=Der	letion RM	I=Reduced Matrix, MS	S-Maske	d Sand Gr	ains	² l ocation: Pl	_=Pore Lining, M=Matrix.
Hydric Soil		netion, ixiv	i=i\eadced iviatiix, ivic	J-IVIASKE	u Sanu Gi	airis.		ntors for Problematic Hydric Soils ³ :
Histosol			Dark Surface	(97)				cm Muck (A10) (MLRA 147)
	oipedon (A2)		Polyvalue Be		ace (S8) (I	MLRA 147		oast Prairie Redox (A16)
Black Hi			Thin Dark Su				, ,	(MLRA 147, 148)
	n Sulfide (A4)		Loamy Gleye			, -,	Pi	iedmont Floodplain Soils (F19)
	Layers (A5)		✓ Depleted Ma		` ,		<u> </u>	(MLRA 136, 147)
2 cm Mu	ck (A10) (LRR N)		Redox Dark	Surface (F6)		V	ery Shallow Dark Surface (TF12)
	Below Dark Surfac	e (A11)	Depleted Dai		. ,			ther (Explain in Remarks)
	ark Surface (A12)		Redox Depre					
	lucky Mineral (S1) (I	LRR N,	Iron-Mangan		es (F12) ((LRR N,		
	147, 148)		MLRA 13	-	(B. 11) D. 14		3, ,,	
	leyed Matrix (S4)		Umbric Surfa					cators of hydrophytic vegetation and
	edox (S5) Matrix (S6)		Piedmont Flo					tland hydrology must be present, ess disturbed or problematic.
	ayer (if observed)	•	Red Falelit is	nateriai (i	ZI) (WILK	A 121, 14	7) uiii	ess disturbed of problematic.
Type:	ayer (ii observed)	•						
• • •	-h\.						Unadaia Cail	Bresset2 Ves ✓ No
	ches):						Hydric Soil	Present? Yes No
Remarks:								

WETLAND DETERMINATION DATA FORM – Eastern Mountains and Piedmont Region to 1-69 Page 100 of 794

Project/Site: Summer Shade Solar Site	City/County: Summer Shade, KY/Metcalf Sampling Date: 10-08-2021
Applicant/Owner: Candela	State: KY Sampling Point: WAS-11
Investigator(s): Mike Williams / Chris Golden	
Landform (hillslope, terrace, etc.): Valley slope	ocal relief (concave, convex, none): Convex Slope (%): 2%
Subregion (LRR or MLRA): LRR N Lat: 36.879332	Long: -85.683763 Datum: NAD 83 KY S
Soil Map Unit Name: BaC2 - Baxter gravelly silt loam, 6 to 12 per	ercent slopes, eroded NIWI classification: Upland
Are climatic / hydrologic conditions on the site typical for this time of ye	
Are Vegetation, Soil, or Hydrology significantly	
Are Vegetation , Soil , or Hydrology naturally pro	
SUMMARY OF FINDINGS – Attach site map showing	g sampling point locations, transects, important features, etc.
Hydrophytic Vegetation Present? Yes No	Is the Sampled Area
Hydric Soil Present? Yes No	within a Wetland? Yes No
Wetland Hydrology Present? Yes No	
Remarks:	
HYDROLOGY	
Wetland Hydrology Indicators:	Secondary Indicators (minimum of two required)
Primary Indicators (minimum of one is required; check all that apply)	` <i></i> _ ` <i></i> _ ` ` <i></i>
Surface Water (A1)	
High Water Table (A2) Hydrogen Sulfi	
	ospheres on Living Roots (C3) Moss Trim Lines (B16)
	educed Iron (C4) Dry-Season Water Table (C2)
	eduction in Tilled Soils (C6) Crayfish Burrows (C8)
Drift Deposits (B3) Algel Met es Crust (B4) Other (Fundamental Drift Deposits (B3)	
Algal Mat or Crust (B4) Other (Explain Iron Deposits (B5)	in Remarks) Stunted or Stressed Plants (D1) Geomorphic Position (D2)
Inundation Visible on Aerial Imagery (B7)	Shallow Aquitard (D3)
Water-Stained Leaves (B9)	Microtopographic Relief (D4)
Aquatic Fauna (B13)	FAC-Neutral Test (D5)
Field Observations:	
Surface Water Present? Yes No Depth (inches	s):
Water Table Present? Yes No Depth (inches):
Saturation Present? Yes No Depth (inches	·
(includes capillary fringe)	
Describe Recorded Data (stream gauge, monitoring well, aerial photo	os, previous inspections), ir available:
Remarks:	

Case No. 2025-00064
Reponse to 1-69
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Sampling Point: WAS-11

20	Absolute	Dominant Indicator	Dominance Test worksheet:
<u>Tree Stratum</u> (Plot size: 30		Species? Status	Number of Dominant Species
1			That Are OBL, FACW, or FAC: (A)
2		NA	Total Number of Dominant
3		NA	Species Across All Strata:1 (B)
4		NA	Beauty (Bassissa) Orașis
5		NA	Percent of Dominant Species That Are OBL, FACW, or FAC: 0.0 (A/B)
6			
7		NA NA	Prevalence Index worksheet:
	0.0	= Total Cover	Total % Cover of: Multiply by:
50% of total cover: 0.0			OBL species <u>25</u> x 1 = <u>25</u>
Sapling/Shrub Stratum (Plot size: 15			FACW species0 x 2 =0
1		NA	FAC species0 x 3 =0
2		NA	FACU species70 x 4 =280
		NA	UPL species0 x 5 =0
3		NA	Column Totals: 95 (A) 305 (B)
4		NA	.,
5		NA	Prevalence Index = B/A = 3.2
6		NA	Hydrophytic Vegetation Indicators:
7			1 - Rapid Test for Hydrophytic Vegetation
8		NA	2 - Dominance Test is >50%
9		NA	3 - Prevalence Index is ≤3.0 ¹
		= Total Cover	4 - Morphological Adaptations ¹ (Provide supporting
50% of total cover: 0.0	20% of	total cover: 0.0	data in Remarks or on a separate sheet)
Herb Stratum (Plot size: 5			-
1. Persicaria punctata	25	OBL	Problematic Hydrophytic Vegetation ¹ (Explain)
2. Amaranthus palmeri	10	FACU	
3. Trifolium repens	60	√ FACU	¹Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
4		MA NA	· · · · · · · · · · · · · · · · · · ·
5		NA	Definitions of Four Vegetation Strata:
		NA	Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or
		NA	more in diameter at breast height (DBH), regardless of
7		NA	height.
8		NA	Sapling/Shrub – Woody plants, excluding vines, less
9		NA	than 3 in. DBH and greater than or equal to 3.28 ft (1
10			m) tall.
11	05.0	NA	Herb - All herbaceous (non-woody) plants, regardless
47.5		= Total Cover	of size, and woody plants less than 3.28 ft tall.
50% of total cover: 47.5	20% of	total cover: 19.0	Woody vine – All woody vines greater than 3.28 ft in
Woody Vine Stratum (Plot size: 15)			height.
1		NA	
2		NA	
3		NA	
4		NA	Hydrophytic
5		NA	Vegetation
	0.0	= Total Cover	Present? Yes No
50% of total cover: 0.0	20% of	total cover: 0.0	
Remarks: (Include photo numbers here or on a separate s	heet.)		

Case No. 2025-00064
Reponse to 1-69
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Sampling Point: WAS-11

Profile Desc	cription: (Describe	to the de	pth needed to docu	ment the	indicator	or confirn	n the absence of ir	ndicators.)
Depth	Matrix			x Feature				
(inches)	Color (moist)	<u> </u>	Color (moist)	%	Type ¹	Loc ²	Texture	Remarks
0-6	10YR 4/3	95	7.5YR 5/8	5	С	M	Silty clay	
6-18	10YR 5/3	90	7.5YR 5/8	10	С	М	Clay	
		-						
						·		
					-			
								_
		-			• ———			
								
		letion, RM	I=Reduced Matrix, M	S=Maske	d Sand Gr	ains.		ore Lining, M=Matrix.
Hydric Soil								for Problematic Hydric Soils ³ :
Histosol			Dark Surface					Muck (A10) (MLRA 147)
	pipedon (A2)		Polyvalue Be					Prairie Redox (A16)
	istic (A3)		Thin Dark Su			147, 148)		.RA 147, 148)
	en Sulfide (A4) d Layers (A5)		Loamy Gleye Depleted Ma		(FZ)			ont Floodplain Soils (F19) .RA 136, 147)
	uck (A10) (LRR N)		Redox Dark		F6)			Shallow Dark Surface (TF12)
	d Below Dark Surfac	e (A11)	Depleted Da	,	,		1 1 7	(Explain in Remarks)
	ark Surface (A12)	- ()	Redox Depre					
	Mucky Mineral (S1) (LRR N,	Iron-Mangan			LRR N,		
	A 147, 148)		MLRA 13					
	Sleyed Matrix (S4)		Umbric Surfa					rs of hydrophytic vegetation and
	Redox (S5)		Piedmont Flo					hydrology must be present,
	Matrix (S6)		Red Parent I	Material (I	F21) (MLR	A 127, 14	7) unless	disturbed or problematic.
	Layer (if observed)							
								✓
Depth (in	ches):						Hydric Soil Pres	sent? Yes No
Remarks:								

WETLAND DETERMINATION DATA FORM – Eastern Mountains and Piedmont Region to 1-69 Page 103 of 794

Project/Site: Summer Shade Solar Site	City/County: Summer Shade, KY/Metcalf Sampling Date: 10-08-2021
Applicant/Owner: Candela	State: KY Sampling Point: WAS-12
Investigator(s): Mike Williams / Chris Golden	
Landform (hillslope, terrace, etc.): Valley/sink area	al relief (concave, convex, none). Concave Slope (%). 2%
Subregion (LRR or MLRA): LRR N Lat: 36.878826	al relief (concave, convex, none): Concave Slope (%): 2% Long: -85.685275 Datum: NAD 83 KY S
Soil Map Unit Name: Ls - Lindside silt loam	NWI classification: N/A
Are climatic / hydrologic conditions on the site typical for this time of year	
Are Vegetation , Soil , or Hydrology significantly of	
Are Vegetation , Soil , or Hydrology naturally prob	
, , , , , , , , , , , , , , , , , , , ,	sampling point locations, transects, important features, etc.
Hydrophytic Vegetation Present? Yes No N	Is the Sampled Area
Hydric Soil Present? Wetland Hydrology Present? Yes V No No No	within a Wetland? Yes No
Wetland Hydrology Present? Yes No Remarks:	
Wetland 07 wet data point - closed depression	
welland of wel data point - closed depression	
HYDROLOGY	
Wetland Hydrology Indicators:	Secondary Indicators (minimum of two required)
Primary Indicators (minimum of one is required; check all that apply)	Surface Soil Cracks (B6)
✓ Surface Water (A1)	
High Water Table (A2) Hydrogen Sulfide	
Saturation (A3) Oxidized Rhizos	pheres on Living Roots (C3) Moss Trim Lines (B16)
Water Marks (B1) Presence of Rec	duced Iron (C4) Dry-Season Water Table (C2)
Sediment Deposits (B2) Recent Iron Red	luction in Tilled Soils (C6) Crayfish Burrows (C8)
Drift Deposits (B3) Thin Muck Surfa	ce (C7) Saturation Visible on Aerial Imagery (C9)
Algal Mat or Crust (B4) Other (Explain in	n Remarks) Stunted or Stressed Plants (D1)
Iron Deposits (B5)	Geomorphic Position (D2)
Inundation Visible on Aerial Imagery (B7)	Shallow Aquitard (D3)
Water-Stained Leaves (B9)	Microtopographic Relief (D4)
Aquatic Fauna (B13)	FAC-Neutral Test (D5)
Field Observations:	Surface
Surface Water Present? Yes V No Depth (inches):	
Water Table Present? Yes No Depth (inches):	/
Saturation Present? Yes No Depth (inches):	Surface Wetland Hydrology Present? Yes No
Describe Recorded Data (stream gauge, monitoring well, aerial photos	s, previous inspections), if available:
Remarks:	

20	Absolute	Dominant Indicator	Dominance Test worksheet:
Tree Stratum (Plot size: 30		Species? Status	Number of Dominant Species
1. Fraxinus pennsylvanica	20	FACW	That Are OBL, FACW, or FAC: 2 (A)
2		NA	Total Number of Deminent
3		NA	Total Number of Dominant Species Across All Strata:2 (B)
4		MA NA	(2)
		NA	Percent of Dominant Species That Are OBL FACW or FAC: 100.0 (A/B)
5			That Are OBL, FACW, or FAC: 100.0 (A/B)
6			Prevalence Index worksheet:
7		NA	Total % Cover of: Multiply by:
40.6	20.0	= Total Cover	40
50% of total cover: <u>10.0</u>	<u>) </u>	total cover: 4.0	<u> </u>
Sapling/Shrub Stratum (Plot size: 15			171011 species x =
1,		NA	X 3 =
2		NA	FACU species 0 x 4 = 0
3		NA	UPL species0 x 5 =0
4		MA NA	Column Totals:60(A)80(B)
· `		NA	4.0
5		NA	Prevalence Index = B/A = 1.3
6		NA	Hydrophytic Vegetation Indicators:
7			1 - Rapid Test for Hydrophytic Vegetation
8		NA	2 - Dominance Test is >50%
9	-	NA	3 - Prevalence Index is ≤3.0 ¹
	0.0	= Total Cover	4 - Morphological Adaptations ¹ (Provide supporting
50% of total cover: 0.0	20% of	total cover: 0.0	-
Herb Stratum (Plot size: 5			data in Remarks or on a separate sheet)
1 Persicaria punctata	40	✓ OBL	Problematic Hydrophytic Vegetation ¹ (Explain)
2		NA	
		NA	¹ Indicators of hydric soil and wetland hydrology must
3		NA	be present, unless disturbed or problematic.
4			Definitions of Four Vegetation Strata:
5		NA	Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or
6	•		more in diameter at breast height (DBH), regardless of
7		NA	height.
8		NA	Canling/Church Weady plants avaluding vines less
9		NA	Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than or equal to 3.28 ft (1
10.		NA	m) tall.
11.		MA NA	
	40.0	= Total Cover	Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.
50% of total cover: <u>20.0</u>	20% of	total cover: 8.0	or size, and woody plants loss than 6.20 it tall.
Woody Vine Stratum (Plot size: 15)	2070 01	total 66761	Woody vine – All woody vines greater than 3.28 ft in
/ (Flot size		NA	height.
1		NIA.	
2			
3		NA	
4		NA	Hydrophytic
5		NA	Vegetation /
	0.0	= Total Cover	Present? Yes No
50% of total cover: 0.0	20% of	total cover: 0.0	
Remarks: (Include photo numbers here or on a separate s			1
(,		

Case No. 2025-00064
Reponse to 1-69
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Sampling Point: WAS-12

Profile Desc	ription: (Describe	to the dep	th needed to docur	nent the	indicator	or confirn	n the absence of inc	licators.)
Depth	Matrix			x Feature				
(inches)	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²	<u>Texture</u>	Remarks
0-4	10YR 3/3	90	7.5YR 3/4	10	С	<u>M</u>	Silt Clay	
4-9	10YR 4/2	70	5YR 4/6	30	С	M	Silt Clay	
9-18	10YR 4/2	60	5YR 3/4	40	С	M	Silt Clay	
				-				
								
		· ——		-				
		. 						
¹ Type: C=Co	oncentration, D=Dep	letion, RM	=Reduced Matrix, MS	S=Maske	d Sand Gr	ains.	² Location: PL=Por	e Lining, M=Matrix.
Hydric Soil							Indicators f	or Problematic Hydric Soils ³ :
Histosol			Dark Surface					uck (A10) (MLRA 147)
	oipedon (A2)		Polyvalue Be					Prairie Redox (A16)
Black Hi			Thin Dark Su			147, 148)		RA 147, 148)
	en Sulfide (A4)		Loamy Gleye		(F2)			nt Floodplain Soils (F19)
	d Layers (A5) uck (A10) (LRR N)		Depleted Ma		Ee)			RA 136, 147) nallow Dark Surface (TF12)
	d Below Dark Surfac	e (A11)	Depleted Dai				1 1 7	Explain in Remarks)
	ark Surface (A12)	5 (7111)	Redox Depre				(.	-xpiain in remaine)
	lucky Mineral (S1) (L	RR N,	Iron-Mangan			LRR N,		
	\ 147, 148)		MLRA 13					
	Gleyed Matrix (S4)		Umbric Surfa					s of hydrophytic vegetation and
	Redox (S5)		Piedmont Flo					nydrology must be present,
	Matrix (S6) Layer (if observed):		Red Parent N	/laterial (F	-21) (MLR	A 127, 14	7) unless di	sturbed or problematic.
	ahaa).						Hydric Soil Prese	ent? Yes No
	ches):						nyaric Soil Prese	ent? Tes No
Remarks:								

WETLAND DETERMINATION DATA FORM – Eastern Mountains and Piedmont Region to 1-69
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Project/Site: Summer Shade Solar Site City/C	County: Summer Shade, KY/Metcalf Sa	ampling Date: 10-08-2021
Applicant/Owner: Candela		Sampling Point: WAS-13
Investigator(s): Mike Williams / Chris Golden Section		
Landform (hillslope, terrace, etc.): Valley slope Local rel	ief (concave, convex, none): Convex	Slope (%): 2%
Subregion (LRR or MLRA): LRR N Lat: 36.878856	Long:85.685312	Datum: NAD 83 KY S
Soil Map Unit Name: Ls - Lindside silt loam	NWI classification	
Are climatic / hydrologic conditions on the site typical for this time of year? Y		
Are Vegetation, Soil, or Hydrology significantly distur		sent? Yes 🔽 No 🔲
Are Vegetation, Soil, or Hydrology naturally problems		
SUMMARY OF FINDINGS – Attach site map showing san	npling point locations, transects, ir	mportant features, etc.
Hydrophytic Vegetation Present? Hydric Soil Present? Wetland Hydrology Present? Yes No V No V No	Is the Sampled Area within a Wetland? Yes	No
Remarks:		
Upland point for wetland 07		
HYDROLOGY		
Wetland Hydrology Indicators:	Secondary Indicators	s (minimum of two required)
Primary Indicators (minimum of one is required; check all that apply)	Surface Soil Cra	
Surface Water (A1) True Aquatic Plants (ated Concave Surface (B8)
High Water Table (A2) Hydrogen Sulfide Od Outside A Phinocephore		
	es on Living Roots (C3) Moss Trim Lines	` '
Water Marks (B1) Sediment Deposits (B2) Presence of Reduced Recent Iron Reduction	· '	
Sediment Deposits (B2) Drift Deposits (B3) Recent Iron Reduction Thin Muck Surface (0		le on Aerial Imagery (C9)
Algal Mat or Crust (B4) Other (Explain in Rer		ssed Plants (D1)
Iron Deposits (B5)	Geomorphic Pos	` '
Inundation Visible on Aerial Imagery (B7)	Shallow Aquitare	` '
Water-Stained Leaves (B9)	Microtopographi	
Aquatic Fauna (B13)	FAC-Neutral Te	
Field Observations:		
Surface Water Present? Yes No Depth (inches):		
Water Table Present? Yes No Depth (inches):		✓
Saturation Present? Yes No Depth (inches):	Wetland Hydrology Present?	Yes No
Describe Recorded Data (stream gauge, monitoring well, aerial photos, pre	vious inspections), if available:	
Remarks:		

20	Absolute	Dominant Indicator	Dominance Test worksheet:
<u>Tree Stratum</u> (Plot size: 30		Species? Status	Number of Dominant Species
1			That Are OBL, FACW, or FAC: (A)
2		NA	Total Number of Dominant
3		NA	Species Across All Strata:3 (B)
4		NA	
5		NA	Percent of Dominant Species That Are OBL, FACW, or FAC: 0.0 (A/B)
6			That Ale OBE, I AOW, OF I AO.
7		NA	Prevalence Index worksheet:
·· 	0.0	= Total Cover	Total % Cover of: Multiply by:
50% of total cover: 0.0			OBL species3 x 1 =3
Sapling/Shrub Stratum (Plot size: 15)			FACW species0 x 2 =0
		NA	FAC species0 x 3 =0
1		NA	FACU species 45 x 4 = 180
2		NA	UPL species 40 x 5 = 200
3		ΝΔ	Column Totals: 88 (A) 383 (B)
4		NA	Column Totals (A) (B)
5			Prevalence Index = B/A = 4.4
6		NA	Hydrophytic Vegetation Indicators:
7		NA	1 - Rapid Test for Hydrophytic Vegetation
8		NA	2 - Dominance Test is >50%
9		NA	3 - Prevalence Index is ≤3.0¹
	0.0	= Total Cover	4 - Morphological Adaptations ¹ (Provide supporting
50% of total cover: 0.0	20% of	total cover: 0.0	
Herb Stratum (Plot size: 5			data in Remarks or on a separate sheet)
1. Persicaria punctata	3	OBL	Problematic Hydrophytic Vegetation ¹ (Explain)
2. Amaranthus palmeri	5	√ FACU	
3. Trifolium repens	40	√ FACU	¹ Indicators of hydric soil and wetland hydrology must
4. Sida rhombifolia	40	√ UPL	be present, unless disturbed or problematic.
5		NA	Definitions of Four Vegetation Strata:
		NA	Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or
6		NA	more in diameter at breast height (DBH), regardless of
7		NA	height.
8		NA	Sapling/Shrub – Woody plants, excluding vines, less
9			than 3 in. DBH and greater than or equal to 3.28 ft (1
10		NA	m) tall.
11		NA	Herb – All herbaceous (non-woody) plants, regardless
44.6	<u>88.0</u>	= Total Cover	of size, and woody plants less than 3.28 ft tall.
50% of total cover: 44.0	<u>)</u> 20% of	total cover: 17.6	Woody vine – All woody vines greater than 3.28 ft in
Woody Vine Stratum (Plot size: 15)			height.
1		NA	
2		NA	
3		NA	
4		NA	Hydrophytic
5		NA	Vegetation
	0.0	= Total Cover	Present? Yes No
50% of total cover: 0.0	20% of	total cover: 0.0	
Remarks: (Include photo numbers here or on a separate s	heet.)		

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SOIL Page 108 of 794
Sampling Point: WAS-13

Depth (inches) Color (moist) % Color (moist) % Depte Loc Sitty clay 9-18 10YR 3/4 100 Clay Sitty clay Cla	Profile Desc	ription: (Describe	to the depti	n needed to docun	ent the ir	ndicator	or confirm	the absence	of indicate	ors.)	
0-9 10YR 3/4 100				Redox		i					
9-18 10YR 5/6 100 Clay Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. Hydric Soil Indicators: Histic Epipedon (A2) Histic Epipedon (A2) Black Histic (A3) Hydrogen Sulfide (A4) Loamy Gleyed Matrix (F3) Stratified Layers (A5) 2 cm Muck (A10) (LRR N) Depleted Below Dark Surface (A11) Thick Dark Surface (A12) Sandy Gleyed Matrix (S4) Sandy Redox (S5) Stripped Matrix (S6) Redox Dark Surface (F13) (MLRA 136, 147) Redox Depressions (F8) Umbric Surface (F13) (MLRA 136, 147) Redox Depressions (F8) Sandy Medox (S5) Stripped Matrix (S6) Red Parent Material (F21) (MLRA 136, 127) Hydric Soil Present? Yes No Hydric Soil Present? Yes No Hydric Soil Present? Yes No				Color (moist)	%	Type'	_Loc ² _			Remarks	
Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. Hydric Soil Indicators: Histosol (A1)	0-9	10YR 3/4	100					Silty clay			
Hydric Soil Indicators: Histosol (A1) Histic Epipedon (A2) Black Histic (A3) Hydrogen Sulfide (A4) Stratified Layers (A5) Depleted Below Dark Surface (S9) Thin Dark Surface (F6) Depleted Below Dark Surface (A11) Thick Dark Surface (A12) Sandy Mucky Mineral (S1) (LRR N, MLRA 147, 148) Sandy Gleyed Matrix (S4) Sandy Redox (S5) Stripped Matrix (S6) Red Parent Material (F21) (MLRA 148) Stripped Matrix (S6) Red Parent Material (F21) (MLRA 127, 147) Restrictive Layer (if observed): Type: Depth (inches): Hydric Soil Present? Yes Indicators for Problematic Hydric Soils³: andicators for Problematic Hydric Soils³: 2 cm Muck (A10) (MLRA 147) Coast Prairie Redox (A16) (MLRA 147, 148) (MLRA 147, 148) Piedmont Floodplain Soils (F19) (MLRA 136, 147) Very Shallow Dark Surface (TF12) Other (Explain in Remarks) Thick Dark Surface (A12) Sandy Mucky Mineral (S1) (LRR N, MLRA 136, Umbric Surface (F13) (MLRA 136, 122) Sandy Redox (S5) Red Parent Material (F21) (MLRA 148) Restrictive Layer (if observed): Type: Depth (inches): Hydric Soil Present? Yes No	9-18	10YR 5/6	100					Clay			
Hydric Soil Indicators: Histosol (A1) Histic Epipedon (A2) Black Histic (A3) Hydrogen Sulfide (A4) Stratified Layers (A5) Depleted Below Dark Surface (S7) Thick Dark Surface (A11) Sandy Mucky Mineral (S1) (LRR N, MLRA 147, 148) Sandy Gleyed Matrix (S4) Sandy Gleyed Matrix (S4) Sandy Redox (S5) Sandy Redox (S5) Stripped Matrix (S6) Red Parent Material (F21) (MLRA 147, 147) Restrictive Layer (if observed): Type: Depth (inches): Hydric Soil Present? Yes No			<u> </u>								
Hydric Soil Indicators: Histosol (A1) Histic Epipedon (A2) Black Histic (A3) Hydrogen Sulfide (A4) Stratified Layers (A5) Depleted Below Dark Surface (A11) Thick Dark Surface (A12) Sandy Mucky Mineral (S1) (LRR N, MLRA 147, 148) Sandy Gleyed Matrix (S4) Sandy Gleyed Matrix (S4) Sandy Redox (S5) Sandy Redox (S5) Sandy Redox (S5) Stripped Matrix (S6) Red Parent Material (F21) (MLRA 147, 147) Restrictive Layer (if observed): Type: Depth (inches): Hydric Soil Present? Yes											
Hydric Soil Indicators: Histosol (A1) Histic Epipedon (A2) Black Histic (A3) Hydrogen Sulfide (A4) Stratified Layers (A5) Depleted Below Dark Surface (A11) Thick Dark Surface (A12) Sandy Mucky Mineral (S1) (LRR N, MLRA 147, 148) Sandy Gleyed Matrix (S4) Sandy Gleyed Matrix (S4) Sandy Redox (S5) Sandy Redox (S5) Stripped Matrix (S6) Red Parent Material (F21) (MLRA 127, 147) Restrictive Layer (if observed): Type: Depth (inches): Hydric Soil Present? Yes No		-						-	-		
Hydric Soil Indicators: Histosol (A1) Histic Epipedon (A2) Black Histic (A3) Hydrogen Sulfide (A4) Stratified Layers (A5) Depleted Below Dark Surface (A11) Thick Dark Surface (A12) Sandy Mucky Mineral (S1) (LRR N, MLRA 147, 148) Sandy Gleyed Matrix (S4) Sandy Gleyed Matrix (S4) Sandy Redox (S5) Sandy Redox (S5) Stripped Matrix (S6) Red Parent Material (F21) (MLRA 127, 147) Restrictive Layer (if observed): Type: Depth (inches): Hydric Soil Present? Yes No											
Hydric Soil Indicators: Histosol (A1) Histic Epipedon (A2) Black Histic (A3) Hydrogen Sulfide (A4) Stratified Layers (A5) Depleted Below Dark Surface (A11) Thick Dark Surface (A12) Sandy Mucky Mineral (S1) (LRR N, MLRA 147, 148) Sandy Gleyed Matrix (S4) Sandy Gleyed Matrix (S4) Sandy Redox (S5) Sandy Redox (S5) Stripped Matrix (S6) Red Parent Material (F21) (MLRA 127, 147) Restrictive Layer (if observed): Type: Depth (inches): Hydric Soil Present? Yes No											
Hydric Soil Indicators: Histosol (A1) Histic Epipedon (A2) Black Histic (A3) Hydrogen Sulfide (A4) Stratified Layers (A5) Depleted Below Dark Surface (A11) Thick Dark Surface (A12) Sandy Mucky Mineral (S1) (LRR N, MLRA 147, 148) Sandy Gleyed Matrix (S4) Sandy Gleyed Matrix (S4) Sandy Redox (S5) Sandy Redox (S5) Stripped Matrix (S6) Red Parent Material (F21) (MLRA 127, 147) Restrictive Layer (if observed): Type: Depth (inches): Hydric Soil Present? Yes No				_							
Hydric Soil Indicators: Histosol (A1) Histic Epipedon (A2) Black Histic (A3) Hydrogen Sulfide (A4) Stratified Layers (A5) Depleted Below Dark Surface (A11) Thick Dark Surface (A12) Sandy Mucky Mineral (S1) (LRR N, MLRA 147, 148) Sandy Gleyed Matrix (S4) Sandy Gleyed Matrix (S4) Sandy Redox (S5) Sandy Redox (S5) Stripped Matrix (S6) Red Parent Material (F21) (MLRA 127, 147) Restrictive Layer (if observed): Type: Depth (inches): Hydric Soil Present? Yes No											
Hydric Soil Indicators: Histosol (A1) Histic Epipedon (A2) Black Histic (A3) Hydrogen Sulfide (A4) Stratified Layers (A5) Depleted Below Dark Surface (A11) Thick Dark Surface (A12) Sandy Mucky Mineral (S1) (LRR N, MLRA 147, 148) Sandy Gleyed Matrix (S4) Sandy Gleyed Matrix (S4) Sandy Redox (S5) Sandy Redox (S5) Stripped Matrix (S6) Red Parent Material (F21) (MLRA 127, 147) Restrictive Layer (if observed): Type: Depth (inches): Hydric Soil Present? Yes No											
Hydric Soil Indicators: Histosol (A1) Histic Epipedon (A2) Black Histic (A3) Hydrogen Sulfide (A4) Stratified Layers (A5) Depleted Below Dark Surface (A11) Thick Dark Surface (A12) Sandy Mucky Mineral (S1) (LRR N, MLRA 147, 148) Sandy Gleyed Matrix (S4) Sandy Gleyed Matrix (S4) Sandy Redox (S5) Sandy Redox (S5) Stripped Matrix (S6) Red Parent Material (F21) (MLRA 127, 147) Restrictive Layer (if observed): Type: Depth (inches): Hydric Soil Present? Yes No											
Hydric Soil Indicators: Histosol (A1) Histic Epipedon (A2) Black Histic (A3) Hydrogen Sulfide (A4) Stratified Layers (A5) Depleted Below Dark Surface (A11) Thick Dark Surface (A12) Sandy Mucky Mineral (S1) (LRR N, MLRA 147, 148) Sandy Gleyed Matrix (S4) Sandy Gleyed Matrix (S4) Sandy Redox (S5) Sandy Redox (S5) Stripped Matrix (S6) Red Parent Material (F21) (MLRA 127, 147) Restrictive Layer (if observed): Type: Depth (inches): Hydric Soil Present? Yes No											
Hydric Soil Indicators: Histosol (A1) Histic Epipedon (A2) Black Histic (A3) Hydrogen Sulfide (A4) Stratified Layers (A5) Depleted Below Dark Surface (A11) Thick Dark Surface (A12) Sandy Mucky Mineral (S1) (LRR N, MLRA 147, 148) Sandy Gleyed Matrix (S4) Sandy Gleyed Matrix (S4) Sandy Redox (S5) Sandy Redox (S5) Stripped Matrix (S6) Red Parent Material (F21) (MLRA 127, 147) Restrictive Layer (if observed): Type: Depth (inches): Hydric Soil Present? Yes No	¹ Type: C=Co	oncentration, D=Der	letion RM=I	Reduced Matrix, MS	=Masked	Sand Gra	ins.	² l ocation: Pl	=Pore Lini	ng. M=Matrix	(.
Histosol (A1) Histic Epipedon (A2) Black Histic (A3) Hydric Soil Present? Yes Polyvalue Below Surface (S7) Polyvalue Below Surface (S8) (MLRA 147, 148) Coast Prairie Redox (A16) (MLRA 147, 148) (MLRA 147, 148) Piedmont Floodplain Soils (F19) (MLRA 136, 147) Very Shallow Dark Surface (TF12) Other (Explain in Remarks) Other (Explain in Remarks) Piedmont Floodplain Soils (F19) (MLRA 136, 147) Very Shallow Dark Surface (TF12) Other (Explain in Remarks) Other (Explain in Remarks) Piedmont Floodplain Soils (F19) (MLRA 136, 147) Very Shallow Dark Surface (TF12) Other (Explain in Remarks) Other (Explain in Remarks) Piedmont Floodplain Soils (F19) (MLRA 136, 122) Sandy Mucky Mineral (S1) (LRR N, MLRA 136) Sandy Gleyed Matrix (S4) Sandy Redox (S5) Stripped Matrix (S6) Restrictive Layer (if observed): Type: Depth (inches): Hydric Soil Present? Yes No			//ouori, ruvi—i	toddood Matrix, Me	Macked	Odila Ole					
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Depleted Below Dark Surface (A11) Thick Dark Surface (A12) Sandy Mucky Mineral (S1) (LRR N, MLRA 147, 148) Sandy Gleyed Matrix (S4) Sandy Redox (S5) Stripped Matrix (S6) Red Parent Material (F21) (MLRA 127, 147) Depleted Dark Surface (F7) Redox Depressions (F8) Iron-Manganese Masses (F12) (LRR N, MLRA 136) Umbric Surface (F13) (MLRA 136, 122) Stripped Matrix (S6) Restrictive Layer (if observed): Type: Depth (inches): Hydric Soil Present? Yes No	Stratified	Layers (A5)						_			
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Stripped Matrix (S6) Red Parent Material (F21) (MLRA 127, 147) unless disturbed or problematic. Restrictive Layer (if observed): Type: Depth (inches): Hydric Soil Present? Yes No											-
Restrictive Layer (if observed): Type: Depth (inches): Hydric Soil Present? Yes No									-		
Type: Depth (inches): Hydric Soil Present? Yes No					iatoriai (i z	- 1 / (III.2 112		, u	- COO GIOTAID	od or probler	nano.
Depth (inches): No		,									
		shes).						Hydric Soil	Present?	Vas	No.
Remarks.		J. 100).						Tiyano con	T TOOCHE.	100	
	Remarks.										

WETLAND DETERMINATION DATA FORM – Eastern Mountains and Piedmont Region to 1-69 Page 109 of 794

Project/Site: Summer Shade Solar Site	City/County: Summer Shade, KY/Metcalf Sampling Date: 10-08-2021
Applicant/Owner: Candela	State: KY Sampling Point: WAS-14
Investigator(s): Mike Williams / Chris Golden	
	ocal relief (concave, convex, none): Concave Slope (%): 0
Subregion (LRR or MLRA): LRR N Lat: 36.880417	Long: -85.684399 Datum: NAD 83 KY S
Soil Man Unit Name: PmB - Pembroke silt loam, 2 to 6 percent	Long:85.684399
Are climatic / hydrologic conditions on the site typical for this time of y	ear? Yes No (If no, explain in Remarks.)
Are Vegetation, Soil, or Hydrology significantly	
Are Vegetation , Soil , or Hydrology , naturally pr	
	g sampling point locations, transects, important features, etc.
Hydrophytic Vegetation Present? Hydric Soil Present? Yes No No	Is the Sampled Area
Wetland Hydrology Present? Wetland Hydrology Present? Yes No	within a Wetland? Yes No
Remarks:	·
Wetland 08 wet data point. Feature appears	to be excavated depression near barn. Minimal soils
present before hitting rock/gravel	
HADBOLOGA	
HYDROLOGY Wetland Hydrology Indicators:	Secondary Indicators (minimum of two required)
Primary Indicators (minimum of one is required; check all that apply)	
Surface Water (A1) True Aquatic F	
High Water Table (A2) Hydrogen Sulf	
	ospheres on Living Roots (C3) Moss Trim Lines (B16)
	educed Iron (C4) Dry-Season Water Table (C2)
	eduction in Tilled Soils (C6) Crayfish Burrows (C8)
Drift Deposits (B3) Thin Muck Sui	
Algal Mat or Crust (B4) Other (Explain	in Remarks) Stunted or Stressed Plants (D1)
Iron Deposits (B5)	Geomorphic Position (D2)
Inundation Visible on Aerial Imagery (B7)	Shallow Aquitard (D3)
Water-Stained Leaves (B9)	Microtopographic Relief (D4)
Aquatic Fauna (B13)	FAC-Neutral Test (D5)
Field Observations:	. 1
Surface Water Present? Yes V No Depth (inches	·
Water Table Present? Yes No Depth (inches	
Saturation Present? Yes Ves No Depth (inches (includes capillary fringe)	s): 0 Wetland Hydrology Present? Yes No
Describe Recorded Data (stream gauge, monitoring well, aerial phot	os, previous inspections), if available:
Remarks:	
Tromano.	

20	Absolute	Dominant Indicator	Dominance Test worksheet:
<u>Tree Stratum</u> (Plot size: 30		Species? Status	Number of Dominant Species
1		✓ NA	That Are OBL, FACW, or FAC: 2 (A)
2		NA	Total Number of Dominant
3		NA	Species Across All Strata:3 (B)
4		NA	Demonstrat Demoiserat Conscient
5		NA	Percent of Dominant Species That Are OBL, FACW, or FAC: 66.7 (A/B)
6			
7		NA	Prevalence Index worksheet:
	0.0	= Total Cover	Total % Cover of: Multiply by:
50% of total cover: 0.0			OBL species30 x 1 =30
Sapling/Shrub Stratum (Plot size: 15			FACW species0 x 2 =0
1		NA	FAC species <u>25</u> x 3 = <u>75</u>
2		NA	FACU species0 x 4 =0
		NA	UPL species 0 x 5 = 0
3		NA	Column Totals: 55 (A) 105 (B)
4		NA	
5		NA	Prevalence Index = B/A =1.9
6		NA	Hydrophytic Vegetation Indicators:
7			1 - Rapid Test for Hydrophytic Vegetation
8		NA	2 - Dominance Test is >50%
9		NA	3 - Prevalence Index is ≤3.0 ¹
		= Total Cover	4 - Morphological Adaptations ¹ (Provide supporting
50% of total cover: 0.0	20% of	total cover: 0.0	data in Remarks or on a separate sheet)
Herb Stratum (Plot size: 5			
1. Echinochloa crus-galli	20	√ FAC	Problematic Hydrophytic Vegetation ¹ (Explain)
2. Persicaria punctata	30	√ OBL	
3. Persicaria longiseta	5	FAC	¹Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
4		NA	
5		NA	Definitions of Four Vegetation Strata:
6		NA	Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or
		NA	more in diameter at breast height (DBH), regardless of
7 8		NA	height.
0		NA	Sapling/Shrub – Woody plants, excluding vines, less
9		NA NA	than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.
10		NA	iii) taii.
11			Herb - All herbaceous (non-woody) plants, regardless
27.1	55.0	= Total Cover	of size, and woody plants less than 3.28 ft tall.
50% of total cover: <u>27.5</u>	20% of	total cover: 11.0	Woody vine – All woody vines greater than 3.28 ft in
Woody Vine Stratum (Plot size: 15)		NIA	height.
1,		NA	
2		NA	
3		NA	
4		NA	Hydrophytic
5		NA	Vegetation /
	0.0	= Total Cover	Present? Yes No
50% of total cover: 0.0	20% of	total cover: 0.0	
Remarks: (Include photo numbers here or on a separate s	heet.)		

Case No. 2025-00064 Reponse to 1-69 Page 111 of 794

SOIL Page 111 of 794
Sampling Point: WAS-14

epth	Matrix	0/		ox Featur		Loc ²	T		Д.		
ches)	Color (moist) 10YR5/3	<u>%</u> 95	Color (moist) 5YR4/6	<u>%</u> 5	Type¹_ C	M	<u>Textu</u>		ке k at 3 inc	marks hes	
	1011(3/3	_ = = = = = = = = = = = = = = = = = = =	311(4/0						K at 5 iiic	1163	
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		nlation DA	A Doduced Metrix M	C Mooks		- <u></u>	21 costio		Linina M	Motrix	
	oncentration, D=De Indicators:	epietion, Riv	M=Reduced Matrix, M	IS=IVIASKE	a Sana G	rains.		n: PL=Pore			Soils ³
Histosol			Dark Surfac	o (S7)			j	_	ıck (A10) (N	-	
	pipedon (A2)		Polyvalue B		ace (S8) (I	MLRA 147	. 148)		rairie Redo		
Black His			Thin Dark S				,e, <u>.</u>		A 147, 148		
	n Sulfide (A4)		Loamy Gley			, ,	[nt Floodplai		9)
Stratified	d Layers (A5)		Depleted Ma	atrix (F3)			_		A 136, 147		
	ick (A10) (LRR N)		Redox Dark		. ,		ļ		allow Dark		12)
	d Below Dark Surfa	ce (A11)	Depleted Da				1	Other (E	xplain in R	emarks)	
	ark Surface (A12)	// DD N	✓ Redox Depr			(1 DD N					
-	Mucky Mineral (S1) A 147, 148)	(LRR N,	Iron-Mangai		ses (F12)	(LRR N,					
WILKA	1 14 <i>1</i> , 140)		WILKA I	(סכ							
				ace (F13)	/MIRA1	36 1221		3Indicators	of hydronh	vtic vegeta	ion and
Sandy G	Bleyed Matrix (S4)		Umbric Surf				48)		of hydroph		
Sandy G Sandy R	Bleyed Matrix (S4) dedox (S5)		Umbric Surf	oodplain	Soils (F19	(MLRA 14		wetland h	ydrology m	ust be pres	ent,
Sandy G Sandy R Stripped	Bleyed Matrix (S4) Redox (S5) Matrix (S6)	i):	Umbric Surf	oodplain	Soils (F19	(MLRA 14		wetland h		ust be pres	ent,
Sandy G Sandy R Stripped trictive L	Bleyed Matrix (S4) Ledox (S5) Matrix (S6) Layer (if observed):	Umbric Surf	oodplain	Soils (F19	(MLRA 14		wetland h	ydrology m	ust be pres	ent,
Sandy G Sandy R Stripped trictive L ype: Ro	sleyed Matrix (S4) dedox (S5) Matrix (S6) Layer (if observed):	Umbric Surf	oodplain	Soils (F19	(MLRA 14	7)	wetland h	ydrology m sturbed or p	oust be presproblematic.	ent,
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Sandy G Sandy R Stripped trictive L ype: Ro Depth (inconarks:	sleyed Matrix (S4) ledox (S5) Matrix (S6) Layer (if observed ock ches): 3	-	Umbric Surf Piedmont Fl Red Parent	oodplain Material (Soils (F19	(MLRA 14	7)	wetland h unless dis	ydrology m sturbed or p	oust be presproblematic.	ent,
Sandy G Sandy R Stripped trictive L type: Ro Depth (inconarks:	sleyed Matrix (S4) ledox (S5) Matrix (S6) Layer (if observed ock ches): 3	-	Umbric Surf Piedmont Fl Red Parent	oodplain Material (Soils (F19	(MLRA 14	7)	wetland h unless dis	ydrology m sturbed or p	oust be presproblematic.	ent,
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Sandy G Sandy R Stripped trictive L type: Ro Depth (inconarks:	sleyed Matrix (S4) ledox (S5) Matrix (S6) Layer (if observed ock ches): 3	-	Umbric Surf Piedmont Fl Red Parent	oodplain Material (Soils (F19	(MLRA 14	7)	wetland h unless dis	ydrology m sturbed or p	oust be presproblematic.	ent,
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Sandy G Sandy R Stripped trictive L ype: Ro Depth (inconarks:	sleyed Matrix (S4) ledox (S5) Matrix (S6) Layer (if observed ock ches): 3	-	Umbric Surf Piedmont Fl Red Parent	oodplain Material (Soils (F19	(MLRA 14	7)	wetland h unless dis	ydrology m sturbed or p	oust be presproblematic.	ent,
Sandy G Sandy R Stripped trictive L ype: Ro Depth (inconarks:	sleyed Matrix (S4) ledox (S5) Matrix (S6) Layer (if observed ock ches): 3	-	Umbric Surf Piedmont Fl Red Parent	oodplain Material (Soils (F19	(MLRA 14	7)	wetland h unless dis	ydrology m sturbed or p	oust be presproblematic.	ent,
Sandy G Sandy R Stripped strictive L Type: Ro Depth (incomarks:	sleyed Matrix (S4) ledox (S5) Matrix (S6) Layer (if observed ock ches): 3	-	Umbric Surf Piedmont Fl Red Parent	oodplain Material (Soils (F19	(MLRA 14	7)	wetland h unless dis	ydrology m sturbed or p	oust be presproblematic.	ent,
Sandy G Sandy R Stripped trictive L ype: Ro Depth (inconarks:	sleyed Matrix (S4) ledox (S5) Matrix (S6) Layer (if observed ock ches): 3	-	Umbric Surf Piedmont Fl Red Parent	oodplain Material (Soils (F19	(MLRA 14	7)	wetland h unless dis	ydrology m sturbed or p	oust be presproblematic.	ent,
Sandy G Sandy R Stripped trictive L ype: Ro Depth (inconarks:	sleyed Matrix (S4) ledox (S5) Matrix (S6) Layer (if observed ock ches): 3	-	Umbric Surf Piedmont Fl Red Parent	oodplain Material (Soils (F19	(MLRA 14	7)	wetland h unless dis	ydrology m sturbed or p	oust be presproblematic.	ent,
Sandy G Sandy R Stripped trictive L ype: Ro Depth (inconarks:	sleyed Matrix (S4) ledox (S5) Matrix (S6) Layer (if observed ock ches): 3	-	Umbric Surf Piedmont Fl Red Parent	oodplain Material (Soils (F19	(MLRA 14	7)	wetland h unless dis	ydrology m sturbed or p	oust be presproblematic.	ent,
Sandy G Sandy R Stripped trictive L ype: Ro Depth (inconarks:	sleyed Matrix (S4) ledox (S5) Matrix (S6) Layer (if observed ock ches): 3	-	Umbric Surf Piedmont Fl Red Parent	oodplain Material (Soils (F19	(MLRA 14	7)	wetland h unless dis	ydrology m sturbed or p	oust be presproblematic.	ent,

WETLAND DETERMINATION DATA FORM – Eastern Mountains and Piedmont Region to 1-69
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Project/Site: Summer Shade Solar Site City/C	County: Summer Shade, KY/Metcalf Sampling Date: 10-08-2021
Applicant/Owner: Candela	State: KY Sampling Point: WAS-15
Investigator(s): Mike Williams / Chris Golden Section	
Landform (hillslope, terrace, etc.): Closed depression Local rel	ief (concave, convex, none): Concave Slope (%): 0
Subregion (LRR or MLRA): LRR N Lat: 36.880426	Long: -85.684364 Datum: NAD 83 KY S
Soil Map Unit Name: PmB - Pembroke silt loam, 2 to 6 percent slope	s NWI classification: Upland
Are climatic / hydrologic conditions on the site typical for this time of year?	
Are Vegetation, Soil, or Hydrology significantly distur	
Are Vegetation , Soil , or Hydrology naturally problem	
	npling point locations, transects, important features, etc.
Hydrophytic Vegetation Present? Hydric Soil Present? Wetland Hydrology Present? Yes No ✓ No ✓ No ✓	Is the Sampled Area within a Wetland? Yes No
Remarks:	
Wetland 08 upland data	
HYDROLOGY	
Wetland Hydrology Indicators:	Secondary Indicators (minimum of two required)
Primary Indicators (minimum of one is required; check all that apply)	Surface Soil Cracks (B6)
Surface Water (A1) True Aquatic Plants (
High Water Table (A2) Seturation (A2) Hydrogen Sulfide Od Ovidinal Phizophore	lor (C1) Drainage Patterns (B10) res on Living Roots (C3) Moss Trim Lines (B16)
Saturation (A3) Oxidized Rhizospher Water Marks (B1) Presence of Reduce	
Sediment Deposits (B2) Recent Iron Reduction	
Drift Deposits (B3) Thin Muck Surface (0	
Algal Mat or Crust (B4) Other (Explain in Rei	
Iron Deposits (B5)	Geomorphic Position (D2)
Inundation Visible on Aerial Imagery (B7)	Shallow Aquitard (D3)
Water-Stained Leaves (B9)	Microtopographic Relief (D4)
Aquatic Fauna (B13)	FAC-Neutral Test (D5)
Field Observations:	
Surface Water Present? Yes No Poeth (inches):	
Water Table Present? Yes No Depth (inches): Saturation Present? Yes No Depth (inches):	√
(includes capillary fringe)	Wetland Hydrology Present? Yes No
Describe Recorded Data (stream gauge, monitoring well, aerial photos, pre	evious inspections), if available:
Remarks:	

	Absolute	Dominant Indicator	Dominance Test worksheet:
<u>Tree Stratum</u> (Plot size: 30	% Cover	Species? Status	Number of Dominant Species
1		✓ NA	That Are OBL, FACW, or FAC: (A)
2		NA	Total Number of Dominant
3		NA	Species Across All Strata:3 (B)
4		NA	
5		NA	Percent of Dominant Species That Are OBL, FACW, or FAC: 0.0 (A/B)
6		NA	That Are OBE, I AGW, OF I AG.
7		MA NA	Prevalence Index worksheet:
	0.0	= Total Cover	Total % Cover of: Multiply by:
50% of total cover: 0.0			OBL species0 x 1 =0
Sapling/Shrub Stratum (Plot size: 15)			FACW species0 x 2 =0
1		NA	FAC species10 x 3 =30
2		NA	FACU species30 x 4 =120
		NA	UPL species 50 x 5 = 250
3		NA	Column Totals: 90 (A) 400 (B)
4		NA	(-)
5		NA	Prevalence Index = B/A = 4.4
6		NA	Hydrophytic Vegetation Indicators:
7			1 - Rapid Test for Hydrophytic Vegetation
8		NA	2 - Dominance Test is >50%
9		N <u>A</u>	3 - Prevalence Index is ≤3.0 ¹
		= Total Cover	4 - Morphological Adaptations ¹ (Provide supporting
50% of total cover: 0.0	20% of	total cover: 0.0	data in Remarks or on a separate sheet)
Herb Stratum (Plot size: 5			Problematic Hydrophytic Vegetation ¹ (Explain)
1. Symphyotrichum pilosum	10	FAC	Problematic Hydrophytic vegetation (Explain)
2. Sida rhombifolia	50	√ UPL	. 1
3. Digitaria sanguinalis	30	√ FACU	¹Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
4		NA	Definitions of Four Vegetation Strata:
5		NA	Definitions of Four Vegetation Strata.
6		NA	Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or
7		MA NA	more in diameter at breast height (DBH), regardless of height.
8.		NA	. Holgha
9.		NA	Sapling/Shrub – Woody plants, excluding vines, less
10.		NA	than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.
		NA NA	• •
11	90.0		Herb – All herbaceous (non-woody) plants, regardless
50% of total cover: _ 45.0) 20% of	= Total Cover	of size, and woody plants less than 3.28 ft tall.
Woody Vine Stratum (Plot size: 15)	2070 01	total cover	Woody vine – All woody vines greater than 3.28 ft in
		NA	height.
1		NΙΛ	•
2		NA	
3			
4		NA	Hydrophytic
5		NA	Vegetation Vegetation
2.2		= Total Cover	Present? Yes No
50% of total cover: 0.0		total cover: 0.0	
Remarks: (Include photo numbers here or on a separate s	heet.)		

Case No. 2025-00064
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Sampling Point: WAS-15

Depth	Matrix	%	Redox Feat	Type ¹ Loc ²	Taritina	Damarka
inches))-1	Color (moist) 10YR 2/2		Color (moist) %	Type ¹ Loc ²	Texture	Remarks
					· -	
-18	5YR 5/6	100		<u>C</u>	Clay	
			·	<u> </u>	. 	
					·	
					· 	
/pe: C=C	concentration, D=De	epletion, RM=	Reduced Matrix, MS=Mas	ked Sand Grains.	² Location: PL=I	Pore Lining, M=Matrix.
	Indicators:	,				rs for Problematic Hydric Soils ³ :
Histoso	l (A1)		Dark Surface (S7)		2 cm	n Muck (A10) (MLRA 147)
_	pipedon (A2)			urface (S8) (MLRA 147	· · · · · · · · · · · · · · · · · · ·	st Prairie Redox (A16)
	listic (A3)			S9) (MLRA 147, 148)		MLRA 147, 148)
	en Sulfide (A4)		Loamy Gleyed Mati			dmont Floodplain Soils (F19)
	d Layers (A5) uck (A10) (LRR N)		Depleted Matrix (F3 Redox Dark Surface	•		MLRA 136, 147)
	ed Below Dark Surfa	ace (A11)	Depleted Dark Surf	` '		er (Explain in Remarks)
	ark Surface (A12)	,	Redox Depressions		<u> </u>	
Sandy I	Mucky Mineral (S1)	(LRR N,	Iron-Manganese Ma	asses (F12) (LRR N,		
	A 147, 148)		MLRA 136)		2	
	Gleyed Matrix (S4)			3) (MLRA 136, 122)		itors of hydrophytic vegetation and
	Redox (S5)			n Soils (F19) (MLRA 1		nd hydrology must be present,
	d Matrix (S6) Layer (if observed	1/-	Red Parent Materia	l (F21) (MLRA 127, 14	unies	s disturbed or problematic.
Type:	_ayo. (oboo. vo.	-,.				
	nches):				Hydric Soil Pr	resent? Yes No
emarks:					1194110 001111	
marks.						

WETLAND DETERMINATION DATA FORM – Eastern Mountains and Piedmont Region to 1-69 Page 115 of 794

Project/Site: Summer Shade Solar Site	City/County: Summer Shade, KY/Metcalf Sampling Date: 10-09-2021
Applicant/Owner Candela	State: KY Sampling Point: WAS-16
Investigator(s): Mike Williams / Chris Golden	Section Township Range: N/A
Landform (hillslope, terrace, etc.): Valley	Section, Township, Range: N/A scal relief (concave, convex, none): Concave Slope (%): 2% Long: -85.682999 Datum: NAD 83 KY S
Subregion (LRR or MLRA): LRR N Lat: 36.880319	Long: -85.682999 Datum: NAD 83 KY S
Soil Map Unit Name: Ls - Lindside silt loam	NWI classification: PEM1F, Freshwater Emergent Wetland
Are climatic / hydrologic conditions on the site typical for this time of years Vegetation, Soil, or Hydrology significantly Are Vegetation, Soil, or Hydrology naturally pr	disturbed? Are "Normal Circumstances" present? Yes No
Hydrophytic Vegetation Present? Hydric Soil Present? Wetland Hydrology Present? Remarks: Yes No No No Remarks:	Is the Sampled Area within a Wetland? Yes No
Wetland 09 wet data point. For upland data po	oint, See WAS-17.
HYDROLOGY	
Wetland Hydrology Indicators:	Secondary Indicators (minimum of two required)
Primary Indicators (minimum of one is required; check all that apply)	Surface Soil Cracks (B6)
Surface Water (A1)	
High Water Table (A2)	
	ospheres on Living Roots (C3) Moss Trim Lines (B16)
Water Marks (B1) Presence of R	educed Iron (C4) Dry-Season Water Table (C2)
Sediment Deposits (B2)	eduction in Tilled Soils (C6) Crayfish Burrows (C8)
Drift Deposits (B3)	
Algal Mat or Crust (B4)Other (Explain	in Remarks) Stunted or Stressed Plants (D1)
Iron Deposits (B5)	Geomorphic Position (D2)
Inundation Visible on Aerial Imagery (B7)	Shallow Aquitard (D3)
Water-Stained Leaves (B9)	Microtopographic Relief (D4)
Aquatic Fauna (B13)	FAC-Neutral Test (D5)
Field Observations: Surface Water Present? Water Table Present? Yes No Depth (inches	,
Saturation Present? Yes No Depth (inches	
(includes capillary fringe)	wetiand nydrology Present? Tes No
Describe Recorded Data (stream gauge, monitoring well, aerial phot	os, previous inspections), if available:
Remarks:	
Tromano.	

	Absolute	Dominant Indicator	Dominance Test worksheet:
<u>Tree Stratum</u> (Plot size: 30	% Cover	Species? Status	Number of Dominant Species
1		✓ NA	That Are OBL, FACW, or FAC:3 (A)
2		NA	Total Number of Dominant
3		NA	Species Across All Strata: 4 (B)
4		NA	
5		NA	Percent of Dominant Species That Are OBL, FACW, or FAC:75.0 (A/B)
6			That Are OBE, FACW, of FAC.
7		NA	Prevalence Index worksheet:
	0.0	= Total Cover	Total % Cover of: Multiply by:
50% of total cover: 0.0			OBL species40 x 1 =40
Sapling/Shrub Stratum (Plot size: 15)	2070 01	total 66V61	FACW species0 x 2 =0
		NA	FAC species 40 x 3 = 120
1		NA	FACU species 0 x 4 = 0
2		NA	UPL species
3		NA	Column Totals: 80 (A) 160 (B)
4			Column Totals. (A) (B)
5		NA	Prevalence Index = B/A =2.0
6		NA	Hydrophytic Vegetation Indicators:
7		NA	1 - Rapid Test for Hydrophytic Vegetation
8		NA	2 - Dominance Test is >50%
9		NA	3 - Prevalence Index is ≤3.0 ¹
	0.0	= Total Cover	
50% of total cover: 0.0	20% of	total cover: 0.0	4 - Morphological Adaptations ¹ (Provide supporting
Herb Stratum (Plot size: 5			data in Remarks or on a separate sheet)
1. Persicaria punctata	10	OBL	Problematic Hydrophytic Vegetation ¹ (Explain)
2. Echinochloa cru-galli	20	√ FAC	
3. Eleocharis obtusa	30	√ OBL	¹ Indicators of hydric soil and wetland hydrology must
4. Cyperus sp.	15	NA	be present, unless disturbed or problematic.
5. Persicaria longiseta	20	✓ FAC	Definitions of Four Vegetation Strata:
•	-	——NA	Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or
6		NA	more in diameter at breast height (DBH), regardless of
7		NA	height.
8		NA	Sapling/Shrub – Woody plants, excluding vines, less
9			than 3 in. DBH and greater than or equal to 3.28 ft (1
10		NA	m) tall.
11		NA	Herb – All herbaceous (non-woody) plants, regardless
4-7	95.0	= Total Cover	of size, and woody plants less than 3.28 ft tall.
50% of total cover: 47.5	20% of	total cover: 19.0	Woody vine – All woody vines greater than 3.28 ft in
Woody Vine Stratum (Plot size: 15)			height.
1		NA	
2		NA	
3		NA	
4		NA	Hydrophytic
5		NA	Vegetation
	0.0	= Total Cover	Present? Yes No
50% of total cover:0.0		total cover: 0.0	
Remarks: (Include photo numbers here or on a separate s	heet.)		
	,		

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Sampling Point: WAS-16

Profile Desc	ription: (Describe	to the de	pth needed to docum	nent the	indicator	or confirm	n the absence	of indicators.)
Depth	Matrix		Redo	x Feature	es			
(inches)	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²	<u>Texture</u>	Remarks
0-3	10YR 3/2	90	5YR 3/4	10	С	<u>P</u>	Silt Clay	
3-18	10YR 3/2	85	5YR 3/4	15	С	M	Silt Clay	
		_						
	-	_	·					
			· 	-				
	-	_			_			
	-	_						
			. <u></u>					
1Type: C-C	ncentration D-Der	oletion PM	=Reduced Matrix, MS	S-Macko	d Sand Gr	aine	² Location: PI	.=Pore Lining, M=Matrix.
Hydric Soil I		Jielion, Kiv	I=Reduced Matrix, Mc	3=IVIASKE	u Sanu Gi	airis.		tors for Problematic Hydric Soils ³ :
Histosol			Dark Surface	(\$7)				cm Muck (A10) (MLRA 147)
	oipedon (A2)		Polyvalue Be		ace (S8) (I	MI RΔ 147		past Prairie Redox (A16)
Black His			Thin Dark Su		. , .		· —	(MLRA 147, 148)
	n Sulfide (A4)		Loamy Gleye			,,		edmont Floodplain Soils (F19)
	Layers (A5)		✓ Depleted Ma		` ,			(MLRA 136, 147)
	ck (A10) (LRR N)		Redox Dark	Surface (F6)		V€	ery Shallow Dark Surface (TF12)
Depleted	Below Dark Surfac	e (A11)	Depleted Dar	rk Surfac	e (F7)		Ot	her (Explain in Remarks)
	ark Surface (A12)		Redox Depre					
	lucky Mineral (S1) (LRR N,	Iron-Mangan		ses (F12) ((LRR N,		
	147, 148)		MLRA 13	-			3	
	leyed Matrix (S4)		Umbric Surfa					cators of hydrophytic vegetation and
	edox (S5)		Piedmont Flo					land hydrology must be present,
	Matrix (S6) ayer (if observed)		Red Parent N	nateriai (F21) (WILK	KA 127, 14	7) unie	ess disturbed or problematic.
	ayer (ii observed)	•						
Type:			<u></u>					- √
	ches):						Hydric Soil	Present? Yes No
Remarks:								

WETLAND DETERMINATION DATA FORM – Eastern Mountains and Piedmont Region to 1-69 Page 118 of 794

Project/Site: Summer Shade Solar Site	Sity/County: Summer Shade, KY/Metcalf Sampling Date: 10-08-2021
Applicant/Owner: Candela	State: KY Sampling Point: WAS-17
Investigator(s): Mike Williams / Chris Golden	
	al relief (concave, convex, none): Convex Slope (%): 0
Subregion (LRR or MLRA): LRR N Lat: 36.880289	Long: -85.682948 Datum: NAD 83 KY S
Soil Map Unit Name: Ls - Lindside silt loam	NWI classification: Upland
Are climatic / hydrologic conditions on the site typical for this time of year	r? Yes No (If no, explain in Remarks.)
Are Vegetation , Soil , or Hydrology significantly of	
Are Vegetation, Soil, or Hydrology naturally prob	
SUMMARY OF FINDINGS – Attach site map showing	sampling point locations, transects, important features, etc.
Hydrophytic Vegetation Present? Yes No	Is the Sampled Area
Hydric Soil Present? Yes No V	within a Wetland? Yes No
Wetland Hydrology Present? Yes No	
Remarks:	0.0.14/71.40
Upland data point for WTL-09, WTL-11, WTL-1	2, & WTL-13
HYDROLOGY	
Wetland Hydrology Indicators:	Secondary Indicators (minimum of two required)
Primary Indicators (minimum of one is required; check all that apply)	Surface Soil Cracks (B6)
Surface Water (A1)	
High Water Table (A2) Hydrogen Sulfide	e Odor (C1) Drainage Patterns (B10)
Saturation (A3) Oxidized Rhizos	pheres on Living Roots (C3) Moss Trim Lines (B16)
Water Marks (B1) Presence of Rec	duced Iron (C4) Dry-Season Water Table (C2)
	uction in Tilled Soils (C6) Crayfish Burrows (C8)
Drift Deposits (B3)	· / • • • • • • • • • • • • • • • • • •
Algal Mat or Crust (B4) Other (Explain ir	
Iron Deposits (B5)	Geomorphic Position (D2)
Inundation Visible on Aerial Imagery (B7)	Shallow Aquitard (D3)
Water-Stained Leaves (B9) Aquatic Fauna (B13)	Microtopographic Relief (D4) FAC-Neutral Test (D5)
Field Observations:	
Surface Water Present? Yes No V Depth (inches):	
Water Table Present? Yes No Depth (inches):	
Saturation Present? Yes No Depth (inches):	./
(includes capillary fringe)	
Describe Recorded Data (stream gauge, monitoring well, aerial photos	, previous inspections), if available:
Remarks:	

Case No. 2025-00064
Reponse to 1-69
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Sampling Point: WAS-17

20	Absolute	Dominant Indicator	Dominance Test worksheet:
<u>Tree Stratum</u> (Plot size: 30		Species? Status	Number of Dominant Species
1		✓ NA	That Are OBL, FACW, or FAC: (A)
2		NA	Total Number of Dominant
3		NA	Species Across All Strata:3 (B)
4		NA	B
5		NA	Percent of Dominant Species That Are OBL, FACW, or FAC: 0.0 (A/B)
6			That Ale OBE, I AOV, OI I AO.
7		NA	Prevalence Index worksheet:
	0.0	= Total Cover	Total % Cover of: Multiply by:
50% of total cover: 0.0			OBL species0 x 1 =0
Sapling/Shrub Stratum (Plot size: 15)	2070 01	total 66761.	FACW species0 x 2 =0
		NA	FAC species 5 x 3 = 15
1		NA	FACU species 33 x 4 = 132
2		NA	UPL species 60 x 5 = 300
3		NA	Column Totals: 98 (A) 447 (B)
4			Column Totals. (A) (A)
5		NA	Prevalence Index = B/A = 4.6
6		NA	Hydrophytic Vegetation Indicators:
7		NA	1 - Rapid Test for Hydrophytic Vegetation
8		NA	2 - Dominance Test is >50%
9.		NA	
	0.0	= Total Cover	3 - Prevalence Index is ≤3.0 ¹
50% of total cover: 0.0			4 - Morphological Adaptations ¹ (Provide supporting
Herb Stratum (Plot size: 5			data in Remarks or on a separate sheet)
1. Persicaria longiseta	5	FAC	Problematic Hydrophytic Vegetation ¹ (Explain)
2 Sida rhombifolia	60	√ UPL	
3. Digitaria sanguinalis	30	✓ FACU	¹ Indicators of hydric soil and wetland hydrology must
4. Trifolium repens	3	FACU	be present, unless disturbed or problematic.
		NA NA	Definitions of Four Vegetation Strata:
5		NA	Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or
6			more in diameter at breast height (DBH), regardless of
7		NA	. height.
8		NA	Sapling/Shrub – Woody plants, excluding vines, less
9		N <u>A</u>	than 3 in. DBH and greater than or equal to 3.28 ft (1
10		NA	m) tall.
11		NA	Herb – All herbaceous (non-woody) plants, regardless
	98.0	= Total Cover	of size, and woody plants less than 3.28 ft tall.
50% of total cover: <u>49.0</u>	20% of	total cover: 19.6	W 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
Woody Vine Stratum (Plot size: 15)			Woody vine – All woody vines greater than 3.28 ft in height.
1		NA	noight.
2		NA	
3		NA	
		NA NA	·
4		NA	Hydrophytic
5	0.0		Vegetation ✓ Present? Yes No
500/ -11-1-1 0.0		= Total Cover	1100m: 100 NO
50% of total cover: 0.0		total cover: 0.0	
Remarks: (Include photo numbers here or on a separate s	sheet.)		

Case No. 2025-00064
Reponse to 1-69
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Sampling Point: WAS-17

Profile Desc	ription: (Describe	to the depth	needed to docum	nent the i	ndicator o	or confirm	the absence	of indicators.)	
Depth	Matrix		Redo	x Features	3				
(inches)	Color (moist)	%	Color (moist)	<u>%</u>	Type ¹	Loc ²	Texture	Rer	marks
0-4	10YR 3/4	100					Silt Clay		
4-18	7.5YR 4/4	100					Silt Clay		
	-								-
<u> </u>							-		
				-		-			_
									
1Type: C-C	oncentration, D=Dep	letion PM-F	Peduced Matrix MS	S-Macked	Sand Gra	ine	² Location: E	PL=Pore Lining, M=	Matrix
Hydric Soil		netion, Kivi=r	Reduced Matrix, Mc	=iviaskeu	Sanu Gra	11115.			atic Hydric Soils ³ :
Histosol			Dark Surface	(97)				2 cm Muck (A10) (M	-
	oipedon (A2)		Polyvalue Be		ce (S8) (M	I RA 147.		Coast Prairie Redox	
Black Hi			Thin Dark Su		. , .		140)	(MLRA 147, 148)	, ,
	n Sulfide (A4)		Loamy Gleye			, ,		Piedmont Floodplair	
	Layers (A5)		Depleted Mar		,			(MLRA 136, 147)	, ,
	ck (A10) (LRR N)		Redox Dark	Surface (F	6)		<u></u> □\	ery Shallow Dark S	
	Below Dark Surfac	e (A11)	Depleted Dar					Other (Explain in Re	emarks)
	ark Surface (A12)		Redox Depre						
	lucky Mineral (S1) (LRR N,	Iron-Mangan		es (F12) (I	_RR N,			
	147, 148)		MLRA 13	•			3,		
	leyed Matrix (S4)		Umbric Surfa					dicators of hydrophy	_
	edox (S5) Matrix (S6)		Piedmont Flo					etland hydrology mu nless disturbed or p	-
	ayer (if observed)	•	irred i aleiit ii	naterial (i .	21) (IVILIX	7 121, 141	<u> </u>	iless disturbed or p	iobiematic.
Type:	-uyo: (oboo: vou)	-							
	shoo).						Usalvia Cai	I Dracent? Vec	No <u>✓</u>
	ches):						nyuric 30i	I Present? Yes	NO
Remarks:									

WETLAND DETERMINATION DATA FORM – Eastern Mountains and Piedmont Region to 1-69 Page 121 of 794

Project/Site: Summer Shade Solar Site	City/County: Summer Shade, KY/Metcalf Sampling Date: 10-09-2021
Applicant/Owner: Candela	State: KY Sampling Point: WAS-18
•••	Section, Township, Range: N/A
	real relief (concave, convex, none). Concave
Outcoming (LDD and LDA) LRR N Lat 36 880358	Long: -85.68164 Datum: NAD 83 KY S
Soil Map Unit Name: CrB - Crider silt loam, 2 to 6 percent slope	Long:85.68164 Datum: NAD 83 KY S
Are climatic / hydrologic conditions on the site typical for this time of ye	ear? Yes No (If no, explain in Remarks.)
Are Vegetation, Soil, or Hydrology significantly	
Are Vegetation , Soil , or Hydrology naturally pro	
	g sampling point locations, transects, important features, etc.
Hydrophytic Vegetation Present? Hydric Soil Present? Yes No No No No No No No N	Is the Sampled Area
Wetland Hydrology Present?	within a Wetland? Yes No
Remarks:	
Wetland 10 wet data point. Feature is in rutted	d outfield access road
HYDROLOGY	
Wetland Hydrology Indicators:	Secondary Indicators (minimum of two required)
Primary Indicators (minimum of one is required; check all that apply)	Surface Soil Cracks (B6)
Surface Water (A1) True Aquatic P	
High Water Table (A2) Hydrogen Sulfin	
	pospheres on Living Roots (C3) Moss Trim Lines (B16)
	educed Iron (C4) Dry-Season Water Table (C2)
	eduction in Tilled Soils (C6) Crayfish Burrows (C8)
Drift Deposits (B3) Thin Muck Surf	
Algal Mat or Crust (B4) Other (Explain	
Iron Deposits (B5)	Geomorphic Position (D2)
Inundation Visible on Aerial Imagery (B7)	Shallow Aquitard (D3)
Water-Stained Leaves (B9)	Microtopographic Relief (D4)
Aquatic Fauna (B13)	FAC-Neutral Test (D5)
Field Observations:	
Surface Water Present? Yes No Depth (inches): 6
Water Table Present? Yes No Depth (inches):
Saturation Present? Yes No Depth (inches	s): 0 Wetland Hydrology Present? Yes No
(includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photo	os previous inspections) if available:
gauge, memoring non, aonar pro-	, promoto mopositorio, in analisario.
Remarks:	

20	Absolute	Dominant Indicator	Dominance Test worksheet:
<u>Tree Stratum</u> (Plot size: 30	% Cover	Species? Status	Number of Dominant Species
1		NA	That Are OBL, FACW, or FAC: 2 (A)
2		NA	Total Number of Dominant
3		NA	Species Across All Strata: 2 (B)
4		NA	
5		NA	Percent of Dominant Species That Are OBL, FACW, or FAC: 100.0 (A/B)
6			That Are OBE, I AGW, OF I AG.
7		NA	Prevalence Index worksheet:
	0.0	= Total Cover	Total % Cover of: Multiply by:
50% of total cover: 0.0			OBL species0 x 1 =0
Sapling/Shrub Stratum (Plot size: 15)	2070 01	total 00 vol	FACW species20 x 2 =40
		NA	FAC species 20 x 3 = 60
1		NA	FACU species 0 x 4 = 0
2		NA	UPL species 0 x 5 = 0
3		NA	Column Totals: 40 (A) 100 (B)
4			Coldifin Totals (A) (B)
5		NA	Prevalence Index = B/A =2.5
6		NA	Hydrophytic Vegetation Indicators:
7		NA	1 - Rapid Test for Hydrophytic Vegetation
8		NA	2 - Dominance Test is >50%
9		NA	3 - Prevalence Index is ≤3.0 ¹
	0.0	= Total Cover	1
50% of total cover: 0.0	20% of	total cover: 0.0	4 - Morphological Adaptations ¹ (Provide supporting
Herb Stratum (Plot size: 5			data in Remarks or on a separate sheet)
1. Echinocloa crus-galli	15	✓ FAC	Problematic Hydrophytic Vegetation ¹ (Explain)
2 Persicaria longiseta	5	FAC	
3. Persicaria lapathifolia	20	√ FACW	¹ Indicators of hydric soil and wetland hydrology must
		NA	be present, unless disturbed or problematic.
· ·		NA	Definitions of Four Vegetation Strata:
5		NA	Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or
6		NA	more in diameter at breast height (DBH), regardless of
7		NA	height.
8		NA	Sapling/Shrub – Woody plants, excluding vines, less
9			than 3 in. DBH and greater than or equal to 3.28 ft (1
10		NA	m) tall.
11		NA	Herb – All herbaceous (non-woody) plants, regardless
00.6	<u>40.0</u>	= Total Cover	of size, and woody plants less than 3.28 ft tall.
50% of total cover: 20.0) 20% of	total cover: 8.0	Woody vine – All woody vines greater than 3.28 ft in
Woody Vine Stratum (Plot size: 15			height.
1		NA	
2		NA	
3		NA	
4		NA	Hydrophytic
5		NA	Vegetation
	0.0	= Total Cover	Present? Yes No
50% of total cover: 0.0		total cover: 0.0	
Remarks: (Include photo numbers here or on a separate s	heet.)		
` '	,		

SOIL

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.) Depth Matrix Redox Features Color (moist) Texture (inches) Color (moist) Type Loc² 0-6 10YR 4/2 90 5YR 3/4 10 Silt clay Refusal at 6 inches С М ²Location: PL=Pore Lining, M=Matrix. ¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. **Hydric Soil Indicators:** Indicators for Problematic Hydric Soils³: Histosol (A1) 2 cm Muck (A10) (MLRA 147) Dark Surface (S7) Histic Epipedon (A2) Polyvalue Below Surface (S8) (MLRA 147, 148) Coast Prairie Redox (A16) Black Histic (A3) Thin Dark Surface (S9) (MLRA 147, 148) (MLRA 147, 148) Hydrogen Sulfide (A4) Loamy Gleyed Matrix (F2) Piedmont Floodplain Soils (F19) Stratified Layers (A5) Depleted Matrix (F3) (MLRA 136, 147) Very Shallow Dark Surface (TF12) 2 cm Muck (A10) (LRR N) Redox Dark Surface (F6) Depleted Below Dark Surface (A11) Depleted Dark Surface (F7) Other (Explain in Remarks) Thick Dark Surface (A12) Redox Depressions (F8) Sandy Mucky Mineral (S1) (LRR N, Iron-Manganese Masses (F12) (LRR N, MLRA 147, 148) MLRA 136) Sandy Gleyed Matrix (S4) Umbric Surface (F13) (MLRA 136, 122) ³Indicators of hydrophytic vegetation and Sandy Redox (S5) Piedmont Floodplain Soils (F19) (MLRA 148) wetland hydrology must be present, unless disturbed or problematic. Stripped Matrix (S6) Red Parent Material (F21) (MLRA 127, 147) Restrictive Layer (if observed): Type: Gravel/Rock Depth (inches): 6 **Hydric Soil Present?** Remarks:

WETLAND DETERMINATION DATA FORM – Eastern Mountains and Piedmont Region to 1-69 Page 124 of 794

Project/Site: Summer Shade Solar Site	City/County: Summer Shade, KY/Metcalf Sampling Date: 10-09-2021
Applicant/Owner: Candela	State: KY Sampling Point: WAS-19
Investigator(s): Mike Williams / Chris Golden	
	cal relief (concave, convex, none). None Slope (%): 0
Subregion (LRR or MLRA): LRR N Lat: 36.880342	Long: -85.681542 Datum: NAD 83 KY S
Soil Map Unit Name: CrB - Crider silt loam, 2 to 6 percent slope	NWI classification: Upland
Are climatic / hydrologic conditions on the site typical for this time of year	
Are Vegetation, Soil, or Hydrology significantly	
Are Vegetation, Soil, or Hydrology naturally pro	
SUMMARY OF FINDINGS – Attach site map showing	g sampling point locations, transects, important features, etc.
Hydrophytic Vegetation Present? Yes No V	In the Samulad Area
Hydric Soil Present? Yes No V	Is the Sampled Area within a Wetland? Yes No
Wetland Hydrology Present? Yes No	
Remarks:	
Wetland 10 upland data point. Cultivated ag fi	eld planted in corn
HYDROLOGY	
Wetland Hydrology Indicators:	Secondary Indicators (minimum of two required)
Primary Indicators (minimum of one is required; check all that apply)	Surface Soil Cracks (B6)
Surface Water (A1)	
High Water Table (A2) Hydrogen Sulfi	
	ospheres on Living Roots (C3) Moss Trim Lines (B16)
Water Marks (B1) Presence of Re	educed Iron (C4) Dry-Season Water Table (C2)
Sediment Deposits (B2)	eduction in Tilled Soils (C6) Crayfish Burrows (C8)
Drift Deposits (B3)	face (C7) Saturation Visible on Aerial Imagery (C9)
Algal Mat or Crust (B4) Other (Explain	in Remarks) Stunted or Stressed Plants (D1)
Iron Deposits (B5)	Geomorphic Position (D2)
Inundation Visible on Aerial Imagery (B7)	Shallow Aquitard (D3)
Water-Stained Leaves (B9)	Microtopographic Relief (D4)
Aquatic Fauna (B13)	FAC-Neutral Test (D5)
Field Observations: Surface Water Present? Yes No Depth (inches	Δ.
	·
Saturation Present? Yes No Depth (inches (includes capillary fringe)): Wetland Hydrology Present? Yes No
Describe Recorded Data (stream gauge, monitoring well, aerial photo	os, previous inspections), if available:
Remarks:	

20	Absolute	Dominant Indicator	Dominance Test worksheet:		
<u>Tree Stratum</u> (Plot size: 30	% Cover	Species? Status	Number of Dominant Species		
1		NA	That Are OBL, FACW, or FAC:1 (A)		
2		NA	Total Number of Dominant		
3		NA	Species Across All Strata:3 (B)		
4		NA			
5		NA	Percent of Dominant Species That Are OBL, FACW, or FAC: 33.3 (A/B)		
6		NA	That Are OBE, I AGW, OF I AG.		
7	-	NA	Prevalence Index worksheet:		
··-	0.0	= Total Cover	Total % Cover of: Multiply by:		
50% of total cover: 0.0			OBL species0 x 1 =0		
Sapling/Shrub Stratum (Plot size: 15			FACW species0 x 2 =0		
1		NA	FAC species 10 x 3 = 30		
3		NA	FACU species 22 x 4 = 88		
2		NA	UPL species 15 x 5 = 75		
3		NA	Column Totals: 47 (A) 193 (B)		
4		NA	(7)		
5		NA	Prevalence Index = B/A = 4.1		
6			Hydrophytic Vegetation Indicators:		
7		NA	1 - Rapid Test for Hydrophytic Vegetation		
8		NA	2 - Dominance Test is >50%		
9		NA	3 - Prevalence Index is ≤3.0 ¹		
		= Total Cover	4 - Morphological Adaptations ¹ (Provide supporting		
50% of total cover: 0.0	20% of	total cover: 0.0	data in Remarks or on a separate sheet)		
Herb Stratum (Plot size: 5)		_	· · · · · · · · · · · · · · · · · · ·		
1. Digitaria sanguinalis	15	√ FACU	Problematic Hydrophytic Vegetation ¹ (Explain)		
2. Rumex crispus	10	✓ FAC	4		
3. Zea mays	10	_ ✓ UPL	¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.		
4. Sida rhombifolia	5	UPL	Definitions of Four Vegetation Strata:		
5. Trifolium repens	2	FACU	Definitions of Four Vegetation Strata.		
6. Amaranthus palmeri	5	FACU	Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or		
7	-	NA	more in diameter at breast height (DBH), regardless of height.		
		NA	. Height.		
9.		NA	Sapling/Shrub – Woody plants, excluding vines, less		
		NA	than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.		
10		NA	in) tail.		
11	47.0		Herb – All herbaceous (non-woody) plants, regardless		
50% of total cover: _ 23.5	47.0	= Total Cover	of size, and woody plants less than 3.28 ft tall.		
	<u>20% or</u>	total cover: 9.4	Woody vine – All woody vines greater than 3.28 ft in		
Woody Vine Stratum (Plot size: 15)		NA	height.		
1					
2					
3		NA			
4		NA	Hydrophytic		
5		NA	Vegetation		
		= Total Cover	Present? Yes No		
50% of total cover: 0.0	20% of	total cover: 0.0			
Remarks: (Include photo numbers here or on a separate s	heet.)				

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Reponse to 1-69
Page 126 of 794
Sampling Point: WAS-19

Profile Desc	ription: (Describe	to the depth	needed to docum	ent the indic	ator or confirm	the absence	of indicators.)
Depth	Matrix			Features			
(inches)	Color (moist)	%	Color (moist)		vpe ¹ Loc ²	Texture	Remarks
0-18	10YR 4/3	100				Silty Clay	
	-						
			_				
			_				
	-						
¹ Type: C=Co	oncentration, D=Dep	letion, RM=R	educed Matrix, MS	=Masked Sar	nd Grains.	² Location: Pl	L=Pore Lining, M=Matrix.
Hydric Soil		,					ators for Problematic Hydric Soils ³ :
Histosol			Dark Surface	(S7)			cm Muck (A10) (MLRA 147)
	pipedon (A2)				S8) (MLRA 147 ,		coast Prairie Redox (A16)
Black Hi					RA 147, 148)	۰,۰	(MLRA 147, 148)
	n Sulfide (A4)		Loamy Gleye		. ,	□Р	iedmont Floodplain Soils (F19)
	d Layers (A5)		Depleted Mat				(MLRA 136, 147)
	ick (A10) (LRR N)		Redox Dark S	Surface (F6)		∨	ery Shallow Dark Surface (TF12)
Depleted	d Below Dark Surface	e (A11)	Depleted Dar	k Surface (F7))	<u></u> о	other (Explain in Remarks)
Thick Da	ark Surface (A12)		Redox Depre	ssions (F8)			
Sandy M	lucky Mineral (S1) (L	.RR N,	Iron-Mangane	ese Masses (F	12) (LRR N,		
	\ 147, 148)		MLRA 136				
	Bleyed Matrix (S4)			ce (F13) (MLF			icators of hydrophytic vegetation and
	tedox (S5)				(F19) (MLRA 14		tland hydrology must be present,
	Matrix (S6)		Red Parent M	laterial (F21) ((MLRA 127, 147	') unl	less disturbed or problematic.
Restrictive I	_ayer (if observed):						
Type:							
Depth (inc	ches):		<u></u>			Hydric Soil	Present? Yes No
Remarks:							

WETLAND DETERMINATION DATA FORM – Eastern Mountains and Piedmont Region to 1-69 Page 127 of 794

Project/Site: Summer Shade Solar Site Cit	y/County: Summer Shade, KY/Metcalf Sampling Date: 10-09-2021
	State: KY Sampling Point: WAS-20
Investigator(s): Mike Williams / Chris Golden Se	ection, Township, Range: N/A
Landform (hillslope, terrace, etc.): Floodplain associated with stream Local	
	Long: Datum: NAD 83 KY S
Soil Map Unit Name:	NWI classification:
Are climatic / hydrologic conditions on the site typical for this time of year?	
	sturbed? Are "Normal Circumstances" present? Yes No
Are Vegetation , Soil , or Hydrology naturally proble	
	ampling point locations, transects, important features, etc.
Hydrophytic Vegetation Present? Hydric Soil Present? Yes No No No No No No No N	Is the Sampled Area
Hydric Soil Present? Wetland Hydrology Present? Yes No No No No No No No N	within a Wetland? Yes No
Remarks:	
WTL-11 Wet Data point. Site heavily impacted	by cattle For Upland Data Point see
WTL-09-UP/WAS-17 Upland Data Point.	by datale. I of opicina bata I office see
WIE 00 017W/10 17 Opidila Bata i oliit.	
HYDROLOGY	
Wetland Hydrology Indicators:	Secondary Indicators (minimum of two required)
Primary Indicators (minimum of one is required; check all that apply)	Surface Soil Cracks (B6)
Surface Water (A1)	ts (B14) Sparsely Vegetated Concave Surface (B8)
High Water Table (A2) Hydrogen Sulfide	
	heres on Living Roots (C3) Moss Trim Lines (B16)
Water Marks (B1) Presence of Redu	
	ction in Tilled Soils (C6) Crayfish Burrows (C8)
Drift Deposits (B3) Thin Muck Surface	· /
Algal Mat or Crust (B4) Other (Explain in F	
Iron Deposits (B5)	Geomorphic Position (D2)
Inundation Visible on Aerial Imagery (B7) Water-Stained Leaves (B9)	Shallow Aquitard (D3) Microtopographic Relief (D4)
Aquatic Fauna (B13)	FAC-Neutral Test (D5)
Field Observations:	
Surface Water Present? Yes No Depth (inches): 2	!
Water Table Present? Yes No Depth (inches):_	
Saturation Present? Yes No Depth (inches): 0	Wetland Hydrology Present? Yes No
(includes capillary fringe)	
Describe Recorded Data (stream gauge, monitoring well, aerial photos,	previous inspections), if available:
Remarks:	

Case No. 2025-00064
Reponse to 1-69
Page 128 of 794
Sampling Point: WAS-20

	Absolute	Dominant Indicator	Dominance Test worksheet:
<u>Tree Stratum</u> (Plot size: 30	% Cover	Species? Status	Number of Dominant Species
1			That Are OBL, FACW, or FAC: (A)
2			Total Number of Dominant
3		NA	Species Across All Strata: 0 (B)
4	-		Percent of Dominant Species
5	-		That Are OBL, FACW, or FAC: (A/B)
6			Prevalence Index worksheet:
7		NA	
		= Total Cover	Total % Cover of: Multiply by:
50% of total cover: 0.0	20% of	total cover: 0.0	OBL species 0 x 1 = 0 FACW species 0 x 2 = 0
Sapling/Shrub Stratum (Plot size: 15			1 AOVV 3pccics
1			1710 species x 0 =
2	-		1 A00 species x + =
3		NA	01 L 3pccics x 0 =
4		NA	Column Totals:3 (A)9 (B)
5		NA	Prevalence Index = B/A = 3.0
6	-		Hydrophytic Vegetation Indicators:
7		NA	1 - Rapid Test for Hydrophytic Vegetation
8		NA	2 - Dominance Test is >50%
9		NA	3 - Prevalence Index is ≤3.0¹
		= Total Cover	4 - Morphological Adaptations ¹ (Provide supporting
50% of total cover: 0.0	20% of	total cover: 0.0	data in Remarks or on a separate sheet)
Herb Stratum (Plot size: 5			Problematic Hydrophytic Vegetation (Explain)
1. Echinocloa crus-galli	3	FAC	Problematic Hydrophytic Vegetation (Explain)
2		NA	1 Indicators of hydric cell and wetlend hydrology and
3		NA	¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
4		NA	Definitions of Four Vegetation Strata:
5		NA	
6		NA	Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of
7		NA	height.
8		NA	Conline/Chaule Mandy plants avaluding visca loss
9		NA	Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than or equal to 3.28 ft (1
10		NA	m) tall.
11		NA	Herb – All herbaceous (non-woody) plants, regardless
	3.0	= Total Cover	of size, and woody plants less than 3.28 ft tall.
50% of total cover:1.5	20% of	total cover: 0.6	Wasdenda Alluna du ina a mastantha 2 00 ft in
Woody Vine Stratum (Plot size: 15)			Woody vine – All woody vines greater than 3.28 ft in height.
1		NA	
2		NA	
3		NA	
4.		NA	Understatio
5.		NA	Hydrophytic Vegetation
		= Total Cover	Present? Yes No
50% of total cover: <u>0.0</u>		total cover: 0.0	
Remarks: (Include photo numbers here or on a separate s	heet.)		
Veg disturbed due to cattle.			
vog alotarboa dao to catao.			

Case No. 2025-00064
Reponse to 1-69
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Sampling Point: WAS-20

Profile Desc	cription: (Describe	to the dept	h needed to docur	nent the	indicator	or confirm	the absence	of indicators.)
Depth	Matrix			x Feature	s 1	. 2	_	
(inches)	Color (moist)	<u>%</u>	Color (moist)	%	Type ¹	Loc ²	Texture	Remarks
0-8	2.5Y 4/2	97	7.5YR 3/4	3	<u>C</u>	M	Silt Clay	
						· 		
				-	· -			
					· -			
		<u> </u>						
	-							
						. ——		
	oncentration, D=Dep	letion, RM=	Reduced Matrix, MS	S=Maske	d Sand Gr	ains.		_=Pore Lining, M=Matrix.
Hydric Soil								tors for Problematic Hydric Soils ³ :
Histosol			Dark Surface					cm Muck (A10) (MLRA 147)
_	oipedon (A2)		Polyvalue Be				148)C	oast Prairie Redox (A16)
	stic (A3) en Sulfide (A4)		Thin Dark Su Loamy Gleye			147, 148)	Пв	(MLRA 147, 148) ledmont Floodplain Soils (F19)
	d Layers (A5)		✓ Depleted Ma		(Г2)			(MLRA 136, 147)
	uck (A10) (LRR N)		Redox Dark		F6)			ery Shallow Dark Surface (TF12)
	d Below Dark Surfac	e (A11)	Depleted Dar					ther (Explain in Remarks)
	ark Surface (A12)		Redox Depre					
	lucky Mineral (S1) (I	LRR N,	Iron-Mangan		ses (F12) (LRR N,		
	A 147, 148)		MLRA 13				3	
	Gleyed Matrix (S4)		Umbric Surfa					cators of hydrophytic vegetation and
	Redox (S5) I Matrix (S6)		Piedmont Flo					tland hydrology must be present, ess disturbed or problematic.
	Layer (if observed):	•	irred i aleiit ii	viateriai (i	Z1) (WILK	A 121, 141	, uiii	ess disturbed of problematic.
Type: Gr								
Depth (in							Hydric Soil	Present? Yes No
Remarks:			<u></u>					

WETLAND DETERMINATION DATA FORM – Eastern Mountains and Piedmont Region to 1-69 Page 130 of 794

Project/Site: Summer Shade Solar Site	City/County: Summer Shade, KY/Metcalf Sampling Date: 10-09-2021
Applicant/Owner: Candela	State: KY Sampling Point: WAS-21
Investigator(s): Mike Williams / Chris Golden	
	ocal relief (concave, convex, none): Concave Slope (%): 2%
Subregion (LRR or MLRA): LRR N Lat: 36.879987	Long: -85.683169 Datum: NAD 83 KY S
Soil Map Unit Name: CrB - Crider silt loam, 2 to 6 percent slope	NWI classification: N/A
Are climatic / hydrologic conditions on the site typical for this time of ye	
Are Vegetation, Soil, or Hydrology significantly	
Are Vegetation, Soil, or Hydrology naturally pro	oblematic? (If needed, explain any answers in Remarks.)
SUMMARY OF FINDINGS – Attach site map showing	g sampling point locations, transects, important features, etc.
Hydrophytic Vegetation Present? Yes ✓ No	In the County of Area
Hydric Soil Present? Yes Vo No	Is the Sampled Area within a Wetland? Yes No
Wetland Hydrology Present? Yes No	. Tes No
Remarks:	
Wetland 12 wet data point. For Upland Data F	Point see WTL-09-UP/WAS-17 Upland Data Point.
LIVERGIAGO	
HYDROLOGY	
Wetland Hydrology Indicators:	Secondary Indicators (minimum of two required)
Primary Indicators (minimum of one is required; check all that apply)	 _ ` ′
Surface Water (A1) True Aquatic P	
High Water Table (A2) Hydrogen Sulfin	· · · · · · · · · · · · · · · · · · ·
	ospheres on Living Roots (C3) Moss Trim Lines (B16)
	educed Iron (C4) Dry-Season Water Table (C2) Oroution in Tilled Soils (C6)
	crayfish Burrows (C8) Crayfish Burrows (C8)
Drift Deposits (B3) Algal Mat or Crust (B4) Thin Muck Surf	
Iron Deposits (B5)	Geomorphic Position (D2)
Inundation Visible on Aerial Imagery (B7)	Shallow Aquitard (D3)
Water-Stained Leaves (B9)	Microtopographic Relief (D4)
Aquatic Fauna (B13)	FAC-Neutral Test (D5)
Field Observations:	
Surface Water Present? Yes No Depth (inches	5):
Water Table Present? Yes No Depth (inches	, <u> </u>
Saturation Present? Yes V No Depth (inches	
(includes capillary fringe)	,
Describe Recorded Data (stream gauge, monitoring well, aerial photo	os, previous inspections), if available:
Remarks:	

Case No. 2025-00064
Reponse to 1-69
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Sampling Point: WAS-21

20	Absolute	Dominant Indicator	Dominance Test worksheet:
<u>Tree Stratum</u> (Plot size: 30	% Cover	Species? Status	Number of Dominant Species
1		NA	That Are OBL, FACW, or FAC: 2 (A)
2		NA	Total Number of Dominant
3		NA	Species Across All Strata: 2 (B)
4		NA	B
5		NA	Percent of Dominant Species That Are OBL, FACW, or FAC: 100.0 (A/B)
6		NA	mar Ale ODE, I AOW, OI I AO.
7.		NA	Prevalence Index worksheet:
	0.0	= Total Cover	Total % Cover of: Multiply by:
50% of total cover: 0.0			OBL species35 x 1 =35
Sapling/Shrub Stratum (Plot size: 15)	2070 01	total 00 vol	FACW species5 x 2 =10
		NA	FAC species 45 x 3 = 135
1		NA	FACU species 8 x 4 = 32
2		NA	UPL species
3		NA	Column Totals: 93 (A) 212 (B)
4			Column Totals (A) (B)
5		NA	Prevalence Index = B/A =2.3
6		NA	Hydrophytic Vegetation Indicators:
7		NA	1 - Rapid Test for Hydrophytic Vegetation
8		NA	2 - Dominance Test is >50%
9.		NA	
	0.0	= Total Cover	3 - Prevalence Index is ≤3.0 ¹
50% of total cover:0.0		total cover: 0.0	4 - Morphological Adaptations ¹ (Provide supporting
Herb Stratum (Plot size: 5)			data in Remarks or on a separate sheet)
1. Persicaria longiseta	25	√ FAC	Problematic Hydrophytic Vegetation ¹ (Explain)
2. Persicaria puctata	30	✓ OBL	
3. Rumex crispus	10	FAC	¹ Indicators of hydric soil and wetland hydrology must
4. Echinocloa crus-galli	10	FAC	be present, unless disturbed or problematic.
5. Trifolium repens	5	FACU	Definitions of Four Vegetation Strata:
		OBL	Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or
6. Ranunculus sceleratus	5		more in diameter at breast height (DBH), regardless of
7. Digitaria sanguinalis	3		height.
8. Persicaria lapathifolia	5	FACW	Sapling/Shrub – Woody plants, excluding vines, less
9		N <u>A</u>	than 3 in. DBH and greater than or equal to 3.28 ft (1
10		NA	m) tall.
11		NA	Herb – All herbaceous (non-woody) plants, regardless
	93.0	= Total Cover	of size, and woody plants less than 3.28 ft tall.
50% of total cover: <u>46.5</u>	20% of	total cover: 18.6	
Woody Vine Stratum (Plot size: 15)			Woody vine – All woody vines greater than 3.28 ft in height.
1		NA	neight.
2.		NA NA	
3		NA	
		NA	·
4		NA NA	Hydrophytic
5		 -	Vegetation Present? Yes No
50% ()		= Total Cover	Tresent: res No
50% of total cover: 0.0		total cover: 0.0	
Remarks: (Include photo numbers here or on a separate s	heet.)		

Case No. 2025-00064
Reponse to 1-69
Page 132 of 794
Sampling Point: WAS-21

Profile Desc	ription: (Describe	to the de	pth needed to docur	ment the	indicator	or confirm	n the absence	of indicators.)
Depth	Matrix		Redox Features					
(inches)	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²	<u>Texture</u>	Remarks
0-6	10YR 3/2	77	7.5 YR 4/6	3	С	M/P	Silt Sand	
	2.5Y 5/3	20						Sand inclusion in the matrix
			· -	-				
						- (
			· -	-				
1Type: C=C	oncentration D=De	oletion RM	1=Reduced Matrix, M	S-Maske	d Sand Gr	ains	² l ocation: P	L=Pore Lining, M=Matrix.
Hydric Soil		Jieuon, ixiv	i=i\educed Matrix, Mi	0-Maske	u Sanu Gi	airis.	Indication	ators for Problematic Hydric Soils ³ :
Histosol			Dark Surface	(97)				cm Muck (A10) (MLRA 147)
	oipedon (A2)		Polyvalue Be		ace (S8) (I	/ILRA 147		Coast Prairie Redox (A16)
	stic (A3)		Thin Dark Su				,	(MLRA 147, 148)
	en Sulfide (A4)		Loamy Gleye			, -,	□P	Piedmont Floodplain Soils (F19)
	d Layers (A5)		Depleted Ma		` ,		<u> </u>	(MLRA 136, 147)
2 cm Mu	ıck (A10) (LRR N)		Redox Dark	Surface (F6)		\v	ery Shallow Dark Surface (TF12)
	d Below Dark Surfac	ce (A11)	Depleted Da		. ,			Other (Explain in Remarks)
	ark Surface (A12)		Redox Depre					
	Mucky Mineral (S1)	LRR N,	Iron-Mangan		ses (F12) (LRR N,		
	A 147, 148)		MLRA 13	-	/MI DA 4/	100	31	Parton of barden barden and the card
	Gleyed Matrix (S4)		Umbric Surfa					licators of hydrophytic vegetation and
	Redox (S5) Matrix (S6)		Piedmont Flo					etland hydrology must be present, less disturbed or problematic.
	Layer (if observed)	·	i\edit alenti	viateriai (i	Z1) (IVILIV	A 121, 14	7) un	less disturbed of problematic.
Type: Ro								
Depth (in			 ,				Hydric Soil	Present? Yes No ✓
	cries). <u> </u>						Hydric 30ii	riesent? resNo
Remarks:								

WETLAND DETERMINATION DATA FORM – Eastern Mountains and Piedmont Region to 1-69 Page 133 of 794

Project/Site: Summer Shade Solar Site	City/County: Summer Shade, KY/Metcalf Sampling Date: 10-09-2021
Applicant/Owner: Candela	State: KY Sampling Point: WAS-22
Investigator(s): Mike Williams / Chris Golden	
	cal relief (concave, convex, none): Concave Slope (%): 2%
Subregion (LRR or MLRA): LRR N Lat: 36.880543	Long:85.682834
Soil Map Unit Name: Ls - Lindside silt loam	NWI classification: N/A
Are climatic / hydrologic conditions on the site typical for this time of ye	
Are Vegetation , Soil , or Hydrology significantly	
Are Vegetation , Soil , or Hydrology naturally pro	
	sampling point locations, transects, important features, etc.
Hydrophytic Vegetation Present? Hydric Soil Present? Yes V No No	Is the Sampled Area
Wetland Hydrology Present?	within a Wetland? Yes No
Remarks:	
Wetland 13 wet data point. Site heavily impact	ted by cattle. For Upland Data Point see
WTL-09-UP/WAS-17 Upland Data Point.	loa by catho. I of opialia bata I officeoo
WIL 00 017WAO 17 Opiana Bata I omit.	
HYDROLOGY	
Wetland Hydrology Indicators:	Secondary Indicators (minimum of two required)
Primary Indicators (minimum of one is required; check all that apply)	Surface Soil Cracks (B6)
Surface Water (A1) True Aquatic Pl	
High Water Table (A2)	
	spheres on Living Roots (C3) Moss Trim Lines (B16)
	educed Iron (C4) Dry-Season Water Table (C2) One field Purpose (C9)
	duction in Tilled Soils (C6) Crayfish Burrows (C8) Crayfish Burrows (C8)
Drift Deposits (B3) Algal Mat or Crust (B4) Thin Muck Surf Other (Explain	· ' ' - ' - ' - ' - ' - ' - ' - ' - ' -
Iron Deposits (B5)	Geomorphic Position (D2)
Inundation Visible on Aerial Imagery (B7)	Shallow Aquitard (D3)
Water-Stained Leaves (B9)	Microtopographic Relief (D4)
Aquatic Fauna (B13)	FAC-Neutral Test (D5)
Field Observations:	
Surface Water Present? Yes No Depth (inches)) <u>: 1</u>
Water Table Present? Yes No Depth (inches)):
Saturation Present? Yes No Depth (inches)	<u>0</u> Wetland Hydrology Present? Yes <u>✓</u> No
(includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photo	s previous inspections) if available:
gaage, memory action process	s, promote inopositions), in available.
Remarks:	

Case No. 2025-00064
Reponse to 1-69
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Sampling Point: WAS-22

20	Absolute	Dominant Indicator	Dominance Test worksheet:	
Tree Stratum (Plot size: 30)		Species? Status	Number of Dominant Species	
1			That Are OBL, FACW, or FAC: (A	۸)
2		NA	Total Number of Dominant	
3		NA	Species Across All Strata: 0 (E	3)
4			D	
5			Percent of Dominant Species That Are OBL, FACW, or FAC: (A	\/B)
6			That Are OBE, I ACW, OIT AC (A	VD)
7		MA NA	Prevalence Index worksheet:	
·	0.0	= Total Cover	Total % Cover of: Multiply by:	
50% of total cover: 0.0			OBL species 0 x 1 = 0	
Sapling/Shrub Stratum (Plot size: 15)	2070 01	total 66V61	FACW species0 x 2 =0	
		NA	FAC species 0 x 3 = 0	
1		A 1 A	FACU species 0 x 4 = 0	
2			UPL species	
3			0	(D)
4			Column Totals (A) ((B)
5		NA	Prevalence Index = B/A =	
6			Hydrophytic Vegetation Indicators:	
7		NA	1 - Rapid Test for Hydrophytic Vegetation	
8		NA		
9		NA	2 - Dominance Test is >50%	
	~ ~	= Total Cover	3 - Prevalence Index is ≤3.0 ¹	
50% of total cover:0.0			4 - Morphological Adaptations ¹ (Provide suppor	ting
Herb Stratum (Plot size: 5)			data in Remarks or on a separate sheet)	
1		NA	Problematic Hydrophytic Vegetation ¹ (Explain)	
		NA		
2		N I A	¹ Indicators of hydric soil and wetland hydrology mus	st
3			be present, unless disturbed or problematic.	
4			Definitions of Four Vegetation Strata:	
5		NA	Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or
6			more in diameter at breast height (DBH), regardless	
7		NA	height.	
8		NA	Sapling/Shrub – Woody plants, excluding vines, le	ee
9		NA	than 3 in. DBH and greater than or equal to 3.28 ft (33 [1
10		NA	m) tall.	
11.		NA	Herb – All herbaceous (non-woody) plants, regardle	000
	0.0	= Total Cover	of size, and woody plants less than 3.28 ft tall.	,,,,
50% of total cover: 0.0		total cover: 0.0		
Woody Vine Stratum (Plot size: 15)			Woody vine – All woody vines greater than 3.28 ft i height.	n
1		NA	neight.	
2			•	
		NA		
3		NA		
4			Hydrophytic	
5		NA	Vegetation ✓ Present? Yes No	
		= Total Cover	Fresent: res NO	
50% of total cover: 0.0		total cover: 0.0		
Remarks: (Include photo numbers here or on a separate s	heet.)			
No vegetation due to impacts from cattle	е			
-				

Case No. 2025-00064
Reponse to 1-69
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Sampling Point: WAS-22

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)								
Depth	Matrix		Redox Features					_
(inches)	Color (moist)	<u>%</u>	Color (moist)	<u>%</u>	Type ¹	Loc ²	<u>Texture</u>	Remarks
0-9	10YR 4/2	90	7.5YR 4/6	10	С	<u>M</u>	Silt Clay	
					С	M		
						<u> </u>		
							-	
								
1Type: C=C	oncentration D-Der	oletion RM	=Reduced Matrix, M	S-Maska	d Sand Gi	aine	² Location: PL	=Pore Lining, M=Matrix.
Hydric Soil		DIGUOTI, TXIV	i=i\eadced iviatrix, ivi	3-Maske	u Sanu Gi	airis.		cors for Problematic Hydric Soils ³ :
Histosol			Dark Surface	(97)				cm Muck (A10) (MLRA 147)
	oipedon (A2)		Polyvalue Be		ace (S8) (I	MLRA 147		past Prairie Redox (A16)
	stic (A3)		Thin Dark Su		. , .			(MLRA 147, 148)
	en Sulfide (A4)		Loamy Gleye			, -,		edmont Floodplain Soils (F19)
	d Layers (A5)		✓ Depleted Ma		` ,			(MLRA 136, 147)
2 cm Mu	ıck (A10) (LRR N)		Redox Dark	Surface (F6)		Ve	ry Shallow Dark Surface (TF12)
	d Below Dark Surfac	e (A11)	Depleted Da				Otl	her (Explain in Remarks)
	ark Surface (A12)		Redox Depre					
	lucky Mineral (S1) (LRR N,	Iron-Mangan		ses (F12)	(LRR N,		
	A 147, 148)		MLRA 13	-	(B. 11 D. 11		3, ,,	
	Gleyed Matrix (S4)		Umbric Surfa					cators of hydrophytic vegetation and
	Redox (S5) Matrix (S6)		Piedmont Flo					and hydrology must be present, ess disturbed or problematic.
	Layer (if observed)	•	Red Falenti	viateriai (i	ZI) (IVILI	IA 121, 14	T unie	ess disturbed of problematic.
Type: Ro		•						
							11	V
Depth (in	cnes): <u> </u>						Hydric Soil F	Present? Yes No
Remarks:								

WETLAND DETERMINATION DATA FORM – Eastern Mountains and Piedmont Region to 1-69 Page 136 of 794

Project/Site: Summer Shade Solar Site	City/County: Summer Shade, KY/Metcalf Sampling Date: 10-09-2021							
Applicant/Owner: Candela	State: KY Sampling Point: WAS-23							
Investigator(s): Mike Williams / Chris Golden Section, Township, Range: N/A								
Subregion (LRR or MLRA): LRR N Lat: 36.881278	al relief (concave, convex, none): Level Slope (%):							
Soil Map Unit Name: Ls - Lindside silt loam	NWI classification: N/A							
Are Vegetation, Soil, or Hydrology naturally problematic? (If needed, explain any answers in Remarks.) SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.								
Hydrophytic Vegetation Present? Yes No No No No No No No N	Is the Sampled Area							
Hydric Soil Present? Wetland Hydrology Present? Yes V No No No	within a Wetland? Yes No							
Wetland Hydrology Present? Yes No Remarks:								
Wetland 14 wet data point - riparian wetland as	sociated with STR-104							
Wettaria 14 Wet data point Inparian Wettaria as	Sociated with OTIC 104							
HYDROLOGY								
Wetland Hydrology Indicators:	Secondary Indicators (minimum of two required)							
Primary Indicators (minimum of one is required; check all that apply)	Surface Soil Cracks (B6)							
Surface Water (A1) True Aquatic Pla	ants (B14) Sparsely Vegetated Concave Surface (B8)							
High Water Table (A2) Hydrogen Sulfid	· · · · · · · · · · · · · · · · · · ·							
Saturation (A3)	spheres on Living Roots (C3) Moss Trim Lines (B16)							
Water Marks (B1) Presence of Rec	duced Iron (C4) Dry-Season Water Table (C2)							
	duction in Tilled Soils (C6) Crayfish Burrows (C8)							
Drift Deposits (B3) Thin Muck Surfa								
Algal Mat or Crust (B4) Other (Explain in								
Iron Deposits (B5)	Geomorphic Position (D2)							
Inundation Visible on Aerial Imagery (B7)	Shallow Aquitard (D3)							
Water-Stained Leaves (B9)	Microtopographic Relief (D4)							
Aquatic Fauna (B13)	FAC-Neutral Test (D5)							
Field Observations:								
Surface Water Present? Yes No Depth (inches):								
Water Table Present? Yes V No Depth (inches):	./							
Saturation Present? Yes Ves No Depth (inches):	0 Wetland Hydrology Present? Yes No							
Describe Recorded Data (stream gauge, monitoring well, aerial photos	s, previous inspections), if available:							
Donale								
Remarks:								

20	Absolute	Dominant Inc		Dominance Test worksheet:			
<u>Tree Stratum</u> (Plot size: 30	% Cover	Species? S		Number of Dominant Species			
1		NA		That Are OBL, FACW, or FAC:3 (A)			
2		NA	<u> </u>	Total Number of Dominant			
3		NA		Species Across All Strata:3 (B)			
4		NA		B			
5		NA		Percent of Dominant Species That Are OBL, FACW, or FAC: 100.0 (A/B)			
6		NA		mat Ale OBE, I AOW, OI I AO.			
7		NA	١	Prevalence Index worksheet:			
	0.0	= Total Cover		Total % Cover of: Multiply by:			
50% of total cover: 0.0			0.0	OBL species30 x 1 =30			
Sapling/Shrub Stratum (Plot size: 15)	2070 01			FACW species10 x 2 =20			
		NA		FAC species 40 x 3 = 120			
1		NA		FACU species 0 x 4 = 0			
2		NA		UPL species			
3		NA		Column Totals: 80 (A) 170 (B)			
4				Column Totals. (A) (B)			
5		NA		Prevalence Index = B/A = 2.1			
6		NA		Hydrophytic Vegetation Indicators:			
7		NA	١	1 - Rapid Test for Hydrophytic Vegetation			
8		NA		2 - Dominance Test is >50%			
9.		NA		2 - Dominance Test is >50% 3 - Prevalence Index is ≤3.0¹			
	0.0	= Total Cover					
50% of total cover: 0.0		total cover:	0.0	4 - Morphological Adaptations ¹ (Provide supporting			
Herb Stratum (Plot size: 5)				data in Remarks or on a separate sheet)			
1. Persicaria longiseta	20	√ FA	C	Problematic Hydrophytic Vegetation ¹ (Explain)			
2. Leersia orizoides	30	✓ OB	3L				
3. Microstegium vimineum	20	√ FA	С	¹ Indicators of hydric soil and wetland hydrology must			
4. Impatiens capensis	10		CW	be present, unless disturbed or problematic.			
5. Carex sp	10	NA		Definitions of Four Vegetation Strata:			
	-	NA		Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or			
6				more in diameter at breast height (DBH), regardless of			
7		NA		height.			
8		NA		Sapling/Shrub – Woody plants, excluding vines, less			
9		NA	١	than 3 in. DBH and greater than or equal to 3.28 ft (1			
10		NA	١	m) tall.			
11		NA	١	Herb – All herbaceous (non-woody) plants, regardless			
	90.0	= Total Cover		of size, and woody plants less than 3.28 ft tall.			
50% of total cover: <u>45.0</u>	20% of	total cover: 1	18.0				
Woody Vine Stratum (Plot size: 15				Woody vine – All woody vines greater than 3.28 ft in height.			
1		NA		noight.			
2.		NIA		•			
3		NA					
		NA		·			
4		NA		Hydrophytic			
5	0.0		·	Vegetation ✓ Present? Yes No			
50% ()		= Total Cover	0.0	riesent: res No			
50% of total cover: 0.0		total cover:	0.0				
Remarks: (Include photo numbers here or on a separate s	heet.)						

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Reponse to 1-69
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Sampling Point: WAS-23

Profile Desc	cription: (Describe	to the dep	th needed to docur	nent the	indicator	or confirn	n the absence o	of indicators.)
Depth	Matrix			x Feature	es			
(inches)	Color (moist)	<u>%</u>	Color (moist)	%	Type ¹	Loc ²	Texture	Remarks
0-18	10YR 4/2	90	7.5YR 4/6	10	С	M	Silt clay	
					-	· 		
		- ——		-	<u> </u>			
					<u> </u>			
					•			
	-				<u> </u>			
		· ——			·			
¹ Type: C=C	oncentration, D=Dep	letion, RM=	Reduced Matrix, M	S=Maske	d Sand Gr	ains.		=Pore Lining, M=Matrix.
Hydric Soil	Indicators:		_				Indica	tors for Problematic Hydric Soils ³ :
Histosol	(A1)		Dark Surface	. ,				cm Muck (A10) (MLRA 147)
	pipedon (A2)		Polyvalue Be					past Prairie Redox (A16)
	istic (A3)		Thin Dark Su			147, 148)		(MLRA 147, 148)
	en Sulfide (A4)		Loamy Gleye		(F2)			edmont Floodplain Soils (F19)
	d Layers (A5)		✓ Depleted Ma		5 0)			(MLRA 136, 147)
	uck (A10) (LRR N) d Below Dark Surfac	o (A11)	Redox Dark Depleted Da	,	,			ery Shallow Dark Surface (TF12) her (Explain in Remarks)
	ark Surface (A12)	e (ATT)	Redox Depre					Tier (Explain in Remarks)
	/lucky Mineral (S1) (I	_RR N,	Iron-Mangan			LRR N.		
	A 147, 148)	,	MLRA 13		, ,	,		
	Gleyed Matrix (S4)		Umbric Surfa		(MLRA 13	86, 122)	³ India	cators of hydrophytic vegetation and
Sandy F	Redox (S5)		Piedmont Flo	odplain S	Soils (F19)	(MLRA 14	48) wet	land hydrology must be present,
	l Matrix (S6)		Red Parent I	Material (F	-21) (MLR	A 127, 147	7) unle	ess disturbed or problematic.
Restrictive	Layer (if observed):							
• • • • • • • • • • • • • • • • • • • •								./
Depth (in	ches):						Hydric Soil I	Present? Yes No
Remarks:							•	

WETLAND DETERMINATION DATA FORM – Eastern Mountains and Piedmont Region to 1-69 Page 139 of 794

Project/Site: Summer Shade Solar Site Ci	ty/County: Summer Shade, KY/Metcalf Sampling Date: 10-09-2021						
Applicant/Owner: Candela	State: KY Sampling Point: WAS-24						
Investigator(s): Mike Williams / Chris Golden Section, Township, Range: N/A							
	relief (concave, convex, none): Slope (%): 2%						
Subregion (LRR or MLRA): LRR N Lat: 36.8813327	Long: -85.6819517 Datum: NAD 83 KY S						
Soil Map Unit Name: Ls - Lindside silt loam	NWI classification: Upland						
Are climatic / hydrologic conditions on the site typical for this time of year	New Manager (Manager Lain Causala)						
Are Vegetation, Soil, or Hydrology significantly di							
Are Vegetation, Soil, or Hydrology naturally probl	ematic? (If needed, explain any answers in Remarks.)						
SUMMARY OF FINDINGS – Attach site map showing s	ampling point locations, transects, important features, etc.						
Hydrophytic Vegetation Present? Yes No V	In the Complet Area						
Hydric Soil Present? Yes No	Is the Sampled Area within a Wetland? Yes No						
Wetland Hydrology Present? Yes No							
Remarks:							
Wetland 14 upland data point							
HYDROLOGY							
Wetland Hydrology Indicators:	Secondary Indicators (minimum of two required)						
Primary Indicators (minimum of one is required; check all that apply)	Surface Soil Cracks (B6)						
Surface Water (A1) True Aquatic Plar	` '						
High Water Table (A2) Hydrogen Sulfide							
	heres on Living Roots (C3) Moss Trim Lines (B16)						
Water Marks (B1) Presence of Redu							
	iction in Tilled Soils (C6) Crayfish Burrows (C8)						
Drift Deposits (B3) Thin Muck Surface							
Algal Mat or Crust (B4) Other (Explain in	Remarks) Stunted or Stressed Plants (D1)						
Iron Deposits (B5)	Geomorphic Position (D2)						
Inundation Visible on Aerial Imagery (B7)	Shallow Aquitard (D3)						
Water-Stained Leaves (B9)	Microtopographic Relief (D4)						
Aquatic Fauna (B13)	FAC-Neutral Test (D5)						
Field Observations:							
Surface Water Present? Yes No V Depth (inches):_							
Water Table Present? Yes No Depth (inches):_	./						
Saturation Present? Yes No Depth (inches):_ (includes capillary fringe)	Wetland Hydrology Present? Yes No						
Describe Recorded Data (stream gauge, monitoring well, aerial photos,	previous inspections), if available:						
Damada							
Remarks:							

Case No. 2025-00064
Reponse to 1-69
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Sampling Point: WAS-24

20	Absolute	Dominant Indicator	Dominance Test worksheet:		
<u>Tree Stratum</u> (Plot size: 30	% Cover	Species? Status	Number of Dominant Species		
1		NA	That Are OBL, FACW, or FAC:1 (A)		
2		NA	Total Number of Dominant		
3		NA	Species Across All Strata: 2 (B)		
4		NA			
5		NA	Percent of Dominant Species That Are OBL, FACW, or FAC: 50.0 (A/B)		
6		MA NA	That Are OBE, FACW, OF FAC (A/B)		
		NA NA	Prevalence Index worksheet:		
7	0.0		Total % Cover of: Multiply by:		
50% of total cover: 0.0		= Total Cover	OBL species $0 x 1 = 0$		
Sapling/Shrub Stratum (Plot size: 15)	20 /6 01	total cover	FACW species $0 \times 2 = 0$		
Sapling/Shrub Stratum (Plot size: 19		NA	FAC species 20 x 3 = 60		
1		NA	FACU species 65 x 4 = 260		
2			17100 openios x 1=		
3		NA	05 000		
4		NA	Column Totals: <u>85</u> (A) <u>320</u> (B)		
5		NA	Prevalence Index = B/A = 3.8		
6		NA	Hydrophytic Vegetation Indicators:		
7		NA			
8		NA	1 - Rapid Test for Hydrophytic Vegetation		
9.		NA	2 - Dominance Test is >50%		
<u> </u>	0.0	= Total Cover	3 - Prevalence Index is ≤3.0 ¹		
50% of total cover:0.0		total cover: 0.0	4 - Morphological Adaptations ¹ (Provide supporting		
Herb Stratum (Plot size: 5)			data in Remarks or on a separate sheet)		
1. Andropogon virginicus	15	FACU	Problematic Hydrophytic Vegetation ¹ (Explain)		
2. Digitaria sanguinalis	30	✓ FACU			
3. Solidago rugosa	20	✓ FAC	¹ Indicators of hydric soil and wetland hydrology must		
4. Schedonorus arundinaceus	10	FACU	be present, unless disturbed or problematic.		
	5	FACU	Definitions of Four Vegetation Strata:		
5. Trifolium repens	5	FACU	Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or		
6. Lespedeza cuneata			more in diameter at breast height (DBH), regardless of		
7		NA	. height.		
8		NA	Sapling/Shrub – Woody plants, excluding vines, less		
9		NA	than 3 in. DBH and greater than or equal to 3.28 ft (1		
10	-	NA	m) tall.		
11		NA	Herb – All herbaceous (non-woody) plants, regardless		
	85.0	= Total Cover	of size, and woody plants less than 3.28 ft tall.		
50% of total cover: 42.5	20% of	total cover: 17.0	Was designed Allows during a section than 0.00 ft in		
Woody Vine Stratum (Plot size: 15			Woody vine – All woody vines greater than 3.28 ft in height.		
1		NA	noight.		
2.		NA NA			
3.		NA			
		NA	•		
4	-	NA	Hydrophytic		
5			Vegetation ✓ Present? Yes No		
50% ()		= Total Cover	11636HC: 163 NO		
50% of total cover: 0.0		total cover: 0.0			
Remarks: (Include photo numbers here or on a separate s	heet.)				

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Sampling Point: WAS-24

Profile Desc	ription: (Describe	to the depth	needed to docur	nent the ir	ndicator o	or confirm	the absence of	indicators.)	
Depth	Matrix			x Features	<u> </u>	. 2	_		
(inches) 0-2	Color (moist) 10YR 4/4	<u>%</u>	Color (moist)	%	Type ¹	Loc ²	Claviloom	Remark	<u>S</u>
							Clay loam		
2-18	10YR 5/4	50					Silty clay		
	7.5 YR 5/6	50					Silty clay		
		. <u> </u>							
		· -	_						
	-	· -							
		· 							
	oncentration, D=Dep	letion, RM=R	educed Matrix, MS	S=Masked	Sand Gra	ins.		Pore Lining, M=Matri	
Hydric Soil				(O-)				rs for Problematic	-
Histosol	` '		Dark Surface Polyvalue Be		oo (CO) /M	I D A 447		n Muck (A10) (MLR<i>A</i> st Prairie Redox (A1	
Black Hi	oipedon (A2) stic (A3)		Thin Dark Su					st Prairie Redox (A1 //LRA 147, 148)	0)
	en Sulfide (A4)		Loamy Gleye			, . ,		lmont Floodplain Soi	ls (F19)
Stratified	d Layers (A5)		Depleted Ma		•		(N	/ILRA 136, 147)	, ,
	ıck (A10) (LRR N)		Redox Dark	,	,			Shallow Dark Surfa	
	d Below Dark Surfac	e (A11)	Depleted Date				Othe	er (Explain in Remar	ks)
	ark Surface (A12) ⁄lucky Mineral (S1) (I	DD N	Redox Depre			DD N			
	147, 148)	-IXIX I V ,	MLRA 13		53 (1 12) (1	-IXIX IV,			
	Gleyed Matrix (S4)		Umbric Surfa		MLRA 13	6, 122)	³ Indica	tors of hydrophytic v	egetation and
	Redox (S5)		Piedmont Flo					nd hydrology must b	
	l Matrix (S6)		Red Parent N	/laterial (F2	21) (MLR	A 127, 147	') unles	s disturbed or proble	ematic.
	Layer (if observed):								
			<u> </u>						✓
	ches):		<u> </u>				Hydric Soil Pr	esent? Yes	No
Remarks:									

WETLAND DETERMINATION DATA FORM – Eastern Mountains and Piedmont Region to 1-69 Page 142 of 794

Project/Site: Summer Shade Solar Site	City/County: Summer Shade, KY/Metcalf Sampling Date: 10-09-2021
Applicant/Owner: Candela	State: KY Sampling Point: WAS-25
Investigator(s): Mike Williams / Chris Golden	· · ·
Subregion (LRR or MLRA): LRR N Lat: 36.881013	al relief (concave, convex, none): Level Slope (%): 0 Long: -85.681981 Datum: NAD 83 KY S
Soil Map Unit Name: Ls - Lindside silt loam	NWI classification: N/A
Are climatic / hydrologic conditions on the site typical for this time of year	NVI classification.
Are Vegetation, Soil, or Hydrology significantly of	
Are Vegetation, Soil, or Hydrology naturally prol	
SUMMARY OF FINDINGS – Attach site map showing	sampling point locations, transects, important features, etc.
Hydrophytic Vegetation Present? Yes No	
Hydric Soil Present? Yes No No	Is the Sampled Area within a Wetland? Yes No
Wetland Hydrology Present? Yes No	Willim a Welland.
Remarks:	
Wetland 15 wet data point	
HYDROLOGY	
Wetland Hydrology Indicators:	Secondary Indicators (minimum of two required)
Primary Indicators (minimum of one is required; check all that apply)	Surface Soil Cracks (B6)
Surface Water (A1) True Aquatic Pla	
High Water Table (A2) Hydrogen Sulfid	
	spheres on Living Roots (C3) Moss Trim Lines (B16)
Water Marks (B1) Presence of Rec	
	duction in Tilled Soils (C6) Crayfish Burrows (C8)
Drift Deposits (B3)	ace (C7) Saturation Visible on Aerial Imagery (C9)
Algal Mat or Crust (B4) Other (Explain in	n Remarks) Stunted or Stressed Plants (D1)
Iron Deposits (B5)	Geomorphic Position (D2)
Inundation Visible on Aerial Imagery (B7)	Shallow Aquitard (D3)
Water-Stained Leaves (B9)	Microtopographic Relief (D4)
Aquatic Fauna (B13)	FAC-Neutral Test (D5)
Field Observations:	1
Surface Water Present? Yes V No Depth (inches):	
Water Table Present? Yes V No Depth (inches):	
Saturation Present? Yes Ves No Depth (inches): (includes capillary fringe)	Wetland Hydrology Present? Yes No
Describe Recorded Data (stream gauge, monitoring well, aerial photos	s, previous inspections), if available:
Remarks:	
Tomano.	

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Reponse to 1-69
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Sampling Point: WAS-25

T 0: (D) : 20	Absolute	Dominant Indicator	Dominance Test worksheet:
<u>Tree Stratum</u> (Plot size: 30)	% Cover	Species? Status	Number of Dominant Species
1			That Are OBL, FACW, or FAC:1 (A)
2			Total Number of Dominant
3		NA	Species Across All Strata:1 (B)
4		NA	Percent of Dominant Species
5		NA	That Are OBL, FACW, or FAC: 100.0 (A/B)
6		NA	
7		NA	Prevalence Index worksheet:
	0.0	= Total Cover	Total % Cover of: Multiply by:
50% of total cover: 0.0			OBL species 20 x 1 = 20
Sapling/Shrub Stratum (Plot size: 15			FACW species70 x 2 =140
1		NA	FAC species10 x 3 =30
2		NA	FACU species0 x 4 =0
3		A I A	UPL species0 x 5 =0
4		N I A	Column Totals:100 (A)190 (B)
		NA	4.0
5		NA	Prevalence Index = B/A =1.9
6		NA	Hydrophytic Vegetation Indicators:
7		NA NA	1 - Rapid Test for Hydrophytic Vegetation
8		NA	2 - Dominance Test is >50%
9			3 - Prevalence Index is ≤3.0 ¹
0.0		= Total Cover	4 - Morphological Adaptations ¹ (Provide supporting
50% of total cover: 0.0	20% of	total cover: U.U	data in Remarks or on a separate sheet)
Herb Stratum (Plot size: 5)	70	√ FACW	Problematic Hydrophytic Vegetation ¹ (Explain)
1. Juncus effusus	70		
2. Leersia oryzoides	20	OBL	¹ Indicators of hydric soil and wetland hydrology must
3. Carex sp	15	NA	be present, unless disturbed or problematic.
4. Microstegium vimineum	10	FAC	Definitions of Four Vegetation Strata:
5		NA	
6		NA	Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of
7		NA	height.
8		NA	0 1 10 1 11 11 11 11 11 11
9.		NA	Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than or equal to 3.28 ft (1
10		NA	m) tall.
11.		NA NA	. Harb. All barbassas (non was de) alente researdless
	115.0	= Total Cover	Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.
50% of total cover: 57.5			
Woody Vine Stratum (Plot size: 15)			Woody vine – All woody vines greater than 3.28 ft in
1		NA	height.
2.		NΙΛ	•
		NA	
3		NA	
4		NA	Hydrophytic
5		 -	Vegetation
50% of total cover: 0.0		= Total Cover total cover: 0.0	100 <u> </u>
		total cover: 0.0	
Remarks: (Include photo numbers here or on a separate si	neet.)		

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)								
Depth	Matrix		Redo	x Feature	s			
(inches)	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²	Texture	Remarks
0-2	10 YR 4/2	97	7.5YR 4/6	3	С	М	Silt clay	
2-18	10YR 5/2	85	5YR 4/6	15	С	М	Clay	
		· ——			· -			
	-				. <u> </u>		-	
		· ——			· -			
							•	
1Tupo: C-C	anacatration D_Dan	lotion DM	=Reduced Matrix, MS		d Sand Cr	roino	² Location: D	L=Pore Lining, M=Matrix.
Hydric Soil		ielion, Kivi	=Reduced Matrix, Mi	5=IVIASKE	u Sanu Gi	allis.		ators for Problematic Hydric Soils ³ :
Histosol			Dark Surface	(97)				cm Muck (A10) (MLRA 147)
	oipedon (A2)		Polyvalue Be		nce (S8) (I	MI RΔ 147		Coast Prairie Redox (A16)
Black Hi			Thin Dark Su				140)	(MLRA 147, 148)
	en Sulfide (A4)		Loamy Gleye			,,		Piedmont Floodplain Soils (F19)
	d Layers (A5)		✓ Depleted Ma		()			(MLRA 136, 147)
	ick (A10) (LRR N)		Redox Dark		F6)		\v	ery Shallow Dark Surface (TF12)
Depleted	d Below Dark Surfac	e (A11)	Depleted Dai	rk Surface	e (F7)		<u></u> c	Other (Explain in Remarks)
	ark Surface (A12)		Redox Depre					
	lucky Mineral (S1) (I	_RR N,	Iron-Mangan		es (F12) ((LRR N,		
	A 147, 148)		MLRA 13				3.	
	Gleyed Matrix (S4)		Umbric Surfa					licators of hydrophytic vegetation and
	Redox (S5) Matrix (S6)		Piedmont Flo					etland hydrology must be present, less disturbed or problematic.
	Layer (if observed):		Red Falentin	viateriai (i	ZI) (WILK	A 121, 14	7) un	liess disturbed of problematic.
	Layer (ii observeu).							
• • • • • • • • • • • • • • • • • • • •	ches):						Usalvia Cail	Present? Yes No
	cnes):						nyaric Soil	Present? resNo
Remarks:								

WETLAND DETERMINATION DATA FORM – Eastern Mountains and Piedmont Region to 1-69
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Project/Site: Summer Shade Solar Site City/C	county: Summer Shade, KY/Metcalf	Sampling Date: 10-09-2021
Applicant/Owner: Candela		Sampling Point: WAS-26
Investigator(s): Mike Williams / Chris Golden Section		
		Slope (%): 2%
$ \begin{array}{cccccccccccccccccccccccccccccccccccc$	Long: -85.682121	Datum: NAD 83 KY S
Soil Map Unit Name: Ls - Lindside silt loam	NWI classific	
Are climatic / hydrologic conditions on the site typical for this time of year? Y	es 🚺 No 🔲 (If no, explain in R	
Are Vegetation, Soil, or Hydrology significantly distur		present? Yes Vo No
Are Vegetation, Soil, or Hydrology naturally problems		
SUMMARY OF FINDINGS – Attach site map showing sam	pling point locations, transects	, important features, etc.
Hydrophytic Vegetation Present? Hydric Soil Present? Wetland Hydrology Present? Yes No No No No No No No No No N	Is the Sampled Area within a Wetland? Yes	
Remarks:		
Wetland 15 upland data point		
HYDROLOGY		
Wetland Hydrology Indicators:	Secondary Indica	ators (minimum of two required)
Primary Indicators (minimum of one is required; check all that apply)	Surface Soil	
Surface Water (A1) True Aquatic Plants (getated Concave Surface (B8)
High Water Table (A2) Seturation (A2) Hydrogen Sulfide Odd	or (C1) Drainage Pa es on Living Roots (C3) Moss Trim L	
Saturation (A3) Oxidized Rhizosphere Water Marks (B1) Presence of Reduced		Water Table (C2)
Sediment Deposits (B2) Recent Iron Reductio		
Drift Deposits (B3) Thin Muck Surface (C		isible on Aerial Imagery (C9)
Algal Mat or Crust (B4) Other (Explain in Ren		tressed Plants (D1)
Iron Deposits (B5)	Geomorphic	Position (D2)
Inundation Visible on Aerial Imagery (B7)	Shallow Aqu	itard (D3)
Water-Stained Leaves (B9)		aphic Relief (D4)
Aquatic Fauna (B13)	FAC-Neutral	Test (D5)
Field Observations: Surface Water Present? Yes No Depth (inches):		
Water Table Present? Yes No Depth (inches):		
Saturation Present? Yes No Depth (inches):	Wetland Hydrology Preser	nt? Yes No
(includes capillary fringe)		K. 105 NO
Describe Recorded Data (stream gauge, monitoring well, aerial photos, pre	vious inspections), if available:	
Remarks:		

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Reponse to 1-69
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Sampling Point: WAS-26

20	Absolute	Dominant Indicator	Dominance Test worksheet:
Tree Stratum (Plot size: 30		Species? Status	Number of Dominant Species
1. Juniperus virginiana	15	√ FACU	That Are OBL, FACW, or FAC: 2 (A)
2		NA	Total Number of Dominant
3		NA	Species Across All Strata:3 (B)
4		NA	D
5		NA	Percent of Dominant Species That Are OBL, FACW, or FAC:66.7 (A/B)
6			That Ale Obe, I Aow, Of I Ao.
7		MA NA	Prevalence Index worksheet:
	15.0	= Total Cover	Total % Cover of: Multiply by:
50% of total cover: 7.5			OBL species0 x 1 =0
Sapling/Shrub Stratum (Plot size: 15)	2070 01	101411 00701.	FACW species10 x 2 =20
		NA	FAC species 90 x 3 = 270
1		NA	FACU species 15 x 4 = 60
2		NA	UPL species 0 x 5 = 0
3		NA	Column Totals: 115 (A) 350 (B)
4			Column Totals. (A) (B)
5		NA	Prevalence Index = B/A =3.0
6		NA	Hydrophytic Vegetation Indicators:
7		NA	1 - Rapid Test for Hydrophytic Vegetation
8	-	NA	2 - Dominance Test is >50%
9		NA	3 - Prevalence Index is ≤3.0 ¹
	0.0	= Total Cover	
50% of total cover: 0.0			4 - Morphological Adaptations ¹ (Provide supporting
Herb Stratum (Plot size: 5)			data in Remarks or on a separate sheet)
1. Solidago rugosa	20	✓ FAC	Problematic Hydrophytic Vegetation ¹ (Explain)
2. Microstegium vimineum	70	√ FAC	
3. Impatiens capensis	10	FACW	¹ Indicators of hydric soil and wetland hydrology must
		NA NA	be present, unless disturbed or problematic.
4			Definitions of Four Vegetation Strata:
5		NA	Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or
6			more in diameter at breast height (DBH), regardless of
7		NA	height.
8		NA	Sapling/Shrub – Woody plants, excluding vines, less
9		NA	than 3 in. DBH and greater than or equal to 3.28 ft (1
10	-	NA	m) tall.
11		NA	Herb – All herbaceous (non-woody) plants, regardless
	100.0	= Total Cover	of size, and woody plants less than 3.28 ft tall.
50% of total cover: _ 50.0			
Woody Vine Stratum (Plot size: 15)			Woody vine – All woody vines greater than 3.28 ft in height.
1		NA	neight.
2.		NA NA	·
		NA	
3		NA	
4		NA NA	Hydrophytic
5			Vegetation Present? Yes No
		= Total Cover	rieseitt: ies No
50% of total cover: 0.0		total cover: 0.0	
Remarks: (Include photo numbers here or on a separate s	heet.)		

Profile Desc	ription: (Describe	to the dep	oth needed to docur	nent the	indicator	or confirn	n the absence	of indicators.)
Depth	Matrix		Redo	x Feature	es			
(inches)	Color (moist)	<u>%</u>	Color (moist)	%	Type ¹	Loc ²	Texture	<u>Remarks</u>
0-10	10YR 4/4	100	-		<u> </u>		Silt clay	
10-18	10YR 4/2	80	5YR 4/6	20	С	M	Silt clay	
					· ·			
	-				·	- ——		
					<u> </u>			
	-							
	-				·	- ——		
					<u> </u>			
¹ Type: C=Co	ncentration D-Der	letion PM	=Reduced Matrix, MS	S-Macke	d Sand Gr	aine	² Location: P	L=Pore Lining, M=Matrix.
Hydric Soil I		netion, Kiv	=Neduced Matrix, Mix	3=IVIASKE	u Sanu Gi	allis.		ators for Problematic Hydric Soils ³ :
Histosol			Dark Surface	(97)				cm Muck (A10) (MLRA 147)
	oipedon (A2)		Polyvalue Be		ace (S8) (I	/II R Δ 147		Coast Prairie Redox (A16)
Black His			Thin Dark Su				, 140)	(MLRA 147, 148)
	n Sulfide (A4)		Loamy Gleye			· · · · , · · · · ,		Piedmont Floodplain Soils (F19)
	Layers (A5)		Depleted Ma		` ,		<u> </u>	(MLRA 136, 147)
2 cm Mu	ck (A10) (LRR N)		Redox Dark	Surface (F6)		□∨	ery Shallow Dark Surface (TF12)
	Below Dark Surfac	e (A11)	Depleted Dai					Other (Explain in Remarks)
	rk Surface (A12)		Redox Depre					
	lucky Mineral (S1) (I	LRR N,	Iron-Mangan		ses (F12) ((LRR N,		
	147, 148)		MLRA 13	-			3,	
	leyed Matrix (S4)		Umbric Surfa					licators of hydrophytic vegetation and
	edox (S5) Matrix (S6)		Piedmont Flo					etland hydrology must be present, less disturbed or problematic.
	ayer (if observed)	•	ited i aleiti i	nateriai (i	Z1) (IVILI	A 121, 141	7) un	liess disturbed of problematic.
Type:	Luyer (ii observeu)	•						
• • • • • • • • • • • • • • • • • • • •	-h\.						Hudeia Cail	Present? Yes No
	ches):						nyaric Soil	Present? Yes No
Remarks:								

WETLAND DETERMINATION DATA FORM – Eastern Mountains and Piedmont Region to 1-69 Page 148 of 794

Project/Site: Summer Shade Solar Site City/	County: Summer Shade, KY/Metcalf Sampling Date: 10-09-2021
Applicant/Owner: Candela	State: KY Sampling Point: WAS-27
Investigator(s): Mike Williams / Chris Golden	tion Township Range: N/A
Landform (hillslope, terrace, etc.): Valley Local re	elief (concave, convex, none): Concave Slope (%): 1
Subregion (LRR or MLRA): LRR N Lat: 36.881298	Long: -85.683119 Datum: NAD 83 KY S
Soil Map Unit Name: Ls - Lindside silt loam	elief (concave, convex, none): Concave Slope (%): 1 Long: -85.683119 Datum: NAD 83 KY S NWI classification: N/A
Are climatic / hydrologic conditions on the site typical for this time of year?	Yes No (If no, explain in Remarks.)
Are Vegetation, Soil, or Hydrology significantly distu	urbed? Are "Normal Circumstances" present? Yes No
Are Vegetation , Soil , or Hydrology naturally probler	
	mpling point locations, transects, important features, etc.
Hydrophytic Vegetation Present? Yes Ves No	Is the Sampled Area
Hydric Soil Present? Wetland Hydrology Present? Yes V No	within a Wetland? Yes No
Remarks:	
Wetland 15 wet data point	
Wettand 10 wet data point	
HYDROLOGY	
Wetland Hydrology Indicators:	Secondary Indicators (minimum of two required)
Primary Indicators (minimum of one is required; check all that apply)	Surface Soil Cracks (B6)
Surface Water (A1)	Sparsely Vegetated Concave Surface (B8)
High Water Table (A2)	dor (C1) Drainage Patterns (B10)
	eres on Living Roots (C3) Moss Trim Lines (B16)
Water Marks (B1) Presence of Reduce	
	ion in Tilled Soils (C6) Crayfish Burrows (C8)
Drift Deposits (B3) Thin Muck Surface Others (Fig. 1): 18 P.	
Algal Mat or Crust (B4) Other (Explain in Re	emarks) Stunted or Stressed Plants (D1) ✓ Geomorphic Position (D2)
Iron Deposits (B5) Inundation Visible on Aerial Imagery (B7)	Shallow Aquitard (D3)
Water-Stained Leaves (B9)	Microtopographic Relief (D4)
Aquatic Fauna (B13)	FAC-Neutral Test (D5)
Field Observations:	
Surface Water Present? Yes No Depth (inches): 1	
Water Table Present? Yes No Depth (inches): 6	
Saturation Present? Yes No Depth (inches): 0	Wetland Hydrology Present? Yes No
(includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, pi	ravious inspections) if available:
Describe Necorded Data (stream gauge, monitoring well, acrial priotos, pi	evious inspections), ii available.
Remarks:	

Case No. 2025-00064
Reponse to 1-69
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Sampling Point: WAS-27

20	Absolute	Dominant Indicator	Dominance Test worksheet:
<u>Tree Stratum</u> (Plot size: 30	% Cover	Species? Status	Number of Dominant Species
1		NA	That Are OBL, FACW, or FAC: 2 (A)
2		NA	Total Number of Dominant
3		NA	Species Across All Strata:2 (B)
4		NA	D
5		NA	Percent of Dominant Species That Are OBL, FACW, or FAC: 100.0 (A/B)
6			That Ale OBE, I AOV, OI I AO.
7		NA	Prevalence Index worksheet:
	0.0	= Total Cover	Total % Cover of: Multiply by:
50% of total cover: 0.0			OBL species60 x 1 =60
Sapling/Shrub Stratum (Plot size: 15)			FACW species35 x 2 =70
1		NA	FAC species0 x 3 =0
		NA	FACU species 0 x 4 = 0
2		NA	UPL species 0 x 5 = 0
3		ΝΔ	Column Totals: 95 (A) 130 (B)
4		NA	(1)
5		NA	Prevalence Index = B/A =1.4
6			Hydrophytic Vegetation Indicators:
7		NA	1 - Rapid Test for Hydrophytic Vegetation
8		NA	2 - Dominance Test is >50%
9		NA	3 - Prevalence Index is ≤3.0 ¹
		= Total Cover	4 - Morphological Adaptations ¹ (Provide supporting
50% of total cover: 0.0	20% of	total cover: 0.0	data in Remarks or on a separate sheet)
Herb Stratum (Plot size: 5		_	-
1. Juncus effusus	30	✓ FACW	Problematic Hydrophytic Vegetation ¹ (Explain)
2. Leersia oryzoides	60	√ OBL	
3. Carex sp	10	NA	¹Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
4 Boehmeria cylindrica	5	FACW	
5		NA	Definitions of Four Vegetation Strata:
6		NA	Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or
		NA	more in diameter at breast height (DBH), regardless of
7 8.		NA	height.
0		NA	Sapling/Shrub – Woody plants, excluding vines, less
9		NA NA	than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.
10		NA	iii) taii.
11	105.0		Herb – All herbaceous (non-woody) plants, regardless
50% (4.4.) 52.6	105.0	= Total Cover	of size, and woody plants less than 3.28 ft tall.
50% of total cover: <u>52.5</u>	20% of	total cover: 21.0	Woody vine – All woody vines greater than 3.28 ft in
Woody Vine Stratum (Plot size: 15)		NA	height.
1,			
2		NA	
3		NA	
4		NA	Hydrophytic
5		NA	Vegetation
		= Total Cover	Present? Yes No
50% of total cover: 0.0	20% of	total cover: 0.0	
Remarks: (Include photo numbers here or on a separate s	heet.)		

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Reponse to 1-69
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Sampling Point: WAS-27

Profile Desc	ription: (Describe	to the dep	oth needed to docur	ment the	indicator	or confirm	the absence	of indicators.)
Depth	Matrix			x Feature	es			
(inches)	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²	<u>Texture</u>	<u>Remarks</u>
0-2	10YR 4/2	97	7.5YR 4/6	3	С	M/PL	Silt clay	
2-8	10YR 5/2	95	7.5YR 4/6	5	C	M	Silt clay	Rock at 8 inches
					<u> </u>			
					<u> </u>			
						· ——		
						· ——		
					<u> </u>			
					-			
¹ Type: C=Co	oncentration, D=Dep	letion, RM	=Reduced Matrix, M	S=Maske	d Sand Gr	ains.	² Location: P	PL=Pore Lining, M=Matrix.
Hydric Soil I		•						ators for Problematic Hydric Soils ³ :
Histosol	(A1)		Dark Surface	e (S7)				2 cm Muck (A10) (MLRA 147)
Histic Ep	pipedon (A2)		Polyvalue Be				148)	Coast Prairie Redox (A16)
Black Hi	, ,		Thin Dark Su			147, 148)		(MLRA 147, 148)
	n Sulfide (A4)		Loamy Gleye		(F2)		F	Piedmont Floodplain Soils (F19)
	Layers (A5)		✓ Depleted Ma		- 0)		П,	(MLRA 136, 147)
	ick (A10) (LRR N) d Below Dark Surfac	·ο (Λ11)	Redox Dark Depleted Da				1 1	/ery Shallow Dark Surface (TF12) Other (Explain in Remarks)
	ark Surface (A12)	e (ATT)	Redox Depre					oner (Explain in Kemarks)
	lucky Mineral (S1) (LRR N.	Iron-Mangan			LRR N.		
	\ 147, 148)	,	MLRA 13		,	,,		
	leyed Matrix (S4)		Umbric Surfa		(MLRA 13	36, 122)	³ Inc	dicators of hydrophytic vegetation and
	edox (S5)		Piedmont Flo					etland hydrology must be present,
Stripped	Matrix (S6)		Red Parent N	Material (I	=21) (MLR	A 127, 147	7) un	less disturbed or problematic.
	ayer (if observed)							
Type: Ro								√
Depth (inc	ches): <u>8</u>						Hydric Soi	Present? Yes No
Remarks:								

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Project/Site: Summer Shade Solar Site	City/County: Summer Shade,	, KY/Metcalf	Sampling Date: 10-09-2021
Applicant/Owner: Candela			Sampling Point: WAS-28
Investigator(s): Mike Williams / Chris Golden			<u> </u>
			Slone (%). 5
Landform (hillslope, terrace, etc.): Hillslope Loc Subregion (LRR or MLRA): LRR N Lat: 36.881339	Long: -85.6	83183	
Soil Map Unit Name: Ls - Lindside silt loam	Long	NWI classific	Datum
Are climatic / hydrologic conditions on the site typical for this time of ye	ar? Yes No (II	f no, explain in R	
Are Vegetation, Soil, or Hydrology significantly			present? Yes No
Are Vegetation, Soil, or Hydrology naturally pro		plain any answe	
SUMMARY OF FINDINGS – Attach site map showing	sampling point location	ns, transects	, important features, etc.
Hydrophytic Vegetation Present? Yes No			
Hydric Soil Present? Yes No V	Is the Sampled Area	Vaa	No✓
Wetland Hydrology Present? Yes No No	within a Wetland?	res	NO
Remarks:			
Wetland 16 upland data point			
·			
HYDROLOGY			
Wetland Hydrology Indicators:	<u> </u>		tors (minimum of two required)
Primary Indicators (minimum of one is required; check all that apply)		Surface Soil	
Surface Water (A1) True Aquatic Pl			getated Concave Surface (B8)
High Water Table (A2) Hydrogen Sulfic	spheres on Living Roots (C3)	Drainage Par Moss Trim Li	
	duced Iron (C4)		Water Table (C2)
	duction in Tilled Soils (C6)	Crayfish Buri	i i
Drift Deposits (B3) Thin Muck Surf			sible on Aerial Imagery (C9)
Algal Mat or Crust (B4) Other (Explain	· · ·		tressed Plants (D1)
Iron Deposits (B5)	,		Position (D2)
Inundation Visible on Aerial Imagery (B7)		Shallow Aqui	
Water-Stained Leaves (B9)		Microtopogra	aphic Relief (D4)
Aquatic Fauna (B13)		FAC-Neutral	Test (D5)
Field Observations:			
Surface Water Present? Yes No Depth (inches)			
Water Table Present? Yes No Depth (inches)			1
Saturation Present? Yes No Depth (inches) (includes capillary fringe)	: Wetland Hy	drology Presen	nt? Yes No
Describe Recorded Data (stream gauge, monitoring well, aerial photo	s, previous inspections), if availa	able:	
Remarks:			

	Absolute		t Indicator	Dominance Test worksheet:
<u>Tree Stratum</u> (Plot size: 30	% Cover	Species'	_	Number of Dominant Species
1			NA NA	That Are OBL, FACW, or FAC:1 (A)
2			NA_	Total Number of Dominant
3			NA	Species Across All Strata: 3 (B)
4			NA	
5			NA	Percent of Dominant Species That Are OBL_FACW_or_FAC: 33.3 (A/B)
			- NA	That Are OBL, FACW, or FAC: 33.3 (A/B)
6			NA	Prevalence Index worksheet:
7			_	Total % Cover of: Multiply by:
700/ (1.1.)		= Total Co		OBL species $0 x 1 = 0$
50% of total cover: 0.0	20% of	total cove	r: U.U	FACW species 0 x 2 = 0
Sapling/Shrub Stratum (Plot size: 15			NIA	1 ACW species
1			NA -	7.10 species x 0 =
2			_NA	7700 oposios x 1=
3			NA	UPL species
4			NA	Column Totals: <u>125</u> (A) <u>470</u> (B)
5			NA	2.0
•			NA	Prevalence Index = B/A =3.8
6			NA	Hydrophytic Vegetation Indicators:
7			NA	1 - Rapid Test for Hydrophytic Vegetation
8			_	2 - Dominance Test is >50%
9			_N <u>A</u>	3 - Prevalence Index is ≤3.0 ¹
		= Total Co		4 - Morphological Adaptations ¹ (Provide supporting
50% of total cover: 0.0	20% of	total cove	r: <u>0.0</u>	data in Remarks or on a separate sheet)
Herb Stratum (Plot size: 5		_		1 🗖
1. Sorghum halepense	70		FACU	Problematic Hydrophytic Vegetation ¹ (Explain)
2. Rumex crispus	10		FAC	
3. Microstegium vimineum	20		FAC	¹ Indicators of hydric soil and wetland hydrology must
4.			NA	be present, unless disturbed or problematic.
5			NA	Definitions of Four Vegetation Strata:
·		-	NA	Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or
6			_NA	more in diameter at breast height (DBH), regardless of
7			_	height.
8			_ NA	Sapling/Shrub – Woody plants, excluding vines, less
9			_NA	than 3 in. DBH and greater than or equal to 3.28 ft (1
10			NA NA	m) tall.
11		-	NA	Herb – All herbaceous (non-woody) plants, regardless
	100.0	= Total Co	ver	of size, and woody plants less than 3.28 ft tall.
50% of total cover: <u>50.0</u>				
Woody Vine Stratum (Plot size: 30)				Woody vine – All woody vines greater than 3.28 ft in height.
1 Rubus flagellaris	25	✓	FACU	noight.
2.		_	NA	•
			- NA	
			NA NA	•
4			_	Hydrophytic
5			_NA	Vegetation Vegetation
		= Total Co		Present? Yes No
50% of total cover: <u>12.5</u>	20% of	total cove	r: <u>5.0</u>	
Remarks: (Include photo numbers here or on a separate sl	neet.)			

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SOIL Page 153 of 794
Sampling Point: WAS-28

Profile Desc	ription: (Describe	to the dept	h needed to docun	ent the ir	ndicator o	or confirm	the absence	of indicators.)	
Depth	Matrix		Redox	c Features	3				
(inches)	Color (moist)	<u>%</u>	Color (moist)	<u>%</u>	Type ¹	Loc ²	Texture	Rem	arks
0-4	10YR 3/3	100					Loamy clay		
4-18	10YR 4/3	100					Clay		
	-								-
							<u> </u>	-	
									_
									-
	-								
1Typo: C-C	ncontration D_Dor	lotion PM-	Reduced Matrix, MS	-Mackad	Sand Gra	nine	² Location: DI	L=Pore Lining, M=W	latriy
Hydric Soil I		neuon, Kivi=	Reduced Matrix, Mc	=iviaskeu	Sand Gra	11115.		ators for Problema	
Histosol			Dark Surface	(97)				cm Muck (A10) (ML	-
	oipedon (A2)		Polyvalue Be		e (S8) (M	I RΔ 147		oast Prairie Redox	
Black His			Thin Dark Su		. , .		· ·•,o	(MLRA 147, 148)	(· · · · •)
	n Sulfide (A4)		Loamy Gleye			., -,	ПР	iedmont Floodplain	Soils (F19)
	Layers (A5)		Depleted Mat		,		<u> </u>	(MLRA 136, 147)	,
	ck (A10) (LRR N)		Redox Dark S		6)		□v	ery Shallow Dark St	urface (TF12)
	Below Dark Surfac	e (A11)	Depleted Dar		. ,		الل	ther (Explain in Rer	narks)
	ark Surface (A12)		Redox Depre						
	lucky Mineral (S1) (LRR N,	Iron-Mangane		es (F12) (I	_RR N,			
	147, 148)		MLRA 136	-			3, ,		
	leyed Matrix (S4)		Umbric Surfa					icators of hydrophyt	_
	edox (S5) Matrix (S6)		Piedmont Flo					tland hydrology mus less disturbed or pro	-
	ayer (if observed)	•	ited ratefit iv	iateriai (i z	ZI) (IVILIX	7 127, 147	1	less disturbed of pro	Diemanc.
Type:	ayor (oboor rou)	•							
	shoo).						Hydric Soil	Present? Yes _	No V
	ches):						Hydric 30ii	Present? res_	NO
Remarks:									

WETLAND DETERMINATION DATA FORM – Eastern Mountains and Piedmont Region to 1-69 Page 154 of 794

Project/Site: Summer Shade Solar Site	City/County: Summer Shade, KY/Metcalf Sampling Date: 10-09-2021
Applicant/Owner: Candela	State: KY Sampling Point: WAS-29
Investigator(s): Mike Williams / Chris Golden	
• • • •	ucal relief (concave, convex, none). Concave Slone (%). 0
Subregion (LRR or MLRA): LRR N Lat: 36.885284	Long: -85.680955 Datum: NAD 83 KY S
Soil Man Unit Name: BaE2 - Baxter gravelly silt loam, 20 to 30 I	percent slopes, eroded NWI classification: PUBH, Freshwater Pond
Are climatic / hydrologic conditions on the site typical for this time of ye	
Are Vegetation, Soil, or Hydrology significantly	
Are Vegetation, Soil, or Hydrology naturally pr	
SUMMARY OF FINDINGS – Attach site map showing	g sampling point locations, transects, important features, etc.
Hydrophytic Vegetation Present? Yes No	Is the Sampled Area
Hydric Soil Present? Yes No	within a Wetland? Yes No
Wetland Hydrology Present? Yes No	
Remarks:	
Wetland 17 wet data point. Old farm pond	
HYDROLOGY	
Wetland Hydrology Indicators:	Secondary Indicators (minimum of two required)
Primary Indicators (minimum of one is required; check all that apply)	Surface Soil Cracks (B6)
✓ Surface Water (A1) True Aquatic F	
High Water Table (A2) Hydrogen Sulfi	
	ospheres on Living Roots (C3) Moss Trim Lines (B16)
	educed Iron (C4) Dry-Season Water Table (C2)
Sediment Deposits (B2)	eduction in Tilled Soils (C6) Crayfish Burrows (C8)
Drift Deposits (B3)	face (C7) Saturation Visible on Aerial Imagery (C9)
Algal Mat or Crust (B4) Other (Explain	in Remarks) Stunted or Stressed Plants (D1)
Iron Deposits (B5)	✓ Geomorphic Position (D2)
Inundation Visible on Aerial Imagery (B7)	Shallow Aquitard (D3)
Water-Stained Leaves (B9)	Microtopographic Relief (D4)
Aquatic Fauna (B13)	FAC-Neutral Test (D5)
Field Observations:	. 2
Surface Water Present? Yes No Depth (inches	
Water Table Present? Yes No Depth (inches	
Saturation Present? Yes No Depth (inches (includes capillary fringe)): 0 Wetland Hydrology Present? Yes No
Describe Recorded Data (stream gauge, monitoring well, aerial photo	os, previous inspections), if available:
Remarks:	
Tromano.	

20	Absolute	Dominant Indicator	Dominance Test worksheet:
<u>Tree Stratum</u> (Plot size: 30	% Cover	Species? Status	Number of Dominant Species
1		NA	That Are OBL, FACW, or FAC: 2 (A)
2		NA	Total Number of Dominant
3		NA	Species Across All Strata: 2 (B)
4		NA	
5		NA	Percent of Dominant Species That Are OBL, FACW, or FAC: 100.0 (A/B)
6			mat Ale OBE, I AOW, OI I AO.
7		NA	Prevalence Index worksheet:
	0.0	= Total Cover	Total % Cover of: Multiply by:
50% of total cover: 0.0			OBL species <u>25</u> x 1 = <u>25</u>
Sapling/Shrub Stratum (Plot size: 15)			FACW species0 x 2 =0
1		NA	FAC species15 x 3 =45
		NA	FACU species 0 x 4 = 0
2		NA	UPL species 0 x 5 = 0
3		ΝΔ	Column Totals: 40 (A) 70 (B)
4		NA	
5		NA	Prevalence Index = B/A =1.8
6			Hydrophytic Vegetation Indicators:
7		NA	1 - Rapid Test for Hydrophytic Vegetation
8		NA	2 - Dominance Test is >50%
9		NA	3 - Prevalence Index is ≤3.0 ¹
		= Total Cover	4 - Morphological Adaptations ¹ (Provide supporting
50% of total cover: 0.0	20% of	total cover: 0.0	data in Remarks or on a separate sheet)
Herb Stratum (Plot size: 5		_	
1. Echinocloa crus-galli	15	√ _FAC	Problematic Hydrophytic Vegetation ¹ (Explain)
2. Eleocharis obtusa	20	√ OBL	
3. Ranunculus sceleratus	5	OBL	¹Indicators of hydric soil and wetland hydrology must
4		NA	be present, unless disturbed or problematic.
5		NA	Definitions of Four Vegetation Strata:
		NA	Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or
		NA	more in diameter at breast height (DBH), regardless of
7		NA	height.
8		NA	Sapling/Shrub – Woody plants, excluding vines, less
9		NA	than 3 in. DBH and greater than or equal to 3.28 ft (1
10			m) tall.
11	40.0	NA	Herb - All herbaceous (non-woody) plants, regardless
	40.0	= Total Cover	of size, and woody plants less than 3.28 ft tall.
50% of total cover: <u>20.0</u>	20% of	total cover: 8.0	Woody vine – All woody vines greater than 3.28 ft in
Woody Vine Stratum (Plot size: 15)			height.
1		NA NA	
2		NA	
3		NA	
4		NA	Hydrophytic
5		NA	Vegetation /
	0.0	= Total Cover	Present? Yes No
50% of total cover: 0.0	20% of	total cover: 0.0	
Remarks: (Include photo numbers here or on a separate s	heet.)		

Case No. 2025-00064
Reponse to 1-69
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Sampling Point: WAS-29

(inches)	Color (moist)	%	Color (moist)	lox Feature %	es Type ¹	Loc ²	Texture	Remarks
0-3	10YR 4/2	70	5YR 3/4	30	C Type	M	Silt clay	Remarks
3-8	10YR 4/2	60	5YR 3/4	40	- C			
	-						Clay	
8-18	10YR 4/2	50	5YR 3/4	50	<u>C</u>	<u>M</u>	Clay	
					_			
	-							
		epletion, RN	1=Reduced Matrix, N	/IS=Maske	ed Sand G	rains.	² Location: PL=Po	re Lining, M=Matrix.
lydric Soil I								for Problematic Hydric Soils ³ :
Histosol	. ,		Dark Surfac		(CO) (MI DA 447		Muck (A10) (MLRA 147)
Black Hi	oipedon (A2)		Polyvalue E Thin Dark S				· —	Prairie Redox (A16) RA 147, 148)
	n Sulfide (A4)		Loamy Gle			147, 140)		ont Floodplain Soils (F19)
	Layers (A5)		✓ Depleted M		(1 _)			RA 136, 147)
	ick (A10) (LRR N)		Redox Darl	. ,	(F6)			hallow Dark Surface (TF12)
	d Below Dark Surf	ace (A11)	Depleted D				Other	(Explain in Remarks)
	ark Surface (A12)		Redox Dep					
	lucky Mineral (S1)	(LRR N,	Iron-Manga		ses (F12)	(LRR N,		
	147, 148) Bleyed Matrix (S4)		MLRA 1 Umbric Sur		(MI DA 1	36 122\	³ Indicato	rs of hydrophytic vegetation and
	edox (S5)		Piedmont F					hydrology must be present,
	Matrix (S6)		Red Parent		•			disturbed or problematic.
	_ayer (if observe	d):	<u> </u>	,	, ,	<u> </u>		<u>'</u>
Туре:								
Depth (inc	ches):						Hydric Soil Pres	ent? Yes No
emarks:								
emarks:								
emarks:								
emarks:								
emarks:								
emarks:								
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WETLAND DETERMINATION DATA FORM – Eastern Mountains and Piedmont Region to 1-69 Page 157 of 794

Project/Site: Summer Shade Solar Site Ci	ty/County: Summer Shade, KY/Metcalf Sampling Date: 10-09-2021
Applicant/Owner: Candela	State: KY Sampling Point: WAS-30
Investigator(s): Mike Williams / Chris Golden Se	
Landform (hillslope, terrace, etc.): Hillsope	relief (concave, convex, none): None Slope (%): 10 Long: -85.680985 Datum: NAD 83 KY S
Subregion (LRR or MLRA): LRR N Lat: 36.885237	Long:85.680985 Datum: NAD 83 KY S
Soil Map Unit Name: BaE2 - Baxter gravelly silt loam, 20 to 30 per	cent slopes, eroded NWI classification: Upland
Are climatic / hydrologic conditions on the site typical for this time of year	
Are Vegetation, Soil, or Hydrology significantly dis	
Are Vegetation, Soil, or Hydrology naturally problem.	
SUMMARY OF FINDINGS – Attach site map showing s	ampling point locations, transects, important features, etc.
Hydrophytic Vegetation Present? Yes No V	Is the Sampled Area
Hydric Soil Present? Yes No	within a Wetland? Yes No
Wetland Hydrology Present? Yes No_ L✓	
Remarks:	
Wetland 17 upland data point - hillslope in pastu	re
HYDROLOGY	
Wetland Hydrology Indicators:	Secondary Indicators (minimum of two required)
Primary Indicators (minimum of one is required; check all that apply)	Surface Soil Cracks (B6)
Surface Water (A1)	
High Water Table (A2) Hydrogen Sulfide	
	heres on Living Roots (C3) Moss Trim Lines (B16)
Water Marks (B1) Presence of Redu	
	ction in Tilled Soils (C6) Crayfish Burrows (C8)
Drift Deposits (B3) Thin Muck Surfac	
Algal Mat or Crust (B4) Other (Explain in	Remarks) Stunted or Stressed Plants (D1)
Iron Deposits (B5)	Geomorphic Position (D2)
Inundation Visible on Aerial Imagery (B7)	Shallow Aquitard (D3)
Water-Stained Leaves (B9)	Microtopographic Relief (D4)
Aquatic Fauna (B13)	FAC-Neutral Test (D5)
Field Observations:	
Surface Water Present? Yes No V Depth (inches):_	
Water Table Present? Yes No Depth (inches):_	./
Saturation Present? Yes No Depth (inches):_	Wetland Hydrology Present? Yes No
(includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos,	previous inspections), if available:
Remarks:	

20	Absolute	Dominant Indicator	Dominance Test worksheet:		
Tree Stratum (Plot size: 30)	% Cover	Species? Status	Number of Dominant Species		
1		NA	That Are OBL, FACW, or FAC: (A)		
2		NA	Total Number of Dominant		
3		NA	Species Across All Strata:1 (B)		
4		NA	D		
5		NA	Percent of Dominant Species That Are OBL, FACW, or FAC: 0.0 (A/B)		
6			That Ale OBE, I AOW, OI I AO.		
7		NA	Prevalence Index worksheet:		
/·	0.0	= Total Cover	Total % Cover of: Multiply by:		
50% of total cover: 0.0			OBL species0 x 1 =0		
Sapling/Shrub Stratum (Plot size: 15)	2070 01	total 66VCI	FACW species0 x 2 =0		
		NA	FAC species 0 x 3 = 0		
1		NA	FACU species 20 x 4 = 80		
2		NA	UPL species 60 x 5 = 300		
3			00 000		
4		NA	Column Totals:80 (A)380 (B)		
5		NA	Prevalence Index = B/A = 4.8		
6		NA	Hydrophytic Vegetation Indicators:		
7		NA	1 - Rapid Test for Hydrophytic Vegetation		
8		NA	2 - Dominance Test is >50%		
9.		NA			
	0.0	= Total Cover	3 - Prevalence Index is ≤3.0 ¹		
50% of total cover:0.0			4 - Morphological Adaptations ¹ (Provide supporting		
Herb Stratum (Plot size: 5)			data in Remarks or on a separate sheet)		
1. Sida rhombifolia	60	✓ UPL	Problematic Hydrophytic Vegetation ¹ (Explain)		
2. Ambrosia artemisiifolia	5	FACU			
3. Schedonorus arundinaceus	15	FACU	¹ Indicators of hydric soil and wetland hydrology must		
3. Schedonords drundinaceds		NA NA	be present, unless disturbed or problematic.		
4			Definitions of Four Vegetation Strata:		
5			Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or		
6		NA	more in diameter at breast height (DBH), regardless of		
7		NA	height.		
8		NA	Canling/Chrush Woody plants avaluding vines less		
9		NA	Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than or equal to 3.28 ft (1		
10.		NA	m) tall.		
11.		MA NA	Horb All backgroup (non-used) blocks recording		
	80.0	= Total Cover	Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.		
50% of total cover: 40.0	20% of	total cover: 16.0			
Woody Vine Stratum (Plot size: ¹⁵)		<u> </u>	Woody vine – All woody vines greater than 3.28 ft in		
		NA	height.		
1					
2		NA NA			
3					
4		NA	Hydrophytic		
5		NA	Vegetation ✓		
		= Total Cover	Present? Yes No		
50% of total cover: 0.0	20% of	total cover: 0.0			
Remarks: (Include photo numbers here or on a separate s	heet.)				
Vegetation grazed by cattle					
regreenes grant up to the					

Case No. 2025-00064
Reponse to 1-69
Page 159 of 794
Sampling Point: WAS-30

Profile Desc	ription: (Describe	to the depth	needed to document the indicator or confirm	n the absence	of indicators.)
Depth	Matrix		Redox Features		
(inches)	Color (moist)	%	Color (moist) % Type ¹ Loc ²	Texture	<u>Remarks</u>
0-1	7.5YR 4/4	100		Silt clay	
1-4	7.5YR 5/4	100		Clay	Refusal at 4 niches - rock
		·			
	-	· 			
		· ——— –			
		· — –			
1- 0.0				21 5	
Type: C=Co		letion, RM=R	educed Matrix, MS=Masked Sand Grains.		L=Pore Lining, M=Matrix. ators for Problematic Hydric Soils ³ :
<u> </u>			Doub Confess (C7)		· · · · · · · · · · · · · · · · · · ·
Histosol	(A1) pipedon (A2)		Dark Surface (S7) Polyvalue Below Surface (S8) (MLRA 147,		cm Muck (A10) (MLRA 147) Coast Prairie Redox (A16)
Black Hi			Thin Dark Surface (S9) (MLRA 147, 148)	140)	(MLRA 147, 148)
	n Sulfide (A4)		Loamy Gleyed Matrix (F2)		Piedmont Floodplain Soils (F19)
	Layers (A5)		Depleted Matrix (F3)	<u> </u>	(MLRA 136, 147)
	ick (A10) (LRR N)		Redox Dark Surface (F6)	\square	/ery Shallow Dark Surface (TF12)
Depleted	Below Dark Surfac	e (A11)	Depleted Dark Surface (F7)		Other (Explain in Remarks)
	ark Surface (A12)		Redox Depressions (F8)		
	lucky Mineral (S1) (I	RR N,	Iron-Manganese Masses (F12) (LRR N,		
	\ 147, 148)		MLRA 136)	3,	
	Sleyed Matrix (S4)		Umbric Surface (F13) (MLRA 136, 122)		licators of hydrophytic vegetation and
	edox (S5) Matrix (S6)		Piedmont Floodplain Soils (F19) (MLRA 14) Red Parent Material (F21) (MLRA 127, 14)		etland hydrology must be present, lless disturbed or problematic.
	_ayer (if observed):		Neu l'alent Material (121) (MENA 121, 14	, un	ness disturbed of problematic.
Type: <u>4</u>	zayer (ii observea).				
	ches): Rock		_	Hydric Soil	Present? Yes No
Remarks:			_	Tiyane oon	11163cm: 16310
Remarks.					

WETLAND DETERMINATION DATA FORM – Eastern Mountains and Piedmont Region to 1-69 Page 160 of 794

Project/Site: Summer Shade Solar Site	ity/County: Summer Shade, KY/Metcalf Sampling Date: 10-09-2021					
pplicant/Owner: Candela State: KY Sampling Point: WAS-31						
Investigator(s): Mike Williams / Chris Golden Section, Township, Range: N/A Landform (hillslope, terrace, etc.): Valley Local relief (concave, convex, none): Concave Slope (%): 2% Subregion (LRR or MLRA): LRR N Lat: 36.881374 Long: -85.678893 Datum: NAD 83 KY Soil Map Unit Name: Ls - Lindside silt loam NWI classification: N/A Are climatic / hydrologic conditions on the site typical for this time of year? Yes No (If no, explain in Remarks.)						
Landform (hillslope, terrace, etc.): Valley	al relief (concave, convex, none): Concave Slope (%): 2%					
Subregion (LRR or MLRA); LRR N Lat: 36.881374	Long: -85.678893 Datum: NAD 83 KY S					
Soil Map Unit Name: Ls - Lindside silt loam	NWI classification: N/A					
Are climatic / hydrologic conditions on the site typical for this time of yea	r? Yes No (If no, explain in Remarks.)					
Are Vegetation , Soil , or Hydrology significantly d	isturbed? Are "Normal Circumstances" present? Yes No					
Are Vegetation, Soil, or Hydrology naturally prob						
	sampling point locations, transects, important features, etc.					
Hydrophytic Vegetation Present? Yes Veg No						
Hydrophytic Vegetation Present? Yes V No No No No No No No No No N	Is the Sampled Area within a Wetland? Yes No					
Wetland Hydrology Present?	within a Wetland? Yes No					
Remarks:						
Wetland 18 wet data point						
point point						
HYDROLOGY						
Wetland Hydrology Indicators:	Secondary Indicators (minimum of two required)					
Primary Indicators (minimum of one is required; check all that apply)	Surface Soil Cracks (B6)					
Surface Water (A1)						
High Water Table (A2) Hydrogen Sulfide						
	oheres on Living Roots (C3) Moss Trim Lines (B16)					
Water Marks (B1) Presence of Red						
	uction in Tilled Soils (C6) Crayfish Burrows (C8)					
Drift Deposits (B3) Algal Mat or Crust (B4) Thin Muck Surfaction Other (Explain in						
Algal Mat or Crust (B4) Other (Explain in Iron Deposits (B5)	Geomorphic Position (D2)					
Inundation Visible on Aerial Imagery (B7)	Shallow Aquitard (D3)					
✓ Water-Stained Leaves (B9)	Microtopographic Relief (D4)					
Aquatic Fauna (B13)	FAC-Neutral Test (D5)					
Field Observations:						
Surface Water Present? Yes No Depth (inches):						
Water Table Present? Yes No Depth (inches):						
Saturation Present? Yes No Depth (inches):	./					
(includes capillary fringe)						
Describe Recorded Data (stream gauge, monitoring well, aerial photos	, previous inspections), if available:					
Remarks:						

Case No. 2025-00064
Reponse to 1-69
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Sampling Point: WAS-31

20	Absolute	Dominant Indicator	Dominance Test worksheet:
<u>Tree Stratum</u> (Plot size: <u>30</u>		Species? Status	Number of Dominant Species
1. Salix nigra	20	✓ OBL	That Are OBL, FACW, or FAC:3 (A)
2		NA	Total Number of Deminent
3		NA	Total Number of Dominant Species Across All Strata:3 (B)
4		MA NA	
<u></u>	-	NA	Percent of Dominant Species That Are ORL FACW or FAC: 100.0 (A/R)
5		NA	That Are OBL, FACW, or FAC: 100.0 (A/B)
6			Prevalence Index worksheet:
7		NA	Total % Cover of: Multiply by:
	20.0	= Total Cover	40
50% of total cover: <u>10.0</u>	<u>) </u>	total cover: 4.0	<u> </u>
Sapling/Shrub Stratum (Plot size: 15			1 ACVI species
1,		NA	FAC species 45 x 3 = 135
2	-	NA	FACU species 0 x 4 = 0
3		NA	UPL species 0 x 5 = 0
4		NA	Column Totals: <u>85</u> (A) <u>175</u> (B)
		NA	0.4
5		NA	Prevalence Index = B/A = 2.1
6		NA	Hydrophytic Vegetation Indicators:
7			1 - Rapid Test for Hydrophytic Vegetation
8		NA	2 - Dominance Test is >50%
9		NA	3 - Prevalence Index is ≤3.0 ¹
	0.0	= Total Cover	4 - Morphological Adaptations ¹ (Provide supporting
50% of total cover: 0.0	20% of	total cover: 0.0	
Herb Stratum (Plot size: 5			data in Remarks or on a separate sheet)
1. Persicaria longiseta	40	√ FAC	Problematic Hydrophytic Vegetation ¹ (Explain)
2 Persicaia puntata	20	√ OBL	
3. Panicum capillare	5	FAC	¹ Indicators of hydric soil and wetland hydrology must
		NA	be present, unless disturbed or problematic.
4			Definitions of Four Vegetation Strata:
5			Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or
6		NA	more in diameter at breast height (DBH), regardless of
7		NA	height.
8		NA	Continue/Charaba Manada and analysis a visual land
9		NA	Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than or equal to 3.28 ft (1
10.		NA	m) tall.
11.		MA NA	
	65.0	= Total Cover	Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.
50% of total cover: <u>32.5</u>	20% of	total cover: 13.0	or orze, and woody plante loss than orze it tail.
Woody Vine Stratum (Plot size: 15)	2070 01	total 66V61	Woody vine – All woody vines greater than 3.28 ft in
4		NA	height.
1		NIA	•
2			
3		NA	
4		NA	Hydrophytic
5		NA	Vegetation
	0.0	= Total Cover	Present? Yes No
50% of total cover: 0.0	20% of	total cover: 0.0	
Remarks: (Include photo numbers here or on a separate s	heet.)		

Case No. 2025-00064
Reponse to 1-69
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Sampling Point: WAS-31

Profile Desc	ription: (Describe	to the de	pth needed to docur	nent the	indicator	or confirn	n the absence	of indicators.)
Depth	Matrix		Redo	x Feature	es			_
(inches)	Color (moist)	<u>%</u>	Color (moist)	<u>%</u>	Type ¹ _	Loc ²	Texture	Remarks
0-6	10YR 4/2	85	7.5YR 4/6	15	С	M		Silt clay
6-10	10YR 3/2	60	5YR 4/6	40	С	М		Sandy silt
	-				-			
		-			_			
		_			_			
					- '-	-		
		-			_			
	-				_			
		_						
¹ Type: C=Co	oncentration, D=Der	oletion. RM	I=Reduced Matrix, MS	S=Maske	d Sand Gi	rains.	² Location: P	L=Pore Lining, M=Matrix.
Hydric Soil I		,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	. rrouged mann, m	- maono	<u></u>			ators for Problematic Hydric Soils ³ :
Histosol			Dark Surface	(S7)				cm Muck (A10) (MLRA 147)
	pipedon (A2)		Polyvalue Be		ace (S8) (I	MLRA 147.		Coast Prairie Redox (A16)
Black Hi			Thin Dark Su				´	(MLRA 147, 148)
Hydroge	n Sulfide (A4)		Loamy Gleye	ed Matrix	(F2)		□P	riedmont Floodplain Soils (F19)
Stratified	l Layers (A5)		Depleted Ma	` ,				(MLRA 136, 147)
	ick (A10) (LRR N)		Redox Dark	,	,		1 1	ery Shallow Dark Surface (TF12)
	d Below Dark Surfac	e (A11)	Depleted Dar		. ,			Other (Explain in Remarks)
	ark Surface (A12)		Redox Depre			(1 DD 11		
	lucky Mineral (S1) (LRK N,	Iron-Mangan		ses (F12)	(LRR N,		
	147, 148) sleyed Matrix (S4)		MLRA 13 Umbric Surfa	•	/MI D A 1	26 122\	³ Ind	licators of hydrophytic vegetation and
	edox (S5)		Piedmont Flo					etland hydrology must be present,
	Matrix (S6)		Red Parent N					less disturbed or problematic.
	_ayer (if observed)	<u> </u>		viatoriai (/ (.,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	-, u	rece dictarsed of presionatio.
Type: Ro								
Depth (inc							Hydric Soil	Present? Yes No
	Jiles)						Tiyunc 3011	Tresent: resNo
Remarks:								

WETLAND DETERMINATION DATA FORM – Eastern Mountains and Piedmont Region to 1-69
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Project/Site: Summer Shade Solar Site	City/County: Summer Shade, KY/Metcalf Sampling Date: 10-09-2021
Applicant/Owner: Candela	State: KY Sampling Point: WAS-32
Investigator(s): Mike Williams / Chris Golden	
Landform (hillslope, terrace, etc.): Hillslope	cal relief (concave, convex, none): Convex Slope (%): 2%
Subregion (LRR or MLRA): LRR N Lat: 36.881409	cal relief (concave, convex, none): Convex Slope (%): 2% Long: -85.679033 Datum: NAD 83 KY S
Soil Map Unit Name: Ls - Lindside silt loam	NWI classification: Upland
Are climatic / hydrologic conditions on the site typical for this time of year	ar? Yes No (If no, explain in Remarks.)
Are Vegetation, Soil, or Hydrology significantly	
Are Vegetation, Soil, or Hydrology naturally pro	
SUMMARY OF FINDINGS – Attach site map showing	sampling point locations, transects, important features, etc.
Hydrophytic Vegetation Present? Hydric Soil Present? Wetland Hydrology Present? Yes No No No No No No No No No N	Is the Sampled Area within a Wetland? Yes No
Remarks:	
Wetland 18 upland data point	
HYDROLOGY	
Wetland Hydrology Indicators:	Secondary Indicators (minimum of two required)
Primary Indicators (minimum of one is required; check all that apply)	Surface Soil Cracks (B6)
Surface Water (A1) True Aquatic Pl	
High Water Table (A2) Saturation (A3) Hydrogen Sulfic	de Odor (C1)
	duced Iron (C4) Dry-Season Water Table (C2)
	duction in Tilled Soils (C6) Crayfish Burrows (C8)
Drift Deposits (B3)	
Algal Mat or Crust (B4) Other (Explain i	
Iron Deposits (B5)	Geomorphic Position (D2)
Inundation Visible on Aerial Imagery (B7)	Shallow Aquitard (D3)
Water-Stained Leaves (B9)	Microtopographic Relief (D4)
Aquatic Fauna (B13)	FAC-Neutral Test (D5)
Field Observations: Surface Water Present? Yes No Depth (inches)	
Water Table Present? Yes No Depth (inches)	
Saturation Present? Yes No Depth (inches)	./
(includes capillary fringe)	
Describe Recorded Data (stream gauge, monitoring well, aerial photo	s, previous inspections), if available:
Remarks:	

Case No. 2025-00064
Reponse to 1-69
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Sampling Point: WAS-32

20	Absolute	Dominant		Dominance Test worksheet:
<u>Tree Stratum</u> (Plot size: 30		Species?		Number of Dominant Species
1. Morus alba	10		UPL	That Are OBL, FACW, or FAC:3 (A)
2. Celtis occidentalis	40		FACU	Total Number of Dominant
3			NA	Species Across All Strata: 6 (B)
4.			NA	
5		-	NA	Percent of Dominant Species That Are OBL FACW or FAC: 50.0 (A/B)
			NA	That Are OBL, FACW, or FAC:(A/B)
6			NA	Prevalence Index worksheet:
7	50.0			Total % Cover of: Multiply by:
500/ -(1-1-1 25.0	0.00	= Total Cov	er 100	OBL species $0 x 1 = 0$
50% of total cover: <u>25.0</u>	<u>20% of </u>	total cover	10.0	FACW species 0 x 2 = 0
Sapling/Shrub Stratum (Plot size: 15	-	,	NΙΛ	1 ACW species
1. Juniperus virginiana	5		NA TAG	770 oposice x o =
2. Acer rubrum	10		FAC	17100 oposios
3			NA	UPL species x 5 = 50
4			NA	Column Totals:140 (A)490 (B)
5			NA	Prevalence Index = B/A = 3.5
6			NA	
			NA	Hydrophytic Vegetation Indicators:
7		-	NA	1 - Rapid Test for Hydrophytic Vegetation
8			NA	2 - Dominance Test is >50%
9	45.0			3 - Prevalence Index is ≤3.0 ¹
7.5		= Total Cov		4 - Morphological Adaptations ¹ (Provide supporting
50% of total cover: 7.5	20% of	total cover:	3.0	data in Remarks or on a separate sheet)
Herb Stratum (Plot size: 5		,	540	Problematic Hydrophytic Vegetation ¹ (Explain)
1. Microstegium viminium	50		FAC	
2. Viola sp	20		NA	* 10 10 10 10 10 10 10 10 10 10 10 10 10
3. Persicaria longiseta	5		FAC	¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
4. Potentilla simplex	10		FACU	· · · · · · · · · · · · · · · · · · ·
5			NA	Definitions of Four Vegetation Strata:
_		-	NA	Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or
•			NA	more in diameter at breast height (DBH), regardless of
7			NA	height.
8			NA	Sapling/Shrub – Woody plants, excluding vines, less
9				than 3 in. DBH and greater than or equal to 3.28 ft (1
10			N <u>A</u>	m) tall.
11			NA	Herb – All herbaceous (non-woody) plants, regardless
	85.0	= Total Cov	er	of size, and woody plants less than 3.28 ft tall.
50% of total cover: 42.5	20% of	total cover:	17.0	Woody vine – All woody vines greater than 3.28 ft in
Woody Vine Stratum (Plot size: 15)				height.
1. Toxicodendron radican	15		FAC	
2.			NA	
3.			NA	
		-	NA	·
4			NA	Hydrophytic
5	15.0			Vegetation Ves No
500/ //		= Total Cov		1103CHC: 103 NO
50% of total cover: 7.5		total cover:	3.0	
Remarks: (Include photo numbers here or on a separate s	heet.)			

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Reponse to 1-69
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Sampling Point: WAS-32

Depth Matrix Redox Features Color (moist) % Type Loc Texture Remarks
0-1 10YR 3/3 Clay loam
1-7 7.5YR 4/6 Clay
17 - O Constanting D Darlotte DM Bedevet Market MO Medical Conditions 24 confee Display Lights M Market
¹ Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. Hydric Soil Indicators: Clocation: PL=Pore Lining, M=Matrix. Indicators for Problematic Hydric Soils ³ :
Histosol (A1) Dark Surface (S7) 2 cm Muck (A10) (MLRA 147)
Histic Epipedon (A2) Polyvalue Below Surface (S8) (MLRA 147, 148) Coast Prairie Redox (A16)
Black Histic (A3)
Hydrogen Sulfide (A4) Loamy Gleyed Matrix (F2) Piedmont Floodplain Soils (F19)
Stratified Layers (A5) Depleted Matrix (F3) (MLRA 136, 147)
2 cm Muck (A10) (LRR N) Redox Dark Surface (F6) Very Shallow Dark Surface (TF12) Depleted Below Dark Surface (A11) Depleted Dark Surface (F7) Other (Explain in Remarks)
Thick Dark Surface (A12) Redox Depressions (F8)
Sandy Mucky Mineral (S1) (LRR N, Iron-Manganese Masses (F12) (LRR N,
MLRA 147, 148) MLRA 136)
Sandy Gleyed Matrix (S4) Umbric Surface (F13) (MLRA 136, 122) Junicators of hydrophytic vegetation and
Sandy Redox (S5) Piedmont Floodplain Soils (F19) (MLRA 148) wetland hydrology must be present,
Stripped Matrix (S6) Red Parent Material (F21) (MLRA 127, 147) unless disturbed or problematic.
Restrictive Layer (if observed):
Type: Roots and rock
Depth (inches): 7 Hydric Soil Present? Yes No
Remarks:
Nemains.

WETLAND DETERMINATION DATA FORM – Eastern Mountains and Piedmont Region to 1-69 Page 166 of 794

Project/Site: Summer Shade Solar Site	City/County: Summer Shade, KY/Metcalf Sampling Date: 10-09-2021
Applicant/Owner: Candela	State: KY Sampling Point: WAS-33
Investigator(s): Mike Williams / Chris Golden	
	ocal relief (concave, convex, none). Concave
Subregion (LRR or MLRA): LRR N Lat: 36.884199	Long: -85.683868 Datum: NAD 83 KY S
Soil Map Unit Name: BaC2 - Baxter gravelly silt loam, 6 to 12 pe	ercent slopes, eroded NWI classification: PUBHh, Freshwater Pond
Are climatic / hydrologic conditions on the site typical for this time of ye	
Are Vegetation, Soil, or Hydrology significantly	
Are Vegetation, Soil, or Hydrology naturally pro	
SUMMARY OF FINDINGS – Attach site map showing	g sampling point locations, transects, important features, etc.
Hydrophytic Vegetation Present? Yes Veg No	In the Complet Area
Hydric Soil Present? Yes No No	Is the Sampled Area within a Wetland? Yes No
Wetland Hydrology Present? Yes No	
Remarks:	
Wetland 19 wetland point - wetland fringe arou	und farm pond
HYDROLOGY	
Wetland Hydrology Indicators:	Secondary Indicators (minimum of two required)
Primary Indicators (minimum of one is required; check all that apply)	Surface Soil Cracks (B6)
✓ Surface Water (A1) True Aquatic P	
High Water Table (A2) Hydrogen Sulfi	
	ospheres on Living Roots (C3) Moss Trim Lines (B16)
Water Marks (B1) Presence of Re	educed Iron (C4) Dry-Season Water Table (C2)
Sediment Deposits (B2)	eduction in Tilled Soils (C6) Crayfish Burrows (C8)
Drift Deposits (B3)	face (C7) Saturation Visible on Aerial Imagery (C9)
Algal Mat or Crust (B4) Other (Explain	in Remarks) Stunted or Stressed Plants (D1)
Iron Deposits (B5)	Geomorphic Position (D2)
Inundation Visible on Aerial Imagery (B7)	Shallow Aquitard (D3)
Water-Stained Leaves (B9)	Microtopographic Relief (D4)
Aquatic Fauna (B13)	FAC-Neutral Test (D5)
Field Observations: Surface Water Present? Yes No Depth (inches	a. 1
Surface Water Present? Yes Vo Depth (inches Water Table Present? Yes No Depth (inches Depth (inches Ves No Vo Depth (inches No	·
Saturation Present? Yes No Depth (inches	·
(includes capillary fringe)	, ——
Describe Recorded Data (stream gauge, monitoring well, aerial photo	os, previous inspections), if available:
Remarks:	

20	Absolute	Dominant Indicator	Dominance Test worksheet:
<u>Tree Stratum</u> (Plot size: 30	% Cover	Species? Status	Number of Dominant Species
1		NA	That Are OBL, FACW, or FAC: 2 (A)
2		NA	Total Number of Dominant
3		NA	Species Across All Strata: 2 (B)
4		NA	
5		NA	Percent of Dominant Species That Are OBL, FACW, or FAC: 100.0 (A/B)
6			That Are OBE, FACW, OF FAC.
_		NA	Prevalence Index worksheet:
7	0.0	= Total Cover	Total % Cover of: Multiply by:
50% of total cover: 0.0			OBL species 60 x 1 = 60
Sapling/Shrub Stratum (Plot size: 15)	2070 01	total 66761.	FACW species0 x 2 =0
		NA	FAC species 25 x 3 = 75
1		NA	FACU species 0 x 4 = 0
2		NA	UPL species 0 x 5 = 0
3			05 405
4			Column Totals: <u>85</u> (A) <u>135</u> (B)
5		NA	Prevalence Index = B/A =1.6
6		NA	Hydrophytic Vegetation Indicators:
7		NA	1 - Rapid Test for Hydrophytic Vegetation
8		NA	2 - Dominance Test is >50%
9.		NA	
	0.0	= Total Cover	Y 3 - Prevalence Index is ≤3.0 ¹
50% of total cover: 0.0			4 - Morphological Adaptations ¹ (Provide supporting
Herb Stratum (Plot size: 5)			data in Remarks or on a separate sheet)
1. Persicaria punctata	45	√ OBL	Problematic Hydrophytic Vegetation¹ (Explain)
2 Persicaria longiseta	25	FAC	
3 Ranunculus sceleratus	15	OBL	¹ Indicators of hydric soil and wetland hydrology must
		NA	be present, unless disturbed or problematic.
4			Definitions of Four Vegetation Strata:
5		NA	Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or
6			more in diameter at breast height (DBH), regardless of
7		NA	height.
8		NA	Sapling/Shrub – Woody plants, excluding vines, less
9		NA	than 3 in. DBH and greater than or equal to 3.28 ft (1
10		NA	m) tall.
11		NA	Herb – All herbaceous (non-woody) plants, regardless
	85.0	= Total Cover	of size, and woody plants less than 3.28 ft tall.
50% of total cover: _ 42.5			
Woody Vine Stratum (Plot size: 15)			Woody vine – All woody vines greater than 3.28 ft in height.
1		NA	neight.
2.		NA	
		NA	
3		NA	•
4		NA NA	Hydrophytic
5			Vegetation Present? Yes No
50% ()		= Total Cover	riesent: res No
50% of total cover: 0.0		total cover: 0.0	
Remarks: (Include photo numbers here or on a separate s	heet.)		

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Sampling Point: WAS-33

Profile Desc	ription: (Describe	to the de	pth needed to docur	nent the	indicator	or confirm	n the absence	of indicators.)
Depth	Matrix		Redo	x Feature	es	. 2		_
(inches)	Color (moist)	%	Color (moist)		Type ¹	Loc ²	<u>Texture</u>	Remarks
0-2	10YR 3/2	98	7.5YR 4/6	2	С	M/P	Clay loam	
2-18	10YR 4/2	90	7.5YR 4/6	10	С	М	Silt Clay	
		_			•			
					·			
		_						
1T C. C.		-leties DN	L Dadwaad Matrix M				21ti DI	Dana Lining M. Matrix
Hydric Soil I		oletion, RIV	1=Reduced Matrix, MS	S=Maske	d Sand Gr	ains.		L=Pore Lining, M=Matrix. ators for Problematic Hydric Soils ³ :
Histosol			Dark Surface	(97)				cm Muck (A10) (MLRA 147)
	oipedon (A2)		Polyvalue Be		ace (S8) (I	/II RA 147		oast Prairie Redox (A16)
Black Hi			Thin Dark Su		. , .		,	(MLRA 147, 148)
	n Sulfide (A4)		Loamy Gleye			, ,	Pi	iedmont Floodplain Soils (F19)
Stratified	d Layers (A5)		✓ Depleted Ma	. ,				(MLRA 136, 147)
	ick (A10) (LRR N)		Redox Dark				1 1	ery Shallow Dark Surface (TF12)
	d Below Dark Surfac	ce (A11)	Depleted Da		, ,		0	ther (Explain in Remarks)
	ark Surface (A12) lucky Mineral (S1) (IDDN	Redox Depre			I DD N		
	147, 148)	LIXIX IV,	MLRA 13		SCS (1 12) (LIXIX IV,		
	Gleyed Matrix (S4)		Umbric Surfa	•	(MLRA 1	36, 122)	³ Indi	icators of hydrophytic vegetation and
	ledox (S5)		Piedmont Flo					tland hydrology must be present,
	Matrix (S6)		Red Parent N	Material (I	F21) (MLR	A 127, 14	7) unl	ess disturbed or problematic.
Restrictive I	_ayer (if observed)	:						
Туре:								./
Depth (inc	ches):						Hydric Soil	Present? Yes No
Remarks:								

WETLAND DETERMINATION DATA FORM – Eastern Mountains and Piedmont Region to 1-69
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Project/Site: Summer Shade Solar Site	City/County: Summer Shade, KY/Metcalf Sampling Date: 10-09-2021
Applicant/Owner: Candela	State: KY Sampling Point: WAS-34
Investigator(s): Mike Williams / Chris Golden	Section Township Range N/A
Landform (hillslope, terrace, etc.): Hillslope	Section, Township, Range: N/A cal relief (concave, convex, none): Convex Slope (%): 2%
Subregion (LRR or MLRA): LRR N Lat: 36.884266	Long: -85.683839 Datum: NAD 83 KY S
Soil Map Unit Name: BaC2 - Baxter gravelly silt loam, 6 to 12 pe	ercent slopes, eroded NWI classification: Upland
Are climatic / hydrologic conditions on the site typical for this time of ye	
Are Vegetation, Soil, or Hydrology significantly	
Are Vegetation , Soil , or Hydrology naturally pro	
	sampling point locations, transects, important features, etc.
Hydrophytic Vegetation Present? Yes No ✓ Hydric Soil Present? Yes No ✓	Is the Sampled Area
Wetland Hydrology Present?	within a Wetland? Yes No
Remarks:	
WTL-19 Upland point	
TVIE TO Opiana point	
HYDROLOGY	
Wetland Hydrology Indicators:	Secondary Indicators (minimum of two required)
Primary Indicators (minimum of one is required; check all that apply)	Surface Soil Cracks (B6)
Surface Water (A1)	lants (B14) Sparsely Vegetated Concave Surface (B8)
High Water Table (A2) Hydrogen Sulfid	
	spheres on Living Roots (C3) Moss Trim Lines (B16)
	educed Iron (C4) Dry-Season Water Table (C2)
	duction in Tilled Soils (C6) Crayfish Burrows (C8)
Drift Deposits (B3) Thin Muck Surf. Other (Foreign)	
Algal Mat or Crust (B4) Other (Explain in Large Page 2 (B5)	
Iron Deposits (B5) Inundation Visible on Aerial Imagery (B7)	Geomorphic Position (D2) Shallow Aquitard (D3)
Water-Stained Leaves (B9)	Microtopographic Relief (D4)
Aquatic Fauna (B13)	FAC-Neutral Test (D5)
Field Observations:	
Surface Water Present? Yes No V Depth (inches)):
Water Table Present? Yes No Vo Depth (inches)):
Saturation Present? Yes No Depth (inches)	./
(includes capillary fringe)	
Describe Recorded Data (stream gauge, monitoring well, aerial photo	ss, previous inspections), if available:
Remarks:	
I and the second	

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Sampling Point: WAS-34

20	Absolute	Dominant Indicator	Dominance Test worksheet:
<u>Tree Stratum</u> (Plot size: 30		Species? Status	Number of Dominant Species
1			That Are OBL, FACW, or FAC: (A)
2		NA	Total Number of Dominant
3		NA	Species Across All Strata:3 (B)
4		NA	
5		NA	Percent of Dominant Species That Are OBL, FACW, or FAC: 0.0 (A/B)
6			That Are OBE, I AGW, OF I AG.
7		NA	Prevalence Index worksheet:
	0.0	= Total Cover	Total % Cover of: Multiply by:
50% of total cover: 0.0			OBL species0 x 1 =0
Sapling/Shrub Stratum (Plot size: 15)			FACW species0 x 2 =0
1		NA	FAC species0 x 3 =0
		NA	FACU species50 x 4 =200
2		NA	UPL species 20 x 5 = 100
3		ΝΔ	Column Totals: 70 (A) 300 (B)
4		NA	(1)
5		NA	Prevalence Index = B/A = 4.3
6			Hydrophytic Vegetation Indicators:
7		NA	1 - Rapid Test for Hydrophytic Vegetation
8		NA	2 - Dominance Test is >50%
9		NA	3 - Prevalence Index is ≤3.0 ¹
		= Total Cover	4 - Morphological Adaptations ¹ (Provide supporting
50% of total cover: 0.0	20% of	total cover: 0.0	data in Remarks or on a separate sheet)
Herb Stratum (Plot size: 5		_	
1. Trifolium repens	25	√ FACU	Problematic Hydrophytic Vegetation ¹ (Explain)
2. Digitaria sanguinalis	25	√ FACU	
3. Sida rhombifolia	20	✓ UPL	¹Indicators of hydric soil and wetland hydrology must
4		NA	be present, unless disturbed or problematic.
5		NA	Definitions of Four Vegetation Strata:
		NA	Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or
6		NA	more in diameter at breast height (DBH), regardless of
7		NA	height.
8		NA	Sapling/Shrub – Woody plants, excluding vines, less
9		NA	than 3 in. DBH and greater than or equal to 3.28 ft (1
10			m) tall.
11	70.0	NA	Herb - All herbaceous (non-woody) plants, regardless
05.0		= Total Cover	of size, and woody plants less than 3.28 ft tall.
50% of total cover: <u>35.0</u>	20% of	total cover: 14.0	Woody vine – All woody vines greater than 3.28 ft in
Woody Vine Stratum (Plot size: 15)			height.
1		NA	
2		NA	
3		NA	
4		NA	Hydrophytic
5		NA	Vegetation
	0.0	= Total Cover	Present? Yes No
50% of total cover: 0.0	20% of	total cover: 0.0	
Remarks: (Include photo numbers here or on a separate s	heet.)		

SOIL

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.) Depth Matrix Redox Features Color (moist) Texture (inches) Type¹ Loc² 0-3 10YR 4/4 100 С Μ Loam ²Location: PL=Pore Lining, M=Matrix. ¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. **Hydric Soil Indicators:** Indicators for Problematic Hydric Soils³: Dark Surface (S7) Histosol (A1) 2 cm Muck (A10) (MLRA 147) Histic Epipedon (A2) Polyvalue Below Surface (S8) (MLRA 147, 148) Coast Prairie Redox (A16) Black Histic (A3) Thin Dark Surface (S9) (MLRA 147, 148) (MLRA 147, 148) Hydrogen Sulfide (A4) Loamy Gleyed Matrix (F2) Piedmont Floodplain Soils (F19) Stratified Layers (A5) Depleted Matrix (F3) (MLRA 136, 147) Very Shallow Dark Surface (TF12) 2 cm Muck (A10) (LRR N) Redox Dark Surface (F6) Depleted Below Dark Surface (A11) Depleted Dark Surface (F7) Other (Explain in Remarks) Thick Dark Surface (A12) Redox Depressions (F8) Sandy Mucky Mineral (S1) (LRR N, Iron-Manganese Masses (F12) (LRR N, MLRA 147, 148) MLRA 136) Sandy Gleyed Matrix (S4) Umbric Surface (F13) (MLRA 136, 122) ³Indicators of hydrophytic vegetation and Sandy Redox (S5) Piedmont Floodplain Soils (F19) (MLRA 148) wetland hydrology must be present, unless disturbed or problematic. Stripped Matrix (S6) Red Parent Material (F21) (MLRA 127, 147) Restrictive Layer (if observed): Type: Rock Depth (inches): 3 **Hydric Soil Present?** Remarks:

WETLAND DETERMINATION DATA FORM – Eastern Mountains and Piedmont Region to 1-69 Page 172 of 794

Project/Site: Summer Shade Solar Site	City/County: Summer Shade, K	Y/ Sampling Date: 10-09-2021
Applicant/Owner: Candela	Sta	te: KY Sampling Point: WAS-35
Investigator(s): Mike Williams / Chris Golden		
Landform (hillslope terrace etc.): Floodplain	cal relief (concave, convex, none).	Convex Slope (%): 1
Landform (hillslope, terrace, etc.): Floodplain Lo Subregion (LRR or MLRA): LRR N Lat: 36.886209	Long: -85.6859	98 Datum: NAD 83 KY S
Soil Map Unit Name: Hu - Huntington silt loam	Long.	NWI classification: N/A
Are climatic / hydrologic conditions on the site typical for this time of year		explain in Remarks.)
Are Vegetation, Soil, or Hydrology significantly		mstances" present? Yes No
Are Vegetation, Soil, or Hydrology naturally pro	blematic? (If needed, explain	n any answers in Remarks.)
SUMMARY OF FINDINGS – Attach site map showing	sampling point locations, t	ransects, important features, etc.
Hydrophytic Vegetation Present? Yes Veg No		
Hydric Soil Present? Yes No	Is the Sampled Area within a Wetland?	Yes No
Wetland Hydrology Present? Yes No No	within a Wetland?	resNO
Remarks:		
Wetland 20 wet data point - associated with st	ream 165	
·		
LIVEROLOGY		
HYDROLOGY Western Hydrology Indicators	Cono	adom la dicatora (minimum of two required)
Wetland Hydrology Indicators:		Indary Indicators (minimum of two required)
Primary Indicators (minimum of one is required; check all that apply)		Surface Soil Cracks (B6)
Surface Water (A1) ☐ True Aquatic P ☐ High Water Table (A2) ☐ Hydrogen Sulfi	· · · ·	Sparsely Vegetated Concave Surface (B8) Drainage Patterns (B10)
		Moss Trim Lines (B16)
		Ory-Season Water Table (C2)
		Crayfish Burrows (C8)
Drift Deposits (B3) Thin Muck Surf	· · · —	Saturation Visible on Aerial Imagery (C9)
Algal Mat or Crust (B4) Other (Explain	• • • • • • • • • • • • • • • • • • • •	Stunted or Stressed Plants (D1)
Iron Deposits (B5)		Geomorphic Position (D2)
Inundation Visible on Aerial Imagery (B7)		Shallow Aquitard (D3)
Water-Stained Leaves (B9)		Microtopographic Relief (D4)
Aquatic Fauna (B13)		FAC-Neutral Test (D5)
Field Observations:		. ,
Surface Water Present? Yes No Depth (inches):	
Water Table Present? Yes No Depth (inches): <u>10</u>	
Saturation Present? Yes Ves No Depth (inches): 0 Wetland Hydrol	logy Present? Yes No
(includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photo	os, previous inspections), if available:	
gauge, memoring nem, acital process	e, providuo inopositorio,, ir availabiei	
Remarks:		

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Reponse to 1-69
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Sampling Point: WAS-35

20	Absolute	Dominant Indicator	Dominance Test worksheet:
<u>Tree Stratum</u> (Plot size: 30	% Cover	Species? Status	Number of Dominant Species
1		NA	That Are OBL, FACW, or FAC:3 (A)
2		NA	Total Number of Dominant
3		NA	Species Across All Strata:3 (B)
4		NA	
5		NA	Percent of Dominant Species That Are OBL, FACW, or FAC: 100.0 (A/B)
6			That Are OBL, FACW, OF FAC.
_		NA	Prevalence Index worksheet:
7	0.0	= Total Cover	Total % Cover of: Multiply by:
50% of total cover: 0.0			OBL species 40 x 1 = 40
Sapling/Shrub Stratum (Plot size: 15)	20 /6 01	total cover	FACW species 0 x 2 = 0
		NA	FAC species 50 x 3 = 150
1,			FACU species 0 x 4 = 0
2			1 ACO species
3		NA	
4			Column Totals:90 (A)190 (B)
5		NA	Prevalence Index = B/A =2.1
6		NA	
7		NA	Hydrophytic Vegetation Indicators:
8		NA	1 - Rapid Test for Hydrophytic Vegetation
9.		NA	2 - Dominance Test is >50%
<u> </u>	0.0	= Total Cover	3 - Prevalence Index is ≤3.0 ¹
50% of total cover: 0.0		total cover: 0.0	4 - Morphological Adaptations ¹ (Provide supporting
Herb Stratum (Plot size: 5)	2070 01	total 66761.	data in Remarks or on a separate sheet)
1. Persicaria puntata	40	√ OBL	Problematic Hydrophytic Vegetation ¹ (Explain)
2. Persicaria longiseta	20	✓ FAC	
	20	✓ FAC	¹ Indicators of hydric soil and wetland hydrology must
3. Microstegium vimineum	10		be present, unless disturbed or problematic.
4. Echinocloa crus-galli		FAC	Definitions of Four Vegetation Strata:
5		NA	Tree Meady place analysis a size 2 is (7.0 cm) or
6		NA	Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of
7		NA	height.
8		NA	One line of Ohmah . When the other terms had been deeper a
9		NA	Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than or equal to 3.28 ft (1
10.		NA	m) tall.
11.		MA NA	
	90.0	= Total Cover	Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.
50% of total cover: 45.0	20% of	total cover: 18.0	or size, and woody plante loss than 6.20 it tall.
Woody Vine Stratum (Plot size: 15)	2070 01	total 66761	Woody vine – All woody vines greater than 3.28 ft in
		NA	height.
1	·	NA NA	•
2			
3		NA	
4		NA	Hydrophytic
5		NA	Vegetation
	0.0	= Total Cover	Present? Yes No
50% of total cover: 0.0	20% of	total cover: 0.0	
Remarks: (Include photo numbers here or on a separate s	heet.)		

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Sampling Point: WAS-35

Profile Desc	ription: (Describe	to the dep	th needed to docum	nent the	indicator	or confirm	the absence	of indicators.)
Depth	Matrix			k Feature				
(inches)	Color (moist)	<u>%</u>	Color (moist)	<u>%</u>	Type ¹	Loc ²	<u>Texture</u>	<u>Remarks</u>
0-6	10YR 4/2	85	7.5YR 4/6	15	<u>C</u>	M	Silt Clay	
6-18	10YR 3/2	70	5YR 4/6	30	С	M	Clay	
		· ·		-	_			
		<u> </u>			_			
					_			
1Typo: C-C	ncontration D_Don	lotion PM	=Reduced Matrix, MS	-Macko	d Sand Gr	oine	² Location: DI	
Hydric Soil I		ietion, Rivi	=Reduced Matrix, MS	=iviaske	a Sana Gr	airis.		tors for Problematic Hydric Soils ³ :
Histosol			Dark Surface	(\$7)				cm Muck (A10) (MLRA 147)
	oipedon (A2)		Polyvalue Be		ace (S8) (N	/ILRA 147,		past Prairie Redox (A16)
Black His			Thin Dark Su				, <u> </u>	(MLRA 147, 148)
	n Sulfide (A4)		Loamy Gleye		(F2)			edmont Floodplain Soils (F19)
	I Layers (A5)		✓ Depleted Mat					(MLRA 136, 147)
	ck (A10) (LRR N) Below Dark Surfac	o (A11)	Redox Dark S Depleted Dar					ery Shallow Dark Surface (TF12) ther (Explain in Remarks)
	ark Surface (A12)	e (ATT)	Redox Depre		, ,			ther (Explain in Remarks)
	lucky Mineral (S1) (I	_RR N,	Iron-Mangane			LRR N.		
	147, 148)	•	MLRA 136		· , ,			
	leyed Matrix (S4)		Umbric Surfa					cators of hydrophytic vegetation and
	edox (S5)		Piedmont Flo					tland hydrology must be present,
	Matrix (S6)		Red Parent M	faterial (F21) (MLR	A 127, 147	7) unl	ess disturbed or problematic.
	_ayer (if observed):							
• • • • • • • • • • • • • • • • • • • •	.l \						11	Present? Yes <u>√</u> No
	ches):						Hydric Soil	Present? Yes No
Remarks:								

WETLAND DETERMINATION DATA FORM – Eastern Mountains and Piedmont Region to 1-69
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Project/Site: Summer Shade Solar Site	City/County: Summer Shade,	KY/ Sam	pling Date: 10-09-2021
Applicant/Owner: Candela		state: KY Sa	Impling Point: WAS-36
Investigator(s): Mike Williams / Chris Golden			
Landform (hillslope, terrace, etc.): Hillslope Lo	cal relief (concave, convex, none):	None	Slope (%): 5
Landform (hillslope, terrace, etc.): Hillslope Lo Subregion (LRR or MLRA): LRR N Lat: 36.886246	Long: -85.68	6019	Datum: NAD 83 KY S
Soil Map Unit Name: Hu - Huntington silt loam		NWI classification:	Upland
Are climatic / hydrologic conditions on the site typical for this time of year	ear? Yes 🚺 No 🔲 (If r	- io, explain in Remark	
Are Vegetation, Soil, or Hydrology significantly		cumstances" presen	t? Yes 🔽 No 🔲
Are Vegetation, Soil, or Hydrology naturally pro		ain any answers in F	
SUMMARY OF FINDINGS – Attach site map showing	sampling point locations	s, transects, imp	portant features, etc.
Hydrophytic Vegetation Present? Hydric Soil Present? Wetland Hydrology Present? Yes No V No No V No No	Is the Sampled Area within a Wetland?	Yes N	do✓_
Remarks:			
Wetland 20 upland data point			
HYDROLOGY			
Wetland Hydrology Indicators:	Se		minimum of two required)
Primary Indicators (minimum of one is required; check all that apply)		Surface Soil Crack	
Surface Water (A1) True Aquatic P		-	d Concave Surface (B8)
High Water Table (A2) Saturation (A3) Hydrogen Sulfi	ospheres on Living Roots (C3)	Drainage Patterns Moss Trim Lines (E	
	educed Iron (C4)	Dry-Season Water	*
	eduction in Tilled Soils (C6)	Crayfish Burrows (
Drift Deposits (B3) Thin Muck Sur			on Aerial Imagery (C9)
Algal Mat or Crust (B4) Other (Explain	` '	Stunted or Stresse	
Iron Deposits (B5)		Geomorphic Positi	
Inundation Visible on Aerial Imagery (B7)		Shallow Aquitard (D3)
Water-Stained Leaves (B9)	<u> </u>	Microtopographic F	Relief (D4)
Aquatic Fauna (B13)	L	FAC-Neutral Test ((D5)
Field Observations:	\		
Surface Water Present? Yes No Very Depth (inches			
Water Table Present? Yes No Pepth (inches No Pepth (inch			/aa Na ✓
(includes capillary fringe)		rology Present? \	/es No
Describe Recorded Data (stream gauge, monitoring well, aerial photo	os, previous inspections), if availab	le:	
Remarks:			

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Sampling Point: WAS-36

20	Absolute	Dominant Indicator	Dominance Test worksheet:
<u>Tree Stratum</u> (Plot size: 30	% Cover	Species? Status	Number of Dominant Species
1		NA	That Are OBL, FACW, or FAC:1 (A)
2		NA	Total Number of Dominant
3		NA	Species Across All Strata:3 (B)
4		NA	Demonstrat Demoissant Organism
5		NA	Percent of Dominant Species That Are OBL, FACW, or FAC: 33.3 (A/B)
6			
7		NA NA	Prevalence Index worksheet:
	0.0	= Total Cover	Total % Cover of: Multiply by:
50% of total cover: 0.0			OBL species0 x 1 =0
Sapling/Shrub Stratum (Plot size: 15			FACW species0 x 2 =0
1		NA	FAC species 30 x 3 = 90
2		NA	FACU species60 x 4 =240
		NA	UPL species 10 x 5 = 50
3		NA	Column Totals: 100 (A) 380 (B)
4		NA	
5		NA	Prevalence Index = B/A = 3.8
6		NA	Hydrophytic Vegetation Indicators:
7			1 - Rapid Test for Hydrophytic Vegetation
8		NA	2 - Dominance Test is >50%
9		NA	3 - Prevalence Index is ≤3.0 ¹
		= Total Cover	4 - Morphological Adaptations ¹ (Provide supporting
50% of total cover: 0.0	20% of	total cover: 0.0	data in Remarks or on a separate sheet)
Herb Stratum (Plot size: 5		_	
1. Ambrosia artemislifolia	40	√ FACU	Problematic Hydrophytic Vegetation ¹ (Explain)
2. Microstegium vimineum	30	√ FAC	
3. Perilla frutescens	20	√ FACU	¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
4. Sida rhombifolia	10	UPL	·
5		NA	Definitions of Four Vegetation Strata:
6		NA	Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or
		NA	more in diameter at breast height (DBH), regardless of
7		NA	. height.
8		NA	Sapling/Shrub – Woody plants, excluding vines, less
9		NA NA	than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.
10			iii) taii.
11	400.0	NA	Herb - All herbaceous (non-woody) plants, regardless
50.0		= Total Cover	of size, and woody plants less than 3.28 ft tall.
50% of total cover: <u>50.0</u>	20% of	total cover: 20.0	Woody vine – All woody vines greater than 3.28 ft in
Woody Vine Stratum (Plot size: 15)		***	height.
1		NA NA	
2		NA	
3		NA	
4		NA	Hydrophytic
5		NA	Vegetation
	0.0	= Total Cover	Present? Yes No
50% of total cover: 0.0	20% of	total cover: 0.0	
Remarks: (Include photo numbers here or on a separate s	heet.)		

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Sampling Point: WAS-36

SOIL Sam

Profile Desc	ription: (Describe	to the depth	needed to docun	nent the i	ndicator	or confirm	the absence	of indicators	.)
Depth	Matrix		Redox	x Features	S				
(inches)	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²	Texture		Remarks
0-10	10YR 4/4	100					Silt Clay	Refusal at	10 inches - rock
	-								
·	-	<u> </u>							
		<u> </u>							
	-								
	-								
¹ Type: C=Co	oncentration, D=Dep	letion, RM=F	Reduced Matrix, MS	S=Masked	Sand Gra	ains.	² Location: P	L=Pore Lining,	M=Matrix.
Hydric Soil	Indicators:						Indic	ators for Prob	lematic Hydric Soils ³ :
Histosol	(A1)		Dark Surface	(S7)			2	cm Muck (A10) (MLRA 147)
	oipedon (A2)		Polyvalue Be	. ,	ce (S8) (N	ILRA 147,		Coast Prairie R	
	stic (A3)		Thin Dark Su					(MLRA 147,	148)
Hydroge	en Sulfide (A4)		Loamy Gleye	d Matrix (F2)		F	Piedmont Flood	plain Soils (F19)
Stratified	d Layers (A5)		Depleted Mat	trix (F3)				(MLRA 136,	147)
2 cm Mu	ıck (A10) (LRR N)		Redox Dark S	Surface (F	6)			ery Shallow D	ark Surface (TF12)
	d Below Dark Surfac	e (A11)	Depleted Dar					Other (Explain i	n Remarks)
	ark Surface (A12)		Redox Depre						
	lucky Mineral (S1) (I	LRR N,	Iron-Mangane		es (F12) (I	_RR N,			
	A 147, 148)		MLRA 130	•			2		
	Sleyed Matrix (S4)		Umbric Surfa						ophytic vegetation and
	Redox (S5)		Piedmont Flo						y must be present,
	Matrix (S6)		Red Parent M	/laterial (F	21) (MLR .	A 127, 147	7) un	iless disturbed	or problematic.
	Layer (if observed):								
Type: Ro									1
Depth (inc	ches): 10		<u></u>				Hydric Soil	Present?	′es No
Remarks:							•		

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Project/Site: Summer Shade Solar Site	City/County: Summer Shade	e, KY/ ç	Sampling Date: 10-10-2021
Applicant/Owner: Candela	City/County: Summer Shade	State: KY	Sampling Point: WAS-37
Investigator(s): Mike Williams / Chris Golden	Section, Township, Range: N/A	\	<u> </u>
Investigator(s): Mike Williams / Chris Golden Landform (hillslope, terrace, etc.): Valley Subregion (LRR or MLRA): LRR N Lat: 36.882505	cal relief (concave, convex, none	_{e):} Concave	Slope (%): 1
Subregion (LRR or MLRA). LRR N Lat. 36.882505	Long: -85.6	\$86194	Datum: NAD 83 KY S
Soil Map Unit Name: Hu - Huntington silt loam		NWI classificat	tion: PUBH-Freshwater Pond
Are climatic / hydrologic conditions on the site typical for this time of ye	ear? Yes 🗸 No 🗌 (I	f no, explain in Rer	
Are Vegetation , Soil , or Hydrology significantly			esent? Yes No No
Are Vegetation , Soil , or Hydrology naturally pr		chicamotanices pro	
SUMMARY OF FINDINGS – Attach site map showing			
	, g		
Hydrophytic Vegetation Present? Hydric Soil Present? Yes No No No	Is the Sampled Area	1	
Hydric Soil Present? Wetland Hydrology Present? Yes ✓ No No No No No No No	within a Wetland?	Yes	No
Remarks:			
Wetland 21 wet data point			
Welland 21 Wet data point			
HYDROLOGY			
Wetland Hydrology Indicators:		Secondary Indicato	ors (minimum of two required)
Primary Indicators (minimum of one is required; check all that apply)		Surface Soil C	racks (B6)
Surface Water (A1)	Plants (B14)	Sparsely Vege	etated Concave Surface (B8)
High Water Table (A2) Hydrogen Sulf		Drainage Patte	
	ospheres on Living Roots (C3)	Moss Trim Line	
	educed Iron (C4)		ater Table (C2)
	eduction in Tilled Soils (C6)	Crayfish Burro	
Drift Deposits (B3) Algal Mat or Crust (B4) Thin Muck Sur Other (Explain			ble on Aerial Imagery (C9) essed Plants (D1)
Iron Deposits (B5)	III Nelliaiks)	Geomorphic P	
Inundation Visible on Aerial Imagery (B7)		Shallow Aquita	
Water-Stained Leaves (B9)		Microtopograp	
Aquatic Fauna (B13)		FAC-Neutral T	
Field Observations:			
Surface Water Present? Yes No Depth (inches	s): <u>0</u>		
Water Table Present? Yes No Depth (inches			
Saturation Present? Yes Ves No Depth (inches	s): 0 Wetland Hy	ydrology Present?	? Yes No
(includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial phot	os. previous inspections), if avail	able:	
3,2,3,7,1,2,7,1,1,1,1	,,		
Remarks:			

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Sampling Point: WAS-37

20	Absolute	Dominant Indicator	Dominance Test worksheet:
<u>Tree Stratum</u> (Plot size: 30	% Cover	Species? Status	Number of Dominant Species
1		NA	That Are OBL, FACW, or FAC:3 (A)
2		NA	Total Number of Dominant
3		NA	Species Across All Strata:3 (B)
4		NA	
5		NA	Percent of Dominant Species That Are OBL, FACW, or FAC: 100.0 (A/B)
6			That Are OBE, FACW, OF FAC.
_		NA	Prevalence Index worksheet:
7	0.0	= Total Cover	Total % Cover of: Multiply by:
50% of total cover: 0.0			OBL species 15 x 1 = 15
Sapling/Shrub Stratum (Plot size: 15)	20 /6 01	total cover	FACW species0 x 2 =0
		NA	FAC species 45 x 3 = 135
1,			FACU species 0 x 4 = 0
2			17100 species x + =
3		NA	200 450
4			Column Totals: (A) (B)
5		NA	Prevalence Index = B/A =2.5
6		NA	Hydrophytic Vegetation Indicators:
7		NA	
8		NA	1 - Rapid Test for Hydrophytic Vegetation
9.		NA	2 - Dominance Test is >50%
<u> </u>	0.0	= Total Cover	3 - Prevalence Index is ≤3.0¹
50% of total cover: 0.0			4 - Morphological Adaptations ¹ (Provide supporting
Herb Stratum (Plot size: 5)			data in Remarks or on a separate sheet)
1. Persicaria punctata	15	√ OBL	Problematic Hydrophytic Vegetation ¹ (Explain)
2. Persicaria longistea	10	FAC	
3. Rumex crispus	15	✓ FAC	¹ Indicators of hydric soil and wetland hydrology must
4. Panicum capillare	20	✓ FAC	be present, unless disturbed or problematic.
· · · · · · · · · · · · · · · · · · ·		NA NA	Definitions of Four Vegetation Strata:
5		NA	Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or
6			more in diameter at breast height (DBH), regardless of
7		NA	height.
8		NA	Sapling/Shrub – Woody plants, excluding vines, less
9		NA	than 3 in. DBH and greater than or equal to 3.28 ft (1
10		NA	m) tall.
11		NA	Herb – All herbaceous (non-woody) plants, regardless
	60.0	= Total Cover	of size, and woody plants less than 3.28 ft tall.
50% of total cover: <u>30.0</u>	20% of	total cover: 12.0	
Woody Vine Stratum (Plot size: 15)			Woody vine – All woody vines greater than 3.28 ft in height.
1		NA	noight.
2		NA	
3		NA	
		NA NA	•
4		NA	Hydrophytic
5			Vegetation Present? Yes No
50% at tatal access 0.0		= Total Cover	103 NO
50% of total cover:0.0		total cover: 0.0	
Remarks: (Include photo numbers here or on a separate s	heet.)		

Case No. 2025-00064
Reponse to 1-69
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Sampling Point: WAS-37

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)											
Depth	Matrix		Redo	x Feature	es	. ,					
(inches)	Color (moist)	<u>%</u>	Color (moist)	%	Type ¹	Loc ²	<u>Texture</u>	Remarks			
0-18	10YR 4/2	95	7.5YR 4/6	5	<u>C</u>	M/P	Silty Clay				
					-						
			-								
	-	_			-						
					_						
1Type: C=C	oncentration D-Der	oletion RM	I=Reduced Matrix, M	S-Maska	d Sand Gr	aine	² Location: PI				
Hydric Soil		Dietion, IXIV	i=i\eudced Matrix, M	0-Maske	u Sanu Gi	airis.		tors for Problematic Hydric Soils ³ :			
Histosol			Dark Surface	(97)				cm Muck (A10) (MLRA 147)			
	oipedon (A2)		Polyvalue Be		ace (S8) (I	/II RA 147		oast Prairie Redox (A16)			
	stic (A3)		Thin Dark Su				, 140)	(MLRA 147, 148)			
	en Sulfide (A4)		Loamy Gleye			· · · · , · · · · ,	Pi	edmont Floodplain Soils (F19)			
	d Layers (A5)		Depleted Ma		()		<u> </u>	(MLRA 136, 147)			
2 cm Mu	ick (A10) (LRR N)		✓ Redox Dark		F6)			ery Shallow Dark Surface (TF12)			
Depleted	d Below Dark Surfac	e (A11)	Depleted Da	rk Surfac	e (F7)		<u></u>	ther (Explain in Remarks)			
	ark Surface (A12)		Redox Depre								
	lucky Mineral (S1) (LRR N,	Iron-Mangan		ses (F12) ((LRR N,					
	A 147, 148)		MLRA 13	•			•				
	Sleyed Matrix (S4)		Umbric Surfa					cators of hydrophytic vegetation and			
	Redox (S5)		Piedmont Flo					tland hydrology must be present,			
	Matrix (S6)		Red Parent I	viateriai (i	-21) (MLR	A 127, 14	/) uni	ess disturbed or problematic.			
	Layer (if observed)	:									
Type:								✓			
Depth (in	ches):						Hydric Soil	Present? Yes No			
Remarks:											

WETLAND DETERMINATION DATA FORM – Eastern Mountains and Piedmont Region to 1-69 Page 181 of 794

Project/Site: Summer Shade Solar Site	City/County: Summer Shade,	KY/	Sampling Date: 10-10-2021
Applicant/Owner: Candela	, ,	State: KY	Sampling Point: WAS-38
Investigator(s): Mike Williams / Chris Golden			
Landform (hillslope, terrace, etc.): Hillslope Local		Convex	Slope (%): 2%
Subregion (LRR or MLRA): LRR N Lat:	Long:	-	Datum: NAD 83 KY S
Soil Map Unit Name:	Long.	NIMI classificat	tion: Upland
Are climatic / hydrologic conditions on the site typical for this time of year	or2 Voo V	_ INVVI Classificat	morks
Are Vegetation , Soil , or Hydrology significantly of			
			esent? Yes No
Are Vegetation, Soil, or Hydrology naturally prob		lain any answers	,
SUMMARY OF FINDINGS – Attach site map showing	sampling point locations	s, transects,	important features, etc.
Hydrophytic Vegetation Present? Yes No No No No No No No N	Is the Sampled Area		
Hydric Soil Present? Yes No V	within a Wetland?	Yes	
Wetland Hydrology Present? Yes No			
Remarks:			
Wetland 21upland data point			
HYDROLOGY			
Wetland Hydrology Indicators:	Se	econdary Indicato	ors (minimum of two required)
Primary Indicators (minimum of one is required; check all that apply)		Surface Soil C	
Surface Water (A1)	ants (B14)	Sparsely Vege	tated Concave Surface (B8)
High Water Table (A2) Hydrogen Sulfid	e Odor (C1)	Drainage Patte	erns (B10)
Saturation (A3) Oxidized Rhizos	pheres on Living Roots (C3)	Moss Trim Line	, ,
Water Marks (B1)	` '	-	ater Table (C2)
	luction in Tilled Soils (C6)	Crayfish Burro	
Drift Deposits (B3) Alan Mark on Crust (B4) Other (Emploin)	` ′		ble on Aerial Imagery (C9)
Algal Mat or Crust (B4) Other (Explain in Deposits (B5)	1 Remarks)	Geomorphic P	essed Plants (D1)
Inundation Visible on Aerial Imagery (B7)		Shallow Aquita	
Water-Stained Leaves (B9)		Microtopograp	` '
Aquatic Fauna (B13)		FAC-Neutral T	
Field Observations:			
Surface Water Present? Yes No Depth (inches):			
Water Table Present? Yes No Depth (inches):			
Saturation Present? Yes No Depth (inches):	Wetland Hyd	rology Present	? Yes No
(includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos		ole:	
Remarks:			

T 0: (D) : 20	Absolute	Dominant Indicator	Dominance Test worksheet:
<u>Tree Stratum</u> (Plot size: 30)		Species? Status	Number of Dominant Species
1			That Are OBL, FACW, or FAC:3 (A)
2			Total Number of Dominant
3		NA	Species Across All Strata:3 (B)
4	-	NA	Percent of Dominant Species
5		NA	That Are OBL, FACW, or FAC:100.0 (A/B)
6		NA	
7		NA	Prevalence Index worksheet:
	0.0	= Total Cover	Total % Cover of: Multiply by:
50% of total cover: 0.0			OBL species x 1 = 0
Sapling/Shrub Stratum (Plot size: 15			FACW species0 x 2 =0
1		NA	FAC species 35 x 3 = 105
2		NA	FACU species8 x 4 =32
3		A I A	UPL species0 x 5 =0
4		N I A	Column Totals: 43 (A) 137 (B)
		NA	
5		NA	Prevalence Index = B/A = 3.2
6		NA	Hydrophytic Vegetation Indicators:
7		NA NA	1 - Rapid Test for Hydrophytic Vegetation
8		NA	2 - Dominance Test is >50%
9			3 - Prevalence Index is ≤3.0 ¹
50% ()		= Total Cover	4 - Morphological Adaptations ¹ (Provide supporting
50% of total cover: 0.0	20% of	total cover: U.U	data in Remarks or on a separate sheet)
Herb Stratum (Plot size: 5)	_	FACU	Problematic Hydrophytic Vegetation ¹ (Explain)
1. Sorghum halepense	5		<u> </u>
2. Rumex crispus	10	√ FAC	¹ Indicators of hydric soil and wetland hydrology must
3. Panicum capillare	15	FAC	be present, unless disturbed or problematic.
4. Persicaria longista	10	✓ FAC	Definitions of Four Vegetation Strata:
5. Trifolium repens	3	FACU	
6		NA	Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of
7	-	NA	height.
8		NA	0 11 10 1 11 11 11 11 11
9		NA	Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than or equal to 3.28 ft (1
10		NA	m) tall.
11.		NA NA	
	43.0	= Total Cover	Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.
50% of total cover: <u>21.5</u>			
Woody Vine Stratum (Plot size: 15)			Woody vine – All woody vines greater than 3.28 ft in height.
1		NA	neight.
2.		NΙΛ	
		NA	
		NA NA	
4		NA	Hydrophytic
5		 -	Vegetation
50% of total cover: 0.0		= Total Cover total cover: 0.0	
		total cover. 0.0	
Remarks: (Include photo numbers here or on a separate si	neet.)		

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Reponse to 1-69
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Sampling Point: WAS-38

SOIL

nches) ·18	Matrix		Redox Features		5 .
10	Color (moist) 10YR3/3	<u>%</u> 100	Color (moist) % Type ¹ Lo	<u>Silty clay</u>	Remarks
	10113/3	_ 100		Silly clay	
	-				
					
	-				
		<u> </u>			
oe: C=C	oncentration, D=De	epletion, RM=	Reduced Matrix, MS=Masked Sand Grains.	² Location: PL=	Pore Lining, M=Matrix.
	Indicators:				ors for Problematic Hydric Soils ³
Histosol	(A1)		Dark Surface (S7)		n Muck (A10) (MLRA 147)
•	pipedon (A2)		Polyvalue Below Surface (S8) (MLRA	· · · · · · · · · · · · · · · · · · ·	st Prairie Redox (A16)
	istic (A3)		Thin Dark Surface (S9) (MLRA 147,		MLRA 147, 148)
	en Sulfide (A4) d Layers (A5)		Loamy Gleyed Matrix (F2) Depleted Matrix (F3)		dmont Floodplain Soils (F19) MLRA 136, 147)
	uck (A10) (LRR N)		Redox Dark Surface (F6)		y Shallow Dark Surface (TF12)
	d Below Dark Surfa	ice (A11)	Depleted Dark Surface (F7)		er (Explain in Remarks)
1	ark Surface (A12)		Redox Depressions (F8)		
-	Mucky Mineral (S1)	(LRR N,	Iron-Manganese Masses (F12) (LRR	Ν,	
	A 147, 148)		MLRA 136)	31	dana a Chandra a ha Canana a da Canana a d
	Gleyed Matrix (S4) Redox (S5)		Umbric Surface (F13) (MLRA 136, 12) Piedmont Floodplain Soils (F19) (ML		ators of hydrophytic vegetation and and and hydrology must be present,
	d Matrix (S6)		Red Parent Material (F21) (MLRA 12		ss disturbed or problematic.
	Layer (if observed	I):		, ,	o diotalizad di problematici
Туре:					
Depth (in	ches):		<u> </u>	Hydric Soil Pr	resent? Yes No
narks:	, -				

WETLAND DETERMINATION DATA FORM – Eastern Mountains and Piedmont Region to 1-69 Page 184 of 794

Project/Site: Summer Shade Solar Site	City/County: Summer Shade, KY	'/ Sampling Date: 10-10-2021
Applicant/Owner: Candela	State	Sampling Date: 10-10-2021 Sampling Point: WAS-39
Investigator(s): Mike Williams / Chris Golden		<u></u>
Landform (hillslope, terrace, etc.): Valley Loc	cal relief (concave, convex, none). Co	oncave Slope (%). 1
Subregion (LRR or MLRA): LRR N Lat: 36.8819838	Long: -85.69094	166 Datum: NAD 83 KY S
Subregion (LRR or MLRA): LRR N Lat: 36.8819838 Soil Map Unit Name: Nk - Newark silt loam	Long.	Mul classification: N/A
Are climatic / hydrologic conditions on the site typical for this time of ye		
		explain in Remarks.)
Are Vegetation, Soil, or Hydrology significantly		nstances" present? Yes No
Are Vegetation, Soil, or Hydrology naturally pro		any answers in Remarks.)
SUMMARY OF FINDINGS – Attach site map showing	sampling point locations, tr	ansects, important features, etc.
Hydrophytic Vegetation Present? Yes ✓ No	Is the Osmanlad Ames	
Hydric Soil Present? Yes Vo	Is the Sampled Area within a Wetland?	Yes No
Wetland Hydrology Present? Yes No	William a Welland.	105 <u></u> NO <u></u>
Remarks:		
Wetland 22 wet data point		
LIVEROLOGY		
HYDROLOGY Wetland Hydrology Indicators:	Socon	dary Indicators (minimum of two required)
Primary Indicators (minimum of one is required; check all that apply)		urface Soil Cracks (B6)
Surface Water (A1) True Aquatic Pl		parsely Vegetated Concave Surface (B8)
High Water Table (A2) Hydrogen Sulfice	· · · · — — ·	rainage Patterns (B10)
	· · ·	oss Trim Lines (B16)
		ry-Season Water Table (C2)
	· · · · —	rayfish Burrows (C8)
Drift Deposits (B3)		aturation Visible on Aerial Imagery (C9)
Algal Mat or Crust (B4) Other (Explain)	· '	tunted or Stressed Plants (D1)
Iron Deposits (B5)		eomorphic Position (D2)
Inundation Visible on Aerial Imagery (B7)	Sr	hallow Aquitard (D3)
Water-Stained Leaves (B9)	Mi	icrotopographic Relief (D4)
Aquatic Fauna (B13)	LF/	AC-Neutral Test (D5)
Field Observations:	0	
Surface Water Present? Yes V No Depth (inches)		
Water Table Present? Yes No Depth (inches)		√
Saturation Present? Yes Vo Depth (inches)	: 0 Wetland Hydrolo	ogy Present? Yes No
Describe Recorded Data (stream gauge, monitoring well, aerial photo	s, previous inspections), if available:	
Deviced		
Remarks:		

20	Absolute	Dominant Indicator	Dominance Test worksheet:
<u>Tree Stratum</u> (Plot size: 30	% Cover	Species? Status	Number of Dominant Species
1		NA	That Are OBL, FACW, or FAC: (A)
2		NA	Total Number of Dominant
3		NA	Species Across All Strata: 0 (B)
4		NA	
5		NA	Percent of Dominant Species That Are OBL, FACW, or FAC: (A/B)
6			That Are OBL, FACW, OF FAC (A/B)
		NA	Prevalence Index worksheet:
7	0.0		Total % Cover of: Multiply by:
50% of total cover: 0.0		= Total Cover	OBL species5 x 1 =5
Sapling/Shrub Stratum (Plot size: 15)	20 /6 01	total cover	FACW species 0 x 2 = 0
Saping/Snrub Stratum (Plot size: 10) 1 Black willow	3	NA	FAC species 12 x 3 = 36
·· <u> </u>		NA	FACU species 3 x 4 = 12
2. Green ash			17100 openios x 1=
3		NA	
4		NA	Column Totals: 20 (A) 53 (B)
5		NA	Prevalence Index = B/A =
6		NA	Hydrophytic Vegetation Indicators:
7		NA	
8		NA	1 - Rapid Test for Hydrophytic Vegetation
9.		NA	2 - Dominance Test is >50%
<u> </u>	6.0	= Total Cover	3 - Prevalence Index is ≤3.0 ¹
50% of total cover: <u>3.0</u>			4 - Morphological Adaptations ¹ (Provide supporting
Herb Stratum (Plot size: 5)	2070 01	total 00 vol	data in Remarks or on a separate sheet)
1 Juncus SAMPLE	25	NA	Problematic Hydrophytic Vegetation ¹ (Explain)
2. Carex sp.	50	NA	
3. Conoclinium coelestinum	10	FAC	¹ Indicators of hydric soil and wetland hydrology must
	2	FAC	be present, unless disturbed or problematic.
4. Vernonia gigantea		OBL	Definitions of Four Vegetation Strata:
5. Persicaria punctata	5		Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or
6. Erigeron canadensis	3	FACU	more in diameter at breast height (DBH), regardless of
7		NA	height.
8		NA	Sapling/Shrub – Woody plants, excluding vines, less
9		NA	than 3 in. DBH and greater than or equal to 3.28 ft (1
10		NA	m) tall.
11.		NA	Herb – All herbaceous (non-woody) plants, regardless
	95.0	= Total Cover	of size, and woody plants less than 3.28 ft tall.
50% of total cover: <u>47.5</u>	20% of	total cover: 19.0	
Woody Vine Stratum (Plot size: 15)			Woody vine – All woody vines greater than 3.28 ft in height.
1		NA	neight.
2.		NA	
		NA	
3		NA	•
4	-		Hydrophytic
5		NA	Vegetation Present? Yes No
0.0		= Total Cover	riesent: res NO
50% of total cover: 0.0		total cover: 0.0	
Remarks: (Include photo numbers here or on a separate s	heet.)		

Case No. 2025-00064
Reponse to 1-69
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Sampling Point: WAS-39

SOIL

Profile Desc	ription: (Describe	to the de	oth needed to docur	nent the	indicator	or confirr	n the absence o	f indicators.)
Depth	Matrix		Redo	x Feature	es			
(inches)	Color (moist)	%	Color (moist)	<u>%</u>	Type ¹	Loc ²	<u>Texture</u>	Remarks
0-5	10YR 4/2	90	7.5YR 4/6	10	С	M	Silt Loam	
5-18	10YR 4/2	80	7.5YR 4/6	20	С	М	Silt Clay	
					_			
							<u> </u>	
		- ——				- ——		
		-			-			
	-		-		_		 .	
								
		letion, RM	=Reduced Matrix, M	S=Maske	d Sand Gr	ains.		=Pore Lining, M=Matrix.
Hydric Soil I								ors for Problematic Hydric Soils ³ :
Histosol			Dark Surface		(0.0) (m Muck (A10) (MLRA 147)
	pipedon (A2)		Polyvalue Be		. , .		· · · —	ast Prairie Redox (A16)
Black Hi			Thin Dark Su			147, 148)		(MLRA 147, 148) edmont Floodplain Soils (F19)
	n Sulfide (A4) I Layers (A5)		Loamy Gleye ✓ Depleted Ma		(FZ)			(MLRA 136, 147)
	ick (A10) (LRR N)		Redox Dark	. ,	F6)			ry Shallow Dark Surface (TF12)
	d Below Dark Surfac	e (A11)	Depleted Da	,			1 1	ner (Explain in Remarks)
	ark Surface (A12)	- ()	Redox Depre					(=
	lucky Mineral (S1) (I	LRR N,	Iron-Mangan			LRR N,		
MLRA	147, 148)		MLRA 13	6)				
	leyed Matrix (S4)		Umbric Surfa					ators of hydrophytic vegetation and
	edox (S5)		Piedmont Flo					and hydrology must be present,
	Matrix (S6)		Red Parent I	Material (F21) (MLR	A 127, 14	7) unle	ss disturbed or problematic.
	_ayer (if observed):	:						
Type:								✓
Depth (inc	ches):						Hydric Soil F	Present? Yes No
Remarks:								

WETLAND DETERMINATION DATA FORM – Eastern Mountains and Piedmont Region to 1-69 Page 187 of 794

Project/Site: Summer Shade Solar Site	City/County: Summer Shade	e, KY/	Sampling Date: 10-10-2021
Applicant/Owner: Candela		State: KY	Sampling Point: WAS-40
Investigator(s): Mike Williams / Chris Golden	Section, Township, Range: N/A		
Investigator(s): Mike Williams / Chris Golden Landform (hillslope, terrace, etc.): Hillslope Lot Subregion (LRR or MLRA): LRR N Lat: 36.8818519	cal relief (concave, convex, non	_{e):} Convex	Slope (%): 2%
Subregion (LRR or MLRA): LRR N Lat: 36.8818519	Long: -85.6	6909117	Datum: NAD 83 KY S
Soil Map Unit Name: Nk - Newark silt loam		NWI classifica	ation: Upland
Are climatic / hydrologic conditions on the site typical for this time of ye	ar? Yes No (— If no, explain in Re	
Are Vegetation, Soil, or Hydrology significantly			resent? Yes No No
Are Vegetation , Soil , or Hydrology naturally pro		xplain any answer	
SUMMARY OF FINDINGS – Attach site map showing			
Thursday the Venetation Brosset?			-
Hydrophytic Vegetation Present? Yes No ✓ Hydric Soil Present? Yes No ✓	Is the Sampled Area		🗸
Wetland Hydrology Present?	within a Wetland?	Yes	_ No
Remarks:			
Wetland 22 upland data point			
Trottaria 22 apiaria data ponit			
HYDROLOGY			
Wetland Hydrology Indicators:	;	Secondary Indicat	ors (minimum of two required)
Primary Indicators (minimum of one is required; check all that apply)		Surface Soil C	` '
Surface Water (A1)			etated Concave Surface (B8)
High Water Table (A2) Hydrogen Sulfid		Drainage Patt	
	spheres on Living Roots (C3)	Moss Trim Lir	
	educed Iron (C4)		Vater Table (C2)
Sediment Deposits (B2) Drift Deposits (B3) Recent Iron Re Thin Muck Surf.	duction in Tilled Soils (C6)	Crayfish Burro	sible on Aerial Imagery (C9)
Algal Mat or Crust (B4) Other (Explain)			ressed Plants (D1)
Iron Deposits (B5)	,	Geomorphic F	
Inundation Visible on Aerial Imagery (B7)		Shallow Aquit	
Water-Stained Leaves (B9)		Microtopograp	ohic Relief (D4)
Aquatic Fauna (B13)		FAC-Neutral	Test (D5)
Field Observations:			
Surface Water Present? Yes No Depth (inches)			
Water Table Present? Yes No Depth (inches)			✓
Saturation Present? Yes No Depth (inches) (includes capillary fringe)	: Wetland H	ydrology Present	? Yes No
Describe Recorded Data (stream gauge, monitoring well, aerial photo	s, previous inspections), if avai	lable:	
Remarks:			

20	Absolute		Indicator	Dominance Test worksheet:
<u>Tree Stratum</u> (Plot size: 30	% Cover			Number of Dominant Species
1			NA	That Are OBL, FACW, or FAC: (A)
2			NA NA	Total Number of Dominant
3			NA	Species Across All Strata: 2 (B)
4			NA	
5			NA	Percent of Dominant Species That Are OBL, FACW, or FAC: 0.0 (A/B)
6			NA	That Are OBL, FACW, OF FAC.
			NA	Prevalence Index worksheet:
7	0.0	= Total Co	=	Total % Cover of: Multiply by:
50% of total cover: 0.0				OBL species $0 \times 1 = 0$
Sapling/Shrub Stratum (Plot size: 15)	20 /6 01	total cove		FACW species 0 x 2 = 0
			NA	FAC species 10 x 3 = 30
1,			NA NA	FACU species 117 x 4 = 468
2			-	17100 openios x 1=
3			NA 	
4			NA	Column Totals:127 (A)498 (B)
5			NA	Prevalence Index = B/A = 3.9
6			NA	Hydrophytic Vegetation Indicators:
7			NA	
8			NA	1 - Rapid Test for Hydrophytic Vegetation
9.			NA	2 - Dominance Test is >50%
<u> </u>	0.0	= Total Co		3 - Prevalence Index is ≤3.0 ¹
50% of total cover: 0.0				4 - Morphological Adaptations ¹ (Provide supporting
Herb Stratum (Plot size: 5)	20 /0 0.	total covo		data in Remarks or on a separate sheet)
1. Schedonorus arundinaceus	90	1	FACU	Problematic Hydrophytic Vegetation ¹ (Explain)
2. Paspalum dilatatum	10		FAC	
3. Andropogon virginicus	2		FACU	¹ Indicators of hydric soil and wetland hydrology must
· · · · · · · · · · · · · · · · · · ·		-	NA	be present, unless disturbed or problematic.
4			NA	Definitions of Four Vegetation Strata:
5			_	Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or
6			NA	more in diameter at breast height (DBH), regardless of
7			NA	height.
8			NA	Sapling/Shrub – Woody plants, excluding vines, less
9			NA	than 3 in. DBH and greater than or equal to 3.28 ft (1
10.			NA	m) tall.
11.			NA	Harb All borbooogie (non woody) planta regardless
	102.0	= Total Co	- ver	Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.
50% of total cover: 51.0		total cover		
Woody Vine Stratum (Plot size: 15)				Woody vine – All woody vines greater than 3.28 ft in
1 Rubus flagelaris	25	1	FACU	height.
-			NA	·
2			NA	
3				•
4			NA 	Hydrophytic
5			NA	Vegetation
		= Total Co		Present? Yes No
50% of total cover: <u>12.5</u>	20% of	total cove	r <u>. 5.0</u>	
Remarks: (Include photo numbers here or on a separate s	heet.)			

Case No. 2025-00064
Reponse to 1-69
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Sampling Point: WAS-40

SOIL

Profile Desc	cription: (Describe	to the dept	h needed to docun	nent the in	dicator o	or confirm	the absence of i	ndicators.)	
Depth	Matrix			x Features					
(inches)	Color (moist)		Color (moist)		Type ¹	Loc ²	<u>Texture</u>	Remarks	
0-3	10YR 4/3	100					Silt loam		
3-18	7.5YR 4/4	100					Clay		
		· ——							
									
		· ——							
	oncentration, D=Dep	letion, RM=	Reduced Matrix, MS	S=Masked S	Sand Gra	ins.		ore Lining, M=Matrix.	1 2 3
Hydric Soil								s for Problematic Hy	
Histosol			Dark Surface		- (00) (55			Muck (A10) (MLRA 1	47)
	oipedon (A2) stic (A3)		Polyvalue Be Thin Dark Su					t Prairie Redox (A16) LRA 147, 148)	
	en Sulfide (A4)		Loamy Gleye			47, 140)		nont Floodplain Soils	(F10)
	d Layers (A5)		Depleted Mar		L)			LRA 136, 147)	(1 13)
	uck (A10) (LRR N)		Redox Dark		5)			Shallow Dark Surface	(TF12)
	d Below Dark Surfac	e (A11)	Depleted Dar				Othe	r (Explain in Remarks))
	ark Surface (A12)		Redox Depre						
	lucky Mineral (S1) (I	_RR N,	Iron-Mangan		s (F12) (L	RR N,			
	A 147, 148)		MLRA 13			>	3, ,,		
	Gleyed Matrix (S4)		Umbric Surfa					ors of hydrophytic veg	
	Redox (S5) I Matrix (S6)		Piedmont Flo					d hydrology must be p disturbed or problema	
	Layer (if observed):	1	Red Falentin	iateriai (FZ	1) (IVILIX)	121, 141) unless	disturbed of problems	alic.
	Layer (ii observea)								
	ches):						Hydric Soil Pre	esent? Yes	No.
Remarks:	Ciles).						Tryunc 3011 Fre		
Remarks:									

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Swart Shade	sulumer stall
	Jucah/McCracken Sampling Date: 1/18/22
Applicant/Owner: KYTE Candela Youles	State: KY Sampling Point: TOL-WAS-C
Investigator(s): Shane Kelley, Zac Hammond CK Section, Townshi	p, Range: N/A
Landform (hillslope, terrace, etc.):	ave, convex, none): CONCAL Slope (%):
Subregion (LRR or MLRA): LRR P Lat: 36.857996	Long: \$5-685\\6 Datum: NAD1983 (KY FIPS)
Soil Map Unit Name: Cross	NWI classification:
Are climatic / hydrologic conditions on the site typical for this time of year? Yes	-
Are Vegetation, Soil, or Hydrology significantly disturbed?	
	(If needed, explain any answers in Remarks.)
SUMMARY OF FINDINGS – Attach site map showing sampling po	int locations, transects, important features, etc.
Hydrophytic Vegetation Present? Hydric Soil Present? Wetland Hydrology Present? Remarks:	npled Area Vetland? Yes No
TO1 - WET- 02	PEM
HYDROLOGY	
Wetland Hydrology Indicators: Primary Indicators (minimum of one is required; check all that apply) Surface Water (A1) High Water Table (A2) High Water Table (A2) Hydrogen Sulfide Odor (C1) Water Marks (B1) Coxidized Rhizospheres along Living Resembly Presence of Reduced Iron (C4) Prift Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5) Inundation Visible on Aerial Imagery (B7) Water-Stained Leaves (B9) Field Observations: Surface Water Present? Water Table Present? Yes No Depth (inches): Saturation Present? Yes No Depth (inches): (includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections)	Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (C9) Geomorphic Position (D2) Shallow Aquitard (D3) FAC-Neutral Test (D5) Sphagnum moss (D8) (LRR T, U) Wetland Hydrology Present? Yes No
Remarks:	

	Absolute Dominant Indicat	
ree Stratum (Plot size:)	% Cover Species? Statu	Number of Dominant Species That Are OBL, FACW, or FAC: (A)
NA		Total Number of Dominant Species Across All Strata: (B)
NA		Percent of Dominant Species (/o.b.
		1 -
		Prevalence Index worksheet:
		Total % Cover of: Multiply by:
	= Total Cover	OBL species x1=
50% of total cover:	20% of total cover:	FACW species x 2 =
apling/Shrub Stratum (Plot size:)		FACU species x4 =
		UPL species x 5 =
		Column Totals: (A) (B)
NA		-
		Prevalence Index = B/A =
		Hydrophytic Vegetation Indicators:
		1 - Rapid Test for Hydrophytic Vegetation
		2 - Dominance Test is >50%
	= Total Cover	3 - Prevalence Index is ≤3.0¹
50% of total cover:		Problematic Hydrophytic Vegetation ¹ (Explain)
erb Stratum (Plot size: 57)		Indicators of hydric soil and wetland hydrology must
TUYCUS EFFUSUS	10 194	be present, unless disturbed or problematic.
Pour protensis	15 / FAU	U Definitions of Four Vegetation Strata:
Solidayo gigantea	30 V FAU	Tree Meady plants evaluating vines 2 in (7.5 arr) or
Lanicera Laconica	10 FACE	Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of
Onodea sensibis	25 / FAU	1 height.
carex unpencidia		
Vernova giganea	3 FAC	than 3 in. DBH and greater than 3.28 ft (1 m) tall.
		Herb – All herbaceous (non-woody) plants, regardless
		of size, and woody plants less than 3.28 ft tall.
		Woody vine - All woody vines greater than 3.28 ft in
		_ height.
		_
110	= Total Cover	
50% of total cover:	20% of total cover:	2
oody Vine Stratum (Plot size:)		
,		-
10		-
- VI		-
	= Total Cover	 Hydrophytic Vegetation
	-	Present? Yes No
50% of total cover:	w).	-

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WETLAND DETERMINATION DATA FORM – Eastern Mountains and Piedmont Region
Project/Site: Symmershade Solas City/County: Symmer Shark Sampling Date: 4/18/22
Applicant/Owner: Summer Shade - Caulela State: KY Sampling Point: TOLWK-
Investigator(s): 4L CL Section, Township, Range: MA
Landform (hillslope, terrace, etc.): Lical relief (concave, convex, none): Convex Slope (%): 3
Subregion (LRR or MLRA): LARN Lat: 36.849256 Long: 95.690551 Datum: MADB3/M
Soil Map Unit Name: Buca NWI classification; NWI classification;
Are climatic / hydrologic conditions on the site typical for this time of year? Yes No (If no, explain in Remarks.)
Are Vegetation, Soil, or Hydrology significantly disturbed?
Are Vegetation, Soil, or Hydrology naturally problematic? (If needed, explain any answers in Remarks.)
<u> </u>
SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.
Hydrophytic Vegetation Present? Hydric Soil Present? Wetland Hydrology Present? Remarks: Ves No No No Is the Sampled Area within a Wetland? Yes No Remarks:
Upland point associated w/ TOI-WET-03 + TOI-WET-04
HYDROLOGY
Wetland Hydrology Indicators: Secondary Indicators (minimum of two required)
Primary Indicators (minimum of one is required; check all that apply) Surface Soil Cracks (B6)
Surface Water (A1) True Aquatic Plants (B14) Sparsely Vegetated Concave Surface (B8)
High Water Table (A2) Hydrogen Sulfide Odor (C1) Drainage Patterns (B10)
Saturation (A3) Oxidized Rhizospheres on Living Roots (C3) Moss Trim Lines (B16)
Water Marks (B1) Presence of Reduced Iron (C4) Dry-Season Water Table (C2)
Sediment Deposits (B2) Recent Iron Reduction in Tilled Soils (C6) Crayfish Burrows (C8)
Drift Deposits (B3) Thin Muck Surface (C7) Saturation Visible on Aerial Imagery (C9)
Algal Mat or Crust (B4) Other (Explain in Remarks) Stunted or Stressed Plants (D1) Geomorphic Position (D2)
Iron Deposits (B5)
Water-Stained Leaves (B9) Microtopographic Relief (D4)
Aquatic Fauna (B13) Aquatic Fauna (B13)
Field Observations:
Surface Water Present? Yes No Depth (inches):
Water Table Present? Yes No Depth (inches):
Saturation Present? Yes No Depth (inches): Wetland Hydrology Present? Yes No Vo
(includes capillary fringe)
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:
Remarks:

VEGETATION (Four Strata) - Use scientific names of plants. Sampling Point: TOI-INE -04 Absolute Dominant Indicator **Dominance Test worksheet:** Tree Stratum (Plot size: % Cover Species? Status Number of Dominant Species Charly itelia 10 FAW That Are OBL, FACW, or FAC: 20 a dendion FACE Total Number of Dominant Ligurd any your Species Across All Strata: (B) Percent of Dominant Species That Are OBL, FACW, or FAC: (A/B) Prevalence Index worksheet: Total % Cover of: Multiply by: = Total Cover OBL species _____ x 1 = ____ 35 20% of total cover: 14 50% of total cover: Sapling/Shrub Stratum (Plot size: 15P+ FACW species ___ ____ x 2 = ___ FAC species _____ x 3 = ____ FACU species _____ x 4 = ____ UPL species _____ x 5 = ____ Column Totals: _____ (A) _____ (B) Prevalence Index = B/A = ____ Hydrophytic Vegetation Indicators: 1 Rapid Test for Hydrophytic Vegetation 2 - Dominance Test is >50% __ 3 - Prevalence Index is ≤3.01 = Total Cover 4 - Morphological Adaptations (Provide supporting 50% of total cover: __ 20% of total cover: data in Remarks or on a separate sheet) Herb Stratum (Plot size: Problematic Hydrophytic Vegetation¹ (Explain) ¹Indicators of hydric soil and wetland hydrology must 15 ambiaculus algori be present, unless disturbed or problematic. **Definitions of Four Vegetation Strata:** Tree - Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than or equal to 3.28 ft (1 Herb - All herbaceous (non-woody) plants, regardless 50 = Total Cover of size, and woody plants less than 3.28 ft tall. 40 20% of total cover:_ 50% of total cover: Woody vine - All woody vines greater than 3.28 ft in Woody Vine Stratum (Plot size: _ Hydrophytic Vegetation Present? __ = Total Cover 50% of total cover: ____ ___ 20% of total cover:_ Remarks: (Include photo numbers here or on a separate sheet.)

Sampling Point: 101-W45-36 SOIL Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.) Depth Redox Features % Type¹ Loc² Color (moist) Texture (inches) Color (moist) 104R 4/2 7.548410 0-3 98 Clay Loam 54R 416 15 3-10 DUR Silt/Clay 1041 6/4 Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. ²Location: PL=Pore Lining, M=Matrix. Hydric Soil Indicators: Indicators for Problematic Hydric Soils3: __ Dark Surface (S7) ___ 2 cm Muck (A10) (MLRA 147) Histosol (A1) Polyvalue Below Surface (S8) (MLRA 147, 148) __ Coast Prairie Redox (A16) _ Histic Epipedon (A2) ___ Thin Dark Surface (S9) (MLRA 147, 148) Black Histic (A3) (MLRA 147, 148) __ Hydrogen Sulfide (A4) Loamy Gleyed Matrix (F2) Piedmont Floodplain Soils (F19) Depleted Matrix (F3) (MLRA 136, 147) _ Stratified Layers (A5) ___ Redox Dark Surface (F6) 2 cm Muck (A10) (LRR N) Very Shallow Dark Surface (TF12) Depleted Dark Surface (F7) Other (Explain in Remarks) Depleted Below Dark Surface (A11) Thick Dark Surface (A12) ★ Redox Depressions (F8) Iron-Manganese Masses (F12) (LRR N, Sandy Mucky Mineral (S1) (LRR N, MLRA 136) MLRA 147, 148) Umbric Surface (F13) (MLRA 136, 122) ³Indicators of hydrophytic vegetation and Sandy Gleyed Matrix (S4) __ Sandy Redox (S5) ___ Piedmont Floodplain Soils (F19) (MLRA 148) wetland hydrology must be present, Stripped Matrix (S6) Red Parent Material (F21) (MLRA 127, 147) unless disturbed or problematic. Restrictive Layer (if observed): NA Type: Hydric Soil Present? Depth (inches): Yes No Remarks:

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WETLAND DETERMINATION DATA FORM – Eastern Mountains and Piedmont Region
Project/Site: Summershade Solar City/County Summershade Sampling Date: 4/ 17/77
Applicant/Owner: Summershad - candle State: Ky Sampling Point: TI-UPS-0
Investigator(s) SK CK Section, Township, Range: NA
Landform (hillstope, terrace, etc.): Depression, Suce Local relief (concave, convex, none): Concave Slope (%): 2
Subregion (LRR or MLRA): LRIZN Lat: 36.919493 Long: 85.640573 Datum: NAD83(Kyl
Soil Map Unit Name: 3aC7, Hu NWI classification: NR
Are climatic / hydrologic conditions on the site typical for this time of year? Yes No (If no, explain in Remarks.)
5 1 1 2 1 3 1 3 1 3 1 3 1 3 1 3 1 3 1 3 1
Are Vegetation, Soil, or Hydrology naturally problematic? (If needed, explain any answers in Remarks.)
SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.
Hydrophytic Vegetation Present? Hydric Soil Present? Wetland Hydrology Present? Remarks: Ves No No No Within a Wetland? Ves No
wetland point associated w/ ToI-WET-04 REM/PFD
HYDROLOGY
Wetland Hydrology Indicators: Secondary Indicators (minimum of two required)
Primary Indicators (minimum of one is required; check all that apply) Surface Soil Cracks (B6)
Surface Water (A1) True Aquatic Plants (B14) Sparsely Vegetated Concave Surface (B8)
High Water Table (A2) Hydrogen Sulfide Odor (C1) Y Drainage Patterns (B10)
X Saturation (A3)
Water Marks (B1) Presence of Reduced Iron (C4) Dry-Season Water Table (C2) Sediment Deposits (B2) Recent Iron Reduction in Tilled Soils (C6) Crayfish Burrows (C8)
☐ Sediment Deposits (B2) ☐ Recent from Reduction in Finited Soils (C6) ☐ Crayinsh Burlows (C6) ☐ Crayinsh Burlows (C6) ☐ Saturation Visible on Aerial Imagery (C9)
Algal Mat or Crust (B4) Other (Explain in Remarks) Stunted or Stressed Plants (D1)
Iron Deposits (B5)
Inundation Visible on Aerial Imagery (B7) Shallow Aquitard (D3)
★ Water-Stained Leaves (B9) Microtopographic Relief (D4)
Aquatic Fauna (B13) FAC-Neutral Test (D5)
Field Observations:
Surface Water Present? Yes No Depth (inches):
Water Table Present? YesX No Depth (inches):
Saturation Present? Yes No Depth (inches): Wetland Hydrology Present? Yes No
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:
Remarks:

Contract to		Dominant		Dominance Test worksheet:
ree Stratum (Plot size:)		Species?		Number of Dominant Species
Fagus grandifitia	_ 5		FACU	That Are OBL, FACW, or FAC: (A)
Limidar Styraciflum	15	<u> </u>	FAC	Total Number of Dominant 3
Arer rubnum	20	$\sqrt{}$	FAC	Total Number of Dominant Species Across All Strata: (B)
1.113				Species release reliable (b)
	-	(3)		Percent of Dominant Species /\(\)0
				That Are OBL, FACW, or FAC: (A/E
				Prevalence Index worksheet:
	+			
		= Total Cov		Total % Cover of: Multiply by:
50% of total cover:	20% of	total cover:	8_	OBL species x 1 =
pling/Shrub Stratum (Plot size:)				FACW species x 2 =
				FAC species x 3 =
				FACU species x 4 =
1.0		-	$\overline{}$	UPL species x 5 =
NA			_	
				Column Totals: (A) (B
				Prevalence Index = B/A =
			(<u></u>	
				Hydrophytic Vegetation Indicators:
			-	1 - Rapid Test for Hydrophytic Vegetation
				∠ 2 - Dominance Test is >50%
			$\overline{}$	3 - Prevalence Index is ≤3.01
		= Total Cov		4 - Morphological Adaptations ¹ (Provide supporting
50% of total cover:	20% of	total cover:	_	data in Remarks or on a separate sheet)
erb Stratum (Plot size:)	100	1	001	Problematic Hydrophytic Vegetation¹ (Explain)
Pakera alabella	60	V_	OBL	Problematic Hydrophytic Vegetation (Explain)
Rahunculus hispidis	10		FAC	
Tri Colium cipens	5		FACL	¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
Lespedeza caneata	7	-	FACU	
Allichica Canedia	2		FACY	Definitions of Four Vegetation Strata:
Alliaria petiolata				Tree - Woody plants, excluding vines, 3 in (7.6 cm) o
Londern Japanian		-	FACU	more in diameter at breast height (DBH), regardless of
		-		height.
				0 - 1 - 101 - 1 - 111 - 1 - 1 - 1 - 1 -
				Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than or equal to 3.28 ft (1
				m) tall.
	721			Herb – All herbaceous (non-woody) plants, regardles:
1/1	01	= Total Cov	112 2	of size, and woody plants less than 3.28 ft tall.
50% of total cover: 4	20% of	total cover:	110.1	Woody vine - All woody vines greater than 3.28 ft in
oody Vine Stratum (Plot size:)				height.
1				
An			7	
W				
1,11				
		_		Hydrophytic
			_	Vegetation
		= Total Cov		Present? Yes No No
50% of total cover:	20% of	total cover:		
marks: (Include photo numbers here or on a separate	sheet.)			
'				

-	-	
•	()	

Sampling Point: 101-WA5-07 Remarks

Depth	Matrix		Redox	Feature	S			
(inches)	Color (moist)	_%	Color (moist)	%	Type1	Loc2	Texture	Remarks
0-8	10,412 611	90	7:51R46	10	C	PLIM	SiltClas	
8-12	104175/1	98	7.54R UL	7	C	PLIM	11	
12-24	104R511	98	10412 1011	7	-	M	11	
12-29	10 110 011		1012 011	i		_		
					_			
_		_			_			
		\equiv						
ype: C=C	oncentration, D=Depl	letion, RM=I	Reduced Matrix, MS	=Masked	Sand Gr	ains.	² Location: Pl	L=Pore Lining, M=Matrix.
ydric Soil	Indicators:							tors for Problematic Hydric Soils ³ :
Black Hi Hydroge Stratifier 2 cm ML Depletee Thick Da Sandy M Sandy G Sandy G Stripped estrictive I	(A1) Dipedon (A2) Distic (A3) En Sulfide (A4) Di Layers (A5) Dick (A10) (LRR N) Dick Surface (A12) Mucky Mineral (S1) (LA 147, 148) Dieyed Matrix (S4) Diedox (S5) Di Matrix (S6) Dayer (if observed):	.RR N,	Dark Surface Polyvalue Beli Thin Dark Sur Loamy Gleyed Depleted Matr Redox Dark S Depleted Dark Redox Depres Iron-Mangane MLRA 136 Umbric Surfac Piedmont Floc Red Parent M	ow Surface (S9 d Matrix (F3) urface (F3) urface (F3 scions (F3 see Mass)) ce (F13) odplain S	(MLRA 16) (MLRA 16) (F2) (F7) (F7) (MLRA 16) (MLRA 16) (F19)	LRR N, 66, 122) (MLRA 14	148) C Pi V O	cm Muck (A10) (MLRA 147) oast Prairie Redox (A16) (MLRA 147, 148) iedmont Floodplain Soils (F19) (MLRA 136, 147) ery Shallow Dark Surface (TF12) ther (Explain in Remarks) icators of hydrophytic vegetation and tland hydrology must be present, less disturbed or problematic. Present? Yes No

Swage Shall		Low-line die Angel /1		
Project/Site: Fergusor Scott Worlands	City/Co	ounty: Smithland / Livin	gston County :	Sampling Date: 4/0/22
Applicant/Owner: KEPENR CILA			State: KY	_ Sampling Point: Tol-W15-0
Investigator(s): W.: Commingham, N. Bunnell SK	Section	n, Township, Range:	N/A	
Landform (hillslope, terrace, etc.): Dupn 4510 F				Slope (%):
Subregion (LRR or MLRA):LRRNL	at: 36.845790	Long: _ %	1.687282	Datum: NAD 83
Soil Map Unit Name: 🛂 🔥			NWI classifica	tion: MA
Are climatic / hydrologic conditions on the site typica	Il for this time of year? Ye	s No	(If no, explain in Re	marks.)
Are Vegetation, Soil, or Hydrology	significantly disturbe	ed? Are "Normal	Circumstances" pro	esent? Yes No
Are Vegetation, Soil, or Hydrology	naturally problemat		explain any answers	
SUMMARY OF FINDINGS – Attach site				
Hydrophytic Vegetation Present? Hydric Soil Present? Wetland Hydrology Present? Remarks:	NoNo	Is the Sampled Area within a Wetland?	Yes	No
Tol- Sinkhole	WET-US depression			PEM
HYDROLOGY				
Wetland Hydrology Indicators:			Secondary Indicate	ors (minimum of two required)
Primary Indicators (minimum of one is required; che	eck all that apply)		Surface Soil C	- Company of the second
Surface Water (A1)	True Aquatic Plants (B1	14)	Sparsely Vege	tated Concave Surface (B8)
High Water Table (A2)	Hydrogen Sulfide Odor		Drainage Patte	erns (B10)
Saturation (A3)	Oxidized Rhizospheres	on Living Roots (C3)	Moss Trim Line	es (B16)
Water Marks (B1)	Presence of Reduced In			ater Table (C2)
Sediment Deposits (B2)	_ Recent Iron Reduction		Crayfish Burro	
Drift Deposits (B3)	Thin Muck Surface (C7	•		ble on Aerial Imagery (C9)
Algal Mat or Crust (B4) Iron Deposits (B5)	_ Other (Explain in Rema	arks)	-,	essed Plants (D1)
Inundation Visible on Aerial Imagery (B7)			Geomorphic Posts Shallow Aquita	Section Control of the Control of th
Water-Stained Leaves (B9)			Microtopograp	
Aquatic Fauna (B13)			FAC-Neutral T	
Field Observations:				551 (2-5)
Surface Water Present? YesNo	Depth (inches):			
Water Table Present? Yes No	Depth (inches): O			
Saturation Present? Yes No	Depth (inches): 0	Wetland H	ydrology Present?	Yes No
(includes capillary fringe) Describe Recorded Data (stream gauge, monitoring	g well, aerial photos, previ-	ous inspections), if avai	ilable:	
				N. Committee
Remarks:				
				V

	Absolute Dominant Indica	ator Dominance Test worksheet:
ree Stratum (Plot size:)	% Cover Species? State	Number of Dominant Species That Are OBL, FACW, or FAC: (A)
. 1.0		Total Number of Dominant Species Across All Strata: (B)
N/H		Percent of Dominant Species That Are OBL, FACW, or FAC: (A/B)
		THAT ALE OBE, I ACW, OF I AC. (AVB.
		Prevalence Index worksheet:
	= Total Cover	Total % Cover of: Multiply by:
50% of total cover:	20% of total cover:	OBL species x 1 =
apling/Shrub Stratum (Plot size:)		FACW species x 2 =
		FAC species x 3 =
		FACU species x 4 =
		UPL species x 5 =
		Column Totals: (A) (B)
NA		Prevalence Index = B/A =
		Hydrophytic Vegetation Indicators:
		1 Rapid Test for Hydrophytic Vegetation
		2 - Dominance Test is >50%
		3 - Prevalence Index is ≤3.0¹
	= Total Cover	4 - Morphological Adaptations¹ (Provide supporting
50% of total cover:	20% of total cover:	data in Remarks or on a separate sheet)
lerb Stratum (Plot size:)	1 6 / 1	Backlamatic Hudocalouis Valantical (Funtain)
· Ludwija palustrus	_ 65 / OB	2년
Kaningdo's hispides	3D / IN	Indicators of hydric soil and wetland hydrology must
		be present, unless disturbed or problematic.
		Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of
		Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than or equal to 3.28 ft (1
0		m) tall.
1		- Herb – All herbaceous (non-woody) plants, regardless
	15 = Total Cover	of size, and woody plants less than 3.28 ft tall.
50% of total cover: <u>#</u>	7,5 20% of total cover: 1	Manda di salan All sanda sinan ancata than 2 20 ft in
(nody Vine Stratum (Plot size:)		Woody vine – All woody vines greater than 3.28 ft in height.
1		
NIA		
		Hydrophytic Vegetation
	= Total Cover	Present? Yes No No
50% of total cover:	= Total Cover 20% of total cover:	

	oth needed to docur		or confirm t	he absence of ind	icators.)
Depth Matrix Inches) Color (moist) %	Color (moist)	% Type ¹	Loc ²	Texture	Remarks
0-12 UVR 4/3 95	545 4/6	% Type¹ C		SIC	Remarks
12 10/12/12	3117 116			2,60	
	-				
	-				
	=	77 1 10 10			144.1.1.4272
Type: C=Concentration, D=Depletion, RM ydric Soil Indicators:	=Reduced Matrix, MS	S=Masked Sand Gra	ins, 1	Location: PL=Pore	Lining, M=Matrix. or Problematic Hydric Soils ³ :
Histosol (A1)	Dark Surface	(\$7)			ick (A10) (MLRA 147)
Histic Epipedon (A2)		: (37) elow Surface (S8) (N	ILRA 147. 14		rairie Redox (A16)
Black Histic (A3)		urface (S9) (MLRA 1			A 147, 148)
_ Hydrogen Sulfide (A4)	Loamy Gleye	ed Matrix (F2)		Piedmor	nt Floodplain Soils (F19)
_ Stratified Layers (A5)	Depleted Ma			•	A 136, 147)
_ 2 cm Muck (A10) (LRR N) _ Depleted Below Dark Surface (A11)	Redox Dark	Surface (F6) rk Surface (F7)			allow Dark Surface (TF12) xplain in Remarks)
Thick Dark Surface (A12)	Redox Depre			Offici (E	Apidiii iii Keilidiks)
_ Sandy Mucky Mineral (S1) (LRR N,		ese Masses (F12) (I	LRR N,		
MLRA 147, 148)	MLRA 13			_	
_ Sandy Gleyed Matrix (S4)		ice (F13) (MLRA 13			of hydrophytic vegetation and
_ Sandy Redox (S5)		oodplain Soils (F19)			ydrology must be present,
_ Stripped Matrix (S6) estrictive Layer (if observed):	Red Parent i	Material (F21) (MLR	H 127, 147)	uniess dis	turbed or problematic.
Type: Nock layer					
Depth (inches):				Hydric Soil Presei	nt? Yes No
emarks:				Trydric Son Tresci	103 V 100
STIGHTS.					

Project/Site: St	MININE Shade	RMINATION D	ATA FORM				Page 202 of 794
Applicant/Owners	Land Land City		'''A FURM_	F			1 ago 202 01 10 1
	mper Shade		or o	- castern Mo	ountains	and Pied	Mont D .
Involution ()	Charle Ven	ewalstes	City/Co	ounty: Sun	Menersh	orde.	mont Region
					STICL ON	au (Sampling Date: 4-1
Landform (hillala		and a	Section	. Township D	St		
Subregion (LRR or ML)	RA): 100 at	C65101-	Local relief	(con-	nge:/	NA '	10 mil: 10
Subregion (LRR or ML) Soil Map Unit Name: Are climatic / hydrologic	Bala	Lat: <u>3</u>	847794	(concave, conv	ex, none): 1	Concade	Slope (%):_
Are climatic / hydrologic	- Davi	W, CVC7		Long	85.7	03441	Slope (%):_
Are climatic / hydrologic Are Vegetation	conditions on the si	te typical for this tim	le of use of	1-		VWI classici	Datum: NA1
Are Vegetation,	Soil, or Hydr	ology signif	ic or year? Yes				cation: PUB Hh
CITAGE A DO	Soil, or Hydra	ology	cantly disturbed	? Are "No	Ormal Circus	ovbigili ili Ki	emarks.)
Are Vegetation, SUMMARY OF FIN	IDINGS - Attack	natura	ally problematic?	(If need	led owner	nstances" pr	emarks.) resent? Yes No
Hydrophytic Van I	- Interest	i site map show	wing sampli	na noint la	eu, explain	any answers	resent? Yes No s in Remarks.) important features,
Hydric Soil Programs	Present? Ye	s X N		a boult loc	ations, tr	ansects,	important 6
Wetland Hydrology Pres	Ye.	s X No_	Is ti	20 0			reatures,
Remarks:	ent? Yes			ne Sampled Are in a Wetland?		\ /	
		7- 100_		www.welland?	Y	esX	No
Wetlan					1	DELL	
Wetland Hydrology In 11						1-10	
Wetland Hydrology Indica Primary Indicators (minimum						PEM	
Wetland Hydrology Indica Primary Indicators (minimur Surface Water (A1)					Secondar	PEM	
Wetland Hydrology Indica Primary Indicators (minimur X Surface Water (A1) X High Water Table (A2)		check all that apply) District (2		Secondary	/ Indicators ((minimum of two required)
Surface Water (A1) High Water Table (A2) Saturation (A3)		check all that apply True Aquatic I Hydrogen Sul	Plants (B14)				(minimum of two required) cs (B6)
X Surface Water (A1) X High Water Table (A2) X Saturation (A3) Water Marks (B1)	ators: m of one is required;	check all that apply True Aquatic Hydrogen Sult Oxidized Rhize	Plants (B14) fide Odor (C1)		Sparse	ely Vegetate	d Co-
Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2)	ators: m of one is required;	check all that apply True Aquatic Hydrogen Sult Oxidized Rhize	Plants (B14) fide Odor (C1) ospheres on Livi	ng Roots (C3)	Sparse Drainac	ely Vegetate	d Concave Surface (B8)
Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3)	ators: m of one is required;	check all that apply True Aquatic I Hydrogen Sulf Oxidized Rhize Presence of Ro	Plants (B14) fide Odor (C1) Dispheres on Livieduced Iron (C4)	ng Roots (C3)	Sparse Draina Moss T Dry-Sea	ely Vegetater ge Patterns i rim Lines (B	d Concave Surface (B8) (B10)
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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)	ators: m of one is required;	check all that apply True Aquatic Hydrogen Sult Oxidized Rhize	Plants (B14) fide Odor (C1) Ospheres on Livi educed Iron (C4) duction in Tilled	Soils (C6)	Sparse Draina Moss T Dry-Sea Crayfish Saturatic	ely Vegetater ge Patterns (rim Lines (B ason Water - n Burrows (C on Visible on	d Concave Surface (B8) (B10) (16) Table (C2)
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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 Aeri Water-Stained Leaves (B3) Aquatic Fauna (B13) d Observations: ace Water Present? er Table Present?	ators: m of one is required; ial Imagery (B7) 9) Yes X No Yes X No	check all that apply True Aquatic I Hydrogen Sult Oxidized Rhizo Presence of Ro Recent Iron Re Thin Muck Surf Other (Explain i	Plants (B14) fide Odor (C1) ospheres on Livi educed Iron (C4) duction in Tilled ace (C7) n Remarks)	Soils (C6)	Sparse Drainag Moss T Dry-Sea Crayfish Saturatic Stunted Geomory Shallow FAC-Neur	ely Vegetater ge Patterns (Passon Water - De Burrows (Con Visible on Or Stressed (D3 Or Stressed Or Stressed Or Stressed Or Stressed Or Stressed (D3 Or Stressed (D3 Or Stressed Or Stressed (D5 Or Stressed (d Concave Surface (B8) (B10) (B16) Table (C2) (B8) A Aerial Imagery (C9) Plants (D1) (D2)

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Sanfishings Proint 69

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Depth (inches)	Matrix			Features			n the absence	, marketing
n -	Color (moist)	%	Color (moist)	_%	Type ¹	Loc2	Texture	Remarks
1-12	1048 414	95	7.5 YR 4/10	5	C	M	SILLELAY	
7-18	1048 4/7	92	7.54R 4/1Z	3	-	M		
	10 115		110 111 112					
				-				
						_		
_				_				
ype: C=Co	ncentration, D=Depl	etion, RM=	Reduced Matrix, MS:	-Masked	Sand Gra	ins.	² Location: PL	=Pore Lining, M=Matrix.
ydric Soil li	ndicators:							ors for Problematic Hydric Soils ³ :
_ Histosol ((A1)		Dark Surface (S7)				m Muck (A10) (MLRA 147)
	ipedon (A2)		Polyvalue Beld		e (S8) (M	LRA 147,		ast Prairie Redox (A16)
_ Black His	stic (A3)		Thin Dark Surf				•	(MLRA 147, 148)
	n Sulfide (A4)		Loamy Gleyed	Matrix (F	2)			edmont Floodplain Soils (F19)
	Layers (A5)		Depleted Matri					(MLRA 136, 147)
	ck (A10) (LRR N)		Redox Dark Si					ry Shallow Dark Surface (TF12)
	Below Dark Surface	e (A11)	Depleted Dark				Oth	ner (Explain in Remarks)
	rk Surface (A12) ucky Mineral (S1) (L	DD N	Redox Depres			DD AL		
	147, 148)	KK N,	Iron-Manganes MLRA 136)		S (F12) (L	KK N,		
	eyed Matrix (S4)		Umbric Surface		/II RΔ 136	122)	3Indic	ators of hydrophytic vegetation and
_ Sandy Re			Piedmont Floo					and hydrology must be present,
	Matrix (S6)		Red Parent Ma				•	ss disturbed or problematic.
estrictive L	ayer (if observed):						ĺ	
Туре:	MA							N.
Depth (incl	nes):						Hydric Soil P	resent? Yes X No
emarks:								
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Case No. 2025-00064

WETLAND DETERMINATION DATA FORM – Eastern Mountains and Piedmont Reponse to 1-69 Summer Shack Solar City/County: Summer Shock Sampling Date: 1-19+2Z Applicant/Owner: Investigator(s): Section, Township, Range:_NA Landform (hillslope, terrace, etc.): 7-2 51-1-Local relief (concave, convex, none): Concauc Subregion (LRR or MLRA): LRPN ____ Long: 95.203572 Soil Map Unit Name: NWI classification: Are climatic / hydrologic conditions on the site typical for this time of year? Yes (If no, explain in Remarks.) Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes X No Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? (If needed, explain any answers in Remarks.) SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc. Hydrophytic Vegetation Present? Yes _____No Is the Sampled Area Hydric Soil Present? Yes within a Wetland? Wetland Hydrology Present? Remarks: upland point associated w/ To1-WET-66 HYDROLOGY Wetland Hydrology Indicators: Secondary Indicators (minimum of two required) Primary Indicators (minimum of one is required; check all that apply) Surface Soil Cracks (B6) Surface Water (A1) ___ True Aquatic Plants (B14) Sparsely Vegetated Concave Surface (B8) High Water Table (A2) Hydrogen Sulfide Odor (C1) __ Drainage Patterns (B10) Saturation (A3) __ Oxidized Rhizospheres on Living Roots (C3) ___ Moss Trim Lines (B16) Water Marks (B1) Presence of Reduced Iron (C4) __ Dry-Season Water Table (C2) Sediment Deposits (B2) Recent Iron Reduction in Tilled Soils (C6) Crayfish Burrows (C8) Drift Deposits (B3) ___ Thin Muck Surface (C7) Saturation Visible on Aerial Imagery (C9) _ Algal Mat or Crust (B4) _ Other (Explain in Remarks) Stunted or Stressed Plants (D1) _ Iron Deposits (B5) Geomorphic Position (D2) Inundation Visible on Aerial Imagery (B7) Shallow Aquitard (D3) Water-Stained Leaves (B9) Microtopographic Relief (D4) Aquatic Fauna (B13) __ FAC-Neutral Test (D5) Field Observations: Yes ____ No ___ Depth (inches): Surface Water Present? Water Table Present? Saturation Present? Depth (inches): Wetland Hydrology Present? Yes ___ (includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available: Remarks:

Case No. 2025-00064

Case	5 INO. 2020 - 00004
Sampling	Reponse to 1-69 115-11

To a Colonia (DL L)			Indicator	Dominance Test worksheet:	
Tree Stratum (Plot size:) 1				Number of Dominant Species That Are OBL, FACW, or FAC:	(A)
3				Total Number of Dominant Species Across All Strata:	(B)
				Percent of Dominant Species That Are OBL, FACW, or FAC:	(A/B
				Prevalence Index worksheet:	
				Total % Cover of: Multiply by:	
EOV of total powers		= Total Cov		OBL species x 1 =	
50% of total cover:	20% 01	total cover		FACW species x 2 =	
apling/Shrub Stratum (Plot size:)				FAC species x 3 =	
				FACU species x 4 =	
-					
		-	_	UPL species x 5 =	
FIA				Column Totals: (A)	(E
NIT NIT				Prevalence Index = B/A =	-
				Hydrophytic Vegetation Indicators:	
				1 - Rapid Test for Hydrophytic Vegetation	
				2 - Dominance Test is >50%	
		= Total Cov	er	3 - Prevalence Index is ≤3.0¹	
50% of total cover:				4 - Morphological Adaptations (Provide sup	porti
erb Stratum (Plot size:)	_			data in Remarks or on a separate sheet)	
Skillaria media	10		UPL	Problematic Hydrophytic Vegetation ¹ (Explain	in)
Trifilium Kinns	70	$\overline{}$	FACH		
Renuncius hispidus	7		FAL	¹ Indicators of hydric soil and wetland hydrology r	nust
Solidage consulation	5		FACU	be present, unless disturbed or problematic.	
Schedon arus arindiaceni	(La			Definitions of Four Vegetation Strata:	
				Tree – Woody plants, excluding vines, 3 in. (7.6	cm) c
				more in diameter at breast height (DBH), regardle	ess o
				height.	
				Sapling/Shrub - Woody plants, excluding vines,	, less
				than 3 in. DBH and greater than or equal to 3.28 m) tall.	ft (1
<u> </u>			-	iii) tan.	
·	12 =	-		Herb - All herbaceous (non-woody) plants, regal	rdles
EDDY of total across 41		Total Cov		of size, and woody plants less than 3.28 ft tall.	
50% of total cover:)	_ 20% or t	total cover:	70.3	Woody vine – All woody vines greater than 3.28 height.	ft in
V . IA			_		
NIT .					
		_			
			_	Hydrophytic	
				Vegetation Present? Yes No	
		Total Cove		riesenti iesNo	
50% of total cover:	7/11% of t	total cover:_			

Case No. 2025-00064

repth Matrix Redox Features Color (moist) % Color (moist) % Type Loc² Texture Remarks L Color (moist) % Color (moist) % Type Loc² L C M DINC (A) Proper C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. Place C=Concentration, D=Depletion, RM=Reduced Matrix (PS) Proper C=Concentration, D=Depletion, RM=Reduced Matrix (PS) Park Surface (S7) Proper C=Concentration, D=Depletion Remarks Place C=Concentration, D=Depletion Rem	Matrix										
riches) Color (moist) % Color (moist) % Type Loc Texture Remarks	ches) Color (moist) % Color (moist) % Type¹ Loc² Texture Remarks		cription: (Describe	to the de	pth needed to docu	ment the	indicator	or confir	m the absence of inc	licators.)	06 of 794
ype: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. ype: C=Concentration, D=Depletion nethers. ype: C=Concentration, D=Depletion filts of the post Ling, M=Matrix. Indicators for Problematic Hydric Soil R=Post Ling, M=Matrix. Indicators for Problematic Hydric Soil R=Post Ling, M=Matrix. Indicators for Problematic Hydric Soil R=Post Ling, M=Matrix, 148) (MLRA 147, 148)	pe: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. dric Soil Indicators: Histosol (A1) Histic Epipedon (A2) Black Histic (A3) Histic Epipedon (A2) Black Histic (A3) Hydrogen Sulfide (A4) Stratified Layers (A5) 2 cm Muck (A10) (MLRA 147, 148) Loamy Gleyed Matrix (F2) Depleted Below Dark Surface (A11) Thio Dark Surface (F6) Depleted Below Dark Surface (A11) Redox Dark Surface (F2) And MLRA 147, 148) Sandy Mucky Mineral (S1) (LRR N, MLRA 147) MLRA 147, 148) Sandy Gleyed Matrix (S4) Sandy Gleyed Matrix (S6) Red Parent Material (F21) (MLRA 127, 147) Depth (inches): Hydric Soil Present? Yes No	epth	Matrix		Red	ox Feature	s				
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Case No. 2025-00064 WETLAND DETERMINATION DATA FORM – Eastern Mountains and Piedmont Region to 1-69 Summer Shade Solar City/County: Project/Site: Cundela Applicant/Owner: Investigator(s): Section, Township, Range: Landform (hillslope, terrace, etc.): Depression ___ Local relief (concave, convex, none): _Concaul Subregion (LRR or MLRA): LRRN Datum: NAC Soil Map Unit Name: NWI classification: Are climatic / hydrologic conditions on the site typical for this time of year? Yes (If no, explain in Remarks.) Are Vegetation ______, or Hydrology ______ significantly disturbed? Are "Normal Circumstances" present? Yes Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? (If needed, explain any answers in Remarks.) SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc. Hydrophytic Vegetation Present? Is the Sampled Area Hydric Soil Present? within a Wetland? Wetland Hydrology Present? Remarks: Wetland point Associated W/701-WET-07 Vey Disturbed heavily. Welland is within Congress. Wetland Hydrology Indicators: Secondary Indicators (minimum of two required) Primary Indicators (minimum of one is required; check all that apply) Surface Soil Cracks (B6) Surface Water (A1) ___ True Aquatic Plants (B14) Sparsely Vegetated Concave Surface (B8) High Water Table (A2) Hydrogen Sulfide Odor (C1) Drainage Patterns (B10) X Oxidized Rhizospheres on Living Roots (C3) Saturation (A3) ___ Moss Trim Lines (B16) Water Marks (B1) Presence of Reduced Iron (C4) Dry-Season Water Table (C2) Sediment Deposits (B2) Recent Iron Reduction in Tilled Soils (C6) Crayfish Burrows (C8) Drift Deposits (B3) Thin Muck Surface (C7) X Saturation Visible on Aerial Imagery (C9) Algal Mat or Crust (B4) Other (Explain in Remarks) Stunted or Stressed Plants (D1) Iron Deposits (B5) X Geomorphic Position (D2) Inundation Visible on Aerial Imagery (B7) Shallow Aquitard (D3) Water-Stained Leaves (B9) Microtopographic Relief (D4) Aquatic Fauna (B13) FAC-Neutral Test (D5) Field Observations: Yes No Depth (inches):_
Yes No Depth (inches):_ Surface Water Present? Water Table Present? No X Depth (inches): Saturation Present? Wetland Hydrology Present? Yes (includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available: Remarks: Sinkhole directly Adjunt to Wetland

Ous	3 140. 2020 00004
Sampling	Reponse to 11-69 145-17

The State of the Land	Absolute Dominant Indicator	Dominance Test worksheet:
Tree Stratum (Plot size:) 1)	% Cover Species? Status	Number of Dominant Species That Are OBL, FACW, or FAC:(A)
3,		Total Number of Dominant Species Across All Strata: (B)
4		(2)
_ / / / /		Percent of Dominant Species That Are OBL, FACW, or FAC: (A/B)
7		Prevalence Index worksheet:
	= Total Cover	Total % Cover of: Multiply by:
50% of total cover:	20% of total cover:	OBL species
Sapling/Shrub Stratum (Plot size:)		FACW species 6 x 2 = D
1		FAC species 40 x 3 = 170
2		FACU species
^		UPL species
3	~	
4. NA		
6		Prevalence Index = B/A = 3.3
7,		Hydrophytic Vegetation Indicators:
8		1 - Rapid Test for Hydrophytic Vegetation
		2 - Dominance Test is >50%
9		3 - Prevalence Index is ≤3.0 ¹
50% of total cover:	= Total Cover 20% of total cover:	4 - Morphological Adaptations ¹ (Provide supporting
Herb Stratum (Plot size: 5F+)	20 % of total cover	data in Remarks or on a separate sheet)
	20 J. FACU	Problematic Hydrophytic Vegetation¹ (Explain)
		700
2. Ranunclus hispidus	TO PAC	¹ Indicators of hydric soil and wetland hydrology must
3. Tribliam ripus	5 FACU	be present, unless disturbed or problematic.
4		Definitions of Four Vegetation Strata:
5		Tree Mondy plants evaluation visus 2 in (7.0 mm)
6		Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of
7		height.
8		Sapling/Shrub – Woody plants, excluding vines, less
9		than 3 in. DBH and greater than or equal to 3.28 ft (1
10,		m) tall.
11		Herb – All herbaceous (non-woody) plants, regardless
	= Total Cover	of size, and woody plants less than 3.28 ft tall.
	5 20% of total cover: 13	Woody vine – All woody vines greater than 3.28 ft in
Woody Vine Stratum (Plot size:)		height.
1		
2		
3		
4		Hydrophytic
5,		Vegetation
	= Total Cover	Present? Yes NoX
50% of total cover:	20% of total cover:	
Remarks: (Include photo numbers here or on a separate s	sheet.)	
11		
problematic Veg d	ul to being la	ocated within a
Cow Ren. Vegite	14.0	
ren. Vegite	firs heavil	1 Ois turbed
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Sampring Pont 69701 - WAS-17

Depth Matrix Redox Features	
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11-18 109R 5/2 9B 759K 4/16 2 C MPL 11	
	
Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. 2 Location: PL=Pore Lining, M=Matrix. Hydric Soil Indicators: Indicators for Problematic Hydric	
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Histic Epipedon (A2) Polyvalue Below Surface (S8) (MLRA 147, 148) Coast Prairie Redox (A16) Black Histic (A3) Thin Dark Surface (S9) (MLRA 147, 148) (MLRA 147, 148)	
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Depleted Below Dark Surface (A11) Depleted Dark Surface (F7) Other (Explain in Remarks)	12)
Thick Dark Surface (A12) Redox Depressions (F8)	
Sandy Mucky Mineral (S1) (LRR N, Iron-Manganese Masses (F12) (LRR N,	
MLRA 147, 148) MLRA 136)	
Sandy Gleyed Matrix (S4) — Umbric Surface (F13) (MLRA 136, 122) 3Indicators of hydrophytic vegetation	ion and
Sandy Redox (S5) — Piedmont Floodplain Soils (F19) (MLRA 148) — wetland hydrology must be present	ent,
Stripped Matrix (S6) Red Parent Material (F21) (MLRA 127, 147) unless disturbed or problematic.	
Restrictive Layer (if observed):	
Туре:	
Depth (inches): No	۰
Remarks:	

Case No. 2025-00064 Reponse to 1-69 Page 210 of 794

Project/Site:	
CONVICTOR AND	Reponse to 1-69 Page 210 of 794 MINATION DATA FORM – Eastern Mountains and Piedmont Region City/County: Summer Shade Sampling Date: 4-1-4
Applicant/Owner	Cityo
Process of the second of the s	City/County: Dumoner Shack
Investigator(s): CK, LD	State: KV Sampling Date: 7-12
Cardiorm (hillslope, terrace, etc.)	Section Terror A Sampling Point Tol-
Subregion (LRR or MLRA): LFR N	Local relief (concave, convex, none): Conseque
Soil Map Unit Name Dog	Local relief (concave, convex, none): Convave Slope (%): Lat: 36.846720 Long: 85.648906 Datum: AM
Are climatic / hydrologic conditions	Datum: A MAI
Are Vegetation	ypical for this time of year? Yes No. NWI classification:
Are Vegetation, Soil, or Hydrolog	gysignificantly disturb to No (If no, explain in Remarks.)
Are Vegetation, Soil, or Hydrolog SUMMARY OF FINDINGS - Attach a	Are "Normal Circumstances" present? Yes No.
SUMMARY OF FINDINGS - Attach o	(If needed, explain any any
Hydrophyline	naturally problematic? (If needed, explain any answers in Remarks.) No
Hydric Soil Drawn Yes	No. V
Wetland Hydrolan P	No V Is the Sampled Area
Wetland Hydrology Present? Yes	
Torrida No.	No
1.101	
upland point Associ	icated Court landful
7,000	intel with wellful TOI-WET-07
IVO DO	101-67
YDROLOGY	
Netland Hydrology Indicators:	
Primary Indicators (minimum of any i	
Primary Indicators (minimum of one is required; che Surface Water (A1)	Secondary Indicators (minimum of two required
High Man	True Aquatic Plants (B14) Surface Soil Cracks (B6)
- Mail Water Table (A2)	- " " " " " " " " " " " " " " " " " " "
High Water Table (A2) Saturation (A3)	— Tydrogen Sulfide Odor (C4) — Sparsely Vegetated C.
Saturation (A3) _ Water Marks (B1)	— Sparsely Vegetated Concave Surface (B8) Oxidized Rhizospheres on Living — Drainage Patterns (R10)
Saturation (A3) Water Marks (B1) Sediment Deposits (B2)	— Rydrogen Sulfide Odor (C1) — Sparsely Vegetated Concave Surface (B8) — Oxidized Rhizospheres on Living Roots (C3) — Moss Trim Lines (R10) — Presence of Reduced Issue (C4)
Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3)	— Rydrogen Sulfide Odor (C1) — Sparsely Vegetated Concave Surface (B8) — Oxidized Rhizospheres on Living Roots (C3) — Drainage Patterns (B10) — Presence of Reduced Iron (C4) — Moss Trim Lines (B16) — Recent Iron Reduction in Tilled Call (C2)
Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4)	— Hydrogen Sulfide Odor (C1) — Sparsely Vegetated Concave Surface (B8) — Oxidized Rhizospheres on Living Roots (C3) — Drainage Patterns (B10) — Presence of Reduced Iron (C4) — Moss Trim Lines (B16) — Recent Iron Reduction in Tilled Soils (C6) — Dry-Season Water Table (C2) — Thin Muck Surface (C7) — Crayfish Burrows (C9)
Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5)	— Rydrogen Sulfide Odor (C1) — Sparsely Vegetated Concave Surface (B8) — Oxidized Rhizospheres on Living Roots (C3) — Moss Trim Lines (B10) — Recent Iron Reduction in Tilled Soils (C6) — Other (Explain in Remarks) — Saturation Visible on Assist I
Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5) Inundation Visible on Aerial Impact (B4)	Prydrogen 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) Other (Explain in Remarks) Sparsely Vegetated Concave Surface (B8) Drainage Patterns (B10) Moss Trim Lines (B16) Dry-Season Water Table (C2) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (C9) Stunted or Stressed Plants (D4)
Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5) Inundation Visible on Aerial Imagery (B7) Water-Stained Leaves (B0)	— Hydrogen Sulfide Odor (C1) —— Sparsely Vegetated Concave Surface (B8) — Oxidized Rhizospheres on Living Roots (C3) —— Moss Trim Lines (B10) —— Moss Trim Lines (B16) —— Dry-Season Water Table (C2) —— Crayfish Burrows (C8) —— Saturation Visible on Aerial Imagery (C9) —— Stunted or Stressed Plants (D1) —— Geomorphic Position (D2)
Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5) Inundation Visible on Aerial Imagery (B7) Water-Stained Leaves (B9) Aquatic Fauna (B13)	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) Other (Explain in Remarks) Sparsely Vegetated Concave Surface (B8) Moss Trim Lines (B16) Dry-Season Water Table (C2) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (C9) Stunted or Stressed Plants (D1) Geomorphic Position (D2) Shallow Aquitard (D3)
Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5) Inundation Visible on Aerial Imagery (B7) Water-Stained Leaves (B9) Aquatic Fauna (B13) d Observations:	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) Other (Explain in Remarks) Sparsely Vegetated Concave Surface (B8) Moss Trim Lines (B10) Dry-Season Water Table (C2) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (C9) Stunted or Stressed Plants (D1) Geomorphic Position (D2) Shallow Aquitard (D3) Microtopographic Relief (D4)
Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5) Inundation Visible on Aerial Imagery (B7) Water-Stained Leaves (B9) Aquatic Fauna (B13) d Observations: ace Water Present?	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) Other (Explain in Remarks) Sparsely Vegetated Concave Surface (B8) Drainage Patterns (B10) Moss Trim Lines (B16) Dry-Season Water Table (C2) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (C9) Stunted or Stressed Plants (D1) Geomorphic Position (D2) Shallow Aquitard (D3) Microtopographic Relief (D4) FAC-Neutral Test (D5)
Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5) Inundation Visible on Aerial Imagery (B7) Water-Stained Leaves (B9) Aquatic Fauna (B13) Dobservations: ace Water Present? Yes No X	- 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) - Other (Explain in Remarks) - Sparsely Vegetated Concave Surface (B8) - Moss Trim Lines (B16) - Dry-Season Water Table (C2) - Crayfish Burrows (C8) - Saturation Visible on Aerial Imagery (C9) - Stunted or Stressed Plants (D1) - Geomorphic Position (D2) - Shallow Aquitard (D3) - Microtopographic Relief (D4) - FAC-Neutral Test (D5)
Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5) Inundation Visible on Aerial Imagery (B7) Water-Stained Leaves (B9) Aquatic Fauna (B13) d Observations: ace Water Present? Par Table Present? Tation Present?	- 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) - Other (Explain in Remarks) - Sparsely Vegetated Concave Surface (B8) - Moss Trim Lines (B16) - Dry-Season Water Table (C2) - Crayfish Burrows (C8) - Saturation Visible on Aerial Imagery (C9) - Stunted or Stressed Plants (D1) - Geomorphic Position (D2) - Shallow Aquitard (D3) - Microtopographic Relief (D4) - FAC-Neutral Test (D5)
Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5) Inundation Visible on Aerial Imagery (B7) Water-Stained Leaves (B9) Aquatic Fauna (B13) d Observations: ace Water Present? Table Present? Tration Present?	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) Other (Explain in Remarks) Depth (inches): Drainage Patterns (B10) Moss Trim Lines (B16) Dry-Season Water Table (C2) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (C9) Stunted or Stressed Plants (D1) Geomorphic Position (D2) Shallow Aquitard (D3) Microtopographic Relief (D4) FAC-Neutral Test (D5) Depth (inches):
Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5) Inundation Visible on Aerial Imagery (B7) Water-Stained Leaves (B9) Aquatic Fauna (B13) d Observations: ace Water Present? Part Table Present?	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) Other (Explain in Remarks) Sparsely Vegetated Concave Surface (B8) Dry-Season Water Table (C2) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (C9) Stunted or Stressed Plants (D1) Geomorphic Position (D2) Shallow Aquitard (D3) Microtopographic Relief (D4) FAC-Neutral Test (D5) Depth (inches):
Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5) Inundation Visible on Aerial Imagery (B7) Water-Stained Leaves (B9) Aquatic Fauna (B13) d Observations: ace Water Present? Per Table Present?	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) Other (Explain in Remarks) Dry-Season Water Table (C2) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (C9) Stunted or Stressed Plants (D1) Geomorphic Position (D2) Shallow Aquitard (D3) Microtopographic Relief (D4) FAC-Neutral Test (D5) Depth (inches): Depth (inches):

Case No. 2025-00064 Reponse to 1-69

Reponse	to 1-69	
Sampling Point!1	PT394WAS-1	13

Tree Stratum (Plot size:)	Absolute Dominant Indicat	or Dominance Test worksheet:
1,	% Cover Species? Statu	Number of Dominant Species That Are OBL, FACW, or FAC: (A)
2		Total Number of Dominant
A N 114		Species Across All Strata:
-		
7		Prevalence Index worksheet:
	= Total Cover	Total % Cover of: Multiply by:
50% of total cover:	20% of total cover:	OBL species x 1 =
Sapling/Shrub Stratum (Plot size:)	p -	FACW species x 2 =
1		FAC species x 3 =
2		FACU species x 4 =
3		UPL species x 5 =
		Column Totals: (A) (B)
5		
3,		Prevalence Index = B/A =
		Hydrophytic Vegetation Indicators:
		1 - Rapid Test for Hydrophytic Vegetation
<u> </u>		2 - Dominance Test is >50%
	- T-1110	3 - Prevalence Index is ≤3.0¹
50% of total cover:	= Total Cover 20% of total cover:	4 - Morphological Adaptations ¹ (Provide supporting
lerb Stratum (Plot size: 544)		data in Remarks or on a separate sheet)
trifolium repus	60 X TACK	
. Schedonorus arundinaceus	30 X FACE	- January Cogolialion (Explain)
. Taraxacum officinals	5 X FACU	¹ Indicators of hydric soil and wetland hydrology must
0111011111	TACO	be present, unless disturbed or problematic.
		Definitions of Four Vegetation Strata:
		Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of
		height.
		Sanling/Shrub Wandardad
		Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than or equal to 3.28 ft (1
)		m) tall.
	- CF	Herb - All herbaceous (non-woody) plants, regardless
500 417	95 = Total Cover	of size, and woody plants less than 3.28 ft tall.
50% of total cover: 47.	5 20% of total cover: 19	
oody Vine Stratum (Plot size:)		Woody vine – All woody vines greater than 3.28 ft in height.
		y
Alla		
711		
		Х.
		Hydrophytic Vegetation
50% of total cover:	= Total Cover	Present? Yes No
	20% of total cover:	

Case No. 2025-00064

Reponse to 1-69701-W95-13

Depth	ription: (Describe Matrix			ox Feature:					,,,,,,,,	
(inches)	Color (moist)	%	Color (moist)	%	Type ¹	_Loc ²	Textur	e	Remar	ks
0-8	104K 4/3	100			_	_	Sitel	47		
								.1		
		-					-			
				_						
				-						
				-						
Type: C=Cor	ncentration, D=Depl	letion, RM=R	educed Matrix, Ma	S=Masked	Sand Gra	ins.	² Location	PI =Pore I	ining, M=Mati	riv
lydric Soil In	dicators:						In	dicators for	Problematic	Hydric Solls ³ :
Histosol (/			Dark Surface						(A10) (MLR	
	pedon (A2)		Polyvalue Be	elow Surfac			, 148)		rie Redox (A1	
Black Hist	. ,		Thin Dark Su	ırface (S9)	(MLRA 14			(MLRA	147, 148)	•
	Sulfide (A4) Layers (A5)		Loamy Gleye		-2)		_		Floodplain So	ils (F19)
	k (A10) (LRR N)		Depleted Ma Redox Dark :	, ,	21				136, 147)	
	Below Dark Surface	(A11)	Depleted Dai				_		ow Dark Surfa	
_ Thick Darl	k Surface (A12)	, ,	Redox Depre		, ,		_	_ Other (Exp	lain in Remar	KS)
_ Sandy Mu	cky Mineral (S1) (Li	RR N,	Iron-Mangan			RR N,				
	147, 148)		MLRA 13	•						
Sandy Gle Sandy Red	eyed Matrix (S4)		Umbric Surfa							egetation and
Sandy Red Stripped M			Piedmont Flo						rology must b	
	yer (if observed):		Red Parent N	naterial (F2	1) (MLKA	127, 147)	unless distu	rbed or proble	matic.
Type:	ROCK	- 1: Kaly	Bedrock							
Depth (inch	es):		_				Undeia C	-!! D40		🗸
emarks:							Hydric S	oil Present?	Yes	No _/\
erriarite.										

		Case No. 2025-00064 Reponse to 1-69
WETLAND D	ETERMINATION BATT	Eastern Mountains and Piedmont Region
Project/Site: Sumpler S	- LININATION DATA FORM -	Eastern Mountains and Bu
Applicant/Owner:	Jacke City/Co.	unty: State: 100 Sampling Date: 4-19
- Lanuela	Vegense bles	unity: Jummershade Sampling D. 4/16
Investigator(s): CK, LD		State: KV Sampling Date: 179
Landform (hillslope, terrace, etc.):	The Slove	Township Point: 701
SOUTH (ETCH OF WILKA): LIKE	N Local relief	
Soil Map Unit Name:	Lat: 36, 836 6.	(concave, convex, none): Concave Slope (%):_ 3 Long: 85.649938 Datum: MAD
Are climatic / hydrologic condition		Datum: NAD
Are Vegetation	the site typical for this time of year? Yes_	NWI classification:
Are Venetation	r Hydrology significantly disturbed?	(II IIU, EKDIAIN IN Domest
Soil o	r Hydrology significantly disturbed?	? Are "Normal Circumstances" present? Yes No_
SUMMARY OF FINDINGS - A	Affach site name inaturally problematic?	(If needed, explain any answers in Remarks.) ng point locations, transects, important features,
Hudeant	mach site map showing samplir	19 point locations 1
Hydrig Sall D	Yes X No	o point locations, transects, important features
Hydric Soil Present?	Yes X No Is th	ne Sampled Area
Wetland Hydrology Present? Remarks:	Yes X No Is the	in a Wetland?
		in a Wetland? Yes No
YDROLOGY		PEM
letland Hydrology Indicators:		
Imary Indicators (minimum of	guired: check all the	Secondaria
Surface Water (A1)	orieck all that apply)	Secondary Indicators (minimum of two required
High Water Table (A2)	True Aquatic Plants (B14)	
Saturation (A3)	— Hydrogen Sulfide Odor (C1)	Sparsely Vegetated Concave Surface (B8) Drainage Patterns (B4)
Water Marks (B1)	Oxidized Rhizospheres on Livi Presence of Reduced I	ing Roots (C3) Drainage Patterns (B10) Moss Triangle (B8)
Sediment Deposits (B2) Drift Deposits (B3)		
Algal Mat or Crust (B4)	Recent Iron Reduction in Tilled Thin Muck Surface (C7)	Dry-Season Water Table (C2) Crayfish Burrows (C8)
Iron Deposits (B5)	Other (Explain in Remarks)	1-1:01 DU/(OW) 11:01
Inundation VIII III	— Capiain in Remarks)	Saturation Visible on Aerial Imagery (C9)
	37)	Stunted or Stressed Plants (D1) Geomorphic Position (D2)
Water-Stained Lague (Fa		Comprise Position (D2)
Leaves (Rg)		- Snallow Aquitand (Day
Aquatic Fauna (B13)		- Snallow Aquitard (D3)
Aquatic Fauna (B13) Observations:		Snallow Aquitard (D3) Microtopographic Relief (D4)
Aquatic Fauna (B13) Observations:	Vo Death (inches)	- Snallow Aquitard (D3)
Aquatic Fauna (B13) Observations: Ce Water Present? Table Present?	No Depth (inches): \	Snallow Aquitard (D3) Microtopographic Relief (D4)
Aquatic Fauna (B13) Observations: Ince Water Present? Table Present? Aquatic Fauna (B13) Yes Yes April 100 Yes Yes April 100 Yes Yes	Depth (inches):	→ Shallow Aquitard (D3) Microtopographic Relief (D4) FAC-Neutral Test (D5)
Aquatic Fauna (B13) Observations: ace Water Present? r Table Present? ation Present? Yes Table Cearse (B9)	Depth (inches):	→ Shallow Aquitard (D3) Microtopographic Relief (D4) FAC-Neutral Test (D5)
ration Present?	Depth (inches):	— Shallow Aquitard (D3) Microtopographic Relief (D4) FAC-Neutral Test (D5)

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VEGETATION (Four Strata) – Use scient Tree Stratum (Plot size:)	Abook	41110,	Sampling Day Tol
1.	% Cover Do	ominant Indicator	Sampling Point: Tol- U
2	Tradvel S	pecies? Status	Workshoot.
3			Number of Dominant Species That Are OBL, FACW, or FAC:
4			THAT ARE OBL, FACW, or FAC:
*		_	I Iotal Number of Danie
5N			Strata:
6			Percent of Domina de
7			That Are OBL, FACW, or FAC:
			Prevalence Index worksheet:
50% of total cover:	= Tota	Il Cover	lotal % Cover of
Sapling/Shrub Stratum (Plot size:) 1)	20% of total c		OBL species
		4	FACW species x 1 = FAC species x 2 =
,			FAC and : X 2 =
AlA			ACO species
42141			- openes
		\ C	Column Totals:
			Column Totals: (A) (B)
		0	Prevalence Index = P/A -
	-	H	ydrophytic Vegetation Indicators:
	*		1 - Rapid Test for U
			1 - Rapid Test for Hydrophytic Vegetation
	- T		2 - Dominance Test is >50%
b Stratum (Plot size: 5ft	= Total Co	over	3 - Prevalence Index is ≤3.0¹
P (1 lot size; 1777)	20% of total cove	er:	4 - Morphological Adaptations (Provide supporting
Rammerles hispaly	10		
Corex yulpinoidea	X	FAC -	Problematic Hydrophytic Vegetation (Explain)
	-5 X	6BL	(Explain)
		1Ind	icators of hudda
		be p	icators of hydric soil and wetland hydrology must present, unless disturbed or problematic.
		Defi	nitions of Early Market or problematic.
			mittons of Four Vegetation Strata
		Tree	144
		Tree	144
		Tree	Woody plants, excluding vines, 3 in. (7.6 cm) or in diameter at breast height (DBH), regardless of tr.
		Tree more heigh	- Woody plants, excluding vines, 3 in. (7.6 cm) or in diameter at breast height (DBH), regardless of t.
		Tree more heigh	- Woody plants, excluding vines, 3 in. (7.6 cm) or in diameter at breast height (DBH), regardless of t.
		Tree more heigh	- Woody plants, excluding vines, 3 in. (7.6 cm) or in diameter at breast height (DBH), regardless of t.
		Sapli than 3 m) tall	- Woody plants, excluding vines, 3 in. (7.6 cm) or in diameter at breast height (DBH), regardless of it. ng/Shrub - Woody plants, excluding vines, less in. DBH and greater than or equal to 3.28 ft (1).
Eng. s.	ZO = Total Cover	Sapli than 3 m) tall	- Woody plants, excluding vines, 3 in. (7.6 cm) or in diameter at breast height (DBH), regardless of it. ng/Shrub - Woody plants, excluding vines, less in. DBH and greater than or equal to 3.28 ft (1
	ての = Total Cover 20% of total cover:	Sapli Ihan 3 m) tall Herb-of size	- Woody plants, excluding vines, 3 in. (7.6 cm) or in diameter at breast height (DBH), regardless of it. - Moody plants, excluding vines, less in. DBH and greater than or equal to 3.28 ft (1 in the control of the c
Eng. s.	ZO = Total Cover	Sapli Ihan 3 m) tall Herb-of size	- Woody plants, excluding vines, 3 in. (7.6 cm) or in diameter at breast height (DBH), regardless of it. - Moody plants, excluding vines, less in. DBH and greater than or equal to 3.28 ft (1 in the control of the c
Eng. s.	ZO = Total Cover	Sapli Ihan 3 m) tall Herb-of size	- Woody plants, excluding vines, 3 in. (7.6 cm) or in diameter at breast height (DBH), regardless of it. - Moody plants, excluding vines, less in. DBH and greater than or equal to 3.28 ft (1 in the control of the c
Eng. s.	ZO = Total Cover	Sapli Ihan 3 m) tall Herb-of size	- Woody plants, excluding vines, 3 in. (7.6 cm) or in diameter at breast height (DBH), regardless of it. ng/Shrub - Woody plants, excluding vines, less in. DBH and greater than or equal to 3.28 ft (1
Eng. s.	ZO = Total Cover	Sapli Ihan 3 m) tall Herb-of size	- Woody plants, excluding vines, 3 in. (7.6 cm) or in diameter at breast height (DBH), regardless of it. - Moody plants, excluding vines, less in. DBH and greater than or equal to 3.28 ft (1 in the control of the c
Eng. s.	ZO = Total Cover	Sapli Ihan 3 m) tall Herb-of size	- Woody plants, excluding vines, 3 in. (7.6 cm) or in diameter at breast height (DBH), regardless of it. - Moody plants, excluding vines, less in. DBH and greater than or equal to 3.28 ft (1 in the control of the c
Eng. s.	ZO = Total Cover	Sapli than 3 m) tall Herb-of size Woody height.	- Woody plants, excluding vines, 3 in. (7.6 cm) or in diameter at breast height (DBH), regardless of it. ng/Shrub - Woody plants, excluding vines, less in. DBH and greater than or equal to 3.28 ft (1 in the state of the stat
Eng. s.	ZO = Total Cover	Tree more height Sapli than 3 m) tall Herb-of size Woody height.	- Woody plants, excluding vines, 3 in. (7.6 cm) or in diameter at breast height (DBH), regardless of it. ng/Shrub - Woody plants, excluding vines, less in. DBH and greater than or equal to 3.28 ft (1 in the state of the state
50% of total cover: 10 Vine Stratum (Plot size:)	= Total Cover:	Tree more height Sapli than 3 m) tall Herb-of size Woody height. Hydropi	- Woody plants, excluding vines, 3 in. (7.6 cm) or in diameter at breast height (DBH), regardless of it. ng/Shrub - Woody plants, excluding vines, less in. DBH and greater than or equal to 3.28 ft (1). - All herbaceous (non-woody) plants, regardless, and woody plants less than 3.28 ft tall. / vine - All woody vines greater than 3.28 ft in
50% of total cover: 10 Vine Stratum (Plot size:)	= Total Cover:	Tree more height Sapli than 3 m) tall Herb-of size Woody height.	- Woody plants, excluding vines, 3 in. (7.6 cm) or in diameter at breast height (DBH), regardless of it. Ing/Shrub - Woody plants, excluding vines, less in. DBH and greater than or equal to 3.28 ft (1 in.) - All herbaceous (non-woody) plants, regardless, and woody plants less than 3.28 ft tall. If vine - All woody vines greater than 3.28 ft in.
50% of total cover:	= Total Cover:	Tree more height Sapli than 3 m) tall Herb-of size Woody height. Hydropi	- Woody plants, excluding vines, 3 in. (7.6 cm) or in diameter at breast height (DBH), regardless of it. ng/Shrub - Woody plants, excluding vines, less in. DBH and greater than or equal to 3.28 ft (1). - All herbaceous (non-woody) plants, regardless, and woody plants less than 3.28 ft tall. / vine - All woody vines greater than 3.28 ft in
50% of total cover:	= Total Cover:	Tree more height Sapli than 3 m) tall Herb-of size Woody height. Hydropi	- Woody plants, excluding vines, 3 in. (7.6 cm) or in diameter at breast height (DBH), regardless of it. Ing/Shrub - Woody plants, excluding vines, less in. DBH and greater than or equal to 3.28 ft (1 in.) - All herbaceous (non-woody) plants, regardless, and woody plants less than 3.28 ft tall. If vine - All woody vines greater than 3.28 ft in.
50% of total cover:	= Total Cover:	Tree more height Sapli than 3 m) tall Herb-of size Woody height. Hydropi	- Woody plants, excluding vines, 3 in. (7.6 cm) or in diameter at breast height (DBH), regardless of it. Ing/Shrub - Woody plants, excluding vines, less in. DBH and greater than or equal to 3.28 ft (1 in.) - All herbaceous (non-woody) plants, regardless, and woody plants less than 3.28 ft tall. If vine - All woody vines greater than 3.28 ft in.
50% of total cover: 10 Vine Stratum (Plot size:)	= Total Cover:	Tree more height Sapli than 3 m) tall Herb-of size Woody height. Hydropi	- Woody plants, excluding vines, 3 in. (7.6 cm) or in diameter at breast height (DBH), regardless of it. Ing/Shrub - Woody plants, excluding vines, less in. DBH and greater than or equal to 3.28 ft (1 in.) - All herbaceous (non-woody) plants, regardless, and woody plants less than 3.28 ft tall. If vine - All woody vines greater than 3.28 ft in.
50% of total cover:	= Total Cover:	Tree more height Sapli than 3 m) tall Herb-of size Woody height. Hydropi	- Woody plants, excluding vines, 3 in. (7.6 cm) or in diameter at breast height (DBH), regardless of it. Ing/Shrub - Woody plants, excluding vines, less in. DBH and greater than or equal to 3.28 ft (1 in.) - All herbaceous (non-woody) plants, regardless, and woody plants less than 3.28 ft tall. If vine - All woody vines greater than 3.28 ft in.
50% of total cover:	= Total Cover:	Tree more height Sapli than 3 m) tall Herb-of size Woody height. Hydropi	- Woody plants, excluding vines, 3 in. (7.6 cm) or in diameter at breast height (DBH), regardless of it. Ing/Shrub - Woody plants, excluding vines, less in. DBH and greater than or equal to 3.28 ft (1 in.) - All herbaceous (non-woody) plants, regardless, and woody plants less than 3.28 ft tall. If vine - All woody vines greater than 3.28 ft in.
50% of total cover:	= Total Cover:	Tree more height Sapli than 3 m) tall Herb-of size Woody height. Hydropi	- Woody plants, excluding vines, 3 in. (7.6 cm) or in diameter at breast height (DBH), regardless of it. Ing/Shrub - Woody plants, excluding vines, less in. DBH and greater than or equal to 3.28 ft (1 in.) - All herbaceous (non-woody) plants, regardless, and woody plants less than 3.28 ft tall. If vine - All woody vines greater than 3.28 ft in.
50% of total cover:	= Total Cover:	Tree more height Sapli than 3 m) tall Herb-of size Woody height. Hydropi	- Woody plants, excluding vines, 3 in. (7.6 cm) or in diameter at breast height (DBH), regardless of it. Ing/Shrub - Woody plants, excluding vines, less in. DBH and greater than or equal to 3.28 ft (1 in.) - All herbaceous (non-woody) plants, regardless, and woody plants less than 3.28 ft tall. If vine - All woody vines greater than 3.28 ft in.
50% of total cover:	= Total Cover:	Tree more height Sapli than 3 m) tall Herb-of size Woody height. Hydropi	- Woody plants, excluding vines, 3 in. (7.6 cm) or in diameter at breast height (DBH), regardless of it. Ing/Shrub - Woody plants, excluding vines, less in. DBH and greater than or equal to 3.28 ft (1 in.) - All herbaceous (non-woody) plants, regardless, and woody plants less than 3.28 ft tall. If vine - All woody vines greater than 3.28 ft in.

San Bring so to 15.69/51 - UNS-14

(inches)	Matrix		pth needed to docum	x Features			
(inches)	Color (moist)	_% a_	Color (moist)		ype ¹ Loc ²	<u>Texture</u>	Remarks
	10 4K 5/2	95	7.541 5 6	5	<u>c</u> _ ~	Siltday	
-18	10412 5/6	70					
	10412 4/3	30					
			-				
						-	
					_	-	
							-
		etion, RM	I=Reduced Matrix, MS	=Masked Sar	nd Grains.		_=Pore Lining, M=Matrix.
ydric Soil I							tors for Problematic Hydric Soils ³ :
_ Histosol			Dark Surface				cm Muck (A10) (MLRA 147)
Histic ⊨p Black His	ipedon (A2)		Polyvalue Bel				oast Prairie Redox (A16)
	n Sulfide (A4)		Thin Dark Sur Loamy Gleye		_KA 147, 14 8)		(MLRA 147, 148)
	Layers (A5)		Z Depleted Mate			— Pi	iedmont Floodplain Soils (F19) (MLRA 136, 147)
	ck (A10) (LRR N)		Redox Dark S			V	ery Shallow Dark Surface (TF12)
	Below Dark Surface	(A11)	Depleted Dari)		ther (Explain in Remarks)
	rk Surface (A12)		Redox Depres	sions (F8)		_	,
	ucky Mineral (S1) (LF	RR N,	Iron-Mangane		12) (LRR N,		
	147, 148)		MLRA 136	•		2	
	eyed Matrix (S4)		Umbric Surfac			³Indi	cators of hydrophytic vegetation and
	edox (S5) Matrix (S6)		Piedmont Floo Red Parent M			•	tland hydrology must be present,
	ayer (if observed):	_	Ned Falent W	aterial (FZ1) (WILKA 127, 14	+r) unic	ess disturbed or problematic.
Type:	L IA						
	hes):					Hydric Soil	Present? Yes X No
emarks:						Tryunc 3011	Fresentr res_/_ NO
SITIOTING.							

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WETLAND DETERMINATION DATA FORM – Eastern Mountains and Piedmont Region Solar _ City/County: _ Applicant/Owner: Sampling Date:_ Investigator(s): LD Sampling Point: TOI- WAS Section, Township, Range:_ Landform (hillslope, terrace, etc.): ___ hillside Local relief (concave, convex, none): _Concaul Subregion (LRR or MLRA): LREN 36.836091 Long: 85.699861 Soil Map Unit Name: Are climatic / hydrologic conditions on the site typical for this time of year? Yes NWI classification: Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? (If no, explain in Remarks.) Are "Normal Circumstances" present? Yes _____ No ___ Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? (If needed, explain any answers in Remarks.) SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc. Hydrophytic Vegetation Present? Hydric Soil Present? is the Sampled Area Wetland Hydrology Present? within a Wetland? Remarks: upland point associated W wettend . TOI-WFT-08 HYDROLOGY Wetland Hydrology Indicators: Primary Indicators (minimum of one is required; check all that apply) Secondary Indicators (minimum of two required) Surface Water (A1) ___ Surface Soil Cracks (B6) __ True Aquatic Plants (B14) High Water Table (A2) Sparsely Vegetated Concave Surface (B8) ___ Hydrogen Sulfide Odor (C1) Saturation (A3) Drainage Patterns (B10) Oxidized Rhizospheres on Living Roots (C3) Water Marks (B1) Moss Trim Lines (B16) Presence of Reduced Iron (C4) Sediment Deposits (B2) Dry-Season Water Table (C2) Recent Iron Reduction in Tilled Soils (C6) Drift Deposits (B3) Crayfish Burrows (C8) Thin Muck Surface (C7) Algal Mat or Crust (B4) Saturation Visible on Aerial Imagery (C9) Other (Explain in Remarks) Iron Deposits (B5) Stunted or Stressed Plants (D1) Inundation Visible on Aerial Imagery (B7) Geomorphic Position (D2) Water-Stained Leaves (B9) Shallow Aquitard (D3) __ Aquatic Fauna (B13) Microtopographic Relief (D4) Field Observations: __ FAC-Neutral Test (D5) Surface Water Present? Depth (inches):____ Water Table Present? Saturation Present? (includes capillary fringe) Wetland Hydrology Present? Yes____ Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available: Remarks:

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VEGETATION (Four Strata) - Use scienti	Absolute Domina	Sampling Point: 70/-()
1. Cura Ovata	% Cover Specie	int Indicator Status Dominance Test worksheet:
3 (+ 0)	/5 X	Number of Do-
3. Acer rubyum		
The state of the s		FACU FACV. OF FAC:
4		Total Number of Dominant
U		Species Across All Strata:
6		Percent of Dominion
6		That Are OBL, FACW, or FAC: 20
7		That Are OBL, FACW, or FAC: 20
	20 - Tat-10	Prevalence Index worksheet:
Sapling/Shrub Steet 50% of total cover:	TOTAL CON	ver Total % Cover of
Plot size:	20% of total cover	OBL species x 1 = FACW species
		FACW species
2		FACW species x 2 =
3		x3=
4		×4-
5		UPL species ×5 =
0		Column Totals:
v		(2)
	-	Frevalence Indox
	-	Hydrophytic Vegetation Indicators:
S		1 - Rapid T- 44
		1 - Rapid Test for Hydrophytic Vegetation
		— 2 Dominance Test is >50%
erb Stratum (Plot size: 50% of total cover:	= Total Cover	3 - Prevalence Index is ≤3.0¹
erb Stratum (Plot size: 50% of total cover:	20% of total cover:	4 - Morphological Adaptations ¹ (Provide supporting
Settler meday		data in Remarks or on a separate sheet)
Schodonerous arundenares		Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic. Definitions of Four Vegetation Strata:
		vegetation Strata:
		Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DRH)
		more in diameter at breast height (DBH), regardless of height.
		neight.
		Sapling/Shrub - Wood
The state of the s		
		than 3 in. DBH and greater than
		Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than or equal to 3.28 ft (1
	35	m) tall. 3.28 ft (1
50% of total cover: 47.5	= Total Cover	Herb – All borbas
50% of total cover: 47.5	= Total Cover 20% of total cover:	Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall
(Flot Size:)	5 = Total Cover 20% of total cover:	Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall
50% of total cover: 47.5	5 = Total Cover 20% of total cover:	Herb – All borbas
(Flot Size:)	5 = Total Cover 20% of total cover:	Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall
(Flot Size:)	5 = Total Cover 20% of total cover:	Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall
(Flot Size:)	5 = Total Cover 20% of total cover:	Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall
(Flot Size:)	5 = Total Cover 20% of total cover:	Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vine – All woody vines greater than 3.28 ft in
(Flot Size:)	= Total Cover 20% of total cover:	Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vine – All woody vines greater than 3.28 ft in height.
FOOL 1:	= Total Cours	Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vine – All woody vines greater than 3.28 ft in Hydrophytic Vegetation
FOOL 1:	= Total Cours	Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vine – All woody vines greater than 3.28 ft in height.
FOOL 1:	= Total Cours	Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vine – All woody vines greater than 3.28 ft in height. Hydrophytic Vegetation Present?
50% of total	= Total Cours	Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vine – All woody vines greater than 3.28 ft in height. Hydrophytic Vegetation Present?
FOOL 1:	= Total Cours	Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vine – All woody vines greater than 3.28 ft in height. Hydrophytic Vegetation Present?
FOOL 1:	= Total Cours	Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vine – All woody vines greater than 3.28 ft in height. Hydrophytic Vegetation Present?
FOOL 1:	= Total Cours	Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vine – All woody vines greater than 3.28 ft in height. Hydrophytic Vegetation Present?
FOR to	= Total Cours	Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vine – All woody vines greater than 3.28 ft in height. Hydrophytic Vegetation Present?
FOR to	= Total Cours	Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vine – All woody vines greater than 3.28 ft in height. Hydrophytic Vegetation Present?

Case No. 2025-00064	
Reponse to 1-69 Sannaling Bounts	5

Color Colo	Depth	Matrix			Features				
17- 12				Color (moist)	% Type¹			Remarks	
Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. Indicators for Problematic Hydric Soils³: Loand (RIC A101) (MLRA 147) Loand (RIC A102) (MLRA 147) Depleted Dark Surface (S9) (MLRA 147, 148) Loandy Gleyed Matrix (F3) Loandy Gleyed Matrix (F3) Sandy Mucky Mineral (S1) (LRR N, MLRA 136, 122) Sandy Mucky Mineral (S1) (LRR N, MLRA 136, 122) Sandy Redox (S5) Stripped Matrix (S4) Sandy Redox (S5) Stripped Matrix (S6) Red Parent Material (F21) (MLRA 127, 147) Type: NP					= $=$				
Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. 2	4-12	- 11							
Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. Thype: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. Thid Cark Surface (S7) Dark Surface (S7) Dark Surface (S9) (MLRA 147, 148) Loamy Gleyed Matrix (F2) Depleted Below Surface (A12) Sandy Muck (A10) (LRR N) Depleted Below Dark Surface (A11) Depleted Dark Surface (F1) Thick Dark Surface (A12) Sandy Mucky Mineral (S1) (LRR N, MLRA 136) Sandy Mucky Mineral (S1) (LRR N, MLRA 136) Sandy Redox (S5) Sandy Redox (S5) Sandy Redox (S5) Sandy Redox (S5) Stripped Matrix (S6) Red Parent Material (F21) (MLRA 127, 147) Depth (inches): Type: Cervicus And Surface (TF12) Type: Cervicus And Surface (TF12) Type: Cervicus And Surface (TF12) (MLRA 127, 147) Type: Cervicu			10			1			
Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. PL=Pore Lining, M=Matrix. Indicators for Problematic Hydric Soils*: Histosol (A1)	12-14	104R 560	95						
Hydric Soil Indicators: Histosol (A1) Histosol (A2) Black Histic (A3) Hydrogen Sulfide (A4) Stratified Layers (A5) Depleted Below Dark Surface (A11) Thick Dark Surface (A12) Sandy Mucky Mineral (S1) (LRR N, MLRA 147, 148) Sandy Gleyed Matrix (S4) Sandy Gleyed Matrix (S4) Sandy Redox (S5) Sandy Redox (S5) Sandy Redox (S5) Stripped Matrix (S6) Redox Dark Surface (F13) (MLRA 136, 142) Whore Matrix (S6) Redox Depressions (F8) Liron-Manganese Masses (F12) (LRR N, MLRA 136, 122) Piedmont Floodplain Soils (F19) (MLRA 136, 147) Very Shallow Dark Surface (TF12) Other (Explain in Remarks) **Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.** Redox Depressions (F8) Hydric Soil Present? Yes No		109R 4/1	5			**			
Hydric Soil Indicators: Histosol (A1) Histosol (A2) Black Histic (A3) Hydrogen Sulfide (A4) Stratified Layers (A5) Depleted Below Dark Surface (A11) Thick Dark Surface (A12) Sandy Mucky Mineral (S1) (LRR N, MLRA 147, 148) Sandy Gleyed Matrix (S4) Sandy Redox (S5) Stripped Matrix (S6) Stripped Matrix (S6) Stripped Matrix (S6) Redox Dark Surface (F13) (MLRA 136, 142) Sandy Redox Dark Surface (F13) (MLRA 136, 142) Sandy Redox Matrix (S6) Redox Depressions (F8) Liron-Manganese Masses (F12) (LRR N, MLRA 136, 122) Piedmont Floodplain Soils (F19) (MLRA 136, 147) Very Shallow Dark Surface (TF12) Other (Explain in Remarks) **Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic. **Redox Perent Material (F21) (MLRA 127, 147) Depth (inches): **Indicators of Problematic Hydric Soils*: **Indicators of Problematic Hydric Soils*: **Indicators of Problematic Hydric Soils*: **Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic. **Redox Perent Material (F21) (MLRA 127, 147) **Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic. **Remarks:** Hydric Soil Present? Yes No									
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Histic Epipedon (A2) Black Histic (A3) Hydrogen Sulfide (A4) Stratified Layers (A5) Depleted Matrix (F3) Depleted Below Dark Surface (A12) Sandy Mucky Mineral (S1) (LRR N, MLRA 147, 148) Sandy Gleyed Matrix (S4) Sandy Gleyed Matrix (S4) Sandy Redox (S5) Stripped Matrix (S6) Redox Dark Surface (F13) (MLRA 136, 122) Depleted Below Dark Surface (F13) (MLRA 147, 148) MLRA 147, 148) Sandy Redox (S5) Stripped Matrix (S6) Red Parent Material (F21) (MLRA 127, 147) Depth (inches): Hydric Soil Present? Yes No	-			Davis Confesso	(07)			•	
Black Histic (A3)						II DA 1/17 1/18\			7)
Hydrogen Sulfide (A4) Stratified Layers (A5) Depleted Matrix (F3) Depleted Below Dark Surface (A11) Thick Dark Surface (A12) Sandy Mucky Mineral (S1) (LRR N, MLRA 147, 148) Sandy Gleyed Matrix (S4) Sandy Redox (S5) Stripped Matrix (S6) Red Parent Material (F21) (MLRA 127, 147) Depth (inches): Hydric Soil Present? Yes No								, ,	
2 cm Muck (A10) (LRR N)	Hydroge	n Sulfide (A4)				,		•	19)
Depleted Below Dark Surface (A11) Thick Dark Surface (A12) Sandy Mucky Mineral (S1) (LRR N, MLRA 147, 148) Sandy Gleyed Matrix (S4) Sandy Redox (S5) Stripped Matrix (S6) Stripped Matrix (S6) Red Parent Material (F21) (MLRA 127, 147) Depth (inches): Depleted Dark Surface (F7) Depleted Dark Surface (F12) (LRR N, MLRA 136, 122) SIndicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic. Hydric Soil Present? Yes		- ' '		-					
Thick Dark Surface (A12) Sandy Mucky Mineral (S1) (LRR N, MLRA 147, 148) Sandy Gleyed Matrix (S4) Sandy Redox (S5) Stripped Matrix (S6) Red Parent Material (F21) (MLRA 127, 147) Depth (inches): Hydric Soil Present? Yes No Redox Depressions (F8) Iron-Manganese Masses (F12) (LRR N, MLRA 136) Jumbric Surface (F13) (MLRA 136, 122) Jumbric Surface (F13) (MLRA 136, 122) Jumbric Surface (F13) (MLRA 148) Wetland hydrology must be present, unless disturbed or problematic. Hydric Soil Present? Yes No Remarks:			(A11)						TF12)
Sandy Mucky Mineral (S1) (LRR N, MLRA 147, 148) Sandy Gleyed Matrix (S4) Sandy Redox (S5) Stripped Matrix (S6) Restrictive Layer (if observed): Type: Depth (inches): MLRA 136) Iron-Manganese Masses (F12) (LRR N, MLRA 136, 122) Jumbric Surface (F13) (MLRA 136, 122) Jumbric Surface (F13) (MLRA 136, 122) Jumbric Surface (F13) (MLRA 148) Wetland hydrology must be present, unless disturbed or problematic. Hydric Soil Present? Yes No No Hydric Soil Present? Yes No			יייי (מויו)	-	• •		Other (Expi	ain in Remarks)	
Sandy Gleyed Matrix (S4) Sandy Redox (S5) Stripped Matrix (S6) Restrictive Layer (if observed): Type: Depth (inches): Depth (inches): Sandy Gleyed Matrix (S4) Umbric Surface (F13) (MLRA 136, 122) Piedmont Floodplain Soils (F19) (MLRA 148) Red Parent Material (F21) (MLRA 127, 147) Wetland hydrology must be present, unless disturbed or problematic. Hydric Soil Present? Yes No No			RR N,			₋RR N,			
Sandy Redox (S5) Piedmont Floodplain Soils (F19) (MLRA 148) wetland hydrology must be present, unless disturbed or problematic. Restrictive Layer (if observed): Type:									
Stripped Matrix (S6) Red Parent Material (F21) (MLRA 127, 147) unless disturbed or problematic. Restrictive Layer (if observed): Type:									
Restrictive Layer (if observed): Type:XIR Depth (inches): Hydric Soil Present? Yes No X									
Type: Hydric Soil Present? Yes No X				Red Falent M	aterial (FZ1) (IVILK	121, 141)	uniess distun	oed or problemati	C.
Remarks:		* 50		20		- 1/			
Remarks:	Type.					Hydri	c Soil Present?	Yes	$N_{o}X$
No Hydrin Suil									
No Mysin Sill									
	Depth (inc	hes):							
	Depth (inc	hes):	Sil						
	Depth (inc	hes):	Sil						
	Depth (inc	hes):	Sil						
	Depth (inc	hes):	Sil						
	Depth (inc	hes):	Sil						
	Depth (inc	hes):	Sil						
	Depth (inc	hes):	Suil						
	Depth (inc	hes):	Sil						
	Depth (inc	hes):	Suil						
	Depth (inc	hes):	Suil						
	Depth (inc	hes):	S.:1						
	Depth (inc	hes):	Sil						
	Depth (inc	hes):	Sil						
	Depth (inc	hes):	Sil						
	Depth (inc	hes):	Sil						
	Depth (inc	hes):	Suil						
	Depth (inc	hes):	Sil						
	Depth (inc	hes):	Sil						

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WETLAND DE	TERMINATION DATA FORM	Page 219 of 794 - Eastern Mountains and Piedmont Region	
Project/Site:	ach Solar	- castern Mountains and Piedmont Region	
Applicant/Owner: Cande	la vernuntes City/C	County: Summer Shall Sampling Date: U-	10
Investigator(s):	D	State: (2	19-
Landform (hillslope, terrace, etc.):	Section Section	on, Township, Range: State: Sampling Point: Tol	- U
Subregion (LRR or MI PA)	Local relie	lar v	
Soil Map Unit Name:	Lat: 360.83604		-1
Are climatic / hydrolani	Nk	Long: 65. 699 735 Datum: 1 6	08
Are climatic / hydrologic conditions on the Are Vegetation, Soil	e site typical for this time of year? Ye		
Are Vegetation, Soil, or l	hydrologysignificantly disturbs	es No (If no, explain in Remarks.)	
Are Vegetation, Soil, or F	lydrologynaturally problems	Are "Normal Circumstances" present? Yes No	
SUMMARY OF FINDINGS - At	tach site man showing	(If needed, explain any answers in Remarks.)	
Hydrophytic Vegetation Property	showing samp	ic? (If needed, explain any answers in Remarks.) oling point locations, transects, important features	
	Yes No	, important realures	, etc
Wetland Hydrology Present?		s the Sampled Area vithin a Wetland?	
Remarks:		No No	
WETLAND buil			
	associated est	Welland = TOLLIN	
	/	101-WET-09	
VDBOLOGU:			
YDROLOGY		PEM PFO	
Vetland Hydrology Indicators:			-
rimary Indicators (minimum of one is requested Surface Water (A1)	uired; check all that apply)	Secondary Indicators (minimum of two required	
Surface Water (A1) High Water Table (A2)	True Aquatic Plants (B14)	Surface Soil Cracks (B6)	1)
Saturation (A3)	- Hydrogen Sulfide Odor (C1	Sparsely Vegetated Concave Surface (Ba)	
Water Marks (B1)	Oxidized Rhizospheres on	Living D. (B10)	1
Sediment Deposits (B2)	reactice of Reduced from	(C4) Moss Trim Lines (B16)	- 1
Drift Deposits (B3)	— Recent Iron Reduction in Ti	Dry-Season Water Table (page)	
Algal Mat or Crust (B4)	—— ···// Миск Surface (С7)	Crayfish Burrows (C8)	
Iron Deposits (R5)	Other (Explain in Remarks)	Saturation Visible on Aerial Imagery (Cg)	
Inundation Visible on Aerial Imagery (B)			
Clamed Leaves (Rg)	")	Geomorphic Position (D2)	T
Aquatic Fauna (B13)		— Granow Aquitard (D3)	
d Observations:		Microtopographic Relief (D4)	
ace Water Present?		FAC-Neutral Test (D5)	
er Table Present?	Depth (inches):		1
ration Present?	Bopui (inches):		
	O Depth (inches):	Wetland Hydrology Present? Yes	
ribe Recorded Data (stream gauge, mon	itoring well, aerial photos, previous ins	Spectional if	
arks;		spections), if available:	+

Case No. 2025-00064 Reponse to 1-69 Page 220 of 794

Absolute	Dominant	Indicator	Sampling Point:	DI- DAL
% Cover	Species?	Status	lest worksneet:	
			That Are ORL FACILITY	Z
				3
			Total Number of Dominant	2
			Species Across All Strata:	(
			Percent of Dominant Species	
			That Are OBL, FACW, or FAC:	
			Prevalence Index workshoot	
=======================================	_	r	Total % Cover of	
20% of to	otal cover:_		OBL species	by:
			FACW species	-
			FAC species	
			FACU species	
			UPL species X4 =	
<u> </u>				
			(A)	(E
-			Prevalence Index = B/A =	
			Hydrophytic Vegetation Indicators	
			1 - Rapid Test for Hydrophylic V	
		.	2 - Dominance Test is SERV	on
	ntal Cours		3 - Prevalence Index is <2.01	
20% of tota	il cover	1_	4 - Morphological Adoptetis 1 -	
	. 00,0,,		data in Remarks	supporting
30	X +	Dal	Problematic Hudsants in a separate she	eet)
	1	1	Experience riverophytic Vegetation (Ex	(plain)
1/5		A .	ndigators of bydrig poil and	
				gy must
	- F	71 De	efinitions of Four Vegetation Strate	
		Te	en Wester	
		mo	ore in diameter at breast balak (25) in. (7	.6 cm) or
		he	ight. (DBH), rega	rdless of
		- Sa	nling/Shout w	
		- tha	in 3 in. DBH and greater then	es, less
		m)	tall.	28 ft (1
50		- Her	b - All herbaceous /	
90 = Total	Cover	Her of s	b – All herbaceous (non-woody) plants, reg ize, and woody plants less than 3.28 thell	ardless
90 = Total 20% of total co	Cover		promite leas trial 3.28 ft fall.	10
= Total 20% of total co	Cover over:10		promite leas trial 3.28 ft fall.	10
90 = Total 20% of total co	Cover		b – All herbaceous (non-woody) plants, regize, and woody plants less than 3.28 ft tall. ody vine – All woody vines greater than 3.2 pht.	10
男〇 = Total _ 20% of total co	Cover		promite leas trial 3.28 ft fall.	10
男〇 = Total _ 20% of total co	Cover		promite leas trial 3.28 ft fall.	10
男〇 = Total _ 20% of total co	Cover	Wood heig	ody vine – All woody vines greater than 3.2 tht.	10
_ 20% of total co	over:_16	Woodheig	ody vine – All woody vines greater than 3.2 tht.	10
= Total C 20% of total cover.)	over: 16	Woodheig	ody vine – All woody vines greater than 3.2 tht.	10
	= To 20% of tota 36	= Total Cover 20% of total cover: = Total Cover 20% of total cover: 30	= Total Cover 20% of total cover: = Total Cover 20% of total cover: - Total Cover 20% of total cover: - Total Cover - Total C	Number of Dominant Species That Are OBL, FACW, or FAC: Total Number of Dominant Species Across All Strata: Percent of Dominant Species That Are OBL, FACW, or FAC: Prevalence Index worksheet: Total % Cover of: Multiph OBL species x 1 = FACW species x 2 = FACW species x 3 = FACU species x 4 = UPL species x 4 = UPL species x 5 = Column Totals: (A) Prevalence Index = B/A = Hydrophytic Vegetation Indicators: 1 - Rapid Test for Hydrophytic Vegetation Y 2 - Dominance Test is >50% 3 - Prevalence Index is ≤3.0¹ 4 - Morphological Adaptations¹ (Provide data in Remarks or on a separate sheep of the present, unless disturbed or problematic. Indicators of hydric soil and wetland hydrolog be present, unless disturbed or problematic. Definitions of Four Vegetation Strata:

SOIL

Depth <u>Matrix</u>		x Features			
(inches) Color (moist) %	Color (moist)	%Type	100	Texture	Remarks
0-18 1048 6/7 90	59124/6	70 C	MPL.	silt day	
Type: C=Concentration, D=Depletion, I	RM=Reduced Matrix, MS	=Masked Sand 0	Grains. 2		re Lining, M=Matrix. for Problematic Hydric Soils³:
Histosol (A1)	Dark Surface			2 cm N	luck (A10) (MLRA 147)
Histic Epipedon (A2)		ow Surface (S8)		18) Coast	Prairie Redox (A16)
Black Histic (A3)		face (S9) (MLRA	147, 148)	•	RA 147, 148)
Hydrogen Sulfide (A4) Stratified Layers (A5)	Loamy Gleye X Depleted Mat				ont Floodplain Soils (F19) RA 136, 147)
2 cm Muck (A10) (LRR N)	Redox Dark S				hallow Dark Surface (TF12)
Depleted Below Dark Surface (A11)	Depleted Dar	k Surface (F7)		-	Explain in Remarks)
Thick Dark Surface (A12)	Redox Depre				
Sandy Mucky Mineral (S1) (LRR N,		se Masses (F12)	(LRR N,		
MLRA 147, 148) Sandy Gloved Matrix (S4)	MLRA 136	•	26 420\	31 11	
Sandy Gleyed Matrix (S4) Sandy Redox (S5)		ce (F13) (MLRA 1 odplain Soils (F19			s of hydrophytic vegetation and hydrology must be present,
Stripped Matrix (S6)		aterial (F21) (ML			nydrology must be present, isturbed or problematic.
Restrictive Layer (if observed):				4,11000	iotalizada di probiotitation
Type:NA					
Depth (inches):				Hydric Soil Pres	ent? Yes No
Remarks:					^

Case No. 2025-00064 Reponse to 1-69 WETLAND DETERMINATION DATA FORM - Eastern Mountains and Piedmont Region 2 o City/County: ___ Project/Site: Applicant/Owner: _ Section, Township, Range: Investigator(s): _ Tousupe Local relief (concave, convex, none): ____ Concaut____ Landform (hillslope, terrace, etc.): Long: 85. 694276 Datum: NAD 83 GZ Subregion (LRR or MLRA): __LQQN Lat: NWI classification: ______ \rightarrow \text{NH} Soil Map Unit Name: ___ __ (If no, explain in Remarks.) Are climatic / hydrologic conditions on the site typical for this time of year? Yes Are "Normal Circumstances" present? Yes ______ No ___ Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? __, Soil _____, or Hydrology ____ naturally problematic? (If needed, explain any answers in Remarks.) Are Vegetation ___ SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc. Hydrophytic Vegetation Present? is the Sampled Area within a Wetland? Hydric Soil Present? Wetland Hydrology Present? Upland print associated w/ wetland - 701 - WET-04 Remarks: **HYDROLOGY** Secondary Indicators (minimum of two required) Wetland Hydrology Indicators: Surface Soil Cracks (B6) Primary Indicators (minimum of one is required; check all that apply) Sparsely Vegetated Concave Surface (B8) True Aquatic Plants (B14) Surface Water (A1) __ Drainage Patterns (B10) ___ Hydrogen Sulfide Odor (C1) ___ High Water Table (A2) Moss Trim Lines (B16) _ Oxidized Rhizospheres on Living Roots (C3) __ Saturation (A3) Dry-Season Water Table (C2) Presence of Reduced Iron (C4) Water Marks (B1) Recent Iron Reduction in Tilled Soils (C6) Crayfish Burrows (C8) Sediment Deposits (B2) Saturation Visible on Aerial Imagery (C9) Thin Muck Surface (C7) Drift Deposits (B3) Stunted or Stressed Plants (D1) Other (Explain in Remarks) __ Algal Mat or Crust (B4) Geomorphic Position (D2) __ Iron Deposits (B5) Shallow Aquitard (D3) Inundation Visible on Aerial Imagery (B7) Microtopographic Relief (D4) ___ Water-Stained Leaves (B9) FAC-Neutral Test (D5) _ Aquatic Fauna (B13) Field Observations: Yes ____ No X Depth (inches):_ Surface Water Present? Yes ____ No _ X Depth (inches):___ Water Table Present? Wetland Hydrology Present? Yes _____ No X Depth (inches): Saturation Present? (includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available: Remarks:

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Reponse to 1-69
Page 223-of 794
As-

VEGETATION (Four Strata) – Use scientific names of plants.

(A) (B) (50) (A/B)
7 (B)
50
50
50 (A/B)
(A/B)
-
Multiply by:
x 1 =
x 2 =
x 3 =
x 4 =
x 5 =
A)(B)
A)(b)
ators:
ytic Vegetation
%
01
ons ¹ (Provide supporting
separate sheet)
egetation¹ (Explain)
ogotation (Explain)
tland hydrology must
problematic.
1 Strata:
vines, 3 in. (7.6 cm) or ht (DBH), regardless of
it (DBI I), regardless of
I. P
, excluding vines, less or equal to 3.28 ft (1
ody) plants, regardless
nan 3.28 ft tall.
greater than 3,28 ft in
No <u>X</u>

Sampling Peoint 1-69 1-1/AS-17

	Matrix		x Features			
hes) Color (me	oist) %	Color (moist)		Loc ² Tex		Remarks
-18 10412	6/2 85	75/2 4/6	16 C	MPL Sil	+ Cls	
10 10					- /	
		1 2 2 2				
ne: C=Concentration,	D=Depletion, F	M=Reduced Matrix, M	S=Masked Sand Gra	ins. ² Loca	tion: PL=Pore Linir	ig, M=Matrix.
iric Soil Indicators:						oblematic Hydric Soils ³ :
Histosol (A1)		Dark Surface	e (\$7)			(10) (MLRA 147)
Histic Epipedon (A2))	Polyvalue Be	elow Surface (S8) (N	ILRA 147, 148)	Coast Prairie	
Black Histic (A3)		Thin Dark S	urface (S9) (MLRA 1	47, 148)	(MLRA 14	
Hydrogen Sulfide (A	4)	Loamy Gley	ed Matrix (F2)			odplain Soils (F19)
Stratified Layers (A5		Depleted Ma			(MLRA 13	
2 cm Muck (A10) (LF	RR N)		Surface (F6)			Dark Surface (TF12) n in Remarks)
Depleted Below Darl	k Surface (A11)		rk Surface (F7)		Other (Explain	II III Kelliaika)
Thick Dark Surface (Redox Depr	essions (F8)	I DD N		
Sandy Mucky Minera	al (S1) (LRR N ,		nese Masses (F12) (LKK N,		
MLRA 147, 148)		MLRA 1	36)	ie 422\	3Indicators of h	drophytic vegetation and
Sandy Gleyed Matrix	x (S4)	Umbric Surf	ace (F13) (MLRA 13 loodplain Soils (F19)	(MLDA 148)	wetland hydro	logy must be present,
Sandy Redox (S5)		Piedmont F	Material (F21) (MLR	Δ 127 147)		ed or problematic.
Stripped Matrix (S6)		Red Parent	Material (FZ1) (MEN	A 121, 141)	GITTE CONTRACTOR	
strictive Layer (if ob						
Туре:	NI	1		1	Iric Soil Present?	Yes X No
				нус	Iric Soil Fresenti	163
Depth (inches):						
Depth (inches):						

Case No. 2025-00064 Reponse to 1-69

WETLAND DETERMINATION DATA FORM - Eastern Mountains and Piedmont Regions of 794 Applicant/Owner: _ Section, Township, Range:_____NA Investigator(s): _ Landform (hillslope, terrace, etc.): Toeslope Local relief (concave, convex, none): ___Concave Datum: AMD83 938967 Long: 85,693564 Subregion (LRR or MLRA): LRR N NWI classification: Soil Map Unit Name: ___ Are climatic / hydrologic conditions on the site typical for this time of year? Yes _____X (If no, explain in Remarks.) Are "Normal Circumstances" present? Yes Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? (If needed, explain any answers in Remarks.) Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc. Hydrophytic Vegetation Present? Is the Sampled Area Hydric Soil Present? within a Wetland? Wetland Hydrology Present? Remarks: Wetland Point associated HYDROLOGY Secondary Indicators (minimum of two required) Wetland Hydrology Indicators: Surface Soil Cracks (B6) Primary Indicators (minimum of one is required; check all that apply) Sparsely Vegetated Concave Surface (B8) True Aquatic Plants (B14) Surface Water (A1) ✓ Drainage Patterns (B10) ___ Hydrogen Sulfide Odor (C1) High Water Table (A2) ___ Moss Trim Lines (B16) Oxidized Rhizospheres on Living Roots (C3) X Saturation (A3) Dry-Season Water Table (C2) Presence of Reduced Iron (C4) Water Marks (B1) Crayfish Burrows (C8) Recent Iron Reduction in Tilled Soils (C6) ___ Sediment Deposits (B2) X Saturation Visible on Aerial Imagery (C9) Thin Muck Surface (C7) Drift Deposits (B3) Stunted or Stressed Plants (D1) Other (Explain in Remarks) Algal Mat or Crust (B4) X Geomorphic Position (D2) Iron Deposits (B5) Shallow Aquitard (D3) _ Inundation Visible on Aerial Imagery (B7) Microtopographic Relief (D4) _ Water-Stained Leaves (B9) FAC-Neutral Test (D5) Aquatic Fauna (B13) Field Observations: __ No ___ Depth (inches):_ Surface Water Present? X No Depth (inches): Water Table Present? Wetland Hydrology Present? Yes _____ No__ No Depth (inches):_ Saturation Present? (includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available: Remarks:

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Reponse to 1-69
Sampling Point 226 01794

VEGETATION (Four Strata) – Use scientific names of plants.

The second secon	Absolute Dominant Indicator	Dominance Test worksheet:
Tree Stratum (Plot size:) 1	% Cover Species? Status	Number of Dominant Species That Are OBL, FACW, or FAC:(A)
B. NA		Total Number of Dominant Species Across All Strata: (B)
		Percent of Dominant Species That Are OBL, FACW, or FAC: (A/B)
i		Prevalence Index worksheet:
, <u> </u>		Total % Cover of: Multiply by:
50% (1.1.1)	= Total Cover	OBL species x 1 =
	20% of total cover:	FACW species x 2 =
Sapling/Shrub Stratum (Plot size:)		FAC species x 3 =
		FACU species x 4 =
2		UPL species x 5 =
3		Column Totals: (A) (B)
4. NA		Column rotals.
5		Prevalence Index = B/A =
6		Hydrophytic Vegetation Indicators:
7		1 - Rapid Test for Hydrophytic Vegetation
8		2 - Dominance Test is >50%
9		3 - Prevalence Index is ≤3.0¹
	= Total Cover	4 - Morphological Adaptations ¹ (Provide supporting
	20% of total cover:	data in Remarks or on a separate sheet)
Herb Stratum (Plot size:)	.0	Problematic Hydrophytic Vegetation ¹ (Explain)
1. Indusina Palustrus	FACW	2 -
2. Schenlonerous avunlances	FACU	¹ Indicators of hydric soil and wetland hydrology must
3. Renainculus hispidly		be present, unless disturbed or problematic.
4. Juneus Fluxes		
5. Anthoxanthum odoratum	5 FACU	
6. Symphy offichum pilosum	_ Z FACU	Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.
8		Sapling/Shrub – Woody plants, excluding vines, less
9		than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.
11,		Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.
50% of total cover: 3 Woody Vine Stratum (Plot size:)	5.5 20% of total cover: 15.4	Woody vine – All woody vines greater than 3.28 ft in height.
1,		
Z		
3		•
4		Hydrophytic
5		Vegetation Present? Yes No No
	= Total Cover 20% of total cover:	Troseini
50% of total cover:	20% of total cover:	_ 1

SOIL

D=Depletion, F Surface (A11) A12) I (S1) (LRR N, (S4)	Color (moist) 7.5 YK 5 7	MS=Masked A MS=Ma	Type C C C C C C Sand Graduce (S8) (M C) (MLRA 1 C) (F2) C (MLRA 13 C) (MLRA 1	ILRA 147, 147, 148) LRR N, 36, 122)	Indicato	Remarks Pore Lining, M=Matrix. Pors for Problematic Hydric Som Muck (A10) (MLRA 147) ast Prairie Redox (A16) MLRA 147, 148) dmont Floodplain Soils (F19) MLRA 136, 147) ry Shallow Dark Surface (TF12) her (Explain in Remarks) sators of hydrophytic vegetation and hydrology must be present, ass disturbed or problematic.	and
D=Depletion, F Surface (A11) A12) I (S1) (LRR N, (S4) Served): NA	7.5 YK 5 7.5	MS=Masked face (S7) e Below Surface (S9) d Matrix (F3) Dark Surface (Fd) Dark Surface (Pd) Dark Surface (Pd) Dark Surface (F1) Dark Surface (F13) Dark Floodplain Seriace (F13)	C C C C C C C C C C C C C C C C C C C	And 147, 148) LRR N, 36, 122) (MLRA 1	2 Location: PL=1 Indicato 2 cn 148) Coa (II Ven Other 3 Indicate wetlate 48) wetlate 17) unles	ors for Problematic Hydric Som Muck (A10) (MLRA 147) ast Prairie Redox (A16) MLRA 147, 148) dmont Floodplain Soils (F19) MLRA 136, 147) ry Shallow Dark Surface (TF12) her (Explain in Remarks) eators of hydrophytic vegetation and hydrology must be present, has disturbed or problematic.	and
D=Depletion, F Surface (A11) A12) I (S1) (LRR N, (S4) Served):	RM=Reduced Matrix — Dark Surf — Polyvalue — Thin Dark — Loamy G — Redox Da — Redox Da — Redox Da — Iron-Man — MLRA — Umbric S — Piedmon — Red Pare	MS=Masked A MS=Ma	ice (S8) (N) (MLRA 1 (F2) F6) e (F7) F8) ses (F12) ((MLRA 13 Soils (F19)	Alar, 148) LRR N, 36, 122)	2Location: PL=I Indicato	ors for Problematic Hydric Som Muck (A10) (MLRA 147) ast Prairie Redox (A16) MLRA 147, 148) dmont Floodplain Soils (F19) MLRA 136, 147) ry Shallow Dark Surface (TF12) her (Explain in Remarks) eators of hydrophytic vegetation and hydrology must be present, has disturbed or problematic.	and
D=Depletion, F Surface (A11) A12) I (S1) (LRR N, (S4) Served): NA	RM=Reduced Matrix, Dark Surf Polyvalue Thin Dark Loamy G Depleted Redox Dark Depleted Redox Dark Iron-Man MLRA Umbric S Piedmon Red Pare	face (S7) e Below Surface (S9) d Matrix (F3) Our Surface (F4) Dark Surface (F4) Depressions	ice (S8) (N) (MLRA 1 (F2) F6) e (F7) F8) ses (F12) ((MLRA 13 Soils (F19)	ains. JILRA 147, 148) LRR N, 36, 122)	² Location: PL=1 Indicato 2 cm , 148) Coa	ors for Problematic Hydric Som Muck (A10) (MLRA 147) ast Prairie Redox (A16) MLRA 147, 148) dmont Floodplain Soils (F19) MLRA 136, 147) ry Shallow Dark Surface (TF12) her (Explain in Remarks) eators of hydrophytic vegetation and hydrology must be present, has disturbed or problematic.	and
D=Depletion, F R N) Surface (A11) A12) I (S1) (LRR N, (S4) Served):	RM=Reduced Matrix — Dark Surf — Polyvalue — Thin Dark Loamy G — Depleted — Redox Da — Redox Da — Redox Da — Iron-Man — Umbric S — Piedmon — Red Pare	rface (S7) e Below Surfa k Surface (S9) Gleyed Matrix (f3) Dark Surface (F4) Dark Surface (P6) Depressions (F6) Enganese Mass A 136) Surface (F13) Int Floodplain S	ice (S8) (N) (MLRA 1 (F2) F6) e (F7) F8) ses (F12) ((MLRA 13 Soils (F19)	ILRA 147, 147, 148) LRR N, 36, 122)	Indicato	ors for Problematic Hydric Som Muck (A10) (MLRA 147) ast Prairie Redox (A16) MLRA 147, 148) dmont Floodplain Soils (F19) MLRA 136, 147) ry Shallow Dark Surface (TF12) her (Explain in Remarks) eators of hydrophytic vegetation and hydrology must be present, has disturbed or problematic.	and
R N) Surface (A11) A12) I (S1) (LRR N, (S4) Served):	Dark Surf Polyvalue Thin Dark Loamy G Depleted Redox Da Redox Da Iron-Man MLRA Umbric S Piedmon Red Pare	rface (S7) e Below Surfa k Surface (S9) Gleyed Matrix (f3) Dark Surface (F4) Dark Surface (P6) Depressions (F6) Enganese Mass A 136) Surface (F13) Int Floodplain S	ice (S8) (N) (MLRA 1 (F2) F6) e (F7) F8) ses (F12) ((MLRA 13 Soils (F19)	ILRA 147, 147, 148) LRR N, 36, 122)	Indicato	ors for Problematic Hydric Som Muck (A10) (MLRA 147) ast Prairie Redox (A16) MLRA 147, 148) dmont Floodplain Soils (F19) MLRA 136, 147) ry Shallow Dark Surface (TF12) her (Explain in Remarks) eators of hydrophytic vegetation and hydrology must be present, has disturbed or problematic.	and
R N) Surface (A11) A12) I (S1) (LRR N, (S4) Served):	Dark Surf Polyvalue Thin Dark Loamy G Depleted Redox Da Redox Da Iron-Man MLRA Umbric S Piedmon Red Pare	rface (S7) e Below Surfa k Surface (S9) Gleyed Matrix (f3) Dark Surface (F4) Dark Surface (P6) Depressions (F6) Enganese Mass A 136) Surface (F13) Int Floodplain S	ice (S8) (N) (MLRA 1 (F2) F6) e (F7) F8) ses (F12) ((MLRA 13 Soils (F19)	ILRA 147, 147, 148) LRR N, 36, 122)	Indicato	ors for Problematic Hydric Som Muck (A10) (MLRA 147) ast Prairie Redox (A16) MLRA 147, 148) dmont Floodplain Soils (F19) MLRA 136, 147) ry Shallow Dark Surface (TF12) her (Explain in Remarks) eators of hydrophytic vegetation and hydrology must be present, has disturbed or problematic.	and
R N) Surface (A11) A12) I (S1) (LRR N, (S4) Served):	Dark Surf Polyvalue Thin Dark Loamy G Depleted Redox Da Redox Da Iron-Man MLRA Umbric S Piedmon Red Pare	rface (S7) e Below Surfa k Surface (S9) Gleyed Matrix (f3) Dark Surface (F4) Dark Surface (P6) Depressions (F6) Enganese Mass A 136) Surface (F13) Int Floodplain S	ice (S8) (N) (MLRA 1 (F2) F6) e (F7) F8) ses (F12) ((MLRA 13 Soils (F19)	ILRA 147, 147, 148) LRR N, 36, 122)	Indicato	ors for Problematic Hydric Som Muck (A10) (MLRA 147) ast Prairie Redox (A16) MLRA 147, 148) dmont Floodplain Soils (F19) MLRA 136, 147) ry Shallow Dark Surface (TF12) her (Explain in Remarks) eators of hydrophytic vegetation and hydrology must be present, has disturbed or problematic.	and
R N) Surface (A11) A12) I (S1) (LRR N, (S4) Served):	Dark Surf Polyvalue Thin Dark Loamy G Depleted Redox Da Redox Da Iron-Man MLRA Umbric S Piedmon Red Pare	rface (S7) e Below Surfa k Surface (S9) Gleyed Matrix (f3) Dark Surface (F4) Dark Surface (P6) Depressions (F6) Enganese Mass A 136) Surface (F13) Int Floodplain S	ice (S8) (N) (MLRA 1 (F2) F6) e (F7) F8) ses (F12) ((MLRA 13 Soils (F19)	ILRA 147, 147, 148) LRR N, 36, 122)	Indicato	ors for Problematic Hydric Som Muck (A10) (MLRA 147) ast Prairie Redox (A16) MLRA 147, 148) dmont Floodplain Soils (F19) MLRA 136, 147) ry Shallow Dark Surface (TF12) her (Explain in Remarks) eators of hydrophytic vegetation and hydrology must be present, has disturbed or problematic.	and
R N) Surface (A11) A12) I (S1) (LRR N, (S4) Served):	Dark Surf Polyvalue Thin Dark Loamy G Depleted Redox Da Redox Da Iron-Man MLRA Umbric S Piedmon Red Pare	rface (S7) e Below Surfa k Surface (S9) Gleyed Matrix (f3) Dark Surface (F4) Dark Surface (P6) Depressions (F6) Enganese Mass A 136) Surface (F13) Int Floodplain S	ice (S8) (N) (MLRA 1 (F2) F6) e (F7) F8) ses (F12) ((MLRA 13 Soils (F19)	ILRA 147, 147, 148) LRR N, 36, 122)	Indicato	ors for Problematic Hydric Som Muck (A10) (MLRA 147) ast Prairie Redox (A16) MLRA 147, 148) dmont Floodplain Soils (F19) MLRA 136, 147) ry Shallow Dark Surface (TF12) her (Explain in Remarks) eators of hydrophytic vegetation and hydrology must be present, has disturbed or problematic.	and
RR N) Surface (A11) A12) I (S1) (LRR N, (S4) Served):	Polyvalue Thin Dark Loamy G Depleted Redox Da Depleted Redox Da Iron-Man MLRA Umbric S Piedmon Red Pare	e Below Surface (S9, Gleyed Matrix (F3) Dark Surface (Fd Dark Surface (Pd Dark Surface (Pd Dark Surface (Pd Dark Surface (Pd Dark Surface (F13) Darface (F13) Darface (F13)	(MLRA 1) (MLRA 1) (F2) F6) e (F7) F8) ses (F12) ((MLRA 13) Soils (F19)	(47, 148) (LRR N, (36, 122)		m Muck (A10) (MLRA 147) ast Prairie Redox (A16) MLRA 147, 148) dmont Floodplain Soils (F19) MLRA 136, 147) ry Shallow Dark Surface (TF12) her (Explain in Remarks) stators of hydrophytic vegetation and hydrology must be present, ass disturbed or problematic.	and
NA						1.7	
						Present? Yes X No _	
					Hydric Soil P	resent? Yes/\NO_	_

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WETL	AND DETERMII	NATION DATA FORI	M – Eastern Mou	untains and Piedmont Region	
Project/Site:		C \	y/County: Swy		20/27
Applicant/Owner:	A	7 1 7 2		State: 14 Sampling Point: 10	wh
Investigator(s):	1/	Se Se		7 - 1	15.625
Landform (hillslope, terrace,				1	1
Subregion (LRR or MLRA)			relier (concave, conve	rex, none): Slope (%):	
		_ Lat:	Long		10.5 (K
Soil Map Unit Name:				NWI classification: W 🖟	
				(If no, explain in Remarks.)	
Are Vegetation, Soil	, or Hydrolog	gy significantly dis	turbed? Are "N	Normal Circumstances" present? Yes X N	No
Are Vegetation, Soil	, or Hydrolog	gy naturally proble	matic? (If nee	eded, explain any answers in Remarks.)	
SUMMARY OF FIND	NGS – Attach	site map showing sa	ampling point lo	ocations, transects, important feature	es. etc
Hydrophytic Vegetation Pro Hydric Soil Present? Wetland Hydrology Present Remarks:	esent? Yes Yes it? Yes	No_X No_X No_X	Is the Sampled A	Area d? Yes No	
upland	point (associated	cay to	etland - TOI-WET-	10
HYDROLOGY					
Wetland Hydrology Indica	ators:			Secondary Indicators (minimum of two reg	quired)
Primary Indicators (minimu	m of one is required	; check all that apply)		Surface Soil Cracks (B6)	
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 A Water-Stained Leaves Aquatic Fauna (B13)	2)) Aerial Imagery (B7)	Presence of Reduc	Odor (C1) eres on Living Roots ed Iron (C4) ion in Tilled Soils (C6) (C7)	Sparsely Vegetated Concave Surface Drainage Patterns (B10) (C3) Moss Trim Lines (B16) Dry-Season Water Table (C2) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (Cancel Stunted or Stressed Plants (D1) Geomorphic Position (D2) Shallow Aquitard (D3) Microtopographic Relief (D4) FAC-Neutral Test (D5)	
Field Observations:		d			
Surface Water Present?		Depth (inches):			
Water Table Present? Saturation Present?	Yes No	X Depth (inches): X Depth (inches):			X
(includes capillary fringe)				and Hydrology Present? Yes No	//
Describe Recorded Data (si	tream gauge, monito	oring well, aerial photos, pr	revious inspections),	if available:	
Remarks:					

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at Canadaa	Dominance Test wo			Absolute	rizo:	Troo Stratum (Dlat alas)
nt Species CW, or FAC: (A)	Number of Dominant That Are OBL, FACW			% Cover	size:)	1
	Total Number of Dom Species Across All St	_			4113	3
nt Species EW, or FAC: (A/E	Percent of Dominant That Are OBL, FACW				1	
workshoot	Prevalence Index wo					
of: Multiply by:						7
x 1 =		er	Total Cov	200/ -5	50% of total cover:	
x 2 =			iotal cover.	20 /6 01	um (Plot size:)	Sanling/Shrub Stratum (Pl
x 3 =					(1 101 0120)	
x 4 =						
x 5 =		-				
(A)(B)	. 1	\equiv				4
dex = B/A =	Prevalence Inde					
	Hydrophytic Vegetat					
for Hydrophytic Vegetation	1 - Rapid Test for					
Test is >50%	2 - Dominance Te					
Index is ≤3.0 ¹	3 - Prevalence Inc	-				9
al Adaptations¹ (Provide supportin	4 - Morphological		Total Cover		50% of total cover:	
arks or on a separate sheet)	data in Remar		otal cover,	2070 017	. (Herb Stratum (Plot size:
drophytic Vegetation ¹ (Explain)	Problematic Hydro	FACH	X	30		1. Schulonuous
		FACU	V	_ 5b		
soil and wetland hydrology must	Indicators of hydric so	FACH	X	410	nthum odoratum	3. Anthoxantho
disturbed or problematic.		FACIA			Jepanica	
Vegetation Strata:	Definitions of Four V				4.1	
s, excluding vines, 3 in. (7.6 cm) or	Tree - Woody plants,					
breast height (DBH), regardless of						
	height.					3,
oody plants, excluding vines, less	Sapling/Shrub – Woo)
greater than or equal to 3.28 ft (1	m) tall.					0.
	1					1.
us (non-woody) plants, regardless plants less than 3.28 ft tall.	of size, and woody pla		Total Cover:		50% of total cover: 5\	
oody vines greater than 3.28 ft in			otal cover.			Voody Vine Stratum (Plot s
	height.				- 12/	
					NH	
					- 1	
V	Hydrophytic Vegetation					
Yes No		_	Total Cove			
					50% of total cover:	
						Remarks: (Include photo nu
				20% of to	50% of total cover: hoto numbers here or on a separate s	Remarks: (Include photo nu

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SOIL

Sampling Point: Tol-WAS-11

epth <u>Matrix</u>	Redox Features		
nches) Color (moist) % 0-18 10 417 5/3 100	Color (moist) % Type ¹ Lo	Sitcher	Remarks
			
vpe: C=Concentration, D=Depletion, RM=	Reduced Matrix, MS=Masked Sand Grains.	² Location: PI =Po	re Lining, M=Matrix.
ydric Soil Indicators:	The state of the s	Indicators	for Problematic Hydric Soils ³ :
Histosol (A1)	Dark Surface (S7)	2 cm N	Muck (A10) (MLRA 147)
Histic Epipedon (A2)	Polyvalue Below Surface (S8) (MLRA	· —	Prairie Redox (A16)
_ Black Histic (A3) _ Hydrogen Sulfide (A4)	Thin Dark Surface (S9) (MLRA 147, 1 Loamy Gleyed Matrix (F2)		RA 147, 148) ont Floodplain Soils (F19)
Stratified Layers (A5)	Depleted Matrix (F3)		RA 136, 147)
2 cm Muck (A10) (LRR N)	Redox Dark Surface (F6)		hallow Dark Surface (TF12)
Depleted Below Dark Surface (A11)	Depleted Dark Surface (F7)	Other	(Explain in Remarks)
Thick Dark Surface (A12) Sandy Mucky Mineral (S1) (LRR N,	Redox Depressions (F8)	NI.	
MLRA 147, 148)	Iron-Manganese Masses (F12) (LRR I MLRA 136)	Ν,	
Sandy Gleyed Matrix (S4)	Umbric Surface (F13) (MLRA 136, 12)	2) ³ Indicator	s of hydrophytic vegetation and
Sandy Redox (S5)	Piedmont Floodplain Soils (F19) (MLR	•	hydrology must be present,
Stripped Matrix (S6)	Red Parent Material (F21) (MLRA 127	7, 147) unless o	listurbed or problematic.
strictive Layer (if observed): Type: \(\mathcal{N} \)			
Depth (inches):	-	Undeia Cail Dana	ent? Yes No
marks:	_	nyaric Soil Pres	ent? YesNo
marks.			
		i.e.	

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	The Wountains and Pleamont Region
Project/Site: Solar City/County:	
Applicant/Owner: Candula Yepewable,	State: Ky Sampling Point: 701-W AS-7
Investigator(s): Section, Township	
Landform (hillslope, terrace, etc.): Depression Local relief (concav	
Subregion (LRR or MLRA): Lat: _3(0.8379 (05	Long: 35-109-541(0 Datum: NAD-8-3/K4)
Soil Map Unit Name: Hu, 348, CKC2	NWI classification: QU3+
Are climatic / hydrologic conditions on the site typical for this time of year? Yes	No (If no, explain in Remarks.)
Are Vegetation, Soil, or Hydrology significantly disturbed?	Are "Normal Circumstances" present? Yes X No
Are Vegetation, Soil, or Hydrology naturally problematic?	(If needed, explain any answers in Remarks.)
SUMMARY OF FINDINGS – Attach site map showing sampling po	oint locations, transects, important features, etc.
Hudrig Soil Drocont?	ampled Area Wetland? Yes No
Wetland point associated will his	Hand = TOI-WET-11 PEM
HYDROLOGY	
Wetland Hydrology Indicators:	Secondary Indicators (minimum of two required)
Primary Indicators (minimum of one is required; check all that apply)	Surface Soil Cracks (B6)
X Surface Water (A1)	Sparsely Vegetated Concave Surface (B8)
High Water Table (A2) Hydrogen Sulfide Odor (C1)	✓ Drainage Patterns (B10)
X Saturation (A3) X Oxidized Rhizospheres on Living	St March 1970
Water Marks (B1) Presence of Reduced Iron (C4)	
Sediment Deposits (B2) Recent Iron Reduction in Tilled S	
Drift Deposits (B3) Thin Muck Surface (C7) Algal Mat or Crust (B4) Other (Explain in Remarks)	Saturation Visible on Aerial Imagery (C9) Stunted or Stressed Plants (D1)
Iron Deposits (B5)	Started of Stressed Plants (D1) X Geomorphic Position (D2)
Inundation Visible on Aerial Imagery (B7)	Shallow Aquitard (D3)
Water-Stained Leaves (B9)	Microtopographic Relief (D4)
Aquatic Fauna (B13)	X FAC-Neutral Test (D5)
Field Observations:	
Surface Water Present? Yes No Depth (inches):	
Water Table Present? Yes X No Depth (inches):	\ \ \ \
Saturation Present? Yes X No Depth (inches): 2	Wetland Hydrology Present? Yes No
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspe	ections), if available:
Remarks:	
	1

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Reponse to 1-69
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Sampling Point: 101-WAS - 26

VEGETATION (Four Strata) - Use scientific names of plants.

Dominant Indicator Status Fk \
Total Number of Dominant Species That Are OBL, FACW, or FAC: Total Number of Dominant Species Across All Strata: Percent of Dominant Species That Are OBL, FACW, or FAC: Prevalence Index worksheet: Total % Cover of: Multiply by: OBL species FACW species FAC species FAC species FACU species Y Y Here of Dominant Species Total % Cover of: Multiply by: OBL species Y FACW species Y FACW species Y FACU species Y
That Are OBL, FACW, or FAC:
Total Number of Dominant Species Across All Strata: Percent of Dominant Species That Are OBL, FACW, or FAC:
Species Across All Strata:
Percent of Dominant Species
Percent of Dominant Species
Percent of Dominant Species
Prevalence Index worksheet: Total % Cover of:
Total Cover OBL species
Total Cover OBL species
OBL species
OBL species x 1 = FACW species x 2 = FAC species x 3 = FACU species x 4 = UPL species x 5 = Column Totals: (A) (B) Prevalence Index = B/A = Hydrophytic Vegetation Indicators; 1 - Rapid Test for Hydrophytic Vegetation
FACW species x 2 = FAC species x 3 = FACU species x 4 = UPL species x 5 = Column Totals: (A) (B) Prevalence Index = B/A = Hydrophytic Vegetation Indicators: 1 - Rapid Test for Hydrophytic Vegetation
FAC species
FACU species x 4 =
UPL species
UPL species
Column Totals: (A) (B) Prevalence Index = B/A = Hydrophytic Vegetation Indicators; 1 - Rapid Test for Hydrophytic Vegetation
Prevalence Index = B/A = Hydrophytic Vegetation Indicators: 1 - Rapid Test for Hydrophytic Vegetation
Prevalence Index = B/A =
Hydrophytic Vegetation Indicators: 1 - Rapid Test for Hydrophytic Vegetation
Hydrophytic Vegetation Indicators: 1 - Rapid Test for Hydrophytic Vegetation
1 - Rapid Test for Hydrophytic Vegetation
2 - Dominance Test is >50%
3 - Prevalence Index is ≤3.0 ¹
Total Cover
tal cover: 4 - Morphological Adaptations¹ (Provide supporting
data in Remarks or on a separate sheet)
Problematic Hydrophytic Vegetation ¹ (Explain)
Problematic Hydrophytic Vegetation' (Explain)
X FACW
Indicators of hydric soil and wetland hydrology must
be present, unless disturbed or problematic.
Definitions of Four Vegetation Strata:
FACIA Demittoris of rodi vegetation strata:
Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or
more in diameter at breast height (DBH), regardless of
height.
Sapling/Shrub - Woody plants, excluding vines, less
3
m) tall.
Herb – All herbaceous (non-woody) plants, regardless
Total Cover of size, and woody plants less than 3.28 ft tall.
tal cover: 12.11 Woody vine – All woody vines greater than 3.28 ft in
height.
noight.

Hydrophytic
Vegetation
otal Cover Present? Yes No
al cover:
di 00V01

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SOIL

Page 233 of 794	1
Sampling Point:	401-WAS-20

rofile Description: (Describe to the de Depth Matrix		Features			STONE STORY
inches) Color (moist) %	Color (moist)	<u>%</u> Ty	pe¹ Loc²	Texture	Remarks
0-10 1092 5/1 85	5924/Ce	<u>15</u> <u>c</u> — –	MIPL	SiltyClay	
ype: C=Concentration, D=Depletion, RM	l=Reduced Matrix, MS=	-Masked San	d Grains.	² Location: PL=Pore	
_ Histosol (A1)	Dark Surface (C7\			or Problematic Hydric Soils ³ :
Histic Epipedon (A2)	Dark Surface (8) (MLRA 147 , 1		ck (A10) (MLRA 147) airie Redox (A16)
Black Histic (A3)	Thin Dark Surf			· —	aine Redox (A16) A 147, 148)
_ Hydrogen Sulfide (A4)	Noamy Gleyed		, ,		t Floodplain Soils (F19)
_ Stratified Layers (A5)	Depleted Matri				A 136, 147)
_ 2 cm Muck (A10) (LRR N)	Redox Dark Su			Very Sha	illow Dark Surface (TF12)
_ Depleted Below Dark Surface (A11)	Depleted Dark			Other (E	xplain in Remarks)
Thick Dark Surface (A12)	Redox Depress		(0) (100):		
Sandy Mucky Mineral (S1) (LRR N, MLRA 147, 148)	Iron-Manganes		ı∠) (LRR N,		
Sandy Gleyed Matrix (S4)	MLRA 136) Umbric Surface		Δ 136 122\	3Indicators	of hydrophytic vacatation and
Sandy Redox (S5)			A 136, 122) F19) (MLRA 148		of hydrophytic vegetation and various of hydrology must be present,
Stripped Matrix (S6)			/ILRA 127, 147)	· ·	turbed or problematic.
estrictive Layer (if observed):				4/1000 410	tarbed or problematic.
Type: _ Rock - Ded rock	_				
Depth (inches): 10				Hydric Soil Preser	t? Yes_X_ No
emarks:	_			nyunc son Freser	itr res NO
Marie Control of the					

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WETLAND DETERMINATION DATA FORM - Eastern Mountains and Piedmont Region Project/Site: City/County: Applicant/Owner: Investigator(s): Section, Township, Range: Landform (hillslope, terrace, etc.): Local relief (concave, convex, none): (LRRN Subregion (LRR or MLRA): Soil Map Unit Name: NWI classification: Are climatic / hydrologic conditions on the site typical for this time of year? Yes (If no, explain in Remarks.) Are Vegetation _____, Soil ____, or Hydrology significantly disturbed? Are "Normal Circumstances" present? Yes Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? (If needed, explain any answers in Remarks.) SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc. Hydrophytic Vegetation Present? Is the Sampled Area Hydric Soil Present? within a Wetland? Wetland Hydrology Present? Remarks; acso conted uplandpoint **HYDROLOGY** Wetland Hydrology Indicators: Secondary Indicators (minimum of two required) Primary Indicators (minimum of one is required; check all that apply) Surface Soil Cracks (B6) Surface Water (A1) ___ True Aquatic Plants (B14) Sparsely Vegetated Concave Surface (B8) High Water Table (A2) Hydrogen Sulfide Odor (C1) Drainage Patterns (B10) Saturation (A3) Oxidized Rhizospheres on Living Roots (C3) Moss Trim Lines (B16) Water Marks (B1) Presence of Reduced Iron (C4) Dry-Season Water Table (C2) Sediment Deposits (B2) Recent Iron Reduction in Tilled Soils (C6) Crayfish Burrows (C8) Drift Deposits (B3) Thin Muck Surface (C7) Saturation Visible on Aerial Imagery (C9) Algal Mat or Crust (B4) Other (Explain in Remarks) Stunted or Stressed Plants (D1) Iron Deposits (B5) Geomorphic Position (D2) Inundation Visible on Aerial Imagery (B7) Shallow Aquitard (D3) Water-Stained Leaves (B9) Microtopographic Relief (D4) Aquatic Fauna (B13) FAC-Neutral Test (D5) Field Observations: Surface Water Present? Water Table Present? Saturation Present? Wetland Hydrology Present? Yes (includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available: Remarks:

Case No. 2025-00064

SOIL

Reponse to 1-69
Page 235 of 794
Sampling Point: 10 W 21

Depth (inches) O-Le	Matrix Color (moist) 1042 5/3 1048 5/6	% 70 10 20	Color (moist)	K Features		Loc ²	S. Itcle	Remarks	
0-10	109R5/C	10		<u> </u>					
		7.					1		
	1014 319	/ (3		_	_	_			
					_	_		_	
				_	_	$\overline{}$			_
				_		_			
						بلسف			
								·	
Type: C=Co	oncentration, D=Deple	tion, RM=Red	duced Matrix, MS	=Masked	Sand Gra	ins.	² Location: P	L=Pore Lining, M=Matrix.	
lydric Soil I	ndicators:							ators for Problematic Hydric S	Soils ³ :
Histosol		_	Dark Surface	. ,				cm Muck (A10) (MLRA 147)	
	oipedon (A2)	_	Polyvalue Bel				148) C	oast Prairie Redox (A16)	
Black His	stic (A3) n Sulfide (A4)	-	Thin Dark Sur			47, 148)	_	(MLRA 147, 148)	
	l Layers (A5)	-	_ Loamy Gleyed _ Depleted Matr		-2)		_ P	iedmont Floodplain Soils (F19) (MLRA 136, 147)	
	ck (A10) (LRR N)	_	Redox Dark S		ŝ)		V	ery Shallow Dark Surface (TF1)	2)
	Below Dark Surface ((A11) _	Depleted Dark	,	•			ther (Explain in Remarks)	- , ,
	ırk Surface (A12)	_	_ Redox Depres					, ,	
	lucky Mineral (S1) (LR	RN, _	Iron-Mangane		s (F12) (L	RR N,			
	147, 148) leyed Matrix (S4)		MLRA 136		W. D. 400	400)	3, ,		
	edox (S5)	-	_ Umbric Surface _ Piedmont Floce					icators of hydrophytic vegetation tland hydrology must be presen	
	Matrix (S6)	_	Red Parent Ma				•	ess disturbed or problematic.	IL,
	ayer (if observed):				7, 1			or and an propromised	
Туре:	201K-7	Berm							\ 0
Depth (incl	thes):					- 1	Hydric Soil	Present? Yes No	X
Remarks:									

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WEILAND DETERMINATION DATA	FORM - Eastern Mounta	ains and Piedmont Region
Project/Site: Summer Stude Solar.	City/County: SWMMeV	Should Sampling Date: 4-20-2
Applicant/Owner: Cumulate Yumanalles		State: Ky Sampling Point: 701-11065
Investigator(s):	Section, Township, Range	AIR .
Landform (hillslope, terrace, etc.): 736 Slage	Local relief (concave convex p	ional: Cabacilli
Subregion (LRR or MLRA): LRR N Lat: 310.	83796LL Lang	
Soil Map Unit Name: Ylu	Long,	
Are climatic / hydrologic conditions on the site typical for this time of	of year? Yes X No	NWI classification:
Are Vegetation, Soil, or Hydrology significa		(If no, explain in Remarks.)
Are Vegetation, Soil, or Hydrology naturally		al Circumstances" present? YesX No
SUMMARY OF FINDINGS – Attach site map show	(, explain any answers in Remarks.) ions, transects, important features, etc.
Hydrophytic Vegetation Present? Hydric Soil Present? Wes X No Yes X No Wetland Hydrology Present? Yes X No No	Is the Sampled Area within a Wetland?	
Remarks:		
Watland point assi	ociated w/	- TOHWET-17 PEM
HYDROLOGY		
Wetland Hydrology Indicators:		Secondary Indicators (minimum of two required)
Primary Indicators (minimum of one is required; check all that app	oly)	Surface Soil Cracks (B6)
✓ Surface Water (A1)	c Plants (B14)	Sparsely Vegetated Concave Surface (B8)
	ulfide Odor (C1)	X Drainage Patterns (B10)
<u>★</u> Saturation (A3) Oxidized Rł	nizospheres on Living Roots (C3)	Moss Trim Lines (B16)
	f Reduced Iron (C4)	Dry-Season Water Table (C2)
	Reduction in Tilled Soils (C6)	Crayfish Burrows (C8)
	Surface (C7)	X Saturation Visible on Aerial Imagery (C9)
	ain in Remarks)	Stunted or Stressed Plants (D1)
Iron Deposits (B5) Inundation Visible on Aerial Imagery (B7)		✓ Geomorphic Position (D2)
Water-Stained Leaves (B9)		Shallow Aquitard (D3)
Aquatic Fauna (B13)		Microtopographic Relief (D4) FAC-Neutral Test (D5)
Field Observations:		FAC-Neutral Test (D5)
Surface Water Present? Yes No Depth (inch	105): 2	
Water Table Present? Yes X No Depth (inch		
Saturation Present? Yes X No Depth (inch	0	lydrology Present? Yes X No
(includes capillary fringe)		
Describe Recorded Data (stream gauge, monitoring well, aerial ph	otos, previous inspections), if avai	llable:
Remarks:		

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SOIL

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Page 237 of 794
Sampling Point: Tolwh5-22

Depth	Matrix	to the de		Feature		or confirm	n the absence of indicators.	
(inches)	Color (moist)	%	Color (moist)	<u>%</u>	Type ¹	_Loc2	Texture	Remarks
6-4	100x 6/1	95	7.5 4R 460	5	-	MIPL		Tomano
4-9	104R611	85	7.542416		C	MIPL	CI CI	
						11-		
	-							
	-							
	-				-			
		-			-			
				_				
Type: C=C	oncentration, D=Dep	letion, RM	=Reduced Matrix, MS	=Masked	Sand Gr	ains.	² Location: PL=Pore Lining, I	M=Matrix.
Hydric Soil							Indicators for Proble	ematic Hydric Soils ³ :
Histosol			Dark Surface				2 cm Muck (A10)	(MLRA 147)
	pipedon (A2)		Polyvalue Belo				148) Coast Prairie Rec	dox (A16)
Black Hi	· · ·		Thin Dark Sur			147, 148)	(MLRA 147, 1	
	n Sulfide (A4)		Loamy Gleyed		F2)		Piedmont Floodp	` ,
	l Layers (A5) ick (A10) (LRR N)		Depleted Matr		·c)		(MLRA 136, 14	•
	Below Dark Surface	ρ (Δ11)	Redox Dark S Depleted Dark					k Surface (TF12)
	irk Surface (A12)	5 (7111)	Redox Depres				Other (Explain in	Remarks)
	lucky Mineral (S1) (L	RR N,	Iron-Mangane			LRR N.		
	147, 148)	,	MLRA 136		(/(
	leyed Matrix (S4)		Umbric Surfac		MLRA 13	6, 122)	3Indicators of hydro	ohytic vegetation and
	edox (S5)		Piedmont Floo					
	Matrix (S6)		Red Parent Ma	aterial (F	21) (MLR	A 127, 147		•
	.ayer (if observed):	.00						
Type:	Rock-B	ic Ro	c C					V
Depth (inc	ches):		_				Hydric Soil Present? Ye	s No
Remarks:						-		

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WETLAND DETERMINATION DATA FORM – Easter	n Mountains and Piedmont Region
Project/Site: Summer 6hack Solar City/County:	Shwirt Shade Sampling Date: 4-20-22
Applicant/Owner: Candela Yenavables	State: Sampling Point: TOI ~ h5
Investigator(s): CK, LD Section, Townsh	
2 04 1 4 2	p, range
Local relief (concave	s, convex, none): Concade Slope (%):
Subregion (LRR or MLRA): LRRN Lat: 3(e.937804)	Long: 85.645508 Datum: NN083(K)
Soil Map Unit Name: 1 4	NWI classification: WA
Are climatic / hydrologic conditions on the site typical for this time of year? Yes	No (If no, explain in Remarks.)
Are Vegetation, Soil, or Hydrology significantly disturbed?	Are "Normal Circumstances" present? Yes No
Are Vegetation, Soil, or Hydrology naturally problematic?	(If needed, explain any answers in Remarks.)
SUMMARY OF FINDINGS – Attach site map showing sampling po	·
The state of the s	ini locations, transects, important leatures, etc.
Hydrophytic Vegetation Present? Yes No X	npled Area
Hydric Soil Present? Yes No within a W	
Wetland Hydrology Present? Yes No	
Remarks:	
upland point associated	W-701-WET-12
HYDROLOGY	
Wetland Hydrology Indicators:	Secondary Indicators (minimum of two required)
Primary Indicators (minimum of one is required; check all that apply)	Surface Soil Cracks (B6)
Surface Water (A1) True Aquatic Plants (B14)	Sparsely Vegetated Concave Surface (B8)
High Water Table (A2) Hydrogen Sulfide Odor (C1)	→ Drainage Patterns (B10)
Saturation (A3) Oxidized Rhizospheres on Living	
Water Marks (B1) Presence of Reduced Iron (C4)	Dry-Season Water Table (C2)
Sediment Deposits (B2) Recent Iron Reduction in Tilled Se	pils (C6) Crayfish Burrows (C8)
Drift Deposits (B3) Thin Muck Surface (C7)	Saturation Visible on Aerial Imagery (C9)
Algal Mat or Crust (B4) Other (Explain in Remarks)	Stunted or Stressed Plants (D1)
Iron Deposits (B5)	Geomorphic Position (D2)
Inundation Visible on Aerial Imagery (B7)	Shallow Aquitard (D3)
Water-Stained Leaves (B9)	Microtopographic Relief (D4)
Aquatic Fauna (B13)	FAC-Neutral Test (D5)
Field Observations:	
Surface Water Present? Yes NoX Depth (inches):	
Water Table Present? Yes No _X Depth (inches):	
Saturation Present? Yes No Depth (inches):	Wetland Hydrology Present? Yes NoX
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspec	tions), if available:
Remarks:	
	1
	1

VEGETATION (Four Strata) – Use scientific names of plants.

Tree Stratum (Plot size:

imes of plants.	Case No. 2025-00064 Reponse to 1-69 Page 239 of 794 Sampling Point: 701-WAS					
Absolute Dominant Indicator % Cover Species? Status	Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: Total Number of Dominant Species Across All Strata: Percent of Dominant Species (A)					
= Total Cover 20% of total cover:	That Are OBL, FACW, or FAC:					
= Total Cover 20% of total cover: 30	Prevalence Index = B/A = Hydrophytic Vegetation Indicators: 1 - Rapid Test for Hydrophytic Vegetation 2 - Dominance Test is >50% 3 - Prevalence Index is ≤3.0¹ 4 - Morphological Adaptations¹ (Provide supporting data in Remarks or on a separate sheet) Problematic Hydrophytic Vegetation¹ (Explain) ¹Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.					
5	Definitions of Four Vegetation Strata: Tree – Woody plants, excluding vines, 3.in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height. Sapling/Shrub – Woody plants, excluding vines, less					
= Total Cover 20% of total cover: 70	than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vine – All woody vines greater than 3.28 ft in height.					

5		-		Percent of Dominant Species That Are OBL, FACW, or FAC: (A/B)
6				
7				Prevalence Index worksheet:
		= Total Cov	er	Total % Cover of: Multiply by:
50% of total cover:	20% of	total cover:		OBL species x 1 =
Sapling/Shrub Stratum (Plot size:)				FACW species x 2 =
1				FAC species x 3 =
2				FACU species x 4 =
3N_1A.A				UPL species x 5 =
4.			_	Column Totals: (A) (B)
6				Prevalence Index = B/A =
7				Hydrophytic Vegetation Indicators:
8				1 - Rapid Test for Hydrophytic Vegetation
9.				2 - Dominance Test is >50%
7	-	Total Cov	0.5	3 - Prevalence Index is ≤3.0 ¹
50% of total cover:				4 - Morphological Adaptations ¹ (Provide supporting
Herb Stratum, (Plot size: 5 ft)		1014		data in Remarks or on a separate sheet)
1. Andropogan virginious	30	X	FACU	Problematic Hydrophytic Vegetation ¹ (Explain)
2. Runnicillas hispides	15		FAC	
3. Schistonorus agandances		X	FIACU	Indicators of hydric soil and wetland hydrology must
4. Jenus Imais			FACL	be present, unless disturbed or problematic.
5. Stellaria media	4		UPL	Definitions of Four Vegetation Strata:
6,			-	Tree – Woody plants, excluding vines, 3₀in. (7.6 cm) or
7				more in diameter at breast height (DBH), regardless of
8				height.
9				Sapling/Shrub - Woody plants, excluding vines, less
10		1		than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.
				in y tan.
11,	100	T-1-1 0-		Herb – All herbaceous (non-woody) plants, regardless
50% of total cover:		= Total Cove total cover:_		of size, and woody plants less than 3.28 ft tall.
Woody Vine Stratum (Plot size:)	20 /0 01 1	total cover		Woody vine – All woody vines greater than 3.28 ft in
1.			-	height.
2			_	11
3. N H				
4				
5.	-			Hydrophytic
0		T.4-1.0		Vegetation Present? Yes No
50% of total cover:		Total Cove		163 160
Remarks: (Include photo numbers here or on a separate sl		.orai cover		
remarks. (moduce prioto flumbers here of off a separate si	ieet.)			
9.				
•				

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SOIL

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Sampling Point: 101 Wh5-23

	cription: (Describe t	o the dept				or confirm	n the absence of ir	ndicators.)
Depth (inches)	Matrix Color (moist)	%	Redo: Color (moist)	<u>k Feature</u> %	Type ¹	_Loc ²	Tautura	Describe.
0-6	1048 612	10	109R 6/6		Type		Texture	Remarks
2.7	10000	10		30		-M	sit day	
Co-18	1042 61	-05	7.54K	_15_		MPL	Silt Clay	
				_				
					-			
				-				
				-			-	
					-	_		
-		_				_		
'Type: C=Co	oncentration, D=Deple	etion, RM=	Reduced Matrix, MS	=Masked	Sand Gra	ains.		re Lining, M=Matrix.
Hydric Soil								for Problematic Hydric Soils ³ :
Histosol			Dark Surface		/ :			Muck (A10) (MLRA 147)
Black Hi	oipedon (A2)		Polyvalue Bel				. —	Prairie Redox (A16)
	n Sulfide (A4)		Thin Dark Sur Loamy Gleyed			47, 148)		RA 147, 148)
	Layers (A5)		✓ Depleted Mate		rz)			ont Floodplain Soils (F19) RA 136, 147)
	ick (A10) (LRR N)		Redox Dark S		6)			hallow Dark Surface (TF12)
	Below Dark Surface	(A11)	Depleted Dark					(Explain in Remarks)
	rk Surface (A12)		Redox Depres					(
	lucky Mineral (S1) (LF	RR N,	Iron-Mangane	se Masse	es (F12) (I	LRR N,		
	147, 148)		MLRA 136	•			_	
	leyed Matrix (S4)		Umbric Surfac					s of hydrophytic vegetation and
	edox (S5)		Piedmont Floo			-	•	hydrology must be present,
	Matrix (S6) ayer (if observed):		Red Parent M	aterial (F	21) (MLR/	A 127, 147	') unless d	disturbed or problematic.
	A A							
Type:		_						V
	ches):		-				Hydric Soil Pres	ent? Yes X No
Remarks:								
								A 1
								4
								4

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Project/Site: Shaw Solar City/County:	Shammer She de Sampling Date: 4-20-7
Applicant/Owner: Candala Vinewables	State: Y Sampling Point: TO 1-10/45
Investigator(s): CK LD Section, Towns	
1 - 11 - a	one), rango.
100	
Subregion (LRR or MLRA): Lat: 36.837657 Soil Map Unit Name: 1 5.48	
.1	NWI classification:
Are climatic / hydrologic conditions on the site typical for this time of year? Yes	No (If no, explain in Remarks.)
Are Vegetation, Soil, or Hydrology significantly disturbed?	Are "Normal Circumstances" present? Yes No
Are Vegetation, Soil, or Hydrology naturally problematic?	(If needed, explain any answers in Remarks.)
SUMMARY OF FINDINGS – Attach site map showing sampling p	point locations, transects, important features, etc.
I Hydric Soil Drecont?	isampled Area a Wetland? Yes No
Welland John	PEM TOI-WET-13
HYDROLOGY	
Wetland Hydrology Indicators:	Secondary Indicators (minimum of two required)
Primary Indicators (minimum of one is required; check all that apply)	Surface Soil Cracks (B6)
Surface Water (A1) True Aquatic Plants (B14)	Sparsely Vegetated Concave Surface (B8)
X High Water Table (A2), Hydrogen Sulfide Odor (C1)	∑ Drainage Patterns (B10)
X Saturation (A3) X Oxidized Rhizospheres on Livin	ng Roots (C3) Moss Trim Lines (B16)
Water Marks (B1) Presence of Reduced Iron (C4)	
Sediment Deposits (B2) Recent Iron Reduction in Tilled	
Drift Deposits (B3) Thin Muck Surface (C7)	X Saturation Visible on Aerial Imagery (C9)
Algal Mat or Crust (B4) Other (Explain in Remarks) Iron Deposits (B5)	Stunted or Stressed Plants (D1)
Inundation Visible on Aerial Imagery (B7)	Geomorphic Position (D2)
Water-Stained Leaves (B9)	Shallow Aquitard (D3)
Aquatic Fauna (B13)	Microtopographic Relief (D4) FAC-Neutral Test (D5)
Field Observations:	
Surface Water Present? Yes No Depth (inches):	
Water Table Present? Yes No Depth (inches):	
Saturation Present? Yes X No Depth (inches):	Wetland Hydrology Present? Yes No
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous insp	uections), if available:
Domoska	- y/ 1
Remarks:	4

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Reponse to 1-69
Page 242 of 794
Sampling Point: 70(-WHS-24)

VEGETATION (Four Strata) – Use scientific names of plants.

		Indicator	Dominance Test worksheet:
% Cover	Species?	Status	Number of Dominant Species
_	_		That Are OBL, FACW, or FAC: (A)
			Total Number of Dominant
			Species Across All Strata: (B)
			Percent of Dominant Species
			Percent of Dominant Species That Are OBL, FACW, or FAC: (A/B)
			Prevalence Index worksheet:
	Total Co	/er	Total % Cover of:Multiply by:
20% of f	total cover	·	OBL species x 1 =
			FACW species x 2 =
			FAC species x 3 =
			FACU species x 4 =
			UPL species x 5 =
	_	_	Column Totals: (A) (B)
	-	_	(, (- ,
_			Prevalence Index = B/A =
	-	_	Hydrophytic Vegetation Indicators:
	-		1 - Rapid Test for Hydrophytic Vegetation
	-		∠ 2 - Dominance Test is >50%
_			3 - Prevalence Index is ≤3.0¹
			4 - Morphological Adaptations¹ (Provide supporting
_ 20% of t	otal cover		data in Remarks or on a separate sheet)
	-1	W	Problematic Hydrophytic Vegetation¹ (Explain)
40_	7	XXXM	Problematic Hydrophytic vegetation (Explain)
15_		FACW	1
15		FIXU	Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
15		OCL	
2		FACU	Definitions of Four Vegetation Strata:
7			Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or
		11111	more in diameter at breast height (DBH), regardless of
			height.
			Sapling/Shrub – Woody plants, excluding vines, less
			than 3 in. DBH and greater than or equal to 3.28 ft (1
			m) tall.
24			Herb – All herbaceous (non-woody) plants, regardless
			of size, and woody plants less than 3.28 ft tall.
2 20% of to	otal cover:	119	Woody vine – All woody vines greater than 3,28 ft in
			height.
		-	
			Hydrophytic
-			Hydrophytic Vegetation (/
	Total Cov	er	Hydrophytic Vegetation Present? Yes No
	20% of the second secon	= Total Cover 20% of total cover 40	= Total Cover _ 20% of total cover: = Total Cover _ 20% of total cover:

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SOIL

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Page 243 of 794
Sampling Point: Tol- why-74

Color (moist) Series Color (moist) Golder (moist) Series Color	Depth	Matrix			ox Features			n the absence of indi	
Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. Varic Soil Indicators:			%				Loc ²	Texture	Remarks
ype: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. ydric Soil Indicators: Histosol (A1) Histic Epipedon (A2) Black Histic (A3) Hydrogen Sulfide (A4) Stratified Layers (A5) Depleted Matrix (F2) Depleted Matrix (F3) Thick Dark Surface (A10) Thick Dark Surface (A11) Thick Dark Surface (A12) Sandy Mucky Mineral (S1) (LRR N, MLRA 147, 148) Sandy Gleyed Matrix (S4) Sandy Redox (S5) Piedmont Floodplain Soils (F19) (LRR N, MLRA 147, 148) MLRA 147, 148) MLRA 147, 148) Jeffeld Dark Surface (F6) Depleted Dark Surface (F6) Depleted Dark Surface (F7) Redox Depressions (F8) Iron-Manganese Masses (F12) (LRR N, MLRA 147, 148) Sandy Gleyed Matrix (S4) Sandy Gleyed Matrix (S4) Sandy Gleyed Matrix (S4) Sandy Redox (S5) Piedmont Floodplain Soils (F19) (MLRA 148) Red Parent Material (F21) (MLRA 127, 147) Pindicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic. Hydric Soil Present? Yes No	6-18	104R 612	85 7	54 4 6	15	C	MPL	SitClay	
Histosol (A1) Dark Surface (S7) 2 cm Muck (A10) (MLRA 147) Histic Epipedon (A2) Polyvalue Below Surface (S8) (MLRA 147, 148) Coast Prairie Redox (A16) Black Histic (A3) Thin Dark Surface (S9) (MLRA 147, 148) (MLRA 147, 148) Hydrogen Sulfide (A4) Loamy Gleyed Matrix (F2) Piedmont Floodplain Soils (F19) Stratified Layers (A5) Depleted Matrix (F3) (MLRA 136, 147) Depleted Below Dark Surface (A11) Depleted Dark Surface (F7) Other (Explain in Remarks) Sandy Mucky Mineral (S1) (LRR N, MLRA 147, 148) Sandy Gleyed Matrix (S4) Umbric Surface (F13) (MLRA 136, 122) Sandy Redox (S5) Piedmont Floodplain Soils (F19) (MLRA 148) Stripped Matrix (S6) Red Parent Material (F21) (MLRA 127, 147) unless disturbed or problematic. Hydric Soil Present? Yes No							1,	/	
Histosol (A1) Dark Surface (S7) 2 cm Muck (A10) (MLRA 147) Histic Epipedon (A2) Polyvalue Below Surface (S8) (MLRA 147, 148) Coast Prairie Redox (A16) Black Histic (A3) Thin Dark Surface (S9) (MLRA 147, 148) (MLRA 147, 148) Hydrogen Sulfide (A4) Loamy Gleyed Matrix (F2) Piedmont Floodplain Soils (F19) Stratified Layers (A5) Depleted Matrix (F3) (MLRA 136, 147) Depleted Below Dark Surface (A11) Depleted Dark Surface (F7) Other (Explain in Remarks) Sandy Mucky Mineral (S1) (LRR N, MLRA 147, 148) Sandy Gleyed Matrix (S4) Umbric Surface (F13) (MLRA 136, 122) Sandy Redox (S5) Piedmont Floodplain Soils (F19) (MLRA 148) Stripped Matrix (S6) Red Parent Material (F21) (MLRA 127, 147) unless disturbed or problematic. Hydric Soil Present? Yes No					_				
Histosol (A1)		-				_			
Histosol (A1)					_	_			
Histosol (A1)						_			
Histosol (A1) Dark Surface (S7) 2 cm Muck (A10) (MLRA 147) Histic Epipedon (A2) Polyvalue Below Surface (S8) (MLRA 147, 148) Coast Prairie Redox (A16) Black Histic (A3) Thin Dark Surface (S9) (MLRA 147, 148) (MLRA 147, 148) Hydrogen Sulfide (A4) Loamy Gleyed Matrix (F2) Piedmont Floodplain Soils (F19) Stratified Layers (A5) Depleted Matrix (F3) (MLRA 136, 147) Depleted Below Dark Surface (A11) Depleted Dark Surface (F7) Other (Explain in Remarks) Sandy Mucky Mineral (S1) (LRR N, MLRA 147, 148) Sandy Gleyed Matrix (S4) Umbric Surface (F13) (MLRA 136, 122) Sandy Redox (S5) Piedmont Floodplain Soils (F19) (MLRA 148) Stripped Matrix (S6) Red Parent Material (F21) (MLRA 127, 147) unless disturbed or problematic. Hydric Soil Present? Yes No									
Histosol (A1)									
Histosol (A1) Dark Surface (S7) 2 cm Muck (A10) (MLRA 147) Histic Epipedon (A2) Polyvalue Below Surface (S8) (MLRA 147, 148) Coast Prairie Redox (A16) Black Histic (A3) Thin Dark Surface (S9) (MLRA 147, 148) (MLRA 147, 148) Hydrogen Sulfide (A4) Loamy Gleyed Matrix (F2) Piedmont Floodplain Soils (F19) Stratified Layers (A5) Depleted Matrix (F3) (MLRA 136, 147) Depleted Below Dark Surface (A11) Depleted Dark Surface (F6) Very Shallow Dark Surface (TF12) Sandy Mucky Mineral (S1) (LRR N, MLRA 147, 148) Sandy Gleyed Matrix (S4) Umbric Surface (F13) (MLRA 136, 122) Sandy Redox (S5) Piedmont Floodplain Soils (F19) (MLRA 148) Sandy Redox (S5) Piedmont Floodplain Soils (F19) (MLRA 147, 148) Stripped Matrix (S6) Red Parent Material (F21) (MLRA 127, 147) unless disturbed or problematic. Hydric Soil Present? Yes No							Ç	-	
Histosol (A1) Dark Surface (S7) 2 cm Muck (A10) (MLRA 147) Histic Epipedon (A2) Polyvalue Below Surface (S8) (MLRA 147, 148) Coast Prairie Redox (A16) Black Histic (A3) Thin Dark Surface (S9) (MLRA 147, 148) (MLRA 147, 148) Hydrogen Sulfide (A4) Loamy Gleyed Matrix (F2) Piedmont Floodplain Soils (F19) Stratified Layers (A5) Depleted Matrix (F3) (MLRA 136, 147) Depleted Below Dark Surface (A11) Depleted Dark Surface (F7) Other (Explain in Remarks) Sandy Mucky Mineral (S1) (LRR N, MLRA 147, 148) Sandy Gleyed Matrix (S4) Umbric Surface (F13) (MLRA 136, 122) Sandy Redox (S5) Piedmont Floodplain Soils (F19) (MLRA 148) Stripped Matrix (S6) Red Parent Material (F21) (MLRA 127, 147) unless disturbed or problematic. Hydric Soil Present? Yes No									
Histosol (A1) Dark Surface (S7) 2 cm Muck (A10) (MLRA 147) Histic Epipedon (A2) Polyvalue Below Surface (S8) (MLRA 147, 148) Coast Prairie Redox (A16) Black Histic (A3) Thin Dark Surface (S9) (MLRA 147, 148) (MLRA 147, 148) Hydrogen Sulfide (A4) Loamy Gleyed Matrix (F2) Piedmont Floodplain Soils (F19) Stratified Layers (A5) Depleted Matrix (F3) (MLRA 136, 147) Depleted Below Dark Surface (A11) Depleted Dark Surface (F7) Other (Explain in Remarks) Sandy Mucky Mineral (S1) (LRR N, MLRA 147, 148) Sandy Gleyed Matrix (S4) Umbric Surface (F13) (MLRA 136, 122) Sandy Redox (S5) Piedmont Floodplain Soils (F19) (MLRA 148) Stripped Matrix (S6) Red Parent Material (F21) (MLRA 127, 147) unless disturbed or problematic. Hydric Soil Present? Yes No				-		-			
Histosol (A1) Dark Surface (S7) 2 cm Muck (A10) (MLRA 147) Histic Epipedon (A2) Polyvalue Below Surface (S8) (MLRA 147, 148) Coast Prairie Redox (A16) Black Histic (A3) Thin Dark Surface (S9) (MLRA 147, 148) (MLRA 147, 148) Hydrogen Sulfide (A4) Loamy Gleyed Matrix (F2) Piedmont Floodplain Soils (F19) Stratified Layers (A5) Depleted Matrix (F3) (MLRA 136, 147) Depleted Below Dark Surface (A11) Depleted Dark Surface (F6) Very Shallow Dark Surface (TF12) Sandy Mucky Mineral (S1) (LRR N, MLRA 147, 148) Sandy Gleyed Matrix (S4) Umbric Surface (F13) (MLRA 136, 122) Sandy Redox (S5) Piedmont Floodplain Soils (F19) (MLRA 148) Sandy Redox (S5) Piedmont Floodplain Soils (F19) (MLRA 147, 148) Stripped Matrix (S6) Red Parent Material (F21) (MLRA 127, 147) unless disturbed or problematic. Hydric Soil Present? Yes No						-			
Histosol (A1) Histic Epipedon (A2) Polyvalue Below Surface (S8) (MLRA 147, 148) Black Histic (A3) Hydrogen Sulfide (A4) Stratified Layers (A5) Depleted Matrix (F2) Depleted Below Dark Surface (A11) Thick Dark Surface (A12) Sandy Mucky Mineral (S1) (LRR N, MLRA 147, 148) Sandy Gleyed Matrix (S4) Sandy Redox (S5) Sandy Redox (S5) Striped Matrix (S4) Peleted Matrix (F3) Coast Prairie Redox (A16) (MLRA 147, 148) Piedmont Floodplain Soils (F19) (MLRA 136, 147) Very Shallow Dark Surface (TF12) Other (Explain in Remarks) Iron-Manganese Masses (F12) (LRR N, MLRA 147, 148) Sandy Redox (S5) Piedmont Floodplain Soils (F19) (MLRA 148) Stripped Matrix (S6) Piedmont Floodplain Soils (F19) (MLRA 148) Red Parent Material (F21) (MLRA 127, 147) Polyvalue Below Surface (S8) (MLRA 147, 148) (MLRA 147, 148) Piedmont Floodplain Soils (F19) Other (Explain in Remarks) Iron-Manganese Masses (F12) (LRR N, MLRA 136, 122) Piedmont Floodplain Soils (F19) (MLRA 148) Red Parent Material (F21) (MLRA 127, 147) Polyvalue Below Surface (S8) (MLRA 147, 148) Coast Prairie Redox (A16) (MLRA 147, 148) Piedmont Floodplain Soils (F19) Other (Explain in Remarks) Iron-Manganese Masses (F12) (LRR N, MLRA 136, 122) Piedmont Floodplain Soils (F19) (MLRA 148) Wetland hydrology must be present, unless disturbed or problematic. Piedmont Floodplain Soils (F19) (MLRA 127, 147) Piedmont Floodplain Soils (F19) Piedmont Floo			etion, RM=F	Reduced Matrix, M	1S=Masked	Sand Gr	ains.		
Histic Epipedon (A2) Black Histic (A3) Hydrogen Sulfide (A4) Stratified Layers (A5) Depleted Matrix (F3) Depleted Below Dark Surface (A11) Depleted Below Dark Surface (A12) Sandy Mucky Mineral (S1) (LRR N, MLRA 147, 148) Sandy Redox (S5) Sandy Redox (S5) Stripped Matrix (S4) Sandy Redox (S5) Stripped Matrix (S6) Stripped Matrix (S6) Depth (inches): Hydric Soil Present? Polyvalue Below Surface (S8) (MLRA 147, 148) (MLRA 147, 148) (MLRA 147, 148) Piedmont Floodplain Soils (F19) (MLRA 147, 148) Piedmont Floodplain Soils (F19) (MLRA 136, 147) Very Shallow Dark Surface (TF12) Other (Explain in Remarks) Piedmont Floodplain Soils (F12) (LRR N, MLRA 136, 122) Piedmont Floodplain Soils (F19) (MLRA 148) Red Parent Material (F21) (MLRA 127, 147) Hydric Soil Present? Yes No				D - 1 0 - 1	(07)				•
Black Histic (A3)						n (SS) /	MI DA 147		
Hydrogen Sulfide (A4) Stratified Layers (A5) Depleted Matrix (F3) Depleted Matrix (F3) Depleted Below Dark Surface (A11) Thick Dark Surface (A12) Sandy Mucky Mineral (S1) (LRR N, MLRA 136) Sandy Gleyed Matrix (S4) Sandy Redox (S5) Sandy Redox (S5) Stripped Matrix (S6) Depth (inches): Loamy Gleyed Matrix (F2) Depleted Matrix (F2) Depleted Matrix (F3) (MLRA 136, 147) Very Shallow Dark Surface (TF12) Other (Explain in Remarks) Other (Explain in Remarks) Negative Matrix (S4) MLRA 136, 122) Piedmont Floodplain Soils (F19) (LRR N, MLRA 136, 122) Piedmont Floodplain Soils (F19) (MLRA 148) MERA 147) Wetland hydrology must be present, unless disturbed or problematic. Hydric Soil Present? Yes No									
Stratified Layers (A5) 2 cm Muck (A10) (LRR N) Depleted Below Dark Surface (A11) Thick Dark Surface (A12) Sandy Mucky Mineral (S1) (LRR N, MLRA 147, 148) Sandy Gleyed Matrix (S4) Sandy Redox (S5) Stripped Matrix (S6) Strictive Layer (if observed) Depleted Matrix (F3) Medox Dark Surface (F6) Depleted Dark Surface (F7) Redox Depressions (F8) Iron-Manganese Masses (F12) (LRR N, MLRA 136) Umbric Surface (F13) (MLRA 136, 122) Piedmont Floodplain Soils (F19) (MLRA 148) Red Parent Material (F21) (MLRA 127, 147) Wetland hydrology must be present, unless disturbed or problematic. Hydric Soil Present? Yes No						•	,,		
Depleted Below Dark Surface (A11) Thick Dark Surface (A12) Sandy Mucky Mineral (S1) (LRR N, MLRA 147, 148) Sandy Gleyed Matrix (S4) Sandy Redox (S5) Stripped Matrix (S6) Stripped Matrix (S6) Depth (inches): Depth (inches): Depleted Dark Surface (F7) Depleted Dark Surface (F12) (LRR N, Depleted Dark Surface (F12) (LRR	Stratified	Layers (A5)				,			
Thick Dark Surface (A12) Sandy Mucky Mineral (S1) (LRR N, MLRA 147, 148) Sandy Gleyed Matrix (S4) Sandy Redox (S5) Stripped Matrix (S6) Stripped Matrix (S6) Extrictive Layer (if observed) Type: Depth (inches): Redox Depressions (F8) Iron-Manganese Masses (F12) (LRR N, MLRA 136) Umbric Surface (F13) (MLRA 136, 122) Iron-Manganese Masses (F12) (LRR N, MLRA 136) White Matrix (S4) Surface (F13) (MLRA 136, 122) Iron-Manganese Masses (F12) (MLRA 136, 122) Iron-Manganese Masses (F12) (LRR N, MLRA 136) Wetland hydrology must be present, unless disturbed or problematic. Hydric Soil Present? Yes No									
Sandy Mucky Mineral (S1) (LRR N, MLRA 147, 148) Sandy Gleyed Matrix (S4) Sandy Redox (S5) Stripped Matrix (S6) Strictive Layer (if observed): Type: Depth (inches): Iron-Manganese Masses (F12) (LRR N, MLRA 136) Jeron-Manganese Masses (F12) (MLRA 136, 122) Jeron-Manganese Masses (F12) (MLRA 148) Jeron-Manganese Masses (F12) (MLRA 148) Jeron-Manganese Masses (F12) (MLRA 127, 147)			(A11)					Other (Ex	plain in Remarks)
MLRA 147, 148) Sandy Gleyed Matrix (S4) Sandy Redox (S5) Piedmont Floodplain Soils (F19) (MLRA 148) Stripped Matrix (S6) Red Parent Material (F21) (MLRA 127, 147) Pestrictive Layer (if observed): Type: Depth (inches): MLRA 136) Umbric Surface (F13) (MLRA 136, 122) Piedmont Floodplain Soils (F19) (MLRA 148) Wetland hydrology must be present, unless disturbed or problematic. Hydric Soil Present? Yes No			DD N				I DD N		
			KK N,			:S (F 12) (LKK N,		
Sandy Redox (S5) Piedmont Floodplain Soils (F19) (MLRA 148) wetland hydrology must be present, unless disturbed or problematic. Stripped Matrix (S6) Red Parent Material (F21) (MLRA 127, 147) unless disturbed or problematic. Type: Depth (inches): Hydric Soil Present? Yes No						MLRA 13	36, 122)	³ Indicators of	of hydrophytic vegetation and
Type: Hydric Soil Present? Yes No									
Type:				Red Parent	Material (F2	21) (MLR	A 127, 147) unless dist	urbed or problematic.
Depth (inches): No		1.14							
		- / -	7	_					V
emarks:		ches):		_				Hydric Soil Presen	t? Yes No
	marks:								
									An .
									S

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Project/Site: Swmw	4 1		City/C					4/70/18
4		Vehewa	City/C	Jounty:				
011	, LD				A + 1A	tate:	_ Sampling Poi	11.781-WAS-
* ' ' -	1		Secti			1-2-21	i di	
andform (hillslope, terrace, e		1113000 17	200 AUDI	ief (concave	, convex, none):	Concar		
Subregion (LRR or MLRA):	. 1	Lai	t_36.8406	791	Long:	69114		WWO83 (K
Soil Map Unit Name:				-7		NWI classifica	ition: NA	
re climatic / hydrologic cond			•		No (If no	o, explain in Re	marks.)	,
re Vegetation, Soil _					Are "Normal Circ	cumstances" pr	esent? Yes	No
re Vegetation, Soil _	, or H	lydrology	naturally problem	atic?	(If needed, expla	in any answers	s in Remarks.)	
SUMMARY OF FINDIN	IGS – At	tach site n	nap showing san	npling po	int locations,	transects,	important fe	atures, etc.
Hydrophytic Vegetation Pres Hydric Soil Present? Wetland Hydrology Present?		YesX YesX YesX	No No	Is the Sar within a V	pled Area etland?	YesX	No	
Remarks: W ETL	AND	point	Ge (Netla	ncl	TOI-W	ET-14	
IYDROLOGY								
Wetland Hydrology Indicat	ors:				Seco	ondary Indicate	ors (minimum of	two required)
Primary Indicators (minimum	of one is r	equired; chec	k all that apply)			Surface Soil C		ivo required)
Surface Water (A1)			True Aquatic Plants (B14)		Sparsely Vegetated Concave Surface (B8)		
High Water Table (A2)		_	Hydrogen Sulfide Ode		X	Drainage Patte		` ′
X Saturation (A3)		4	Oxidized Rhizosphere		Roots (C3)	Moss Trim Line	es (B16)	- 1
Water Marks (B1)		-	Presence of Reduced				ater Table (C2)	
Sediment Deposits (B2)Drift Deposits (B3)		_	Recent Iron Reduction			Crayfish Burro	, ,	1
Algal Mat or Crust (B4)		_	Thin Muck Surface (C Other (Explain in Ren				ble on Aerial Ima	
Iron Deposits (B5)		-	Caron (Explain in Ton	iai ko)		Geomorphic P	essed Plants (D1	,
Inundation Visible on Ae	rial Imager	y (B7)				Shallow Aquita		
Water-Stained Leaves (E						Microtopograpi		
Aquatic Fauna (B13)					X	FAC-Neutral To	est (D5)	
ield Observations:		/						
urface Water Present?	Yes/	1	Depth (inches):					
/ater Table Present?	Yes	No	· · · · · · · · · · · · · · · · · · ·				<i>\(1</i>	1
aturation Present? ncludes capillary fringe)	Yes _X		Depth (inches):(<u> </u>	Wetland Hydro		Yes	No
escribe Recorded Data (stre	sam gauge	, monitoring w	veii, aeriai priotos, prev	/lous inspec	ions), if available	:		
lemarks:								

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VEGETATION (Four Strata) – Use scientific names of plants

2NFt	Absolute Dominant Indica	
Tree Stratum (Plot size: 30 F+	% Cover Species? Stat	Number of Dominant Species
Querus phellos		That Are OBL, FACW, or FAC: (A)
2		Total Number of Dominant
3		Species Across All Strata: (B)
4		Percent of Dominant Species
5		That Are OBL, FACW, or FAC: (A/B)
6		Prevalence Index worksheet:
7		
500/ 61 41	= Total Cover	OBL species x1 =
	20% of total cover:	
Sapling/Shrub Stratum (Plot size:)		FAC species x 2 =
1		FAC species x3 =
2		FACU species x 4 =
3		UPL species x 5 =
NA		Column Totals: (A) (B)
),		Prevalence Index = B/A =
5,		Hydrophytic Vegetation Indicators:
7		1 - Rapid Test for Hydrophytic Vegetation
3,		2 - Dominance Test is >50%
)		3 - Prevalence Index is ≤3.0¹
	= Total Cover	4 - Morphological Adaptations¹ (Provide supporting
50% of total cover:	20% of total cover:	data in Remarks or on a separate sheet)
Herb Stratum (Plot size:)	- N 1-A	
. Junius affingus		
Conicera japanica	10 FA	The disease of budgie and and and and and and and
3. Tuncus tinus	5 FM	be present, unless disturbed or problematic
	30 X FA	Definitions of Four Vegetation Strata:
5. Andropogon virginicus		<u>M</u>
3. Schidbreton's available	10 FIAC	Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of
		height.
3,		
		Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than or equal to 3.28 ft (1
0		m) tall.
1.		Hart Allbridge () 1) ()
	92 = Total Cover	Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.
50% of total cover: 45	20% of total cover:	
Voody Vine Stratum (Plot size:)		 Woody vine – All woody vines greater than 3.28 ft in height.
· · · · · · · · · · · · · · · · · · ·		tioight.
		-
NI		
		-
		Hydrophytic
	- Total Cause	Vegetation Present? Yes \(\sum \) No
	= Total Cover 20% of total cover:	100
50% of total cover:		1

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SOIL

Sampling Point: Tol-WA5-76

(inches)	Matrix							or indicators.)	
	Color (moist)	%	Color (moist)	%	Type'	_Loc2	Texture	Remarks	
0-8	109R 5/2	85	7.5 9K 5/6	15	C	M	Siltyclas	outr	
8-18	10815 6/4	97	7.54125/6	3	<u> </u>	<u>M</u>	Sillyclay		
				=					
Type: C=Co		etion, RM=	Reduced Matrix, MS	 =Masked	Sand Gra	ins.		L=Pore Lining, M=Matrix. ators for Problematic Hydric Soils ³ :	
Histosol ((A1)		Dark Surface				2	cm Muck (A10) (MLRA 147)	
Black His			Polyvalue Bek Thin Dark Sur	face (S9)	(MLRA 1		, 148) C	oast Prairie Redox (A16) (MLRA 147, 148)	
	Sulfide (A4)		Loamy Gleyed		- 2)		P	iedmont Floodplain Soils (F19)	
	Layers (A5) ck (A10) (LRR N)		Depleted Matr Redox Dark S		C)			(MLRA 136, 147)	
	Below Dark Surface	(A11)	Depleted Dark					ery Shallow Dark Surface (TF12)	
	rk Surface (A12)	(, , , , ,	Redox Depres				_ 0	ther (Explain in Remarks)	
	ucky Mineral (S1) (LF	RR N,	Iron-Mangane			RR N.			
	147, 148)		MLRA 136			,			
	eyed Matrix (S4)		Umbric Surfac				³ lndi	cators of hydrophytic vegetation and	
_ Sandy Re			Piedmont Floo				i8) wei	tland hydrology must be present,	
	Matrix (S6)		Red Parent Ma	aterial (F2	21) (MLR A	127, 147	7) unl	ess disturbed or problematic.	
	ayer (if observed):								
	MIA		_				1	V	
Depth (incl	nes):		_				Hydric Soil	Present? Yes No	
emarks:									

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Project/Site: Summur			ountains and Pledme	
Applicant/Owner	ohow della	City/County:	wither Dhill	Sampling Date: 4757
Applicant/Owner:	are renewates		State:	Sampling Point: 101-Wh
Investigator(s):	1	Section, Township, R		
Landform (hillslope, terrace, etc.):	hillsich	ocal relief (concave, con	nvex, none): Cohceus	Slope (%):
Subregion (LRR or MLRA):	Lat: 36.44	10640 Lo	ng: <u>45.697191</u>	Datum:
Soil Map Unit Name: Hu			NWI classifica	
Are climatic / hydrologic conditions on	the site typical for this time of y	ear? Yes <u> </u>	(If no, explain in Re	emarks.)
Are Vegetation, Soil, o	r Hydrology significantly	y disturbed? Are	"Normal Circumstances" pr	resent? Yes X No
Are Vegetation, Soil, o	r Hydrology naturally pr	roblematic? (If n	eeded, explain any answer	s in Remarks.)
SUMMARY OF FINDINGS - A	Attach site map showing	g sampling point	locations, transects,	important features, etc.
Hydrophytic Vegetation Present? Hydric Soil Present? Wetland Hydrology Present? Remarks:	Yes No X Yes No X Yes No X	Is the Sample within a Wetla		_ NoX
	Point as	socialis	w/ TO1-	WET- H
HYDROLOGY				
Wetland Hydrology Indicators:			Secondary Indicate	ors (minimum of two required)
Primary Indicators (minimum of one is	required; check all that apply)		Surface Soil C	racks (B6)
Surface Water (A1)	True Aquatic P		Sparsely Vege	tated Concave Surface (B8)
High Water Table (A2)	Hydrogen Sulfi		Drainage Patte	· · ·
Saturation (A3) Water Marks (B1)		ospheres on Living Root		
Sediment Deposits (B2)	Presence of Re	educed fron (C4) eduction in Tilled Soils (ater Table (C2)
Drift Deposits (B3)	Thin Muck Surf			
Algal Mat or Crust (B4)	Other (Explain			ble on Aerial Imagery (C9) essed Plants (D1)
Iron Deposits (B5)			Geomorphic P	• •
Inundation Visible on Aerial Imag	ery (B7)		Shallow Aquita	, ,
Water-Stained Leaves (B9)			Microtopograp	
Aquatic Fauna (B13)			FAC-Neutral T	
Field Observations:	V			
Surface Water Present? Yes	NoX Depth (inches)):		
_	No X Depth (inches)):		
Saturation Present? Yes (includes capillary fringe)	No Depth (inches)): We	etland Hydrology Present?	Yes No_X
Describe Recorded Data (stream gaug	ge, monitoring well, aerial photo	os, previous inspections), if available:	
Remarks:				
				l l

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VEGETATION (Four Strata) – Use scientific names of plants.

	Absolute	Dominant Indi	Sampling Point: 70 - WAS- cator Dominance Test worksheet:
Tree Stratum (Plot size:)		Species? St	I Number of Dominant Species
			That Are OBL, FACW, or FAC: (A)
-			Total Number of Dominant
· \ \			Species Across All Strata: (B)
V			Percent of Dominant Species
			That Are OBL, FACW, or FAC: (A/B)
			Prevalence Index worksheet:
		-	Total % Cover of: Multiply by:
		= Total Cover	OBL species x 1 =
50% of total cover:	20% 01	total cover:	FACW species x 2 =
apling/Shrub Stratum (Plot size:)			FAC species x 3 =
			FACU species x 4 =
			UPL species x 5 =
			Column Totals: (A) (B)
4 111			(A) (B)
NA			Prevalence Index = B/A =
			Hydrophytic Vegetation Indicators:
			1 - Rapid Test for Hydrophytic Vegetation
			2 - Dominance Test is >50%
			3 - Prevalence Index is ≤3.0¹
		Total Cover	4 - Morphological Adaptations ¹ (Provide supporting
50% of total cover: erb Stratum (Plot size: 5 + 1)	20% of	total cover:	data in Remarks or on a separate sheet)
	70	y t	Problematic Hydrophytic Vegetation ¹ (Explain)
Schidonin ous arundancea	15	<u>x</u> <u>r</u>	ACO.
7.74	- 55		Indicators of hydric soil and wetland hydrology must
	-3		be present, unless disturbed or problematic.
Alliaria potiolata		FF	Definitions of Four Vegetation Strata:
			Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or
			more in diameter at breast height (DBH), regardless of
			height.
			Sapling/Shrub - Woody plants, excluding vines, less
			than 3 in. DBH and greater than or equal to 3.28 ft (1
			m) tall.
·	110		Herb All herbaceous (non-woody) plants, regardless
51.		Total Cover	of size, and woody plants less than 3.28 ft tall.
50% of total cover: 50	20% of t	otal cover:_ <u>&</u> C	Woody vine – All woody vines greater than 3.28 ft in
oody Vine Stratum (Plot size:)			height.
.10			-
NA			
•			Hydrophytic
			Vegetation
	=	Total Cover	Vegetation Present? Yes No

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SOIL

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Sampling Point: Tol-WAS-ZG

Profile Description: (Describe to the deposition Depth Matrix	Redox Feature			
(inches) Color (moist) %	Color (moist) %		Texture	Remarks
0-5 104K 313 100			S.H loun	
	- 70			
Type: C=Concentration, D=Depletion, RM	=Daduard Matrix MS-Marker	L Cond Crains	21 anation, DI -	Dona Links - Manharata
ydric Soil Indicators:	-Reduced Matrix, MS-Masked	i Sano Grains.	Location: PL=	Pore Lining, M=Matrix. ors for Problematic Hydric Soils ³ :
_ Histosol (A1)	Dark Surface (S7)			m Muck (A10) (MLRA 147)
Histic Epipedon (A2)	Polyvalue Below Surfa	ce (S8) (MLRA 147.		ast Prairie Redox (A16)
Black Histic (A3)	Thin Dark Surface (S9)			MLRA 147, 148)
_ Hydrogen Sulfide (A4)	Loamy Gleyed Matrix (dmont Floodplain Soils (F19)
_ Stratified Layers (A5)	Depleted Matrix (F3)			MLRA 136, 147)
_ 2 cm Muck (A10) (LRR N)	Redox Dark Surface (F	'		y Shallow Dark Surface (TF12)
_ Depleted Below Dark Surface (A11) _ Thick Dark Surface (A12)	Depleted Dark SurfaceRedox Depressions (Fe		Oth	er (Explain in Remarks)
_ Sandy Mucky Mineral (S1) (LRR N,	Redox Depressions (Fo	•		
MLRA 147, 148)	MLRA 136)	55 (1 12) (LIXIX IX ,		
Sandy Gleyed Matrix (S4)	Umbric Surface (F13) (MLRA 136, 122)	³ Indica	ators of hydrophytic vegetation and
_ Sandy Redox (S5)	Piedmont Floodplain S			and hydrology must be present,
_ Stripped Matrix (S6)	Red Parent Material (F	21) (MLRA 127, 14 7	7) unles	ss disturbed or problematic.
estrictive Layer (if observed):	1.0			
Type: Rock Bedr	00 10			Y
Depth (inches):5			Hydric Soil P	resent? Yes No
emarks:				

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WETLAND DETERMINATION DATA FORM – Eastern Mountains and Piedmont Region City/County: Applicant/Owner: State: Investigator(s): Section, Township, Range:___ Landform (hillslope, terrace, etc.): Concavi Local relief (concave, convex, none): Subregion (LRR or MLRA): Lat: 36.845704 Soil Map Unit Name: NWI classification: Are climatic / hydrologic conditions on the site typical for this time of year? Yes (If no, explain in Remarks:) Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? (If needed, explain any answers in Remarks.) SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc. Hydrophytic Vegetation Present? Is the Sampled Area Hydric Soil Present? within a Wetland? Wetland Hydrology Present? Yes Remarks: Wetland point association 1 - TOI-WET - 15 **HYDROLOGY** Wetland Hydrology Indicators: Secondary Indicators (minimum of two required) Primary Indicators (minimum of one is required; check all that apply) Surface Soil Cracks (B6) Surface Water (A1) ___ True Aquatic Plants (B14) Sparsely Vegetated Concave Surface (B8) High Water Table (A2) Hydrogen Sulfide Odor (C1) _ Drainage Patterns (B10) X Oxidized Rhizospheres on Living Roots (C3) Saturation (A3) Moss Trim Lines (B16) Water Marks (B1) Presence of Reduced Iron (C4) Dry-Season Water Table (C2) Sediment Deposits (B2) Recent Iron Reduction in Tilled Soils (C6) Crayfish Burrows (C8) Drift Deposits (B3) _ Thin Muck Surface (C7) Saturation Visible on Aerial Imagery (C9) Algal Mat or Crust (B4) Other (Explain in Remarks) Stunted or Stressed Plants (D1) Iron Deposits (B5) Inundation Visible on Aerial Imagery (B7) Shallow Aquitard (D3) Water-Stained Leaves (B9) Microtopographic Relief (D4) Aquatic Fauna (B13) FAC-Neutral Test (D5) Field Observations: Surface Water Present? Depth (inches): Water Table Present? Depth (inches):_____ Saturation Present? No_ Wetland Hydrology Present? Yes _ X Depth (inches):____ (includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available: Remarks:

VEGETATION (Four Strata) – Use scientific names of plants.

Absolute	Dominant	Indicator	Dominance Test worksheet:
			Number of Dominant Species
			That Are OBL, FACW, or FAC:(A)
			1
			Total Number of Dominant Species Across All Strata: (B)
			Percent of Dominant Species
			That Are OBL, FACW, or FAC: (A/B
			Prevalence Index worksheet:
	- Total Co		Total % Cover of: Multiply by:
			OBL species x 1 =
		· 	FACW species x 2 =
			FAC species x 3 =
	-		FACU species x 4 =
			UPL species x 5 =
			Column Totals: (A) (B)
			Column rotals(A)(B)
			Prevalence Index = B/A =
			Hydrophytic Vegetation Indicators:
			1 - Rapid Test for Hydrophytic Vegetation
			2 - Dominance Test is >50%
			3 - Prevalence Index is ≤3.0¹
			4 - Morphological Adaptations ¹ (Provide supporting
20% of 0	total cover:		
07		more	data in Remarks or on a separate sheet)
00		TAN	Problematic Hydrophytic Vegetation ¹ (Explain)
_ 7		FACU	1
10		FAC	¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
10		UPL	
			Definitions of Four Vegetation Strata:
			Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or
			more in diameter at breast height (DBH), regardless of height.
			neight.
			Sapling/Shrub – Woody plants, excluding vines, less
			than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.
-			in tall.
107			Herb – All herbaceous (non-woody) plants, regardless
75 0000 -64	Total Cov	704	of size, and woody plants less than 3.28 ft tall.
20% of t	otal cover:	20.9	Woody vine – All woody vines greater than 3.28 ft in
			height.
-	$\overline{}$		
-			
			Hydrophytic
			Vegetation /
		-	vegetation
=	Total Cove	er	Present? Yes No No
	% Cover	# Cover Species? = Total Cover. = Total Cover. = Total Cover. = Total Cover. Total Cover. Total Cover. Total Cover. Total Cover. Total Cover. Total Cover. Total Cover. Total Cover.	= Total Cover 20% of total cover: = Total Cover 20% of total cover: 30

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'SOIL

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Sampling Point: 701-WMS-27

Profile Description: (Describe to Depth Matrix			Feature		01 001111111	The absence of	maicators.)
(inches) Color (moist)	%	Color (moist)	%_	Type	Loc ²	Texture	Remarks
5-18 1042 6/3	100	7.5 94 4/6	5	<u>C</u>	MIPL	sitchy_	
					=		
Type: C=Concentration, D=Deple lydric Soil Indicators: Histosol (A1)	etion, RM=R			Sand Gra	ains.	Indicato	Pore Lining, M=Matrix. rs for Problematic Hydric Soils ³ :
Histic Epipedon (A2) Black Histic (A3) Hydrogen Sulfide (A4) Stratified Layers (A5) 2 cm Muck (A10) (LRR N) Depleted Below Dark Surface Thick Dark Surface (A12) Sandy Mucky Mineral (S1) (LR MLRA 147, 148)		Dark Surface (Polyvalue Belo Thin Dark Surf Loamy Gleyed Depleted Matri Redox Dark Si Depleted Dark Redox Depres Iron-Manganes MLRA 136)	ow Surface (S9) I Matrix (F3) urface (F6 Surface sions (F8 se Masse	(MLRA 1 F2) 6) (F7) b) s (F12) (I	47, 148) .RR N,	148) Coa:	n Muck (A10) (MLRA 147) st Prairie Redox (A16) fLRA 147, 148) mont Floodplain Soils (F19) fLRA 136, 147) r Shallow Dark Surface (TF12) er (Explain in Remarks)
Sandy Gleyed Matrix (S4) Sandy Redox (S5) Stripped Matrix (S6) cestrictive Layer (if observed):		Umbric Surface Piedmont Floo Red Parent Ma	dplain Sc	ils (F19)	MLRA 148	3) wetlar	tors of hydrophytic vegetation and nd hydrology must be present, s disturbed or problematic.
Type:Depth (inches):		-				Hydric Soil Pre	esent? Yes No
Remarks:							

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WETLAND DETERMINATION DATA FORM - Eastern Mountains and Piedmont Region Summer Shale Solar City/County: Summershale Applicant/Owner: Investigator(s): _ Section, Township, Range: Landform (hillslope, terrace, etc.): Local relief (concave, convex, none): _ Ohcule Subregion (LRR or MLRA): LRIZN Soil Map Unit Name: PUBH Are climatic / hydrologic conditions on the site typical for this time of year? Yes __ (If no, explain in Remarks.) Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? (If needed, explain any answers in Remarks.) SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc. Hydrophytic Vegetation Present? Is the Sampled Area Hydric Soil Present? within a Wetland? Wetland Hydrology Present? Remarks: **HYDROLOGY** Wetland Hydrology Indicators: Secondary Indicators (minimum of two required) Primary Indicators (minimum of one is required; check all that apply) Surface Soil Cracks (B6) Surface Water (A1) ___ True Aquatic Plants (B14) ___ Sparsely Vegetated Concave Surface (B8) High Water Table (A2) ___ Hydrogen Sulfide Odor (C1) ___ Drainage Patterns (B10) Saturation (A3) Oxidized Rhizospheres on Living Roots (C3) ___ Moss Trim Lines (B16) Water Marks (B1) Presence of Reduced Iron (C4) Dry-Season Water Table (C2) Sediment Deposits (B2) Recent Iron Reduction in Tilled Soils (C6) Crayfish Burrows (C8) Drift Deposits (B3) X Saturation Visible on Aerial Imagery (C9) _ Thin Muck Surface (C7) Algal Mat or Crust (B4) Other (Explain in Remarks) Stunted or Stressed Plants (D1) Iron Deposits (B5) ★ Geomorphic Position (D2) Inundation Visible on Aerial Imagery (B7) ___ Shallow Aquitard (D3) Water-Stained Leaves (B9) Microtopographic Relief (D4) Aquatic Fauna (B13) FAC-Neutral Test (D5) Field Observations: Surface Water Present? No ____ Depth (inches): Water Table Present? Saturation Present? No _____ Depth (inches): Wetland Hydrology Present? Yes (includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available: Remarks:

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Sampling Point: 761-W175-27

VEGETATION (Four Strata) - Use scientific names of plants.

		Indicator	Dominance Test worksheet:
% Cover		_	Number of Dominant Species
	-		That Are OBL, FACW, or FAC: (A)
			Total Number of Day is 1
			Total Number of Dominant Species Across All Strata: (B)
			Opedica Adrosa Air Otrata.
			Percent of Dominant Species
			That Are OBL, FACW, or FAC: (A/B)
-			Description of the second of t
			Prevalence Index worksheet:
	= Total Cov	/er	Total % Cover of: Multiply by:
20% of	total cover	:	OBL species x 1 =
			FACW species x 2 =
			FAC species x 3 =
			FACU species x 4 =
			UPL species x 5 =
			Column Totals: (A) (B)
			Prevalence Index = B/A =
		_	Hydrophytic Vegetation Indicators:
	_		1 - Rapid Test for Hydrophytic Vegetation
			2 - Dominance Test is >50%
=	Total Cov	er	3 - Prevalence Index is ≤3.0¹
			4 - Morphological Adaptations ¹ (Provide supporting
			data in Remarks or on a separate sheet)
5		TALL	Problematic Hydrophytic Vegetation ¹ (Explain)
			Madicators of hydric call and continued to the
20_		PAK	¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
			Definitions of Four Vegetation Strata:
			Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or
			more in diameter at breast height (DBH), regardless of
		-	height.
			Carlos (Ot 1 M)
			Sapling/Shrub Woody plants, excluding vines, less than 3 in. DBH and greater than or equal to 3.28 ft (1
			m) tall.
			,
0-			Herb – All herbaceous (non-woody) plants, regardless
			of size, and woody plants less than 3.28 ft tall.
20% of t	otal cover:	10.)	Woody vine – All woody vines greater than 3.28 ft in
			height.
			nargin.
		_	Togics
=	_	_	Togita
			Toght.
			Hydrophytic
		\equiv	
	Total Cove	er	Hydrophytic
	20% of 5	= Total Cover 20% of total cover 5	= Total Cover S

SOIL

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Sampling Point:

Depth	Matrix		th needed to docum Redox	Features				
(inches)	Color (moist)	%	Color (moist)	%	Type ¹	Loc2	Texture	Remarks
049	10412 5/2	95	7.5 4×5/6	5	_ C	M	Sityan	
				_	_			
	-			_		_		
	-	-		_				-
				_	-	-		
		_						
	Annual Value			_				
Type: C=Co lydric Soil I		etion, RM=	Reduced Matrix, MS	=Masked	Sand Gra	ins.		_=Pore Lining, M=Matrix. stors for Problematic Hydric Soils ³ :
Histosol			Dark Surface	(07)				
	ipedon (A2)		Dark Surface (N) (SR) (M	I PA 1/17		cm Muck (A10) (MLRA 147)
Histic Ep Black His			Thin Dark Surf				C	oast Prairie Redox (A16) (MLRA 147, 148)
	n Sulfide (A4)		Loamy Gleyed	, ,	•	+7, 140)	Pi	edmont Floodplain Soils (F19)
	Layers (A5)		Nepleted Matri		-/		' '	(MLRA 136, 147)
	ck (A10) (LRR N)		Redox Dark Si		6)		Ve	ery Shallow Dark Surface (TF12)
	Below Dark Surface	(A11)	Depleted Dark					ther (Explain in Remarks)
	rk Surface (A12)		X Redox Depres	sions (F8	3)			,
	ucky Mineral (S1) (L	RR N,	Iron-Manganes			RR N,		
	147, 148)		MLRA 136)					
	leyed Matrix (S4)		Umbric Surface					cators of hydrophytic vegetation and
	edox (S5)		Piedmont Floo				•	land hydrology must be present,
	Matrix (S6)		Red Parent Ma	aterial (F2	21) (MLRA	127, 147) unle	ess disturbed or problematic.
	ayer (if observed):							
	17		-					
Type:	Rock						Hydric Soil	Present? Yes X No
	(4)							
Type: Depth (inc	(4)		_					
Type: Depth (inc	(4)		_					
Type: Depth (inc	(4)		_					
Type: Depth (inc	(4)		_					
Type: Depth (inc	(4)		_					
Type: Depth (inc	(4)							
Type: Depth (inc	(4)							
Type: Depth (inc	(4)							
Type: Depth (inc	(4)							
Type: Depth (inc	(4)							
Type: Depth (inc	(4)							
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Type: Depth (inc	(4)							
Type: Depth (inc	(4)							
Type: Depth (inc	(4)							
Type: Depth (inc	(4)							
Type: Depth (inc	(4)							
Туре:	(4)							
Type: Depth (inc	(4)							
Type: Depth (inc	(4)							
Type: Depth (inc	(4)							
Type: Depth (inc	(4)							
Type: Depth (inc	(4)							

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Project/Site: Summer Sh. & Solar City/County:	4
Applicant/Owner: Candela renewables	
OV ID	State: KY Sampling Point: 701- WK Sampling Point: 701-
	A
Subregion (LRR or MLRA): LRR N Lat: 3(0.849383	
Soil Map Unit Name: 5-6 T-	
Are climatic / hydrologic conditions on the site typical for this time of year? Yes	TTTT Glassification,
Are Vegetation, Soil, or Hydrology significantly disturbed?	No (If no, explain in Remarks.) Are "Normal Circumstances" present? Yes No
Are Vegetation, Soil, or Hydrology naturally problematic?	(If needed, explain any answers in Remarks.)
SUMMARY OF FINDINGS – Attach site map showing sampling	,
HVdric Soil Present?	Sampled Area a Wetland? Yes No
Wetland point associated a	N TO1 -WET-17
HYDROLOGY	
Wetland Hydrology Indicators:	Secondary Indicators (minimum of two required)
Primary Indicators (minimum of one is required; check all that apply)	Surface Soil Cracks (B6)
✓ Surface Water (A1)	Sparsely Vegetated Concave Surface (B8)
High Water Table (A2) Hydrogen Sulfide Odor (C1)	X Drainage Patterns (B10)
Saturation (A3) — Oxidized Rhizospheres on Liv	
Water Marks (B1) Presence of Reduced Iron (C4	
Sediment Deposits (B2) Recent Iron Reduction in Tille	
Drift Deposits (B3) Thin Muck Surface (C7)	Saturation Visible on Aerial Imagery (C9)
Algal Mat or Crust (B4) Other (Explain in Remarks)	Stunted or Stressed Plants (D1)
Iron Deposits (B5)	★ Geomorphic Position (D2)
Inundation Visible on Aerial Imagery (B7)	Shallow Aquitard (D3)
<u>X</u> Water-Stained Leaves (B9)	Microtopographic Relief (D4)
Aquatic Fauna (B13)	K FAC-Neutral Test (D5)
Field Observations:	111-
Surface Water Present? Yes X No Depth (inches): 2	1
Water Table Present? Yes X No Depth (inches): O	V
Saturation Present? Yes X No Depth (inches): O	Wetland Hydrology Present? Yes No
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous ins	pections), if available:
Remarks;	
Tomano	

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Sampling Point: 101-WAS-29

VEGETATION (Four Strata) - Use scientific names of plants.

20 ()	Absolute	Dominant	Indicator	Dominance Test worksheet:
Tree Stratum (Plot size: 30 H) 1. Fraxing Panns Ilvan: 6		Species?		Number of Dominant Species
2			1110	That Are OBL, FACW, or FAC: (A) Total Number of Dominant
3,				Species Across All Strata: (B)
4		7		
5		_		Percent of Dominant Species That Are OBL, FACW, or FAC: (A/B)
6				
7				Prevalence Index worksheet:
		= Total Cov	er	Total % Cover of: Multiply by:
50% of total cover:	5 20% of	total cover:		OBL species x 1 =
Sapling/Shrub Stratum (Plot size:)	1		61	FACW species x 2 =
1. Fraxinus pennsylvanies	'		FACW	FAC species x 3 =
2				FACU species x 4 =
3				UPL species x 5 =
4				Column Totals: (A) (B)
5				5 1 1 1 5 5 5
6				Prevalence Index = B/A =
7,				Hydrophytic Vegetation Indicators:
8.				1 - Rapid Test for Hydrophytic Vegetation
9.				2 - Dominance Test is >50%
7	7 :	= Total Cove	2r	3 - Prevalence Index is ≤3.0 ¹
50% of total cover:		total cover:		4 - Morphological Adaptations (Provide supporting
Herb Stratum (Plot size: 5 ft)		-		data in Remarks or on a separate sheet)
1. Cura vulmodo	5		68L	Problematic Hydrophytic Vegetation ¹ (Explain)
2. Runnaulus Nispedus	70	7	FAC	
3. Juneus tenais	20	Y	FACW	¹ Indicators of hydric soil and wetland hydrology must
4. Juneus effuores	10		FACIN	be present, unless disturbed or problematic.
5. Banunculus abortinus	10		FACU	Definitions of Four Vegetation Strata:
6. Ludwigis polostrus	-5		FACW	Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or
T.			11100	more in diameter at breast height (DBH), regardless of
	-			height.
3		-	_	Sapling/Shrub - Woody plants, excluding vines, less
d				than 3 in. DBH and greater than or equal to 3.28 ft (1
10			-	m) tall.
	70	-		Herb – All herbaceous (non-woody) plants, regardless
500/ 64-1-1 3+	_	Total Cove	14	of size, and woody plants less than 3.28 ft tall.
50% of total cover: 3	20% of 1	total cover:_		Woody vine – All woody vines greater than 3.28 ft in
Noody Vine Stratum (Plot size:)			1	height.
- 11/				
- NA				
3				₹)
				Hydrophytic
i				Vegetation 🗸
		Total Cove		Present? Yes No No
50% of total cover:		otal cover:_		
Remarks: (Include photo numbers here or on a separate	sheet.)			
				4)

SOIL

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Sampling Point:

Depth	Matrix			Features			n the absence of indi	
(inches)	Color (moist)	%	Color (moist)	%	/Type ¹	Loc ²	Texture	Remarks
0~8	104R 6/2	93	7.5424/6		<u>C</u>	<u></u>	Sandy Loam	
ype: C=Co	oncentration, D=Deple	etion, RM	=Reduced Matrix, MS=	-Masked	Sand Gra	ins.	² Location: PL=Pore	Lining, M=Matrix.
ydric Soil I								r Problematic Hydric Soils ³ :
Black His Hydroger Stratified 2 cm Mur Depleted Thick Da Sandy M MLRA Sandy G Sandy Re Stripped	ipedon (A2)		Dark Surface (Polyvalue Belo Thin Dark Surf Loamy Gleyed Depleted Matri Redox Dark Su Depleted Dark Redox Depress Iron-Manganes MLRA 136) Umbric Surface Piedmont Floor Red Parent Ma	w Surface (S9) Matrix (Fx (F3) urface (F6 Surface (F8 sions (F8 se Masse e (F13) (Matrix (F13))	(MLRA 1 (E7) (F7)) s (F12) (L MLRA 13(47, 148) .RR N, 5, 122) MLRA 14	148) Coast Pro- (MLRA Piedmont (MLRA Very Sha Other (Ex	ck (A10) (MLRA 147) airie Redox (A16) A 147, 148) E Floodplain Soils (F19) A 136, 147) Illow Dark Surface (TF12) Eplain in Remarks) of hydrophytic vegetation and drology must be present, urbed or problematic.
Туре:	Rock		_,					· · · · · · · · · · · · · · · · · · ·
Depth (inc	nes):		_		_		Hydric Soil Presen	1? Yes <u>\(\)</u> No

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Are climatic / hydrologic conditions on the site typical for this time of year? Yes No (If no, explain Are Vegetation, Soil, or Hydrology significantly disturbed? Are "Normal Circumstance Are Vegetation, Soil, or Hydrology naturally problematic? (If needed, explain any a SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transcelled Hydrophytic Vegetation Present? Yes No Is the Sampled Area within a Wetland? Yes No Wetland Hydrology Present? Yes No Within a Wetland? Yes No Wetland Hydrology Present? Associated Associated Of the following formal point locations and the sampled Area within a Wetland? Yes No Wetland Hydrology Indicators: Secondary In Secondary In Secondary In Secondary In Secondary In Surface	Datum: PROS V ssification: NK in Remarks.) ses" present? Yes \(\sum_{\text{No}} \) No swers in Remarks.) sects, important features, etc.
Investigator(s):	Slope (%): 7 Datum: PRDS V ssification: NK In Remarks.) ses" present? Yes \(\sum \) No swers in Remarks.) sects, important features, etc.
Landform (hillslope, terrace, etc.):	Slope (%): 7 Datum: PRDS V ssification: NK In Remarks.) ses" present? Yes \(\sum \) No swers in Remarks.) sects, important features, etc.
Subregion (LRR or MLRA): LRK N Lat: 31e.849845 Long: 45.7000 Soil Map Unit Name: SaB NWI class Are climatic / hydrologic conditions on the site typical for this time of year? Yes No (If no, explain Are Vegetation, Soil, or Hydrology significantly disturbed? Are "Normal Circumstance Are Vegetation, Soil, or Hydrology naturally problematic? (If needed, explain any a SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transcript Hydrophytic Vegetation Present? Yes No Suthin a Wetland? Yes Wetland Hydrology Present? Yes No X Spocially Suthin a Wetland? Yes Wetland Hydrology Indicators: Secondary In Surface Primary Indicators (minimum of one is required; check all that apply) Surface	Datum: PROS V ssification: NK in Remarks.) ses" present? Yes \(\sum \) No swers in Remarks.) sects, important features, etc.
Subregion (LRR or MLRA): LRK N Lat: 316.8198.45 Long: 45.7000 Soil Map Unit Name: Soil Map Unit Name: NWI class Are climatic / hydrologic conditions on the site typical for this time of year? Yes No (If no, explain Are Vegetation, Soil, or Hydrology significantly disturbed? Are "Normal Circumstance Are Vegetation, Soil, or Hydrology naturally problematic? (If needed, explain any a SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transce Hydrophytic Vegetation Present? Yes No Summary No Wetland Hydrology Present? Yes No Summary No Su	Datum: PROS V ssification: NK in Remarks.) ses" present? Yes \(\sum \) No swers in Remarks.) sects, important features, etc.
NWI class Are climatic / hydrologic conditions on the site typical for this time of year? Yes No (If no, explain Are Vegetation , Soil , or Hydrology , significantly disturbed? Are "Normal Circumstance Are Vegetation , Soil , or Hydrology , naturally problematic? (If needed, explain any a SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transce Hydrophytic Vegetation Present? Yes	ssification: Nh in Remarks.) ses" present? Yes \(\sum \) No nswers in Remarks.) sects, important features, etc.
Are climatic / hydrologic conditions on the site typical for this time of year? Yes No (If no, explain Are Vegetation, Soil, or Hydrology significantly disturbed? Are "Normal Circumstance Are Vegetation, Soil, or Hydrology naturally problematic? (If needed, explain any a SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transce Hydrophytic Vegetation Present? Yes No Is the Sampled Area within a Wetland? Yes No Wetland Hydrology Present? Yes No Wetland Hydrology Present? Yes No Wetland Hydrology Present? Yes No Wetland Hydrology Indicators: Secondary In	in Remarks.) es" present? Yes No nswers in Remarks.) ects, important features, etc. No
Are Vegetation, Soil, or Hydrology significantly disturbed? Are "Normal Circumstance Are Vegetation, Soil, or Hydrology naturally problematic? (If needed, explain any a SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transcent of the sampled Area within a Wetland Area within a Wetland? Yes No Is the Sampled Area within a Wetland? Yes No Wetland Hydrology Present? Yes No Use Wetland Hydrology Present? Associated Use To I within a Wetland? Yes Wetland Hydrology Indicators: Secondary In Secondary In Surface Secondary In Surface Soil	es" present? Yes No nswers in Remarks.) ects, important features, etc.
Are Vegetation, Soil, or Hydrology naturally problematic? (If needed, explain any a SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transcelled the soil of the sample of	nswers in Remarks.) ects, important features, etc.
SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transcelled Hydrophytic Vegetation Present? Hydrophytic Vegetation Present? Yes No No Wetland Hydrology Present? Wetland Hydrology Present? Remarks: HYDROLOGY Wetland Hydrology Indicators: Primary Indicators (minimum of one is required; check all that apply) Surface	ects, important features, etc.
Hydrophytic Vegetation Present? Hydric Soil Present? Wetland Hydrology Present? Remarks: HYDROLOGY Wetland Hydrology Indicators: Primary Indicators (minimum of one is required; check all that apply) Is the Sampled Area within a Wetland? Yes	
Hydric Soil Present? Wetland Hydrology Present? Remarks: HYDROLOGY Wetland Hydrology Indicators: Primary Indicators (minimum of one is required; check all that apply) Is the Sampled Area within a Wetland? Yes	
Wetland Hydrology Present? Remarks: HYDROLOGY Wetland Hydrology Indicators: Primary Indicators (minimum of one is required; check all that apply) Within a Wetland? Yes No X Within a Wetland? Yes No X Within a Wetland? Yes	
Remarks: Upland point associated of without - Tole HYDROLOGY Wetland Hydrology Indicators: Primary Indicators (minimum of one is required; check all that apply) Surface	- WET- 17
HYDROLOGY Wetland Hydrology Indicators: Primary Indicators (minimum of one is required; check all that apply)	- WET- 17
HYDROLOGY Wetland Hydrology Indicators: Primary Indicators (minimum of one is required; check all that apply) Surface	- WE1-11
HYDROLOGY Wetland Hydrology Indicators: Primary Indicators (minimum of one is required; check all that apply) Surface	
Wetland Hydrology Indicators: Secondary Indicators (minimum of one is required; check all that apply) Surface	
Wetland Hydrology Indicators: Secondary Indicators (minimum of one is required; check all that apply) Surface	
Wetland Hydrology Indicators: Secondary Indicators (minimum of one is required; check all that apply) Surface	
Primary Indicators (minimum of one is required; check all that apply) Surface	
	dicators (minimum of two required)
	Soil Cracks (B6)
	Vegetated Concave Surface (B8)
0.1 (1.740)	Patterns (B10)
	m Lines (B16)
	son Water Table (C2)
	Burrows (C8) on Visible on Aerial Imagery (C9)
	or Stressed Plants (D1)
	phic Position (D2)
	Aquitard (D3)
	ographic Relief (D4)
Aquatic Fauna (B13) FAC-Ne	utral Test (D5)
Field Observations:	
Surface Water Present? Yes No _X Depth (inches):	10
Water Table Present? Yes NoX_ Depth (inches):	
Saturation Present? Yes NoX Depth (inches): Wetland Hydrology Pro	esent? Yes NoX
(includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:	
Booking Negoriaes Butta (Stream gauge, monitoring well, aerial protos, previous inspections), il available.	
Remarks:	

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VEGETATION (Four Strata) – Use scientific names of plants.

		Dominant		Dominance Test worksheet:
ree Stratum (Plot size:)	% Cover			Number of Dominant Species That Are OBL, FACW, or FAC: (A)
	-		-	Total Number of Dominant
NA			-	Species Across All Strata: (B)
	7	-		Percent of Dominant Species
	_	_	_	That Are OBL, FACW, or FAC:(A/B)
				Prevalence Index worksheet:
FOOV - \$4-4-1		= Total Cov		OBL species x 1 =
50% of total cover:	20% of	total cover:		FACW species x 2 =
apling/Shrub Stratum (Plot size:)				
				FACIL species x 3 =
0	-	_	_	FACU species x 4 =
MA	-			UPL species x 5 =
		$\overline{}$		Column Totals: (A) (B)
			_	Prevalence Index = B/A =
				Hydrophytic Vegetation Indicators:
			-	1 - Rapid Test for Hydrophytic Vegetation
				2 - Dominance Test is >50%
				3 - Prevalence Index is ≤3.0¹
		Total Cov		4 - Morphological Adaptations¹ (Provide supporting
50% of total cover:	20% of	total cover:		data in Remarks or on a separate sheet)
erb Stratum (Plot size:)	10			Problematic Hydrophytic Vegetation¹ (Explain)
Ranunclus hispides	10	~	FAC	residential rigarophytic vegetation (Explain)
Schidencions arundanoch	20_	-5	FACU	¹ Indicators of hydric soil and wetland hydrology must
Trilliam repens	35_		FACU	be present, unless disturbed or problematic.
Andropogon Virginians	_15		FACU	Definitions of Four Vegetation Strata:
Ranunculas abvortions			FACM	Total W. had be a life of the state of
floustania caerulea	_7_		FACIN	Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of
Taruxcum officinals	_5_		FAIN	height.
Rubus alleghaniensis	_2_			Sapling/Shrub – Woody plants, excluding vines, less
Juneus Linuis	_ 5			than 3 in. DBH and greater than or equal to 3.28 ft (1
				m) tall.
				Herb – All herbaceous (non-woody) plants, regardless
.12		Total Cove		of size, and woody plants less than 3.28 ft tall.
50% of total cover:	20% of t	otal cover:_	19.7	Woody vine – All woody vines greater than 3.28 ft in
oody Vine Stratum (Plot size:)				height.
14				
DI.				
				Hydrophytic
				Vegetation
	=	Total Cove	1	Present? Yes No
		otal cover:_	(

SOIL

Sampling Point: 101-Whs 30

Depth	Matrix		oth needed to docum	Feature		-	4	· ····································
(inches)	Color (moist)	%	Color (moist)	%	_Type ¹	_Loc2	Texture	Remarks
0-7	104R 6/2	85	7.5 YR 5/6	15	C	M	SiltLoam	
7-18	104R7/2	70	104R6/6	30	C	M		
ydric Soil I	Indicators:	letion, RM	=Reduced Matrix, MS		Sand Gra	ins.		Pore Lining, M=Matrix. rs for Problematic Hydric Soils ³ :
Black His Hydroge Stratified 2 cm Mu Depleted	pipedon (A2)	e (A11)	Dark Surface Polyvalue Beld Thin Dark Surface Loamy Gleyed Depleted Matrix Redox Dark Significant Redox Depresion	ow Surface (S9) I Matrix (I ix (F3) urface (F	(MLRA 1 F2) 6) (F7)	LRA 147, 47, 148)	148) Coa (N Pied (N Very	n Muck (A10) (MLRA 147) st Prairie Redox (A16) MLRA 147, 148) Imont Floodplain Soils (F19) MLRA 136, 147) r Shallow Dark Surface (TF12) er (Explain in Remarks)
_ Sandy M MLRA _ Sandy G _ Sandy Re	ucky Mineral (S1) (L 147, 148) leyed Matrix (S4) edox (S5) Matrix (S6)	.RR N,	Iron-Mangane MLRA 136 Umbric Surfac Piedmont Floo Red Parent Ma	se Masse) e (F13) (i dplain Sc	es (F12) (L MLRA 136 pils (F19) (5, 122) MLRA 14	8) wetlar	tors of hydrophytic vegetation and hydrology must be present,
	ayer (if observed):		Red Farein ivia	ateriai (F2	ZI) (WILKA	127, 147) unless	s disturbed or problematic.
Туре:	11/							
Depth (inc	hes):		<u> </u>				Hydric Soil Pro	esent? Yes X No
emarks:						,		

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0 11 1 5.	City/County: Sampling Date: 4 21 27
Applicant/Owner: Candla Penewable	State: Sampling Point: 701-W/N3-7
Investigator(s): CK, LD	Section, Township, Range:
	<u> </u>
	_ocal relief (concave, convex, none):
C 7 -74.	
	NWI classification:
Are climatic / hydrologic conditions on the site typical for this time of	
Are Vegetation, Soil, or Hydrology significant	· · · · · · · · · · · · · · · · · · ·
Are Vegetation, Soil, or Hydrology naturally p	problematic? (If needed, explain any answers in Remarks.)
SUMMARY OF FINDINGS – Attach site map showin	ng sampling point locations, transects, important features, etc.
Hydrophytic Vegetation Present? Hydric Soil Present? Wetland Hydrology Present? Yes X No	Is the Sampled Area within a Wetland? Yes No
Wetland point associal.	e w/ Wetland - TOI - WET-18 PEM
HYDROLOGY	
Wetland Hydrology Indicators:	Secondary Indicators (minimum of two required)
Primary Indicators (minimum of one is required; check all that apply	
 Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Oxidized Rhiz Presence of R Recent Iron R Thin Muck Sur 	Ifide Odor (C1)
Field Observations:	
Surface Water Present? Water Table Present? Saturation Present? Yes X No Depth (inches	s): 4 s): No
Describe Recorded Data (stream gauge, monitoring well, aerial phot	tos, previous inspections), il avaliable.
Remarks:	

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Reponse to 1-69

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Sampling Point: 701-WAS-31

VEGETATION (Four Strata) – Use scientific names of plants.

% Cover	Dominant Species?		Dominance Test worksheet:
	Opecies (Status	Number of Deminent Consise
			Number of Dominant Species That Are OBL, FACW, or FAC: (A)
			(//
	-		Total Number of Dominant
			Species Across All Strata: (B)
	_		Percent of Dominant Species
		-	That Are OBL, FACW, or FAC: (A/B)
			Prevalence Index worksheet:
			Total % Cover of:Multiply by:
20% of	total cover:		OBL species x 1 =
			FACW species x 2 =
			FAC species x 3 =
			FACU species x 4 =
			UPL species x 5 =
			Column Totals: (A) (B)
	-		(3)
		$\overline{}$	Prevalence Index = B/A =
			Hydrophytic Vegetation Indicators:
-	·		1 - Rapid Test for Hydrophytic Vegetation
			2 - Dominance Test is >50%
_	Total Cove	er	3 - Prevalence Index is ≤3.0¹
			4 - Morphological Adaptations ¹ (Provide supporting
			data in Remarks or on a separate sheet)
30	V	EACIN	Problematic Hydrophytic Vegetation¹ (Explain)
20	X		
		-	¹ Indicators of hydric soil and wetland hydrology must
		FACH	be present, unless disturbed or problematic.
-			Definitions of Four Vegetation Strata:
5		FACH	4. 4. 7. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1.
	•	FACH	Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or
5			more in diameter at breast height (DBH), regardless of height.
			noight.
		THEW	Sapling/Shrub – Woody plants, excluding vines, less
	_		than 3 in. DBH and greater than or equal to 3.28 ft (1
			m) tall.
			Herb – All herbaceous (non-woody) plants, regardless
			of size, and woody plants less than 3.28 ft tall.
20% of to	otal cover:_	15_	Woody vine All woody vines greates they 2.00 ft in
			Woody vine – All woody vines greater than 3.28 ft in height.
			The Light Control of the Light
		_	
	-		Hydrophytic
			Vegetation Present? Yes No
		r	Present? Yes No
20% of to	otal cover:_		
20% of to sheet.)			
	20% of 10 15 5 2 5 2 20% of t	= Total Cover: 20% of total cover: = Total Cover: 20% of total cover: 30	= Total Cover 20% of total cover: = Total Cover 20% of total cover: 30

SOIL

Reponse to 1-69
Page 264 of 794
Sampling Point: 101-Whs-31

ofile Description: (Describe to the de epth <u>Matrix</u>	Redox Features	
nches) Color (moist) %	Color (moist) % Type Loc²	Texture Remarks
104R 6/1 97	7.5 YR 5 16 3 C M	SityClay
dric Soil Indicators:	M=Reduced Matrix, MS=Masked Sand Grains.	² Location: PL=Pore Lining, M=Matrix. Indicators for Problematic Hydric Soils ³ :
Histosol (A1) Histic Epipedon (A2) Black Histic (A3) Hydrogen Sulfide (A4) Stratified Layers (A5) 2 cm Muck (A10) (LRR N) Depleted Below Dark Surface (A11) Thick Dark Surface (A12) Sandy Mucky Mineral (S1) (LRR N, MLRA 147, 148) Sandy Gleyed Matrix (S4) Sandy Redox (S5) Stripped Matrix (S6)	 Dark Surface (S7) Polyvalue Below Surface (S8) (MLRA 14 Thin Dark Surface (S9) (MLRA 147, 148) Loamy Gleyed Matrix (F2) Depleted Matrix (F3) Redox Dark Surface (F6) Depleted Dark Surface (F7) Redox Depressions (F8) Iron-Manganese Masses (F12) (LRR N, MLRA 136) Umbric Surface (F13) (MLRA 136, 122) Piedmont Floodplain Soils (F19) (MLRA 22) Red Parent Material (F21) (MLRA 127, 14) 	(MLRA 147, 148) — Piedmont Floodplain Soils (F19) (MLRA 136, 147) — Very Shallow Dark Surface (TF12) — Other (Explain in Remarks)
strictive Layer (if observed):		
Depth (inches):	-	Hydric Soil Present? Yes No
marks:		

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	/County: Shall Sampling Date: 4/21/2
Applicant/Owner: Candal - venewalles	
71.	State: Ky Sampling Point: 701-WA
000	tion, Township, Range: NA
Landform (hillslope, terrace, etc.): https://www.local.re	elief (concave, convex, none): Slope (%):
Subregion (LRR or MLRA): LRR N Lat: 36.850	12 3 Long: 85.700903 Datum: NADRS
Soil Map Unit Name:S , T a	NWI classification:/A
Are climatic / hydrologic conditions on the site typical for this time of year?	Yes No (If no, explain in Remarks.)
Are Vegetation, Soil, or Hydrology significantly distu	urbed? Are "Normal Circumstances" present? Yes No
Are Vegetation, Soil, or Hydrology naturally problen	CAT DESCRIPTION OF TAXABLE MANAGEMENT
	mpling point locations, transects, important features, etc
Hydrophytic Vegetation Present? Hydric Soil Present? Wetland Hydrology Present? Remarks:	Is the Sampled Area within a Wetland? Yes No
upland point associaled	Wetland - 701-WET-18 And 702-WET-02
HYDROLOGY	
Wetland Hydrology Indicators:	Secondary Indicators (minimum of two required)
Primary Indicators (minimum of one is required; check all that apply)	Surface Soil Cracks (B6)
Surface Water (A1) True Aquatic Plants	
High Water Table (A2) Hydrogen Sulfide Oc	· · · · ·
Saturation (A3) Oxidized Rhizospher	res on Living Roots (C3) Moss Trim Lines (B16)
Water Marks (B1) Presence of Reduce	
Sediment Deposits (B2) Recent Iron Reduction	on in Tilled Soils (C6) Crayfish Burrows (C8)
Drift Deposits (B3) Thin Muck Surface (
Algal Mat or Crust (B4) Other (Explain in Re	
Iron Deposits (B5)	Geomorphic Position (D2)
Inundation Visible on Aerial Imagery (B7)	Shallow Aquitard (D3)
Water-Stained Leaves (B9)	Microtopographic Relief (D4)
Aquatic Fauna (B13)	FAC-Neutral Test (D5)
Field Observations:	
Surface Water Present? Yes No Depth (inches):	
Water Table Present? Yes No Depth (inches):	<u> </u>
Saturation Present? Yes No Depth (inches): (includes capillary fringe)	Wetland Hydrology Present? Yes No^_
Describe Recorded Data (stream gauge, monitoring well, aerial photos, pre	evious inspections), if available:
Demodus	
Remarks:	

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Reponse to 1-69
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Sampling Point: 701 who 70

VEGETATION (Four Strata) – Use scientific names of plants.

61 - 1 1 -	D	ALL PARTY OF	Ta
Absolute % Cover			Dominance Test worksheet:
			Number of Dominant Species
			That Are OBL, FACW, or FAC. (A)
			Total Number of Dominant 2
-			Species Across All Strata: (B)
			Percent of Dominant Species
			That Are OBL, FACW, or FAC:
			(70)
			Prevalence Index worksheet:
	Total Cov	or	Total % Cover of: Multiply by:
			OBL species x 1 =
	00101		FACW species x 2 =
			FAC species x 3 =
			FACU species x 4 =
			UPL species x 5 =
			Column Totals: (A) (B)
			5 1 1 1 5 5 5
			Prevalence Index = B/A =
			Hydrophytic Vegetation Indicators:
			1 - Rapid Test for Hydrophytic Vegetation
		_	2 - Dominance Test is >50%
	-		3 - Prevalence Index is ≤3.0 ¹
			4 - Morphological Adaptations ¹ (Provide supporting
20% of t	otal cover:		data in Remarks or on a separate sheet)
			I '
40		FACH	Problematic Hydrophytic Vegetation ¹ (Explain)
25	+	FACIA	
15			¹ Indicators of hydric soil and wetland hydrology must
10			be present, unless disturbed or problematic.
15			Definitions of Four Vegetation Strata:
-50		-	Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or
		+	more in diameter at breast height (DBH), regardless of
		FACU	height.
			Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than or equal to 3.28 ft (1
	-		m) tall.
			,
1140	T-1-10	_	Herb – All herbaceous (non-woody) plants, regardless
			of size, and woody plants less than 3.28 ft tall.
20% Of to	orai cover:	<u> </u>	Woody vine – All woody vines greater than 3.28 ft in
		1	height.
		-	
			ľ.,
			Hydrophytic Vegetation
			Present? Yes No
_			
= 20% of to	Total Cove		
	20% of t	= Total Cover: = Total Cover: = Total Cover: = Total Cover: 10	= Total Cover 20% of total cover: = Total Cover 20% of total cover:

SOIL

Reponse to 1-69
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Sampling Point: 101-WAS-32

Profile Description: (Describe to the de			or confirm	the absence of in	dicators.)
Depth Matrix (inches) Color (moist) %	Redox Featu Color (moist) %	Type ¹	Loc ²	Toyture	Domestra
A Section 1997	7.54K 6/6 3		LOC		Remarks
0-3 1048 6/2 97	1.54K WILL 3			Silt pam	
3-12 1094 614 91	1.54R66 3				
12- 109R 614 100			-	47	
			_		
					
			-		
Town CoConnectation DeDuction DA	A-D-dused Makin MO-M-du			21 11 11 11 11	
¹ Type: C=Concentration, D=Depletion, RN Hydric Soil Indicators:	A=Reduced Matrix, MS=Maske	ed Sand Gra	ins.		e Lining, M=Matrix.
	Dark Surface (97)			•	for Problematic Hydric Soils ³ :
Histosol (A1) Histic Epipedon (A2)	Dark Surface (S7)Polyvalue Below Surf	ace (SB) /##	I DA 147		uck (A10) (MLRA 147)
Black Histic (A3)	Thin Dark Surface (S				Prairie Redox (A16) R A 147, 148)
Hydrogen Sulfide (A4)	Loamy Gleyed Matrix		11, 140,		nt Floodplain Soils (F19)
Stratified Layers (A5)	Depleted Matrix (F3)	()			RA 136, 147)
2 cm Muck (A10) (LRR N)	Redox Dark Surface	(F6)			nallow Dark Surface (TF12)
Depleted Below Dark Surface (A11)	Depleted Dark Surface	e (F7)			Explain in Remarks)
Thick Dark Surface (A12)	Redox Depressions (
Sandy Mucky Mineral (S1) (LRR N,	Iron-Manganese Mas	ses (F12) (L	.RR N,		
MLRA 147, 148)	MLRA 136)			0	
Sandy Gleyed Matrix (S4)	Umbric Surface (F13)				of hydrophytic vegetation and
Sandy Redox (S5) Stripped Matrix (S6)	Piedmont Floodplain			•	nydrology must be present,
Restrictive Layer (if observed):	Red Parent Material (rzı) (IVILKA	127, 147	uniess di	sturbed or problematic.
Type:					,
Depth (inches):				11. 14. 0. 11.0	, X
Remarks:				Hydric Soil Prese	nt? Yes No

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WETLAND DETERMINA	TION DATA FORM	 Eastern Mounta 	ins and Piedmont Region
Project/Site: Summurshale S	1.1	County: Sammurs	2 2 2 2 2
Applicant/Owner:	bles		State: Sampling Point: 701-UNS-
Investigator(s): CIZ, LD		ion, Township, Range:	
Landform (hillslope, terrace, etc.):h_ 510pc		elief (concave, convex, no	
1 200		5-17 Long: 4	5.649 699 Datum: NAD83
Soil Map Unit Name:	Lat	Z Long	
		V	NWI classification: NWI
Are climatic / hydrologic conditions on the site typic:		,	
Are Vegetation, Soil, or Hydrology _			al Circumstances" present? Yes No
Are Vegetation, Soil, or Hydrology _		, ,	explain any answers in Remarks.)
SUMMARY OF FINDINGS – Attach site	map showing san	npling point location	ons, transects, important features, etc.
Hydrophytic Vegetation Present? Yes	No No No	Is the Sampled Area within a Wetland?	YesXNo
WEThank point	atsoira La	e w _	701-WET-19
HYDROLOGY			PLI
Wetland Hydrology Indicators:			S
Primary Indicators (minimum of one is required; ch	neck all that apply)		Secondary Indicators (minimum of two required)
X Surface Water (A1)	True Aquatic Plants ((B14)	Surface Soil Cracks (B6)
X High Water Table (A2)	Hydrogen Sulfide Od		Sparsely Vegetated Concave Surface (B8) Drainage Patterns (B10)
Saturation (A3)		es on Living Roots (C3)	Moss Trim Lines (B16)
Water Marks (B1)	Presence of Reduced	- , ,	Dry-Season Water Table (C2)
Sediment Deposits (B2)	Recent Iron Reductio		Crayfish Burrows (C8)
Drift Deposits (B3)	Thin Muck Surface (C		X Saturation Visible on Aerial Imagery (C9)
Algal Mat or Crust (B4)	Other (Explain in Ren	·	Stunted or Stressed Plants (D1)
Iron Deposits (B5)		,	Geomorphic Position (D2)
Inundation Visible on Aerial Imagery (B7)			Shallow Aquitard (D3)
Water-Stained Leaves (B9)			Microtopographic Relief (D4)
Aquatic Fauna (B13)			X FAC-Neutral Test (D5)
Field Observations:			
Surface Water Present? Yes X No	Depth (inches):	<u></u>	
Water Table Present? Yes X No	Depth (inches):	2	
Saturation Present? Yes No (includes capillary fringe)	Depth (inches):(Wetland H	ydrology Present? Yes X No
Describe Recorded Data (stream gauge, monitoring	g well, aerial photos, pre	vious inspections), if avai	ilable:
Remarks:			
Wetlaml is graz	ed by C	20,45	
			i i i k

VEGETATION (Four Strata) – Use scientific names of plants.

Tree Stratum (Plot size:)	Absolute Dominant % Cover Species?		Dominance Test worksheet: Number of Dominant Species
1		-	That Are OBL, FACW, or FAC:(A)
3		=	Total Number of Dominant Species Across All Strata: (B)
5			Percent of Dominant Species That Are OBL, FACW, or FAC: (A/B
6			Prevalence Index worksheet:
7		_	
500/ of total covers	= Total Cov 20% of total cover:		OBL species x 1 =
Sapling/Shrub Stratum (Plot size:)			FACW species x 2 =
			FAC species x 3 =
1,			FACU species x 4 =
2			UPL species x 5 =
3			Column Totals: (A) (B)
4. 5.		_	
6			Prevalence Index = B/A =
7			Hydrophytic Vegetation Indicators:
0			1 - Rapid Test for Hydrophytic Vegetation
9.			2 - Dominance Test is >50%
	= Total Cove	er	V 3 - Prevalence Index is ≤3.01
50% of total cover:	20% of total cover:		4 - Morphological Adaptations (Provide supporting
Herb Stratum (Plot size: 5ft)			data in Remarks or on a separate sheet)
1. Runmedly Mispider	60 X	FAC	Problematic Hydrophytic Vegetation ¹ (Explain)
2. June 4 Hours	5	FACW	
3. Schidansons applinaces	10	FACE	Indicators of hydric soil and wetland hydrology must
4. Ludwinia palastras		FACUS	be present, unless disturbed or problematic.
5		17150	Definitions of Four Vegetation Strata:
5			Tree - Woody plants, excluding vines, 3 in. (7.6 cm) or
7			more in diameter at breast height (DBH), regardless of
		-	height.
3			Sapling/Shrub – Woody plants, excluding vines, less
d			than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.
0		_	inj air.
1	90 = Total Cove	r ,	Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.
50% of total cover:	20% of total cover:	18	Woody vine – All woody vines greater than 3.28 ft in
Noody Vine Stratum (Plot size:)			height.
XIA		_	
- 1		-	
			Hydrophytic
	T.110	-	Vegetation Present? Yes X
	= Total Cove	r	163_/X_ 140
50% of total cover:	Zo /o OF LOTAL COVEL:_		

SOIL

Reponse to 1-69
Page 270 of 79
Sampling Point: 101 -WH 5-33

Profile Description: (Describe to the de	pth needed to document the indicator or confirm the absence of indicators.)
DepthMatrix	Redox Features
(inches) Color (moist) %	Color (moist) % Type¹ Loc² Texture Remarks
D-Le 1092411 90	7548416 10 C MPL S.Hclay
CO-18 104×7/1 90	7.54R 5/8 10 C M My Loam
	·
	·
	· — — — — — — — — — — — — — — — — — — —
Transport	A Deducation and the second se
Hydric Soil Indicators:	M=Reduced Matrix, MS=Masked Sand Grains. 2 Location: PL=Pore Lining, M=Matrix.
	Indicators for Problematic Hydric Soils ³ :
Histosol (A1)	Dark Surface (S7) 2 cm Muck (A10) (MLRA 147)
Histic Epipedon (A2)	Polyvalue Below Surface (S8) (MLRA 147, 148) Coast Prairie Redox (A16)
Black Histic (A3) Hydrogen Sulfide (A4)	Thin Dark Surface (S9) (MLRA 147, 148) (MLRA 147, 148) Loamy Gleyed Matrix (F2) Piedmont Floodplain Soils (F19)
Stratified Layers (A5)	——————————————————————————————————————
2 cm Muck (A10) (LRR N)	Depleted Matrix (F3) (MLRA 136, 147) Redox Dark Surface (F6) Very Shallow Dark Surface (TF12)
Depleted Below Dark Surface (A11)	Nedox Bark Surface (16) Very Shallow Bark Surface (1712) Other (Explain in Remarks)
Thick Dark Surface (A12)	Redox Depressions (F8)
Sandy Mucky Mineral (S1) (LRR N,	Iron-Manganese Masses (F12) (LRR N,
MLRA 147, 148)	MLRA 136)
Sandy Gleyed Matrix (S4)	Umbric Surface (F13) (MLRA 136, 122) 3Indicators of hydrophytic vegetation and
Sandy Redox (S5)	Piedmont Floodplain Soils (F19) (MLRA 148) wetland hydrology must be present,
Stripped Matrix (S6)	Red Parent Material (F21) (MLRA 127, 147) unless disturbed or problematic.
Restrictive Layer (if observed):	
Type:NA	
Depth (inches):	Hydric Soil Present? Yes X No
	Hydric Soil Present? Yes X No
Remarks:	

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Are Vegetation, Soil, or Hydrology significantly disturbed? Are "Normal of the Normal of the Nor	State: Sampling Point: Slope (%): Slope (%): Datum: Datum: Slope (%):
Applicant/Owner:	State: Sampling Point:
Lat: 310.85 Long: 45	e):
Landform (hillslope, terrace, etc.):	e):
Subregion (LRR or MLRA):	Datum: MD83 NWI classification: f no, explain in Remarks.) Circumstances" present? Yes
Soil Map Unit Name:	NWI classification: f no, explain in Remarks.) Circumstances" present? YesX_ No xplain any answers in Remarks.) ns, transects, important features, etc. Yes No
Are climatic / hydrologic conditions on the site typical for this time of year? Yes No (I Are Vegetation, Soil, or Hydrology significantly disturbed? Are "Normal of Are Vegetation, Soil, or Hydrology naturally problematic? (If needed, ex SUMMARY OF FINDINGS – Attach site map showing sampling point location Hydrophytic Vegetation Present? Yes No Is the Sampled Area within a Wetland? Wetland Hydrology Present? Yes No Wetland Hydrology Present?	f no, explain in Remarks.) Circumstances" present? Yes
Are Vegetation, Soil, or Hydrology significantly disturbed? Are "Normal of Are Vegetation, Soil, or Hydrology naturally problematic? (If needed, ex SUMMARY OF FINDINGS – Attach site map showing sampling point location Hydrophytic Vegetation Present? Yes No Is the Sampled Area within a Wetland? Wetland Hydrology Present? Yes No Wetland Hydrology Present?	Circumstances" present? Yes No cplain any answers in Remarks.) ns, transects, important features, etc. Yes No
Are Vegetation, Soil, or Hydrology naturally problematic? (If needed, ex SUMMARY OF FINDINGS – Attach site map showing sampling point location Hydrophytic Vegetation Present? Yes No Is the Sampled Area within a Wetland? Wetland Hydrology Present? Yes No Wetland Hydrology Present?	cplain any answers in Remarks.) ns, transects, important features, etc. Yes No
SUMMARY OF FINDINGS – Attach site map showing sampling point location Hydrophytic Vegetation Present? Hydrophytic Vegetation Present? Yes No Hydric Soil Present? Wetland Hydrology Present? Yes No Wetland Hydrology Present? Remarks:	ns, transects, important features, etc
Hydrophytic Vegetation Present? Hydric Soil Present? Wetland Hydrology Present? Remarks: Yes No Yes No Yes No No Remarks:	Yes No
Hydrophytic Vegetation Present? Hydric Soil Present? Wetland Hydrology Present? Remarks: Yes No Yes No Wetland Hydrology Present? Is the Sampled Area within a Wetland?	Yes No
upland point associable w/	TOLVIET 19
	- /01-WC1911
HYDROLOGY	
William	Secondary Indicators (minimum of two required)
Primary Indicators (minimum of one is required; check all that apply)	Surface Soil Cracks (B6)
Surface Water (A1) True Aquatic Plants (B14)	Sparsely Vegetated Concave Surface (B8)
High Water Table (A2) Hydrogen Sulfide Odor (C1)	Drainage Patterns (B10)
Saturation (A3) Oxidized Rhizospheres on Living Roots (C3)	Moss Trim Lines (B16)
Water Marks (B1) Presence of Reduced Iron (C4)	Dry-Season Water Table (C2)
Sediment Deposits (B2) Recent Iron Reduction in Tilled Soils (C6)	Crayfish Burrows (C8)
Drift Deposits (B3) Thin Muck Surface (C7)	_ Saturation Visible on Aerial Imagery (C9)
Algal Mat or Crust (B4) Other (Explain in Remarks)	Stunted or Stressed Plants (D1)
Iron Deposits (B5) Inundation Visible on Aerial Imagery (B7)	_ Geomorphic Position (D2)
Water-Stained Leaves (B9)	_ Shallow Aquitard (D3)
Aquatic Fauna (B13)	Microtopographic Relief (D4) FAC-Neutral Test (D5)
ield Observations:	_ TAO-Neutral Test (D3)
Surface Water Present? Yes No _K_ Depth (inches):	
Nater Table Present? Yes No Depth (inches):	
	drology Present? Yes NoX
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if availa	ble:
Remarks:	

VEGETATION (Four Strata) – Use scientific names of plants.

245 7 26 St o	Absolute	Dominant		Dominance Test worksheet:
Tree Stratum (Plot size:)		Species?	<u>Status</u>	Number of Dominant Species
1				That Are OBL, FACW, or FAC:(A)
3 11/		. 3-		Total Number of Dominant
3N				Species Across All Strata: (B)
5				Percent of Dominant Species That Are OBL, FACW, or FAC: (A/B)
6				That Are OBL, FACW, or FAC: (A/B)
7			_	Prevalence Index worksheet:
		= Total Cov	er	Total % Cover of: Multiply by:
50% of total cover:				OBL species x 1 =
Sapling/Shrub Stratum (Plot size:)				FACW species x 2 =
1				FAC species x 3 =
2				FACU species x 4 =
3				UPL species x 5 =
4				Column Totals: (A) (B)
5				Davidson late 50
6,				Prevalence Index = B/A =
7				Hydrophytic Vegetation Indicators:
8				1 - Rapid Test for Hydrophytic Vegetation
9.				2 - Dominance Test is >50%
		Total Cov	er	3 - Prevalence Index is ≤3.0 ¹
50% of total cover:				4 - Morphological Adaptations (Provide supporting
Herb Stratum (Plot size: 5 Ft)				data in Remarks or on a separate sheet)
- × ·	50	X	FACU	Problematic Hydrophytic Vegetation ¹ (Explain)
1. Intoleno pipens 2. Tunno tennis 3. Stillaria Midia	20		FACL	
3. Stellaria media	30	X	UPL	¹ Indicators of hydric soil and wetland hydrology must
4. Tarixacum officinale	7		FACU	be present, unless disturbed or problematic.
5			PPC.	Definitions of Four Vegetation Strata:
6				Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or
				more in diameter at breast height (DBH), regardless of
7			-	height.
8			$\overline{}$	Sapling/Shrub – Woody plants, excluding vines, less
9				than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.
10				m) tan.
	152			Herb – All herbaceous (non-woody) plants, regardless
50% of total cover: 51		: Total Cover:		of size, and woody plants less than 3.28 ft tall.
	20% 01	iolai cover.	20,7,	Woody vine - All woody vines greater than 3.28 ft in
Woody Vine Stratum (Plot size:)				height.
No.				
NA			$\overline{}$	
1			-	Hydrophytic
0,			-	Vegetation Present? Yes No
		Total Cover:		Present? YesNo
50% of total cover:	000/ 11			

SOIL

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Sampling Point: 701-WAS-34

epth	cription: (Describe to Matrix				x Feature			10000000	,
nches)	Color (moist)	_%_	Color (%	Type ¹	_Loc ²	Texture	Remarks
)-1	10412 3/2	100			_			Siltylown	
-18	104K (1)	90	10 YR	5/8	10	C	M	5.14 lour	
			-			=	_		
		=							
	Y	_	_	=	_	_	_		
ype: C=C	oncentration, D=Deple	etion, RM=	Reduced I	Matrix, MS	=Masked	Sand Gra	nins.	² Location: PL=Po	ore Lining, M=Matrix.
Black Hi Hydroge Stratified 2 cm Mu Depleted Thick Da Sandy M MLRA Sandy G Sandy R Stripped	pipedon (A2) sistic (A3) en Sulfide (A4) d Layers (A5) uck (A10) (LRR N) d Below Dark Surface ark Surface (A12) flucky Mineral (S1) (LI A 147, 148) sleyed Matrix (S4) dedox (S5) Matrix (S6) Layer (if observed):		Poly Thir Loa Dep Red Dep Red Iron Unit	n Dark Su my Gleye leted Mat ox Dark S leted Dar ox Depre- Mangane flcRA 136 oric Surfac Imont Floo	ow Surface (S9) d Matrix (I rix (F3) Surface (F k Surface ssions (F8 ese Masse b) ce (F13) (I odplain So	6) (F7)	47, 148) .RR N, 6, 122) MLRA 14	2 cm M Coast	for Problematic Hydric Soils ³ : Muck (A10) (MLRA 147) Prairie Redox (A16) RA 147, 148) ont Floodplain Soils (F19) RA 136, 147) challow Dark Surface (TF12) (Explain in Remarks) rs of hydrophytic vegetation and hydrology must be present, disturbed or problematic.

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	Summer Shack Sampling Date: 4/22/23
Applicant/Owner: Candela renewables	State: Ky Sampling Point: 101-1NA
Investigator(s): Qk, LD Section, Towns	4.110
	ve, convex, none): Concoul Slope (%):
Subregion (LRR or MLRA): LRRN Lat: 36.85393	
Soil Map Unit Name: Boc NY	NWI classification: NIA
Are climatic / hydrologic conditions on the site typical for this time of year? Yes	_ No (If no, explain in Remarks.)
Are Vegetation, Soil, or Hydrology significantly disturbed?	Are "Normal Circumstances" present? Yes X
Are Vegetation, Soil, or Hydrology naturally disturbed?	(If needed, explain any answers in Remarks.)
SUMMARY OF FINDINGS – Attach site map showing sampling p	
Hydric Soil Present? Wetland Hydrology Present? Remarks: Nowithin a	ampled Area Wetland? Yes No
Wetland point association	W1-70HWET-20 PEM/PSS
HYDROLOGY	
Wetland Hydrology Indicators:	Secondary Indicators (minimum of two required)
Primary Indicators (minimum of one is required; check all that apply)	Surface Soil Cracks (B6)
Surface Water (A1) True Aquatic Plants (B14)	Sparsely Vegetated Concave Surface (B8)
High Water Table (A2) Hydrogen Sulfide Odor (C1)	✓ Drainage Patterns (B10)
X Saturation (A3) X Oxidized Rhizospheres on Livin	
Water Marks (B1) Presence of Reduced Iron (C4)	
Sediment Deposits (B2) Recent Iron Reduction in Tilled	
Drift Deposits (B3) Thin Muck Surface (C7)	Saturation Visible on Aerial Imagery (C9)
Algal Mat or Crust (B4) Other (Explain in Remarks) Iron Deposits (B5)	Stunted or Stressed Plants (D1)
Inundation Visible on Aerial Imagery (B7)	Geomorphic Position (D2) Shallow Aquitard (D3)
Water-Stained Leaves (B9)	Shallow Adultard (D3) Microtopographic Relief (D4)
Aquatic Fauna (B13)	FAC-Neutral Test (D5)
Field Observations:	A Trie House Foot (55)
Surface Water Present? Yes No Depth (inches):	
Water Table Present? Yes X No Depth (inches):	
Saturation Present? Yes X No Depth (inches);	Wetland Hydrology Present? Yes No
(includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspe	ections), if available:
Bernd	
Remarks:	
	n I

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Reponse to 1-69
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Sampling Point: 70 - WAS-35

VEGETATION (Four Strata) – Use scientific names of plants.

	Absolute Dominant Indicator	Dominance Test worksheet:
Tree Stratum (Plot size:)	% Cover Species? Status	Number of Dominant Species
1,		That Are OBL, FACW, or FAC: (A)
2		Total Number of Dominant
3		Species Across All Strata: (B)
4/ [\]		Description of the second of t
5		Percent of Dominant Species That Are OBL, FACW, or FAC: (A/B)
6		
7		Prevalence Index worksheet:
	= Total Cover	Total % Cover of: Multiply by:
50% of total cover:	20% of total cover:	OBL species x 1 =
Sapling/Shrub Stratum (Plot size:)		FACW species x 2 =
1,		FAC species x 3 =
2		FACU species x 4 =
0		UPL species x 5 =
4 11/7		Column Totals: (A) (B)
7-		Column rotals(A)
5		Prevalence Index = B/A =
6		Hydrophytic Vegetation Indicators:
7		1 - Rapid Test for Hydrophytic Vegetation
8,		2 - Dominance Test is >50%
9		
	= Total Cover	3 - Prevalence Index is ≤3.0¹
↑ 50% of total cover:	20% of total cover:	4 - Morphological Adaptations (Provide supporting
Herb Stratum (Plot size:)		data in Remarks or on a separate sheet)
1. Cirax uniprodia	30 X DEL	Problematic Hydrophytic Vegetation ¹ (Explain)
2. Imag effusus		
3. chilaryis polastrus	30 X FACW	Indicators of hydric soil and wetland hydrology must
4. Schedonous overdences	15 FAQU	be present, unless disturbed or problematic.
		Definitions of Four Vegetation Strata:
		Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or
6,		more in diameter at breast height (DBH), regardless of
7		height.
8		Sapling/Shrub – Woody plants, excluding vines, less
9		than 3 in. DBH and greater than or equal to 3.28 ft (1
10		m) tall.
11,		Herb – All herbaceous (non-woody) plants, regardless
	100 = Total Cover	of size, and woody plants less than 3.28 ft tall.
50% of total cover: 40	20% of total cover: 20	
Woody Vine Stratum (Plot size:)		Woody vine – All woody vines greater than 3.28 ft in height.
1.		neight.
2		
2		
3NA		
4		Hydrophytic
5		Vegetation
	= Total Cover	Present? Yes No
50% of total cover:	20% of total cover:	
50% of total cover:	20% of total cover:	Present? Yes No

SOIL

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Sampling Point:

Depth Matrix Color (moist) % O-18 IOY2 6 z 85	Redox	Features				of indicators.)
0-18 1042 6/2 85	Color (moist)	%	Type ¹	Loc ²	<u>Texture</u>	Remarks
	7.54×4/6	16	C	PL	day Lorm	
	-	-				
		-				
	-					
				-	· · · · · ·	
Francisco Company Comp					21 11 12	B. III town III
Type: C=Concentration, D=Depletion, RN ydric Soil Indicators:	1=Reduced Matrix, MS	=Masked S	Sand Gra	ains.		Pore Lining, M=Matrix. ors for Problematic Hydric Soils ³ :
_ Histosol (A1)	Dark Surface	(S7)				m Muck (A10) (MLRA 147)
Histic Epipedon (A2)	Polyvalue Bel		e (S8) (N	ILRA 147		ast Prairie Redox (A16)
_ Black Histic (A3)	Thin Dark Sur				. —	MLRA 147, 148)
_ Hydrogen Sulfide (A4)	Loamy Gleyed	d Matrix (F		•		dmont Floodplain Soils (F19)
_ Stratified Layers (A5)	X Depleted Matr					MLRA 136, 147)
_ 2 cm Muck (A10) (LRR N)	Redox Dark S	•				y Shallow Dark Surface (TF12)
_ Depleted Below Dark Surface (A11) _ Thick Dark Surface (A12)	Depleted Dark Redox Depres				Oth	er (Explain in Remarks)
Sandy Mucky Mineral (S1) (LRR N,	Iron-Mangane			RR N.		
MLRA 147, 148)	MLRA 136		- (–, (-			
_ Sandy Gleyed Matrix (S4)	Umbric Surfac					ators of hydrophytic vegetation and
_ Sandy Redox (S5)	Piedmont Floo				•	and hydrology must be present,
Stripped Matrix (S6) estrictive Layer (if observed):	Red Parent M	aterial (F2	1) (MLR	A 127, 14	7) unles	ss disturbed or problematic.
Type: NA						
Depth (inches):					Hydric Soil P	resent? Yes X No
emarks:					Tryune com t	resent: res No
		the second			J. S. Au	
				Silve	The second	
					- Au	
X.				S. Contraction of the Contractio	ig Au	
X					- S. Au	
X					Alan da	
X						
X					J. P. Au.	
X					- Au	
X					A. A	

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	stern wountains and Pledmont Region
Project/Site: Symman Shila Solav City/County:	Sampling Date: 4/22/22
Applicant/Owner: Candela Venducibles	State: Y Sampling Point: TOI - WAS
	wnship, Range: NA
Landform (hillslope, terrace, etc.):Local relief (con	
10001	Long: 85, 648891 Datum: NAO23/L
Soil Map Unit Name: 34C, NK	NWI classification:
Are climatic / hydrologic conditions on the site typical for this time of year? Yes	
Are Vegetation, Soil, or Hydrology significantly disturbed?	Are "Normal Circumstances" present? Yes No
Are Vegetation, Soil, or Hydrology naturally distribed?	
	(If needed, explain any answers in Remarks.)
SUMMARY OF FINDINGS – Attach site map showing sampling	point locations, transects, important features, etc.
Hydric Soil Present?	e Sampled Area n a Wetland? Yes No
upland print associated wil	- TOI-WET-20 nd TOI-WET-21
HYDROLOGY	
Wetland Hydrology Indicators:	Secondary Indicators (minimum of two required)
Primary Indicators (minimum of one is required; check all that apply)	Surface Soil Cracks (B6)
Surface Water (A1) True Aquatic Plants (B14)	Sparsely Vegetated Concave Surface (B8)
High Water Table (A2) Hydrogen Sulfide Odor (C1)	
Saturation (A3) Oxidized Rhizospheres on Li	- ,
Water Marks (B1) Presence of Reduced Iron (C	C4) Dry-Season Water Table (C2)
Sediment Deposits (B2) Recent Iron Reduction in Tille	ed Soils (C6) Crayfish Burrows (C8)
Drift Deposits (B3) Thin Muck Surface (C7)	Saturation Visible on Aerial Imagery (C9)
Algal Mat or Crust (B4) Other (Explain in Remarks)	Stunted or Stressed Plants (D1)
Iron Deposits (B5) Inundation Visible on Aerial Imagery (B7)	Geomorphic Position (D2)
Water-Stained Leaves (B9)	Shallow Aquitard (D3)
Aquatic Fauna (B13)	Microtopographic Relief (D4) FAC-Neutral Test (D5)
Field Observations:	
Surface Water Present? Yes No Depth (inches):	
Water Table Present? Yes No Depth (inches):	
Saturation Present? Yes No Depth (inches):	Wetland Hydrology Present? Yes No
(includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous in	spections) if available:
gaage, memoring went, acrial pricates, previous in	speciforia), il avaliable.
Remarks:	
	1
	1

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VEGETATION (Four Strata) - Use scientific names of plants

	plants. Dominant Indicator	Sampling Point: Tol-WAS-
% Cover	Species? Status	Number of Dominant Species That Are OBL, FACW, or FAC:(A)
		Total Number of Dominant Species Across All Strata: (B)
-		Percent of Dominant Species
		- That Are OBL, FACW, or FAC: (A/B)
		Prevalence Index worksheet:
	= Total Cover	Total % Cover of: Multiply by:
20% of	total cover:	OBL species x 1 =
70	v the	FACW species x 2 =
	- A TAC	FACUL species x 3 =
	X FACU	FACU species x 4 =
		UPL species x 5 = Column Totals: (A) (B)
		. Column Totals(A)(B)
		Prevalence Index = B/A =
		Hydrophytic Vegetation Indicators:
		1 - Rapid Test for Hydrophytic Vegetation
		2 - Dominance Test is >50%
15	= Total Cover _	3 - Prevalence Index is ≤3.0¹
5 20% of	total cover; 5	4 - Morphological Adaptations ¹ (Provide supporting
	1	data in Remarks or on a separate sheet)
30	- X FACU	Problematic Hydrophytic Vegetation ¹ (Explain)
26	X FACU	1
30	X pacu	¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
-5	FAC	Definitions of Four Vegetation Strata:
5	FACU	
		Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of
		height.
		Sanling/Shrub Woody plants avaluation visual land
		Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than or equal to 3.28 ft (1
		m) tall.
		Herb – All herbaceous (non-woody) plants, regardless
		nerb = All Herbaceous (non-woody) plants, regardless
	Total Cover	of size, and woody plants less than 3.28 ft tall.
	Total Cover total cover: 18	of size, and woody plants less than 3.28 ft tall.
		of size, and woody plants less than 3.28 ft tall. Woody vine – All woody vines greater than 3.28 ft in
		of size, and woody plants less than 3.28 ft tall. Woody vine – All woody vines greater than 3.28 ft in
		of size, and woody plants less than 3.28 ft tall. Woody vine – All woody vines greater than 3.28 ft in
		of size, and woody plants less than 3.28 ft tall. Woody vine – All woody vines greater than 3.28 ft in
20% of t	otal cover: 18	of size, and woody plants less than 3.28 ft tall. Woody vine – All woody vines greater than 3.28 ft in height. Hydrophytic Vegetation
20% of t		of size, and woody plants less than 3.28 ft tall. Woody vine – All woody vines greater than 3.28 ft in height. Hydrophytic
	20% of Z b 5 20% of 30 26 30 5	# Cover Species? Status ———————————————————————————————————

SOIL

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Sampling Point:

Depth	cription: (Describe t Matrix	o the depth i		Features		or commi	ii tile absence	or indicate	ors.)
(inches)	Color (moist)		Color (moist)	%	Type ¹	_Loc ²	Texture		Remarks
0-18	1090 6 2	26 J	159R 4JL	<u>15</u> —	<u>C</u>	<u>PL</u>	SiltyCle	<u></u>	
	oncentration, D=Deple	etion, RM=Rec	duced Matrix, MS	=Masked	Sand Gra	nins.			ng, M=Matrix. roblematic Hydric Soils³:
Histosol Histic Ep Black Hi Hydroge Stratified 2 cm Mu Depleted Thick Da Sandy M MLRA Sandy R	(A1) pipedon (A2)	(A11)	Dark Surface Polyvalue Beld Thin Dark Sur Loamy Gleyed Depleted Matr Redox Dark S Depleted Dark Redox Depres Iron-Mangane MLRA 136 Umbric Surfac Piedmont Floo	ow Surface face (S9) I Matrix (F ix (F3) urface (F6 Surface (sisions (F8) se Masses) e (F13) (N odplain So	(MLRA 1 2) (F7)) s (F12) (L MLRA 130 ils (F19) (47, 148) LRR N, 6, 122) (MLRA 14	2 148) C Pi Vo O	cm Muck (/oast Prairie (MLRA 14 iedmont Flo (MLRA 13 ery Shallow ther (Explai) cators of hy tland hydrol	A10) (MLRA 147) Redox (A16) 7, 148) podplain Soils (F19) 6, 147) Dark Surface (TF12) in in Remarks) ydrophytic vegetation and logy must be present,
estrictive L	Layer (if observed):		_ Red Parent Ma		,,,		Hydric Soil		ed or problematic. Yes No

Project/Site: Shamur Shad (Splan FORM - Eastern Mount Applicant/Owner: Candula remused Science State S	
Applicant/Owner: Candula remuse 61 City/County	
Investigatorial CV ID	Sec. 1
HIVESONGOLIST A LA L	tains and Piedmont P
Landform (hillslope, terrace, etc.): 7-4 Step, Skrium Section, Township	er Shal
Cal Mark of Micros (Constitution of the Constitution of the Consti	State: Sampling Date
A 21/2 32	one). Car
Are Control / hydrologic conditions on the site typical for this time	5.699455 Slop
Are vegatation Soil and the second	30 10 10 2 2
Are Vegelation, Soil, or Hydrology naturally disturbed?	NWI classification: NA
Are Vegetation, Soil, or Hydrology significantly disturbed? Are Vegetation, Soil, or Hydrology naturally problematic? Are "Normal Company of the company o	ino, explain in Remarks.)
Are Vegetation, Soil, or Hydrology significantly disturbed?	"cumstances" present? Von
Hydric Soil Present? Yes No No	alln any answers in Remarks
Wetland Hydrology Present?	transects, impact
Remarks: Yes No Vertand Hydrology Present? Yes No Vertand Hydrology Present? Yes No Vertand Hydrology Present? Within a Work No Vertand Hydrology Present?	, important featu
INTUANED DOINT a scock tuck in	v \/
WET	res No
DED	
10	1-WET-71
HYDROLOGY	
Wetland Hydrology Indicators:	stint is 701 links
Primary indicators (minimum of one is required; check all that appet	15 TOI-WAS
## ***********************************	
High Water Table (A2) Saturation (A3) Hydrogen Sulfide Ode Secondary Secondary	Indicators (pul.)
_ Oxidized Rhizon Gor (C1)	Indicators (minimum of two require
 ✓ Saturation (A3) — Water Marks (B1) — Sediment Deposits (B2) — Presence of Reduced Iron (C4) → Drainage ✓ Thin Muck Service (B14) — Sparsel ✓ Drainage ✓ Moss Tel 	y Vegetated Concave Surface (B8) Patterns (B10)
Drift Deposits (B3) Recent Iron Reduction (C4) Moss T. Moss	Patterns (B10)
Algal Mat or Crust (B4) Other (Explain Control of Cont	" Lines (B16)
- Ulaufiel -	valer Table (Co.
. / Odligation	(00)
Aquatic Fauna (B13)	Stressed President (C9)
Aquatic Fauna (B13) Aquatic Fauna (B13) Geomorphic Shallow Aqui	Visible on Aerial Imagery (C9) Stressed Plants (D1) Position (D2)
Surface Water Present?	itard (D3)
Voter Table Products	phic Relief (D4)
Saturation Present? Yes No Depth (inches): Depth (inches):	est (D5)
ncludes capillary fringe) Depth (Inches):	
caturation Present? Yes No Depth (inches): Depth (inches): Wetland Hydrology Present? Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:	
emarks: Present?	v Y
of available:	Yes No
	1
	1
	I

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	ames of			Sampling Point: Tol-Whs-
Tree Stratum (Plot size: 15 1. Liquid ambay styraciflum	Absolute % Cover 25	Dominant Species?	Indicator Status FAC	Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: (A)
. Litiodundron tulipifer-	10	X	FACU	Total Number of Dominant
Acer rublum	15_		FAC	Species Across All Strata: (B)
				Percent of Dominant Species That Are OBL, FACW, or FAC: (A/
		_		Prevalence Index worksheet:
	50	= Total Cov		Total % Cover of: Multiply by:
50% of total cover: 25		total cover:		OBL species x 1 =
apling/Shrub Stratum (Plot size: 15 Ct)				FACW species x 2 =
Syssatias albidum	5	X	FACH	FAC species x 3 =
Lightlamber showerflag	10	T	Clar	FACU species x 4 =
			PERC	UPL species x 5 =
			_	Column Totals: (A) (E
				Prevalence Index = B/A =
				Hydrophytic Vegetation Indicators:
				1 - Rapid Test for Hydrophytic Vegetation
				2 - Dominance Test is >50%
	15 =	Total Cove	ar .	3 - Prevalence Index is ≤3.0 ¹
50% of total cover:	20% of t	total cover:	່ 3	4 - Morphological Adaptations ¹ (Provide supportions)
rb Stratum (Plot size: 5P)	_			data in Remarks or on a separate sheet)
Cevax stulphodia	20	X	OBL	Problematic Hydrophytic Vegetation¹ (Explain)
De la transfer de la companya della companya de la companya della	25	X	6BL	
Ludwing polastros		X	FACW	¹ Indicators of hydric soil and wetland hydrology must
Juneary effusing			FALW	be present, unless disturbed or problematic.
				Definitions of Four Vegetation Strata:
				Tree - Woody plants, excluding vines, 3 in. (7.6 cm) of
				more in diameter at breast height (DBH), regardless o
		_		height.
			_	Sapling/Shrub - Woody plants, excluding vines, less
				than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.
				Herb – All herbaceous (non-woody) plants, regardless
F00/ - f1-1-1		Total Cove	4	of size, and woody plants less than 3.28 ft tall.
50% of total cover: 32.5 ody Vine Stratum (Plot size:)	_ 20% of to	otal cover:_	13	Woody vine - All woody vines greater than 3.28 ft in
				height.
- 4 /			- 10	
ANA				
V 4				
				Hydrophytic Vegetation
		Total Cove	r	Present? Yes No
50% of total cover:		STOL COVER		

SOIL

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Sampling Point: (01-Wh5-37

(inches)	Matrix		oth needed to docur Redo	x Feature					
	Color (moist)	%	Color (moist)	%	Type ¹	_Loc2	Texture	-	Remarks
0-11	104/2 5/1	97	104K 5/8	3	C	M	Sandysi	I+ Look	3
1-18	54 Cel1	100					SiltiClas	1	
	9	_					-	-	
		_		_	_	-	-	-	
	-							-	
_								-	
	_	-							
	oncentration, D=Dep	letion, RM	Reduced Matrix, MS	S=Masked	Sand Gra	ins.	² Location: P	L=Pore Linii	ng, M=Matrix.
ydric Soil	Indicators:								oblematic Hydric Soils ³ :
_ Histosol			Dark Surface				2	cm Muck (A	A10) (MLRA 147)
	pipedon (A2)		Polyvalue Be				148) (Redox (A16)
	istic (A3) en Sulfide (A4)		Thin Dark Su Loamy Gleye			47, 148)		(MLRA 14	
	d Layers (A5)		▼ Depleted Mat		1 2)		<u> </u>	MLRA 13	odplain Soils (F19) 6. 147)
_ 2 cm Mu	uck (A10) (LRR N)		Redox Dark S		6)		v		Dark Surface (TF12)
	d Below Dark Surface	e (A11)	Depleted Dar				c	ther (Explai	n in Remarks)
	ark Surface (A12)	DD M	Redox Depre						
	Mucky Mineral (S1) (L A 147, 148)	.KK N,	Iron-Mangane MLRA 136		es (F12) (L	RR N,			
	Gleyed Matrix (S4)		Umbric Surfa	-	MLRA 136	5. 122)	3Ind	icators of hy	drophytic vegetation and
	Redox (S5)		Piedmont Flo						ogy must be present,
	Matrix (S6)		Red Parent M	laterial (F	21) (MLR	127, 147			ed or problematic.
	Layer (if observed):								
	NA		_						1
Depth (inc	ches):						Hydric Soil	Present?	Yes No
emarks:									
emarks:									
emarks;									
emarks;									
emarks:									
emarks;									
emarks:									
emarks;									
marks:									

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	Eastern Mountains and Pledmont Region
	inty: Summurshad Sampling Date: 4-22-27
Applicant/Owner: Candula Yanculables	State: KV Sampling Point: 101-W/Yo
	Township, Range: NA
Landform (hillslope, terrace, etc.): Local relief	(concave, convex, none): Coheall Slope (%): Z
	8 Long: 85.1097348 Datum: AJAD 830
Soil Map Unit Name: 3 a C	NWI classification:
Are climatic / hydrologic conditions on the site typical for this time of year? Yes	✓ No (If no, explain in Remarks.)
Are Vegetation, Soil, or Hydrology significantly disturbed	
Are Vegetation, Soil, or Hydrology naturally problematic	· · · · · · · · · · · · · · · · · · ·
SUMMARY OF FINDINGS – Attach site map showing sampl	
Hydric Soil Drecent?	the Sampled Area ithin a Wetland? Yes No
Wetland point associated	~1 - TOI-WET-22 PEM
HYDROLOGY	
Wetland Hydrology Indicators: Primary Indicators (minimum of one is required; check all that apply) X Surface Water (A1)	Drainage Patterns (B10) Moss Trim Lines (B16) Dry-Season Water Table (C2) Tilled Soils (C6) Saturation Visible on Aerial Imagery (C9) Stunted or Stressed Plants (D1) Geomorphic Position (D2) Shallow Aquitard (D3) Microtopographic Relief (D4) FAC-Neutral Test (D5) Wetland Hydrology Present? Yes No

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Sampling Point: /OI -WAS - 38

VEGETATION (Four Strata) - Use scientific names of plants.

	Absolute Dominant Indicator	Dominance Test worksheet:
Tree Stratum (Plot size:)	% Cover Species? Status	Number of Dominant Species
1		That Are OBL, FACW, or FAC: (A)
2		Total Number of Dominant
3		Species Across All Strata: (B)
4N V1		
5		Percent of Dominant Species That Are OBL, FACW, or FAC: [A/B]
6		That the GBE, I flow, GITAGE (AB)
7		Prevalence Index worksheet:
	= Total Cover	Total % Cover of: Multiply by:
50% of total cover:	20% of total cover:	OBL species x 1 =
Sapling/Shrub Stratum (Plot size:)		FACW species x 2 =
1,		FAC species x 3 =
2		FACU species x 4 =
		UPL species x 5 =
4		Column Totals: (A) (B)
5		``
6		Prevalence Index = B/A =
		Hydrophytic Vegetation Indicators:
7		1 - Rapid Test for Hydrophytic Vegetation
8		2 - Dominance Test is >50%
v		3 - Prevalence Index is ≤3.0 ¹
EON of total cause	= Total Cover	4 - Morphological Adaptations (Provide supporting
50% of total cover:	20% of total cover:	data in Remarks or on a separate sheet)
Herb Stratum (Plot size: SFT)	80 X FACW	Problematic Hydrophytic Vegetation¹ (Explain)
1. Januas ettusus		
2. Androw pogor vivginicus	4 - 1 - 1	¹ Indicators of hydric soil and wetland hydrology must
3. Solidas grantin	15 FACW	be present, unless disturbed or problematic.
7-		Definitions of Four Vegetation Strata:
5		T W
6		Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of
7		height.
8		Sanling/Shaub Woody slave such discussion in
9		Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than or equal to 3.28 ft (1
10		m) tall.
11		Herb – All herbaceous (non-woody) plants, regardless
	= Total Cover	of size, and woody plants less than 3.28 ft tall.
50% of total cover:	20% of total cover:	
Woody Vine Stratum (Plot size:)		Woody vine – All woody vines greater than 3.28 ft in height.
1		
21		
3		
4.		
5.		Hydrophytic Vegetation
	= Total Cover	Present? Yes No
50% of total cover:	20% of total cover:	
Remarks: (Include photo numbers here or on a separate		
Tremains, (moidde photo humbers here of off a separate	Sileet.)	

SOIL

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Page 285 of 794	1 195-30
Sampling Daint D	-10,10

		to the dep	oth needed to docum			or confir	m the absence	of indicators.)
Depth (inches)	Color (moist)	%	Color (moist)	x Feature %	Type ¹	Loc ²	Texture	Remarks
0-2	1048 4 1z	100	- Color (moloty		1700		5. Hy Clay	Remarks
2-16	- Un (1 =		Dryn Fla			- 14	0119014	
2 10	10 902 Ce 12	95	7.542 5/8	5_		<u>M</u>	-10	
	-				-			
							-	
	-		-	-				
								-
-								
Type: C=C	oncentration, D=Der	oletion, RM	=Reduced Matrix, MS	=Masked	d Sand Gra	ains.	² Location: PL	=Pore Lining, M=Matrix.
Hydric Soil	Indicators:							tors for Problematic Hydric Soils ³ :
Histosol	(A1)		Dark Surface	(S7)			20	em Muck (A10) (MLRA 147)
	pipedon (A2)		Polyvalue Bel				, 148) Co	past Prairie Redox (A16)
	istic (A3)		Thin Dark Sur			47, 148)		(MLRA 147, 148)
	en Sulfide (A4)		Loamy Gleyer		(F2)			edmont Floodplain Soils (F19)
	d Layers (A5) uck (A10) (LRR N)		Depleted Mat Redox Dark S		:6)			(MLRA 136, 147) ry Shallow Dark Surface (TF12)
	d Below Dark Surfac	e (A11)	Depleted Dark	•	•			her (Explain in Remarks)
	ark Surface (A12)	,	Redox Depres					Tor (Explain III Normarks)
	/lucky Mineral (S1) (I	LRR N,	Iron-Mangane			RR N,		
	A 147, 148)		MLRA 136					
	Bleyed Matrix (S4)		Umbric Surfac					cators of hydrophytic vegetation and
	Redox (S5) I Matrix (S6)		Piedmont Floo				· ·	and hydrology must be present,
	Layer (if observed):		Red Parent M	atenai (F	21) (IVILR)	A 127, 14	(1) unie	ess disturbed or problematic.
Type:	74 1 1-4	• 0					1	
	ches):		-				Undria Sail D	Present? Yes X No
Remarks:			_				nyuric Soil F	resentr res / No
Kemarks.								

WETLAND DETERMINATIO	N P	Page 286 of 794
0 0 1	TAI	FORM – Eastern Mountains and Piedmont Region
Project/Site: Summer Shale Solar	r.	City/County: Shamey Shale
Applicant/Owner: Candela renuvable	5	City/County: Shammar A. //
Investigator(s):		Section T State: Ky Sampling Date:
Landform (hillslope, terrace, etc.):		Coulding to the control of the contr
100	3/ 10	poal relief (concave, easy)
Soil Man Unit Name C. B	36.95	ocal relief (concave, convex, none): On(an)
Are climatic / hydrologic conditions on the site typical for	the	510pe (9
Are climatic / hydrologic conditions on the site typical for Are Vegetation, Soil, or Hydrology	- Or year	NWI Classic
Are Vegetation Soil or Hydrology	grifficantly o	disturbed? (If no, explain in Do.
Are Vegetation, Soil, or Hydrology SUMMARY OF FINDINGS – Attach site ma	p showing	Are "Normal Circumstances" present? Yes X plematic? (If needed, explain any answers in Remarks.) sampling point locations, transects, important feature Is the Sampled Area
Hydrophytic Vegetation Present? Yes	No.	ampling point locations, transport
Hydric Soil Present? Yes	NO	le the o
Wetland Hydrology Present? Yes	NO	Is the Sampled Area within a Wetland?
Remarks:		Yes NoX
upland poin	<u> </u>	
	as 500	iatul 1
i i		instead W/ Wetland-TOI-WET-2
YDROLOGY		
Wetland Hydrology Indicators:		
Primary Indicators (minimum of one is required; check a	II that	
Surface Water (A1)	mat apply)	Secondary Indicators (minimum of two require Surface Soil Cracks (B6)
High Water Table (A2)	ue Aquatic Plants (B	Surface Sell o
Soturation (A2)	drogen Sulfide Odor	Surface Soil Cracks (B6)
Saturation (A3) Ox	dized Rhizospheres	(C1) — Sparsely Vegetated Concave Surface (B8) On Living Roots (C3)
Water Marks (B1) Pr	kidized Rhizospheres esence of Reduced In ecent Iron Reduced	on Living Roots (C3) Drainage Patterns (B10) Moss T.
_ Common Bopoons (BZ)	Certif Iron D	Lines (R1c)
Drift Deposits (B3) Th	ecent Iron Reduction in Muck Surface (C7) her (Explain	n Tilled Soils (C6) Dry-Season Water Table (C2) Craviish Burer
Algal Mat or Crust (B4) Ot	her (Explain in Remark	
Iron Deposits (B5)	, vernan	
Inundation Visible on Aerial Imagery (B7)		Stunted or Stressed Plants (D1) Geomorphic Position (D2)
Water-Stained Leaves (B9)		— Geomorphic Position (D2)
Aquatic Fauna (B13)		Adultond (De
ield Observations:		- Wildrotopographic Park
urface Water Present? Yes NoX Do	epth (inches):	FAC-Neutral Test (D5)
Vater Table Present? Yes No X Do	epth (inches):	,20)
escribe Recorded Data (stream gauge, monitoring well,	epth (inches):	1.00
escribe Recorded Data (stream gauge, monitoring well,	aerial photos	Wetland Hydrology Present? Yes No X
	previous ir	nspections), if available:
lemarks:		y a dvalidble:
		1
		1

VEGETATION (Five Strata) – Use scientific names of plants.

Tree Stratum (Plot size: 13) 1. Figure grantifeling		Dominant Species?	Indicator Status FKU	Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: (A)
2,				Total Number of Dominant Species Across All Strata: (B)
4		=	_	Percent of Dominant Species That Are OBL, FACW, or FAC: (A/E
	20	= Total Cov	er	Prevalence Index worksheet:
50% of total cover: 10				Total % Cover of: Multiply by:
Sapling Stratum (Plot size:)	20% 01	total cover:		OBL species x 1 =
1. Fagus Grane'l Filia	5	J	FACIN	FACW species x 2 =
2. Lyndambar Styraciflum	117		The	FAC species x 3 =
3. Jampons Nicynama		->-	FACU	FACU species x 4 =
				UPL species x 5 =
4 5				Column Totals: (A) (B)
6				Prevalence Index = B/A =
		Total Cove		Hydrophytic Vegetation Indicators:
Flex 50% of total cover: 10	20% of	total cover:_	4.	1 - Rapid Test for Hydrophytic Vegetation
Stratum (Plot size:)		. 1	0	2 - Dominance Test is >50%
1. Schidohorous arimulinares	20	X	then	3 - Prevalence Index is ≤3.0 ¹
2. Anthroxon hispides	_56	X	FAC	4 - Morphological Adaptations (Provide supporting
3. Claytonia Vergraces	5		FACL	data in Remarks or on a separate sheet)
4				Problematic Hydrophytic Vegetation ¹ (Explain)
5				
6				¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
	75 =	Total Cove	r	
50% of total cover: <u>37 - 4</u>				Definitions of Five Vegetation Strata:
Herb Stratum (Plot size:)				Tree – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and 3 in. (7.6 cm) or larger in diameter at breast height (DBH).
1,				(7.0 cm) of larger in diameter at breast height (DBH).
				Sapling – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) DBH.
AX				Shrub – Woody plants, excluding woody vines,
		_		approximately 3 to 20 ft (1 to 6 m) in height.
				Herb – All herbaceous (non-woody) plants, including herbaceous vines, regardless of size, and woody plants, except woody vines, less than approximately 3
0				ft (1 m) in height.
1				Woody vine – All woody vines, regardless of height.
		Total Cove	- 1	
50% of total cover:	_ 20% of to	otal cover:_		
Voody Vine Stratum (Plot size:)				
1.14				
· Alk				
- VIV				
				Hydrophytic
	= -	Total Cover		Hydrophytic Vegetation
50% of total cover:	200/ of to	tal anyon		Present? Yes No
	Z(170 (11 10)			

SOIL

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Sampling Point: Tol-WAS-39

Profile Description: (Describe Depth Matrix			x Feature				,
inches) Color (moist)	_%	Color (moist)	%	Type ¹	Loc2	Texture	Remarks
0°5 1048 4/2	100	-	-	-	_	Siltan	
3-18 10 4 5/4	100	_	_	-		11	
- 10 10 pm 3/4	100		_	-			-
-							-
					_		
			-				
		-		_		-	-
		-			_		
	_						
Type: C=Concentration, D=Depl	letion, RM=I	Reduced Matrix, MS	S=Masked	Sand Gra	ins	² l ocation: Pl	=Pore Lining, M=Matrix.
ydric Soil Indicators:	one in the in	TOODOO MOUNT IN	- Macked	Ourid Ore	1113.		tors for Problematic Hydric Soils ³ :
Histosol (A1)		Dark Surface	(S7)				cm Muck (A10) (MLRA 147)
Histic Epipedon (A2)		Polyvalue Be		e (S8) (M	LRA 147.		past Prairie Redox (A16)
Black Histic (A3)		Thin Dark Su					(MLRA 147, 148)
Hydrogen Sulfide (A4)		Loamy Gleye			•		edmont Floodplain Soils (F19)
_ Stratified Layers (A5)		Depleted Mat					(MLRA 136, 147)
2 cm Muck (A10) (LRR N)		Redox Dark S					ery Shallow Dark Surface (TF12)
_ Depleted Below Dark Surface	e (A11)	Depleted Dar				Ot	ther (Explain in Remarks)
_ Thick Dark Surface (A12) _ Sandy Mucky Mineral (S1) (L	DD N	Redox Depre					
Sandy Mucky Mineral (ST) (L MLRA 147, 148)	KK N,	Iron-Mangane		s (F12) (L	RK N,		
_ Sandy Gleyed Matrix (S4)		Umbric Surfa		WI PA 136	122)	3India	cators of hydrophytic vegetation and
Sandy Redox (S5)		Piedmont Flo					land hydrology must be present,
Stripped Matrix (S6)		Red Parent M				-	ess disturbed or problematic.
estrictive Layer (if observed):				, (J	see distance of problematic.
Type:							
Depth (inches):						Hydric Soil F	Present? Yes No
emarks:						Trydric 30ii i	resent: resNO

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WETLAND DETERMINATION DATA FORM - Eastern Mountains and Piedmont Region

Project/Site: Summer Shale Solar City/County: Summer Shale Sampling Date: 4-22. Applicant/Owner: Candida Veneraldes	_
Investigator(s): CK, LD Section, Township, Range: No	A
landform (hillstone terrace etc.): To St. Leed with (
Subregion (LRR or MLRA): LRRN Lat: 316,95 4170	
Soil Man Unit Name: NK	3
NWI classification: NWI classification:	
Are Vegeteties Cell (in no, explain in Remarks.)	
Are Venetation College and help to No	
SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, et	
Hydrophytic Vegetation Present? Voc. X No.	.C.
Hydric Soil Present?	
Hydric Soil Present? Yes No within a Wetland? Yes No No No	
Remarks:	
Wether print associated w/ Without - ToI-WET-23	
HYDROLOGY	
Wetland Hydrology Indicators:	
Primary Indicators (minimum of one is required; check all that apply) Secondary Indicators (minimum of two required)	
X Surface Water (A1) True Adulatio Plants (D44)	1
Y High Water Table (A2)	1
Saturation (A3)	1
Water Marks (B1) Presence of Poduced Land (B1)	1
Sediment Denosits (R2) Recent Iron Padient - Till	
Drift Deposits (B3) Thin Muck Surface (C7)	1
Algal Mat or Crust (B4) Other (Explain in Remarks) Saturation Visible on Aerial Imagery (C9) Stunted or Stressed Plants (D1)	
Geomorphic Position (DO)	
murdation visible on Aerial imagery (B7) Shallow Aquitand (D3)	
Microtronographic Bellist (D.4)	
FAC-Neutral Test (D5)	0
Field Observations:	1
Surface Water Present? Yes X No Depth (inches):	
Water Table Present? Yes X No Depth (inches): 0	
Saturation Present? Yes No Depth (inches): Wetland Hydrology Present? Yes No No	
(includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:	
Remarks:	

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Sampling Point:

VEGETATION (Five Strata) – Use scientific names of plants.

Tree Stratum (Plot size:)	Absolute % Cover			Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: (A)
2. 3. A 1 1				Total Number of Dominant Species Across All Strata: (B)
/////				Percent of Dominant Species That Are OBL, FACW, or FAC: (A/B)
6	·			Prevalence Index worksheet:
F00/ -(4.1.)				Total % Cover of: Multiply by:
50% of total cover:	20% of t	otal cover	:	OBL species x 1 =
Sapling Stratum (Plot size:)				FACW species x 2 =
1				FAC species x 3 =
2		_		FACU species x 4 =
3				UPL species x 5 =
4		-		Column Totals: (A) (B)
6				Prevalence Index = B/A =
	=	Total Cov	er	Hydrophytic Vegetation Indicators:
50% of total cover:	20% of to	otal cover		1 - Rapid Test for Hydrophytic Vegetation
Shrub Stratum (Plot size:)				2 - Dominance Test is >50%
1				3 - Prevalence Index is ≤3.0 ¹
2				4 - Morphological Adaptations (Provide supporting
3				data in Remarks or on a separate sheet)
4				Problematic Hydrophytic Vegetation ¹ (Explain)
5	-		_	Indicators of hydric soil and wetland hydrology must
6				be present, unless disturbed or problematic.
		Total Cov		Definitions of Five Vegetation Strata:
50% of total cover:	20% of to	otal cover:		Tree – Woody plants, excluding woody vines,
Herb Stratum (Plot size:)	25	V	03	approximately 20 ft (6 m) or more in height and 3 in. (7.6 cm) or larger in diameter at breast height (DBH).
1. Cardemine bulbosa 2. Teneus effecus	20	×/	FIACLU	(7.6 cm) of larger in diameter at breast neight (DBH).
		×	OBL	Sapling – Woody plants, excluding woody vines,
4. Ludwigic p. lustrus	10	^	FACW	approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) DBH.
. Arthraxon hispides	5		FAC	Shrub – Woody plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height.
5,				
7. 3			-	Herb – All herbaceous (non-woody) plants, including herbaceous vines, regardless of size, and woody
9			_	plants, except woody vines, less than approximately 3
10				ft (1 m) in height.
11				Woody vine – All woody vines, regardless of height.
	/00 =	Total Cov	er	
50% of total cover: <u>5</u> 0			<i>~</i> .	
Noody Vine Stratum (Plot size:)		,,		
2				
3(\int \bullet \bullet)				
i			2 - 1	
j				Underglodie
	=	Total Cov	er	Hydrophytic Vegetation
50% of total cover:	20% of to	tal cover:		Present? Yes No
Remarks: (Include photo numbers here or on a separate s				

SOIL

Case No. 2025-00064
Reponse to 1-69
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Sampling Point: 701-Wh3-C(b)

Depth	ription: (Describe Matrix			ox Feature					•
(inches)	Color (moist)	%	Color (moist)	%	Type ¹	Loc2	Texture		Remarks
D-le	10486/2	90	7.5 4Ke	10	C	MPL	SiltClay		
					N		1		
			•		-				
		_	-	-	-				
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	5								
				-	-				
			-		-				
			-						
Type: C=Co	ncentration, D=Depl	etion, RM=	Reduced Matrix, M	S=Masked	d Sand Gr	ains.	² Location: PL=	Pore Lining	M=Matrix
lydric Soil I	ndicators:	23311				u			lematic Hydric Soils ³ :
Histosol ((A1)		Dark Surfac	e (S7)					O) (MLRA 147)
	pedon (A2)		Polyvalue B		ce (S8) (I	MLRA 147,		st Prairie R	
Black His	tic (A3)		Thin Dark S					WLRA 147,	
	Sulfide (A4)		Loamy Gley		(F2)				lplain Soils (F19)
	Layers (A5)		Depleted Ma					MLRA 136,	
	ck (A10) (LRR N)		Redox Dark						ark Surface (TF12)
	Below Dark Surface	e (A11)	Depleted Da				Oth	er (Explain i	n Remarks)
	k Surface (A12) ucky Mineral (S1) (L	DD NI	Redox Depre			LDDN			
	147, 148)	KK N,	Iron-Mangar MLRA 13		es (F12) (LKK N,			
	eyed Matrix (S4)		Umbric Surfa		(MI RA 12	16 122)	3Indies	tore of hydr	ophytic vegetation and
Sandy Re			Piedmont Flo						y must be present,
	Matrix (S6)		Red Parent			•	•		or problematic.
	ayer (if observed):			`	, (or production
Type:	BedvocK		200						
Depth (incl	nes):						Hydric Soil Pr	esent? V	es No
Remarks:							yano oon		<u> </u>
tomarks,									

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WETLAND DETERMINATION DATA FORM - Eastern Mountains and Piedmont Region (K, Lb _____ Section, Township, Range: __ Investigator(s): Toesline Landform (hillslope, terrace, etc.): Local relief (concave, convex, none): Subregion (LRR or MLRA): LRK 36.853955 Long: 85.697044 Lat: Datum: XIAL Soil Map Unit Name: NWI classification: Are climatic / hydrologic conditions on the site typical for this time of year? Yes (If no, explain in Remarks.) Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? (If needed, explain any answers in Remarks.) SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc. Hydrophytic Vegetation Present? Is the Sampled Area Hydric Soil Present? within a Wetland? Wetland Hydrology Present? Remarks: upland point associated w/ webal-TDI-NET-23 **HYDROLOGY** Wetland Hydrology Indicators: Secondary Indicators (minimum of two required) Primary Indicators (minimum of one is required; check all that apply) Surface Soil Cracks (B6) Surface Water (A1) __ True Aquatic Plants (B14) ___ Sparsely Vegetated Concave Surface (B8) High Water Table (A2) ___ Hydrogen Sulfide Odor (C1) ___ Drainage Patterns (B10) Saturation (A3) Oxidized Rhizospheres on Living Roots (C3) ___ Moss Trim Lines (B16) Water Marks (B1) ___ Presence of Reduced Iron (C4) __ Dry-Season Water Table (C2) Sediment Deposits (B2) Recent Iron Reduction in Tilled Soils (C6) Crayfish Burrows (C8) Drift Deposits (B3) ___ Thin Muck Surface (C7) Saturation Visible on Aerial Imagery (C9) Algal Mat or Crust (B4) ___ Other (Explain in Remarks) Stunted or Stressed Plants (D1) Iron Deposits (B5) Geomorphic Position (D2) Inundation Visible on Aerial Imagery (B7) Shallow Aquitard (D3) Water-Stained Leaves (B9) Microtopographic Relief (D4) Aquatic Fauna (B13) FAC-Neutral Test (D5) Field Observations: Surface Water Present? Water Table Present? Saturation Present? No X Depth (inches): _ Wetland Hydrology Present? Yes (includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available: Remarks:

Case No. 2025-00064
Reponse to 1-69
Page 293 at 794 AS - U |
Sampling Point:

VEGETATION (Five Strata) – Use scientific names of plants.

1 Liquid Ambeur Styles (A) 2 Ambeur (Plot size: 50% of total cover: 20% of total cover: 20% of total cover: 50% of total cover: 20% of total cover: 50% of total cover	76 (1)	Absolute Dominant Indicator	Dominance Test worksheet:
That Are CBI, FACW, or FAC: A Total Number of Dominant Species Total Cover Total Cover Total Cover Total Cover Total Cover Total Cover Dominant Species Total Cover Dominant Species Total Cover Dominant Species Total Cover Total Cover Dominant Species Total Cover Dominant Species Total Cover Dominant Species Total Cover Total Cover Dominant Species Total Cover Dominant Species Total Cover Dominant	Tree Stratum (Plot size: 36 Ft)		Number of Dominant Species
Species Across All Streto Percent of Dominant Species All Streto Supling Stratum (Plot size 1	1. Liquidambay Styrafleug	10 X FAC	That Are OBL, FACW, or FAC:(A)
Species Across All Streto Percent of Dominant Species All Streto Supling Stratum (Plot size 1	2		T-MAN 1 (D)
## Percent of Deminant Species			
Fective of Lorenter Species Fect			Opecies Across Air Strata.
1			
Pervalence Index worksheet: Total Cover 1 Total Scover of: Multiply by. OBL species X 1 = FACW species X 2 = FACW species X 3 = FACW species X 3 = FACW species X 3 = FACW species X 5 = FACW spe			That Are OBL, FACW, or FAC: (A/B)
Total Stratum (Plot size: 5	0	10	Prevalence Index worksheet:
Sapiling Stratum (Plot size:	r	= Total Cover	The state of the s
### FACW species	50% of total cover:	20% of total cover:1	
1	Sapling Stratum (Plot size:		
2 3 4			
UPL species x5 = Column Totals: (A) (B)			FAC species x 3 =
UPL species	0 (1)		FACU species x 4 =
Column Totals: (A) (B) Provalence Index = B/A = Hydrophytic Vegetation Indicators: 1	/\//\		
Prevalence Index = BIA = Hydrophytic Vegetation Indicators: 1 - Rapid Test for Hydrophytic Vegetation 2 - Dominance Test is >50% 2 - Dominance Test is >50% 3 - Prevalence Index is s3.0 4 - Morphological Adaptations' (Provide supporting data in Remarks or on a separate sheet) Problematic Hydrophytic Vegetation' (Explain) Problematic Hydrophytic Vegetation Strata: Tree - Woody plants, excluding woody vines, approximately 20 it (6 m) or more in height and 3 in. (7.6 cm) or larger in diameter at breast height (DBH). Sapling - Woody plants, excluding woody vines, approximately 20 it (6 m) or more in height and less than 3 in. (7.6 cm) DBH. Shrub - Woody plants, excluding woody vines, approximately 20 it (6 m) or more in height and less than 3 in. (7.6 cm) DBH. Shrub - Woody plants, excluding woody vines, approximately 3 to 20 it (1 to 6 m) in height. Herb - All herbaceous (non-woody) plants, including herbaceous vines, regardless of size, and woody plants, except woody vines, regardless of height. Hydrophytic Wegetation Present? Yes No No No No No No No N			
Frevelence Index = BIA = Hydrophytic Vegetation Indicators: 1. Rapid Test for Hydrophytic Vegetation 2. Dominance Test is >50% of total cover. 3. Prevalence Index is \$3.0\] 4. Morphological Adaptations' (Provide supporting data in Remarks or on a separate sheet) Problematic Hydrophytic Vegetation' (Explain) 4. Morphological Adaptations' (Provide supporting data in Remarks or on a separate sheet) Problematic Hydrophytic Vegetation' (Explain) Indicators of hydric soil and welland hydrology must be present, unless disturbed or problematic. Definitions of Five Vegetation Strata: Tree - Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and 3 in. (7.6 cm) or larger in diameter at breast height (DBH) TACL	5		(A)
Total Cover			Prevalence Index = B/A =
Shrub Stratum (Plot size:			
Shrub Stratum (Plot size:			The state of the s
3 - Prevalence Index is \$3.0¹ 4 - Morphological Adaptations¹ (Provide supporting data in Remarks or on a separate sheet) Problematic Hydrophytic Vegetation¹ (Explain) 1 - From Stratum (Plot size: 5 Pt) 1 - From Stratum (Plot size: 5 Pt) 1 - From Stratum (Plot size: 5 Pt) 2 - School var Stratum (Plot size: 5 Pt) 3 - From Stratum (Plot size: 5 Pt) 4 - Ryman Crispas 5 Fact		20% of total cover:	
4 - Morphological Adaptations (Provide supporting data in Remarks or on a separate sheet) Problematic Hydrophytic Vegetation (Explain) Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic. Definitions of Five Vegetation Strata: Tree - Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and 3 in. (7.6 cm) or larger in diameter at breast height (DBH). Sapling - Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) DBH. Shrub - Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) DBH. Shrub - Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) DBH. Shrub - Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) DBH. Woody Vine - All herbaceous (non-woody) plants, including herbaceous vines, regardless of size, and woody plants, excluding woody vines, approximately 3 ft (1 m) in height. Woody Vine - All woody vines, regardless of height. Woody vine - All woody vines, regardless of height. Hydrophytic Vegetation Present? Yes No			ľ
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data in Remarks or on a separate sheet) Problematic Hydrophytic Vegetation (Explain) indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic. Findicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic. Definitions of Five Vegetation Strata: Tree — Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and 3 in. (7.6 cm) or larger in diameter at breast height (DBH). Sapling — Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) DBH. Shrub — Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) DBH. Shrub — Woody plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height. Herb — All herbaceous (non-woody) plants, including herbaceous vines, regardless of size, and woody plants, except woody vines, less than approximately 3 it (1 m) in height. Woody Vine Stratum (Plot size:)	2		4 - Morphological Adaptations (Provide supporting
- Problematic Hydrophytic Vegetation (Explain) 5.			data in Remarks or on a separate sheet)
indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic. Total Cover			Problematic Hydrophytic Vegetation ¹ (Explain)
be present, unless doil and wetland hydrology must be present, unless disturbed or problematic. Total Cover			
be present, unless disturbed or problematic. Definitions of Five Vegetation Strata:			¹Indicators of hydric soil and wetland hydrology must
Solve of total cover:	6		be present, unless disturbed or problematic.
Tree – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and 3 in. (7.6 cm) or larger in diameter at breast height (DBH). Sapling – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and 3 in. (7.6 cm) or larger in diameter at breast height (DBH). Sapling – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) DBH. Shrub – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) DBH. Shrub – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) DBH. Shrub – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) DBH. Shrub – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) DBH. Shrub – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height (DBH). Shrub – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) DBH. Shrub – Woody plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height. Herb – All herbaceous (non-woody) plants, including herbaceous vines, regardless of size, and woody plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height. Woody vine – All woody vines, regardless of height. Woody vine – All woody vines, regardless of height. Herb – All woody vines, approximately 3 to 20 ft (1 to 6 m) in height and less than 3 in. (7.6 cm) DBH. Shrub – Woody plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height. Herb – All herbaceous (non-woody) plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height. Woody vine – All woody vines, approximately 3 to 20 ft (1 to 6 m) in height. Woody vine – All woody vines, approximately 3 to 20 ft (1 to 6 m) in height. Woody vine – All woody vines, approximately 3 t		= Total Cover	
Herb Stratum (Plot size: 5 ft) 1. Propress Urgaria 5 1. Propress Urgaria 5 1. Propress Urgaria 5 2. Propress Propress Stratum (Plot size: 5 ft) 3. Arthrogan hisa the Holl to the Hol	50% of total cover:	20% of total cover-	Seminor of the regulation of ata.
1 Phylogram Urgarus 5 FACU 2 Scholarium Crispas 5 FACU 3. Arthron hispitus 5 FACU 4 Crispas 5 FACU 5 FACU 6 All hoxan thum of a ratum 15 FACU 8 FACU 8 FACU 10 FACU 11 FACU 10 FACU 11	0.1	20 % 01 total 00 vci	
2 Scholonivas Errodunces 30 FMU 3. Arthroph hispites 5 FAC 4. Rymul Crispas 5 FAC 5. Anthroxam thum oxforatum 15 FACU 8. Shrub - Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) DBH. Shrub - Woody plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height. Herb - All herbaceous (non-woody) plants, including herbaceous vines, regardless of size, and woody plants, except woody vines, less than approximately 3 ft (1 m) in height. Woody vine - All woody vines, regardless of height. 10.		5 FN/11	
3. Arthroph hisp. do. 40 TAC And Crispa's 5 TAC Anthrophysic Vegetation Present? Yes No Yes			(7.6 cm) or larger in diameter at breast height (DBH).
approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) DBH. Shrub - Woody plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height. Herb - All herbaceous (non-woody) plants, including herbaceous vines, regardless of size, and woody plants, except woody vines, less than approximately 3 ft (1 m) in height. Woody vine - All woody vines, regardless of height. Woody vine Stratum (Plot size:			Sapling – Woody plants, excluding woody vines.
Shrub – Woody plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height. Herb – All herbaceous (non-woody) plants, including herbaceous vines, regardless of size, and woody plants, except woody vines, less than approximately 3 ft (1 m) in height. Woody Vine Stratum (Plot size:) 1	3. Arthraxon hispitus		approximately 20 ft (6 m) or more in height and less
Shrub – Woody plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height. Herb – All herbaceous (non-woody) plants, including herbaceous vines, regardless of size, and woody plants, except woody vines, less than approximately 3 ft (1 m) in height. Woody vine – All woody vines, regardless of height. Woody vine – All woody vines, regardless of height. Woody vine – All woody vines, regardless of height. Hydrophytic Vegetation Present? Yes No	4. Knmed Crispa's	5 FAC	than 3 in. (7.6 cm) DBH.
approximately 3 to 20 ft (1 to 6 m) in height. 7. Caranium Carolino Num 2 8. Herb – All herbaceous (non-woody) plants, including herbaceous vines, regardless of size, and woody plants, except woody vines, less than approximately 3 ft (1 m) in height. 10. Woody Vine – All woody vines, regardless of height. Woody Vine Stratum (Plot size:) 1	5. Solidary sandy		Shrub - Woody plants, excluding woody vince
### Herb – All herbaceous (non-woody) plants, including herbaceous vines, regardless of size, and woody plants, except woody vines, less than approximately 3 ft (1 m) in height. ### Herb – All herbaceous (non-woody) plants, including herbaceous vines, regardless of size, and woody plants, except woody vines, less than approximately 3 ft (1 m) in height. ### Woody vine – All woody vines, regardless of height. ### Woody Vine Stratum (Plot size:) ### D – All herbaceous (non-woody) plants, including herbaceous vines, regardless of size, and woody plants, except woody vines, regardless of height. ### Woody vine – All woody vines, regardless of height. ### Woody Vine Stratum (Plot size:) ### Herb – All herbaceous (non-woody) plants, including herbaceous vines, regardless of size, and woody plants, except woody vines, regardless of height. ### Woody Vine – All woody vines, regardless of height. ### Woody Vine Stratum (Plot size:) ### Herb – All herbaceous (non-woody) plants, including herbaceous vines, regardless of size, and woody plants, except woody vines, regardless of height. ### Woody Vine – All woody vines, regardless of height. ### Herb – All herbaceous (non-woody) plants, except woody vines, regardless of height. ### Woody Vine – All woody vines, regardless of height. ### Herb – All herbaceous (non-woody) plants, except woody vines, regardless of height. ### Woody Vine – All woody vines, regardless of height. ### Woody Vine – All woody vines, regardless of height. ### Herb – All herbaceous (non-woody vines, regardless of height. ### Woody Vine – All woody vines, regardless of height. ### Herb – All herbaceous (non-woody vines, regardless of height. ### Herb – All herbaceous (non-woody vines, regardless of height.) ### Woody Vine – All woody vines, regardless of height. ### Herb – All herbaceous (non-woody vines, regardless of height.) ### Herb – All herbaceous (non-woody vines, regardless of height.) ### Herb – All herbaceous (non-woody vines, regardless of height	71011		
8	7		, , , , , , , , , , , , , , , , , , , ,
plants, except woody vines, less than approximately 3 ft (1 m) in height. Woody vine – All woody vines, regardless of height. 102			
## 10			
Woody Vine – All woody vines, regardless of height. 107	9		
102	10		
102	11,		Woody vine – All woody vines, regardless of height.
50% of total cover: 5 20% of total cover: 10 1 20% of total cover: 10 1 2.		107 = Total Cover	
Woody Vine Stratum (Plot size:) 1 2 3 4 5 = Total Cover Vegetation Present? Yes No	ZI		
1		20% of total cover:_\(\bullet \bullet \)	
= Total Cover = Total Cover 20% of total cover: 20% of total cover: Yes No	Woody Vine Stratum (Plot size:)		
= Total Cover = Total Cover 20% of total cover: 20% of total cover: Yes No	1		
= Total Cover = Total Cover 20% of total cover: 20% of total cover: Yes No	2		
= Total Cover = Total Cover 20% of total cover: 20% of total cover: Yes No	3.		
= Total Cover = Total Cover 20% of total cover: 20% of total cover: Yes No	1		
= Total Cover = Total Cover 20% of total cover: 20% of total cover: Yes No	*		
= Total Cover 50% of total cover: 20% of total cover: Yes No	5		Hydrophytic
50% of total cover: 20% of total cover: Present? Yes No		= Total Cover	
	50% of total cover	20% of total cover:	
remarks: (include photo numbers here or on a separate sheet.)			
	remarks: (include photo numbers here or on a separate sl	neet.)	

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SOIL

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Sampling Point:

Depth Matrix		Redox Features		m the absence		
inches) Color (moist)	% Color (mo		Type ¹ Loc ²	Texture	Remarks	
2-14 104 5/4	100 -	-		Siltych		
101371				511/01		
					-	
				-	+	
				-		
Type: C=Concentration, D=Deplet	tion, RM=Reduced Mat	rix, MS=Masked S	and Grains.		L=Pore Lining, M=Matrix.	- 1
lydric Soil Indicators:					ators for Problematic Hydrid	: Soils':
Histosol (A1)		urface (S7)	(00) (84)		cm Muck (A10) (MLRA 147)	
_ Histic Epipedon (A2)		lue Below Surface		, 148) (Coast Prairie Redox (A16)	
Black Histic (A3) Hydrogen Sulfide (A4)		ark Surface (S9) (I		_	(MLRA 147, 148)	
Hydrogen Sulfide (A4) Stratified Layers (A5)		Gleyed Matrix (F2 ed Matrix (F3)	:)	^	Piedmont Floodplain Soils (F19	1)
Stratilled Layers (A5) 2 cm Muck (A10) (LRR N)		ed Matrix (F3) Dark Surface (F6)		ĭ	(MLRA 136, 147) 'ery Shallow Dark Surface (TF	:40)
Depleted Below Dark Surface (ed Dark Surface (F			other (Explain in Remarks)	12)
_ Thick Dark Surface (A12)		Depressions (F8)	• •	_ `	Aller (Explain in Nemarks)	
Sandy Mucky Mineral (S1) (LR		anganese Masses	(F12) (LRR N.			
MLRA 147, 148)		RA 136)	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,			
_ Sandy Gleyed Matrix (S4)		Surface (F13) (M	LRA 136, 122)	³ Ind	licators of hydrophytic vegetat	ion and
_ Sandy Redox (S5)	Piedme	ont Floodplain Soil	s (F19) (MLRA 1		etland hydrology must be pres	
_ Stripped Matrix (S6)	Red Pa	rent Material (F21) (MLRA 127, 14	7) un	less disturbed or problematic.	
estrictive Layer (if observed):						
Type: Bedwark	-					
Depth (inches):				Hydric Soil	Present? Yes N	。 ×
emarks:						
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Project/Site:): B
Section, Township, Range: NA Slope (% Local relief (concave, convex, none): UNCAUL Slope (% Slope (% Local relief (concave, convex, none): UNCAUL Slope (% Slope (% Long: 85-61998 Datum: NA Long: 8):_ 0
andform (hillslope, terrace, etc.):	- 1
tubregion (LRR or MLRA):	- 1
NWI classification: NWI cl	4007 K
e climatic / hydrologic conditions on the site typical for this time of year? Yes No (If no, explain in Remarks.) e Vegetation, Soil, or Hydrology significantly disturbed? Are "Normal Circumstances" present? Yes X e Vegetation, Soil, or Hydrology naturally problematic? (If needed, explain any answers in Remarks.)	
re Vegetation, Soil, or Hydrology significantly disturbed? Are "Normal Circumstances" present? Yes	
e Vegetation, Soil, or Hydrology naturally problematic? (If needed, explain any answers in Remarks.)	
	No
SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important featur	es, etc.
Hydrophytic Vegetation Present? Yes No Hydric Soil Present? Yes No Wetland Hydrology Present? Yes No	
Remarks:	
Wether portet use of which w/. 701-WET-24	
PSS IPFO	
YDROLOGY	
Vetland Hydrology Indicators: Secondary Indicators (minimum of two re	equired)
rimary Indicators (minimum of one is required; check all that apply) Surface Soil Cracks (B6)	
Surface Water (A1) True Aquatic Plants (B14) Sparsely Vegetated Concave Surface	e (B8)
High Water Table (A2) Hydrogen Sulfide Odor (C1) Drainage Patterns (B10)	
Saturation (A3) Oxidized Rhizospheres on Living Roots (C3) Moss Trim Lines (B16)	
Water Marks (B1) Presence of Reduced Iron (C4) Dry-Season Water Table (C2)	
Sediment Deposits (B2) Recent Iron Reduction in Tilled Soils (C6) Crayfish Burrows (C8)	
Drift Deposits (B3) Thin Muck Surface (C7) Saturation Visible on Aerial Imagery	(C9)
Algal Mat or Crust (B4) Other (Explain in Remarks) Stunted or Stressed Plants (D1)	
_ Iron Deposits (B5) Geomorphic Position (D2)	
Inundation Visible on Aerial Imagery (B7) Shallow Aquitard (D3)	
Water-Stained Leaves (B9) Microtopographic Relief (D4)	- //
Aquatic Fauna (B13) FAC-Neutral Test (D5)	
eld Observations:	
urface Water Present? Yes No Depth (inches): Ater Table Present? Yes No Depth (inches):	
/ater Table Present? Yes No Depth (inches):	
aturation Present? Yes 😾 No Depth (inches): Wetland Hydrology Present? YesX No_	
rescribe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:	
lemarks:	
GIIdINS.	
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VEGETATION (Four Strata) - Use scientific names of plants.

	Absolute		Indicator	Dominance Test worksheet:
Tree Stratum (Plot size:) I		Species?		Number of Dominant Species That Are OBL, FACW, or FAC: (A
a. Wh	_	_		Total Number of Dominant Species Across All Strata: (E
·		_		Percent of Dominant Species That Are OBL, FACW, or FAC:
			$\overline{}$	Prevalence Index worksheet:
				Total % Cover of: Multiply by:
50% of total cover:		= Total Cov		OBL species x1 =
Sapling/Shrub Stratum (Plot size: 15 ft)	20% 01	total cover.		FACW species x 2 =
· Asimna trilobs	2		The.	FAC species x 3 =
Carlett Court 1			FACH	FACU species x 4 =
. Cultis occidentiles			PIZEN	l .
·				UPL species x 5 =
				Column Totals: (A) (
				Prevalence Index = B/A =
				Hydrophytic Vegetation Indicators:
<u> </u>				1 - Rapid Test for Hydrophytic Vegetation
				2 - Dominance Test is >50%
				3 - Prevalence Index is ≤3.0 ¹
		= Total Cove		
50% of total cover: 3.5	20% of	total cover:_	1,4	4 - Morphological Adaptations¹ (Provide support
lerb Stratum (Plot size: 5 ft)		1	meta after	data in Remarks or on a separate sheet)
. Renunculus claritis	36	7	Floren	Problematic Hydrophytic Vegetation ¹ (Explain)
· Prosection Urregination	20	X	Flac	
· Valerianella rudiala	20	X	FAC	¹ Indicators of hydric soil and wetland hydrology mus be present, unless disturbed or problematic.
Erigiran Strigosis	15		FROM	Andrew Street Control of the Control
				Definitions of Four Vegetation Strata:
				Tree – Woody plants, excluding vines, 3 in. (7.6 cm)
				more in diameter at breast height (DBH), regardless
			-	height.
				Sapling/Shrub – Woody plants, excluding vines, les
				than 3 in. DBH and greater than or equal to 3.28 ft (
0				m) tall.
1		-	_	Herb – All herbaceous (non-woody) plants, regardle
FOOY - 51-1-1 12 **		Total Cove		of size, and woody plants less than 3.28 ft tall.
50% of total cover: 42.5	20% of 1	total cover:_	11	Woody vine – All woody vines greater than 3.28 ft in
/oody Vine Stratum (Plot size:)				height.
a (A				
N w)				
				Hydrophytic
				Vacatation
	=	Total Cove	r	Present? Yes X No
50% of total cover:	20% of t	total cover:_		
	sheet.)			
emarks: (Include photo numbers here or on a separate s	,			

Case No. 2025-00064

SOIL

Reponse to 1-69
Page 297 of 794
Sampling Point: Tolume 47

(inches) b-19	Color (moist)		TIGUON	Features				
	VIII	%	Color (moist)	%	Type ¹	_Loc2	Texture	Remarks
10-18	542 4/4	95	25/124/6	5_	<u></u>	M	Siltyclay	
	54K 4/4	106				_		
					=	\equiv		
		=		=	_	_		
					=	\equiv		
Type: C=Con ydric Soil In	centration, D=Deple	etion, RM=	Reduced Matrix, MS=	Masked S	Sand Gra	ins.		re Lining, M=Matrix.
Histosol (A Histic Epip Black Histi Hydrogen Stratified L 2 cm Muck Depleted E Thick Dark Sandy Muc MLRA 1 Sandy Gle Sandy Rec Stripped M	A1) pedon (A2) ic (A3) Sulfide (A4) Layers (A5) k (A10) (LRR N) Below Dark Surface k Surface (A12) cky Mineral (S1) (LI 147, 148) ryed Matrix (S4) dox (S5)		Dark Surface (Polyvalue Belo Thin Dark Surf Loamy Gleyed Depleted Matri Redox Dark Su Depleted Dark Redox Depress Iron-Manganes MLRA 136) Umbric Surface Piedmont Floor Red Parent Ma	w Surface ace (S9) (Matrix (F: x (F3) urface (F6 Surface (sions (F8) e Masses e (F13) (M	(MLRA 14 2)) F7) s (F12) (L !LRA 136 ls (F19) (47, 148) .RR N, 5, 122) MLRA 14	2 cm M 148)	for Problematic Hydric Soils ³ : fuck (A10) (MLRA 147) Prairie Redox (A16) RA 147, 148) ont Floodplain Soils (F19) RA 136, 147) hallow Dark Surface (TF12) Explain in Remarks) s of hydrophytic vegetation and hydrology must be present, isturbed or problematic.
Туре:	NA		_					· · · · · ·
emarks:	es):		-				Hydric Soil Pres	ent? Yes X No

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\sim \sim 1 \leq 1.	City/County: Sampling Date: 4 26 + 2
Applicant/Owner: Candla renuvables	State: Ky Sampling Point: Tol-why
	Section, Township, Range:NA
Landform (hillslope, terrace, etc.):	Local relief (concave, convex, none): Slope (%):
Subregion (LRR or MLRA): LRRN Lat: 36.80	62717 Long: 85. 699976 Datum: NH583(
Soil Map Unit Name;Cr5	NWI classification:
Are climatic / hydrologic conditions on the site typical for this time of	V
Are Vegetation, Soil, or Hydrology significar	V
Are Vegetation, Soil, or Hydrology naturally	
	ing sampling point locations, transects, important features, etc
Hydrophytic Vegetation Present? Hydric Soil Present? Wetland Hydrology Present? Yes No Wetland Hydrology Present?	Is the Sampled Area within a Wetland? Yes No
Remarks:	W - TOI-WET-24
HYDROLOGY	
Wetland Hydrology Indicators:	Secondary Indicators (minimum of two required)
Primary Indicators (minimum of one is required; check all that appl	ly) Surface Soil Cracks (B6)
	c Plants (B14) Sparsely Vegetated Concave Surface (B8)
	ulfide Odor (C1) Drainage Patterns (B10)
	nizospheres on Living Roots (C3) Moss Trim Lines (B16)
	Reduced Iron (C4) Dry-Season Water Table (C2)
Drift Deposits (B3) Thin Muck S	Reduction in Tilled Soils (C6) Crayfish Burrows (C8) Surface (C7) Saturation Visible on Aerial Imagery (C9)
— · · · · —	ain in Remarks) Stunted or Stressed Plants (D1)
Iron Deposits (B5)	Geomorphic Position (D2)
Inundation Visible on Aerial Imagery (B7)	Shallow Aquitard (D3)
Water-Stained Leaves (B9)	Microtopographic Relief (D4)
Aquatic Fauna (B13)	FAC-Neutral Test (D5)
Field Observations:	
Surface Water Present? Yes No Depth (inch	ies):
Water Table Present? Yes No Depth (inch	nes):
Saturation Present? Yes No Depth (inch-	les): Wetland Hydrology Present? Yes No_K
Describe Recorded Data (stream gauge, monitoring well, aerial ph	otos, previous inspections), if available:
Remarks:	
Remarks.	

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VEGETATION (Four Strata) – Use scientific names of plants.

Sampling Point: Tolulas-43

1. / 100 color dan	= = % of to	Species?	FACU FACU FACU	Number of Dominant Species That Are OBL, FACW, or FAC: Total Number of Dominant Species Across All Strata: Percent of Dominant Species That Are OBL, FACW, or FAC: (A) (B) Prevalence Index worksheet:
3. Alanthus altissima 10 4. Sungarous hissiniam 10 5. (1) 10 occ. Inflied 5 6) = % of to	Y Y Total Cove	FACU FACU FACU	Total Number of Dominant Species Across All Strata: Percent of Dominant Species That Are OBL, FACW, or FAC: (B) (A/B)
3. Allanthus allissima 10 4. Sunphous hysinam 10 5. (1) 10 occilulis 5 6. 50% of total cover: 47.5 209 Sapling/Shrub Stratum (Plot size: 15) 1. Allanthus allissima 10 2. Julyanam 1104 ann 5 3.) = % of to	Total Covertal cover:	FACU	Total Number of Dominant Species Across All Strata: Percent of Dominant Species That Are OBL, FACW, or FAC: (B)
3. Allanthus allissima 4. Junipulas hysintam 5. Litis occilintus 6	= = % of to	Total Covertal cover:	FACU	Species Across All Strata: (B) Percent of Dominant Species That Are OBL, FACW, or FAC: (A/B)
4. Juniphrous hysinum 5. 15 6. 7. 50% of total cover: 47.5 20% Sapling/Shrub Stratum (Plot size: 15) 1. All anthor allies in 10 2. Juniphrous yinghana 5 3.	= = % of to	Total Covertal cover:	TYLL	Percent of Dominant Species That Are OBL, FACW, or FAC: (A/B)
5	= % of to	Total Cove		That Are OBL, FACW, or FAC: (A/B)
6	= % of to	Total Cove		That Are OBL, FACW, or FAC: (A/B)
50% of total cover: 47.5 20% Sapling/Shrub Stratum (Plot size: 15) 1. All anthor all is sim. 10 2. July an ying han. 5 3.	% of to	Total Cove		
50% of total cover: 47.5 20% Sapling/Shrub Stratum (Plot size: 15) 1. All harther all is sime 10 2. July my 104 harm 5 3.	% of to	Total Cove		Prevalence Index worksheet:
50% of total cover: 47.5 20% Sapling/Shrub Stratum (Plot size: 15) 1. All anthor all is sim. 10 2. Jungan on ying hann 5 3.	% of to	Total Covertal cover:_		
Sapling/Shrub Stratum (Plot size: 15) 1. Allanthus allissim 10 2. Jungar on yearnam 5 3.	% of to	Total Cove otal cover:_	er	Total % Cover of: Multiply by:
Sapling/Shrub Stratum (Plot size: 15) 1. Allanthus alliesim. 10 2. Juin an yirahan 5 3.		otal cover:_	11	
1. Allanthos altissim. 10 2. This on yorkann 5 3.			17_	OBL species x 1 =
2. This any yergeham 5				FACW species x 2 =
2. This any yergehaven 5		√	FAU	FAC species x 3 =
3		X	FACL	FACU species x 4 =
			1_1124	
				UPL species x 5 =
4				Column Totals (A) (B)
5				
				Prevalence Index = B/A =
6				Hydrophytic Vegetation Indicators:
7				1 - Rapid Test for Hydrophytic Vegetation
8				
9				2 - Dominance Test is >50%
"	_			3 - Prevalence Index is ≤3.0¹
7+		Total Cove		4 - Morphological Adaptations ¹ (Provide supporting
50% of total cover: <u>75</u> 20%	% of to	tal cover:_	5	data in Remarks or on a separate sheet)
Herb Stratum (Plot size:)				
1. Persience was now			FAC	Problematic Hydrophytic Vegetation¹ (Explain)
2. Runnichy aborting 40	7	1	PACU	
				¹ Indicators of hydric soil and wetland hydrology must
3. Alliam canadana 10			FARM	be present, unless disturbed or problematic.
4. Rubins alleganionsis 10)		FACE	Definitions of Four Vegetation Strata:
5. Erlysman strigory 5			Free	Definitions of Four vegetation Strata:
	-		-16-6	Tree - Woody plants, excluding vines, 3 in. (7.6 cm) or
6				more in diameter at breast height (DBH), regardless of
7,				height.
8				
9				Sapling/Shrub – Woody plants, excluding vines, less
	-		_	than 3 in. DBH and greater than or equal to 3.28 ft (1
10				m) tall.
11,				Herb – All herbaceous (non-woody) plants, regardless
4 %	> =	Total Cove		of size, and woody plants less than 3.28 ft tall.
		tal cover:_	10	, pranto 1000 main 0.20 m tam
	0 01 10	101 00101		Woody vine – All woody vines greater than 3.28 ft in
Woody Vine Stratum (Plot size:)				height.
1				
2				
3.				
N 10	-			
4	_			Hydrophytic
5				Vegetation
	= 7	Total Cove	r	Present? Yes No
50% of total cover: 20%				
Remarks: (Include photo numbers here or on a separate sheet.)				

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SOIL

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Sampling Point:

Denth	Matrix		oth needed to docum	Features		or commi	ii ule absence	of indicators.)
Depth (inches)	Color (moist)	%	Color (moist)	%	Type1	Loc2	Texture	Remarks
0-14	10 9K4/3	100	~	-	-	-	Clartum	
14-14	1174R 6/2	95	7.54R 4/U	5	_	M	-	
1 10	109-010		1.012 110			101		
				_				-
						_		
	-			-		_	-	
								-
Type: C=Cr	oncentration D=Den	letion RM	=Reduced Matrix, MS:	-Macked	Sand Gra	ine	² Location: DI	 _=Pore Lining, M=Matrix.
ydric Soil I		icaon, i divi	-reduced Wallix, Wo	IVIdakeu	Oanu Gre	11113.		ators for Problematic Hydric Soils ³ :
_ Histosol			Dark Surface ((S7)				cm Muck (A10) (MLRA 147)
	pipedon (A2)		Polyvalue Belo		e (S8) (M	LRA 147.		oast Prairie Redox (A16)
Black His			Thin Dark Sur					(MLRA 147, 148)
_ Hydroge	n Sulfide (A4)		Loamy Gleyed				Pi	iedmont Floodplain Soils (F19)
	Layers (A5)		Depleted Matr	ix (F3)				(MLRA 136, 147)
	ck (A10) (LRR N)		Redox Dark S	•				ery Shallow Dark Surface (TF12)
	Below Dark Surface	e (A11)	Depleted Dark				_ o	ther (Explain in Remarks)
	irk Surface (A12)	DD N	Redox Depres			DD 11		
	lucky Mineral (S1) (L . 147, 148)	.KK N,	Iron-Manganes		s (F12) (L	.RR N,		
	leyed Matrix (S4)		MLRA 136 Umbric Surfac		JI DA 130	: 199\	³ Indi	cators of hydrophytic vegetation and
	edox (S5)		Piedmont Floo					tland hydrology must be present,
	Matrix (S6)		Red Parent Ma					ess disturbed or problematic.
	aver (if observed):			<u> </u>			1	
Type:	, NA ,						Hydric Soil	Present? Yes No X
Type	NA							
	NA		_					
Type: Depth (inc	NA							
Type: Depth (inc	NA						.1.	
Type: Depth (inc	NA						1	
Type: Depth (inc	NA						1	
Type: Depth (inc	NA						1	
Type: Depth (inc	NA						1	
Type: Depth (inc	NA							
Type: Depth (inc	NA							
Type: Depth (inc	NA							
Type: Depth (inc	NA							
Type: Depth (inc	NA						1	
Type: Depth (inc	NA							
Type: Depth (inc	NA							
Type: Depth (inc	NA							
Type: Depth (inc	NA							
Type: Depth (inc	NA							
Type: Depth (inc	NA							
Type: Depth (inc	NA							
Type: Depth (inc	NA							
Type: Depth (inc	NA							
Type: Depth (inc	NA							
Type: Depth (inc	NA							

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0 -1 0		tern Mountains and Piedmont Region Sampling Date: 4	1/20/22
/ / / /		State: Ky Sampling Point:	,
Investigator(s): CK LD		nship, Range: NA	OI WITE
Landform (hillslope, terrace, etc.):			1012 41
Subregion (LRR or MLRA): JRR N		cave, convex, none): Concern Slope	1 ANK 3 (14)
12 ()	Lat. See 6 Jillion	n/lac	AUTO SE
Soil Map Unit Name:		,	
Are climatic / hydrologic conditions on the site typic			
Are Vegetation, Soil, or Hydrology		Are "Normal Circumstances" present? Yes	_ No
Are Vegetation, Soil, or Hydrology _	•	(If needed, explain any answers in Remarks.)	
SUMMARY OF FINDINGS – Attach site	e map showing sampling	point locations, transects, important feat	ures, etc.
Hydrophytic Vegetation Present? Hydric Soil Present? Wetland Hydrology Present? Yes Yes Remarks:	X No Is the	Sampled Area a Wetland? Yes No	
Wetten I point	essocial e	v without - TOI-WET-ZE	5
HYDROLOGY			
Wetland Hydrology Indicators:		Secondary Indicators (minimum of two	required)
Primary Indicators (minimum of one is required; cl	heck all that apply)	Surface Soil Cracks (B6)	
Surface Water (A1)	True Aquatic Plants (B14)	Sparsely Vegetated Concave Sur	face (B8)
High Water Table (A2)	Hydrogen Sulfide Odor (C1)	Drainage Patterns (B10)	
X Saturation (A3)	Oxidized Rhizospheres on Liv		
Water Marks (B1)	Presence of Reduced Iron (C		
Sediment Deposits (B2) Drift Deposits (B3)	Recent Iron Reduction in TilleThin Muck Surface (C7)	ed Soils (C6) Crayfish Burrows (C8) Saturation Visible on Aerial Image	(00)
Algal Mat or Crust (B4)	Other (Explain in Remarks)	Saturation visible on Aerial Image Stunted or Stressed Plants (D1)	ily (C9)
Iron Deposits (B5)		Geomorphic Position (D2)	
Inundation Visible on Aerial Imagery (B7)		Shallow Aquitard (D3)	
Water-Stained Leaves (B9)		Microtopographic Relief (D4)	
Aquatic Fauna (B13)		FAC-Neutral Test (D5)	
Field Observations:	1		
	Depth (inches):		
Water Table Present? Yes X No	Depth (inches):O	Y	
Saturation Present? Yes No (includes capillary fringe)	Depth (inches):O	Wetland Hydrology Present? Yes N	o
Describe Recorded Data (stream gauge, monitoring	ng well, aerial photos, previous ins	spections), if available:	
Remarks:	-		-
Aren	gruzed by	Cows	
			- 1

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VEGETATION (Four Strata) – Use scientific names of plants.

Absolute	Dominant	Indicator	Dominance Test worksheet:
	Species?	<u>Status</u>	
			Number of Dominant Species That Are OBL, FACW, or FAC: (A)
			Total Number of Dominant Species Across All Strata: (B)
			Percent of Dominant Species That Are OBL, FACW, or FAC:
			That Are OBL, PACW, or PAC:
			Prevalence Index worksheet:
			Total % Cover of: Multiply by:
			OBL species x 1 =
_			FACW species x 2 =
5	X	KALL	FAC species x 3 =
		4 MCM	FACU species x 4 =
			UPL species x 5 =
			Column Totals: (A) (B)
			Dravatanas Inday - D/A -
			Prevalence Index = B/A =
			Hydrophytic Vegetation Indicators:
			1 - Rapid Test for Hydrophytic Vegetation
			★ 2 - Dominance Test is >50%
			3 - Prevalence Index is ≤3.0¹
			4 - Morphological Adaptations¹ (Provide supporting
_ 20 /0 01 1	otal cover		data in Remarks or on a separate sheet)
110	7	th.	Problematic Hydrophytic Vegetation¹ (Explain)
10		LDCL	
1)	<u> </u>		¹ Indicators of hydric soil and wetland hydrology must
15			be present, unless disturbed or problematic.
5		MPL	Definitions of Four Vegetation Strata:
			Deminions of Four Vegetation Strata.
			Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or
			more in diameter at breast height (DBH), regardless of height.
			neight.
			Sapling/Shrub – Woody plants, excluding vines, less
		-	than 3 in. DBH and greater than or equal to 3.28 ft (1
_			m) tall.
_			Herb - All herbaceous (non-woody) plants, regardless
			of size, and woody plants less than 3.28 ft tall.
_ 20% of t	otal cover:_	17	Woody vine – All woody vines greater than 3.28 ft in
			height.
_			
		=	Hydrophytic
	Total Cours		Vegetation \checkmark
	Total Cove	=	
	20% of t	= Total Cover: 20% of total cover: = Total Cove 20% of total cover: 40	= Total Cover 20% of total cover: 5 X FACW = Total Cover 20% of total cover: 40 X FACW 15 X OGL 5 NPL

SOIL

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Sampling Point: 751 - W45-44

	cription: (Describe	to the dept	h needed to docun	ent the i	ndicator	or confirm	n the absence	of indicators.)
Depth (inches)	Matrix	%		Feature		1.002	Taukusa	D-mistro
(inches)	Z.57 43	150	Color (moist)	%	_Type ¹	_Loc ² _	Texture	Remarks
5-2			m = 1/m +1 k	-	-		SiltClay	
2-8	104R 5/3	90	7.54846	-	<u>c</u>	PL	ClayLabor	
8-18	104R 5/3	100		_	-	-	Chiploun	
							1	
-		_		_				·
				_	-			
-					_			
				-		_		
-					_			-
¹Tuno: C=Co		ation DM-	Daduas d Matrix MC		Cand Ca		21 Ai DI	-Daniel St. M. M. M.
Hydric Soil I	oncentration, D=Depl	etion, RM=	Reduced Matrix, MS	=Masked	Sand Gra	ains.		.=Pore Lining, M=Matrix.
_			Dork Surface	(C7)				tors for Problematic Hydric Soils ³ :
Histosol	(A1) pipedon (A2)		Dark Surface Polyvalue Bel		ne (99\ /M	II DA 447		cm Muck (A10) (MLRA 147)
Black His			Polyvalue Bel					past Prairie Redox (A16) (MLRA 147, 148)
	n Sulfide (A4)		Loamy Gleyed			-77, 140 <i>)</i>		edmont Floodplain Soils (F19)
	Layers (A5)		Depleted Mati		-,			(MLRA 136, 147)
	ck (A10) (LRR N)		Redox Dark S		6)			ery Shallow Dark Surface (TF12)
Depleted	l Below Dark Surface	(A11)	Depleted Dark					ther (Explain in Remarks)
	rk Surface (A12)		K Redox Depres					1.1
	lucky Mineral (S1) (L	RR N,	Iron-Mangane		es (F12) (I	LRR N,		1.1
	147, 148)		MLRA 136	-			2	
	leyed Matrix (S4)		Umbric Surfac					cators of hydrophytic vegetation and
	edox (S5) Matrix (S6)		Piedmont Floo					land hydrology must be present,
	ayer (if observed):		Red Parent M	atenai (F	21) (MLR/	A 127, 147	r) unie	ess disturbed or problematic.
Type:								
Depth (inc			_				Hydric Soil F	Present? Yes No
Remarks:							Trydric doi:1	resenti res NO
rtomants.								
	_							
	Trampole	l b	, Cumis	;			¥	
	7	/						1

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0 1 0 .	unty: Summy Shall sampling Date: 4-20-22
0 11	State: Ky Sampling Point: 70 1-WA) - 4
1	
	, Township, Range: NA
Landform (hillslope, terrace, etc.): Deposition Local relief	1-1
Subregion (LRR or MLRA): LRRN Lat: 36.85966	
Soil Map Unit Name:	NWI classification; NV
Are climatic / hydrologic conditions on the site typical for this time of year? Yes	
Are Vegetation, Soil, or Hydrology significantly disturbed	ed? Are "Normal Circumstances" present? Yes No
Are Vegetation, Soil, or Hydrology naturally problemati	c? (If needed, explain any answers in Remarks.)
SUMMARY OF FINDINGS – Attach site map showing samp	ling point locations, transects, important features, etc.
Hydric Soil Drecont?	s the Sampled Area within a Wetland? Yes No
	18 W- TOI-WET-25
HYDROLOGY	
Wetland Hydrology Indicators:	Secondary Indicators (minimum of two required)
Primary Indicators (minimum of one is required; check all that apply)	Surface Soil Cracks (B6)
Surface Water (A1) True Aquatic Plants (B1	4) Sparsely Vegetated Concave Surface (B8)
High Water Table (A2) Hydrogen Sulfide Odor	
Saturation (A3) Oxidized Rhizospheres	
Water Marks (B1) Presence of Reduced Ir	
Sediment Deposits (B2) Recent Iron Reduction i	
Drift Deposits (B3) Thin Muck Surface (C7) Algal Mat or Crust (B4) Other (Explain in Remai	
Algal Mat or Crust (B4) Other (Explain in Remail Iron Deposits (B5)	
Inundation Visible on Aerial Imagery (B7)	Geomorphic Position (D2) Shallow Aquitard (D3)
Water-Stained Leaves (B9)	Microtopographic Relief (D4)
Aquatic Fauna (B13)	FAC-Neutral Test (D5)
Field Observations:	
Surface Water Present? Yes No Depth (inches):	
Water Table Present? Yes No Depth (inches):	
Saturation Present? Yes No Depth (inches):	Wetland Hydrology Present? Yes No
(includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previo	us inspections), if available:
Remarks:	
Tiginal No.	
	1
	1

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VEGETATION (Four Strata) – Use scientific names of plants.

Sampling Point: 101-UA5-45

	Absolute	Dominant		Dominance Test worksheet:
Tree Stratum (Plot size: 30 Pt)		Species?		Number of Dominant Species 2
1. Gleditsia trioxcanthos	75	X	FAL	That Are OBL, FACW, or FAC:(A)
2. Kobihia psyllograch	30_		FACIL	Total Number of Dominant 5
3. Celtis produktis	15	*	tacu	Total Number of Dominant Species Across All Strata: (B)
4. Acer Pubium			CAX	Opedies Acidss All Strata.
		_	TIT	Percent of Dominant Species
5,		-	_	That Are OBL, FACW, or FAC: 40 (A/B)
5				
N				Prevalence Index worksheet:
	75	= Total Cov	er	Total % Cover of: Multiply by:
50% of total cover: 3				OBL species x 1 =
Sapling/Shrub Stratum (Plot size: 15 Ft)	2070 0	total oover.		FACW species x 2 =
	5	x	FAC	FAC species x 3 =
Gled him triganthon				
				FACU species x 4 =
				UPL species x 5 =
				Column Totals: (A) (B)
				Prevalence Index = B/A =
				Hydrophytic Vegetation Indicators:
				1 - Rapid Test for Hydrophytic Vegetation
				2 - Dominance Test is >50%
	5 -	-	$\overline{}$	3 - Prevalence Index is ≤3.0 ¹
		= Total Cov		4 - Morphological Adaptations (Provide supporting
50% of total cover: 1.	<u>5</u> 20% of	total cover:		data in Remarks or on a separate sheet)
erb Stratum (Plot size: 5Pt)				
3tellaria media	60	+	401	Problematic Hydrophytic Vegetation¹ (Explain)
Range gules his bides	15		FAC	
				¹ Indicators of hydric soil and wetland hydrology must
Scholenarous avandances			Fren	be present, unless disturbed or problematic.
Rumix Cuispus	5		FAC	Definitions of Four Vegetation Strata:
Persiatia Virginiana	_ 7		FAC	The state of the s
X				Tree - Woody plants, excluding vines, 3 in. (7.6 cm) or
				more in diameter at breast height (DBH), regardless of
				height.
				Sapling/Shrub - Woody plants, excluding vines, less
				than 3 in. DBH and greater than or equal to 3.28 ft (1
),				m) tall.
	-			
•	82		_	Herb – All herbaceous (non-woody) plants, regardless
4	10-16-	Total Cov	er all	of size, and woody plants less than 3.28 ft tall.
50% of total cover:	20% of	total cover:	10.0	Woody vine - All woody vines greater than 3,28 ft in
oody Vine Stratum (Plot size:)				height.
0119		_		
Will				
				Hydrophytic
				Vegetation
		Total Cove	ar a	Present? Yes No>
50% of total cover:		otal cover		

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SOIL

Sampling Point: Tol-WH5-47

Depth (inches) Matrix Redox Feature 0-12 7.5 YR 4/6 160 —	73		
0-18 754R 4/6 160	Type ¹ Loc ²	<u>Texture</u>	Remarks
		Clan	
			
		-	
Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked	d Sand Grains.	² Location: PL=Por	re Lining, M=Matrix.
ydric Soil Indicators:			for Problematic Hydric Solls ³ :
Histosol (A1) Dark Surface (S7)			luck (A10) (MLRA 147)
Histic Epipedon (A2) Polyvalue Below Surfa	ce (\$8) (MLRA 147 ,	148) Coast i	Prairie Redox (A16)
Black Histic (A3) Thin Dark Surface (S9) (MLRA 147, 148)		RA 147, 148)
Hydrogen Sulfide (A4) Loamy Gleyed Matrix ((F2)	Piedmo	ont Floodplain Soils (F19)
Stratified Layers (A5) Depleted Matrix (F3)			RA 136, 147)
2 cm Muck (A10) (LRR N) Redox Dark Surface (F			hallow Dark Surface (TF12)
Depleted Below Dark Surface (A11)		Other (Explain in Remarks)
Sandy Mucky Mineral (S1) (LRR N, Iron-Manganese Mass			
MLRA 147, 148) MLRA 136)	C3 (1 12) (LICITIA)		
Sandy Gleyed Matrix (S4) Umbric Surface (F13) ((MLRA 136, 122)	³ Indicator	s of hydrophytic vegetation and
Sandy Redox (S5) Piedmont Floodplain S			hydrology must be present,
Stripped Matrix (S6) Red Parent Material (F		•	isturbed or problematic.
testrictive Layer (if observed):			
Туре:			
Depth (inches):		Hydric Soil Pres	ent? Yes No
Remarks:			

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	County: Shanner Shall Sampling Date: 4-26-27
Applicant/Owner: Candila hymaniles	State: Sampling Point: 701-W15
0. 15	on, Township, Range: NA
Subregion (LRR or MLRA): LPR N Lat: 36.85%	
100 000	- 10
	NWI classification:
Are climatic / hydrologic conditions on the site typical for this time of year? Y	
Are Vegetation, Soil, or Hydrology significantly distur	•
Are Vegetation, Soil, or Hydrology naturally problems	
SUMMARY OF FINDINGS – Attach site map showing sam	ppling point locations, transects, important features, etc.
Hydrophytic Vegetation Present? Hydric Soil Present? Wetland Hydrology Present? Remarks:	Is the Sampled Area within a Wetland? Yes No
Wettend print associated	W Wetterd - TOI-WET-20
HYDROLOGY	
Wetland Hydrology Indicators:	Secondary Indicators (minimum of two required)
Primary Indicators (minimum of one is required; check all that apply)	Surface Soil Cracks (B6)
Surface Water (A1) True Aquatic Plants (_ ' ' '
High Water Table (A2) Hydrogen Sulfide Odd	
	es on Living Roots (C3) Moss Trim Lines (B16)
Water Marks (B1) Presence of Reduced Sediment Deposits (B2) Recent Iron Reduction	<u> </u>
Drift Deposits (B3) Thin Muck Surface (C	· · · · · · · · · · · · · · · · · · ·
Algal Mat or Crust (B4) Other (Explain in Ren	=
Iron Deposits (B5)	Geomorphic Position (D2)
💢 Inundation Visible on Aerial Imagery (B7)	Shallow Aquitard (D3)
Water-Stained Leaves (B9)	Microtopographic Relief (D4)
Aquatic Fauna (B13)	FAC-Neutral Test (D5)
Field Observations:	
Surface Water Present? Yes No Depth (inches):	
Water Table Present? Yes X No Depth (inches): You Saturation Present? Yes X No Depth (inches): You Depth	Wetland Hydrology Present? Yes X
(includes capillary fringe)	Welland Hydrology Flesent? Tes No
Describe Recorded Data (stream gauge, monitoring well, aerial photos, pre-	vious inspections), if available:
Remarks:	
	Δ.
	The state of the s

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VEGETATION (Four Strata) - Use scientific names of plants.

Tree Stratum (Plot size:)	Absolute % Cover	Dominant Species?		Dominance Test worksheet: Number of Dominant Species
1				That Are OBL, FACW, or FAC:(A)
23				Total Number of Dominant Species Across All Strata: (B)
5		-		Percent of Dominant Species That Are OBL, FACW, or FAC: (A/B)
7				Prevalence Index worksheet:
	-	Total Cove		
50% of total cover:	20% of t	otal cover:		OBL species x 1 = FACW species x 2 =
Sapling/Shrub Stratum (Plot size:)				FAC species x 2 =
1 2				FACU species x 4 =
				UPL species x 5 =
				Column Totals: (A) (B)
5		2_		Prevalence Index = B/A =
5,				Hydrophytic Vegetation Indicators:
7.				1 - Rapid Test for Hydrophytic Vegetation
3			_	2 - Dominance Test is >50%
0		Total Cove		3 - Prevalence Index is ≤3.0¹
50% of total cover:				4 - Morphological Adaptations ¹ (Provide supporting
Herb Stratum (Plot size: 5 ft)				data in Remarks or on a separate sheet)
. Juneas offine	30		FAW	Problematic Hydrophytic Vegetation¹ (Explain)
2. Resembly hybrides	15		FAC	Undicators of hydric acid and watered hydrology at
3. Ludwin admittes	10		FACU	¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
Schedmens arundingen				Definitions of Four Vegetation Strata:
5,				Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or
				more in diameter at breast height (DBH), regardless of
-			_	height.
3			_	Sapling/Shrub – Woody plants, excluding vines, less
0			_	than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.
1				
	<u>(10</u> =	Total Cove	or .	Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.
50% of total cover: 30 Voody Vine Stratum (Plot size:)	20% of to	otal cover:_	12	Woody vine – All woody vines greater than 3.28 ft in
				height.
Mr.				
·				Hydrophytic
				Vegetation
	=	Total Cove		Present? Yes No
50% of total cover:	20% of to	ntal cover		

Case No. 2025-00064
Reponse to 1-69
Page 309 of 794
Sampling Point: 101-whs-40

SOIL

Depth	Matrix				x Feature				for the second
(inches)	Color (moist)		Color (r	moist)	30	Type1	Loc2	<u>Texture</u>	Remarks
0-18	104K 5/8	70 75	112	414	30		MPL	SITICLY	
				-	_	-			-
				-		-			-
						-			
Type: C=Cor I ydric Soil In	ncentration, D=Depl ndicators:	letion, RM=Re	duced N	Matrix, MS	S=Masked	Sand Gr	ains.	Location: PL	.=Pore Lining, M=Matrix. tors for Problematic Hydric Soils³:
Histosol (/	A1)		Dar	k Surface	(S7)				cm Muck (A10) (MLRA 147)
	pedon (A2)	_				ce (S8) (N	ILRA 147,		past Prairie Redox (A16)
Black Hist		_			rface (S9)				(MLRA 147, 148)
	Sulfide (A4)	_			d Matrix (-	, ,		edmont Floodplain Soils (F19)
	Layers (A5)			leted Mat		/			(MLRA 136, 147)
	k (A10) (LRR N)				Surface (F	6)			ery Shallow Dark Surface (TF12)
	Below Dark Surface	- ∍ (A11)			k Surface				ther (Explain in Remarks)
Thick Dar	k Surface (A12)				ssions (F8				, , , , , , , , , , , , , , , , , , , ,
Sandy Mu	icky Mineral (S1) (L				ese Masse		LRR N,		
	147, 148)			ILRA 130		` ' '	·		
	eyed Matrix (S4)	_			ce (F13) (MLRA 13	6, 122)	³ Indio	cators of hydrophytic vegetation and
Sandy Re							(MLRA 14		land hydrology must be present,
	Matrix (S6)	_			-		A 127, 147	•	ess disturbed or problematic.
Restrictive La	ayer (if observed):				•				or and and or problemater
Type:									X
	nes):							Hydric Soil I	Present? Yes X No
Remarks:									

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WETLAND DETERMINATION DATA FORM – Eastern Mountains and Piedmont Region

Landform (hillslope, terrace, etc.): Local relication (LRR or MLRA): LRR or MLRA): Lat: 36.85843 Soil Map Unit Name: C.D7, C.D2 Are climatic / hydrologic conditions on the site typical for this time of year? Y Are Vegetation, Soil, or Hydrology significantly distured are Vegetation, Soil, or Hydrology naturally problems SUMMARY OF FINDINGS – Attach site map showing same	State:Ky Sampling Point:
Hydrophytic Vegetation Present? Yes No K Hydric Soil Present? Yes X No	Is the Sampled Area within a Wetland? Yes No
Wetland Hydrology Present? Yes No	Within a Wedand:
Remarks:	
upland point iss	701-WET-200
HYDROLOGY	
Wetland Hydrology Indicators:	Secondary Indicators (minimum of two required)
Primary Indicators (minimum of one is required; check all that apply)	Surface Soil Cracks (B6)
Surface Water (A1) True Aquatic Plants (I	
High Water Table (A2) Hydrogen Sulfide Odd	
I ·	es on Living Roots (C3) Moss Trim Lines (B16)
Water Marks (B1) Presence of Reduced	_ ` ` , _
Sediment Deposits (B2) Recent Iron Reduction This Mark Surface (C	
Drift Deposits (B3) Thin Muck Surface (C Algal Mat or Crust (B4) Other (Explain in Rem	
Algal Mat or Crust (B4) Other (Explain in Rem Iron Deposits (B5)	narks) Stunted or Stressed Plants (D1) Geomorphic Position (D2)
Inundation Visible on Aerial Imagery (B7)	Shallow Aquitard (D3)
Water-Stained Leaves (B9)	Microtopographic Relief (D4)
Aquatic Fauna (B13)	FAC-Neutral Test (D5)
Field Observations:	
Surface Water Present? Yes No Depth (inches):	
Water Table Present? Yes No Depth (inches):	_
Saturation Present? Yes No Depth (inches):	
(includes capillary fringe)	
Describe Recorded Data (stream gauge, monitoring well, aerial photos, prev	rious inspections), if available:
Remarks:	

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Reponse to 1-69
Page 311 of 794
Sampling Point: 10 - WAS 47

VEGETATION (Five Strata) – Use scientific names of plants.

	Absolute	Dominant	Indicator	Dominance Test worksheet:
Tree Stratum (Plot size:)	% Cover	Species?	Status	Number of Dominant Species
1				That Are OBL, FACW, or FAC:(A)
2				
3				Total Number of Dominant Species Across All Strata: (B)
				Species Across All Strata.
4				Percent of Dominant Species
5				That Are OBL, FACW, or FAC: (A/B)
6				Prevalence Index worksheet:
		= Total Co	ver	
50% of total cover:	20% of	total cover		Total % Cover of: Multiply by:
Sapling Stratum (Plot size:)				OBL species x 1 =
				FACW species x 2 =
1,				FAC species x 3 =
2		_		FACU species x 4 =
3	-		-	UPL species x 5 =
4. NA				Column Totals: (A) (B)
5				Column Fotolis. (A)
6				Prevalence Index = B/A =
	-	= Total Cov	/er	Hydrophytic Vegetation Indicators:
500	7			1 - Rapid Test for Hydrophytic Vegetation
50% of total cover:	20% of	total cover	:	
Shrub Stratum (Plot size:)				2 - Dominance Test is >50%
1,				3 - Prevalence Index is ≤3.0 ¹
2. 3.				4 - Morphological Adaptations (Provide supporting
3				data in Remarks or on a separate sheet)
4				Problematic Hydrophytic Vegetation ¹ (Explain)
5				¹ Indicators of hydric soil and wetland hydrology must
6				be present, unless disturbed or problematic.
		Total Cov	er er	Definitions of Five Vegetation Strata:
50% of total cover:	20% of t	total cover		T. M. I.
Herb Stratum (Plot size: 5f)				Tree – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and 3 in.
1. Trifolium repuns	30	X	FACU	(7.6 cm) or larger in diameter at breast height (DBH).
2. Schoolomron, avanda even		X	Place	
			UPL	Sapling – Woody plants, excluding woody vines,
3. Plantigo les colota	10			approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) DBH.
4. Rennander Ligieur.	7.		FAC	
5. Janeny tahuis			FACL	Shrub – Woody plants, excluding woody vines,
6. Symphyslicen Dansum	_10_		tac	approximately 3 to 20 ft (1 to 6 m) in height.
7. Andropodon u't cinicus	2-		LACK	Herb – All herbaceous (non-woody) plants, including
8. Junias AFERSUS	2		THEW	herbaceous vines, regardless of size, and woody
9.				plants, except woody vines, less than approximately 3
				ft (1 m) in height.
10				Woody vine – All woody vines, regardless of height.
11	88			The state of the s
		Total Cov		
50% of total cover: 44	20% of t	total cover	17.6	
Woody Vine Stratum (Plot size:)				
1				
· ·	-			
2				
11 -				
3				
3 4				
3V 45.				
3V 45		: Total Co	er	Hydrophytic
5		Total Cov		Vegetation
3				

Case No. 2025-00064

SOIL

Reponse to 1-69
Page 312 of 794
Sampling Point: 101-WAS-47

Profile Description: (Describe to the dep Depth Matrix			alcator	or confirm	the absence o	findicators.)
Depth Matrix (inches) Color (moist) %	Color (moist)	x Features	Type ¹	Loc ²	Texture	Remarks
0-9 104R 5/4 70	7.54× 4/6	30	С	MIPL	Silter	
		_		_		
		\equiv		\equiv		
				_		
¹Type: C=Concentration, D=Depletion, RM=	Reduced Matrix, MS	S=Masked S	Sand Gra	ains.		Pore Lining, M=Matrix.
Hydric Soil Indicators:					Indicate	ors for Problematic Hydric Soils ³ :
Histosol (A1) Histic Epipedon (A2) Black Histic (A3) Hydrogen Sulfide (A4) Stratified Layers (A5) Community Communit	Dark Surface Polyvalue Be Thin Dark Su Loamy Gleye Depleted Mat Redox Dark S Depleted Dar Redox Depre Iron-Mangane MLRA 13i Umbric Surfa Piedmont Flo Red Parent M	low Surface rface (S9) (d Matrix (Fi trix (F3) Surface (F6 k Surface (ssions (F8) ese Masses 6) ce (F13) (N odplain Soi	MLRA 1 2)) F7) s (F12) (I ILRA 13 Is (F19)	47, 148) LRR N, 6, 122) (MLRA 14	148) Coa (Pie (Ver (Oth () 3Indica () 8) wetla	m Muck (A10) (MLRA 147) ast Prairie Redox (A16) MLRA 147, 148) dmont Floodplain Soils (F19) MLRA 136, 147) y Shallow Dark Surface (TF12) er (Explain in Remarks) ators of hydrophytic vegetation and hydrology must be present, as disturbed or problematic.
Remarks:						

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SOIL

Sampling Point: TOA-WAS-0/

Profile Description: (Describe to the dep	th needed to docume	nt the indicate	or confirm	n the absence	of indicators.)
DepthMatrix	Redox F	eatures			
	Color (moist)	% Type	_Loc ²	Texture	Remarks
12 22 (215/1	7.5 YB 3/6	10 C		SIC	
12-20 2.545/4 70	7,5480/6	10 <u>C</u>	_ <u>M</u>	Sic	
(2.5\2.5/1 20					Corrections
		==		<u> </u>	
Type: C=Concentration, D=Depletion, RM=lydric Soil Indicators:	Reduced Matrix, MS=N	flasked Sand C	rains.	² Location: PL:	=Pore Lining, M=Matrix. ors for Problematic Hydric Soils ³ :
Histosol (A1)	Dark Surface (S7	7)		2 c	m Muck (A10) (MLRA 147)
Histic Epipedon (A2) Black Histic (A3)	Polyvalue Below	Surface (S8) (MLRA 147,	148) Co	ast Prairie Redox (A16)
Hydrogen Sulfide (A4)	Thin Dark Surfac	:e (S9) (MLRA Matrix (E2)	147, 148)		MLRA 147, 148)
Stratified Layers (A5)	Depleted Matrix (Pie	dmont Floodplain Soils (F19)
2 cm Muck (A10) (LRR N)	Redox Dark Surf				MLRA 136, 147) y Shallow Dark Surface (TF12)
Depleted Below Dark Surface (A11)	Depleted Dark St			Oth	er (Explain in Remarks)
_ Thick Dark Surface (A12)	Redox Depression			<u> </u>	(=Apidin in Normanio)
Sandy Mucky Mineral (S1) (LRR N,	Iron-Manganese	Masses (F12)	(LRR N,		
MLRA 147, 148) _ Sandy Gleyed Matrix (S4)	MLRA 136)				
Sandy Redox (S5)	Umbric Surface (I	F13) (MLRA 1	36, 122)	³ Indica	ators of hydrophytic vegetation and
Stripped Matrix (S6)	Piedmont FloodpRed Parent Mate	lain Soils (F19	(MLRA 148	-	ind hydrology must be present,
estrictive Layer (if observed):	red raient water	rial (FZT) (IVILE	(A 127, 147)	unles	ss disturbed or problematic.
Туре:					
Depth (inches):				Hudein Call D	10 11
emarks:				Hydric Soil P	resent? Yes No
	€ <mark>.</mark>				
					-
					1
					<i>i</i>
					i.
				A.	1
				A	
				A.	i.
					i -
				A	
		-24			
		- sid			
		- s-d			

		· 24			

Case No. 2025-00064

Project/Site: <u>Summer Sha</u> Applicant/Owner: <u>Camela</u> 1	DETERMINATION DATA F	City/County: Summan	Shade	Sampling Date: 4/2/22			
nvestigator(s): Shave Kolles	Chable		State: KV	Sampling Point: Ta2-W			
Subregion (LRR or MI RA): LPD	11 3/ 01/01	ocal relief (concave, convex,	none): Convet	Slope (%): 2			
Subregion (LRR or MLRA): LRR Soil Map Unit Name: Baba	Lat: _36,8150	Long:	-85.690497	Datum: MADA3			
				cation: NA			
re climatic / hydrologic conditions or vegetation	on the site typical for this time of y	ear? Yes No	_ (If no, explain in F				
re Vegetation, Soil	, or Hydrology significantly	/ diatrusts = 40		present? Yes No			
re Vegetation, Soil	or Hydrology naturally pr	oblematic? (If needed	i, explain any answe	rs in Remarks)			
SUMMARY OF FINDINGS -	· Attach site map showing	sampling point locat	ions, transects	important for 1			
- Settle III I Cacilli	Yes No		,	, important features, et			
lydric Soil Present?	Yes No	Is the Sampled Area					
Vetland Hydrology Present?	Yes No	within a Wetland?	Yes	_ No _			
Sindiks.							
		1	1				
	Upland point ass	5, W/ TO2-W	モアーロー きって	01-WET-16			
	'	,	,	10			
DROLOGY	-						
etland Hydrology Indicators:							
imary Indicators (minimum of one	S required; check all the		Secondary Indicate	rs (minimum of two required)			
Surface Water (A1)			Surface Soil C	racks (B6)			
High Water Table (A2)	True Aquatic Pla	nts (B14)		tated Concave Surface (B8)			
Saturation (A3)	Hydrogen Sulfide Oxidized Bhizone	Odor (C1)	Drainage Patte	rns (B10)			
Water Marks (B1)	Presence of Redu	oheres on Living Roots (C3)	Moss Trim Line	s (B16)			
Sediment Deposits (B2)	Recent Iron Redu	ection in Tilled Soils (C6)	Dry-Season Wa	ater Table (C2)			
Drift Deposits (B3) Algal Mat or Crust (B4)	Thin Muck Surfac	e (C7)	Crayfish Burrov	/s (C8)			
Iron Deposits (B5)	Other (Explain in I	Remarks)	Stunted or Stand	le on Aerial Imagery (C9)			
Inundation Visible on Aerial Image	(PT)		Geomorphic Po	ssed Plants (D1)			
Water-Stained Leaves (B9)	эгу (В <i>7</i>)		Shallow Aquitar				
Aquatic Fauna (B13)			Microtopographi	c Relief (D4)			
d Observations:			FAC-Neutral Tes	st (D5)			
ace Water Present? Yes	No Depth (inches):						
er Table Present? Yes	No Depth (inches):						
ration Present?	No Depth (inches):						
ides capillary fringe)		Wetland Hy	Wetland Hydrology Present? Yes No ~				
ribe Recorded Data (stream gauge	monitoring well, aerial photos, p	revious inspections), if availa	ble:				
arks:							
				1			

VEGETATION (Four Strata) – Use scientific names of plants.

	ames of	piants.		Sampling Points 1594 50
Tree Stratum (Plot size: 30 Fx)	Absolute	Dominant		Dominance Test worksheet:
	% Cover			Number of Dominant Species
1. Juniperus virginiana	10_	V	FACU	That Are OBL, FACW, or FAC:(A)
2. Private company			FAW	
3. Sassafrass alladum	_		FACU	Species Across All Strata: (B)
4		_		Percent of Dominant Species
5				That Are OBL, FACW, or FAC: (A/B)
6				
7.				Prevalence Index worksheet:
	18	Total Cov	er	Total % Cover of: Multiply by:
50% of total cover:				OBL species x 1 =
Sapling/Shrub Stratum (Plot size:)				FACW species x 2 =
1				FAC species x 3 =
2				FACU species x 4 =
2				UPL species x 5 =
4. NA			_	Column Totals: (A) (B)
				Goldmir rotals. (A)
5				Prevalence Index = B/A =
6				Hydrophytic Vegetation Indicators:
7				1 - Rapid Test for Hydrophytic Vegetation
8				2 - Dominance Test is >50%
9				
		Total Cov	er	3 - Prevalence Index is ≤3.0¹
50% of total cover:	20% of f	otal cover:		4 - Morphological Adaptations (Provide supporting
Herb Stratum (Plot size: 56)		,		data in Remarks or on a separate sheet)
1. Trifolium repense	25	1	FECIL	Problematic Hydrophytic Vegetation ¹ (Explain)
2. Frigeron Strigosus	3		FACU	
3. Stellaria media	10		190	¹ Indicators of hydric soil and wetland hydrology must
4. Scheduprous animalin acca		1	FACU	be present, unless disturbed or problematic.
2/102/1 21/1-17	1			Definitions of Four Vegetation Strata:
	-15		FAC	Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or
6. Kuris callery ana			FACU	more in diameter at breast height (DBH), regardless of
•				height.
В				Sapling/Shrub – Woody plants, excluding vines, less
9				than 3 in. DBH and greater than or equal to 3.28 ft (1
10				m) tall.
11				Herb – All herbaceous (non-woody) plants, regardless
	75 =	Total Cove	er	of size, and woody plants less than 3.28 ft tall.
50% of total cover: 37,5		otal cover:		
Noody Vine Stratum (Plot size:)				Woody vine – All woody vines greater than 3.28 ft in height.
				neight
2.				
N.A			===	
				Hydrophytic
			-	Vegetation Present? Yes No
5				
550% of total cover:		Total Cove		100 110

Case No. 2025-00064 Sampling Boint:

Depth	Matrix		Redox	Feature				
(inches)	Color (moist)	%	Color (moist)	%	Type ¹	_Loc ²	Texture	Remarks
0-9	104R 4/3	100					SIL	
7-20	1048 5/3	97	7.5485/6	3	<u></u>	<u>M</u>	Sic	
		=		=				
ype: C=Co		letion, RM	=Reduced Matrix, MS		Sand Gra	ains.		_=Pore Lining, M=Matrix. ators for Problematic Hydric Soils ³ :
Histosol			Dark Surface (2	cm Muck (A10) (MLRA 147)
Histic Ep Black His Hydroger Stratified 2 cm Muc Depleted Thick Dan Sandy Mi MLRA Sandy Gi Sandy Re	ipedon (A2) itic (A3) in Sulfide (A4) Layers (A5) ick (A10) (LRR N) Below Dark Surface ick Surface (A12) ucky Mineral (S1) (L 147, 148) eyed Matrix (S4)		Polyvalue Beld Thin Dark Surd Loamy Gleyed Depleted Matr Redox Dark Si Depleted Dark Redox Depres Iron-Manganes MLRA 136) Umbric Surfact Piedmont Floo Red Parent Ma	ow Surface (S9) I Matrix (I ix (F3) urface (F Surface sions (F8 Se Masse) e (F13) (I dplain Sc	(MLRA 1 F2) 6) (F7) 8) es (F12) (I MLRA 13 bils (F19)	47, 148) _RR N, 6, 122) (MLRA 14	, 148) Co Pi Ve Oi 3India	coast Prairie Redox (A16) (MLRA 147, 148) iedmont Floodplain Soils (F19) (MLRA 136, 147) ery Shallow Dark Surface (TF12) ther (Explain in Remarks) cators of hydrophytic vegetation and eland hydrology must be present, ess disturbed or problematic.
	ayer (if observed):		Neu i alentiwa	aterial (1 2	z i) (IVILIX	4 127, 14	r) unit	ess disturbed or problematic.
Type:								
Depth (incl	nes):						Hydric Soil I	Present? Yes No

	Mountains and Piedmont Regionse to 1-69 Page 317 of 794
Project/Site: Symmen Shade Solor City/County: Sym	
Applicant/Owner: Cardou	State: KY Sampling Point: 02-61A5-0
Investigator(s): Shave Kelley Section, Township	o, Range: N A
Landform (hillslope, terrace, etc.): Local relief (concave,	convex, none): Concare Slope (%): 2
Subregion (LRR or MLRA): LRN Lat: 36.05061	Long: -85.70/627 Datum: NAD83 (N/FI
Soil Map Unit Name: SaB:	NWI classification:
Are climatic / hydrologic conditions on the site typical for this time of year? Yes t	No (If no, explain in Remarks.)
Are Vegetation, Soil, or Hydrology significantly disturbed?	Are "Normal Circumstances" present? Yes No
	(If needed, explain any answers in Remarks.)
SUMMARY OF FINDINGS – Attach site map showing sampling poi	· ·
Hydrophytic Vegetation Present? Hydric Soil Present? Wetland Hydrology Present? Yes No Is the Sam within a Wetland Hydrology Present?	
Remarks:	
02-WET-02	
	PFO
HYDROLOGY	
Wetland Hydrology Indicators:	Secondary Indicators (minimum of two required)
Primary Indicators (minimum of one is required; check all that apply)	Surface Soil Cracks (B6)
✓ Surface Water (A1) True Aquatic Plants (B14)	Sparsely Vegetated Concave Surface (B8)
High Water Table (A2) Hydrogen Sulfide Odor (C1)	Drainage Patterns (B10)
✓ Saturation (A3) Oxidized Rhizospheres on Living F	
Water Marks (B1) Presence of Reduced Iron (C4)	Dry-Season Water Table (C2)
 Sediment Deposits (B2) Recent Iron Reduction in Tilled So Drift Deposits (B3) Thin Muck Surface (C7) 	ils (C6)
Algal Mat or Crust (B4) Other (Explain in Remarks)	Stunted or Stressed Plants (D1)
Iron Deposits (B5)	Geomorphic Position (D2)
Inundation Visible on Aerial Imagery (B7)	Shallow Aquitard (D3)
Water-Stained Leaves (B9)	Microtopographic Relief (D4)
Aquatic Fauna (B13)	FAC-Neutral Test (D5)
Field Observations:	
Surface Water Present? Yes No Depth (inches):	
Water Table Present? Yes No Depth (inches):	
Saturation Present? Yes V No Depth (inches): D (includes capillary fringe)	Wetland Hydrology Present? Yes No
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspect	ions), if available;

Case No. 2025-00064 Sampling Poling-6962-WAS-DS SOIL Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.) Depth Matrix Redox Features (inches) Color (moist) Color (moist) 1048 51 7.59K414 Clay Loan ¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. ²Location: PL=Pore Lining, M=Matrix. **Hydric Soil Indicators:** Indicators for Problematic Hydric Soils³: Histosol (A1) Dark Surface (S7) _ 2 cm Muck (A10) (MLRA 147) Histic Epipedon (A2) Polyvalue Below Surface (S8) (MLRA 147, 148) _ Coast Prairie Redox (A16) Black Histic (A3) Thin Dark Surface (S9) (MLRA 147, 148) (MLRA 147, 148) Hydrogen Sulfide (A4) Loamy Gleyed Matrix (F2) Piedmont Floodplain Soils (F19) Stratified Layers (A5) X Depleted Matrix (F3) (MLRA 136, 147) 2 cm Muck (A10) (LRR N) Redox Dark Surface (F6) Very Shallow Dark Surface (TF12) Depleted Below Dark Surface (A11) Depleted Dark Surface (F7) Other (Explain in Remarks) Thick Dark Surface (A12) Redox Depressions (F8) Sandy Mucky Mineral (S1) (LRR N, Iron-Manganese Masses (F12) (LRR N, MLRA 147, 148) MLRA 136) Sandy Gleyed Matrix (S4) Umbric Surface (F13) (MLRA 136, 122) ³Indicators of hydrophytic vegetation and Sandy Redox (S5) Piedmont Floodplain Soils (F19) (MLRA 148) wetland hydrology must be present, Stripped Matrix (S6) Red Parent Material (F21) (MLRA 127, 147) unless disturbed or problematic. Restrictive Layer (if observed): Depth (inches): **Hydric Soil Present?** Remarks:

Case No. 2025-00064 WETLAND DETERMINATION DATA FORM – Eastern Mountains and Piedmont Region 1-69 City/County: Summer Shake Project/Site: Summer Shade, Solog Sampling Date:________ Applicant/Owner: Candela Bereubles Investigator(s): Shawe (elley C. Kabel, L. Down S. Section, Township, Range: MA Landform (hillslope, terrace, etc.): Hillslope Local relief (concave, convex, none): Subregion (LRR or MLRA): Lat: 36,85112 Long: -85,702154 Datum: NAD83/KHEE Soil Map Unit Name: 50% NWI classification: __________ Are climatic / hydrologic conditions on the site typical for this time of year? Yes (If no, explain in Remarks.) Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes ____\ Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? (If needed, explain any answers in Remarks.) SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc. Hydrophytic Vegetation Present? Yes Is the Sampled Area Hydric Soil Present? within a Wetland? Wetland Hydrology Present? Remarks: Upland point associated w/ TG2-WET-03 **HYDROLOGY** Wetland Hydrology Indicators: Secondary Indicators (minimum of two required) Primary Indicators (minimum of one is required; check all that apply) Surface Soil Cracks (B6) Surface Water (A1) __ True Aquatic Plants (B14) Sparsely Vegetated Concave Surface (B8) High Water Table (A2) ___ Hydrogen Sulfide Odor (C1) __ Drainage Patterns (B10) Saturation (A3) Oxidized Rhizospheres on Living Roots (C3) ___ Moss Trim Lines (B16) Water Marks (B1) ___ Dry-Season Water Table (C2) Presence of Reduced Iron (C4) Sediment Deposits (B2) ___ Recent Iron Reduction in Tilled Soils (C6) ___ Crayfish Burrows (C8) ___ Thin Muck Surface (C7) Drift Deposits (B3) ___ Saturation Visible on Aerial Imagery (C9) Algal Mat or Crust (B4) Other (Explain in Remarks) Stunted or Stressed Plants (D1) Iron Deposits (B5) Geomorphic Position (D2) Inundation Visible on Aerial Imagery (B7) Shallow Aquitard (D3) Water-Stained Leaves (B9) __ Microtopographic Relief (D4) Aquatic Fauna (B13) FAC-Neutral Test (D5) Field Observations: Yes _____ No __/_ Depth (inches):_ Surface Water Present? Water Table Present? Saturation Present? Yes _____ No

Depth (inches): Wetland Hydrology Present? Yes _____ (includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available: Remarks:

VEGETATION (Four Strata) – Use scientific names of plants.

043C 140. 2025-00004	
Sampling Reponse to 1-69	S

Number of Dominant Species That Are OBL, FACW, or FAC: Total Number of Dominant Species That Are OBL, FACW, or FAC:
Total Number of Dominant Species Across All Strata: Percent of Dominant Species That Are OBL, FACW, or FAC: Prevalence Index worksheet: Total % Cover of: OBL species
Prevalence Index = B/A =
Species Across All Strata: (B) Percent of Dominant Species That Are OBL, FACW, or FAC: (A/E Prevalence Index worksheet: Total % Cover of: Multiply by: OBL species x 1 = FACW species x 2 = FAC species x 3 = FACU species x 4 = UPL species x 5 = Column Totals: (A) (B) Prevalence Index = B/A = Hydrophytic Vegetation Indicators: 1 - Rapid Test for Hydrophytic Vegetation 2 - Dominance Test is >50% 3 - Prevalence Index is ≤3.0¹ 4 - Morphological Adaptations¹ (Provide supporting data in Remarks or on a separate sheet)
Percent of Dominant Species That Are OBL, FACW, or FAC: Prevalence Index worksheet: Total % Cover of:
That Are OBL, FACW, or FAC: Prevalence Index worksheet: Total % Cover of:
Prevalence Index worksheet: Total % Cover of: Multiply by: OBL species x 1 = FACW species x 2 = FAC species x 4 = UPL species x 5 = Column Totals: (A) (B) Prevalence Index = B/A = Hydrophytic Vegetation Indicators: 1 - Rapid Test for Hydrophytic Vegetation 2 - Dominance Test is >50% 3 - Prevalence Index is ≤3.0¹ 4 - Morphological Adaptations¹ (Provide supporting data in Remarks or on a separate sheet)
Cover over: Prevalence Index worksheet: Total % Cover of: Multiply by: OBL species x 1 = FACW species x 2 = FAC species x 3 = FACU species x 4 = UPL species x 5 = Column Totals: (A) (B) Prevalence Index = B/A = Hydrophytic Vegetation Indicators: 1 - Rapid Test for Hydrophytic Vegetation 2 - Dominance Test is >50% 3 - Prevalence Index is ≤3.0¹ 4 - Morphological Adaptations¹ (Provide supporting data in Remarks or on a separate sheet)
Cover over: Total % Cover of: Multiply by: OBL species x 1 = FACW species x 2 = FAC species x 4 = UPL species x 5 = Column Totals: (A) Prevalence Index = B/A = Hydrophytic Vegetation Indicators: 1 - Rapid Test for Hydrophytic Vegetation 2 - Dominance Test is >50% 3 - Prevalence Index is ≤3.0¹ 4 - Morphological Adaptations¹ (Provide supporting data in Remarks or on a separate sheet)
OBL species x 1 =
FACW species x 2 =
FAC species x 3 = FACU species x 4 = UPL species x 5 = Column Totals: (A) (B) Prevalence Index = B/A = Hydrophytic Vegetation Indicators: 1 - Rapid Test for Hydrophytic Vegetation 2 - Dominance Test is >50% 3 - Prevalence Index is ≤3.0¹ 4 - Morphological Adaptations¹ (Provide supportine data in Remarks or on a separate sheet)
FAC species x 3 = FACU species x 4 = UPL species x 5 = Column Totals: (A) (B) Prevalence Index = B/A = Hydrophytic Vegetation Indicators: 1 - Rapid Test for Hydrophytic Vegetation 2 - Dominance Test is >50% 3 - Prevalence Index is ≤3.0¹ 4 - Morphological Adaptations¹ (Provide supportine data in Remarks or on a separate sheet)
FACU species x 4 =
UPL species x 5 =
Column Totals: (A) (B) Prevalence Index = B/A = Hydrophytic Vegetation Indicators: 1 - Rapid Test for Hydrophytic Vegetation 2 - Dominance Test is >50% 3 - Prevalence Index is ≤3.0¹ 4 - Morphological Adaptations¹ (Provide supporting data in Remarks or on a separate sheet)
Prevalence Index = B/A = Hydrophytic Vegetation Indicators: 1 - Rapid Test for Hydrophytic Vegetation 2 - Dominance Test is >50% 3 - Prevalence Index is ≤3.0¹ 4 - Morphological Adaptations¹ (Provide supportindata in Remarks or on a separate sheet)
Prevalence Index = B/A = Hydrophytic Vegetation Indicators: 1 - Rapid Test for Hydrophytic Vegetation 2 - Dominance Test is >50% 3 - Prevalence Index is ≤3.0¹ 4 - Morphological Adaptations¹ (Provide supportine data in Remarks or on a separate sheet)
Hydrophytic Vegetation Indicators: 1 - Rapid Test for Hydrophytic Vegetation 2 - Dominance Test is >50% 3 - Prevalence Index is ≤3.0¹ 4 - Morphological Adaptations¹ (Provide supportindata in Remarks or on a separate sheet)
1 - Rapid Test for Hydrophytic Vegetation2 - Dominance Test is >50%3 - Prevalence Index is ≤3.0¹4 - Morphological Adaptations¹ (Provide supportindata in Remarks or on a separate sheet)
2 - Dominance Test is >50% 3 - Prevalence Index is ≤3.0¹ 4 - Morphological Adaptations¹ (Provide supportin data in Remarks or on a separate sheet)
2 - Dominance Test is >50% 3 - Prevalence Index is ≤3.0¹ 4 - Morphological Adaptations¹ (Provide supportin data in Remarks or on a separate sheet)
Cover your: data in Remarks or on a separate sheet) 3 - Prevalence Index is ≤3.0¹ 4 - Morphological Adaptations¹ (Provide supporting data in Remarks or on a separate sheet)
Cover 4 - Morphological Adaptations (Provide supportind data in Remarks or on a separate sheet)
data in Remarks or on a separate sheet)
-3-3-3
Problematic Hydrophytic Vegetation ¹ (Explain)
10
Indicators of hydric soil and wetland hydrology must
be present, unless disturbed or problematic.
Definitions of Four Vegetation Strata:
Definitions of Four Vegetation Strata;
Tree - Woody plants, excluding vines, 3 in. (7.6 cm) o
more in diameter at breast height (DBH), regardless of
height.
Sapling/Shrub – Woody plants, excluding vines, less
than 3 in. DBH and greater than or equal to 3.28 ft (1
m) tall.
Herb – All herbaceous (non-woody) plants, regardless
Cover of size, and woody plants less than 3.28 ft tall.
wer: 8.2 Woody vine – All woody vines greater than 3.28 ft in
height.

Hydrophytic
Vegetation
Cover Present? Yes No
ver:

Sampling Potnit-69/2-WP5-05

Depth	cription: (Describe Matrix		Redo	x Feature	S			25-22-27
(inches)	Color (moist)	%	Color (moist)	%	Type ¹	_Loc2	Texture	Remarks
5-6	104R 5/1	100					Sic	
6-20	101R 7/1	97	104R 5/4	3		\sim	CL	-
					_	_ 		
	oncentration, D=Depl	letion, RM=	Reduced Matrix, MS	S=Masked	Sand Gra	ins.		PL=Pore Lining, M=Matrix.
_ Histosol			Dark Surface	(07)				cators for Problematic Hydric Soils ³ :
Histic Ep Black His Hydroge Stratified 2 cm Mu Depleted Thick Da Sandy M MLRA Sandy G Sandy Ro Stripped	bipedon (A2) stic (A3) n Sulfide (A4) I Layers (A5) ck (A10) (LRR N) I Below Dark Surface irk Surface (A12) lucky Mineral (S1) (L 147, 148) leyed Matrix (S4) edox (S5) Matrix (S6) .ayer (if observed):		Polyvalue Be Thin Dark Su Loamy Gleye Depleted Mal Redox Dark S Depleted Dar Redox Depre Iron-Mangane MLRA 13i Umbric Surfa Piedmont Flo Red Parent M	low Surfa rface (S9) d Matrix (trix (F3) Surface (F k Surface ssions (Fi ese Masse 5) ce (F13) (odplain Se	(MLRA 14 F2) 6) (F7) 3) es (F12) (L MLRA 136 bils (F19) (47, 148) RR N, 5, 122) MLRA 14	148)	2 cm Muck (A10) (MLRA 147) Coast Prairie Redox (A16) (MLRA 147, 148) Piedmont Floodplain Soils (F19) (MLRA 136, 147) Very Shallow Dark Surface (TF12) Other (Explain in Remarks) dicators of hydrophytic vegetation and retland hydrology must be present, nless disturbed or problematic.

Case No. 2025-00064 Reponse to 1-69 Page 322 of 794

WETLAND DETERMINATION DATA FORM – Eastern Mountains and Piedmont Region

Project/Site: Summer Shade	Solar		Citv/Co	unty: Metcalfe/ M	Monroe		Sampling Date: 2/28/24
Applicant/Owner: Summer SI	nade Solar, I	LLC			S	tate: KY	Sampling Point: WAS-44
Investigator(s): Kristen Clem			Section	n. Township, Rang	ne. N/A		
Landform (hillslope, terrace, etc						Concave	Slone (%): 0
Subregion (LRR or MLRA): LF	_{3.).} ≀R	Late	36.851176	Long:	-85.692	2892	Olope (70)
Soil Map Unit Name: BaE2, C		Lai		Long.		NDA/I -1 'C' -	Datum
				Υ		INVVI classific	cation: 1 = 111
Are climatic / hydrologic conditi							
Are Vegetation N, Soil N	, or Hydr	ology N	_ significantly disturb	ped? Are "No	ormal Cir	cumstances" p	oresent? Yes X No No sin Remarks.)
Are Vegetation N, Soil N	, or Hydr	ology N	_naturally problema	itic? (If need	ded, expla	ain any answe	ers in Remarks.)
SUMMARY OF FINDING	GS – Attac	h site ma	p showing sam	pling point lo	cations	, transects	, important features, etc.
Hydrophytic Vegetation Prese	ant? V	as X	No				
Hydric Soil Present?	γιι: Υ	es X	No	Is the Sampled A		., X	No
Wetland Hydrology Present?	Y	es X	No	within a Wetland	?	res <u>^`</u>	No
Remarks:							
Wetland point for W	-25. Depr	essiona	I wetland in flo	odplain of st	tream		
Trouding point for tr	_оор.	00010110	. Woulding in in	э с ар .а с . с .			
HYDROLOGY							
Wetland Hydrology Indicato	ors:				Sec	condary Indica	ators (minimum of two required)
Primary Indicators (minimum	of one is requ	ired; check a	all that apply)		<u>_</u>	Surface Soil	Cracks (B6)
Surface Water (A1)	Surface Water (A1) True Aquatic Plants (B14)						getated Concave Surface (B8)
High Water Table (A2)		_	lydrogen Sulfide Odd	` '		Drainage Pa	
Saturation (A3)			oxidized Rhizosphere	_	(C3)	Moss Trim L	
Water Marks (B1)			resence of Reduced	, ,	\vdash	-	Water Table (C2)
Sediment Deposits (B2)			Recent Iron Reduction	,	⁵⁾ 님	Crayfish Bur	
Drift Deposits (B3) Thin Muck Surface (C7) Saturation Visible on Aerial Imagery (C9)							= : : :
Algal Mat or Crust (B4)		ШС	Other (Explain in Rem	narks)	片		tressed Plants (D1)
Iron Deposits (B5) Inundation Visible on Aer	ial Imagan, (E	7)				1	Position (D2)
Water-Stained Leaves (B		07)			H	Shallow Aqu	aphic Relief (D4)
Aquatic Fauna (B13)	19)					FAC-Neutral	. , ,
Field Observations:				1		1710 Houlian	1001 (20)
Surface Water Present?	Yes X	No I	Depth (inches): 1				
Water Table Present?			Depth (inches):				
Saturation Present?			Depth (inches): 2		and Hydr	ology Preser	nt? Yes X No
(includes capillary fringe)						-	N. 103N
Describe Recorded Data (stre	am gauge, m	onitoring we	ell, aerial photos, pre	vious inspections),	if availab	le:	
Remarks:							

VEGETATION (Four Strata) – Use scientific names of plants.

30 ft	Absolute	Dominant I		Dominance Test worksheet:
Tree Stratum (Plot size:)	% Cover	Species?	Status	Number of Dominant Species
1. N/A				That Are OBL, FACW, or FAC: 1 (A)
2				
				Total Number of Dominant Species Across All Strata: 1 (B)
3			-	Species Across All Strata: 1 (B)
4				Percent of Dominant Species
5				That Are OBL, FACW, or FAC: 100 (A/B)
6				
7				Prevalence Index worksheet:
		= Total Cove		Total % Cover of: Multiply by:
50% of total cover:				OBL species x 1 =
	20 /0 01	total cover	-	FACW species x 2 =
Sapling/Shrub Stratum (Plot size: 15 ft)				
1. N/A	· ——			FAC species x 3 =
2				FACU species x 4 =
3				UPL species x 5 =
4				Column Totals: (A) (B)
5				Prevalence Index = B/A =
6				Hydrophytic Vegetation Indicators:
7				1 - Rapid Test for Hydrophytic Vegetation
8				
9				2 - Dominance Test is >50%
o				3 - Prevalence Index is ≤3.0 ¹
F00/ of total accord		= Total Cove		4 - Morphological Adaptations ¹ (Provide supporting
50% of total cover:	20% 01	total cover:_		data in Remarks or on a separate sheet)
Herb Stratum (Plot size: 5 ft)				Problematic Hydrophytic Vegetation ¹ (Explain)
1. Rannunculus hispidus	15	Υ	FACW	Floblematic Hydrophytic vegetation (Explain)
2. Juncus effusus	10	N	FACW	
3 Echinochloa grus-galli	60	N	FACW	¹ Indicators of hydric soil and wetland hydrology must
<u> </u>				be present, unless disturbed or problematic.
4				Definitions of Four Vegetation Strata:
5	· 			Tree Woody plants evaluding vines 2 in (7.6 cm) or
6				Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of
7				height.
8				
•				Sapling/Shrub – Woody plants, excluding vines, less
				than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.
10				iii) taii.
11				Herb – All herbaceous (non-woody) plants, regardless
	85	= Total Cove	r	of size, and woody plants less than 3.28 ft tall.
50% of total cover: <u>42.5</u>	20% of	total cover:_	17	
Woody Vine Stratum (Plot size: 5 ft)				Woody vine – All woody vines greater than 3.28 ft in height.
. NI/A				neight.
2				
3				
4				Hydrophytic
5				Vegetation
		= Total Cove		Present? Yes X No
50% of total cover:				
		total oover		
Remarks: (Include photo numbers here or on a separate s	sheet.)			

Case No. 2025-00064
Reponse to 1-69
Page 324 of 794
Sampling Point: WAS-44

SOIL

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.) Depth Matrix Redox Features Color (moist) Color (moist) Type¹ Texture (inches) C, PL 0-2 10YR 4/2 95 7.5YR 4/6 5 Silty loam M 2-15 10YR 4/1 90 7.5YR 4/6 С Silty Clay 10 ²Location: PL=Pore Lining, M=Matrix. ¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. **Hydric Soil Indicators:** Indicators for Problematic Hydric Soils³: ___ 2 cm Muck (A10) (MLRA 147) ___ Histosol (A1) Dark Surface (S7) ___ Histic Epipedon (A2) Polyvalue Below Surface (S8) (MLRA 147, 148) Coast Prairie Redox (A16) ___ Black Histic (A3) Thin Dark Surface (S9) (MLRA 147, 148) (MLRA 147, 148) ___ Hydrogen Sulfide (A4) Loamy Gleyed Matrix (F2) Piedmont Floodplain Soils (F19) Depleted Matrix (F3) ___ Stratified Layers (A5) (MLRA 136, 147) 2 cm Muck (A10) (LRR N) Redox Dark Surface (F6) Very Shallow Dark Surface (TF12) Depleted Below Dark Surface (A11) Depleted Dark Surface (F7) __ Other (Explain in Remarks) Thick Dark Surface (A12) Redox Depressions (F8) Sandy Mucky Mineral (S1) (LRR N, ___ Iron-Manganese Masses (F12) (LRR N, MLRA 147, 148) MLRA 136) Sandy Gleyed Matrix (S4) Umbric Surface (F13) (MLRA 136, 122) ³Indicators of hydrophytic vegetation and ___ Sandy Redox (S5) ___ Piedmont Floodplain Soils (F19) (MLRA 148) wetland hydrology must be present, Stripped Matrix (S6) Red Parent Material (F21) (MLRA 127, 147) unless disturbed or problematic. Restrictive Layer (if observed): Type: Yes X **Hydric Soil Present?** Depth (inches): Remarks:

Case No. 2025-00064 Reponse to 1-69 Page 325 of 794

Project/Site: Summer Shade	Solar	Citv/Count	ty: Metcalfe/ Monro	ре	Sampling Date: 2/28/24
Applicant/Owner: Summer SI	hade Solar, LLC		,	State: KY	Sampling Point: WAS-45
Investigator(s): Kristen Clem		Section	Township, Range: N/A	A	<u> </u>
Landform (hillslope, terrace, etc					Slope (%): 0
Subregion (LRR or MLRA): LF	R Late:	36.851268	Long: -85.6	693020	NAD83
Soil Map Unit Name: BaE2	Lat		Long	NDA(Lalaaa)	Datum
			Υ	NVVI classific	cation: Opidina
Are climatic / hydrologic conditi					
Are Vegetation N, Soil N	, or Hydrology N	_significantly disturbed	d? Are "Normal	Circumstances" p	oresent? Yes X No No nor in Remarks.)
Are Vegetation N, Soil N	, or Hydrology N	_ naturally problematic	? (If needed, ex	xplain any answe	rs in Remarks.)
SUMMARY OF FINDING	GS – Attach site ma	p showing sampl	ing point location	ns, transects	s, important features, etc.
Hydrophytic Vegetation Prese	ent? Ves	No X			
Hydric Soil Present?	Yes	NI _O X	the Sampled Area		No X
Wetland Hydrology Present?	Yes	No X	ithin a Wetland?	Yes	No <u>^_</u>
Remarks:					
Upland point for W-2	25 located in mov	vn field			
	20 located in mov	VII IICIG			
HYDROLOGY					
Wetland Hydrology Indicato	ors:		,	Secondary Indica	ators (minimum of two required)
Primary Indicators (minimum		all that apply)		Surface Soil	
Surface Water (A1)		rue Aquatic Plants (B14	4)		getated Concave Surface (B8)
High Water Table (A2)		lydrogen Sulfide Odor (Drainage Pa	-
Saturation (A3)	_	Oxidized Rhizospheres	· '	Moss Trim L	
Water Marks (B1)		Presence of Reduced Iron		Dry-Season	Water Table (C2)
Sediment Deposits (B2)	□ F	Recent Iron Reduction in	n Tilled Soils (C6)	Crayfish Bur	rows (C8)
Drift Deposits (B3)	□ ⊤	hin Muck Surface (C7)		Saturation V	isible on Aerial Imagery (C9)
Algal Mat or Crust (B4)		Other (Explain in Remar	ks)	Stunted or S	tressed Plants (D1)
Iron Deposits (B5)					Position (D2)
Inundation Visible on Aer				Shallow Aqu	` '
Water-Stained Leaves (B	39)			_	aphic Relief (D4)
Aquatic Fauna (B13)				FAC-Neutral	Test (D5)
Field Observations:	Vaa Na X	Don'th (Cook oo)			
Surface Water Present?	Yes No X				
Water Table Present?	Yes No X				X
Saturation Present? (includes capillary fringe)	Yes No X	Depth (inches):	Wetland H	ydrology Preser	nt? Yes No_X
Describe Recorded Data (stre	eam gauge, monitoring we	ell, aerial photos, previo	us inspections), if avai	lable:	
Remarks:					

30 ft	Absolute	Dominant		Dominance Test worksheet:
Tree Stratum (Plot size:)	% Cover	Species?	Status	Number of Dominant Species
1. N/A				That Are OBL, FACW, or FAC: 0 (A)
2				Total Number of Danisant
3				Total Number of Dominant Species Across All Strata: 1 (B)
4.				Openies / toross / tir etrata.
				Percent of Dominant Species
5				That Are OBL, FACW, or FAC: 0 (A/B)
6				Prevalence Index worksheet:
7				
	:	= Total Cove	er	Total % Cover of: Multiply by:
50% of total cover:	20% of	total cover:		OBL species x 1 =
Sapling/Shrub Stratum (Plot size: 15 ft)				FACW species x 2 =
1. N/A				FAC species x 3 =
· · ·				FACU species x 4 =
2				UPL species x 5 =
3				
4				Column Totals: (A) (B)
5				Prevalence Index = B/A =
6				
7				Hydrophytic Vegetation Indicators:
				1 - Rapid Test for Hydrophytic Vegetation
8				2 - Dominance Test is >50%
9				3 - Prevalence Index is ≤3.0 ¹
	:	= Total Cove	er	4 - Morphological Adaptations ¹ (Provide supporting
50% of total cover:	20% of	total cover:_		
Herb Stratum (Plot size: 5 ft)				data in Remarks or on a separate sheet)
1. Angropogodon virginicus	70	Υ	FACU	Problematic Hydrophytic Vegetation ¹ (Explain)
2. Cynodon dactylon	5	N	FACU	
3 Schedonorus arundinaceus	25	N	FACU	¹ Indicators of hydric soil and wetland hydrology must
3. Ochedonords ardindinaceds		- IN	1 700	be present, unless disturbed or problematic.
4				Definitions of Four Vegetation Strata:
5				
6				Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or
7				more in diameter at breast height (DBH), regardless of height.
				noight.
8				Sapling/Shrub – Woody plants, excluding vines, less
9				than 3 in. DBH and greater than or equal to 3.28 ft (1
10				m) tall.
11				Herb – All herbaceous (non-woody) plants, regardless
	100	= Total Cove	er	of size, and woody plants less than 3.28 ft tall.
50% of total cover: 50	20% of	total cover:	20	
Woody Vine Stratum (Plot size: 5 ft)				Woody vine – All woody vines greater than 3.28 ft in height.
. NI/A				Height.
2				
3				
4				Hydrophytic
5				Vegetation
	:	= Total Cove	er	Present? Yes No X
50% of total cover:	20% of	total cover:		
Remarks: (Include photo numbers here or on a separate				
Tremarks. (include prioto numbers here of our a separate	311661.)			

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Sampling Point: WAS-45

SOIL

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.) Depth Matrix Redox Features Loc² Color (moist) Color (moist) Type Texture (inches) 0-2 10YR 4/4 98 5YR 4/6 2 С Silty loam Disturbed from past grading M Disturbed from past grading 2-13 10 YR 4/3 100 Silty loam ²Location: PL=Pore Lining, M=Matrix. ¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. **Hydric Soil Indicators:** Indicators for Problematic Hydric Soils³: ___ 2 cm Muck (A10) (MLRA 147) ___ Histosol (A1) Dark Surface (S7) ___ Histic Epipedon (A2) Polyvalue Below Surface (S8) (MLRA 147, 148) Coast Prairie Redox (A16) ___ Black Histic (A3) Thin Dark Surface (S9) (MLRA 147, 148) (MLRA 147, 148) ___ Hydrogen Sulfide (A4) Loamy Gleyed Matrix (F2) Piedmont Floodplain Soils (F19) ___ Stratified Layers (A5) Depleted Matrix (F3) (MLRA 136, 147) 2 cm Muck (A10) (LRR N) Redox Dark Surface (F6) Very Shallow Dark Surface (TF12) Depleted Below Dark Surface (A11) Depleted Dark Surface (F7) _ Other (Explain in Remarks) Thick Dark Surface (A12) Redox Depressions (F8) Sandy Mucky Mineral (S1) (LRR N, Iron-Manganese Masses (F12) (LRR N, MLRA 147, 148) MLRA 136) Sandy Gleyed Matrix (S4) Umbric Surface (F13) (MLRA 136, 122) ³Indicators of hydrophytic vegetation and ___ Sandy Redox (S5) ___ Piedmont Floodplain Soils (F19) (MLRA 148) wetland hydrology must be present, Stripped Matrix (S6) Red Parent Material (F21) (MLRA 127, 147) unless disturbed or problematic. Restrictive Layer (if observed): Type: No X **Hydric Soil Present?** Depth (inches): Remarks:

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Project/Site: Summer Shade	Solar	City/Co	unty: Metcalfe/ Monro	e	Sampling Date: 2/28/24
Applicant/Owner: Summer Sh	nade Solar, LLC	o.ty, oo	<u></u>	State: KY	Sampling Point: WAS-91
Investigator(s): Kristen Cleme		Section			
					Slone (%). 1
Landform (hillslope, terrace, etc. Subregion (LRR or MLRA): LR	.). .R	36.848738	Lang: -85.6	698698	Clope (70)
Soil Map Unit Name: SaB, Nk	Lat.		Long	A.D.A.(I	
Are climatic / hydrologic condition					
Are Vegetation N, Soil N	, or Hydrology N	significantly disturb	ped? Are "Normal	Circumstances" p	resent? Yes X No
Are Vegetation N, Soil N	, or Hydrology N	naturally problema	itic? (If needed, e.	xplain any answe	rs in Remarks.)
SUMMARY OF FINDING	SS – Attach site ma	ap showing sam	pling point locatio	ns, transects	, important features, etc.
Hydrophytic Vegetation Prese	nt? Yes X	No	In the Commission Area		
Hydric Soil Present?	Yes X	No	Is the Sampled Area within a Wetland?	Yes X	No
Wetland Hydrology Present?	Yes X	No	William a Wolland	.00	
Remarks:					
Wetland point for W-	55a. Depression	nal wetland in t	floodplain of strea	am	
LIVEROLOGY					
HYDROLOGY Westland Hydrology Indicate	****			Coondon, Indian	toro (minimum of two required)
Wetland Hydrology Indicato		all that apply)			tors (minimum of two required)
Primary Indicators (minimum of Surface Water (A1)		True Aquatic Plants (I	D14)	Surface Soil	getated Concave Surface (B8)
High Water Table (A2)		Hydrogen Sulfide Odd		Drainage Pa	· · · ·
Saturation (A3)	_		es on Living Roots (C3)	Moss Trim Li	
Water Marks (B1)		Presence of Reduced			Water Table (C2)
Sediment Deposits (B2)	_	Recent Iron Reduction	, ,	Crayfish Bur	` '
Drift Deposits (B3)		Thin Muck Surface (C	37)	Saturation Vi	sible on Aerial Imagery (C9)
Algal Mat or Crust (B4)		Other (Explain in Ren	narks)	Stunted or S	tressed Plants (D1)
Iron Deposits (B5)				✓ Geomorphic	Position (D2)
Inundation Visible on Aeri				Shallow Aqui	
Water-Stained Leaves (B9	9)			_	aphic Relief (D4)
Aquatic Fauna (B13)			T	✓ FAC-Neutral	Test (D5)
Field Observations: Surface Water Present?	Yes X No	Donth (inches): 1.5			
Water Table Present?	Yes No X				
Saturation Present?	Yes X No			ydrology Preser	it? Yes ^X No
(includes capillary fringe)					it: resio
Describe Recorded Data (stre	am gauge, monitoring w	ell, aerial photos, pre	vious inspections), if avai	lable:	
Remarks:					

30 ft	Absolute			Dominance Test worksheet:
Tree Stratum (Plot size:)	% Cover	Species?	Status	Number of Dominant Species
1. N/A				That Are OBL, FACW, or FAC: 1 (A)
2				Total Number of Deminent
3				Total Number of Dominant Species Across All Strata: 1 (B)
4.				Openies / toross / tir etrata.
				Percent of Dominant Species
5				That Are OBL, FACW, or FAC: 100 (A/B)
6	_			Prevalence Index worksheet:
7	_			
		= Total Cove	er	Total % Cover of: Multiply by:
50% of total cover:	20% o	f total cover:		OBL species x 1 =
Sapling/Shrub Stratum (Plot size: 15 ft)				FACW species x 2 =
1. N/A				FAC species x 3 =
· · ·				FACU species x 4 =
2				UPL species x 5 =
3				
4				Column Totals: (A) (B)
5				Prevalence Index = B/A =
6				
7				Hydrophytic Vegetation Indicators:
				1 - Rapid Test for Hydrophytic Vegetation
8				2 - Dominance Test is >50%
9	_			3 - Prevalence Index is ≤3.0 ¹
		= Total Cove	er	4 - Morphological Adaptations ¹ (Provide supporting
50% of total cover:	20% o	f total cover:		
Herb Stratum (Plot size: 5 ft)				data in Remarks or on a separate sheet)
1 Rannunculus occidentalis	15	N	FACW	Problematic Hydrophytic Vegetation ¹ (Explain)
2 Juncus effusus	10	N	FACW	
3. Echinochloa grus-galli	70	Y Y	FACW	¹ Indicators of hydric soil and wetland hydrology must
3. Letimochioa grus-gain			TACVV	be present, unless disturbed or problematic.
Luciana America	_	N.I.		are process, assess assessed as processed
4. Juncus tenuis	5	N	FAC	Definitions of Four Vegetation Strata:
4. Juncus tenuis 5.			FAC	Definitions of Four Vegetation Strata:
5			FAC	Definitions of Four Vegetation Strata: Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or
5				Definitions of Four Vegetation Strata: Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of
5		- 		Definitions of Four Vegetation Strata: Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or
5				Definitions of Four Vegetation Strata: Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height. Sapling/Shrub – Woody plants, excluding vines, less
5				Definitions of Four Vegetation Strata: Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height. Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than or equal to 3.28 ft (1
5				Definitions of Four Vegetation Strata: Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height. Sapling/Shrub – Woody plants, excluding vines, less
5				Definitions of Four Vegetation Strata: Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height. Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.
5				Definitions of Four Vegetation Strata: Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height. Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than or equal to 3.28 ft (1
5	100			Definitions of Four Vegetation Strata: Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height. Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.
5	100	= Total Cove		Definitions of Four Vegetation Strata: Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height. Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vine – All woody vines greater than 3.28 ft in
5	100 20% o	= Total Cover:		Definitions of Four Vegetation Strata: Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height. Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.
5	100 20% o	= Total Cover:		Definitions of Four Vegetation Strata: Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height. Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vine – All woody vines greater than 3.28 ft in
5	100 20% o	= Total Cover:		Definitions of Four Vegetation Strata: Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height. Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vine – All woody vines greater than 3.28 ft in
5	100 20% o	= Total Cover:		Definitions of Four Vegetation Strata: Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height. Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vine – All woody vines greater than 3.28 ft in
5	100 20% o	= Total Cover:		Definitions of Four Vegetation Strata: Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height. Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vine – All woody vines greater than 3.28 ft in height.
5	100 20% o	= Total Cover:		Definitions of Four Vegetation Strata: Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height. Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vine – All woody vines greater than 3.28 ft in
5	100 20% o	= Total Cover:	er 20	Definitions of Four Vegetation Strata: Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height. Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vine – All woody vines greater than 3.28 ft in height.
5	100 20% o	= Total Cover:	er 20	Definitions of Four Vegetation Strata: Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height. Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vine – All woody vines greater than 3.28 ft in height. Hydrophytic Vegetation
5	100 20% o	= Total Cover:	er 20	Definitions of Four Vegetation Strata: Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height. Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vine – All woody vines greater than 3.28 ft in height. Hydrophytic Vegetation
5	100 20% o	= Total Cover:	er 20	Definitions of Four Vegetation Strata: Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height. Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vine – All woody vines greater than 3.28 ft in height. Hydrophytic Vegetation
5	100 20% o	= Total Cover:	er 20	Definitions of Four Vegetation Strata: Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height. Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vine – All woody vines greater than 3.28 ft in height. Hydrophytic Vegetation
5	100 20% o	= Total Cover:	er 20	Definitions of Four Vegetation Strata: Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height. Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vine – All woody vines greater than 3.28 ft in height. Hydrophytic Vegetation
5	100 20% o	= Total Cover:	er 20	Definitions of Four Vegetation Strata: Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height. Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vine – All woody vines greater than 3.28 ft in height. Hydrophytic Vegetation
5	100 20% o	= Total Cover:	er 20	Definitions of Four Vegetation Strata: Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height. Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vine – All woody vines greater than 3.28 ft in height. Hydrophytic Vegetation
5	100 20% o	= Total Cover:	er 20	Definitions of Four Vegetation Strata: Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height. Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vine – All woody vines greater than 3.28 ft in height. Hydrophytic Vegetation
5	100 20% o	= Total Cover:	er 20	Definitions of Four Vegetation Strata: Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height. Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vine – All woody vines greater than 3.28 ft in height. Hydrophytic Vegetation
5	100 20% o	= Total Cover:	er 20	Definitions of Four Vegetation Strata: Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height. Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vine – All woody vines greater than 3.28 ft in height. Hydrophytic Vegetation

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SOIL

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Sampling Point: WAS-91

Profile Desc	ription: (Describe	to the de	pth needed to docur	nent the	indicator	or confirm	n the absence	of indicators.)
Depth	Matrix			x Feature				
(inches)	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²	Texture	Remarks
0-6	10YR 4/1	95	7.5YR 5/6	5	С	М	Silty loam	
6-16	10YR 4/2	90	7.5YR 4/6	10	С	M	Silty Clay	
		_			_			
					_			
					_			
					_			
					_	-		
					_			
					_			
¹Type: C=C	oncentration D-Der	letion RM	I=Reduced Matrix, MS	S-Maske	ad Sand Gr	aine	² Location: P	L=Pore Lining, M=Matrix.
Hydric Soil		netion, Kiv	i=Reduced Matrix, Mc	3=IVIASKE	d Sand Gi	all is.		ators for Problematic Hydric Soils ³ :
Histosol			Dark Surface	(97)				cm Muck (A10) (MLRA 147)
	oipedon (A2)		Polyvalue Be		ace (S8) (I	/ILRA 147.		Coast Prairie Redox (A16)
Black Hi			Thin Dark Su				=	(MLRA 147, 148)
	en Sulfide (A4)		Loamy Gleye			, -,	P	Piedmont Floodplain Soils (F19)
	d Layers (A5)		✓ Depleted Ma	trix (F3)	, ,		· 	(MLRA 136, 147)
2 cm Mu	ıck (A10) (LRR N)		Redox Dark	Surface ((F6)		\	ery Shallow Dark Surface (TF12)
	d Below Dark Surfac	e (A11)	Depleted Dar				c	Other (Explain in Remarks)
	ark Surface (A12)		Redox Depre					
	Mucky Mineral (S1)	LRR N,	Iron-Mangan		ses (F12) (LRR N,		
	A 147, 148)		MLRA 13	-			3,	
	Gleyed Matrix (S4)		Umbric Surfa					licators of hydrophytic vegetation and
	Redox (S5) Matrix (S6)		Piedmont Floor Red Parent N					etland hydrology must be present, less disturbed or problematic.
	Layer (if observed)		Red Paterit is	nateriai (rzi) (IVILK	A 121, 14	<i>i</i>) un	liess disturbed of problematic.
	Layer (II observed)							
							Hydric Soil	Present? Yes X No
	ches):						nyaric Soil	Present? Yes X No
Remarks:								

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Project/Site: Summer Shade	e Solar	City/Co	unty: Metcalfe/ Monro	e	Sampling Date: 2/28/24
Applicant/Owner: Summer S	hade Solar, LLC	o.t.y, cc	<u></u>	State: KY	Sampling Point: WAS-92
Investigator(s): Kristen Clem		Section			
					Slone (%). 1
Landform (hillslope, terrace, et Subregion (LRR or MLRA): LF	RR Late	36.849314	-85.6	698191	Olope (70)
	Lai:		Long:	A.D.A.(1	PFO
Soil Map Unit Name: SaB			Υ		
Are climatic / hydrologic condit					
Are Vegetation N, Soil N	, or Hydrology N	significantly disturb	oed? Are "Normal	Circumstances" p	present? Yes X No
Are Vegetation N, Soil N	, or Hydrology N	naturally problema	itic? (If needed, ex	xplain any answe	rs in Remarks.)
SUMMARY OF FINDING	GS – Attach site m	ap showing sam	pling point location	ns, transects	, important features, etc.
Hydrophytic Vegetation Prese	ent? Yes X	_ No			
Hydric Soil Present?	Yes X	No	Is the Sampled Area within a Wetland?	ves X	No
Wetland Hydrology Present?			within a wetland:	163	
Remarks:		1			
Wetland point for W	-55b. Depression	nal PFO portion	n of wetland		
·	·	•			
HYDROLOGY					
Wetland Hydrology Indicate		II (b - (b)			ators (minimum of two required)
Primary Indicators (minimum				Surface Soil	` '
Surface Water (A1) High Water Table (A2)		True Aquatic Plants (I Hydrogen Sulfide Odd		Sparsely veg Drainage Pa	getated Concave Surface (B8)
Saturation (A3)	_		es on Living Roots (C3)	Moss Trim Li	
Water Marks (B1)		Presence of Reduced			Water Table (C2)
Sediment Deposits (B2)	_	Recent Iron Reduction	` '	✓ Crayfish Bur	` '
Drift Deposits (B3)		Thin Muck Surface (C		_ '	sible on Aerial Imagery (C9)
Algal Mat or Crust (B4)		Other (Explain in Rem	narks)	Stunted or S	tressed Plants (D1)
Iron Deposits (B5)				Geomorphic	Position (D2)
Inundation Visible on Ae			i	Shallow Aqui	itard (D3)
Water-Stained Leaves (E	39)			_	aphic Relief (D4)
Aquatic Fauna (B13)				✓ FAC-Neutral	Test (D5)
Field Observations: Surface Water Present?	Yes X No	Donth (inches): 0.25			
Water Table Present?	Yes No _X				
Saturation Present?	Yes X No			ydrology Preser	nt? Yes ^X No
(includes capillary fringe)					it: 165 NO
Describe Recorded Data (stre	eam gauge, monitoring w	rell, aerial photos, pre	vious inspections), if avail	lable:	
Remarks:					

To a Straton (Plateins 30 ft	Absolute	Dominant	Indicator	Dominance Test worksheet:
Tree Stratum (Plot size:)		Species?		Number of Dominant Species
1. Acer rubrum	20	N	FAC	That Are OBL, FACW, or FAC: 1 (A)
2. Platanus occidentalis	35	Υ	FACW	Total Number of Dominant
3				Species Across All Strata: 1 (B)
4				
5				Percent of Dominant Species That Are ORL FACW or FAC: 100 (A/B)
				That Are OBL, FACW, or FAC: 100 (A/B)
6				Prevalence Index worksheet:
7				Total % Cover of: Multiply by:
4		= Total Cove		OBL species x 1 =
50% of total cover: 27.5	20% of	total cover:	11	
Sapling/Shrub Stratum (Plot size: 15 ft)				FACW species x 2 =
1. N/A				FAC species x 3 =
2				FACU species x 4 =
3				UPL species x 5 =
4				Column Totals: (A) (B)
5				
				Prevalence Index = B/A =
6				Hydrophytic Vegetation Indicators:
7				1 - Rapid Test for Hydrophytic Vegetation
8				2 - Dominance Test is >50%
9				3 - Prevalence Index is ≤3.0 ¹
		= Total Cove		4 - Morphological Adaptations ¹ (Provide supporting
50% of total cover:	20% of	total cover:		data in Remarks or on a separate sheet)
Herb Stratum (Plot size: 5 ft)				Problematic Hydrophytic Vegetation¹ (Explain)
1. Carex sp.	30		-	Problematic Hydrophytic Vegetation (Explain)
2				1
3				¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
4				
5				Definitions of Four Vegetation Strata:
				Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or
6				more in diameter at breast height (DBH), regardless of
7				height.
8				Sapling/Shrub – Woody plants, excluding vines, less
9				than 3 in. DBH and greater than or equal to 3.28 ft (1
10				m) tall.
11				Herb – All herbaceous (non-woody) plants, regardless
	100	= Total Cove	er	of size, and woody plants less than 3.28 ft tall.
50% of total cover: 50	20% of	total cover:	20	Manakardan Allamankardan manakardan kan 0.00 fi in
Woody Vine Stratum (Plot size: 5 ft)				Woody vine – All woody vines greater than 3.28 ft in height.
1. N/A				Hoight.
3			·	
4				Hydrophytic
_				Vegetation Present? Yes X No
5		 Total Cove 	er	Present? Yes X No No No
	:			
5 50% of total cover:				

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Sampling Point: WAS-92

SOIL

(inches)	Matrix Color (moist)	%	Color (moist)	ox Features % Typ	pe ¹ Loc ²	Texture		Remarks	
(inches) 0-1	10YR 3/3	100	Color (moist)		<u>Loc</u>	Loam	topsoil/de		
	10YR 4/1	90	7.5YR 4/6	10 C			1000011/40	, intao	
1-15	101K 4/1	90	7.51K 4/0	10 C	IVI	Silty Clay			
							-		
			·						
Type: C=C	Concentration D=D	enletion RM	1=Reduced Matrix, M	S-Masked Sand	H Grains	² Location: P	I =Pore Linin	a M-Matrix	
	Indicators:	opiction, rei	i=rcaacca Matrix, M	O-Masked Cark	oranio.	Indic	ators for Pro	blematic Hy	dric Soils ³ :
_ Histosol			Dark Surface	e (S7)				10) (MLRA 1 4	
	pipedon (A2)			elow Surface (S	B) (MLRA 147		Coast Prairie		,
_ Black H	listic (A3)		Thin Dark S	urface (S9) (MLI	RA 147, 148)		(MLRA 147		
	en Sulfide (A4)			ed Matrix (F2)		F		odplain Soils	(F19)
	d Layers (A5)		✓ Depleted Ma				(MLRA 136		
	uck (A10) (LRR N)			Surface (F6)				Dark Surface	
	ed Below Dark Surf Park Surface (A12)	ace (A11)	Depleted Da	rk Surface (F7)			tner (Expiair	n in Remarks)	
	Mucky Mineral (S1)	(I RR N		essions (F6) nese Masses (F1	2) (I RR N				
	A 147, 148)	, (=::::,	MLRA 13		-/ (= ,				
	Gleyed Matrix (S4)			ace (F13) (MLR	A 136, 122)	³ Inc	licators of hy	drophytic veg	etation and
	Redox (S5)			oodplain Soils (F				ogy must be p	
	d Matrix (S6)		Red Parent	Material (F21) (I	/ILRA 127, 14	7) un	less disturbe	d or problema	atic.
	Layer (if observe	d):							
Type:								V	
1 ype						Hydric Soil	Present?	Yes X	No
	nches):					•			
Depth (in	nches):								
Depth (in	nches):								
Depth (in	nches):								
Depth (in	nches):								
Depth (in	nches):								
Depth (in	nches):								
Depth (in	nches):								
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Depth (in	nches):								
Depth (in	nches):								
Depth (in	nches):								
Depth (in	nches):								

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Project/Site: Summer Shad	e Solar		Citv/Co	ounty: Metcalfe/ Monro	oe	Sampling Date: 2/28/24
Applicant/Owner: Summer S	Shade Solar,	LLC			State: KY	Sampling Point: WAS-93
Investigator(s): Kristen Clen			Section			
						Slone (%). 0
Landform (hillslope, terrace, e Subregion (LRR or MLRA): \underline{L}	RR	Lot	36.848666	-85.6	698217	Olope (70)
		Lat: _		Long:		. Unland
Soil Map Unit Name: Nk						
Are climatic / hydrologic condi						
Are Vegetation N, Soil N	., or Hyd	rology N	significantly distur	bed? Are "Normal	Circumstances" p	oresent? Yes X No
Are Vegetation N, Soil N	l, or Hyd	rology N	naturally problema	atic? (If needed, e	xplain any answe	rs in Remarks.)
SUMMARY OF FINDIN	GS – Attac	ch site ma	ap showing sam	pling point locatio	ns, transects	, important features, etc.
Hydrophytic Vegetation Pres	sent?	Yes	No X			
Hydric Soil Present?	,	res	No X No X	Is the Sampled Area within a Wetland?	Vaa	No X
Wetland Hydrology Present?	,	Yes	No X	within a wettand?	res	NO
Remarks:						
Upland point for W-	JJa and		ated III mown	illelu		
HYDROLOGY						
Wetland Hydrology Indicat						tors (minimum of two required)
Primary Indicators (minimum	of one is requ				Surface Soil	` '
Surface Water (A1)			True Aquatic Plants (getated Concave Surface (B8)
High Water Table (A2)			Hydrogen Sulfide Od	, ,	Drainage Pat	
Saturation (A3) Water Marks (B1)			Presence of Reduced	es on Living Roots (C3)	Moss Trim Li	Water Table (C2)
Sediment Deposits (B2)		_	Recent Iron Reductio	, ,	Crayfish Buri	,
Drift Deposits (B3)			Thin Muck Surface (C			sible on Aerial Imagery (C9)
Algal Mat or Crust (B4)			Other (Explain in Rer	,		tressed Plants (D1)
Iron Deposits (B5)					Geomorphic	Position (D2)
Inundation Visible on Ae	• • •	B7)			Shallow Aqui	itard (D3)
Water-Stained Leaves (B9)				_	aphic Relief (D4)
Aquatic Fauna (B13)					FAC-Neutral	Test (D5)
Field Observations:			5 4 6 1 1			
Surface Water Present?			Depth (inches):			
Water Table Present?	· ·	· · · · · · · · · · · · · · · · · · ·	Depth (inches):			nt? Yes No X
Saturation Present? (includes capillary fringe)	Yes	NO	Depth (inches):	wetland H	ydrology Presen	it? Yes No
Describe Recorded Data (str	eam gauge, r	nonitoring w	ell, aerial photos, pre	vious inspections), if avai	lable:	
Devente						
Remarks:						

30 ft	Absolute	Dominant		Dominance Test worksheet:
Tree Stratum (Plot size:)	% Cover	Species?	Status	Number of Dominant Species
1. N/A				That Are OBL, FACW, or FAC: 0 (A)
2				
3				Total Number of Dominant Species Across All Strata: 1 (B)
				Species Across All Strata: 1 (B)
4		· 		Percent of Dominant Species
5				That Are OBL, FACW, or FAC: 0 (A/B)
6	_	·		
7				Prevalence Index worksheet:
		= Total Cov	or .	Total % Cover of: Multiply by:
50% of total cover:				OBL species x 1 =
	20 /6 01	total cover.	·	FACW species x 2 =
Sapling/Shrub Stratum (Plot size: 15 ft)				
1. N/A				FAC species x 3 =
2	_			FACU species x 4 =
3				UPL species x 5 =
4				Column Totals: (A) (B)
5				Prevalence Index = B/A =
6	. .			Hydrophytic Vegetation Indicators:
7				1 - Rapid Test for Hydrophytic Vegetation
8				
9				2 - Dominance Test is >50%
o				3 - Prevalence Index is ≤3.0 ¹
FOO/ of total course		= Total Cov		4 - Morphological Adaptations ¹ (Provide supporting
50% of total cover:	20% 01	total cover		data in Remarks or on a separate sheet)
Herb Stratum (Plot size: 5 ft)				Problematic Hydrophytic Vegetation ¹ (Explain)
1. Angropogodon virginicus	5	N	FACU	1 Tobiematic Trydrophytic Vegetation (Explain)
2. Cynodon dactylon	85	Υ	FACU	
3				¹ Indicators of hydric soil and wetland hydrology must
				be present, unless disturbed or problematic.
				Definitions of Four Vegetation Strata:
5				Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or
6				more in diameter at breast height (DBH), regardless of
7				height.
8				
				Sapling/Shrub – Woody plants, excluding vines, less
				than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.
10		· -		III) tall.
11				Herb – All herbaceous (non-woody) plants, regardless
	90	= Total Cov	er	of size, and woody plants less than 3.28 ft tall.
50% of total cover: 45	20% of	total cover:	18	W 1 1 All 1 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2
Woody Vine Stratum (Plot size: 5 ft)				Woody vine – All woody vines greater than 3.28 ft in height.
. NI/A				Height.
• •				
2		-		
3	-	· -		
4				Hydrophytic
5				Vegetation
		= Total Cov	rer	Present? Yes No X
50% of total cover:				
		total oover.		
Remarks: (Include photo numbers here or on a separate	sneet.)			

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Reponse to 1-69
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Sampling Point: WAS-93

SOIL

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.) Depth Matrix Redox Features Loc² Color (moist) Color (moist) Type Texture (inches) 0-2 10YR 4/4 98 5YR 4/6 2 С Silty loam Disturbed from past grading M Disturbed from past grading 2-13 10 YR 4/3 100 Silty loam ²Location: PL=Pore Lining, M=Matrix. ¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. **Hydric Soil Indicators:** Indicators for Problematic Hydric Soils³: ___ 2 cm Muck (A10) (MLRA 147) ___ Histosol (A1) Dark Surface (S7) ___ Histic Epipedon (A2) Polyvalue Below Surface (S8) (MLRA 147, 148) Coast Prairie Redox (A16) ___ Black Histic (A3) Thin Dark Surface (S9) (MLRA 147, 148) (MLRA 147, 148) ___ Hydrogen Sulfide (A4) Loamy Gleyed Matrix (F2) Piedmont Floodplain Soils (F19) ___ Stratified Layers (A5) Depleted Matrix (F3) (MLRA 136, 147) 2 cm Muck (A10) (LRR N) Redox Dark Surface (F6) Very Shallow Dark Surface (TF12) Depleted Below Dark Surface (A11) Depleted Dark Surface (F7) _ Other (Explain in Remarks) Thick Dark Surface (A12) Redox Depressions (F8) Sandy Mucky Mineral (S1) (LRR N, Iron-Manganese Masses (F12) (LRR N, MLRA 147, 148) MLRA 136) Sandy Gleyed Matrix (S4) Umbric Surface (F13) (MLRA 136, 122) ³Indicators of hydrophytic vegetation and ___ Sandy Redox (S5) ___ Piedmont Floodplain Soils (F19) (MLRA 148) wetland hydrology must be present, Stripped Matrix (S6) Red Parent Material (F21) (MLRA 127, 147) unless disturbed or problematic. Restrictive Layer (if observed): Type: No X **Hydric Soil Present?** Depth (inches): Yes Remarks:

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Project/Site: Summer Shade	Solar		City/Co	unty: Metcalfe/ Monro	ре	Sampling Date: 2/28/24
Applicant/Owner: Summer SI	nade Solar,	LLC	Oity/00	unty.	State: KY	Sampling Point: WAS-94
Investigator(s): Kristen Cleme	ens, Tim Gr	abenstein	Section			
Landform (hillslope, terrace, etc.	Depress	sion	L ocal reli	ef (concave, convex, non	ne): Concave	Slope (%): 1
Landform (hillslope, terrace, etc Subregion (LRR or MLRA): <u>LF</u>	::, <u></u> ≀R	l at·	36.848248	Long85.0	697927	
Soil Map Unit Name: SaB, Nk				zong	NWI classific	ration: PEM
Are climatic / hydrologic conditi		te typical fo	or this time of year? V			
						present? Yes X No
Are Vegetation N, Soil N	or Hyd	rology	significantly disturb	tic? (If needed, e	xplain any answe	
						, important features, etc.
Hydrophytic Vegetation Prese	nt2	vos X	No			
Hydric Soil Present?	11111	res Yes X	No No	Is the Sampled Area within a Wetland?	v X	No
Wetland Hydrology Present?	•	Yes X	No	within a wetland?	Yes <u>^`</u>	NO
Remarks:			Į.			
Wetland point for W	-56, loca	ted in fl	oodplain depre	ssion		
HYDROLOGY						
Wetland Hydrology Indicato						ators (minimum of two required)
Primary Indicators (minimum	of one is requ				Surface Soil	
Surface Water (A1)			True Aquatic Plants (I			getated Concave Surface (B8)
High Water Table (A2) Saturation (A3)			Hydrogen Sulfide Odd	or (C1) es on Living Roots (C3)	Drainage Pa Moss Trim L	
Water Marks (B1)			Presence of Reduced	=		Water Table (C2)
Sediment Deposits (B2)			Recent Iron Reduction	, ,	✓ Crayfish Bur	` '
Drift Deposits (B3)			Thin Muck Surface (C	7)		isible on Aerial Imagery (C9)
Algal Mat or Crust (B4)			Other (Explain in Rem	narks)	Stunted or S	tressed Plants (D1)
Iron Deposits (B5)						Position (D2)
Inundation Visible on Aer		B7)			Shallow Aqu	
Water-Stained Leaves (B Aquatic Fauna (B13)	9)				FAC-Neutral	aphic Relief (D4)
Field Observations:				-	FAC-Neutral	1631 (D3)
Surface Water Present?	Yes X	No	Depth (inches): 0.75			
Water Table Present?			Depth (inches):			
Saturation Present?			Depth (inches): 2		ydrology Preser	nt? Yes X No
(includes capillary fringe) Describe Recorded Data (stre				vious inspections) if avai	ilabla:	
Describe Recorded Data (Sire	am gauge, n	normorning w	veii, aeriai priotos, pre	vious irispections), ir avai	liable.	
Remarks:						

30 ft	Absolute			Dominance Test worksheet:
Tree Stratum (Plot size:)	% Cover	Species?	<u>Status</u>	Number of Dominant Species
1. N/A				That Are OBL, FACW, or FAC: 1 (A)
2				
				Total Number of Dominant Species Across All Strata: 1 (B)
3				Species Across All Strata: 1 (B)
4				Percent of Dominant Species
5				That Are OBL, FACW, or FAC: 100 (A/B)
6	_	_		
7				Prevalence Index worksheet:
		= Total Co	VOT	Total % Cover of: Multiply by:
50% of total cover: 27.5	20% 0	-		OBL species x 1 =
	2070 0	n total cover		FACW species x 2 =
Sapling/Shrub Stratum (Plot size: 15 ft)				FAC species x 3 =
1. N/A	_			
2	_			FACU species x 4 =
3				UPL species x 5 =
4				Column Totals: (A) (B)
5				Prevalence Index = B/A =
6				Hydrophytic Vegetation Indicators:
7	_			1 - Rapid Test for Hydrophytic Vegetation
8				
9				2 - Dominance Test is >50%
<u> </u>	_	= Total Co		3 - Prevalence Index is ≤3.0 ¹
E00/ of total cover	200/ 0	-		4 - Morphological Adaptations ¹ (Provide supporting
50% of total cover:	20% 0	i total cover		data in Remarks or on a separate sheet)
Herb Stratum (Plot size: 5 ft)				Problematic Hydrophytic Vegetation ¹ (Explain)
1. Ranunculus hispidus	10	N	FAC	1 Toblematic Tryarophytic Vegetation (Explain)
2. Echinochloa grus-galli	80	Υ	FACW	4
3				¹ Indicators of hydric soil and wetland hydrology must
				be present, unless disturbed or problematic.
4				Definitions of Four Vegetation Strata:
5				Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or
6				more in diameter at breast height (DBH), regardless of
7	_	_		height.
8				
•				Sapling/Shrub – Woody plants, excluding vines, less
				than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.
10				m) tan.
11	_			Herb – All herbaceous (non-woody) plants, regardless
	90	= Total Co	ver	of size, and woody plants less than 3.28 ft tall.
50% of total cover: 45	20% o	of total cover	r:	Woody vine – All woody vines greater than 3.28 ft in
Woody Vine Stratum (Plot size: 5 ft)				height.
1. N/A				Holght.
3				
4				Hydrophytic
5	_	_		Vegetation
		= Total Co	ver	Present? Yes X No
50% of total cover:	20% o	f total cover	r:	
Remarks: (Include photo numbers here or on a separate				
Remarks. (include prioto numbers here of on a separate	Sileet.)			

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Reponse to 1-69
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Sampling Point: WAS-94

SOIL

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.) Depth Matrix Redox Features Loc² Texture Color (moist) Color (moist) Type¹ (inches) 5Y 5/4 0-410YR 4/2 95 5 С Loam M Silty Clay 4-12 10YR 4/1 7.5YR 4/6 С 85 15 M Rocky restrictive layer after 12 in ²Location: PL=Pore Lining, M=Matrix. ¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. **Hydric Soil Indicators:** Indicators for Problematic Hydric Soils³: ___ 2 cm Muck (A10) (MLRA 147) ___ Histosol (A1) Dark Surface (S7) ___ Histic Epipedon (A2) Polyvalue Below Surface (S8) (MLRA 147, 148) Coast Prairie Redox (A16) Black Histic (A3) Thin Dark Surface (S9) (MLRA 147, 148) (MLRA 147, 148) Hydrogen Sulfide (A4) Loamy Gleyed Matrix (F2) Piedmont Floodplain Soils (F19) Depleted Matrix (F3) Stratified Layers (A5) (MLRA 136, 147) 2 cm Muck (A10) (LRR N) Redox Dark Surface (F6) Very Shallow Dark Surface (TF12) Depleted Below Dark Surface (A11) Depleted Dark Surface (F7) _ Other (Explain in Remarks) Thick Dark Surface (A12) Redox Depressions (F8) Sandy Mucky Mineral (S1) (LRR N, Iron-Manganese Masses (F12) (LRR N, MLRA 147, 148) MLRA 136) Sandy Gleyed Matrix (S4) Umbric Surface (F13) (MLRA 136, 122) ³Indicators of hydrophytic vegetation and ___ Sandy Redox (S5) ___ Piedmont Floodplain Soils (F19) (MLRA 148) wetland hydrology must be present, Stripped Matrix (S6) Red Parent Material (F21) (MLRA 127, 147) unless disturbed or problematic. Restrictive Layer (if observed): Type: Rock Yes X Depth (inches): 12 **Hydric Soil Present?** Remarks:

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Project/Site: Summer Shade	Solar	City/Co	unty: Metcalfe/ Monro	e	Sampling Date: 2/28/24
Applicant/Owner: Summer Sh	ade Solar, LLC		<u></u>	State: KY	Sampling Point: WAS-96
Investigator(s): Kristen Cleme		Section			
					Slone (%). 1
Landform (hillslope, terrace, etc Subregion (LRR or MLRA): <u>LR</u>	R Lat.	36.848110	85.6	697615	Olope (70)
Soil Map Unit Name: Nk	Lai		Long	NNA// 1 - 10'	PFM
•			Υ		
Are climatic / hydrologic condition					
Are Vegetation N, Soil N	, or Hydrology N	significantly disturb	ped? Are "Normal	Circumstances" p	present? Yes X No
Are Vegetation N , Soil N	, or Hydrology N	naturally problema	itic? (If needed, ex	xplain any answe	rs in Remarks.)
SUMMARY OF FINDING	S – Attach site ma	ap showing sam	pling point location	ns, transects	, important features, etc.
Hydrophytic Vegetation Preser	nt? Yes X	No	Is the Sampled Area		
Hydric Soil Present?	Yes _^	No	within a Wetland?	Yes X	No
Wetland Hydrology Present? Remarks:	Yes _^	No			
Wetland point for W-	57, located in flo	oodplain depre	ssion		
HYDROLOGY					
Wetland Hydrology Indicator					tors (minimum of two required)
Primary Indicators (minimum o				Surface Soil	` '
Surface Water (A1)		True Aquatic Plants (I			getated Concave Surface (B8)
High Water Table (A2) Saturation (A3)	_	Hydrogen Sulfide Odd	es on Living Roots (C3)	Drainage Pa Moss Trim Li	
Water Marks (B1)		Presence of Reduced			Water Table (C2)
Sediment Deposits (B2)	_	Recent Iron Reduction	` '	✓ Crayfish Bur	` '
Drift Deposits (B3)		Thin Muck Surface (C		_ '	sible on Aerial Imagery (C9)
Algal Mat or Crust (B4)	(Other (Explain in Rem	narks)	Stunted or S	tressed Plants (D1)
Iron Deposits (B5)					Position (D2)
Inundation Visible on Aeri				Shallow Aqu	` '
Water-Stained Leaves (BS Aquatic Fauna (B13)))			_	aphic Relief (D4)
Field Observations:				✓ FAC-Neutral	Test (D5)
Surface Water Present?	Yes X No	Denth (inches). 1			
Water Table Present?	Yes No X				
Saturation Present?	Yes X No			ydrology Preser	nt? Yes ^X No
(includes capillary fringe)					
Describe Recorded Data (stream	am gauge, monitoring w	ell, aerial photos, pre	vious inspections), if avail	lable:	
Remarks:					

30 ft	Absolute	Dominant		Dominance Test worksheet:
Tree Stratum (Plot size:)	% Cover	Species?	Status	Number of Dominant Species
1. N/A				That Are OBL, FACW, or FAC: 1 (A)
2				
				Total Number of Dominant Species Across All Strata: 1 (B)
3				Species Across All Strata: 1 (B)
4				Percent of Dominant Species
5				That Are OBL, FACW, or FAC: 100 (A/B)
6				
7				Prevalence Index worksheet:
		= Total Cove		Total % Cover of: Multiply by:
50% of total cover: 27.5				OBL species x 1 =
· · · · · · · · · · · · · · · · · · ·	20 /6 01	total cover.		FACW species x 2 =
Sapling/Shrub Stratum (Plot size: 15 ft)				
1. N/A				FAC species x 3 =
2				FACU species x 4 =
3				UPL species x 5 =
4				Column Totals: (A) (B)
5				Prevalence Index = B/A =
6				Hydrophytic Vegetation Indicators:
7				1 - Rapid Test for Hydrophytic Vegetation
8				<u> </u>
9				2 - Dominance Test is >50%
o				3 - Prevalence Index is ≤3.0 ¹
500/ of total account		= Total Cove		4 - Morphological Adaptations ¹ (Provide supporting
50% of total cover:	20% 01	total cover:		data in Remarks or on a separate sheet)
Herb Stratum (Plot size: 5 ft)				Problematic Hydrophytic Vegetation ¹ (Explain)
1. Ranunculus hispidus	5	N	FAC	Floblematic Hydrophytic vegetation (Explain)
2. Echinochloa grus-galli	70	Υ	FACW	
Juncus effusus	3	N	FAACW	¹ Indicators of hydric soil and wetland hydrology must
				be present, unless disturbed or problematic.
4				Definitions of Four Vegetation Strata:
5				Troe Woody plants evaluding vines 2 in (7.6 cm) or
6				Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of
7				height.
8				
•				Sapling/Shrub – Woody plants, excluding vines, less
				than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.
10				III) tall.
11				Herb – All herbaceous (non-woody) plants, regardless
	78	= Total Cove	er	of size, and woody plants less than 3.28 ft tall.
50% of total cover: 39	20% of	total cover:	15.6	
Woody Vine Stratum (Plot size: 5 ft)				Woody vine – All woody vines greater than 3.28 ft in height.
. NI/A				Height.
2				
3				
4				Hydrophytic
5				Vegetation
		= Total Cove		Present? Yes X No
50% of total cover:				·
		total cover.		
Remarks: (Include photo numbers here or on a separate	sheet.)			
				· · · · · · · · · · · · · · · · · · ·

Case No. 2025-00064
Reponse to 1-69
Page 342 of 794
Sampling Point: WAS-96

SOIL

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.) Depth Matrix Redox Features Loc² Texture Color (moist) Color (moist) Type¹ (inches) 5Y 5/4 0-3 10YR 4/2 95 5 С Loam M Silty Clay 3-12 10YR 4/1 90 7.5YR 4/6 С 10 M Rocky restrictive layer after 12 in ²Location: PL=Pore Lining, M=Matrix. ¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. **Hydric Soil Indicators:** Indicators for Problematic Hydric Soils³: ___ 2 cm Muck (A10) (MLRA 147) ___ Histosol (A1) Dark Surface (S7) ___ Histic Epipedon (A2) Polyvalue Below Surface (S8) (MLRA 147, 148) Coast Prairie Redox (A16) Black Histic (A3) Thin Dark Surface (S9) (MLRA 147, 148) (MLRA 147, 148) Hydrogen Sulfide (A4) Loamy Gleyed Matrix (F2) Piedmont Floodplain Soils (F19) Depleted Matrix (F3) Stratified Layers (A5) (MLRA 136, 147) 2 cm Muck (A10) (LRR N) Redox Dark Surface (F6) Very Shallow Dark Surface (TF12) Depleted Below Dark Surface (A11) Depleted Dark Surface (F7) _ Other (Explain in Remarks) Thick Dark Surface (A12) Redox Depressions (F8) Sandy Mucky Mineral (S1) (LRR N, Iron-Manganese Masses (F12) (LRR N, MLRA 147, 148) MLRA 136) Sandy Gleyed Matrix (S4) Umbric Surface (F13) (MLRA 136, 122) ³Indicators of hydrophytic vegetation and ___ Sandy Redox (S5) ___ Piedmont Floodplain Soils (F19) (MLRA 148) wetland hydrology must be present, Stripped Matrix (S6) Red Parent Material (F21) (MLRA 127, 147) unless disturbed or problematic. Restrictive Layer (if observed): Type: Rock Yes X Depth (inches): 12 **Hydric Soil Present?** Remarks:

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Project/Site: Summer Shade	Solar		City/Co	unty: Metcalfe/ Monr	oe	_ Sampling Date: 2/28/24
Applicant/Owner: Summer S	hade Solar, Ll	_C			State: KY	Sampling Point: WAS-95
Investigator(s): Kristen Clem			Section	on, Township, Range: N/	'A	
Landform (hillslope, terrace, et						Slope (%): 0
Subregion (LRR or MLRA): LF		l at·	36.848222	Long85.	.697743	Datum: NAD83
Soil Map Unit Name: Nk					NIMI classifi	cotion: Upland
Are climatic / hydrologic condit	iono on the cite	turnian I fo	ur thin time of woor? V	as X Na	INVVI Classiii	Campiles \
Are Vegetation N, Soil N	, or Hydrol	ogy 📉	significantly disturb	oed? Are "Normal	Circumstances"	present? Yes X No ers in Remarks.)
SUMMARY OF FINDING	GS – Attach	site m	ap showing sam	pling point location	ons, transect	s, important features, etc.
Hydrophytic Vegetation Prese	ent? Ye	s	No X No X	Is the Sampled Area		
Hydric Soil Present?	Ye	s	No_X	within a Wetland?	Yes	No X
Wetland Hydrology Present?	Ye	s	No_X			
Remarks:						
Upland point for W-	56 and W-	57, loc	cated in mown	field		
HYDROLOGY						
Wetland Hydrology Indicate						eators (minimum of two required)
Primary Indicators (minimum	of one is require					l Cracks (B6)
Surface Water (A1)			True Aquatic Plants (I			egetated Concave Surface (B8)
High Water Table (A2)			Hydrogen Sulfide Odd	or (C1) es on Living Roots (C3)		atterns (B10)
Saturation (A3) Water Marks (B1)			Presence of Reduced		Moss Trim I	Water Table (C2)
Sediment Deposits (B2)			Recent Iron Reduction	, ,	Crayfish Bu	· · ·
Drift Deposits (B3)			Thin Muck Surface (C	` '		/isible on Aerial Imagery (C9)
Algal Mat or Crust (B4)		一百	Other (Explain in Ren	,		Stressed Plants (D1)
Iron Deposits (B5)			` '	,		c Position (D2)
Inundation Visible on Ae	rial Imagery (B7)			Shallow Aq	uitard (D3)
Water-Stained Leaves (E	39)				Microtopogi	aphic Relief (D4)
Aquatic Fauna (B13)					FAC-Neutra	al Test (D5)
Field Observations:		V				
Surface Water Present?			Depth (inches):			
Water Table Present?			Depth (inches):			~
Saturation Present? (includes capillary fringe)	Yes N	10 <u>^</u>	Depth (inches):	Wetland H	lydrology Prese	nt? Yes No_X
Describe Recorded Data (stre	eam gauge, mo	nitoring w	vell, aerial photos, pre	vious inspections), if ava	ilable:	
Remarks:						

30 ft	Absolute	Dominant		Dominance Test worksheet:
Tree Stratum (Plot size:)	% Cover	Species?	Status	Number of Dominant Species
1. N/A				That Are OBL, FACW, or FAC: 0 (A)
2				Total Number of Deminerat
3				Total Number of Dominant Species Across All Strata: 1 (B)
4.				Openies / toress / tir etrata.
				Percent of Dominant Species
5				That Are OBL, FACW, or FAC: 0 (A/B)
6				Prevalence Index worksheet:
7				
	:	= Total Cove	er	Total % Cover of: Multiply by:
50% of total cover:	20% of	total cover:_		OBL species x 1 =
Sapling/Shrub Stratum (Plot size: 15 ft)				FACW species x 2 =
1. N/A				FAC species x 3 =
· · ·				FACU species x 4 =
2				UPL species x 5 =
3				
4				Column Totals: (A) (B)
5				Prevalence Index = B/A =
6				
7				Hydrophytic Vegetation Indicators:
				1 - Rapid Test for Hydrophytic Vegetation
8				2 - Dominance Test is >50%
9				3 - Prevalence Index is ≤3.0 ¹
	:	= Total Cove	er	4 - Morphological Adaptations ¹ (Provide supporting
50% of total cover:	20% of	total cover:_		
Herb Stratum (Plot size: 5 ft)				data in Remarks or on a separate sheet)
1. Angropogodon virginicus	20	N	FACU	Problematic Hydrophytic Vegetation ¹ (Explain)
2. Cynodon dactylon	70	Υ	FACU	
3 Trifolium pratense	10	N	FACU	¹ Indicators of hydric soil and wetland hydrology must
3. Thouam praterise	10	<u> </u>	1 700	be present, unless disturbed or problematic.
4				Definitions of Four Vegetation Strata:
5				
6				Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or
7				more in diameter at breast height (DBH), regardless of height.
				Holght.
8.				Sapling/Shrub – Woody plants, excluding vines, less
9				than 3 in. DBH and greater than or equal to 3.28 ft (1
10				m) tall.
11				Herb – All herbaceous (non-woody) plants, regardless
	100	= Total Cove	er	of size, and woody plants less than 3.28 ft tall.
50% of total cover: 50	20% of	total cover:	20	
Woody Vine Stratum (Plot size: 5 ft)				Woody vine – All woody vines greater than 3.28 ft in height.
. NI/A				neight.
2				
3				
4				Hydrophytic
5				Vegetation
	:	= Total Cove	er	Present? Yes No X
50% of total cover:	20% of	total cover:		
Remarks: (Include photo numbers here or on a separate				
Tremarks. (include prioto numbers here of our a separate	311661.)			

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Case No. 2025-00064 Reponse to 1-69 Sampling Point: WAS-95 SOIL Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.) Depth Redox Features Color (moist) Texture Color (moist) % Type¹ (inches) 0-12 10YR 4/4 100 Silty loam Restrictive layer at ~12 in ²Location: PL=Pore Lining, M=Matrix. ¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. **Hydric Soil Indicators:** Indicators for Problematic Hydric Soils³: ___ 2 cm Muck (A10) (MLRA 147) ___ Histosol (A1) Dark Surface (S7) ___ Histic Epipedon (A2) Polyvalue Below Surface (S8) (MLRA 147, 148) Coast Prairie Redox (A16) ___ Black Histic (A3) Thin Dark Surface (S9) (MLRA 147, 148) (MLRA 147, 148) ___ Hydrogen Sulfide (A4) Loamy Gleyed Matrix (F2) Piedmont Floodplain Soils (F19) ___ Stratified Layers (A5) Depleted Matrix (F3) (MLRA 136, 147) __ 2 cm Muck (A10) (LRR N) Redox Dark Surface (F6) Very Shallow Dark Surface (TF12) Depleted Below Dark Surface (A11) Depleted Dark Surface (F7) __ Other (Explain in Remarks) Thick Dark Surface (A12) Redox Depressions (F8) ___ Sandy Mucky Mineral (S1) (LRR N, ___ Iron-Manganese Masses (F12) (LRR N, MLRA 147, 148) MLRA 136) Sandy Gleyed Matrix (S4) Umbric Surface (F13) (MLRA 136, 122) ³Indicators of hydrophytic vegetation and ___ Sandy Redox (S5) ___ Piedmont Floodplain Soils (F19) (MLRA 148) wetland hydrology must be present, Stripped Matrix (S6) Red Parent Material (F21) (MLRA 127, 147) unless disturbed or problematic. Restrictive Layer (if observed): Type: Rock No X Depth (inches): 12 Hydric Soil Present? Remarks:

Case No. 2025-00064 Reponse to 1-69 Page 346 of 794

Project/Site: Summer Shade	Solar		Citv/Co	unty: Metcalfe/ Monr	oe	Sampling Date: 2/28/24
Applicant/Owner: Summer SI	nade Solar,	LLC			State: KY	Sampling Point: WAS-96
Investigator(s): Kristen Clem			Section	n, Township, Range: N	/A	
Landform (hillslope, terrace, etc.						Slope (%): 1
Subregion (LRR or MLRA): LF	: ≀R	l at·	36.848110	Long: -85	.697615	Datum: NAD83
Soil Map Unit Name: Nk		Lai.		Long	NIM/I alogoifi	Datum
Are climatic / hydrologic conditi			- this time of we are	X	INVVI CIASSIII	Callon: 1 - 111
Are Vegetation N, Soil N	, or Hyd	rology N	significantly disturb	ped? Are "Norma	I Circumstances"	present? Yes X No ers in Remarks.)
Are Vegetation N., Soil N.	, or Hyd	rology IN	naturally problema	tic? (If needed,	explain any answe	ers in Remarks.)
SUMMARY OF FINDING	3S – Atta	ch site m	ap showing sam	pling point location	ons, transects	s, important features, etc.
Hydrophytic Vegetation Prese	ent?	Yes X	No			
Hydric Soil Present?		Yes X	No	Is the Sampled Area within a Wetland?	Ves X	No
Wetland Hydrology Present?	,	Yes X	No	Within a Wetland:	163	
Remarks:			1			
Wetland point for W	-58, loca	ited in de	epression alon	g power line RC)\\\	
HYDROLOGY					Casaadaa.ladia	
Wetland Hydrology Indicate		uiradı abaalı	call that apply			ators (minimum of two required)
Primary Indicators (minimum	or one is req			24.4)		Cracks (B6)
Surface Water (A1) High Water Table (A2)			True Aquatic Plants (I Hydrogen Sulfide Odd			getated Concave Surface (B8) atterns (B10)
Saturation (A3)				es on Living Roots (C3)	Moss Trim L	
Water Marks (B1)			Presence of Reduced	= : : :	_	Water Table (C2)
Sediment Deposits (B2)			Recent Iron Reduction	, ,	Crayfish Bu	i i
Drift Deposits (B3)			Thin Muck Surface (C	, ,		/isible on Aerial Imagery (C9)
Algal Mat or Crust (B4)			Other (Explain in Rem	•	=	Stressed Plants (D1)
Iron Deposits (B5)					✓ Geomorphic	Position (D2)
Inundation Visible on Aer	ial Imagery (B7)			Shallow Aqu	uitard (D3)
Water-Stained Leaves (B	9)				Microtopogr	aphic Relief (D4)
Aquatic Fauna (B13)					✓ FAC-Neutra	l Test (D5)
Field Observations:		V				
Surface Water Present?			Depth (inches):			
Water Table Present?			Depth (inches):			Y
Saturation Present? (includes capillary fringe)	Yes _^	_ No	Depth (inches): 3	Wetland I	Hydrology Prese	nt? Yes X No
Describe Recorded Data (stre	am gauge, r	monitoring w	vell, aerial photos, prev	vious inspections), if ava	ailable:	
Remarks:						
itemarks.						

30 ft	Absolute	Dominant	Indicator	Dominance Test worksheet:
Tree Stratum (Plot size:)	% Cover	Species?	Status	Number of Dominant Species
1. N/A				That Are OBL, FACW, or FAC: 2 (A)
2				Total Number of Deminent
3				Total Number of Dominant Species Across All Strata: 2 (B)
4.				Sporice / torode / till otrata.
				Percent of Dominant Species
5				That Are OBL, FACW, or FAC: 100 (A/B)
6				Prevalence Index worksheet:
7				
	=	= Total Cove	er	Total % Cover of: Multiply by:
50% of total cover: 27.5	20% of	total cover:	11	OBL species x 1 =
Sapling/Shrub Stratum (Plot size: 15 ft)				FACW species x 2 =
1 Acer rubrum	5	N	FAC	FAC species x 3 =
- Liquidambar styrasiflus	25	Y	FAC	FACU species x 4 =
	· ———			UPL species x 5 =
3				
4				Column Totals: (A) (B)
5				Dravalance Index - P/A -
6			_	Prevalence Index = B/A =
				Hydrophytic Vegetation Indicators:
7				1 - Rapid Test for Hydrophytic Vegetation
8				2 - Dominance Test is >50%
9				3 - Prevalence Index is ≤3.0 ¹
	30	= Total Cove	er	4 - Morphological Adaptations ¹ (Provide supporting
50% of total cover: 15	20% of	total cover:	6	
Herb Stratum (Plot size: 5 ft)				data in Remarks or on a separate sheet)
1. Microstegium vimineum	75	Υ	FAC	Problematic Hydrophytic Vegetation ¹ (Explain)
2. Cyperus esculentus	10	N	FACW	
	5	N	FAACW	¹ Indicators of hydric soil and wetland hydrology must
3. Juncus effusus	<u> </u>	IN	FAACW	be present, unless disturbed or problematic.
4				Definitions of Four Vegetation Strata:
5	<u> </u>			
6				Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or
				more in diameter at breast height (DBH), regardless of
7				height.
8				Sapling/Shrub – Woody plants, excluding vines, less
9				than 3 in. DBH and greater than or equal to 3.28 ft (1
10				m) tall.
11				Herb – All herbaceous (non-woody) plants, regardless
	90	= Total Cove	er.	of size, and woody plants less than 3.28 ft tall.
50% of total cover: 45		total cover:		
Woody Vine Stratum (Plot size: 5 ft)				Woody vine – All woody vines greater than 3.28 ft in
. NI/A				height.
				
2				
3				
4				Livelyambyetia
5				Hydrophytic Vegetation
		= Total Cove		Present? Yes X No
50% of total cover:				
		iolai cover		
Remarks: (Include photo numbers here or on a separate	sheet.)			

Case No. 2025-00064
Reponse to 1-69
Page 348 of 794
Sampling Point: WAS-96

SOIL

(inches)	Matrix Color (moist)	%	Color (moist)	ox Feature %	SType ¹	Loc ²	Texture		Remarks	
0-3	10YR 4/2	90	7.5 YR 4/6	10	C, PL	M	clay loam		Nemains	
	10YR 5/1			5	C C	M				
3-12	101K 5/1	95	7.5YR 4/6	5	<u> </u>	IVI	clay loam			
								Soils dis	turbed from	ROW grading
			-					-		
		epletion, RM	I=Reduced Matrix, M	/IS=Masked	Sand Gra	ains.	² Location: P	L=Pore Lini	ng, M=Matrix	
-	Indicators:								roblematic H	_
Histoso			Dark Surfac						A10) (MLRA	
	pipedon (A2)		Polyvalue B		. , .		148) C		Redox (A16))
	listic (A3)		Thin Dark S			47, 148)	_	(MLRA 14		(510)
	en Sulfide (A4)		Loamy Gley		F2)		P		oodplain Soils	(F19)
	ed Layers (A5) uck (A10) (LRR N)		✓ Depleted M Redox Dark		.e)		V	(MLRA 13	v Dark Surfac	o (TE12)
	ed Below Dark Surf		Depleted Da	,	,			•	in in Remarks	, ,
	ark Surface (A12)	400 (7111)	Redox Depi				~	Allor (Explo	iii iii recinane	<i>5)</i>
	Mucky Mineral (S1)	(LRR N,	Iron-Manga			RR N.				
	A 147, 148)		MLRA 1		()(,				
	Gleyed Matrix (S4)		Umbric Surf	•	MLRA 13	6, 122)	³ Ind	licators of h	ydrophytic ve	getation and
Sandy [Redox (S5)		Piedmont F	loodplain S	oils (F19)	(MLRA 14	18) we	etland hydro	logy must be	present,
Stripped	d Matrix (S6)		Red Parent	Material (F	21) (MLR	A 127, 147	7) un	less disturb	ed or problem	natic.
Restrictive	Layer (if observe	d):								
Type:										
.) [Hydric Soil	Present?	Yes X	No
Depth (in	nches):									
Depth (in	nches):									
Depth (in	nches):									
Depth (in	nches):									
Depth (in	nches):									
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	nches):									

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Project/Site: Summer Shad	e Solar		City/Co	ounty: Metcalfe/ Monro	oe	Sampling Date: 2/28/24
Applicant/Owner: Summer S	Shade Solar	, LLC				Sampling Point: WAS-97
Investigator(s): Kristen Clen) Section	on Township Range N/A		
						Slone (%): 0
Landform (hillslope, terrace, e Subregion (LRR or MLRA): <u>L</u>	RR	1 -1	36 849929	er (concave, convex, non	69.8730	Slope (%) NAD83
		Lat:	00.010020	Long:	300700	Datum: 14 (200
Soil Map Unit Name: Nk						
Are climatic / hydrologic condi						
Are Vegetation N Soil N	√, or Hyc	drology N	significantly distur	bed? Are "Normal	Circumstances" p	present? Yes X No No
Are Vegetation N , Soil N						
SUMMARY OF FINDIN	IGS – Atta	ch site m	nap showing sam	npling point locatio	ns, transects	, important features, etc.
Hydrophytic Vegetation Pres	sent?	Yes	No X			
Hydric Soil Present?		Yes	No X	Is the Sampled Area within a Wetland?	Voc	No X
Wetland Hydrology Present?	?	Yes	No X	within a wetiand?	162	NO
Remarks:				<u> </u>		
Upland point for W-	-58					
opiana point for W	00					
HYDROLOGY						
Wetland Hydrology Indicat	ors:				Secondary Indica	tors (minimum of two required)
Primary Indicators (minimum	of one is req	uired; chec	k all that apply)		Surface Soil	Cracks (B6)
Surface Water (A1)			True Aquatic Plants ((B14)	Sparsely Veg	getated Concave Surface (B8)
High Water Table (A2)			Hydrogen Sulfide Od	or (C1)	Drainage Pat	tterns (B10)
Saturation (A3)			Oxidized Rhizospher	es on Living Roots (C3)	Moss Trim Li	ines (B16)
Water Marks (B1)		⊢	Presence of Reduced	, ,	Dry-Season	Water Table (C2)
Sediment Deposits (B2)		닏	Recent Iron Reduction		Crayfish Buri	
Drift Deposits (B3)		님	Thin Muck Surface (C	•	=	sible on Aerial Imagery (C9)
Algal Mat or Crust (B4)		Ш	Other (Explain in Rer	marks)		tressed Plants (D1)
Iron Deposits (B5) Inundation Visible on Ae	orial Imaganu	(D7)				Position (D2)
Water-Stained Leaves ((D <i>I</i>)			Shallow Aqui	aphic Relief (D4)
Aquatic Fauna (B13)	D9)				FAC-Neutral	
Field Observations:						1001 (20)
Surface Water Present?	Vas	No X	Depth (inches):			
Water Table Present?			Depth (inches):			
Saturation Present?	·		Depth (inches):		ydrology Presen	nt? Yes No X
(includes capillary fringe)						10310
Describe Recorded Data (str	ream gauge, i	monitoring v	well, aerial photos, pre	evious inspections), if avai	lable:	
Remarks:						
Remarks.						

Total Street on (Bladesian 30 ft	Absolute	Dominant		Dominance Test worksheet:
Tree Stratum (Plot size:)	% Cover	Species?	Status	Number of Dominant Species
1. N/A				That Are OBL, FACW, or FAC: 0 (A)
2				Total Number of Deminent
3				Total Number of Dominant Species Across All Strata: 2 (B)
4.				(B)
				Percent of Dominant Species
5				That Are OBL, FACW, or FAC: 0 (A/B)
6				Prevalence Index worksheet:
7				
	:	= Total Cove	er	Total % Cover of: Multiply by:
50% of total cover:	20% of	total cover:		OBL species x 1 =
Sapling/Shrub Stratum (Plot size: 15 ft)				FACW species x 2 =
1 Juniperus virginiana	10	Υ	FACU	FAC species x 3 =
2 Liquidambar styraciflua	5	N	FAC	FACU species x 4 =
				UPL species x 5 =
3				
4				Column Totals: (A) (B)
5				Dravalance Index - P/A -
6				Prevalence Index = B/A =
				Hydrophytic Vegetation Indicators:
7				1 - Rapid Test for Hydrophytic Vegetation
8				2 - Dominance Test is >50%
9				3 - Prevalence Index is ≤3.0 ¹
	15	= Total Cove	er	4 - Morphological Adaptations¹ (Provide supporting
50% of total cover: 7.5	20% of	total cover:	3	
Herb Stratum (Plot size: 5 ft)				data in Remarks or on a separate sheet)
1. Angropogodon virginicus	5	N	FACU	Problematic Hydrophytic Vegetation ¹ (Explain)
2. Juniperus virginiana	25	Y	FACU	
	10	<u>.</u> N	FAC	¹ Indicators of hydric soil and wetland hydrology must
3. Microstegium vimineum	- —			be present, unless disturbed or problematic.
4. Solidago canadensis	5	<u>N</u>	FACU	Definitions of Four Vegetation Strata:
5. Vernonia gigantea	5	N	FACU	
6				Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or
7				more in diameter at breast height (DBH), regardless of height.
ь				neight.
0				Sapling/Shrub – Woody plants, excluding vines, less
8				than 3 in. DBH and greater than or equal to 3.28 ft (1
8				
				m) tall.
9				m) tall.
9			er	
9	50	= Total Cove		m) tall. Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.
9		= Total Cove		m) tall. Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vine – All woody vines greater than 3.28 ft in
9	50 20% of	= Total Cover:		m) tall. Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.
9	50 20% of	= Total Cover:		m) tall. Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vine – All woody vines greater than 3.28 ft in
9	50 20% of	= Total Cover:		m) tall. Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vine – All woody vines greater than 3.28 ft in
9	50 20% of	= Total Cover:		m) tall. Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vine – All woody vines greater than 3.28 ft in
9	50 20% of	= Total Cover:		m) tall. Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vine – All woody vines greater than 3.28 ft in height.
9	50 20% of	= Total Cover:		m) tall. Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vine – All woody vines greater than 3.28 ft in height. Hydrophytic
9	50 20% of	= Total Cover:		m) tall. Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vine – All woody vines greater than 3.28 ft in height.
9	50 20% of	= Total Cover:	10	m) tall. Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vine – All woody vines greater than 3.28 ft in height. Hydrophytic Vegetation
9	50 20% of	= Total Cover:	10	m) tall. Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vine – All woody vines greater than 3.28 ft in height. Hydrophytic Vegetation
9	50 20% of	= Total Cover:	10	m) tall. Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vine – All woody vines greater than 3.28 ft in height. Hydrophytic Vegetation
9	50 20% of	= Total Cover:	10	m) tall. Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vine – All woody vines greater than 3.28 ft in height. Hydrophytic Vegetation
9	50 20% of	= Total Cover:	10	m) tall. Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vine – All woody vines greater than 3.28 ft in height. Hydrophytic Vegetation
9	50 20% of	= Total Cover:	10	m) tall. Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vine – All woody vines greater than 3.28 ft in height. Hydrophytic Vegetation
9	50 20% of	= Total Cover:	10	m) tall. Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vine – All woody vines greater than 3.28 ft in height. Hydrophytic Vegetation
9	50 20% of	= Total Cover:	10	m) tall. Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vine – All woody vines greater than 3.28 ft in height. Hydrophytic Vegetation
9	50 20% of	= Total Cover:	10	m) tall. Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vine – All woody vines greater than 3.28 ft in height. Hydrophytic Vegetation
9	50 20% of	= Total Cover:	10	m) tall. Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vine – All woody vines greater than 3.28 ft in height. Hydrophytic Vegetation

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SOIL

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Sampling Point: WAS-97

Profile Desc	ription: (Describe	to the dept	h needed to docun	ent the ir	ndicator o	r confirm	the absence	of indicators.)	
Depth	Matrix			c Features					
(inches)	Color (moist)	<u>%</u>	Color (moist)	<u>%</u>	Type ¹	Loc ²	Texture	Re	emarks
0-2	10YR 5/4	100					clay loam		
2-13	10YR 4/3	100					clay loam	Soils disturbed	d from ROW grading
		·							_
	-								_
	-							-	-
	-							-	
	-								
	-								
	-	·							
¹Type: C=Co	oncentration, D=Dep	letion RM=	Reduced Matrix MS	=Masked	Sand Gra	ins	² Location: P	L=Pore Lining, M	=Matrix
Hydric Soil I		iodon, ravi	rtoadood Matrix, Me	Macked	Cana Ora				natic Hydric Soils ³ :
Histosol			Dark Surface	(S7)				2 cm Muck (A10) (I	
	pipedon (A2)		Polyvalue Be		e (S8) (M	LRA 147,		Coast Prairie Redo	
Black His			Thin Dark Su					(MLRA 147, 148	3)
Hydroge	n Sulfide (A4)		Loamy Gleye		⁻ 2)		P	Piedmont Floodpla	` ,
	Layers (A5)		Depleted Mat					(MLRA 136, 147	•
	ck (A10) (LRR N)		Redox Dark S					ery Shallow Dark	
	Below Dark Surface	e (A11)	Depleted Dar				c	Other (Explain in R	emarks)
	ark Surface (A12) lucky Mineral (S1) (L	DD N	Redox Depre Iron-Mangane			DD N			
	147, 148)	-KK N,	MLRA 136		S (F 12) (L	.KK N,			
	leyed Matrix (S4)		Umbric Surfa	•	MLRA 136	5. 122)	³ Ind	dicators of hydroph	nytic vegetation and
	edox (S5)		Piedmont Flo					etland hydrology m	
	Matrix (S6)		Red Parent M					less disturbed or p	-
Restrictive L	ayer (if observed):							-	
Type:									
Depth (inc	ches):						Hydric Soil	Present? Yes	No X
Remarks:							_		

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Project/Site: Summer Shade	e Solar	City/Cou	unty: Metcalfe/ Monro	e	Sampling Date: 2/28/24
Applicant/Owner: Summer S	hade Solar, LLC			State: KY	Sampling Point: WAS-99
Investigator(s): Kristen Clem		Section			
					Slone (%). 1
Landform (hillslope, terrace, et Subregion (LRR or MLRA): LF	RR Lat.	36.849321	-85.6	695467	Olope (70)
Soil Map Unit Name: SaB, NI	Lat: _ K		Long	NA// 1 'C'	PFO
			Υ		
Are climatic / hydrologic condit					
Are Vegetation N, Soil N	, or Hydrology N	significantly disturb	ed? Are "Normal of		resent? Yes X No
Are Vegetation N, Soil N	, or Hydrology N	_ naturally problema	tic? (If needed, ex	xplain any answe	rs in Remarks.)
SUMMARY OF FINDING	GS – Attach site ma	ap showing sam	pling point location	ns, transects	, important features, etc.
Hydrophytic Vegetation Prese	ent? Yes X	No			
Hydric Soil Present?	Yes X	No	Is the Sampled Area within a Wetland?	ves X	No
Wetland Hydrology Present?			within a wettand:	163	
Remarks:		•			
Wetland point for W	-59a. PFO portio	n of W-59			
·	·				
HYDROLOGY				Casandan Indias	tora (minimum of two required)
Wetland Hydrology Indicate		all that apply	Ī		tors (minimum of two required)
Primary Indicators (minimum Surface Water (A1)		all that apply) Frue Aquatic Plants (E		Surface Soil	getated Concave Surface (B8)
High Water Table (A2)		Hydrogen Sulfide Odo		✓ Sparsely veg ✓ Drainage Par	· · · · ·
Saturation (A3)	_		` '	Moss Trim Li	` '
Water Marks (B1)		Presence of Reduced		_	Water Table (C2)
Sediment Deposits (B2)	_	Recent Iron Reduction	` '	Crayfish Buri	` '
Drift Deposits (B3)		Thin Muck Surface (C	7)	Saturation Vi	sible on Aerial Imagery (C9)
Algal Mat or Crust (B4)		Other (Explain in Rem	arks)	Stunted or S	tressed Plants (D1)
Iron Deposits (B5)				_	Position (D2)
Inundation Visible on Ae			i	Shallow Aqui	
Water-Stained Leaves (E ☐ Aquatic Fauna (B13)	39)			_	phic Relief (D4)
Field Observations:			<u> </u>	✓ FAC-Neutral	Test (D5)
Surface Water Present?	Yes X No	Denth (inches): 0.5			
Water Table Present?	Yes No X				
Saturation Present?	Yes X No			ydrology Presen	t? Yes ^X No
(includes capillary fringe)					1105
Describe Recorded Data (stre	eam gauge, monitoring we	ell, aerial photos, prev	rious inspections), if avail	able:	
Remarks:					

30 ft	Absolute	Dominant		Dominance Test worksheet:
Tree Stratum (Plot size:)		Species?		Number of Dominant Species
1. Platanus occidentalis	30	Υ	FACW	That Are OBL, FACW, or FAC: 3 (A)
2. Acer rubrum	10	N	FAC	Total Number of Deminent
3. Fagus frandifoloia	10	N	FACU	Total Number of Dominant Species Across All Strata: 3 (B)
4				(2)
· · · · · · · · · · · · · · · · · · ·				Percent of Dominant Species That Are ORL FACW or FAC: 100 (A/R)
5				That Are OBL, FACW, or FAC: 100 (A/B)
6				Prevalence Index worksheet:
7				Total % Cover of: Multiply by:
		= Total Cove		
50% of total cover: 25	20% of	total cover:	10	OBL species x 1 =
Sapling/Shrub Stratum (Plot size: 15 ft)				FACW species x 2 =
1. Acer rubrum	5	N	FAC	FAC species x 3 =
2. Lindera benzoin	15	Υ	FAC	FACU species x 4 =
3. Acer negundo	5	N	FACW	UPL species x 5 =
4 Salix nigra	5	N	OBL	Column Totals: (A) (B)
·· ·				
5				Prevalence Index = B/A =
6				Hydrophytic Vegetation Indicators:
7				1 - Rapid Test for Hydrophytic Vegetation
8				2 - Dominance Test is >50%
9				3 - Prevalence Index is ≤3.0 ¹
	30	= Total Cove	er	4 - Morphological Adaptations ¹ (Provide supporting
50% of total cover: 15	20% of	total cover:	6	
Herb Stratum (Plot size: 5 ft)				data in Remarks or on a separate sheet)
1. Microstegium vimineum	10	Υ	FAC	Problematic Hydrophytic Vegetation ¹ (Explain)
2. Carex pennsylvanica	-	-	Not listed	
3. Juncus effusus	5	N	FACW	¹ Indicators of hydric soil and wetland hydrology must
4 Sphagnum sp	· 		-	be present, unless disturbed or problematic.
·· ·				Definitions of Four Vegetation Strata:
5				Tree Mondy plants evaluating vince 2 in (7.6 cm) or
6				Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of
7				height.
8				
9				Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than or equal to 3.28 ft (1
10				m) tall.
11.	- · ·			
11	15 .	T 0		Herb – All herbaceous (non-woody) plants, regardless
FOO/ of total covery 75		= Total Cove		of size, and woody plants less than 3.28 ft tall.
50% of total cover: 7.5	20% of	total cover.		Woody vine – All woody vines greater than 3.28 ft in
Woody Vine Stratum (Plot size: 5 ft)				height.
1. <u>N/A</u>				
2				
3				
4				Hydrophytic
5				Vegetation
		= Total Cove	er	Present? Yes X No
50% of total cover:				
Remarks: (Include photo numbers here or on a separate				
Tremains. (include prioto numbers here of our a separate	311661.)			

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SOIL

Sampling Point: WAS-99 Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.) Depth Matrix Redox Features Color (moist) Color (moist) Type¹ Texture (inches) silty clay loam 0-3 10YR 5/3 90 7.5 YR 4/6 10 С M 3-13 10YR 5/2 95 7.5YR 4/6 5 С M clay loam ²Location: PL=Pore Lining, M=Matrix. ¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. **Hydric Soil Indicators:** Indicators for Problematic Hydric Soils³: ___ 2 cm Muck (A10) (MLRA 147) ___ Histosol (A1) Dark Surface (S7) ___ Histic Epipedon (A2) Polyvalue Below Surface (S8) (MLRA 147, 148) Coast Prairie Redox (A16) ___ Black Histic (A3) Thin Dark Surface (S9) (MLRA 147, 148) (MLRA 147, 148) ___ Hydrogen Sulfide (A4) Loamy Gleyed Matrix (F2) Piedmont Floodplain Soils (F19) Depleted Matrix (F3) ___ Stratified Layers (A5) (MLRA 136, 147) 2 cm Muck (A10) (LRR N) Redox Dark Surface (F6) Very Shallow Dark Surface (TF12) Depleted Below Dark Surface (A11) Depleted Dark Surface (F7) _ Other (Explain in Remarks) Thick Dark Surface (A12) Redox Depressions (F8) Sandy Mucky Mineral (S1) (LRR N, ___ Iron-Manganese Masses (F12) (LRR N, MLRA 147, 148) MLRA 136) Sandy Gleyed Matrix (S4) Umbric Surface (F13) (MLRA 136, 122) ³Indicators of hydrophytic vegetation and ___ Sandy Redox (S5) ___ Piedmont Floodplain Soils (F19) (MLRA 148) wetland hydrology must be present, Stripped Matrix (S6) Red Parent Material (F21) (MLRA 127, 147) unless disturbed or problematic. Restrictive Layer (if observed): Type: Yes X **Hydric Soil Present?** Depth (inches): Remarks:

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Project/Site: Summer Shade	Solar	City/Cou	unty: Metcalfe/ Monro	e	Sampling Date: 2/28/24
Applicant/Owner: Summer SI	hade Solar, LLC			State: KY	Sampling Point: WAS-101
Investigator(s): Kristen Clem		Section			
					Slone (%). 1
Landform (hillslope, terrace, etc Subregion (LRR or MLRA): <u>LF</u>	₹R Lat:			694727	Olope (70)
	Lai:		Long	A.D.A.(1	PSS
Soil Map Unit Name: Nk			Υ		
Are climatic / hydrologic conditi	• •	•			,
					present? Yes X No
Are Vegetation N, Soil N	, or Hydrology N	_ naturally problema	tic? (If needed, ex	xplain any answe	rs in Remarks.)
SUMMARY OF FINDING	GS – Attach site ma	ap showing sam	pling point location	ns, transects	, important features, etc.
Hydrophytic Vegetation Prese	ent? Yes X	No			
Hydric Soil Present?	Yes X	No	Is the Sampled Area within a Wetland?	ves X	No
Wetland Hydrology Present?			within a wettand:	163	
Remarks:					
Wetland point for W	-59b. PSS portion	n of W-59			
	•				
HYDROLOGY				0	tone (edicinose of the management)
Wetland Hydrology Indicate		all that and h			ators (minimum of two required)
Primary Indicators (minimum				Surface Soil	` '
Surface Water (A1) High Water Table (A2)		Γrue Aquatic Plants (Ε Hydrogen Sulfide Odo	· ·	☐ Sparsely veg ✓ Drainage Pa	getated Concave Surface (B8)
Saturation (A3)	_		s on Living Roots (C3)	Moss Trim Li	` '
Water Marks (B1)		Presence of Reduced			Water Table (C2)
Sediment Deposits (B2)	_	Recent Iron Reduction	` '	Crayfish Bur	` '
Drift Deposits (B3)		Thin Muck Surface (C		_ '	sible on Aerial Imagery (C9)
Algal Mat or Crust (B4)		Other (Explain in Rem	arks)	Stunted or S	tressed Plants (D1)
Iron Deposits (B5)					Position (D2)
Inundation Visible on Aer	=		į	Shallow Aqu	
Water-Stained Leaves (B	39)			_	aphic Relief (D4)
Aquatic Fauna (B13)				✓ FAC-Neutral	Test (D5)
Field Observations: Surface Water Present?	Yes X No	Depth (inches): 0.5			
Water Table Present?	Yes No _X				
Saturation Present?	Yes X No			ydrology Preser	nt? Yes ^X No
(includes capillary fringe)					It: 165 NO
Describe Recorded Data (stre	eam gauge, monitoring we	ell, aerial photos, prev	rious inspections), if avail	lable:	
Remarks:					

30 ft	Absolute	Dominant		Dominance Test worksheet:		
Tree Stratum (Plot size:)	% Cover	Species?	Status	Number of Dominant Species		
1. N/A				That Are OBL, FACW, or FAC: 5 (A)		
2				Total Number of Deminent		
3				Total Number of Dominant Species Across All Strata: 5 (B)		
4.				Openies / toross / tir etrata.		
				Percent of Dominant Species		
5				That Are OBL, FACW, or FAC: 100 (A/B)		
6				Prevalence Index worksheet:		
7				Total % Cover of: Multiply by:		
	:	= Total Cove	er			
50% of total cover:	20% of	total cover:		OBL species x 1 =		
Sapling/Shrub Stratum (Plot size: 15 ft)				FACW species x 2 =		
1. Salix nigra	30	Υ	OBL	FAC species x 3 =		
2. Alnus serrulata	25	Υ	OBL	FACU species x 4 =		
3. Liquidambar styraciflua	25	Υ	FAC	UPL species x 5 =		
<u> </u>				Column Totals: (A) (B)		
4				Goldmin Totals (A) (B)		
5				Prevalence Index = B/A =		
6				Hydrophytic Vegetation Indicators:		
7						
8				1 - Rapid Test for Hydrophytic Vegetation		
9				2 - Dominance Test is >50%		
<u> </u>		Total Cove		3 - Prevalence Index is ≤3.0 ¹		
500/ of total account 40		= Total Cove		4 - Morphological Adaptations ¹ (Provide supporting		
	20% of	total cover:		data in Remarks or on a separate sheet)		
Herb Stratum (Plot size: 5 ft)	4.0		- 40	Problematic Hydrophytic Vegetation ¹ (Explain)		
1. Microstegium vimineum	10	N	FAC	: resistance : symophism is egetation: (2xpram)		
2. Symphiotrychum pilosum	20	Υ	FAC	11 office term of house's configuration of house terms of		
3. Juncus effusus	15	Υ	FACW	 Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic. 		
4. Scirpus atrovirens	10	N	OBL			
5. Salix nigra	10	N	OBL	Definitions of Four Vegetation Strata:		
6. Lysimachia nummularia	5	N	FACW	Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or		
				more in diameter at breast height (DBH), regardless of		
7				height.		
8				Sapling/Shrub – Woody plants, excluding vines, less		
9				than 3 in. DBH and greater than or equal to 3.28 ft (1		
10				m) tall.		
11.						
	70	Total Cove		Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.		
50% of total cover: 35	= Total Cover 20% of total cover: 14			of size, and woody plants less than 3.26 it tall.		
· · · · · · · · · · · · · · · · · · ·	20% 01	total cover.		Woody vine - All woody vines greater than 3.28 ft in		
Woody Vine Stratum (Plot size: 5 ft)				height.		
1. N/A						
2						
3						
4						
				Hydrophytic		
5				Vegetation Present? Yes X No		
		= Total Cove		1103CHC: 103 NO		
50% of total cover:	20% of	total cover:				
Remarks: (Include photo numbers here or on a separate	sheet.)					

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Reponse to 1-69
Page 357 of 794
Sampling Point: WAS-104

SOIL

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.) Depth Matrix Redox Features Color (moist) Color (moist) Type Texture (inches) C, PL 0 - 410YR 6/2 95 5 silty clay loam 7.5 YR 4/6 M 4-16 10YR 6-1 90 7.5YR 4/6 С 10 M silty clay loam ²Location: PL=Pore Lining, M=Matrix. ¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. **Hydric Soil Indicators:** Indicators for Problematic Hydric Soils³: ___ 2 cm Muck (A10) (MLRA 147) ___ Histosol (A1) Dark Surface (S7) ___ Histic Epipedon (A2) Polyvalue Below Surface (S8) (MLRA 147, 148) Coast Prairie Redox (A16) ___ Black Histic (A3) Thin Dark Surface (S9) (MLRA 147, 148) (MLRA 147, 148) ___ Hydrogen Sulfide (A4) Loamy Gleyed Matrix (F2) Piedmont Floodplain Soils (F19) Depleted Matrix (F3) ___ Stratified Layers (A5) (MLRA 136, 147) 2 cm Muck (A10) (LRR N) Redox Dark Surface (F6) Very Shallow Dark Surface (TF12) Depleted Below Dark Surface (A11) Depleted Dark Surface (F7) _ Other (Explain in Remarks) Thick Dark Surface (A12) Redox Depressions (F8) Sandy Mucky Mineral (S1) (LRR N, ___ Iron-Manganese Masses (F12) (LRR N, MLRA 147, 148) MLRA 136) Sandy Gleyed Matrix (S4) Umbric Surface (F13) (MLRA 136, 122) ³Indicators of hydrophytic vegetation and ___ Sandy Redox (S5) ___ Piedmont Floodplain Soils (F19) (MLRA 148) wetland hydrology must be present, Stripped Matrix (S6) Red Parent Material (F21) (MLRA 127, 147) unless disturbed or problematic. Restrictive Layer (if observed): Type: Yes X **Hydric Soil Present?** Depth (inches): Remarks:

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Project/Site: Summer Shade	e Solar		City/Co	unty: Metcalfe/ Monr	oe	Sampling Date: 2/28/24		
Applicant/Owner: Summer S	hade Solar, L	LC			State: KY	Sampling Point: WAS-102		
Investigator(s): Kristen Clemens, Tim Grabenstein Section, Township, Range: N/A								
Landform (hillslope, terrace, et						Slope (%): 0		
Subregion (LRR or MLRA): LF								
Soil Map Unit Name: Nk		Lai.		Long	NIVA/I alaasif	Upland		
Are climatic / hydrologic condit	Carra and the after	t		X N	INVVI CIASSII	Described		
Are Vegetation N, Soil N	u, or Hydro	logy IN	significantly disturl	bed? Are "Norma	I Circumstances"	present? Yes X No		
Are Vegetation N, Soil N	or Hydro	logy N	naturally problema	atic? (If needed,	explain any answ	ers in Remarks.)		
SUMMARY OF FINDIN	GS – Attacl	site m	nap showing sam	pling point location	ons, transect	s, important features, etc.		
Hydrophytic Vegetation Pres	ent? Ye	es	_{No} X					
Hydric Soil Present?	Ye	es	No X No X	Is the Sampled Area within a Wetland?	Ves	No X		
Wetland Hydrology Present?	Ye	es	No_X	within a wettand:	163			
Remarks:								
Upland point for W-	59a and V	/-59b						
HYDROLOGY					Canandan da dia	nata na (animina na at tura na anima di		
Wetland Hydrology Indicate		radi abaa	le all that apply			cators (minimum of two required)		
Primary Indicators (minimum	or one is requi	rea; cnec		D4.4)		il Cracks (B6)		
Surface Water (A1) High Water Table (A2) True Aquatic Plants (B14) Hydrogen Sulfide Odor (C1)						Sparsely Vegetated Concave Surface (B8) Drainage Patterns (B10)		
Saturation (A3) Invalide Odor (C1) Oxidized Rhizospheres on Living Roots (C3)						Lines (B16)		
Water Marks (B1)		H	Presence of Reduced		=	n Water Table (C2)		
Sediment Deposits (B2)		Crayfish Bu	` '					
Drift Deposits (B3)		一百	Recent Iron Reductio Thin Muck Surface (C	` ,		Visible on Aerial Imagery (C9)		
Algal Mat or Crust (B4)			Other (Explain in Ren	•		Stressed Plants (D1)		
Iron Deposits (B5)			Geomorphic Position (D2)					
Inundation Visible on Ae	rial Imagery (B		Shallow Aquitard (D3)					
Water-Stained Leaves (E	39)			Microtopographic Relief (D4)				
Aquatic Fauna (B13)					FAC-Neutra	al Test (D5)		
Field Observations:		. Y						
Surface Water Present?			Depth (inches):					
Water Table Present?			Depth (inches):					
Saturation Present? (includes capillary fringe)	Yes	No <u>^</u>	Depth (inches):	Wetland I	Hydrology Prese	ent? Yes No_X		
Describe Recorded Data (str	eam gauge, mo	nitoring v	well, aerial photos, pre	vious inspections), if ava	ailable:			
Remarks:								
itemarks.								

2	Number of Dominant Species That Are OBL, FACW, or FAC: 1 (A)
2	Total Number of Dominant Species Across All Strata: 6 (B) Percent of Dominant Species That Are OBL, FACW, or FAC: 17 (A/B) Prevalence Index worksheet: Total % Cover of: Multiply by: OBL species x 1 = FACW species x 2 =
3.	Species Across All Strata: 6 (B)
3.	Species Across All Strata: 6 (B)
4	Percent of Dominant Species That Are OBL, FACW, or FAC: 17 (A/B) Prevalence Index worksheet:
5	Percent of Dominant Species 17
6	Prevalence Index worksheet: = Total Cover
7	= Total Cover = Total Cover
Total Cover	= Total Cover = Total Cover = Total % Cover of:
Sapling/Shrub Stratum (Plot size: 15 ft 10	50% of total cover: = 10tal Cover OBL species x 1 = atum (Plot size: 15 ft)
Sapling/Shrub Stratum (Plot size: 15 ft) 1. Lindera benzoin 10 Y FAC FAC species x 2 = FACU species x 3 = Image: Species	<u>atum</u> (Plot size: 15 ft) FACW species x 2 =
1. Lindera benzoin 1. Lindera benzoin 2. Fagus grandifolia 10 Y FACU 2. Fagus grandifolia 10 Y FACU 3. UPL species	(1 lot 0.20)
1. Lindera benzoin 10 Y FAC FAC species x 3 =	
2. Fagus grandifolia 10 Y FACU FACU species x 4 =	10 1 1AO 1AO Species X3 =
3	10 V FACIL FACIL PACIES VA-
4	LIDI anasias
5	
6	Column Totals: (A) (B)
6	
7	1 Total Heavy = 271 =
8	Trydrophytic vegetation indicators.
9	1 - Napid 163t for Hydrophytic Vegetation
9	
20 = Total Cover 4 - Morphological Adaptations¹ (Provide support data in Remarks or on a separate sheet)	
Herb Stratum (Plot size: 5 ft 1. Rosa multiflora 5 Y FACU 2. Juniperus virginiana 5 Y FACU 1. In the stratum of the size is 5 ft 2. Juniperus virginiana 5 Y FACU 1. In the stratum of the size is 5 ft 2. Juniperus virginiana 5 Y FACU 1. In the size is 5 ft 2. Juniperus virginiana 5 Y FACU 1. In the size is 5 ft 3. Juniperus virginiana 5 Y FACU 1. In the size is 5 ft 3. Juniperus virginiana 5 Y FACU 1. In the size is 5 ft 3. Juniperus virginiana 5 Y FACU 1. In the size is 5 ft 3. Juniperus virginiana 5 Y FACU 1. In the size is 5 ft 3. Juniperus virginiana 5 Y FACU 1. In the size is 5 ft 3. Juniperus virginiana 5 Y FACU 1. In the size is 5 ft 3. Juniperus virginiana 5 Y FACU 1. In the size is 5 ft 3. Juniperus virginiana 5 Y FACU 1. In the size is 5 ft 3. Juniperus virginiana 5 Y FACU 1. In the size is 5 ft 3. Juniperus virginiana 5 Y FACU 1. In the size is 5 ft 3. Juniperus virginiana 5 Y FACU 1. In the size is 5 ft 3. Juniperus virginiana 5 Y FACU 1. In the size is 5 ft 3. Juniperus virginiana 5 Y FACU 1. In the size is 5 ft 3. Juniperus virginiana 5 Y FACU 1. In the size is 5 ft 3. Juniperus virginiana 5 Y FACU 1. In the size is 5 ft 3. Juniperus virginiana 5 Y FACU 1. In the size is 5 ft 3. Juniperus virginiana 5 Y FACU 1. Juniperus virginiana 5 Y FACU 1. Juniperus virginiana 6 Y FACU 1. Juniperus virginiana 7 Y FACU 1. Juniperus	70 Total Cover
Herb Stratum (Plot size: 5 tr)	50% of total cover: 10 20% of total cover: 4 I
1. Rosa multiflora 2. Juniperus virginiana 5 Y FACU 5 Y FACU FACU 1. In the state of the state o	of gize. Oil
2. Juniperus virginiana 5 Y FACU	Problematic Hydrophytic Vegetation' (Evplain)
11. d'anton of books on the discount of books on the discount of the discount	
Alium vincele E V FACIL I III III III III III III III III II	1 Indicators of hydric soil and wetland hydrology must
3. Allum vineale 5 Taco be present, unless disturbed or problematic.	be present, unless disturbed or problematic.
4. Lonicera japonica 5 Y FACU Definitions of Four Vegetation Strata:	Sa Y FACU Definitions of Four Vegetation Strata:
5	
Tree – Woody plants, excluding vines, 3 in. (7.6 cn	Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or
There in diameter at breast height (DBT), regardless	more in diameter at breast neight (BBH), regardless of
7 height.	
8. Sapling/Shrub – Woody plants, excluding vines, le	Sapling/Shrub – Woody plants, excluding vines, less
10 m) tall.	m) tall.
11.	Herb – All herbaceous (non-woody) plants, regardless
20 = Total Cover of size, and woody plants less than 3.28 ft tall.	
Woody Vine Stretum (Plet size, 5 ft)	50% of total cover: 10 20% of total cover: 4
. N/A	50% of total cover: 4 Woody vine – All woody vines greater than 3.28 ft in
1. <u>N/A</u>	um (Plot size: 5 ft) Woody vine – All woody vines greater than 3.28 ft in height.
2	um (Plot size: 5 ft) Woody vine – All woody vines greater than 3.28 ft in height.
3	um (Plot size: 5 ft) Woody vine – All woody vines greater than 3.28 ft in height.
4	um (Plot size: 5 ft) Woody vine – All woody vines greater than 3.28 ft in height.
Hydrophytic	um (Plot size: 5 ft) Woody vine – All woody vines greater than 3.28 ft in height.
Brocont2 Voc No X	um (Plot size: 5 ft) Woody vine – All woody vines greater than 3.28 ft in height.
	wm (Plot size: 5 ft Woody vine – All woody vines greater than 3.28 ft in height. Hydrophytic Vegetation Present? Veg. No. X
= Total Gover	woody vine – All woody vines greater than 3.28 ft in height. Hydrophytic Vegetation Present? Yes No X
50% of total cover: 20% of total cover:	woody vine – All woody vines greater than 3.28 ft in height. Hydrophytic Vegetation Present? Yes No X 50% of total cover: 20% of total cover:
50% of total cover: 20% of total cover:	woody vine – All woody vines greater than 3.28 ft in height. Hydrophytic Vegetation Present? Yes No X 50% of total cover: 20% of total cover:
50% of total cover: 20% of total cover:	woody vine – All woody vines greater than 3.28 ft in height. Hydrophytic Vegetation Present? Yes No X 50% of total cover: 20% of total cover:
= 10tal Gover	woody vine – All woody vines greater than 3.28 ft in height. Hydrophytic Vegetation Present? Yes No X 50% of total cover: 20% of total cover:
50% of total cover: 20% of total cover:	woody vine – All woody vines greater than 3.28 ft in height. Hydrophytic Vegetation Present? Yes No X 50% of total cover: 20% of total cover:
50% of total cover: 20% of total cover:	woody vine – All woody vines greater than 3.28 ft in height. Hydrophytic Vegetation Present? Yes No X 50% of total cover: 20% of total cover:
50% of total cover: 20% of total cover:	woody vine – All woody vines greater than 3.28 ft in height. Hydrophytic Vegetation Present? Yes No X 50% of total cover: 20% of total cover:
50% of total cover: 20% of total cover:	woody vine – All woody vines greater than 3.28 ft in height. Hydrophytic Vegetation Present? Yes No X 50% of total cover: 20% of total cover:
50% of total cover: 20% of total cover:	woody vine – All woody vines greater than 3.28 ft in height. Hydrophytic Vegetation Present? Yes No X 50% of total cover: 20% of total cover:

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SOIL

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Sampling Point: WAS-10

Profile Des	cription: (Describe	to the de	oth needed to docum	nent the	indicator	or confirn	n the absend	ce of indicators.)
Depth	Matrix			x Feature				
(inches)	Color (moist)	%	Color (moist)	<u>%</u>	Type ¹	Loc ²	<u>Texture</u>	- -
0-2	10YR 5/4	100					clay loam	
2-13	10YR 4/3	100					clay loam	
					· ——		-	
-							-	
-					·			<u> </u>
1							2	
		oletion, RM	=Reduced Matrix, MS	S=Masked	d Sand Gra	ains.		PL=Pore Lining, M=Matrix.
•	Indicators:			(= -)				cators for Problematic Hydric Soils ³ :
Histoso			Dark Surface					2 cm Muck (A10) (MLRA 147)
	pipedon (A2)		Polyvalue Be				, 148)	Coast Prairie Redox (A16)
	listic (A3)		Thin Dark Su			47, 148)		(MLRA 147, 148)
	en Sulfide (A4)		Loamy Gleye		(F2)			Piedmont Floodplain Soils (F19)
	d Layers (A5)		Depleted Mat		- 0\			(MLRA 136, 147)
	uck (A10) (LRR N)	oo (A44)	Redox Dark S					Very Shallow Dark Surface (TF12)
	ed Below Dark Surfact ark Surface (A12)	e (ATT)	Depleted Dar Redox Depre				_	Other (Explain in Remarks)
	Mucky Mineral (S1) (IDDN	Iron-Mangan			DD N		
	A 147, 148)	LIXIX IV,	MLRA 13		163 (1 12 <i>)</i> (1	LIXIX IV,		
	Gleyed Matrix (S4)		Umbric Surfa		(MI RΔ 13	6 122)	311	ndicators of hydrophytic vegetation and
	Redox (S5)		Piedmont Flo					vetland hydrology must be present,
	d Matrix (S6)		Red Parent N					unless disturbed or problematic.
	Layer (if observed)) <u>.</u>	110011 0101111	iatoriai (i	21) (2 11		·,	anioco diotarbod or problematic.
Type:		•						
							Harabeta O.	oil Present? Yes No X
	nches):						Hydric So	oil Present? Yes No X
Remarks:								

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Project/Site: Summer Shade	Solar		City/Co	unty: Metcalfe/ Monr	oe	Sampling Date: 2/29/24
Project/Site: Summer Shade Applicant/Owner: Summer Shade	nade Solar,	LLC	Oity/00			Sampling Point: WAS-103
Investigator(s): Kristen Cleme	ens, Tim Gr	abenstein	Sectio			
Landform (hillslope, terrace, etc	Depress	ion	Local reli	ef (concave, convex, no	ne): Concave	Slope (%): 1
Landform (hillslope, terrace, etc Subregion (LRR or MLRA): LR	R	Lat:	36.859848	Long: -85	678154	Datum: NAD83
Soil Map Unit Name: Nk, BaD	2, DkB				NWI classific	ation: PEM
Are climatic / hydrologic conditi		te typical fo	or this time of year? Yo			
Are Vegetation \underline{Y} , Soil \underline{N}						present? Yes X No
Are Vegetation N, Soil N					explain any answe	
						, important features, etc.
Hydrophytic Vegetation Prese Hydric Soil Present? Wetland Hydrology Present?	Υ	′es <u>^</u>	No No No	Is the Sampled Area within a Wetland?	Yes X	No
Wetland point for World Neg. Area has been	•		•	•	•	ausing disturbance to
HYDROLOGY						
Wetland Hydrology Indicator Primary Indicators (minimum ✓ 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 Aer Water-Stained Leaves (B Aquatic Fauna (B13) Field Observations: Surface Water Present? Water Table Present? Saturation Present?	ial Imagery (Eg) Yes X Yes		True Aquatic Plants (E Hydrogen Sulfide Odd	or (C1) es on Living Roots (C3) Iron (C4) in in Tilled Soils (C6) 7) narks)	Surface Soil Sparsely Veg Drainage Pa Moss Trim Li Dry-Season Crayfish Bur Saturation Vi Stunted or S Geomorphic Shallow Aqu	getated Concave Surface (B8) Itterns (B10) Ines (B16) Water Table (C2) Irows (C8) Isible on Aerial Imagery (C9) Itressed Plants (D1) Position (D2) Itrest (D3) Inphic Relief (D4) Test (D5)
(includes capillary fringe) Describe Recorded Data (stre						it? Yes No
Remarks:						

30 ft	Absolute	Dominant I		Dominance Test worksheet:
Tree Stratum (Plot size:)	% Cover	Species?	Status	Number of Dominant Species
1. N/A				That Are OBL, FACW, or FAC: 1 (A)
2				Total Number of Deminent
3				Total Number of Dominant Species Across All Strata: 1 (B)
4				
				Percent of Dominant Species That Are ORL FACW or FAC: 100 (A/R)
5				That Are OBL, FACW, or FAC: 100 (A/B)
6				Prevalence Index worksheet:
7				Total % Cover of: Multiply by:
		= Total Cove		
50% of total cover:	20% of	total cover:_		OBL species x 1 =
Sapling/Shrub Stratum (Plot size: 15 ft)				FACW species x 2 =
1. N/A				FAC species x 3 =
2				FACU species x 4 =
3				UPL species x 5 =
				Column Totals: (A) (B)
4				
5				Prevalence Index = B/A =
6				Hydrophytic Vegetation Indicators:
7				1 - Rapid Test for Hydrophytic Vegetation
8				2 - Dominance Test is >50%
9				
		= Total Cove		3 - Prevalence Index is ≤3.0 ¹
50% of total cover:				4 - Morphological Adaptations ¹ (Provide supporting
Herb Stratum (Plot size: 5 ft)	2070 01	total bovol		data in Remarks or on a separate sheet)
1. Echinochloa grus-galli	10	Υ	FACW	Problematic Hydrophytic Vegetation ¹ (Explain)
2. Juncus tenuis	5	N	FAC	¹ Indicators of hydric soil and wetland hydrology must
3. Juncus effusus	5	<u>N</u>	FACW	be present, unless disturbed or problematic.
4. Carex sp*	10	-	-	Definitions of Four Vegetation Strata:
5. Packera glabella	5	N	OBL	John Marie of Four Vogetation of ata.
6. Elymus virginicus	60			Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or
	-			more in diameter at breast height (DBH), regardless of
7				height.
8	· ——			Sapling/Shrub – Woody plants, excluding vines, less
9				than 3 in. DBH and greater than or equal to 3.28 ft (1
10				m) tall.
11	. <u></u>			Herb – All herbaceous (non-woody) plants, regardless
	95	= Total Cove	er	of size, and woody plants less than 3.28 ft tall.
50% of total cover: 42.5	20% of	total cover:_	19	W 1 2 4 4 4 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6
Woody Vine Stratum (Plot size: 5 ft)				Woody vine – All woody vines greater than 3.28 ft in height.
1. N/A				neight.
2				
3				
4	· ——			Hydrophytic
5				Vegetation
	:	= Total Cove	er	Present? Yes X No
50% of total cover:	20% of	total cover:_		
Remarks: (Include photo numbers here or on a separate	sheet.)			
	,			
Carex unidentifiable due to mowing				

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Reponse to 1-69
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Sampling Point: WAS-104

Profile Desc	cription: (Describe	to the de	pth needed to docur			or confirr	n the absence	of indicators.)
Depth	Matrix		Redo	x Feature	es		_	
(inches)	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²	<u>Texture</u>	Remarks
0-14	10YR 4/2	10	7.5 YR 10	10	C, PL	М	clay loam	Soils disturbed from ag use
		-			· -			
	-	-	· -	-	· 			
		-			• ———		-	
1- 0.0							2	
		letion, RM	1=Reduced Matrix, M	S=Maske	d Sand Gra	ains.		L=Pore Lining, M=Matrix. ators for Problematic Hydric Soils ³ :
Hydric Soil			5 1 6 1	(0-)				•
Histosol			Dark Surface		(00) (7)	U DA 44=		cm Muck (A10) (MLRA 147)
	pipedon (A2)		Polyvalue Be				, 148) C	Coast Prairie Redox (A16)
	stic (A3) en Sulfide (A4)		Thin Dark Su			47, 148)	-	(MLRA 147, 148)
	d Layers (A5)		Loamy Gleye Depleted Ma		(FZ)		<u> </u>	Piedmont Floodplain Soils (F19)
	a Layers (A5) ack (A10) (LRR N)		Redox Dark		E6)			(MLRA 136, 147) Yery Shallow Dark Surface (TF12)
	d Below Dark Surfac	۵ (۵11)	Depleted Da	,	,			Other (Explain in Remarks)
	ark Surface (A12)	e (ATT)	Redox Depre				_ `	other (Explain in Kemarks)
	lucky Mineral (S1) (I	RR N.	Iron-Mangan			LRR N.		
	A 147, 148)		MLRA 13		/00 (i. i. <u>_</u>) (,		
	Gleyed Matrix (S4)		Umbric Surfa	•	(MLRA 13	6. 122)	³ Ind	licators of hydrophytic vegetation and
	Redox (S5)		Piedmont Flo					etland hydrology must be present,
	Matrix (S6)		Red Parent N					less disturbed or problematic.
	Layer (if observed):			`	, ,		Í	
Type:								
	ches):						Hydric Soil	Present? Yes X No
Remarks:							11,741.10 001.	
Remarks.								

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Project/Site: Summer Shade	e Solar		Citv/Co	ounty: Metcalfe/ Monro	ое	Sampling Date: 2/29/24
Applicant/Owner: Summer S	hade Solar,	LLC			State: KY	Sampling Point: WAS-105
Investigator(s): Kristen Clen			Section			<u> </u>
						Slone (%). 3
Landform (hillslope, terrace, e Subregion (LRR or MLRA): \underline{L}	.c.) RR	Lot	36.858322	-85.0	680255	Olope (70)
		Lat:		Long:		. Unland
Soil Map Unit Name: Nk						
Are climatic / hydrologic condi						
Are Vegetation Y, Soil N	i, or Hydr	ology N	significantly distur	bed? Are "Normal	Circumstances" p	present? Yes X No
Are Vegetation N , Soil N	i, or Hydr	ology N	naturally problema	atic? (If needed, e		
SUMMARY OF FINDIN	GS – Attac	h site m	ap showing sam	pling point locatio	ns, transects	, important features, etc.
Hydrophytic Vegetation Pres	ent?	es/es	No X			
Hydric Soil Present?	\	/es	No X No X	Is the Sampled Area within a Wetland?	Vos	No X
Wetland Hydrology Present?	· \	/es	No_X	within a wetland:	163	
Remarks:			l			
Upland point for W-						, vog.
HYDROLOGY						
Wetland Hydrology Indicat						ators (minimum of two required)
Primary Indicators (minimum	of one is requ				Surface Soil	` '
Surface Water (A1)			True Aquatic Plants (getated Concave Surface (B8)
High Water Table (A2)			Hydrogen Sulfide Ode	, ,	Drainage Pa	
Saturation (A3) Water Marks (B1)			Presence of Reduced	es on Living Roots (C3)	Moss Trim L	Water Table (C2)
Sediment Deposits (B2)		=	Recent Iron Reductio	,	Crayfish Bur	` '
Drift Deposits (B3)			Thin Muck Surface (C			isible on Aerial Imagery (C9)
Algal Mat or Crust (B4)			Other (Explain in Ren	,		tressed Plants (D1)
Iron Deposits (B5)					Geomorphic	Position (D2)
Inundation Visible on Ae	rial Imagery (I	37)			Shallow Aqu	itard (D3)
Water-Stained Leaves (39)					aphic Relief (D4)
Aquatic Fauna (B13)					FAC-Neutral	Test (D5)
Field Observations:		Y				
Surface Water Present?			Depth (inches):			
Water Table Present?			Depth (inches):			Y
Saturation Present? (includes capillary fringe)	Yes	No _^	Depth (inches):	Wetland H	ydrology Preser	nt? Yes No_X
Describe Recorded Data (str	eam gauge, n	nonitoring v	ell, aerial photos, pre	vious inspections), if avai	ilable:	
Remarks:						

Tara Ciratura (Blataina 30 ft	Absolute	Dominant		Dominance Test worksheet:
Tree Stratum (Plot size:) 1. N/A		Species?	Status	Number of Dominant Species That Are OBL, FACW, or FAC: 0 (A)
2				Total Number of Dominant Species Across All Strata: 2 (B)
4				Openies / toross / tir otrata.
5.				Percent of Dominant Species That Are OBL, FACW, or FAC: 0 (A/B)
6				Prevalence Index worksheet:
7				Total % Cover of: Multiply by:
F00/ - (total		= Total Cove		OBL species x 1 =
50% of total cover:	20% of	total cover:		FACW species x 2 =
Sapling/Shrub Stratum (Plot size: 15 ft)				FAC species x 3 =
1. N/A				
2				FACU species x 4 =
3				UPL species x 5 =
4				Column Totals: (A) (B)
5				Prevalence Index = B/A =
				Hydrophytic Vegetation Indicators:
7				1 - Rapid Test for Hydrophytic Vegetation
8				2 - Dominance Test is >50%
9	00			3 - Prevalence Index is ≤3.0 ¹
500/ (1.1) 10		= Total Cove		4 - Morphological Adaptations ¹ (Provide supporting
50% of total cover: 10	20% of	total cover:	4	data in Remarks or on a separate sheet)
Herb Stratum (Plot size: 5 ft 1. Andropogodon virginicus	15	N	FACU	Problematic Hydrophytic Vegetation ¹ (Explain)
2. Setaria pumila	30	Υ	FACU	
3. Alium vineale	5	N	FACU	¹ Indicators of hydric soil and wetland hydrology must
4 Schedonorus arundinaceus	40	Υ	FACU	be present, unless disturbed or problematic.
5				Definitions of Four Vegetation Strata:
6.				Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or
				more in diameter at breast height (DBH), regardless of
7				height.
8				Sapling/Shrub – Woody plants, excluding vines, less
9				than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.
10				ini) tali.
11				Herb – All herbaceous (non-woody) plants, regardless
500/ of total access 45		= Total Cove		of size, and woody plants less than 3.28 ft tall.
<u>Woody Vine Stratum</u> (Plot size: 5 ft)	20% of	total cover:	10	Woody vine – All woody vines greater than 3.28 ft in height.
1. <u>N/A</u>				
2				
3				
4				Hydrophytic
5				Vegetation
		= Total Cove	er	Present? Yes No X
50% of total cover:	20% of	total cover:		
Remarks: (Include photo numbers here or on a separate	sheet.)			
Area has been previously used as corr	field			
Alloa had boom providuoly adda ad oom	i iioia			

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Reponse to 1-69
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Sampling Point: WAS-104

Profile Desc	ription: (Describe	to the de	pth needed to docur	ment the	indicator	or confirm	n the absence	e of indicators.)
Depth	Matrix		Redo	x Feature	es			
(inches)	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²	Texture	Remarks
0-6	10YR 4/4	98	10YR 2/2	2	С	M	clay loam	
6-15	10YR 4/3	100					clay loam	Soils disturbed by ag use
					-			
	-			-	<u> </u>			
					· -			
				-				
¹ Type: C=Co	oncentration, D=Dep	letion, RM	l=Reduced Matrix, M	S=Maske	d Sand Gr	ains.	² Location: P	PL=Pore Lining, M=Matrix.
Hydric Soil		•						ators for Problematic Hydric Soils ³ :
Histosol	(A1)		Dark Surface	e (S7)			2	2 cm Muck (A10) (MLRA 147)
	oipedon (A2)		Polyvalue Be		ace (S8) (I	ILRA 147		Coast Prairie Redox (A16)
Black Hi			Thin Dark Su		. , .			(MLRA 147, 148)
	en Sulfide (A4)		Loamy Gleye		(F2)		F	Piedmont Floodplain Soils (F19)
	d Layers (A5)		Depleted Ma	. ,				(MLRA 136, 147)
	ıck (A10) (LRR N)		Redox Dark	,	,			/ery Shallow Dark Surface (TF12)
	d Below Dark Surfac	e (A11)	Depleted Da				_ 0	Other (Explain in Remarks)
	ark Surface (A12)	DD N	Redox Depre			U DD N		
	Mucky Mineral (S1) (I \ 147, 148)	LKK N,	Iron-Mangan MLRA 13		ses (F12) (LKK N,		
	Gleyed Matrix (S4)		Umbric Surfa	-	/MI D A 13	26 122\	³ Inc	dicators of hydrophytic vegetation and
	Redox (S5)		Piedmont Flo					etland hydrology must be present,
	Matrix (S6)		Red Parent N					nless disturbed or problematic.
	Layer (if observed):	:			, (,	Í	
Type:	,							
	ches):						Hydric Soil	I Present? Yes No X
Remarks:							Tiyano oon	111030III. 103 <u> </u>
Remarks.								

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Project/Site: Summer Shade	Solar	City/Co	unty: Metcalfe/ Monro	ре	Sampling Date: 2/29/24
Applicant/Owner: Summer SI	hade Solar, LLC	Sity/ 88	<u> </u>	State: KY	Sampling Point: WAS-105
Investigator(s): Kristen Cleme		Section			
					Slone (%). 1
Landform (hillslope, terrace, etc Subregion (LRR or MLRA): <u>LF</u>	₹R	36.858499	Long: -85.6	680106	Olope (70)
			Long:	NA41 1 10	PFM
Soil Map Unit Name: Nk, BaB			Υ		
Are climatic / hydrologic conditi					
Are Vegetation N, Soil N	, or Hydrology N	significantly disturb	ped? Are "Normal	Circumstances" p	oresent? Yes X No
Are Vegetation N, Soil N	, or Hydrology N	naturally problema	itic? (If needed, e.	xplain any answe	rs in Remarks.)
SUMMARY OF FINDING	GS – Attach site m	ap showing sam	pling point locatio	ns, transects	, important features, etc.
Hydrophytic Vegetation Prese Hydric Soil Present?	ent? Yes X Yes X	No	Is the Sampled Area within a Wetland?	Yes X	No
Wetland Hydrology Present?		_ No	William a Welland.		
Remarks:		1			
Wetland point for W			water pond		
HYDROLOGY					
Wetland Hydrology Indicato					tors (minimum of two required)
Primary Indicators (minimum				Surface Soil	` '
Surface Water (A1)		True Aquatic Plants (I			getated Concave Surface (B8)
High Water Table (A2) Saturation (A3)	H	Hydrogen Sulfide Odd	es on Living Roots (C3)	✓ Drainage Pa Moss Trim Li	` '
Water Marks (B1)	H	Presence of Reduced	=		Water Table (C2)
Sediment Deposits (B2)	□	Recent Iron Reduction	, ,	Crayfish Bur	` '
Drift Deposits (B3)		Thin Muck Surface (C			sible on Aerial Imagery (C9)
Algal Mat or Crust (B4)		Other (Explain in Ren	narks)	Stunted or S	tressed Plants (D1)
Iron Deposits (B5)				✓ Geomorphic	Position (D2)
Inundation Visible on Aer				Shallow Aqui	
Water-Stained Leaves (B	(9)			_	aphic Relief (D4)
Aquatic Fauna (B13)				✓ FAC-Neutral	Test (D5)
Field Observations: Surface Water Present?	Yes X No	Donth (inches): 0.75			
Water Table Present?	Yes No X				
Saturation Present?	Yes X No			ydrology Preser	nt? Yes ^X No
(includes capillary fringe)					100
Describe Recorded Data (stre	eam gauge, monitoring v	vell, aerial photos, pre	vious inspections), if avai	lable:	
Remarks:					

30 ft	Absolute	Dominant		Dominance Test worksheet:
Tree Stratum (Plot size:)	% Cover	Species?	Status	Number of Dominant Species
1. N/A				That Are OBL, FACW, or FAC: 2 (A)
2				Total Number of Deminant
3				Total Number of Dominant Species Across All Strata: 2 (B)
4.				(B)
				Percent of Dominant Species
5				That Are OBL, FACW, or FAC: 100 (A/B)
6				Prevalence Index worksheet:
7				
	=	= Total Cove	er	Total % Cover of: Multiply by:
50% of total cover:	20% of	total cover:		OBL species x 1 =
Sapling/Shrub Stratum (Plot size: 15 ft)				FACW species x 2 =
1. N/A				FAC species x 3 =
· · ·				FACU species x 4 =
2				UPL species x 5 =
3				
4				Column Totals: (A) (B)
5				Prevalence Index = B/A =
6				
				Hydrophytic Vegetation Indicators:
7				1 - Rapid Test for Hydrophytic Vegetation
8				2 - Dominance Test is >50%
9				3 - Prevalence Index is ≤3.0 ¹
	:	= Total Cove	er	4 - Morphological Adaptations¹ (Provide supporting
50% of total cover:	20% of	total cover:		
Herb Stratum (Plot size: 5 ft)				data in Remarks or on a separate sheet)
1. Echinochloa grus-galli	30	Υ	FACW	Problematic Hydrophytic Vegetation ¹ (Explain)
2. Typha latifolia	10	N	OBL	
3. Juncus effusus	25	Y	FACW	¹ Indicators of hydric soil and wetland hydrology must
				be present, unless disturbed or problematic.
4. Carex Iurida	10	<u>N</u>	OBL	Definitions of Four Vegetation Strata:
5. Packera glabella	5	N	OBL	
6. Rumex crispus	5	N	FACW	Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or
7				more in diameter at breast height (DBH), regardless of height.
7				neight.
8				Sapling/Shrub – Woody plants, excluding vines, less
9				than 3 in. DBH and greater than or equal to 3.28 ft (1
10				m) tall.
11				Herb – All herbaceous (non-woody) plants, regardless
	85	= Total Cove	er	of size, and woody plants less than 3.28 ft tall.
50% of total cover: 42.5		total cover:		
Woody Vine Stratum (Plot size: 5 ft)				Woody vine – All woody vines greater than 3.28 ft in
. NI/A				height.
1. WA	· ———			
2				
3				
4				Hadaankat's
5				Hydrophytic Vegetation
<u> </u>		= Total Cove		Present? Yes X No
50% of total cover:				
		total cover.		
Remarks: (Include photo numbers here or on a separate	sheet.)			

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Sampling Point: WAS-10 SOIL Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.) Depth Matrix Redox Features Color (moist) Texture Color (moist) Type¹ (inches) silty clay 10YR 4/2 80 7.5 YR 4/6 20 C, PL 0-2 M 2-8 10 YR 4/1 85 15 С 7.5 YR 4/6 M silty clay 85 15 С 8-16 10 YR 5/1 7.5 YR 4/6 silty clay ²Location: PL=Pore Lining, M=Matrix. ¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. **Hydric Soil Indicators:** Indicators for Problematic Hydric Soils³: ___ 2 cm Muck (A10) (MLRA 147) ___ Histosol (A1) Dark Surface (S7) ___ Histic Epipedon (A2) Polyvalue Below Surface (S8) (MLRA 147, 148) Coast Prairie Redox (A16) ___ Black Histic (A3) Thin Dark Surface (S9) (MLRA 147, 148) (MLRA 147, 148) ___ Hydrogen Sulfide (A4) Loamy Gleyed Matrix (F2) Piedmont Floodplain Soils (F19) Depleted Matrix (F3) ___ Stratified Layers (A5) (MLRA 136, 147) 2 cm Muck (A10) (LRR N) Redox Dark Surface (F6) Very Shallow Dark Surface (TF12) Depleted Below Dark Surface (A11) Depleted Dark Surface (F7) _ Other (Explain in Remarks) Thick Dark Surface (A12) Redox Depressions (F8) Sandy Mucky Mineral (S1) (LRR N, Iron-Manganese Masses (F12) (LRR N, MLRA 147, 148) MLRA 136) Sandy Gleyed Matrix (S4) Umbric Surface (F13) (MLRA 136, 122) ³Indicators of hydrophytic vegetation and ___ Sandy Redox (S5) ___ Piedmont Floodplain Soils (F19) (MLRA 148) wetland hydrology must be present, Stripped Matrix (S6) Red Parent Material (F21) (MLRA 127, 147) unless disturbed or problematic. Restrictive Layer (if observed): Type: Yes X **Hydric Soil Present?** Depth (inches): Remarks:

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Project/Site: Summer Shade	e Solar		Citv/Co	unty: Metcalfe/ Monro	oe	Sampling Date: 2/29/24
Applicant/Owner: Summer S	hade Solar,	LLC			State: KY	Sampling Point: WAS-106
Investigator(s): Kristen Clen			Section			<u> </u>
				-		Slone (%). 3
Landform (hillslope, terrace, e Subregion (LRR or MLRA): \underline{L}	.c.) RR	Lot	36.858322	-85.6	680255	Olope (70)
		Lat:		Long:		. Unland
Soil Map Unit Name: Nk				V		
Are climatic / hydrologic condi						
Are Vegetation Y, Soil N	i, or Hydr	ology N	significantly distur	bed? Are "Normal	Circumstances" p	present? Yes X No
Are Vegetation N , Soil N	i, or Hydr	ology N	naturally problema	atic? (If needed, e		
SUMMARY OF FINDIN	GS – Attac	h site m	ap showing sam	pling point locatio	ns, transects	, important features, etc.
Hydrophytic Vegetation Pres	ent?	es/es	No X			
Hydric Soil Present?	\	/es	No X No X	Is the Sampled Area within a Wetland?	Vos	No X
Wetland Hydrology Present?	,	es	No_X	within a wettand?	162	
Remarks:						
Upland point for W-						o vog.
HYDROLOGY						
Wetland Hydrology Indicat						ators (minimum of two required)
Primary Indicators (minimum	of one is requ				Surface Soil	` '
Surface Water (A1)			True Aquatic Plants (getated Concave Surface (B8)
High Water Table (A2)			Hydrogen Sulfide Ode	, ,	Drainage Pa	
Saturation (A3) Water Marks (B1)			Presence of Reduced	es on Living Roots (C3)	Moss Trim L	Water Table (C2)
Sediment Deposits (B2)			Recent Iron Reductio	,	Crayfish Bur	` ,
Drift Deposits (B3)			Thin Muck Surface (C			isible on Aerial Imagery (C9)
Algal Mat or Crust (B4)			Other (Explain in Ren	•		tressed Plants (D1)
Iron Deposits (B5)					Geomorphic	Position (D2)
Inundation Visible on Ae	rial Imagery (f	37)			Shallow Aqu	itard (D3)
Water-Stained Leaves (39)				_	aphic Relief (D4)
Aquatic Fauna (B13)					FAC-Neutral	Test (D5)
Field Observations:		Y				
Surface Water Present?			Depth (inches):			
Water Table Present?			Depth (inches):			Y
Saturation Present? (includes capillary fringe)	Yes	No _^	Depth (inches):	Wetland H	ydrology Preser	nt? Yes No_X
Describe Recorded Data (str	eam gauge, n	nonitoring w	vell, aerial photos, pre	vious inspections), if avai	lable:	
Remarks:						

Tara Ciratura (Blataina 30 ft	Absolute	Dominant		Dominance Test worksheet:
Tree Stratum (Plot size:) 1. N/A		Species?	Status	Number of Dominant Species That Are OBL, FACW, or FAC: 0 (A)
2				Total Number of Dominant Species Across All Strata: 2 (B)
4				Openies / toross / tir otrata.
5.				Percent of Dominant Species That Are OBL, FACW, or FAC: 0 (A/B)
6				Prevalence Index worksheet:
7				Total % Cover of: Multiply by:
F00/ - (total		= Total Cove		OBL species x 1 =
50% of total cover:	20% of	total cover:		FACW species x 2 =
Sapling/Shrub Stratum (Plot size: 15 ft)				FAC species x 3 =
1. N/A				
2				FACU species x 4 =
3				UPL species x 5 =
4				Column Totals: (A) (B)
5				Prevalence Index = B/A =
				Hydrophytic Vegetation Indicators:
7				1 - Rapid Test for Hydrophytic Vegetation
8				2 - Dominance Test is >50%
9	00			3 - Prevalence Index is ≤3.0 ¹
500/ (1.1) 10		= Total Cove		4 - Morphological Adaptations ¹ (Provide supporting
50% of total cover: 10	20% of	total cover:	4	data in Remarks or on a separate sheet)
Herb Stratum (Plot size: 5 ft 1. Andropogodon virginicus	15	N	FACU	Problematic Hydrophytic Vegetation ¹ (Explain)
2. Setaria pumila	30	Υ	FACU	
3. Alium vineale	5	N	FACU	¹ Indicators of hydric soil and wetland hydrology must
4 Schedonorus arundinaceus	40	Υ	FACU	be present, unless disturbed or problematic.
5				Definitions of Four Vegetation Strata:
6.				Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or
				more in diameter at breast height (DBH), regardless of
7				height.
8				Sapling/Shrub – Woody plants, excluding vines, less
9				than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.
10				ini) tali.
11				Herb – All herbaceous (non-woody) plants, regardless
500/ of total access 45		= Total Cove		of size, and woody plants less than 3.28 ft tall.
<u>Woody Vine Stratum</u> (Plot size: 5 ft)	20% of	total cover:	10	Woody vine – All woody vines greater than 3.28 ft in height.
1. <u>N/A</u>				
2				
3				
4				Hydrophytic
5				Vegetation
		= Total Cove	er	Present? Yes No X
50% of total cover:	20% of	total cover:		
Remarks: (Include photo numbers here or on a separate	sheet.)			
Area has been previously used as corr	field			
Alloa had boom providuoly adda ad oom	i iioia			

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Sampling Point: WAS-10

SOIL

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.) Depth Matrix Redox Features Loc² Color (moist) Color (moist) Type¹ Texture (inches) 10YR 4/4 98 10YR 2/2 2 С 0-6 M clay loam Soils disturbed by ag use 6-15 10YR 4/3 100 clay loam ²Location: PL=Pore Lining, M=Matrix. ¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. **Hydric Soil Indicators:** Indicators for Problematic Hydric Soils³: ___ 2 cm Muck (A10) (MLRA 147) ___ Histosol (A1) Dark Surface (S7) ___ Histic Epipedon (A2) Polyvalue Below Surface (S8) (MLRA 147, 148) Coast Prairie Redox (A16) ___ Black Histic (A3) Thin Dark Surface (S9) (MLRA 147, 148) (MLRA 147, 148) ___ Hydrogen Sulfide (A4) Loamy Gleyed Matrix (F2) Piedmont Floodplain Soils (F19) ___ Stratified Layers (A5) Depleted Matrix (F3) (MLRA 136, 147) 2 cm Muck (A10) (LRR N) Redox Dark Surface (F6) Very Shallow Dark Surface (TF12) Depleted Below Dark Surface (A11) Depleted Dark Surface (F7) _ Other (Explain in Remarks) Thick Dark Surface (A12) Redox Depressions (F8) Sandy Mucky Mineral (S1) (LRR N, ___ Iron-Manganese Masses (F12) (LRR N, MLRA 147, 148) MLRA 136) Sandy Gleyed Matrix (S4) Umbric Surface (F13) (MLRA 136, 122) ³Indicators of hydrophytic vegetation and ___ Sandy Redox (S5) ___ Piedmont Floodplain Soils (F19) (MLRA 148) wetland hydrology must be present, Stripped Matrix (S6) Red Parent Material (F21) (MLRA 127, 147) unless disturbed or problematic. Restrictive Layer (if observed): Type: No X **Hydric Soil Present?** Depth (inches): Yes Remarks:

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Project/Site: Summer Shade	e Solar	City/Co	unty: Metcalfe/ Monro	oe .	Sampling Date: 2/29/24
Applicant/Owner: Summer S	hade Solar, LLC			State: KY	Sampling Date: 2/29/24 Sampling Point: WAS-107
Investigator(s): Kristen Clem		Section	n Township Range N/A	A	
Landform (hillslope, terrace, et			· · · · · ·		Slone (%): 1
Subregion (LRR or MLRA): LF	RR 1 at:	36.859284	er (concave, convex, non	680805	Slope (76)
Subregion (LRR of MLRA):	22 SaB CrB		Long		PFM
Soil Map Unit Name: Nk, Ba			v		
Are climatic / hydrologic condit					
Are Vegetation Y, Soil N	, or Hydrology Y	significantly disturb	ped? Are "Normal		oresent? Yes X No No
Are Vegetation N, Soil N	, or Hydrology N	naturally problema	tic? (If needed, e.	xplain any answe	rs in Remarks.)
SUMMARY OF FINDIN	GS – Attach site m	ap showing sam	pling point locatio	ns, transects	, important features, etc.
Hydrophytic Vegetation President Soil Present?	Yes _^	No	Is the Sampled Area within a Wetland?	Yes X	No
Wetland Hydrology Present?	Yes _^	No			
Remarks: Wetland point for W field	'-62 (test pit 1/2).	Large depress	sional wetland bo	ordering INT	stream through open
HYDROLOGY					
Wetland Hydrology Indicate	ors:			Secondary Indica	tors (minimum of two required)
Primary Indicators (minimum	of one is required; check	all that apply)		Surface Soil	Cracks (B6)
Surface Water (A1)		True Aquatic Plants (I	314)	Sparsely Ve	getated Concave Surface (B8)
High Water Table (A2)		Hydrogen Sulfide Odd		Drainage Pa	
Saturation (A3)			es on Living Roots (C3)	Moss Trim Li	
Water Marks (B1) Sediment Deposits (B2)	_	Presence of Reduced Recent Iron Reduction	, ,	Crayfish Buri	Water Table (C2)
Drift Deposits (B3)		Thin Muck Surface (C			sible on Aerial Imagery (C9)
Algal Mat or Crust (B4)	_	Other (Explain in Rem	•		tressed Plants (D1)
Iron Deposits (B5)	_	` '	,		Position (D2)
Inundation Visible on Ae	rial Imagery (B7)			Shallow Aqui	itard (D3)
Water-Stained Leaves (E	39)			Microtopogra	aphic Relief (D4)
Aquatic Fauna (B13)				✓ FAC-Neutral	Test (D5)
Field Observations:					
Surface Water Present?	Yes No X				
Water Table Present?	Yes No X				Y
Saturation Present? (includes capillary fringe)	Yes X No	Depth (inches):	Wetland H	ydrology Presen	t? Yes ^ No
Describe Recorded Data (str	eam gauge, monitoring w	ell, aerial photos, pre	vious inspections), if avai	lable:	
Demonto					
Remarks:					

Tara Ciratura (Blataina 30 ft	Absolute	Dominant		Dominance Test worksheet:
Tree Stratum (Plot size:) 1. N/A		Species?	Status	Number of Dominant Species That Are OBL, FACW, or FAC: 1 (A)
2				Total Number of Dominant
3				Species Across All Strata: 1 (B)
4				
5				Percent of Dominant Species That Are OBL, FACW, or FAC: 100 (A/B)
6		·		Prevalence Index worksheet:
7	· 	·		Total % Cover of: Multiply by:
		= Total Cove		OBL species x 1 =
50% of total cover:	20% of	total cover:		
Sapling/Shrub Stratum (Plot size: 15 ft)				FACW species x 2 =
1. N/A		·		FAC species x 3 =
2				FACU species x 4 =
3				UPL species x 5 =
4				Column Totals: (A) (B)
5				Prevalence Index = B/A =
6		·		Hydrophytic Vegetation Indicators:
7				1 - Rapid Test for Hydrophytic Vegetation
8				2 - Dominance Test is >50%
9				3 - Prevalence Index is ≤3.0 ¹
	:	= Total Cove	er	4 - Morphological Adaptations¹ (Provide supporting
50% of total cover:	20% of	total cover:		
Herb Stratum (Plot size: 5 ft)				data in Remarks or on a separate sheet)
1. Microstegium vimineium	15	N	FAC	Problematic Hydrophytic Vegetation ¹ (Explain)
2. Andropogodon virginicus	5	N	FACU	
3. Juncus effusus	60	Υ	FACW	¹ Indicators of hydric soil and wetland hydrology must
4 Elymus virginicus	15	N	FACW	be present, unless disturbed or problematic.
5				Definitions of Four Vegetation Strata:
				Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or
6		·		more in diameter at breast height (DBH), regardless of
7				height.
8	· ———	·		Sapling/Shrub – Woody plants, excluding vines, less
9		· ——		than 3 in. DBH and greater than or equal to 3.28 ft (1
10	· ———	·		m) tall.
11				Herb - All herbaceous (non-woody) plants, regardless
		= Total Cove		of size, and woody plants less than 3.28 ft tall.
50% of total cover: 47.5 Woody Vine Stratum (Plot size: 5 ft)	20% of	total cover:	19	Woody vine – All woody vines greater than 3.28 ft in
1. N/A				height.
2.				
3				
4				Hydrophytic
5				Vegetation Present? Yes X No
EOO/ of total agreer		= Total Cove		100 100
50% of total cover:		total cover.		
Remarks: (Include photo numbers here or on a separate s	sheet.)			

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Sampling Point: WAS-107

Profile Desc	ription: (Describe	to the de	pth needed to docur	ment the	indicator	or confirr	n the absence	of indicators.)
Depth	Matrix		Redo	x Feature	es			
(inches)	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²	Texture	Remarks
0-3	10YR 4/2	80	7.5 YR 4/4	20	С	М	clay loam	Soils disturbed from ag use/ ditching
3-13	10YR 4/1	85	7.5YR 4/6	15	С	M	clay loam	
								Rocky restrictive layer after ~13 in
	-			-				
			· -		_			
					_			
	-	-	· · ·					
					_			
¹ Type: C=Co	oncentration, D=Dep	letion, RM	1=Reduced Matrix, M	S=Maske	d Sand Gr	ains.	² Location: P	L=Pore Lining, M=Matrix.
Hydric Soil I								ators for Problematic Hydric Soils ³ :
Histosol	(A1)		Dark Surface	e (S7)			2	cm Muck (A10) (MLRA 147)
	pipedon (A2)		Polyvalue Be	. ,	ace (S8) (I	VILRA 147		Coast Prairie Redox (A16)
Black Hi	stic (A3)		Thin Dark Su	urface (S	9) (MLRA	147, 148)		(MLRA 147, 148)
Hydroge	n Sulfide (A4)		Loamy Gleye		(F2)		P	riedmont Floodplain Soils (F19)
	l Layers (A5)		✓ Depleted Ma	trix (F3)				(MLRA 136, 147)
	ick (A10) (LRR N)		Redox Dark	,				'ery Shallow Dark Surface (TF12)
	Below Dark Surfac	e (A11)	Depleted Da				c	Other (Explain in Remarks)
	ark Surface (A12)	DD N	Redox Depre			(I DD N		
	lucky Mineral (S1) (I \ 147, 148)	LKK N,	Iron-Mangan MLRA 13		ses (F12) ((LKK N,		
	sleyed Matrix (S4)		Umbric Surfa	-	(MI D A 11	26 122)	³ Ind	licators of hydrophytic vegetation and
	edox (S5)		Piedmont Flo					etland hydrology must be present,
	Matrix (S6)		Red Parent I					less disturbed or problematic.
	_ayer (if observed):	:		(, (,	1	
Type: Ro								
Depth (inc							Hydric Soil	Present? Yes X No
Remarks:							Tiyano oon	1105cm: 105 100
Remarks.								

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Project/Site: Summer Shad	e Solar		Citv/Co	unty: Metcalfe/ Monro	ре	Sampling Date: 2/29/24
Applicant/Owner: Summer S	Shade Solar, I	LC			State: KY	Sampling Date: 2/29/24 Sampling Point: WAS-108
Investigator(s): Kristen Clen			Section	on Township Range N//	Α	<u> </u>
						Slone (%)· 2
Landform (hillslope, terrace, e Subregion (LRR or MLRA): \underline{L}	RR	Lot	36.858050	-85.0	681751	Olope (70)
		Lat:		Long:		. Unland
Soil Map Unit Name: Nk				V		
Are climatic / hydrologic condi						
Are Vegetation Y, Soil N	, or Hydro	ology N	significantly distur	bed? Are "Normal	Circumstances" p	present? Yes X No
Are Vegetation N, Soil N	↓, or Hydro	ology N	naturally problema	atic? (If needed, e		
SUMMARY OF FINDIN	IGS – Attac	h site m	ap showing sam	pling point locatio	ns, transects	, important features, etc.
Hydrophytic Vegetation Pres	sent? Y	es	No X			
Hydric Soil Present?	Y	es	No X No X	Is the Sampled Area within a Wetland?	Vaa	No X
Wetland Hydrology Present?	Y	es	No_X	within a wetiand?	res	
Remarks:						
Upland point for W-		,	· 			5
HYDROLOGY						
Wetland Hydrology Indicat						ators (minimum of two required)
Primary Indicators (minimum	of one is requi				Surface Soil	` '
Surface Water (A1)		B14)		getated Concave Surface (B8)		
High Water Table (A2) Saturation (A3)			Hydrogen Sulfide Ode	or (C1) es on Living Roots (C3)	Drainage Pa Moss Trim L	
Water Marks (B1)			Presence of Reduced			Water Table (C2)
Sediment Deposits (B2)			Recent Iron Reductio	,	Crayfish Bur	` '
Drift Deposits (B3)			Thin Muck Surface (C			isible on Aerial Imagery (C9)
Algal Mat or Crust (B4)			Other (Explain in Ren	narks)	Stunted or S	tressed Plants (D1)
Iron Deposits (B5)					Geomorphic	Position (D2)
Inundation Visible on Ae	• • •	7)			Shallow Aqu	` ′
Water-Stained Leaves (B9)					aphic Relief (D4)
Aquatic Fauna (B13)					FAC-Neutral	Test (D5)
Field Observations: Surface Water Present?	Vaa	No X	Depth (inches):			
Water Table Present?			Depth (inches):			
Saturation Present?			Depth (inches):		ydrology Preser	nt? Yes No X
(includes capillary fringe)						it: 165 NO
Describe Recorded Data (str	eam gauge, mo	onitoring w	rell, aerial photos, pre	vious inspections), if avai	ilable:	
Remarks:						
Nomans.						

30 ft	Absolute	Dominant		Dominance Test worksheet:
Tree Stratum (Plot size:)	% Cover	Species?	Status	Number of Dominant Species
1. N/A				That Are OBL, FACW, or FAC: 0 (A)
2				Total Number of Deminent
3				Total Number of Dominant Species Across All Strata: 2 (B)
4				(2)
				Percent of Dominant Species
5				That Are OBL, FACW, or FAC: 0 (A/B)
6				Prevalence Index worksheet:
7				Total % Cover of: Multiply by:
		= Total Cov		
50% of total cover:	20% of	total cover:		OBL species x 1 =
Sapling/Shrub Stratum (Plot size: 15 ft)				FACW species x 2 =
1. N/A				FAC species x 3 =
2				FACU species x 4 =
3				UPL species x 5 =
				Column Totals: (A) (B)
4				
5				Prevalence Index = B/A =
6				Hydrophytic Vegetation Indicators:
7				1 - Rapid Test for Hydrophytic Vegetation
8				2 - Dominance Test is >50%
9				
	00	= Total Cov	er	3 - Prevalence Index is ≤3.0 ¹
50% of total cover: 10	20% of			4 - Morphological Adaptations ¹ (Provide supporting
Herb Stratum (Plot size: 5 ft)	2070 01	total oovol.		data in Remarks or on a separate sheet)
1. Andropogodon virginicus	10	N	FACU	Problematic Hydrophytic Vegetation ¹ (Explain)
2. Setaria pumila	10	N	FACU	¹ Indicators of hydric soil and wetland hydrology must
3. Trifolium repens	40	N	FACU	be present, unless disturbed or problematic.
4. Schedonorus arundinaceus	10	Υ	FACU	Definitions of Four Vegetation Strata:
5. Lamium purpureum	20	Υ	FACU	
6				Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or
				more in diameter at breast height (DBH), regardless of height.
7				neight.
8				Sapling/Shrub – Woody plants, excluding vines, less
9				than 3 in. DBH and greater than or equal to 3.28 ft (1
10				m) tall.
11				Herb – All herbaceous (non-woody) plants, regardless
	90	= Total Cov	er	of size, and woody plants less than 3.28 ft tall.
50% of total cover: 45	20% of	total cover:	18	Was divides. All was divided an action them 2.00 ft in
Woody Vine Stratum (Plot size: 5 ft)				Woody vine – All woody vines greater than 3.28 ft in height.
1. N/A				noight.
2.				
3				
4				Hydrophytic
5				Vegetation
		= Total Cov	er	Present? Yes No _X
50% of total cover:	20% of	total cover:		
Remarks: (Include photo numbers here or on a separate	sheet.)			
Area has been previously used as corr	field			
Area has been previously used as con	Heid			

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Sampling Point: WAS-104

Profile Desc	cription: (Describe	to the dept	h needed to docur	nent the in	ndicator o	r confirm	the abse	nce of indicators.)	
Depth	Matrix		Redo	x Features					
(inches)	Color (moist)	<u>%</u>	Color (moist)	<u>%</u>	Type ¹	Loc ²	Texture		
0-16	10YR 4/4	100					clay loa	<u> </u>	
								Soils disturbed by ag use	
	-			·					_
	-								
								<u> </u>	
	-								
	-								
1Typo: C-C	oncentration, D=Dep	lotion PM-	Poducod Matrix MS	S-Mackad	Sand Gra	inc	² Location	n: PL=Pore Lining, M=Matrix.	
Hydric Soil		ielion, Rivi=	Reduced Matrix, Mis	5=IVIaskeu	Sand Gra	iris.		ndicators for Problematic Hydric Soils ³ :	
-			Dork Surface	(87)					
Histosol	pipedon (A2)		Dark Surface Polyvalue Be		o (SS) /M	I D A 147		_ 2 cm Muck (A10) (MLRA 147) _ Coast Prairie Redox (A16)	
	istic (A3)		Thin Dark Su		. , .		140) _	(MLRA 147, 148)	
	en Sulfide (A4)		Loamy Gleye	, ,	•	11, 140)		_ Piedmont Floodplain Soils (F19)	
	d Layers (A5)		Depleted Ma		_/		_	(MLRA 136, 147)	
	uck (A10) (LRR N)		Redox Dark		3)			Very Shallow Dark Surface (TF12)	
Deplete	d Below Dark Surfac	e (A11)	Depleted Dar	k Surface	(F7)		_	_ Other (Explain in Remarks)	
	ark Surface (A12)		Redox Depre						
	Mucky Mineral (S1) (I	_RR N,	Iron-Mangan		s (F12) (L	.RR N,			
	A 147, 148)		MLRA 13	•				3	
	Gleyed Matrix (S4)		Umbric Surfa					³ Indicators of hydrophytic vegetation and	
	Redox (S5)		Piedmont Flo					wetland hydrology must be present,	
	Matrix (S6)		Red Parent N	/laterial (F2	21) (WLR)	127, 147	<u>')</u>	unless disturbed or problematic.	
	Layer (if observed):								
								Y	
	ches):						Hydric	Soil Present? Yes No X	-
Remarks:									

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Project/Site: Summer Shade	Solar		Citv/Co	unty: Metcalfe/ Monre	oe	Sampling Date: 2/29/24
Applicant/Owner: Summer Sh	nade Solar,	LLC			State: KY	Sampling Point: WAS-109
Investigator(s): Kristen Cleme			Section	n. Township, Range: N/	A	<u> </u>
Landform (hillslope, terrace, etc						Slone (%): 1
Subregion (LRR or MLRA): LR	 R	Late	36.858185	Lang: -85.	681487	Glope (70)
Soil Map Unit Name: Nk, BaC	2 SaB Crl	Lai. _. B		Long	NDA(I -1 : C	Datum
				Υ	NVVI classifi	cation: 1 =
Are climatic / hydrologic conditi						
Are Vegetation, Soil _N	, or Hyd	rology 1	significantly disturb	ped? Are "Normal	Circumstances"	present? Yes X No ers in Remarks.)
Are Vegetation N, Soil N	, or Hyd	rology N	naturally problema	tic? (If needed, e	explain any answe	ers in Remarks.)
SUMMARY OF FINDING	3S – Atta	ch site m	ap showing sam	pling point location	ns, transects	s, important features, etc.
Hydrophytic Vegetation Prese	ant?	_{Vos} X	No			
Hydric Soil Present?	,	Yes X	No	Is the Sampled Area	v X	No
Wetland Hydrology Present?	,	Yes X	No	within a Wetland?	Yes <u>^`</u>	NO
Remarks:						
Wetland point for Wa	-62 (test	pit 2/2).	Large depress	sional wetland be	ordering IN	T stream through open
field	(
HYDROLOGY						
Wetland Hydrology Indicato						ators (minimum of two required)
Primary Indicators (minimum	of one is req					Cracks (B6)
Surface Water (A1)			True Aquatic Plants (I			egetated Concave Surface (B8)
High Water Table (A2)			Hydrogen Sulfide Odd			atterns (B10)
☐ Saturation (A3) ☐ Oxidized Rhizospheres on Living Roots (C3) ☐ Moss Trim Lines (B16)						
Water Marks (B1)			Presence of Reduced	, ,		Water Table (C2)
Sediment Deposits (B2)			Recent Iron Reduction		Crayfish Bu	
Drift Deposits (B3)			Thin Muck Surface (C Other (Explain in Rem	,		/isible on Aerial Imagery (C9) Stressed Plants (D1)
Algal Mat or Crust (B4) Iron Deposits (B5)		Ш,	Otrier (Explain in Ren	iaiks)		Position (D2)
Inundation Visible on Aer	ial Imagery (R7)			Shallow Aqu	` ′
Water-Stained Leaves (B		D1)				aphic Relief (D4)
Aquatic Fauna (B13)	3)				FAC-Neutra	
Field Observations:						
Surface Water Present?	Yes	No X	Depth (inches):			
Water Table Present?			Depth (inches):			
Saturation Present?			Depth (inches): 1		lvdrology Prese	nt? Yes X No
(includes capillary fringe)						
Describe Recorded Data (stre	am gauge, r	nonitoring w	eli, aeriai pnotos, pre	vious inspections), if ava	liable:	
Remarks:						

Tara Ciratura (Blataina 30 ft	Absolute	Dominant		Dominance Test worksheet:
Tree Stratum (Plot size:) 1. N/A		Species?		Number of Dominant Species That Are OBL, FACW, or FAC: 1 (A)
2				Total Number of Dominant
3				Species Across All Strata: 1 (B)
4				
5				Percent of Dominant Species That Are OBL, FACW, or FAC: 100 (A/B)
6				Prevalence Index worksheet:
7				Total % Cover of: Multiply by:
		= Total Cov		OBL species x 1 =
50% of total cover:	20% of	total cover:		
Sapling/Shrub Stratum (Plot size: 15 ft)				FACW species x 2 =
1. N/A				FAC species x 3 =
2				FACU species x 4 =
3				UPL species x 5 =
4				Column Totals: (A) (B)
5				Prevalence Index = B/A =
6				Hydrophytic Vegetation Indicators:
7				1 - Rapid Test for Hydrophytic Vegetation
8				2 - Dominance Test is >50%
9				
		= Total Cov	er	3 - Prevalence Index is ≤3.0 ¹
50% of total cover:	20% of	total cover:		4 - Morphological Adaptations ¹ (Provide supporting
Herb Stratum (Plot size: 5 ft)				data in Remarks or on a separate sheet)
1. Microstegium vimineium	15	N	FAC	Problematic Hydrophytic Vegetation ¹ (Explain)
2 Packera glabella	5	N	OBL	
3. Juncus effusus	5	N	FACW	¹ Indicators of hydric soil and wetland hydrology must
4 Elymus virginicus	75	Y	FACW	be present, unless disturbed or problematic.
··· <u> </u>				Definitions of Four Vegetation Strata:
5				Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or
6.				more in diameter at breast height (DBH), regardless of
7				height.
8				Sapling/Shrub – Woody plants, excluding vines, less
9				than 3 in. DBH and greater than or equal to 3.28 ft (1
10				m) tall.
11				Herb - All herbaceous (non-woody) plants, regardless
		= Total Cov		of size, and woody plants less than 3.28 ft tall.
50% of total cover: 50	20% of	total cover:	20	Woody vine – All woody vines greater than 3.28 ft in
Woody Vine Stratum (Plot size: 5 ft)				haight
1. N/A				height.
11				neight.
2				neight.
				neight.
2				
2. 3.				Hydrophytic Vegetation
2		= Total Cov	 er	Hydrophytic
2		= Total Cov		Hydrophytic Vegetation
2		= Total Cov		Hydrophytic Vegetation
2		= Total Cov		Hydrophytic Vegetation
2		= Total Cov		Hydrophytic Vegetation
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2		= Total Cov		Hydrophytic Vegetation
2		= Total Cov		Hydrophytic Vegetation
2		= Total Cov		Hydrophytic Vegetation

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Sampling Point: WAS-104

Profile Desc	ription: (Describe	to the de	pth needed to docum	nent the	indicator	or confirr	n the absence	of indicators.)
Depth	Matrix		Redo	x Feature	es			
(inches)	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²	Texture	Remarks
0-2	10YR 4/2	90	7.5 YR 4/4	10	C, PL	M	clay loam	Soils disturbed from ag use/ ditching
2-13	10YR 4/1	90	7.5YR 4/6	10	С	M	clay loam	
								Rocky restrictive layer after ~13 in
					-			
		_			_			
-								
					-			
		_			-			
		_			_			
¹ Type: C=Co	oncentration, D=Dep	oletion, RM	M=Reduced Matrix, MS	S=Maske	d Sand Gra	ains.	² Location: P	L=Pore Lining, M=Matrix.
Hydric Soil I			·					ators for Problematic Hydric Soils ³ :
Histosol	(A1)		Dark Surface	(S7)			2	cm Muck (A10) (MLRA 147)
	pipedon (A2)		Polyvalue Be		ace (S8) (N	ILRA 147		Coast Prairie Redox (A16)
Black His	stic (A3)		Thin Dark Su	rface (S9	9) (MLRA 1	47, 148)		(MLRA 147, 148)
	n Sulfide (A4)		Loamy Gleye		(F2)		F	Piedmont Floodplain Soils (F19)
	l Layers (A5)		✓ Depleted Ma	trix (F3)				(MLRA 136, 147)
	ick (A10) (LRR N)		Redox Dark S	,	,			ery Shallow Dark Surface (TF12)
	d Below Dark Surfac	e (A11)	Depleted Dar				c	Other (Explain in Remarks)
	ark Surface (A12)		Redox Depre					
	lucky Mineral (S1) (I	LRR N,	Iron-Mangan		ses (F12) (LRR N,		
	147, 148)		MLRA 13	•	(NIII DA 40	0 400\	3,	
	sleyed Matrix (S4)		Umbric Surfa					licators of hydrophytic vegetation and
	edox (S5)		Piedmont Flo					etland hydrology must be present,
	Matrix (S6) _ayer (if observed)		Red Parent N	nateriai (i	F21) (WLK	A 127, 14	<i>(</i>) un	less disturbed or problematic.
	_ayer (ii observed)							
Type:							1	
	ches):						Hydric Soil	Present? Yes X No
Remarks:								

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Project/Site: Summer Shad	e Solar		City/Co	ounty: Metcalfe/ Monro	oe	Sampling Date: 2/29/24
Applicant/Owner: Summer S	hade Solar, I	LC			State: KY	Sampling Date: 2/29/24 Sampling Point: WAS-110
Investigator(s): Kristen Clen) Section	on Township Range N/	A	
. , .						Slone (%): 2
Landform (hillslope, terrace, e Subregion (LRR or MLRA): \underline{L}	RR	Lot	36.858050	1 ang85.	681751	Glope (70)
		Lat:		Long:		. Unland
Soil Map Unit Name: Nk				V		
Are climatic / hydrologic condi						
Are Vegetation Y, Soil N	or Hydro	ology N	significantly distur	bed? Are "Normal	Circumstances" p	oresent? Yes X No
Are Vegetation N, Soil N	l, or Hydro	ology N	naturally problema	atic? (If needed, e		
SUMMARY OF FINDIN	GS – Attac	h site m	nap showing sam	pling point locatio	ns, transects	s, important features, etc.
Hydrophytic Vegetation Pres	sent? Y	es	No X			
Hydric Soil Present?	Y	es	No X No X	Is the Sampled Area within a Wetland?	Vac	No X
Wetland Hydrology Present?	Y	es	No X	within a wetiand?	165	NO
Remarks:						
Upland (test pit 2/2)	· 					J
HYDROLOGY						
Wetland Hydrology Indicat						ators (minimum of two required)
Primary Indicators (minimum	of one is requi				Surface Soil	,
Surface Water (A1)			True Aquatic Plants (getated Concave Surface (B8)
High Water Table (A2) Saturation (A3)		H	Hydrogen Sulfide Od	or (C1) es on Living Roots (C3)	Drainage Pa Moss Trim L	
Water Marks (B1)		H	Presence of Reduced	=		Water Table (C2)
Sediment Deposits (B2)		一	Recent Iron Reductio	` ,	Crayfish Bur	` '
Drift Deposits (B3)			Thin Muck Surface (C			isible on Aerial Imagery (C9)
Algal Mat or Crust (B4)			Other (Explain in Ren	narks)	Stunted or S	tressed Plants (D1)
Iron Deposits (B5)					Geomorphic	Position (D2)
Inundation Visible on Ae	• • •	7)			Shallow Aqu	` '
Water-Stained Leaves (39)					aphic Relief (D4)
Aquatic Fauna (B13)				I	FAC-Neutral	Test (D5)
Field Observations:	V	N. X	Don'th (Cook oo)			
Surface Water Present?			Depth (inches): Depth (inches):			
Water Table Present? Saturation Present?			Depth (inches):		lydrology Preser	nt? Yes No X
(includes capillary fringe)	res	NO <u>**</u>	Depth (inches):	wetiand n	lydrology Preser	it? resNo
Describe Recorded Data (str	eam gauge, me	onitoring v	vell, aerial photos, pre	vious inspections), if ava	ilable:	
Remarks:						
Remarks.						

Tara Ciratura (Blataina 30 ft	Absolute	Dominant		Dominance Test worksheet:
Tree Stratum (Plot size:) 1. N/A		Species?	Status	Number of Dominant Species That Are OBL, FACW, or FAC: 0 (A)
2				Total Number of Dominant Species Across All Strata: 2 (B)
4				Openies / toross / tir otrata.
5.				Percent of Dominant Species That Are OBL, FACW, or FAC: 0 (A/B)
6				Prevalence Index worksheet:
7				Total % Cover of: Multiply by:
F00/ - (total		= Total Cove		OBL species x 1 =
50% of total cover:	20% of	total cover:		FACW species x 2 =
Sapling/Shrub Stratum (Plot size: 15 ft)				FAC species x 3 =
1. N/A				
2				FACU species x 4 =
3				UPL species x 5 =
4				Column Totals: (A) (B)
5				Prevalence Index = B/A =
				Hydrophytic Vegetation Indicators:
7				1 - Rapid Test for Hydrophytic Vegetation
8				2 - Dominance Test is >50%
9	00			3 - Prevalence Index is ≤3.0 ¹
500/ (1.1) 10		= Total Cove		4 - Morphological Adaptations ¹ (Provide supporting
50% of total cover: 10	20% of	total cover:	4	data in Remarks or on a separate sheet)
Herb Stratum (Plot size: 5 ft 1. Andropogodon virginicus	15	N	FACU	Problematic Hydrophytic Vegetation ¹ (Explain)
2. Setaria pumila	30	Υ	FACU	
3. Alium vineale	5	N	FACU	¹ Indicators of hydric soil and wetland hydrology must
4 Schedonorus arundinaceus	40	Υ	FACU	be present, unless disturbed or problematic.
5				Definitions of Four Vegetation Strata:
6.				Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or
				more in diameter at breast height (DBH), regardless of
7				height.
8				Sapling/Shrub – Woody plants, excluding vines, less
9				than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.
10				ini) tali.
11				Herb – All herbaceous (non-woody) plants, regardless
500/ of total access 45		= Total Cove		of size, and woody plants less than 3.28 ft tall.
<u>Woody Vine Stratum</u> (Plot size: 5 ft)	20% of	total cover:	10	Woody vine – All woody vines greater than 3.28 ft in height.
1. <u>N/A</u>				
2				
3				
4				Hydrophytic
5				Vegetation
		= Total Cove	er	Present? Yes No X
50% of total cover:	20% of	total cover:		
Remarks: (Include photo numbers here or on a separate	sheet.)			
Area has been previously used as corr	field			
Alloa had boom providuoly adda ad oom	i ilola			

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Sampling Point: WAS-11

Type: C=Concentrally dric Soil Indicato Histosol (A1) Histic Epipedon (Black Histic (A3) Hydrogen Sulfide Stratified Layers 2 cm Muck (A10) Depleted Below Thick Dark Surfally Sandy Mucky Mine MLRA 147, 14 Sandy Gleyed Matrix (Sandy Redox (Sandy R	4/3 ation, D=Deplors: (A2) e (A4) (A5)) (LRR N) Dark Surface ace (A12) ineral (S1) (L48) latrix (S4) 5) S6) observed):	e (A11)	Dark Surface Polyvalue B Thin Dark S Loamy Gley Depleted M Redox Dark Depleted Da Redox Depl Iron-Manga MLRA 1: Umbric Surf	ce (S7) delow Surfa durface (S9 yed Matrix (F3) d Surface (F1 dark Surface (F13) face (F13) loodplain S	ce (S8) (N) (MLRA 1 (F2) F6) e (F7) 8) es (F12) (I	ILRA 147, 47, 148) LRR N, 6, 122)	Indi , 148) 3lr	Soils disturbed by ag use PL=Pore Lining, M=Matrix. icators for Problematic Hydric Soils³ 2 cm Muck (A10) (MLRA 147) Coast Prairie Redox (A16) (MLRA 147, 148) Piedmont Floodplain Soils (F19) (MLRA 136, 147) Very Shallow Dark Surface (TF12) Other (Explain in Remarks)
Type: C=Concentrally ydric Soil Indicato Histosol (A1) Histic Epipedon (Black Histic (A3) Hydrogen Sulfide Stratified Layers 2 cm Muck (A10) Depleted Below of the Dark Surfally Sandy Mucky Minger Mucky Minge	4/3 ation, D=Deplors: (A2) e (A4) (A5)) (LRR N) Dark Surface ace (A12) ineral (S1) (L48) latrix (S4) 5) S6) observed):	100	=Reduced Matrix, M Dark Surface Polyvalue B Thin Dark S Loamy Gley Depleted Matrix Redox Dark Depleted Date Redox Depleted Date Umbric Surfer Diedmont F	dS=Masked se (S7) delow Surface (S9 yed Matrix (F3) a Surface (Fark Surface ressions (F nese Mass 36) face (F13) loodplain S	ce (S8) (N) (MLRA 1 (F2) (F7) (S) (MLRA 13)	ILRA 147, 47, 148) LRR N, 6, 122)	2Location: Indi	Soils disturbed by ag use PL=Pore Lining, M=Matrix. icators for Problematic Hydric Soils³ 2 cm Muck (A10) (MLRA 147) Coast Prairie Redox (A16) (MLRA 147, 148) Piedmont Floodplain Soils (F19) (MLRA 136, 147) Very Shallow Dark Surface (TF12) Other (Explain in Remarks)
Type: C=Concentra ydric Soil Indicato Histosol (A1) Histic Epipedon (Black Histic (A3) Hydrogen Sulfide Stratified Layers 2 cm Muck (A10) Depleted Below Thick Dark Surfa Sandy Mucky Mi MLRA 147, 14 Sandy Gleyed M Sandy Redox (Sillar) Stripped Matrix (Bestrictive Layer (ifform) Type: Depth (inches):	e (A4) (A5) (A5) (LRR N) Dark Surface (A12) ineral (S1) (L48) latrix (S4) 5) S6) observed):	etion, RM=	Dark Surface Polyvalue B Thin Dark S Loamy Gley Depleted M Redox Dark Depleted Da Redox Depl Iron-Manga MLRA 1: Umbric Surf	ce (S7) delow Surfa durface (S9 yed Matrix (F3) d Surface (F1 dark Surface (F13) face (F13) loodplain S	ce (S8) (N) (MLRA 1 (F2) F6) e (F7) 8) es (F12) (I	ILRA 147, 47, 148) LRR N, 6, 122)	² Location: Indi	PL=Pore Lining, M=Matrix. icators for Problematic Hydric Soils³ 2 cm Muck (A10) (MLRA 147) Coast Prairie Redox (A16) (MLRA 147, 148) Piedmont Floodplain Soils (F19) (MLRA 136, 147) Very Shallow Dark Surface (TF12) Other (Explain in Remarks)
ydric Soil Indicato Histosol (A1) Histic Epipedon (Black Histic (A3) Hydrogen Sulfide Stratified Layers 2 cm Muck (A10) Depleted Below Thick Dark Surfa Sandy Mucky Mi MLRA 147, 14 Sandy Gleyed M Sandy Redox (Si Stripped Matrix (Bestrictive Layer (iff	(A2) e (A4) (A5)) (LRR N) Dark Surface ace (A12) ineral (S1) (L 48) latrix (S4) 5) S6) observed):	e (A11)	Dark Surface Polyvalue B Thin Dark S Loamy Gley Depleted M Redox Dark Depleted Da Redox Depl Iron-Manga MLRA 1: Umbric Surf	ce (S7) delow Surfa durface (S9 yed Matrix (F3) d Surface (F1 dark Surface (F13) face (F13) loodplain S	ce (S8) (N) (MLRA 1 (F2) F6) e (F7) 8) es (F12) (I	ILRA 147, 47, 148) LRR N, 6, 122)	Indi , 148) 3lr	icators for Problematic Hydric Soils ³ 2 cm Muck (A10) (MLRA 147) Coast Prairie Redox (A16) (MLRA 147, 148) Piedmont Floodplain Soils (F19) (MLRA 136, 147) Very Shallow Dark Surface (TF12) Other (Explain in Remarks)
ydric Soil Indicato Histosol (A1) Histic Epipedon (Black Histic (A3) Hydrogen Sulfide Stratified Layers 2 cm Muck (A10) Depleted Below Thick Dark Surfa Sandy Mucky Mi MLRA 147, 14 Sandy Gleyed M Sandy Redox (Si Stripped Matrix (Bestrictive Layer (iff	(A2) e (A4) (A5)) (LRR N) Dark Surface ace (A12) ineral (S1) (L 48) latrix (S4) 5) S6) observed):	e (A11)	Dark Surface Polyvalue B Thin Dark S Loamy Gley Depleted M Redox Dark Depleted Da Redox Depl Iron-Manga MLRA 1: Umbric Surf	ce (S7) delow Surfa durface (S9 yed Matrix (F3) d Surface (F1 dark Surface (F13) face (F13) loodplain S	ce (S8) (N) (MLRA 1 (F2) F6) e (F7) 8) es (F12) (I	ILRA 147, 47, 148) LRR N, 6, 122)	Indi , 148) 3lr	icators for Problematic Hydric Soils ³ 2 cm Muck (A10) (MLRA 147) Coast Prairie Redox (A16) (MLRA 147, 148) Piedmont Floodplain Soils (F19) (MLRA 136, 147) Very Shallow Dark Surface (TF12) Other (Explain in Remarks)
ydric Soil Indicato Histosol (A1) Histic Epipedon (Black Histic (A3) Hydrogen Sulfide Stratified Layers 2 cm Muck (A10) Depleted Below Thick Dark Surfa Sandy Mucky Mi MLRA 147, 14 Sandy Gleyed M Sandy Redox (Si Stripped Matrix (Bestrictive Layer (iff	(A2) e (A4) (A5)) (LRR N) Dark Surface ace (A12) ineral (S1) (L 48) latrix (S4) 5) S6) observed):	e (A11)	Dark Surface Polyvalue B Thin Dark S Loamy Gley Depleted M Redox Dark Depleted Da Redox Depl Iron-Manga MLRA 1: Umbric Surf	ce (S7) delow Surfa durface (S9 yed Matrix (F3) d Surface (F1 dark Surface (F13) face (F13) loodplain S	ce (S8) (N) (MLRA 1 (F2) F6) e (F7) 8) es (F12) (I	ILRA 147, 47, 148) LRR N, 6, 122)	Indi , 148) 3lr	icators for Problematic Hydric Soils ³ 2 cm Muck (A10) (MLRA 147) Coast Prairie Redox (A16) (MLRA 147, 148) Piedmont Floodplain Soils (F19) (MLRA 136, 147) Very Shallow Dark Surface (TF12) Other (Explain in Remarks)
Histosol (A1) Histic Epipedon (Black Histic (A3) Hydrogen Sulfide Stratified Layers 2 cm Muck (A10) Depleted Below Thick Dark Surfa Sandy Mucky Mi MLRA 147, 14 Sandy Gleyed M Sandy Redox (S: Stripped Matrix (estrictive Layer (if Type: Depth (inches):	(A2) e (A4) (A5)) (LRR N) Dark Surface ace (A12) ineral (S1) (L 48) latrix (S4) 5) S6) c observed):	, ,	Polyvalue B Thin Dark S Loamy Gley Depleted M Redox Dark Depleted Da Redox Depl Iron-Manga MLRA 1: Umbric Surf	delow Surface (S9 yed Matrix (F3) atrix (F3) a Surface (Fark Surface Fressions (Fonese Mass 36) face (F13) loodplain S) (MLRA 1 (F2) (F6) (F7) 8) es (F12) (I	47, 148) LRR N, 6, 122)	7, 148)	2 cm Muck (A10) (MLRA 147) Coast Prairie Redox (A16) (MLRA 147, 148) Piedmont Floodplain Soils (F19) (MLRA 136, 147) Very Shallow Dark Surface (TF12) Other (Explain in Remarks)
Histic Epipedon (Black Histic (A3) Hydrogen Sulfide Stratified Layers 2 cm Muck (A10) Depleted Below Thick Dark Surfat Sandy Mucky Mit MLRA 147, 14 Sandy Gleyed M Sandy Redox (Stripped Matrix (Estrictive Layer (iff Type: Depth (inches):	e (A4) (A5)) (LRR N) Dark Surface ace (A12) ineral (S1) (L 48) latrix (S4) 5) S6) observed):	, ,	Polyvalue B Thin Dark S Loamy Gley Depleted M Redox Dark Depleted Da Redox Depl Iron-Manga MLRA 1: Umbric Surf	delow Surface (S9 yed Matrix (F3) atrix (F3) a Surface (Fark Surface Fressions (Fonese Mass 36) face (F13) loodplain S) (MLRA 1 (F2) (F6) (F7) 8) es (F12) (I	47, 148) LRR N, 6, 122)	-, 148)	Coast Prairie Redox (A16) (MLRA 147, 148) Piedmont Floodplain Soils (F19) (MLRA 136, 147) Very Shallow Dark Surface (TF12) Other (Explain in Remarks)
				Material (F	(MLR)		7)	wetland hydrology must be present, unless disturbed or problematic.
emarks:							Hydric Sc	oil Present? Yes No X

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Project/Site: Summer Shade	Solar	City/Co	ounty: Metcalfe/ Monro	e	Sampling Date: 2/29/24
Applicant/Owner: Summer SI	hade Solar, LLC	Only/ 00		State: KY	Sampling Point: WAS-111
Investigator(s): Kristen Clem		stein Section			
Landform (hillslope, terrace, etc					Slana (9/): 0-3
Subregion (LRR or MLRA): LF	5.): <u>Depression</u>	Local reli	er (concave, convex, non	e): <u></u>	Slobe (%):
		Lat: 30.033330	Long:05.0	019404	Datum: NADOS
Soil Map Unit Name: CbB, Ba					
Are climatic / hydrologic conditi					
Are Vegetation N , Soil N	, or Hydrology	N significantly distur	bed? Are "Normal	Circumstances" p	present? Yes X No No
Are Vegetation N, Soil N	, or Hydrology	N naturally problems	atic? (If needed, e.		
SUMMARY OF FINDING	GS – Attach sit	e map showing sam	pling point locatio	ns, transects	, important features, etc.
Hydrophytic Vegetation Prese	ent? Yes X	No			
Hydric Soil Present?	Yes X	No	Is the Sampled Area within a Wetland?	vaa X	Ne
Wetland Hydrology Present?		No	within a wetiand?	162	
Remarks:					
Wetland point for W		,			
HYDROLOGY					
Wetland Hydrology Indicato					ators (minimum of two required)
Primary Indicators (minimum	of one is required;	check all that apply)		Surface Soil	` '
Surface Water (A1)		True Aquatic Plants (getated Concave Surface (B8)
High Water Table (A2)		Hydrogen Sulfide Od	, ,	Drainage Pa	
Saturation (A3) Water Marks (B1)		Presence of Reduced	es on Living Roots (C3)	Moss Trim L	Water Table (C2)
Sediment Deposits (B2)		Recent Iron Reductio	, ,	Crayfish Bur	` '
Drift Deposits (B3)		Thin Muck Surface (C			isible on Aerial Imagery (C9)
Algal Mat or Crust (B4)		Other (Explain in Ren	•		tressed Plants (D1)
Iron Deposits (B5)				Geomorphic	Position (D2)
Inundation Visible on Aer	rial Imagery (B7)			Shallow Aqu	itard (D3)
Water-Stained Leaves (B	39)				aphic Relief (D4)
Aquatic Fauna (B13)				✓ FAC-Neutral	Test (D5)
Field Observations:	,	/			
Surface Water Present?		Depth (inches):			
Water Table Present?		Depth (inches):			Y
Saturation Present? (includes capillary fringe)	Yes _^ No _	Depth (inches): 6	Wetland H	ydrology Preser	nt? Yes ^ No
Describe Recorded Data (stre	eam gauge, monitor	ing well, aerial photos, pre	vious inspections), if avai	lable:	
Remarks:					

30 ft	Absolute Dominant Indicator	Dominance Test worksheet:
Tree Stratum (Plot size:)	% Cover Species? Status	Number of Dominant Species
1. N/A		That Are OBL, FACW, or FAC: 1 (A)
2		
		Total Number of Dominant Species Across All Strata: 1 (B)
3		Species Across All Strata: 1 (B)
4		Percent of Dominant Species
5		That Are OBL, FACW, or FAC: 100 (A/B)
6		
7		Prevalence Index worksheet:
	= Total Cover	Total % Cover of: Multiply by:
50% of total cover:	20% of total cover:	OBL species x 1 =
	20 % of total cover	FACW species x 2 =
Sapling/Shrub Stratum (Plot size: 15 ft)		
1. N/A		FAC species x 3 =
2		FACU species x 4 =
3		UPL species x 5 =
4		Column Totals: (A) (B)
5		Prevalence Index = B/A =
6		Hydrophytic Vegetation Indicators:
7		1 - Rapid Test for Hydrophytic Vegetation
8		
9		2 - Dominance Test is >50%
o		3 - Prevalence Index is ≤3.0 ¹
500/ of total account	= Total Cover	4 - Morphological Adaptations ¹ (Provide supporting
	20% of total cover:	data in Remarks or on a separate sheet)
Herb Stratum (Plot size: 5 ft)		Problematic Hydrophytic Vegetation ¹ (Explain)
1. Typha latifolia	100 Y OBL	1 Tobiematic Trydrophytic Vegetation (Explain)
2		
3		¹ Indicators of hydric soil and wetland hydrology must
		be present, unless disturbed or problematic.
4		Definitions of Four Vegetation Strata:
5		Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or
6		more in diameter at breast height (DBH), regardless of
7		height.
8		
		Sapling/Shrub – Woody plants, excluding vines, less
		than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.
10		m) tan.
11		Herb – All herbaceous (non-woody) plants, regardless
	100 = Total Cover	of size, and woody plants less than 3.28 ft tall.
50% of total cover: 50	20% of total cover: 20	W 1 2 4 1 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2
Woody Vine Stratum (Plot size: 5 ft)		Woody vine – All woody vines greater than 3.28 ft in height.
. NI/A		neight.
2		
3		
4		Hydrophytic
5		Vegetation
	= Total Cover	Present? Yes X No
50% of total cover:	20% of total cover:	
Remarks: (Include photo numbers here or on a separate	sileet.)	

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Sampling Point: WAS-11

SOIL

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.) Depth Matrix Redox Features Color (moist) Color (moist) Type Texture (inches) C, PL silty clay loam 0-3 10YR 5/2 85 7.5 YR 4/4 15 M 3-15 10YR 6/1 85 7.5YR 4/6 15 С M clay loam ²Location: PL=Pore Lining, M=Matrix. ¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. **Hydric Soil Indicators:** Indicators for Problematic Hydric Soils³: ___ 2 cm Muck (A10) (MLRA 147) ___ Histosol (A1) Dark Surface (S7) ___ Histic Epipedon (A2) Polyvalue Below Surface (S8) (MLRA 147, 148) Coast Prairie Redox (A16) ___ Black Histic (A3) Thin Dark Surface (S9) (MLRA 147, 148) (MLRA 147, 148) ___ Hydrogen Sulfide (A4) Loamy Gleyed Matrix (F2) Piedmont Floodplain Soils (F19) Depleted Matrix (F3) ___ Stratified Layers (A5) (MLRA 136, 147) 2 cm Muck (A10) (LRR N) Redox Dark Surface (F6) Very Shallow Dark Surface (TF12) Depleted Below Dark Surface (A11) Depleted Dark Surface (F7) _ Other (Explain in Remarks) Thick Dark Surface (A12) Redox Depressions (F8) Sandy Mucky Mineral (S1) (LRR N, ___ Iron-Manganese Masses (F12) (LRR N, MLRA 147, 148) MLRA 136) Sandy Gleyed Matrix (S4) Umbric Surface (F13) (MLRA 136, 122) ³Indicators of hydrophytic vegetation and ___ Sandy Redox (S5) ___ Piedmont Floodplain Soils (F19) (MLRA 148) wetland hydrology must be present, Stripped Matrix (S6) Red Parent Material (F21) (MLRA 127, 147) unless disturbed or problematic. Restrictive Layer (if observed): Type: Yes X **Hydric Soil Present?** Depth (inches): Remarks:

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Project/Site: Summer Shade	Solar		City/Co	unty: Metcalfe/ Monr	oe	Sampling Date: 2/29/24
Project/Site: Summer Snade Applicant/Owner: Summer SI	nade Solar,	LLC	Oity/O0			Sampling Point: WAS-113
Investigator(s): Kristen Cleme	ens, Tim G	rabenstein) Section			
Landform (hillslope, terrace, etc.	Linear		L ocal reli	ef (concave, convex, nor	ne). Concave	Slone (%)· 0
Landform (hillslope, terrace, etc Subregion (LRR or MLRA): LF	%	l at·	36.853243	Long: -85.	678846	NAD83
Soil Map Unit Name: CbB		Lat.		Long	NIWI classific	eation: PSS
Are climatic / hydrologic conditi	one on the c	ito typical fo	or this time of year? V			
Are Vegetation N, Soil N						present? Yes X No
					explain any answe	i, important features, etc.
Hydrophytic Vegetation Prese	ant?	_{Vas} X	_ No			
Hydric Soil Present?	,	Yes X	No	Is the Sampled Area within a Wetland?	vos X	No
Wetland Hydrology Present?	,	Yes X	No	within a wettand?	165	NO
Remarks:			1			
Wetland point for W	-63b and	1 VV-64b	(PSS). Linear	wetland followin	g perenniai	stream channel
HYDROLOGY						
Wetland Hydrology Indicato	ors:				Secondary Indica	ators (minimum of two required)
Primary Indicators (minimum	of one is req	uired; checl	k all that apply)		Surface Soil	
Surface Water (A1)			True Aquatic Plants (314)	Sparsely Ve	getated Concave Surface (B8)
High Water Table (A2)			Hydrogen Sulfide Odd		Drainage Pa	
Saturation (A3)				es on Living Roots (C3)	Moss Trim L	
Water Marks (B1) Sediment Deposits (B2)		H	Presence of Reduced Recent Iron Reduction	, ,	Crayfish Bur	Water Table (C2)
Drift Deposits (B3)		片	Thin Muck Surface (C	, ,		isible on Aerial Imagery (C9)
Algal Mat or Crust (B4)			Other (Explain in Rem	,		tressed Plants (D1)
Iron Deposits (B5)		_	` '	,		Position (D2)
Inundation Visible on Aer	ial Imagery (B7)			Shallow Aqu	itard (D3)
Water-Stained Leaves (B	9)				Microtopogra	aphic Relief (D4)
Aquatic Fauna (B13)					✓ FAC-Neutral	Test (D5)
Field Observations:	Y		1			
Surface Water Present?			Depth (inches): 1 Depth (inches):			
Water Table Present? Saturation Present?			Depth (inches): 4		lydrology Preser	nt? Yes ^X No
(includes capillary fringe)						it: 165 NO
Describe Recorded Data (stre	am gauge, r	nonitoring v	vell, aerial photos, pre	vious inspections), if ava	ilable:	
Remarks:						
Tromano.						

30 ft	Absolute	Dominant		Dominance Test worksheet:
Tree Stratum (Plot size:)	% Cover	Species?	Status	Number of Dominant Species
1. N/A				That Are OBL, FACW, or FAC: 1 (A)
2				
				Total Number of Dominant Species Across All Strata: 1 (B)
3				Species Across All Strata: 1 (B)
4				Percent of Dominant Species
5				That Are OBL, FACW, or FAC: 100 (A/B)
6	_			
7				Prevalence Index worksheet:
		= Total Cove		Total % Cover of: Multiply by:
50% of total cover:				OBL species x 1 =
	2070 01	total cover.		FACW species x 2 =
Sapling/Shrub Stratum (Plot size: 15 ft)				FAC species x 3 =
1. Salix nigra				
2. Alnus serrulata				FACU species x 4 =
3				UPL species x 5 =
4		<u> </u>		Column Totals: (A) (B)
5				Prevalence Index = B/A =
6				Hydrophytic Vegetation Indicators:
7				1 - Rapid Test for Hydrophytic Vegetation
8				
9				2 - Dominance Test is >50%
<u> </u>				3 - Prevalence Index is ≤3.0 ¹
FOO/ of total covers		= Total Cove		4 - Morphological Adaptations ¹ (Provide supporting
50% of total cover:	20% 01	total cover:_		data in Remarks or on a separate sheet)
Herb Stratum (Plot size: 5 ft)				Problematic Hydrophytic Vegetation ¹ (Explain)
1. Microstegium vimineium	90	Υ	FAC	1 Toblematic Trydrophytic Vegetation (Explain)
2. Onoclea sensibilis	5	N	FACW	
3 Juncus effusus	5	N	FACW	¹ Indicators of hydric soil and wetland hydrology must
				be present, unless disturbed or problematic.
" "				Definitions of Four Vegetation Strata:
5	_			Tree Woody plants evaluding vines 2 in (7.6 cm) or
6	_			Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of
7				height.
8				
•				Sapling/Shrub – Woody plants, excluding vines, less
				than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.
10				iii) taii.
11				Herb – All herbaceous (non-woody) plants, regardless
	100	= Total Cove	er	of size, and woody plants less than 3.28 ft tall.
50% of total cover: 50	20% of	total cover:	20	W
Woody Vine Stratum (Plot size: 5 ft)				Woody vine – All woody vines greater than 3.28 ft in height.
. NI/A				neight.
2				
3				
4				Hydrophytic
5				Vegetation
		= Total Cove		Present? Yes X No
50% of total cover:				
		total bovol.	_	
Remarks: (Include photo numbers here or on a separate	sneet.)			

Case No. 2025-00064
Reponse to 1-69
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Sampling Point: WAS-11

SOIL

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.) Depth Matrix Redox Features Color (moist) Color (moist) Type¹ Texture (inches) C, PL silty clay loam 0-3 10YR 5/1 80 7.5 YR 4/4 20 M 3-10 10YR 6/1 85 15 С 7.5YR 4/6 M clay loam 85 15 С 10-16 10YR 6/1 7.5 YR 4/4 M clay loam ²Location: PL=Pore Lining, M=Matrix. ¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. **Hydric Soil Indicators:** Indicators for Problematic Hydric Soils³: ___ 2 cm Muck (A10) (MLRA 147) ___ Histosol (A1) Dark Surface (S7) ___ Histic Epipedon (A2) Polyvalue Below Surface (S8) (MLRA 147, 148) Coast Prairie Redox (A16) ___ Black Histic (A3) Thin Dark Surface (S9) (MLRA 147, 148) (MLRA 147, 148) ___ Hydrogen Sulfide (A4) Loamy Gleyed Matrix (F2) Piedmont Floodplain Soils (F19) Depleted Matrix (F3) ___ Stratified Layers (A5) (MLRA 136, 147) 2 cm Muck (A10) (LRR N) Redox Dark Surface (F6) Very Shallow Dark Surface (TF12) Depleted Below Dark Surface (A11) Depleted Dark Surface (F7) _ Other (Explain in Remarks) Thick Dark Surface (A12) Redox Depressions (F8) Sandy Mucky Mineral (S1) (LRR N, Iron-Manganese Masses (F12) (LRR N, MLRA 147, 148) MLRA 136) Sandy Gleyed Matrix (S4) Umbric Surface (F13) (MLRA 136, 122) ³Indicators of hydrophytic vegetation and ___ Sandy Redox (S5) ___ Piedmont Floodplain Soils (F19) (MLRA 148) wetland hydrology must be present, Stripped Matrix (S6) Red Parent Material (F21) (MLRA 127, 147) unless disturbed or problematic. Restrictive Layer (if observed): Type: Yes X **Hydric Soil Present?** Depth (inches): Remarks:

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Project/Site: Summer Shade	e Solar		Citv/Co	unty: Metcalfe/ Moni	oe	_ Sampling Date: 2/29/24
Applicant/Owner: Summer S	hade Solar, L	LC			State: KY	Sampling Point: WAS-112
Investigator(s): Kristen Clem			n Section	on, Township, Range: N	/A	<u> </u>
Landform (hillslope, terrace, et						Slope (%): 0
Subregion (LRR or MLRA): LF	RR	l at	. 36.853301	Long: -85	.679515	Datum: NAD83
Soil Map Unit Name: CbB		Lai	•	Long	NIVA/I alaasif	Datum
Are climatic / hydrologic condit	Carra and the after	6 m 2 m 1 f		X N	INVVI Classii	Described
Are Vegetation N, Soil N	u, or Hydro	logy IN	significantly disturb	ped? Are "Norma	I Circumstances"	present? Yes X No vers in Remarks.)
Are Vegetation N., Soil N.	or Hydro	logy N	naturally problema	itic? (If needed,	explain any answ	rers in Remarks.)
SUMMARY OF FINDIN	GS – Attacl	n site n	nap showing sam	pling point location	ons, transect	s, important features, etc.
Hydrophytic Vegetation Pres	ent? Ye	es	No X			
Hydric Soil Present?	Ye	es	No X No X	Is the Sampled Area within a Wetland?	Vos	No X
Wetland Hydrology Present?	Ye	es	No_X	within a wettand:	163	
Remarks:			1			
Upland point for W-	63a, W-63	b, W-	64a, and W-64l)		
HYDROLOGY					Canandan Indi	antone (esiaino esa af torre manuima di
Wetland Hydrology Indicate		radi aham	It all that apply			cators (minimum of two required)
Primary Indicators (minimum	or one is requi	rea; cned		D4.4\		il Cracks (B6)
Surface Water (A1) High Water Table (A2)		片	True Aquatic Plants (I Hydrogen Sulfide Odd			egetated Concave Surface (B8) atterns (B10)
Saturation (A3)		片		es on Living Roots (C3)		Lines (B16)
Water Marks (B1)		Ħ	Presence of Reduced	=	=	n Water Table (C2)
Sediment Deposits (B2)		┌	Recent Iron Reduction	, ,	Crayfish Bu	` ′
Drift Deposits (B3)			Thin Muck Surface (C	` '		Visible on Aerial Imagery (C9)
Algal Mat or Crust (B4)			Other (Explain in Ren	,		Stressed Plants (D1)
Iron Deposits (B5)					Geomorphi	c Position (D2)
Inundation Visible on Ae	rial Imagery (B	7)			Shallow Aq	uitard (D3)
Water-Stained Leaves (E	39)				Microtopog	raphic Relief (D4)
Aquatic Fauna (B13)					FAC-Neutra	al Test (D5)
Field Observations:	.,	X	5 (1			
Surface Water Present?			Depth (inches):			
Water Table Present?			Depth (inches):			ent? Yes No X
Saturation Present? (includes capillary fringe)	Yes	No <u>^</u>	_ Depth (inches):	Wetland I	Hydrology Prese	ent? Yes No_X
Describe Recorded Data (str	eam gauge, mo	nitoring	well, aerial photos, pre-	vious inspections), if ava	ailable:	
Remarks:						

30 ft	Absolute	Dominant I		Dominance Test worksheet:
Tree Stratum (Plot size:)	% Cover	Species?	Status	Number of Dominant Species
1. N/A				That Are OBL, FACW, or FAC: 0 (A)
2				Total Number of Deminent
3				Total Number of Dominant Species Across All Strata: 1 (B)
4.				Sporice / torode / till otrata.
				Percent of Dominant Species
5				That Are OBL, FACW, or FAC: 0 (A/B)
6				Prevalence Index worksheet:
7				
	:	= Total Cove	r	Total % Cover of: Multiply by:
50% of total cover:	20% of	total cover:_		OBL species x 1 =
Sapling/Shrub Stratum (Plot size: 15 ft)				FACW species x 2 =
1. N/A				FAC species x 3 =
· · ·				FACU species x 4 =
2				UPL species x 5 =
3				
4				Column Totals: (A) (B)
5				Prevalence Index = B/A =
6				
7				Hydrophytic Vegetation Indicators:
				1 - Rapid Test for Hydrophytic Vegetation
8				2 - Dominance Test is >50%
9				3 - Prevalence Index is ≤3.0 ¹
		= Total Cove		4 - Morphological Adaptations ¹ (Provide supporting
50% of total cover: 10	20% of	total cover:	1	
Herb Stratum (Plot size: 5 ft)				data in Remarks or on a separate sheet)
1. Lamium purpureum	60	Υ	FACU	Problematic Hydrophytic Vegetation ¹ (Explain)
2. Euonymus fortunei	40	N	FACU	
3. Glycine max*			-	¹ Indicators of hydric soil and wetland hydrology must
3. Glycine max		-		be present, unless disturbed or problematic.
4		<u> </u>		Definitions of Four Vegetation Strata:
5				
6				Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or
7				more in diameter at breast height (DBH), regardless of height.
				noight.
8				Sapling/Shrub – Woody plants, excluding vines, less
9				than 3 in. DBH and greater than or equal to 3.28 ft (1
10		<u> </u>		m) tall.
11				Herb – All herbaceous (non-woody) plants, regardless
	100	= Total Cove	r	of size, and woody plants less than 3.28 ft tall.
50% of total cover: 50	20% of	total cover: 2	20	
Woody Vine Stratum (Plot size: 5 ft)		_		Woody vine – All woody vines greater than 3.28 ft in
. NI/A				height.
• •				
2				
3				
4				Hydrophytic
5				Vegetation
		= Total Cove	r	Present? Yes No _X
50% of total cover:				
				<u> </u>
Remarks: (Include photo numbers here or on a separate	sneet.)			
*Old soybeans present				

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Reponse to 1-69
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Sampling Point: WAS-11

(inches)	Matrix			<u> Feature</u>		. 2	_		
1 1	Color (moist)	<u>%</u>	Color (moist)	%	Type ¹	Loc ²	Texture	Remarks Disturbed from playing	
-4	10YR 4/3	95	10YR 2/4, rocky	5	<u>C</u>	M	clay loam	Disturbed from plowing	
-15	10YR 4/4	100	- · <u></u> -		_		-	-	
	-				_				
			· ——						
			<u> </u>						
					-				
			· -						
					_		·		
		epletion, RN	M=Reduced Matrix, MS	S=Maske	d Sand G	ains.	² Location: P	L=Pore Lining, M=Matrix.	3
	Indicators:							ators for Problematic Hydric	Soils':
_ Histoso			Dark Surface		(- -)			cm Muck (A10) (MLRA 147)	
	pipedon (A2)		Polyvalue Be				, 148) C	Coast Prairie Redox (A16)	
	listic (A3)		Thin Dark Su Loamy Gleye			147, 148)	Б	(MLRA 147, 148) riedmont Floodplain Soils (F19)	
	en Sulfide (A4) ed Layers (A5)		Depleted Mat		(Г2)		<u> </u>	(MLRA 136, 147)	
_	uck (A10) (LRR N)		Redox Dark S		F6)		V	ery Shallow Dark Surface (TF1	2)
	ed Below Dark Surfa	ace (A11)	Depleted Dar	,	,			Other (Explain in Remarks)	_,
	ark Surface (A12)	,	Redox Depre		. ,			,	
	Mucky Mineral (S1)	(LRR N,	Iron-Mangan			(LRR N,			
MLR	A 147, 148)		MLRA 13	6)					
	Gleyed Matrix (S4)		Umbric Surfa					icators of hydrophytic vegetation	
	Redox (S5)		Piedmont Flo					etland hydrology must be presen	nt,
	d Matrix (S6)		Red Parent N	1aterial (F21) (MLF	RA 127, 14	7) un	less disturbed or problematic.	
	Layer (if observed	d):							
Type:									Y
Depth (ir	nches):						Hydric Soil	Present? Yes No	<u> </u>
emarks:									
emarks.									
emarks.									
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Project/Site: Summer Shade	e Solar		City/County:	Metcalfe/ Monro	e	Sampling Date: 2/29/24
Applicant/Owner: Summer S	hade Solar, LLC		_Only/ Ocumy:		State: KY	Sampling Point: WAS-115
Investigator(s): Kristen Clem			Section To	washin Range N/A		campung : cum
						Slone (%). 1
Landform (hillslope, terrace, et Subregion (LRR or MLRA): LF	RR	36.851337	Local relief (col	1.285.6	680048	Slope (70)
Subregion (LRR or MLRA):	```	Lat:		Long:	3000 10	Datum: 147 (200
Soil Map Unit Name: Ls, BaC						
Are climatic / hydrologic condit						
Are Vegetation N, Soil N	l, or Hydroloς	gy <u>Y</u> significan	tly disturbed?	Are "Normal	Circumstances" p	present? Yes X No
Are Vegetation N, Soil N	ًا, or Hydroloç	gy <u>N</u> naturally į	oroblematic?	(If needed, ex		
SUMMARY OF FINDIN	GS – Attach s	site map showir	ng samplin	g point location	ns, transects	, important features, etc.
Hydrophytic Vegetation Pres	ent? Yes	X No				
Hydric Soil Present?	Yes	X No		e Sampled Area in a Wetland?	vaa X	No
Wetland Hydrology Present?		X No		n a wetiand?	res <u>~</u>	NO
Remarks:						
Wetland point for W	/-65					
Wodana point for W						
HYDROLOGY						
Wetland Hydrology Indicate	ors:				Secondary Indica	ators (minimum of two required)
Primary Indicators (minimum	of one is required	l; check all that apply	/)		Surface Soil	Cracks (B6)
Surface Water (A1)		True Aquatic	Plants (B14)	Į	Sparsely Ve	getated Concave Surface (B8)
High Water Table (A2)		Hydrogen Su	ılfide Odor (C1)	Drainage Pa	tterns (B10)
Saturation (A3)				iving Roots (C3)	Moss Trim Li	
Water Marks (B1)		_	Reduced Iron (' i	_ `	Water Table (C2)
Sediment Deposits (B2)			Reduction in Ti	lled Soils (C6)	Crayfish Buri	
Drift Deposits (B3)		Thin Muck S	, ,			isible on Aerial Imagery (C9)
Algal Mat or Crust (B4) Iron Deposits (B5)		Other (Expla	in in Remarks)			tressed Plants (D1)
Inundation Visible on Ae	rial Imagery (R7)				Shallow Aqui	Position (D2)
Water-Stained Leaves (E	• • • •					aphic Relief (D4)
Aquatic Fauna (B13)	,				✓ FAC-Neutral	· ' '
Field Observations:						
Surface Water Present?	Yes No	X Depth (inche	es):			
Water Table Present?		X Depth (inche				
Saturation Present?	Yes X No	Depth (inche	es): 1	Wetland H	ydrology Presen	nt? Yes X No
(includes capillary fringe) Describe Recorded Data (stre					1-1-1-	
Describe Recorded Data (str	eam gauge, monii	toring well, aerial pho	otos, previous	nspections), if avail	iable:	
Remarks:						

T Circle (District 30 ft	Absolute	Dominant		Dominance Test worksheet:
Tree Stratum (Plot size:) 1. N/A		Species?	Status	Number of Dominant Species That Are OBL, FACW, or FAC: 1 (A)
2				Total Number of Dominant
3				Species Across All Strata: 1 (B)
4				Persont of Dominant Charles
5	· ·			Percent of Dominant Species That Are OBL, FACW, or FAC: 100 (A/B)
6				Prevalence Index worksheet:
7				Total % Cover of: Multiply by:
50% of total cover:		= Total Cove		OBL species x 1 =
4 F #4	20% 01	iolai cover.		FACW species x 2 =
₄ N/Δ				FAC species x 3 =
				FACU species x 4 =
2				UPL species x 5 =
3				
4				Column Totals: (A) (B)
5				Prevalence Index = B/A =
6				Hydrophytic Vegetation Indicators:
7				1 - Rapid Test for Hydrophytic Vegetation
8				2 - Dominance Test is >50%
9				3 - Prevalence Index is ≤3.0 ¹
		= Total Cove		4 - Morphological Adaptations ¹ (Provide supporting
50% of total cover:	20% of	total cover:		data in Remarks or on a separate sheet)
Herb Stratum (Plot size: 5 ft 1. Echinochloa grus-galli	10	N	FACW	Problematic Hydrophytic Vegetation ¹ (Explain)
2. Elymus virginicus	50	<u>Y</u>	FACW	
3. Juncus effusus	20	N	FACW	¹ Indicators of hydric soil and wetland hydrology must
4 Juncus tenius	5	N	FAC	be present, unless disturbed or problematic.
· · · · · · · · · · · · · · · · · · ·				Definitions of Four Vegetation Strata:
5				Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or
6				more in diameter at breast height (DBH), regardless of
7				height.
8				Sapling/Shrub – Woody plants, excluding vines, less
9				than 3 in. DBH and greater than or equal to 3.28 ft (1
10				m) tall.
11				Herb – All herbaceous (non-woody) plants, regardless
	85	= Total Cove	er	of size, and woody plants less than 3.28 ft tall.
50% of total cover: 42.5	20% of	total cover:	17	Woody vine – All woody vines greater than 3.28 ft in
Woody Vine Stratum (Plot size: 5 ft)				height.
1. N/A				
2				
3				
4				Hydranbytia
5				Hydrophytic Vegetation
		= Total Cove	er	Present? Yes X No
50% of total cover:	20% of	total cover:		
Remarks: (Include photo numbers here or on a separate s	sheet.)			
Carex unidentifiable due to mowing				
Carex unidentinable due to mowing				

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Sampling Point: WAS-11

(inches)	Matrix			ox Feature	es			_
	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²	Texture	Remarks
-15	10YR 4/1	90	7.5 YR 4/5	10	C, PL	M	clay loam	Soils disturbed from ag use
	-							
	· ·		<u> </u>					
			-					
			· -	· -				
	· ·		<u></u>					
· · · · · · · · · ·	Name and the Date of the Control of	mletien DA	A Deduced Metric M				21	L. Dona Lining M. Matrix
	Indicators:	epietion, Riv	/I=Reduced Matrix, M	i5=iviaske	d Sand Gra	ains.	Location: P	L=Pore Lining, M=Matrix. ators for Problematic Hydric Soils ³ :
			Dorle Curfoo	o (C7)				
_ Histoso	pipedon (A2)		Dark Surfac Polyvalue B		aco (SS) (N	II DA 1 <i>1</i> 7		cm Muck (A10) (MLRA 147) coast Prairie Redox (A16)
	listic (A3)		Thin Dark S				((MLRA 147, 148)
	en Sulfide (A4)		Loamy Gley			47, 140)	P	iedmont Floodplain Soils (F19)
	ed Layers (A5)		Depleted Ma		(1 2)		'	(MLRA 136, 147)
	uck (A10) (LRR N)		Redox Dark		F6)		V	ery Shallow Dark Surface (TF12)
	ed Below Dark Surfa	ice (A11)	Depleted Da					Other (Explain in Remarks)
_ Thick D	ark Surface (A12)	, ,	Redox Depr	essions (F	- 8)			
_ Sandy I	Mucky Mineral (S1)	(LRR N,	Iron-Mangai	nese Mass	ses (F12) (LRR N,		
MLR	A 147, 148)		MLRA 13	36)				
	Gleyed Matrix (S4)		Umbric Surf					icators of hydrophytic vegetation and
	Redox (S5)		Piedmont FI					tland hydrology must be present,
	d Matrix (S6)		Red Parent	Material (F21) (MLR	A 127, 14	7) un	less disturbed or problematic.
	Layer (if observed	l):	Artificial cob	ble/rock	fill creati	na		
Type: R			restrictive la					V
Depth (in	nches): <u>8</u>			,	0	J	Hydric Soil	Present? Yes X No
							•	
Remarks:								

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WETLAND DETERMINATION DATA FORM – Eastern Mountains and Piedmont Region

Project/Site: Summer Shade	Solar		Citv/Co	unty: Metcalfe/ Moni	roe	_ Sampling Date: 2/29/24
Applicant/Owner: Summer S	hade Solar, L	LC			State: KY	Sampling Point: WAS-116
Investigator(s): Kristen Clem			Section	n Township Range. N	/A	<u> </u>
Landform (hillslope, terrace, et						Slone (%): 0
Subregion (LRR or MLRA): LF						
		Lat:		Long:		Datum: Unland
Soil Map Unit Name: BaC2				v	NWI classif	ication: Opiding
Are climatic / hydrologic condit						
Are Vegetation N, Soil N	, or Hydro	logy N	significantly disturb	oed? Are "Norma	l Circumstances"	present? Yes X No vers in Remarks.)
Are Vegetation N, Soil N	, or Hydro	logy N	naturally problema	itic? (If needed,	explain any answ	vers in Remarks.)
SUMMARY OF FINDIN	GS – Attach	site m	ap showing sam	pling point location	ons, transect	s, important features, etc.
Hydrophytic Vegetation Prese	ent? Va	ie.	No X			
Hydric Soil Present?	Ye	s	No X No X	Is the Sampled Area	V	No X
Wetland Hydrology Present?	Υe	s	No X	within a Wetland?	res	NO
Remarks:			L			
Upland point for W-	65. Open f	ield ar	ea frequently r	nown causing d	isturbance t	to veg.
				g		10 10 91
HYDROLOGY						
Wetland Hydrology Indicate	ors:					cators (minimum of two required)
Primary Indicators (minimum	of one is requir					il Cracks (B6)
Surface Water (A1)			True Aquatic Plants (I			egetated Concave Surface (B8)
High Water Table (A2)			Hydrogen Sulfide Odd			atterns (B10)
Saturation (A3)				es on Living Roots (C3)		Lines (B16)
Water Marks (B1) Sediment Deposits (B2)			Presence of Reduced Recent Iron Reduction	, ,	Crayfish Bu	n Water Table (C2)
Drift Deposits (B3)			Thin Muck Surface (C	, ,		Visible on Aerial Imagery (C9)
Algal Mat or Crust (B4)			Other (Explain in Rem	,		Stressed Plants (D1)
Iron Deposits (B5)			` '	,	_	c Position (D2)
Inundation Visible on Ae	rial Imagery (B7	')			Shallow Aq	` '
Water-Stained Leaves (E	39)				Microtopog	raphic Relief (D4)
Aquatic Fauna (B13)					FAC-Neutra	al Test (D5)
Field Observations:		· · ·				
Surface Water Present?			Depth (inches):			
Water Table Present?			Depth (inches):			
Saturation Present? (includes capillary fringe)	Yes 1	Vo <u>х</u>	Depth (inches):	Wetland I	Hydrology Prese	ent? Yes No_X
Describe Recorded Data (stre	eam gauge, mo	nitoring w	vell, aerial photos, pre	l vious inspections), if ava	ailable:	
Remarks:						

VEGETATION (Four Strata) – Use scientific names of plants.

Tara Ciratura (Blataina 30 ft	Absolute	Dominant		Dominance Test worksheet:
Tree Stratum (Plot size:) 1. N/A		Species?	Status	Number of Dominant Species That Are OBL, FACW, or FAC: 0 (A)
2				Total Number of Dominant Species Across All Strata: 2 (B)
4				
5				Percent of Dominant Species That Are OBL, FACW, or FAC: 0 (A/B)
6				Prevalence Index worksheet:
·-		= Total Cov		Total % Cover of: Multiply by:
50% of total cover:				OBL species x 1 =
Sapling/Shrub Stratum (Plot size: 15 ft)	2070 01	total covor.		FACW species x 2 =
₄ N/Δ				FAC species x 3 =
				FACU species x 4 =
2.				UPL species x 5 =
3				Column Totals: (A) (B)
4				(1) (2)
5				Prevalence Index = B/A =
6				Hydrophytic Vegetation Indicators:
7				1 - Rapid Test for Hydrophytic Vegetation
8				2 - Dominance Test is >50%
9				3 - Prevalence Index is ≤3.0 ¹
		= Total Cov		4 - Morphological Adaptations ¹ (Provide supporting
	20% of	total cover:	4	data in Remarks or on a separate sheet)
Herb Stratum (Plot size: 5 ft)	10	NI	FACIL	Problematic Hydrophytic Vegetation ¹ (Explain)
1. Plantago lanceolota	10	N	FACU	
2. Lamium purpureum	30	Y	FACU	¹ Indicators of hydric soil and wetland hydrology must
3. Glycine max*		-	-	be present, unless disturbed or problematic.
4. Schedonorus arundinaceus	40	Υ	FACU	Definitions of Four Vegetation Strata:
5. Lamium amplexicaule	20	N	FACU	Tree Meady plants evaluating vince 2 in (7.6 cm) or
6				Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of
7				height.
8				Sapling/Shrub – Woody plants, excluding vines, less
9				than 3 in. DBH and greater than or equal to 3.28 ft (1
10				m) tall.
11	_			Herb – All herbaceous (non-woody) plants, regardless
	100	= Total Cov	er	of size, and woody plants less than 3.28 ft tall.
50% of total cover: 50	20% of	total cover:	20	Woody vine – All woody vines greater than 3.28 ft in
Woody Vine Stratum (Plot size: 5 ft)				height.
1. N/A				
2				
3				
4				Hadron bod's
5				Hydrophytic Vegetation
		= Total Cov	er	Present? Yes No X
50% of total cover:				
Remarks: (Include photo numbers here or on a separate				1
Area has been previously used as soyl		М		
Area has been previously used as soys	Jean ne	iu		

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SOIL

Sampling Point: WAS-116 Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.) Depth Redox Features Color (moist) Loc² Color (moist) Type Texture (inches) 0-12 silty clay loam 10YR 4/4 98 10YR 2/2 2 С M Soils disturbed by ag use ²Location: PL=Pore Lining, M=Matrix. ¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. **Hydric Soil Indicators:** Indicators for Problematic Hydric Soils³: ___ 2 cm Muck (A10) (MLRA 147) ___ Histosol (A1) Dark Surface (S7) ___ Histic Epipedon (A2) Polyvalue Below Surface (S8) (MLRA 147, 148) Coast Prairie Redox (A16) ___ Black Histic (A3) Thin Dark Surface (S9) (MLRA 147, 148) (MLRA 147, 148) ___ Hydrogen Sulfide (A4) Loamy Gleyed Matrix (F2) Piedmont Floodplain Soils (F19) ___ Stratified Layers (A5) Depleted Matrix (F3) (MLRA 136, 147) 2 cm Muck (A10) (LRR N) Redox Dark Surface (F6) Very Shallow Dark Surface (TF12) Depleted Below Dark Surface (A11) Depleted Dark Surface (F7) _ Other (Explain in Remarks) Thick Dark Surface (A12) Redox Depressions (F8) Sandy Mucky Mineral (S1) (LRR N, ___ Iron-Manganese Masses (F12) (LRR N, MLRA 147, 148) MLRA 136) Sandy Gleyed Matrix (S4) Umbric Surface (F13) (MLRA 136, 122) ³Indicators of hydrophytic vegetation and ___ Sandy Redox (S5) ___ Piedmont Floodplain Soils (F19) (MLRA 148) wetland hydrology must be present, Stripped Matrix (S6) Red Parent Material (F21) (MLRA 127, 147) unless disturbed or problematic. Restrictive Layer (if observed): Type: No X **Hydric Soil Present?** Depth (inches): Remarks:

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WETLAND DETERMINATION DATA FORM – Eastern Mountains and Piedmont Region

Project/Site: Summer Shade	Solar	Citv/Co	ounty: Metcalfe/ Monro	oe	Sampling Date: 2/29/24
Applicant/Owner: Summer Sh	nade Solar, LLC			State: KY	Sampling Point: WAS-117
Investigator(s): Kristen Cleme			on, Township, Range: N/	A	<u> </u>
Landform (hillslope, terrace, etc					Slone (%): 0-3
Subregion (LRR or MLRA): LR	?:) ₹R	1 at: 36.856320	Long: -85.	681103	Glope (70)
Soil Map Unit Name: CbB, Ba		_ Lat			
			. X	NVVI classific	cation: 1 2 111
Are climatic / hydrologic conditi					
Are Vegetation N, Soil N	, or Hydrology	/ N significantly distur	bed? Are "Normal	Circumstances"	present? Yes X No ers in Remarks.)
Are Vegetation N, Soil N	, or Hydrology	/ N naturally problema	atic? (If needed, e	explain any answe	ers in Remarks.)
SUMMARY OF FINDING	GS – Attach si	te map showing san	npling point locatio	ns, transects	s, important features, etc.
Hydrophytic Vegetation Prese	ont? Vos)	⟨ No.			
Hydric Soil Present?	yes >	(No No	Is the Sampled Area	Y	
Wetland Hydrology Present?	Yes >	No	within a Wetland?	Yes <u>//</u>	No
Remarks:					
Wetland point for W	-66. Depress	sion with standing	water downslope	from pond	
Trottaria point for tr	00. Dop.000	order with ottaining	water de wholepe	mom pond	
HYDROLOGY					
Wetland Hydrology Indicato	ors:			Secondary Indica	ators (minimum of two required)
Primary Indicators (minimum	of one is required;	check all that apply)	_	Surface Soil	Cracks (B6)
Surface Water (A1)		True Aquatic Plants (B14)	✓ Sparsely Ve	getated Concave Surface (B8)
High Water Table (A2)		Hydrogen Sulfide Od	or (C1)	✓ Drainage Pa	atterns (B10)
Saturation (A3)		Oxidized Rhizospher	es on Living Roots (C3)	Moss Trim L	ines (B16)
Water Marks (B1)		Presence of Reduced	d Iron (C4)	Dry-Season	Water Table (C2)
Sediment Deposits (B2)		Recent Iron Reduction	, ,	Crayfish Bur	rows (C8)
Drift Deposits (B3)		Thin Muck Surface (C	,		isible on Aerial Imagery (C9)
Algal Mat or Crust (B4)		Other (Explain in Rer	narks)		Stressed Plants (D1)
Iron Deposits (B5)					Position (D2)
Inundation Visible on Aer				Shallow Aqu	
Water-Stained Leaves (B	(9)			_	aphic Relief (D4)
Aquatic Fauna (B13)			<u></u>	✓ FAC-Neutra	l Test (D5)
Field Observations:	. X	Depth (inches): 2			
Surface Water Present?					
Water Table Present?		X Depth (inches): Depth (inches): 4		lydrology Prese	X
Saturation Present? (includes capillary fringe)					nt? Yes X No
Describe Recorded Data (stre	am gauge, monito	oring well, aerial photos, pre	vious inspections), if ava	ilable:	
Remarks:					
Nomano.					

VEGETATION (Four Strata) – Use scientific names of plants.

30 ft	Absolute	Dominant		Dominance Test worksheet:
Tree Stratum (Plot size:)	% Cover	Species?	Status	Number of Dominant Species
1. N/A				That Are OBL, FACW, or FAC: 1 (A)
2				Total Number of Deminent
3				Total Number of Dominant Species Across All Strata: 1 (B)
4.				(2)
				Percent of Dominant Species That Are ORL FACW or FAC: 100 (A/R)
5				That Are OBL, FACW, or FAC: 100 (A/B)
6				Prevalence Index worksheet:
7	-			Total % Cover of: Multiply by:
		= Total Cov		
50% of total cover:	20% of	total cover:		OBL species x 1 =
Sapling/Shrub Stratum (Plot size: 15 ft)				FACW species x 2 =
1. N/A				FAC species x 3 =
2				FACU species x 4 =
3				UPL species x 5 =
				Column Totals: (A) (B)
4				
5				Prevalence Index = B/A =
6	_			Hydrophytic Vegetation Indicators:
7				1 - Rapid Test for Hydrophytic Vegetation
8		-		2 - Dominance Test is >50%
9				
		= Total Cov		3 - Prevalence Index is ≤3.0 ¹
50% of total cover:				4 - Morphological Adaptations ¹ (Provide supporting
Herb Stratum (Plot size: 5 ft)	20 /0 01	total oover.		data in Remarks or on a separate sheet)
1. Microstegium vimineium	40	Υ	FAC	Problematic Hydrophytic Vegetation ¹ (Explain)
2. Typha latifolia	10	N	OBL	¹ Indicators of hydric soil and wetland hydrology must
3. Juncus effusus	5	N	FACW	be present, unless disturbed or problematic.
4. Elymus virginicus	5	N	FACW	Definitions of Four Vegetation Strata:
5. Packera glabella	5	N	OBL	John Marie of Four Vogetation of ata.
6. Lysimachia nummularia	5	N	FACW	Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or
				more in diameter at breast height (DBH), regardless of height.
7				neight.
8				Sapling/Shrub – Woody plants, excluding vines, less
9				than 3 in. DBH and greater than or equal to 3.28 ft (1
10				m) tall.
11				Herb – All herbaceous (non-woody) plants, regardless
	70	= Total Cov	er	of size, and woody plants less than 3.28 ft tall.
50% of total cover: 35	20% of	total cover:	14	W 1 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2
Woody Vine Stratum (Plot size: 5 ft)				Woody vine – All woody vines greater than 3.28 ft in height.
1. N/A				neight.
2				
3	_			
4				Hydrophytic
5				Vegetation
	:	= Total Cov	er	Present? Yes X No
50% of total cover:	20% of	total cover:		
Remarks: (Include photo numbers here or on a separate	sheet.)			
	,			

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Sampling Point: WAS-117

SOIL

Profile Desc	ription: (Describe	to the dep	th needed to docum	ent the	indicator	or confirm	the absence of	of indicators.)	
Depth	Matrix		Redox	c Feature	es				
(inches)	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²	<u>Texture</u>	Remarks	
0-2	10YR 4/2	90	7.5 YR 4/4	10	C, PL	M	silty clay loam		
2-10	10YR 6/1	85	7.5YR 4/6	15	С	М	clay loam		
10-16	10YR 5/1	85	7.5 YR 4/4	15	С	M	clay loam		
				-	-				
		-		-					
	-								
					<u> </u>				
					-				
1 _{Tymov} C. Co	nacotration D Dan	lotion DM	Dadwood Matrix MC	Mooko	d Cond C		² l continue DI	Doro Lining M. Motriy	
Hydric Soil I		letion, Rivi	=Reduced Matrix, MS	=IVIaske	d Sand Gr	ains.		=Pore Lining, M=Matrix. tors for Problematic Hydric	Soils ³ .
Histosol			Dark Surface	(\$7)				cm Muck (A10) (MLRA 147)	oons .
	oipedon (A2)		Polyvalue Bel		ace (S8) (N	II RΔ 147		past Prairie Redox (A16)	
Black His			Thin Dark Su					(MLRA 147, 148)	
	n Sulfide (A4)		Loamy Gleye			41, 140)		edmont Floodplain Soils (F19)	
	Layers (A5)		✓ Depleted Mat		(1 2)			(MLRA 136, 147)	
	ck (A10) (LRR N)		Redox Dark S		F6)			ry Shallow Dark Surface (TF1	2)
	Below Dark Surfac	e (A11)	Depleted Dar	,	,			her (Explain in Remarks)	
	ark Surface (A12)	0 (/)	Redox Depre				•.	(2.4)	
	lucky Mineral (S1) (I	RR N.	Iron-Mangane			LRR N.			
	\ 147, 148)	,	MLRA 136		· · · / (,			
	leyed Matrix (S4)		Umbric Surfa		(MLRA 13	6. 122)	³ Indio	cators of hydrophytic vegetation	n and
	edox (S5)		Piedmont Flo					and hydrology must be preser	
	Matrix (S6)		Red Parent M					ess disturbed or problematic.	,
	_ayer (if observed):				/ (1	<u>'</u>	
Type:									
	ches):						Hydric Soil F	Present? Yes X No	
Remarks:									

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WETLAND DETERMINATION DATA FORM – Eastern Mountains and Piedmont Region

Project/Site: Summer Shad	e Solar		City/Co	ounty: Metcalfe/ Monro	oe	Sampling Date: 2/29/24
Applicant/Owner: Summer S	Shade Solar.	LLC				Sampling Point: WAS-118
Investigator(s): Kristen Clen) Section	on Township Range N/A		
						Slone (%). 0
Landform (hillslope, terrace, e Subregion (LRR or MLRA): <u>L</u>	RR	Lot	. 36.856162	85.6	681116	Olope (70)
		Lat:		Long:		. Unland
Soil Map Unit Name: BaC2				V		
Are climatic / hydrologic condi						
Are Vegetation Y, Soil N	√, or Hyd	lrology N	significantly distur	bed? Are "Normal	Circumstances" p	oresent? Yes X No
Are Vegetation N , Soil N	√, or Hyd	Irology N	naturally problema	atic? (If needed, e	xplain any answe	rs in Remarks.)
SUMMARY OF FINDIN	IGS – Atta	ch site m	nap showing san	npling point locatio	ns, transects	, important features, etc.
Hydrophytic Vegetation Pres	sent?	Yes	No X			
Hydric Soil Present?	ione.	Yes	No_X No_X	Is the Sampled Area	Vaa	No X
Wetland Hydrology Present?	?	Yes	No X	within a Wetland?	res	NO ··
Remarks:						
Upland point for W-	-66					
opiana point for W	00					
HYDROLOGY						
Wetland Hydrology Indicat	ors:				Secondary Indica	tors (minimum of two required)
Primary Indicators (minimum	n of one is rea	uired; chec	k all that apply)		Surface Soil	Cracks (B6)
Surface Water (A1)			True Aquatic Plants (B14)	Sparsely Veg	getated Concave Surface (B8)
High Water Table (A2)			Hydrogen Sulfide Od	or (C1)	Drainage Pa	tterns (B10)
Saturation (A3)		닏		es on Living Roots (C3)	Moss Trim Li	
Water Marks (B1)		닏	Presence of Reduced	` '	_ `	Water Table (C2)
Sediment Deposits (B2)		\vdash	Recent Iron Reduction		Crayfish Bur	
Drift Deposits (B3)		Η	Thin Muck Surface (C	•		sible on Aerial Imagery (C9)
Algal Mat or Crust (B4) Iron Deposits (B5)		ш	Other (Explain in Rer	narks)		tressed Plants (D1) Position (D2)
Inundation Visible on Ae	erial Imagery ('R7)			Shallow Aqui	· · ·
Water-Stained Leaves (<i>D</i> .,				aphic Relief (D4)
Aquatic Fauna (B13)	/				FAC-Neutral	
Field Observations:						
Surface Water Present?	Yes	No X	Depth (inches):			
Water Table Present?			Depth (inches):			
Saturation Present?	Yes	No X	Depth (inches):	Wetland H	ydrology Preser	it? Yes No_X
(includes capillary fringe)					1-1-1-	
Describe Recorded Data (str	ream gauge, r	nonitoring \	weii, aeriai pnotos, pre	evious inspections), if avai	lable:	
Remarks:						

VEGETATION (Four Strata) – Use scientific names of plants.

30 ft	Absolute	Dominant		Dominance Test worksheet:
Tree Stratum (Plot size:)	% Cover	Species?	Status	Number of Dominant Species
1. N/A				That Are OBL, FACW, or FAC: 0 (A)
2				Total Number of Deminerat
3				Total Number of Dominant Species Across All Strata: 1 (B)
4.				eposico / toroco / tir etrata.
				Percent of Dominant Species
5				That Are OBL, FACW, or FAC: 0 (A/B)
6				Prevalence Index worksheet:
7				
	:	= Total Cove	er	Total % Cover of: Multiply by:
50% of total cover:	20% of	total cover:		OBL species x 1 =
Sapling/Shrub Stratum (Plot size: 15 ft)				FACW species x 2 =
1. N/A				FAC species x 3 =
· · ·				FACU species x 4 =
2				UPL species x 5 =
3				
4				Column Totals: (A) (B)
5				Prevalence Index = B/A =
6				
				Hydrophytic Vegetation Indicators:
7				1 - Rapid Test for Hydrophytic Vegetation
8				2 - Dominance Test is >50%
9				3 - Prevalence Index is ≤3.0 ¹
	20	= Total Cove	er	4 - Morphological Adaptations ¹ (Provide supporting
50% of total cover: 10	20% of	total cover:	4	
Herb Stratum (Plot size: 5 ft)				data in Remarks or on a separate sheet)
1. Andropogodon virginicus	40	N	FACU	Problematic Hydrophytic Vegetation ¹ (Explain)
2. Setaria pumila	10	N	FACU	
3 Schedonorus arundinaceus	50	<u>Y</u>	FACU	¹ Indicators of hydric soil and wetland hydrology must
3. Scriedonorus arundinaceus	30		FACU	be present, unless disturbed or problematic.
4				Definitions of Four Vegetation Strata:
5				
6				Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or
7				more in diameter at breast height (DBH), regardless of height.
				neight.
8				Sapling/Shrub – Woody plants, excluding vines, less
9				than 3 in. DBH and greater than or equal to 3.28 ft (1
10				m) tall.
11				Herb – All herbaceous (non-woody) plants, regardless
	100	= Total Cove	er	of size, and woody plants less than 3.28 ft tall.
50% of total cover: 45		total cover:		
Woody Vine Stratum (Plot size: 5 ft)		_		Woody vine – All woody vines greater than 3.28 ft in
. NI/A				height.
2				
3				
4				Hydrophytic
5				Vegetation
		= Total Cove		Present? Yes No $\frac{\chi}{}$
50% of total cover:				
		total oover.		
Remarks: (Include photo numbers here or on a separate	sneet.)			

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Sampling Point: WAS-11

SOIL

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.) Depth Redox Features Color (moist) Color (moist) Type Texture (inches) 0-14 10YR 4/4 98 10YR 2/4 2 С M clay loam ²Location: PL=Pore Lining, M=Matrix. ¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. **Hydric Soil Indicators:** Indicators for Problematic Hydric Soils³: ___ 2 cm Muck (A10) (MLRA 147) ___ Histosol (A1) Dark Surface (S7) ___ Histic Epipedon (A2) Polyvalue Below Surface (S8) (MLRA 147, 148) Coast Prairie Redox (A16) ___ Black Histic (A3) Thin Dark Surface (S9) (MLRA 147, 148) (MLRA 147, 148) ___ Hydrogen Sulfide (A4) Loamy Gleyed Matrix (F2) Piedmont Floodplain Soils (F19) ___ Stratified Layers (A5) Depleted Matrix (F3) (MLRA 136, 147) __ 2 cm Muck (A10) (LRR N) Redox Dark Surface (F6) Very Shallow Dark Surface (TF12) Depleted Below Dark Surface (A11) Depleted Dark Surface (F7) __ Other (Explain in Remarks) Thick Dark Surface (A12) Redox Depressions (F8) ___ Sandy Mucky Mineral (S1) (LRR N, ___ Iron-Manganese Masses (F12) (LRR N, MLRA 147, 148) MLRA 136) Sandy Gleyed Matrix (S4) Umbric Surface (F13) (MLRA 136, 122) ³Indicators of hydrophytic vegetation and ___ Sandy Redox (S5) ___ Piedmont Floodplain Soils (F19) (MLRA 148) wetland hydrology must be present, Stripped Matrix (S6) Red Parent Material (F21) (MLRA 127, 147) unless disturbed or problematic. Restrictive Layer (if observed): Type: No X **Hydric Soil Present?** Depth (inches): Remarks:

Appendix C TABLES

Table 1. Soil Types Known to Occur within the Summer Shade Solar Project, Metcalfe and Monroe Counties, Kentucky

Map Unit Symbol	Map Unit Name	Hydric (Yes/No)	Acres in AOI	Percent of AOI
BaB	Baxter gravelly silt loam, 2 to 6 percent slopes	No	74.7	5.1%
BaB2	Baxter gravelly silt loam, 2 to 6 percent slopes, eroded	No	1.8	0.1%
BaC	Baxter gravelly silt loam, 6 to 12 percent slopes	No	59.9	4.1%
BaC2	Baxter gravelly silt loam, 6 to 12 percent slopes, eroded	No	254.3	17.3%
BaD	Baxter gravelly silt loam, 12 to 20 percent slopes	No	20.1	1.4%
BaD2	Baxter gravelly silt loam, 12 to 20 percent slopes, eroded	No	197.6	13.5%
BaE	Baxter gravelly silt loam, 20 to 30 percent slopes	No	94.8	6.5%
BaE2	Baxter gravelly silt loam, 20 to 30 percent slopes, eroded	No	240.7	16.4%
BcC3	Baxter cherty silty clay loam, 6 to 12 percent slopes, severely eroded	No	5	0.3%
BcD3	Baxter cherty silty clay loam, 12 to 20 percent slopes, severely eroded	No	8.1	0.6%
BcE3	Baxter cherty silty clay loam, 20 to 30 percent slopes, severely eroded	No	2.7	0.2%
BoD	Bodine cherty silt loam, 12 to 20 percent slopes	No	3.2	0.2%
BoE	Bodine cherty silt loam, 20 to 35 percent slopes	No	8.8	0.6%
CbB	Captina silt loam, 2 to 6 percent slopes	No	6.1	0.4%
CkB	Clarksville cherty silt loam, 2 to 6 percent slopes	No	16.6	1.1%
CkC2	Clarksville cherty silt loam, 6 to 12 percent slopes, eroded	No	35.6	2.4%
CkD2	Clarksville cherty silt loam, 12 to 20 percent slopes, eroded	No	6.8	0.5%
CkE2	Clarksville cherty silt loam, 20 to 30 percent slopes, eroded	No	9.2	0.6%
CrB	Crider silt loam, 2 to 6 percent slopes	No	93	6.3%
CrB2	Crider silt loam, 2 to 6 percent slopes, eroded	No	5.1	0.3%
CrC2	Crider silt loam, 6 to 12 percent slopes, eroded	No	12.1	0.8%
CuB2	Cumberland cherty silt loam, 2 to 6 percent slopes, eroded (frederick)	No	1	0.1%
DaD	Dandridge and Westmoreland shaly silt loams, 12 to 20 percent slopes (dandridge, garmon)	No	11.2	0.8%



Map Unit Symbol	Map Unit Name	Hydric (Yes/No)	Acres in AOI	Percent of AOI
DaF	Dandridge and Westmoreland shaly silt loams, 20 to 50 percent slopes (dandridge, garmon)	No	34.6	2.4%
DcB	Dandridge and Westmoreland silt loams, 2 to 6 percent slopes (dandridge, garmon)	No	2.3	0.2%
DcC	Dandridge and Westmoreland silt loams, 6 to 12 percent slopes (dandridge, garmon)	No	4.3	0.3%
DeB	Dewey silt loam, 2 to 6 percent slopes	No	13.7	0.9%
DeC2	Dewey silt loam, 6 to 12 percent slopes, eroded	No	0.2	0.0%
DkB	Dickson silt loam, 2 to 6 percent slopes	No	12.9	0.9%
HcB	Humphreys cherty silt loam, 2 to 6 percent slopes	No	1.5	0.1%
HcC2	Humphreys cherty silt loam, 6 to 12 percent slopes, eroded	No	5.5	0.4%
Hg	Huntington gravelly silt loam (sensabaugh)	No	21.9	1.5%
Hu	Huntington silt loam	No	43.9	3.0%
Ls	Lindside silt loam	No	20.9	1.4%
MoB	Mountview silt loam, 2 to 6 percent slopes	No	0.3	0.0%
Nk	Newark silt loam	Yes	49	3.3%
PmB	Pembroke silt loam, 2 to 6 percent slopes	No	9.2	0.6%
Pt	Pits, quarries	No	2.4	0.2%
Rk	Rock land (rock outcrop)	No	12.8	0.9%
SaB	Sango silt loam, 2 to 6 percent slopes	No	26.4	1.8%
Та	Taft silt loam	Yes	21.3	1.5%
W	Water	No	2.1	0.1%
FrD	Frederick cherty silt loam, 12 to 20 percent slopes	No	4.9	0.3%
Hu	Huntington silt loam	No	0.9	0.1%
Ne	Newark silt loam	Yes	6.4	0.4%
TrC	Trimble cherty silt loam, 6 to 12 percent slopes	No	1.6	0.1%
	Totals for Are	a of Interest	1,467.4	100.0%



Table 2. Wetlands Identified at the Summer Shade Solar Project, Metcalfe and Monroe Counties, Kentucky

Wetland Name	Latitude	Longitude	Cowardin Classification	Preliminary Jurisdictional Class	Total Area (Acres)
W-01	36.872039	-85.684335	PEM	RPW	0.08
W-02a	36.875907	-85.684275	PEM	NRPW	0.36
W-02b	36.876135	-85.683519	PEM	NRPW	0.02
W-03	36.876697	-85.680776	PEM	NRPW	0.01
W-04	36.879302	-85.682514	PEM	NRPW	0.28
W-05	36.879680	-85.682086	PEM	NRPW	0.14
W-06a	36.879495	-85.683829	PEM	NRPW	0.79
W-06b	36.879249	-85.684853	PEM	NRPW	0.40
W-06c	36.879646	-85.684289	PEM	NRPW	0.01
W-07	36.878640	-85.685301	PEM	NRPW	0.18
W-08	36.880449	-85.684397	PEM	NRPW	0.03
W-09	36.880292	-85.683240	PEM	NRPW	0.29
W-10	36.880170	-85.681664	PEM	NRPW	0.05
W-11	36.880365	-85.682584	PEM	NRPW	0.02
W-12	36.880143	-85.682987	PEM	NRPW	0.06
W-13	36.880563	-85.682761	PEM	NRPW	0.06
W-14	36.881340	-85.681855	PEM	NRPW	0.02
W-15	36.880960	-85.681942	PEM	NRPW	0.22
W-16a	36.881192	-85.682946	PEM	NRPW	0.51
W-16b	36.881855	-85.682065	PFO	NRPW	0.02
W-16c	36.882186	-85.681416	PEM	NRPW	0.18
W-17	36.885457	-85.680928	PEM	NRPW	0.44
W-18a	36.881400	-85.678854	PFO	NRPW	0.05
W-18b	36.881344	-85.678902	PEM	NRPW	0.01
W-19	36.884139	-85.684102	PEM	NRPW	0.19
W-20	36.886187	-85.685987	PEM	NRPW	0.01
W-21	36.882102	-85.686428	PEM	NRPW	1.37
W-22a	36.882297	-85.691037	PEM	RPW	1.38
W-22b	36.882297	-85.691583	PEM	RPW	0.01
W-22c	36.883194	-85.692906	PEM	RPW	0.11
W-23	36.851625	-85.685255	PSS	RPW	1.17
W-24	36.852966	-85.685075	PEM	RPW	0.03
W-25	36.851137	-85.692906	PEM	NRPW	0.06
W-26	36.849475	-85.690660	PFO	NRPW	0.25
W-27	36.848948	-85.690524	PFO	NRPW	0.35
W-28	36.845763	-85.687263	PEM	NRPW	0.01
W-29a	36.838989	-85.693404	PEM	NRPW	0.00
W-29b	36.838964	-85.693560	PEM	NRPW	0.00



Wetland Name	Latitude	Longitude	Cowardin Classification	Preliminary Jurisdictional Class	Total Area (Acres)
W-29c	36.838798	-85.694341	PEM	NRPW	0.01
W-29d	36.838549	-85.694609	PEM	NRPW	0.04
W-30	36.838167	-85.695278	PEM	NRPW	0.83
W-31	36.837878	-85.695740	PEM	NRPW	0.04
W-32	36.837644	-85.695096	PEM	NRPW	0.22
W-33	36.840634	-85.697127	PEM	NRPW	0.03
W-34	36.845719	-85.688096	PEM	NRPW	0.04
W-35	36.845604	-85.689923	PEM	NRPW	0.01
W-36	36.850207	-85.701280	PEM	RPW	0.41
W-37	36.845826	-85.690824	PEM	NRPW	0.07
W-38	36.850723	-85.701711	PFO	RPW	0.35
W-39	36.851151	-85.702339	PFO	RPW	0.42
W-40	36.851548	-85.699686	PEM	RPW	0.10
W-41	36.853992	-85.698259	PEM	RPW	0.48
W-42	36.853910	-85.699784	PFO	RPW	0.47
W-43	36.854466	-85.697164	PEM	RPW	0.05
W-44	36.854158	-85.696891	PEM	RPW	0.14
W-45	36.862732	-85.699934	PFO	NRPW	0.01
W-46	36.859722	-85.699105	PEM	NRPW	0.00
W-47	36.858517	-85.697229	PEM	NRPW	0.15
W-48	36.858235	-85.698866	PEM	NRPW	0.02
W-49a	36.855579	-85.695487	PFO	RPW	0.42
W-49b	36.855846	-85.695160	PEM	RPW	0.01
W-50	36.836089	-85.700010	PFO	NRPW	0.07
W-51a	36.836518	-85.699320	PFO	NRPW	0.44
W-51b	36.837288	-85.698827	PEM	NRPW	0.76
W-52	36.847819	-85.703470	PEM	NRPW	0.04
W-53	36.846846	-85.699039	PEM	NRPW	0.01
W-54	36.849956	-85.699786	PEM	RPW	2.02
W-55a	36.848826	-85.698511	PEM	RPW	1.16
W-55b	36.849331	-85.698137	PFO	RPW	0.17
W-56	36.848392	-85.697633	PEM	RPW	0.13
W-57	36.848133	-85.697503	PEM	RPW	0.04
W-58	36.849475	-85.698957	PEM	NRPW	0.38
W-59a	36.849464	-85.695339	PFO	RPW	0.23
W-59b	36.849982	-85.694082	PSS	RPW	3.60
W-60	36.860078	-85.678587	PEM	NRPW	1.00
W-61	36.858278	-85.680398	PEM	NRPW	0.13
W-62	36.859379	-85.682642	PEM	NRPW	3.17
W-63a	36.853625	-85.680810	PEM	RPW	0.47
W-63b	36.853278	-85.679326	PSS	RPW	0.01



Wetland Name	Latitude	Longitude	Cowardin Classification	Preliminary Jurisdictional Class	Total Area (Acres)
W-64a	36.853340	-85.678891	PEM	RPW	0.08
W-64b	36.853315	-85.678885	PSS	RPW	0.06
W-65	36.851245	-85.680053	PEM	NRPW	0.31
W-66	36.856254	-85.681449	PEM	NRPW	0.57

¹ Pending official determination by the USACE

Table 3. Streams Identified at the Summer Shade Solar Project, Metcalfe and Monroe Counties, Kentucky

Stream Name	Latitude	Longitude	Flow Class	Preliminary Jurisdictional Class ¹	Width (ft)	Total Linear Feet
S-001-iii	36.866866	-85.688626	PER	RPW	18	6714.40
S-002-i	36.867287	-85.694996	PER	RPW	11	653.84
S-003-i	36.866778	-85.695635	EPH	NRPW	2	132.52
S-004-i	36.865632	-85.694134	EPH	RPW	2	43.69
S-004-i	36.865765	-85.693799	INT	RPW	3.5	198.59
S-004-ii	36.865802	-85.693185	INT	RPW	3.5	195.25
S-005-i	36.865898	-85.693881	EPH	NRPW	1	116.68
S-006-ii	36.865575	-85.692655	INT	RPW	4	1145.74
S-007-i	36.865386	-85.692130	INT	RPW	3	308.24
S-008-i	36.865136	-85.691861	EPH	NRPW	1.5	126.61
S-009-i	36.864659	-85.692580	EPH	NRPW	2	170.3
S-010-i	36.867892	-85.691743	EPH	NRPW	1.5	274.12
S-011-i	36.869472	-85.689397	EPH	RPW	2	77.93
S-011-i	36.868995	-85.689870	INT	RPW	4	402.31
S-011-ii	36.867946	-85.690455	INT	RPW	4	638.14
S-012-i	36.868681	-85.689306	EPH	NRPW	2	140.05
S-012-i	36.868568	-85.689690	INT	NRPW	3	108.61
S-013-i	36.868431	-85.689591	EPH	NRPW	2	180.53
S-014-i	36.868385	-85.689481	EPH	NRPW	1	26.47
S-015-i	36.868305	-85.690500	EPH	NRPW	1	94.7
S-016-i	36.868196	-85.690478	EPH	NRPW	1	128.16
S-017-i	36.864673	-85.692979	EPH	NRPW	2	83.38
S-018-i	36.865110	-85.693812	EPH	RPW 1.5		76.92
S-018-i	36.865453	-85.693612	INT	RPW	2	205.85
S-019-i	36.866946	-85.694018	EPH	RPW	2	92.56



Stream Name	Latitude	Longitude	Flow Class	Preliminary Jurisdictional Class ¹	Width (ft)	Total Linear Feet
S-019-i	36.867181	-85.693647	INT	RPW	2	189.4
S-020-i	36.868546	-85.695221	EPH	NRPW	NRPW 1.5	
S-021-i	36.868664	-85.695322	EPH	NRPW	2	170.98
S-022-i	36.869124	-85.696718	EPH	NRPW	3	435.15
S-023-i	36.869731	-85.697217	INT	RPW	4	230.79
S-024-i	36.870355	-85.695555	EPH	NRPW	3	267.96
S-025-i	36.869972	-85.694410	INT	NRPW	1	50.71
S-026-i	36.870073	-85.694401	EPH	NRPW	3	70.98
S-026-ii	36.869755	-85.694730	EPH	NRPW	3	243.65
S-027-i	36.869198	-85.691552	PER	RPW	2	287.29
S-027-i	36.869259	-85.692239	INT	RPW	10	184.14
S-027-ii	36.868754	-85.693560	INT	RPW	10	768.7
S-028-i	36.869042	-85.692422	EPH	NRPW	1.5	53.5
S-029-i	36.869027	-85.692544	EPH	NRPW	2	60.47
S-030-i	36.869441	-85.691978	EPH	NRPW	1.5	75.74
S-031-i	36.869205	-85.693692	INT	NRPW	3	470.09
S-032-i	36.869351	-85.688133	EPH	NRPW	1	95.47
S-032-i	36.869210	-85.688108	INT	NRPW	4	8.79
S-032-ii	36.868010	-85.688415	INT	RPW	4	1036.34
S-033-i	36.869240	-85.687992	EPH	NRPW	1.5	76.46
S-034-i	36.869013	-85.688268	EPH	NRPW	1	57.23
S-035-i	36.868672	-85.687721	EPH	NRPW	2.5	316.45
S-036-i	36.867482	-85.687829	EPH	NRPW	2.5	218.94
S-037-i	36.866141	-85.689117	INT	RPW	11	591.73
S-038-i	36.865678	-85.687189	EPH	NRPW	3	256.41
S-039-i	36.867138	-85.689431	PER	RPW	2	73.22
S-040-i	36.866656	-85.691202	EPH	NRPW	1.5	135.13
S-041-i	36.863158	-85.693680	EPH	NRPW	4	191.29
S-042-i	36.863351	-85.693777	EPH	NRPW	2.5	90.85
S-043-i	36.864093	-85.691777	EPH	NRPW	3	534.17
S-044-i	36.864329	-85.691472	EPH	NRPW	2	135.04
S-045-i	36.864614	-85.690798	EPH	NRPW 3		37.33
S-046-i	36.864898	-85.690825	EPH	NRPW 1		166.91
S-047-i	36.863585	-85.691809	EPH	NRPW 2		202.18
S-048-i	36.863567	-85.691999	EPH	NRPW 2		126.28
S-049-i	36.863350	-85.691788	EPH	NRPW	2	120.73



Stream Name	Latitude	Longitude	Flow Class	Preliminary Jurisdictional Class ¹	Width (ft)	Total Linear Feet
S-050-i	36.862491	-85.692269	EPH	NRPW	2.5	140.35
S-051-i	36.861401	-85.691895	EPH	NRPW 2		176.83
S-052-i	36.861226	-85.692036	EPH	NRPW	2	73.03
S-053-i	36.860356	-85.691538	EPH	NRPW	2.5	141.91
S-054-i	36.860128	-85.691608	EPH	NRPW	2.5	180.43
S-055-i	36.859757	-85.691308	EPH	NRPW	2.5	226.97
S-055-i	36.860149	-85.691379	INT	NRPW	5	87.15
S-055-ii	36.860430	-85.691175	INT	NRPW	5	158.4
S-056-i	36.859393	-85.692933	EPH	NRPW	1.5	71.57
S-057-ii	36.871818	-85.684508	PER	RPW	10	607.98
S-057-iii	36.870778	-85.690115	PER	RPW	10	1411.45
S-058-i	36.869760	-85.690404	EPH	RPW	3.5	138.1
S-058-i	36.869935	-85.690471	INT	NRPW	4	11.1
S-058-ii	36.870138	-85.690716	INT	RPW	4	218.25
S-059-i	36.869729	-85.690387	EPH	NRPW	1.5	31.22
S-060-i	36.869959	-85.690327	EPH	NRPW	2	105.42
S-061-i	36.869345	-85.686229	EPH	NRPW	1.5	272.25
S-062-i	36.869715	-85.684472	EPH	NRPW	1.5	174.04
S-062-i	36.869613	-85.684789	INT	NRPW	3.5	47.02
S-062-ii	36.868304	-85.686212	INT	NRPW	3.5	1455.09
S-063-i	36.868566	-85.686534	EPH	NRPW	1	162.14
S-064-i	36.868336	-85.686132	INT	NRPW	2	52.01
S-064-i	36.868332	-85.685904	EPH	NRPW	2	87.37
S-065-i	36.867889	-85.686717	EPH	NRPW	1	128.37
S-066-i	36.867163	-85.686348	EPH	NRPW	1.5	165.73
S-067-i	36.866365	-85.687267	EPH	NRPW	2.5	60.87
S-068-i	36.866241	-85.686647	EPH	NRPW	3	41.14
S-069-i	36.866227	-85.686547	EPH	NRPW	2	37.79
S-070-i	36.866895	-85.686301	EPH	NRPW	1	66.68
S-071-i	36.866755	-85.686080	EPH	NRPW	1.5	74.3
S-072-i	36.866865	-85.685763	EPH	NRPW	1	178.81
S-073-i	36.866791	-85.685638	EPH	NRPW	1.5	155.29
S-074-i	36.866729	-85.685563	EPH	NRPW	1	44.01
S-075-i	36.866761	-85.685473	EPH	NRPW	1.5	43.47
S-076-ii	36.867140	-85.683797	PER	RPW	12	343.16
S-077-i	36.868839	-85.684105	INT	RPW	2	134.79



Stream Name	Latitude	Longitude	Flow Class	Preliminary Jurisdictional Class ¹	Width (ft)	Total Linear Feet
S-077-ii	36.867941	-85.684306	INT	RPW	2	581.21
S-078-i	36.868231	-85.684555	EPH	NRPW	1	97.78
S-079-i	36.868841	-85.684266	EPH	NRPW	1	96.14
S-080-i	36.869729	-85.684854	EPH	NRPW	1	112.01
S-081-i	36.870897	-85.685061	EPH	NRPW	1.5	76.16
S-082-i	36.871028	-85.684199	EPH	NRPW	1.5	45.64
S-082-ii	36.871163	-85.684868	PER	RPW	2	71.81
S-082-ii	36.871142	-85.684560	INT	RPW	1.5	123.51
S-082-ii	36.871129	-85.684312	EPH	RPW	1.5	53.72
S-083-i	36.871348	-85.683512	EPH	NRPW	1	35.17
S-083-ii	36.871118	-85.683850	EPH	NRPW	1	236.50
S-084-i	36.871163	-85.683571	EPH	NRPW	4	125.15
S-085-i	36.872789	-85.684035	EPH	NRPW	1.5	271.08
S-086-i	36.872645	-85.683826	EPH	NRPW	1.5	182.07
S-087-i	36.872271	-85.683666	EPH	NRPW	3	279.32
S-088-i	36.871568	-85.683759	EPH	NRPW	1	77.32
S-089-i	36.871316	-85.683445	EPH	NRPW	1	74.48
S-090-i	36.871071	-85.683491	EPH	NRPW	2	30.59
S-091-i	36.870980	-85.683523	EPH	NRPW	1.5	171.07
S-092-i	36.879249	-85.681509	INT	NRPW	4	33.99
S-092-ii	36.879325	-85.681995	INT	NRPW	4	288.04
S-093-i	36.879322	-85.681401	EPH	NRPW	1	94.96
S-094-i	36.878431	-85.681881	EPH	NRPW	1.5	738.52
S-095-i	36.879485	-85.680334	EPH	NRPW	1.5	136.5
S-096-i	36.879052	-85.683480	INT	NRPW	3	142.66
S-097-ii	36.879967	-85.683704	PER	NRPW	4.5	2052.4
S-098-i	36.883376	-85.680488	INT	NRPW	1.5	279.06
S-098-ii	36.881575	-85.682361	INT	NRPW	1.5	1110.81
S-099-i	36.880813	-85.684070	EPH	NRPW	0.5	102.94
S-100-i	36.880453	-85.680210	EPH	NRPW	0.5	432.92
S-101-i	36.880122	-85.684973	INT	NRPW	1.5	523.95
S-102-i	36.881045	-85.684809	EPH	NRPW	1	51.89
S-103-i	36.870086	-85.682478	EPH	NRPW	1.5	371.12
S-104-i	36.869556	-85.682505	EPH	NRPW	1	173.49
S-105-i	36.869469	-85.682490	EPH	NRPW	1.5	150.85
S-105-ii	36.869377	-85.682122	EPH	NRPW	1.5	95.06



Stream Name	Latitude	Longitude	Flow Class	Preliminary Jurisdictional Class ¹	Width (ft)	Total Linear Feet
S-106-i	36.869334	-85.682217	EPH	NRPW	1.5	23.13
S-107-i	36.869011	-85.682470	EPH	NRPW	1	129.5
S-108-iii	36.870321	-85.681528	PER	RPW	6	1647.91
S-109-i	36.869780	-85.682116	EPH	NRPW	1	123.73
S-110-i	36.870492	-85.682366	EPH	NRPW	1.5	365.33
S-110-ii	36.870229	-85.681797	INT	RPW	2	36.06
S-111-i	36.871834	-85.680219	PER	RPW	3.5	346.57
S-112-i	36.870556	-85.682326	EPH	NRPW	1.5	323.11
S-113-i	36.870643	-85.682183	EPH	NRPW	1.5	338
S-114-i	36.872287	-85.681904	EPH	NRPW	2	169.48
S-114-ii	36.870819	-85.681784	PER	RPW	4	426.5
S-114-ii	36.871562	-85.681946	INT	RPW	2.5	182.88
S-114-ii	36.871939	-85.681946	EPH	RPW	2	101.02
S-115-i	36.871273	-85.681111	EPH	NRPW	1	182.12
S-116-i	36.870832	-85.682258	EPH	NRPW	1.5	278.32
S-117-i	36.870990	-85.682241	EPH	NRPW	1	283.83
S-118-i	36.871166	-85.682083	EPH	NRPW	1	185.59
S-119-i	36.872093	-85.681974	EPH	NRPW	2.5	37.34
S-120-i	36.873861	-85.679998	EPH	NRPW	3	84.02
S-120-ii	36.873516	-85.680859	PER	NRPW	3	410.35
S-120-ii	36.873791	-85.680157	EPH	NRPW	3	32.1
S-121-i	36.873859	-85.680108	EPH	NRPW	2	32.54
S-122-i	36.873692	-85.681325	EPH	NRPW	2	31.2
S-123-i	36.873947	-85.681127	EPH	NRPW	1	69.4
S-124-i	36.874483	-85.682232	EPH	NRPW	1	45.91
S-125-i	36.874263	-85.682771	EPH	NRPW	4	74.76
S-126-i	36.874635	-85.683832	EPH	NRPW	4	148.25
S-127-i	36.874659	-85.683934	EPH	NRPW	1.5	64.39
S-128-i	36.877078	-85.684334	EPH	NRPW	3	738.96
S-129-i	36.876084	-85.683293	EPH	NRPW	2	78.26
S-130-i	36.876410	-85.682496	EPH	NRPW	2	508.44
S-131-i	36.875772	-85.681564	EPH	NRPW	3	171.04
S-132-i	36.879486	-85.685991	EPH	NRPW	1	38.91
S-133-i	36.879252	-85.686342	EPH	NRPW	1.5	90.25
S-134-i	36.879316	-85.686200	EPH	NRPW	1.5	50.6
S-135-i	36.879341	-85.686388	EPH	NRPW	1	69.72



Stream Name	Latitude	Longitude	Flow Class	Preliminary Jurisdictional Class ¹	Width (ft)	Total Linear Feet
S-136-i	36.879333	-85.686446	EPH	NRPW	1	30.11
S-137-i	36.879715	-85.686035	EPH	NRPW	1	124.17
S-138-i	36.879876	-85.685988	EPH	NRPW	1	72.21
S-139-i	36.879917	-85.686037	EPH	NRPW	1.5	56.4
S-140-i	36.880208	-85.684881	EPH	NRPW	1	100.01
S-141-i	36.880368	-85.683901	EPH	NRPW	1	69.78
S-142-i	36.880301	-85.682465	EPH	NRPW	2.5	87.67
S-143-i	36.880384	-85.682319	EPH	NRPW	1.5	74.45
S-144-i	36.880533	-85.679185	INT	NRPW	2	1727.53
S-145-i	36.881060	-85.683134	EPH	NRPW	1	28.07
S-146-i	36.883102	-85.679163	EPH	NRPW	1.5	81.09
S-147-i	36.883535	-85.679588	EPH	NRPW	2	131.72
S-148-i	36.883073	-85.680583	INT	NRPW	4	38.54
S-149-i	36.884398	-85.679140	EPH	NRPW	1.5	226.83
S-150-i	36.884777	-85.678652	EPH	NRPW	1	94.08
S-151-i	36.886210	-85.675423	EPH	NRPW	1.5	55.48
S-152-i	36.886198	-85.675551	EPH	NRPW	1.5	60.06
S-153-i	36.883439	-85.678728	EPH	NRPW	3	111.06
S-154-i	36.884977	-85.675531	EPH	NRPW	1	196.03
S-155-i	36.881768	-85.678837	EPH	NRPW	2	210.36
S-156-i	36.883564	-85.675645	EPH	NRPW	1.5	65.81
S-157-i	36.882101	-85.677081	EPH	NRPW	2	66.25
S-158-i	36.881511	-85.677237	EPH	NRPW	1.5	65.82
S-159-i	36.885499	-85.686735	EPH	NRPW	3	262.81
S-160-i	36.885588	-85.687130	EPH	NRPW	1.5	21.02
S-161-i	36.885617	-85.686288	EPH	NRPW	1	39.63
S-162-i	36.886231	-85.685827	INT	NRPW	1	236.71
S-163-i	36.886134	-85.685577	INT	NRPW	1.5	67.77
S-163-i	36.886135	-85.685462	INT	NRPW	1.5	32.29
S-164-i	36.886306	-85.684147	EPH	NRPW	3	884.14
S-165-i	36.886324	-85.682809	EPH	NRPW	1	119.22
S-166-i	36.885076	-85.683027	EPH	NRPW	1.5	123.52
S-167-i	36.884390	-85.682909	EPH	NRPW 1.5		334.39
S-168-i	36.884399	-85.682761	EPH	NRPW 1		50.15
S-169-i	36.883230	-85.684412	EPH	NRPW 2		496.59
S-170-i	36.882503	-85.682792	EPH	NRPW	2	422.06



Stream Name	Latitude	Longitude	Flow Class	Preliminary Jurisdictional Class ¹	Width (ft)	Total Linear Feet
S-171-i	36.883072	-85.692534	INT	RPW	3	589.67
S-172-i	36.874945	-85.681468	EPH	NRPW	1	119.21
S-173-i	36.879936	-85.687155	EPH	NRPW	3	50.89
S-174-ii	36.853967	-85.682412	PER	RPW	4	2017.99
S-175-i	36.852618	-85.685679	PER	RPW	3	42.19
S-175-ii	36.853182	-85.685581	PER	RPW	3	414.83
S-176-i	36.852472	-85.685516	INT	RPW	4	162.49
S-177-i	36.853047	-85.685312	INT	RPW	1	148.55
S-178-i	36.849188	-85.683329	EPH	NRPW	4	267.05
S-178-ii	36.849930	-85.683446	EPH	NRPW	4	463.55
S-179-i	36.849362	-85.683699	EPH	NRPW	3	102.75
S-180-i	36.850157	-85.682680	EPH	NRPW	1.5	236.71
S-181-i	36.848989	-85.690829	INT	NRPW	2	184.15
S-182-i	36.843698	-85.698668	EPH	NRPW	2	206
S-183-i	36.842916	-85.699189	INT	NRPW	5	223.75
S-184-i	36.840379	-85.699559	INT	NRPW	4	740.27
S-185-i	36.839865	-85.697840	EPH	NRPW	1.5	63.64
S-186-i	36.838668	-85.700947	INT	NRPW	4	407.46
S-187-i	36.838967	-85.701018	INT	NRPW	3	66.86
S-188-i	36.837988	-85.695838	EPH	NRPW	2	190.5
S-189-i	36.839069	-85.698337	PER	NRPW	5	59.89
S-189-ii	36.838180	-85.696798	PER	NRPW	5	1128.24
S-190-i	36.840150	-85.696185	INT	NRPW	3	109.84
S-190-i	36.839949	-85.696445	INT	NRPW	3	24.79
S-190-ii	36.839784	-85.697149	EPH	NRPW	2	501.15
S-190-ii	36.839997	-85.696345	INT	NRPW	3	57.73
S-191-i	36.839985	-85.696210	INT	NRPW	1	41.21
S-192-i	36.839084	-85.698202	EPH	NRPW	0.5	36.38
S-193-i	36.839815	-85.697719	EPH	NRPW	1.5	39.85
S-194-i	36.841714	-85.697604	EPH	NRPW	3	110.13
S-195-i	36.843710	-85.693652	EPH	NRPW	2	602.19
S-196-i	36.849312	-85.699768	INT	RPW	3	289.5
S-197-i	36.849846	-85.700786	INT	RPW 3		125.93
S-198-i	36.862363	-85.698857	PER	RPW 6		207.47
S-199-i	36.864179	-85.698372	EPH	NRPW	0.5	374.39
S-200-i	36.864014	-85.697734	EPH	NRPW	1	47.96



Stream Name	Latitude	Longitude	Flow Class	Preliminary Jurisdictional Class ¹	Width (ft)	Total Linear Feet
S-201-iii	36.864490	-85.703173	PER	RPW	4	1281.5
S-202-i	36.864550	-85.702383	EPH	NRPW	1.5	124.97
S-203-i	36.863890	-85.703232	INT	RPW	3	125.69
S-203-ii	36.864326	-85.703545	INT	RPW	4	285.9
S-204-i	36.863802	-85.703393	EPH	NRPW	1	135.06
S-205-i	36.863921	-85.703580	EPH	NRPW	1	95.78
S-206-i	36.864926	-85.703944	INT	RPW	3	95.98
S-207-i	36.864095	-85.704653	PER	RPW	4.5	237.7
S-207-ii	36.864632	-85.704529	PER	RPW	5	177.29
S-208-i	36.864261	-85.704747	INT	RPW	3.5	143.29
S-209-i	36.858442	-85.697521	EPH	NRPW	2	47.97
S-210-i	36.858071	-85.698812	EPH	NRPW	2.5	124.13
S-211-i	36.847586	-85.692378	EPH	NRPW	3	64.89
S-212-i	36.847698	-85.692377	INT	NRPW	4	85.06
S-212-ii	36.847728	-85.693139	INT	NRPW	4	459.1
S-213-ii	36.850079	-85.701829	PER	RPW	8	1327.63
S-213-ii	36.850988	-85.703182	INT	RPW	4	84.59
S-214-i	36.851484	-85.702580	PER	RPW	5.5	418.97
S-215-ii	36.853832	-85.698449	PER	RPW	5.5	1957.22
S-216-i	36.850942	-85.702687	INT	RPW	3	103.89
S-217-i	36.850624	-85.702098	INT	RPW	2	65.01
S-218-i	36.851038	-85.700670	INT	RPW	2	1021.98
S-219-i	36.851848	-85.700028	INT	RPW	2	86.05
S-220-i	36.853528	-85.701055	INT	RPW	4	239.86
S-221-i	36.853692	-85.700479	EPH	RPW	1	45.3
S-222-i	36.853857	-85.699615	INT	RPW	5.5	96.06
S-223-i	36.853857	-85.699062	EPH	RPW	0.5	29.55
S-224-i	36.853918	-85.698817	INT	RPW	1.5	92.33
S-225-i	36.854292	-85.697365	INT	RPW	2	101.49
S-226-i	36.854182	-85.697181	INT	RPW	1.5	65.86
S-227-i	36.854459	-85.696755	INT	RPW	1	104.99
S-228-i	36.854640	-85.696633	INT	RPW	3	41.58
S-229-i	36.854731	-85.696135	INT	RPW 3		215.93
S-230-i	36.854646	-85.695930	INT	RPW 3		19.33
S-231-i	36.855515	-85.696020	INT	RPW 3		225.55
S-232-i	36.855536	-85.696173	INT	RPW	3	97.06



Stream Name	Latitude	Longitude	Flow Class	Preliminary Jurisdictional Class ¹	Width (ft)	Total Linear Feet
S-233-i	36.889454	-85.687807	EPH	NRPW	4	271.23
S-233-i	36.889118	-85.687557	INT	NRPW	6	15.16
S-233-ii	36.888448	-85.687371	INT	RPW	6	508.49
S-234-i	36.889211	-85.687318	EPH	NRPW	2	150.52
S-235-i	36.888805	-85.687647	EPH	NRPW	8	44.32
S-236-i	36.888759	-85.687617	EPH	NRPW	0.5	27.53
S-236-ii	36.888787	-85.687553	EPH	NRPW	0.5	17.51
S-237-i	36.888961	-85.678060	EPH	NRPW	6	341.08
S-238-i	36.887638	-85.681528	EPH	NRPW	10	471.03
S-239-i	36.886163	-85.687442	EPH	NRPW	5	80.42
S-240-i	36.886292	-85.689091	EPH	NRPW	10	305.26
S-241-i	36.886957	-85.689902	EPH	NRPW	6	131.53
S-242-i	36.889222	-85.690759	EPH	NRPW	5	67.83
S-243-i	36.889497	-85.690555	EPH	NRPW	6	242.49
S-243-ii	36.889203	-85.693689	PER	RPW	17	1334.44
S-243-ii	36.889059	-85.691226	EPH	RPW	6	280.42
S-243-ii	36.888646	-85.691821	INT	RPW	8	217.68
S-243-iii	36.890647	-85.695093	PER	RPW	6	510.91
S-244-i	36.888323	-85.690964	EPH	NRPW	8	650.88
S-245-i	36.888375	-85.691904	INT	RPW	6	173.82
S-245-i	36.888525	-85.692021	INT	RPW	6	98.72
S-246-i	36.888261	-85.693409	EPH	NRPW	6	514.79
S-247-i	36.890803	-85.691079	INT	RPW	15	103.08
S-247-i	36.890742	-85.691617	PER	RPW	5	281.36
S-247-ii	36.890527	-85.693216	PER	RPW	5	964.74
S-248-i	36.890531	-85.691618	EPH	NRPW	5	253.43
S-249-i	36.890712	-85.692423	EPH	NRPW	3.5	47.65
S-250-i	36.890663	-85.692878	INT	RPW	1.5	111.48
S-251-i	36.851226	-85.680137	INT	NRPW	8	757.61
S-252-i	36.848181	-85.697971	INT	RPW	3	37.03
S-252-ii	36.848059	-85.697694	PER	RPW	10	2666.49
S-253-i	36.851617	-85.691627	PER	RPW	5	496.5
S-254-i	36.849072	-85.699694	INT	RPW	10	378.51
S-255-i	36.848824	-85.699980	EPH	NRPW	8	44.84
S-256-i	36.848724	-85.699709	EPH	NRPW	8	88.98
S-257-i	36.848742	-85.699425	EPH	NRPW	3	83.44



Stream Name	Latitude	Longitude	Flow Class	Preliminary Jurisdictional Class ¹	Width (ft)	Total Linear Feet
S-258-i	36.849178	-85.695453	INT	RPW	12	74.31
S-258-ii	36.848674	-85.695841	INT	RPW 12		400.46
S-259-i	36.849229	-85.695524	INT	RPW	5	69.59
S-260-i	36.849213	-85.695036	EPH	NRPW	6	130.87
S-261-i	36.849307	-85.695176	EPH	NRPW	4	21.25
S-262-i	36.850330	-85.697799	EPH	RPW	2	936.27
S-263-i	36.862471	-85.683584	EPH	NRPW	3	195.21
S-264-i	36.862371	-85.683633	EPH	NRPW	5	180.13
S-265-i	36.862318	-85.683907	PER	RPW	30	106.3
S-265-ii	36.864302	-85.684901	PER	RPW	30	1633.59
S-266-i	36.863143	-85.682777	INT	RPW	11	799.64
S-267-i	36.863759	-85.683849	EPH	NRPW	3	136.08
S-268-i	36.863867	-85.684072	EPH	NRPW	3	110.36
S-269-i	36.863913	-85.684103	EPH	NRPW	3	94.94
S-270-i	36.863994	-85.684160	EPH	NRPW	5	102.02
S-271-i	36.864048	-85.684257	EPH	NRPW	5	137
S-272-i	36.864144	-85.684478	EPH	NRPW	4	71.51
S-273-i	36.864200	-85.684482	EPH	NRPW	4	85.67
S-274-i	36.864312	-85.684678	EPH	NRPW	2	68.01
S-275-i	36.864456	-85.684774	EPH	NRPW	8	128.45
S-276-i	36.864805	-85.685085	EPH	NRPW	6	233.24
S-277-i	36.865208	-85.685471	EPH	NRPW	8	206.8
S-278-i	36.865825	-85.683956	EPH	NRPW	8	174.38
S-279-i	36.863969	-85.681892	INT	RPW	4	35.05
S-279-i	36.863827	-85.681642	EPH	NRPW	3.5	166.25
S-279-ii	36.864861	-85.682473	INT	RPW	4	797.51
S-280-i	36.864752	-85.682372	EPH	NRPW	1	73.39
S-281-i	36.864550	-85.682605	EPH	NRPW	5	88.56
S-282-i	36.864318	-85.682350	EPH	NRPW	4	10.17
S-283-i	36.863965	-85.681428	EPH	NRPW	3.5	170.02
S-284-i	36.863815	-85.681836	EPH	NRPW	6	144.63
S-285-i	36.865334	-85.682001	EPH	NRPW	3	303.82
S-286-i	36.864819	-85.679609	EPH	NRPW 5		132.95
S-287-i	36.864921	-85.679108	INT	RPW	4	241.99
S-288-i	36.864714	-85.678704	EPH	NRPW	6	140.55
S-289-i	36.864129	-85.678053	PER	RPW	8	343.22



Stream Name	Latitude	Longitude	Flow Class	Preliminary Jurisdictional Class¹	Width (ft)	Total Linear Feet
S-290-i	36.861969	-85.678831	EPH	NRPW	5	96.64
S-290-ii	36.863864	-85.678583	PER	RPW	10	736.28
S-290-ii	36.862673	-85.678926	INT	RPW	8	497.12
S-291-i	36.863275	-85.678998	INT	NRPW	3	155.43
S-291-i	36.862824	-85.679690	EPH	NRPW	4	431.26
S-292-i	36.863108	-85.678923	EPH	NRPW	4	41.4
S-293-i	36.862872	-85.678459	EPH	NRPW	5	187.22
S-294-i	36.861942	-85.678903	EPH	NRPW	3	101.68
S-295-i	36.860461	-85.678970	INT	NRPW	1.5	802.1
S-296-i	36.861396	-85.680633	EPH	NRPW	4	176.74
S-297-i	36.859107	-85.682203	INT	NRPW	2	1217.26
S-298-i	36.859563	-85.680843	INT	NRPW	2	644.1
S-298-ii	36.860739	-85.680757	INT	NRPW	2	242.76
UDF-01-i	36.858590	-85.678999	UDF	NRPW	3	556
UDF-02-i	36.857708	-85.679429	UDF	NRPW	4	548.09

¹ Pending official determination by the USACE

Table 4. Open Water Features Identified at the Summer Shade Solar Project, Metcalfe and Monroe Counties, Kentucky

Open Water Name	Latitude	Longitude	Cowardin Classification	Preliminary Jurisdictional Class¹	Total Area in Acres
OW-01	36.858923	-85.692985	PUBGx	NRPW	0.55
OW-02	36.879122	-85.682864	PUBGx	NRPW	0.91
OW-03	36.874828	-85.682013	PUBGx	NRPW	0.49
OW-04	36.881741	-85.677064	PUBGx	NRPW	0.24
OW-05	36.882172	-85.679519	PUBGx	NRPW	0.45
OW-06	36.883919	-85.684058	PUBGx	NRPW	0.42
OW-07	36.882213	-85.687183	PUBGx	NRPW	0.86
OW-08	36.882695	-85.691421	PUBGx	RPW	0.28
OW-09	36.849583	-85.690780	PUBGx	NRPW	0.01
OW-10	36.848598	-85.690723	PUBGx	NRPW	0.03
OW-11	36.845855	-85.698990	PUBGx	NRPW	0.35
OW-12	36.845050	-85.692011	PUBGx	NRPW	0.67
OW-13	36.845895	-85.690134	PUBGx	NRPW	0.86
OW-14	36.854976	-85.696187	PUBGx	RPW	0.15
OW-15	36.855154	-85.695702	PUBGx	RPW	0.46



Open Water Name	Latitude	Longitude	Cowardin Classification	Preliminary Jurisdictional Class¹	Total Area in Acres
OW-16	36.862245	-85.699475	PUBGx	NRPW	0.05
OW-17	36.889072	-85.678143	PUBGx	NRPW	0.06
OW-18	36.850513	-85.697690	PUBGx	RPW	0.00
OW-19	36.849903	-85.694836	PUBGx	RPW	0.03
OW-20	36.858601	-85.680492	PUBGx	NRPW	0.60
OW-21	36.856612	-85.680765	PUBGx	NRPW	0.54
OW-22	36.851555	-85.680813	PUBGx	NRPW	0.53

¹ Pending official determination by the USACE

