

**Letter of Notification
Vine-City of Columbus
West 138 kV
Transmission Line
Relocation Project**



An **AEP** Company

*BOUNDLESS ENERGY*SM

PUCO Case No. 22-0918-EL-BLN

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

Submitted by:
Ohio Power Company

October 14, 2022

Letter of Notification for Vine-City of Columbus West 138 kV Transmission Line Relocation Project

Letter of Notification

Ohio Power Company Vine-City of Columbus West 138 kV Transmission Line Relocation Project

4906-6-05

Ohio Power Company (the “Company”) provides the following information to the Ohio Power Siting Board (“OPSB”) pursuant to Ohio Administrative Code Section 4906-6-05.

4906-6-5(B) General Information

B(1) Project Description

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

The Company proposes the Vine-City of Columbus West 138 kilovolt (kV) Transmission Line Relocation Project (the “Project”) in the City of Columbus, Franklin County, Ohio. The purpose of this project is to relocate 0.3 miles of overhead 138 kV transmission line to underground 138 kV transmission line, which was requested by a customer, in order to accommodate new development in the area. The underground relocation will be rebuilt within road right-of-way (“ROW”) or the existing transmission line ROW. The Project will also require the installation of two riser poles on either end of the relocated 138 kV line to accommodate the transition from overhead to underground. In addition, one span of overhead transmission line will be required to be adjusted to accommodate the new riser pole on the western end of the Project. The location of the Project is shown on Figure 1 and Figure 2 in Appendix A.

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

- (1) New construction, extension, or relocation of single or multiple circuit electric power transmission line(s), or upgrading existing transmission or distribution line(s) for operation at a higher transmission voltage, as follows:*
 - (b) Line(s) greater than 0.2 miles in length but not greater than two miles in length.*

The Project has been assigned PUCO Case No. 22-0918-EL-BLN.

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B(2) Statement of Need

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

The Project's primary purpose is to relocate 0.3 miles of the overhead Vine - City of Columbus West 138 kV transmission line to an underground 138 kV transmission line. A customer notified the Company of its plans to develop property in the area where the existing 138 kV line is currently. As such, the customer requested that the Company relocate the existing 138 kV underground at the customer's expense. Removing the Vine - City of Columbus West 138 kV line is not feasible, as this line is one of two feeds that directly serves the City of Columbus network and is necessary for the reliability of the City of Columbus' network.

The Project need was submitted to PJM in the September 2022. The Project was not reported in the Company's 2022 Long-Term Forecast Report because the Project was unknown at the time of filing.

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 line and proposed relocation is shown in Figure 1 of Appendix A.

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 relocates 0.3 miles of the overhead Vine-City of Columbus West 138 kV transmission line to an underground 138 kV transmission line at the request of a customer. The customer plans to develop property in the area where the existing 138 kV line is currently. The Project will be completed at the customer's expense. No impacts to ecological or cultural resources resulting from the Project have been identified. Further, the line cannot be removed due to the reliability the line provides to the area. Therefore, completing the Project as requested by the customer is the preferred alternative and no other alternatives were considered.

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.

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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 Ohio Revised Code (“OAC”) Section 4906-6-08(A)(1-6). Further, the Company 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 provides the public access to an electronic copy of this LON and the public notice for this LON. An electronic copy of the LON will be served to the public library in each political subdivision for this Project. The Company retains ROW land agents that discuss Project timelines, construction and restoration activities and convey information to affected owners and tenants throughout the Project.

B(6) Construction Schedule

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

Construction of the Project is planned to begin in November 2022, and the anticipated in-service date will be October 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 provides the proposed Project area on a map of 1:24,000-scale (1 inch equals 2,000 feet), showing the Project on the United States Geological Survey (USGS) 7.5-minute topographic map of the Southwest Columbus, Ohio quadrangle. Figure 2 in Appendix A shows the Project Area on recent aerial photography, dated 2020, as provided by ESRI World Imagery at a scale of 1:2,400 scale (1 inch equals 200 feet).

To visit the Project site from the OPSB Office, head west on East Broad Street for approximately 0.4 mile. Turn right onto North Front Street and continue for 0.3 mile. Turn left onto West Spring Street. Continue for 0.3 mile before turning right onto Neil Avenue. The Project area is approximately 0.4 mile north at the intersection of Neil Avenue and Vine Street (latitude 39.971545, longitude -83.009507). The Project extends east and west along Vine Street from this location.

B(8) Property Agreements

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

The Project relocates an overhead transmission line to underground operation. The underground relocation will be constructed within road ROW through an agreement with the City of Columbus obtained by the customer. Three parcels at the eastern and western ends of the Project will be crossed by the overhead spans. No new ROW will be required on any of these parcels. No other property easements, options, or land use agreements are necessary to construct the Project or operate the transmission line.

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

Property Parcel Number	Agreement Type	Easement/ Option Obtained (Yes/No)
010-253404	Existing ROW	Yes
010-053470	Existing ROW	Yes
010-066303	Existing ROW	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.

Line Asset Name - Vine-City of Columbus West 138 kV, anticipated technical specifications:

Underground

Voltage: 138 kV
 Conductors: (3) 5000 kcmil copper solid dielectric transmission cables
 Static Wire: 350 kcmil ground continuity conductor
 Insulators: Not applicable
 ROW Width: Installed in public road right of way
 Structure Types: Underground duct bank

Overhead

Voltage: 138 kV
 Conductors: (3) 795 kcm ACSR 45/7 Strand
 Static Wire: (1) 7#8 Alumoweld,
 Insulators: Polymer
 ROW Width: 80'
 Structure Type: (2) Custom Steel monopole riser poles with a drill pier concrete foundation

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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.

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, of centerline).

Our results, calculated using EPRI's CYMCAP 8.0 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) and 50 feet (right) of centerline, respectively.

Vine-City of Columbus West 138 kV Line			
Condition	Load (A)	Phasing Arrangements	Magnetic Field (mG)*
(1) Normal Max. Loading[^]	1183	A-B-C	4.55/192.42/4.95
(2) Emergency Line Loading^{^^}	1183	A-B-C	4.55/192.42/4.95
(3) Winter Conductor Rating^{^^^}	1200	A-B-C	4.62/195.19/5.02

[^]Peak line flow expected with all system facilities in service.

^{^^}Maximum flow during a critical system contingency

^{^^^}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

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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 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)(c) Project Cost

The estimated capital cost of the project.

The capital cost estimate for the proposed Project, which is comprised of applicable tangible and capital costs, is approximately \$4,100,000 based on a Class 5 estimate. The costs of this Project will be fully recovered through reimbursement by the customer.

B(10) Social and Economic Impacts

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

B(10)(a) Land Use Characteristics

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

Aerial photography of the Project vicinity is provided as Figure 2 in Appendix A. The Project is located in the City of Columbus, Franklin County, Ohio. Land use in the Project area consists of urban development including commercial buildings and multi-family residences on the adjacent properties.

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 agricultural land is located within the Project footprint or adjacent properties. The Franklin County Auditor provided a list of parcels registered as Agricultural District Land on October 6, 2022. None of the Project Area properties were identified as an Agricultural District Land parcel.

B(10)(c) Archaeological and Cultural Resources

Provide a description of the applicant’s investigation concerning the presence or absence of significant archaeological or cultural resources that may be located within the potential disturbance area of the project, a statement of the findings of the investigation, and a copy of any document produced as a result of the investigation.

The Company’s consultant completed a Phase I Cultural Resource Management Investigation of the Project Area. No archaeology sites or historic structures were identified, and no further investigation was considered to be necessary for the Project. The Ohio Historic Preservation Office (“SHPO”) agreed that the Project will have no effect on historic properties and no additional coordination is necessary prior to construction. A copy of the October 5, 2022 concurrence letter from SHPO is provided in Appendix C.

B(10)(d) Local, State, and Federal Agency Correspondence

Provide a list of the local, state, and federal governmental agencies known to have requirements that must be met in connection with the construction of the project, and a list of documents that have been or are being filed with those agencies in connection with siting and constructing the project.

The Project disturbance is below the reporting levels for an Ohio Environmental Protection Agency Stormwater Pollution Prevention Plan.

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The Project required an Economic Development permit from the City of Columbus and concurrence from the City of Columbus was received in September 2022.

No streams or wetlands were delineated in the Project area (see Appendix D). Therefore, the Project will not require a Clean Water Act Section 404 Permit from the U.S. Army Corps of Engineers or a Section 401 Water Quality Certification from the OEPA.

The FEMA Flood Insurance Rate Map was reviewed to identify any floodplains/flood hazard areas that have been mapped within the Project Area (specifically, map number **39049C0307K**). Based on this mapping, no mapped FEMA floodplains are located in the Project Area. Therefore, no floodplain permit will be required for this Project.

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

B(10)(e) Threatened, Endangered, and Rare Species

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

The Company's consultant requested comments from the United States Fish and Wildlife Service (USFWS) and Ohio Department of Natural Resources (ODNR) regarding threatened and endangered species with the potential to inhabit the Project area. On October 6, 2022, USFWS stated that they do not anticipate adverse effects to federally endangered, threatened, or proposed species or proposed or designated critical habitat, see Appendix C.

ODNR provided a response on October 6, 2022, see Appendix C. Records of four mussel species and the little brown bat were reported in the vicinity of the Project. Further, ODNR indicated that the Project area is likely situated within the range of 26 threatened and endangered species. These species include Indiana, northern long-eared, little brown, and tricolored bat species listed as endangered or threatened at the federal or state level. The Company's consultant conducted a desk top survey based on the current Ohio Division of Wildlife and U.S. fish and Wildlife Services (OH-Field Office) Joint Guidance for Bat Surveys and Tree Clearing and did not identify any hibernaculums in the area. Tree clearing for the Project is anticipated to occur between October 1 and March 31. Bat species are not expected to be impacted by the Project.

No streams were identified in the Project area. Threatened and endangered aquatic species such as listed fishes and mussels will not be impacted.

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.

Based on a review of GIS data including Public Areas Database of the U.S. (PADUS) and parcels from the county auditor, unique ecological sites, geologic features, animal assemblages, scenic rivers, state wildlife areas, state nature preserves, state or national parks, state or national forests, or other protected natural areas were not identified within the Project Area.

FEMA Flood Insurance Rate Maps were consulted to identify any floodplains/flood hazard areas that have been mapped in the Project Area (specifically, map number **39049C0307K**). Based on these maps, no mapped FEMA floodplains are located in the Project area.

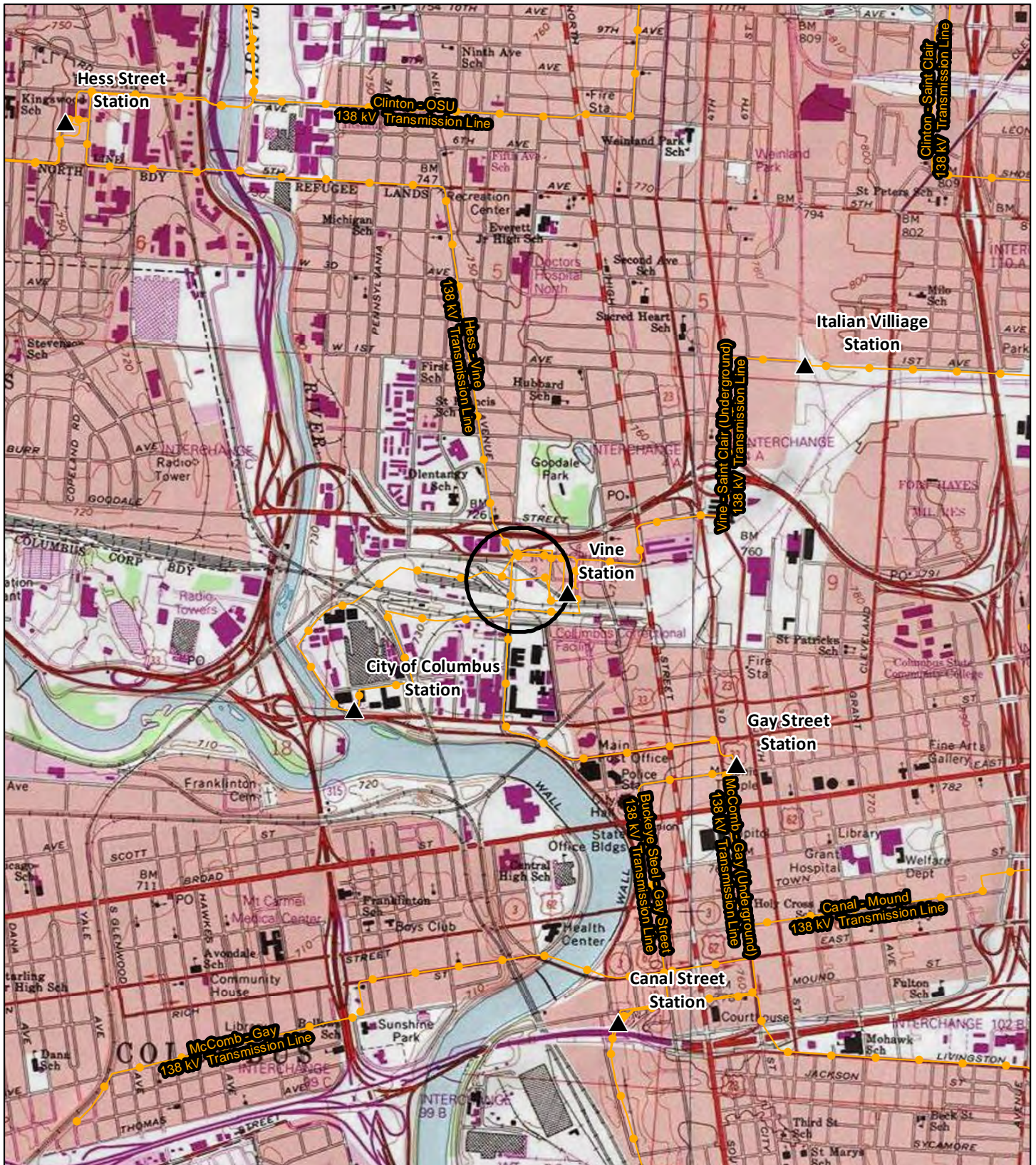
Wetland and stream delineation field surveys were completed within the Project area by the Company's consultant in September 2022. No streams or wetlands were delineated in the Project area. (see Figure 3 in Appendix D).




B(10)(g) Unusual Conditions

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

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

APPENDIX A – FIGURES



-  Project
-  Existing Transmission Line (138 kV)
-  Existing Station

Data Sources: AEP, USGS 7.5' Topographic Quadrangles (SW Columbus and SE Columbus, Ohio)

Ohio State Plane South NAD 1983



October 06, 2022

PROJECT LOCATION

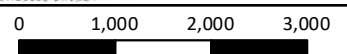


DELAWARE COUNTY, OHIO

FIGURE 1
TOPOGRAPHIC OVERVIEW



Vine-City of Columbus West
138 kV Transmission Line
Relocation Project



Feet



- Proposed Underground 138 kV Transmission Line
- - Proposed 138 kV Overhead Span Relocation
- Existing Transmission Line (138 kV)
- Parcel Boundary

Data Sources: AEP,
Franklin County Auditor,
ESRI World Imager (2020)

Ohio State Plane South
NAD 1983

October 11, 2022



FIGURE 2
PROJECT AERIAL MAP

Vine-City of Columbus West
138 kV Transmission Line
Relocation Project

0 100 200 300 400
Feet

APPENDIX B – PJM SUBMITTAL

Need Number: AEP-2022-OH070

Process Stage: Need Meeting 9/16/2022

Supplemental Project Driver:

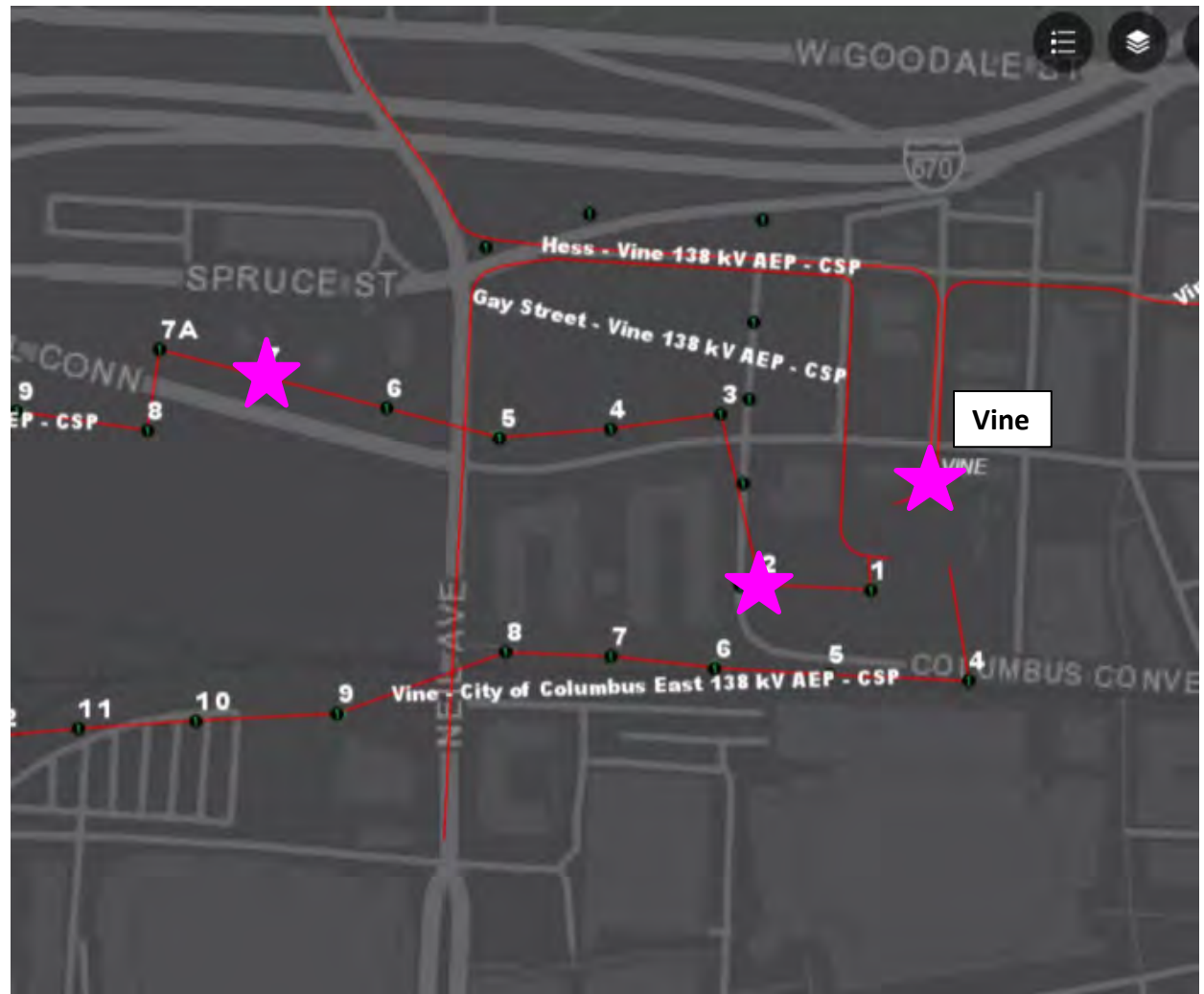
Customer Service

Specific Assumption Reference:

AEP Guidelines for Transmission Owner Identified Needs (AEP Assumptions slide 7)

Problem Statement:

- A customer has requested that AEP relocate the section from structures 2 to 7 of the Vine - City of Columbus West 138kV line from overhead to underground to accommodate development in the area. The customer has requested this work to be in service by June 2023.



APPENDIX C – AGENCY CORRESPONDENCE



In reply, refer to
2022-FRA-56008

October 5, 2022

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

RE: Vine Street-City of Columbus 138kV Rebuild Project, City of Columbus, Franklin County, Ohio

Dear Mr. Weller:

This letter is in response to the correspondence received September 29, 2022 regarding the proposed Vine Street-City of Columbus 138kV Rebuild Project, City of Columbus, Franklin County, Ohio. We appreciate the opportunity to comment on this project. The comments of the Ohio State Historic Preservation Office (SHPO) are made pursuant to Section 149.53 of the Ohio Revised Code and the Ohio Power Siting Board rules for siting this project (OAC 4906-5). The comments of the Ohio SHPO are also submitted in accordance with the provisions of Section 106 of the National Historic Preservation Act of 1966, as amended (54 U.S.C. 306108 [36 CFR 800]).

The following comments pertain to the *Cultural Resource Management Literature Review for the Vine Street-City of Columbus 138kV Rebuild Project in The City of Columbus, Franklin County, Ohio* by Ryan J. Weller (Weller & Associates, Inc. 2022).

A literature review was completed for the proposed Vine Street-City of Columbus 138kV Rebuild Project, which consists of an aboveground line to an underground easement from Structure 2 to Structure 7. No previously identified archaeological sites are located within the project area. The project as proposed will not affect history/architecture resources. Our office agrees no additional cultural resource investigation is needed.

Based on the information provided, we agree that the project as proposed will have no effect on historic properties. No further coordination with this office is necessary, unless the project changes or unless new or additional historic properties are discovered during implementation of this project. In such a situation, this office should be contacted. If you have any questions, please contact me at (614) 298-2022, or by e-mail at khorrocks@ohiohistory.org. Thank you for your cooperation.

Sincerely,

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

Krista Horrocks, Project Reviews Manager
Resource Protection and Review

RPR Serial No: 1095168



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

October 6, 2022

Aaron Geckle
V3 Companies
312 Walnut Street, Suite 1600
Cincinnati, OH 45202

Re: 22-0910; AEP Vine-City of Columbus West 138 kV Transmission Line Relocation

Project: The proposed project involves relocating approximately 0.3 miles of the existing Vine-City of Columbus 138 kV transmission line from overhead to underground.

Location: The proposed project is located in the City of Columbus, 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: The Natural Heritage Database has the following data within one mile of the project area:

Elktoe (*Alasmidonta marginata*), SC
Wavy-rayed Lampmussel (*Lampsilis fasciola*), SC
Round Pigtoe (*Pleurobema sintoxia*), SC
Pondhorn (*Uniomerus tetralasmus*), T

Conservation status abbreviations are as follows: E = state endangered; T = state threatened; P = state potentially threatened; SC = state species of concern; SI = state special interest; U = state status under review; X = presumed extirpated in Ohio; FE = federally endangered, and FT = federally threatened.

The review was performed on the specified project area as well as an additional one-mile radius. 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 an area is not a statement that rare species or unique features are absent from that area.

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

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

The project is within the vicinity of records for the 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 Eileen Wyza at Eileen.Wyza@dnr.ohio.gov).

In addition, the entire state of Ohio is within the range of the Indiana bat (*Myotis sodalis*), a state endangered and federally endangered species, the northern long-eared bat (*Myotis septentrionalis*), a state endangered and federally 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 & NORTHERN LONG-EARED BAT SURVEY GUIDELINES](#)." If a habitat assessment finds that a potential hibernaculum is present within 0.25 miles of the project area, please send this information to Eileen Wyza for project recommendations. If a potential or known hibernaculum is found, the DOW recommends a 0.25-mile tree cutting and subsurface disturbance buffer around the hibernaculum entrance, however, limited summer or winter tree cutting may be acceptable after consultation with the DOW. If no tree cutting or subsurface impacts to a hibernaculum are proposed, this project is not likely to impact these species.

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

Federally Endangered

clubshell (*Pleurobema clava*)
rayed bean (*Villosa fabalis*)
northern riffleshell (*Epioblasma torulosa rangiana*)
snuffbox (*Epioblasma triquetra*)
purple cat's paw (*Epioblasma o. obliquata*)

Federally Threatened

rabbitsfoot (*Quadrula cylindrica cylindrica*)

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

pondhorn (*Uniomerus tetralasmus*)
Salamander Mussel (*Simpsonaias ambigua*)

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

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

State Endangered

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

State Threatened

lake chubsucker (*Erimyzon sucetta*)
paddlefish (*Polyodon spathula*)

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

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

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

The [local floodplain administrator](#) should be contacted concerning the possible need for any floodplain permits or approvals for this project.

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

Mike Pettegrew
Environmental Services Administrator

United States Department of the Interior



FISH AND WILDLIFE SERVICE

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



October 6, 2022

Project Code: 2022-0082743

Re: AEP Vine Street 138 kV transmission line relocation

Dear Mr./Ms.,

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.

Sincerely,

Patrice Ashfield
Field Office Supervisor

APPENDIX D – ECOLOGICAL RESOURCES DELINEATION REPORT

**VINE-CITY OF COLUMBUS WEST
138 kV TRANSMISSION LINE
RELOCATION PROJECT
ECOLOGICAL RESOURCES INVENTORY
REPORT**



PROJECT SITE:

Vine and Kilbourne Streets
City of Columbus, Franklin County, Ohio

PREPARED FOR:

AEP Ohio Transmission Company, Inc.
8500 Smiths Mill Road
New Albany, Ohio 43054



An **AEP** Company

BOUNDLESS ENERGY™

PREPARED BY:

V3 Companies, Ltd.
312 Walnut Street
Suite 1600
Cincinnati, Ohio 45202

October 2022

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CHAPTER 1 INTRODUCTION

AEP Ohio Transmission Company, Inc., (AEP) plans to convert approximately 0.3 mile of the Vine-City of Columbus 138 kV Transmission Line from overhead operation to underground at the request of a customer in the City of Columbus, Franklin County, Ohio (the Project). The section of transmission line is located predominantly along Kilbourne Street and Vine Street with the underground relocation shifting slightly primarily within the existing road right-of-way (ROW). The Project area (SITE) is generally centered on and within 25 feet of the existing and proposed alignments resulting in an approximately 3.2-acre corridor (**Figure 1**).

V3 Companies, Ltd (V3) evaluated the SITE for wetlands, streams, open water, and threatened and endangered species and habitat.

This report has been prepared solely in accordance with an agreement between AEP and V3. The services performed by V3 have been conducted in a manner consistent with the level of quality and skill generally exercised by members of its profession and consulting practices relating to this type of engagement.

This report is solely for the use of AEP. It was prepared based upon an understanding of AEP's specific objective(s) and based upon information obtained by V3 in furtherance of AEP's specific objective(s). Any reliance on this report by third parties shall be at such third party's sole risk as this report may not contain, or be based upon, sufficient information for purposes of other parties, for their objectives, or for other uses. This report shall only be presented in full and may not be used to support any objectives other than those for AEP as set out in the report, except where written approval and consent are expressly provided by AEP and V3.



CHAPTER 2 METHODS

2.1 LAND COVER SURVEY

V3 coordinated with the U.S. Fish and Wildlife Service (USFWS) and Ohio Department of Natural Resources (ODNR) to determine the potential presence of protected areas within the site area. Potential protected areas include unique ecological sites, geologic features, animal assemblages, scenic rivers, state wildlife areas, nature preserves, parks, state/national forests, wildlife refuges, and others.

V3 also completed a desktop terrestrial habitat analysis using geographic information system (GIS) software and aerial imagery. V3 identified land cover and vegetative community types within the Project area and determined the percent share of total area accounted for by each. V3 verified this analysis by completing a pedestrian survey of the Project area, noting vegetative species composition and documenting conditions with representative photographs.

2.2 WETLAND DELINEATION

V3 completed a wetland desktop review of Project area using the following: U.S. Geological Survey (USGS) topographic maps; aerial photography; National Wetland Inventory (NWI) maps; U.S. Department of Agriculture (USDA) Natural Resources Conservation Service (NRCS) soil survey maps; and Federal Emergency Management Agency (FEMA) National Flood Hazard Layer (NFHL) data.

V3 completed an on-site wetland delineation using the Routine Determination Method (RDM) as per the U.S. Army Corps of Engineers (USACE) *Wetlands Delineation Manual* and *Midwest Supplement*. This approach recognizes the three parameters of wetland hydrology, hydrophytic vegetation, and hydric soils to identify and delineate wetland boundaries. Wetland surveys were conducted using the most current regulations as regulated by Ohio Administrative Code (OAC) rules 3745-1-50 through 3745-1-54. V3 used a portable global positioning system (GPS) of sub-meter accuracy to delineate all wetlands identified within the Project area. Once delineated, V3 classified these wetlands using the Ohio Rapid Assessment Method (ORAM) for wetlands.

2.3 STREAM DELINEATION

V3 completed a stream desktop review using the available USGS topographic mapping, aerial photography, and FEMA National Flood Hazard Layer (NFHL) data. A review of the Ohio Environmental Protection Agency (OEPA) Stream Water Quality Certification Eligibility Web Map and Aquatic Life Use Designations (OAC 3745-1) was also completed to determine if any potential jurisdictional streams have special permitting requirements.

V3 identified drainage features located at the Project area. If the feature exhibited an ordinary high water mark¹ (OHWM), V3 determined its jurisdictional status using the pre-2015 regulatory definition² of “Waters of the U.S.” If the feature qualified as a “Water of the U.S.,” V3 classified it as an ephemeral, intermittent, or perennial stream.³ As regulated by OAC Chapter 3745-1-24, V3 performed a functional habitat assessment using the Headwater Habitat Evaluation Index (HHEI) or the Qualitative Habitat Evaluation Index (QHEI). V3 recorded stream centerlines using a hand-held GPS of sub-meter accuracy.

¹ 33 Code of Federal Regulations (CFR) §328.3(c)(7)

² 40 CFR §230.3(s)a

³ 3 CFR §32.3(c)(3,5,8)



V3 also used a hand-held GPS to record the placement of upland drainage features lacking an OHWM but did not complete an HHEI or QHEI for these features.

2.4 OPEN WATER SURVEY

V3 completed an on-SITE survey for open water features (such as ponds) within the site area. V3 recorded the placement of these features using a hand-held GPS unit of sub-meter accuracy.

2.5 ENDANGERED, THREATENED, AND RARE SPECIES

V3 coordinated with the USFWS and the ODNR regarding the potential presence of any rare, threatened, or endangered species within the Project area in September 2022. This included a submittal to the USFWS Information and Planning Consultation (IPaC) website and correspondence letters to the USFWS and ODNR.

V3 also completed an on-site pedestrian habitat survey, noting and recording instances of rare, threatened, or endangered species habitat observed. If applicable, V3 documented rare, threatened, or endangered habitat using a hand-held GPS. If present, areas of karst topography and underground mine openings were also reviewed for potential as winter hibernacula for bat species.



CHAPTER 3 RESULTS

V3 completed on-SITE Project area fieldwork on 20 September 2022. This included a land cover survey, wetland delineation, stream delineation, open water survey, and habitat survey.

3.1 LAND COVER

Review of GIS databases and county parcel data indicated no protected areas within the Project area limits. V3's land cover survey identified three land cover and vegetative community types within the Project area (**Table 1** and **Figure 2**).

Table 1: Land Cover Survey Results

Type	Anthropogenic Disturbance	Unique, Rare, or High Quality?	Project Area Acreage (approximate)
Landscaped Lawns	Maintained grassland consistent vegetation mowing. Planting of non-native species is prevalent.	No	0.97
Scrub/Shrub/ROW	Existing electric transmission line with maintained vegetation including small coniferous trees and honeysuckle	No	0.10
Existing Asphalt/Gravel Roadway or Parking	Extremely disturbed areas completely or almost completely free of vegetation	No	2.12

Figure 2 shows the approximate placement of these land cover types. Representative photographs of the habitat in the Project area are included in **Appendix A**.

3.2 WETLANDS

V3 identified no wetlands within the Project area. **Figure 3** shows limits of the wetland delineation. No NWI features are mapped within the Project area. Data sheets for upland areas evaluated on SITE can be referenced in **Appendix B**.

3.3 STREAMS

No streams, ditches, or drainage features were identified within the Project area.

3.4 OPEN WATERS

V3 identified no open water features situated within the Project area.

3.5 ENDANGERED, THREATENED, AND RARE SPECIES

USFWS provided a written response regarding their review of the Project on 6 October 2022. Due to the Project type, size, and location, USFWS stated that they do not anticipate adverse effects to federally endangered, threatened, or proposed species or proposed or designated critical habitat. ODNR provided a response on 6 October 2022. Records of four mussel species and the little brown bat were reported in the vicinity of the Project. Further, ODNR indicated that the Project area is likely situated within the range of 26 threatened and endangered species, for which V3 identified no instance of potential habitat (**Table 2, Figure 4**). The response letters are provided in **Appendix C**.



Table 2: Habitat Survey Results

Scientific Name	Common Name	Federal Status	State Status	Habitat	Typical ODNR Comments	USFWS Comments	Habitat Observed	Potential Impacts & Avoidance
Bats								
<i>Myotis sodalis</i>	Indiana bat	E	E	During the spring and summer (April 1 through September 30), these species of bats predominately roost in trees behind loose, exfoliating bark, in crevices and cavities, or in the leaves. Primarily use caves for hibernacula, although they are also known to hibernate in abandoned underground mines.	Project is within the vicinity little brown bats. Additional summer surveys would not constitute presence/absence in the area. ODNR DOW recommends that habitat be conserved wherever possible. If suitable habitat occurs within the Project area and trees need to be cut, the ODNR DOW recommends cutting occur between October 1 and March 31. ODNR also recommends a desktop habitat assessment, followed by a field assessment if needed, to determine if a potential hibernaculum is present within 0.25 mile of the Project area.	Due to the Project type, size, and location, USFWS does not anticipate adverse effects to these species.	None	Any trees over 3 inches dbh will be cleared October 1 to March 31. Based on the current USFWS guidelines, no potential hibernacula were identified within 0.25 mile.
<i>Myotis septentrionalis</i>	Northern long-eared bat	T	E					
<i>Myotis lucifugus</i>	Little brown bat	N/A	E			None		
<i>Perimyotis subflavus</i>	Tricolored bat	N/A	E			None		



Scientific Name	Common Name	Federal Status	State Status	Habitat	Typical ODNR Comments	USFWS Comments	Habitat Observed	Potential Impacts & Avoidance
Fishes								
<i>Lepisosteus platostomus</i>	Shortnose gar	N/A	E	Perennial streams of sufficient size.	ODNR 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.	None	None	No perennial streams were observed within the Project area.
<i>Notropis ariommus</i>	Popeye shiner	N/A	E					
<i>Hiadon alosoides</i>	Goldeye	N/A	E					
<i>Ichthyomyzon fossor</i>	Northern brook lamprey	N/A	E					
<i>Etheostoma exile</i>	Iowa darter	N/A	E					
<i>Etheostoma maculatum</i>	Spotted darter	N/A	E					
<i>Exoglossum laurae</i>	Tonguetied minnow	N/A	E					
<i>Erimyzon sucetta</i>	Lake chubsucker	N/A	T					
<i>Polyodon spathula</i>	Paddlefish	N/A	T					
Mussels								
<i>Epioblasma torulosa rangiana</i>	Northern Riffleshell	E	E	Perennial streams of sufficient size.	The Project area is within the range of this species.	Due to the Project type, size, and location, USFWS does not anticipate adverse effects to these species.	None	No perennial streams were observed within the Project area. No in-water work is proposed.
<i>Epioblasma obliquata obliquata</i>	Purple cat's paw	E	E					
<i>Quadrula cylindrica</i>	Rabbitsfoot	T	E					
<i>Eliptio crassidens crassidens</i>	Elephant-ear	N/A	E					
<i>Pleurobema cordatum</i>	Ohio pigtoe	N/A	E					
<i>Lampsilis avata</i>	Pocketbook	N/A	E					



Scientific Name	Common Name	Federal Status	State Status	Habitat	Typical ODNR Comments	USFWS Comments	Habitat Observed	Potential Impacts & Avoidance
<i>Unio moeruser tetralasmus</i>	Pondhorn	N/A	T					
<i>Epioblasma triquetra</i>	Snuffbox	E	E					
<i>Fosconaia subrotunda</i>	Long solid	N/A	E					
<i>Megaloniais nervosa</i>	Washboard	N/A	E					
<i>Pleurobema clava</i>	Clubshell	E	E					
<i>Villosa fabalis</i>	Rayed bean	E	E					
<i>Simpsonaias ambigua</i>	Salamandar mussel	N/A	T					
Insects								
<i>Danaus plexippus</i>	Monarch butterfly	C	N/A	Migratory species that lay their eggs on their obligate milkweed host plant.	None	Due to the Project type, size, and location, USFWS does not anticipate adverse effects to this species.	None	Transient nature of species and limited footprint of Project work areas relative to surrounding area.

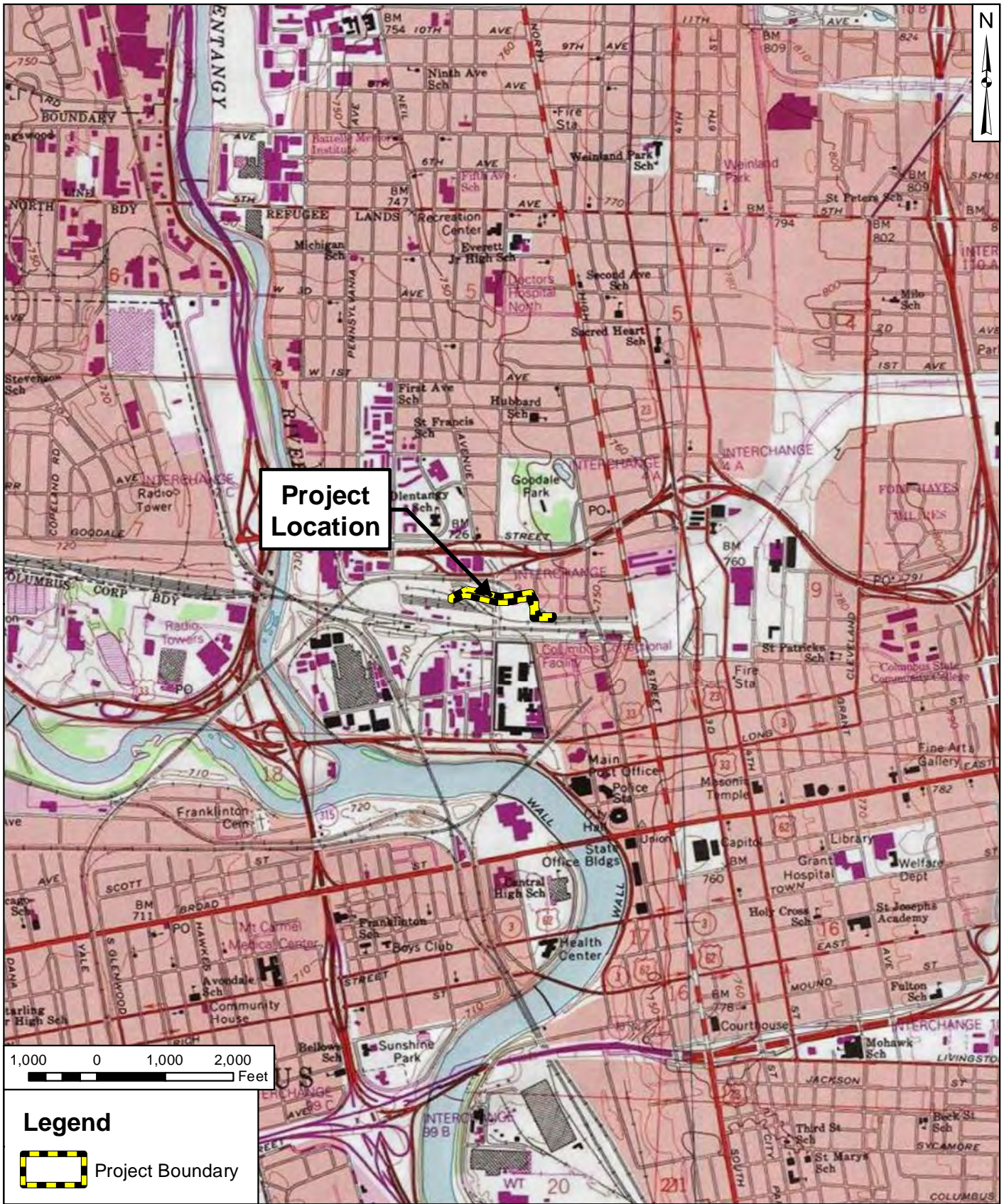



CHAPTER 4 CONCLUSION

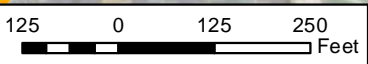
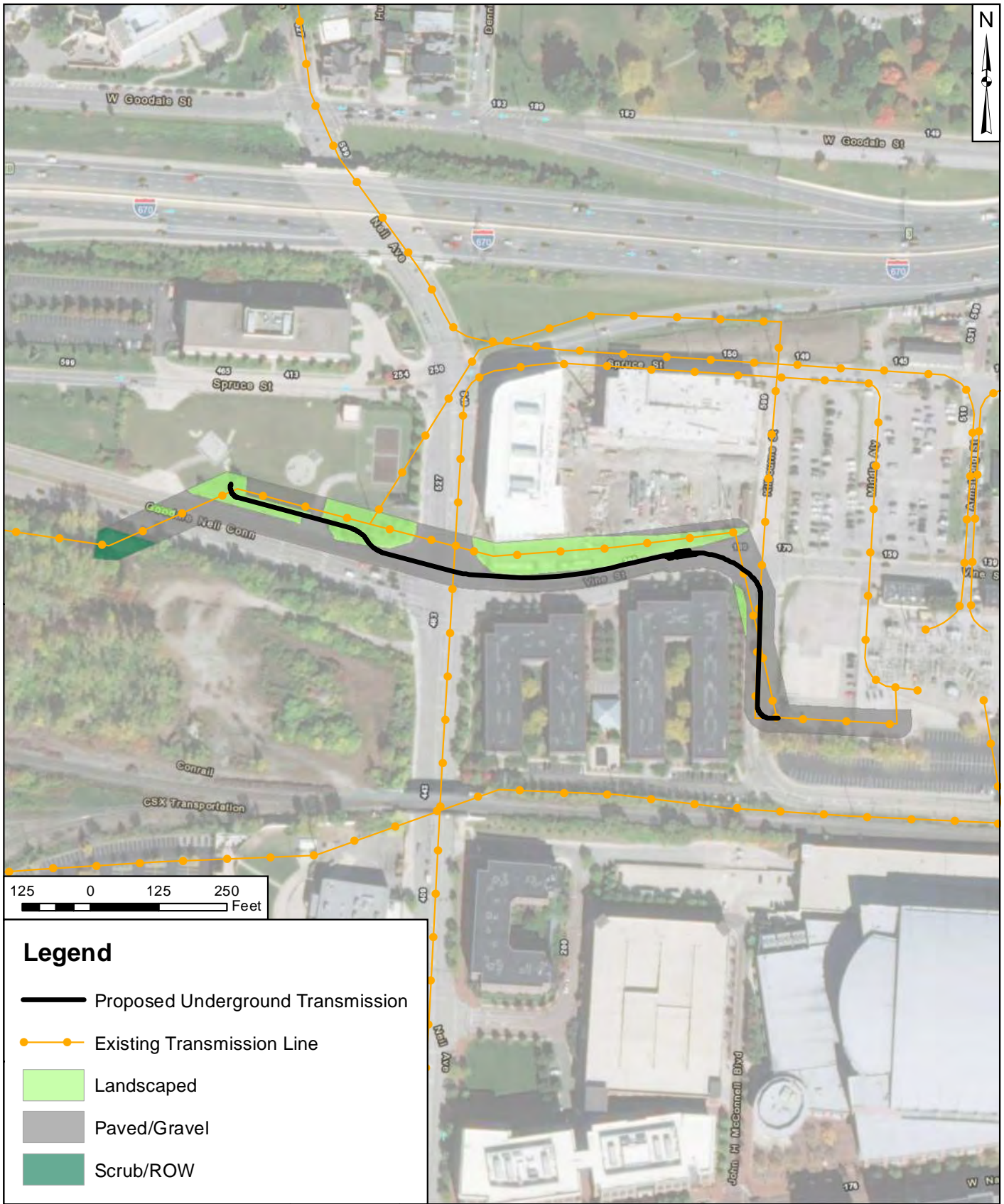
On 20 September 2022, V3 completed a wetland delineation, stream delineation, open water survey, and habitat survey for the Project area of the proposed Vine-City of Columbus West 138 kV transmission line relocation. V3 identified no wetlands, streams, drainage features, open water features, or endangered, threatened, or rare species habitat were identified within the Project area.






USFWS provided a written response regarding their review of the Project on 6 October 2022. Due to the Project type, size, and location, USFWS stated that they do not anticipate adverse effects to federally endangered, threatened, or proposed species or proposed or designated critical habitat. ODNR provided a response on 6 October 2022. Records of four mussel species and the little brown bat were reported in the vicinity of the Project. Further, ODNR indicated that the Project area is likely situated within the range of 26 threatened and endangered species. These species include Indiana, northern long-eared, little brown, and tricolored bat species listed as endangered or threatened at the federal or state level. No underground mine points or karst features are mapped by ODNR within 0.25 mile of the SITE. Based on the current USFWS guidelines, no potential hibernacula were identified within 0.25 mile. The closest mapped potential hibernaculum based on these data sources is approximately five miles to the northwest. Any trees over three inches dbh will be cleared October 1 to March 31.




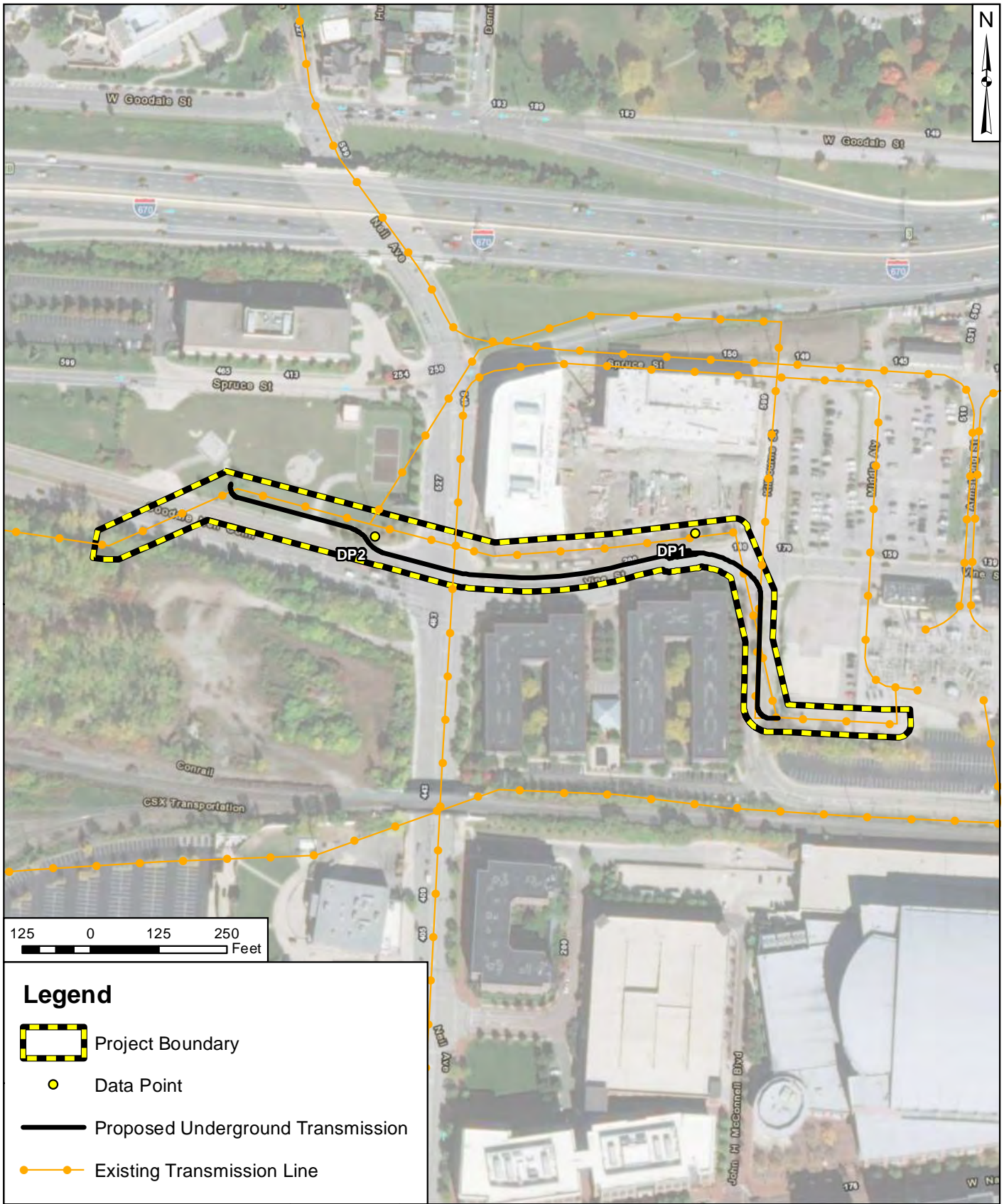


 <p>312 Walnut Street, Ste 1600 Cincinnati, Ohio 45202 513.800.3622 phone www.v3co.com</p> <p>Visio, Vertere, Virtute... "The Vision To Transform with Excellence"</p>	<p>PROJECT NO.: 210180.078</p> <p>CREATED BY: ARG</p> <p>DATE: 09/19/2022</p> <p>SCALE: See Scale Bar</p>	<p>CLIENT: American Electric Power 8500 Smiths Mill Road New Albany, Ohio 43054</p> <p>BASE LAYER: USGS Topographic Quadrangle Map: Southwest Columbus, OH</p>	<p>TITLE: PROJECT LOCATION MAP</p> <p>SITE: Vine-City of Columbus West 138 kV Transmission Line Relocation City of Columbus, Franklin County, Ohio</p>	<p>FIGURE: 1</p>
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Legend	
	Proposed Underground Transmission
	Existing Transmission Line
	Landscaped
	Paved/Gravel
	Scrub/ROW

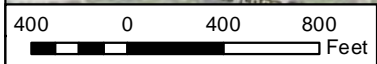
 312 Walnut Street, Ste 1600 Cincinnati, Ohio 45202 513.800.3622 phone www.v3co.com	PROJECT NO.: 210180.068	CLIENT: American Electric Power 8500 Smiths Mill Road New Albany, Ohio 43054	TITLE: HABITAT ASSESSMENT MAP	
	CREATED BY: ARG	DATE: 09/21/2022	BASE LAYER: Aerial Imagery (2020)	SITE: Vine-City of Columbus West 138 kV Transmission Line Relocation City of Columbus, Franklin County, Ohio
Visio, Vertere, Virtute... "The Vision To Transform with Excellence"	SCALE: See Scale Bar			





Legend

- Project Boundary
- Data Point
- Proposed Underground Transmission
- Existing Transmission Line


312 Walnut Street, Ste 1600 Cincinnati, Ohio 45202 513.800.3622 phone www.v3co.com	PROJECT NO.: 210180.068	CLIENT: American Electric Power 8500 Smiths Mill Road New Albany, Ohio 43054	TITLE: WETLAND AND STREAM DELINEATION MAP	
	CREATED BY: ARG	DATE: 09/19/2022	BASE LAYER: Aerial Imagery (2020)	SITE: Vine-City of Columbus West 138 kV Transmission Line Relocation City of Columbus, Franklin County, Ohio
Visio, Vertere, Virtute... "The Vision To Transform with Excellence"	SCALE: See Scale Bar			



Legend

-  Project Boundary
-  0.25-mile Project Area Buffer

* No potential bat hibernacula such as karst features or known mine openings were identified within 0.25 mile of the Project.

 312 Walnut Street, Ste 1600 Cincinnati, Ohio 45202 513.800.3622 phone www.v3co.com	PROJECT NO.: 210180.010	CLIENT: American Electric Power 8500 Smiths Mill Road New Albany, Ohio 43054	TITLE: THREATENED & ENDANGERED SPECIES HABITAT MAP	
	CREATED BY: ARG	DATE: 09/28/2022	BASE LAYER: Aerial Imagery (2020)	SITE: Vine-City of Columbus West 138 kV Transmission Line Relocation City of Columbus, Franklin County, Ohio
Visio, Vertere, Virtute... "The Vision To Transform with Excellence"	SCALE: See Scale Bar			

Appendix A

Representative Habitat Photographs



Photo: 1

Overhead span from
Vine Station

Direction of View:

West

Date:

20 September 2022



Photo: 2

Existing and proposed
alignments along
Kilbourne Street

Direction of View:

North

Date:

20 September 2022



Photo: 3

Existing and proposed
alignments along Vine
Street from Kilbourne
Street

Direction of View:

West

Date:

20 September 2022



Photo: 4

Data Point 1

Direction of View:

West

Date:

20 September 2022



Photo: 5

Existing and proposed alignments along Vine Street from Neil Avenue

Direction of View:

West

Date:

20 September 2022



Photo: 6

Data Point 2

Direction of View:

West

Date:

20 September 2022



Photo: 7

Overhead span across
Vine Street

Direction of View:

Southwest

Date:

20 September 2022



Photo: 8

Western endpoint of
project and overhead
span

Direction of View:

South

Date:

20 September 2022



Appendix B

Wetland Delineation Materials



WETLAND DETERMINATION FORM-MIDWEST REGION

Site: Vine Street Relocation City/County: Franklin County Date: 20 Sep 2022 Data Point: DP 1
 Client: American Electric Power State: OH Section, Township, Range: Sec 8, T 5N, R 22W
 Investigator(s): N. Houk, A. Geckle Landform Terraces Local Relief Convex
 Slope (%): 3-5 Lat. 39.971743 Long. -83.007856 Datum NAD 83 NWI Class: N/A
 Soil Map Unit Name: Urban land - Ockley complex, 0 to 6 percent slopes
 Climatic/hydrologic conditions typical for time of year? Y/N Y
 Vegetation _____, Soil _____ or Hydrology _____ significantly disturbed
 Vegetation _____, Soil _____ or Hydrology _____ naturally problematic
 Are Normal Circumstances Present? Yes No

SUMMARY OF FINDINGS

Hydrophytic Vegetation Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Is the DP within a Wetland? Yes <input type="checkbox"/> No <input type="checkbox"/> X <input checked="" type="checkbox"/>
Hydric Soil Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	
Wetland Hydrology Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	
Remarks: Does not meet all wetland criteria	

VEGETATION

Tree Stratum	Plot size:	Absolute % Cover	Dominant Species	Indicator Status	Dominance Test Worksheet Number of dominant species that are OBL, FACW, or FAC: 1 Total number of dominant species across all strata: 3 Percent of dominant species that are OBL, FACW, or FAC: 33.33 Prevalence Index Worksheet Total % cover of: OBL species 0 x 1 = 0 FACW species 10 x 2 = 20 FAC species 30 x 3 = 90 FACU species 60 x 4 = 240 UPL species 0 x 5 = 0 Total 100 = 350 Prevalence Index: 3.50 Hydrophytic Vegetation Indicators: Rapid Test for Hydrophytic Veg. Dominance Test is >50% Prevalence Index is <3.0* Morphological Adaptations* Problematic Hydrophytic Vegetation* *Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic Hydrophytic Vegetation Present? Yes <input type="checkbox"/> No <input type="checkbox"/> X <input checked="" type="checkbox"/>
1. _____	30'	_____	_____	_____	
2. _____		_____	_____	_____	
3. _____		_____	_____	_____	
4. _____		_____	_____	_____	
5. _____		0	Total Cover	_____	
Shrub Stratum Plot size: 15'					
1. _____		_____	_____	_____	
2. _____		_____	_____	_____	
3. _____		_____	_____	_____	
4. _____		_____	_____	_____	
5. _____		0	Total Cover	_____	
Herb Stratum Plot size: 5'					
1. <i>Poa pratensis</i>		30	Y	FAC 3	
2. <i>Schedonorus arundinaceus</i>		20	Y	FACU 4	
3. <i>Taraxacum officinale</i>		20	Y	FACU 4	
4. <i>Echinochloa crus-galli</i>		10	N	FACW 2	
5. <i>Trifolium repens</i>		10	N	FACU 4	
6. <i>Setaria faberi</i>		10	N	FACU 4	
7. _____		_____	_____	_____	
8. _____		_____	_____	_____	
		100	Total Cover	_____	
Woody Vine Stratum Plot size: 5'					
1. _____		_____	_____	_____	
2. _____		_____	_____	_____	
		0	Total Cover	_____	
Remarks: _____					

SOIL

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

Depth (inches)	Matrix		Redox Features					Texture	Remarks
	Color	%	Color	%	Type*	Loc**			
0-18	10YR 4/2	100						SIL	Fill

*Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Coated Sand grains **Location: PL=Pore Lining, M=Matrix

Hydric Soil Indicators:

_____ Histosol (A1)	_____ Sandy Mucky Mineral (S1)	_____ Redox Dark Surface (F6)
_____ Histic Epipedon (A2)	_____ 5cm Mucky Peat or Peat	_____ Depleted Dark Surface (F7)
_____ Black Histic (A3)	_____ Sandy Gleyed Matrix (S4)	_____ Redox Depressions (F8)
_____ Hydrogen Sulfide (A4)	_____ Sandy Redox (S5)	_____ Indicators for Problematic Hydric Soils
_____ Stratified Layers (A5)	_____ Stripped Matrix (S6)	_____ Coast Prairie Redox (A16)
_____ 2 cm Muck (A10)	_____ Loamy Mucky Mineral (F1)	_____ Iron-Manganese Masses (F12)
_____ Depleted Below Dark Surface (A11)	_____ Loamy Gleyed Matrix (F2)	_____ Very Shallow Dark Surface (F12)
_____ Thick Dark Surface (A12)	_____ Depleted Matrix (F3)	_____ Other

Restrictive Layer (if observed): Type: _____ Depth (Inches): _____

Remarks: _____

Hydric Soil Present? Yes No X

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (check all that apply)				Secondary Indicators		
_____ Surface Water (A1)	_____ Water Stained Leaves (B9)	_____ Surface Soil Cracks (B6)	_____	_____	_____	_____
_____ High Water Table (A2)	_____ Aquatic Fauna (B13)	_____ Drainage Patterns (B10)	_____	_____	_____	_____
_____ Saturation (A3)	_____ True Aquatic Plants (B14)	_____ Dry-Season Water Table (C2)	_____	_____	_____	_____
_____ Water Marks (B1)	_____ Hydrogen Sulfide Odor (C1)	_____ Crayfish Burrows (C8)	_____	_____	_____	_____
_____ Sediment Deposits (B2)	_____ Oxidized Rhizospheres on Living Roots	_____ Saturation Visible on Aerial Imagery (C9)	_____	_____	_____	_____
_____ Drift Deposits (B3)	_____ Presence of Reduced Iron (C4)	_____ Stunted or Stressed Plants (D1)	_____	_____	_____	_____
_____ Algal Mat or Crust (B4)	_____ Recent Iron Reduction in Tilled Soil (C6)	_____ Geomorphic Position (D2)	_____	_____	_____	_____
_____ Iron Deposits (B5)	_____ Thin Muck Surface (C7)	_____ FAC-Neutral Test (D5)	_____	_____	_____	_____
_____ Inundation Visible on Aerial Imagery (B7)	_____ Gauge or Well Data (D9)	_____	_____	_____	_____	_____
_____ Sparsely Vegetated Concave Surface	_____ Other	_____	_____	_____	_____	_____
Field Observations: Surface Water Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>				Hydrology Indicators Present?		
Water Table Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>				Yes <input type="checkbox"/> No <input type="checkbox"/> X <input checked="" type="checkbox"/>		
Saturation Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>						

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

WETLAND DETERMINATION FORM-MIDWEST REGION

Site: Vine Street Relocation City/County: Franklin County Date: 20 Sep 2022 Data Point: DP 2
 Client: American Electric Power State: OH Section, Township, Range: Sec 8, T 5N, R 22W
 Investigator(s): N. Houk, A. Geckle Landform Terraces Local Relief Convex
 Slope (%): 3-5 Lat. 39.971716 Long. -83.009950 Datum NAD 83 NWI Class: N/A
 Soil Map Unit Name: Urban land - Ockley complex, 0 to 6 percent slopes
 Climatic/hydrologic conditions typical for time of year? Y/N Y
 Vegetation _____, Soil _____ or Hydrology _____ significantly disturbed
 Vegetation _____, Soil _____ or Hydrology _____ naturally problematic
 Are Normal Circumstances Present? Yes No

SUMMARY OF FINDINGS

Hydrophytic Vegetation Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Is the DP within a Wetland? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
Hydric Soil Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	
Wetland Hydrology Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	
Remarks: Does not meet all wetland criteria	

VEGETATION

Tree Stratum	Plot size:	Absolute % Cover	Dominant Species	Indicator Status	Dominance Test Worksheet Number of dominant species that are OBL, FACW, or FAC: 1 Total number of dominant species across all strata: 3 Percent of dominant species that are OBL, FACW, or FAC: 33.33 Prevalence Index Worksheet Total % cover of: OBL species 0 x 1 = 0 FACW species 0 x 2 = 0 FAC species 30 x 3 = 90 FACU species 70 x 4 = 280 UPL species 0 x 5 = 0 Total 100 = 370 Prevalence Index: 3.70 Hydrophytic Vegetation Indicators: Rapid Test for Hydrophytic Veg. Dominance Test is >50% Prevalence Index is <3.0* Morphological Adaptations* Problematic Hydrophytic Vegetation* *Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic Hydrophytic Vegetation Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
1. _____	30'				
2. _____					
3. _____					
4. _____					
5. _____		0	Total Cover		
Shrub Stratum	Plot size: 15'				
1. _____					
2. _____					
3. _____					
4. _____					
5. _____		0	Total Cover		
Herb Stratum	Plot size: 5'				
1. <i>Taraxacum officinale</i>		30	Y	FACU 4	
2. <i>Plantago lanceolata</i>		25	Y	FACU 4	
3. <i>Poa pratensis</i>		20	Y	FAC 3	
4. <i>Digitaria sanguinalis</i>		10	N	FACU 4	
5. <i>Setaria pumila</i>		10	N	FAC 3	
6. <i>Cichorium intybus</i>		5	N	FACU 4	
7. _____					
8. _____					
		100	Total Cover		
Woody Vine Stratum	Plot size: 5'				
1. _____					
2. _____					
		0	Total Cover		
Remarks:					

SOIL

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

Depth (inches)	Matrix		Redox Features						Texture	Remarks
	Color	%	Color	%	Type*	Loc**				
0-18	10YR 5/2	100						SIL	Fill	

*Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Coated Sand grains **Location: PL=Pore Lining, M=Matrix

Hydric Soil Indicators:		
<input type="checkbox"/> Histosol (A1)	<input type="checkbox"/> Sandy Mucky Mineral (S1)	<input type="checkbox"/> Redox Dark Surface (F6)
<input type="checkbox"/> Histic Epipedon (A2)	<input type="checkbox"/> 5cm Mucky Peat or Peat	<input type="checkbox"/> Depleted Dark Surface (F7)
<input type="checkbox"/> Black Histic (A3)	<input type="checkbox"/> Sandy Gleyed Matrix (S4)	<input type="checkbox"/> Redox Depressions (F8)
<input type="checkbox"/> Hydrogen Sulfide (A4)	<input type="checkbox"/> Sandy Redox (S5)	Indicators for Problematic Hydric Soils
<input type="checkbox"/> Stratified Layers (A5)	<input type="checkbox"/> Stripped Matrix (S6)	<input type="checkbox"/> Coast Prairie Redox (A16)
<input type="checkbox"/> 2 cm Muck (A10)	<input type="checkbox"/> Loamy Mucky Mineral (F1)	<input type="checkbox"/> Iron-Manganese Masses (F12)
<input type="checkbox"/> Depleted Below Dark Surface (A11)	<input type="checkbox"/> Loamy Gleyed Matrix (F2)	<input type="checkbox"/> Very Shallow Dark Surface (F12)
<input type="checkbox"/> Thick Dark Surface (A12)	<input type="checkbox"/> Depleted Matrix (F3)	<input type="checkbox"/> Other

Restrictive Layer (if observed): Type: _____	Hydric Soil Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
Depth (Inches): _____	
Remarks:	

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (check all that apply)				Secondary Indicators		
<input type="checkbox"/> Surface Water (A1)	<input type="checkbox"/> Water Stained Leaves (B9)	<input type="checkbox"/> Surface Soil Cracks (B6)		<input type="checkbox"/> Drainage Patterns (B10)		
<input type="checkbox"/> High Water Table (A2)	<input type="checkbox"/> Aquatic Fauna (B13)	<input type="checkbox"/> Dry-Season Water Table (C2)		<input type="checkbox"/> Crayfish Burrows (C8)		
<input type="checkbox"/> Saturation (A3)	<input type="checkbox"/> True Aquatic Plants (B14)	<input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)		<input type="checkbox"/> Stunted or Stressed Plants (D1)		
<input type="checkbox"/> Water Marks (B1)	<input type="checkbox"/> Hydrogen Sulfide Odor (C1)	<input type="checkbox"/> Geomorphic Position (D2)		<input type="checkbox"/> FAC-Neutral Test (D5)		
<input type="checkbox"/> Sediment Deposits (B2)	<input type="checkbox"/> Oxidized Rhizospheres on Living Roots					
<input type="checkbox"/> Drift Deposits (B3)	<input type="checkbox"/> Presence of Reduced Iron (C4)					
<input type="checkbox"/> Algal Mat or Crust (B4)	<input type="checkbox"/> Recent Iron Reduction in Tilled Soil (C6)					
<input type="checkbox"/> Iron Deposits (B5)	<input type="checkbox"/> Thin Muck Surface (C7)					
<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)	<input type="checkbox"/> Gauge or Well Data (D9)					
<input type="checkbox"/> Sparsely Vegetated Concave Surface	<input type="checkbox"/> Other					
Field Observations: Surface Water Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Depth (inches)			Hydrology Indicators Present?		
Water Table Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Depth (inches)			Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>		
Saturation Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Depth (inches)					
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:						

Appendix C

USFWS and ODNR Coordination



United States Department of the Interior



FISH AND WILDLIFE SERVICE

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



October 6, 2022

Project Code: 2022-0082743

Re: AEP Vine Street 138 kV transmission line relocation

Dear Mr./Ms.,

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.

Sincerely,

Patrice Ashfield
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

October 6, 2022

Aaron Geckle
V3 Companies
312 Walnut Street, Suite 1600
Cincinnati, OH 45202

Re: 22-0910; AEP Vine-City of Columbus West 138 kV Transmission Line Relocation

Project: The proposed project involves relocating approximately 0.3 miles of the existing Vine-City of Columbus 138 kV transmission line from overhead to underground.

Location: The proposed project is located in the City of Columbus, 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: The Natural Heritage Database has the following data within one mile of the project area:

Elktoe (*Alasmodonta marginata*), SC
Wavy-rayed Lampmussel (*Lampsilis fasciola*), SC
Round Pigtoe (*Pleurobema sintoxia*), SC
Pondhorn (*Uniomerus tetralasmus*), T

Conservation status abbreviations are as follows: E = state endangered; T = state threatened; P = state potentially threatened; SC = state species of concern; SI = state special interest; U = state status under review; X = presumed extirpated in Ohio; FE = federally endangered, and FT = federally threatened.

The review was performed on the specified project area as well as an additional one-mile radius. 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 an area is not a statement that rare species or unique features are absent from that area.

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

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

The project is within the vicinity of records for the 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 Eileen Wyza at Eileen.Wyza@dnr.ohio.gov).

In addition, the entire state of Ohio is within the range of the Indiana bat (*Myotis sodalis*), a state endangered and federally endangered species, the northern long-eared bat (*Myotis septentrionalis*), a state endangered and federally 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 & NORTHERN LONG-EARED BAT SURVEY GUIDELINES](#)." If a habitat assessment finds that a potential hibernaculum is present within 0.25 miles of the project area, please send this information to Eileen Wyza for project recommendations. If a potential or known hibernaculum is found, the DOW recommends a 0.25-mile tree cutting and subsurface disturbance buffer around the hibernaculum entrance, however, limited summer or winter tree cutting may be acceptable after consultation with the DOW. If no tree cutting or subsurface impacts to a hibernaculum are proposed, this project is not likely to impact these species.

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

Federally Endangered

clubshell (*Pleurobema clava*)
rayed bean (*Villosa fabalis*)
northern riffleshell (*Epioblasma torulosa rangiana*)
snuffbox (*Epioblasma triquetra*)
purple cat's paw (*Epioblasma o. obliquata*)

Federally Threatened

rabbitsfoot (*Quadrula cylindrica cylindrica*)

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

pondhorn (*Uniomerus tetralasmus*)

Salamander Mussel (*Simpsonaias ambigua*)

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

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

State Endangered

goldeye (*Hiodon alosoides*)

shortnose gar (*Lepisosteus platostomus*)

Iowa darter (*Etheostoma exile*)

spotted darter (*Etheostoma maculatum*)

northern brook lamprey (*Ichthyomyzon fossor*)

tonguetied minnow (*Exoglossum laurae*)

popeye shiner (*Notropis ariommus*)

State Threatened

lake chubsucker (*Erimyzon sucetta*)

paddlefish (*Polyodon spathula*)

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

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

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

The [local floodplain administrator](#) should be contacted concerning the possible need for any floodplain permits or approvals for this project.

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

Mike Pettegrew
Environmental Services Administrator

**This foregoing document was electronically filed with the Public Utilities
Commission of Ohio Docketing Information System on
10/14/2022 4:43:08 PM**

in

Case No(s). 22-0918-EL-BLN

Summary: Correspondence Letter of Notification Vine-City of Columbus West 138
kV Transmission Line Relocation Project electronically filed by Hector Garcia-
Santana on behalf of Ohio Power Company