Letter of Notification for the Bermuda 345 kV Station Project

AEP OHIO TRANSMISSION COMPANY™

An AEP Company

BOUNDLESS ENERGY™

PUCO Case No. 25-0046-EL-BLN

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

Submitted by:
AEP Ohio Transmission Company, Inc.

February 5, 2025

LETTER OF NOTIFICATION

AEP Ohio Transmission Company, Inc.

Bermuda 345 kV Station Project

4906-6-05 Accelerated Application Requirements

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

4906-6-05(B) General Information

B(1) Project Description

The name of the project and applicant's reference number, names and reference number(s) of resulting circuits, a brief description of the project, and why the project meets the requirements for a Letter of Notification.

The Company needs to construct the Bermuda 345 kV Station Project ("Project") located in the city of New Albany and Jersey Township, Licking County, Ohio. The Project involves constructing a new 6.1-acre transmission substation to provide electricity to a customer's facility. The Project is located on property owned by the Company and near the intersection of Johnstown-Utica Road and Beech Road. The Bermuda Station is located immediately adjacent to the existing Corridor-Conesville 345 kV Transmission Line and will receive looped service from this line (to be filed under a separate application with the OPSB). The location of the property (collectively the "Project Area") is shown on Figure 1 and Figure 2 in Appendix A.

The Project meets the requirements for a Letter of Notification ("LON") as defined by Item 3 of Appendix A to Ohio Administrative Code Section 4906-1-01, *Application Requirement Matrix for Electric Power Transmission Lines*:

(3) Constructing a new electric power transmission substation

The Project has been assigned Case No. 25-0046-EL-BLN.

B(2) Statement of Need

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

A customer has requested a new 345 kV delivery to serve their facility requiring 285 MW of initial and ultimate peak demand in the New Albany, Ohio area. To meet the customer's request, the Company will construct a new 345 kV station, Bermuda Station, the subject of this application. To deliver power to the Bermuda Station, the Company will tap the Conesville – Corridor 345 kV Transmission Line. Service to the

customer-owned station will be provided via approximately 0.1-mile single circuit 345 kV transmission tie-lines from the Company's proposed Bermuda Station to the customer's distribution stepdown station, to be filed at a later date.

Failure to move forward with the proposed Project will result in the inability to serve the customer's projected 285 MW load expectations and thereby jeopardize the customer's plans in the New Albany area.

The need was presented and reviewed with stakeholders at the February 7, 2023, PJM TEAC meeting. The solution was presented and reviewed at the May 9, 2023, PJM TEAC meeting, and subsequently assigned a PJM Supplemental number of s3442.10. This Project was included in the Company's 2024 Long Term Forecast Report, and is located on pages 134 and 135 (Table FE-T10), see **Appendix B**.

B(3) Project Location

The applicant shall provide the location of the project in relation to existing or proposed lines and substations shown on an area system map of sufficient scale and size to show existing and proposed transmission facilities in the Project area.

The location of the Project in relation to existing transmission lines and substations is shown on Figure 1, in Appendix A. Figure 2, in Appendix A, identifies the Project components on a 2023 aerial photograph.

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 Project is located on property owned by the Company. Based on the customer's proposed development and existing facilities in the area, the proposed location of the station is the most suitable location for the Project. Other alternatives would require longer 345 kV lines to connect to the station, or potentially impacting neighboring properties, as opposed to remaining entirely on the customer's property. The Project is located on undeveloped, farm land and will not require impacts to any delineated wetland or streams. The location of the Project minimizes impacts to the community and the environment, while taking into account the engineering and construction needs of the customer. The Project also represents the most suitable location and most appropriate solution for meeting the Company's and customers' needs.

B(5) Public Information Program

The applicant shall describe its public information program to inform affected property owners and tenants of the nature of the project and the proposed timeframe for project construction and restoration activities.

The Company will inform affected property owners and tenants about this Project through several different mediums. Within seven days of filing this LON, the Company will issue a public notice in a newspaper of

general circulation in the Project area. The notice will comply with all requirements of OAC Section 4906-6-08(A)(1-6). Further, the Company has mailed (or will mail) a letter, via first class mail, to affected landowners, tenants, contiguous owners and any other landowner the Company may approach for an easement necessary for the construction, operation, or maintenance of the Project. The letter will comply with all requirements of OAC Section 4906-6-08(B). The Company maintains a website (http://aeptransmission.com/ohio/) which hosts an electronic copy of this LON and the public notifice of this LON. An electronic and paper copy of the LON will be served to the public library in each political subdivision affected by this Project. In addition, the Company retains ROW land agents that discuss Project timelines, construction and restoration activities and convey this information to affected owners and tenants.

B(6) Construction Schedule

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

Construction of the Project is planned to begin in April 2025 with an anticipated in-service date of December 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, in Appendix A, identifies the location of the Project area on a United States Geological Survey 1:24,000 Jersey quadrangle map. Appendix A, Figure 2 displays the Project area on a 2023 aerial photograph.

B(8) Property Agreements

The applicant shall provide a list of properties for which the applicant has obtained easements, options, and/or land use agreements necessary to construct and operate the facility and a list of the additional properties for which such agreements have not been obtained.

The proposed Bermuda Station is entirely located on property owned by the Company.

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 new Bermuda 345 kV Station is proposed to have a breaker and a half configuration, and include the following major equipment:

- 1 – 16' x 60' Base Drop-In Control Module
- 11 – 345 kV Circuit Breakers

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.

B(9)(b)(i) Calculated Electric and Magnetic Field Strength Levels

i) Calculated Electric and Magnetic Field Levels

Not applicable. No occupied residences or institutions are located within 100 feet of the Project.

B(9)(b)(ii) Design Alternatives

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

Not applicable. No occupied residences or institutions are located within 100 feet of the Project.

B(9)(b)(ii)(c) Project Cost

The estimated capital cost of the project.

The costs estimate for the proposed Project, which is comprised of applicable tangible and capital costs, is approximately $40.3 million using a Class 4 estimate. Pursuant to the PJM OATT, the costs for this Project will be recovered in the AEP Ohio Transmission Company Inc.'s FERC formula rate (Attachment H-20 to the PJM OATT) and allocated to the AEP Zone.

B(10) Social and Economic Impacts

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

B(10)(a) Operating 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.

The Project is located in the city of New Albany and Jersey Township, Licking County, Ohio. Land use in the Project area is predominantly agricultural vacant land or residential land, as classified by the Licking County Auditor. The Project is located within an area of New Albany that is currently undergoing industrial development. No schools, parks, places of worship, cemeteries, wildlife management areas, or nature preserve lands were identified in proximity to 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.

No properties registered as agricultral district land are located in the Project area based on coordination with the Licking County Auditor's Office on February 4, 2025. The Project occupies 6.1 acres, all of which has historically been used for row crop land.

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.

The Company's consultant completed a literature review, visual inspection, Phase I Archaeological and Phase I History/Architectural surveys, and coordinated with the State Historic Preservation Office ("SHPO"). The Company's consultant recommended that the Project will have no adverse effect on historic properties and no further cultural resource work would be necessary. In their July 3, 2023 response, SHPO concurred with the consultant's recommendation (see **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 ("OEPA") for authorization of construction storm water discharge under NPDES General Permit for Discharges of Storm Water Associated with Construction Activity OHC000006. The Company will also submit a SWPPP to the city of New Albany that adheres to the city's permit requirements. The Company will implement and maintain best management practices as outlined in the Project-specific Storm Water Pollution Prevention Plan to minimize erosion and sediment to Project surface waters during storm events.

The Company's consultant identified no wetlands or streams within the Project area. Additionally, no Federal Emergency Management Agency's ("FEMA") designated 100-year floodplain or regulatory floodway areas are located within the Project area. Therefore, no floodplain permitting is expected to be required for the Project. A local stormwater permit will be obtained from the city of New Albany prior to the start of construction.

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

Coordination letters were submitted to the United State 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 of the Project for potential impacts to state and/or federally protected species. ODNR and USFWS provided responses on July 6, 2023 and June 16, 2023, respectively. Copies of the agencies' responses are presented in **Appendix C**.

Table 4, in **Appendix D** lists the federal and state threatened or endangered species in the Project area.

Based on the nature of the proposed Project activities and habitat characteristics of the surrounding vicinity, construction impacts to protected species are not anticipated.

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.

In May and June 2023, the Company's consultant conducted wetland and stream delineation surveys for an approximately 31.1-acre survey area encompassing the Project (see **Appendix D**). As a result of these surveys, no streams or wetlands were identified within the Project survey area. No other areas of ecological concern were identified within the Project area.

Based on a review of the Protected Areas Database of the United States as well as the Conservation Easement Database, there are no state or national parks, forests, wildlife areas or mapped conservation easements in the vicinity of the Project.

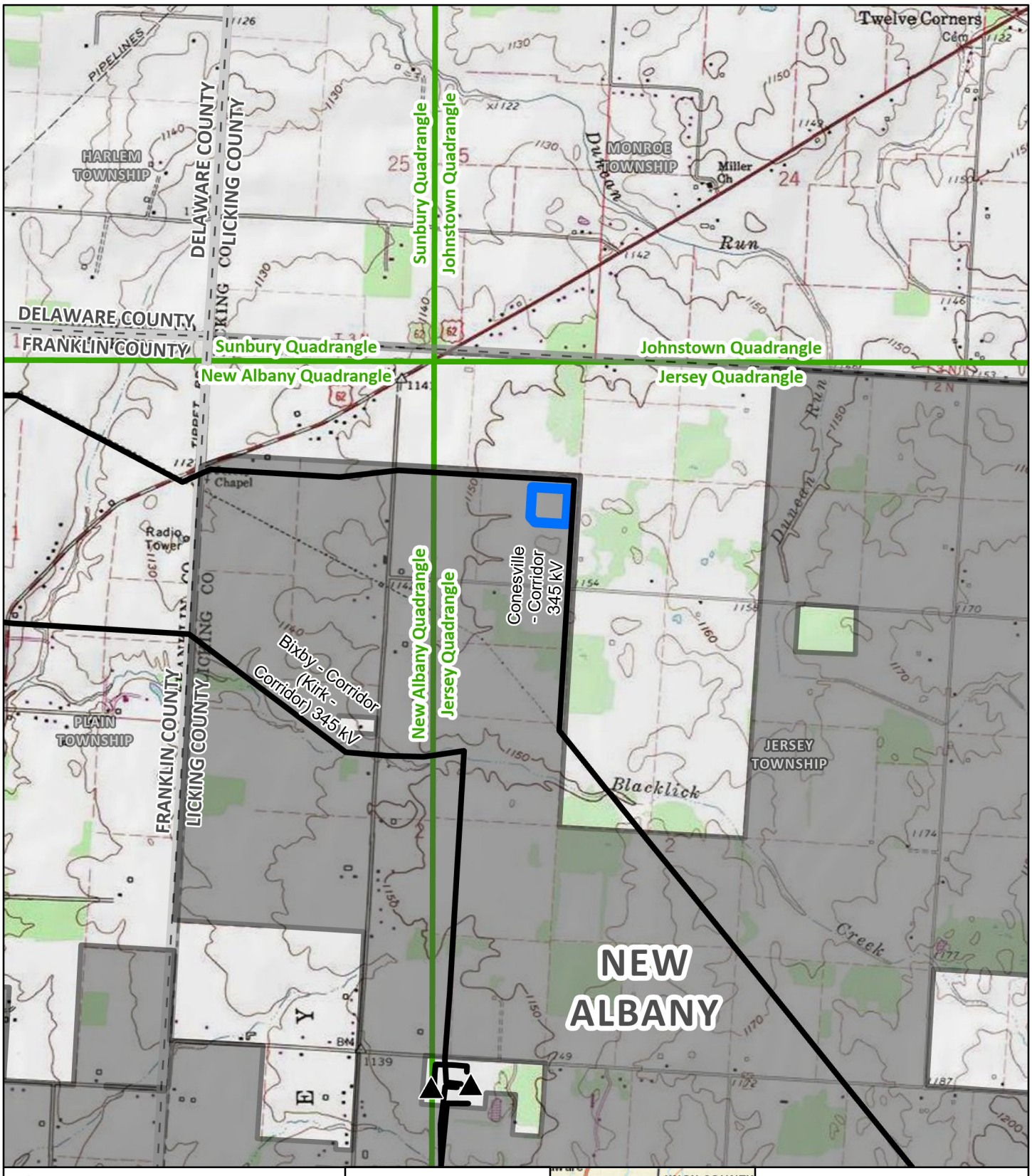
The FEMA Flood Insurance Rate Map (map number 39089C0280J) was reviewed to check for the presence of floodplains/flood hazard areas within the Project area. No mapped FEMA floodplains are located in the Project area.

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 Maps



- Existing AEP Substation
- Existing AEP Transmission Line
- Proposed Bermuda 345 kV Station
- Municipality
- Township Boundary
- County Boundary
- USGS 7.5' Topographic Quad Boundary

Sources:
USGS (2021)

StatePlane
Ohio North
NAD 83

January 23, 2025

Map 1
Project Area

AEP OHIO TRANSMISSION COMPANY

Bermuda 345 kV Station Project

0 1,000 2,000 3,000

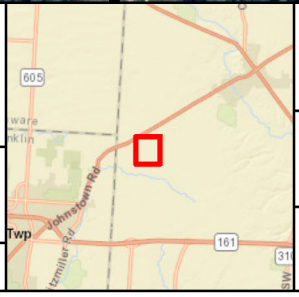
US Feet

Existing AEP Transmission Line
Proposed Bermuda 345 kV Station
Agricultural District Parcel
Parcel Boundary

Sources:
Google Imagery (2024)

StatePlane
Ohio North
NAD 83

February 04, 2025



Map 2
Aerial Map

AEP OHIO TRANSMISSION COMPANY

Bermuda 345 kV Station Project

0 250 500 750
Feet

Appendix B LFTR Slides

PUCO Form FE-T10: Ohio Transmission Company
Summary of Proposed Substations

Substation Name	Voltage(s) (kV)	Type Distribution (D) Transmission (T)	Timing	Line Association(s)	Line Existing or Proposed	Minimum Substation Site Acreage
Tarrapin (AC1-188 TP2018191)	138kV	T	2024 - 2025	Terrapin - Dixon Run 138 kV	P	Approx. 2
Red Run (AC2-015 TP2019144)	138 kV	T	2023 - 2024	Chatfield - Red Run 138 kV	P	Approx. 8
Red Run (AC2-015 TP2019144)	138kV	T	2023 - 2024	Howard - Red Run 138 kV	P	Approx. 8
Red Run (AC2-015 TP2019144)	138kV	T	2023 - 2024	Red Run - First Solar 138 kV	P	Approx. 8
Spickard (AC2-061 TP2020137)	138 kV	T	2023	Hillsboro - Spickard 138 kV	P	Approx. 8
Spickard (AC2-061 TP2020137)	138kV	T	2023	Clinton County (Duke) - Spickard 138 kV	P	Approx. 8
Spickard (AC2-061 TP2020137)	138kV	T	2023	Spickared - Dodson Creek 138 kV	P	Approx. 8
Rocky Ford (AE1-146 TP2020271)	138 kV	T	2023 - 2024	Ebersole - Rocky Ford 138 kV	P	Approx. 8
Rocky Ford (AE1-146 TP2020271)	138kV	T	2023 - 2024	Fostoria Centeral - Rocky Ford 138 kV	P	Approx. 8
Rocky Ford (AE1-146 TP2020271)	138kV	T	2023 - 2024	Rocky Ford - Arcadia 138 kV	P	Approx. 8
Cyprus (TP2022769)	138 / 345	T	2024	Beatty - Cyprus 345 kV	P	Station expansion
Cyprus (TP2022769)	138 / 345	T	2024	Bixby - Cyprus 345 kV	P	Station expansion
Cyprus (TP2022769)	138 / 345	T	2024	Cyprus - White Road 138 kV	P	Station expansion
Cyprus (TP2022769)	138 / 345	T	2024	Canal Street - Cyprus 138 kV	P	Station expansion
Cyprus (TP2022769)	138 / 345	T	2024	Cyprus - Fethers McGraw E 138 kV	P	Station expansion
Cyprus (TP2022769)	138 / 345	T	2024	Cyprus - Fethers McGraw F 138 kV	P	Station expansion
Cyprus (TP2022769)	138 / 345	T	2024	Cyprus - Chilly Willy C 138 kV	P	Station expansion
Cyprus (TP2022769)	138 / 345	T	2024	Cyprus - Chilly Willy D 138 kV	P	Station expansion
Innovation (TP2022055)	138 / 345 kV	T	2024	Corridor - Innovation 345 kV	E	Station expansion
Innovation (TP2022055)	138 / 345 kV	T	2024	Conesville - Innovation 345 kV	E	Station expansion
Innovation (TP2022055)	138 / 345 kV	T	2024	Innovation - Mordor 138 kV #1	P	Station expansion
Innovation (TP2022055)	138 / 345 kV	T	2024	Innovation - Mordor 138 kV #2	P	Station expansion
Bermuda (TP2023011)	345 kV	T	2025 - 2026	Bermuda - innovation 345 kV	P	Approx. 6
Bermuda (TP2023011)	345 kV	T	2025 - 2026	Bermuda - Corridor 345 kV	P	Approx. 6

PUCO Form FE-T10: Ohio Transmission Company
Summary of Proposed Substations

Substation Name	Voltage(s) (kV)	Type Distribution (D) Transmission (T)	Timing	Line Association(s)	Line Existing or Proposed	Minimum Substation Site Acreage
Bermuda (TP2023011)	345 kV	T	2025 - 2026	Bermuda - Vassell 345 kV	P	Approx. 6
Bermuda (TP2023011)	345 kV	T	2025 - 2026	Bermuda -Arnor 345 kV #1	P	Approx. 6
Bermuda (TP2023011)	345 kV	T	2025 - 2026	Bermuda -Arnor 345 kV #2	P	Approx. 6
Bermuda (TP2023011)	345 kV	T	2025 - 2026	Bermuda -Arnor 345 kV #3	P	Approx. 6
Bermuda (TP2023011)	345 kV	T	2025 - 2026	Bermuda -Arnor 345 kV #4	P	Approx. 6
Curleys (TP2022958)	345 kV	T	2029	Bermuda - Curleys 345 kV #1	P	Approx. 10
Curleys (TP2022958)	345 kV	T	2029	Bermuda - Curleys 345 kV #2	P	Approx. 10
Curleys (TP2022958)	345 kV	T	2029	Corridor - Curleys 345 kV	P	Approx. 10
Curleys (TP2022958)	345 kV	T	2029	Curleys - Vassell 345 kV	P	Approx. 10
Curleys (TP2022958)	345 kV	T	2029	Curleys - Numenor 345 kV #1	P	Approx. 10
Curleys (TP2022958)	345 kV	T	2029	Curleys - Numenor 345 kV #2	P	Approx. 10
Curleys (TP2022958)	345 kV	T	2029	Curleys - Numenor 345 kV #3	P	Approx. 10
Curleys (TP2022958)	345 kV	T	2029	Curleys - Numenor 345 kV #4	P	Approx. 10

Appendix C Agency Coordination Letters

In reply, refer to
2023-LIC-58251

July 3, 2023

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

RE: Bermuda Station Greenfield Project, Jersey Township, Licking County, Ohio

Dear Mr. Weller:

This letter is in response to the correspondence received June 14, 2023 regarding the proposed Bermuda Station Greenfield 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 *Phase I Cultural Resource Management Investigations for the Approximately 54.08 ha (133.63) Bermuda Station Greenfield Project in Jersey Township, Licking County, Ohio* by Ryan J. Weller and Scott McIntosh (Weller & Associates, Inc. 2023).

A literature review, visual inspection, surface collection, and shovel test unit excavation was completed as part of the investigations. Three (3) previously identified archaeological sites are located within the project area, Ohio Archaeological Inventory (OAI) 33LI3080-33LI3082. The sites were previously determined not eligible for listing in the National Register of Historic Places (NRHP). Five (5) new archaeological sites were identified during survey, OAI#33LI3596-33LI3600. The sites are recommended not eligible for listing in the NRHP. Our office agrees with this recommendation and no additional archaeological investigation is needed. No additional architectural resources were identified in the current study area that were not previously reviewed for other surveys.

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. Our office requests Weller & Associates, Inc. complete the OAI forms for 33LI3596-33LI3600 as soon as possible. Please notify our office when that form has been completed. If you have any questions, please contact me at (614) 298-2022, or by e-mail at khorrocks@ohiohistory.org. Thank you for your cooperation.

Sincerely,

Krista Horrocks, Project Reviews Manager
Resource Protection and Review

RPR Serial No: 1098668

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

July 6, 2023

Anna Findish
AECOM
707 Grant Street
Pittsburgh, PA 15219

Re: 23-0663; AEP Bermuda Station and Bermuda ADS 345kV Tie

Project: The proposed project involves the construction of a new 345kV substation, and the installation of four 0.03-mile greenfield 345kV transmission lines.

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).

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 ≥ 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 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

June 16, 2023

Project Code: 2023-0088051

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 ≥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 ≥3 inches dbh, we recommend avoiding tree removal wherever possible. If any caves or abandoned mines may be disturbed, further coordination with this office is requested to determine if fall or spring portal surveys are warranted. If no caves or abandoned mines are present and trees ≥3 inches dbh cannot be avoided, we recommend removal of any trees ≥3 inches dbh only occur between October 1 and March 31. Seasonal clearing is recommended to avoid adverse effects to Indiana bats and northern long-eared bats.

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). 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.

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

Sincerely,

Patrice Ashfield
Field Office Supervisor

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

Appendix D Ecological Report

BERMUDA STATION PROJECT

LICKING COUNTY, OHIO

ECOLOGICAL REPORT

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

Prepared by:

525 Vine Street, Suite 1800
Cincinnati, Ohio 45202

Project #: 60708694

August 2023

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1.0 INTRODUCTION

American Electric Power Ohio Transmission Company (AEP Ohio Transco) is proposing the construction of a new 345 kilovolt (kV) substation (Project) near the intersection of Beech and Miller Road in Licking County, Ohio (OH). The survey area associated with this report for the Project is located on the 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. The EMHT survey area that overlaps with the AECOM project survey area does not contain any streams, wetlands, or ponds, which was reviewed by the United States Army Corps of Engineers (USACE) on August 8, 2022, under file number LRH-2022-557-SCR, **Appendix A**. Directly abutting, but not overlapping the Project survey area, a separate survey effort was conducted by EMHT which identified a total of four wetlands (EMHT-Wetland R1, EMHT-Wetland N, EMHT-Wetland M, and Wetland S) that appear in **Figures 2 and 3**. These EMHT Wetlands are currently undergoing USACE confirmation. A Jurisdictional Determination (JD) was submitted to the USACE by EMHT on March 28, 2023. As the delineation was completed by EMHT, complete copies of the data forms and photographs have not been provided to AECOM. However, AECOM has field verified that these features are outside of the Project survey area. Only features that intersect the Project survey area have been included within this report.

The purpose of the field survey was to assess the presence of aquatic resources and possible waters of the United States (WOTUS) that occur within the proposed Project area. Secondarily, 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 at the proposed Bermuda Station area. The Project survey area is approximately 31.07-acres. Prior to conducting field surveys, digital United Stated Department of Agriculture (USDA) Natural Resources Conservation Service (NRCS) soil survey data, United States Fish and Wildlife Service (USFWS) National Wetlands 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 (GIS) 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: 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 *Regional Supplement* 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 type 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 the 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 mile (259 hectares), and a maximum depth of water pools equal to or less than 15.75 inches, were evaluated utilizing the Headwater Habitat Evaluation Index (HHEI) methodology and all other streams assessed using the QHEI methodology. 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 based on whether it may be ineligible for coverage under the 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 needs to be applied for. Impacts to streams within each watershed would then have eligibility for 401 WQC determined by the watershed category. The three categories are defined as:

Eligible: Streams within the watershed are eligible for coverage under the OEPA'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 Water Quality Certification 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 an RTE species review and general field habitat surveys within the Project survey area. AECOM submitted requests to the 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. 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 RTE 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 B**. This assessment was conducted by reviewing data on mining activity and karst geology from the ODNR Division of Mineral Resources and USGS websites.

3.0 RESULTS

On May 17, 2023, and June 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 wetlands, streams, or ponds.

3.1 WETLAND DELINEATION

3.1.1 PRELIMINARY SOILS EVALUATION

According to the USDA NRCS Web Soil Survey, three soil map units are mapped within the Project survey area (USDA NRCS, 2021a and 2021b). Of these, one was identified as a hydric soil, and two 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 3**.

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 (%)
Bennington	BeB	Bennington silt loam, 2 to 6 percent slopes	End moraines and ground moraines	Yes*	Condit 3% Pewamo 3%
Centerburg	Cen1B1	Centerburg silt loam, 2 to 6 percent slopes	End moraines and ground moraines	Yes*	Condit 4% Marengo 3%
Pewamo	Pe	Pewamo silty clay loam, low carbonate till, 0 to 2 percent slopes	Drainageways, depressions	Yes	Condit 9%

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

3.1.2 NATIONAL WETLANDS INVENTORY MAP REVIEW

According to NWI data covering the Project location, the Project survey area does not contain any mapped NWI wetlands. The location of the NWI mapped wetlands in the Project vicinity are shown on **Figure 3**.

3.1.3 DELINEATED WETLANDS

During the field survey, AECOM confirmed the EMHT delineation results that no wetlands occur within the Project Survey Area. There are three delineated EMHT wetlands that are shown on **Figure 2 and 3** that are adjacent to the Project survey area, but not located within the Project survey area. The locations and approximate extent of the wetlands are shown on **Figures 2 and 3**. AECOM completed an USACE Data Form as a representative of the upland community type for the Project survey area, the USACE Data Form and representative photographs are included in **Appendix C**.

3.2 STREAM DELINEATION

During the field survey, AECOM confirmed the EMHT delineation results that no streams occur within the Project survey area.

3.2.1 OEPA STREAM ELIGIBILITY

OEPA stream eligibility for 401 Water Quality Certification mapping was reviewed for the Project survey area. The Project occurs across two watersheds, designated by 401 WQC eligibility, as listed in **Table 2**. One watershed is listed as “Eligible”, and the other “Possibly Eligible,” see **Table 2**. 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 3**. 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
050600011503	Headwaters Blacklick Creek	Possibly Eligible	0
050600011307	Duncan Run	Eligible	0
		Total	**0**

3.4 PONDS

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

3.5 UPLAND DRAINAGE FEATURES

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

3.6 VEGETATIVE COMMUNITIES

AECOM ecologists conducted a general habitat survey in conjunction with the stream and wetland field surveys. The entire Project survey area exists in agriculture row-crop, as described in **Table 3**. 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 D**.

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
Agriculture Row-Crop	Agricultural lands being utilized for row-crop production and associated activities, typically devoid of vegetation outside of the target crop and opportunistic/invasive species.	31.07	100
	Totals:	**31.07**	**100%**

3.7 RARE, THREATENED AND ENDANGERED SPECIES AGENCY COORDINATION

Protected Species Agency Consultation –

On June 7, 2023, coordination letters were sent to USFWS and the ODNR)Ohio Natural Heritage Program and Division of Wildlife (DOW), seeking an environmental review for the Project for potential impacts to RTE species.

Responses were received from the USFWS on June 16, 2023, and from the ODNR on July 6, 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 E**. **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 study area are provided as **Appendix D**.

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
Mammals							
Indiana bat (*Myotis sodalis*)	Endangered	Endangered	Summer habitat During spring/summer, bat species roost in trees behind loose, exfoliating bark, in crevices and cavities, or in leaves. Hibernaculum(a) During winter, these species hibernate in humid mines, caves, and occasionally man-made structures.	Summer habitat **No -** Within the Project survey area, no areas of young successional forest were identified which appear to be potentially suitable summer roosting and foraging habitat. Hibernaculum(a) **No** – No mine openings and/or known caves are located within 0.25 miles of Project survey area and the 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 survey area. .	Summer Tree Clearing April 1 – September 30	Summer habitat If suitable habitat occurs within the Project survey area, the USFWS and ODNR DOW recommend seasonal tree cutting (October 1 to March 31). If summer tree clearing is required, additional coordination with the ODNR and the USFWS is warranted. Hibernaculum(a) In accordance with 2022 Ohio ODNR DOW and the USFWS Joint Guidance for Bat Surveys and Tree Clearing (2022 Joint Guidance), a 0.25-mile tree cutting and subsurface disturbance buffer around a hibernaculum entrance is recommended.	Summer habitat Potential summer roosting habitat is not present within the Project survey area. If trimming or clearing of trees is required, then a seasonal tree clearing, between October 1 and March 31, is recommended.
Northern long-eared bat (*Myotis septentrionalis*)	Endangered	Endangered	Summer habitat During spring/summer, bat species roost in trees behind loose, exfoliating bark, in crevices and cavities, or in leaves. Hibernaculum(a) During winter, these species hibernate in humid mines, caves, and occasionally man-made structures.	Summer habitat **No** - Within the Project survey area, no areas of young successional forest were identified which appear to be potentially suitable summer roosting and foraging habitat. Hibernaculum(a) **No** – No mine openings and/or known caves are located within 0.25 miles of Project survey area and the 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 survey area. .	Summer Tree Clearing April 1 – September 30	Summer habitat If suitable habitat occurs within the Project survey area, the USFWS and ODNR DOW recommend seasonal tree cutting (October 1 to March 31). Known presence of species was indicated in the ODNR response and additional summer surveys would not constitute presence/absences of this species Hibernaculum(a) In accordance with 2022 Ohio ODNR DOW and the USFWS Joint Guidance for Bat Surveys and Tree Clearing (2022 Joint Guidance), a 0.25-mile tree cutting and subsurface disturbance buffer around a hibernaculum entrance is recommended.	Summer habitat Potential summer roosting habitat is not present within the Project survey area. If trimming or clearing of trees is required, then a seasonal tree clearing, between October 1 and March 31, is recommended. Additional summer surveys would not constitute presence/absence within the Project survey area for the northern long-eared bat.
Little brown bat (*Myotis lucifugus*)	Endangered	N/A	Summer habitat During spring/summer, bat species roost in trees behind loose, exfoliating bark, in crevices and cavities, or in leaves. Hibernaculum(a) During winter, these species hibernate in humid mines, caves, and occasionally man-made structures.	Summer habitat **No** - Within the Project survey area, no areas of young successional forest were identified which appear to be potentially suitable summer roosting and foraging habitat. Hibernaculum(a) **No** – No mine openings and/or known caves are located within 0.25 miles of Project survey area and the 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 survey area. .	Summer Tree Clearing April 1 – September 30	Summer habitat If suitable habitat occurs within the Project survey area, the USFWS and ODNR DOW recommend seasonal tree cutting (October 1 to March 31). If summer tree clearing is required, additional coordination with the ODNR and the USFWS is warranted. Hibernaculum(a) 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 Appendix E), a 0.25-mile tree cutting and subsurface disturbance buffer around a hibernaculum entrance is recommended.	Summer habitat Potential summer roosting habitat is not present within the Project survey area. If trimming or clearing of trees is required, then a seasonal tree clearing, between October 1 and March 31, is recommended.

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 (*Perimyotis subflavus*)	Endangered	Proposed Endangered	<u>Summer habitat</u> During spring/summer, bat species roost in trees behind loose, exfoliating bark, in crevices and cavities, or in leaves. <u>Hibernaculum(a)</u> During winter, these species hibernate in humid mines, caves, and occasionally man-made structures.	<u>Summer habitat</u> **No** - Within the Project survey area, areas of young successional forest were identified which appear to be potentially suitable summer roosting and foraging habitat. <u>Hibernaculum(a)</u> **No** – No mine openings and/or known caves are located within 0.25 miles of Project survey area and the 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 survey area. .	<u>Summer Tree Clearing</u> April 1 – September 30	<u>Summer habitat</u> If suitable habitat occurs within the Project survey area, the USFWS and ODNR DOW recommends seasonal tree cutting (October 1 to March 31). If summer tree clearing is required, additional coordination with the ODNR and the USFWS is warranted. <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), a 0.25-mile tree cutting and subsurface disturbance buffer around a hibernaculum entrance is recommended.	<u>Summer habitat</u> Potential summer roosting habitat is not present within the Project survey area. If trimming or clearing of trees is required, then a seasonal tree clearing, between October 1 and March 31, is recommended.
Fish							
Lake chubsucker *(Erimyzon sucetta)*	Threatened	None	This species is found mainly in lakes, ponds, swamps, and streams**.**	**No** -- During the field survey, AECOM confirmed the EMHT delineation results that no streams occur within the Project survey area.	N/A	Due to the location, and the fact that there is no in-water work proposed in a perennial stream, this Project is not likely to impact this species.	No
Birds							
Northern harrier (*Circus hudsonis*)	Endangered	None	This species hunts over grasslands and nests can be found in large marshes and grasslands.	**No** – Based on field/desktop reviews, the Project survey area has an absence of habitat for northern harrier, due to the agricultural activities taking place within the Project survey area.	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 the species.	No

Protected Species Agency Summary –

Based on general observations during the ecological survey, forested clearing is not anticipated. If tree clearing is required, the ODNR and the USFWS recommend implementations of seasonal tree clearing between October 1 and March 31 to avoid adverse effects to the Indiana bat, northern long-eared bat, little brown 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 Indiana bat, little brown 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 will be completed with the 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 survey area and no caves, mines, and/or karst features were identified. As per the ODNR and the USFWS guidance, further coordination regarding potential hibernaculum is only necessary if the habitat assessment find potential habitat within 0.25 miles of the Project surveyarea. 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 B**.

No impacts are anticipated for the any of the other aquatic listed species and no in-water work is proposed as part of the Project or species habitat is present. Additionally, an absence of potential nesting habitat for the northern harrier was identified based on a desktop and field review of the Project survey area. The absence of habitat was due to the agricultural activities taking place within the Project survey area; therefore, no further coordination regarding this listed bird species is warranted regarding this Project.

4.0 SUMMARY

The ecological survey of the Project survey area confirms the previously completed EMHT delineation that identified no wetlands, streams, or ponds. An upland data point was taken as a representative for the Project survey area. 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 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 federally listed RTE species within range of the Project survey area, no bat species were identified as having summer roosting habitat and no potential hibernacula was identified within the Project survey area. Potential summer roosting habitat is not present within the Project area, if trimming or clearing of trees is required, it was recommended by the ODNR and the USFWS to complete seasonal tree clearing activities between October 1 and March 31. If seasonal tree clearing cannot be completed, mist net surveys could be completed for the Indiana bat, northern long eared bat, and/or tricolored bat between April 1 and

September 30. However, the northern long-eared bat is known to occur within the Project survey area and additional mist net surveys would not constitute presence/absence for this species. As there is presence of the northern long-eared bat, limited summer tree cutting inside of the 0.25-mile buffer for this species could be permitted by further coordinating results of emergent and/or roost surveys with the ODNR.

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 AECOM's assessment. The results 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.

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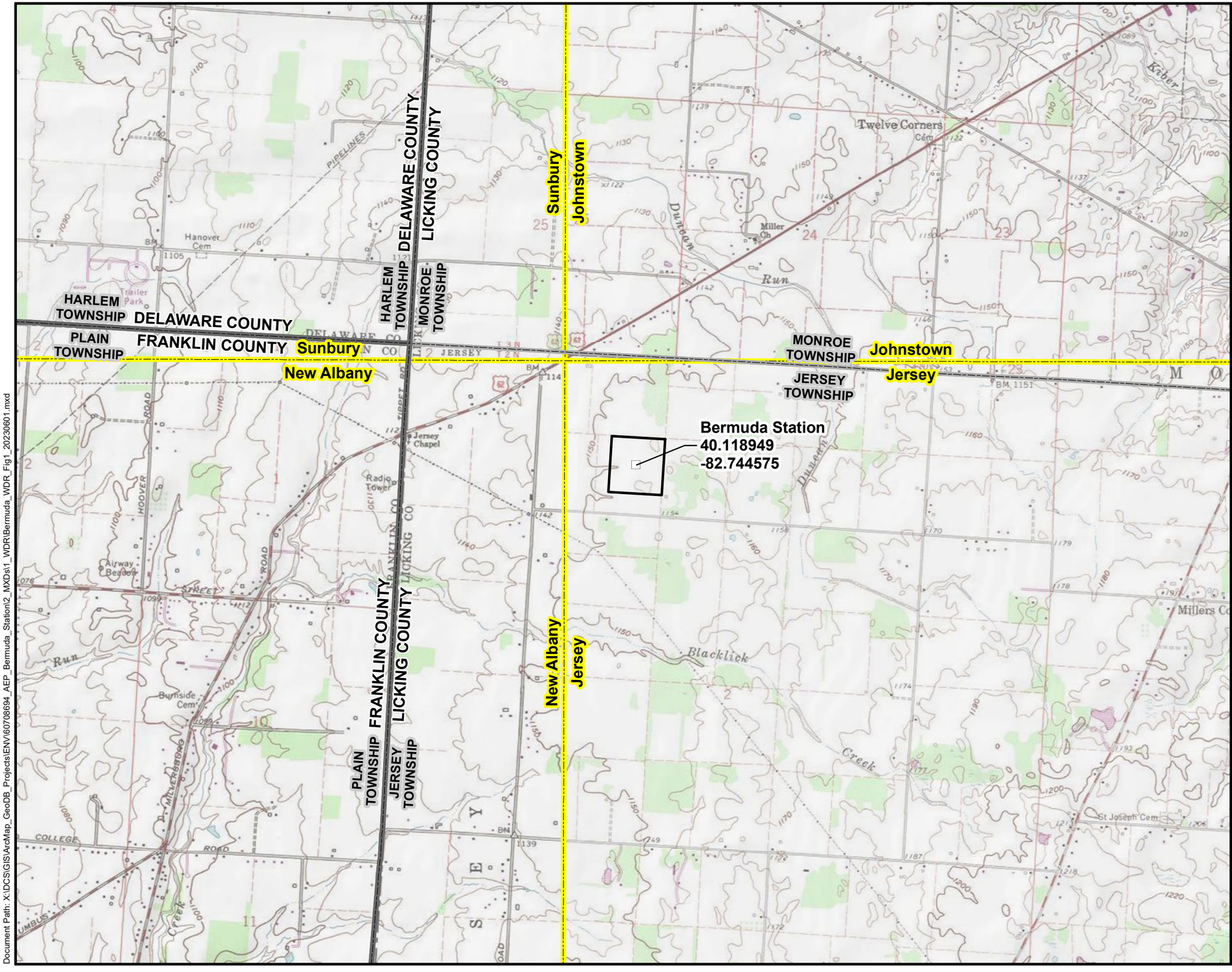

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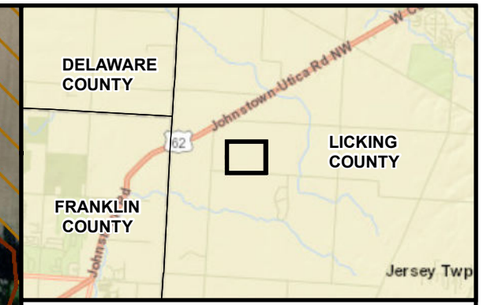

Legend

- Upland Data Point
- Station
- Project Survey Area
- EMHT Completed Survey Area
- EMHT Delineated Wetland
- NWI Wetlands (USFWS)
- HUC 12 (USGS)
- Township Boundary
- County Boundary
- SSURGO Soil Map Unit (NRCS)
- Hydric SSURGO Soil Map Unit (NRCS)

BeA: Bennington silt loam, 0 to 2 percent slopes

BeB: Bennington silt loam, 2 to 6 percent slopes

Pe: Pewamo silty clay loam, low carbonate till, 0 to 2 percent slopes

Cen1B1: Centerburg silt loam, 2 to 6 percent slopes

N

0 100 200 400

Feet

AEP

Bermuda Station Project

FIGURE 2
SOIL MAP AND
NATIONAL WETLANDS INVENTORY MAP

DATE: 7/25/2023	1 INCH = 200 FEET
CREATED BY: CJT	CHECKED BY: AF
JOB NO.: 60708694	AECOM

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Legend

- Upland Data Point
- Station
- Contour (2ft)
- Project Survey Area
- EMHT Completed Survey Area
- EMHT Delineated Wetland
- Township Boundary
- County Boundary

N

0 100 200 400

Feet

Bermuda Station Project

FIGURE 3
WETLAND DELINEATION AND STREAM ASSESSMENT MAP

DATE: 7/25/2023	1 INCH = 200 FEET
CREATED BY: CJT	CHECKED BY: AF
JOB NO.: 60708694	AECOM

Date Saved: 7/25/2023
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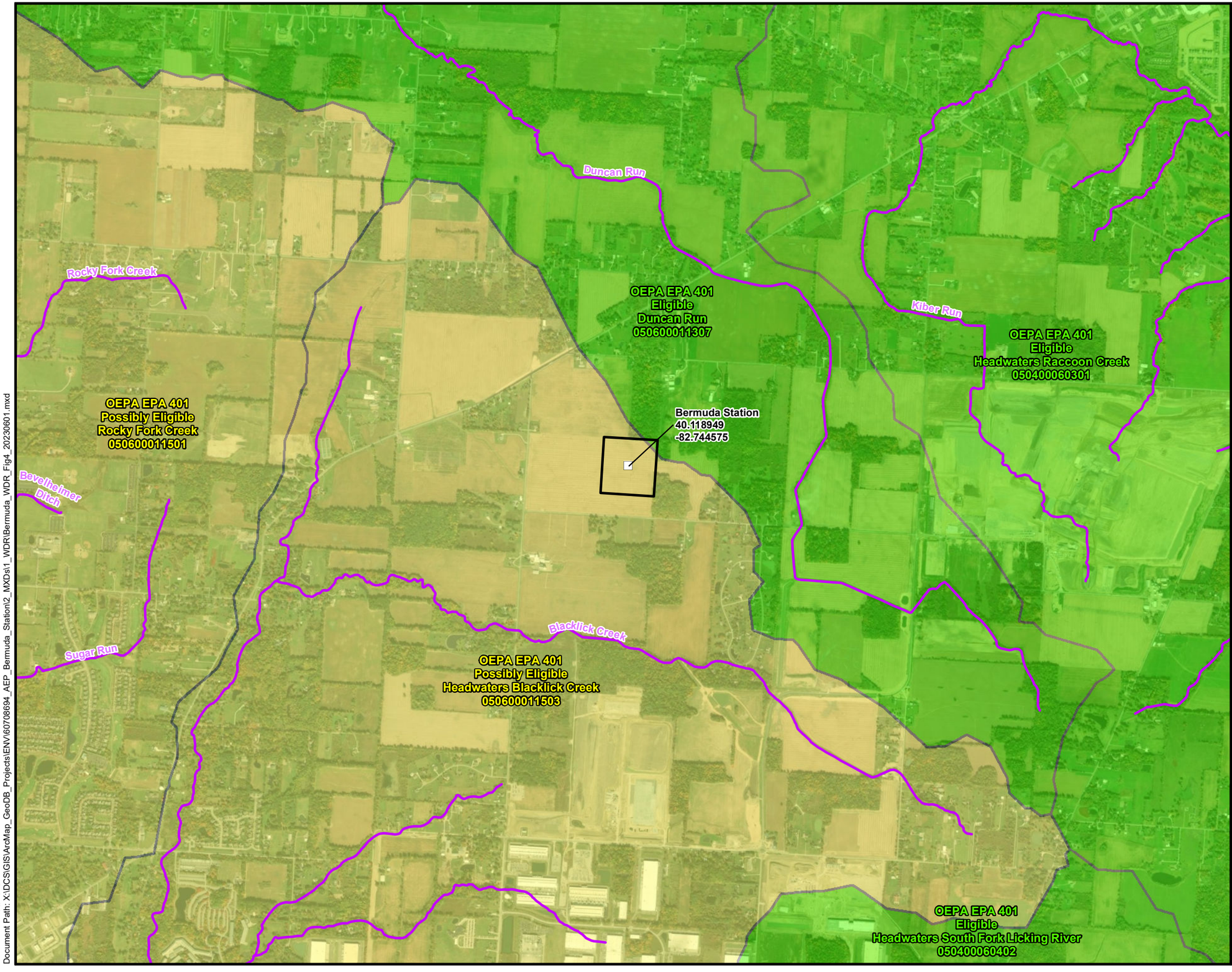

Legend

- Station
- NHD Stream (USGS)
- Project Survey Area

OEPA Eligibility:

- Eligible
- Possibly Eligible

N

0 1,000 2,000 4,000

Feet

AEP

Bermuda Station Project

FIGURE 4

STREAM ELIGIBILTY MAP

DATE: 7/6/2023	1 INCH = 2,000 FEET
CREATED BY: CJT	CHECKED BY: AF
JOB NO.: 60708694	AECOM

Date Saved: 7/6/2023
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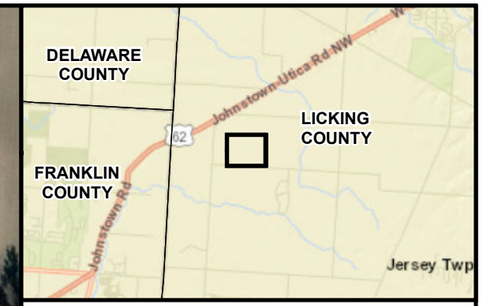

Legend

- Station
- Photograph Location
- Project Survey Area

Vegetative Community Type

- Agricultural Row Crops

N

0 100 200 400

Feet

Bermuda Station Project

FIGURE 5
VEGETATIVE COMMUNITIES ASSESSMENT MAP

DATE: 6/12/2023	1 INCH = 200 FEET
CREATED BY: CJT	CHECKED BY: AF
JOB NO.: 60708694	AECOM

Date Saved: 6/12/2023
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APPENDIX A

UNITED STATES ARMY CORPS OF ENGINEERS JURISDICTIONAL DETERMINATION (LRH-2022-557-SCR)

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

REPLY TO
ATTENTION OF

August 8, 2022

Regulatory Division
North Branch
LRH-2022-557-SCR

APPROVED AND PRELIMINARY JURISDICTIONAL DETERMINATIONS

Mr. Dick Roggenkamp
The New Albany Company
8000 Walton Parkway, Suite 120
New Albany, Ohio 43054

Dear Mr. Roggenkamp:

I refer to the *Investigation of Waters of the United States, North Beech Corridor, Plain/ Jersey Townships, Franklin/Licking Counties, Ohio,* completed by EMH&T and submitted to this office on July 1, 2022 with additional information received on July 11, 2022. You have requested a preliminary jurisdictional determination (JD) for the potential jurisdictional aquatic resources and an approved jurisdictional determination for the non-jurisdictional features on the approximate 672-acre site. The JD review area is located east and west of Beech Road, north and south of Miller Road, and south and east of U.S. 62 (Johnstown Road) Plain/Jersey Townships, Franklin and Licking Counties, Ohio at approximately 40.11512 latitude, -82.75260 longitude. On-site waters flow to Blacklick Creek, an indirect tributary of the Scioto River, a traditional navigable water of the United States. We have assigned the following file number to your PCN: LRH-2022-557-SCR. Please reference this file number on all future correspondence related to this subject proposal.

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 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 5.78 acres of nine (9) wetlands (Wetland H, I, K, L, M, S, T, U, and V) and 6,276 linear feet (0.805 acre) of five (5) streams (Streams 1-5) are located within the preliminary JD boundary. 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 a copy of the preliminary JD form. If you agree with the findings of this preliminary JD and understand your options regarding the same, please sign and date 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 Cecil Cox of the North Branch at cecil.m.cox@usace.army.mil or 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, the 672-acre site contains one (1) Grass Swale (1,883 linear feet), five (5) Ponds (totaling 0.66 acre), and 14 Wetlands (totaling 29.37acres). Grass Swale 1 does not carry a relatively permanent flow of water, lacks consistent ordinary high-water marks, sediment sorting, defined bed and banks, or wetland characteristics. Ponds 1-5 have been constructed entirely in uplands, are not impoundments of a jurisdictional stream, and have no connection to a water of the United States. Wetlands A-G, J, N-R, and Pond Fringe are surrounded by uplands and do not exhibit a distinct surface water connection to a water of the United States. Wetlands A-G, J, N-R, and Pond Fringe would not support interstate or foreign commerce interests, nor do they contain any rare, threatened, or endangered species. Therefore, Grass Swale, Ponds 1-5, and Wetlands A-G, J, N-R, and Pond Fringe are not jurisdictional waters of the United States. However, you should contact the Ohio Environmental Protection Agency, Division of Surface Water, at (614) 664-2001 to determine state permit requirements.

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 water determination was coordinated with the USEPA Region 5 and the Corps Headquarters, with coordination completed on July 22, 2022 and August 4, 2022, respectively.

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:

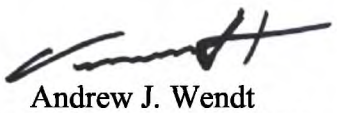
Regulatory Administrative Appeals Officer
United States Army Corps of Engineers
Great Lakes and Ohio River Division
550 Main Street, Room 10780
Cincinnati, Ohio 45202-3222
Phone: (513) 684-2699
Fax: (513) 684-2460

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

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

If you have any questions concerning the above, please contact Cecil Cox of the North Branch at 304-399-5274, by mail at the above address, or by email at cecil.m.cox@usace.army.mil.

Sincerely,



Andrew J. Wendt
Regulatory Project Manager
North Branch

Enclosures
cc:
Bryan Lombard via email

Appendix 2 - PRELIMINARY JURISDICTIONAL DETERMINATION (PJD) FORM

BACKGROUND INFORMATION

A. **REPORT COMPLETION DATE FOR PJD:** 13-JUL-2022

B. **NAME AND ADDRESS OF PERSON REQUESTING PJD:**
Roggenkamp, Dick
The New Albany Company
8000 Walton Parkway
Suite 120
New Albany, OH 43054

C. **DISTRICT OFFICE, FILE NAME, AND NUMBER:**
LRH, North Beech Corridor JD, LRH-2022-00557-SCR

D. **PROJECT LOCATION(S) AND BACKGROUND INFORMATION:**
(USE THE TABLE BELOW TO DOCUMENT MULTIPLE AQUATIC RESOURCES AND/OR AQUATIC RESOURCES AT DIFFERENT SITES)

State: OH County/parish/borough: Licking County City: Plain/Jersey Townships
Center coordinates of site (lat/long in degree decimal format):
Lat.: 40.115124° Long.: -82.752606°
Universal Transverse Mercator: 17
Name of nearest waterbody: Blacklick Creek

E. **REVIEW PERFORMED FOR SITE EVALUATION (CHECK ALL THAT APPLY):**
☐ Office (Desk) Determination. Date: 13 July 2022
☐ Field Determination. Date(s):

TABLE OF AQUATIC RESOURCES IN REVIEW AREA WHICH "MAY BE" SUBJECT TO REGULATORY JURISDICTION.

Site Number	Latitude (decimal degrees)	Longitude (decimal degrees)	Estimated amount of aquatic resource in review area (acreage and linear feet, if applicable)	Type of aquatic resource (i.e., wetland vs. non-wetland waters)	Geographic authority to which the aquatic resource "may be" subject (i.e., Section 404 or Section 10/404)
Stream 1	40.112127	-82.761369	4781 feet	Non-wetland waters	Section 404
Stream 2	40.117132	-82.768715	1137 feet	Non-wetland waters	Section 404
Stream 3	40.112544	-82.762072	67 feet	Non-wetland waters	Section 404
Stream 4	40.111902	-82.761505	81 feet	Non-wetland waters	Section 404
Stream 5	40.107134	-82.738898	210 feet	Non-wetland waters	Section 404
Wetland H	40.114849	-82.770699	1.86 acres	Wetland	Section 404
Wetland I	40.111667	-82.762484	0.24 acres	Wetland	Section 404
Wetland K	40.112348	-82.761342	0.22 acres	Wetland	Section 404
Wetland L	40.112381	-82.762633	0.08 acres	Wetland	Section 404
Wetland M	40.112048	-82.76178	0.33 acres	Wetland	Section 404
Wetland S	40.107245	-82.742229	1.61 acres	Wetland	Section 404
Wetland T	40.107131	-82.741373	0.1 acres	Wetland	Section 404
Wetland U	40.107223	-82.740148	1.02 acres	Wetland	Section 404
Wetland V	40.106198	-82.73905	0.32 acres	Wetland	Section 404

[1] Districts may establish timeframes for requester to return signed PJD forms. If the requester does not respond within the established time frame, the district may presume concurrence and no additional follow up is necessary prior to finalizing an action.

1) The Corps of Engineers believes that there may be jurisdictional aquatic resources in the review area, and the requestor of this PJD is hereby advised of his or her option to request and obtain an approved JD (AJD) for that review area based on an informed decision after having discussed the various types of JDs and their characteristics and circumstances when they may be appropriate.
2) In any circumstance where a permit applicant obtains an individual permit, or a Nationwide General Permit (NWP) or other general permit verification requiring "pre-construction notification" (PCN), or requests verification for a non-reporting NWP or other general permit, and the permit applicant has not requested an AJD for the activity, the permit applicant is hereby made aware that: (1) the permit applicant has elected to seek a permit authorization based on a PJD, which does not make an official determination of jurisdictional aquatic resources; (2) the applicant has the option to request an AJD before accepting the terms and conditions of the permit authorization, and that basing a permit authorization on an AJD could possibly result in less compensatory mitigation being required or different special conditions; (3) the applicant has the right to request an individual permit rather than accepting the terms and conditions of the NWP or other general permit authorization; (4) the applicant can accept a permit authorization and thereby agree to comply with all the terms and conditions of that permit, including whatever mitigation requirements the Corps has determined to be necessary; (5) undertaking any activity in reliance upon the subject permit authorization without requesting an AJD constitutes the applicant's acceptance of the use of the PJD; (6) accepting a permit authorization (e.g., signing a proffered individual permit) or undertaking any activity in reliance on any form of Corps permit authorization based on a PJD constitutes agreement that all aquatic resources in the review area affected in any way by that activity will be treated as jurisdictional, and waives any challenge to such jurisdiction in any administrative or judicial compliance or enforcement action, or in any administrative appeal or in any Federal court; and (7) whether the applicant elects to use either an AJD or a PJD, the.JD will be processed as soon as practicable. Further, an AJD, a proffered individual permit (and all terms and conditions contained therein), or individual permit denial can be administratively appealed pursuant to 33 C.F.R. Part 331. If, during an administrative appeal, it becomes appropriate to make an official determination whether geographic jurisdiction exists over aquatic resources in the review area, or to provide an official delineation of jurisdictional aquatic resources in the review area, the Corps will provide an AJD to accomplish that result, as soon as is practicable. This PJD finds that there "may be" waters of the U.S. and/or that there "may be" navigable waters of the U.S. on the subject review area, and identifies all aquatic features in the review area that could be affected by the proposed activity, based on the following information:

SUPPORTING DATA. Data reviewed for PJD (check all that apply)

Checked items should be included in subject file. Appropriately reference sources below where indicated for all checked items:

_X_ Maps, plans, plots or plat submitted by or on behalf of the PJD requestor: The applicant, New Albany Company, has submitted a Investigation of Waters of the United States, North Beech Corridor, Plain and Jersey Townships, Franklin/Licking Counties, Ohio, completed by EMH&T and submitted to this office on 1 July 2022 with additional information received on 11 July 2022.
_X_ Map: Delineation Map Exhibit 6 of submitted report.
_X_ Data sheets prepared/submitted by or on behalf of the PJD requestor.
  _X_ Office concurs with data sheets/delineation report.

[1] Districts may establish timeframes for requester to return signed PJD forms. If the requester does not respond within the established time frame, the district may presume concurrence and no additional follow up is necessary prior to finalizing an action.

___ Office does not concur with data sheets/delineation report. Rationale: _____.
___ Data sheets prepared by the Corps: _____.
___ Corps navigable waters' study: _____.
___ U.S. Geological Survey Hydrologic Atlas: _____.
___ USGS NHD data.
_X_ USGS 8 and 12 digit HUC maps. 050600011503 – Headwaters Blacklick Creek.
_X_ U.S. Geological Survey map(s). Cite scale & quad name: 7.5' New Albany and Jersey, Ohio Quads Exhibit 2 of submitted report.
_X_ Natural Resources Conservation Service Soil Survey. Citation: Exhibit 3A of submitted report.
_X_ National wetlands inventory map(s). Cite name: Exhibit 5 of submitted report.
___ State/local wetland inventory map(s): _____.
_X_ FEMA/FIRM maps: Exhibit 4 of submitted report.
___ 100-year Floodplain Elevation is: _____. (National Geodetic Vertical Datum of 1929)
_X_ Photographs: _X_ Aerial (Name & Date): Exhibit 1 of submitted report.
___ or _X_ Other (Name & Date): Photos within submitted report.
___ Previous determination(s). File no. and date of response letter: _____.
___ Other information (please specify): _____.

IMPORTANT NOTE: The information recorded on this form has not necessarily been verified by the Corps and should not be relied upon for later jurisdictional determinations.

Signature and date of Regulatory staff member completing PJD

Signature and date of person requesting PJD (REQUIRED, unless obtaining the signature is impracticable)[1]
DIR. of REAL ESTATE

[1] Districts may establish timeframes for requester to return signed PJD forms. If the requester does not respond within the established time frame, the district may presume concurrence and no additional follow up is necessary prior to finalizing an action.

APPROVED JURISDICTIONAL DETERMINATION FORM
U.S. Army Corps of Engineers

This form should be completed by following the instructions provided in Section IV of the JD Form Instructional Guidebook.

SECTION I: BACKGROUND INFORMATION

A. REPORT COMPLETION DATE FOR APPROVED JURISDICTIONAL DETERMINATION (JD): July 13, 2022

B. DISTRICT OFFICE, FILE NAME, AND NUMBER: Huntington District, North Beech Corridor, LRH-2022-557-SCR

C. PROJECT LOCATION AND BACKGROUND INFORMATION:
State: Ohio County/parish/borough: Franklin and Licking City: Plain and Jersey Townships
Center coordinates of site (lat/long in degree decimal format): Lat. 40.11512° N, Long. -82.75260° W.
Universal Transverse Mercator:
Name of nearest waterbody: Blacklick Creek
Name of nearest Traditional Navigable Water (TNW) into which the aquatic resource flows: Scioto River
Name of watershed or Hydrologic Unit Code (HUC): 050600011503 - Headwaters Blacklick Creek
☒ Check if map/diagram of review area and/or potential jurisdictional areas is/are available upon request.
☐ Check if other sites (e.g., offsite mitigation sites, disposal sites, etc…) are associated with this action and are recorded on a different JD form.

D. REVIEW PERFORMED FOR SITE EVALUATION (CHECK ALL THAT APPLY):
☒ Office (Desk) Determination. Date: 13 July 2022
☐ Field Determination. Date(s):

SECTION II: SUMMARY OF FINDINGS

A. RHA SECTION 10 DETERMINATION OF JURISDICTION.

There **Are no** *"navigable waters of the U.S."* within Rivers and Harbors Act (RHA) jurisdiction (as defined by 33 CFR part 329) in the review area. [*Required*]
☐ Waters subject to the ebb and flow of the tide.
☐ Waters are presently used, or have been used in the past, or may be susceptible for use to transport interstate or foreign commerce.
Explain: .

B. CWA SECTION 404 DETERMINATION OF JURISDICTION.

There **Are no** *"waters of the U.S."* within Clean Water Act (CWA) jurisdiction (as defined by 33 CFR part 328) in the review area. [*Required*]

1. **Waters of the U.S.**
   a. **Indicate presence of waters of U.S. in review area (check all that apply):** [1]
      ☐ TNWs, including territorial seas
      ☐ Wetlands adjacent to TNWs
      ☐ Relatively permanent waters[2] (RPWs) that flow directly or indirectly into TNWs
      ☐ Non-RPWs that flow directly or indirectly into TNWs
      ☐ Wetlands directly abutting RPWs that flow directly or indirectly into TNWs
      ☐ Wetlands adjacent to but not directly abutting RPWs that flow directly or indirectly into TNWs
      ☐ Wetlands adjacent to non-RPWs that flow directly or indirectly into TNWs
      ☐ Impoundments of jurisdictional waters
      ☐ Isolated (interstate or intrastate) waters, including isolated wetlands

   b. **Identify (estimate) size of waters of the U.S. in the review area:**
      Non-wetland waters: linear feet: width (ft) and/or acres.
      Wetlands: acres.

   c. **Limits (boundaries) of jurisdiction** based on: **Pick List**
      Elevation of established OHWM (if known): .

2. **Non-regulated waters/wetlands (check if applicable):**[3]
   ☒ Potentially jurisdictional waters and/or wetlands were assessed within the review area and determined to be not jurisdictional.
   Explain: **The approximate 262-acre approved JD review area contains one (1) Grass Swale (1,883 linear feet), five (5) Ponds (totaling 0.66 acre), and 14 Wetlands (totaling 29.37 acres) that have been evaluated for possible jurisdiction. Grass swale 1 does not carry a relatively permanent flow of water, lacks consistent ordinary high-water marks, sediment sorting, defined bed and banks, or wetland characteristics. Ponds 1-5 have been constructed entirely in uplands, are not impoundments of a jurisdictional stream, and have no connection to a water of the United States.**

[1] Boxes checked below shall be supported by completing the appropriate sections in Section III below.
[2] For purposes of this form, an RPW is defined as a tributary that is not a TNW and that typically flows year-round or has continuous flow at least "seasonally" (e.g., typically 3 months).
[3] Supporting documentation is presented in Section III.F.

Wetlands A-G, J, N-R, and Pond Fringe are surrounded by uplands and do not exhibit a distinct surface water connection to a water of the United States. Wetlands A-G, J, N-R, and Pond Fringe would not support interstate or foreign commerce interests, nor do they contain any rare, threatened, or endangered species. The closest stream is approximately 0.2 mile south of Wetland R, approximately 0.1 mile west of Wetlands B, C, D, and J, and approximately 0.15 mile south of Wetlands A, E, F, G, N, O, P, Q, and Pond Fringe. This office has determined that Grass Swale, Ponds 1-5, and Wetlands A-G, J, N-R, and Pond Fringe are non-jurisdictional features and not subject to regulation under Section 404 of the Clean Water Act (CWA).

SECTION III: CWA ANALYSIS

A. TNWs AND WETLANDS ADJACENT TO TNWs

The agencies will assert jurisdiction over TNWs and wetlands adjacent to TNWs. If the aquatic resource is a TNW, complete Section III.A.1 and Section III.D.1. only; if the aquatic resource is a wetland adjacent to a TNW, complete Sections III.A.1 and 2 and Section III.D.1.; otherwise, see Section III.B below.

1. **TNW**
   Identify TNW: .

   Summarize rationale supporting determination: .

2. **Wetland adjacent to TNW**
   Summarize rationale supporting conclusion that wetland is "adjacent": .

B. CHARACTERISTICS OF TRIBUTARY (THAT IS NOT A TNW) AND ITS ADJACENT WETLANDS (IF ANY):

This section summarizes information regarding characteristics of the tributary and its adjacent wetlands, if any, and it helps determine whether or not the standards for jurisdiction established under *Rapanos* have been met.

The agencies will assert jurisdiction over non-navigable tributaries of TNWs where the tributaries are "relatively permanent waters" (RPWs), i.e. tributaries that typically flow year-round or have continuous flow at least seasonally (e.g., typically 3 months). A wetland that directly abuts an RPW is also jurisdictional. If the aquatic resource is not a TNW, but has year-round (perennial) flow, skip to Section III.D.2. If the aquatic resource is a wetland directly abutting a tributary with perennial flow, skip to Section III.D.4.

A wetland that is adjacent to but that does not directly abut an RPW requires a significant nexus evaluation. Corps districts and EPA regions will include in the record any available information that documents the existence of a significant nexus between a relatively permanent tributary that is not perennial (and its adjacent wetlands if any) and a traditional navigable water, even though a significant nexus finding is not required as a matter of law.

If the waterbody[4] is not an RPW, or a wetland directly abutting an RPW, a JD will require additional data to determine if the waterbody has a significant nexus with a TNW. If the tributary has adjacent wetlands, the significant nexus evaluation must consider the tributary in combination with all of its adjacent wetlands. This significant nexus evaluation that combines, for analytical purposes, the tributary and all of its adjacent wetlands is used whether the review area identified in the JD request is the tributary, or its adjacent wetlands, or both. If the JD covers a tributary with adjacent wetlands, complete Section III.B.1 for the tributary, Section III.B.2 for any onsite wetlands, and Section III.B.3 for all wetlands adjacent to that tributary, both onsite and offsite. The determination whether a significant nexus exists is determined in Section III.C below.

1. **Characteristics of non-TNWs that flow directly or indirectly into TNW**

   (i) General Area Conditions:
   Watershed size: **Pick List**
   Drainage area: **Pick List**
   Average annual rainfall: inches
   Average annual snowfall: inches

   (ii) Physical Characteristics:
   (a) Relationship with TNW:
   ☐ Tributary flows directly into TNW.
   ☐ Tributary flows through **Pick List** tributaries before entering TNW.

   Project waters are **Pick List** river miles from TNW.
   Project waters are **Pick List** river miles from RPW.
   Project waters are **Pick List** aerial (straight) miles from TNW.
   Project waters are **Pick List** aerial (straight) miles from RPW.
   Project waters cross or serve as state boundaries. Explain: .

   Identify flow route to TNW[5]: .
   Tributary stream order, if known: .

[4] Note that the Instructional Guidebook contains additional information regarding swales, ditches, washes, and erosional features generally and in the arid West.
[5] Flow route can be described by identifying, e.g., tributary a, which flows through the review area, to flow into tributary b, which then flows into TNW.

(b) General Tributary Characteristics (check all that apply):

Tributary is: ☐ Natural
☐ Artificial (man-made). Explain: .
☐ Manipulated (man-altered). Explain: .

Tributary properties with respect to top of bank (estimate):
Average width: feet
Average depth: feet
Average side slopes: **Pick List.**

Primary tributary substrate composition (check all that apply):

☐ Silts	☐ Sands	☐ Concrete
☐ Cobbles	☐ Gravel	☐ Muck
☐ Bedrock	☐ Vegetation. Type/% cover:	
☐ Other. Explain: .		

Tributary condition/stability [e.g., highly eroding, sloughing banks]. Explain: .
Presence of run/riffle/pool complexes. Explain: .
Tributary geometry: **Pick List**
Tributary gradient (approximate average slope): %

(c) Flow:
Tributary provides for: **Pick List**
Estimate average number of flow events in review area/year: **Pick List**
Describe flow regime: .
Other information on duration and volume: .

Surface flow is: **Pick List.** Characteristics: .

Subsurface flow: **Pick List**. Explain findings: .
☐ Dye (or other) test performed: .

Tributary has (check all that apply):
☐ Bed and banks
☐ OHWM[6] (check all indicators that apply):

☐ clear, natural line impressed on the bank	☐ the presence of litter and debris
☐ changes in the character of soil	☐ destruction of terrestrial vegetation
☐ shelving	☐ the presence of wrack line
☐ vegetation matted down, bent, or absent	☐ sediment sorting
☐ leaf litter disturbed or washed away	☐ scour
☐ sediment deposition	☐ multiple observed or predicted flow events
☐ water staining	☐ abrupt change in plant community
☐ other (list):	

☐ Discontinuous OHWM.[7] Explain: .

If factors other than the OHWM were used to determine lateral extent of CWA jurisdiction (check all that apply):

☐ High Tide Line indicated by:	☐ Mean High Water Mark indicated by:
☐ oil or scum line along shore objects	☐ survey to available datum;
☐ fine shell or debris deposits (foreshore)	☐ physical markings;
☐ physical markings/characteristics	☐ vegetation lines/changes in vegetation types.
☐ tidal gauges	
☐ other (list):	

(iii) Chemical Characteristics:
Characterize tributary (e.g., water color is clear, discolored, oily film; water quality; general watershed characteristics, etc.).
Explain: .
Identify specific pollutants, if known: .

---

[6]A natural or man-made discontinuity in the OHWM does not necessarily sever jurisdiction (e.g., where the stream temporarily flows underground, or where the OHWM has been removed by development or agricultural practices). Where there is a break in the OHWM that is unrelated to the waterbody's flow regime (e.g., flow over a rock outcrop or through a culvert), the agencies will look for indicators of flow above and below the break.
[7]Ibid.

(iv) Biological Characteristics. Channel supports (check all that apply):

- ☐ Riparian corridor. Characteristics (type, average width): .
- ☐ Wetland fringe. Characteristics: .
- ☐ Habitat for:
  - ☐ Federally Listed species. Explain findings: .
  - ☐ Fish/spawn areas. Explain findings: .
  - ☐ Other environmentally-sensitive species. Explain findings: .
  - ☐ Aquatic/wildlife diversity. Explain findings: .

2. Characteristics of wetlands adjacent to non-TNW that flow directly or indirectly into TNW

(i) Physical Characteristics:

(a) General Wetland Characteristics:

Properties:

Wetland size: acres

Wetland type. Explain: .

Wetland quality. Explain: .

Project wetlands cross or serve as state boundaries. Explain: .

(b) General Flow Relationship with Non-TNW:

Flow is: **Pick List**. Explain: .

Surface flow is: **Pick List**

Characteristics: .

Subsurface flow: **Pick List**. Explain findings: .

- ☐ Dye (or other) test performed: .

(c) Wetland Adjacency Determination with Non-TNW:

- ☐ Directly abutting
- ☐ Not directly abutting
  - ☐ Discrete wetland hydrologic connection. Explain: .
  - ☐ Ecological connection. Explain: .
  - ☐ Separated by berm/barrier. Explain: .

(d) Proximity (Relationship) to TNW

Project wetlands are **Pick List** river miles from TNW.

Project waters are **Pick List** aerial (straight) miles from TNW.

Flow is from: **Pick List.**

Estimate approximate location of wetland as within the **Pick List** floodplain.

(ii) Chemical Characteristics:

Characterize wetland system (e.g., water color is clear, brown, oil film on surface; water quality; general watershed characteristics; etc.). Explain: .

Identify specific pollutants, if known: .

(iii) Biological Characteristics. Wetland supports (check all that apply):

- ☐ Riparian buffer. Characteristics (type, average width): .
- ☐ Vegetation type/percent cover. Explain: .
- ☐ Habitat for:
  - ☐ Federally Listed species. Explain findings: .
  - ☐ Fish/spawn areas. Explain findings: .
  - ☐ Other environmentally-sensitive species. Explain findings: .
  - ☐ Aquatic/wildlife diversity. Explain findings: .

3. Characteristics of all wetlands adjacent to the tributary (if any)

All wetland(s) being considered in the cumulative analysis: **Pick List**

Approximately ( ) acres in total are being considered in the cumulative analysis.

For each wetland, specify the following:

Directly abuts? (Y/N)	Size (in acres)	Directly abuts? (Y/N)	Size (in acres)

Summarize overall biological, chemical and physical functions being performed: .

C. SIGNIFICANT NEXUS DETERMINATION

A significant nexus analysis will assess the flow characteristics and functions of the tributary itself and the functions performed by any wetlands adjacent to the tributary to determine if they significantly affect the chemical, physical, and biological integrity of a TNW. For each of the following situations, a significant nexus exists if the tributary, in combination with all of its adjacent wetlands, has more than a speculative or insubstantial effect on the chemical, physical and/or biological integrity of a TNW. Considerations when evaluating significant nexus include, but are not limited to the volume, duration, and frequency of the flow of water in the tributary and its proximity to a TNW, and the functions performed by the tributary and all its adjacent wetlands. It is not appropriate to determine significant nexus based solely on any specific threshold of distance (e.g. between a tributary and its adjacent wetland or between a tributary and the TNW). Similarly, the fact an adjacent wetland lies within or outside of a floodplain is not solely determinative of significant nexus.

Draw connections between the features documented and the effects on the TNW, as identified in the *Rapanos* Guidance and discussed in the Instructional Guidebook. Factors to consider include, for example:

- Does the tributary, in combination with its adjacent wetlands (if any), have the capacity to carry pollutants or flood waters to TNWs, or to reduce the amount of pollutants or flood waters reaching a TNW?
- Does the tributary, in combination with its adjacent wetlands (if any), provide habitat and lifecycle support functions for fish and other species, such as feeding, nesting, spawning, or rearing young for species that are present in the TNW?
- Does the tributary, in combination with its adjacent wetlands (if any), have the capacity to transfer nutrients and organic carbon that support downstream foodwebs?
- Does the tributary, in combination with its adjacent wetlands (if any), have other relationships to the physical, chemical, or biological integrity of the TNW?

Note: the above list of considerations is not inclusive and other functions observed or known to occur should be documented below:

1. **Significant nexus findings for non-RPW that has no adjacent wetlands and flows directly or indirectly into TNWs.** Explain findings of presence or absence of significant nexus below, based on the tributary itself, then go to Section III.D: .

2. **Significant nexus findings for non-RPW and its adjacent wetlands, where the non-RPW flows directly or indirectly into TNWs.** Explain findings of presence or absence of significant nexus below, based on the tributary in combination with all of its adjacent wetlands, then go to Section III.D: .

3. **Significant nexus findings for wetlands adjacent to an RPW but that do not directly abut the RPW.** Explain findings of presence or absence of significant nexus below, based on the tributary in combination with all of its adjacent wetlands, then go to Section III.D: .

D. DETERMINATIONS OF JURISDICTIONAL FINDINGS. THE SUBJECT WATERS/WETLANDS ARE (CHECK ALL THAT APPLY):

1. **TNWs and Adjacent Wetlands.** Check all that apply and provide size estimates in review area:
   - ☐ TNWs: linear feet width (ft), Or, acres.
   - ☐ Wetlands adjacent to TNWs: acres.

2. **RPWs that flow directly or indirectly into TNWs.**
   - ☐ Tributaries of TNWs where tributaries typically flow year-round are jurisdictional. Provide data and rationale indicating that tributary is perennial: .
   - ☐ Tributaries of TNW where tributaries have continuous flow "seasonally" (e.g., typically three months each year) are jurisdictional. Data supporting this conclusion is provided at Section III.B. Provide rationale indicating that tributary flows seasonally: .

Provide estimates for jurisdictional waters in the review area (check all that apply):
☐ Tributary waters: linear feet width (ft).
☐ Other non-wetland waters: acres.
Identify type(s) of waters: .

3. **Non-RPWs[8] that flow directly or indirectly into TNWs.**
☐ Waterbody that is not a TNW or an RPW, but flows directly or indirectly into a TNW, and it has a significant nexus with a TNW is jurisdictional. Data supporting this conclusion is provided at Section III.C.

Provide estimates for jurisdictional waters within the review area (check all that apply):
☐ Tributary waters: linear feet width (ft).
☐ Other non-wetland waters: acres.
Identify type(s) of waters: .

4. **Wetlands directly abutting an RPW that flow directly or indirectly into TNWs.**
☐ Wetlands directly abut RPW and thus are jurisdictional as adjacent wetlands.
☐ Wetlands directly abutting an RPW where tributaries typically flow year-round. Provide data and rationale indicating that tributary is perennial in Section III.D.2, above. Provide rationale indicating that wetland is directly abutting an RPW: .

☐ Wetlands directly abutting an RPW where tributaries typically flow "seasonally." Provide data indicating that tributary is seasonal in Section III.B and rationale in Section III.D.2, above. Provide rationale indicating that wetland is directly abutting an RPW: .

Provide acreage estimates for jurisdictional wetlands in the review area: acres.

5. **Wetlands adjacent to but not directly abutting an RPW that flow directly or indirectly into TNWs.**
☐ Wetlands that do not directly abut an RPW, but when considered in combination with the tributary to which they are adjacent and with similarly situated adjacent wetlands, have a significant nexus with a TNW are jurisidictional. Data supporting this conclusion is provided at Section III.C.

Provide acreage estimates for jurisdictional wetlands in the review area: acres.

6. **Wetlands adjacent to non-RPWs that flow directly or indirectly into TNWs.**
☐ Wetlands adjacent to such waters, and have when considered in combination with the tributary to which they are adjacent and with similarly situated adjacent wetlands, have a significant nexus with a TNW are jurisdictional. Data supporting this conclusion is provided at Section III.C.

Provide estimates for jurisdictional wetlands in the review area: acres.

7. **Impoundments of jurisdictional waters.[9]**
As a general rule, the impoundment of a jurisdictional tributary remains jurisdictional.
☐ Demonstrate that impoundment was created from "waters of the U.S.," or
☐ Demonstrate that water meets the criteria for one of the categories presented above (1-6), or
☐ Demonstrate that water is isolated with a nexus to commerce (see E below).

E. ISOLATED [INTERSTATE OR INTRA-STATE] WATERS, INCLUDING ISOLATED WETLANDS, THE USE, DEGRADATION OR DESTRUCTION OF WHICH COULD AFFECT INTERSTATE COMMERCE, INCLUDING ANY SUCH WATERS (CHECK ALL THAT APPLY):[10]
☐ which are or could be used by interstate or foreign travelers for recreational or other purposes.
☐ from which fish or shellfish are or could be taken and sold in interstate or foreign commerce.
☐ which are or could be used for industrial purposes by industries in interstate commerce.
☐ Interstate isolated waters. Explain: .
☐ Other factors. Explain: .

Identify water body and summarize rationale supporting determination: .

---

[8]See Footnote # 3.
[9] To complete the analysis refer to the key in Section III.D.6 of the Instructional Guidebook.
[10] **Prior to asserting or declining CWA jurisdiction based solely on this category, Corps Districts will elevate the action to Corps and EPA HQ for review consistent with the process described in the Corps/EPA *Memorandum Regarding CWA Act Jurisdiction Following Rapanos.***

Provide estimates for jurisdictional waters in the review area (check all that apply):
☐ Tributary waters: linear feet width (ft).
☐ Other non-wetland waters: acres.
Identify type(s) of waters: .
☐ Wetlands: acres.

F. NON-JURISDICTIONAL WATERS, INCLUDING WETLANDS (CHECK ALL THAT APPLY):
☐ If potential wetlands were assessed within the review area, these areas did not meet the criteria in the 1987 Corps of Engineers Wetland Delineation Manual and/or appropriate Regional Supplements.
☒ Review area included isolated waters with no substantial nexus to interstate (or foreign) commerce.
☒ Prior to the Jan 2001 Supreme Court decision in "*SWANCC*," the review area would have been regulated based solely on the "Migratory Bird Rule" (MBR).
☐ Waters do not meet the "Significant Nexus" standard, where such a finding is required for jurisdiction. Explain: .
☐ Other: (explain, if not covered above): .

Provide acreage estimates for non-jurisdictional waters in the review area, where the sole potential basis of jurisdiction is the MBR factors (i.e., presence of migratory birds, presence of endangered species, use of water for irrigated agriculture), using best professional judgment (check all that apply):
☐ Non-wetland waters (i.e., rivers, streams): linear feet width (ft).
☒ Lakes/ponds: Ponds 1-5, 0.66 acres.
☐ Other non-wetland waters: linear feet acres. List type of aquatic
☒ resource: . Wetlands: Wetlands A-G, J, N-R, and Pond Fringe, 29.37 acres.

Provide acreage estimates for non-jurisdictional waters in the review area that do not meet the "Significant Nexus" standard, where such a finding is required for jurisdiction (check all that apply):
☐ Non-wetland waters (i.e., rivers, streams): linear feet, width (ft).
☐ Lakes/ponds: acres.
☒ Other non-wetland waters: 1,883 linear feet acres. List type of aquatic resource: Grass Swale 1.
☐ Wetlands: acres.

SECTION IV: DATA SOURCES.

A. SUPPORTING DATA. Data reviewed for JD (check all that apply - checked items shall be included in case file and, where checked and requested, appropriately reference sources below):
☒ Maps, plans, plots or plat submitted by or on behalf of the applicant/consultant: Investigation of Waters of the United States, North Beech Corridor, Plain and Jersey Townships, Franklin and Licking Counties, Ohio, completed by EMH&T and submitted to this office on 1 July 2022 with additional information received on 11 July 2022.
☒ Data sheets prepared/submitted by or on behalf of the applicant/consultant.
☒ Office concurs with data sheets/delineation report.
☐ Office does not concur with data sheets/delineation report.
☐ Data sheets prepared by the Corps: .
☐ Corps navigable waters' study: .
☐ U.S. Geological Survey Hydrologic Atlas: .
☐ USGS NHD data.
☒ USGS 8 and 12 digit HUC maps.
☒ U.S. Geological Survey map(s). Cite scale & quad name: 7.5' New Albany and Jersey, Ohio Quads Exhibit 2 of submitted report.
☒ USDA Natural Resources Conservation Service Soil Survey. Citation: Exhibit 3A of submitted report.
☒ National wetlands inventory map(s). Cite name: Exhibit 5 of submitted report.
☐ State/Local wetland inventory map(s): .
☒ FEMA/FIRM maps: Exhibit 4 of submitted report.
☐ 100-year Floodplain Elevation is: (National Geodectic Vertical Datum of 1929)
☒ Photographs: ☒ Aerial (Name & Date): Exhibit 1 and 6 of submitted report.
or ☒ Other (Name & Date): Photos within submitted report.
☐ Previous determination(s). File no. and date of response letter: .
☐ Applicable/supporting case law: .
☐ Applicable/supporting scientific literature: .
☐ Other information (please specify): .

B. ADDITIONAL COMMENTS TO SUPPORT JD: .

APPENDIX B

DESKTOP ASSESSMENT FOR WINTER BAT HABITAT

American Electric Power
8600 Smith's Mill Road
New Albany, OH 43054
ajtoohey@ aep.com

June 7, 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; NHDRequest@dnr.state.oh.us

Reference: Request for Technical Assistance, Bermuda Station, and Bermuda ADS 345kV Tie In Projects, 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 Bermuda Station and Bermuda ADS 345kV Tie In (Projects) in Licking County, Ohio (OH). The Bermuda Station component consists of construction of a new 345kV substation near the intersection of Beech and Miller Road and the Bermuda ADS 345kV Tie In component consists of the installation of four, 0.03-mile, greenfield, 345kV transmission lines (Bermuda-ADS Tie Line No. 1, No.2, No.3, and No.4) within a 1,000-foot-wide right-of-way between the proposed Bermuda Station and the customer station in Licking County, OH. The proposed survey area is approximately 102 acres in Licking County, Ohio. The Project study area is located on USGS Jersey and New Albany, Ohio U.S. Geologic Survey 7.5' topographical quadrangles 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 are not anticipated to be 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.

Sincerely,

Brian Miller
Environmental Project Manager
Phone: (412-667-9172)
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

No mining activities, karst features, and/or sink holes are within the extent of the map frame. The closest feature is 0.97 miles northwest of the project area.

Sunbury

Johnstown

MONROE TOWNSHIP

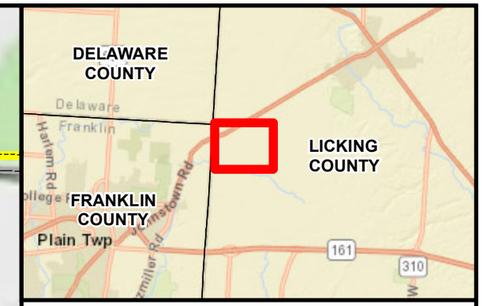
JERSEY TOWNSHIP

LICKING COUNTY

Bermuda Station and
Bermuda ADS 345kV
Tie In Projects
40.118367
-82.747460

New Albany

Jersey



Legend

- Project Area
- Quarter Mile Review Area
- Ohio USGS 7.5' Topographic Quadrangle
- Township Boundary
- County Boundary

N

0 600 1,200

Feet

AEP

Bermuda Station and Bermuda ADS 345kV Tie In Projects

FIGURE 1
TOPOGRAPHIC PROJECT OVERVIEW

DATE: 6/7/2023	1 INCH = 600 FEET
CREATED BY: CJT	CHECKED BY: AH
JOB NO.: 60708694	AECOM

Date Saved: 6/7/2023
Document Path: X:\DCS\GIS\ArcMap_GeoDB_Projects\ENV\60708694_AEP_Bermuda_Station\2_MXDs\0_TE\Bermuda_Station_ODNRFigure1_Topo_Overview.mxd

No mining activities, karst features, and/or sink holes are within the extent of the map frame. The closest feature is 0.97 miles northwest of the project area.

Sunbury

Johnstown

MONROE TOWNSHIP

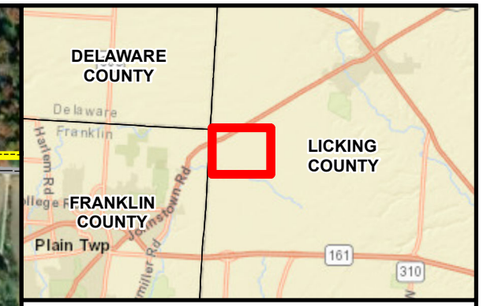
JERSEY TOWNSHIP

LICKING COUNTY

Bermuda Station and
Bermuda ADS 345kV
Tie In Projects
40.118367
-82.747460

New Albany

Jersey



Legend

- Project Area
- Quarter Mile Review Area
- Ohio USGS 7.5' Topographic Quadrangle
- Township Boundary
- County Boundary

N

0 600 1,200

Feet

AEP

Bermuda Station and Bermuda ADS 345kV Tie In Projects

FIGURE 2
AERIAL PROJECT OVERVIEW

DATE: 6/7/2023	1 INCH = 600 FEET
CREATED BY: CJT	CHECKED BY: AH
JOB NO.: 60708694	AECOM

Date Saved: 6/7/2023
Document Path: X:\DCS\GIS\ArcMap_GeoDB_Projects\ENV\60708694_AEP_Bermuda_Station\2_MXDs\0_TE\Bermuda_Station_ODNRFigure2_Aerial_Overview.mxd

APPENDIX C

UNITED STATES ARMY CORPS OF ENGINEERS UPLAND DETERMINATION DATA FORM AND PHOTOGRAPHS

WETLAND DETERMINATION DATA FORM - Midwest Region

Project/Site: Conesville Corridor | City/County: Licking | Sampling Date: 17-May-23

Applicant/Owner: AEP | State: OH | Sampling Point: **UPL-MRK-001**

Investigator(s): MRK, LPZ | Section, Township, Range: S | T 2N | R 15W

Landform (hillslope, terrace, etc.): Flat | Local relief (concave, convex, none): convex

Slope: 1.0% / 0.6 ° | Lat.: 40.120385 | Long.: -82.745269 | Datum: NAD83

Soil Map Unit Name: BeB: Bennington silt loam, 2 to 6 percent slopes | 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 ○ No ◉	**Is the Sampled Area within a Wetland?** Yes ○ No ◉
Hydric Soil Present?	Yes ○ No ◉	
Wetland Hydrology Present?	Yes ○ No ◉	

Remarks:
Upland data point collected to characterize the site. Upland data was collected within an active agricultural field.

VEGETATION - Use scientific names of plants.

	Absolute % Cover	Dominant Species?	Rel.Strat. Cover	Indicator Status
Tree Stratum (Plot size: 30' radius)				
1.	0	☐	0.0%	
2.	0	☐	0.0%	
3.	0	☐	0.0%	
4.	0	☐	0.0%	
5.	0	☐	0.0%	0
	0	= Total Cover		
Sapling/Shrub Stratum (Plot size: 15' radius)				
1.	0	☐	0.0%	
2.	0	☐	0.0%	
3.	0	☐	0.0%	
4.	0	☐	0.0%	
5.	0	☐	0.0%	
	0	= Total Cover		
Herb Stratum (Plot size: 5' radius)				
1. Arenaria serpyllifolia	50	☑	55.6%	FAC
2. Lamium purpureum	25	☑	27.8%	UPL
3. Packera glabella	15	☐	16.7%	FACW
4.	0	☐	0.0%	
5.	0	☐	0.0%	
6.	0	☐	0.0%	
7.	0	☐	0.0%	
8.	0	☐	0.0%	
9.	0	☐	0.0%	
10.	0	☐	0.0%	
	90	= Total Cover		
Woody Vine Stratum (Plot size: 30' radius)				
1.	0	☐	0.0%	
2.	0	☐	0.0%	
	0	= Total Cover		

Dominance Test worksheet:

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

Total Number of Dominant Species Across All Strata: 2 (B)

Percent of dominant Species That Are OBL, FACW, or FAC: 50.0% (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	15	x 2 =	30
FAC species	50	x 3 =	150
FACU species	0	x 4 =	0
UPL species	25	x 5 =	125
Column Totals:	90 (A)		305 (B)

Prevalence Index = B/A = 3.389

Hydrophytic Vegetation Indicators:

- ☐ **1 - Rapid Test for Hydrophytic Vegetation**
- ☐ **2 - Dominance Test is > 50%**
- ☐ **3 - Prevalence Index is ≤3.0** [1]
- ☐ **4 - Morphological Adaptations** [1] **(Provide supporting data in Remarks or on a separate sheet)**
- ☐ **Problematic Hydrophytic Vegetation** [1] **(Explain)**

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

Hydrophytic Vegetation Present? Yes ○ No ◉

Remarks: (Include photo numbers here or on a separate sheet.)
Field plowed and planted regularly for agriculture.

*Indicator suffix = National status or professional decision assigned because Regional status not defined by FWS.

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 Color (moist)		%	Redox Features Color (moist)		%	Type[1]	Loc[2]	Texture	Remarks
0-16	10YR	3/3	90	10YR	3/6	10	C	M	Silt Loam	

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

Hydric Soil Indicators:

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

Indicators for Problematic Hydric Soils [3]:

- ☐ Coast Prairie Redox (A16)
- ☐ Dark Surface (S7)
- ☐ Iron Manganese Masses (F12)
- ☐ Very Shallow Dark Surface (TF12)
- ☐ Other (Explain in Remarks)

[3] 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:

Field is plowed regularly for agriculture.

HYDROLOGY

Wetland Hydrology Indicators:

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

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

Secondary Indicators (minimum of two required)

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

Field Observations:

Surface Water Present? Yes ○ No ◉ Depth (inches): _____

Water Table Present? Yes ○ No ◉ Depth (inches): _____

Saturation Present? (includes capillary fringe) Yes ○ No ◉ Depth (inches): _____

Wetland Hydrology Present? Yes ○ No ◉

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

NA

Remarks:

No source of hydrology was observed.

AECOM Imagine it. Delivered.

PHOTOGRAPHIC RECORD
Upland Photograph Record

Client Name:	Site Location:	Project No.
AEP	Bermuda Station Project	60708694

UPL-MRK-001

Date:

May 17, 2022

Description:

Upland Data Point

Facing North

UPL-MRK-001

Date:

May 17, 2023

Description:

Upland Data Point

Facing East

AECOM Imagine it. Delivered.

PHOTOGRAPHIC RECORD
Upland Photograph Record

Client Name:	Site Location:	Project No.
AEP	Bermuda Station Project	60708694

UPL-MRK-001

Date:

May 17, 2023

Description:

Upland Data Point

Facing South

UPL-MRK-001

Date:

May 17, 2023

Description:

Upland Data Point

Facing West

AECOM Imagine it. Delivered.

PHOTOGRAPHIC RECORD
Upland Photograph Record

Client Name:	Site Location:	Project No.
AEP	Bermuda Station Project	60708694

UPL-MRK-001

Date:

May 17, 2023

Description:

Upland Data Point

Facing Soil

APPENDIX D

HABITAT PHOTOGRAPHIC RECORD

AECOM Imagine it. Delivered.

PHOTOGRAPHIC RECORD
Habitat Photograph Record

Client Name:	Site Location:	Project No.
AEP	Bermuda Station Project	60708694

PH-01
Date: June 6, 2023
Description: Agriculture Row-Crop Facing West

PH-02
Date: June 6, 2023
Description: Agriculture Row-Crop/Forest Edge Facing East

AECOM Imagine it. Delivered.

PHOTOGRAPHIC RECORD
Habitat Photograph Record

Client Name:	Site Location:	Project No.
AEP	Bermuda Station Project	60708694

PH-03 **Date:** June 6, 2023 **Description:** Agriculture Row-Crop Facing South	

PH-04 **Date:** June 6, 2023 **Description:** Agriculture Row-Crop Facing South	

AECOM Imagine it. Delivered.

PHOTOGRAPHIC RECORD
Habitat Photograph Record

Client Name:	Site Location:	Project No.
AEP	Bermuda Station Project	60708694

PH-05

Date:

June 6, 2023

Description:

Agriculture Row-Crop/Forest Edge

Facing South

APPENDIX E

AGENCY CORRESPONDENCE

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

July 6, 2023

Anna Findish
AECOM
707 Grant Street
Pittsburgh, PA 15219

Re: 23-0663; AEP Bermuda Station and Bermuda ADS 345kV Tie

Project: The proposed project involves the construction of a new 345kV substation, and the installation of four 0.03-mile greenfield 345kV transmission lines.

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).

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 ≥ 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 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

June 16, 2023

Project Code: 2023-0088051

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 ≥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 ≥3 inches dbh, we recommend avoiding tree removal wherever possible. If any caves or abandoned mines may be disturbed, further coordination with this office is requested to determine if fall or spring portal surveys are warranted. If no caves or abandoned mines are present and trees ≥3 inches dbh cannot be avoided, we recommend removal of any trees ≥3 inches dbh only occur between October 1 and March 31. Seasonal clearing is recommended to avoid adverse effects to Indiana bats and northern long-eared bats.

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). 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.

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

Sincerely,

Patrice Ashfield
Field Office Supervisor

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