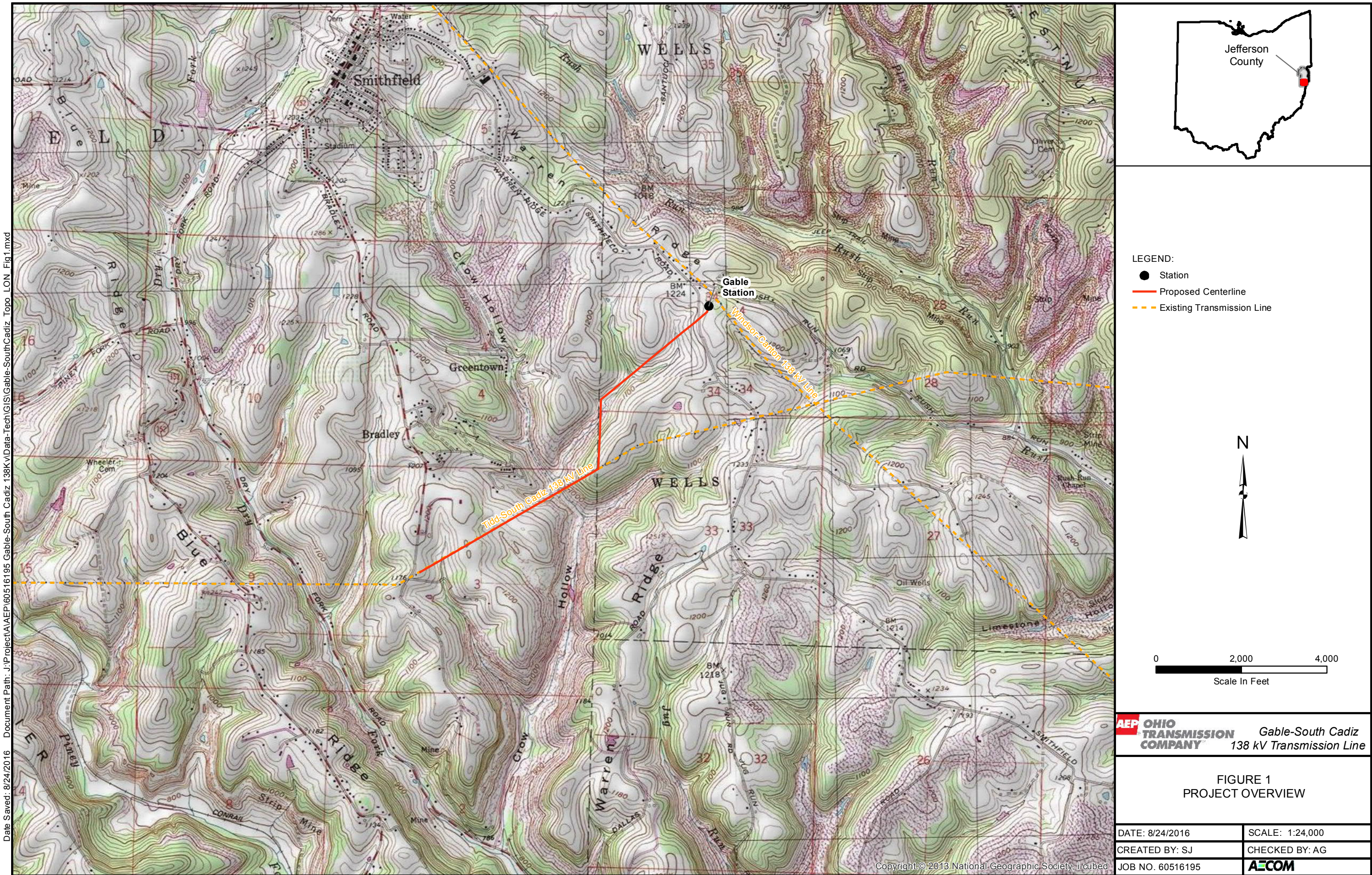


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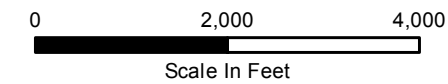
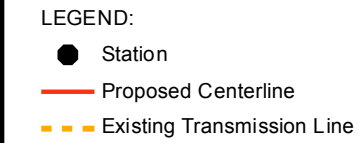


FIGURE 2
AERIAL PHOTOGRAPHY OF
PROJECT OVERVIEW

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APPENDIX A

SOCIOECONOMIC, LAND USE, AND AGRICULTURAL DISTRICT REVIEW REPORT

GABLE – SOUTH CADIZ 138 KV TRANSMISSION LINE PROJECT, JEFFERSON COUNTY, OHIO

SOCIOECONOMIC, LAND USE, AND AGRICULTURAL DISTRICT REVIEW REPORT

Prepared for:

American Electric Power Ohio Transmission Company
700 Morrison Road
Gahanna, Ohio 45230



Prepared by:



525 Vine Street, Suite 1800
Cincinnati, Ohio 45202

Project #: 60516195

August 2016

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3.0	AGRICULTURAL DISTRICT LAND	2
4.0	CONCLUSION.....	2

FIGURES (follow text)

Number

FIGURE 1 LAND USE MAP

1.0 PROJECT DESCRIPTION

This document presents the socioeconomic, land use, and agricultural district review conducted by AECOM for American Electric Power Ohio Transmission Company's (AEP Ohio Transco) proposed Gable-South Cadiz 138 kV Transmission Line Rebuild Project (Project). AEP Ohio Transco is proposing to construct approximately 1.9 miles of the existing Gable-South Cadiz 138 kV line in Jefferson County, Ohio.

As part of the Ohio Power Siting Board (OPSB) Letter of Notification (LON) requirements, AEP Ohio Transco is required to assess and report the socioeconomic, land use, and agricultural district characteristics potentially affected by the Project, as stated in Ohio Administrative Code (OAC) Rule 4906-6-05(B)(10)(a) and (b). These rules state:

- (10) The applicant shall describe the social and ecological impacts of the project.*
 - (a) Provide brief, general description of land use within the vicinity of the proposed project, including a list of municipalities, townships, and counties affected.*
 - (b) 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.*

AEP Ohio Transco retained AECOM to conduct a desktop review of socioeconomic, land use, and agricultural district land characteristics. A study corridor was established within 1,000 feet of each side of the line to be rebuilt, resulting in a 2,000-foot wide study corridor. In conjunction with ecological field surveys for the Project, AECOM noted land uses crossed by the Project. This report will be used to assist AEP Ohio Transco's efforts to avoid or minimize impacts to socioeconomic characteristics and land uses potentially present in the study area during construction activities.

2.0 GENERAL LAND USE DESCRIPTION

Land use within the study area is shown on Figure 1. Current land use characteristics were obtained through review of aerial photography taken in 2013; the United States Geological Survey (USGS) 7.5-minute topographic map of Steubenville West (1986), Tiltonsville (1986), Smithfield (1985), and Dillonvale (1985), Ohio quadrangles; parcel GIS files of the Project area; and a field reconnaissance conducted in August 2016.

The Project vicinity is a rural area that is primarily pasture land with some wooded areas and scattered residences that are primarily concentrated at the northeast end of the Project vicinity. Some reclaimed mining lands are also within the 2,000-foot wide study corridor. Twenty-six residences were identified within 1,000 feet of the proposed Project centerline, the closest of which is located approximately 450 feet away. Transportation and utility corridors are also present.

The 2,000-foot wide study corridor is completely within Jefferson County. General land use trends in the area suggest consistent usage over time. Minimal growth is expected in the immediate Project vicinity.

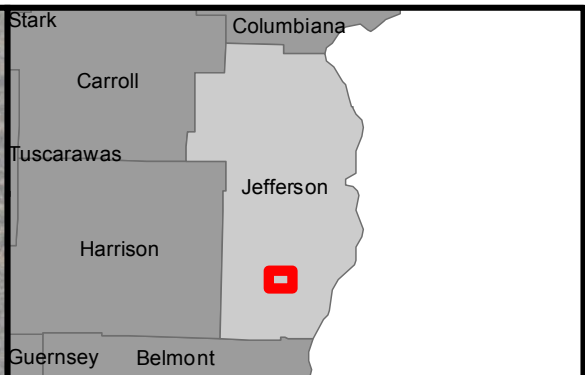
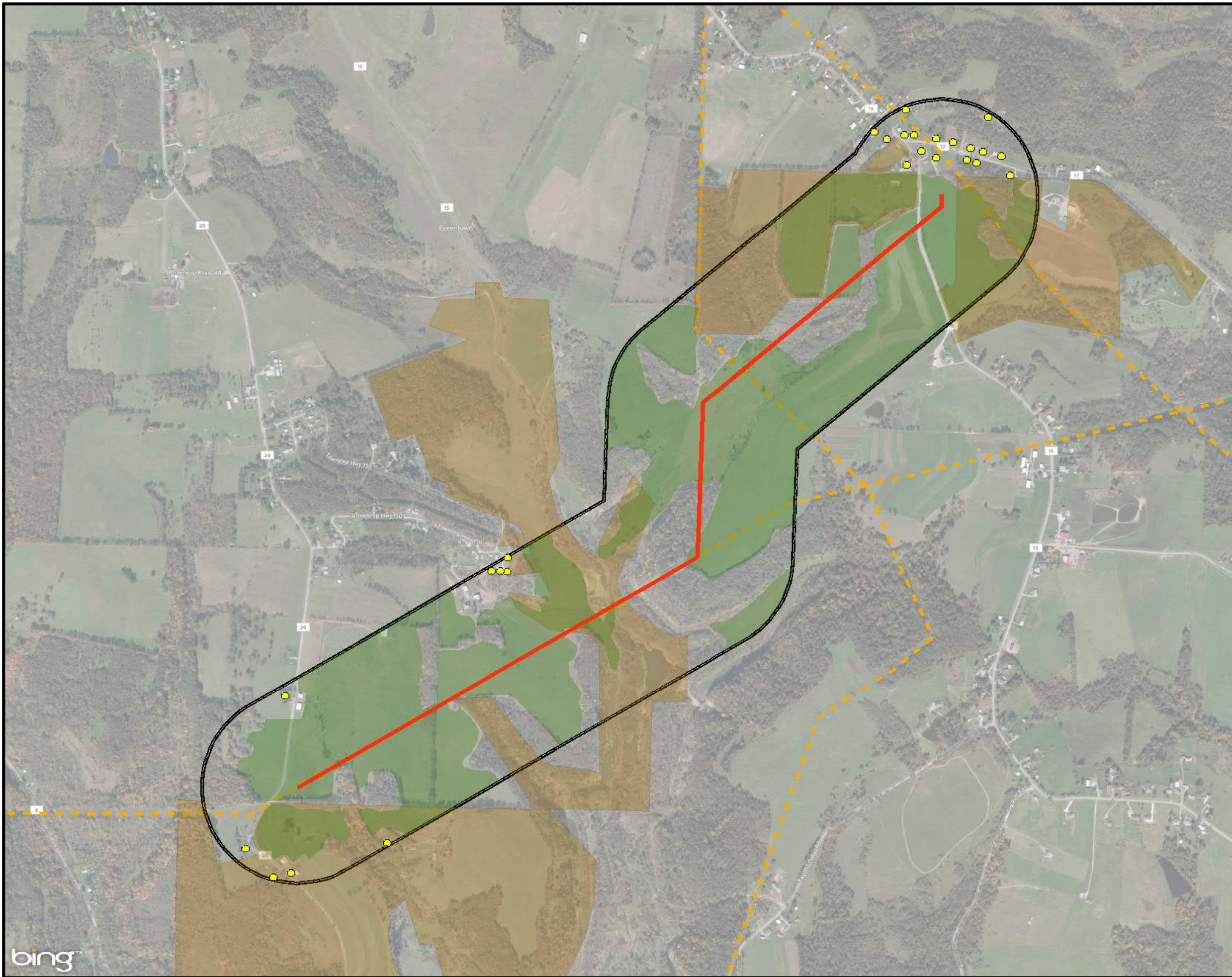
3.0 AGRICULTURAL DISTRICT LAND

The Project vicinity is primarily rural, flat and has a few rolling hills. Most agricultural land in the project vicinity is pasture land. Based on information provided by the Jefferson County Auditor's Office, ten agricultural district land parcels were identified within 1,000 feet of the Project. Impacts to agricultural land uses are expected to be minimal, with only the small footprint of poles requiring conversion of farmland. Access roads necessary to construct the Project may temporarily impact agricultural uses. AEP Ohio Transco will work with property owners to compensate for temporary impacts to agricultural land.

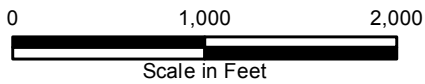
4.0 CONCLUSION

The Project is not expected to significantly impact current socioeconomic characteristics, land use, or agricultural district land in the vicinity. The Project is not expected to negatively impact any future land use plans for the area.

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- LEGEND:
- Proposed Transmission Line Centerline
 - 2,000-foot Study Area
 - Residence
 - Agricultural/Pasture Land
 - Agricultural District Land Parcel
 - Existing Transmission Line




Base Map:
<http://www.esri.com/software/arcgis/arcgisonline/bing-maps.html>



Gable-South Cadiz
138 KV Rebuild Project

FIGURE 1
LAND USE MAP

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APPENDIX B

THREATENED AND ENDANGERED SPECIES SURVEY REPORT

GABLE-SOUTH CADIZ 138 KV TRANSMISSION LINE PROJECT, JEFFERSON COUNTY, OHIO

RARE, THREATENED, AND ENDANGERED SPECIES SURVEY REPORT

Prepared for:

American Electric Power Ohio Transmission Company
700 Morrison Road
Gahanna, Ohio 43230



Prepared by:

AECOM
525 Vine Street, Suite 1800
Cincinnati, Ohio 45202

Project #: 60516159

August 2016

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ATTACHMENT

Number

ATTACHMENT A	AGENCY RESPONSES
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1.0 PROJECT DESCRIPTION

This document presents the results of the rare, threatened, and endangered species assessment conducted by AECOM for American Electric Power Ohio Transmission Company's (AEP Ohio Transco) proposed Gable-South Cadiz 138 kV Transmission Line Project (Project). AEP Ohio Transco is proposing to construct approximately 1.9 miles of new 138 kV electric transmission line in Jefferson County, Ohio.

As part of the Ohio Power Siting Board (OPSB) Letter of Notification (LON) requirements, AEP Ohio Transco is required to assess and report the federal and state designated species potentially affected by the Project, as stated in Ohio Administrative Code (OAC) Rule 4906-6-05(B)(10)(e). This rule states:

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

(e) 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.

AEP retained AECOM to conduct rare, threatened, and endangered species review and field surveys within areas crossed by the Project ROW. This report will be used to assist AEP Ohio Transco's efforts to avoid impacts to threatened and endangered species potentially present in the survey area during construction activities.

2.0 METHODS

The first phase of the survey involved a review of online lists of federal and state species of concern. In addition to the review of available literature, AECOM submitted a request to Ohio Department of Natural Resources (ODNR) Ohio Natural Heritage Database (ONHD) for Geographical Information System (GIS) records of species of concern that were reported within close proximity to the Project. AECOM also submitted coordination letters to the U.S. Fish and Wildlife Service (USFWS) and ODNR – Office of Real Estate soliciting comments on the Project. Agency-identified species and available species-specific information was reviewed to identify the various habitat types that listed species are known to frequent. AECOM field ecologists conducted a general habitat survey in conjunction with the stream and wetland field survey on August 17 and 18, 2016.

3.0 AGENCY COORDINATION

3.1 State Species of Concern

In an email dated August 15, 2016, ODNR provided a corresponding response to a request for ONHD GIS records including specific comments regarding the Project. The ONHD review indicated that no

records of rare or endangered species were found within a one-mile radius of the Project. Additionally, no state or federal wildlife areas, nature preserves, conservation areas, parks, scenic rivers, or other protected natural areas are within a one mile radius of the Project area. A copy of the ODNR ONHD response is included in Attachment A.

To address the Project's potential to impact state protected species, AECOM conducted a web based literature review of the ODNR State Listed Wildlife Species List, June 2016, to identify what species potentially occur in Jefferson County, Ohio. Table 1 lists the species identified during the ODNR literature review.

TABLE 1
STATE LISTED SPECIES THAT COULD INHABIT
JEFFERSON COUNTY, OHIO

Common Name	Scientific Name	State Status	General Notes
Mammals			
Indiana Bat	<i>Myotis sodalis</i>	Endangered	Seasonal clearing restrictions
Black Bear	<i>Ursus americanus</i>	Endangered	Not likely to impact
Amphibian-Salamander			
Eastern Hellbender	<i>Cryptobranchus alleganiensis alleganiensis</i>	Endangered	No in-stream work planned
Fish			
Tippecanoe Darter	<i>Etheostoma Tippecanoe</i>	Threatened	No in-stream work planned
Channel Darter	<i>Percina copelandi</i>	Threatened	No in-stream work planned
River Darter	<i>Percina shumardi</i>	Threatened	No in-stream work planned
Insects			
Riffle Snaketail	<i>Ophiogomphus carolus</i>	Threatened	No in-stream work planned
Regal Fritillary	<i>Speyeria idalia</i>	Endangered	No in-stream work planned
Bivalves			
Black Sandshell	<i>Ligumia recta</i>	Threatened	No in-stream work planned
Threehorn Wartyback	<i>Obliquaria reflexa</i>	Threatened	No in-stream work planned

Indiana bat comments: On recent projects within Jefferson County, ODNR requested that suitable Indiana bat habitat should be conserved or cut between October 1st and March 31st. A net survey must be conducted between June 15th and August 15th prior to cutting, if clearing is necessary during summer months.

Black bear comments: The black bear, a state endangered species, is a potential inhabitant of Jefferson County. Due to the mobility of the black bear, this Project is not likely to impact this species.

Eastern hellbender comments: The eastern hellbender (*Cryptobranchus alleganiensis alleganiensis*), a state endangered species and a federally listed species of concern, is a potential inhabitant of Jefferson County. This aquatic salamander inhabits perennial streams with large flat rocks. Due to the location and that no in-water work is proposed, this Project is not likely to impact this species.

Fish comments: The Tippecanoe darter (*Etheostoma Tippecanoe*), channel darter (*Percina copelandi*), and river darter (*Percina shumardi*) are state listed species and potential inhabitants of Jefferson County. Due to the location and that no in-water work is proposed, this Project is not likely to impact these species.

Mussel comments: The black sandshell (*Ligumia recta*) and threehorn wartyback (*Obliquaria reflexa*) are state listed species and potential inhabitants of Jefferson County. Due to the location and that no in-water work is proposed, this Project is not likely to impact these species.

AECOM submitted a coordination letter to ODNR on August 23, 2016, soliciting comments on the Project. AECOM has not received a response regarding the Project from ODNR to date. Should additional information become available from ODNR, which differs significantly from the above listed species, an addendum report will be provided.

3.2 Federal Species of Concern

To address the Project's potential to impact federally protected species, AECOM conducted a web based literature review of the USFWS Ohio County Distribution List of *Federally Listed Species by Ohio Counties, November 2015*, a table that is publicly available on their website, to identify what species potentially occur in Jefferson County, Ohio. Table 2 lists the two species identified during the USFWS literature review.

**TABLE 2
FEDERALLY LISTED SPECIES THAT COULD INHABIT
JEFFERSON COUNTY, OHIO**

Common Name	Scientific Name	Federal Status	General Notes
Mammals			
Indiana bat	<i>Myotis sodalis</i>	Endangered	Seasonal clearing restrictions
Northern long-eared bat	<i>Myotis septentrionalis</i>	Threatened	Seasonal clearing restrictions

Federally Listed Species by Ohio Counties, November, 2015.
Accessed August 22, 2016:
<https://www.fws.gov/midwest/endangered/lists/ohio-cty.html>

AECOM submitted a coordination letters to the USFWS on August 23, 2016, soliciting comments on the Project. AECOM has not received a response regarding the Project from USFWS to date. Should additional information become available from USFWS, which differs significantly from the above listed species, an addendum report will be provided.

Indiana Bat and Northern Long-Eared Bat: The federal government lists the Indiana bat as endangered in Ohio. Winter Indiana bat hibernacula include caves and mines, while summer habitat typically includes tree species exhibiting exfoliating bark or cavities that can be used for roosting. The 8- to 10-inch diameter size classes of several species of hickory (*Carya* spp.), oak (*Quercus* spp.), ash (*Fraxinus* spp.), birch (*Betula* spp.), and elm (*Ulmus* spp.) have been found to be utilized by the Indiana bat. These tree species and many others may be used when dead, if there are adequately sized patches of loosely-adhering bark or open cavities. The structural configuration of forest stands favored for roosting includes a mixture of loose-barked trees with 60 to 80 percent canopy closure and a low density sub-canopy (less than 30 percent between about 6 feet high and the base canopy). The suitability of roosting habitat for foraging or the proximity to suitable foraging habitat is critical to the evaluation of a particular tree stand. An open subcanopy zone, under a moderately dense canopy, is important to allow maneuvering while catching insect prey. Proximity to water is critical, because insect prey density is greater over or near open water.

The federal government lists the northern long-eared bat species as Threatened in Ohio. As with the Indiana bat, winter northern long-eared bat hibernacula include caves and mines, while summer habitat typically includes tree species exhibiting exfoliating bark or cavities that can be used for roosting. Northern long-eared bat has also been found, albeit rarely, roosting in structures like barns and sheds.

AEP proposes to cut identified Indiana bat habitat trees between October 1st and March 31st to minimize potential impacts to the Indiana bat and other bat species. Due to the project type, size, location, and the proposed implementation of seasonal tree cutting (clearing of trees ≥ 3 inches diameter at breast height between October 1st and March 31st) to avoid impacts to Indiana bats and northern long-eared bats, AEP does not anticipate adverse effects to any federally endangered, threatened, proposed or candidate species.

4.0 SUMMARY

AEP retained AECOM to conduct a rare, threatened, and endangered species literature review for areas located within 1,000 feet of the proposed Project, a field survey within the proposed Project survey corridor, and conduct coordination with USFWS, ONHD and ODNR. This report will be used to assist AEP's efforts to avoid impacts to rare, threatened, and endangered species potentially present in the ROW during construction activities. The field survey was conducted by AECOM field ecologists on August 17th and 18th, 2016. No species of concern or signs of these species, and no unique habitats were observed.

5.0 CONCLUSION

Based upon the nature of the Project, review of available current literature, review of federal and state records of species of concern, and review of agency correspondence, it is not anticipated that federal or state species of concern will be impacted by the Project as currently planned (see below). AEP has worked to develop a construction access plan that contains the least amount of impact to sensitive resources (wetlands, streams, etc.), as well as minimizing impacts to threatened and endangered species habitat that may be present along the alignment.

AECOM submitted coordination letters to USFWS and ODNR on August 23, 2016, soliciting comments on the Project. AECOM has not received a response regarding the Project from either agency to date. Should additional information become available from USFWS or ODNR, which differs significantly from the above listed species, an addendum report will be provided.

AEP proposes to cut identified Indiana bat habitat trees between October 1st and March 31st to minimize potential impacts to the Indiana bat and other bat species. Due to the project type, size, location, and the proposed implementation of seasonal tree cutting (clearing of trees ≥ 3 inches diameter at breast height between October 1st and March 31st) to avoid impacts to Indiana bats and northern long-eared bats, AEP does not anticipate adverse effects to any federally endangered, threatened, proposed or candidate species.

ATTACHMENT A

AGENCY RESPONSES



Ohio Department of Natural Resources

JOHN R. KASICH, GOVERNOR

JAMES ZEHRINGER, DIRECTOR

Ohio Division of Wildlife

Raymond W. Petering, Chief
2045 Morse Rd., Bldg. G
Columbus, OH 43229-6693
Phone: (614) 265-6300

August 15, 2016

Betsy Ewoldt
AECOM
525 Vine St.
Cincinnati, OH 45202

Dear Ms. Ewoldt,

After reviewing the Natural Heritage Database, I find the Division of Wildlife has no records of rare or endangered species in the Gable-South Cadiz 138 kV Transmission Line project area, including a one mile radius, in Smithfield and Wells Townships, Jefferson County, Ohio. We are unaware of any unique ecological sites, geologic features, animal assemblages, scenic rivers, state wildlife areas, nature preserves, parks or forests, national wildlife refuges, parks or forests or other protected natural areas within a one mile radius of the project area.

Our inventory program has not completely surveyed Ohio and relies on information supplied by many individuals and organizations. Therefore, a lack of records for any particular area is not a statement that rare species or unique features are absent from that area. This letter only represents a review of rare species and natural features data within the Ohio Natural Heritage Database. It does not fulfill coordination under the National Environmental Policy Act (NEPA) or the Fish and Wildlife Coordination Act (48 Stat. 401, as amended; 16 U.S. C. 661 et seq.) and does 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.

Please contact me at 614-265-6818 if I can be of further assistance.

Sincerely,

A handwritten signature in blue ink that reads "Debbie Woischke".

Debbie Woischke
Ohio Natural Heritage Database Program

This foregoing document was electronically filed with the Public Utilities

Commission of Ohio Docketing Information System on

9/6/2016 2:59:10 PM

in

Case No(s). 16-1576-EL-BLN

Summary: Letter of Notification - 16-1576-EL-BLN part 2 of 6 electronically filed by Mrs. Erin C Miller on behalf of AEP Ohio Transmission Company