

Figure No. 1

Title

Project Location Map

Client/Project

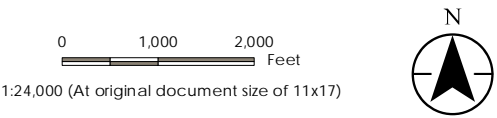
AEP Ohio Transmission Company, Inc.
Lemaster-Lick 138kV
Transmission Line Relocation Project

Project Location

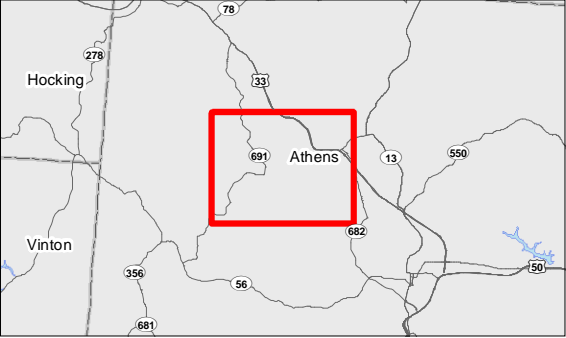
Athens County, Ohio

193704783

Prepared by JD on 2017-03-08
Technical Review by CP on 2017-03-09
Independent Review by DG on 2017-03-13



- Legend**
- Existing Lemaster-Lick Transmission Line to be Removed
 - Proposed Lemaster-Lick Transmission Line Relocation
 - Project Area (100' ROW)
 - Proposed Lemaster Substation



- Notes**
- Coordinate System: NAD 1983 StatePlane Ohio South FIPS 3402 Feet
 - Data Sources Include: Stantec, AEP, NADS
 - Background: USGS 7.5' Topographic Quadrangles - Nelsonville (OH, 1983) and The Plains (OH, 1975)



A.2 FIGURE 2 – WETLAND AND WATERBODY DELINEATION MAP

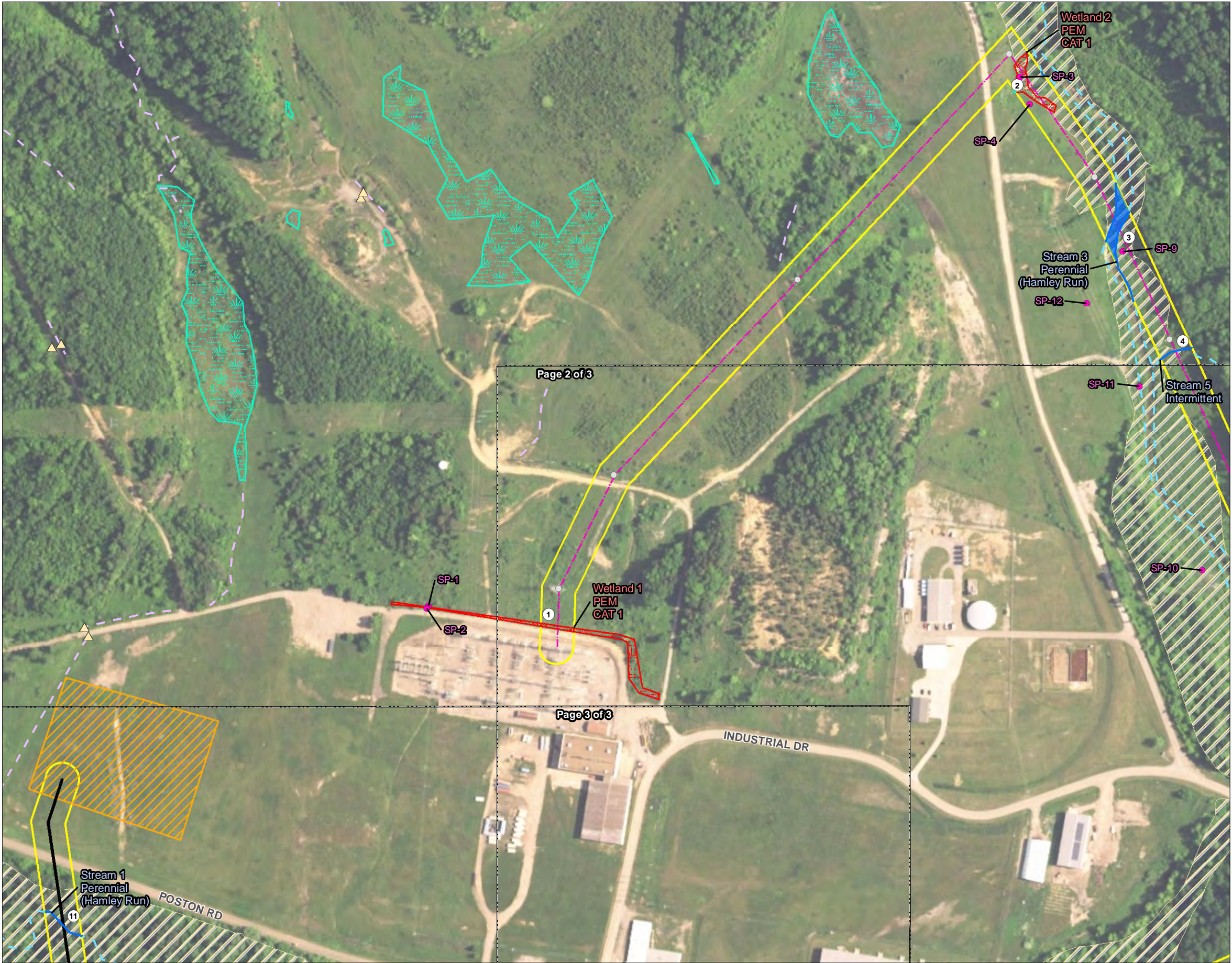
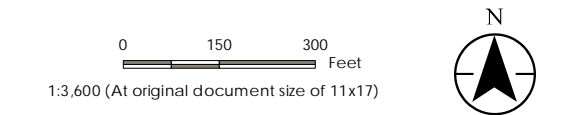
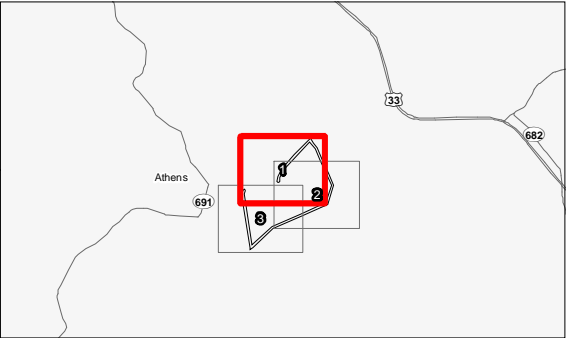


Figure No.
2
Title
Wetland and Waterbody
Delineation Map
Client/Project
AEP Ohio Transmission Company, Inc.
Lemaster-Lick 138kV
Transmission Line Relocation Project
Project Location
Athens County, Ohio
193704783
Prepared by JD on 2017-03-08
Technical Review by CP on 2017-03-09
Independent Review by DG on 2017-03-13



- Legend
- Existing Structure
 - Existing Lemaster-Lick Transmission Line to be Removed
 - Proposed Lemaster-Lick Transmission Line Relocation
 - Project Area (100' ROW)
 - Proposed Substation
 - Wetland Determination Sample Point
 - Existing Culvert
 - Photo Location
 - Upland Drainage Feature
 - Approximate Upland Drainage Feature
 - Field Delineated Waterway
 - Approximate Waterway
 - Field Delineated Waterway Area
 - Field Delineated Emergent Wetland
 - Approximate Wetland
 - FEMA Flood Hazard Areas
 - 100-year Flood Zone
 - 100-year Floodway



Notes

- Coordinate System: NAD 1983 StatePlane Ohio South FIPS 3402 Feet
- Data Sources Include: Stantec, AEP, NADS, FEMA, USGS, OGRIP
- Orthophotography: 2015 NAIP



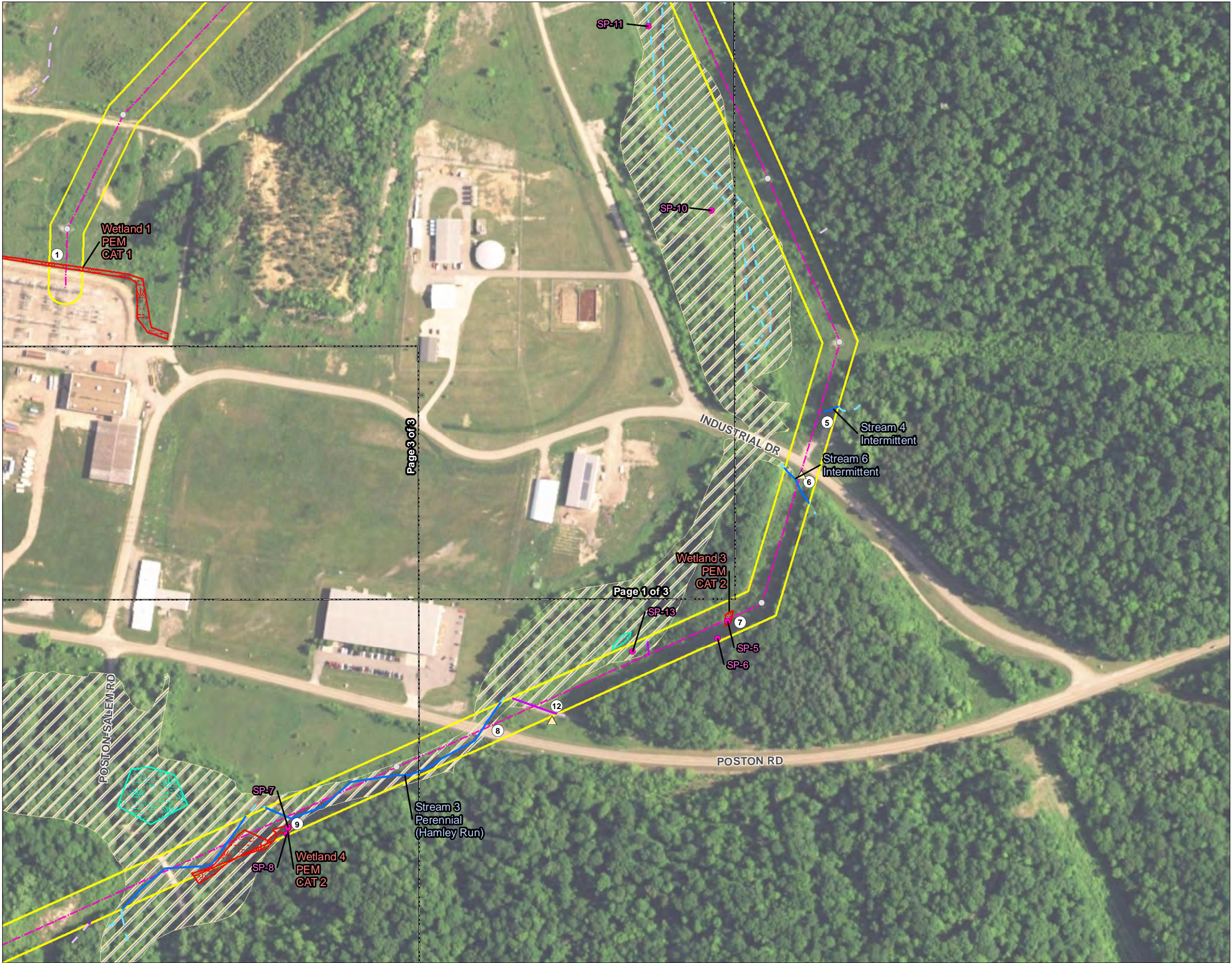


Figure No.
2

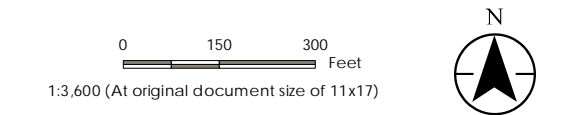
Title
**Wetland and Waterbody
Delineation Map**

Client/Project
AEP Ohio Transmission Company, Inc.
Lemaster-Lick 138kV
Transmission Line Relocation Project

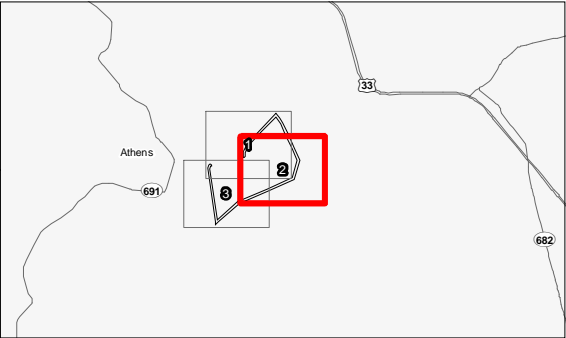
Project Location
Athens County, Ohio

193704783

Prepared by JD on 2017-03-08
Technical Review by CP on 2017-03-09
Independent Review by DG on 2017-03-13



- Legend**
- | | |
|--|-----------------------------------|
| ● Existing Structure | Field Delineated Waterway Area |
| Existing Lemaster-Lick Transmission Line to be Removed | Field Delineated Emergent Wetland |
| Proposed Lemaster-Lick Transmission Line Relocation | Approximate Wetland |
| Project Area (100' ROW) | FEMA Flood Hazard Areas |
| Proposed Substation | 100-year Flood Zone |
| Wetland Determination Sample Point | 100-year Floodway |
| Existing Culvert | |
| Photo Location | |
| Upland Drainage Feature | |
| Approximate Upland Drainage Feature | |
| Field Delineated Waterway | |
| Approximate Waterway | |



- Notes**
1. Coordinate System: NAD 1983 StatePlane Ohio South FIPS 3402 Feet
 2. Data Sources Include: Stantec, AEP, NADS, FEMA, USGS, OGRIP
 3. Orthophotography: 2015 NAIP



A.3 FIGURE 3 – HABITAT ASSESSMENT MAP

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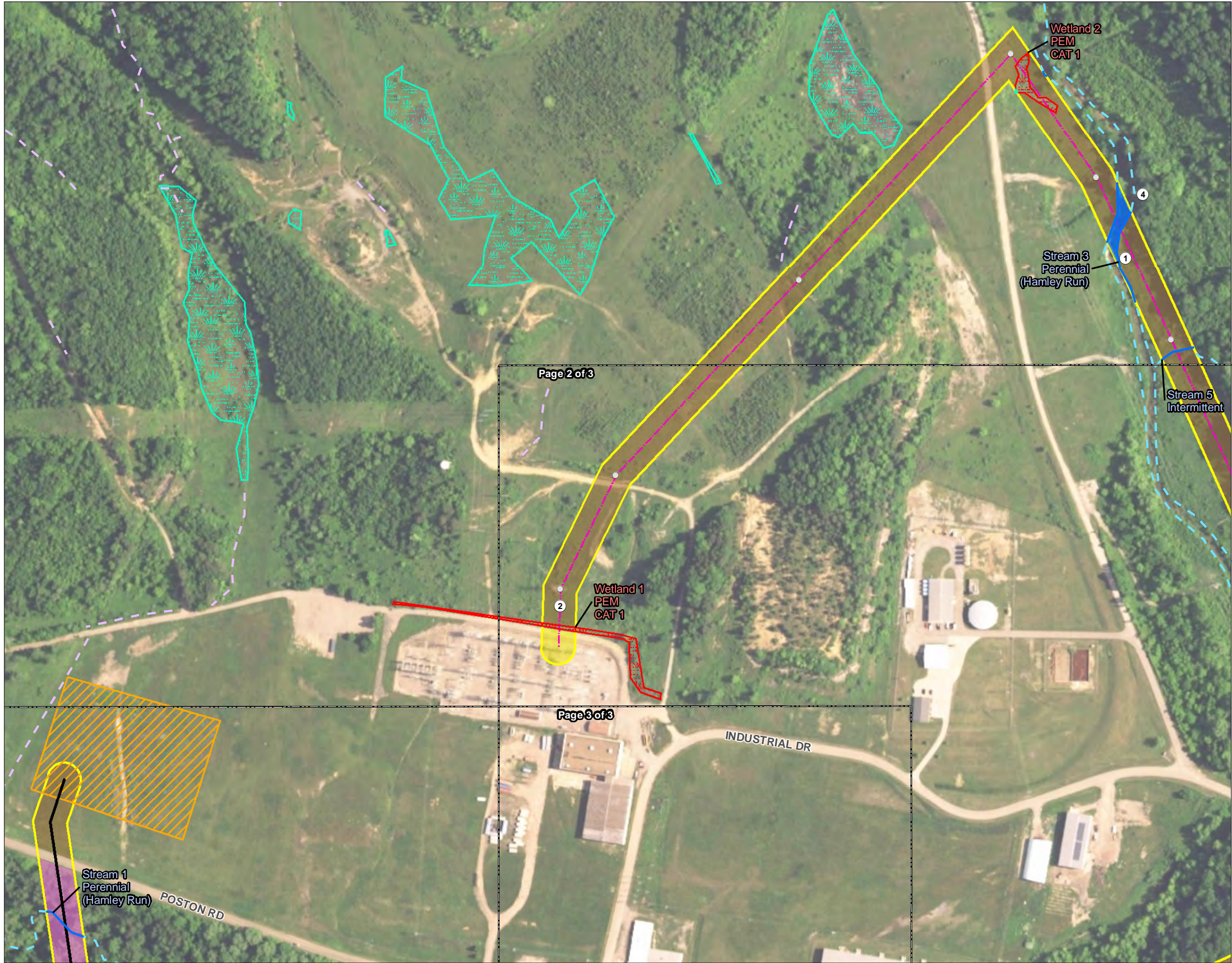


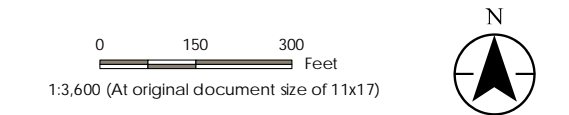
Figure No.
3
Title
Habitat Assessment Map

Client/Project
AEP Ohio Transmission Company, Inc.
Lemaster-Lick 138kv
Transmission Line Relocation Project

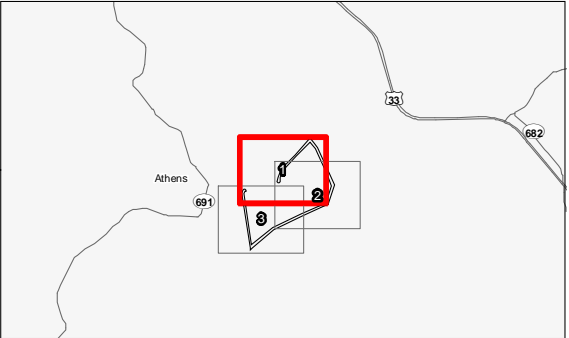
Project Location
Athens County, Ohio

193704783

Prepared by JD on 2017-03-08
Technical Review by CP on 2017-03-09
Independent Review by DG on 2017-03-13



- Legend
- | | |
|---|-------------------------------------|
| Existing Structure | Photo Location |
| Existing Lemaster-Lick Transmission Line to be Removed | Upland Drainage Feature |
| Proposed Lemaster-Lick Transmission Line Relocation | Approximate Upland Drainage Feature |
| Project Area (100' ROW) | Field Delineated Waterway |
| Proposed Substation | Approximate Waterway |
| Habitat Area | Field Delineated Waterway Area |
| Industrial | Field Delineated Emergent Wetland |
| Mixed Early Successional/Second Growth Deciduous Forest | Approximate Wetland |
| Old Field | |



Notes

1. Coordinate System: NAD 1983 StatePlane Ohio South FIPS 3402 Feet
2. Data Sources Include: Stantec, AEP, NADS, USGS, OGRIP
3. Orthophotography: 2015 NAIP



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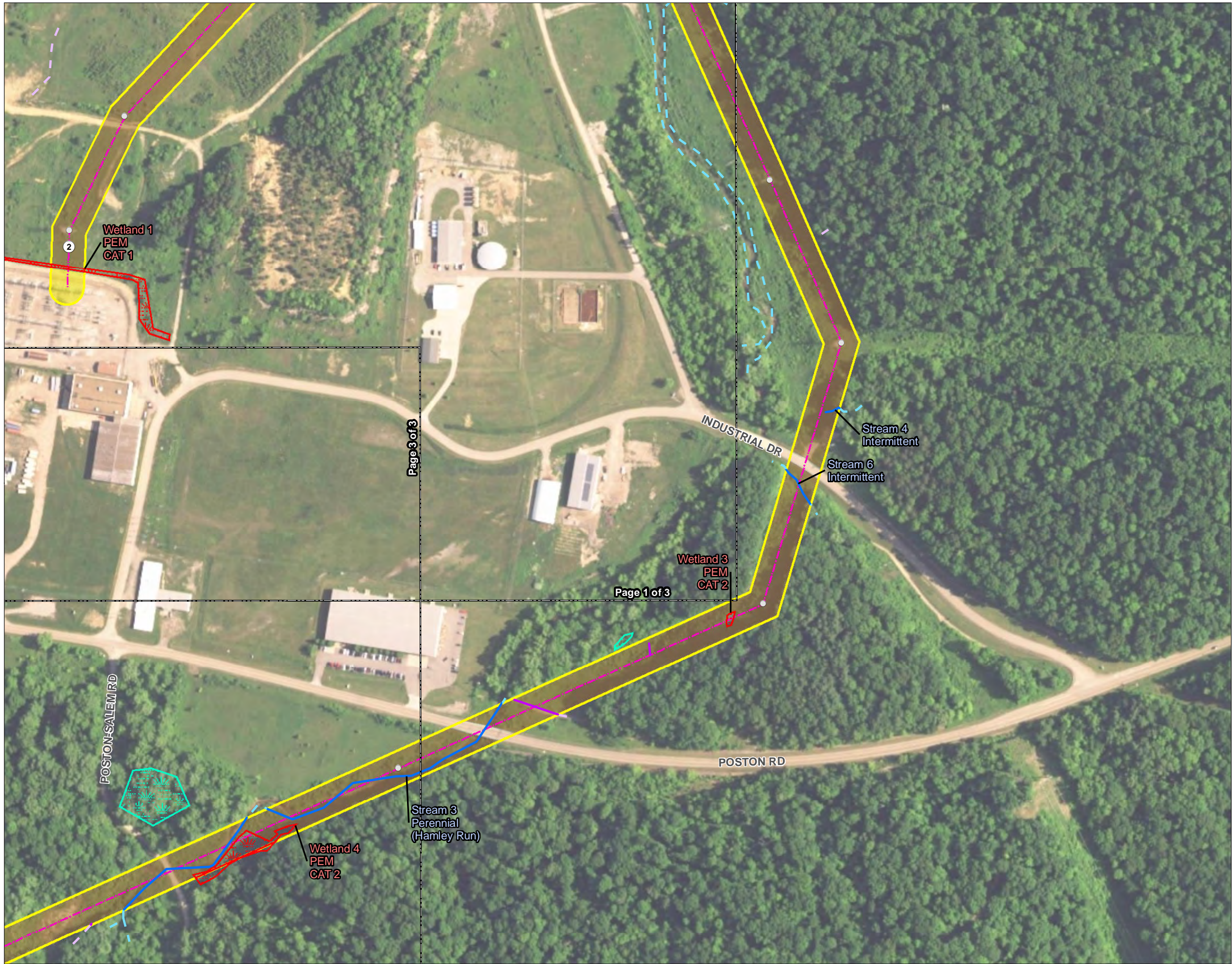


Figure No.
3

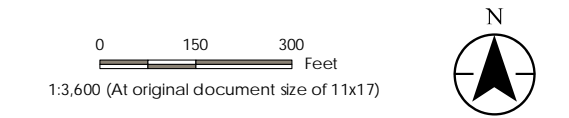
Title
Habitat Assessment Map

Client/Project
AEP Ohio Transmission Company, Inc.
Lemaster-Lick 138kv
Transmission Line Relocation Project

Project Location
Athens County, Ohio

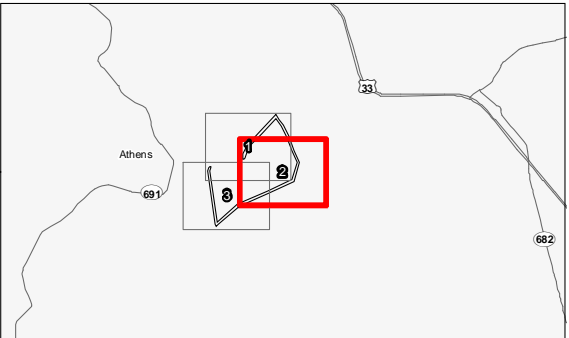
193704783

Prepared by JD on 2017-03-08
Technical Review by CP on 2017-03-09
Independent Review by DG on 2017-03-13



Legend

● Existing Structure	○ Photo Location
Existing Lemaster-Lick Transmission Line to be Removed	Upland Drainage Feature
Proposed Lemaster-Lick Transmission Line Relocation	Approximate Upland Drainage Feature
Project Area (100' ROW)	Field Delineated Waterway
Proposed Substation	Approximate Waterway
Habitat Area	Field Delineated Waterway Area
Industrial	Field Delineated Emergent Wetland
Mixed Early Successional/Second Growth Deciduous Forest	Approximate Wetland
Old Field	



Notes

- Coordinate System: NAD 1983 StatePlane Ohio South FIPS 3402 Feet
- Data Sources Include: Stantec, AEP, NADS, USGS, OGRIP
- Orthophotography: 2015 NAIP



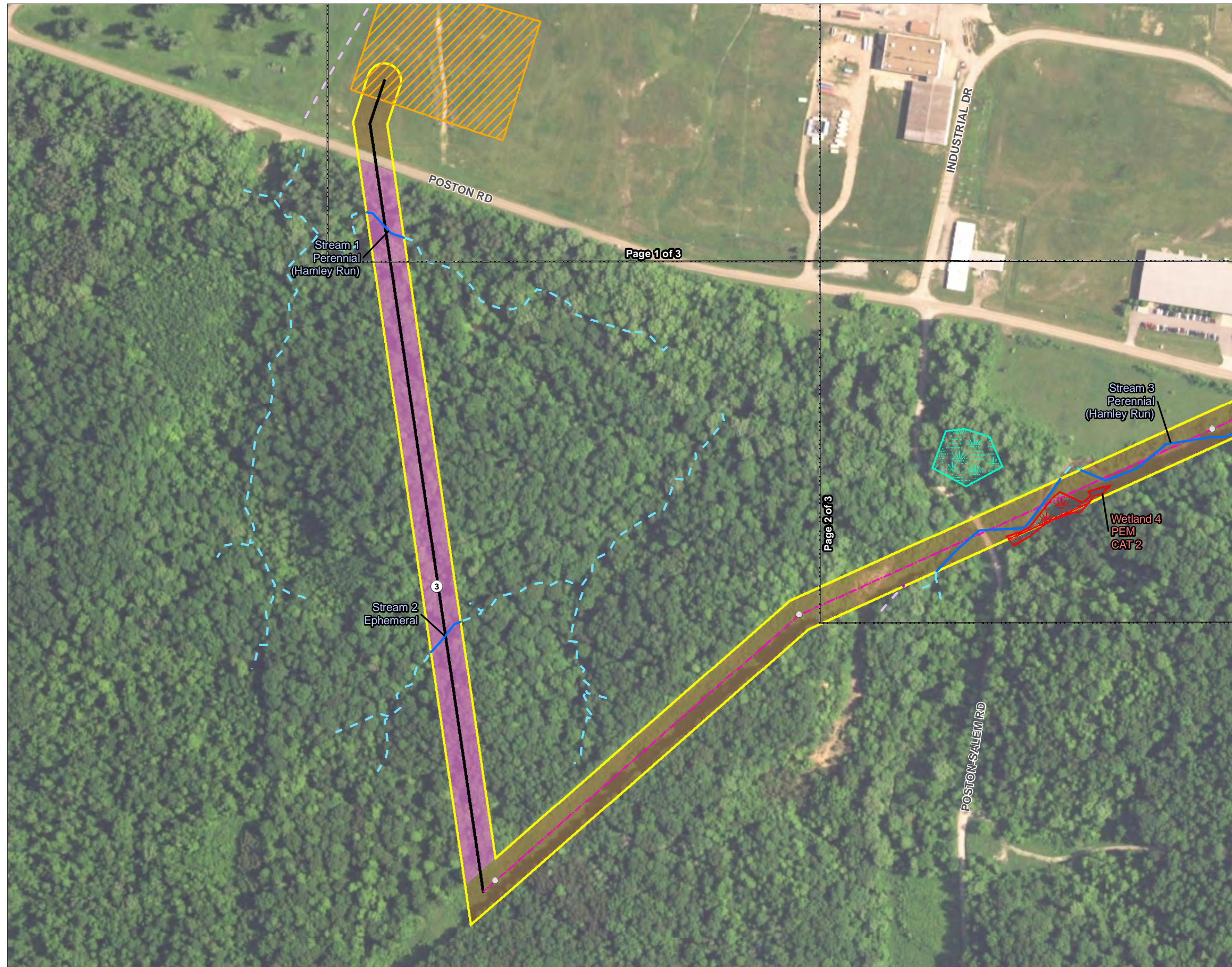


Figure No.

3

Title

Habitat Assessment Map

Client/Project

AEP Ohio Transmission Company, Inc.
Lemaster-Lick 138kv
Transmission Line Relocation Project

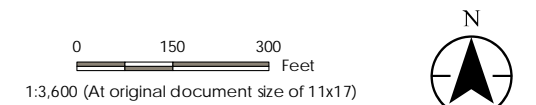
Project Location
Athens County, O

193704783

















Prepared by JD on 2017-03-08

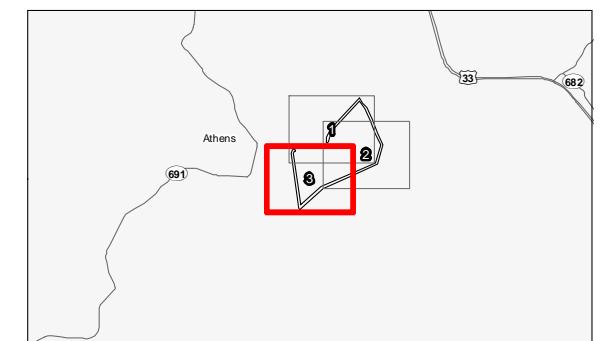
Technical Review by CP on 2017-03-09

Independent Review by DG on 2017-03-13



Legend

-  Existing Structure
-  Existing Lemaster-Lick Transmission Line to be Removed
-  Proposed Lemaster-Lick Transmission Line Relocation
-  Project Area (100' ROW)
-  Proposed Substation
- Habitat Area**
 -  Industrial
 -  Mixed Early Successional/Second Growth Deciduous Forest
 -  Old Field
-  Photo Location
-  Upland Drainage Feature
-  Approximate Upland Drainage Feature
-  Field Delineated Waterway
-  Approximate Waterway
-  Field Delineated Waterway Area
-  Field Delineated Emergent Wetland
-  Approximate Wetland



Notes

1. Coordinate System: NAD 1983 StatePlane Ohio South FIPS 3402 Feet
2. Data Sources Include: Stantec, AEP, NADS, USGS, OGRIP
3. Orthophotography: 2015 NAIP



Appendix B Agency Correspondence



Ohio Department of Natural Resources

JOHN R. KASICH, GOVERNOR

JAMES ZEHRINGER, DIRECTOR

Office of Real Estate
Paul R. Baldridge, Chief
2045 Morse Road – Bldg. E-2
Columbus, OH 43229
Phone: (614) 265-6649
Fax: (614) 267-4764

December 30, 2016

Dan Godec
Stantec Consulting Services Inc.
11687 Lebanon Road
Cincinnati, Ohio 45241

Re: 16-865; Request for Technical Assistance, AEP Lemaster Station Project

Project: The proposed project involves the construction of the Lemaster Station.

Location: The proposed project is located in York, Dover, and Waterloo Townships, Athens 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 data request response is included on pages 3-4 of the project documentation.

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 Indiana bat (*Myotis sodalis*), a state endangered and federally endangered species. Presence of the Indiana bat has been established in the area, and therefore additional summer surveys would not constitute presence/absence in the area. The following species of trees have relatively high value as potential Indiana bat roost trees: shagbark hickory (*Carya ovata*), shellbark hickory (*Carya laciniosa*), bitternut hickory (*Carya cordiformis*), black ash (*Fraxinus nigra*), green ash (*Fraxinus pennsylvanica*), white ash (*Fraxinus americana*), shingle oak (*Quercus imbricaria*), northern red oak (*Quercus rubra*), slippery elm (*Ulmus rubra*), American elm (*Ulmus americana*), eastern cottonwood (*Populus deltoides*), silver maple (*Acer saccharinum*), sassafras (*Sassafras albidum*), post oak (*Quercus stellata*), and white oak (*Quercus alba*). Indiana bat roost trees consists of

trees that include dead and dying trees with exfoliating bark, crevices, or cavities in upland areas or riparian corridors and living trees with exfoliating bark, cavities, or hollow areas formed from broken branches or tops. However, Indiana bats are also dependent on the forest structure surrounding roost trees. If suitable habitat occurs within the project area, the DOW recommends trees be conserved. If suitable habitat occurs within the project area and trees must be cut, the DOW recommends cutting occur between October 1 and March 31. If no tree removal is proposed, this project is not likely to impact this species.

The project is within the range of the club shell (*Pleurobema clava*), a state endangered and federally endangered mussel, the sheepnose (*Plethobasus cyphus*), a state endangered and federally endangered mussel, the fanshell (*Cyprogenia stegaria*), a state endangered and federally endangered mussel, the pink mucket (*Lampsilis orbiculata*), a state endangered and federally endangered mussel, the snuffbox (*Epioblasma triquetra*), a state endangered and federally endangered mussel, the threehorn wartyback (*Obliquaria reflexa*), a state threatened mussel, the fawnsfoot (*Truncilla donaciformis*), a state threatened mussel, and the black sandshell (*Ligumia recta*), a state threatened mussel. Due to the location, and that there is no in-water work proposed in a perennial stream of sufficient size, this project is not likely to impact these species.

The project is within the range of the channel darter (*Percina copelandi*), a state threatened fish, and the river darter (*Percina shumardi*), a state threatened fish. The DOW recommends no in-water work in perennial streams from April 15 to June 30 to reduce impacts to indigenous aquatic species and their habitat. If no in-water work is proposed, this project is not likely to impact these or other aquatic species.

The project is within the range of the timber rattlesnake (*Crotalus horridus horridus*), a state endangered species, and a federal species of concern. The timber rattlesnake is a woodland species. In addition to using wooded areas, the timber rattlesnake also utilizes sunlit gaps in the canopy for basking and deep rock crevices known as den sites for overwintering. Due to the location, the type of habitat at the project site, and the type of work proposed, this project is not likely to impact this species.

The project is within the range of the eastern spadefoot toad (*Scaphiopus holbrookii*), a state endangered species. This species is found in areas of sandy soils that are associated with river valleys. Breeding habitats may include flooded agricultural fields or other water holding depressions. Due to the location, the type of habitat at the project site and within the vicinity of the project area, and the type of work proposed, this project is not likely to impact this species.

The project is within the range of the mud salamander (*Pseudotriton montanus*), a state threatened species. Due to the location, the type of habitat present at the project site, and the type of work proposed, this project is not likely to impact this species.

The project is within the range of the black bear (*Ursus americanus*), a state endangered species. Due to the mobility of this species, this project is not likely to impact this species.

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

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

The local floodplain administrator should be contacted concerning the possible need for any floodplain permits or approvals for this project. Your local floodplain administrator contact information can be found at the website below.

<http://water.ohiodnr.gov/water-use-planning/floodplain-management#PUB>

ODNR appreciates the opportunity to provide these comments. Please contact John Kessler at (614) 265-6621 if you have questions about these comments or need additional information.

John Kessler
ODNR Office of Real Estate
2045 Morse Road, Building E-2
Columbus, Ohio 43229-6693
John.Kessler@dnr.state.oh.us



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

November 17, 2016

Dan Godec
Stantec Consulting Services, Inc.
11687 Lebanon Rd.
Cincinnati, OH 45241

Dear Mr. Godec,

I have reviewed the Natural Heritage Database for the Lemaster Station project area, including a one mile radius, in York, Dover and Waterloo Townships, Athens County, Ohio. The numbers/letters on the list below correspond to the areas marked on the accompanying map. Common name, scientific name and status are given for each species.

- A. Wayne National Forest – US Forest Service
- B. Hamley Run Floodplain Forest Conservation Site
- 1. *Eupatorium pilosum* – Rough Boneset, recently added to inventory, status not determined
- 2. Breeding Amphibian Site
- 3. *Brachycentrus numerosus* – caddisfly, endangered
- 4. Floodplain Forest Plant Community
- 5. *Terrapene carolina* – Eastern Box Turtle, species of concern
- 6. Mixed Mesophytic Forest Plant Community

A Conservation Site is an area deemed by the Natural Heritage Program to be a high quality natural area not currently under formal protection. It may, for example, harbor one or more rare species, be an outstanding example of a plant community or have geologically significant features, etc. These sites may be in private ownership and our listing of them does not imply permission for access.

We are unaware of any geologic features, scenic rivers, state wildlife areas, nature preserves, parks or forests or national wildlife refuges or parks within a one mile radius of the project area.

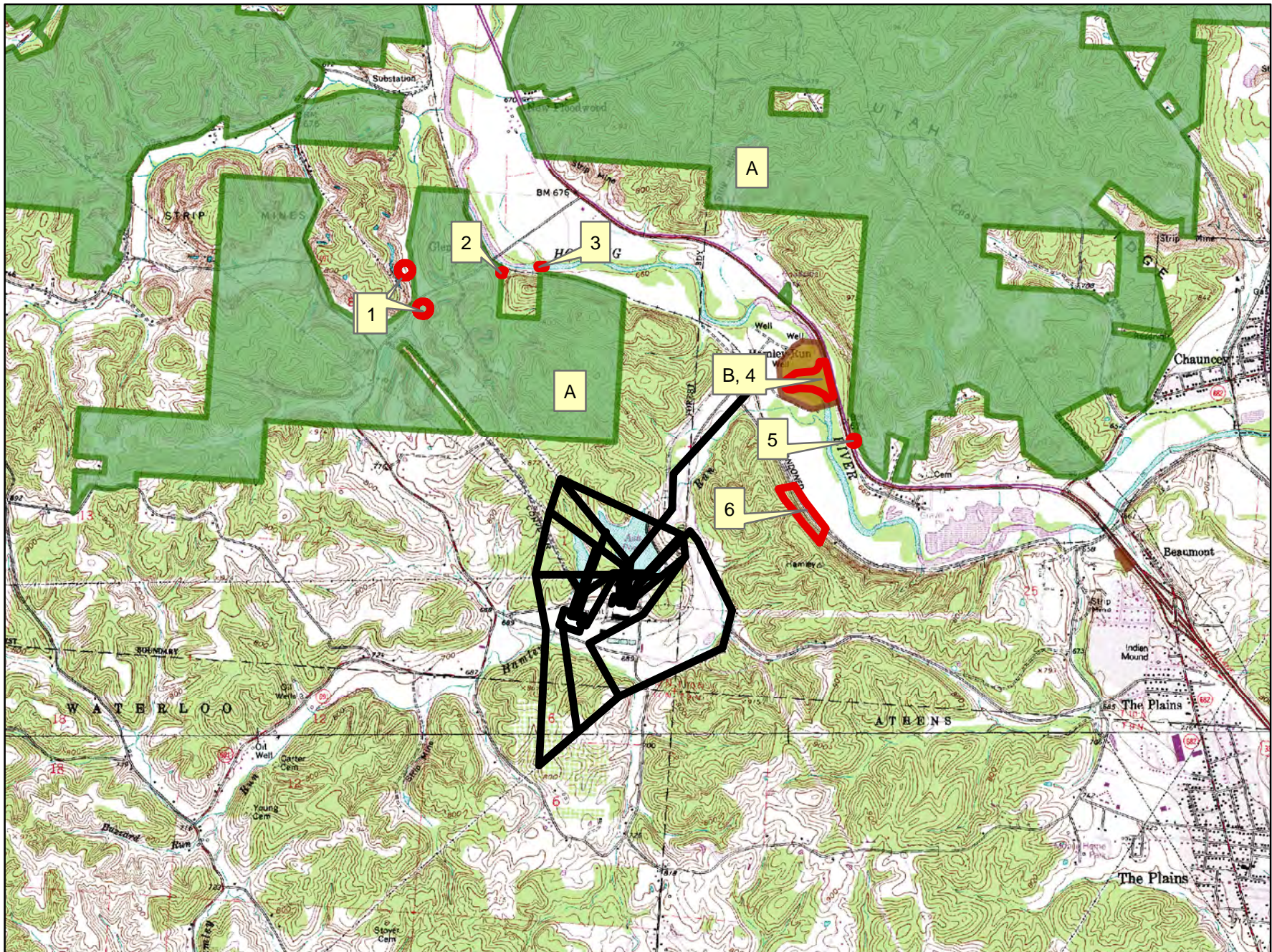
Our inventory program has not completely surveyed Ohio and relies on information supplied by many individuals and organizations. Therefore, a lack of records for any particular area is not a statement that rare species or unique features are absent from that area. This letter only represents a review 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,

Debbie Woischke
Ohio Natural Heritage Program

Lemaster Station Project



Godec, Daniel

From: susan_zimmermann@fws.gov on behalf of Ohio, FW3 <ohio@fws.gov>
Sent: Monday, November 28, 2016 11:29 AM
To: Godec, Daniel
Cc: nathan.reardon@dnr.state.oh.us; kate.parsons@dnr.state.oh.us
Subject: Lemaster Electric Transmission Substation Project, Athens Co.



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



TAILS: 03E15000-2017-TA-0252

Dear Mr. Godec,

We have received your recent correspondence requesting information about the subject proposal. There are no federal wilderness areas, wildlife refuges or designated critical habitat within the vicinity of the project area. The following comments and recommendations will assist you in fulfilling the requirements for consultation under section 7 of the Endangered Species Act of 1973, as amended (ESA).

The U.S. Fish and Wildlife Service (Service) recommends that proposed developments avoid and minimize water quality impacts and impacts to high quality fish and wildlife habitat (e.g., forests, streams, wetlands). Additionally, natural buffers around streams and wetlands should be preserved to enhance beneficial functions. If streams or wetlands will be impacted, the Corps of Engineers should be contacted to determine whether a Clean Water Act section 404 permit is required. Best management practices should be used to minimize erosion, especially on slopes. All disturbed areas should be mulched and revegetated with native plant species. Prevention of non-native, invasive plant establishment is critical in maintaining high quality habitats.

FEDERALLY LISTED SPECIES COMMENTS: All projects in the State of Ohio lie within the range of the federally endangered **Indiana bat** (*Myotis sodalis*) and the federally threatened **northern long-eared bat** (*Myotis septentrionalis*). In Ohio, presence of the Indiana bat and northern long-eared bat is assumed wherever suitable habitat occurs unless a presence/absence survey has been performed to document absence. Suitable summer habitat for Indiana bats and northern long-eared bats consists of a wide variety of forested/wooded habitats where they roost, forage, and travel and may also include some adjacent and interspersed non-forested habitats such as emergent wetlands and adjacent edges of agricultural fields, old fields and pastures. This includes forests and woodlots containing potential roosts (i.e., live trees and/or snags ≥ 3 inches diameter at breast height (dbh) that have any exfoliating bark, cracks, crevices, hollows and/or cavities), as well as linear features such as fencerows, riparian forests, and other wooded corridors. These wooded areas may be dense or loose aggregates of trees with variable amounts of canopy closure. Individual trees may be considered suitable habitat when they exhibit the characteristics of a potential roost tree and are located within 1,000 feet (305 meters) of other forested/wooded habitat. Northern long-eared bats have also been observed roosting in human-made structures, such as buildings, barns, bridges, and bat houses; therefore, these structures should also be considered potential summer habitat. In the winter, Indiana bats and northern long-eared bats hibernate in caves and abandoned mines.

The proposed project is in the vicinity of one or more confirmed records of Indiana bats. Therefore, we recommend that trees ≥ 3 inches dbh be saved wherever possible. Because the project will result in a small amount of forest clearing

relative to the available habitat in the immediately surrounding area, habitat removal is unlikely to result in significant impacts to these species. Since Indiana bat presence in the vicinity of the project has been confirmed, clearing of trees ≥ 3 inches dbh during the summer roosting season may result in direct take of individuals. If any caves or abandoned mines may be disturbed, further coordination with this office is requested to determine if fall or spring portal surveys are warranted. If no caves or abandoned mines are present and tree removal is unavoidable, we recommend that removal of any trees ≥ 3 inches dbh only occur between October 1 and March 31. Following this seasonal tree clearing recommendation should ensure that any effects to Indiana bats and northern long-eared bats are insignificant or discountable. **Please note that, because Indiana bat presence has already been confirmed in the project vicinity, any additional summer surveys would not constitute presence/absence surveys for this species.**


If there is a federal nexus for the project (e.g., federal funding provided, federal permits required to construct), no tree clearing should occur on any portion of the project area until consultation under section 7 of the ESA, between the Service and the federal action agency, is completed. We recommend that the federal action agency submit a determination of effects to this office, relative to the Indiana bat and northern long-eared bat, for our review and concurrence.

Due to the project type, size, and location, we do not anticipate adverse effects to any other federally endangered, threatened, proposed, or candidate species. Should the project design change, or during the term of this action, additional information on listed or proposed species or their critical habitat become available, or if new information reveals effects of the action that were not previously considered, consultation with the Service should be initiated to assess any potential impacts.

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 ESA, and are consistent with the intent of the National Environmental Policy Act of 1969 and the Service's Mitigation Policy. This letter provides technical assistance only and does not serve as a completed section 7 consultation document. We recommend that the project be coordinated with the Ohio Department of Natural Resources due to the potential for the project to affect state listed species and/or state lands. Contact John Kessler, Environmental Services Administrator, at (614) 265-6621 or at john.kessler@dnr.state.oh.us.

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,



Dan Everson

Field Supervisor

cc: Nathan Reardon, ODNR-DOW

Kate Parsons, ODNR-DOW

Appendix C Representative Photographs

Wetland and Waterbody Photographs

AEP Ohio Transmission Company, Inc.
Lemaster-Lick 138 kV Transmission Line Relocation Project
Athens County, Ohio



Photo Location 1. View of Wetland 1. Photograph taken facing north.



Photo Location 1. View of Wetland 1. Photograph taken facing east.

AEP Ohio Transmission Company, Inc.
Lemaster-Lick 138 kV Transmission Line Relocation Project
Athens County, Ohio



Photo Location 2. View of Wetland 2. Photograph taken facing east.



Photo Location 2. View of Wetland 2. Photograph taken facing west.

AEP Ohio Transmission Company, Inc.
Lemaster-Lick 138 kV Transmission Line Relocation Project
Athens County, Ohio



Photo Location 3. View of Stream 3 (Hamley Run). Photograph taken facing upstream/south.



Photo Location 3. View of Stream 3 (Hamley Run). Photograph taken facing downstream/north.

AEP Ohio Transmission Company, Inc.
Lemaster-Lick 138 kV Transmission Line Relocation Project
Athens County, Ohio



Photo Location 4. View of Stream 5. Photograph taken facing upstream/east.



Photo Location 4. View of Stream 5. Photograph taken facing downstream/west.

AEP Ohio Transmission Company, Inc.
Lemaster-Lick 138 kV Transmission Line Relocation Project
Athens County, Ohio



Photo Location 5. View of Stream 4. Photograph taken facing upstream/east.



Photo Location 5. View of Stream 4. Photograph taken facing downstream/west.

AEP Ohio Transmission Company, Inc.
Lemaster-Lick 138 kV Transmission Line Relocation Project
Athens County, Ohio



Photo Location 6. View of Stream 6. Photograph taken facing upstream/southeast.



Photo Location 6. View of Stream 6. Photograph taken facing downstream/northwest.

AEP Ohio Transmission Company, Inc.
Lemaster-Lick 138 kV Transmission Line Relocation Project
Athens County, Ohio



Photo Location 7. View of Wetland 3. Photograph taken facing north.



Photo Location 7. View of Wetland 3. Photograph taken facing south.

AEP Ohio Transmission Company, Inc.
Lemaster-Lick 138 kV Transmission Line Relocation Project
Athens County, Ohio



Photo Location 8. View of Stream 3 (Hamley Run). Photograph taken facing upstream/southwest.



Photo Location 8. View of Stream 3 (Hamley Run). Photograph taken facing downstream/northeast.

This foregoing document was electronically filed with the Public Utilities

Commission of Ohio Docketing Information System on

4/3/2017 12:03:33 PM

in

Case No(s). 17-0633-EL-BLN

Summary: Letter of Notification 2 of 4 parts electronically filed by Mr. Hector Garcia on behalf of AEP Ohio Transmission Company