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April 29, 2021

Ms. Tanowa Troupe, Secretary
Ohio Power Siting Board
180 E. Broad Street, 11th Floor
Columbus, OH 43215

Re: OPSB Case No. 21-329-EL-BLN
Yellowbud Solar, LLC
Letter of Notification Application for the Yellowbud Switchyard Project

Dear Ms. Troupe:

Accompanying this letter are hard and electronic copies of a letter of notification application by Yellowbud Solar, LLC for its Yellowbud Switchyard Project.

Yellowbud Solar, LLC makes the following declarations:

Name of applicant:

Yellowbud Solar, LLC
c/o National Grid Renewables Development, LLC
8400 Normandale Lake Blvd., Suite 1200
Bloomington, MN 55437

Name and location of proposed facility:

Yellowbud Switchyard Project
Union Township, Ross County, Ohio

Notarized Statement:

See attached Affidavit of Nathan Franzen
Officer, Yellowbud Solar, LLC



Legal Counsel

Ms. Tanowa Troupe, Secretary

April 29, 2021

Page 2

Very truly yours,

/s/ Anna Sanyal

Anna Sanyal

Vorys, Sater, Seymour and Pease LLP

Attorney for Yellowbud Solar, LLC

AAS/jaw

BEFORE THE OHIO POWER SITING BOARD

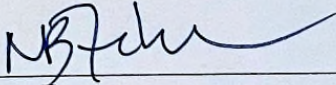
In the Matter of the Letter of Notification)
Application by Yellowbud Solar, LLC for a) Case No. 21-329-EL-BLN
Certificate to Construct an Electric)
Generation Facility in Ross County, Ohio)

OFFICER AFFIDAVIT

STATE OF MINNESOTA)
COUNTY OF HENNEPIN) SS:

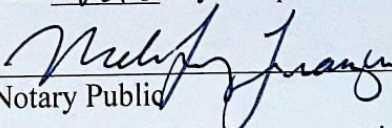
Now comes Nathan Franzen, Vice President of Development of Yellowbud Solar, LLC and an officer of Yellowbud Solar, LLC, having been first duly sworn, declares and states as follows:

1. I am an executive officer for the Yellowbud Solar Facility located in Deer Creek and Wayne Townships in Pickaway County, Ohio and in Deerfield and Union Townships in Ross County, Ohio.
2. I have reviewed the Letter of Notification Application for the switchyard and short gen-tie line, which will connect the Yellowbud Solar Facility to the electric distribution grid in Union Township, Ross County, Ohio, to be submitted in Case No. 21-329-EL-BGN.
3. To the best of my knowledge, information, and belief, the information and statements contained in the Letter of Notification Application are true and correct.
4. To the best of my knowledge, information, and belief, the Letter of Notification Application is complete.

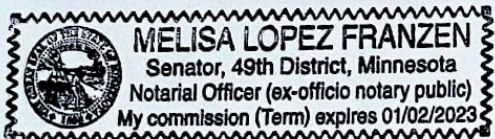


Nathan Franzen
Vice President of Development
Yellowbud Solar, LLC

Sworn to before me and signed in my presence this 28th day of April 2021.



Notary Public
My Commission Expires: 1/2/23



Yellowbud Solar, LLC

Letter of Notification for Switchyard Infrastructure

Case 21-329-EL-BLN

Applicant: Yellowbud Solar, LLC



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Exhibits

- Exhibit A-** Location of the proposed switchyard
- Exhibit B-** Map of the Project
- Exhibit C-** Detailed site plan
- Exhibit D-** Assessment of ecological resources
- Exhibit E-** Potential impacts to cultural resources

4906-6-05(B) General Information

Yellowbud Solar, LLC (Yellowbud) provides the following information in accordance with the requirements of Ohio Administrative Code (OAC) Section 4906-6-05. Additionally, as noted in the pre-application letter filed on April 7, 2021, the Applicant is requesting 21-day expedited approval of this certificate application.

4906-6-05(B)(1) Project Description *The applicant shall provide the name of the project and applicant's reference number, names and reference number(s) of resulting circuits, a brief description of the project, and why the project meets the requirements for a letter of notification or construction notice application.*

Yellowbud, a subsidiary of National Grid Renewables, proposes to construct a switchyard and short gen-tie line in the form of an electrical bus (Project) to interconnect the proposed 274 MW Yellowbud Solar Facility (Case No. 20-1972-EL-BGN) to the electric distribution grid in Union Township, Ross County, Ohio. The Project includes the switchyard infrastructure, site access roads, and a laydown yard to support construction activities. The collector substation adjacent to the switchyard is already approved for construction in Yellowbud's Certificate of Environmental Compatibility and Public Need for the Solar Facility (Case 20-1972-EL-BGN). The switchyard, once constructed, will accommodate the infrastructure necessary to reroute AEP Ohio Transmission Company's (AEP) 138 kV Biers Run to Circleville electric transmission line across Westfall Road, directly into and back out of the proposed switchyard infrastructure. No new circuits are proposed as a part of this work. The realignment of the transmission line into and out of the proposed switchyard will be addressed as a separate construction notice to the Ohio Power Siting Board (OPSB) as that infrastructure is wholly owned and operated by AEP. Following construction of the Project, it is anticipated that the certificate will be transferred to AEP, as it will be the long-term owner and operator of the switchyard infrastructure.

The Project is considered associated infrastructure to an electric power transmission line. Thus, the proposed Project meets the requirements for a Letter of Notification as identified in OAC 4906-1-01, Appendix A ("Application Requirement Matrix for Electric Power Transmission Lines") which states that the construction of a new electric power transmission substation qualifies for a Letter of Notification. The Project has been assigned case number 21-329-EL-BLN.

4906-6-05(B)(2) Statement of Need *If the proposed project is an electric power transmission line or gas pipeline, the applicant shall provide a statement explaining the need for the proposed facility.*

The Project is necessary to interconnect the Solar Facility (Case No. 20-1972-EL-BGN) to the electric grid. The interconnection of the Solar Facility to the grid is not possible without the construction of the switchyard infrastructure.

4906-6-05(B)(3) Project Location *The applicant shall provide the location of the project in relation to existing or proposed lines and substations shown on an area system map of sufficient scale and size to show existing and proposed transmission facilities in the project area.*

Exhibit A shows the location of the proposed switchyard in relation to the existing 138 kV Biers Run to Circleville electric transmission line.

4906-6-05(B)(4) Alternatives Considered *The applicant shall describe the alternatives considered and reasons why the proposed location or route is best suited for the proposed facility. The discussion shall include, but not be limited to, impacts associated with socioeconomic, ecological, construction, or engineering aspects of the project.*

Due to the OPSB's approval of the collector substation (Case No. 20-0972-EL-BGN) that will connect to the switchyard, availability of land at the location, and the location of the 138 kV Biers Run to Circleville electric transmission line, there is no reasonable or practicable alternative for the location of the proposed infrastructure. The interconnection serves as the most direct, cost effective means of interconnecting the Solar Facility to the electric grid. Ecological, socioeconomic, construction, and engineering considerations were thoroughly reviewed in the siting of infrastructure for the proposed Solar Facility. The switchyard was placed adjacent to the collector substation in an upland, previously disturbed agricultural area to avoid any adverse ecological impacts. Socioeconomic impacts are closely aligned with the greater Solar Facility, which will bring significant tax revenue, hundreds of temporary construction jobs, as well as permanent operations and maintenance jobs to the community. Locating the switchyard adjacent to the collector substation will bring efficiencies in construction and engineering via a shared access drive and overall shared project resources.

4906-6-05(B)(5) Public Information Program *The applicant shall describe its public information program to inform affected property owners and tenants of the nature of the project and the proposed timeframe for project construction and restoration activities.*

Yellowbud will notify the public about the proposed Project in accordance with the applicable rules identified in OAC 4906-06-08, including a landowner mailing.

During the certificate application process for the Solar Facility, Yellowbud held a pre-application meeting, public hearings, and has conducted significant public outreach to inform nearby neighbors and stakeholders about that project. The public has been made aware of the general plans for the switchyard and interconnection throughout the certificating process for the Solar Facility. Furthermore, this Project is likely be indiscernible from overall construction activities associated with the Solar Facility.

4906-6-05(B)(6) Construction Schedule *The applicant shall provide an anticipated construction schedule and proposed in-service date of the project.*

Construction of the Project will begin as early as the second quarter of 2021. The in-service date of the construction is dependent on AEP's timeline to reroute the transmission line infrastructure through the switchyard infrastructure. As previously noted, the realignment of the existing line effort will be separately addressed by AEP through a separate notification to the OSPB. The exact timing of the line work is yet to be determined but will occur during the construction of the Solar Facility. Based on ongoing coordination with AEP, the in-service date for the switchyard, which will allow for the ongoing commissioning efforts associated with the Solar Facility, is anticipated to be approximately second quarter of 2022.

4906-6-05(B)(7) Area Map *The applicant shall provide a map of at least 1:24,000 scale clearly depicting the facility with clearly marked streets, roads, and highways, and an aerial image.*

Exhibit B shows a map of the Project on an aerial image at a scale of 1:24000. Exhibit C shows a detailed site plan of the proposed Project.

4906-6-05(B)(8) Property Agreements *The applicant shall provide a list of properties for which the applicant has obtained easements, options, and/or land use agreements necessary to construct and operate the facility and a list of the additional properties for which such agreements have not been obtained.*

The Project is completely located on property that will be owned by Yellowbud. A purchase option is pending and will be executed prior to construction of the Project. No other easements or agreements are necessary to accommodate the switchyard. Access to the Project will be from a new access drive from Westfall Road, and Yellowbud will coordinate any necessary driveway ingress/egress requirements from Ross County prior to construction. Following construction of the Project, it is anticipated that ownership of the Switchyard will be transferred to AEP, as it will be the long-term owner and operator of the switchyard infrastructure.

4906-6-05(B)(9) Technical Features *The applicant shall describe the following information regarding the technical features of the project:*

4906-6-05(B)(9)(a) Operating characteristics, estimated number and types of structures required, and right-of-way and/or land requirements *Operating characteristics, estimated number and types of structures required, and right-of-way and/or land requirements.*

The Project will consist of a single 1.2 acre permanent switchyard that will contain the infrastructure necessary to connect the Solar Facility substation to the electric grid, a 0.7 acres of permanent access road which will provide site access during construction and operation and will also be shared with the Solar Facility infrastructure in the long term, and a 1.3 acre laydown yard which will be used to accommodate construction activities. This laydown yard is also anticipated to service the greater Solar Facility during construction and provide long-term staging for the operations and maintenance building associated with the Solar Facility.

The switchyard will include the electrical bus from the collection substation into the switchyard, as well as a three-breaker ring bus that controls the flow of electricity to AEP's 138 kV Biers Run to Circleville electric transmission line. The components within the switchyard, including dead end structures, are not anticipated to exceed a height of approximately 65 feet. A detailed site plan and profile view of switchyard infrastructure is provided as Exhibit C.

4906-6-05(B)(9)(b) Electric and Magnetic Fields *For electric power transmission lines that are within one hundred feet of an occupied residence or institution, the production of electric and magnetic fields during the operation of the proposed electric power transmission line. The discussion shall include:*

The nearest occupied residence to the proposed Project is approximately 475 feet from the Project's electrical components. No institutions are nearby to the Project. Therefore, this rule is not applicable to the proposed Project. Additionally, the occupied residence is owned by a participating landowner for the Solar Facility, who has been kept up to date regarding plans for that project.

4906-6-05(B)(9)(b)(i) *Calculated electric and magnetic field strength levels at one meter above ground under the lowest conductors and at the edge of the right-of-way for:*

This rule is not applicable to the proposed Project.

4906-6-05(B)(9)(b)(i)(a) *Normal maximum loading.*

This rule is not applicable to the proposed Project.

4906-6-05(B)(9)(b)(i)(b) *Emergency line loading.*

This rule is not applicable to the proposed Project.

4906-6-05(B)(9)(b)(i)(c) *Winter normal conductor rating.*

This rule is not applicable to the proposed Project.

(ii) A discussion of the applicant's consideration of design alternatives with respect to electric and magnetic fields and their strength levels, including alternate conductor configuration and phasing, tower height, corridor location, and right-of-way width.

This rule is not applicable to the proposed Project.

4906-6-05-(B)(9)(c) *The estimated capital cost of the project.*

The estimated capital cost of the Project is anticipated to be approximately 8 million dollars.

4906-6-05(B)(10) Social and Economic Impacts *The applicant shall describe the social and ecological impacts of the project.*

The proposed Project is sited completely on previously disturbed agricultural land, and has been sited to avoid impacts to wetland features. Tree clearing will not be necessary and no-in water work is proposed. Yellowbud completed an assessment of ecological impacts for the Solar Facility, which contains the proposed switchyard infrastructure. An assessment of ecological resources specific to this Project is included as Exhibit D.

4906-6-05(B)(10)(a) General Description of Land Use *Provide a brief, general description of land use within the vicinity of the proposed project, including a list of municipalities, townships, and counties affected.*

The Project is located entirely within Union Township, Ross County, Ohio. General land use in the area consists of primarily agricultural land with scattered homesteads. The Project will utilize approximately 3.2 acres of upland agricultural land for the electrical switchyard, access roads, and staging area adjacent to the proposed Solar Facility. Given that the Project is adjacent to other electrical infrastructure for the Solar Facility, impacts to the surrounding area are anticipated to be minimal. The nearest population centers to the Project include Circleville, located approximately 8 miles to the northeast, and Chillicothe approximately 9 miles to the southeast.

4906-6-05(B)(10)(b) Agricultural Land Information *Provide the acreage and a general description of all agricultural land, and separately all agricultural district land, existing at least sixty days prior to submission of the application within the potential disturbance area of the project.*

The Project will permanently impact approximately 3.2 acres of agricultural land. The switchyard is entirely contained within land currently designated as CAUV land, but will no longer qualify for the program following execution of the purchase option for the parcel.

4906-6-05(B)(10)(c) Archaeological and Cultural Resources *Provide a description of the applicant's investigation concerning the presence or absence of significant archeological or cultural resources that may be located within the potential disturbance area of the project, a statement of the findings of the investigation, and a copy of any document produced as a result of the investigation.*

The Project is entirely contained within the Project Area for the Solar Facility (Case No. 20-1972-EL-BGN), and an Archaeological Survey and Architectural History Evaluation were completed for that certificate application. Yellowbud signed an MOU with the Ohio State Historic Preservation Office for the Solar Facility. The MOU identified avoidance areas for archaeological resources and screening for architectural resources within the Solar Facility project area. No avoidance features were identified within the area of the proposed switchyard. Because the height and switchyard is less or equal to that of the collection substation considered in the Solar Facility certificate application, no additional adverse impacts to architectural resources are anticipated as a result of the proposed Project. Additionally, based on the data collected for the Solar Facility, no impacts to cultural or archaeological resources are anticipated from the construction of the switchyard. A memorandum examining potential impacts to cultural resources for the Project is included as Exhibit E.

4906-6-05(B)(10)(d) Local, State, and Federal Agency Correspondence *Provide a list of the local, state, and federal governmental agencies known to have requirements that must be met in connection with the construction of the project, and a list of documents that have been or are being filed with those agencies in connection with siting and constructing the project.*

Per OPSB rules and state statute, Yellowbud has applied via the Letter of Notification process for the proposed Project. The adjacent Solar Facility has also obtained a Certificate of Environmental Compatibility and Public Need.

No federal permits are anticipated for the Project. All wetlands within the purchase area are under the jurisdiction of the state of Ohio, and no other federal permitting triggers are anticipated.

State permits necessary for the construction of the Project include the Ohio National Pollutant Discharge Elimination System construction storm water general permit, which will assess pre-and post-construction stormwater controls. This will include the development of a Stormwater Pollution Prevention Plan. No oversized or overweight loads are anticipated for the Project, but if necessary, state and local permissions shall be obtained. No isolated wetland permitted from the Ohio EPA are anticipated to be necessary as wetland impacts will be avoided during construction and operation of the switchyard infrastructure.

The Project will coordinate closely with Ross County to obtain the necessary ingress and egress permissions for the proposed driveway for access to the Project.

4906-6-05(B)(10)(e) Threatened, Endangered, and Rare Species *Provide a description of the applicant's investigation concerning the presence or absence of federal and state designated species (including endangered species, threatened species, rare species, species proposed for listing, species under review for listing, and species of special interest) that may be located within the potential disturbance area of the project, a statement of the findings of the investigation, and a copy of any document produced as a result of the investigation.*

The Project is contained within the project area for the Solar Facility, and ecological impacts were evaluated for the Solar Facility. Various studies and consultation with the Ohio Department of Natural Resources and U.S. Fish and Wildlife Service were also completed as a part of the certificate application for the Solar Facility. Exhibit D identifies impacts to threatened and endangered species specific to the switchyard infrastructure. Due to the location of the infrastructure on previously disturbed agricultural land, impacts to sensitive species are anticipated to be low. No tree clearing is planned for the Project, and no wetlands will be impacted.

4906-6-05B(10)(f) Areas of Ecological Concern *Provide a description of the applicant's investigation concerning the presence or absence of areas of ecological concern (including national and state forests and parks, floodplains, wetlands, designated or proposed wilderness areas, national and state wild and scenic rivers, wildlife areas, wildlife refuges, wildlife management areas, and wildlife sanctuaries) that may be located within the potential disturbance area of the project, a statement of the findings of the investigation, and a copy of any document produced as a result of the investigation.*

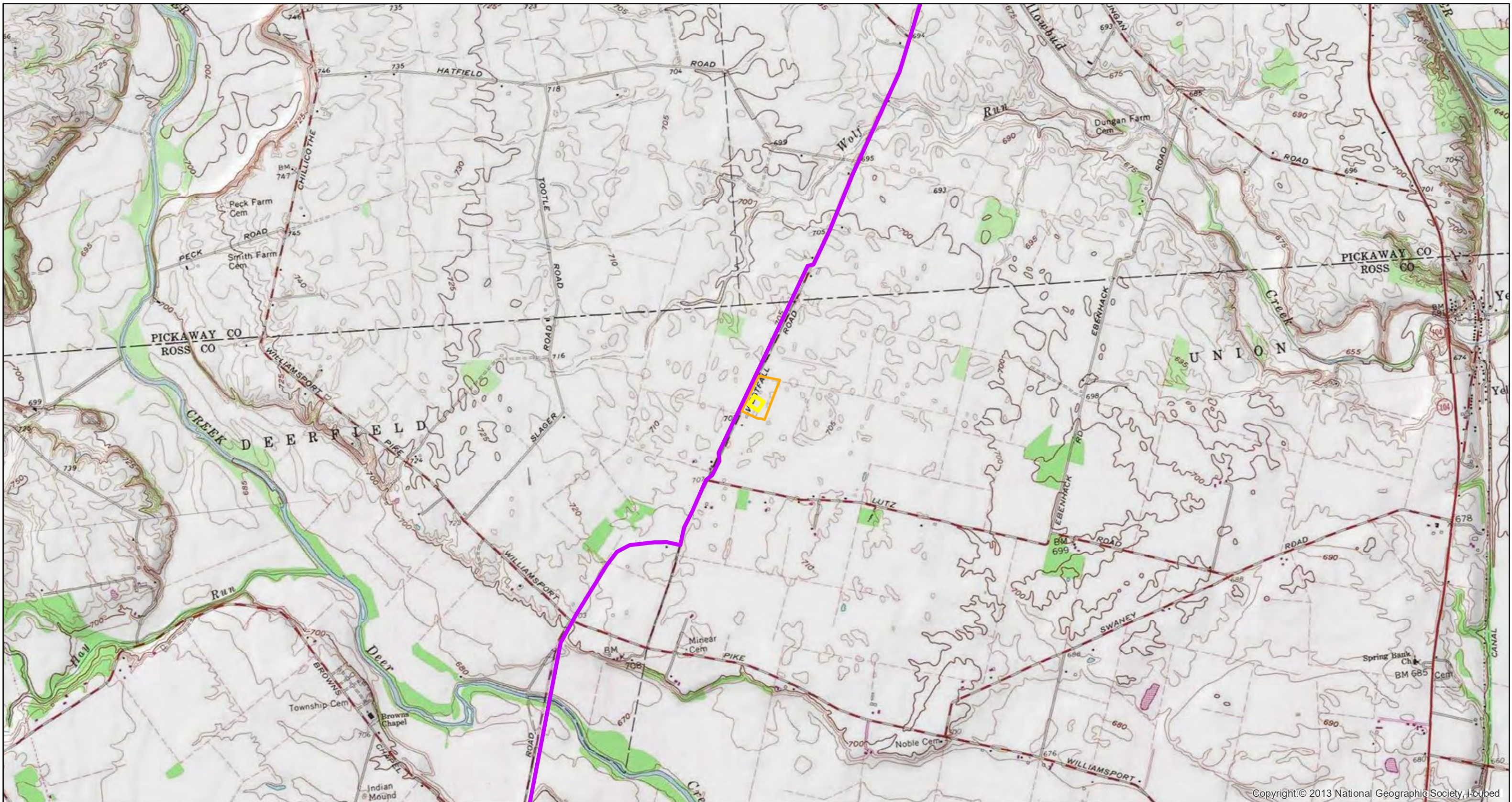
The Project is completely contained on private lands which will be owned by Yellowbud prior to construction. It is anticipated that ownership of the Switchyard will be transferred to AEP, as it will be the long-term owner and operator of the switchyard infrastructure. No state forests, parks, floodplains, designated wilderness areas, national and state wild and scenic rivers, wildlife areas, wildlife refuges, wildlife management areas, or wildlife sanctuaries are in the vicinity of the proposed Project. Wetlands are located on the parcel that is being purchased for the proposed switchyard and substation infrastructure, however these will be avoided by during construction and operation of the Project.

4906-6-05(B)(10)(g) *Provide any known additional information that will describe any unusual conditions resulting in significant environmental, social, health, or safety impacts.*

No unusual conditions are known in the vicinity of the Project that would result in significant environmental, social, health, or safety impacts.

Exhibit A

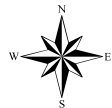
Location of the proposed switchyard



Copyright:© 2013 National Geographic Society, Houbert

0 0.25 0.5 1 Miles

1:24,000



For environmental review purposes only

Exhibit A **Project Overview Map** **Yellowbud Solar, LLC Proposed Switchyard** **Union Township, Ross County, Ohio**




-  Switchyard/Collector Substation Parcel
-  Switchyard Fenced Boundary
-  138 kV Biers Run to Circleville Transmission Line

Exhibit B

Map of the Project



Source: Esri, Maxar, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community, Copyright © 2013 National Geographic Society, Inc.

0 500 1,000 2,000
Feet

1:24,000



For environmental review purposes only

Exhibit B Aerial Site Map Yellowbud Solar, LLC Proposed Switchyard Union Township, Ross County, Ohio




-  Switchyard/Collector Substation Parcel
-  Switchyard Fenced Boundary
-  138 kV Biers Run to Circleville Transmission Line

Exhibit C

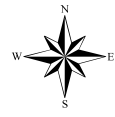
Detailed site plan



Source: Esri, Maxar, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community

0 100 200 400 Feet

1:1,800

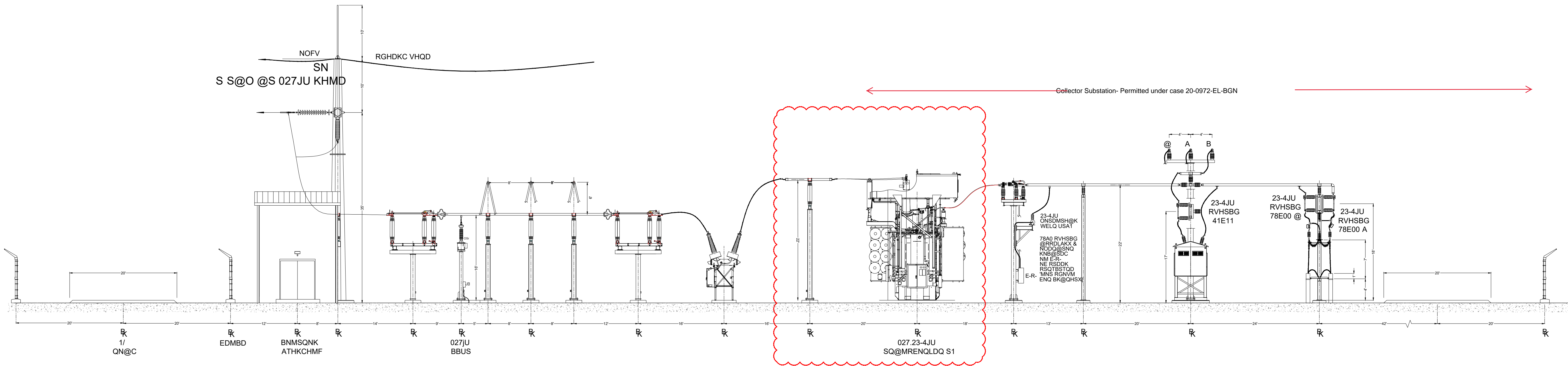


For environmental review purposes only

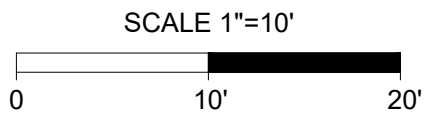
Exhibit C Site Plan Yellowbud Solar, LLC Proposed Switchyard Union Township, Ross County, Ohio

- Parcel (Purchase Option to be Executed)
- Proposed Site Access (To Be Shared With Case 20-0972-EL-BGN)
- Laydown Area (Gravelled)
- Switchyard Components
- Switchyard Fenced Boundary
- 138 kV Biers Run to Circleville Transmission Line
- Yellowbud Solar Project Area (Case 20-0972-EL-BGN)
- Previously Permitted Infrastructure (Case 20-0972-EL-BGN)

Y:\94146838 Yellowbud Solar\Drawg\Electrical\YBDE-211-01 SUBSTATION EQUIPMENT GENERAL ARRANGEMENT.dwg | Plotted on 12/20/2020 9:38 AM | by Ruben Sierra



RDBSHNM @ @



MNSDR

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ATR RTOONQS GDHFGS @MC
BNMEHFTQ@SHNM VHKK BG@MFD @R ODQ
SGD SQ@MRENQLDQ CHLDMRHN-



PROJECT NAME & ADDRESS

YELLOWBUD SOLAR
ROSS & PICKAWAY COUNTIES
OHIO

DATE 11/20/2020
PROJECT NUMBER 46936
DRAWN BY R. SIERRA
DESIGNED BY S. UPADHYAY

SEAL

PRELIMINARY
NOT FOR CONSTRUCTION

REVISIONS	
#	DESCRIPTION
A	12/11/20 ISSUED FOR REVIEW
B	
C	
D	
E	

DRAWING DESCRIPTION

**SUBSTATION
EQUIPMENT
SECTION A-A**

34"x22" FULL SIZE
(17"x11" PLOTS ARE HALF SCALE)

SCALE	SHEET NUMBER
1" = 10'	YBD-E-211-01



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971 North Gilbert Road, Suite 204 | Gilbert, AZ 85224
TEL: 480.366.8888 FAX: 480.366.1310 WWW.TIMMONS.COM

Exhibit D

Assessment of ecological resources

Technical Memorandum

Date: April 2, 2021

To: William Risse
Yellowbud Solar, LLC

From: Cardno, Bruce Moreira

RE: **Yellowbud Solar Switchyard Project - Ecological Assessment**

Cardno conducted an ecological assessment of the Yellowbud Solar Switchyard Project Area (Switchyard Area). The Project is located within Union Township, Ross County, Ohio. This assessment is to provide the information required by Section 4906-6-05(b)(10)(e)&(f) for the 10.1 acre Switchyard Area which will contain the switchyard for the Yellowbud Project (see Figure 1, Project Overview). The Switchyard will be comprised of:

- > a 1.2-acre permanent gravel pad that will be fenced and contain the electrical equipment required for interconnection of the solar project to the electrical grid,
- > a 0.7-acre access road to connect the switchyard to the closest public road
- > a 1.3-acre laydown yard to provide temporary staging for equipment in the switchyard. This staging area is also planned for project operations and maintenance use and would remain in place for the life of the project.

The Switchyard Area is primarily an active agricultural field along Westfall Road (Figure 1).

Cardno prepared this assessment using Geographic Information Systems (GIS) to screen for and classify potential environmental resources, as well as field data and observations during surveys conducted in spring of 2020. Sources of the desktop reference material included, but was not limited to, the U.S. Department of Agriculture (USDA) Natural Resources Conservation Service (NRCS) Soil Survey for Paulding County, historic aerial photographs and farmed wetland maps from the USDA Farm Service Agency (FSA), U.S. Fish and Wildlife Service (USFWS) National Wetland Inventory (NWI) maps, Ohio Wetland Inventory (OWI) maps, U.S. Geological Survey (USGS) topographic maps, the USGS National Hydrography Dataset (NHD), and recent aerial photographs.

1.0 Land Use

The land use types within the 10.2-acre Switchyard Area are based on data provided by the Multi-Resolution Land Characteristics Consortium (MRLC), from the 2011 National Land Cover Database, amended 2014¹. The land use category within the Switchyard Area is classified according to the predominant land use, as follows:

- > **Agricultural (Cultivated Crops)** – areas used for the production of annual crops, such as corn, soybeans, vegetables, tobacco, and cotton, and also perennial woody crops such as orchards and vineyards. Crop vegetation accounts for greater than 20% of total vegetation. This class also includes all land being actively tilled.
- > **Agricultural (Pasture/Hay)** – Areas of grasses, legumes, or grass-legume mixtures planted for livestock grazing or the production of seed or hay crops, typically on a perennial cycle. Pasture/hay vegetation accounts for greater than 20% of total vegetation.

¹ https://www.mrlc.gov/nlcd11_data.php

The NLCD² showed that Agricultural (Cultivated Crops) accounted for the majority of the Switchyard Area acreage and Agricultural (Pasture/Hay) accounted for a small portion of the southern part of the Switchyard Area. Based on a review of available aerial imagery and field observations in 2020, the Switchyard Area is in an agricultural field currently being used for hay/pasture.

2.0 Geology

The Project is located within the Columbus Lowland of Ohio. The lowland is surrounded in all directions by relative uplands, having a broad regional slope toward the Scioto Valley and other large streams. The Columbus Lowland is loamy, high-lime (west) to medium-lime (east) Wisconsinan-age till and extensive outwash in Scioto Valley over deep Devonian- to Mississippian-age carbonate rocks, shales and siltstones. (ODGS 1998).

The Switchyard Area is overlain by the Olentangy Shale bedrock formation. The Olentangy Shale is a gray to greenish-gray shale of Devonian age that averages about 30 feet in thickness. It was named for exposures along the Olentangy River in Delaware County. It lies above the Delaware Limestone and beneath the Ohio Shale. Fossils are moderately abundant in some areas but generally the Olentangy Shale is poorly fossiliferous.

The Switchyard Area is not located within karst geology and therefore, Project construction or operation would not be impacted by karst terrain.

² Homer, C.G., Dewitz, J.A., Yang, L., Jin, S., Danielson, P., Xian, G., Coulston, J., Herold, N.D., Wickham, J.D., and Megown, K. 2015. Completion of the 2011 National Land Cover Database for the conterminous United States-Representing a decade of land cover change information. *Photogrammetric Engineering and Remote Sensing*, v. 81, no. 5, p. 345-354.



Figure 1. Project Overview of Yellowbud Solar Switchyard Project in Ross County, Ohio

3.0 Soils

Soils within the Switchyard Area are represented by the two types outlined in Table 3-1 below. Project soil information was obtained from the Web Soil Survey, an application of the NRCS (USDA-NRCS, 2017), and from the Soil Survey of Ross County, Ohio (USDA-NRCS, 2006). The dominant soil types were Crosby silt loam and Miamian silt loam, accounting for 69% and 31% respectively of the Switchyard Area. Soil series within the Switchyard Area were identified as low slope, which matched general expectations when consulting the topographic and aerial maps. Below are the dominate soil series:

The Crosby series, 69% of the total Switchyard Area, consists of very deep, somewhat poorly drained soils that are moderately deep to dense till. Crosby soils formed in as much as 56 cm (22 inches) of loess or other silty material and in the underlying loamy till. They are on till plains. Slope ranges from 0 to 6 percent.

The Miamian series, 31% of the total Switchyard Area, consists of very deep, well drained soils that are moderately deep to dense till. These soils formed in as much as 46 cm (18 inches) of loess and the underlying loamy till on till plains and moraines. Slope ranges from 2 to 12 percent.

Table 3-1. Soils within the Project Corridor

Type	Map Unit Description	Hydric Rating	Acreage	Switchyard Area (%)
CvA	Crosby silt loam, Southern Ohio Till Plain, 0 to 2 percent slopes	5	6.9	69%
MhB2	Miamian silt loam, 2 to 6 percent slopes, eroded	5	3.2	31%

3.1 Highly Erodible Soils / Steep Slopes

Based on a review of the NRCS Web Soil Survey, the Project Area soils are not classified as highly erodible soils, most with Wind Erodibility Group ratings being 5 (0 being highly erodible; 90 being least erodible).

3.2 Hydric Soils

The Switchyard Area is composed of non-hydric or only partially hydric soils with both soil series having a hydric rating of 10 or less.

4.0 Pre-construction Surveys

The following is a discussion of the results of field surveys of the Switchyard Area conducted in Summer 2020.

4.1 Vegetative Community

Vegetative communities within the Switchyard Area were evaluated based on desktop interpretation of aerial photography then verified during field surveys. Agricultural land is the dominant community type in the Switchyard Area. All of the major plant communities found within the Switchyard Area are common to Ohio.

Agricultural Land

All of the Switchyard Area is used for agricultural production but is currently fallowed. The dominant crops produced on agricultural lands in the Switchyard Area are hay species. The field may have been used for tilled agricultural row crops (i.e. soy or corn) in the past, but field observations from 2020 indicate the field is currently used as pasture/hay. The type of crop may change seasonally, but the general extent of the crop area would remain consistent.

Forestland

No forestland is present within the Switchyard Area.

4.2 Wetlands and Waterbodies

Cardno conducted surface water delineation surveys in the Switchyard Area during Summer 2020 to determine the extent and jurisdiction of surface waters within the Switchyard Area. A ¼-mile visual investigation was also conducted around the Switchyard Area for sensitive habitats. No wetlands or waterbodies were delineated within the Switchyard Area.

4.3 Wildlife Resources

Information on the existing wildlife in the Switchyard Area was obtained from a variety of sources, including observations during site surveys, and publicly available data from Federal and State agencies. Wildlife within the Switchyard Area could potentially utilize it for foraging, migratory stopover, breeding, and/or shelter. Based on the current land use, species present in the vicinity of the Switchyard Area are primarily associated with agricultural fields, and pasture grasslands. Typical wildlife species that were observed during the field delineations included white-tailed deer and common woodland and grassland songbirds. Major species, as defined by Ohio Administrative Code (OAC) Chapter 4906-17, are those species with recreational or commercial value, or are listed as Federal- or State-listed threatened or endangered species. Common game species in southwestern Ohio include cottontail rabbit, northern bobwhite (quail), Canadian geese, gray and fox squirrels, mallard and other ducks, mourning doves, ring-necked pheasants, ruffed grouse, white-tailed deer, and wild turkey.³ Other than the agricultural crops in the area, no commercially valuable species are anticipated to be present in the Switchyard Area.

Based on existing habitat community (row crops and turf grass) and the seasonal/annual disturbance from agriculture and mowing the Switchyard Area would not be suitable habitat for rare, threatened, or endangered (RTE) species. No RTE species were observed in or around the Switchyard Area during field surveys.

Correspondence with US Fish and Wildlife Service (FWS) and Ohio Department of Natural Resources (ODNR) indicated that the potential federal or state listed species would be unlikely to occur in agricultural lands. Because the Switchyard Area is located entirely in agricultural lands, these species would be unlikely to be present.

5.0 Conclusion

Overall, the Project will have minimal to no environmental impacts. The Project is proposed to be primarily be built on land that has already been disturbed seasonally/annually for agriculture or roadside maintenance mowing. The Project's most significant change will come from the conversion of agricultural land to land to be used for the switchyard (up to 3.2-acres total permanent impacts). Yellowbud has designed the Project to avoid impacts to wetlands, waterbodies, woodlots, and aquatic and terrestrial wildlife species.

³ http://www.dnr.state.oh.us/Home/wild_resource/subhomepage/ResearchandSurveys/WildlifePopulationStatusLandingPage/tabid/19230/Default.aspx

Exhibit E

Potential impacts to cultural resources

April 2, 2021

Mr. William Risse
Permitting Specialist
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Bloomington, MN 55437

Cardno

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Subject: Archaeological Reconnaissance Survey for Yellowbud Solar Project

Dear Mr. Risse:

Cardno, Inc. (Cardno) conducted an archaeological reconnaissance survey for the proposed area of potential disturbance for the Yellowbud Solar Project (Project) in Ross and Pickaway Counties, Ohio. Specifically, this letter is to provide confirmation of the archaeological reconnaissance survey of a 10.2-acre area located on the east side of Westfall Road, to be used for construction of the Project switchyard (see Figure 1). The Project switchyard is located in Ross County, at UTM Zone 17S, 322420.26 m E, 4374615.28 m N. This information is being provided to satisfy the information required by the Ohio Administrative Code, Section 4906-6-05(B)(10)(c).

Cardno conducted a desktop review and Phase I archaeological reconnaissance survey of the Area of Potential Effect (APE) for the Project switchyard area. The initial desktop review was conducted using records provided by the Ohio State Historic Preservation Office (OH-SHPO), along with other relevant resources including historic mapping, to identify previously recorded cultural resources within or adjacent to the Project switchyard area. The records review did not identify any previously recorded cultural resources within or adjacent to the Project switchyard area.

The archaeological Phase I reconnaissance survey of the Project switchyard parcel identified one newly recorded archaeological site. Site 33-RO-1536 consists of a prehistoric isolate find. In consultation with OH-SHPO, site was determined not to meet National Register of Historic Places (NRHP) eligibility criteria. As a result, no further archaeological work is recommended at site 33-RO-1536 and the Project switchyard is recommended to proceed as planned.

It is the recommendation of Cardno that no archaeological resources will be impacted by the construction of the proposed Project switchyard.

If you have further questions or require additional information, please feel free to contact me at ryan.peterson@cardno.com or (317) 945-6309.

Yellowbud Solar, LLC
April 2, 2021

2



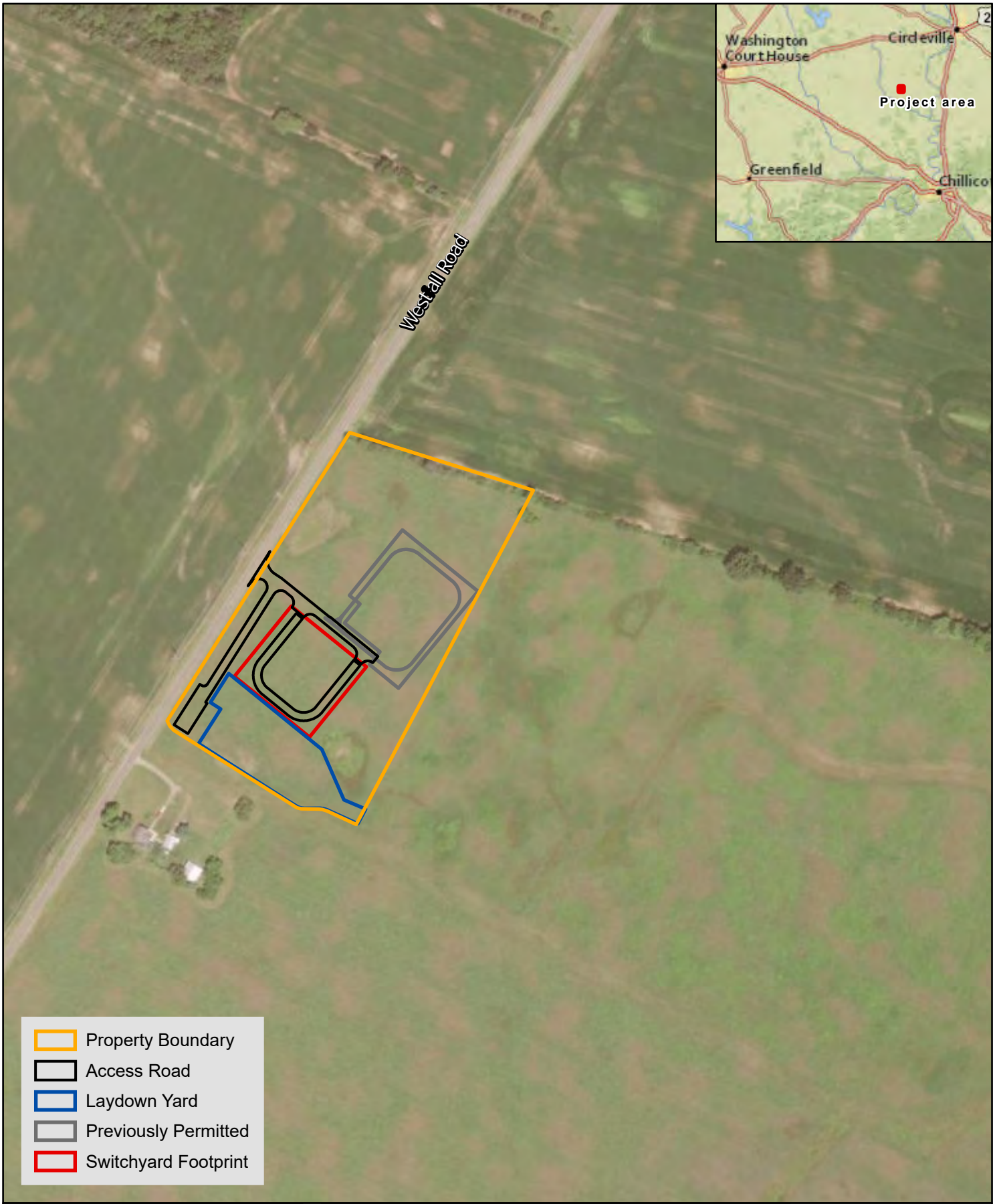
Thank you for your time,

Sincerely,

A handwritten signature in blue ink that reads 'Ryan J. Peterson'. The signature is fluid and cursive, with a large, sweeping 'R' and a distinct 'P'.

Ryan Peterson
Senior Principal Archaeologist
for Cardno
Direct Line +1 317 945 6309
Email: ryan.peterson1@cardno.com

Attachment: Figure 1 Yellowbud Cultural Overview



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Project Overview Yellowbud Solar Switchyard Ross County, Ohio



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Case No(s). 21-0329-EL-BLN

Summary: Application Letter of Notification Application electronically filed by Ms. Anna Sanyal on behalf of Yellowbud Solar, LLC