

# Construction Notice for the Brie-Voltron 138 kV Transmission Line Project



An **AEP** Company

PUCO Case No. 24-0152-EL-BNR

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

Submitted by:  
Ohio Power Company

February 23, 2024

## Construction Notice for the Brie-Voltron 138 kV Transmission Line Project

### CONSTRUCTION NOTICE

#### Ohio Power Company Brie-Voltron 138 kV Transmission Line Project

#### 4906-6-05

Ohio Power Company (the “Company”) provides the following information in accordance with the requirements of Ohio Administrative Code Section 4906-6-05.

#### 4906-6-5(B) General Information

##### B(1) Project Description

**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 Construction Notice.**

The Company proposes the Brie-Voltron 138 kV Transmission Line Project (the “Project”) in the City of New Albany, Plain Township, Licking County, Ohio. The Project involves construction of two parallel, approximately one-mile, double circuit 138 kV transmission lines (Brie – Voltron East and Brie – Voltron West) between the existing Brie Station (approved in Case No. 22-0799-EL-BLN) and a customer’s station. The Project will require a 100-ft wide transmission right-of-way (ROW) for each line. The Project will support a customer’s development in the area.

**Figure 1 and Figure 2**, included in **Appendix A**, show the location of the Project in relation to the surrounding vicinity.

The Project meets the requirements for a Construction Notice (CN) because it is within the types of projects defined by item 1(d)(i) of Ohio Administrative Code Section 4906-1-01 Appendix A of the Application Requirement Matrix For Electric Power Transmission Lines:

- 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:*

*(d) 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. 24-0152-EL-BNR.

## Construction Notice for the Brie-Voltron 138 kV Transmission Line Project

### **B(2) Statement of Need**

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

In order to serve a customer in the area, the Company will be required to construct two 138 kV transmission lines, approximately one mile each, which is the subject of this application. These lines will connect the customer's Voltron Station, to the Company's Brie Station (approved in OPSB No. 22-0799-EL-BLN). The proposed transmission lines are necessary to serve the customer's expected initial and ultimate peak load of 220 MW in the New Albany area.

Failure to move forward with the proposed Project will result in the inability to serve the customer's load expectations and jeopardize the customer's plans in the New Albany area. The customer has requested an in-service date of February 11, 2025.

The need and solution for this supplemental Project was presented and reviewed with stakeholders at the August 18, 2023, PJM SRRTEP meetings, see **Appendix B**. The Project was included in the Company's 2023 Supplemental Long Term Forecast Report on page 6.

### **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 location of the Project in relation to existing and proposed transmission lines and substations is shown on **Figure 1**.

### **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.**

The Company conducted an analysis that included initial investigations of alternative routes between the customer station (Voltron Station) and Brie Station. Due to the location of these stations, the customer's development, and the transmission lines being located entirely on customer property, no other alternatives were considered for the Project. Any other alternative would result in additional forested clearing, impact additional landowners, and has a possibility to impact wetlands or streams outside the Customer site.

The proposed route is located entirely on the customer's parcel, which is under active development and recently disturbed. There are no known impacts to cultural resources, forested areas, streams, or wetlands. Additionally, no residences are located within 1,000 feet of the Project. Therefore, this Project represents the most suitable location and is the most appropriate solution for meeting the Company and the customer's needs in the area.

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### **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 Project will be located entirely within Customer owned property, with no additional property owners or tenants affected. 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 in 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 anticipated to begin in June 2024, and the anticipated in-service date is February 2025.

### **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.**

**Figure 1** provides the proposed Project area and existing transmission facilities on a map of 1:24,000-scale (1-inch equals 2,000 feet), showing the Project on a topographic map of the Jersey quadrangle provided by the National Geographic Society. **Figure 2** shows the Project area on recent aerial photography, dated 2021, as provided by the Environmental Systems Research Institute (ESRI), at a scale of 1:6,000 (1-inch equals 500 feet).

To visit the Project site from Columbus, Ohio, take I-670 East for approximately six miles and then merge onto I-270 N toward Cleveland. Continue on I-270 for approximately two miles, then take Exit 30 New Albany/OH 161E. Continue on OH 161E for 7.5 miles and then take the Township Highway 88/Beech Road exit. Turn right onto Beech Road and continue for approximately 1.5 miles. The approximate address for the southern terminus of the Project at Brie Station is 820 Beech Road, at latitude 40.0578°, longitude - 82.7476°

### **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**



## Construction Notice for the Brie-Voltron 138 kV Transmission Line Project

**facility and a list of the additional properties for which such agreements have not been obtained.**

All work activities are proposed on parcels (094-106914-00.000 and 094-106782-00.000), which are currently owned by the customer. The Company has entered into easement agreements with the customer.

### **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.**

The Brie-Voltron 138 kV East is estimated to include the following:

Voltage: 138 kV  
Conductors: Double Circuit, (2-bundle) (6) 795KCM 26/7 DRAKE ACSR  
Static Wire: (2) 144ct OPGW  
Insulators: Polymer  
ROW Width: 100-foot  
Structure Types: Three (3) 2-pole steel dead-end structures,  
Two (2) 2-pole steel running angle structures, and  
Four (4) mono pole steel tangent structures.  
All poles are self-supporting on concrete pier foundations.

The transmission line construction for the Brie-Voltron 138 kV West is anticipated to include the following:

Voltage: 138 kV  
Conductors: Double Circuit, (2-bundle) (6) 795KCM 26/7 DRAKE ACSR  
Static Wire: (2) 144ct OPGW  
Insulators: Polymer  
ROW Width: 100-foot  
Structure Types: Three (3) 2-pole steel dead-end structures,  
Two (2) 2-pole steel running angle structures, and  
Three (3) mono pole steel tangent structures.  
All poles are self-supporting on concrete pier foundations.

### **B(9)(b) Electric and Magnetic Fields**

**For electric power transmission lines that are within one hundred feet of an occupied residence or institution, the production of electric and magnetic fields during the operation of the proposed electric power transmission line.**

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

## **Construction Notice for the Brie-Voltron 138 kV Transmission Line Project**

### **B(9)(c) Project Cost**

#### **The estimated capital cost of the project.**

The cost estimate for the proposed Project, which is comprised of applicable tangible and capital costs, is approximately \$11,100,000 from a Class 4 estimate. Ninety percent of the costs of the Project will be recovered through reimbursement from the customer. Pursuant to the PJM Open Access Transmission Tariff (“OATT”), the remaining costs for this Project will be recovered in the Company’s Federal Energy Regulatory Commission (“FERC”) formula rate (Attachment H-14 to the PJM OATT) and allocated to the AEP Zone.

### **B(10) Social and Ecological Impacts**

#### **The applicant shall describe the social and ecological impacts of the project:**

#### **B(10)(a) Land Use Characteristics**

##### **Provide a brief, general description of land use within the vicinity of the proposed project, including a list of municipalities, townships, and counties affected.**

An aerial photograph of the Project vicinity is provided as **Figure 2**. The Project location and vicinity have historically been agricultural land and scrub-shrub vegetation with scattered woodlots throughout the Project area, but has recently undergone land use change to light commercial and industrial use. The Project is located in the City of New Albany, Plain Township, Licking County, Ohio. There are no parks, churches, cemeteries, wildlife management areas, or nature preserve lands within 1,000 feet of the Project.

#### **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 Licking County Auditor provided a list of parcels registered as Agricultural District Land on February 22, 2024, that confirmed the Project is not located within lands identified as Agricultural District Land. In addition, the Project does not cross any agricultural land.

The entirety of the Project site occurs within the customer development and situated on land currently utilized for future commercial and/or industrial development. Therefore, significant disturbances to agricultural practices are not anticipated to occur as result of the Project.

#### **B(10)(c) Archaeological and Cultural Resources**

##### **Provide a description of the applicant’s investigation concerning the presence or absence of significant archaeological 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.**

## Construction Notice for the Brie-Voltron 138 kV Transmission Line Project

Phase I Archaeological investigations and History/Architecture Investigations for the Project occurred in June 2023. No archaeological sites or architectural resources of 50 years of age or older were identified within the Area of Potential Effect (APE) as the area has been disturbed by ongoing construction activities.

On July 5, 2023, the Ohio State Historic Preservation Office (“SHPO”) concurred with the recommendations and stated that the Project will have no effect on historic properties and no further investigations or consultation with SHPO is necessary. Coordination with SHPO is provided as **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 will be filed with the Ohio Environmental Protection Agency for authorization of construction stormwater discharges under General Permit OHC000006. The Company will also coordinate stormwater permitting needs with local government agencies, as necessary. The Company will implement and maintain best management practices as outlined in the Project-specific Stormwater Pollution Prevention Plan to minimize erosion and control sediment to protect surface water quality during storm events.

The Company’s consultant conducted a stream and wetland delineation within the Project study area. No wetlands, streams, or ponds were identified within the Project study area as provided in **Section (10)(f)** below. Therefore, no streams or wetlands are proposed for disturbances as part of this Project and authorization from the United States Army Corps of Engineers (USACE) is not warranted.

No FEMA regulated floodplains or floodways will be disturbed by the Project as identified in FEMA Map ID# 39089C0286J.

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 United States Fish and Wildlife Service (USFWS) Ohio Ecological Services Field Office seeking technical assistance on the Project for potential impacts to threatened or endangered species. The July 12, 2023, response letter from the USFWS (see **Appendix C**) indicated that the federally endangered Indiana bat (*Myotis sodalis*),

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northern long-eared bat (*Myotis septentrionalis*), and tricolored bat (*Perimyotis subflavus*) as being within range of the Project area. The USFWS indicated that seasonal tree clearing would be required if suitable bat habitat trees were identified. Any tree clearing required for the Project will adhere to seasonal restrictions (March 31 through October 1); therefore, adverse impacts to protected bat species are not anticipated as a result of the Project. Due to the Project type, size, and location, USFWS does not anticipate adverse effects to any other federally endangered, threatened, proposed, or candidate species.

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 seeking an environmental review of the proposed Project for potential impacts on state listed and federally listed threatened or endangered species. Correspondence from ODNR DOW/OHNP and the ODNR – Office of Real Estate was received on August 11, 2023 (See **Appendix C**).

According to the DOW, the Project is within the range of the state and federally endangered Indiana bat, the state and federally endangered northern long-eared bat, the state endangered little brown bat (*Myotis lucifugus*), and the state and federally endangered tricolored bat. Additionally, the DOW indicated that the Project is within the vicinity of records for the northern long-eared bat. Because of the presence of state endangered bat species established in the area, summer tree cutting is not recommended, and additional summer surveys would not constitute presence/absence in the area. If summer tree clearing activities are required, the Company intends to coordinate with the ODNR and USFWS.

Similar to the USFWS response, ODNR recommends cutting between October 1 and March 31 to avoid impacts to these protected bat species. Based on a desktop survey for caves, mines, and other potential openings, no winter hibernacula were identified within 0.25 mile of the Project (See **Appendix D**). Based on general observations during the ecological survey, the existing land use includes actively disturbed areas. No forested areas were identified within the Project area. Therefore, no additional coordination with ODNR regarding bat species is required.

The ODNR-DOW indicated that the Project is within the range of one aquatic fish species, state threatened Lake chubsucker (*Erimyzon sucetta*). Due to the absence of streams within the Project area, no impacts are anticipated to this species.

In addition, the ODNR lists the Project in the range of the northern harrier (*Circus hudsonius*). The ODNR recommends that nesting habitats for the listed species be avoided during their nesting periods. Based on existing site conditions, potential nesting habitat for the Northern Harrier was not identified due to the existing land use being actively disturbed or associated with developed land associated with the customer's development. Therefore, no further coordination regarding northern harrier was warranted regarding this Project as no habitat was present.

A copy of the agency correspondence is provided in **Appendix C**. Additional information regarding habitat assessments within the Project area is provided within the Wetland Delineation and Stream Assessment Report found in **Appendix D**.

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### **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.**

The Company's consultant prepared an ecological survey report which is provided in **Appendix D**. The Project area is located within an active customer development site that is absent of streams, wetlands, and ponds.

Coordination letters were submitted to the USFWS and ODNR requesting a review the Project and identification of areas of ecological concern. The USFWS's response email was received on July 12, 2023, (**Appendix D**) and did not indicate any federal wilderness areas, wildlife refuges, or designated critical habitat within the vicinity of the Project. The ODNR's response received on August 11, 2023 (**Appendix D**) did not indicate any known unique ecological sites, geologic features, scenic rivers, state wildlife areas, state natural preserves, state or national parks, state or national forests, national wildlife refuges, or other protected natural areas within the Project area.

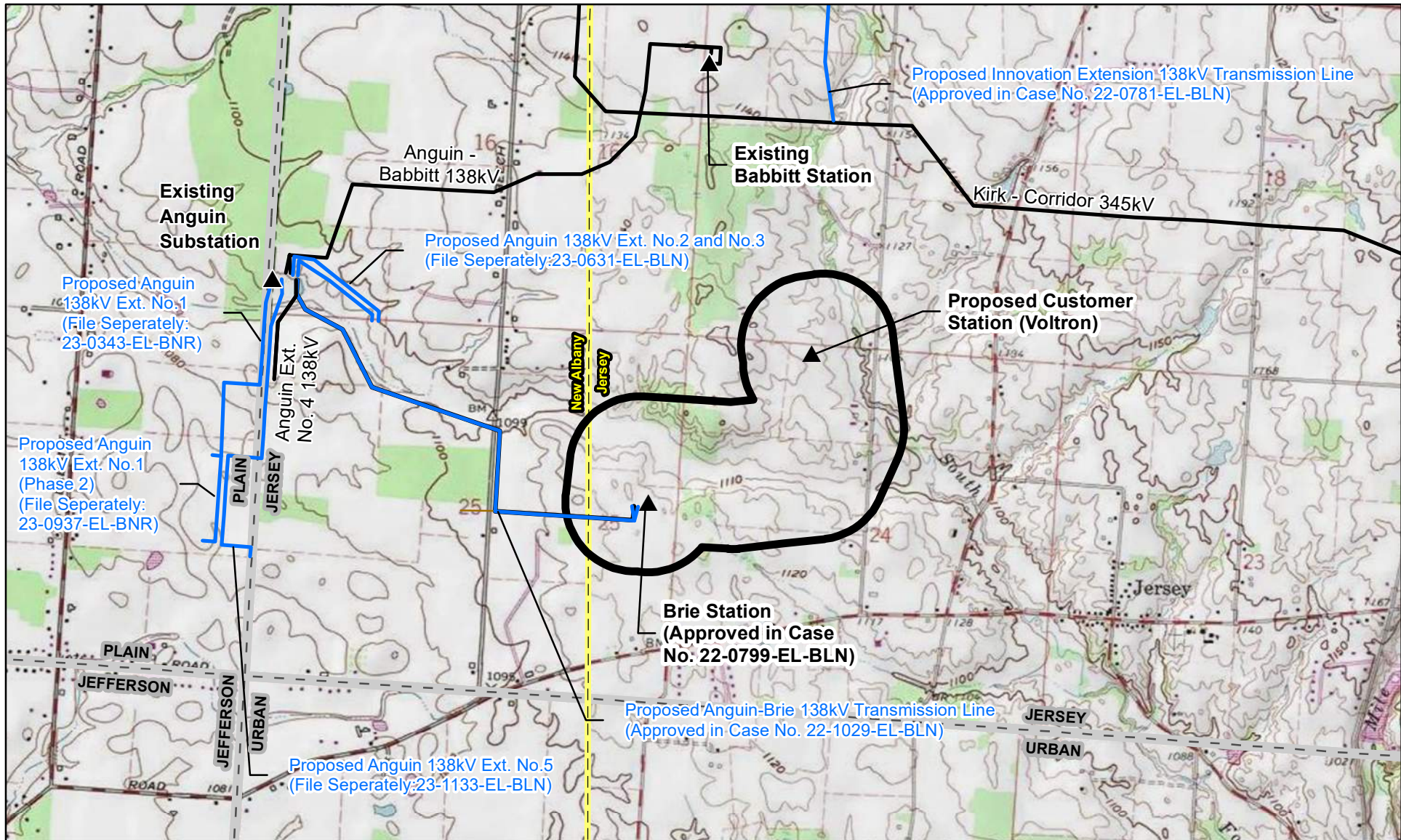
### **B(10)(g) Unusual Conditions**

**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 Figures**





- ▲ Station
- Existing Transmission Line
- Proposed Transmission Line
- ▭ Project Area
- ▭ Township Boundary
- ▭ US Topographic Lines

Data Sources: AEP, USGS 7.5' Topographic Quadrangles (Jersey)

Coordinate System and Datum: NAD 83 State Plane Ohio South, Feet

February 22, 2024



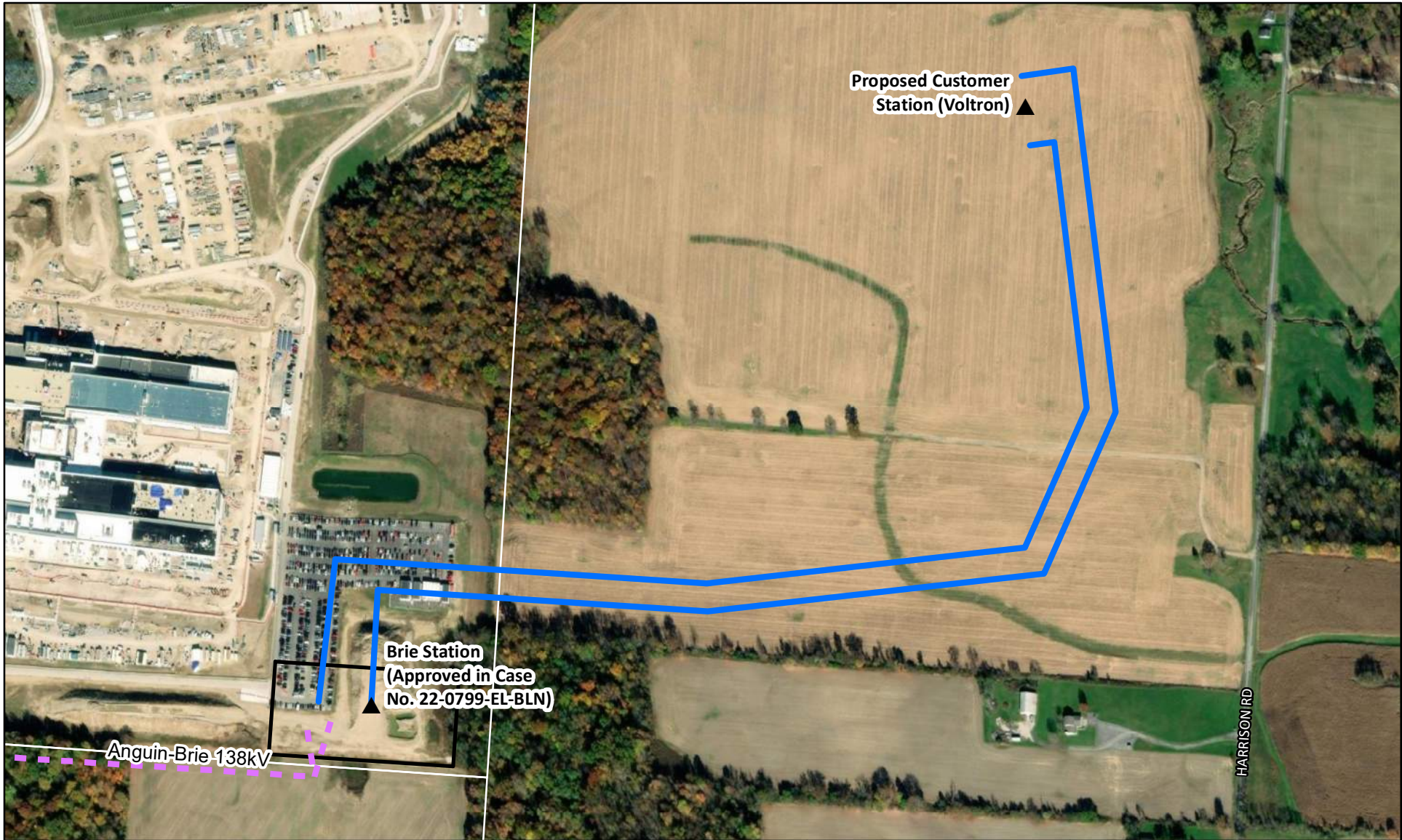
**FIGURE 1  
TOPOGRAPHIC OVERVIEW**

An AEP Company

Construction Notice  
Brie - Voltron 138 kV  
Transmission Line Project

0 1,000 2,000 3,000 4,000  
Feet





- ▲ Station
- Proposed Brie - Voltron 138kV Transmission Line
- - - Proposed Anguin-Brie 138kV Transmission Line (Approved in Case No. 22-1029-EL-BLN)
- ▭ Parcel Boundary
- ▭ Brie Station (Approved in Case No. 22-0799-EL-BLN)


Data Sources:  
AEP & ESRI Imagery, 2021

Coordinate System and Datum:  
NAD 83 State Plane  
Ohio South, Feet

February 22, 2024



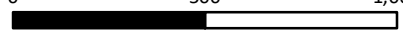
**FIGURE 2  
AERIAL MAP**



An AEP Company

Construction Notice  
Brie - Voltron 138 kV  
Transmission Line Project

0                      500                      1,000



Feet



## **Appendix B PJM Solution and Long Term Forecast Report**

# AEP S2781 Scope/Cost Update New Albany, Ohio

**S2781: Need Number:** AEP-2021-OH031, Posted to 2022 AEP local Plan

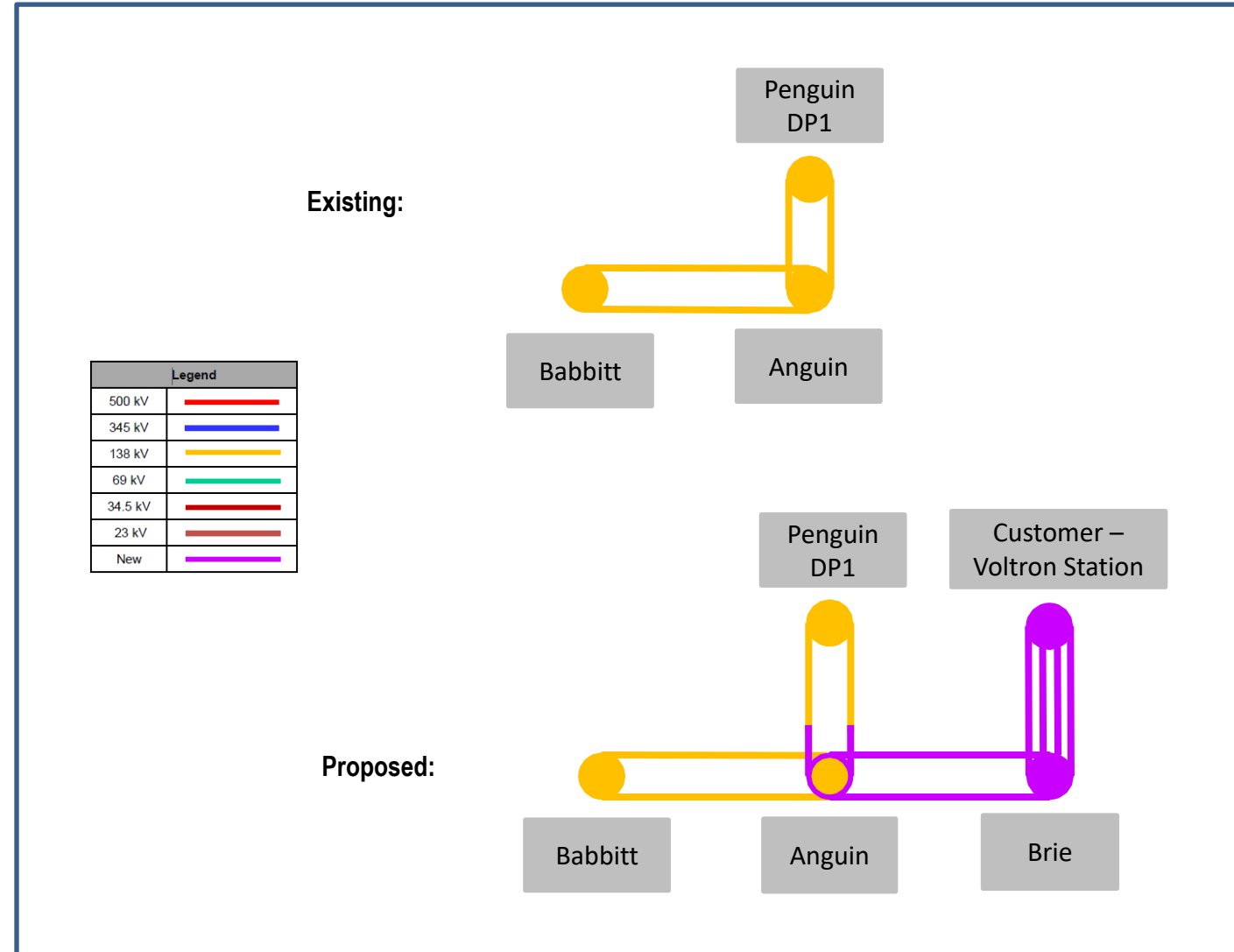
**Project Description (Changes are marked in Red):**

- **Anguin 138 kV Station:** Relocate the Anguin extension No. 4 into strings C & D at Anguin station installing two circuit breakers in each string to complete the strings. The new double circuit line to Brie station will be installed in strings A & B. Expand DICM to accommodate additional relays. **Estimated Cost: \$1.33M (s2781.1)**
- **Anguin – Penguin DP1 138kV:** Re-terminate the existing 138 kV Anguin Extension lines into strings C & D at Anguin Station. **Estimated Cost: \$0.78M (s2781.2)**
- **Brie 138kV Station:** Establish the greenfield 138kV Brie station. Two full breaker and a half strings and 2 partial strings will be initially installed; total of ten (10) 138 kV breakers. **Estimated Cost: \$11.04M (s2781.3)**
- **Anguin – Brie 138 kV:** Build ~1.5 miles of greenfield 138kV double circuit line between Anguin and Brie station with 2 Bundle ACSS 1033.5 Curlew. Extend the telecom fiber into Brie station for relaying/communication. Short span construction and larger than normal foundations are required in this area to maintain clearances and paths for future development from the customers in the area, leading to higher than normal costs for this line. **Estimated Cost: \$7.83M (s2781.4)**
- **Brie – Customer (Voltron)138kV:** **Construct approximately 2 miles of two double circuit 138 kV tie lines #1-4 to the customer’s facility. Estimated Cost: \$0.11M-\$4.11M (s2781.5)**

**Total Estimated Transmission Cost: ~~\$21.08M~~-\$25.08M**

**Projected In-Service: ~~6/1/2023~~ 5/14/2024**

**Reason for the change:** The specific location for the customer station was updated and is further from Brie station than originally thought.



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

<b>1</b>	<b>LINE NAME AND NUMBER:</b>	Brie - Why 1 & 2 (customer) 138 kV (s2781 TP2021088)
<b>2</b>	<b>POINTS OF ORIGIN AND TERMINATION</b>	Brie - Why 1 & 2 (customer) INTERMEDIATE STATION - N/A
<b>3</b>	<b>RIGHTS-OF-WAY: LENGTH / WIDTH / CIRCUITS</b>	~0.1 miles / 100 ft / 2 circuit
<b>4</b>	<b>VOLTAGE: DESIGN / OPERATE</b>	138 kV / 138 kV
<b>5</b>	<b>APPLICATION FOR CERTIFICATE:</b>	2022
<b>6</b>	<b>CONSTRUCTION:</b>	2023
<b>7</b>	<b>CAPITAL INVESTMENT:</b>	\$0.05M
<b>8</b>	<b>PLANNED SUBSTATION:</b>	Brie
<b>9</b>	<b>SUPPORTING STRUCTURES:</b>	Steel
<b>10</b>	<b>PARTICIPATION WITH OTHER UTILITIES</b>	N/A
<b>11</b>	<b>PURPOSE OF THE PLANNED TRANSMISSION LINE</b>	Service to new customer
<b>12</b>	<b>CONSEQUENCES OF LINE CONSTRUCTION DEFERMENT OR TERMINATION</b>	Unable to serve new customer
<b>13</b>	<b>MISCELLANEOUS:</b>	
<b>1</b>	<b>LINE NAME AND NUMBER:</b>	Brie - Why 3 & 4 (customer) 138 kV (s2781 TP2021088)
<b>2</b>	<b>POINTS OF ORIGIN AND TERMINATION</b>	Brie - Why 3 & 4 (customer) INTERMEDIATE STATION - N/A
<b>3</b>	<b>RIGHTS-OF-WAY: LENGTH / WIDTH / CIRCUITS</b>	~0.1 miles / 100 ft / 2 circuit
<b>4</b>	<b>VOLTAGE: DESIGN / OPERATE</b>	138 kV / 138 kV
<b>5</b>	<b>APPLICATION FOR CERTIFICATE:</b>	2022
<b>6</b>	<b>CONSTRUCTION:</b>	2023
<b>7</b>	<b>CAPITAL INVESTMENT:</b>	\$0.05M
<b>8</b>	<b>PLANNED SUBSTATION:</b>	Brie
<b>9</b>	<b>SUPPORTING STRUCTURES:</b>	Steel
<b>10</b>	<b>PARTICIPATION WITH OTHER UTILITIES</b>	N/A
<b>11</b>	<b>PURPOSE OF THE PLANNED TRANSMISSION LINE</b>	Service to new customer
<b>12</b>	<b>CONSEQUENCES OF LINE CONSTRUCTION DEFERMENT OR TERMINATION</b>	Unable to serve new customer
<b>13</b>	<b>MISCELLANEOUS:</b>	
<b>1</b>	<b>LINE NAME AND NUMBER:</b>	Fostoria Central - Melmore 138 kV (s2782 TP2021594)
<b>2</b>	<b>POINTS OF ORIGIN AND TERMINATION</b>	Fostoria Central - Melmore INTERMEDIATE STATION - Iron Triangle

## **Appendix C Agency Correspondence**



# Ohio Department of Natural Resources

MIKE DEWINE, GOVERNOR

MARY MERTZ, DIRECTOR

**Office of Real Estate**  
*Tara Paciorek, Chief*  
2045 Morse Road – Bldg. E-2  
Columbus, OH 43229  
*Phone: (614) 265-6661*  
*Fax: (614) 267-4764*

August 11, 2023

Anna Findish  
AECOM Technical Services, Inc.  
707 Grant Street, 6th Floor  
Pittsburgh, Pennsylvania 15219

**Re:** 23-0799; Brie-Voltron East and Brie-Voltron Project

**Project:** The proposed project involves the installation of two new greenfield 138kV transmission lines, which will occupy the same approximate 200-foot-wide right-of-way from the proposed Brie Station to the proposed Voltron Station.

**Location:** The proposed project is located in Jersey Township, Licking 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:** A review of the Ohio Natural Heritage Database indicates there are no records of state or federally listed plants or animals within one mile of the specified project area. Records searched date from 1980.

Please note that Ohio has not been completely surveyed and we rely on receiving information from many sources. Therefore, a lack of records for any particular 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 northern long-eared bat (*Myotis septentrionalis*), 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 Eileen Wyza at [Eileen.Wyza@dnr.ohio.gov](mailto:Eileen.Wyza@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 endangered 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 & NORTHERN LONG-EARED 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 Eileen Wyza 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 the lake chubsucker (*Erimyzon sucetta*) a state threatened fish. 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 or other aquatic species.

The project is within the range of the northern harrier (*Circus hudsonius*), 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, this project is not likely to impact this species.

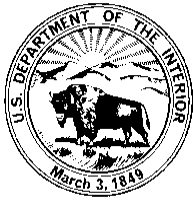
Due to the potential of impacts to federally listed species, as well as to state listed species, we recommend that this project be coordinated with the US Fish & Wildlife Service.

**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.

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

Mike Pettegrew  
Environmental Services Administrator



# United States Department of the Interior

## FISH AND WILDLIFE SERVICE

Ecological Services  
4625 Morse Road, Suite 104  
Columbus, Ohio 43230  
(614) 416-8993 / FAX (614) 416-8994



July 12, 2023

Project Code: 2023-0100620

Dear Ms. Anna Findish:

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, endangered, and proposed 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 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  $\geq 3$  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.

Federally Proposed Species: On September 14, 2022, the Service proposed to list the tricolored bat (*Perimyotis subflavus*) as endangered under the ESA. The bat faces extinction due to the impacts of white-nose syndrome, a deadly disease affecting cave-dwelling bats across the continent. During spring, summer, and fall, this species roosts primarily among leaf clusters of live or recently dead trees, emerging at dusk to hunt for insects over waterways and forest edges. While white-nose syndrome is by far the most serious threat to the tricolored bat, other threats now have an increased significance due to the dramatic decline in the species' population. These threats include disturbance to bats in roosting, foraging, commuting, and over-wintering habitats. Mortality due to collision with wind turbines, especially during migration, has also been documented across their range. Conservation measures for the Indiana bat and northern long-eared bat will also help to conserve the tricolored bat.



*Seasonal Tree Clearing for Federally Listed Bat Species:* Should the proposed project site contain trees  $\geq 3$  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  $\geq 3$  inches dbh cannot be avoided, we recommend removal of any trees  $\geq 3$  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.

If implementation of this seasonal tree cutting recommendation is not possible, a summer presence/absence survey may be conducted for Indiana bats and northern long-eared bats. If Indiana bats and northern long-eared bats are not detected during the survey, then tree clearing may occur at any time of the year. Surveys must be conducted by an approved surveyor and be designed and conducted in coordination with the Ohio Field Office. Surveyors must have a valid federal permit. Please note that in Ohio summer mist net surveys may only be conducted between June 1 and August 15.

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](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, Environmental Services Administrator, at (614) 265-6387 or at [mike.pettegrew@dnr.ohio.gov](mailto:mike.pettegrew@dnr.ohio.gov).

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](mailto:ohio@fws.gov).

Sincerely,

A handwritten signature in blue ink, appearing to read "Patrice Ashfield". The signature is fluid and cursive, with a large initial "P" and "A".

Patrice Ashfield  
Field Office Supervisor

cc: Nathan Reardon, ODNR-DOW  
Eileen Wyza, ODNR-DOW



In reply, refer to  
2023-LIC-58375

July 5, 2023

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

**RE: Brie-Meta 138kV Project, Jersey Township, Licking County, Ohio**

Dear Mr. Weller:

This letter is in response to the correspondence received June 29, 2023 regarding the proposed Brie-Meta 138kV Project, Jersey Township, Licking 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 letter report titled *Cultural Resource Investigations for the Brie-Meta 138kV Project in Jersey Township, Licking County, Ohio* by Ryan J. Weller (Weller & Associates, Inc. 2023).

A literature review was completed as part of the investigations. No previously identified archaeological sites are located within the project area. The area was found to be disturbed by active construction activities. Our office agrees no additional archaeological investigation is needed. There are also no historic resources within the Area of Potential Effects (APE).

Based on the information provided, we agree the project as proposed will have no effect on historic properties. 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](mailto:khorrocks@ohiohistory.org). Thank you for your cooperation.

Sincerely,

A handwritten signature in black ink, appearing to read "Krista Horrocks".

Krista Horrocks, Project Reviews Manager  
Resource Protection and Review

RPR Serial No: 1098841

## **Appendix D Ecological Resources Inventory Report**

# **BRIE-VOLTRON 138KV TRANSMISSION LINE PROJECT**

## **LICKING COUNTY, OHIO**

### **ECOLOGICAL REPORT**

*Prepared for:*

American Electric Power Ohio Transmission Company  
8600 Smiths Mill Road  
New Albany, Ohio 43054



*Prepared by:*

**AECOM**

525 Vine Street, Suite 1800  
Cincinnati, Ohio 45202

Project #: 60713540 and 60713545

August 2023

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## 1.0 INTRODUCTION

American Electric Power Ohio Transmission Company (AEP Ohio Transco) is proposing the construction of a double circuit, greenfield 138 kilovolt (kV) transmission line as part of the Brie-Vottron 138kV Transmission Line (Project) connecting the Brie Station to the existing customer station (Voltron Station) in Licking County, Ohio (OH). The double circuit alignment is composed of the Brie-Voltron East and Brie-Voltron West alignments that are approximately 0.95-mile and 0.88-mile in length, respectively. The Project survey area is located on Jersey OH United States Geological Survey (USGS) 7.5-minute topographical quadrangle as displayed on the Project Overview Map (**Figure 1**).

Due to the active construction activities by others within the vicinity of the Project, an EMHT survey area overlaps with the AECOM Project survey area, which a USACE Preliminary Jurisdictional Determination (PJD): LRH-2018-688 MUS-South Fork Licking River verified jurisdictional features within the Project area (**Appendix A**). Of the previously identified features, only non-jurisdictional swales that were confirmed by the USACE under this PJD were located within AECOM Project survey area. The boundaries of the EMHT delineated wetlands and streams are provided on **Figures 2 and 3** for reference but only those features within AECOM Project study area are included within this report. As the delineation was completed by others and not under public release, complete copies of the data forms and photographs have not been provided. However, AECOM has field verified the presence of these features and applicable forms have been included and/or supplemented with data provided by EMHT.

The purpose of the field survey was to assess the presence of wetlands and possible “waters of the United States” (WOTUS) that occur within the proposed Project area. Secondly, land uses were also recorded to classify and characterize potential habitat for rare, threatened, and endangered (RTE) species. This report will be used to assist AEP Ohio Transco’s efforts to identify potential WOTUS and RTE species habitat present within the proposed Project area to avoid or minimize impacts during construction activities.

## 2.0 METHODOLOGY

The field survey was conducted over approximately 200-foot-wide survey area along the Project. The Project survey area is approximately 22.0 acres. Prior to conducting field surveys, digital United States Department of Agriculture (USDA) Natural Resources Conservation Service (NRCS) soil survey data, United States Fish and Wildlife Service (USFWS) National Wetland Inventory (NWI) data, USGS National Hydrography Dataset (NHD), Federal Emergency Management Agency (FEMA) 100-year floodplain data, and USGS 7.5-minute topographic maps were reviewed to identify the occurrence and location of potential wetland areas and/or streams.

Field survey activities included recording the physical boundaries of observed water features using sub-meter capable EOS Arrow Global Positioning System (GPS) units in conjunction with the ArcGIS Field Maps application on iPad tablets. The GPS data was imported into ArcMap Geographic Information System



software, where the data was reviewed, edited for accuracy, and compiled in a format suitable for transfer and use by AEP Ohio Transco. Water features were delineated and assessed based upon the appropriate procedures detailed below. Land uses observed within the Project Survey Area were assigned a general classification based upon the principal land characteristics and vegetative cover of the location.

## **2.1 WETLAND DELINEATION**

The Project survey area was evaluated according to the procedures outlined in the United States Army Corps of Engineers (USACE) *Corps of Engineers Wetland Delineation Manual* (Environmental Laboratory, 1987) and *Regional Supplement to the Corps of Engineers Wetland Delineation Manual*: (USACE, 2012) and *Midwest Region (Version 2.0)* (USACE, 2010).

During field survey activities AECOM utilized the routine on-site delineation method described in the 1987 manual and supplements that consisted of a pedestrian site reconnaissance, including identifying the vegetative communities, soils identification, a geomorphologic assessment of hydrology, and notation of disturbance. If a wetland was identified, AECOM completed a USACE Wetland Determination Data Form (USACE Data Form) within each unique wetland habitat to serve as a representative of the wetland hydrology, vegetative community, and soil characteristics. Adjacent to each wetland complex, AECOM completed an additional USACE Data Form as a representative of the upland community.

### **2.1.1 WETLAND CLASSIFICATION**

Wetlands identified in the field were classified based on the naming convention found in *Classification of Wetlands and Deepwater Habitats of the United States* (Cowardin *et al*, 1979). The unique wetland habitats were classified as palustrine emergent (PEM), palustrine forested (PFO), palustrine unconsolidated bottom (PUB), palustrine scrub-shrub (PSS), or other classifications for some wetlands. Multiple Cowardin classifications may be present where more than one classification's vegetation is dominant (vegetation covers 30 percent or more of the substrate). Where multiple Cowardin classifications are present, the Cowardin classification of the plants that constitute the uppermost layer of vegetation having 30% or greater coverage is used for classification.

### **2.1.2 WETLAND ASSESSMENT**

Each delineated wetland was assessed following the Ohio Environmental Protection Agency (OEPA) *Ohio Rapid Assessment Method for Wetlands v. 5.0* (ORAM) (Mack, 2001). Wetland assessments utilized the 10-page ORAM form, providing a final Category rating for each wetland.

## **2.2 STREAM ASSESSMENT**

Streams were identified by the presence of a defined bed and bank, and evidence of an ordinary high-water mark (OHWM). The USACE defines the OHWM as "that line on the shore established by the fluctuations

of water and indicated by physical characteristics such as a clear, natural line impressed on the bank, shelving, changes in the character of soil, destruction of terrestrial vegetation, the presence of litter and debris, or other appropriate means that consider the characteristics of the surrounding areas” (USACE, 2005).

### 2.2.1 OEPA PRIMARY HEADWATER HABITAT ASSESSMENT

Stream assessments were conducted using the methods described in the OEPA’s *Methods for Assessing Habitat in Flowing Waters: Using OEPA’s Qualitative Habitat Evaluation Index (QHEI)* (Rankin, 2006) and in the OEPA’s *Field Methods for Evaluating Primary Headwater Streams in Ohio* (OEPA, 2020). Streams associated with watershed area less than or equal to 1.0 square miles (259 hectares), and a maximum depth of water pools equal to or less than 15.75 inches were evaluated utilizing the Primary Headwater Habitat Evaluation Index methodology and all other streams assessed using the QHEI. Flow regime (ephemeral, intermittent, perennial) was determined by the appropriate stream assessment score per OEPA manuals (OEPA, 2020) and by AECOM’s professional opinion.

Streams assessed in the Project survey area were reviewed for existing OEPA Aquatic Life Use Designations per OEPA’s Water Quality Standards (*OAC Chapter 3745-1*). Those without an existing use designation were assigned a provisional aquatic life use designation based upon habitat assessment results (Rankin, 1989; OEPA, 2020).

### 2.2.2 OEPA 401 WATER QUALITY CERTIFICATION FOR NATIONWIDE PERMIT ELIGIBILITY

The OEPA has designated each watershed in the state on the basis of whether it may be ineligible for coverage under OEPA’s 401 Water Quality Certification (WQC) for Nationwide Permits (OEPA, 2017). Mapping provided by the OEPA illustrates the eligibility of streams in the area to fall under a Nationwide Permit for 401 certification or if an individual state WQC need to be applied for coverage. Impacts to streams within each watershed would then have eligibility for 401 Water Quality Certification determined by the watershed category. The three categories are defined as:

**Eligible:** Streams within the watershed are eligible for coverage under Ohio EPA’s water quality certification for the nationwide permits if all other general and regional special terms and conditions are met.

**Ineligible:** Projects affecting high quality streams and undesignated streams draining directly to high quality streams, as represented in the map, must undergo an individual 401 Water Quality Certification review process.

**Possibly Eligible:** Additional field screening procedures are required for streams in the watershed to determine appropriate eligibility. Projects affecting undesignated streams within those HUC12 watersheds that do not directly but eventually drain into high quality waters, might be eligible for coverage under the

OEPA's 401 WQC for Nationwide Permits depending on the results of a field screening assessment. The procedures for determining individual stream eligibility in this scenario are specified in Appendix D "Stream Eligibility Determination Process" of the OEPA Ohio State Water Quality Certification of the 2017 Nationwide Permit Reauthorization.

### **2.2.3 UPLAND DRAINAGE FEATURES**

An upland drainage feature (UDF) is a non-jurisdictional drainage that does not meet the criteria of either a jurisdictional stream or a wetland. A UDF generally lacks an OHWM (USACE, 2005), and are equivalent to a swale or an erosional feature as described by the USACE: "generally shallow features in the landscape that may convey water across upland areas during and following storm events. Swales usually occur on nearly flat slopes and typically have grass or other low-lying vegetation throughout the swale" (USACE, 2005).

A roadside ditch may also be documented as a UDF if it meets the "not potentially jurisdictional" characterization as described in the Office of Environmental Services *Roadway Ditch Characterization Flowchart* (Ohio Department of Transportation, 2014). This would include a ditch that originates entirely within the roadway right-of-way, has a seasonal flow regime, was not constructed to drain a wetland, and does not have hydrophytic vegetation extending more than an insignificant amount beyond its original configuration.

In addition, UDF's (including swales, ditches, and other erosional features) are generally not WOTUS except in certain circumstances, such as relocated streams.

## **2.3 RARE, THREATENED, AND ENDANGERED SPECIES**

AECOM conducted a RTE species review and general field habitat surveys within the Project Survey Area. AECOM submitted requests to Ohio Department of Natural Resources (ODNR) Office of Real Estate – Environmental Review Section and the USFWS Ohio Ecological Services Field Office soliciting comments on the proposed Project. Responses were received on August 11, 2023, and July 12, 2023, respectively (**Appendix B**). Agency-identified species of concern and available species-specific information was reviewed to identify the various habitat types that listed species are known to inhabit. Agency-identified species of concern and available species-specific information was reviewed to identify the various habitat types that listed species are known to inhabit.

AECOM field ecologists conducted a general habitat survey in conjunction with the stream and wetland field surveys as part of assessing potential impacts to rare, threatened, and endangered species. Land uses within the Project survey area were assigned a general classification based upon the principal land characteristics and vegetative cover as observed during the field surveys.

AECOM conducted a desktop assessment of the Project survey area and a quarter-mile buffer around it to identify potentially occurring winter bat hibernaculum that may be present near the Project which is located in **Appendix C**. This assessment was conducted by reviewing data on mining activity and karst geology from the ODNR Division of Mineral Resources and United States Geological Survey websites.

### 3.0 RESULTS

On July 6, 2023, AECOM ecologists walked the Project Survey Area to conduct the wetland delineation, stream assessment and habitat survey. Within the Project survey area, AECOM did not identify any streams, wetlands, or ponds. An upland data point was recorded within the Project survey area, and the representative data form is provided as **Appendix D**.

#### 3.1 WETLAND DELINEATION

##### 3.1.1 PRELIMINARY SOILS EVALUATION

According to the USDA/NRCS Web Soil Survey, five soil map units are mapped within the Project Survey Area (USDA NRCS, 2021a and 2021b). Of these, one was identified as hydric soils, and three soil map units were identified as having hydric inclusions. Soils indicated as hydric inclusions are not predominately hydric soils and hydric soils are more likely to be found in topographic settings. **Table 1** below provides a detailed overview of all soil series and soil map units present within the Project survey area. Soil map units located in the Project survey area and vicinity are shown on **Figure 2**.

**TABLE 1 - SOIL MAP UNITS AND DESCRIPTIONS WITHIN THE PROJECT SURVEY AREA**

Soil Series	Map Unit Symbol	Map Unit Description	Topographic Setting	Hydric	Hydric Component (%)
Amanda	AmD2	Amanda silt loam, 12 to 18 percent slopes, eroded	Knolls on till plains, valleys on till plains	No	N/A
Bennington	BeA	Bennington silt loam, 0 to 2 percent slopes	Ground moraines, end moraines	Yes*	Condit 5% Pewamo 3%
Centerburg	Cen1B1	Centerburg silt loam, 2 to 6 percent slopes	Ground moraines, end moraines	Yes*	Condit 4% Marengo 3%
Centerburg	Cen1C2	Centerburg silt loam, 6 to 12 percent slopes, eroded	Ground moraines, end moraines	Yes*	Condit 4%
Pewamo	Pe	Pewamo silty clay loam, low carbonate till, 0 to 2 percent slopes	Drainageways, depressions	Yes	Pewamo 85% Condit 9%

NA = Not Applicable or Not Available; Yes\* = Hydric inclusion present

### 3.1.2 NATIONAL WETLAND INVENTORY MAP REVIEW

According to NWI data covering the Project location, the Project survey area does not contain any NWI wetlands. The locations of NWI mapped wetlands in the Project vicinity are shown on **Figure 2**.

### 3.1.3 DELINEATED WETLANDS

During the field survey, AECOM did not identify any wetlands within the Project survey area. An upland data point was recorded within the Project survey area, and the representative data form is provided as **Appendix D**. Delineated EMHT wetlands that are adjacent to the Project Survey Area but are not located within the Project survey area are shown on **Figure 2 and 3**. Additionally, existing EMHT Wetland Protection Areas are located adjacent to the Project survey area, but not located within the Project survey area, as shown on **Figure 2 and 3**.

### 3.2 STREAM DELINEATION

During the field survey, AECOM did not identify any streams within the Project survey area.

#### 3.2.1 OEPA STREAM ELIGIBILITY

The Project occurs across two watersheds, designated by 401 WQC eligibility, as listed in **Table 2**. These watersheds are listed as “Eligible” and “Possibly Eligible.” OEPA stream eligibility mapping for the Project vicinity, is provided on **Figure 4**.

### 3.3 FEMA 100 YEAR FLOODPLAINS

Mapped FEMA designated 100-year floodplains and floodways are displayed on **Figure 2**. No regulated FEMA 100-year floodplains and/or floodways are located within the Project survey area (FEMA, 2018)

**TABLE 2- SUMMARY OF WATERSHED 401 WQC ELIGIBILITY WITHIN THE PROJECT SURVEY AREA**

HUC-12	Watershed	401 WQC Eligibility	Number of Stream Assessments
050400060402	Headwaters South Fork Licking River	Eligible	0
050600011503	Headwaters Blacklick Creek	Possibly Eligible	0
<b>Total</b>			<b>0</b>

### 3.4 PONDS

During the field survey, AECOM did not identify any ponds within the Project survey area.

### 3.5 UPLAND DRAINAGE FEATURES

Two upland drainage features (UDF) were observed within the Project survey area. The extent of the UDFs is displayed on **Figure 2 and 3**. Photographs of the UDFs are provided as **Appendix E**. Due to the active construction in the Project survey area, non-Jurisdictional Determination EMHT Swale 6 was no longer present at the time of the ecological survey. A photograph of the absence of EMHT Swale 6 is shown in **Appendix E**.

### 3.6 VEGETATIVE COMMUNITIES

AECOM ecologists conducted a general habitat survey in conjunction with the stream and wetland field surveys. As described in **Table 3**, below, the entire Project survey area consists of urban area. Habitat descriptions applicable to the Project are provided below. Vegetative communities are depicted visually on aerial photography in **Figure 5**. Representative photographs of the vegetative communities in the Project area are provided as **Appendix F**.

**TABLE 3- VEGETATIVE COMMUNITIES WITHIN THE PROJECT SURVEY AREA**

Vegetative Community	Description	Approximate Acreage Within the Project Survey Area	Approximate Percentage Within the Project Survey Area
Urban	Urban areas are areas developed with residential and commercial land uses, including roads, buildings and parking lots. These areas are generally devoid of significant woody and herbaceous vegetation.	22.0	100
<b>Totals:</b>		<b>22.0</b>	<b>100</b>

### 3.7 RARE, THREATENED AND ENDANGERED SPECIES AGENCY COORDINATION

#### ***Protected Species Agency Consultation –***

On July 10, 2023, coordination letters were sent to United States Fish and Wildlife Service (USFWS) and the Ohio Department of Natural Resources (ODNR) Ohio Natural Heritage Program (ONHP) and Division of Wildlife (DOW), seeking an environmental review for the Project for potential impacts to threatened and endangered species.

Responses were received from the USFWS on July 12, 2023, and from the ODNR on August 11, 2023. According to a response letter received from the USFWS, two federally endangered bat and one federally proposed bat were identified within range of the Project area. Regarding state threatened and endangered species that may occur within the Project vicinity, six species were listed by the ODNR.

Correspondence letters from the USFWS and ODNR for the Project are included as **Appendix B. Table 4** provides a list of species of concern identified by the agencies as potentially occurring within the vicinity of the Project. Photographs of the habitat within the Project Area are provided as **Appendix F**.



**TABLE 4  
ODNR AND USFWS LISTED SPECIES WITHIN THE PROJECT SURVEY AREA**

Common Name (Scientific Name)	State Status	Federal Status	Typical Habitat	Habitat Observed	Avoidance Dates	Agency Comments	Potential Impacts
<b>Mammals</b>							
Indiana Bat ( <i>Myotis sodalis</i> )	Endangered	Endangered	<p><u>Summer habitat</u> During spring/summer, bat species roost in trees behind loose, exfoliating bark, in crevices and cavities, or in leaves.</p> <p><u>Hibernaculum(a)</u> During winter, these species hibernate in humid mines, caves, and occasionally.</p>	<p><u>Summer habitat</u> <b>No</b> - Within the Project survey area, no areas of young successional forest were identified which appear to be potentially suitable summer roosting and foraging habitat.</p> <p><u>Hibernaculum(a)</u> <b>No</b> – No Mines openings and/or known caves are located within 0.25 miles of Project area and USFWS did not identify known hibernacula within 5-miles of the Project. Furthermore, field evaluations did not identify any potential hibernaculum(a) within the Project area.</p>	<p><u>Summer Tree Clearing</u> April 1 – September 30</p>	<p><u>Summer habitat</u> If suitable habitat occurs within the Project survey Area, the USFWS and ODNR DOW recommends seasonal tree cutting (October 1 and March 31). If summer tree clearing is required, additional coordination with the ODNR/USFWS is warranted.</p> <p><u>Hibernaculum(a)</u> In accordance with 2022 Ohio ODNR DOW and the USFWS Joint Guidance for Bat Surveys and Tree Clearing (2022 Joint Guidance) (copy of guidance provided within <b>Appendix B</b>), a 0.25-mile tree cutting and subsurface disturbance buffer around hibernaculum entrance is recommended.</p>	<p><u>Summer habitat</u> Potential summer roosting habitat is not present within the Project area and should tree clearing be required, seasonal tree clearing, between October 1 and March 31, is recommended.</p> <p><u>Hibernaculum(a)</u> As per the 2022 Joint Guidance, if potential hibernacula are found and it is assumed bats are present, the ODNR/USFWS suggest a 0.25-mile tree cutting and subsurface disturbance buffer around the hibernaculum entrance. However, if impacts cannot be avoided, further evaluation and coordination with the ODNR and USFWS is warranted</p>
Northern Long-eared Bat ( <i>Myotis septentrionalis</i> )	Threatened	Endangered	<p><u>Summer habitat</u> During spring/summer, bat species roost in trees behind loose, exfoliating bark, in crevices and cavities, or in leaves.</p> <p><u>Hibernaculum(a)</u> During winter, these species hibernate in humid mines, caves, and occasionally man-made structures.</p>	<p><u>Summer habitat</u> <b>No</b>- Within the Project survey area, no areas of young successional forest were identified which appear to be potentially suitable summer roosting and foraging habitat.</p> <p><u>Hibernaculum(a)</u> <b>No</b> – No Mines openings and/or known caves are located within 0.25 miles of Project area. Furthermore, field evaluations did not identify any potential hibernaculum(a) within the Project area.</p>	<p><u>Summer Tree Clearing</u> April 1 – September 30</p>	<p><u>Summer habitat</u> If suitable habitat occurs within the Project survey Area, the USFWS and ODNR DOW recommends seasonal tree cutting (October 1 and March 31).</p> <p>Known presence of species was indicated in ODNR response and additional summer surveys would not constitute presence/absence of this species.</p> <p><u>Hibernaculum(a)</u> In accordance with 2022 Ohio ODNR DOW and the USFWS Joint Guidance for Bat Surveys and Tree Clearing (2022 Joint Guidance) (copy of guidance provided within <b>Appendix B</b>), a 0.25-mile tree cutting and subsurface disturbance buffer around hibernaculum entrance is recommended.</p>	<p><u>Summer habitat</u> Potential summer roosting habitat is not present within the Project area and should tree clearing be required, seasonal tree clearing, between October 1 and March 31, is recommended.</p> <p>Additional summer surveys would not constitute presence/absence within the Project area for the northern long-eared bat.</p> <p><u>Hibernaculum(a)</u> As per the 2022 Joint Guidance, if potential hibernacula are found and it is assumed bats are present, the ODNR/USFWS suggest a 0.25-mile tree cutting and subsurface disturbance buffer around the hibernaculum entrance. However, if impacts cannot be avoided, further evaluation and coordination with the ODNR and USFWS is warranted</p>
Little brown bat ( <i>Myotis lucifugus</i> )	Endangered	NA	<p><u>Summer habitat</u> During spring/summer, bat species roost in trees behind loose, exfoliating bark, in crevices and cavities, or in leaves.</p> <p><u>Hibernaculum(a)</u> During winter, these species hibernate in humid mines, caves, and occasionally man-made structures.</p>	<p><u>Summer habitat</u> <b>No</b> - Within the Project survey area, areas of young successional forest were identified which appear to be potentially suitable summer roosting and foraging habitat.</p> <p><u>Hibernaculum(a)</u> <b>No</b> – No Mines openings and/or known caves are located within 0.25 miles of Project area. Furthermore, field evaluations did not identify any potential hibernaculum(a) within the Project area.</p>	<p><u>Summer Tree Clearing</u> April 1 – September 30</p>	<p><u>Summer habitat</u> If suitable habitat occurs within the Project survey Area, the USFWS and ODNR DOW recommends seasonal tree cutting (October 1 and March 31). If summer tree clearing is required, additional coordination with the ODNR/USFWS is warranted.</p> <p>Known presence of species was indicated in ODNR response and additional summer surveys would not constitute presence/absences of this species</p> <p><u>Hibernaculum(a)</u> In accordance with 2022 Ohio ODNR DOW and the USFWS Joint Guidance for Bat Surveys and Tree Clearing (2022 Joint Guidance) (copy of guidance provided within <b>Appendix B</b>), a 0.25-mile tree cutting and subsurface disturbance buffer around hibernaculum entrance is recommended.</p>	<p><u>Summer habitat</u> Potential summer roosting habitat is not present within the Project area and should tree clearing be required, seasonal tree clearing, between October 1 and March 31, is recommended.</p> <p>Additional summer surveys would not constitute presence/absence within the Project area for the Little brown bat</p> <p><u>Hibernaculum(a)</u> As per the 2022 Joint Guidance, if potential hibernacula are found and it is assumed bats are present, the ODNR/USFWS suggest a 0.25-mile tree cutting and subsurface disturbance buffer around the hibernaculum entrance. However, if impacts cannot be avoided, further evaluation and coordination with the ODNR and USFWS is warranted</p>



**TABLE 4  
ODNR AND USFWS LISTED SPECIES WITHIN THE PROJECT SURVEY AREA**

Common Name (Scientific Name)	State Status	Federal Status	Typical Habitat	Habitat Observed	Avoidance Dates	Agency Comments	Potential Impacts
Tricolored bat ( <i>Perimyotis subflavus</i> )	Endangered	Proposed	<p><u>Summer habitat</u> During spring/summer, bat species roost in trees behind loose, exfoliating bark, in crevices and cavities, or in leaves.</p> <p><u>Hibernaculum(a)</u> During winter, these species hibernate in humid mines, caves, and occasionally man-made structures.</p>	<p><u>Summer habitat</u> <b>No</b> - Within the Project survey area, no areas of young successional forest were identified which appear to be potentially suitable summer roosting and foraging habitat.</p> <p><u>Hibernaculum(a)</u> <b>No</b> – No Mines openings and/or known caves are located within 0.25 miles of Project area. Furthermore, field evaluations did not identify any potential hibernaculum(a) within the Project area.</p>	<p><u>Summer Tree Clearing</u> April 1 – September 30</p>	<p><u>Summer habitat</u> If suitable habitat occurs within the Project survey Area, the USFWS and ODNR DOW recommends seasonal tree cutting (October 1 and March 31). If summer tree clearing is required, additional coordination with the ODNR/USFWS is warranted.</p> <p><u>Hibernaculum(a)</u> In accordance with 2022 Ohio ODNR DOW and USFWS Joint Guidance for Bat Surveys and Tree Clearing (2022 Joint Guidance), a 0.25-mile tree cutting and subsurface disturbance buffer around hibernaculum entrance is recommended.</p>	<p><u>Summer habitat</u> Potential summer roosting habitat is not present within the Project area and should tree clearing be required, seasonal tree clearing, between October 1 and March 31, is recommended.</p> <p><u>Hibernaculum(a)</u> As per the 2022 Joint Guidance, if potential hibernacula are found and it is assumed bats are present, the ODNR/USFWS suggest a 0.25-mile tree cutting and subsurface disturbance buffer around the hibernaculum entrance. However, if impacts cannot be avoided, further evaluation and coordination with the ODNR and USFWS is warranted</p>
<b>Fish</b>							
Lake chubsucker ( <i>Erimyzon sucetta</i> )	Threatened	None	This species is found mainly in lakes, ponds, swamps, and streams.	<b>No</b> – no lakes, ponds or swamps present. Streams present, but not sufficient size-	N/A	Due to the location, and there is no in-water work proposed in a perennial stream, this Project is not likely to impact this species.	No
<b>Birds</b>							
Northern harrier ( <i>Circus hudsonis</i> )	Endangered	None	This species hunts over grasslands and nests can be found in large marshes and grasslands.	<b>No</b> – Based on field reviews, the Project area does not contain continuous habitat greater than 2-acres; subjected to “edge effect” or increase predation due to proximity of tree lines; and area is highly urbanized/industrial.	April 15 to July 31	Habitat should be avoided during the bird’s nesting period between April 15 through July 31. If habitat will not be impacted, this Project will not likely impact species.	No

**Protected Species Agency Summary –**

Based on general observations during the ecological survey, forested clearing is not anticipated as there is no occurrence of forested habitat within the Project survey area and no tree clearing is proposed as part of the Project. If tree clearing were to become part of the Project scope of work, the ODNR and the USFWS recommends implementations of seasonal tree clearing between October 1 and March 31 to avoid adverse effects to Indiana bat, northern long-eared bat, and tricolored bat. If trees must be cut during the summer months, the ODNR recommends that a mist net survey could be completed for the Indiana bat, northern long-eared bat, and the tricolored bat between June 1 and August 15. However, additional summer surveys would not constitute presence/absence within the Project survey area for the northern long-eared bat. If summer tree clearing is needed, additional coordination would be completed with ODNR and the USFWS.

AECOM completed a desktop review for potential hibernaculum in accordance with the 2022 Ohio ODNR DOW and the USFWS Joint Guidance for Bat Surveys and Tree Clearing within 0.25 miles of the Project area and no caves, mines, and/or karst features were identified. As per ODNR and USFWS guidance, further coordination regarding potential hibernaculum is only necessary if the habitat assessment find potential habitat within 0.25 miles of the Project survey area. Therefore, no further coordination was necessary with either the ODNR and/or the USFWS regarding the listed bat species. Results of the desktop habitat assessment have been included within **Appendix C**.

No impacts are anticipated for the fish, mussels, birds or amphibians as no in-water work is proposed as part of the Project or species habitat is present. Additionally, the potential for nesting habitat for the Northern Harrier was absent based on field/desktop review of the Project survey area. The absence of habitat was due to the extensive disturbance to the surrounding area where grading and other construction activities are taking place as well as fragmented habitat thus lacking contiguous habitat. Therefore, no further coordination regarding this listed species is necessary concerning this Project.

**4.0 SUMMARY**

The ecological survey of the Project survey area identified no wetlands, streams, or ponds. Two UDFs were observed within the Project survey area. Due to the active construction in the Project survey area, non-Jurisdictional Determination EMHT Swale 6, as part of the PJD: LRH-2018-688 MUS-South Fork Licking River, included in **Appendix A**, was no longer present at the time of the ecological survey.

The reported results of the ecological survey conducted by AECOM on this Project are limited to the areas within the Project survey area provided in **Figure 2 and 3**. Areas that fall outside of the Project survey area were not evaluated in the field and not included in the reporting of the survey.

Of the six state and/or federal listed threatened or endangered species within range of the Project survey area, summer roosting habitat was not identified for any of the four bat species and no potential hibernacula was

identified within the Project survey area. Due to the lack of presence of summer roosting habitat for these bat species, the recommendation by the ODNR and USFWS to complete seasonal tree clearing activities between October 1 to March 31 should not be necessary. If seasonal tree clearing should become part of the scope of the Project, Seasonal tree clearing restrictions will be observed and further coordination may be required. Additionally, the potential for nesting habitat for the Northern Harrier was absent based on field/desktop review of the project area. The absence of habitat was due to the extensive disturbance to the surrounding area where grading and other construction activities are taking place as well as fragmented habitat thus lacking contiguous habitat. Therefore, no further coordination regarding this listed species.

The information contained in this Ecological report is for a survey area that may be much larger than the actual Project limits-of-disturbance; therefore, lengths and acreages listed in this report may not constitute the actual impacts of the Project defined in subsequent permit applications. If necessary, a separate report that identifies the actual Project impacts will be provided with agency submittals.

The field survey results presented herein apply to the existing and reasonably foreseeable site conditions at the time of our assessment. They cannot apply to site changes of which AECOM is unaware and has not had the opportunity to review. Changes in the condition of a property may occur with time due to natural processes or human impacts at the project site or on adjacent properties. Changes in applicable standards may also occur as a result of legislation or the expansion of knowledge over time. Accordingly, the findings of this report may be invalidated, wholly or in part, by changes beyond the control of AECOM.

## 5.0 REFERENCES

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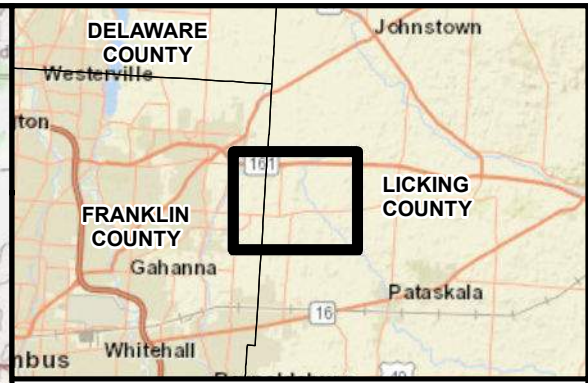
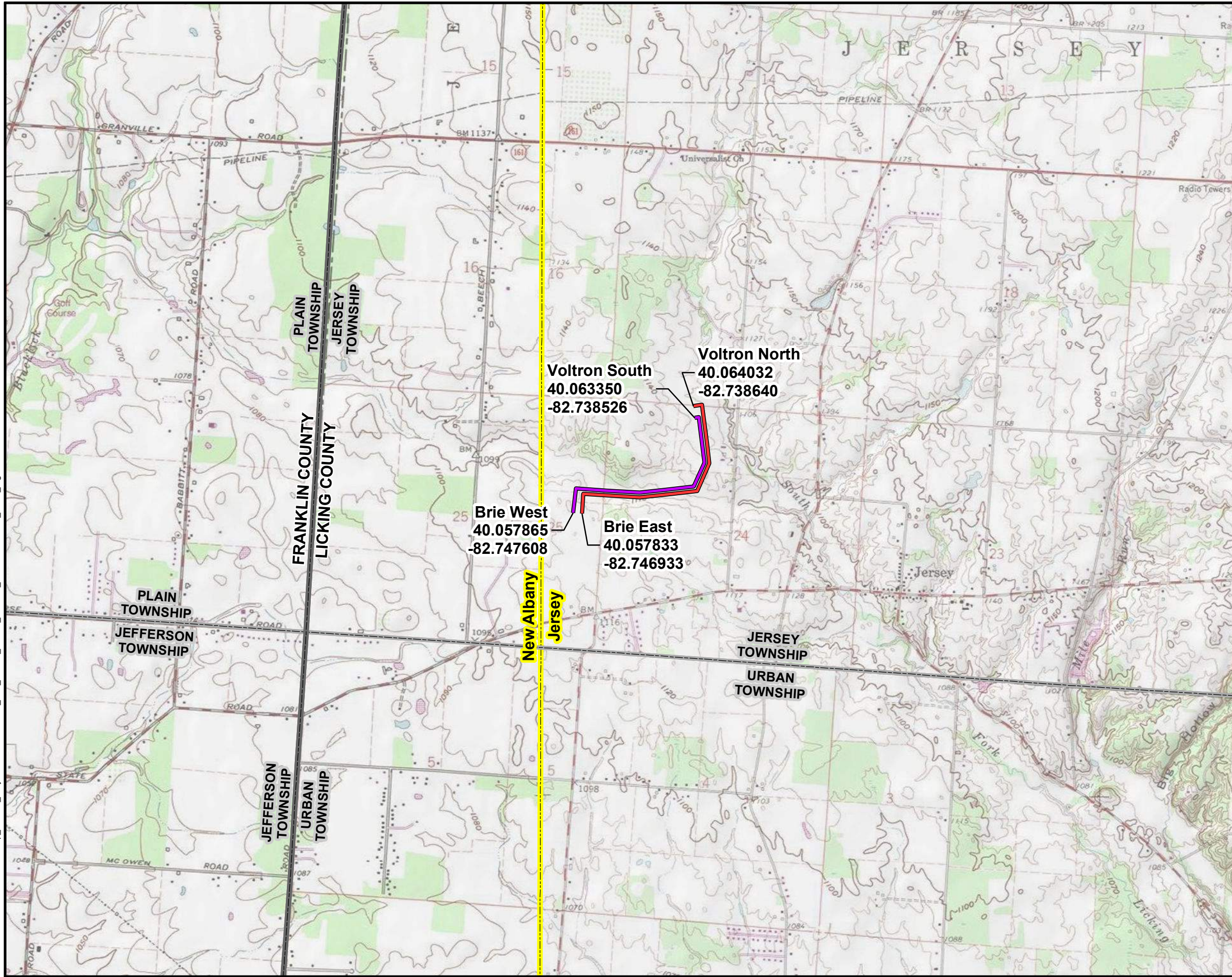
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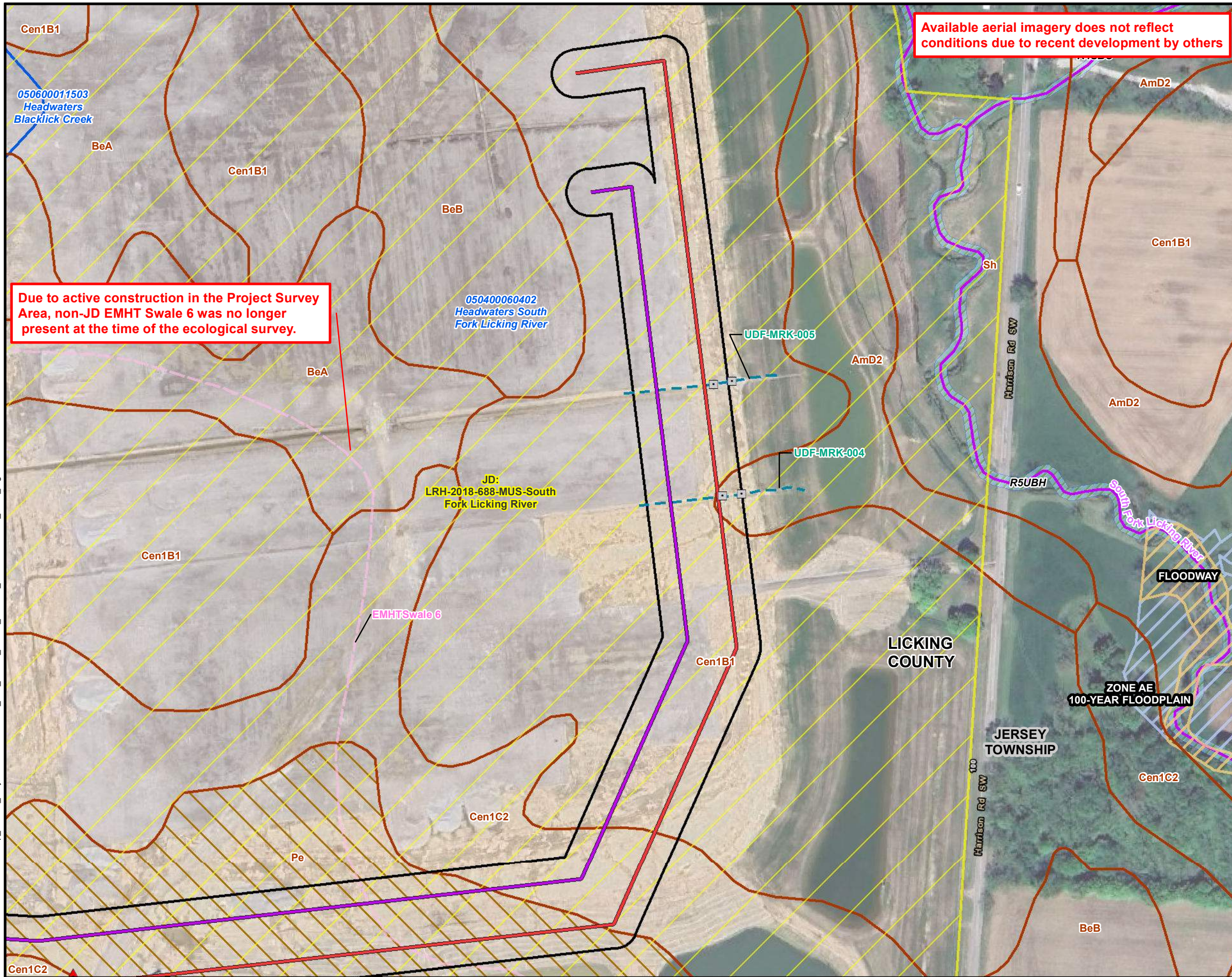
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- Brie-Voltron West 138kV Transmission Line
- Ohio USGS 7.5' Topographic Quadrangle
- Township Boundary
- County Boundary

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**AMERICAN ELECTRIC POWER** Brie-Voltron 138kV  
Transmission Line Project

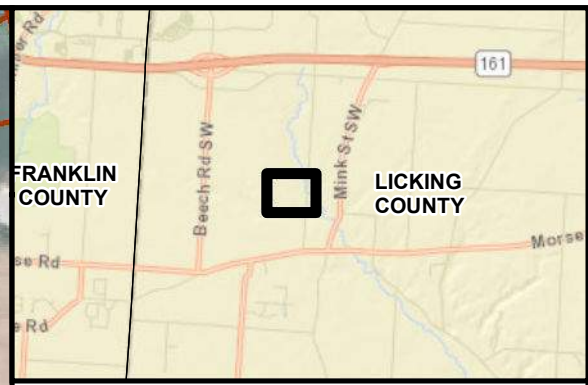
<b>FIGURE 1 PROJECT OVERVIEW</b>	
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JOB NO.:	<b>AECOM</b>





Available aerial imagery does not reflect conditions due to recent development by others

Due to active construction in the Project Survey Area, non-JD EMHT Swale 6 was no longer present at the time of the ecological survey.



**Legend**

- ▣ Culvert
- ▲ Upland Data Point
- Brie-Voltron East 138kV Transmission Line
- Brie-Voltron West 138kV Transmission Line
- Delineated Upland Drainage Feature
- EMHT Delineated Swale
- NHD Stream (USGS)
- ▭ Project Survey Area
- ▨ EMHT Completed Survey Area
- ▨ NWI Wetland (USFWS)
- ▨ NFHL 100-Year Floodplain (FEMA)
- ▨ NFHL Floodway (FEMA)
- ▨ HUC 12 (USGS)
- ▨ SSURGO Soil Map Unit (NRCS)
- ▨ Hydric SSURGO Soil Map Unit (NRCS)

AmD2: Amanda silt loam, 12 to 18 percent slopes, eroded  
 BeA: Bennington silt loam, 0 to 2 percent slopes  
 Cen1B1: Centerburg silt loam, 2 to 6 percent slopes  
 Cen1C2: Centerburg silt loam, 6 to 12 percent slopes, eroded  
 Pe: Pewamo silty clay loam, low carbonate till, 0 to 2 percent slopes

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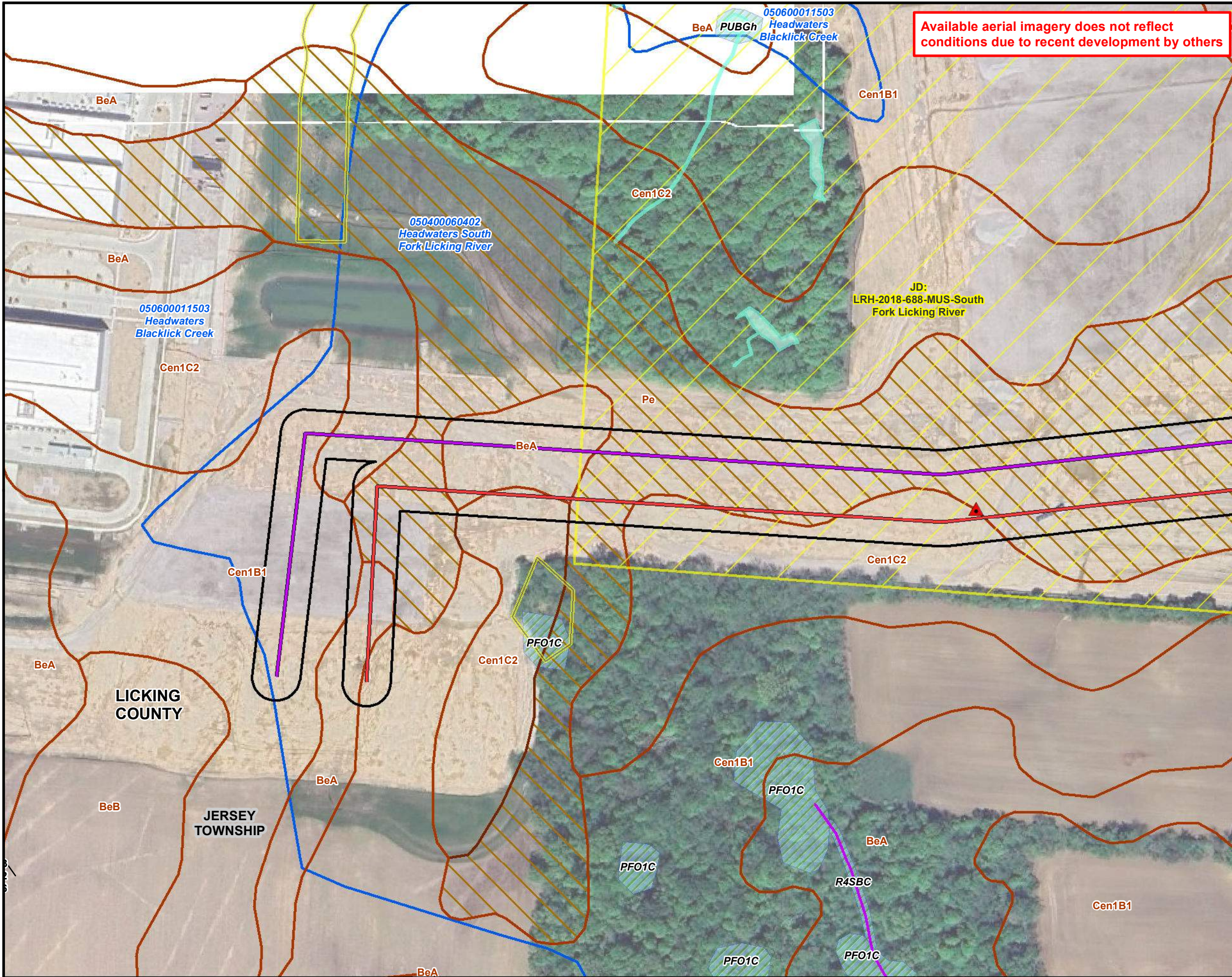
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**AMERICAN ELECTRIC POWER** Brie-Voltron 138kV Transmission Line Project

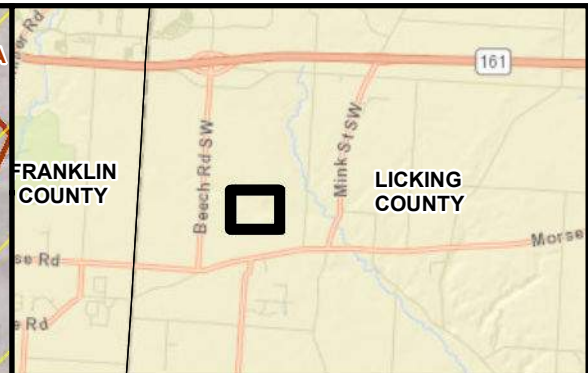
<b>FIGURE 2A SOIL MAP AND NATIONAL WETLAND INVENTORY MAP</b>	
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JOB NO.:	<b>AECOM</b>



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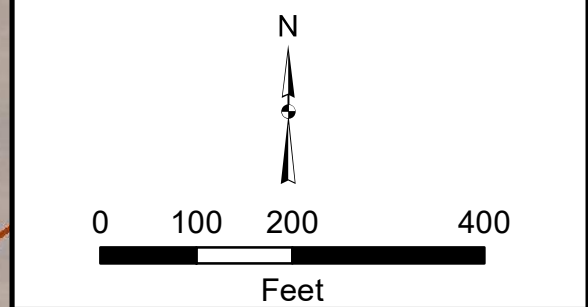


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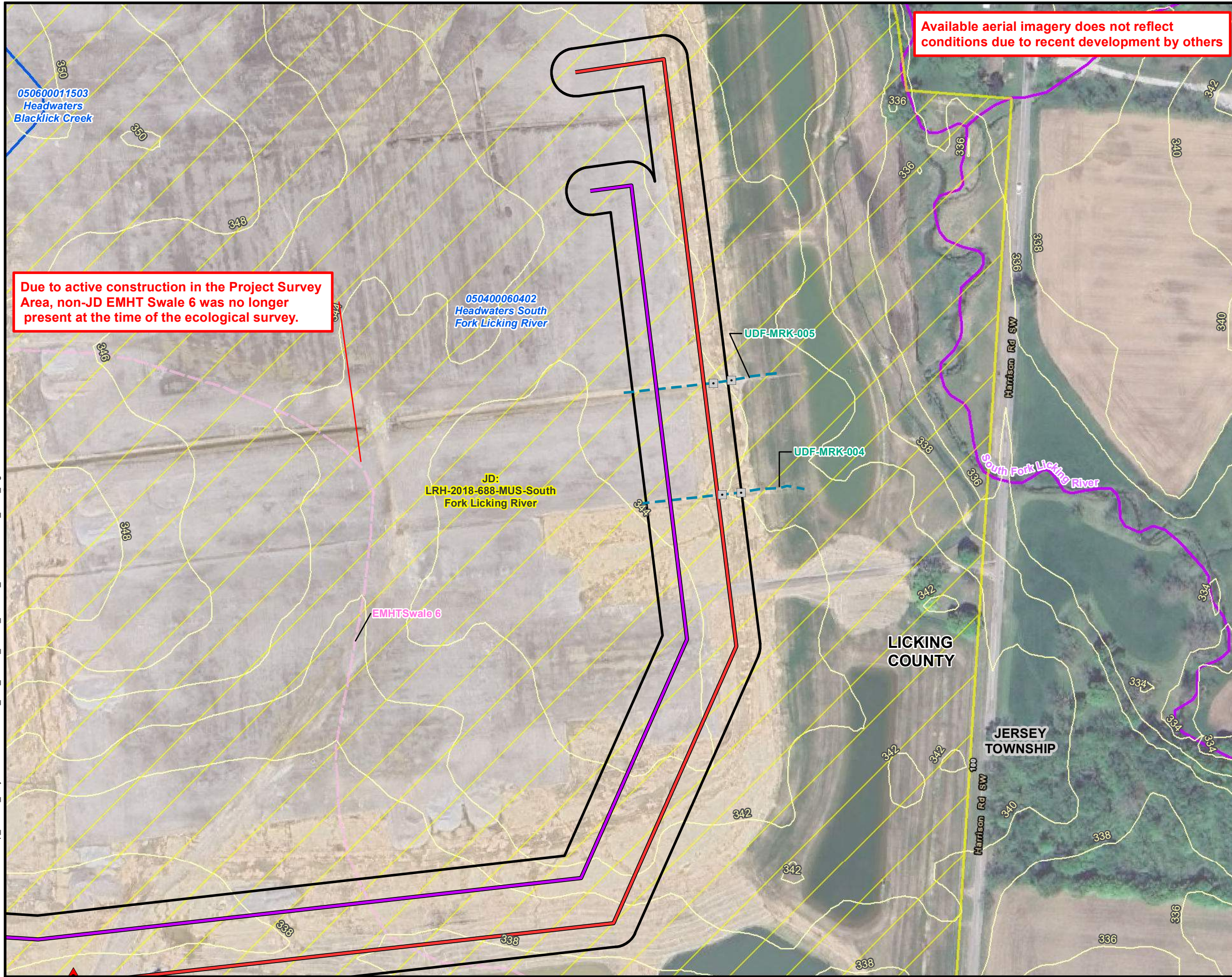
- Upland Data Point
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  - Brie-Voltron West 138kV Transmission Line
  - NHD Stream (USGS)
  - Project Survey Area
  - EMHT Delineated Wetland
  - EMHT Wetland Protection Area
  - EMHT Completed Survey Area
  - NWI Wetland (USFWS)
  - HUC 12 (USGS)
  - SSURGO Soil Map Unit (NRCS)
  - Hydric SSURGO Soil Map Unit (NRCS)
- AmD2: Amanda silt loam, 12 to 18 percent slopes, eroded
- BeA: Bennington silt loam, 0 to 2 percent slopes
- Cen1B1: Centerburg silt loam, 2 to 6 percent slopes
- Cen1C2: Centerburg silt loam, 6 to 12 percent slopes, eroded
- Pe: Pewamo silty clay loam, low carbonate till, 0 to 2 percent slopes



**AMERICAN ELECTRIC POWER** Brie-Voltron 138kV Transmission Line Project

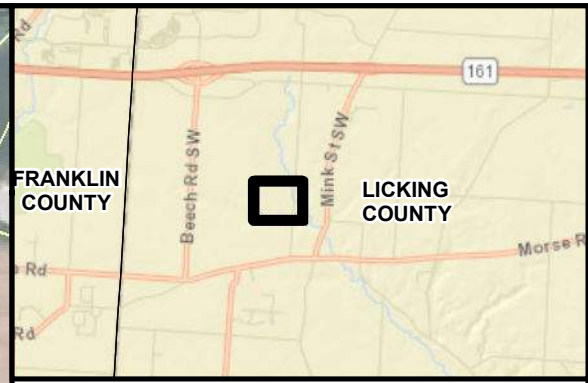
<b>FIGURE 2B SOIL MAP AND NATIONAL WETLAND INVENTORY MAP</b>	
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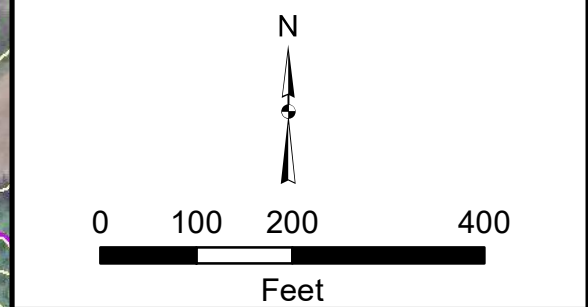


Available aerial imagery does not reflect conditions due to recent development by others

Due to active construction in the Project Survey Area, non-JD EMHT Swale 6 was no longer present at the time of the ecological survey.



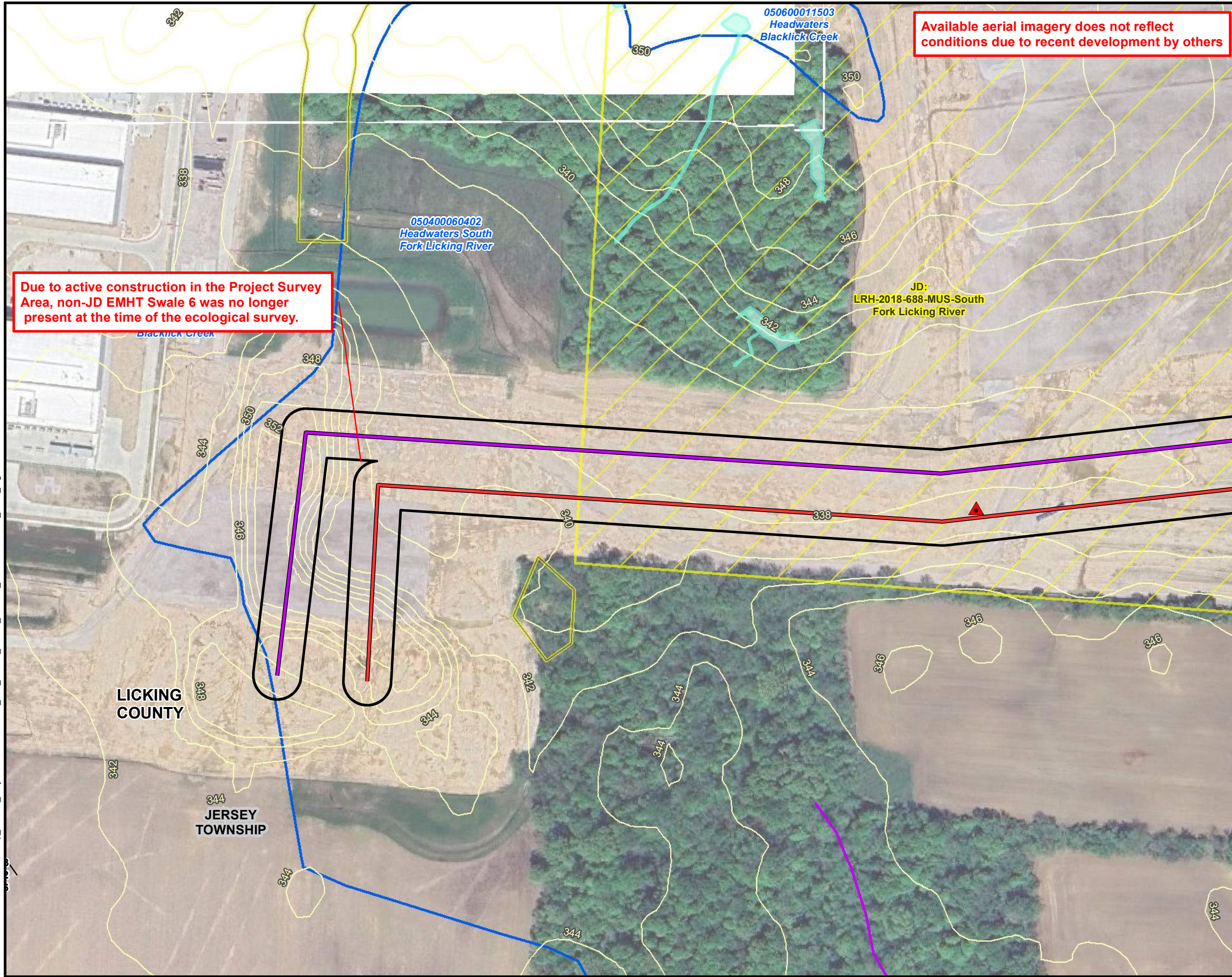
- Legend**
- ▣ Culvert
  - ▲ Upland Data Point
  - Brie-Voltron East 138kV Transmission Line
  - Brie-Voltron West 138kV Transmission Line
  - - Delineated Upland Drainage Feature
  - EMHT Delineated Swale
  - NHD Stream (USGS)
  - Contours (2ft)
  - ▭ Project Survey Area
  - ▨ EMHT Completed Survey Area
  - ▭ HUC 12 (USGS)



**AMERICAN ELECTRIC POWER** Brie-Voltron 138kV Transmission Line Project

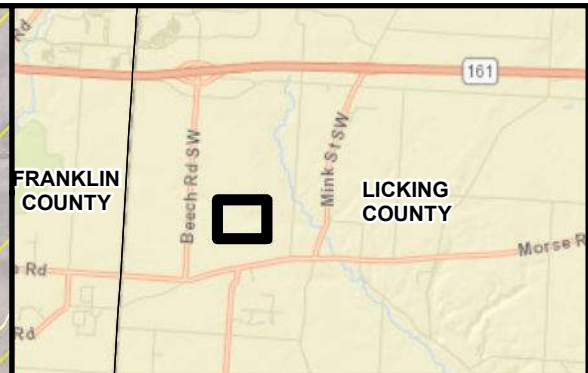
<b>FIGURE 3A WETLAND DELINEATION AND STREAM ASSESSMENT MAP</b>	
DATE: 8/24/2023	1 INCH = 200 FEET
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JOB NO.:	<b>AECOM</b>



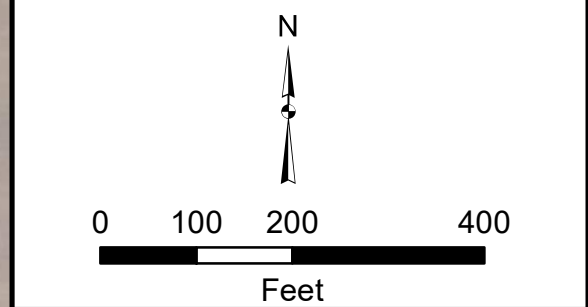


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Due to active construction in the Project Survey Area, non-JD EMHT Swale 6 was no longer present at the time of the ecological survey.



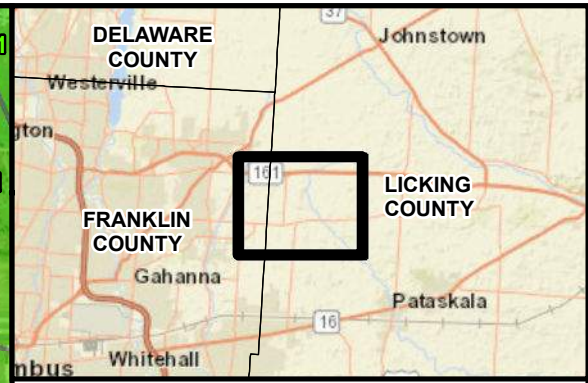
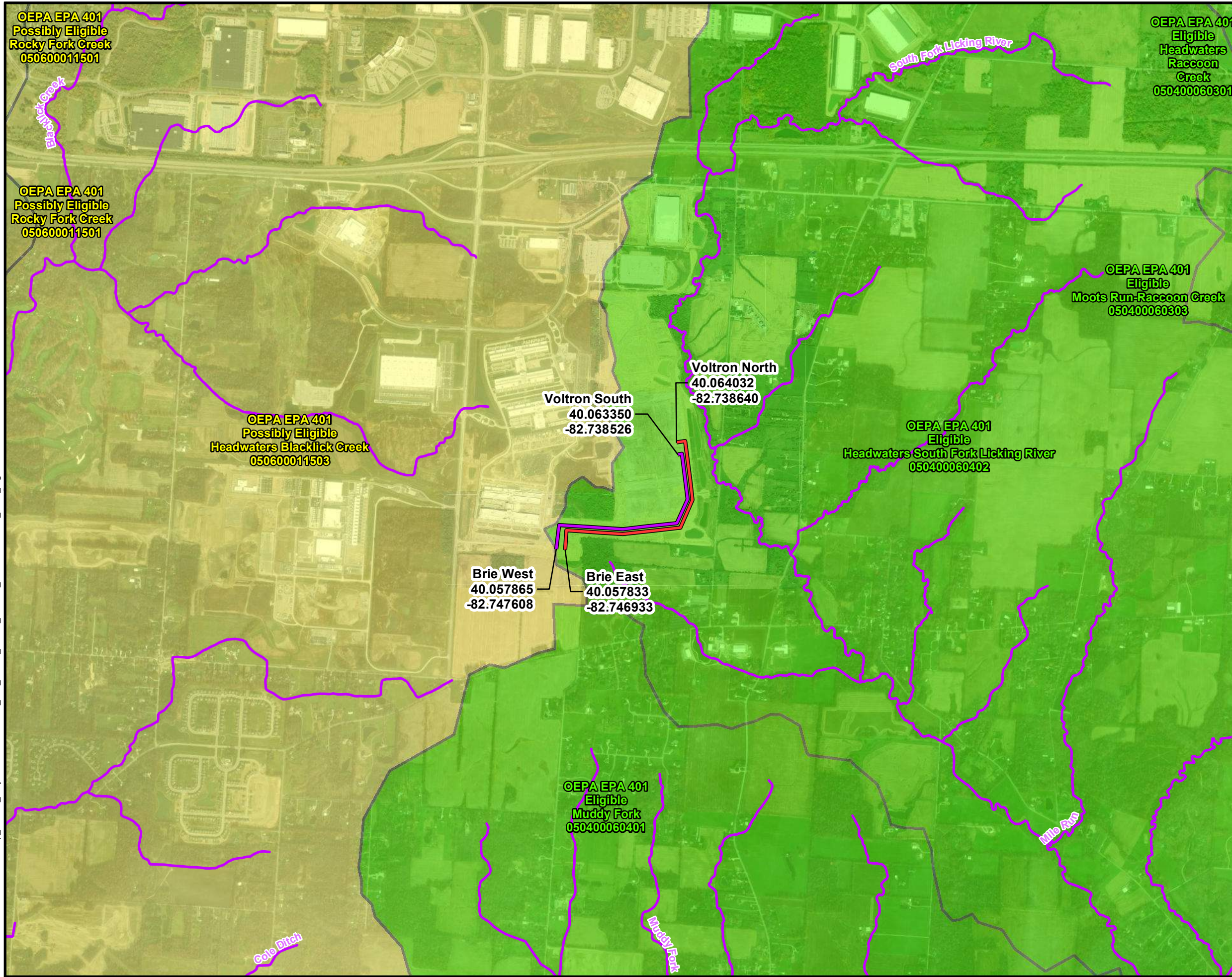
- ### Legend
- ▲ Upland Data Point
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  - Brie-Voltron West 138kV Transmission Line
  - NHD Stream (USGS)
  - Contours (2ft)
  - ▭ Project Survey Area
  - ▭ EMHT Delineated Wetland
  - ▭ EMHT Wetland Protection Area
  - ▭ EMHT Completed Survey Area
  - ▭ HUC 12 (USGS)



**AMERICAN ELECTRIC POWER** Brie-Voltron 138kV Transmission Line Project

<b>FIGURE 3B WETLAND DELINEATION AND STREAM ASSESSMENT MAP</b>	
DATE: 8/24/2023	1 INCH = 200 FEET
CREATED BY: CJT	CHECKED BY: AF
JOB NO.:	<b>AECOM</b>





**Legend**

- Brie-Voltron East 138kV Transmission Line
- Brie-Voltron West 138kV Transmission Line
- NHD Stream (USGS)

**OEPA Eligibility:**

- Eligible
- Possibly Eligible

N

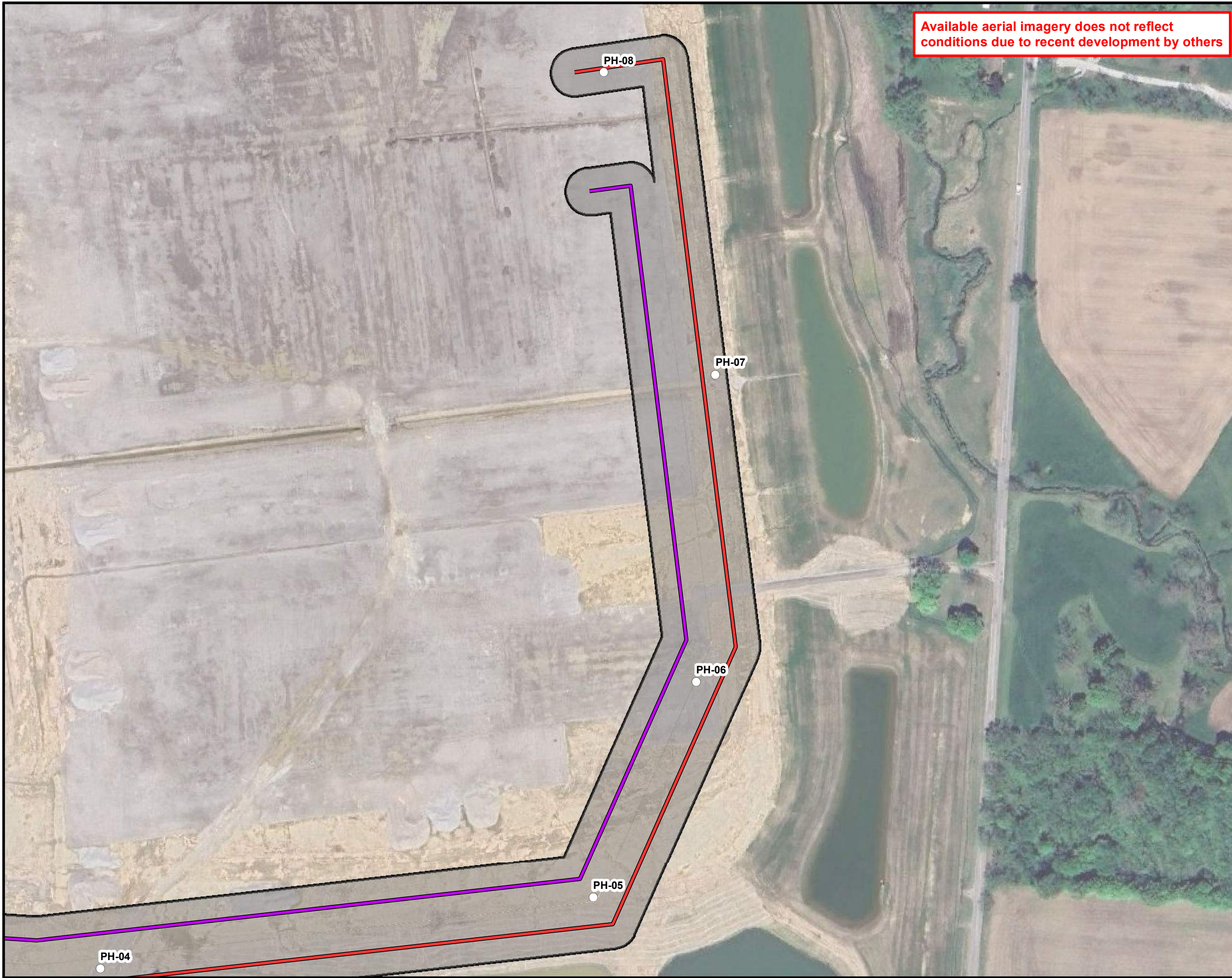
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**AMERICAN ELECTRIC POWER** Brie-Voltron 138kV  
Transmission Line Project

<b>FIGURE 4 STREAM ELIGIBILITY MAP</b>	
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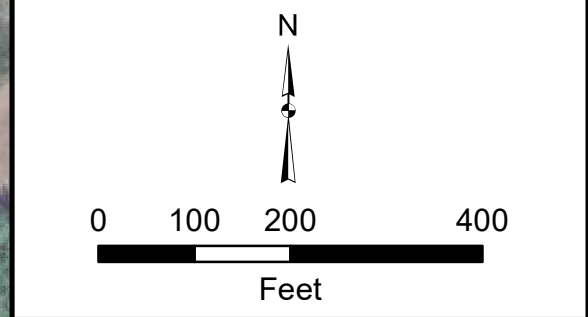


**Legend**

- Photograph Location
- Brie-Voltron East 138kV Transmission Line
- Brie-Voltron West 138kV Transmission Line
- ▭ Project Survey Area

**Vegetative Community Type**

- Urban

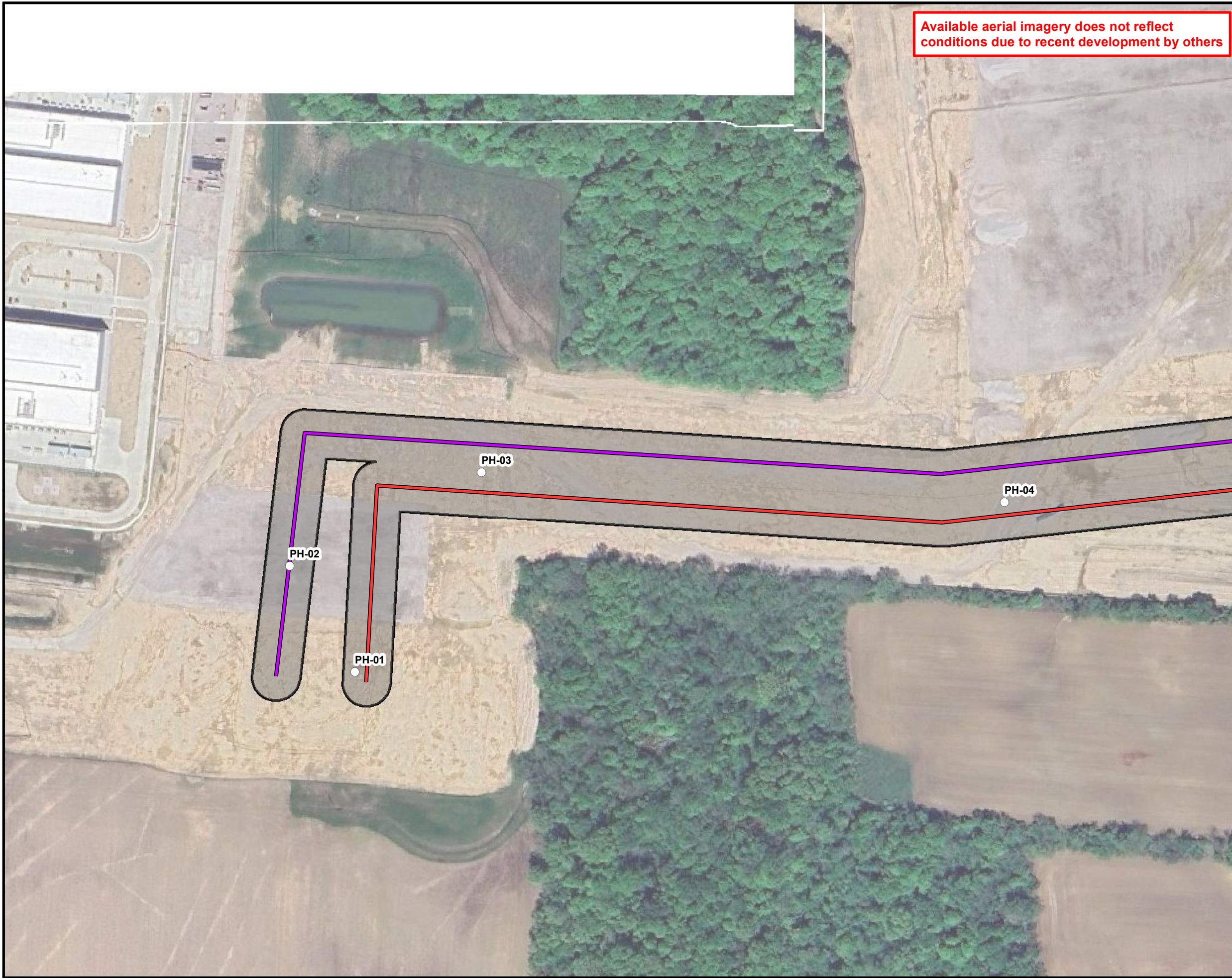


**AMERICAN ELECTRIC POWER** Brie-Voltron 138kV Transmission Line Project

<b>FIGURE 5A VEGETATIVE COMMUNITIES ASSESSMENT MAP</b>	
DATE: 8/24/2023	1 INCH = 200 FEET
CREATED BY: CJT	CHECKED BY: AF
JOB NO.:	<b>AECOM</b>



Date Saved: 7/20/2023  
Document Path: X:\DCS\GIS\ArcMap\_GeodB\_Projects\ENVI\0703453\_Brie\_Voltron\_ECO\2\_MXD\3\_WDR\BrieVoltron\_WDR\_Figs.mxd



Available aerial imagery does not reflect conditions due to recent development by others

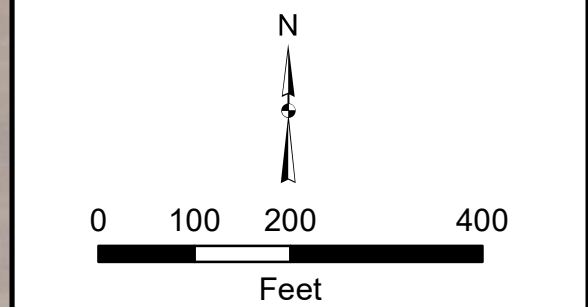


**Legend**

- Photograph Location
- Brie-Voltron East 138kV Transmission Line
- Brie-Voltron West 138kV Transmission Line
- ▭ Project Survey Area

**Vegetative Community Type**

- Urban



**AMERICAN ELECTRIC POWER** Brie-Voltron 138kV Transmission Line Project

**FIGURE 5B  
VEGETATIVE COMMUNITIES  
ASSESSMENT MAP**

DATE: 8/24/2023	1 INCH = 200 FEET
CREATED BY: CJT	CHECKED BY: AF
JOB NO.:	<b>AECOM</b>



**APPENDIX A**

**UNITED STATES ARMY CORPS OF ENGINEERS JURISDICTIONAL DETERMINATION (LRH-2018-688-MUS-SOUTH FORK LICKING RIVER)**



REPLY TO  
ATTENTION OF

**DEPARTMENT OF THE ARMY**  
HUNTINGTON DISTRICT, CORPS OF ENGINEERS  
502 EIGHTH STREET  
HUNTINGTON, WEST VIRGINIA 25701-2070

April 2, 2020

Regulatory Division  
North Branch  
LRH-2018-688-MUS-South Fork Licking River

## **APPROVED AND PRELIMINARY JURISDICTIONAL DETERMINATIONS**

Mr. Bobby Hollis  
SideCat, LLC  
1601 Willow Road  
Menlo, California 94025

Dear Mr. Hollis:

I refer to the *Project Why I Investigation of Waters of the United States* dated February 2020, submitted on your behalf by EMH&T, Inc., and received in this office on February 24, 2020. You have requested a preliminary jurisdictional determination (JD) for the potential jurisdictional aquatic resources and an approved JD for the potential non-jurisdictional features on the approximately 280-acre site located north of Morse Road, west of Harrison Road, and south of Worthington Road in New Albany, Licking County, Ohio at approximately 40.065003, -82.740568. Your JD request has been assigned the following file number: LRH-2018-688-MUS-South Fork Licking River. 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 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 discharging dredged and/or fill material into waters of the United States, including wetlands. Section 10 of the Rivers and Harbors Act of 1899 (Section 10) requires a DA permit be obtained for any work in, on, over or under a navigable water.

### ***Preliminary Jurisdictional Determination***

Based upon a review of the information provided, this office has determined 0.11 acre of one (1) emergent wetland (Wetland N), 1.04 acres of two (2) forested wetlands (Wetlands A and C), 1,214 linear feet of three (3) intermittent streams (Streams 1, 2, and 4), and 5,142 linear feet of one (1) perennial stream (Stream 3) are located within the approximately 280-acre site. The aquatic resources identified above and on the enclosed preliminary JD form may be waters of the United States in accordance with the Regulatory Guidance Letter for JDs issued by the Corps on October 31, 2016 (Regulatory Guidance Letter No. 16-01). As indicated in the guidance, this



preliminary JD is non-binding and cannot be appealed (33 CFR 331.2), and only provides a written indication that waters of the United States, including wetlands, may be present on-site.

You have declined to exercise the option to obtain an approved JD in this instance and at this time for the above aquatic resources. However, for the purposes of the determination of impacts, compensatory mitigation, and other resource protection measures for activities that require authorization from this office, the above aquatic resources will be evaluated as if they are waters of the United States.

Enclosed please find two (2) copies of the preliminary JD. If you agree with the findings of this preliminary JD and understand your options regarding the same, please sign and date one (1) copy of the preliminary JD form and return it to this office within 30 days of receipt of this letter. You should submit the signed copy to the following address:

United States Army Corps of Engineers  
Huntington District  
Attn: North Branch  
502 Eighth Street  
Huntington, West Virginia 25701

#### ***Approved Jurisdictional Determination***

Our December 2, 2008 headquarters guidance entitled *Clean Water Act Jurisdiction Following the U.S. Supreme Court's Decision in Rapanos v. United States & Carabell v. United States* was followed in the final verification of Section 404 jurisdiction. Based on a review of the information provided and other information available to us, Wetland B (0.91 acre), Wetland D (0.07 acre), Wetland E (0.08 acre), and Wetland O (0.07 acre) are surrounded by uplands and do not exhibit a distinct surface water connection to a water of the United States. Additionally, Wetlands B, D, E, and O would not support interstate or foreign commerce interests, nor do they contain any rare or endangered species. Therefore, Wetlands B, D, E, and O are not jurisdictional waters of the United States 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. The approved JD boundary also includes 9,040 linear feet of six (6) non-jurisdictional features. Swales 1-6 are erosional features in the landscape that exhibit no ordinary high water mark, defined bed and banks, or wetland characteristics. Therefore, Swales 1-6 are not considered jurisdictional waters of the United States.

In accordance with the June 5, 2007 Joint Memorandum between the United States Environmental Protection Agency (USEPA) and the Corps and the January 28, 2008 Corps Memorandum regarding coordination on jurisdictional determinations, this isolated wetland determination was coordinated with the USEPA Region 5 and the Corps Headquarters, with coordination completed on March 30, 2020.

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 June 1, 2020. It is not necessary to submit an RFA form to the Division Office if you do not object to the determination in this letter.

A copy of this letter will be provided to your agent, Heather Dardinger with EMH&T, Inc. at 5500 New Albany Road, Columbus, Ohio 43054. If you have any questions concerning the above, please contact Ms. Kayla Adkins of the North Branch at 304-399-5850, by mail at the above address, or by email at [kayla.n.adkins@usace.army.mil](mailto:kayla.n.adkins@usace.army.mil).

Sincerely,

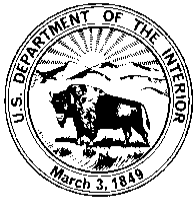
**Andrew  
John Wendt**

Digitally signed by  
Andrew John Wendt  
Date: 2020.04.02  
11:04:04 -04'00'

Andrew J. Wendt  
Regulatory Project Manager  
North Branch

Enclosures

**APPENDIX B**  
**AGENCY CORRESPONDENCE**



# United States Department of the Interior

## FISH AND WILDLIFE SERVICE

Ecological Services  
4625 Morse Road, Suite 104  
Columbus, Ohio 43230  
(614) 416-8993 / FAX (614) 416-8994



July 12, 2023

Project Code: 2023-0100620

Dear Ms. Anna Findish:

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, endangered, and proposed 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 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  $\geq 3$  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.

Federally Proposed Species: On September 14, 2022, the Service proposed to list the tricolored bat (*Perimyotis subflavus*) as endangered under the ESA. The bat faces extinction due to the impacts of white-nose syndrome, a deadly disease affecting cave-dwelling bats across the continent. During spring, summer, and fall, this species roosts primarily among leaf clusters of live or recently dead trees, emerging at dusk to hunt for insects over waterways and forest edges. While white-nose syndrome is by far the most serious threat to the tricolored bat, other threats now have an increased significance due to the dramatic decline in the species' population. These threats include disturbance to bats in roosting, foraging, commuting, and over-wintering habitats. Mortality due to collision with wind turbines, especially during migration, has also been documented across their range. Conservation measures for the Indiana bat and northern long-eared bat will also help to conserve the tricolored bat.

*Seasonal Tree Clearing for Federally Listed Bat Species:* Should the proposed project site contain trees  $\geq 3$  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  $\geq 3$  inches dbh cannot be avoided, we recommend removal of any trees  $\geq 3$  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.

If implementation of this seasonal tree cutting recommendation is not possible, a summer presence/absence survey may be conducted for Indiana bats and northern long-eared bats. If Indiana bats and northern long-eared bats are not detected during the survey, then tree clearing may occur at any time of the year. Surveys must be conducted by an approved surveyor and be designed and conducted in coordination with the Ohio Field Office. Surveyors must have a valid federal permit. Please note that in Ohio summer mist net surveys may only be conducted between June 1 and August 15.

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](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, Environmental Services Administrator, at (614) 265-6387 or at [mike.pettegrew@dnr.ohio.gov](mailto:mike.pettegrew@dnr.ohio.gov).

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](mailto:ohio@fws.gov).

Sincerely,

A handwritten signature in blue ink, appearing to read "Patrice Ashfield". The signature is stylized with a large initial "P" and a long, sweeping underline.

Patrice Ashfield  
Field Office Supervisor

cc: Nathan Reardon, ODNR-DOW  
Eileen Wyza, ODNR-DOW



# Ohio Department of Natural Resources

MIKE DEWINE, GOVERNOR

MARY MERTZ, DIRECTOR

**Office of Real Estate**  
*Tara Paciorek, Chief*  
2045 Morse Road – Bldg. E-2  
Columbus, OH 43229  
*Phone: (614) 265-6661*  
*Fax: (614) 267-4764*

August 11, 2023

Anna Findish  
AECOM Technical Services, Inc.  
707 Grant Street, 6th Floor  
Pittsburgh, Pennsylvania 15219

**Re:** 23-0799; Brie-Voltron East and Brie-Voltron Project

**Project:** The proposed project involves the installation of two new greenfield 138kV transmission lines, which will occupy the same approximate 200-foot-wide right-of-way from the proposed Brie Station to the proposed Voltron Station.

**Location:** The proposed project is located in Jersey Township, Licking 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:** A review of the Ohio Natural Heritage Database indicates there are no records of state or federally listed plants or animals within one mile of the specified project area. Records searched date from 1980.

Please note that Ohio has not been completely surveyed and we rely on receiving information from many sources. Therefore, a lack of records for any particular 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 northern long-eared bat (*Myotis septentrionalis*), 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 Eileen Wyza at [Eileen.Wyza@dnr.ohio.gov](mailto:Eileen.Wyza@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 endangered 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 & NORTHERN LONG-EARED 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 Eileen Wyza 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 the lake chubsucker (*Erimyzon sucetta*) a state threatened fish. 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 or other aquatic species.

The project is within the range of the northern harrier (*Circus hudsonius*), 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, this 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.

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

Mike Pettegrew  
Environmental Services Administrator



## OHIO DIVISION OF WILDLIFE AND U.S. FISH AND WILDLIFE SERVICE (OH-FIELD OFFICE) JOINT GUIDANCE FOR BAT SURVEYS AND TREE CLEARING MAY 2022

This document has been updated with new state guidance for the 2022 field season.

*This guidance applies to state recommendations only. Contact the USFWS to determine if federal consultation is also necessary to comply with federal law.*

### **Agency Contacts:**

**ODNR-DOW Permit Coordinator:** Wildlife.Permits@dnr.ohio.gov, (614) 265-6315

**ODNR-DOW Bat Survey Coordinator:** Eileen Wyza, Eileen.Wyza@dnr.ohio.gov, (614) 265-6764

**USFWS OHFO Endangered Species:** Angela Boyer, angela\_boyer@fws.gov, (614) 416-8993, ext.122

### **Covid-19 Guidance:**

Surveyors should follow all covid protocols put in place by their agency. All surveyors should wear masks when handling bats and anyone exhibiting symptoms of covid-19 should not participate in bat surveys.

### **Ohio Mist-net Surveys:**

This document serves as guidance for bat mist netting activities in Ohio and does not supersede any requirements listed on your permits or facility certificate. All permit conditions must be strictly adhered to for permits to be valid and for renewal of permits beyond the existing year.

Due to the presence of White-nose Syndrome (WNS), mist-netting in Ohio must be conducted between June 1 and August 15 unless stated otherwise in your state permit. The ODNR Division of Wildlife (ODNR-DOW) and U.S. Fish and Wildlife Service (USFWS) Ohio Field Office (OHFO) have determined that delaying netting activities until June 1 will provide additional recovery time for bats affected by WNS. For presence/probable absence surveys, netting will not be accepted outside of the June 1 - August 15 timeframe.

To assess project areas for presence or probable absence of the state and federally listed Indiana bat (*Myotis sodalis*) and northern long-eared bat (*Myotis septentrionalis*) during summer residency, the USFWS developed the USFWS Range-wide Indiana Bat and Northern Long-eared Bat Summer Survey Guidelines (March 2022). This protocol, **with minor modifications referenced below**, can also be used in Ohio for the 2022 field season and includes surveying for the state-listed little brown bat (*Myotis lucifugus*) and tricolored bat (*Perimyotis subflavus*).

According to the updated federal range-wide guidelines, presence/probable absence net surveys for northern long-eared bats shall incorporate either 16 net nights per square 0.5 kilometer (123 acres) of project area, or four net nights per kilometer for linear projects. Presence/probable absence net surveys for Indiana bats shall incorporate nine net nights per square 0.5 kilometer (123 acres) of project area, or two net nights per kilometer for linear

projects. If a project area is eligible for a presence/probable absence survey for both Indiana bats and northern long-eared bats, following the northern long-eared bat level of effort will qualify as a presence/ probable absence survey for both species. However, if a project area is eligible for a presence/absence survey for both species, following the Indiana bat level of effort will not qualify the survey for a northern long-eared bat presence/ probable absence survey.

The USFWS published a proposed rule to reclassify the northern long-eared bat as endangered on March 23, 2022. The USFWS must publish a final rule on the northern long-eared bat's status by the end of November 2022 to meet a federal court order. Project proponents may continue to use the current 4(d) rule while the northern long-eared bat remains listed as a threatened species. If the reclassification is finalized, the 4(d) rule will be nullified as the ESA does not allow application of 4(d) rules for species listed as endangered. Therefore, for proposed project activities that may impact northern long-eared bats with a possibility of not being completed prior to the final listing decision in November, we recommend that project proponents discuss with the Ohio Field Office to determine if surveys may be prudent to avoid potential delays to their project timelines resulting from a change to the northern long-eared bat's listing status.

**Exception for Ohio mist-net surveys:** All presence/absence surveys conducted for state listed bat species (Indiana, northern long-eared, little brown, tricolored) should follow the maximum net nights set forth in the federal guidance to be considered valid by ODNR-DOW. Any modifications to this position will be communicated at the time of the site authorization approval. As Ohio's laws do not have a similar liability exclusion comparable to the federal 4d Rule, additional surveys within an existing buffer may not be applicable to ODNR-DOW's recommendations on tree cutting.

### **Ohio Acoustic Surveys:**

Acoustic bat surveys for presence/absence will be accepted by ODNR-DOW for the 2022 season. Surveys should follow guidelines laid out in the USFWS Range-wide Indiana Bat and Northern Long-eared Bat Summer Survey Guidelines (March 2022) with the following exceptions:

- Ohio survey dates are June 1 – August 15, 2022
- After conducting automated analyses using one or more of the currently available 'approved' acoustic bat ID programs<sup>1</sup>, qualitative analysis (i.e., manual vetting) of any calls recorded from state-endangered species (*M. sodalis*, *M. septentrionalis*<sup>2</sup>, *M. lucifugus*<sup>2</sup>, and *P. subflavus*<sup>2</sup>) must be completed.
- **All presence/absence acoustic surveys conducted for state listed bat species (Indiana, northern long-eared, little brown, tricolored) should follow the maximum acoustic nights set forth in the federal guidance to be considered valid by ODNR-DOW. Any modifications to this position will be communicated at the time of the site authorization approval.**

At a minimum, for each detector site/night a program considered presence of state-listed bats likely, review all files (including no IDs) from that site/night. If more than one acoustic bat ID program is used, qualitative analysis must also include a comparison of the results of each program by site and night.

### **Before Field Season:**

- Anyone surveying bats using mist-nets in the state of Ohio must obtain a federal permit as well as a state scientific collection permit. The federal permit should include both the Indiana bat and the northern long-eared bat.
- Your ODNR-DOW permit consists of two documents: a Scientific Collector (Wild Animal) Permit and an endangered species letter signed by the Chief of the Division of Wildlife (in addition to your federal permit).

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<sup>1</sup> <https://www.fws.gov/media/indiana-bat-summer-survey-guidance>

<sup>2</sup> State listing as endangered effective July 1, 2020

Both ODNR-DOW documents must be obtained prior to field work and kept with you and any sub-permittees during field work.

### **During Field Season:**

- Prior to initiation of field work (a minimum of two weeks in advance), permittees must provide proposed mist netting plans to USFWS and ODNR-DOW in the form of an e-mail letter to the USFWS OHFO and copy to the ODNR-DOW Bat Survey Coordinator. Plans must be reviewed and approved by USFWS OHFO and ODNR-DOW before ANY surveys take place. Study plans must specify objectives, location details, dates of proposed work, and all other relevant details. When handling bats, you must strictly adhere to the current WNS Decontamination Protocol (current version can be found at <https://www.whitenosesyndrome.org/topics/decontamination>). Clothing, boots, gear, and equipment should all be thoroughly decontaminated between nights, as well as between netting sites.
- Request bat bands at least two weeks in advance of needing them. Bat bands can be obtained by e-mailing the ODNR-DOW Bat Survey Coordinator with how many bands are needed, current permit number, sizes, and a mailing address. Bands will not be issued until your permits are valid. We have two sizes of bands—2.4 mm and 4.2 mm. The 2.4 mm split metal bat ring made of aluminum alloy is suitable for banding small bats. This band must be placed on all captured Indiana, northern long-eared, little brown, and tricolored bats. The larger 4.2 mm band is suitable for silver-haired (*Lasionycteris noctivagans*), big brown (*Eptesicus fuscus*), and hoary (*Lasiurus cinereus*) bats. You must band all Indiana, northern long-eared, little brown, and tricolored bats with ODNR-DOW bands; therefore, you should not be in the field without the 2.4 mm sized band.
- Only individuals who are named on the ODNR-DOW endangered species letter portion of the permit and on the corresponding federal bat permit may conduct and oversee mist-net surveys. Trained assistants may work on permitted bat activities under the direct and on-site supervision of a named permittee. All bat IDs must be verified by a named permittee. If an Indiana bat and/or northern long-eared bat is captured, the permittee shall notify the USFWS and the ODNR-DOW Bat Survey Coordinator referenced above within 48 hours via email. If a little brown bat or tricolored bat is captured, notify the ODNR-DOW Bat Survey Coordinator only within 48 hours via email. Reports of listed bat captures should include specific information such as spatial location of capture, band information, radio-transmitter frequency information, sex, reproductive status, and age of individual.
- For presence/absence surveys, ODNR-DOW requires all female and juvenile state endangered and threatened bat species (Indiana, northern long-eared, little brown, and tricolored bat) be radio-tracked if caught, in accordance with methods outlined in Appendix D of USFWS 2022 Range-wide Indiana Bat Summer Survey Guidelines.
- If you are taking any biological samples (tissue, fur, blood, etc.), this must be specifically authorized in your state and federal permits and noted in your survey proposal.

### **After Field Season:**

By March 15, you must submit your final ODNR-DOW report(s) from the previous summer. You are not required to fill out the ODNR-DOW Wildlife Diversity Bat Excel Spreadsheet; instead, please forward your USFWS Midwestern US Spreadsheet (found here: <https://www.fws.gov/media/bat-reporting-spreadsheets-2020-2021>) to the ODNR-DOW Bat Survey Coordinator and ODNR-DOW Permit Coordinator and include your state permit number along with an electronic copy of the project report. Electronic summaries emailed during the field season are NOT considered as full compliance of this reporting requirement.

## Ohio Environmental Review Recommendations for projects involving disturbance near potential/known bat hibernacula (cliffs, caves, mines) or tree cutting:

**Step 1:** Coordinate with Ohio Division of Wildlife (DOW) regarding existing records for state-listed endangered bat summer and/or winter occurrence information. Potential hibernacula found during a habitat assessment must address possible suitability for Indiana bats, northern long-eared bats, tricolored bats, and little brown bats.

If project site contains a known bat hibernaculum(a) –

- For state-listed endangered species other than the Indiana bat, a recommendation of 0.25-mile tree cutting buffer around all known entrances to protect existing conditions at the hibernaculum(a). The U.S. Fish and Wildlife Service (USFWS) should be contacted for guidance on projects occurring within 5 miles of known or potential Indiana bat hibernacula. If the project involves subsurface disturbance, consultation with DOW is required.
- Limited tree cutting may be permitted within the buffer. Coordinate with DOW.

If a project site does not contain known bat hibernaculum(a)

- Conduct a desktop habitat assessment of the project area. Tools such as the [ODNR Mines of Ohio Viewer](#), [Karst Interactive Map](#), topographic maps, aerial photos, historical records, etc. should be used to determine if there are any potential caves, mines, karst features, rock ledges, or other features that may serve as potential hibernacula.
  - If no such features are found, proceed to Step 2.
  - If potential hibernacula are found during the desktop assessment:
    - Assume bats are using these hibernacula and refrain from clearing trees from March 15-November 15

**-Or-**

- Conduct a field habitat assessment to determine if a potential hibernaculum(a) is present within the action area. We encourage impacts to ledges and rock outcroppings be avoided. If impacts cannot be avoided, features should be evaluated for potential roosting characteristics such as recesses, overhangs, and crevices.
  - **NOTE:** The USFWS Range-wide Indiana Bat Guidelines, Appendix H, contains instructions for completing a habitat assessment, but only includes criteria for Indiana bat hibernacula.

**Step 2:** When conducted, a presence/absence survey must follow current DOW guidelines.

**Step 3:** If a state-listed endangered bat is captured or recorded during the survey:

- Recommendation of no summer tree cutting, or limited cutting following guidelines detailed below, within 5 miles (or 2.5 miles for tricolored bats) of the capture site if a roost is not located.
- Recommendation of no summer tree cutting, or limited cutting following guidelines detailed below, within 2.5 miles of a roost tree if located.

If no state-listed endangered bat is captured or recorded during the survey:

- Summer tree cutting may proceed for 5 years before a new survey is needed under state guidance.

**Limited summer tree cutting guidance for bats that are only state-listed endangered:** Limited tree cutting in summer may be permitted after consultation with DOW, but clearing trees with the following characteristics should be avoided unless they pose a hazard: dead or live trees of any size with loose, shaggy bark; crevices, holes, or cavities; clusters of dead leaves; live trees of any species with DBH  $\geq 20$ ".

## **FREQUENTLY ASKED QUESTIONS**

### **When does the ODNR-DOW Bat Survey protocol have to be used?**

This protocol should be used anytime Indiana bat, northern long-eared bat, little brown bat, or tricolored bat summer presence/probable absence surveys are conducted in the state of Ohio.

### **How many detector nights are required for presence/probable absence acoustic surveys?**

As described in the current USFWS Range-wide Indiana Bat and Northern Long-eared Bat Summer Survey Guidelines:

Level of effort for all state-listed endangered bat species including Indiana bat and northern long-eared bats: Follow maximum detector nights as outlined in the federal guidance (for northern long-eared bat).

#### Northern Long-eared Bat Level of Effort:

Linear projects: a minimum of 4 detector nights per km (0.6 miles) of suitable summer habitat

Non-linear projects: a minimum of 14 detector nights per 123 acres (0.5 km<sup>2</sup>) of suitable summer habitat.

At least 2 detector locations per 123 acre "site" shall be sampled until at least 8 detector nights has been completed over the course of at least 2 calendar nights (may be consecutive). For example:

- 4 detectors for 3 nights and 1 detector for 2 nights each (can sample the same location or move within the site)
- 2 detectors for 7 nights each (can sample the same location or move within the site)
- 1 detector for 14 nights (must sample at least 2 locations and move within the site – we recommend evenly distributing LOE among locations)

#### Indiana Bat Level of Effort:

Linear projects: a minimum of 4 detector nights per km (0.6 miles) of suitable summer habitat

Non-linear projects: a minimum of 10 detector nights per 123 acres (0.5 km<sup>2</sup>) of suitable summer habitat.

At least 2 detector locations per 123 acre "site" shall be sampled until at least 8 detector nights has been completed over the course of at least 2 calendar nights (may be consecutive). For example:

- 5 detectors for 2 nights each (can sample the same location or move within the site)
- 2 detectors for 5 nights each (can sample the same location or move within the site)
- 1 detector for 10 nights (must sample at least 2 locations and move within the site – we recommend evenly distributing LOE among locations)

### **How many net surveys are required for presence/probable absence?**

Level of effort for all state-listed endangered bat species including Indiana bat and northern long-eared bats: Follow maximum net nights as outlined in the federal guidance (for northern long-eared bat).

Net surveys for northern long-eared bat presence/probable absence shall incorporate, at a minimum, either 16 net nights per square 0.5 kilometer (123 acres) of project area, or four net nights per kilometer for linear projects. For linear projects, there must be at least one net night of survey on two different nights (minimum of two nights). This does not allow for two net nights on a single night for surveys.

Net surveys for Indiana bat presence/probable absence shall incorporate, at a minimum, either nine net nights net nights per square 0.5 kilometer (123 acres) of project area, or two net nights per kilometer for linear projects. For linear projects, there must be at least one net night of survey on two different nights (minimum of two nights). This does not allow for two net nights on a single night for surveys.



**How long are the results of the surveys valid for an assessment of an area?**

Mist-net or acoustic surveys documenting probable absence of state-listed endangered bats are valid for five years.

**When can acoustic or net surveys occur in Ohio?**

In Ohio, acoustic or net surveys may only be conducted from June 1 through August 15 unless indicated otherwise in your state permit. Any surveys outside of the June 1 - August 15 timeframe cannot be used in Ohio to assess the presence/probable absence of state-listed bats.

**Can a presence/probable absence survey be conducted within a known Indiana bat and/or northern long-eared bat capture/detection buffer?**

Surveys generally cannot be used to document presence/probable absence of state-listed endangered bats where presence of the species has already been confirmed by prior surveys.

**What if a project is proposing to clear trees between April 1 and September 30 when bats may be present but no bat records exist in the project area?**

Any Ohio project that is not within a known bat record buffer, and tree clearing between April 1 and September 31 is being proposed, may have a presence/probable absence survey conducted between June 1 and August 15 following the range-wide guidance. If a presence/probable absence survey is not performed, presence of listed bats is assumed.

**How does take of northern long-eared bats differ from Indiana bats?**

Under Ohio law, there is no exemption for take of any listed bat species.

**Where do I get bands?**

If you need bands, email the ODNR-DOW Bat Survey Coordinator at least two weeks in advance with your current ODNR permit number, how many bands in each size (2.4 and 4.2 mm) you will need this season, and a current address to ship the bands.

**Do I have to band every bat?**

No, currently this is optional. However, you are required as per your state permit to band all Indiana, northern long-eared, little brown, and tricolored bats.

**APPENDIX C**  
**DESKTOP ASSESSMENT FOR WINTER BAT HABITAT**



American Electric Power  
8600 Smith's Mill Road  
New Albany, OH 43054  
[ajtoohy@aep.com](mailto:ajtoohy@aep.com)

July 10, 2023

Attention: Mr. John Kessler  
Ohio Department of Natural Resources  
2045 Morse Road, Building E-2  
Columbus, Ohio 43229-6693

Via email: [environmentalreviewrequest@dnr.state.oh.us](mailto:environmentalreviewrequest@dnr.state.oh.us); [NHDRequest@dnr.state.oh.us](mailto:NHDRequest@dnr.state.oh.us)

Reference: Request for Technical Assistance, Brie-Voltron East and Brie-Voltron  
West, Licking County, Ohio

Dear Mr. Kessler:

AEP Ohio Transmission Company, Inc. (AEP), is formally requesting that the Ohio Department of Natural Resources (ODNR) complete a review for the proposed Brie-Voltron East and Brie-Voltron West (Project) in Licking County, Ohio (OH). The project consists of two new greenfield 138kV transmission lines, which will occupy the same approximate 200-foot-wide right-of-way from proposed Brie Station to the proposed Voltron Station in Licking County, OH. The Brie East to Voltron North transmission line alignment length is approximately 0.95-mile and the Brie West to Voltron South transmission line alignment length is approximately 0.88-mile. The Project study area is located on USGS Jersey, Ohio U.S. Geologic Survey 7.5' topographical quadrangle as displayed on the Topographic Project Overview Map (Figure 1).

AECOM completed a desktop review of publicly available data to identify underground voids which could be potential hibernation sites for overwintering bats (hibernacula) within 0.25-miles of the Project area. The data sources utilized include USGS topographical maps, aerial photography, and ODNR's Division of Mineral Resources and Geological Survey Data for Known Mining Activity and Karst Geology/Sinkholes as shown on Figure 1 and 2. Based on the available desktop resources, there are no underground and historic surface mines as well as karst features located within 0.25-mile of the Project. Therefore, potential hibernacula is not anticipated to occur within range of the Project area.

Please provide us with the results of the ODNR's environmental review, including results of the ODNR Natural Heritage Database search, at your earliest convenience. If you have questions or need additional information regarding the Project, please contact me at the phone number or email below. Thank you for your assistance with this request.

BOUNDLESS ENERGY™

Sincerely,



Brian Miller  
Environmental Project Manager  
Phone: (412-667-9172)  
[brian.miller1@aecom.com](mailto:brian.miller1@aecom.com)

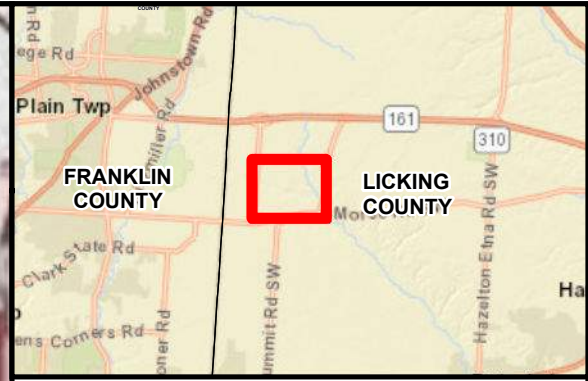
Attachments: Figure 1 – Topographic Project Overview  
Figure 2 – Aerial Project Overview  
Natural Heritage Data Request Form  
Electronic Shapefiles (.shp)

Cc: Amy J. Toohey  
Environmental Specialist-Consultant  
Phone: (614-565-1480)  
[ajtoohey@aep.com](mailto:ajtoohey@aep.com)





BOUNDLESS ENERGY™

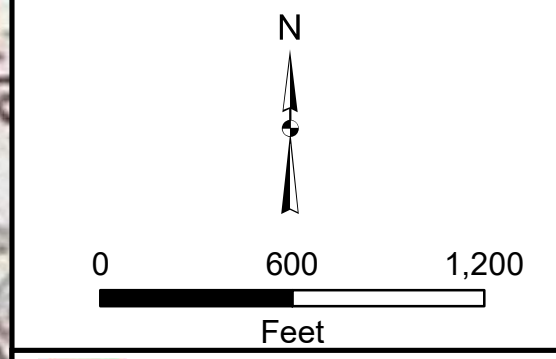


No mining activities, karst features, and/or sink holes are within the extent of the map frame. The closest feature is 3.45 miles northwest of the project area.



**Legend**

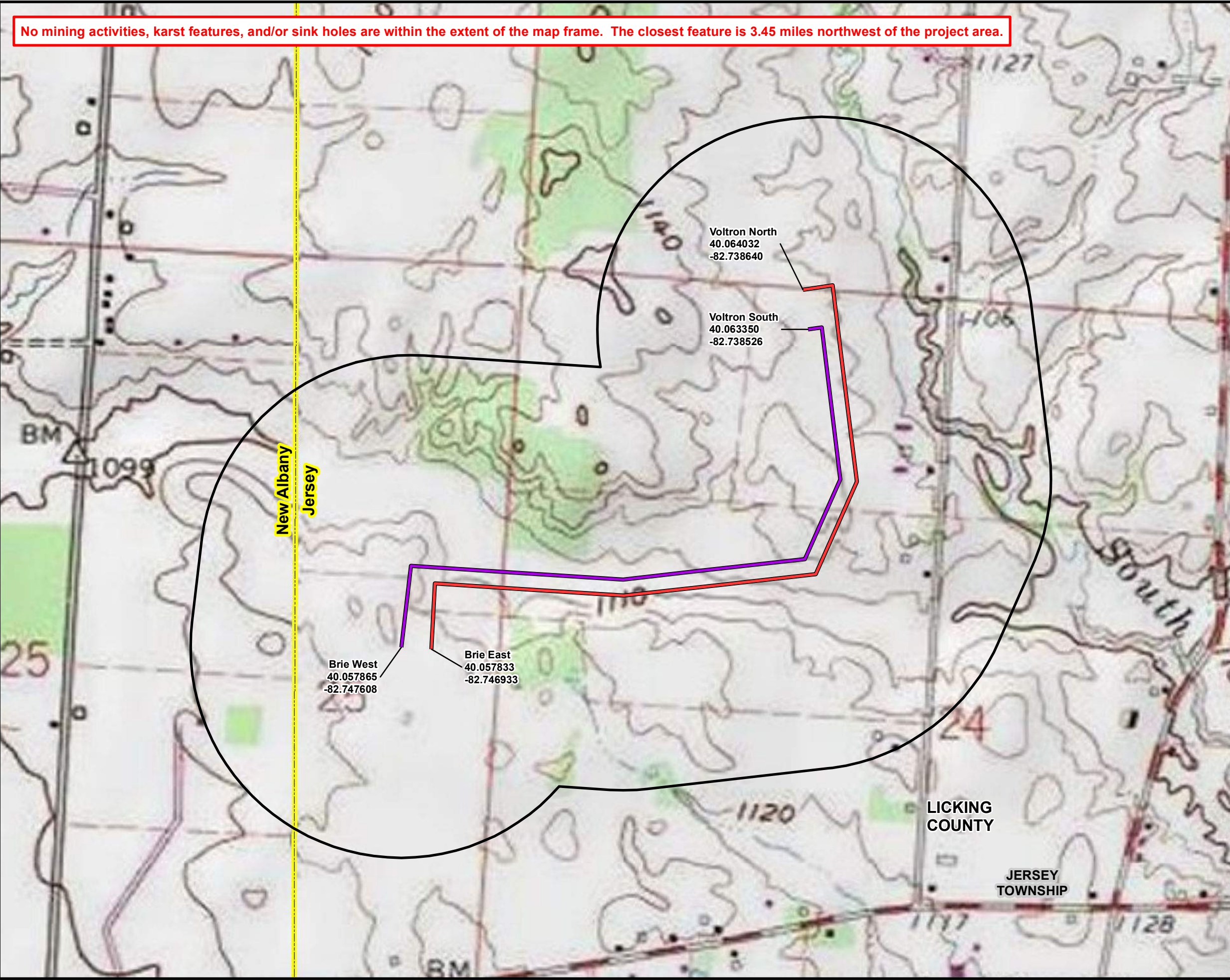
-  Brie-Voltron East 138kV Transmission Line
-  Brie-Voltron West 138kV Transmission Line
-  Quarter Mile Review Area
-  Ohio USGS 7.5' Topographic Quadrangle



**FIGURE 1**  
TOPOGRAPHIC PROJECT OVERVIEW

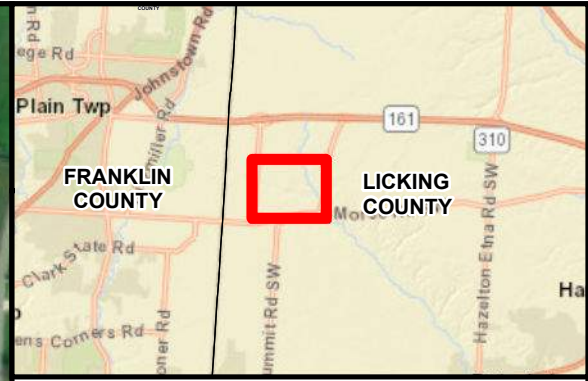
DATE: 7/10/2023	1 INCH = 600 FEET
CREATED BY: CJT	CHECKED BY: AF
JOB NO.:	<b>AECOM</b>

Date Saved: 7/10/2023  
Document Path: X:\DCS\GIS\ArcMap\_GeoDB\_Projects\ENV\60703453\_Brie\_Voltron\_ECOV2\_MXD\2\_T&E\BrieVoltron\_ODNR\Figure1\_Topo\_Overview.mxd

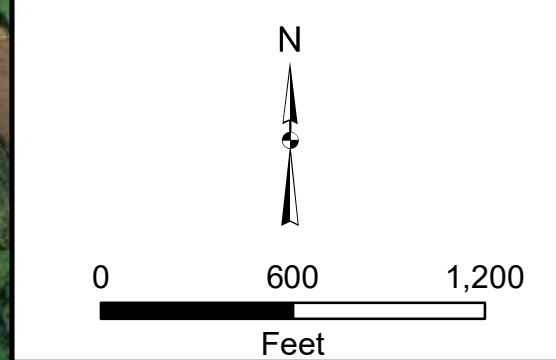




No mining activities, karst features, and/or sink holes are within the extent of the map frame. The closest feature is 3.45 miles northwest of the project area.



- Legend**
- Brie-Voltron East 138kV Transmission Line
  - Brie-Voltron West 138kV Transmission Line
  - Quarter Mile Review Area
  - Ohio USGS 7.5' Topographic Quadrangle



Voltron North  
40.064032  
-82.738640

Voltron South  
40.063350  
-82.738526

Brie West  
40.057865  
-82.747608

Brie East  
40.057833  
-82.746933

New Albany  
Jersey

LICKING COUNTY  
JERSEY TOWNSHIP

Available aerial imagery does not reflect conditions due to recent development by others



FIGURE 2  
AERIAL PROJECT OVERVIEW

DATE: 7/10/2023	1 INCH = 600 FEET
CREATED BY: CJT	CHECKED BY: AF
JOB NO.:	AECOM

Date Saved: 7/10/2023  
Document Path: X:\DCS\GIS\ArcMap\_GeoDB\_Projects\ENV\60703453\_Brie\_Voltron\_EC02\_MXD\2\_T&E\BrieVoltron\_ODNR\Figure2\_Aerial\_Overview.mxd



**APPENDIX D**  
**UPLAND DATA FORM / PHOTOGRAPHS**

**WETLAND DETERMINATION DATA FORM - Midwest Region**

Project/Site: Brie-Voltron 138kV Transmission Line Project City/County: Licking Sampling Date: 06-Jul-23  
 Applicant/Owner: AEP State: OH Sampling Point: UPL-MRK-001  
 Investigator(s): MRK, AJH Section, Township, Range: S \_\_\_\_\_ T 2N R 15W  
 Landform (hillslope, terrace, etc.): Flat Local relief (concave, convex, none): flat  
 Slope: 1.0% / 0.6° Lat.: 40.058831 Long.: -82.742382 Datum: NAD83

Soil Map Unit Name: Cen1C2: Centerburg silt loam, 6 to 12 percent slopes, eroded NWI classification: NA  
 Are climatic/hydrologic conditions on the site typical for this time of year? Yes  No  (If no, explain in Remarks.)  
 Are Vegetation , Soil , or Hydrology  significantly disturbed? Are "Normal Circumstances" present? Yes  No   
 Are Vegetation , Soil , or Hydrology  naturally problematic? (If needed, explain any answers in Remarks.)

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

Hydrophytic Vegetation Present? Yes <input type="radio"/> No <input checked="" type="radio"/> Hydric Soil Present? Yes <input type="radio"/> No <input checked="" type="radio"/> Wetland Hydrology Present? Yes <input type="radio"/> No <input checked="" type="radio"/>	<b>Is the Sampled Area within a Wetland?</b> Yes <input type="radio"/> No <input checked="" type="radio"/>
Remarks: Upland data point collected to characterize the site. Area has been regraded for construction of new buildings using stone and fill materials.	

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

	Absolute % Cover	Dominant Species? Rel.Strat. Cover	Indicator Status	
<b>Tree Stratum</b> (Plot size: <u>30'</u> radius)				
1. _____	0	<input type="checkbox"/> 0.0%		
2. _____	0	<input type="checkbox"/> 0.0%		
3. _____	0	<input type="checkbox"/> 0.0%		
4. _____	0	<input type="checkbox"/> 0.0%		
5. _____	0	<input type="checkbox"/> 0.0%		
0 = Total Cover				
<b>Sapling/Shrub Stratum</b> (Plot size: <u>15'</u> radius)				
1. _____	0	<input type="checkbox"/> 0.0%		
2. _____	0	<input type="checkbox"/> 0.0%		
3. _____	0	<input type="checkbox"/> 0.0%		
4. _____	0	<input type="checkbox"/> 0.0%		
5. _____	0	<input type="checkbox"/> 0.0%		
0 = Total Cover				
<b>Herb Stratum</b> (Plot size: <u>5'</u> radius)				
1. <u>Lolium perenne</u>	20	<input checked="" type="checkbox"/> 80.0%	FACU	
2. <u>Dactylis glomerata</u>	5	<input checked="" type="checkbox"/> 20.0%	FACU	
3. _____	0	<input type="checkbox"/> 0.0%		
4. _____	0	<input type="checkbox"/> 0.0%		
5. _____	0	<input type="checkbox"/> 0.0%		
6. _____	0	<input type="checkbox"/> 0.0%		
7. _____	0	<input type="checkbox"/> 0.0%		
8. _____	0	<input type="checkbox"/> 0.0%		
9. _____	0	<input type="checkbox"/> 0.0%		
10. _____	0	<input type="checkbox"/> 0.0%		
25 = Total Cover				
<b>Woody Vine Stratum</b> (Plot size: <u>30'</u> radius)				
1. _____	0	<input type="checkbox"/> 0.0%		
2. _____	0	<input type="checkbox"/> 0.0%		
0 = 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: 2 (B)

Percent of dominant Species That Are OBL, FACW, or FAC: 0.0% (A/B)

---

**Prevalence Index worksheet:**

Total % Cover of:	Multiply by:
OBL species <u>0</u>	x 1 = <u>0</u>
FACW species <u>0</u>	x 2 = <u>0</u>
FAC species <u>0</u>	x 3 = <u>0</u>
FACU species <u>25</u>	x 4 = <u>100</u>
UPL species <u>0</u>	x 5 = <u>0</u>
<b>Column Totals:</b> <u>25</u> (A)	<u>100</u> (B)
Prevalence Index = B/A = <u>4.000</u>	

---

**Hydrophytic Vegetation Indicators:**

1 - Rapid Test for Hydrophytic Vegetation

2 - Dominance Test is > 50%

3 - Prevalence Index is ≤ 3.0<sup>1</sup>

4 - Morphological Adaptations<sup>1</sup> (Provide supporting data in Remarks or on a separate sheet)

Problematic Hydrophytic Vegetation<sup>1</sup> (Explain)

<sup>1</sup> Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

---

**Hydrophytic Vegetation Present?** Yes  No

Remarks: (Include photo numbers here or on a separate sheet.)  
 Vegetation is sparse due to recent construction.



**SOIL**

Sampling Point: **UPL-MRK-001**

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

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>		
0-16	2.5Y	4/4	100				Silty Clay Loam	25% mixed stone

<sup>1</sup>Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains.      <sup>2</sup>Location: PL=Pore Lining, M=Matrix.

**Hydric Soil Indicators:**

<input type="checkbox"/> Histosol (A1)	<input type="checkbox"/> Sandy Gleyed Matrix (S4)	<b>Indicators for Problematic Hydric Soils <sup>3</sup>:</b>
<input type="checkbox"/> Histic Epipedon (A2)	<input type="checkbox"/> Sandy Redox (S5)	
<input type="checkbox"/> Black Histic (A3)	<input type="checkbox"/> Stripped Matrix (S6)	
<input type="checkbox"/> Hydrogen Sulfide (A4)	<input type="checkbox"/> Loamy Mucky Mineral (F1)	
<input type="checkbox"/> Stratified Layers (A5)	<input type="checkbox"/> Loamy Gleyed Matrix (F2)	
<input type="checkbox"/> 2 cm Muck (A10)	<input type="checkbox"/> Depleted Matrix (F3)	
<input type="checkbox"/> Depleted Below Dark Surface (A11)	<input type="checkbox"/> Redox Dark Surface (F6)	
<input type="checkbox"/> Thick Dark Surface (A12)	<input type="checkbox"/> Depleted Dark Surface (F7)	
<input type="checkbox"/> Sandy Muck Mineral (S1)	<input type="checkbox"/> Redox Depressions (F8)	
<input type="checkbox"/> 5 cm Mucky Peat or Peat (S3)		

<sup>3</sup> Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

**Restrictive Layer (if observed):**

Type: \_\_\_\_\_

Depth (inches): \_\_\_\_\_

**Hydric Soil Present?**    Yes     No

Remarks:  
Fill material placed during recent construction.

**HYDROLOGY**

**Wetland Hydrology Indicators:**

<u>Primary Indicators (minimum of one is required; check all that apply)</u>	<u>Secondary Indicators (minimum of two required)</u>
<input type="checkbox"/> Surface Water (A1)	<input type="checkbox"/> Surface Soil Cracks (B6)
<input type="checkbox"/> High Water Table (A2)	<input type="checkbox"/> Drainage Patterns (B10)
<input type="checkbox"/> Saturation (A3)	<input type="checkbox"/> Dry Season Water Table (C2)
<input type="checkbox"/> Water Marks (B1)	<input type="checkbox"/> Crayfish Burrows (C8)
<input type="checkbox"/> Sediment Deposits (B2)	<input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)
<input type="checkbox"/> Drift Deposits (B3)	<input type="checkbox"/> Stunted or Stressed Plants (D1)
<input type="checkbox"/> Algal Mat or Crust (B4)	<input type="checkbox"/> Geomorphic Position (D2)
<input type="checkbox"/> Iron Deposits (B5)	<input type="checkbox"/> FAC-Neutral Test (D5)
<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)	
<input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)	
<input type="checkbox"/> Water-Stained Leaves (B9)	
<input type="checkbox"/> Aquatic Fauna (B13)	
<input type="checkbox"/> True Aquatic Plants (B14)	
<input type="checkbox"/> Hydrogen Sulfide Odor (C1)	
<input type="checkbox"/> Oxidized Rhizospheres on Living Roots (C3)	
<input type="checkbox"/> Presence of Reduced Iron (C4)	
<input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)	
<input type="checkbox"/> Thin Muck Surface (C7)	
<input type="checkbox"/> Gauge or Well Data (D9)	
<input type="checkbox"/> Other (Explain in Remarks)	

**Field Observations:**

Surface Water Present?	Yes <input type="radio"/> No <input checked="" type="radio"/>	Depth (inches): _____	<b>Wetland Hydrology Present?</b> Yes <input type="radio"/> No <input checked="" type="radio"/>
Water Table Present?	Yes <input type="radio"/> No <input checked="" type="radio"/>	Depth (inches): _____	
Saturation Present? (includes capillary fringe)	Yes <input type="radio"/> No <input checked="" type="radio"/>	Depth (inches): _____	

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

Remarks:  
No source of hydrology was observed.

<b>Client Name:</b> AEP	<b>Site Location:</b> Brie-Innovation 138kV Transmission Line	<b>Project No.</b> 60713540 and 6071545
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<b>UPL-MRK-001</b>	
<b>Date:</b> July 7, 2023	
<b>Description:</b> Upland Area Facing North	

<b>UPL-MRK-001</b>	
<b>Date:</b> July 7, 2023	
<b>Description:</b> Upland Area Facing South	

<b>Client Name:</b> AEP	<b>Site Location:</b> Brie-Innovation 138kV Transmission Line	<b>Project No.</b> 60713540 and 6071545
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<b>UPL-MRK-001</b>	
<b>Date:</b> July 7, 2023	
<b>Description:</b> Upland Area Facing East	

<b>UPL-MRK-001</b>	
<b>Date:</b> July 7, 2023	
<b>Description:</b> Upland Area Facing West	




<b>Client Name:</b> AEP	<b>Site Location:</b> Brie-Innovation 138kV Transmission Line	<b>Project No.</b> 60713540 and 6071545
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<b>UPL-MRK-001</b>	
<b>Date:</b> July 7, 2023	
<b>Description:</b> Upland Area Facing Soil	

**APPENDIX E**  
**UPLAND DRAINAGE FEATURE PHOTOGRAPHIC RECORD**

<b>Client Name:</b> AEP	<b>Site Location:</b> Brie-Voltron 138kV Transmission Line Project	<b>Project No.</b> 60713540 and 60713545
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<b>UDF-MRK-004</b>	
<b>Date:</b> July 7, 2023	
<b>Description:</b> Upland Drainage Feature Facing East	

<b>UDF-MRK-004</b>	
<b>Date:</b> July 7, 2023	
<b>Description:</b> Upland Drainage Feature Facing West	



<b>Client Name:</b> AEP	<b>Site Location:</b> Brie-Voltron 138kV Transmission Line Project	<b>Project No.</b> 60713540 and 60713545
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<b>UDF-MRK-004</b>	
<b>Date:</b> July 7, 2023	
<b>Description:</b>  Upland Drainage Feature  Facing Substrate	

<b>UDF-MRK-005</b>	
<b>Date:</b> July 7, 2023	
<b>Description:</b>  Upland Drainage Feature  Facing Upstream	

<b>Client Name:</b> AEP	<b>Site Location:</b> Brie-Voltron 138kV Transmission Line Project	<b>Project No.</b> 60713540 and 60713545
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<b>UDF-MRK-005</b>	
<b>Date:</b> July 7, 2023	
<b>Description:</b> Upland Drainage Feature Facing Downstream	

<b>UDF-MRK-005</b>	
<b>Date:</b> July 7, 2023	
<b>Description:</b> Upland Drainage Feature Facing Substrate	



**APPENDIX F**  
**HABITAT PHOTOGRAPHIC RECORD**

<b>Client Name:</b> AEP	<b>Site Location:</b> Brie-Voltron 138kV Transmission Line Project	<b>Project No.</b> 60713540 and 6071545
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<b>PH-01</b>
<b>Date:</b> July 7, 2023
<b>Description:</b> Urban Facing East



<b>PH-02</b>
<b>Date:</b> July 7, 2023
<b>Description:</b> Urban Facing West



<b>Client Name:</b> AEP	<b>Site Location:</b> Brie-Voltron 138kV Transmission Line Project	<b>Project No.</b> 60713540 and 6071545
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<b>PH-03</b>
<b>Date:</b> July 7, 2023
<b>Description:</b> Urban Facing North



<b>PH-04</b>
<b>Date:</b> July 7, 2023
<b>Description:</b> Urban Facing North





<b>Client Name:</b> AEP	<b>Site Location:</b> Brie-Voltron 138kV Transmission Line Project	<b>Project No.:</b> 60713540 and 6071545
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<b>PH-05</b>
<b>Date:</b> July 7, 2023
<b>Description:</b>  Urban  Facing East



<b>PH-06</b>
<b>Date:</b> July 7, 2023
<b>Description:</b>  Urban  Facing North



<b>Client Name:</b> AEP	<b>Site Location:</b> Brie-Voltron 138kV Transmission Line Project	<b>Project No.</b> 60713540 and 6071545
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<b>PH-07</b>
<b>Date:</b> July 7, 2023
<b>Description:</b> Urban Facing West



<b>PH-08</b>
<b>Date:</b> July 7, 2023
<b>Description:</b> Urban Facing North

