Construction Notice Kileville – Shire No. 3 and No. 4 138-kV Tie Lines Project

PUCO Case No. 23-0970-EL-BNR

Submitted to:
The Ohio Power Siting Board
Pursuant to Ohio Administrative Code
Section 4906-6-05

Submitted by:
Ohio Power Company

October 23, 2023

Construction Notice

Kileville-Shire No. 3 and No. 4 138-kV Tie Lines Project

4906-6-05

Ohio Power Company (the "Company") is providing the following information to the Ohio Power Siting Board (OPSB) in accordance with the accelerated application requirements of Ohio Administrative Code Section 4906-6-05.

4906-6-05(B) General Information

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.

The Company has identified the need to construct the Kileville-Shire No. 3 and No. 4 138-kV Tie Lines Project (the "Project") to provide additional electricity to a customer's facility in Jerome Township, Union County, Ohio. Previously, the Company filed and in-serviced the Kileville-Shire No. 1 and No. 2 138 kV Tie Lines (approved in Case No. 23-0153-EL-BNR) to serve the initial customer request. The Project will provide the customer with additional capacity by constructing two additional tie lines, totaling less than 0.1 mile between the Company's approved Kileville Substation (approved in Case No. 22-1119-EL-BLN) and the customer's stepdown substation (Shire Substation). The location of the Project and the associated previously approved projects are shown on **Exhibit 1** and **Exhibit 2** in **Appendix A**.

The Project meets the requirements for a Construction Notice (CN) because it is within the types of projects defined by Item (1)(c)(i) of 4906-1-01 *Appendix A Application Requirement Matrix For Electric Power Transmission Lines* of which states:

> *(1) New construction, extension, or relocation of single or multiple circuit electric power transmission line(s), or upgrading existing transmission or distribution line(s) for operation at a higher transmission voltage, as follows:*
>
> > *(c) Line(s) primarily needed to attract or meet the requirements of a specific customer or customers, as follows:*
> >
> > > *(i) The line is completely on property owned by the specific customer or the applicant*

The Project has been assigned PUCO Case No. 23-0970-EL-BNR**.**

B(2) Statement of Need

If the proposed project is an electric power transmission line or natural gas transmission line, a statement explaining the need for the proposed facility.

The Project is needed to address an additional 138 kV service requested by an existing customer in Jerome Township, Union County, Ohio. To meet the customer's needs of 258 MW of peak load, the Company will install two additional 138 kV tie-lines between the Company's Kileville Station and the customer's step-down station (Shire Station) to increase capacity. The customer has requested an in-service date of April 1, 2024.

Failure to move forward with the proposed Project will result in the inability to meet the customer's expectations and thereby jeopardize the customer's plans to increase their load to 258 MW.
The need was presented and reviewed with stakeholders at the February 17, 2022, PJM SSRTEP Western Meeting. The solution was presented and reviewed with stakeholders at the May 9, 2023, PJM TEAC Meeting. A PJM supplemental number has not been identified for the Project but will be provided to OPSB once it has been established by PJM. The Project is listed in the Company's supplemental 2023 Long Term Forecast Report on page 26, see Appendix B.

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.

The Project is in Jerome Township, Union County, Ohio. **Exhibit 1** in **Appendix A** shows the Project area on a United States Geological Survey (USGS) Hilliard and Shawnee Hills topographic quadrangle map in relation to existing facilities. **Exhibit 2** in **Appendix A** identifies the Project on aerial imagery.

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.

Kileville Substation is located on property owned by the Company and aligns with the layout of the surrounding customer's proposed development plans. Due to the location of the Kileville Substation and the customer's step down substation (Shire Substation), the proposed tie lines are a direct connection between the two and no additional landowners are impacted. In addition, the proposed Project will result in no impacts to wetlands, streams, or known cultural resource areas eligible for the National Register of Historic Places (NRHP).

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.

The Company maintains a website (http://aeptransmission.com/ohio/) on which an electronic copy of this CN is available. An electronic copy of the CN will be served to the public library and each political subdivision affected by this Project.

B(6) Construction Schedule

The applicant shall provide an anticipated construction schedule and proposed in-service date of the project.

Construction of the Project is planned to start in February 2024 with a proposed in-service date of April 2024.

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 1 in **Appendix A** provides the proposed Project area on a map of 1:24,000-scale (1-inch equals 2,500 feet) on the Hilliard and Shawnee Hills USGS 7.5-minute topographic map of the Project area. **Exhibit 2** in **Appendix A** shows the Project area on ESRI World Imagery at a scale of 1:6,000-scale (1-inch equals 500 feet. The ESRI World Imagery is dated March 2023.

To visit the Project from Columbus, take I-70 West and take exit 93 onto I-270 North. Take I-270 North for approximately 9.0 miles. Take exit 17B onto OH-161 West/US-33 West, then take exit 106 for OH-161 West. Turn left onto OH-161 West/Post Road and take the first exit at the traffic circle onto OH-161 West. Keep right onto Industrial Parkway/Old US Highway 33 then take the second exit at the traffic circle and stay on Industrial Parkway/Old US Highway 33. Turn left onto Warner Road and the Project is on the left (south) at geographic coordinates 40.116909, -83.198864.

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 proposed Project is located on Parcel Number 1500300200000 which is owned by the Company. No other property easements, options, or land use agreements are necessary to construct the Project or operate the station.

B(9) Technical Features

The applicant shall describe the following information regarding the technical features of the project:

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

Each tie line construction is estimated to include the following.

Voltage: 138 kV
Conductors: (3) 556KCM ASCR 26/7 Dove
Static Wire: (2) 7#10 Alumoweld
Insulators: Polymer
ROW Width: Not Applicable
Structure Types: Not Applicable

B(9)(b) Electric and Magnetic Fields

No occupied residences or institutions are located within 100 feet of the Project.

B(9)(c) Project Costs

The estimated capital cost of the project.

The capital cost estimate for the Project, which is comprised of applicable tangible and capital costs, is approximately $270,000 using a Class 4 estimate. Per the Ohio retail tariff, the Customer is responsible for 40% of the cost of the Project. The remainder of the Project cost, pursuant to the PJM OATT, will be recovered in the Ohio Power Company FERC formula rate (Attachment H-14 to the PJM OATT) and allocated to the AEP Zone.

B(10) Social and Economic Impacts

The applicant shall describe the social and ecological impacts of the project.

B(10)(a) 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 in Jerome Township, Union County, Ohio. Land use around the Project area includes agricultural fields and commercial and residential properties. However, large commercial and industrial facilities are currently under development in this area, and the parcel within which the Project is situated on is currently being developed by the customer. There are no schools, hospitals, places of worship, or airports within 1,000 feet of the Project's transmission tie-lines.

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 is on customer property and does not impact agricultural land. The Union County Auditor's office was contacted to obtain information about Agricultural District Lands and received the requested data via email on September 20, 2023. No Agricultural District Lands are within the potential disturbance area of the Project. No agricultural lands are crossed by the Project.

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 Company's consultant completed Phase I Cultural Resource Management Investigations of the Project Area to document previous studies. Recent ground disturbance within the Project area was noted on the customer's property. The consultant identified one aboveground resource greater than 50 years old in the area of potential effect but recommended that this feature was not eligible for the National Register of Historic Places (NRHP). The Ohio State Historic Preservation Office ("SHPO") provided a response to its review of the Project on July 25, 2022. SHPO acknowledged that the recent disturbance was not the result of work done by the Company or its subcontractor but stated that the disturbance made the Project area uninvestigable for archaeological resources. SHPO indicated that they were unable to comment on the Project's effect on archeological resource due to the high level of recent disturbance on site. SHPO concurred with the consultant's recommendation that the aboveground resource is not eligible for listing in the NRHP. SHPO stated that no further coordination was necessary unless the Project changes or additional resources are discovered during implementation of the Project. Correspondence with the SHPO received to date is provided in **Appendix C.**

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.

A Notice of Intent was be filed with the Ohio Environmental Protection Agency for authorization of construction storm water discharges under General Permit OHCD000006 as part of the overall Kileville Substation and associated transmission line construction. The Company will also coordinate storm water permitting needs with Union County as required. The Company will implement and maintain best management practices as outlined in the Project-specific Storm Water Pollution Prevention Plan ("SWPPP") to minimize erosion control sediment to protect surface water quality during storm events.

Wetland and stream delineation field surveys were completed within the Project area by the Company's consultant in February, September, and November 2022. No streams or wetlands were identified within the Project footprint (see Appendix D).

The FEMA Flood Insurance Rate Map was reviewed to identify any floodplains/flood hazard areas that have been mapped within the Project Area (specifically, map number **39049C0127K**). Based on this mapping, no mapped FEMA floodplains are located in the Project Area. Therefore, no floodplain permit will be required for the Project.

There are no other known local, state, or federal requirements that must be met prior to commencement of the proposed Project.

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.

As part of the ecological study completed for the Project, a coordination letter was submitted to the USFWS Ohio Ecological Services Field Office seeking technical assistance on the Project for potential impacts to threatened or endangered species. The April 13, 2022 response letter from the USFWS (see Appendix C) indicates that the entire State of Ohio lies within the range of the federally threatened northern long-eared bat and federally endangered Indiana bat.

Additionally, the proposed Project is in the vicinity of one or more confirmed records of Indiana bat. However, no tree clearing is anticipated for the Project, therefore no adverse effects are anticipated for the northern long-eared bat or the Indiana bat.

A coordination letter was submitted to the Ohio Department of Natural Resources ("ODNR") Division of Wildlife ("DOW") Ohio Natural Heritage Program ("ONHP") and the ODNR - Office of Real Estate in March 2022 seeking an environmental review of the proposed Project for potential impacts on state-listed and federally-listed threatened or endangered species. Correspondence from ODNR's DOW/OHNP and the ODNR – Office of Real Estate was received on April 1, 2022 (see **Appendix C**).

According to ODNR-DOW, the Project is within the range of the Indiana bat, northern long-eared bat, little brown bat, and tricolored bat. In addition, the Project is within the vicinity of records for the Indiana bat. Because the presence of state endangered bat species has been established in the area, summer tree cutting is not recommended, and additional summer surveys would not constitute presence/absence in the area. During the spring and summer (April 1 through September 30), the Indiana, northern long-eared, little brown, and tricolored bat species predominantly roost in trees behind loose, exfoliating bark, in crevices and cavities, or in the leaves. The DOW recommends tree cutting only occur from October 1 through March 31, conserving trees with loose, shaggy bark and/or crevices, holes, or cavities, as well as trees with dbh ≥ 20 inches if possible. The DOW also recommends conducting a desktop habitat assessment, followed by a field assessment if needed, to determine if there are potential hibernaculum present within 0.25 miles of the Project area. The Company's consultant completed a habitat desktop assessment in accordance with the 2020 Range-wide Indiana Bat Survey Guidelines utilizing available ODNR websites, including data on known abandoned or active mines and locations of known or suspected karst geology. The desktop assessment did not identify any mines within a 0.25-mile buffer of the Project area (See Figure 4 of

Appendix D), no potential hibernacula were observed within the Project area during field surveys, and the Company does not anticipate the need to clear trees for the Project. Therefore, the Project is not likely to impact these species.

According to the ODNR response letter, the Project is within the range of seven mussel and one fish species listed as federally or state endangered or threatened. However, due to the location, and that there is no in-water work proposed in any perennial streams of sufficient size, this Project is not likely to impact these species.

The Project is also within the range of the state-listed endangered American bittern, king rail, lark sparrow, and state-listed threatened least bittern. If any of these species nesting habitat (i.e., wetlands, marsh, and/or grassland) will be impacted, construction should be avoided in this habitat during the species' nesting period of May 1 through July 31. No nesting habitat was identified within the Project area; therefore, the Project is not likely to impact these species.

The Project is also within the range of the state-listed endangered loggerhead shrike and lark sparrow. If their nesting habitat (i.e., hedgerows, thickets, and fencerows) will be impacted, construction should be avoided in this habitat during the species' nesting period of April 1 through July 31. No nesting habitat was identified within the Project area; therefore, the Project is not likely to impact these species.

The Project is also within the range of the state-listed endangered northern harrier. If their nesting habitat (i.e., large marsh, or grasslands) will be impacted, construction should be avoided in this habitat during the species' nesting period of April 15 through July 31. No nesting habitat was identified within the Project area; therefore, the Project is not likely to impact this species.

B(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.

No unique ecological sites, geologic features, animal assemblages, scenic rivers, state wildlife areas, state nature preserves, state or national parks, state or national forests, or other protected natural areas were identified within the Project Area.

FEMA Flood Insurance Rate Maps were consulted to identify any floodplains/flood hazard areas that have been mapped in the Project Area (specifically, map number **39049C0127K**). Based on these maps, no mapped FEMA floodplains are located in the Project area.

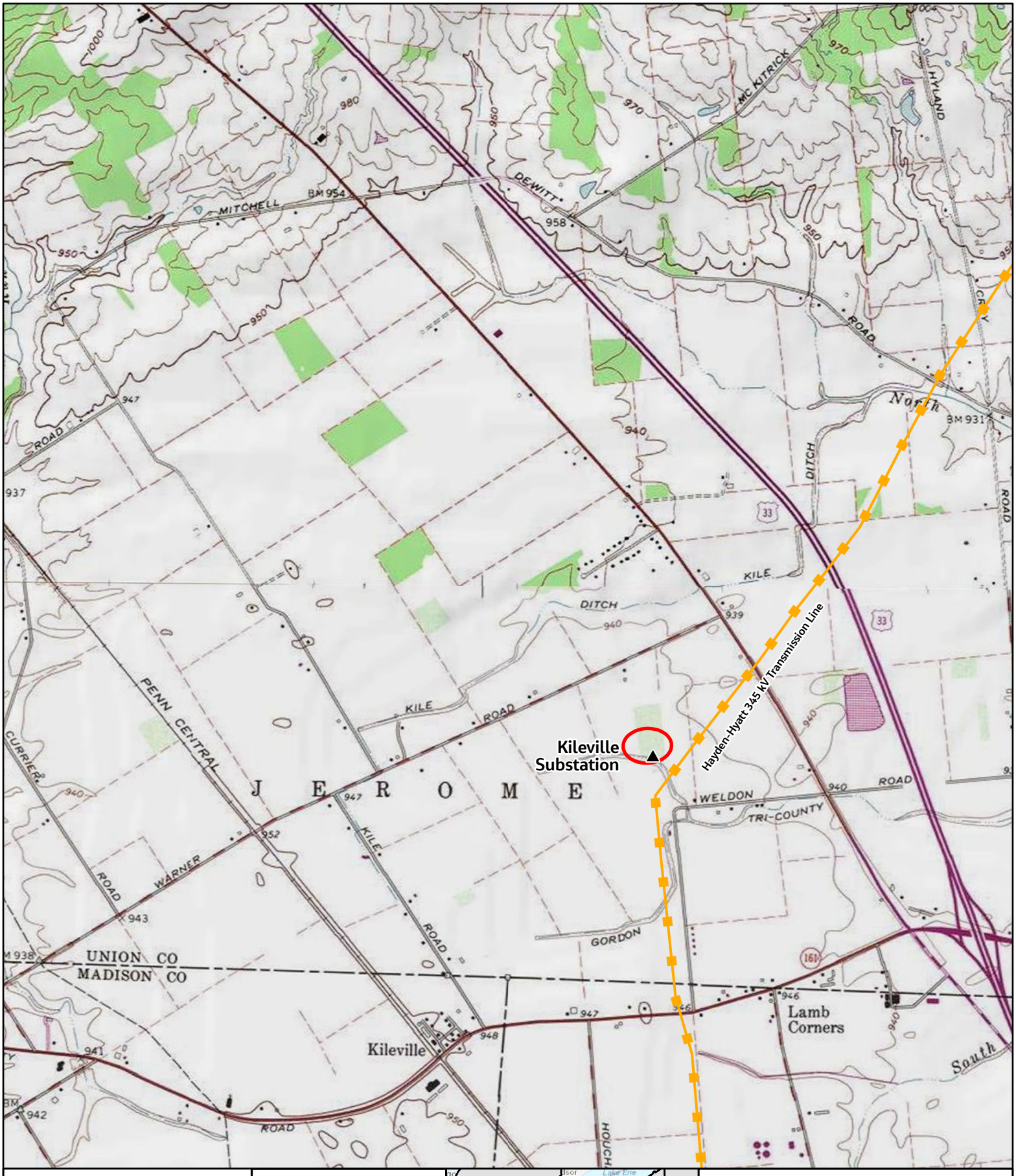
Wetland and stream delineation field surveys were completed within the Project area by the Company's consultant in February, September, and November 2022. No streams or wetlands were identified within the Project footprint (see Appendix D).

B(10)(g) Unusual Conditions

Provide any known additional information that will describe any unusual conditions resulting in significant environmental, social, health, or safety impacts.

To the best of the Company's knowledge, no unusual conditions exist that would result in significant environmental, social, health, or safety impacts.

Appendix A Project Maps



Legend

- ▲ Existing Substation
- Project Area
- Existing 345kV Transmission Line

Base Map Source:
USGS Historical
Topographic Map

Coordinate System
State Plane Ohio North
FIPS 3401 (US Feet)
Datum: NAD 1983
Scale: 1:24,000

N

10/11/2023

Exhibit 1
Topographic Overview

AEP OHIO
An AEP Company

Kileville-Shire 3 & 4
138 kV Transmission Line Project
Union County, OH

0 2,000 4,000
US Feet

Existing Substation

Kileville-Shire No.3 & No.4 Tie Lines

OPSB Approved Transmission Line (Filed Separately)

Existing 345 kV Transmission Line

Roadways

Parcel Boundaries

Base Map Source:
ESRI World Imagery

Coordinate System
State Plane Ohio North
FIPS 3401 (US Feet)
Datum: NAD 1983
Scale: 1:6,000

N

10/18/2023

Exhibit 2
Aerial Overview

AEP OHIO
An AEP Company

Kileville-Shire 3 & 4
138 kV Transmission Line Project
Union County, OH

0 500 1,000
US Feet

Appendix B Long Term Forecast Report and PJM Solution Submittal

PUCO Form FE-T9 Supplement:
AEP Ohio
Specifications of Planned Transmission Lines

1.	**LINE NAME AND NUMBER:**	Jerome - Rohan #4 138 kV (TP2021576)
2.	**POINTS OF ORIGIN AND TERMINATION**	Jerome - Rohan #4 INTERMEDIATE STATIONS - N/A
3.	**RIGHTS-OF-WAY: LENGTH / WIDTH / CIRCUITS**	0.05 mi / 100 ft / 1 circuit
4.	**VOLTAGE: DESIGN / OPERATE**	138 kV / 138 kV
5.	**APPLICATION FOR CERTIFICATE:**	2023
6.	**CONSTRUCTION:**	2024
7.	**CAPITAL INVESTMENT:**	$0.11 M
8.	**PLANNED SUBSTATION:**	Jerome
9.	**SUPPORTING STRUCTURES:**	Steel
10.	**PARTICIPATION WITH OTHER UTILITIES**	N/A
11.	**PURPOSE OF THE PLANNED TRANSMISSION LINE**	Service to new customer
12.	**CONSEQUENCES OF LINE CONSTRUCTION DEFERMENT OR TERMINATION**	Unable to serve new customer
13.	**MISCELLANEOUS:**	
1.	**LINE NAME AND NUMBER:**	Kileville - Shire #3 138 kV (TP2021576)
2.	**POINTS OF ORIGIN AND TERMINATION**	Kileville - Shire #3 INTERMEDIATE STATIONS - N/A
3.	**RIGHTS-OF-WAY: LENGTH / WIDTH / CIRCUITS**	0.03 mi / 100 ft / 1 circuit
4.	**VOLTAGE: DESIGN / OPERATE**	138 kV / 138 kV
5.	**APPLICATION FOR CERTIFICATE:**	2023
6.	**CONSTRUCTION:**	2024
7.	**CAPITAL INVESTMENT:**	$0.12 M
8.	**PLANNED SUBSTATION:**	N/A
9.	**SUPPORTING STRUCTURES:**	Steel
10.	**PARTICIPATION WITH OTHER UTILITIES**	N/A
11.	**PURPOSE OF THE PLANNED TRANSMISSION LINE**	Service to new customer
12.	**CONSEQUENCES OF LINE CONSTRUCTION DEFERMENT OR TERMINATION**	Unable to serve new customer
13.	**MISCELLANEOUS:**	
1.	**LINE NAME AND NUMBER:**	Kileville - Shire #4 138 kV (TP2021576)
2.	**POINTS OF ORIGIN AND TERMINATION**	Kileville - Shire #4 INTERMEDIATE STATIONS - N/A
3.	**RIGHTS-OF-WAY: LENGTH / WIDTH / CIRCUITS**	0.03 mi / 100 ft / 1 circuit
4.	**VOLTAGE: DESIGN / OPERATE**	138 kV / 138 kV

PUCO Form FE-T9 Supplement:
AEP Ohio
Specifications of Planned Transmission Lines

5.	**APPLICATION FOR CERTIFICATE:**	2023
6.	**CONSTRUCTION:**	2024
7.	**CAPITAL INVESTMENT:**	$0.12 M
8.	**PLANNED SUBSTATION:**	N/A
9.	**SUPPORTING STRUCTURES:**	Steel
10.	**PARTICIPATION WITH OTHER UTILITIES**	N/A
11.	**PURPOSE OF THE PLANNED TRANSMISSION LINE**	Service to new customer
12.	**CONSEQUENCES OF LINE CONSTRUCTION DEFERMENT OR TERMINATION**	Unable to serve new customer
13.	**MISCELLANEOUS:**	
1.	**LINE NAME AND NUMBER:**	Anguin - QTS Cust #1 &2 138 kV (TP2022073)
2.	**POINTS OF ORIGIN AND TERMINATION**	Anguin - QTS Cust #1 &2 INTERMEDIATE STATIONS - N/A
3.	**RIGHTS-OF-WAY: LENGTH / WIDTH / CIRCUITS**	0.03 mi / 100 ft / 2 circuit
4.	**VOLTAGE: DESIGN / OPERATE**	138 kV / 138 kV
5.	**APPLICATION FOR CERTIFICATE:**	2023
6.	**CONSTRUCTION:**	2024
7.	**CAPITAL INVESTMENT:**	$3.19 M
8.	**PLANNED SUBSTATION:**	N/A
9.	**SUPPORTING STRUCTURES:**	Steel
10.	**PARTICIPATION WITH OTHER UTILITIES**	N/A
11.	**PURPOSE OF THE PLANNED TRANSMISSION LINE**	Service to new customer
12.	**CONSEQUENCES OF LINE CONSTRUCTION DEFERMENT OR TERMINATION**	Unable to serve new customer
13.	**MISCELLANEOUS:**	
1.	**LINE NAME AND NUMBER:**	Anguin - QTS Cust #3 138 kV (TP2022073)
2.	**POINTS OF ORIGIN AND TERMINATION**	Anguin - QTS Cust #13 INTERMEDIATE STATIONS - N/A
3.	**RIGHTS-OF-WAY: LENGTH / WIDTH / CIRCUITS**	0.03 mi / 100 ft / 1 circuit
4.	**VOLTAGE: DESIGN / OPERATE**	138 kV / 138 kV
5.	**APPLICATION FOR CERTIFICATE:**	2023
6.	**CONSTRUCTION:**	2024
7.	**CAPITAL INVESTMENT:**	$1.34 M
8.	**PLANNED SUBSTATION:**	N/A
9.	**SUPPORTING STRUCTURES:**	Steel

AEP Transmission Zone M-3 Process
Jerome

Need Number: AEP-2021-OH049

Process Stage: Solution Meeting 5/9/2023

Previously Presented: Needs Meeting 7/16/2021, Need Meeting 9/17/2021 & Need Meeting 2/17/2023

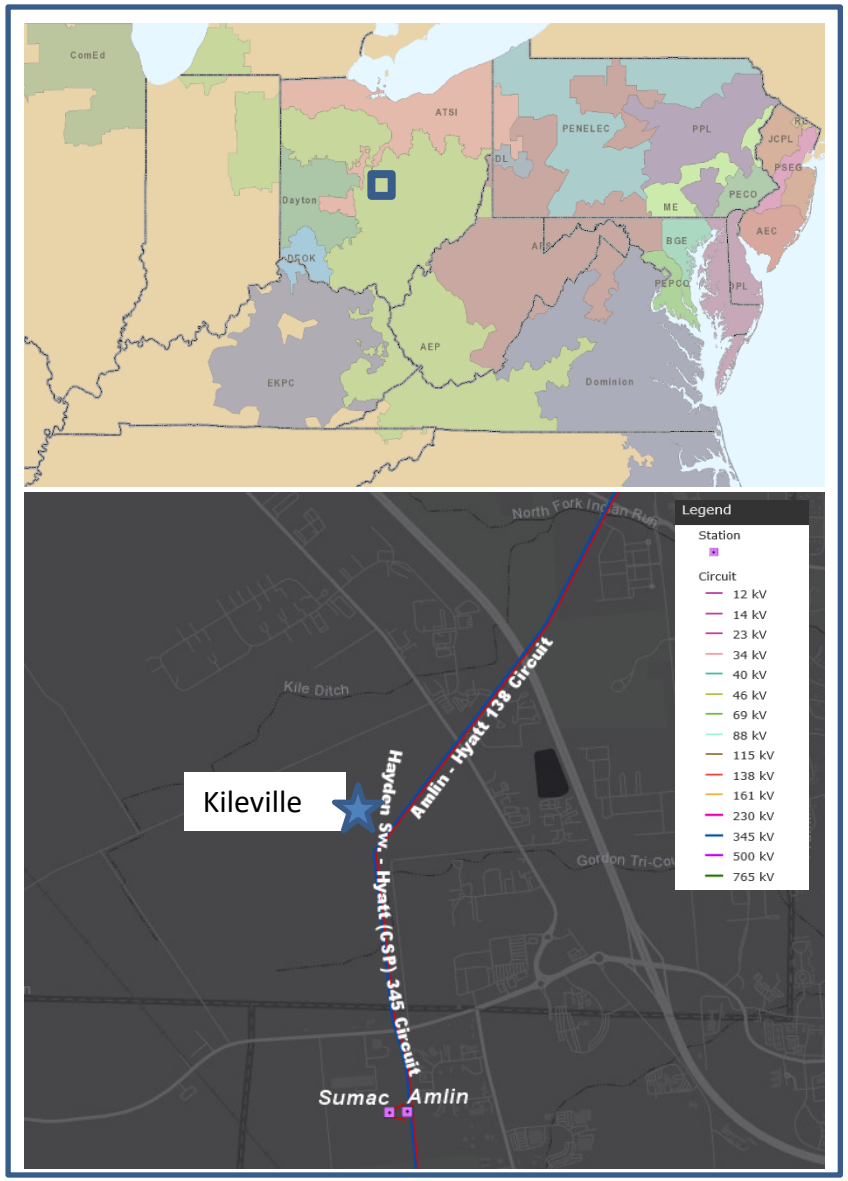
Project Driver: Customer Service

Specific Assumption Reference: AEP Connection Requirements for the AEP Transmission System (AEP Assumptions Slide 12)

Problem Statement:

<u>Jerome Delivery Point (AEP) 138 kV:</u>

- A customer has requested new transmission service in Plain City, Ohio.
- The delivery point will be used to serve a customer with high potential for rapid load growth. The initial load will be 106 MW with a potential future peak load demand of 203 MW.
- Service is requested by June 2024.
- The customer communicated a much more aggressive load ramp/build out schedule that would put their peak load at approximately 160 MW by early 2025 at the site.
- This Need was originally presented as a Buckeye Power request; The customer has since requested service from AEP Ohio at the site. As part of this request, the customer has indicated the need for additional feeds at the delivery which will bring the load amount up to 203 MW.



AEP Transmission Zone M-3 Process
Dublin & Hilliard, OH

Need Number: AEP-2021-OH049

Process Stage: Solutions Meeting 5/9/2023

Proposed Solution:

The following scope of work is all direct connect facilities to physically connect demand to the grid.

- **Jerome 138 kV**: Construct a greenfield Jerome station with (11) 138kV 63kA 4000A circuit breakers in breaker and half bus configuration. Construct ~ 2.5 miles of double circuit 138kV transmission line extending from Celtic & Kileville stations utilizing 2-bundled ACSS Cardinal 954 (45/7) conductor, SE rating 1061 MVA. Construct ~1.6 miles of double circuit 138kV transmission line extending from Jerome to cut-in back to Hyatt – Amlin line utilizing 2-bundled ACSS Cardinal 954 (45/7) conductor, SE rating 1061 MVA. Construct (4) 138 kV tie lines to the customers dead end structures ~0.05 miles utilizing ACSR Dove 556.5 (26/7) conductor SE 284 MVA. Customers will be directly connected at this station. Cost: **$30 M**

Appendix C Agency Coordination Letters

Office of Real Estate
John Kessler, Chief
2045 Morse Road – Bldg. E-2
Columbus, OH 43229
Phone: (614) 265-6621
Fax: (614) 267-4764

April 1, 2022

Matthew Teitt
Stantec Consulting Services, Inc.
1500 Lake Shore Drive Suite 100
Columbus OH 43204

Re: 22-0245; AEP Kileville Station Project

Project: The proposed project includes the construction of a new 138 kV substation.

Location: The proposed project is located in Jerome Township, Union County, Ohio.

The Ohio Department of Natural Resources (ODNR) has completed a review of the above referenced project. These comments were generated by an inter-disciplinary review within the Department. These comments have been prepared under the authority of the Fish and Wildlife Coordination Act (48 Stat. 401, as amended; 16 U.S.C. 661 et seq.), the National Environmental Policy Act, the Coastal Zone Management Act, Ohio Revised Code and other applicable laws and regulations. These comments are also based on ODNR's experience as the state natural resource management agency and do not supersede or replace the regulatory authority of any local, state or federal agency nor relieve the applicant of the obligation to comply with any local, state or federal laws or regulations.

Natural Heritage Database: The Natural Heritage Database has the following data at or within one mile of the project area:

Least Bittern (*Ixobrychus exilis*), T
Sora Rail (*Porzana carolina*), SC
King Rail (*Rallus elegans*), E
Virginia Rail (*Rallus limicola*), SC

The review was performed on the project area specified in the request as well as an additional one-mile radius. Records searched date from 1980. Conservation status abbreviations are as follows: E = state endangered; T = state threatened; P = state potentially threatened; SC = state species of concern; SI = state special interest; U = state status under review; X = presumed extirpated in Ohio; FE = federally endangered, and FT = federally threatened.

Please note that Ohio has not been completely surveyed and we rely on receiving information from many sources. Therefore, a lack of records for an area is not a statement that rare species or unique features are absent from that area.

Fish and Wildlife: The Division of Wildlife (DOW) has the following comments.

The DOW recommends that impacts to streams, wetlands and other water resources be avoided and minimized to the fullest extent possible, and that Best Management Practices be utilized to minimize erosion and sedimentation.

The project is within the vicinity of records for the Indiana bat (*Myotis sodalis*), a state endangered and federally endangered species. Because presence of state endangered bat species has been established in the area, summer tree cutting is not recommended, and additional summer surveys would not constitute presence/absence in the area. However, limited summer tree cutting inside this buffer may be acceptable after further consultation with DOW (contact Erin Hazelton at Erin.hazelton@dnr.ohio.gov).

In addition, the entire state of Ohio is within the range of the Indiana bat (*Myotis sodalis*), a state endangered and federally endangered species, the northern long-eared bat (*Myotis septentrionalis*), a state endangered and federally threatened species, the little brown bat (*Myotis lucifugus*), a state endangered species, and the tricolored bat (*Perimyotis subflavus*), a state endangered species. During the spring and summer (April 1 through September 30), these bat species predominately roost in trees behind loose, exfoliating bark, in crevices and cavities, or in the leaves. However, these species are also dependent on the forest structure surrounding roost trees. The DOW recommends tree cutting only occur from October 1 through March 31, conserving trees with loose, shaggy bark and/or crevices, holes, or cavities, as well as trees with DBH $\geq$ 20 if possible.

The DOW also recommends that a desktop habitat assessment is conducted, followed by a field assessment if needed, to determine if a potential hibernaculum is present within the project area. Direction on how to conduct habitat assessments can be found in the current USFWS "*Range-wide Indiana Bat Survey Guidelines*." If a habitat assessment finds that a potential hibernaculum is present within 0.25 miles of the project area, please send this information to Erin Hazelton for project recommendations. If a potential or known hibernaculum is found, the DOW recommends a 0.25-mile tree cutting and subsurface disturbance buffer around the hibernaculum entrance, however, limited summer or winter tree cutting may be acceptable after consultation with the DOW. If no tree cutting or subsurface impacts to a hibernaculum are proposed, this project is not likely to impact these species.

The project is within the range of the following listed mussel species.
Federally Endangered
nuffbox (*Epioblasma triquetra*)
clubshell (*Pleurobema clava*)
Northern riffleshell (*Epioblasma torulosa rangiana*)
rayed bean (*Villosa fabalis*)

Federally Threatened
rabbitsfoot (*Quadrula cylindrica cylindrica*)

State Endangered
elephant-ear (*Elliptio crassidens crassidens*)

State Threatened
pondhorn (*Uniomerus tetralasmus*)

Due to the location, and that there is no in-water work proposed in a perennial stream of sufficient size, this project is not likely to impact these species.

The project is within the range of the following listed fish species.
State Threatened
the Tippecanoe darter (*Etheostoma Tippecanoe*)

The DOW recommends no in-water work in perennial streams from March 15 through June 30 to reduce impacts to indigenous aquatic species and their habitat. If no in-water work is proposed in a perennial stream, this project is not likely to impact these or other aquatic species.

The project is within the range of the American bittern (*Botaurus lentiginosus*), a state endangered bird. Nesting bitterns prefer large undisturbed wetlands that have scattered small pools amongst dense vegetation. They occasionally occupy bogs, large wet meadows, and dense shrubby swamps. If this type of habitat will be impacted, construction should be avoided in this habitat during the species' nesting period of May 1 through July 31. If this type of habitat will not be impacted, the project is not likely to impact this species.

The project is within the range of the king rail (*Rallus elegans*), a state endangered bird. Nests for this species are deep bowls constructed out of grass and usually hidden very well in marsh vegetation. If this type of habitat will be impacted, construction should be avoided in this habitat during the species' nesting period of May 1 through July 31. If no wetland habitat will be impacted, the project is not likely to impact this species.

The project is within the range of the lark sparrow (*Chondestes grammacus*), a state endangered bird. This sparrow nests in grassland habitats with scattered shrub layers, disturbed open areas, as well as patches of bare soil. In the Oak Openings area west of Toledo, lark sparrows occupy open grass and shrubby fields along sandy beach ridges. These summer residents normally migrate out of Ohio shortly after their young fledge or leave the nest. If this type of habitat will be impacted, construction should be avoided in this habitat during the species' nesting period of May 1 through July 31. If this habitat will not be impacted, this project is not likely to impact this species.

The project is within the range of the least bittern (*Ixobrychus exilis*), a state threatened bird. This secretive marsh species prefers dense emergent wetlands with thick stands of cattails, sedges, sawgrass or other semiaquatic vegetation interspersed with woody vegetation and open water. If this type of habitat will be impacted, construction should be avoided in this habitat during the species' nesting period of May 1 through July 31. If this type of habitat will not be impacted, this project is not likely to impact this species.

The project is within the range of the loggerhead shrike (*Lanius ludovicianus*), a state endangered bird. The loggerhead shrike nests in hedgerows, thickets and fencerows. They hunt over hayfields, pastures, and other grasslands. If thickets or other types of dense shrubbery habitat will be impacted, construction should be avoided in this habitat during the species' nesting period of April 1 through July 31. If this habitat will not be impacted, this project is not likely to impact this species.

The project is within the range of the northern harrier (*Circus hudsonis*), a state endangered bird. This is a common migrant and winter species. Nesters are much rarer, although they occasionally breed in large marshes and grasslands. Harriers often nest in loose colonies. The female builds a nest out of sticks on the ground, often on top of a mound. Harriers hunt over grasslands. If this type of habitat will be impacted, construction should be avoided in this habitat during the species'

nesting period of April 15 through July 31. If this habitat will not be impacted, the project is not likely to impact this species.

Due to the potential of impacts to federally listed species, as well as to state listed species, we recommend that this project be coordinated with the US Fish & Wildlife Service.

Water Resources: The Division of Water Resources has the following comment.

The local floodplain administrator should be contacted concerning the possible need for any floodplain permits or approvals for this project. Your local floodplain administrator contact information can be found at the website below.

http://water.ohiodnr.gov/portals/soilwater/pdf/floodplain/Floodplain%20Manager%20Community%20Contact%20List_8_16.pdf

ODNR appreciates the opportunity to provide these comments. Please contact Mike Pettegrew at mike.pettegrew@dnr.ohio.gov if you have questions about these comments or need additional information.

Mike Pettegrew
Environmental Services Administrator

From:	Ohio, FW3
To:	Gillette, Tyler
Cc:	nathan.reardon@dnr.state.oh.us; Parsons, Kate; Teitt, Matthew; Grant S Stuller
Subject:	Proposed 138 kV Kileville Station Project, Union County, Ohio
Date:	Wednesday, April 13, 2022 2:44:19 PM
Attachments:	image.png image.png

UNITED STATES DEPARTMENT OF THE INTERIOR
U.S. Fish and Wildlife Service
Ecological Services Office
4625 Morse Road, Suite 104
Columbus, Ohio 43230
(614) 416-8993 / Fax (614) 416-8994

Project Code: 2022-0012784

Dear Mr. Gillette,

The U.S. Fish and Wildlife Service (Service) has received your recent correspondence requesting information about the subject proposal. We offer the following comments and recommendations to assist you in minimizing and avoiding adverse impacts to threatened and endangered species pursuant to the Endangered Species Act of 1973 (16 U.S.C. 1531 et seq), as amended (ESA).

Federally Threatened and Endangered Species: The endangered Indiana bat (*Myotis sodalis*) and threatened northern long-eared bat (*Myotis septentrionalis*) occur throughout the State of Ohio. The Indiana bat and northern long-eared bat may be found wherever suitable habitat occurs unless a presence/absence survey has been performed to document absence. Suitable summer habitat for Indiana bats and northern long-eared bats consists of a wide variety of forested/wooded habitats where they roost, forage, and breed that may also include adjacent and interspersed non-forested habitats such as emergent wetlands and adjacent edges of agricultural fields, woodlots, fallow fields, and pastures. Roost trees for both species include live and standing dead trees ≥3 inches diameter at breast height (dbh) that have any exfoliating bark, cracks, crevices, hollows and/or cavities. These roost trees may be located in forested habitats as well as linear features such as fencerows, riparian forests, and other wooded corridors. Individual trees may be considered suitable habitat when they exhibit the characteristics of a potential roost tree and are located within 1,000 feet of other forested/wooded habitat. Northern long-eared bats have also been observed roosting in human-made structures, such as buildings, barns, bridges, and bat houses; therefore, these structures should also be considered potential summer habitat. In the winter, Indiana bats and northern long-eared bats hibernate in caves, rock crevices and abandoned mines.

Seasonal Tree Clearing for Federally Listed Bat Species: The proposed project is in the vicinity of one or more confirmed records of Indiana bats. Should the proposed project site contain trees ≥3 inches dbh, we recommend avoiding tree removal wherever possible. If any caves or abandoned mines may be disturbed, further coordination with this office is requested to determine if fall or spring portal surveys are warranted. If no caves or abandoned mines are present and trees ≥3 inches dbh cannot be avoided, we recommend removal of any trees ≥3 inches dbh only occur between October 1 and March 31. Seasonal clearing is recommended to avoid adverse effects to Indiana bats and northern long-eared bats. While incidental take of northern long-eared bats from most tree clearing is exempted by a 4(d) rule (see

http://www.fws.gov/midwest/endangered/mammals/nleb/index.html), incidental take of Indiana bats is still prohibited without a project-specific exemption. Thus, seasonal clearing is recommended where Indiana bats are known or assumed present. Please note that, because Indiana bat presence has already been confirmed in the project vicinity, any additional summer surveys would not constitute presence/absence surveys for this species.

Section 7 Coordination: If there is a federal nexus for the project (e.g., federal funding provided, federal permits required to construct), then no tree clearing should occur on any portion of the project area until consultation under section 7 of the ESA, between the Service and the federal action agency, is completed. We recommend the federal action agency submit a determination of effects to this office, relative to the Indiana bat and northern long-eared bat, for our review and concurrence. This letter provides technical assistance only and does not serve as a completed section 7 consultation document.

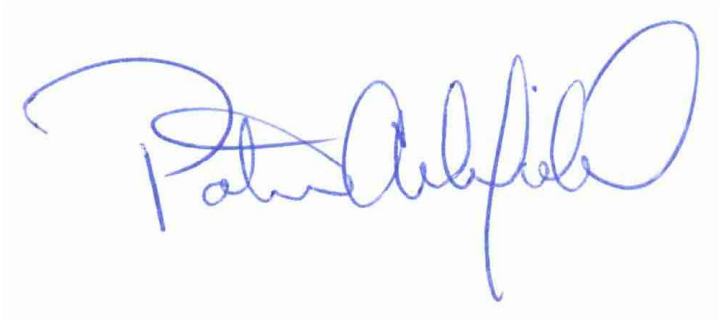
Stream and Wetland Avoidance: Over 90% of the wetlands in Ohio have been drained, filled, or modified by human activities, thus is it important to conserve the functions and values of the remaining wetlands in Ohio (https://epa.ohio.gov/portals/47/facts/ohio_wetlands.pdf). We recommend avoiding and minimizing project impacts to all wetland habitats (e.g., forests, streams, vernal pools) to the maximum extent possible in order to benefit water quality and fish and wildlife habitat. Additionally, natural buffers around streams and wetlands should be preserved to enhance beneficial functions. If streams or wetlands will be impacted, the U.S. Army Corps of Engineers should be contacted to determine whether a Clean Water Act section 404 permit is required. Best management practices should be used to minimize erosion, especially on slopes. Disturbed areas should be mulched and revegetated with native plant species. In addition, prevention of non-native, invasive plant establishment is critical in maintaining high quality habitats.

Due to the project type, size, and location, we do not anticipate adverse effects to any other federally endangered, threatened, or proposed species, or proposed or designated critical habitat. Should the project design change, or additional information on listed or proposed species or their critical habitat become available, or if new information reveals effects of the action that were not previously considered, coordination with the Service should be initiated to assess any potential impacts.

Thank you for your efforts to conserve listed species and sensitive habitats in Ohio. We recommend coordinating with the Ohio Department of Natural Resources due to the potential for the proposed project to affect state listed species and/or state lands. Contact Mike Pettegrew, Acting Environmental Services Administrator, at (614) 265-6387 or at mike.pettegrew@dnr.state.oh.us.

If you have questions, or if we can be of further assistance in this matter, please contact our office at (614) 416-8993 or ohio@fws.gov.

Sincerely,



Patrice Ashfield
Field Office Supervisor

cc: Nathan Reardon, ODNR-DOW
Kate Parsons, ODNR-DOW

In reply, refer to
2022-UNI-55202

July 25, 2022

Mr. Ryan J. Weller
Weller & Associates, Inc.
1395 West Fifth Avenue
Columbus, Ohio 43212

RE: Kileville Station Project, Jerome Township, Union County, Ohio

Dear Mr. Weller:

This letter is in response to the correspondence received June 27, 2022 regarding the proposed Kileville Station Project, Jerome Township, Union County, Ohio. We appreciate the opportunity to comment on this project. The comments of the Ohio State Historic Preservation Office (SHPO) are made pursuant to Section 149.53 of the Ohio Revised Code and the Ohio Power Siting Board rules for siting this project (OAC 4906-5). The comments of the Ohio SHPO are also submitted in accordance with the provisions of Section 106 of the National Historic Preservation Act of 1966, as amended (54 U.S.C. 306108 [36 CFR 800]).

The following comments pertain to the *Phase I Cultural Resource Management Investigations for the 2.3 ha (5.7 ac) Kileville Station Project in Jerome Township, Union County, Ohio* by Ryan J. Weller and Scott McIntosh (Weller & Associates, Inc. 2022).

Efforts were made by Weller & Associates, Inc. to complete archaeological investigations within the project area; however, the entire project area has been recently disturbed by the surrounding development. Though it is our understanding this disturbance did not take place by American Electric Power (AEP) or their subcontractors, unfortunately, this makes the project area uninvestigable for archaeological resources. Our office is unable to comment on the project's effect to archaeological resources due to the high level of recent disturbance on site.

A literature review and field survey were completed as part of the investigations. One (1) extant property fifty years of age or older was identified within the Area of Potential Effects (APE). It is Weller's recommendation that this property is not eligible for listing in the National Register of Historic Places (NRHP). Our office agrees with Weller's recommendations regarding eligibility.

Based on the information provided, our office has determined the proposed project will not affect aboveground historic properties. However, we are unable to comment on the project's affect to archaeological resources, due to the recent disturbance on site by the surrounding development. No further coordination with this office is necessary, unless the project changes or unless new or additional historic properties are discovered during implementation of this project. In such a situation, this office should be contacted. If you have any questions, please contact me at (614) 298-2022, or by e-mail at khorrocks@ohiohistory.org or Joy Williams at jwilliams@ohiohistory.org. Thank you for your cooperation.

Sincerely,

Krista Horrocks, Project Reviews Manager
Resource Protection and Review

RPR Serial No: 1093917

Appendix D Wetland Delineation Report

Kileville 138 kV Station Project, Union County, Ohio

Ecological Survey Report

Prepared for:

AEP Ohio Transmission Company, Inc.
8600 Smiths Mill Road
New Albany, OH 43054

Prepared by:

Stantec Consulting Services Inc.
1500 Lake Shore Drive, Suite 100
Columbus, OH 43204

December 5, 2022

Sign-off Sheet

This document entitled Kileville 138 kV Station Project Ecological Resources Inventory Report was prepared by Stantec Consulting Services Inc. ("Stantec") for the account of AEP Ohio Transmission Company, Inc. (the "Client"). Any reliance on this document by any third party is strictly prohibited. The material in it reflects Stantec's professional judgment in light of the scope, schedule and other limitations stated in the document and in the contract between Stantec and the Client. The opinions in the document are based on conditions and information existing at the time the document was published and do not take into account any subsequent changes. In preparing the document, Stantec did not verify information supplied to it by others. Any use which a third party makes of this document is the responsibility of such third party. Such third party agrees that Stantec shall not be responsible for costs or damages of any kind, if any, suffered by it or any other third party as a result of decisions made or actions taken based on this document.

Prepared by Zoe True

(signature)

Zoe True

Reviewed by Charlie Allen

(signature)

Charlie Allen

Reviewed by Michelle Kearns

(signature)

Michelle Kearns

Table of Contents

LIST OF TABLES

LIST OF APPENDICES

1.0 INTRODUCTION

AEP Ohio Transmission Company, Inc. (AEP) is proposing to construct a new 138 kilovolt (kV) station in Union County, Ohio. The Kileville 138 kV Station Project (the Project) is located in Jerome Township, Ohio (Figure 1, Appendix B). The Project will include the construction of a new 138 kV station with associated structures and access road. An approximate 5-acre study area for the proposed new station was surveyed for wetlands, waterbodies, open water features, upland drainage features, and potential threatened, endangered, and rare species habitat by Stantec Consulting Services Inc. (Stantec) biologists on February 23, September 26, and November 30, 2022 (Figure 2, Appendix B). The approximate locations of features located up to 50 feet outside of the Project area were also recorded during the field surveys, where landowner access was permitted. However, no data forms were collected on features that did not extend into the Project area. These features are shown on the Figure 2 map in Appendix B as "approximate" wetlands, streams (waterways), open waters, and upland drainage features.

2.0 METHODS

2.1 WETLAND DELINEATION

Prior to completing the field surveys, a desktop review of the Project area was conducted using U.S. Geological Survey (USGS) topographic maps, National Wetlands Inventory (NWI) maps, U.S. Department of Agriculture (USDA) Natural Resources Conservation Service (NRCS) soil survey data, and aerial imagery mapping. Stantec completed a wetland delineation study in accordance with the *Corps of Engineers Wetlands Delineation Manual* (USACE Environmental Laboratory 1987) and the *Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Midwest Region* (Version 2.0; USACE 2012). Wetland categories were classified using the Ohio Rapid Assessment Method (ORAM) for Wetlands Version 5.0 (Mack 2001).

2.2 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 22250 Federal Register/Vol. 85, No. 77 (effective June 22, 2020; USACE 2020). Functional assessment of streams within the Project area was based on completion of the Ohio Environmental Protection Agency's (OEPA) Headwater Habitat Evaluation Index (HHEI; OEPA 2020) and/or Qualitative Habitat Evaluation Index (QHEI; OEPA 2006). The centerline and/or the OHWM locations of each waterway were identified and surveyed using a handheld sub-meter accuracy global positioning system (GPS) unit and mapped with GIS software. Additionally, the locations of upland drainage features (which lacked a continuously defined bed and bank/OHWM) identified within the Project area were also recorded with a sub-meter accuracy GPS unit during the field surveys.

2.3 RARE SPECIES

Prior to conducting the field surveys, Stantec contacted the Ohio Department of Natural Resources (ODNR) and the U.S. Fish and Wildlife Service (USFWS) for information regarding rare, threatened, or endangered species and their habitats of concern within the vicinity of the Project area (Appendix E – Agency Correspondence). To assess potential impacts to rare, threatened, or endangered species, Stantec scientists conducted a pedestrian reconnaissance of the Project area, collected information on existing habitats within the Project area, and assessed the potential for these habitats to be used by these species.

3.0 RESULTS

3.1 TERRESTRIAL HABITAT

Stantec completed field surveys within the Project area on February 23, September 26, and November 30, 2022, for potentially suitable habitats for threatened and endangered species. Figure 3 (Appendix B) shows the land cover, vegetation communities, and any identified rare, threatened, or endangered species habitats observed within the Project area during the habitat assessment surveys. Representative photographs of the vegetation communities/habitats identified within the Project area are included in Appendix D-2 of this report (photo locations are shown on Figure 3 in Appendix B). Information regarding the vegetation communities/habitats identified within the Project area are provided in Table 1.

Table 1. Vegetation Communities and Land Cover Found within the Kileville 138 kV Station Project Area, Union County, Ohio

Vegetation Communities and Land Cover Types within the Project Area	Degree of Human-Related Ecological Disturbance	Unique, Rare, or High Quality?	Approximate Acreage Within Project Area
Industrial Land	Extreme Disturbance/Ruderal Community (dominated by opportunistic invaders, planted non-native species, and/or native highly tolerant taxa).	No	4.69
		TOTAL	**4.69**

3.2 WETLANDS

Stantec completed field surveys for wetlands within the Project area on February 23, September 26, and November 30, 2022. The Project area contains three National Wetland Inventory (NWI) features (Table 2). Stantec did not identify any wetlands located within the Project area.

Table 2. Summary of NWI Disposition within the Kileville 138 kV Station Project Area, Union County, Ohio

NWI Code	NWI Description	Figure 2 Page Number	Related Field Inventoried Resource	Comments
PFO1A	Palustrine, Forested, Broad-leaved Deciduous, Temporarily Flooded	1	SP01	At the time of the field survey the area consisted of filled gravel. A sample point was collected within the NWI during a previous delineation (02/23/2022) conducted by Stantec. The field collected SP01 determined the area to be upland at the time of the previous delineation.
PFO1A	Palustrine, Forested, Broad-leaved Deciduous, Temporarily Flooded	1	SP02	At the time of the field survey the area consisted of filled gravel. A sample point was collected within the NWI during a previous delineation (02/23/2022) conducted by Stantec. The field collected SP02 determined the area to be upland at the time of the previous delineation.
R4SBC	Riverine, Intermittent, Streambed, Seasonally Flooded	1	SP03	At the time of the field survey the area consisted of filled gravel.

3.3 STREAMS

No streams were delineated within the Project area during the field surveys on February 23, September 26, and November 30, 2022. The Project area does contain a mapped National Hydrography Data (NHD) features or U.S. Geological Survey (USGS) named streams.

3.4 OPEN WATERS

No open waters (i.e., ponds, lakes) were delineated within the Project area during the field surveys completed on February 23 and November 30, 2022.

3.5 RARE, THREATENED, OR ENDANGERED SPECIES HABITAT

Table 3. Summary of Potential Federal and Ohio State-Listed Species within the Kileville 138 kV Station Project Area, Union County, Ohio

Common/Scientific Names	*State Listed Status	*Federally Listed Status	Typical Habitat	Habitat Observed	Agency Comment** (Appendix E)	Potential Impacts and Avoidance Dates
Indiana bat / *Myotis sodalis*	E	E	The Indiana bat is likely distributed over the entire State of Ohio, though not uniformly. This species generally forages in openings and edge habitats within upland and floodplain forest, but they also forage over old fields and pastures (Brack et al. 2010). Natural roost structures include trees (live or dead) with exfoliating bark, and exposure to solar radiation. Other important factors for roost trees include relative location to other trees, a permanent water source and foraging areas. Dead trees are preferred as maternity roosts; however, live trees are often used as secondary roosts depending on microclimate conditions (USFWS 2007, USFWS 2020b). Roosts have also occasionally been found to consist of cracks and hollows in trees, utility poles, buildings, and bat boxes. Primarily use caves for hibernacula, although are also known to hibernate in abandoned underground mines (Brack et al. 2010).	No suitable habitat was observed within the project area.	**ODNR** – The Project is within the vicinity of records for the Indiana bat. Because presence of state endangered bat species have been established in the area, summer tree cutting is not recommended, and additional summer surveys would not constitute presence/absence in the area. The DOW recommends tree cutting only occur from October 1 through March 31, conserving trees with loose, shaggy bark and/or crevices, holes, or cavities, as well as trees with diameter at breast height (dbh) ≥ 20 inches if possible. In addition, the DOW recommends a desktop habitat assessment, followed by a field assessment if needed, to determine if there are potential hibernacula present within the Project area. **USFWS** – The proposed Project is in the vicinity of one or more confirmed records of Indiana bat. Should the proposed Project site contain trees ≥3 inches dbh, USFWS recommends avoiding tree removal whenever possible. If no caves or abandoned mines are present and trees ≥3 inches dbh cannot be avoided, USFWS recommends removal only occur between October 1 and March 31. Please note that, because Indiana bat presence has already been confirmed in the Project vicinity, any additional summer surveys would not constitute presence/absence surveys for this species.	No suitable habitat was observed within the project area. Therefore, this Project is not likely to impact this species.
Northern Long-eared Bat / *Myotis septentrionalis*	E	T	The northern long-eared bat is found throughout Ohio. This species generally forages in forested habitat and openings in forested habitat and utilizes cracks, cavities, and loose bark within live and dead trees, as well as buildings as roosting habitat (Brack et al. 2010; USFWS 2020a). The species utilizes caves and abandoned mines as winter hibernacula. Various sized caves are used providing they have a constant temperature, high humidity, and little to no air current (Brack et al. 2010).	No suitable habitat was observed within the project area.	**ODNR** – This Project lies within the range of the northern long-eared bat. During the spring and summer (April 1 through September 30), this bat species predominantly roost in trees behind loose, exfoliating bark, in crevices and cavities, or in the leaves. The DOW recommends tree cutting only occur from October 1 through March 31, conserving trees with loose, shaggy bark and/or crevices, holes, or cavities, as well as trees with dbh ≥ 20 inches if possible. In addition, the DOW recommends a desktop habitat assessment, followed by a field assessment if needed to determine if there are potential hibernacula present within the Project area. **USFWS -** Recommends avoiding tree removal whenever possible. If no caves or abandoned mines are present and trees ≥3 inches dbh cannot be avoided, USFWS recommends removal only occur between October 1 and March 31. Incidental take of northern long-eared bats from most tree clearing is exempt by a 4(d) rule.	No suitable habitat was observed within the project area. Therefore, this Project is not likely to impact this species.

Common/Scientific Names	*State Listed Status	*Federally Listed Status	Typical Habitat	Habitat Observed	Agency Comment** (Appendix E)	Potential Impacts and Avoidance Dates
Little Brown Bat/ *Myotis lucifugus*	E	N/A	This bat uses a wide range of habitats and man-made structures for roosting, including buildings and attics. Less frequently, they use hollows of trees. Winter hibernation sites typically consist of caves, tunnels, abandoned mines. Foraging habitat for this species generally occurs over water, along the edges of lakes and stream or in woodlands near waterbodies (NatureServe 2022).	No suitable habitat was observed within the project area.	**ODNR** - This Project lies within the range of the little brown bat. During the spring and summer (April 1 through September 30), this bat species predominantly roost in trees behind loose, exfoliating bark, in crevices and cavities, or in the leaves. The DOW recommends tree cutting only occur from October 1 through March 31, conserving trees with loose, shaggy bark and/or crevices, holes, or cavities, as well as trees with dbh ≥ 20 inches if possible. In addition, the DOW recommends a desktop habitat assessment, followed by a field assessment if needed to determine if there are potential hibernacula present within the Project area. **USFWS** – No comment	No suitable habitat was observed within the project area. Therefore, this Project is not likely to impact this species.
Tricolored Bat/ *Perimyotis subflavus*	E	N/A	This species is found throughout Ohio and is associated with forested landscapes, foraging near trees and along waterways. Maternity and summer roosts usually occur in dead or live tree foliage, or in the south, in clumps of Spanish moss. Maternity colonies may also use tree cavities or man-made structures, such as buildings or bridges. Caves, mines, and rock crevices may be used as night roosts between foraging (NatureServe 2022).	No suitable habitat was observed within the project area.	**ODNR** - This Project lies within the range of the tricolored bat. During the spring and summer (April 1 through September 30), this bat species predominantly roost in trees behind loose, exfoliating bark, in crevices and cavities, or in the leaves. The DOW recommends tree cutting only occur from October 1 through March 31, conserving trees with loose, shaggy bark and/or crevices, holes, or cavities, as well as trees with dbh ≥ 20 inches if possible. In addition, the DOW recommends a desktop habitat assessment, followed by a field assessment if needed to determine if there are potential hibernacula present within the Project area. **USFWS** – No Comment.	No suitable habitat was observed within the project area. Therefore, this Project is not likely to impact this species.
King Rail / *Rallus elegans*	E	N/A	Occurs in freshwater marshes, upland – wetland marsh edges, rice fields or similar flooded farmlands, shrub swamps (NatureServe 2022).	No suitable habitat was observed within the Project area.	**ODNR –** The Natural Heritage Database has a record of this species at or within a one-mile radius of the Project area. If marsh vegetation will be impacted, construction should be avoided in this habitat during the species' nesting period of May 1 through July 31. If no wetland habitat will be impacted, the Project is not likely to impact this species. **USFWS** – No Comment.	No suitable habitat was observed within the Project area. Therefore, this Project is not likely to impact this species.
American bittern / *Botaurus lentiginosus*	E	N/A	Occurs primarily in large freshwater and (less often) brackish marshes, including lake and pond edges where cattails, sedges, or bulrushes are plentiful and marshes where there are patches of open water and aquatic bed vegetation (NatureServe 2022).	No suitable habitat was observed within the Project area.	**ODNR –** If large undisturbed wetlands with scattered small pools amongst dense vegetation will be impacted, construction should be avoided in this habitat during the species' nesting period of May 1 through July 31. If this type of habitat will not be impacted, the Project is not likely to impact this species. **USFWS** – No Comment.	No suitable habitat was observed within the Project area. Therefore, this Project is not likely to impact this species.
Lark Sparrow / *Chondestes grammacus*	E	N/A	Breeding habitat includes various open situations with scattered bushes and trees: shortgrass, mixed-grass, and tallgrass prairie with a shrub component and sparse litter; parkland, sandhills; barrens; old fields; cultivated fields; shrub thickets (NatureServe 2022)	No suitable habitat was observed within the Project area.	**ODNR –** If grassland habitat with scattered shrub layers, disturbed open areas, as well as patches of bare soil will be impacted, construction should be avoided in this habitat during the species' nesting period of May 1 through July 31. If this habitat will not be impacted, this Project is not likely to impact this species.	No suitable habitat was observed within the Project area. Therefore, this Project is not likely to impact this species.

Common/Scientific Names	*State Listed Status	*Federally Listed Status	Typical Habitat	Habitat Observed	Agency Comment** (Appendix E)	Potential Impacts and Avoidance Dates
					USFWS – No Comment.	
Loggerhead shrike / *Lanius ludovicianus*	E	N/A	Occurs in open country with scattered trees and shrubs, savanna, desert scrub, and, occasionally, open woodland; often perches on poles, wires, or fenceposts (NatureServe 2022).	No suitable habitat was observed within the Project area.	**ODNR –** If thickets or other types of dense shrubbery habitat will be impacted, construction should be avoided in this habitat during the species' nesting period of April 1 through July 31. If this habitat will not be impacted, this Project is not likely to impact this species. **USFWS** – No Comment.	No suitable habitat was observed within the Project area. Therefore, this Project is not likely to impact this species.
Northern Harrier / *Circus hudsonis*	E	N/A	Breeds in wide-open habitats ranging from Arctic tundra to prairie grasses to fields and marshes. Nests are concealed on the ground in grasses or wetland vegetation (All About Birds 2022).	No suitable habitat was observed within the Project area.	**ODNR** - If marsh or grassland habitat will be impacted, construction should be avoided in this habitat during the species' nesting period of April 15 through July 31. If this habitat will not be impacted, this Project is not likely to impact this species. **USFWS** – No Comment	No suitable habitat was observed within the Project area. Therefore, this Project is not likely to impact this species.
Least Bittern / *Ixobrychus exilis*	T	N/A	Occurs in tall emergent vegetation in marshes, primarily freshwater, less commonly in coastal brackish marshes and mangrove swamps. Prefers marshes with scattered bushes or other woody growth (NatureServe 2022).	No suitable habitat was observed within the Project area.	**ODNR –** The Natural Heritage Database has a record of this species at or within a one-mile radius of the Project area. If emergent wetland habitat will be impacted, construction should be avoided in this habitat during the species' nesting period of May 1 through July 31. If this habitat will not be impacted, this Project is not likely to impact this species. **USFWS** – No Comment.	No suitable habitat was observed within the Project area. Therefore, this Project is not likely to impact this species.
Sora Rail / *Porzana carolina*	SC	N/A	Occurs primarily in shallow freshwater emergent wetlands, less frequently in bogs, fens, wet meadows, and flooded fields, sometimes foraging on open mudflats adjacent to marshy habitat (NatureServe 2022).	No suitable habitat was observed within the Project area.	**ODNR –** The Natural Heritage Database has a record of this at or within a one-mile radius of the Project area. **USFWS** – No Comment.	No suitable habitat was observed within the Project area. Therefore, this Project is not likely to impact this species.
Virginia Rail / *Rallus limicola*	SC	N/A	Occurs in freshwater and occasionally brackish marshes, mostly in cattails, reeds, and deep grasses, also in or close to other emergent vegetation (NatureServe 2022).	No suitable habitat was observed within the Project area.	**ODNR –** The Natural Heritage Database has a record of this species at or within a one-mile radius of the Project area. **USFWS** – No Comment.	No suitable habitat was observed within the Project area. Therefore, this Project is not likely to impact this species.
Clubshell / *Pleurobema clava*	E	E	Despite the type locality of Lake Erie, this is a species of small to medium sized rivers and streams (NatureServe 2022).	No suitable habitat was observed within the Project area.	**ODNR –** The Project is within the range of this species. Due to the location, and that there is no in-water work proposed in a perennial stream of sufficient size, this Project is not likely to impact this species. **USFWS** – Due to the Project type, size, and location, USFWS does not anticipate adverse effects to any other federally endangered, threatened, or proposed species, or proposed or designated critical habitat.	No suitable habitat was observed within the Project area. In addition, no in-water work is proposed in a perennial stream. Therefore, this Project is not likely to impact this species.
Northern Riffleshell / *Epioblasma torulosa rangiana*	E	E	Preferred habitat is swiftly moving water. The high oxygen concentrations in swift streams may be necessary for survival. It is a species of riffle areas of smaller streams, and as such has fared better than larger river species (NatureServe 2022).	No suitable habitat was observed within the Project area.	**ODNR –** The Project is within the range of this species. Due to the location, and that there is no in-water work proposed in a perennial stream of sufficient size, this Project is not likely to impact this species. **USFWS** – Due to the Project type, size, and location, USFWS does not anticipate adverse effects to any other federally endangered, threatened, or proposed species, or proposed or designated critical habitat.	No suitable habitat was observed within the Project area. In addition, no in-water work is proposed in a perennial stream. Therefore, this Project is not likely to impact this species.

Common/Scientific Names	*State Listed Status	*Federally Listed Status	Typical Habitat	Habitat Observed	Agency Comment** (Appendix E)	Potential Impacts and Avoidance Dates
Rayed Bean / *Villosa fabalis*	E	E	It is generally known from smaller headwater creeks, but records exist in larger rivers. They are usually found in or near shoal or riffle areas, and in the shallow wave-washed areas of glacial lakes, including Lake Erie (NatureServe 2022).	No suitable habitat was observed within the Project area.	**ODNR –** The Project is within the range of this species. Due to the location, and that there is no in-water work proposed in a perennial stream of sufficient size, this Project is not likely to impact this species. **USFWS** – Due to the Project type, size, and location, USFWS does not anticipate adverse effects to any other federally endangered, threatened, or proposed species, or proposed or designated critical habitat.	No suitable habitat was observed within the Project area. In addition, no in-water work is proposed in a perennial stream. Therefore, this Project is not likely to impact this species.
Snuffbox / *Epioblasma triquetra*	E	E	Occurs in medium-sized streams to large rivers generally on mud, rocky, gravel, or sand substrates in flowing water. Often deeply buried in substrate and overlooked by collectors (NatureServe 2022).	No suitable habitat was observed within the Project area.	**ODNR –** The Project is within the range of this species. Due to the location, and that there is no in-water work proposed in a perennial stream of sufficient size, this Project is not likely to impact this species. **USFWS** – Due to the Project type, size, and location, USFWS does not anticipate adverse effects to any other federally endangered, threatened, or proposed species, or proposed or designated critical habitat.	No suitable habitat was observed within the Project area. In addition, no in-water work is proposed in a perennial stream. Therefore, this Project is not likely to impact this species.
Elephant-ear / *Elliptio crassidens*	E	N/A	An inhabitant of channels in large creeks to rivers with moderate to swift currents, primarily on sand and limestone or rock substrates (NatureServe 2022).	No suitable habitat was observed within the Project area.	**ODNR –** The Project is within the range of this species. Due to the location, and that there is no in-water work proposed in a perennial stream of sufficient size, this Project is not likely to impact this species **USFWS** – No Comment.	No suitable habitat was observed within the Project area. In addition, o in-water work is proposed in a perennial stream. Therefore, this Project is not likely to impact this species.
Rabbitsfoot / *Quadrula cylindrica cylindrica*	E	T	The typical habitat is small to medium rivers with moderate to swift currents, and in smaller streams it inhabits bars or gravel and cobble close to the fast current (NatureServe 2022).	No suitable habitat was observed within the Project area.	**ODNR –** The Project is within the range of this species. Due to the location, and that there is no in-water work proposed in a perennial stream of sufficient size, this Project is not likely to impact this species **USFWS** – Due to the Project type, size, and location, USFWS does not anticipate adverse effects to any other federally endangered, threatened, or proposed species, or proposed or designated critical habitat.	No suitable habitat was observed within the Project area. In addition, due to the location and habitat within the Project area, this Project is not likely to impact this species.
Pondhorn / *Uniomerus tetralasmus*	T	N/A	Typically inhabits quite or slow-moving, shallow waters of shoughs, borrow pits, ponds, ditches, and meandering streams. It is tolerant of poor water conditions and can be found well buried in a substrate of fine silt and/or mud (NatureServe 2022).	No suitable habitat was observed within the Project area.	**ODNR –** The Project is within the range of this species. Due to the location, and that there is no in-water work proposed in a perennial stream of sufficient size, this Project is not likely to impact this species **USFWS** – No Comment.	No suitable habitat was observed within the Project area. In addition, no in-water work is proposed in a perennial stream. Therefore, this Project is not likely to impact this species.

Common/Scientific Names	*State Listed Status	*Federally Listed Status	Typical Habitat	Habitat Observed	Agency Comment** (Appendix E)	Potential Impacts and Avoidance Dates
Tippecanoe Darter / *Etheostoma tippecanoe*	NA	N/A	This fish prefers medium to large streams in the Ohio River drainage system and are found in riffles of moderate current with substrate of gravel or cobble sized rocks (ODNR Division of Wildlife 2022).	No suitable habitat was observed within the Project area.	**ODNR** - The Project is within the range of this species. The DOW recommends no in-water work in perennial streams from March 15 through June 30 to reduce impacts to indigenous aquatic species and their habitat. If no in-water work is proposed in a perennial stream, this Project is not likely to impact this species. **USFWS** – No Comment.	No suitable habitat was observed within the Project area. In addition, no in-water work is proposed in a perennial stream. Therefore, this Project is not likely to impact this species.

*Status key: E=Endangered; T=Threatened; PT=Potentially Threatened; SC=Species of Concern

**The information is based on the literature review response information from ODNR and USFWS and is study area/project specific.

4.0 CONCLUSIONS AND RECOMMENDATIONS

Stantec conducted a wetland and waterbodies delineation and a preliminary habitat assessment for threatened and endangered species within the Project area on February 23, September 26, and November 30, 2022. During the field surveys, one upland drainage feature (UDF) was delineated within the Project area. No wetlands, streams or open water features were observed within the Project area. No U.S. Geological Survey named streams are depicted within the project area; however there are three NWI features depicted within the Project area.

The information provided by Stantec regarding wetland and stream boundaries is based on an analysis of the wetland and upland conditions present within the Project area at the time of the field work. The delineations were performed by experienced and qualified professionals using regulatory agency-accepted practices and sound professional judgment.

An approved jurisdictional determination (AJD) and no permit required letter drafted by the USACE on February 1, 2021 that overlaps a portion of the Project area associated with this report was provided to AEP (Appendix F). The AJD states that Ditch 1 (see Proposed Site Plan and Impacts Map; Appendix F) is a ditch with ephemeral flow that was constructed in uplands and is therefore not a jurisdictional water of the United States (WOTUS) and is not subject to regulation under section 404.In addition, Wetlands A, B and C (see Proposed Site Plan and Impacts Map; Appendix F) do not abut a water identified as a jurisdictional WOTUS, are not inundated by flooding from a WOTUS in a typical year and are not physically separated from a WOTUS only by a natural berm, bank, dune, or similar natural feature. Therefore, USACE determined that Wetlands A, B, and C are not considered jurisdictional WOTUS and are not subject to regulation under Section 404. None of the above wetlands or ditches were delineated within the Project area covered in this report. The previously identified ditch and wetlands referenced in the AJD have been filled and were not observed at the time of the most recent site visits conducted by Stantec on September 26 and November 30, 2022. The OEPA General Isolated Wetland Permit Application detailing the proposed impacts to the non-jurisdictional ditch and wetlands is also included in Appendix F.

An ODNR Ohio Natural Heritage Program data request and environmental review request letter was sent to the ODNR Office of Real Estate on March 7, 2022. The ODNR Office of Real Estate response letter dated April 1, 2022, stated that the entire state of Ohio is within the range of the Indiana bat, northern long-eared bat, little brown bat, and the tricolored bat. In addition, the Project is within the vicinity of records for the Indiana bat. Because presence of state endangered bat species has been established in the area, summer tree cutting is not recommended, and additional summer surveys would not constitute presence/absence in the area.

During the spring and summer (April 1 through September 30), the Indiana, northern long-eared, little brown, and tricolored bat species predominantly roost in trees behind loose, exfoliating bark, in crevices and cavities, or in the leaves. The DOW recommends tree cutting only occur from

October 1 through March 31, conserving trees with loose, shaggy bark and/or crevices, holes, or cavities, as well as trees with dbh ≥ 20 inches if possible.

The DOW also recommends conducting a desktop habitat assessment, followed by a field assessment if needed, to determine if there are potential hibernaculum(a) present within 0.25 miles of the Project area. Stantec completed a habitat desktop assessment in accordance with the 2020 Range-wide Indiana Bat Survey Guidelines (USFWS 2020b) utilizing available ODNR websites, including data on known abandoned or active mines (ODNR 2022a) and locations of known or suspected karst geology (ODNR 2022b). The desktop assessment did not identify and mines within a 0.25-mile buffer of the Project area (Figure 4). No potential hibernacula or summer foraging and roosting habitat were observed within the Project area during the field surveys. Therefore, impact to these species are not likely.

According to the ODNR response letter, the Project is within the range of the federally-listed endangered snuffbox, clubshell, northern riffleshell, and rayed bean, the federally threatened rabbitsfoot, the state-listed endangered elephant-ear, and the state-listed threatened pondhorn. However, due to the location, and that there is no in-water work proposed in a perennial stream of sufficient size, this Project is not likely to impact these species.

According to the ODNR response letter, the Project is within the range of the state-listed threatened Tippecanoe darter. The DOW recommends no in-water work in perennial streams from March 15 through June 30 to reduce impacts to indigenous aquatic species and their habitat. However, no in-water work is proposed in a perennial stream, this Project is not likely to impact these or other aquatic species.

The Project is also within the range of the state-listed endangered American bittern, king rail, lark sparrow, and state-listed threatened least bittern. If any of these species nesting habitat (I.e., wetlands, marsh, and/or grassland) will be impacted, construction should be avoided in this habitat during the species' nesting period of May 1 through July 31. No nesting habitat is within the Project area; therefore, the Project is not likely to impact this species.

The Project is also within the range of the state-listed endangered loggerhead shrike. If their nesting habitat (i.e., hedgerows, thickets, and fencerows) will be impacted, construction should be avoided in this habitat during the species' nesting period of April 1 through July 31. No nesting habitat is within the Project area; therefore, the Project is not likely to impact this species.

The Project is also within the range of the state-listed endangered northern harrier. If their nesting habitat (i.e., large marsh, or grasslands) will be impacted, construction should be avoided in this habitat during the species' nesting period of April 15 through July 31. No nesting habitat is within the Project area; therefore, the Project is not likely to impact this species.

The ODNR response letter also included comments from the Natural Heritage Database with data of species located at or within a one-mile radius of the Project area. The Natural Heritage Database included 4 bird species; however, no preferred habitat is present within the Project area, and therefore these species are not likely to be impacted by the Project.

A technical assistance request letter was also submitted to the USFWS on March 7, 2022. The USFWS response letter dated April 13, 2022, recommends that the proposed Project avoid and minimize impacts to all wetland habitats to the maximum extent possible and natural buffers around streams and wetlands should be preserved to enhance beneficial functions.

According to the USFWS response letter, the entire State of Ohio lies within the range of the federally threatened northern long-eared bat and federally endangered Indiana bat. The proposed Project is in the vicinity of one or more confirmed records of Indiana bat. Should the proposed Project site contain trees ≥3 inches dbh, USFWS recommends avoiding tree removal whenever possible. If no caves or abandoned mines are present and trees ≥3 inches dbh cannot be avoided, USFWS recommends removal only occur between October 1 and March 31. Please note that, because Indiana bat presence has already been confirmed in the Project vicinity, any additional summer surveys would not constitute presence/absence surveys for this species.

Seasonal clearing is recommended to avoid adverse effects to Indiana bat and northern long-eared bats. While incidental take of northern long-eared bats from most tree clearing is exempted by a 4(d) rule, incidental take of Indiana bats is still prohibited without a project-specific exemption.

The Project area does not contain suitable foraging and roosting habitat for the Indiana bat and northern long-eared bat. Therefore, impacts to these species are not likely.

The USFWS also stated that due to the Project type, size, and location, they do not anticipate adverse effects to any other federally endangered, threatened, proposed or candidate species due to the Project type, size, and location (Appendix E).

5.0 REFERENCES

All About Birds. 2019. Northern Harrier Identification. Available at: https://www.allaboutbirds.org/guide/Northern_Harrier/id. Accessed April 2022.

Brack, Virgil Jr., Dale W. Sparks, John O. Whitaker Jr., Brianne L. Walters, and Angela Boyer. 2010. Bats of Ohio. Indiana State University Center for North American Bat Research and Conservation.

Cowardin, L.M., V. Carter V., F.C. Golet, and E.T. LaRoe. 1979. Classification of Wetlands and Deepwater Habitats of the United States. U.S. Fish and Wildlife Service Report No. FWS/OBS/-79/31. Washington, D.C.

Mack, J.J. 2001. Ohio Rapid Assessment Method for Wetlands, Manual for Using Version 5.0. Ohio EPA Technical Bulletin Wetland/2001-1-1. Ohio Environmental Protection Agency, Division of Surface Water, 401 Wetland Ecology Unit, Columbus, Ohio.

NatureServe. 2022. NatureServe Explorer: An online encyclopedia of life [web application]. Version 7.1. NatureServe, Arlington, VA. U.S.A. Available at http://explorer.natureserve.org. Accessed April 2022.

ODNR, Division of Geological Survey. 2022a. Karst Interactive Map. Available online at Karst Interactive Map Viewer (ohiodnr.gov). Accessed April 2022.

ODNR, Division of Mineral Resources and Division of Geological Survey. Mines of Ohio. 2022b. Available online at ODNR Mines of Ohio Viewer (ohiodnr.gov). Accessed April 2022.

ODNR Division of Wildlife. 2022. Species Guide Index. Available at http://wildlife.ohiodnr.gov/species-and-habitats/species-guide-index/. Accessed April 2022.

Ohio Environmental Protection Agency (OEPA). 2006. Methods for Assessing Habitat in Flowing Waters: Using the Qualitative Habitat Evaluation Index (QHEI).

Ohio EPA. 2020. Field Methods for Evaluating Primary Headwater Streams in Ohio. Version 4.1. Ohio EPA Division of Surface Water, Columbus, Ohio. 130 pp.

U.S. Army Corps of Engineers (USACE), Environmental Laboratory. 1987. Corps of Engineers Wetlands Delineation Manual, Technical Report Y 87 1, U.S. Army Engineer Waterway Experiment Station, Vicksburg, Mississippi.

USACE. 2005. Guidance on Ordinary High Water Mark Identification (Regulatory Guidance Letter, No.05-05). Available online at https://www.nap.usace.army.mil/Portals/39/docs/regulatory/rgls/rgl05-05.pdf. Accessed April 2022.

USACE. 2010. *Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Midwest Region (Version 2.0),* ed. J. S. Wakeley, R. W. Lichvar, and C. V. Noble. ERDC/EL TR-10-16. Vicksburg, MS: U.S. Army Engineer Research and Development Center.

USACE. 2020. The Navigable Waters Protection Rule: Definition of "Waters of the United States"; Vol 85, No. 77. Fed. Reg. 22250. April 21, 2020. Federal Register: The Daily Journal of the United States. Available at https://www.federalregister.gov/documents/2020/04/21/2020-02500/the-navigable-waters-protection-rule-definition-of-waters-of-the-united-states.

USFWS. 2007. Indiana bat (*Myotis sodalis*) draft recovery plan: First revision. U.S. Fish and Wildlife Service, Ft. Snelling, Minnesota. 258 pp.

USFWS. 2020a. Northern Long-eared Bat (*Myotis septentrionalis*). Available online at https://www.fws.gov/midwest/Endangered/mammals/nleb/nlebFactSheet.html.. Accessed April 2022.

USFWS. 2020b. 2020 Range-wide Indiana Bat Survey Guidelines, March 2020. Available at https://www.fws.gov/midwest/endangered/mammals/inba/surveys/pdf/FINAL%20Range-wide%20IBat%20Survey%20Guidelines%203.23.20.pdf. Accessed April 2022.

Appendix A IMPACT TABLES

Table 1. Vegetation Communities and Land Cover Found within the Kileville 138 kV Line Extension Project, Union County, Ohio

Vegetation Communities and Land Cover Types within the Project Area	Degree of Human-Related Ecological Disturbance	Unique, Rare, or High Quality?	Approximate Acreage Within Project Area
Industrial Land	Extreme Disturbance/Ruderal Community (dominated by opportunistic invaders, planted non-native species, and/or native highly tolerant taxa).	No	4.69
TOTAL			**4.69**

Table 2. Summary of NWI Disposition within the Kileville 138 kV Station Project Area, Union County, Ohio

NWI Code	NWI Description	Figure 2 Page Number	Related Field Inventoried Resource	Comments
PFO1A	Palustrine, Forested, Broad-leaved Deciduous, Temporarily Flooded	1	SP01	Area determined to not contain the three wetland indicators.
PFO1A	Palustrine, Forested, Broad-leaved Deciduous, Temporarily Flooded	1	SP02	Area determined to not contain the three wetland indicators.
R4SBC	Riverine, Intermittent, Streambed, Seasonally Flooded	1	SP03	Determined to be upland drainage feature.

Appendix B FIGURES

B.1 PROJECT LOCATION MAP

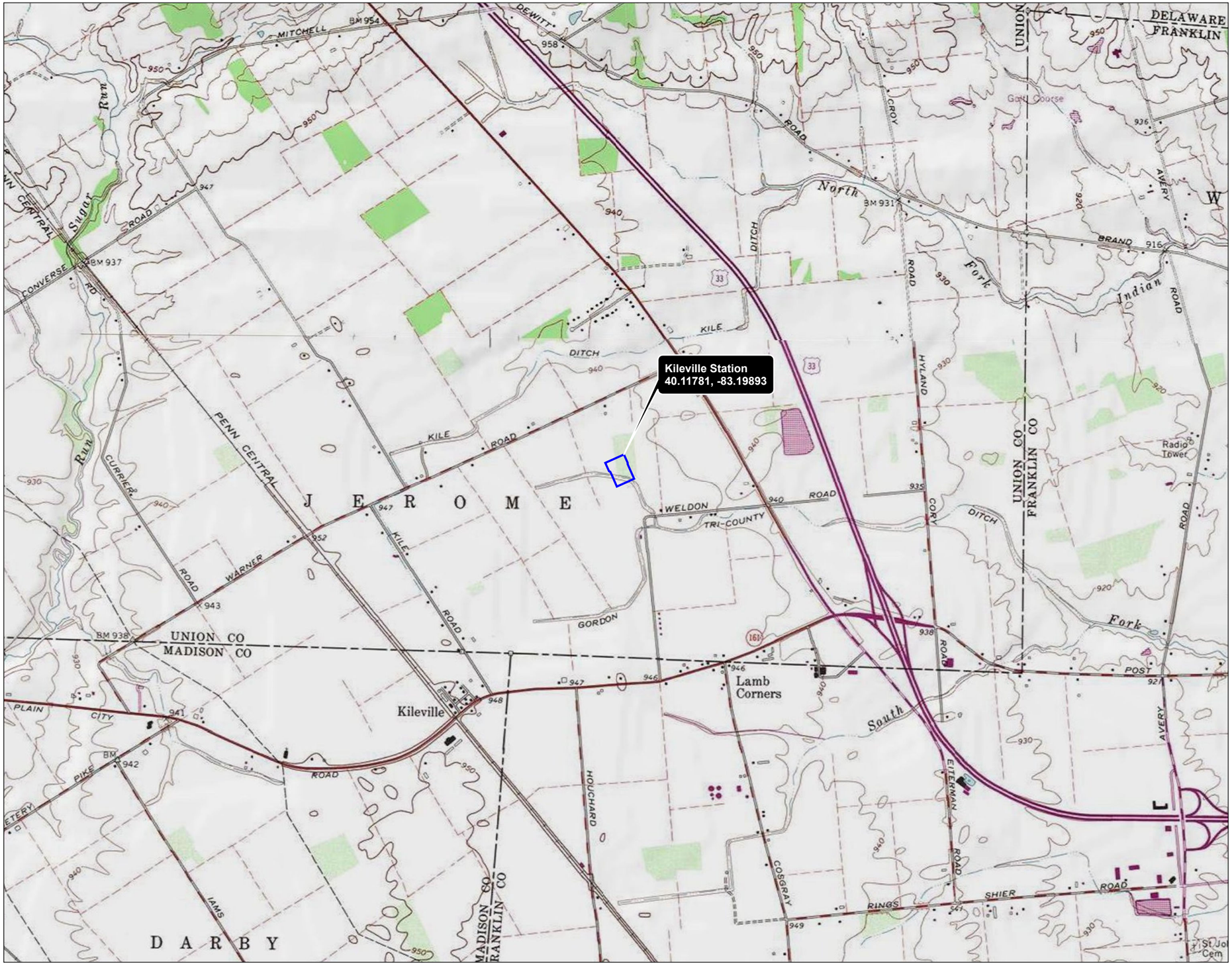


Figure No.
1

Title
Project Location Map

Client/Project 193708637
AEP Ohio Transmission Company, Inc.
Kileville 138kV Station Project

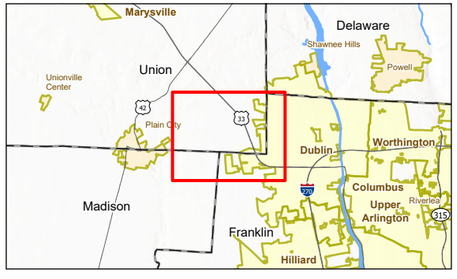
Project Location
Union County, Ohio

Prepared by JDS on 2022-12-02
TR by CA on 2022-12-05
IR by MK on 2022-12-05

N

0 1,000 2,000 Feet
(At original document size of 11x17)
1:24,000

Legend
Project Boundary



Notes
1. Coordinate System: NAD 1983 StatePlane Ohio North FIPS 3401 Feet
2. Data Sources: Stantec, AEP, USGS, NADS
3. Background: USGS 7.5' Topographic Quadrangles: Hilliard, OH (1980)

Stantec

B.2 WETLAND AND WATERBODY DELINEATION MAP

Figure No.
2

Title
Wetland and Waterbody Delineation Map

Client/Project 193708637
AEP Ohio Transmission Company, Inc.
Kileville 138kV Station Project

Project Location
Union County, Ohio

Prepared by JDS on 2022-12-02
TR by CA on 2022-12-05
IR by MK on 2022-12-05

N

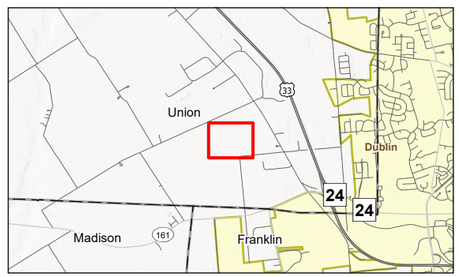
0 100 200 Feet
(At original document size of 11x17)
1:2,400

Legend
- Existing Structure
- Existing 138 kV Transmission Line
- Proposed Kilevile 138 kV Extension
- Proposed Kileville-Squire 138 kV Tie Lines
- Project Boundary
- Customer's Proposed Squire Distribution Substation
- Proposed Kileville Station
- Photo Location
- Wetland Determination Sample Point
- Approximate Upland Drainage Feature
- Approximate Wetland
- Approximate Open Water
- National Wetlands Inventory Feature

National Hydrography Dataset
- Perennial Stream*
- Intermittent Stream
- Waterbody*

FEMA Flood Hazard Area*
- 100-year Floodplain
- Floodway

*No features within data frame



Notes
1. Coordinate System: NAD 1983 StatePlane Ohio North FIPS 3401 Feet
2. Data Sources: Stantec, AEP, USGS, NADS, USFWS, FEMA
3. Background: Esri World Imagery

Stantec

B.3 HABITAT ASSESSMENT MAP

Figure No.
3

Title
Habitat Assessment Map

Client/Project 193708637
AEP Ohio Transmission Company, Inc.
Kileville 138kV Station Project

Project Location
Union County, Ohio

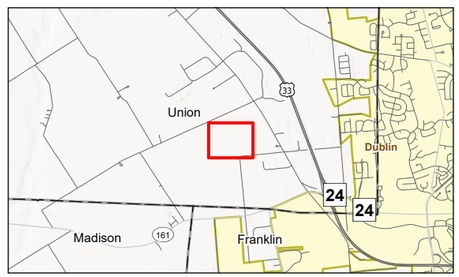
Prepared by JDS on 2022-12-02
TR by CA on 2022-12-05
IR by MK on 2022-12-05

N

0 100 200 Feet
(At original document size of 11x17)
1:2,400

Legend
- Existing Structure
- Existing 138 kV Transmission Line
- Proposed Kilevile 138 kV Extension
- Proposed Kileville-Squire 138 kV Tie Lines
- Project Boundary
- Customer's Proposed Squire Distribution Substation
- Proposed Kileville Station
- Photo Location

Habitat
- Industrial Land



Notes
1. Coordinate System: NAD 1983 StatePlane Ohio North FIPS 3401 Feet
2. Data Sources: Stantec, AEP, USGS, NADS
3. Background: 2019 NAIP

Stantec

B.4 BAT HIBERNACULA DESKTOP STUDY MAP

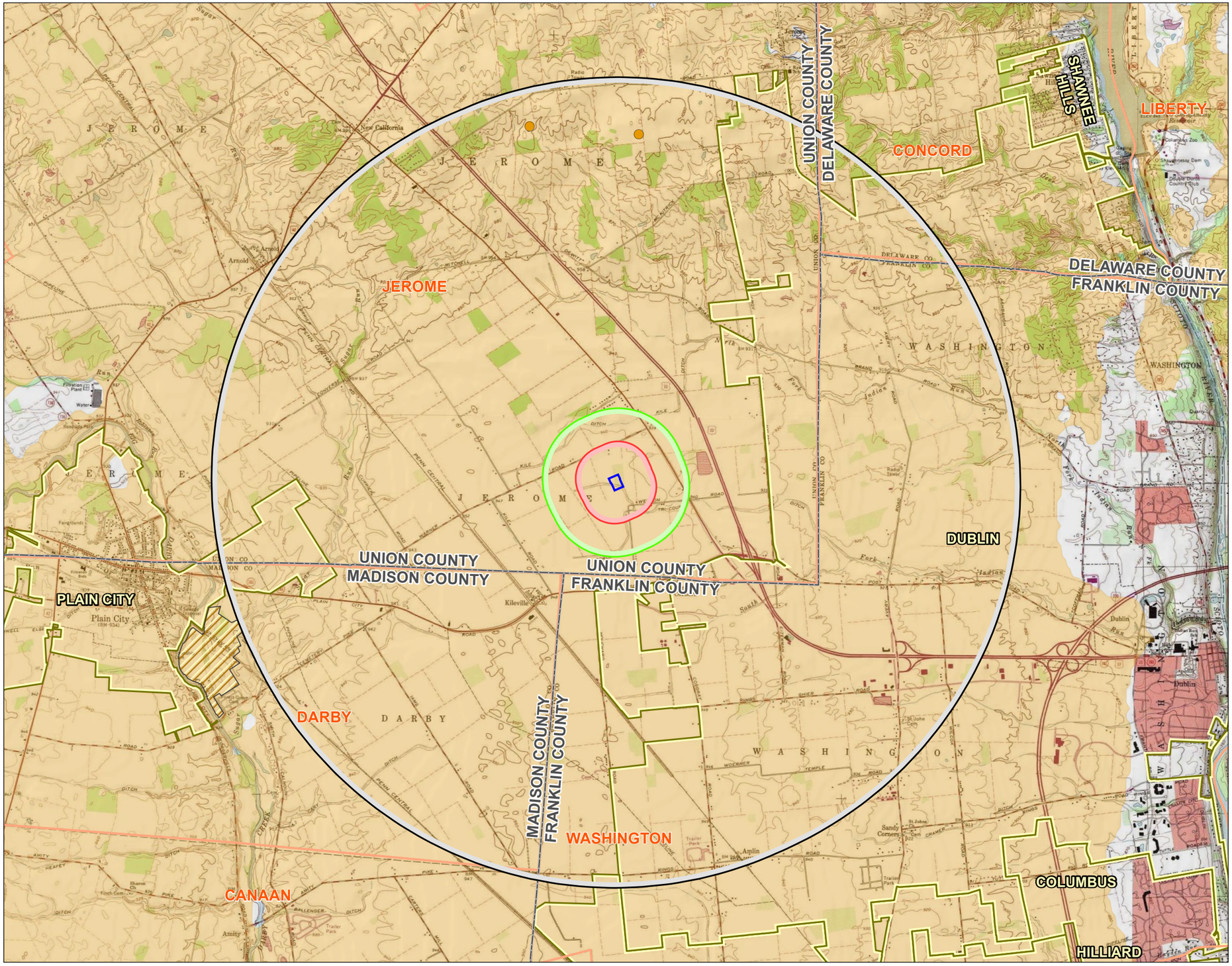


Figure No.
4

Title
Bat Hibernacula Desktop Study Map

Client/Project
AEP Ohio Transmission Company, Inc.
Kileville 138kV Station Project

193708709

Project Location
Union County, Ohio

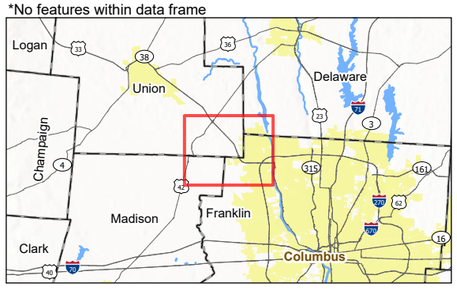
Prepared by JDS on 2022-12-02
TR by CA on 2022-12-05
IR by MK on 2022-12-05

N

0 2,000 4,000 Feet
(At original document size of 11x17)
1:48,000

Legend
- Project Boundary
- 0.25-Mile Project Area Buffer
- 0.5-Mile Project Area Buffer
- 3-Mile Project Area Buffer
- Municipal Boundary
- Township Boundary
- Karst Feature
- Area of Karst Geology
- Abandoned Underground Mine*
- Inactive Mine*
- Active Surface Mine*
- Abandoned Surface Mine Area*
- Abandoned Underground Mine Area*
- Inactive Surface Mine Area*
- Active Surface Mine Area
- Surface Mine Area (Unknown Status)*

*No features within data frame



Notes
1. Coordinate System: NAD 1983 StatePlane Ohio South FIPS 3402 Feet
2. Data Sources: Stantec, AEP, USGS, ODNR, NADS
3. Background: USGS 7.5' Topographic Quadrangles - Hilliard, OH (1980)

Stantec

Appendix C FIELD COLLECTED DATA FORMS

C.1 WETLAND DETERMINATION FORMS

WETLAND DETERMINATION DATA FORM – Midwest Region

Project/Site: Kileville Station City/County: Union Sampling Date: 02/23/2022

Applicant/Owner: AEP Ohio Transmission Company, Inc. State: Ohio Sampling Point: SP01

Investigator(s): MKTG Section, Township, Range:

Landform (hillside, terrace, etc.): Terrace Local relief (concave, convex, none): Convex Slope %: 2

Subregion (LRR or MLRA): Lat: 40.11841 Long: -83.198698 Datum: WGS84

Soil Map Unit Name: NWI classification: PFO1A

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No (If no, explain in Remarks.)

Are Vegetation N, Soil N, or Hydrology N significantly disturbed? Are "Normal Circumstances" present? Yes X No

Are Vegetation N, Soil N, or Hydrology N naturally problematic? (If needed, explain any answers in Remarks.)

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

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

Remarks: (Explain alternative procedures here or in a separate report.)

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 30 ft)	Absolute % Cover	Dominant Species	Indicator Status
1. Carya cordiformis	40	No	FACU
2. Quercus alba	20	Yes	FACU
3.			
4.			
5.			
	60 = Total Cover		
Sapling/Shrub Stratum (Plot size: 15 ft)			
1.			
2.			
3.			
4.			
5.			
	= Total Cover		
Herb Stratum (Plot size: 5 ft)			
1.			
2.			
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
	= Total Cover		
Woody Vine Stratum (Plot size: 30 ft)			
1.			
2.			
	= Total Cover		

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 0 (A)

Total Number of Dominant Species Across All Strata: 1 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 0 (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	0	x 2 =	0
FAC species	0	x 3 =	0
FACU species	60	x 4 =	240
UPL species	0	x 5 =	0
Column Totals:	60 (A)		240 (B)

Prevalence Index = B/A = 4

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 data in Remarks or on a separate sheet)

___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? Yes No X

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

SOIL

Sampling Point: SP01

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth	Matrix		Redox Features					
(inches)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-14	10YR 3/1	100		0			Clay Loam	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ 2 cm Muck (A10)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ 5 cm Mucky Peat or Peat (S3)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ Coast Prairie Redox (A16)
- ___ Iron-Manganese Masses (F12)
- ___ Red Parent Material (F21)
- ___ Very Shallow Dark Surface (F22)
- ___ Other (Explain in Remarks)

Restrictive Layer (if observed):

Type: Clay loam

Depth (inches): 14

Hydric Soil Present? Yes ____ No X

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ True Aquatic Plants (B14)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Gauge or Well Data (D9)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present	Yes ___	No ___	Depth (inches): ___
Water Table Present	Yes ___	No ___	Depth (inches): ___
Saturation Present (includes capillary fringe)	Yes ___	No ___	Depth (inches): ___

Wetland Hydrology Present? Yes ____ No X

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

Remarks:

WETLAND DETERMINATION DATA FORM – Midwest Region

Project/Site: Kileville 138 kV Station Project City/County: Union Sampling Date: 02/23/2022

Applicant/Owner: AEP Ohio Transmission Company, Inc. State: Ohio Sampling Point: SP02

Investigator(s): Michelle Kearns, Tyler Gillette Section, Township, Range:

Landform (hillside, terrace, etc.): Terrace Local relief (concave, convex, none): Convex Slope %: 3

Subregion (LRR or MLRA): Lat: 40.117947 Long: -83.199101 Datum: WGS84

Soil Map Unit Name: Brookston silty clay loam, fine texture, 0-2% slopes NWI classification: PFO1A

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No ____ (If no, explain in Remarks.)

Are Vegetation N , Soil N , or Hydrology N significantly disturbed? Are "Normal Circumstances" present? Yes X No ____

Are Vegetation N , Soil N , or Hydrology N naturally problematic? (If needed, explain any answers in Remarks.)

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

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

Remarks: (Explain alternative procedures here or in a separate report.)

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 30 ft)	Absolute % Cover	Dominant Species	Indicator Status
1. Carya ovata	40	Yes	FACU
2. Acer saccharum	20	Yes	FACU
3. Quercus palustris	10	No	FACW
4. Prunus serotina	10	No	FACU
5.			
	80	= Total Cover	
Sapling/Shrub Stratum (Plot size: 15 ft)			
1. Acer saccharum	40	Yes	FACU
2. Lonicera maackii	30	Yes	UPL
3. Lindera benzoin	20	Yes	FACW
4. Celtis occidentalis	10	No	FAC
5.			
	100	= Total Cover	
Herb Stratum (Plot size: 5 ft)			
1.			
2.			
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
		= Total Cover	
Woody Vine Stratum (Plot size: 30 ft)			
1.			
2.			
		= Total Cover	

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 1 (A)

Total Number of Dominant Species Across All Strata: 5 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 20 (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	30	x 2 =	60
FAC species	10	x 3 =	30
FACU species	110	x 4 =	440
UPL species	30	x 5 =	150
Column Totals:	180 (A)		680 (B)

Prevalence Index = B/A = 3.78

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 data in Remarks or on a separate sheet)

___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? **Yes** ____ **No** X

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

SOIL

Sampling Point: SP02

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth	Matrix		Redox Features					
(inches)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-7	10YR 3/2	100		0			Clay Loam	
7-21	10YR 4/1	100		0			Clay Loam	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ 2 cm Muck (A10)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ 5 cm Mucky Peat or Peat (S3)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ Coast Prairie Redox (A16)
- ___ Iron-Manganese Masses (F12)
- ___ Red Parent Material (F21)
- ___ Very Shallow Dark Surface (F22)
- ___ Other (Explain in Remarks)

Restrictive Layer (if observed):

Type: NA

Depth (inches): 21

Hydric Soil Present? **Yes** ____ **No** X

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ True Aquatic Plants (B14)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Gauge or Well Data (D9)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present	Yes ___	No X	Depth (inches): ___
Water Table Present	Yes ___	No X	Depth (inches): ___
Saturation Present (includes capillary fringe)	Yes ___	No X	Depth (inches): ___

Wetland Hydrology Present? **Yes** ____ **No** X

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

Remarks:

WETLAND DETERMINATION DATA FORM – Midwest Region

Project/Site: Kileville Station City/County: Union Sampling Date: 11/30/2022

Applicant/Owner: AEP Ohio Transmission Company, Inc. State: Ohio Sampling Point: SP03

Investigator(s): Samantha Heitzenrater / Zoe True Section, Township, Range:

Landform (hillside, terrace, etc.): Terrace Local relief (concave, convex, none): None Slope %: 0

Subregion (LRR or MLRA): Lat: 40.117371 Long: -83.198714 Datum: WGS84

Soil Map Unit Name: Brookston silty clay loam, fine texture 0-2% slopes NWI classification: None

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No (If no, explain in Remarks.)

Are Vegetation Y, Soil Y, or Hydrology Y significantly disturbed? Are "Normal Circumstances" present? Yes X No

Are Vegetation Y, Soil Y, or Hydrology Y naturally problematic? (If needed, explain any answers in Remarks.)

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

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

Remarks: (Explain alternative procedures here or in a separate report.)
Sample point was taking in an existing gravel industrial site

VEGETATION – Use scientific names of plants.

	Absolute % Cover	Dominant Species	Indicator Status
Sapling/Shrub Stratum (Plot size: 30 ft)			
1.			
3.			
4.			
5.			
	= Total Cover		
Tree Stratum (Plot size: 15 ft)			
1.			
2.			
3.			
4.			
5.			
	= Total Cover		
Herb Stratum (Plot size: 5 ft)			
1.			
2.			
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
	= Total Cover		
Woody Vine Stratum (Plot size: 30 ft)			
1.			
2.			
	= Total Cover		

Dominance Test worksheet:

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:	
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 ≤3.0[1]

___ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? Yes No X

Remarks: (Include photo numbers here or on a separate sheet.)
100% gravel

SOIL

Sampling Point: SP03

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth	Matrix		Redox Features					
(inches)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ 2 cm Muck (A10)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ 5 cm Mucky Peat or Peat (S3)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ Coast Prairie Redox (A16)
- ___ Iron-Manganese Masses (F12)
- ___ Red Parent Material (F21)
- ___ Very Shallow Dark Surface (F22)
- ___ Other (Explain in Remarks)

Restrictive Layer (if observed):

Type: Gravel / compactions

Depth (inches): 0+

Hydric Soil Present? Yes ____ No X

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ True Aquatic Plants (B14)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Gauge or Well Data (D9)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present	Yes ___	No X	Depth (inches): ___
Water Table Present	Yes ___	No X	Depth (inches): ___
Saturation Present (includes capillary fringe)	Yes ___	No X	Depth (inches): ___

Wetland Hydrology Present? Yes ____ No X

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

Remarks:

Appendix D REPRESENTATIVE PHOTOGRAPHS

D.1 WETLAND AND WATERBODY PHOTOGRAPHS

AEP Ohio Transmission Company, Inc.
Kileville 138kV Station Project
Union County, Ohio

Photo Location 1. View of wetland determination sample point SP01, upland, collected on 2/23/2022. Photograph taken facing south.

Photo Location 1. View of wetland determination sample point SP01, soil profile. Collected on 2/23/2022.

Photo Location 2. View of existing conditions of NWI feature (SP01; PFO1A) within Project area.. Photograph taken facing northeast.

Photo Location 3. View of wetland determination sample point SP02, upland, collected on 2/23/2022. Photograph taken facing northeast.

Photo Location 3. View of wetland determination sample point SP02 soil profile. Collected on 2/23/2022.

Photo Location 4. View of existing conditions of NWI feature (SP02; PFO1A) within Project area. Photograph taken facing northwest.

Photo Location 5. View of wetland determination sample point, SP03, industrial/gravel. Photograph taken facing east.

D.2 HABITAT PHOTOGRAPHS

Photo Location 1. View of industrial land. Photograph taken facing north.

Photo Location 1. View of industrial land. Photograph taken facing south.

Photo Location 2. View of industrial land. Photograph taken facing north.

Photo Location 2. View of industrial land. Photograph taken facing south.

Photo Location 3. View of industrial land. Photograph taken facing north.

Photo Location 3. View of industrial land. Photograph taken facing south.

Photo Location 4. View of industrial land. Photograph taken facing north.

Photo Location 4. View of industrial land. Photograph taken facing south.

Appendix E AGENCY CORRESPONDENCE

Office of Real Estate
John Kessler, Chief
2045 Morse Road – Bldg. E-2
Columbus, OH 43229
Phone: (614) 265-6621
Fax: (614) 267-4764

April 1, 2022

Matthew Teitt
Stantec Consulting Services, Inc.
1500 Lake Shore Drive Suite 100
Columbus OH 43204

Re: 22-0245; AEP Kileville Station Project

Project: The proposed project includes the construction of a new 138 kV substation.

Location: The proposed project is located in Jerome Township, Union County, Ohio.

The Ohio Department of Natural Resources (ODNR) has completed a review of the above referenced project. These comments were generated by an inter-disciplinary review within the Department. These comments have been prepared under the authority of the Fish and Wildlife Coordination Act (48 Stat. 401, as amended; 16 U.S.C. 661 et seq.), the National Environmental Policy Act, the Coastal Zone Management Act, Ohio Revised Code and other applicable laws and regulations. These comments are also based on ODNR's experience as the state natural resource management agency and do not supersede or replace the regulatory authority of any local, state or federal agency nor relieve the applicant of the obligation to comply with any local, state or federal laws or regulations.

Natural Heritage Database: The Natural Heritage Database has the following data at or within one mile of the project area:

Least Bittern (*Ixobrychus exilis*), T
Sora Rail (*Porzana carolina*), SC
King Rail (*Rallus elegans*), E
Virginia Rail (*Rallus limicola*), SC

The review was performed on the project area specified in the request as well as an additional one-mile radius. Records searched date from 1980. Conservation status abbreviations are as follows: E = state endangered; T = state threatened; P = state potentially threatened; SC = state species of concern; SI = state special interest; U = state status under review; X = presumed extirpated in Ohio; FE = federally endangered, and FT = federally threatened.

Please note that Ohio has not been completely surveyed and we rely on receiving information from many sources. Therefore, a lack of records for an area is not a statement that rare species or unique features are absent from that area.

Fish and Wildlife: The Division of Wildlife (DOW) has the following comments.

The DOW recommends that impacts to streams, wetlands and other water resources be avoided and minimized to the fullest extent possible, and that Best Management Practices be utilized to minimize erosion and sedimentation.

The project is within the vicinity of records for the Indiana bat (*Myotis sodalis*), a state endangered and federally endangered species. Because presence of state endangered bat species has been established in the area, summer tree cutting is not recommended, and additional summer surveys would not constitute presence/absence in the area. However, limited summer tree cutting inside this buffer may be acceptable after further consultation with DOW (contact Erin Hazelton at Erin.hazelton@dnr.ohio.gov).

In addition, the entire state of Ohio is within the range of the Indiana bat (*Myotis sodalis*), a state endangered and federally endangered species, the northern long-eared bat (*Myotis septentrionalis*), a state endangered and federally threatened species, the little brown bat (*Myotis lucifugus*), a state endangered species, and the tricolored bat (*Perimyotis subflavus*), a state endangered species. During the spring and summer (April 1 through September 30), these bat species predominately roost in trees behind loose, exfoliating bark, in crevices and cavities, or in the leaves. However, these species are also dependent on the forest structure surrounding roost trees. The DOW recommends tree cutting only occur from October 1 through March 31, conserving trees with loose, shaggy bark and/or crevices, holes, or cavities, as well as trees with DBH $\geq$ 20 if possible.

The DOW also recommends that a desktop habitat assessment is conducted, followed by a field assessment if needed, to determine if a potential hibernaculum is present within the project area. Direction on how to conduct habitat assessments can be found in the current USFWS "*Range-wide Indiana Bat Survey Guidelines*." If a habitat assessment finds that a potential hibernaculum is present within 0.25 miles of the project area, please send this information to Erin Hazelton for project recommendations. If a potential or known hibernaculum is found, the DOW recommends a 0.25-mile tree cutting and subsurface disturbance buffer around the hibernaculum entrance, however, limited summer or winter tree cutting may be acceptable after consultation with the DOW. If no tree cutting or subsurface impacts to a hibernaculum are proposed, this project is not likely to impact these species.

The project is within the range of the following listed mussel species.
Federally Endangered
nuffbox (*Epioblasma triquetra*)
clubshell (*Pleurobema clava*)
Northern riffleshell (*Epioblasma torulosa rangiana*)
rayed bean (*Villosa fabalis*)

Federally Threatened
rabbitsfoot (*Quadrula cylindrica cylindrica*)

State Endangered
elephant-ear (*Elliptio crassidens crassidens*)

State Threatened
pondhorn (*Uniomerus tetralasmus*)

Due to the location, and that there is no in-water work proposed in a perennial stream of sufficient size, this project is not likely to impact these species.

The project is within the range of the following listed fish species.
State Threatened
the Tippecanoe darter (*Etheostoma Tippecanoe*)

The DOW recommends no in-water work in perennial streams from March 15 through June 30 to reduce impacts to indigenous aquatic species and their habitat. If no in-water work is proposed in a perennial stream, this project is not likely to impact these or other aquatic species.

The project is within the range of the American bittern (*Botaurus lentiginosus*), a state endangered bird. Nesting bitterns prefer large undisturbed wetlands that have scattered small pools amongst dense vegetation. They occasionally occupy bogs, large wet meadows, and dense shrubby swamps. If this type of habitat will be impacted, construction should be avoided in this habitat during the species' nesting period of May 1 through July 31. If this type of habitat will not be impacted, the project is not likely to impact this species.

The project is within the range of the king rail (*Rallus elegans*), a state endangered bird. Nests for this species are deep bowls constructed out of grass and usually hidden very well in marsh vegetation. If this type of habitat will be impacted, construction should be avoided in this habitat during the species' nesting period of May 1 through July 31. If no wetland habitat will be impacted, the project is not likely to impact this species.

The project is within the range of the lark sparrow (*Chondestes grammacus*), a state endangered bird. This sparrow nests in grassland habitats with scattered shrub layers, disturbed open areas, as well as patches of bare soil. In the Oak Openings area west of Toledo, lark sparrows occupy open grass and shrubby fields along sandy beach ridges. These summer residents normally migrate out of Ohio shortly after their young fledge or leave the nest. If this type of habitat will be impacted, construction should be avoided in this habitat during the species' nesting period of May 1 through July 31. If this habitat will not be impacted, this project is not likely to impact this species.

The project is within the range of the least bittern (*Ixobrychus exilis*), a state threatened bird. This secretive marsh species prefers dense emergent wetlands with thick stands of cattails, sedges, sawgrass or other semiaquatic vegetation interspersed with woody vegetation and open water. If this type of habitat will be impacted, construction should be avoided in this habitat during the species' nesting period of May 1 through July 31. If this type of habitat will not be impacted, this project is not likely to impact this species.

The project is within the range of the loggerhead shrike (*Lanius ludovicianus*), a state endangered bird. The loggerhead shrike nests in hedgerows, thickets and fencerows. They hunt over hayfields, pastures, and other grasslands. If thickets or other types of dense shrubbery habitat will be impacted, construction should be avoided in this habitat during the species' nesting period of April 1 through July 31. If this habitat will not be impacted, this project is not likely to impact this species.

The project is within the range of the northern harrier (*Circus hudsonis*), a state endangered bird. This is a common migrant and winter species. Nesters are much rarer, although they occasionally breed in large marshes and grasslands. Harriers often nest in loose colonies. The female builds a nest out of sticks on the ground, often on top of a mound. Harriers hunt over grasslands. If this type of habitat will be impacted, construction should be avoided in this habitat during the species'

nesting period of April 15 through July 31. If this habitat will not be impacted, the project is not likely to impact this species.

Due to the potential of impacts to federally listed species, as well as to state listed species, we recommend that this project be coordinated with the US Fish & Wildlife Service.

Water Resources: The Division of Water Resources has the following comment.

The local floodplain administrator should be contacted concerning the possible need for any floodplain permits or approvals for this project. Your local floodplain administrator contact information can be found at the website below.

http://water.ohiodnr.gov/portals/soilwater/pdf/floodplain/Floodplain%20Manager%20Community%20Contact%20List_8_16.pdf

ODNR appreciates the opportunity to provide these comments. Please contact Mike Pettegrew at mike.pettegrew@dnr.ohio.gov if you have questions about these comments or need additional information.

Mike Pettegrew
Environmental Services Administrator

From:	Ohio, FW3
To:	Gillette, Tyler
Cc:	nathan.reardon@dnr.state.oh.us; Parsons, Kate; Teitt, Matthew; Grant S Stuller
Subject:	Proposed 138 kV Kileville Station Project, Union County, Ohio
Date:	Wednesday, April 13, 2022 2:44:19 PM
Attachments:	image.png image.png

UNITED STATES DEPARTMENT OF THE INTERIOR
U.S. Fish and Wildlife Service
Ecological Services Office
4625 Morse Road, Suite 104
Columbus, Ohio 43230
(614) 416-8993 / Fax (614) 416-8994

Project Code: 2022-0012784

Dear Mr. Gillette,

The U.S. Fish and Wildlife Service (Service) has received your recent correspondence requesting information about the subject proposal. We offer the following comments and recommendations to assist you in minimizing and avoiding adverse impacts to threatened and endangered species pursuant to the Endangered Species Act of 1973 (16 U.S.C. 1531 et seq), as amended (ESA).

Federally Threatened and Endangered Species: The endangered Indiana bat (*Myotis sodalis*) and threatened northern long-eared bat (*Myotis septentrionalis*) occur throughout the State of Ohio. The Indiana bat and northern long-eared bat may be found wherever suitable habitat occurs unless a presence/absence survey has been performed to document absence. Suitable summer habitat for Indiana bats and northern long-eared bats consists of a wide variety of forested/wooded habitats where they roost, forage, and breed that may also include adjacent and interspersed non-forested habitats such as emergent wetlands and adjacent edges of agricultural fields, woodlots, fallow fields, and pastures. Roost trees for both species include live and standing dead trees ≥3 inches diameter at breast height (dbh) that have any exfoliating bark, cracks, crevices, hollows and/or cavities. These roost trees may be located in forested habitats as well as linear features such as fencerows, riparian forests, and other wooded corridors. Individual trees may be considered suitable habitat when they exhibit the characteristics of a potential roost tree and are located within 1,000 feet of other forested/wooded habitat. Northern long-eared bats have also been observed roosting in human-made structures, such as buildings, barns, bridges, and bat houses; therefore, these structures should also be considered potential summer habitat. In the winter, Indiana bats and northern long-eared bats hibernate in caves, rock crevices and abandoned mines.

Seasonal Tree Clearing for Federally Listed Bat Species: The proposed project is in the vicinity of one or more confirmed records of Indiana bats. Should the proposed project site contain trees ≥3 inches dbh, we recommend avoiding tree removal wherever possible. If any caves or abandoned mines may be disturbed, further coordination with this office is requested to determine if fall or spring portal surveys are warranted. If no caves or abandoned mines are present and trees ≥3 inches dbh cannot be avoided, we recommend removal of any trees ≥3 inches dbh only occur between October 1 and March 31. Seasonal clearing is recommended to avoid adverse effects to Indiana bats and northern long-eared bats. While incidental take of northern long-eared bats from most tree clearing is exempted by a 4(d) rule (see

http://www.fws.gov/midwest/endangered/mammals/nleb/index.html), incidental take of Indiana bats is still prohibited without a project-specific exemption. Thus, seasonal clearing is recommended where Indiana bats are known or assumed present. Please note that, because Indiana bat presence has already been confirmed in the project vicinity, any additional summer surveys would not constitute presence/absence surveys for this species.

Section 7 Coordination: If there is a federal nexus for the project (e.g., federal funding provided, federal permits required to construct), then no tree clearing should occur on any portion of the project area until consultation under section 7 of the ESA, between the Service and the federal action agency, is completed. We recommend the federal action agency submit a determination of effects to this office, relative to the Indiana bat and northern long-eared bat, for our review and concurrence. This letter provides technical assistance only and does not serve as a completed section 7 consultation document.

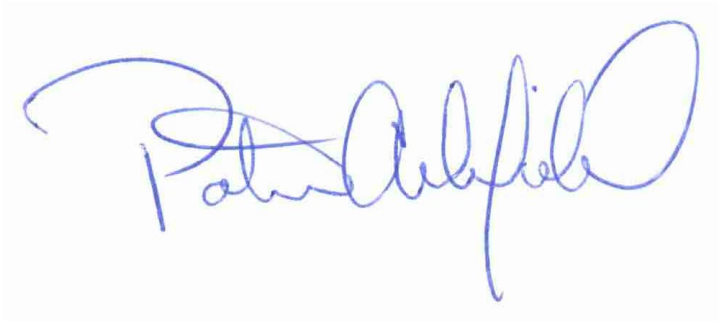
Stream and Wetland Avoidance: Over 90% of the wetlands in Ohio have been drained, filled, or modified by human activities, thus is it important to conserve the functions and values of the remaining wetlands in Ohio (https://epa.ohio.gov/portals/47/facts/ohio_wetlands.pdf). We recommend avoiding and minimizing project impacts to all wetland habitats (e.g., forests, streams, vernal pools) to the maximum extent possible in order to benefit water quality and fish and wildlife habitat. Additionally, natural buffers around streams and wetlands should be preserved to enhance beneficial functions. If streams or wetlands will be impacted, the U.S. Army Corps of Engineers should be contacted to determine whether a Clean Water Act section 404 permit is required. Best management practices should be used to minimize erosion, especially on slopes. Disturbed areas should be mulched and revegetated with native plant species. In addition, prevention of non-native, invasive plant establishment is critical in maintaining high quality habitats.

Due to the project type, size, and location, we do not anticipate adverse effects to any other federally endangered, threatened, or proposed species, or proposed or designated critical habitat. Should the project design change, or additional information on listed or proposed species or their critical habitat become available, or if new information reveals effects of the action that were not previously considered, coordination with the Service should be initiated to assess any potential impacts.

Thank you for your efforts to conserve listed species and sensitive habitats in Ohio. We recommend coordinating with the Ohio Department of Natural Resources due to the potential for the proposed project to affect state listed species and/or state lands. Contact Mike Pettegrew, Acting Environmental Services Administrator, at (614) 265-6387 or at mike.pettegrew@dnr.state.oh.us.

If you have questions, or if we can be of further assistance in this matter, please contact our office at (614) 416-8993 or ohio@fws.gov.

Sincerely,



Patrice Ashfield
Field Office Supervisor

cc: Nathan Reardon, ODNR-DOW
Kate Parsons, ODNR-DOW

Appendix F APPROVED JURISDICTINAL DETERMINATION & OEPA ISOLATED PERMIT APPLICATION

DEPARTMENT OF THE ARMY
CORPS OF ENGINEERS, HUNTINGTON DISTRICT
502 8TH STREET
HUNTINGTON, WV 25701

REPLY TO ATTENTION OF

February 1, 2021

Regulatory Division
North Branch
LRH-2021-72-SCR

APPROVED JURISDICTIONAL DETERMINATION AND NO PERMIT REQUIRED

Mr. Andrew Cangey
Amazon Data Services
2570 Beech Road
Johnstown, Ohio 43054

Dear Ms. Cangey:

I refer to jurisdictional determination (JD) report entitled *Jurisdictional Waters Delineation Report – CMH-086* completed by Ramboll and received in this office on January 19, 2021. You have requested an approved JD for the aquatic resources located on the approximate 100-acre site. The property is located at 8567 Warner Road in Plain City, Union County, Ohio at approximately 40.1196 latitude, -83.1983 longitude. Your JD request has been assigned the following file number: LRH-2021-72-SCR. Please reference this number on all future correspondence related to this JD request.

The United States Army Corps of Engineers' (Corps) authority to regulate waters of the United States is based on the definitions and limits of jurisdiction contained in 33 CFR 328, including the amendment to 33 CFR 328.3 (85 Federal Register 22250), and 33 CFR 329. Section 404 of the Clean Water Act (Section 404) requires a Department of the Army (DA) permit be obtained prior to the discharge of dredged or fill material into waters of the United States, including wetlands. Section 10 of the Rivers and Harbors Act of 1899 requires a DA permit be obtained for any work in, on, over or under navigable water.

Approved Jurisdictional Determination

The Navigable Waters Protection Rule, which became effective on June 22, 2020, was followed in this verification of Section 404 jurisdiction for the proposed 100-acre review area, and the AJD boundary. Based upon a review of the submitted report and additional information available to us, this office has determined approximately 2,240 linear feet of one (1) ditch (Ditch 1), and 0.22 acre of three (3) wetlands (Wetland A – 0.03 acre, Wetland B – 0.03 acre, and Wetland C – 0.16 acre) were delineated within the AJD boundary.

Ditch 1 is a ditch with ephemeral flow that was constructed in uplands, is not a water of the United States per 33 CFR 328.3(a)(1) or (2), and was not constructed in an adjacent wetland per 33 CFR 328.2 (a)(4). Therefore, Ditch 1 is not a jurisdictional water of the United States per 33 CFR 328.3(b)(5) and is not subject to regulation under Section 404.. Wetlands A, B, and C do

not abut a water identified in 33 CFR 328.3(a)(1), (2), or (3), are not inundated by flooding from a water identified in 33 CFR 328.3(a)(1), (2), or (3) in a typical year, are not physically separated from a water identified in 33 CFR 328.3(a)(1), (2), or (3) only by a natural berm, bank, dune, or similar natural feature, and are not physically separated from a water identified in 33 CFR 328.3(a)(1), (2), or (3) only by an artificial dike, barrier, or similar artificial structure. Therefore, Wetlands A, B, and C are not considered a jurisdictional waters of the United States per 33 CFR 328.3(b)(1) and are not subject to regulation under Section 404. However, you should contact the Ohio Environmental Protection Agency, Division of Surface Water, at (614) 664-2001 to determine state permit requirements.

This jurisdictional verification is valid for a period of five (5) years from the date of this letter unless new information warrants revision of the delineation prior to the expiration date. This letter contains an approved JD for the subject site within the approved JD boundary. If you object to this determination, you may request an administrative appeal under Corps regulations at 33 CFR 331. Enclosed you will find a Notification of Appeal Process (NAP) fact sheet and Request for Appeal (RFA) form. If you request to appeal this determination you must submit a completed RFA form to the Great Lakes and Ohio River Division Office at the following address:

Appeal Review Officer
United States Army Corps of Engineers
Great Lakes and Ohio River Division
550 Main Street, Room 10-714
Cincinnati, Ohio 45202-3222
Phone: (513) 684-2699
Fax: (513) 684-2460

In order for an RFA to be accepted by the Corps, the Corps must determine that it is complete, that it meets the criteria for appeal under 33 CFR 331.5, and that it has been received by the Division Office within 60 days of the date of the NAP. Should you decide to submit an RFA form, it must be received at the above address by **March **, 2021**. **It is not necessary to submit an RFA form to the Division office if you do not object to the determination in this letter.**

This determination has been conducted to identify the limits of the Corps' Section 404 jurisdiction for the particular site identified in this request. This determination may not be valid for the wetland conservation provisions of the Food Security Act of 1985. If you or your tenant are United States Department of Agriculture (USDA) program participants, or anticipate participation in USDA programs, you should request a certified wetland determination from the local office of the Natural Resources Conservation Service prior to starting work.

No Permit Required

Based on a review of the information provided, we have determined your proposal will neither result in a discharge of dredged and/or fill material into waters of the United States nor involve work in, on, over or under a navigable water of the United States. Therefore, no DA permit is required from this office for the proposed activity.

This letter does not excuse you from the obligation to obtain any other Federal, state and/or local authorization, if required. You should not commence work until you receive the required authorizations. In addition, this letter does not grant any property rights or exclusive privileges, or authorize any injury to the property or rights of others. If you contemplate any changes or additional activities from those described in your request dated November 5, 2020, please submit them to this office for authorization review prior to any construction.

A copy of this letter will be provided to the Ohio Environmental Protection Agency at Lazarus Government Building, Post Office Box 1049 Columbus, Ohio 43216-3669. If you have any questions concerning the above, please contact Andrew Wendt at (513) 825-4518, by mail at the above address, or by email at andrew.j.wendt@usace.army.mil.

Sincerely,

Laurie A. Moore
Regulatory Project Manager
North Branch

Enclosures

Table 1. Non-jurisdictional features associated with the CMH-086 Approved JD, LRH-2021-72-SCR					
Aquatic Resources	**Latitude & Longitude (°N)**	**(°W)**	**Cowardin Class**	**Linear feet and/or Acres in review area**	**Regulatory Authority**
Ditch 1	40.1176	-83.2013	Ephemeral	2,240 linear feet	None; Excluded under (b)(5)
Wetland A	40.1196	-83.1983	PEM	0.03 acre	None; Excluded under (b)(1)
Wetland B	40.1185	-83.1985	PEM	0.03 acre	None; Excluded under (b)(1)
Wetland C	40.1178	-83.1977	PEM	0.16 acre	None; Excluded under (b)(1)

Site Boundary
Design Component
Limits of Disturbance
Culvert
Non-Jurisdictional Ditch
PEM Wetland
PFO Wetland
Wetland Impact

Source:
Background: Aerial Photo: 8/4/2019

0 150 300 Feet

1 inch = 300 feet

PROPOSED SITE PLAN AND IMPACTS MAP

CMH 086
8567 Warner Road
Plain City, Ohio

ITEM 4B-1

RAMBOLL US CORPORATION
A RAMBOLL COMPANY

RAMBOLL

Ohio Environmental Protection Agency

Mike DeWine, Governor
Jon Husted, Lt. Governor
Laurie A. Stevenson, Director

Re: CMH-086 Warner Road
Permit - Intermediate
Approval
401 Wetlands
Union
DSW401217251W

April 20, 2021

Garrett Jansma
Amazon Data Services, Inc.
410 Terry Ave
North Seattle, WA 98109
Jansma@amazon.com

Subject: Grant Authorization under Isolated Wetland and Ephemeral Stream General Permit (Level One)
CMH-086 Warner Road
Ohio EPA ID No. 217251W

Dear Mr. Jansma:

On March 8, 2021, the Ohio Environmental Protection Agency (Ohio EPA) received a pre-activity notice (PAN) for coverage under the OHIO GENERAL PERMIT FOR FILLING CATEGORY 1 AND CATEGORY 2 ISOLATED WETLANDS AND EPHEMERAL STREAMS (general permit). In the PAN, you requested to impact 0.22 acre of forested Category 2 wetlands for the purpose of constructing a commercial development located in Plain City, Union County (40.118817, -83.199834). After an administrative review of the PAN, it was determined to be complete on March 29, 2021. As compensatory mitigation for the aforementioned impacts you shall purchase 0.6 acre of forested wetland mitigation from The Nature Conservancy's In-Lieu Fee Program located in the Upper Scioto Watershed (05060001).

Ohio EPA has reviewed your request and has determined that it meets the PAN requirements for coverage under the general permit.

Please familiarize yourself with the general permit (see link below). It contains requirements and prohibitions with which you must comply. In particular, please be aware of permit condition Part VI.F requiring mitigation credit proof of purchase within 30 days of receipt of this authorization.

OHIO GENERAL PERMIT FOR FILLING CATEGORY 1 AND 2 ISOLATED WETLANDS AND EPHEMERAL STREAMS

Additionally, please be aware that as per ORC §6111.022(E) and Part VII of the general permit, the proposed filling of the isolated wetland(s) and/or ephemeral stream(s) must be completed by April 20, 2023. If you do not complete the filling within this time, you must submit a new pre-activity notice to Ohio EPA.

You may find a copy of Ohio EPA's rules and laws online at http://www.epa.ohio.gov/dsw/dswrules.aspx. Information regarding Ohio's Section 401 and Isolated Wetlands Permitting programs is also available online at http://www.epa.ohio.gov/dsw/401/permitting.aspx.

If you have any questions, please contact me via email at Matthew.Lamoreaux@epa.ohio.gov.

Sincerely,

Matt Lamoreaux
Application Coordinator
401/Wetlands/Mitigation Section

ec: Andrea Kilbourne, Andrea.Kilbourne@epa.ohio.gov, Ohio EPA, DSW, Mitigation Coordinator
Jeff Boyles, Jeffrey.Boyles@epa.ohio.gov, 401/Wetlands/Mitigation Section Supervisor, Ohio EPA
Wes Barnett, wes.barnett@usace.army.mil, Department of the Army, Huntington District, Corps of Engineers
Devin Schenk, dschenk@TNC.org, The Nature Conservancy
Andrew Cangey, cangeyac@amazon.com, Amazon Data Services, Inc.
Jamie VanDusen, Jamie.VanDusen@ramboll.com, Ramboll Americas Engineering Solutions, Inc.

DSW File

General Isolated Wetland Permit Application (Level One)

Division of Surface Water/Stormwater Section

(For impacts of ½ acre or less to Category 1 and 2 isolated wetlands)

Section 1: Applicant and Consultant/Agent Information		
	Applicant	**Consultant/Agent**
Company/Agency Name:	Amazon Data Services, Inc.	Ramboll Americas Engineering Solutions, Inc.
Address:	410 Terry Avenue, North Seattle, WA 98109	8805 Governors Hill Drive, Suite 164, Cincinnati, OH 45249
Contact Name/Title:	Garrett Jansma/DRO	Jamie VanDusen/Project Ecologist
Contact Phone:	(949) 410-5315	(517) 282-8575
Alternate Phone:		
Contact FAX:		
Contact Email:	Jansma@amazon.com	jamie.vandusen@ramboll.com
Technical Contact:	Andrew Cangey	
Technical Phone:	(724) 674-4033	
Technical Email:	cangeyac@amazon.com	

Section 2: Project Information

A. Project Name: CMH-086 Warner Road

B. Has Pre-Application Coordination occurred? ☐ Yes ☒ No

401 Pre-application Reviewer: **Date of 401 Pre-application Meeting:**

C. Brief Project Description: On behalf of Amazon Data Services Inc., Ramboll is requesting authorization to impact approximately 0.22 acres of three isolated wetlands as part of a proposed Amazon web service data center facility. The data center will consist of four data center halls, one "special projects" area with two small research buildings, an electrical substation with an adjoining switchyard and associated "mega charge" station, a water storage facility, and other associated infrastructure (security guardhouse and entrance truck turnaround area, access roads, parking areas, utilities, and stormwater management system). The purpose of the proposed data center is to provide data/information management services.

D. Construction Start Date: 05/01/2021 **End Date:** 04/01/2023

E. Is any portion of the activity complete now? ☐ Yes ☒ No

Is this an "After-The-Fact" permit application? ☐ Yes ☒ No

Description of completed activities and its impact on the waters of the state.:

F. Coordinates LATITUDE: 40.118817 **LONGITUDE:** -83.199834

G. Project Address: 8567 Warner Road, Plain City, OH

Location Description: The 100-acre site is located at 8567 Warner Road in Plain City, Ohio

ZIP Code(s): 43064

County(ies):	**Township(s):**
Union	
Union	Jerome

H. 12 Digit HUC Number:	**I. Watershed Name:**
050600011203	Indian Run

J. U.S. Army Corps of Engineers District: Huntington

K. Proposed Impacts to Isolated Wetlands:

☐ Beach Nourishment	☐ Blasting	☐ Breakwater	☐ Bulkhead
☐ Bridge/Culvert	☐ Dam	☐ Dredge	☒ Fill
☐ Groin/Jetty	☐ Levees/Berms	☐ Mine Through	☐ Revetment

☐ Bank Stabilization ☐ Stream Channelization ☐ Stream Relocation ☐ Water Body Crossing
☐ Weirs ☐ Other

L. Other water related permits issued or required include:

☐ Individual 404 Permit

☐ Individual 401 WQC

☐ Nationwide Permit

☐ Section 9 Permit

☐ Section 10 Permit

☐ NPDES Permit

☐ Permit to Install

☐ Regional General Permit

☐ ODNR Permit

☐ Oil & Gas Storm Water General Permit

M. Are there other aquatic resources on the project site?

☐ Perennial Streams ☐ Intermittent Streams ☐ Ephemeral Streams ☐ Non-Isolated Wetlands ☐ Lakes/Ponds

Section 3: Fees

Are you exempt from fees?		☐ Yes ☒ No	(If YES, leave fee section blank)
Is this an After the Fact (ATF) application?		☐ Yes ☒ No	
If YES, double the fees. Maximum fees of $10,000			
Application Fee =			$200.00
Review Fees			
Wetland Acres Impacted	0.22 x $500.00 =		$110.00
	Total Review Fees =		$110.00
	Total Fees ($200 Application Fee + Total Review Fees) =		$310.00
	Due at the time of application submittal =		$310.00

PLEASE MAKE FEE CHECK PAYABLE TO: "TREASURER, STATE OF OHIO"

Section 4: Submitted Documentation

Check all documents/items that have been submitted.

☒ Proposed Project Mapping

Upload File(s): Item 3B_Photograph Location Map.pdf, Item 4 Description of Impacts_.pdf, Item 4B-1_Prop Site Plan and Impacts.pdf, Item 4A-2_Aerial Photograph.pdf, Item 4A-1_Topographic Map.pdf, Item 4A-3_Vicinity Map.pdf

☒ Wetland Delineation Report

Upload File(s): FINAL CMH 086_Jurisdictional WOTUS Report_1_15_2021.pdf

☒ Wetland categorization (including 10-page ORAM sheets)

Upload File(s): Wetland A.pdf, Wetland C.pdf, NHD Response.pdf, Wetland B.pdf

☒ Site Photographs

Upload File(s): Wetland Photos.pdf

☒ US Army Corps of Engineers Jurisdictional Determination

Upload File(s): LRH-2021-72-SCR CMH-086 AJD Request AJD Letter.pdf

☐ Proposed Mitigation Plan

Section 5: Applicant and Agent Signature

Application is hereby made for an Isolated Wetland Permit. I certify that the information provided on this form and all attachments related to this project are true and accurate to the best of my knowledge.	
Applicant Name (printed or typed):	**Applicant Signature:**
Agent Name (printed or typed):	**Agent Signature:**

Application for Section 401 Water Quality Certification - Proposed Wetland Impacts and Mitigation

Division of Surface Water

401 Water Quality Certification and Isolated Wetland Permitting Unit

Section 1: Wetlands Onsite and Proposed Impacts

Wetland ID	ORAM Score	Category	Cat. Verified by Ohio EPA?	Ohio EPA Reviewer who Verified	Size (Acres)			Proposed Impacts (Acres)		
					Forest	None	Total	Forest	None	Total
Wetland C	49.0	2	No		0.16	0.00	0.16	0.16	0.00	0.16
Wetland B	48.0	2	No		0.03	0.00	0.03	0.03	0.00	0.03
Wetland A	45.0	2	No		0.00	0.03	0.03	0.00	0.03	0.03
Wetland Acreage Totals					0.19	0.03	0.22	0.19	0.03	0.22
Totals: Category 1 Wetlands					0.00	0.00	0.00	0.00	0.00	0.00
Totals: Category 2 Wetlands					0.19	0.03	0.22	0.19	0.03	0.22
Totals: Category 3 Wetlands					0.00	0.00	0.00	0.00	0.00	0.00

Section 2: Proposed Wetland Mitigation (Check All That Apply) Preferred Alternative

☐ **Wetland Mitigation Bank**

Mitigation Bank: **Other Mitigation Bank:**

Number of Forested Credits: **Type of Credits (if applicable):**

Number of Non-Forested Credits: **Type of Credits (if applicable):**

☐ **Proof of Reservation?**

☒ **In-Lieu Fee Program** **ILF Sponsor:** The Nature Conservancy **Other ILF Sponsor:**

Number of Wetland Credits: 0.6

☒ **Proof of Reservation?**

Upload File(s): AWS CMH-086_Letter of Credit Availability and Reservation_updated 2.22.2021_Upper Scioto.pdf

☐ **On-Site Permittee-Responsible Mitigation**

☐ **Restoration/Creation** **Type of Wetland:** **Acres:**

☐ **Preservation** **Type of Wetland:** **Acres:**

☐ **Enhancement** **Type of Wetland:** **Acres:**

☐ **Other**

Other Description:

☐ **Off-Site Permittee-Responsible Mitigation**

☐ **Restoration/Creation** **Type of Wetland:** **Acres:**

☐ **Preservation**	**Type of Wetland:**	**Acres:**
☐ **Enhancement**	**Type of Wetland:**	**Acres:**
☐ **Other**		

Other Description: