

# Letter of Notification for the Cyprus – Parsons 138 kV Transmission Line Project



An **AEP** Company

BOUNDLESS ENERGY™

PUCO Case No. 22-0254-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.

April 7, 2022

# LETTER OF NOTIFICATION FOR CYPRUS – PARSONS 138 KV TRANSMISSION LINE PROJECT

## LETTER OF NOTIFICATION

AEP Ohio Transmission Company, Inc.

Cyprus – Parsons 138 kV Transmission Line 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 is proposing the Cyprus – Parsons 138 kV Transmission Line Project (the Project), in Hamilton Township, Franklin County, Ohio. The Project involves constructing approximately 0.3 mile of new, double circuit 138 kV transmission line from the proposed Cyprus 138 kV Station (Case No. 21-0786-EL-BLN) to the existing Parsons Station. The Project is located on property owned by the Company and the customer. The location of the Project is shown on Figures 1 and 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*:

*(1) New construction, extension, or relocation of single or multiple circuit electric power transmission line(s), or upgrading existing transmission or distribution line(s) for operation at a higher transmission voltage, as follows:*

*(b) Line(s) greater than 0.2 miles in length but not greater than two miles in length*

The Project has been assigned Case No. 22-0254-EL-BLN.

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### 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 transmission customer is requesting 138 kV service to a site south of AEP's existing Parsons distribution Station in Lockbourne, Ohio. The initial load is expected to be 100 MW with a projected peak demand of 675 MW as communicated by the customer. The Company will tie into the existing White Road - Canal Street 138 kV circuit (Beatty-Canal Street 138 kV line, Case No. 22-0090-EL-BNR) and construct approximately 2.3 miles of new, double-circuit 138 kV line (approved in Case No. 21-1056-EL-BLN), to interconnect to the Company's proposed Cyprus Station (approved in Case No. 21-0786-EL-BLN). Service to the initial customer-owned station on the site will be provided by constructing two new 0.3-mile double circuit 138 kV lines south from the Company's proposed Cyprus Station (approved in Case No. 21-1057-EL-BNR). To meet the customer's redundancy requirements to the site, one circuit from each double-circuit line will provide service to the customer-owned station on the site. The second double-circuit line will provide service to the customer's second station just to the south of the first site, which will begin construction in the near future. The customer requested an in service date (ISD) of July 22, 2022 for the first station.

Failure to move forward with the proposed Project will result in Ohio Power Company's inability to serve the customer's load expectations, thereby jeopardizing the customer's plans in the area (675 MW peak).

In addition, building the 2.3 miles of double circuit line into Cyprus Station, the Company will also construct 0.3 miles of double circuit 138 kV line from the proposed Cyprus Station to the Parsons Station, which is the subject of this application, and will allow Ohio Power Company to retire the existing 40 kV lines serving Parsons Station today. The Marion-Parsons 40kV double circuit line is approximately 5.2 miles and could not be used to serve the 100 MW of load anticipated by the customer. Upgrading the line on centerline to 138 kV standards is significantly more costly. The line contains 4 lattice structures that were installed in 1972 and the 46 remaining structures were most likely installed in 1926. There are 102 open conditions on 36 unique structures, which relates to 72% of the structures on this line. The Marion-Parsons 40 kV line is the only source to Parsons Station and cannot be taken out of service for basic maintenance or to facilitate future conversion from the obsolete 40 kV system. Therefore, the new 2.6 mile greenfield 138 kV source will provide operational flexibility and efficiency to the area.

The original Parsons 138 kV Conversion project was presented during the November 2, 2017 PJM SRRTEP meeting and subsequently assigned PJM identifier s2342. The need and solution for the customer driven supplemental project was presented and reviewed with stakeholders during the January 15, 2021 and May 21, 2021 PJM SRRTEP meeting and assigned PJM identifier s2526. This Project was included in a supplement to the Company's 2021 Long Term Forecast Report, and is located on page 12 and 13 (Table FE-T9, Specifications of Planned Transmission Lines), see Appendix B.

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### **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 2019 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 Company and customer property. Based on the customer's proposed development and existing facilities in the area, the proposed location of the Cyprus – Parsons 138 kV Transmission Line is the most suitable location for the Project. Other alternatives would require impacting neighboring properties, as opposed to remaining primarily on the Company's and customer's property. The Project is located on either undeveloped farmland or landscaped areas and will require minimal non-mechanized clearing. The Project will not require impacts to any delineated wetland or streams. The location of the Project minimizes impacts to the community and the environment, while considering 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 customer's 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 notice 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.



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### 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 September 2022 with an anticipated in-service date of August 2023.

### 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 quadrangle map. Appendix A, Figure 2 displays the Project components on a 2020 aerial photograph.

To visit from downtown Columbus, Ohio, take I-70 W/I-71 S toward I-71S to Cincinnati for 5.5 miles. Take exit 101 for I-270 E for two miles. Take exit 52 to merge onto US-23 S/S High Street/Portsmouth-Columbus Road towards Circleville for one mile. Turn left on Rathmell Road and continue for 0.8 mile. Turn right onto Parsons Road and continue for 0.3 mile. The Project is located to the west of Parsons Road.

### 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.**

A list of properties required for the Project are provided in the table below.

Property Parcel Number	Agreement Type	Easement or Option Obtained (Yes/No)
510-180711	New Easement Agreement	Yes
150-000812	N/A	N/A
495-299203	New Easement Agreement	Yes

### 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 transmission line is estimated to include the following:

Voltage: 138kV  
Conductors: 795 kcmil 26/7 DRAKE ACSS  
Static Wire: (2) 7#8 Alumoweld  
Insulators: Polymer  
ROW Width: 100 feet  
Structure Type: Two (2) double circuit, steel two-pole dead ends  
Two (2), double circuit, two-pole delta steel braced-post  
Two (2), single circuit, steel monopole vertical dead-end

**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**

Three loading conditions were examined: (1) Normal Maximum Loading, (2) Emergency Loading, and (3) Winter Normal Conductor Rating, consistent with the OPSB requirements. Normal Maximum Loading represents the peak flow expected with all system facilities in service; daily/hourly flows fluctuate below this level. Emergency loading is the maximum current flow during unusual (contingency) conditions, which exist only for short periods of time. Winter normal (WN) conductor rating represents the maximum current flow that a line, including its terminal equipment, can carry during winter conditions. **It is not anticipated that this circuit of this line would operate at its WN rating in the foreseeable future.**

EMF levels were computed one meter above ground under the line and at the ROW edges (50/50 feet, left/right). 50 feet to left side of left tower and 50 away to right side of right tower.

Our results, calculated using EPRI's EMF Workstation 2015 software are summarized below.

\*EMF levels (left ROW edge/maximum/right ROW edge) computed one meter above ground at the point of minimum ground clearance, assuming balanced phase currents and 1.0 P.U. Voltages. ROW width is 50 feet (left tower) and 50 feet (right tower), respectively.

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Cyprus-Parsons 138 kV Transmission Line					
Condition	Load (A)	Phasing Arrangements	Ground Clearance (feet)	Electric Field (kV/m)*	Magnetic Field (mG)*
(1) Normal Max. Loading <sup>^</sup>	104.72	A-B-C	32.5	0.12/1.48/0.17	3.47/10.12/4.06
(2) Emergency Line Loading <sup>^^</sup>	532.18	A-B-C	33.43	0.13/1.59/0.15	7.14/21.84/8.35
(3) Winter Conductor Rating <sup>^^^</sup>	1359.74	A-B-C	32.5	0.12/1.48/0.17	45.08/131.54/52.78

<sup>^</sup>Peak line flow expected with all system facilities in service.

<sup>^^</sup>Maximum flow during a critical system contingency

<sup>^^^</sup>Maximum continuous flow that the line, including its terminal equipment, can withstand during winter conditions.

For power-frequency EMF, IEEE Standard C95.6TM-2002 recommends the following limits:

	General Public	Controlled Environment
	-----	-----
Electric Field Limit (kV/m)	5.0	20.0
Magnetic Field Limit (mG)	9040	27,100

The above EMF levels are well within the limits specified in IEEE Standard C95.6TM-2002. Those limits have been established to "prevent harmful effects in human beings exposed to electromagnetic fields in the frequency range of 0-3 kHz."

## 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.**

Design alternatives were not considered due to EMF strength levels. Transmission lines, when energized, generate EMF. Laboratory studies have failed to establish a strong correlation between exposure to EMF and effects on human health. However, some people are concerned that EMF have impacts on human health. Due to these concerns, EMF associated with the new circuits was calculated and set forth in the table above. The EMF was computed in a manner to maximize the estimate, assuming the highest reasonable input values based on conditions along the proposed transmission line rebuild. Normal daily EMF levels would be less than these, which were calculated at maximum load conditions. Based on studies from the National Institutes of Health, the magnetic field (measured in milliGauss, or mG) associated with emergency loading at the highest EMF value for this transmission line is lower than those associated with normal household appliances like microwave ovens, electric shavers and hair dryers. For additional information regarding EMF, the National Institutes of Health has posted

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information on their website: <http://www.niehs.nih.gov/health/topics/agents/emf/>. Additionally, information on electric and magnetic fields is available on the Company's website: <https://www.aepohio.com/info/projects/emf/OurPosition.aspx>. The information found on the Company's website describes the basics of electromagnetic field theory, scientific research activities, and EMF exposures encountered in everyday life. Similar material will be made available for those affected by the construction activities for this Project.

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

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

The capital costs estimate for the proposed Project, which is comprised of applicable tangible and capital costs, is approximately \$1.7 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 Hamilton Township, Franklin County, Ohio. Land use in the Project area is situated on predominately undeveloped farmland and vacant residential land as classified by the Franklin County Auditor. A residential subdivision is located approximately 80 feet west of the Project (west of Parsons Station). The Project is located within 1,000 feet of 113 single-family residences. Hamilton Elementary School and Hamilton Middle School are located approximately 975 to 1,200 feet east, respectively, of the northern endpoint of the Project (Parsons Station). No parks, churches, cemeteries, wildlife management areas, or nature preserve lands are located within 1,000 feet of the centerline of the Project.

#### **B(10)(b) Agricultural Land Information**

##### **Provide the acreage and a general description of all agricultural land, and separately all agricultural district land, existing at least sixty days prior to submission of the application within the potential disturbance area of the project.**

No properties registered as agricultural district land are located in the Project area based on email coordination with the Franklin County Auditor's Office on March 2, 2022. The Project occupies 3.1 acres of land. Of that, approximately 1.7 acres has historically been used for row crops, 0.3 acre has been historically successional hardwood woodland habitat, which has been recently removed by the customer, one acre is occupied by the Parsons Station, and 0.1 acre exists as low density developed land. However,

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it should be noted that the customer has been actively constructing their project on their property, so the land use on their property has changed from the historical use.

### **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 Phase I Archaeological and Phase I History/Architectural surveys for the Project, which involved subsurface testing and visual inspection in August 2021. The Company's consultant did not identify any archaeological sites or historic structures. The Company's consultant recommends a finding of no adverse effect on cultural resources for the Project and recommends that no further cultural resource work is necessary for the Project. The results of the coordination with the State Historic Preservation Office will be provided to OPSB once it has been received.

### **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 OHC000005. The Company will also submit a Storm Water Pollution Prevention Plan (SWPPP) to the City of Columbus that adheres to the City's permit requirements. The Company will implement and maintain best management practices as outlined in the Project-specific SWPPP to minimize erosion and sediment to Project surface waters during storm events.

The Project is not located within the Federal Emergency Management Agency (FEMA) 100-year floodplain. No floodplain permitting is therefore required for the Project. A local stormwater permit will be obtained from the City of Columbus prior to the start of construction.

The Project is located in the City of Columbus Wellfield Protection Boundary. As defined by the City of Columbus-Chapter 1115 Wellfield Protection, the majority of the Project is located in Wellfield Protection Area II (Five-year time of travel). In compliance with the City of Columbus's Chapter 1115, AEP is coordinating with the City's Wellfield Protection Coordinator. In compliance with Chapter 1115 plan notes for construction will be developed, and a Spill Prevention Control and Countermeasures (SPCC) Plan will be prepared. Coordination and approval for the City's wellfield protection aspect of the Project is included in the City's approval of the station grading and stormwater package.

No other known local, state or federal requirements were required for the Project.

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### **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.**

On February 24, 2022, 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 March 25, 2022 and March 10, 2022, respectively. Copies of the agencies' responses are presented in Appendix D.

The ODNR Natural Heritage Database (ONHD) returned no records of state or federally listed plants or animals within one-mile of the Project. Additionally, ODNR is unaware of any unique ecological sites, geologic features, animal assemblages, scenic rivers, state nature preserves, wildlife areas, parks or forests, national wildlife refuges, or other protected natural areas within the Project.

The DOW indicated that the Project lies within the range of the following state or federal threatened, endangered, and/or protected freshwater mussel species: the purple cat's paw (*Epioblasma o. obliquata*), the clubshell (*Pleurobema clava*), the northern riffleshell (*Epioblasma torulosa rangiana*), the rayed bean (*Villosa fabalis*), the snuffbox (*Epioblasma triquetra*), the rabbitsfoot (*Quadrula cylindrica cylindrica*), the elephant-ear (*Elliptio crassidens crassidens*), the long solid (*Fusconaia maculate maculate*), the Ohio pigtoe (*Pleurobema cordatum*), the pocketbook (*Lampsilis ovata*), the washboard (*Megaloniais nervosa*), the black sandshell (*Ligumia recta*), the fawnsfoot, the pondhorn (*Uniomereus tetralasmus*), and the threehorn wartyback (*Obliquariaia reflexa*). The DOW advised that due to the Project location and that there is no in-water work proposed in a perennial stream, the Project is not likely to impact these mussel species. Additionally, no surface water features were identified within the Project.

The DOW indicated the Project lies within the range of the following state or federal threatened, endangered, and/or protected fish species: the goldeye (*Hiodon alosoides*), the Iowa darter (*Etheostoma exile*), the popeye shiner (*Notropis ariommus*), the northern brook lamprey (*Ichthyomyzon fossor*), the spotted darter (*Etheostoma maculatum*), the shortnose gar (*Lepisosteus platostomus*), the tonguetied minnow (*Exoglossum laurae*), the lake chubsucker (*Erimyzon sucetta*), the paddlefish (*Polyodon spathula*), and the Tippetcanoe darter. The DOW recommends no in-water work in perennial streams from March 15 through June 30 to reduce impacts to indigenous aquatic species and their habitat. No surface water features were identified within the Project; therefore, no adverse impacts are anticipated for these species.

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The DOW also indicated the Project lies within the range of the following state or federal threatened, endangered, and/or protected bird species: the American bittern (*Botaurus lentiginosus*), the black-crowned night-heron (*Nycticorax nycticorax*), the cattle egret (*Bubulcus ibis*), the lark sparrow (*Chondestes grammacus*), the least bittern (*Ixobrychus exilis*), the northern harrier (*Circus hudsonis*), the sandhill crane (*Grus canadensis*), and the upland sandpiper (*Bartramia longicauda*). The DOW recommends that construction be avoided during their various nesting periods if suitable habitat is present within the Project. The Project does not present potentially suitable habitat for the above-listed bird species and therefore no adverse impacts are anticipated for the species.

The DOW identified that the entire state of Ohio is within the range of the state and federally endangered Indiana bat (*Myotis sodalis*), the state and federally threatened northern long-eared bat (*Myotis septentrionalis*), the state endangered little brown bat (*Myotis lucifugus*), and the state endangered tri-colored bat (*Perimyotis subflavus*). Furthermore, the DOW indicated that the project (Cyprus Station) is within the vicinity of records for the little brown bat. The DOW recommends seasonal tree cutting for trees  $\geq 3$  inches diameter at breast height (dbh) between October 1 and March 31, conserving trees with loose, shaggy bark and/or crevices, holes, or cavities, as well as trees greater than 20 inches dbh if possible, to avoid adverse impacts to these species. 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. Potentially suitable habitat for these bat species was not identified within the Project and a desktop assessment conducted prior to the field survey identified no potential hibernacula within a 0.5-mile radius of the Project. No tree clearing is planned for the Project.

USFWS indicated that no adverse effects to federally endangered, threatened, proposed species, or proposed or designated critical habitat are anticipated due to the project type, size, and location.

The Company will continue to coordinate with USFWS and ODNR. However, 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.**

On April 7, 2021, the Company's consultant completed a wetland and stream delineation survey of an approximately 3.2-acre survey area (Appendix D). During the April 7, 2021 field survey, no wetlands or

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streams 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 39049C\_84) was reviewed to check for the presence of floodplains/flood hazard areas within the Project area. The Project area is not within any mapped FEMA floodplains or floodways. Therefore, no floodplain permitting is expected to be required for the Project.

### **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.**

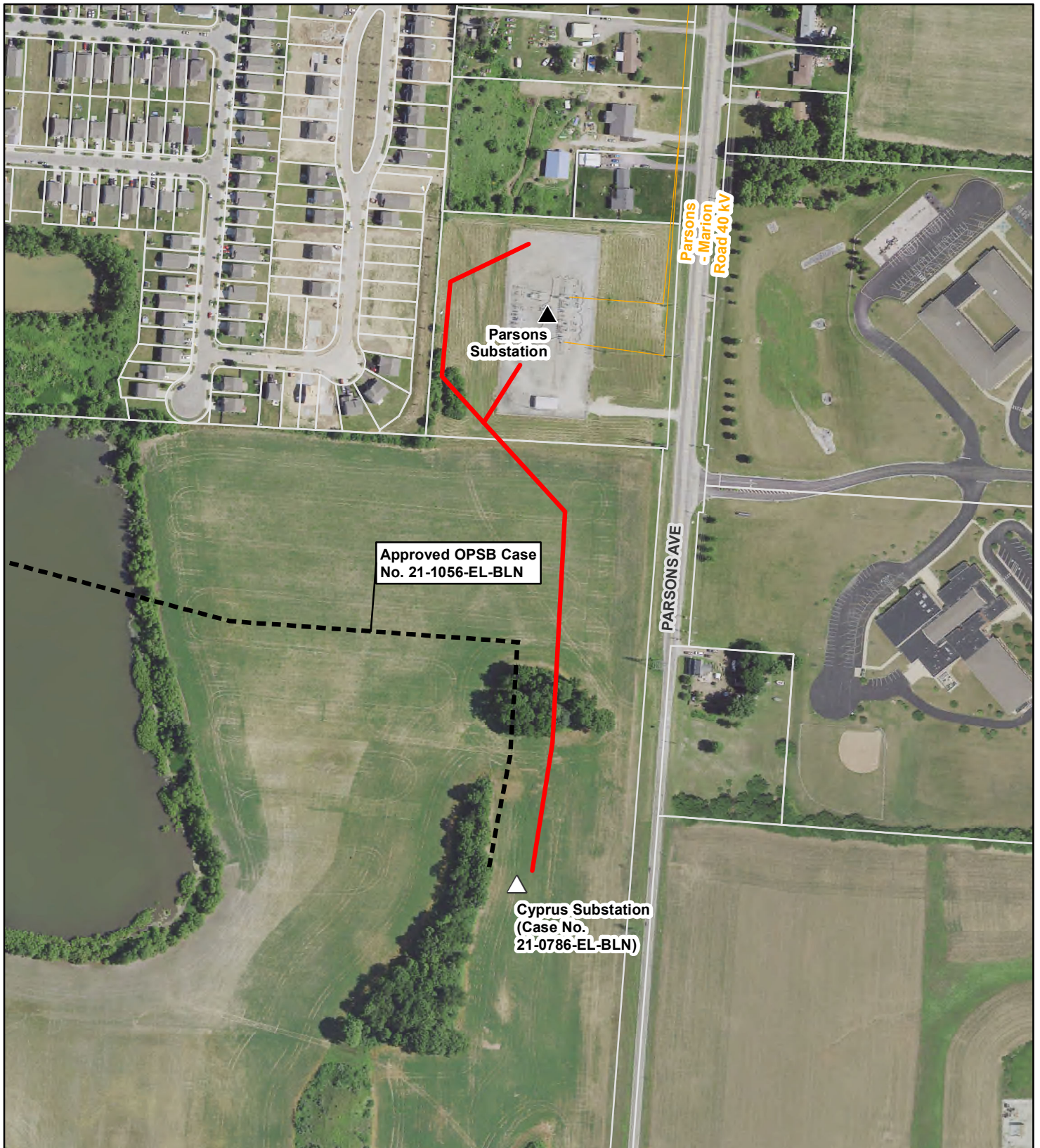
To the best of the Company's knowledge, no unusual conditions exist that would result in significant environmental, social, health, or safety impacts.



## Appendix A Project Maps







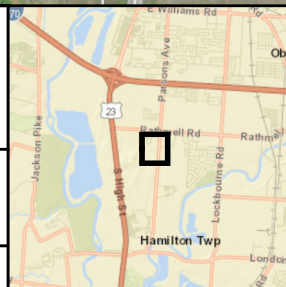
- ▲ Existing Substation
- △ Proposed Substation (OPSB Approved)
- Proposed Cyprus 138 kV Extension (OPSB Approved)
- Cyprus - Parsons 138 kV Transmission Line
- Existing Transmission Line (69 kV and below)
- Parcel Boundary

Sources:  
 OGRIP Imagery (2020)  
 Franklin County Parcels (2021)

State Plane Ohio  
 South NAD 83



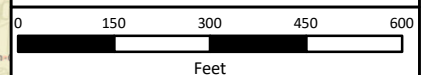
March 18, 2022



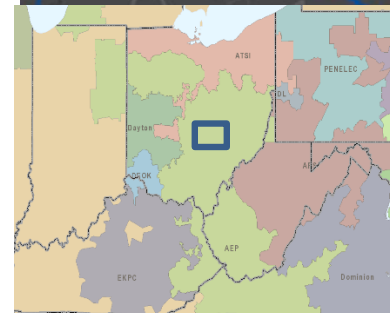
## Map 2 Aerial Map



Cyprus - Parsons 138 kV  
 Transmission Line Project



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

**Model: 2025 RTEP**



**Need Number:** AEP-2021-OH002

**Process Stage:** Solutions Meeting 05/21/2021

**Proposed Solution:**

- **Cyprus 138 kV Station:** Establish a greenfield ten-breaker 138kV (63 kA) laid out as breaker and a half station on property provided by the customer south of AEP's Parsons station. Install 138 kV retail metering towards Customer station. **Estimated Cost: \$ 14.22M**
- **Cyprus – Cyprus (Customer) 138 kV #1:** Build ~0.3miles of double circuit 138kV line using 795 ACSR conductor. Extend fiber cable & install redundant fiber cable for relaying and communication to the customer station. One circuit will serve customer's first building, second circuit will be partially constructed to be utilized for future second building to customer's redundancy requirements. **Estimated Cost: \$ 0.96M**
- **Cyprus – Cyprus (Customer) 138 kV #2:** Build ~0.3miles of double circuit 138kV line using 795 ACSR conductor. Extend fiber cable & install redundant fiber cable for relaying and communication to Customer Station. One circuit will serve customer's first building, second circuit will be partially constructed to be utilized for future second building due to customer's redundancy requirements. **Estimated Cost: \$ 0.0M (Fully Reimbursable)**
- **White Road 138 kV:** Upgrade line to fiber relaying and remote end work. **Estimated Cost: \$ 0.46M**
- **Canal Street 138 kV:** Upgrade line to fiber relaying and remote end work. **Estimated Cost: \$ 0.53M**

**Total Estimated Cost: \$ 16.17M**

**Ancillary Benefits:** The scope of work associated with s2342 establishes the 138 kV lines from Canal Street and White Road to feed Parsons station. This project will tap the new lines to provide service to the customer and then continue on to feed Parsons station as proposed in s2342. AEP will only build the site out to serve the initial 100 MW. Any future load growth and required upgrades will be developed as agreements are signed by the customer to expand their operations. Further, AEP is investigating any potential cost savings by relocating the Parsons station site to be included in the Cyprus construction. Any changes in scope to s2342 that results from this will be re-presented.

**Alternatives Considered:**

Constructing and operating Cyprus station initially as a ring laid out as a breaker and a half configuration was considered, but not chosen after taking into account the customer's anticipated build out schedule. There would have been approximately \$1M in incremental costs to convert the station from ring to breaker and a half as part of the second build out. In addition to the incremental cost, the conversion would have exposed the customer served out of Cyprus along with the customers served from Parsons to extended periods of radial service during construction due to the required physical layout of the station as an initial ring bus. AEP Ohio has limited to zero ability to pick up the ~3,700 distribution customers out Parsons in the event of an outage of the station.

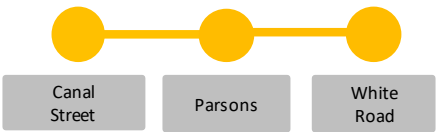
**Projected In-Service:** 12/1/2022 (07/31/2022 for customer portions)

**Project Status:** Scoping

**Model:** RTEP 2025

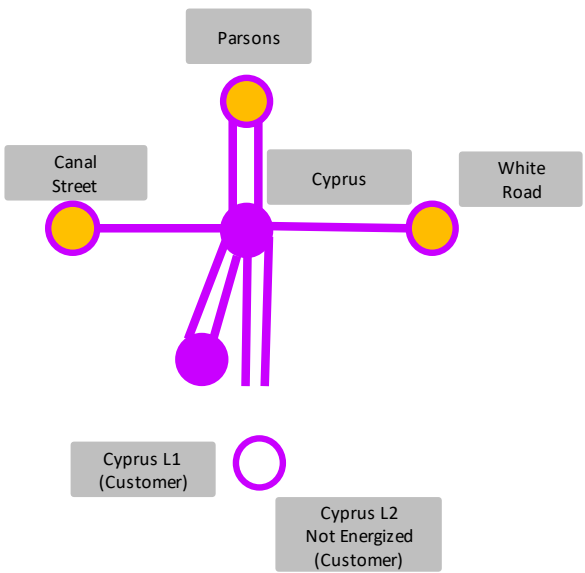
## Bubble Diagram

### Existing:



Legend	
500 kV	<span style="color: red;">—</span>
345 kV	<span style="color: blue;">—</span>
138 kV	<span style="color: orange;">—</span>
69 kV	<span style="color: green;">—</span>
34.5 kV	<span style="color: red;">—</span>
23 kV	<span style="color: brown;">—</span>
New	<span style="color: purple;">—</span>

### Proposed:



PUCO FORM FE-T9  
AEP OHIO TRANSMISSION COMPANY  
SPECIFICATIONS OF PLANNED TRANSMISSION LINES

1.	LINE NAME AND NUMBER:	Parsons Extension #1
2.	POINTS OF ORIGIN AND TERMINATION	Canal, Cyprus, White Road
3.	RIGHTS-OF-WAY: LENGTH / WIDTH / CIRCUITS	0.1 miles , single circuit
4.	VOLTAGE: DESIGN / OPERATE	138kV / 138 kV
5.	APPLICATION FOR CERTIFICATE:	2/3/2022
6.	CONSTRUCTION:	2022
7.	CAPITAL INVESTMENT:	\$0.3M
8.	PLANNED SUBSTATION:	Cyprus
9.	SUPPORTING STRUCTURES:	Steel
10.	PARTICIPATION WITH OTHER UTILITIES	N/A
11.	PURPOSE OF THE PLANNED TRANSMISSION LINE	Line work required to connect Cyprus and Parsons to allow for aging 40 kV equipment to be retired at Parsons
12.	CONSEQUENCES OF LINE CONSTRUCTION DEFERMENT OR TERMINATION	Parsons station can not be converted from 40 kV to 138 kV.
13.	MISCELLANEOUS:	N/A

PUCO FORM FE-T9  
AEP OHIO TRANSMISSION COMPANY  
SPECIFICATIONS OF PLANNED TRANSMISSION LINES

1.	LINE NAME AND NUMBER:	Parsons Extension #2
2.	POINTS OF ORIGIN AND TERMINATION	Canal, Cyprus, White Road
3.	RIGHTS-OF-WAY: LENGTH / WIDTH / CIRCUITS	0.1 miles , single circuit
4.	VOLTAGE: DESIGN / OPERATE	138kV / 138 kV
5.	APPLICATION FOR CERTIFICATE:	2/3/2022
6.	CONSTRUCTION:	2022
7.	CAPITAL INVESTMENT:	\$0.3M
8.	PLANNED SUBSTATION:	Cyprus
9.	SUPPORTING STRUCTURES:	Steel
10.	PARTICIPATION WITH OTHER UTILITIES	N/A
11.	PURPOSE OF THE PLANNED TRANSMISSION LINE	Line work required to connect Cyprus and Parsons to allow for aging 40 kV equipment to be retired at Parsons
12.	CONSEQUENCES OF LINE CONSTRUCTION DEFERMENT OR TERMINATION	Parsons station can not be converted from 40 kV to 138 kV.
13.	MISCELLANEOUS:	N/A



## **Appendix C Agency Correspondence**



# Ohio Department of Natural Resources

MIKE DeWINE, GOVERNOR

MARY MERTZ, DIRECTOR

## Office of Real Estate

*John Kessler, Chief*

2045 Morse Road – Bldg. E-2

Columbus, OH 43229

Phone: (614) 265-6621

Fax: (614) 267-4764

March 25, 2022

Philip Renner  
WSP USA  
Suite 2500  
312 Elm Street  
Cincinnati, OH 45202

**Re:** 22-0204; Cyprus-Parsons 138 kV Transmission Line Project

**Project:** The proposed project involves the installation of 0.3 miles of 138kV transmission line from an existing station to a proposed new station.

**Location:** The proposed project is located in Hamilton Township, Franklin 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. In addition, we are unaware of any unique ecological sites, geologic features, animal assemblages, scenic rivers, state nature preserves, wildlife areas, parks or forests, national wildlife refuges, or other protected natural areas within the 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 little brown bat (*Myotis lucifugus*), a state endangered species. Because presence of state endangered bat species has been established in the

area, summer tree cutting is not recommended, and additional summer surveys would not constitute presence/absence in the area. However, limited summer tree cutting inside this buffer may be acceptable after further consultation with DOW (contact Erin Hazelton at [Erin.hazelton@dnr.ohio.gov](mailto:Erin.hazelton@dnr.ohio.gov)).

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

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

The project is within the range of the following listed mussel species.

#### Federally Endangered

clubshell ( <i>Pleurobema clava</i> )	rayed bean ( <i>Villosa fabalis</i> )
northern riffleshell ( <i>Epioblasma torulosa rangiana</i> )	snuffbox ( <i>Epioblasma triquetra</i> )
purple cat’s paw ( <i>Epioblasma o. obliquata</i> )	

#### Federally Threatened

rabbitsfoot ( <i>Quadrula cylindrica cylindrica</i> )
---

#### State Endangered

elephant-ear ( <i>Elliptio crassidens crassidens</i> )	pocketbook ( <i>Lampsilis ovata</i> )
long solid ( <i>Fusconaia maculata maculate</i> )	washboard ( <i>Megaloniais nervosa</i> )
Ohio pigtoe ( <i>Pleurobema cordatum</i> )	

#### State Threatened

black sandshell ( <i>Ligumia recta</i> )	pondhorn ( <i>Unio merus tetralasmus</i> )
fawnsfoot ( <i>Truncilla donaciformis</i> )	threehorn wartyback ( <i>Obliquaria reflexa</i> )

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

The project is within the range of the following listed fish species.

State Endangered

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goldeye ( <i>Hiodon alosoides</i> )	shortnose gar ( <i>Lepisosteus platostomus</i> )
Iowa darter ( <i>Etheostoma exile</i> )	spotted darter ( <i>Etheostoma maculatum</i> )
northern brook lamprey ( <i>Ichthyomyzon fossor</i> )	tonguetied minnow ( <i>Exoglossum laurae</i> )
popeye shiner ( <i>Notropis ariommus</i> )	

State Threatened

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lake chubsucker ( <i>Erimyzon sucetta</i> )	Tippecanoe darter ( <i>Etheostoma tippecanoe</i> )
paddlefish ( <i>Polyodon spathula</i> )	

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

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

The project is within the range of the black-crowned night-heron (*Nycticorax nycticorax*), a state-threatened bird. Night-herons are so named because they are nocturnal, conducting most of their foraging in the evening hours or at night, and roost in trees near wetlands and waterbodies during the day. Night herons are migratory and are typically found in Ohio from April 1 through December 1 but can be found in more urbanized areas with reliable food sources year-round. Black-crowned night-herons primarily forage in wetlands and other shallow aquatic habitats, and roost in trees nearby. These night-herons nest in small trees, saplings, shrubs, or sometimes on the ground, near bodies of water and wetlands. If this type of habitat will be impacted, construction should be avoided in this habitat during the species' nesting period of May 1 through July 31. If this type of habitat will not be impacted, this project is not likely to impact this species.

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

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

The project is within the range of the northern harrier (*Circus hudsonis*), a state endangered bird. This is a common migrant and winter species. Nesters are much rarer, although they occasionally breed in large marshes and grasslands. Harriers often nest in loose colonies. The female builds a

nest out of sticks on the ground, often on top of a mound. Harriers hunt over grasslands. If this type of habitat will be impacted, construction should be avoided in this habitat during the species' nesting period of April 15 through July 31. If this habitat will not be impacted, this project is not likely to impact this species.

The project is within the range of the sandhill crane (*Grus canadensis*), a state threatened species. Sandhill cranes are primarily a wetland-dependent species. On their wintering grounds, they will utilize agricultural fields; however, they roost in shallow, standing water or moist bottomlands. On breeding grounds they require a rather large tract of wet meadow, shallow marsh, or bog for nesting. If grassland, prairie, or wetland habitat will be impacted, construction should be avoided in this habitat during the species' nesting period of April 1 through August 31. If this habitat will not be impacted, this project is not likely to have an impact on this species.

The project is within the range of the upland sandpiper (*Bartramia longicauda*), a state endangered bird. Nesting upland sandpipers utilize dry grasslands including native grasslands, seeded grasslands, grazed and ungrazed pasture, hayfields, and grasslands established through the Conservation Reserve Program (CRP). 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 type of 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. Your local floodplain administrator contact information can be found at the website below.

[http://water.ohiodnr.gov/portals/soilwater/pdf/floodplain/Floodplain%20Manager%20Community%20Contact%20List\\_8\\_16.pdf](http://water.ohiodnr.gov/portals/soilwater/pdf/floodplain/Floodplain%20Manager%20Community%20Contact%20List_8_16.pdf)

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

Mike Pettegrew  
Environmental Services Administrator

## Renner, Philip

---

**From:** Ohio, FW3 <ohio@fws.gov>  
**Sent:** Thursday, March 10, 2022 12:54 PM  
**To:** Renner, Philip  
**Subject:** Cyprus-Parsons 138 kV Transmission Line, Franklin County, Ohio



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



Project Code: 2022-0013855

Dear Mr. Renner,

The U.S. Fish and Wildlife Service (Service) 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 effects to threatened and endangered species pursuant to the Endangered Species Act of 1973 (16 U.S.C. 1531 et seq), as amended (ESA).

Federally Threatened and Endangered Species: Due to the project, type, size, and location, we do not anticipate adverse effects to federally endangered, threatened, or proposed species or proposed or designated critical habitat. If there are any project modifications during the term of this action, or additional information for listed or proposed species or their critical habitat becomes available, or if new information reveals effects of the action that were not previously considered, then please contact us for additional project review.

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

Sincerely,

Patrice M. Ashfield  
Ohio Field Office Supervisor

## **Appendix D      Ecological Survey Report**

# CYPRUS – PARSONS 138 KV TRANSMISSION LINE PROJECT ECOLOGICAL SURVEY REPORT



PROJECT NO.: LP2043151.105

DATE: APRIL 2022

AEP Transmission  
8500 Smith's Mill Road  
New Albany, OH 43054



An AEP Company

BOUNDLESS ENERGY™

WSP USA  
312 ELM STREET, SUITE 2500  
CINCINNATI, OH 45202



WSP.COM





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# 1 INTRODUCTION

On behalf of American Electric Power (AEP) Ohio Transmission Company, Inc. (AEP Ohio Transco), WSP USA (WSP) conducted environmental surveys for the proposed approximately 0.3-mile-long Cyprus – Parsons 138 kV Transmission Line Project (“Project”), located in Hamilton Township, Franklin County, Ohio. The environmental survey included a wetland and water resource delineation and characterization of potential habitat for state and federally listed species. The wetland delineation was performed to determine whether wetlands and streams are present within the vicinity of the Project that would meet the definition of Waters of the United States (WoUS) or be subject to regulations implemented by the Ohio Environmental Protection Agency (OEPA), and to document their extents and current conditions if present. The wetland delineation was performed by individuals trained in the three-parameter methodology (hydrophytic vegetation, wetland hydrology, and hydric soils) adopted by the U.S. Army Corps of Engineers (USACE) as outlined in the USACE *Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Midwest Region, (Version 2.0)* (USACE, 2010) and in the *Corps of Engineers Wetlands Delineation Manual* (Environmental Laboratory, 1987).

The report presents the results of the ecological considerations and review of the site’s existing and reasonably foreseeable site conditions at the time of the environmental surveys. The results cannot apply to site changes occurring after the survey which WSP has not had the opportunity to review. During the course of any survey, site conditions may change over time due to human and/or natural causes; as such, the results presented in this report may be invalidated, either wholly or in part, by changes beyond the control of WSP.

## 2 BACKGROUND INFORMATION

### 2.1 PROJECT AREA

The approximately 0.3-mile Project is located within Hamilton Township, Franklin County, Ohio. The 100 foot wide Environmental Survey Corridor (ESC) originates at the proposed Cyprus Station (39.8568°, -82.9915°) and extends north to the existing Parsons Station (39.8593°, -82.9907°) (Figure 1, Appendix A). The approximately 3.2-acre ESC encompasses the proposed 100-foot-wide right-of-way (ROW) as well as proposed access roads. The ESC is within the Lockbourne, Ohio U.S. Geological Survey (USGS) 7.5-minute topographic map quadrangle boundary. Table 2-1 provides an overview of the project location.

**TABLE 2-1: GENERAL PROJECT INFORMATION**

<b>COUNTY:</b>	Franklin
<b>TOWNSHIP:</b>	Hamilton
<b>END POINT COORDINATES:</b>	Cyprus Station: 39.8568°, -82.9915° Parsons Station: 39.8593°, -82.9907°
<b>USGS QUADRANGLE:</b>	Lockbourne, Ohio
<b>ENVIRONMENTAL SURVEY CORRIDOR LENGTH (mi.):</b>	0.27
<b>ENVIRONMENTAL SURVEY CORRIDOR WIDTH (ft.):</b>	100
<b>ENVIRONMENTAL SURVEY CORRIDOR SIZE (ac.):</b>	3.2
<b>ELEVATION RANGE (ft. above sea level):</b>	710 – 730
<b>8-DIGIT HYDROLOGIC UNIT CODE:</b>	05060001
<b>12-DIGIT HYDROLOGIC UNIT CODE(S) :</b>	05060001-23-03
<b>DATE(S) OF SURVEY :</b>	April 7, 2021

#### 2.1.1 DRAINAGE BASINS

All streams in the vicinity of the ESC drain to the Scioto River, which is traditionally navigable waterway (TNW). The ESC is located within the Upper Scioto (HUC [hydrologic unit code] 05060001) drainage basin. The ESC lies within the Grant Run-Scioto River sub-watershed (12-digit HUC 05060001-23-03), as outlined in Table 2-2 (USDA, 2019).

The OEPA *401 Water Quality Certification for the Nationwide Permits Web Mapping Application* indicates that field-assessed streams within the identified 12-digit sub-watershed are denoted as “ineligible”; indicating that stream



impacts within the ESC will require an individual 401 water quality certification provided that the OEPA's general and special limitations and conditions for the nationwide permits are met (OEPA, 2020).

**TABLE 2-2: 12-DIGIT HUC'S CROSSED BY THE PROJECT**

8-DIGIT HUC CODE <sup>1</sup>	8-DIGIT HUC CODE NAME <sup>1</sup>	12-DIGIT HUC CODE <sup>1</sup>	12-DIGIT HUC NAME <sup>1</sup>	OHIO EPA SECTION 401 ELIGIBILITY <sup>2</sup>
05060001	Upper Scioto	05060001-23-03	Grant Run-Scioto River	Ineligible

<sup>1</sup>Source: USDA, 2019

<sup>2</sup>Source: OEPA, 2020

## 3 METHODOLOGY

On April 7, 2021, a WSP ecologist traversed the approximately 0.3-miles long and 100-foot-wide ESC (approximately 3.2-acres) to conduct a wetland and waters delineation. The physical boundaries of aquatic resources were recorded using a Trimble Global Positioning System (GPS) unit rated for sub-decimeter accuracy. The GPS data was then geo-corrected using Trimble GPS Pathfinder Office software (version 5.60) and reviewed for quality control.

Prior to conducting field surveys, WSP ecologists completed a desktop review by analyzing several federal and state documents for the presence of wetland and streams. This review included Natural Resources Conservation Service (NRCS) soil survey data, U.S. Fish and Wildlife Service (USFWS) National Wetlands Inventory (NWI) maps of Ohio, USGS 7.5-minute topographic maps, and USGS National Hydrography Dataset (NHD) stream and river data as an exercise to identify the occurrence and location of potential wetlands and streams.

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### 3.1 WETLAND AND STREAM DELINEATION

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#### 3.1.1 WETLAND DELINEATION

The USACE and the U.S. Environmental Protection Agency (USEPA) define wetlands as areas inundated or saturated by surface water or groundwater at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions (33 CFR, Part 328.3).

Wetlands were delineated according to Section 404 of the Clean Water Act, Technical Report Y-87-1 *Corps of Engineers Wetlands Delineation Manual ('87 Manual)* (Environmental Laboratory, 1987), and the *Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Midwest Region, (Version 2.0) (Regional Supplement)* (USACE, 2010). Representative data points were collected for wetlands and corresponding, adjacent upland areas. Wetland data was recorded on the USACE *Regional Supplement Wetland Determination Data Forms*.

Wetland vegetation communities were classified according to the *Classification of Wetlands and Deepwater Habitats of the United States*, commonly referred to as the Cowardin Classification System (Cowardin et al., 1979). Wetlands within the ESC were assessed using the OEPA *Ohio Rapid Assessment Method for Wetlands v. 5.0 (ORAM)* to determine the ecological quality and level of disturbance (Mack, 2001).

---

#### 3.1.2 STREAM DELINEATION AND ASSESSMENT

Streams were identified by the presence of a defined bed and bank, and evidence of an ordinary high water mark (OHWM). The OHWM is defined in the USACE *Regulatory Guidance Letter No. 05-05* (USACE, 2005). Generally, the OHWM is identified by a clearly defined, natural line along the stream bank created by fluctuations and flow of water; this may include changes in contours, substrate, vegetation, and debris (USACE, 2005).

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* (Rankin, 2006) and *Field Evaluation Manual for Ohio's Primary Headwater Habitat Streams, Version 3* (Davic, 2012).



## 4 RESULTS

A WSP ecologist surveyed the ESC on April 7, 2021 by walking the approximately 3.2-acre ESC and evaluating for wetlands and other WoUS. The WSP ecologist did not identify wetlands, streams, or ponds within the ESC. The lack of identified water resources are depicted on the Delineated Features Map (Figure 3, Appendix A).

### 4.1 DESKTOP REVIEW

#### 4.1.1 SOILS EVALUATION

According to the NRCS Soil Data for Franklin County, Ohio, there are five soil map units shown within the ESC, as presented in Table 4-1. The soils observed by the WSP ecologist during the reconnaissance of the ESC were consistent with the NRCS soil survey mapping.

**TABLE 4-1: SOIL UNITS MAPPED WITHIN THE ESC**

SOIL UNIT SYMBOL	SOIL UNIT NAME	PERCENT HYDRIC	HYDRIC RATING <sup>1</sup>
EIB	Eldean silt loam, 2 to 6 percent slopes	0	Non-Hydric
EIC2	Eldean silt loam, 6 to 12 percent slopes, eroded	0	Non-Hydric
EID2	Eldean silt loam, 12 to 18 percent slopes, eroded	0	Non-Hydric
OcB	Ockley silt loam, Southern Ohio Till Plain, 2 to 6 percent slopes	0	Non-Hydric
OcC2	Ockley silt loam, 6 to 12 percent slopes	0	Non-Hydric

<sup>1</sup>Non-Hydric = 0% hydric soil component; Predominantly Non-Hydric = 1-32%; Partially Hydric = 33-65%; Predominantly Hydric = 66-99%; and All Hydric = 100%.

Source: Soil Survey Staff, NRCS. Web Soil Survey.

#### 4.1.2 NATIONAL WETLANDS INVENTORY REVIEW

According to the NWI maps of the Lockbourne, Ohio quadrangle boundary, there are no mapped NWI features within the ESC. The location of NWI features mapped within the vicinity of the ESC are shown on Figure 2 (Appendix A).

#### 4.1.3 FEMA FLOODPLAIN REVIEW

According to Federal Emergency Management Agency (FEMA) National Flood Hazard Layer, there are no 100-year floodplains or regulated floodways within the ESC.

### 4.2 DELINEATED WETLANDS

During environmental surveys of the ESC, the WSP ecologist did not identify any wetlands within the approximately 0.3-mile-long, 100-foot-wide ESC. Representative photographs of the ESC were taken and are provided in Appendix B.

## 4.3 STREAMS AND RIVERS

During environmental surveys of the ESC, the WSP ecologist did not identify any streams within the approximately 0.3-mile-long, 100-foot-wide ESC.

## 4.4 PONDS AND OPEN WATER

During environmental surveys of the ESC, the WSP ecologist did not identify any ponds, lakes, or reservoirs within the approximately 0.3-mile-long, 100-foot-wide ESC.

## 4.5 VEGETATIVE COMMUNITIES

The WSP ecologists conducted a general habitat survey in conjunction with the stream and wetland field surveys. A variety of woody and herbaceous habitats, as described below in Table 4-2, are present within the ESC. A breakdown of vegetated land cover is provided, overlain on aerial photography in Figure 4 (Appendix A).

**TABLE 4-2: VEGETATIVE COMMUNITIES WITHIN THE ESC**

VEGETATIVE COMMUNITY	DESCRIPTION	ACREAGE WITHIN THE ESC	PERCENTAGE OF ESC
Agricultural Land	Agricultural land primarily consisting of soybean and corn fields were present within the ESC.	1.7	16.2%
Developed, High Intensity	These areas consist of developed residential, industrial, and commercial land uses, including roads, buildings, and parking lots. These areas are generally devoid of significant vegetation.	0.1	18.2%
Developed, Open Space	Cleared, developed, and maintained areas were observed within the ESC. These landscaped areas are frequently mowed or maintained grasses and forbs.	1.3	36.8%
Scrub/Shrub	Scrub/shrub habitats represent the successional stage between old field and second growth forest, and often emerge in recently harvested forests responding to the lack of overhead canopy.	0.1	2.5%
<b>Total</b>		<b>3.2</b>	<b>100%</b>

## 4.6 THREATENED AND ENDANGERED SPECIES COORDINATION

WSP conducted a rare, threatened, and endangered species habitat review for areas crossed by the ESC. Table 4-3 provides a list of species of concern and potentially suitable habitat within the ESC.



#### *4.6.1 USFWS COORDINATION*

A request for review was submitted to the USFWS on February 24, 2022. A response from the USFWS (Project Code 2022-0013855) was received on March 10, 2022, and has been included in Appendix C. The USFWS response indicated that due to the location, size, and type of project, adverse effects to federally endangered, threatened, and proposed species are not expected.

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#### *4.6.2 ODNR COORDINATION*

A request for Environmental Review was submitted to ODNR on February 24, 2022. An ODNR Environmental Review (22-0204) was received on March 25, 2022. WSP has provided observations of threatened and endangered species habitat within the ESC as Table 4-3. The ODNR Environmental Review has been included in Appendix C.



**TABLE 4-3: LISTED SPECIES COMMENTED ON BY ODNR AND USFWS**

COMMON NAME (SCIENTIFIC NAME)	STATE STATUS	FEDERAL STATUS	HABITAT DESCRIPTION	POTENTIAL HABITAT OBSERVED IN ESC	AGENCY COMMENT	WSP IMPACT ASSESSMENT
Mammals						
Indiana bat ( <i>Myotis sodalis</i> )	Endangered	Endangered	Winter hibernacula are provided by caves and mines. Summer roost habitat typically includes live or dead trees with exfoliating bark, crevices, or cavities that can be used for roosting. Open sub-canopy areas and flight corridors are important to allow maneuvering during foraging. Proximity to water sources provides a greater density of insect prey.	No	ODNR has recommended seasonal tree clearing dates (October 1 through March 31) to avoid impacts protected bat species.  ODNR recommended a desktop habitat assessment for potential hibernacula within a 0.25-mile radius of the ESC.	Potentially suitable habitat was not identified within the ESC. No potential hibernacula were identified within 0.25-miles of the ESC.
northern long-eared bat ( <i>Myotis septentrionalis</i> )	Threatened	Threatened				
little brown bat ( <i>Myotis lucifugus</i> )	Endangered	Not Listed				
tri-colored bat ( <i>Perimyotis subflavus</i> )	Endangered	Not Listed				
Freshwater Mussels						
clubshell ( <i>Pleurobema clava</i> )	Endangered	Endangered	Habitat is typically provided by streams and small rivers with well-oxygenated riffles and sand and gravel substrates.	No	ODNR has indicated that due to the location and the lack of in-water work proposed in perennial streams, the Project is not likely to impact this species	Potentially suitable habitat was not identified within the ESC.
northern riffleshell ( <i>Epioblasma torulosa rangiana</i> )	Endangered	Endangered	Habitat is provided by coarse gravel substrates in swift-flowing riffles and runs.			
purple cat's paw ( <i>Epioblasma obliquata obliquata</i> )	Endangered	Endangered	Habitat is provided by large rivers in the Ohio River basin, typically in shallow, swift-flowing waters with silt-free substrates.			
rayed bean ( <i>Villosa fabalis</i> )	Endangered	Endangered	The rayed bean typically inhabits small headwater creeks in gravel and sand substrates.			



**TABLE 4-3: LISTED SPECIES COMMENTED ON BY ODNR AND USFWS**

COMMON NAME (SCIENTIFIC NAME)	STATE STATUS	FEDERAL STATUS	HABITAT DESCRIPTION	POTENTIAL HABITAT OBSERVED IN ESC	AGENCY COMMENT	WSP IMPACT ASSESSMENT
snuffbox ( <i>Epioblasma triquetra</i> )	Endangered	Endangered	The snuffbox is usually found in small- to mid-sized streams in areas with swift current. Adults are typically burrowed in sand, gravel, or cobble substrates.	No	ODNR has indicated that due to the location and the lack of in-water work proposed in perennial streams, the Project is not likely to impact this species	Potentially suitable habitat was not identified within the ESC.
rabbitsfoot ( <i>quadrula cylindrica cylindrica</i> )	Endangered	Threatened	Habitat is provided by shallow water areas with reduced velocity in small to medium sized rivers. The rabbitsfoot is typically found in gravel and sand substrates.			
elephant ear ( <i>Elliptio crassidens crassidens</i> )	Endangered	Not Listed	Primarily inhabits large rivers in mud, sand or fine gravel.			
long solid ( <i>Fusconaia maculata maculata</i> )	Endangered	Not Listed	Habitat is generally provided by large rivers in gravel substrates.			
Ohio pigtoe ( <i>Pleurobema cordatum</i> )	Endangered	Not Listed	Habitat is generally provided by medium to large rivers in sand or gravel substrates.			
pocketbook ( <i>Lampsilis ovata</i> )	Endangered	Not Listed	Habitat is generally provided by large rivers with sand and gravel substrates.			
washboard ( <i>Megaloniaias nervosa</i> )	Endangered	Not Listed	Habitat is generally provided by large rivers with swift current and mud, sand, or gravel substrates.			
black sandshell ( <i>Ligumia recta</i> )	Threatened	Not Listed	Typical habitat includes medium and large rivers with gravel and firm sand substrates.			
fawnsfoot ( <i>Truncilla donaciformis</i> )	Threatened	Not Listed	Habitat includes large rivers in sand or gravel substrates.			
pondhorn ( <i>Unio merus tetralasmus</i> )	Threatened	Not Listed	This species is typically found in ponds, small creeks, and headwater streams with sand or mud substrates.			
threehorn wartyback ( <i>Obliquaria reflexa</i> )	Threatened	Not Listed	Typically found in large rivers with moderate current and stable gravel, sand and mud bottoms.			



**TABLE 4-3: LISTED SPECIES COMMENTED ON BY ODNR AND USFWS**

COMMON NAME (SCIENTIFIC NAME)	STATE STATUS	FEDERAL STATUS	HABITAT DESCRIPTION	POTENTIAL HABITAT OBSERVED IN ESC	AGENCY COMMENT	WSP IMPACT ASSESSMENT
Fish						
goldeye ( <i>Hiodon alosoides</i> )	Endangered	Not Listed	Habitat is provided by large rivers with turbid water and clay soils.	No	ODNR has indicated that if no in-water work is proposed in perennial streams, this project is not likely to impact this species.	Potentially suitable habitat was not identified within the ESC.
Iowa darter ( <i>Etheostoma exile</i> )	Endangered	Not Listed	Habitat is provided by clear, vegetated streams, lakes, and ponds.			
northern brook lamprey ( <i>Ichthyomyzon fossor</i> )	Endangered	Not Listed	Habitat is provided by medium-sized streams with clean gravel riffles.			
popeye darter ( <i>Notropis ariommus</i> )	Endangered	Not Listed	Habitat is provided by moderate-sized streams with clear water.			
shortnose gar ( <i>Lepisosteus platostomus</i> )	Endangered	Not Listed	Habitat is provided by large rivers and associated backwaters.			
spotted darter ( <i>Etheostoma maculatum</i> )	Endangered	Not Listed	Occur in freshwater rivers marked with the presence of boulders and other rocks.			
tonguetied minnow ( <i>Exoglossum laurae</i> )	Endangered	Not Listed	Habitat is provided by small- to medium-sized streams with clean gravel substrates.			
lake chubsucker ( <i>erimyzon sucetta</i> )	Threatened	Not Listed	Habitat is provided by moderately clear waters in lakes and oxbows, as well as marshy streams with organic debris.			
paddlefish ( <i>Polyodon spathula</i> )	Threatened	Not Listed	Habitat is provided by areas with rocky substrates and swift currents in large rivers.			
Tippecanoe darter ( <i>Etheostoma tippecanoe</i> )	Threatened	Not Listed	Habitat is provided by gravel/cobble riffles featuring fast currents in medium to large rivers.			



**TABLE 4-3: LISTED SPECIES COMMENTED ON BY ODNR AND USFWS**

COMMON NAME (SCIENTIFIC NAME)	STATE STATUS	FEDERAL STATUS	HABITAT DESCRIPTION	POTENTIAL HABITAT OBSERVED IN ESC	AGENCY COMMENT	WSP IMPACT ASSESSMENT
Birds						
American bittern ( <i>Botaurus lentiginosus</i> )	Endangered	Not Listed	Nesting bitterns prefer large undisturbed wetlands that have scattered small pools amongst dense vegetation. They occasionally occupy bogs, large wet meadows, and dense shrubby swamps.	No	ODNR has recommended that potential nesting habitat be avoided during the May 1 <sup>st</sup> to July 31 <sup>st</sup> nesting period.	Potentially suitable habitat was not identified within the ESC.
black-crowned night-heron ( <i>Nycticorax nycticorax</i> )	Threatened	Not Listed	Roost in trees near wetlands and waterbodies during the day and forage at night. but can be found in more urbanized areas with reliable food sources year-round. Nest in small trees, saplings, shrubs, or sometimes on the ground, near bodies of water and wetlands.	No	ODNR has recommended that potential nesting habitat be avoided during the May 1 <sup>st</sup> to July 31 <sup>st</sup> nesting period.	Potentially suitable habitat was not identified within the ESC.
Upland sandpiper ( <i>Bartramia longicauda</i> )	Endangered	Not Listed	Nesting habitat is provided in grasslands, pastures, and old-field areas.	No	ODNR has recommended that potential nesting habitat be avoided during the April 15 <sup>th</sup> to July 31 <sup>st</sup> nesting period.	Potentially suitable habitat was not identified within the ESC.
lark sparrow ( <i>Chondestes grammacus</i> )	Endangered	Not Listed	Nests in grassland habitats with scattered shrub layers, disturbed open areas, as well as patches of bare soil. In the Oak Openings area west of Toledo, lark sparrows occupy open grass and shrubby fields along sandy beach ridges.	No	ODNR has recommended that potential nesting habitat be avoided during the May 1 <sup>st</sup> to June 30 <sup>th</sup> nesting period.	Potentially suitable habitat was not identified within the ESC.
least bittern ( <i>Ixobrychus exilis</i> )	Threatened	Not Listed	Prefers dense emergent wetlands with thick stands of cattails, sedges, sawgrass or other semiaquatic vegetation interspersed with woody vegetation and open water.	No	ODNR has recommended that potential nesting habitat be avoided during the May 1 <sup>st</sup> to July 31 <sup>st</sup> nesting period.	Potentially suitable habitat was not identified within the ESC.



**TABLE 4-3: LISTED SPECIES COMMENTED ON BY ODNR AND USFWS**

COMMON NAME (SCIENTIFIC NAME)	STATE STATUS	FEDERAL STATUS	HABITAT DESCRIPTION	POTENTIAL HABITAT OBSERVED IN ESC	AGENCY COMMENT	WSP IMPACT ASSESSMENT
northern harrier ( <i>Circus hudsonis</i> )	Endangered	Not Listed	Nesters are much rarer, although they occasionally breed in large marshes and grasslands. The female builds a nest out of sticks on the ground, often on top of a mound. Harriers hunt over grasslands.	No	ODNR has recommended that potential nesting habitat be avoided during the May 15 <sup>th</sup> to August 1 <sup>st</sup> nesting period	Potentially suitable habitat was not identified within the ESC.
sandhill crane ( <i>Grus canadensis</i> )	Threatened	Not Listed	wetland-dependent species that roosts in shallow, standing water or moist bottomlands. On breeding grounds, they require a rather large tract of wet meadow, shallow marsh, or bog for nesting.	No	ODNR has recommended that potential nesting habitat be avoided during the April 1 <sup>st</sup> to September 1 <sup>st</sup> nesting period.	Potentially suitable habitat was not identified within the ESC.



## 5 SUMMARY

WSP conducted environmental surveys of the proposed approximately 0.3-mile-long Cyprus – Parsons 138 kV Transmission Line Project on April 7, 2021. The results discussed in this report are confined to the ESC limits described in earlier sections and depicted on Figure 3 (Appendix A). No wetlands, streams, or open water features were identified by the WSP ecologist within the ESC. No potential summer roosting habitat for bats was identified within the ESC, and no potential bat hibernacula were identified within 0.25-miles the ESC during the field survey.

Based on observations within the ESC during environmental surveys, USFWS comments, and ODNR comments, potential impacts to the Indiana bat and northern long-eared bat are not anticipated since the forested areas that would typically provide potential summer roost habitat for bat species located within the ESC had been cleared and/or impacted at the time of the environmental survey and no longer provide potential habitat to bat species during summer months.

WSP performed a desktop review for potential hibernacula within the vicinity of the Project as a result of comments from ODNR relating to state- and federally-listed bat species. Topographic maps did not depict caves, cliffs/ledges, or karst topography within a three-mile radius of the ESC. A review of aerial imagery also did not provide evidence of these habitat types. No potential hibernacula were identified within 0.25-miles of the ESC and no potential hibernacula were identified within the ESC during the field survey. Additional information pertaining to the state- and federally-listed bat species is provided in Table 4-3.

Potentially suitable habitat for state and/or federally listed threatened and endangered bird species was not identified within the ESC.



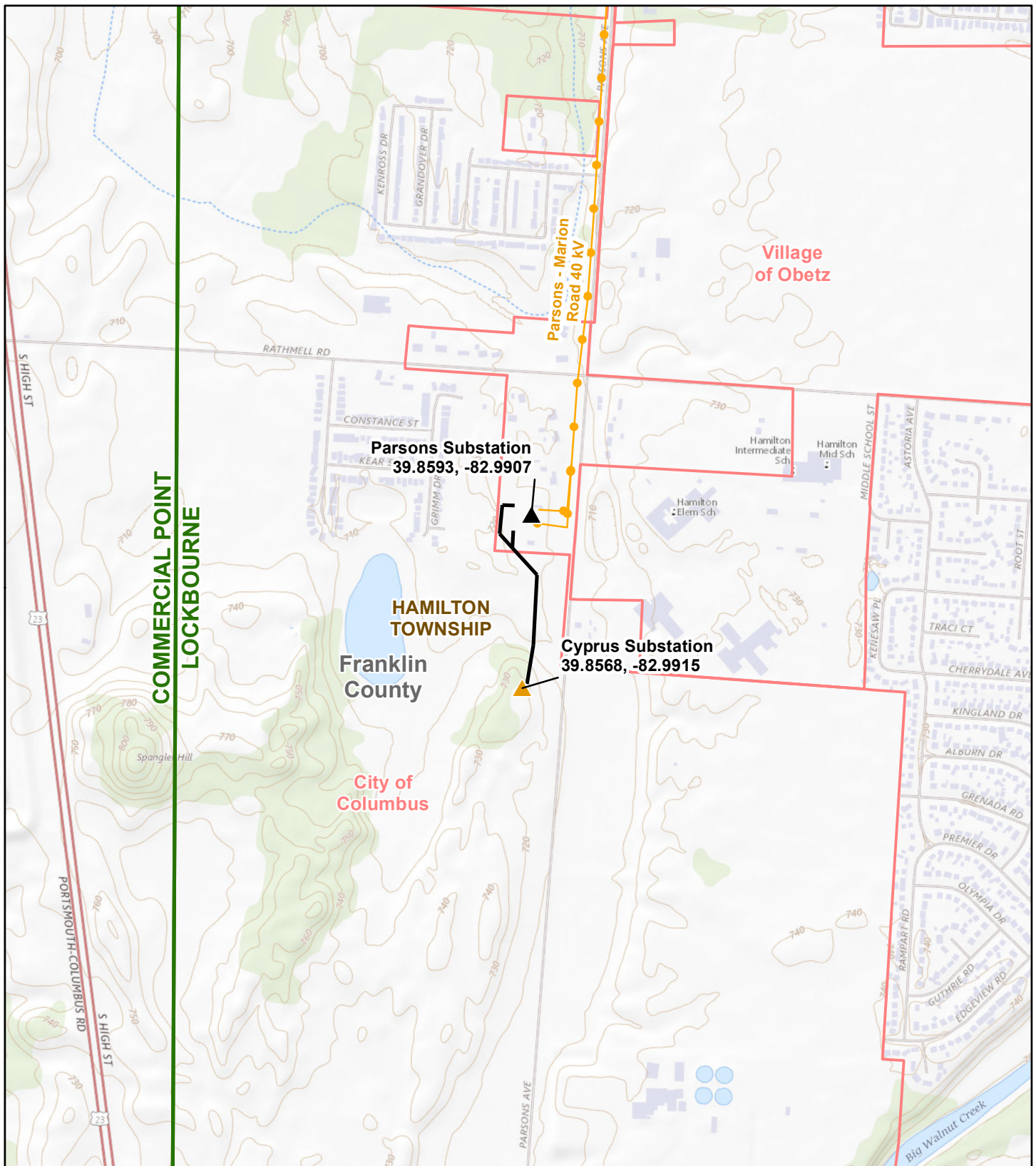
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# APPENDIX

## A FIGURES



<ul style="list-style-type: none"> <li><span style="color: orange;">▲</span> Proposed Substation</li> <li><span style="color: black;">▲</span> Existing Substation</li> <li><span style="color: orange;">—</span> Existing Transmission Line</li> <li><span style="color: black;">—</span> Parsons-Cyprus 138kV Transmission Line</li> <li><span style="border: 1px solid green; display: inline-block; width: 20px; height: 10px;"></span> USGS 24k Topo Quad Boundary</li> <li><span style="border: 1px solid red; display: inline-block; width: 20px; height: 10px;"></span> Municipal Boundary</li> <li><span style="border: 1px solid brown; display: inline-block; width: 20px; height: 10px;"></span> Township Boundary</li> <li><span style="border: 1px solid gray; display: inline-block; width: 20px; height: 10px;"></span> County Boundary</li> </ul>	<p>Sources: USGS Topo Quads (2013)</p> <p>Coordinate System: State Plane Ohio South NAD 1983</p> <p>February 8, 2022</p>		<p>Cyprus - Parsons 138kV Transmission Line Project</p> <p><b>Figure 1. Project Location Map</b></p> <div style="display: flex; align-items: center;"> <div style="margin-right: 20px;"> </div> <div style="margin-right: 20px;"> </div> </div> <div style="display: flex; align-items: center;"> <div style="margin-right: 20px;"> <p>0 500 1,000 Feet</p> </div> <div> <p>N</p> </div> </div>
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<ul style="list-style-type: none"><li>▲ Proposed Substation</li><li>▲ Existing Substation</li><li>— Parsons-Cyprus 138kV Transmission Line</li><li>● Existing Transmission Line</li><li>--- Environmental Survey Corridor</li></ul>	<ul style="list-style-type: none"><li>NWI Wetlands</li><li>NHD Waterbody</li><li>Soil Map Unit</li></ul>	<ul style="list-style-type: none"><li>Municipal Boundary</li><li>Township Boundary</li><li>County Boundary</li></ul>	<p>2019 Imagery (NAIP) Wetland (USFWS) Hydrography (USGS) Soil Units (USDA) Floodplains (FEMA)</p>		<p>CYPRUS - PARSONS 138 KV TRANSMISSION LINE PROJECT</p> <p><b>Figure 2. Environmental Basemap</b></p>
			<p>Coordinate System: Ohio State Plane South NAD 1983</p>		
			<p>February 8, 2022</p>		<p>0 200 400 Feet</p>





<div>▲ Proposed Substation</div> <div>▲ Existing Substation</div> <div>● Existing Transmission Line</div> <div>— Parsons-Cyprus 138kV Transmission Line</div> <div>--- Environmental Survey Corridor</div> <div>□ Municipal Boundary</div> <div>□ Township Boundary</div> <div>□ County Boundary</div>	Sources: 2019 Imagery (NAIP)		CYPRUS - PARSONS 138KV TRANSMISSION LINE PROJECT	
	Coordinate System: Ohio State Plane South NAD 1983		<b>Figure 3. Delineated Features</b>	
	February 8, 2022			
		<div><div>N</div><div>0200400 Feet</div></div>		





<ul style="list-style-type: none"><li>▲ Proposed Substation</li><li>▲ Existing Substation</li><li>— Existing Transmission Line</li><li>— Parsons-Cyprus 138kV Transmission Line</li><li>--- Environmental Survey Corridor</li></ul> <p><b>Vegetation Coverage</b></p> <ul style="list-style-type: none"><li>Agricultural Land</li><li>Developed, High Intensity</li></ul>	<ul style="list-style-type: none"><li>Developed, Open Space</li><li>Scrub/Shrub</li><li>Municipal Boundary</li><li>Township Boundary</li><li>County Boundary</li></ul>	<p>Sources: 2019 Imagery (NAIP)</p> <p>Coordinate System: Ohio State Plane South NAD 1983</p> <p>February 9, 2022</p>		<p>CYPRUS - PARSONS 138 KV TRANSMISSION LINE PROJECT</p> <p><b>Figure 4. Vegetation Coverage</b></p> <div></div> <div></div>
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# APPENDIX

## B REPRESENTATIVE PHOTOGRAPHS



PHOTOGRAPH 1



Recently cleared woodland and adjacent cultivated field, facing south on April 7, 2021.

PHOTOGRAPH 2



Agricultural land within ESC facing east on April 7, 2021.



PHOTOGRAPH 3



Representative view of scrub-shrub habitat, facing southeast on April 7, 2021.



# APPENDIX

## C AGENCY COORDINATION

## Renner, Philip

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**From:** Ohio, FW3 <ohio@fws.gov>  
**Sent:** Thursday, March 10, 2022 12:54 PM  
**To:** Renner, Philip  
**Subject:** Cyprus-Parsons 138 kV Transmission Line, Franklin County, Ohio



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



Project Code: 2022-0013855

Dear Mr. Renner,

The U.S. Fish and Wildlife Service (Service) 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 effects to threatened and endangered species pursuant to the Endangered Species Act of 1973 (16 U.S.C. 1531 et seq), as amended (ESA).

Federally Threatened and Endangered Species: Due to the project, type, size, and location, we do not anticipate adverse effects to federally endangered, threatened, or proposed species or proposed or designated critical habitat. If there are any project modifications during the term of this action, or additional information for listed or proposed species or their critical habitat becomes available, or if new information reveals effects of the action that were not previously considered, then please contact us for additional project review.

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

Sincerely,

Patrice M. Ashfield  
Ohio Field Office Supervisor



# Ohio Department of Natural Resources

MIKE DeWINE, GOVERNOR

MARY MERTZ, DIRECTOR

## Office of Real Estate

*John Kessler, Chief*

2045 Morse Road – Bldg. E-2

Columbus, OH 43229

Phone: (614) 265-6621

Fax: (614) 267-4764

March 25, 2022

Philip Renner  
WSP USA  
Suite 2500  
312 Elm Street  
Cincinnati, OH 45202

**Re:** 22-0204; Cyprus-Parsons 138 kV Transmission Line Project

**Project:** The proposed project involves the installation of 0.3 miles of 138kV transmission line from an existing station to a proposed new station.

**Location:** The proposed project is located in Hamilton Township, Franklin 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. In addition, we are unaware of any unique ecological sites, geologic features, animal assemblages, scenic rivers, state nature preserves, wildlife areas, parks or forests, national wildlife refuges, or other protected natural areas within the 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 little brown bat (*Myotis lucifugus*), a state endangered species. Because presence of state endangered bat species has been established in the

area, summer tree cutting is not recommended, and additional summer surveys would not constitute presence/absence in the area. However, limited summer tree cutting inside this buffer may be acceptable after further consultation with DOW (contact Erin Hazelton at [Erin.hazelton@dnr.ohio.gov](mailto:Erin.hazelton@dnr.ohio.gov)).

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

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

The project is within the range of the following listed mussel species.

#### Federally Endangered

clubshell ( <i>Pleurobema clava</i> )	rayed bean ( <i>Villosa fabalis</i> )
northern riffleshell ( <i>Epioblasma torulosa rangiana</i> )	snuffbox ( <i>Epioblasma triquetra</i> )
purple cat’s paw ( <i>Epioblasma o. obliquata</i> )	

#### Federally Threatened

rabbitsfoot ( <i>Quadrula cylindrica cylindrica</i> )
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#### State Endangered

elephant-ear ( <i>Elliptio crassidens crassidens</i> )	pocketbook ( <i>Lampsilis ovata</i> )
long solid ( <i>Fusconaia maculata maculate</i> )	washboard ( <i>Megaloniais nervosa</i> )
Ohio pigtoe ( <i>Pleurobema cordatum</i> )	

#### State Threatened

black sandshell ( <i>Ligumia recta</i> )	pondhorn ( <i>Unio merus tetralasmus</i> )
fawnsfoot ( <i>Truncilla donaciformis</i> )	threehorn wartyback ( <i>Obliquaria reflexa</i> )

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

The project is within the range of the following listed fish species.

State Endangered

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goldeye ( <i>Hiodon alosoides</i> )	shortnose gar ( <i>Lepisosteus platostomus</i> )
Iowa darter ( <i>Etheostoma exile</i> )	spotted darter ( <i>Etheostoma maculatum</i> )
northern brook lamprey ( <i>Ichthyomyzon fossor</i> )	tonguetied minnow ( <i>Exoglossum laurae</i> )
popeye shiner ( <i>Notropis ariommus</i> )	

State Threatened

---

lake chubsucker ( <i>Erimyzon sucetta</i> )	Tippecanoe darter ( <i>Etheostoma tippecanoe</i> )
paddlefish ( <i>Polyodon spathula</i> )	

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

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

The project is within the range of the black-crowned night-heron (*Nycticorax nycticorax*), a state-threatened bird. Night-herons are so named because they are nocturnal, conducting most of their foraging in the evening hours or at night, and roost in trees near wetlands and waterbodies during the day. Night herons are migratory and are typically found in Ohio from April 1 through December 1 but can be found in more urbanized areas with reliable food sources year-round. Black-crowned night-herons primarily forage in wetlands and other shallow aquatic habitats, and roost in trees nearby. These night-herons nest in small trees, saplings, shrubs, or sometimes on the ground, near bodies of water and wetlands. If this type of habitat will be impacted, construction should be avoided in this habitat during the species' nesting period of May 1 through July 31. If this type of habitat will not be impacted, this project is not likely to impact this species.

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

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

The project is within the range of the northern harrier (*Circus hudsonis*), a state endangered bird. This is a common migrant and winter species. Nesters are much rarer, although they occasionally breed in large marshes and grasslands. Harriers often nest in loose colonies. The female builds a

nest out of sticks on the ground, often on top of a mound. Harriers hunt over grasslands. If this type of habitat will be impacted, construction should be avoided in this habitat during the species' nesting period of April 15 through July 31. If this habitat will not be impacted, this project is not likely to impact this species.

The project is within the range of the sandhill crane (*Grus canadensis*), a state threatened species. Sandhill cranes are primarily a wetland-dependent species. On their wintering grounds, they will utilize agricultural fields; however, they roost in shallow, standing water or moist bottomlands. On breeding grounds they require a rather large tract of wet meadow, shallow marsh, or bog for nesting. If grassland, prairie, or wetland habitat will be impacted, construction should be avoided in this habitat during the species' nesting period of April 1 through August 31. If this habitat will not be impacted, this project is not likely to have an impact on this species.

The project is within the range of the upland sandpiper (*Bartramia longicauda*), a state endangered bird. Nesting upland sandpipers utilize dry grasslands including native grasslands, seeded grasslands, grazed and ungrazed pasture, hayfields, and grasslands established through the Conservation Reserve Program (CRP). 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 type of 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. Your local floodplain administrator contact information can be found at the website below.

[http://water.ohiodnr.gov/portals/soilwater/pdf/floodplain/Floodplain%20Manager%20Community%20Contact%20List\\_8\\_16.pdf](http://water.ohiodnr.gov/portals/soilwater/pdf/floodplain/Floodplain%20Manager%20Community%20Contact%20List_8_16.pdf)

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

Mike Pettegrew  
Environmental Services Administrator

**This foregoing document was electronically filed with the Public Utilities  
Commission of Ohio Docketing Information System on**

**4/7/2022 1:52:24 PM**

**in**

**Case No(s). 22-0254-EL-BLN**

Summary: Letter of Notification Cyprus – Parsons 138 kV Transmission Line  
Project electronically filed by Hector Garcia-Santana on behalf of AEP Ohio  
Transmission Company, Inc.