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August 31, 2018

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RE: Case No. 18-1333-EL-BNR
In the Matter of the Construction Notice Application for AEP Ohio
Transmission Company, Inc. for a Certificate of Environmental
Compatibility and Public Need for the Southwest Lima 345kV
Transmission Line Extension Project

Dear Chairman Haque,

Attached please find a copy of AEP Ohio Transmission Company, Inc.'s ("AEP Ohio Transco") Construction Notice application for the above-referenced project, which is being submitted pursuant to O.A.C. 4906-6-05.

Copies of this filing will also be submitted to the executive director or the executive director's designee and provided to the OPSB Staff via electronic message.

If you have any questions, please do not hesitate to contact me.
Respectfully submitted,

/s/ Christen M. Blend
Christen M. Blend (0086881), Counsel of Record
Hector Garcia (0084517)

Counsel for AEP Ohio Transmission Company, Inc.

cc: John Jones, Counsel OPSB Staff
Jon Pawley, OPSB Staff

Construction Notice for the Southwest Lima 345 kV Transmission Line Extension Project



An **AEP** Company

BOUNDLESS ENERGY™

PUCO Case No. 18-1333-EL-BNR

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

Submitted by:
AEP Ohio Transmission Company, Inc.

August 31, 2018

CONSTRUCTION NOTICE

AEP Ohio Transmission Company, Inc.'s Southwest Lima 345 kV Transmission Line Extension Project

4906-6-05

AEP Ohio Transmission Company, Inc. ("AEP Ohio Transco") provides the following information to the Ohio Power Siting Board ("OPSB") pursuant to Ohio Administrative Code Section 4906-6-05.

4906-6-05(B) General Information

B(1) Project Description

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

AEP Ohio Transco proposes the Southwest Lima 345 kV Transmission Line Extension Project ("Project"), located in Shawnee Township, Allen County, Ohio. In 2016, additional circuit breakers and associated station equipment support structures were constructed in the Southwest Lima 345 kV Transmission Station to address PJM requirements. In February 2018, a design and installation error that has resulted in a clearance violation between the Southwest Lima 345 kV Transmission Station and the Marysville-Southwest Lima 345 kV circuit was declared. If not corrected within one year after declaration, the clearance violation would result in a compliance violation self-report and possible circuit derating. The purpose of this Project is to add a support structure (wood pole) to move the Marysville-Southwest Lima 345 kV circuit conductors away from station equipment to provide the required clearance. The Project will be constructed on existing Ohio Power Company property. Appendix A shows the location of the Project.

The Project meets the requirements for a Construction Notice ("CN") because it is within the types of projects defined in Item (1)(a) of Appendix A to O.A.C. 4906-1-01, *Application Requirement Matrix for Electric Power Transmission Lines*:

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

The Project has been assigned PUCO Case No. 18-1333-EL-BNR

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.

A review of completed 345 kV line work at the Southwest Lima 345 kV Transmission Station in support of PJM project b1957 has demonstrated that a clearance violation exists between installed structures (completed in 2016) and the southern circuit (Marysville – Southwest Lima 345 kV circuit) of the Southwest Lima 345 kV Extension line. This Project is necessary to correct the clearance violation within one year after declaration to mitigate the need for a compliance violation self-report as well as a potential decrease in facility ratings.

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.

Appendix A shows the location of the Project in relation to the proposed transmission line structure and substation.

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 proposed pole location was specifically chosen to meet clearance requirements from the Marysville-Southwest Lima 345 kV circuit and substation equipment while also avoiding impacts to any environmentally sensitive areas. The resulting alignment represents the most suitable and least-impact pole location alternative. Socioeconomic, land use, and ecological information is presented in Section B(10). A Project area map showing land use features in the Project area is included as Figure 3 of Appendix A.

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.

Because the Project will be located fully on Ohio Power Company-owned property, no other property owners or tenants will be affected. AEP Ohio Transco maintains a website (<http://aeptransmission.com/ohio/>) on which an electronic copy of this CN is available. A paper copy of the CN will be served to the public library in each political subdivision affected by this 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 the fourth quarter of 2018, and the anticipated in-service date will be approximately February 2019.

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.

Appendix A, Figure 1 provides a topographical map of existing and proposed facilities at 1:24,000, and Figure 2 provides an aerial image showing roads and highways, clearly marked with Project components. Figure 3 provides the land uses of the Project area.

From Columbus, take I-270 N toward Cleveland, and take exist 17B and merge onto OH-161 W/US-33, continuing onto US-33W for about 85.3 miles. Turn right onto OH-65 N and continue for 5.1 miles, turn left onto Buckland Holden Rod and continue for five miles, turn right onto Wapakoneta Cridersville Road and continue for two miles. Continue onto Sellers Road for 1.4 miles, and the Southwest Lima 345 kV Transmission Substation will be on the right.

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 is located on Ohio Power Company property. No other property easements, options, or land use agreements are necessary to construct the Project or operate the transmission line.

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.

Voltage:	345 kV
Conductors:	1,708,000 CM ACSR/AE 66/19

Static Wire: 7#8 Alumoweld
Insulators: Polymer (Ceramic may be used based on supply availability.)
ROW Width: N/A, Ohio Power Company Property.
Structure Types: One wood, single phase, running corner structure needed.

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.

No occupied residences or institutions are located within 100 feet of the Project.

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

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

No occupied residences or institutions are located within 100 feet of the 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 \$200,000, using a Class 3 Estimate.

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.

The Project is located within Shawnee Township, Allen County, Ohio. Figure 3 in Appendix A shows the land use within the Project area, which is a landscaped field. No tree clearing is anticipated to be required for the Project. One category one wetland is found within the Project area, but will not be affected by the Project. The Project parcel is owned by Ohio Power Company. There are no residences located within 100 feet of the Project area. There are no parks, churches, cemeteries, wildlife management areas, or nature preserve lands within 1,000 feet of the centerline of the Project.

B(10)(b) Agricultural Land Information

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

The Project area is classified as commercial/utility land. The Allen County Auditor indicates that no agricultural district lands or agricultural land will be affected by the Project. The Project includes the construction of one wood pole on Ohio Power Company property resulting in a minor shift of the alignment into an existing distribution station. The land use affected by this Project is a landscaped field.

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.

A cultural survey within this Project area was conducted for another AEP Ohio Transco project. The report holds relevant data for this Project, and will be directly coordinated with the OPSB.

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

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

A Notice of Intent will be filed with the Ohio Environmental Protection Agency for authorization of construction storm water discharges under General Permit OHC000005, and AEP Ohio Transco will implement and maintain best management practices as outlined in the project-specific Storm Water Pollution Prevention Plan to minimize erosion and control sediment to protect surface water quality during storm events.

Coordination with the Ohio History Connection (OHC), United States Fish and Wildlife Service ("USFWS"), and the Ohio Department of Natural Resources ("ODNR") has been completed and coordination letters can be found in Appendix C.

The Project will not require a Clean Water Act Section 404 Permit from the U.S. Army Corps of Engineers ("USACE") or Pre-Construction Notification to the USACE as no streams or wetlands will be impacted by the Project. No structures are located within a 100-year floodplain area. Therefore, no floodplain permitting is expected to be required for the Project.

A Wetland Delineation and Stream Assessment Report is found as Appendix B.

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

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

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

AEP Ohio Transco has coordinated with USFWS and ODNR in regards to special status species within the vicinity of the Project. No impacts are expected to such species as a result of this Project. Copies of the coordination letters are included as Appendix C.

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.

A Wetland and Stream Delineation report was completed by AEP Ohio Transco's consultants within the Project Area and is included as Appendix B. There are no streams impacted by the installation of the proposed Project. A Category 1 wetland is found north and west of the proposed pole location, though no impacts are expected. If impacts are to occur to the wetland, temporary timber matting will be utilized to minimize impacts and the area will be restored to its pre-construction conditions.

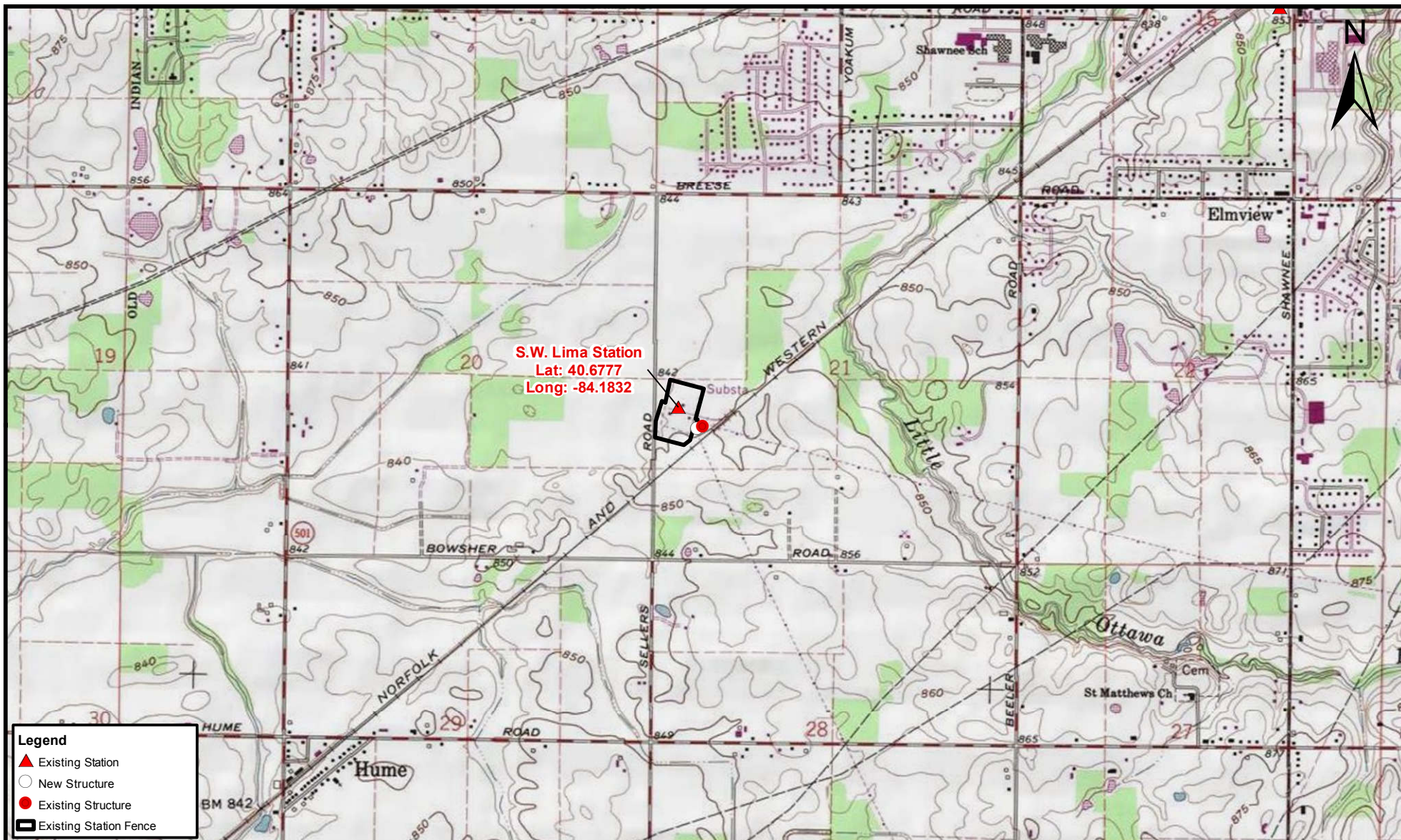
B(10)(g) Unusual Conditions

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

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

Appendix A Project Maps

Figures 1, 2, 3



AEP Ohio Transmission Company

Southwest Lima Station Expansion Project

Allen County, Ohio

Projected Coordinate System: Ohio State Plane (North)

Datum: North American Datum - 1983

Linear Unit: Feet

BASE MAP SOURCE:
© 2013 National Geographic Society, i-cubed



CREATED BY: GO

CHECKED BY: AS

SCALE: 1" = 2,000' (1:24,000)
AT 8.5"x11" PAPER SIZE

SITE LOCATION
MAP

AECOM

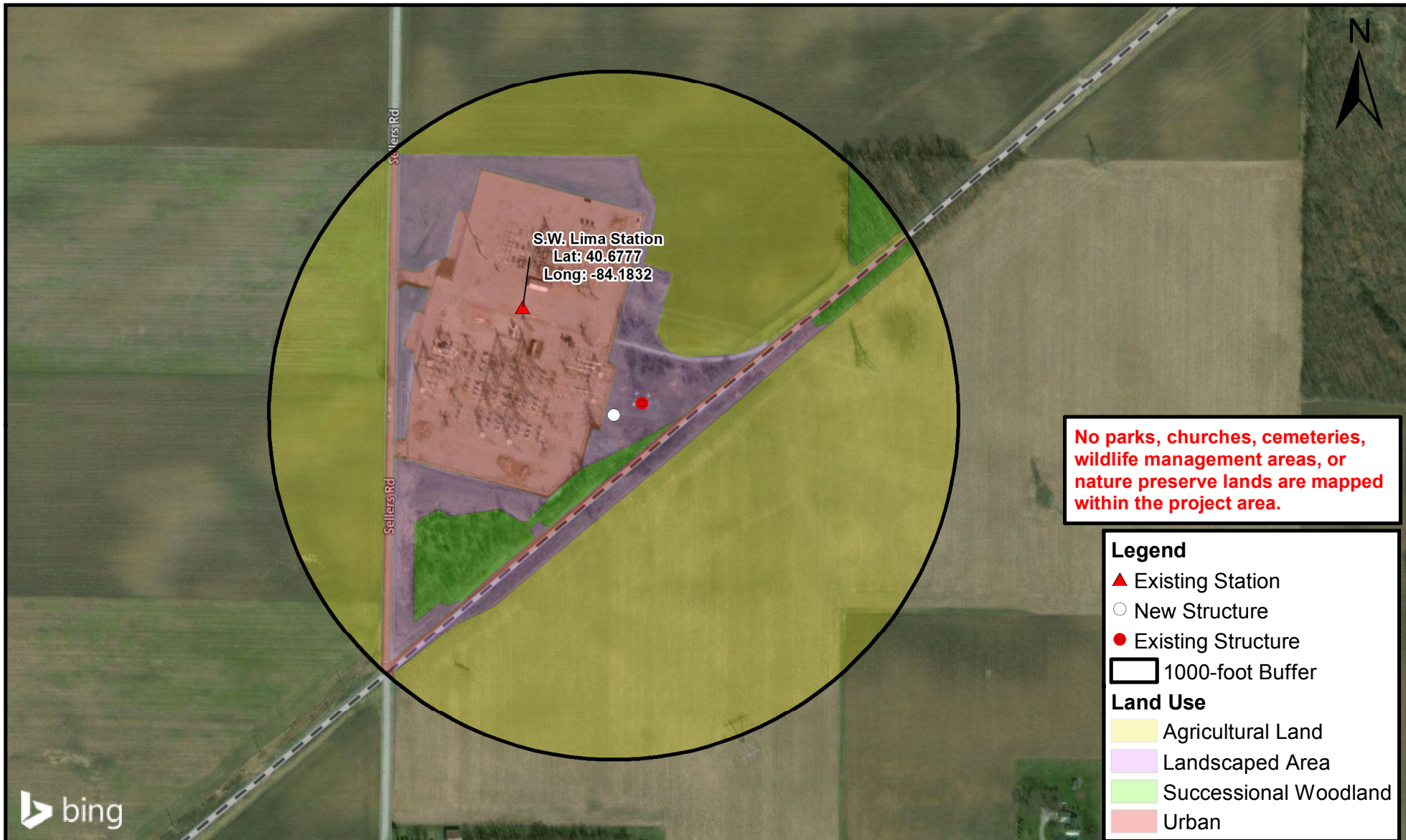
DATE: 8/21/2018

0 1,000 2,000
Scale in Feet

**AEP OHIO
TRANSMISSION
COMPANY**



AEP Ohio Transmission Company Southwest Lima Station Expansion Project Allen County, Ohio	Projected Coordinate System: Ohio State Plane (North) Datum: North American Datum - 1983 Linear Unit: Feet BASE MAP SOURCE: © 2013 National Geographic Society, i-cubed		CREATED BY: GO CHECKED BY: AS	SCALE: 1" = 200' (1:2,400) AT 8.5"x11" PAPER SIZE SITE LOCATION MAP AECOM	DATE: 8/21/2018 0 100 200 Scale in Feet AEP OHIO TRANSMISSION COMPANY
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AEP Ohio Transmission Company

Southwest Lima Station Expansion Project

Allen County, Ohio

Projected Coordinate System: Ohio State Plane (North)

Datum: North American Datum - 1983

Linear Unit: Feet

BASE MAP SOURCE:
© 2013 National Geographic Society, i-cubed



CREATED BY: BAW

CHECKED BY: AG

SCALE: 1" = 400' (1:4,800)
AT 8.5"x11" PAPER SIZE

LAND USES IN
PROJECT AREA

AECOM

DATE: 8/21/2018

0 200 400
Scale in Feet

**AEP OHIO
TRANSMISSION
COMPANY**

Appendix B Ecological Resources Inventory Report

SOUTHWEST LIMA STATION EXPANSION PROJECT, ALLEN COUNTY, OHIO

WETLAND DELINEATION AND STREAM ASSESSMENT 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 #: 60553292

September 2017

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FIGURES**Number**

FIGURE 1	Overview Map
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APPENDIX B	OEPA Wetland ORAM Forms
APPENDIX C	Delineated Feature Photographs
APPENDIX D	Correspondence Letter from USFWS

LIST OF ACRONYMS and ABBREVIATIONS

AEP Ohio Transco	American Electric Power Ohio Transmission Company
FAC	Facultative
FACU	Facultative upland
FACW	Facultative wetland
GPS	Global Positioning System
HHEI	Headwater Habitat Evaluation Index
IBI	Index of Biotic Integrity
NRCS	Natural Resources Conservation Service
NWI	National Wetlands Inventory
OBL	Obligate wetland
ODNR	Ohio Department of Natural Resources
OEPA	Ohio Environmental Protection Agency
OHWM	Ordinary high water mark
PEM	Palustrine emergent wetland
PFO	Palustrine forested wetland
QHEI	Qualitative Habitat Evaluation Index
ROW	Right-of-way
UPL	Upland
U.S.	United States
USACE	United States Army Corps of Engineers
USDA	United States Department of Agriculture
USFWS	United States Fish and Wildlife Service
USGS	United States Geological Survey

1.0 INTRODUCTION

American Electric Power Ohio Transmission Company's (AEP Ohio Transco) is proposing to expand its existing Southwest Lima Station in Allen County, Ohio. AEP requested that AECOM survey approximately 51 acres that includes the existing 10-acre station and adjacent areas. The fenced expansion area will cover no more than two additional acres on the 51-acre property owned by AEP. The existing fenced area of the station is approximately 10 acres. The proposed Project is illustrated on Figure 1.

Land uses within the Project survey area were assigned a general classification based upon the principal land characteristics of the location as observed through aerial photography review and observations during the field surveys. The general land use type within the proposed Project area included: successional woodland, actively farmed agricultural areas, the existing transmission station and surrounding landscape area, and maintained transmission line right-of-way (ROW).

2.0 METHODOLOGY

The purpose of the field survey was to assess whether wetlands and other "waters of the U.S." exist within the approximately 51-acre Project survey area. Prior to conducting field surveys, digital and published county Natural Resources Conservation Service (NRCS) soil surveys, U.S. Fish and Wildlife Service (USFWS) National Wetland Inventory (NWI) maps, and U.S. Geological Survey (USGS) 7.5-minute topographic maps were reviewed as an exercise to identify the occurrence and location of potential wetland areas.

On September 6th, 2017, AECOM ecologists walked the Project survey area to conduct a wetland delineation and stream assessment. During the field survey, the physical boundaries of observed water features were recorded using sub-decimeter accurate Trimble Global Positioning System (GPS) units. The GPS data was imported into ArcMap GIS software, where the data was then reviewed and edited for accuracy.

2.1 WETLAND DELINEATION

The Project survey area was evaluated according to the procedures outlined in the U.S. Army Corps of Engineers (USACE) 1987 Wetland Delineation Manual (1987 Manual) (Environmental Laboratory, 1987) and the Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Midwest Region (Version 2.0) (Regional Supplement) (USACE, 2010). The Midwest Regional Supplement was release by the USACE in August 2010 to address regional wetland characteristics and improve the accuracy and efficiency of wetland delineation procedures. This 1987 Manual and Regional Supplement define wetlands as areas that have positive evidence of three environmental parameters: hydric soils, wetland

hydrology, and hydrophytic vegetation. Wetland boundaries are placed where one or more of these parameters give way to upland characteristics.

Since quantitative data were not available for any of the identified wetlands, AECOM utilized the routine delineation method described in the 1987 Manual and Regional Supplements that consisted of a pedestrian site reconnaissance, including identifying the vegetation communities, soils identification, a geomorphologic assessment of hydrology, and notation of disturbance. The methodology used to examine each parameter is described in the following sections.

2.1.1 SOILS

Soils were examined for hydric soil characteristics using a spade shovel to extract soil samples. A *Munsell Soil Color Chart* (Kollmorgen Corporation, 2010) was used to identify the hue, value, and chroma of the matrix and mottles of the soils. Generally, mottled soils with a matrix chroma of two or less, or unmottled soils with a matrix chroma of one or less are considered to exhibit hydric soil characteristics (Environmental Laboratory, 1987). In sandy soils, mottled soils with a matrix chroma of three or less, or unmottled soils with a matrix chroma of two or less are considered to be hydric soils.

2.1.2 HYDROLOGY

The *1987 Manual* requires that an area be inundated or saturated to the surface for an absolute minimum of five percent of the growing season (areas saturated between five percent and 12.5 percent of the growing season may or may not be wetlands, while areas saturated over 12.5 percent of the growing season fulfill the hydrology requirements for wetlands). The *Regional Supplement* states that the growing season dates are determined through onsite observations of the following indicators of biological activity in a given year: (1) above-ground growth and development of vascular plants, and/or (2) soil temperature (12-in. depth) is 41 degree Fahrenheit (°F) or higher as an indicator of soil microbial activity. Therefore, the beginning of the growing season in a given year is indicated by whichever condition occurs earlier, and the end of the growing season by whichever persists later.

The *Regional Supplement* also stated that if onsite data gathering is not practical, the growing season can be approximated by the number of days between the average (five years out of ten, or 50 percent probability) date of the last and first 28°F air temperature in the spring and fall, respectively. The National Weather Service WETS data obtained from the NRCS National Water and Climate Center reveals for Allen County that in an average year, this period lasts from April 10 to November 2, or 206 days. In the Project area, five percent of the growing season equates to approximately ten days.

The soils and ground surface were examined for evidence of wetland hydrology in lieu of detailed hydrological data. This is an acceptable approach according to the *1987 Manual* and the *Regional Supplement*. Evidence indicating wetland hydrology typically includes primary indicators such as surface

water, saturation, water marks, drift deposits, water-stained leaves, sediment deposits and oxidized rhizospheres on living roots; and secondary indicators such as drainage patterns, geomorphic position, micro-topographic relief, and a positive Facultative (FAC)-neutral test (USACE, 2010).

2.1.3 VEGETATION

Dominant vegetation was visually assessed for each stratum (tree, sapling/shrub, herb and woody vine) and an indicator status of obligate wetland (OBL), facultative wetland (FACW), facultative (FAC), facultative upland (FACU), and/or upland (UPL) was assigned to each plant species based on the U.S. Army Corps of Engineers *2016 National Wetland Plant List: Midwest Region*, which encompasses the area of the Project. An area is determined to have hydrophytic vegetation when, under normal circumstances, 50 percent or more of the composition of the dominant species are OBL, FACW and/or FAC species. Vegetation of an area was determined to be non-hydrophytic when more than 50 percent of the composition of the dominant species was FACU and/or UPL species. In addition to the dominance test, the FAC-Neutral test and prevalence tests are used to determine if a wetland has a predominance of hydrophytic vegetation. Recent USACE guidance indicates that to the extent possible, the hydrophytic vegetation decision should be based on the plant community that is normally present during the wet portion of the growing season in a normal rainfall year (USACE, 2010).

Vegetation sampling for wetland delineation can be challenging when some plants die back due to freezing temperatures or other factors (USACE, 2010). The end of the growing season is indicated when woody deciduous species lose their leaves or the last herbaceous plants cease flowering and their leaves become dry or brown, whichever occurs latest. The wetland delineation field work within the Project area was conducted after the occurrence of these events and therefore, outside the normal growing season. Conducting a wetland delineation outside the normal growing season can make identifying the wetland/upland boundary more challenging and may require further assessment during the next growing season.

2.1.4 WETLAND CLASSIFICATIONS

Wetlands were classified based on the naming convention found in *Classification of Wetlands and Deepwater Habitats of the United States* (Cowardin *et al*, 1979). The identified wetland within the survey corridor was classified as a freshwater, Palustrine system, which includes non-tidal wetlands dominated by trees, shrubs, emergents, mosses, or lichens. Two palustrine wetland classes were identified within the Project survey corridor:

- **PEM** – Emergent wetlands are characterized by erect, rooted, herbaceous hydrophytes, excluding mosses and lichens. This vegetation is present for most of the growing season in most years. These wetlands are usually dominated by perennial plants.

- **PFO** – Forested wetlands are characterized by woody vegetation that is 3 inches or more DBH, regardless of total height. These wetlands generally include an overstory of broad-leaved and needle-leaved trees, an understory of young saplings and shrubs, and a herbaceous layer.

2.1.5 OHIO RAPID ASSESSMENT METHOD v. 5.0

The Ohio Environmental Protection Agency (OEPA) Ohio Rapid Assessment Method for Wetlands v. 5.0 (ORAM) was developed to determine the relative ecological quality and level of disturbance of a particular wetland in order to meet requirements under Section 401 of the Clean Water Act. Wetlands are scored on the basis of hydrology, upland buffer, habitat alteration, special wetland communities, and vegetation communities. Each of these subject areas is further divided into subcategories under ORAM v. 5.0 resulting in a score that describes the wetland using a range from 0 (low quality and high disturbance) to 100 (high quality and low disturbance). Wetlands scored from 0 to 29.9 are grouped into "Category 1", 30 to 59.9 are "Category 2" and 60 to 100 are "Category 3". Transitional zones exist between "Categories 1 and 2" from 30 to 34.9 and between "Categories 2 and 3" from 60 to 64.9. However, according to the OEPA, if the wetland score falls into the transitional range, it must be given the higher Category unless scientific data can prove it should be in a lower Category (Mack, 2001).

Category 1 Wetlands

Category 1 wetlands support minimal wildlife habitat, hydrological and recreational functions, and do not provide for or contain critical habitats for threatened or endangered species. In addition, Category 1 wetlands are often hydrologically isolated and have some or all of the following characteristics: low species diversity, no significant habitat for wildlife use, limited potential to achieve wetland functions, and/or a predominance of non-native species. These limited quality wetlands are considered to be a resource that has been severely degraded or has a limited potential for restoration, or is of low ecological functionality.

Category 2 Wetlands

Category 2 wetlands "...support moderate wildlife habitat, or hydrological or recreational functions," and as wetlands which are "...dominated by native species but generally without the presence of, or habitat for, rare, threatened or endangered species; and wetlands which are degraded but have a reasonable potential for reestablishing lost wetland functions." Category 2 wetlands constitute the broad middle category of "good" quality wetlands, and can be considered a functioning, diverse, healthy water resource that has ecological integrity and human value. Some Category 2 wetlands are lacking in human disturbance and considered to be naturally of moderate quality; others may have been Category 3 wetlands in the past, but have been degraded to Category 2 status.

Category 3 Wetlands

Wetlands that are assigned to Category 3 have “...superior habitat, or superior hydrological or recreational functions.” They are typified by high levels of diversity, a high proportion of native species, and/or high functional values. Category 3 wetlands include wetlands which contain or provide habitat for threatened or endangered species, are high quality mature forested wetlands, vernal pools, bogs, fens, or which are scarce regionally and/or statewide. A wetland may be a Category 3 wetland because it exhibits one or all of the above characteristics. For example, a forested wetland located in the flood plain of a river may exhibit “superior” hydrologic functions (e.g. flood retention, nutrient removal), but not contain mature trees or high levels of plant species diversity.

2.2 STREAM CROSSINGS

Regulatory activities under the Clean Water Act provide authority for states to issue water quality standards and “designated uses” to all waters of the U.S. upstream to the highest reaches of the tributary streams. In addition, the Federal Water Pollution Control Act of 1972 and its 1977 and 1987 amendments require knowledge of the potential fish or biological communities that can be supported in a stream or river, including upstream headwaters. Streams were identified by the presence of a defined bed and bank, and evidence of an ordinary high water mark (OHWM). The USACE defines OHWM as “that line on the shore established by the fluctuations of water and indicated by physical characteristics such as a clear, natural line impressed on the bank, shelving, changes in the character of soil, destruction of terrestrial vegetation, the presence of litter and debris, or other appropriate means that consider the characteristics of the surrounding areas” (USACE, 2005).

Stream assessments were conducted using the methods described in the OEPA’s Methods for Assessing Habitat in Flowing Waters: Using OEPA’s *Qualitative Habitat Evaluation Index* (Rankin, 2006) and in the OEPA’s Field Evaluation Manual for Ohio’s Primary Headwater Habitat Streams (Ohio EPA, 2012).

2.2.1 OEPA QUALITATIVE HABITAT EVALUATION INDEX

The qualitative habitat evaluation index (QHEI) is designed to provide a rapid determination of habitat features that correspond to those physical factors that most affect fish communities and which are generally important to other aquatic life (e.g., macroinvertebrates). The quantitative measure of habitat used to calibrate the QHEI score are Indices (or Index) of Biotic Integrity (IBI) for fish. In most instances the QHEI is sufficient to give an indication of habitat quality, and the intensive quantitative analysis used to measure the IBI is not necessary. It is the IBI, rather than the QHEI, that is directly correlated with the aquatic life use designation for a particular surface water.

The QHEI method is generally considered appropriate for waterbodies with drainage basins greater than one square mile, if natural pools are greater than 40 cm, or if the water feature is shown as blue-line

waterways on USGS 7.5-minute topographic quadrangle maps. In order to convey general stream habitat quality to the regulated public, the OEPA has assigned narrative ratings to QHEI scores. The ranges vary slightly for headwater streams (H are those with a watershed area less than or equal to 20 square miles) versus larger streams (L are those with a watershed area greater than 20 square miles). The Narrative Rating System includes: Very Poor (<30 H and L), Poor (30 to 42 H, 30 to 44 L), Fair (43 to 54 H, 45 to 59 L), Good (55 to 69 H, 60 to 74 L) and Excellent (70+ H, 75+ L).

2.2.2 OEPA PRIMARY HEADWATER HABITAT EVALUATION INDEX

Headwater streams are typically considered to be first-order and second-order streams, meaning streams that have no upstream tributaries (or “branches”) and those that have only first-order tributaries, respectively. The stream order concept can be problematic when used to define headwater streams because stream-order designations vary depending upon the accuracy and resolution of the stream delineation. Headwater streams are generally not shown on USGS 7.5-minute topographic quadrangles and are sometimes difficult to distinguish on aerial photographs. Nevertheless, headwater streams are now recognized as useful monitoring units due to their abundance, widespread spatial scale and landscape position (Fritz, et al. 2006). Impacts to headwater streams can have a cascading effect on the downstream water quality and habitat value. The headwater habitat evaluation index (HHEI) is a rapid field assessment method for physical habitat that can be used to appraise the biological potential of most Primary Headwater Habitat (PHWH) streams. The HHEI was developed using many of the same techniques as used for QHEI, but has criteria specifically designed for headwater habitats. To use HHEI, the stream must have a “defined bed and bank, with either continuous or periodically flowing water, with watershed area less than or equal to 1.0 mi² (259 ha), and a maximum depth of water pools equal to or less than 15.75 inches (40 cm)” (Ohio EPA, 2012).

Headwater streams are scored on the basis of channel substrate composition, bankfull width, and maximum pool depth. Assessments result in a score (0 to 100) that is converted to a specific PHWH stream class. Streams that are scored from 0 to 29.9 are typically grouped into “Class 1 PHWH Streams”, 30 to 69.9 are “Class 2 PHWH Streams”, and 70 to 100 are “Class 3 PHWH Streams”. Technically, a stream can score relatively high, but actually belong in a lower class, and vice-versa. According to the OEPA, if the stream score falls into a class and the scorer feels that based on site observations that score does not reflect the actual stream class, a decision-making flow chart can be used to determine appropriate PHWH stream class using the HHEI protocol (Ohio EPA, 2012). Evidence of anthropogenic alterations to the natural channel will result in a “Modified” qualifier for the stream.

Class 1 PHWH Streams: Class 1 PHWH Streams are those that have “normally dry channels with little or no aquatic life present” (Ohio EPA, 2012). These waterways are usually ephemeral, with water present for short periods of time due to infiltration from snowmelts or rainwater runoff.

Class 2 PHWH Streams: Class 2 PHWH Streams are equivalent to "warm-water habitat" streams. This stream class has a "moderately diverse community of warm-water adapted native fauna either present seasonally or on an annual basis" (Ohio EPA, 2012). These species communities are composed of vertebrates (fish and salamanders) and/or benthic macroinvertebrates that are considered pioneering, headwater temporary, and/or temperature facultative species.

Class 3 PHWH Streams: Class 3 PHWH Streams usually have perennial water flow with cool-cold water adapted native fauna. The community of Class 3 PHWH Streams is comprised of vertebrates (either cold water adapted species of headwater fish and or obligate aquatic species of salamanders, with larval stages present), and/or a diverse community of benthic cool water adapted macroinvertebrates present in the stream continuously (on an annual basis).

2.3 Threatened and Endangered Species

AECOM conducted a rare, threatened, and endangered species review and general field habitat surveys within areas crossed by the Project survey area. 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. 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 coordination letters to the USFWS and ODNR – Division of Soil and Water Resources (DSWR) requesting records of species of concern that were reported within close proximity to the Project and also soliciting comments on the Project. Responses from USFWS and ODNR have not been received to date. AECOM field ecologists conducted a general habitat survey in conjunction with the stream and wetland field survey on September 6th, 2017.

3.0 RESULTS

Within the Project survey area, AECOM delineated three wetlands and one stream within the Project survey area. The delineated features are discussed in detail in the following sections.

3.1 WETLAND DELINEATION

3.1.1 Preliminary Soils Evaluation

Soils in the delineated wetland were observed and documented as part of the delineation methodology. According to the USDA/NRCS Web Soil Surveys of Allen County, Ohio (NRCS 2016) and the NRCS Hydric Soils Lists of Ohio, fifteen soil series are mapped within the Project survey area (NRCS 2016). Within these soil series, ten soil map units are listed as hydric. Table 1 provides a detailed overview of all soil series and soil map units within the Project survey area. Soil map units located within the Project survey area are shown on Figure 2.

TABLE 1
SOIL MAP UNITS AND DESCRIPTIONS WITHIN THE SOUTHWEST LIMA STATION EXPANSION PROJECT
SURVEY AREA

Soil Series	Symbol	Map Unit Description	Topographic Setting	Hydric	Hydric Component (%)
Gallman	GaA	Gallman loam, 0 to 2 percent slopes	Rises on glacial drainage channels, rises on outwash plains	Not Hydric	N/A
	GaB	Gallman loam, 2 to 6 percent slopes	End moraines, knolls on ground moraines, knolls on outwash plains, knolls on glacial drainage channels	Not Hydric	N/A
	GbA	Gallman silt loam, 0 to 2 percent slopes	Rises on glacial drainage channels, rises on outwash plains	Not Hydric	N/A
Glynwood	Gwg5C2	Glynwood clay loam, ground moraine, 6 to 12 percent slopes, eroded	Ground moraines	Hydric	Pewamo (7)
Houcktown	HpB	Houcktown sandy loam, 2 to 4 percent slopes	Knolls on ground moraines, knolls on end moraines, knolls on lake plains	Hydric	Alvada (5)
	HsA	Houcktown silt loam, 0 to 2 percent slopes	Rises on deltas on lake plains, rises on lake plains, rises on ground moraines	Hydric	Alvada (5)
	HsB	Houcktown silt loam, 2 to 4 percent slopes	Knolls on end moraines, knolls on ground moraines	Not Hydric	N/A
Medway	MbA	Medway silt loam, 0 to 2 percent slopes, occasionally flooded	Flats on floodplains	Hydric	Very poorly drained soils (5)
Pewamo	PmA	Pewamo silty clay loam, 0 to 1 percent slopes	Depressions on till plains, drainageways on till plains	Hydric	Pewamo (85) Minster (6)
Saranac	SbA	Saranac silty clay loam, 0 to 1 percent slopes, rarely flooded	Backswamps on floodplains, flats on floodplains	Hydric	Saranac (90)
Shoals	ShA	Shoals silt loam, 0 to 2 percent slopes, occasionally flooded	Floodplains	Hydric	Sloan (8)
Sleeth	SnA	Sleeth silt loam, 0 to 2 percent slopes	Flats on outwash plains, stream terraces, rises on outwash plains	Hydric	Westland (10)
Thackery	TkA	Thackery loam, sandy substratum, 0 to 2 percent slopes	Flats on stream terraces, flats on outwash plains, rises on stream terraces, rises on outwash plains	Not Hydric	N/A
Westland	WdA	Westland clay loam, 0 to 1 percent slopes	Depressions on outwash plains, drainageways on outwash plains, glacial drainage channels	Hydric	Westland (90)
Westland-Rensselaer	WeA	Westland-Rensselaer complex, 0 to 1 percent slopes	Depressions on outwash plains, drainageways on outwash plains, glacial drainage channels	Hydric	Westland (50)

NOTES:

(1) Data sources include:

[USDA, NRCS. 2017 Soil Survey Geographic \(SSURGO\) Database. Available online at: http://soildatamart.nrcs.usda.gov/](http://soildatamart.nrcs.usda.gov/)

[USDA, NRCS. December 2015. National Hydric Soils List by State. Available online at: http://www.nrcs.usda.gov/wps/portal/nrcs/main/soils/use/hydric/](http://www.nrcs.usda.gov/wps/portal/nrcs/main/soils/use/hydric/)

3.1.2 National Wetland Inventory Map Review

National Wetland Inventory (NWI) wetlands are areas of potential wetland that have been identified from USFWS aerial photograph interpretation which have typically not been field verified. Forested and heavy scrub/shrub wetlands are often not shown on NWI maps as foliage effectively hides the visual signature that indicates the presence of standing water and moist soils from an aerial view. The USFWS website

states that the NWI maps are not intended or designed for jurisdictional wetland identification or location. As a result, NWI maps do not show all the wetlands found in a particular area nor do they necessarily provide accurate wetland boundaries. NWI maps are useful for providing indications of potential wetland areas, which are often supported by soil mapping and hydrologic predictions, based upon topographical analysis using USGS topographic maps.

According to the NWI maps of the Lima, Ohio quadrangle, the Project survey area contains one mapped NWI wetland. This feature is located in the northeastern portion of the Project survey area and is characterized as a riverine, lower perennial, unconsolidated bottom, permanently flooded area (R2UBH).

3.1.3 Delineated Wetlands

During the field survey, AECOM identified three wetlands, ranging in size from 0.06 to 0.27 acres, within the Project survey corridor. The three wetlands within the Project survey corridor are of two different wetland habitat types: two PEM wetlands and one PFO wetland. See Table 2 for a summary of the delineated wetlands within the Project survey corridor.

Additionally, AECOM commonly splits wetlands where there is an obvious break between Cowardin wetland types. This split results in each wetland section being assessed independently; however, AECOM recognizes that split wetland sections are a component of a larger wetland complex.

The locations and approximate extent of the wetlands identified within the Project survey corridor are shown on Figures 3A through Figure 3B. Completed USACE and ORAM wetland delineation forms are provided in Appendix A and B, respectively. Representative color photographs taken of the wetlands are provided in Appendix C.

TABLE 2
DELINEATED WETLANDS WITHIN THE SOUTHWEST LIMA STATION EXPANSION PROJECT
SURVEY AREA

Wetland Name	Latitude	Longitude	Cowardin Wetland Type ^a	ORAM Score	ORAM Category	Acreage within Project Survey Corridor
Wetland 01	40.676742	-84.182925	PEM	14.5	Category 1	0.27
Wetland 02a	40.675470	-84.184289	PEM	22.5	Category 1	0.06
Wetland 02b	40.675391	-84.184175	PFO	22.5	Category 1	0.14
Total: 3 Wetlands						0.5

Cowardin Wetland Type^a: PEM = palustrine emergent, PFO = palustrine forested

3.1.4 Delineated Wetlands ORAM V5.0 Results

Within the Project survey corridor, the three wetlands were identified as Category 1 wetlands. Wetland 01 had the lowest ORAM score, 14.5, while Wetlands 02a and 02bb had the highest score 22.5. A breakdown of ORAM scores can be found in Table 2. Completed ORAM forms are provided in Appendix B.

Category 1 Wetlands

The three Category 1 wetlands delineated within the Project survey corridor include: two PEM wetlands (Wetland 01 and Wetland 02a) and one PFO wetland (Wetland 02b). The Category 1 wetlands generally exhibited narrow to medium upland buffers, low to high intensive surround land use (e.g. old field, shrubland, young second growth forest, open pasture, row cropping), sparse to moderate percentage of invasive species, and had habitat and hydrology generally recovering or recently impacted from previous manipulation due to clearcutting, sedimentation, nutrient enrichment, and farming.

Category 2 Wetlands

No Category 2 wetlands were identified during the surveys.

Category 3 Wetlands

No Category 3 wetlands were identified during the surveys.

3.2 STREAM CROSSINGS

AECOM identified one perennial stream, totaling 220 linear feet, within the Project survey area. Stream 01 (Little Ottawa River) was not assessed using either HHEI or QHEI methodology since it is a larger waterbody and has an OEPA aquatic use designation. The location of the stream is shown on Figure 3B.

The OEPA has established water use designation for streams throughout Ohio as outlined in the Ohio Administrative Code (OAC), OAC-3745-1-07. Water use designations within the Maumee River drainage basin are regulated under OAC-3745-1-11. Little Ottawa River was identified with a state of Ohio aquatic use designation of warmwater habitat (WWH).

AECOM has preliminarily determined that the assessed stream within the Project survey area appears to be jurisdictional (i.e., waters of the U.S.), as it appears to be a tributary that flows into or combines with other streams (waters of the U.S.).

3.3 PONDS

No ponds were identified by AECOM within the Project survey area.

3.4 VEGETATIVE COMMUNITIES WITHIN THE PROJECT SURVEY AREA

AECOM field ecologists conducted a general habitat survey in conjunction with the stream and wetland field survey on September 6th, 2017. Portions of the Project survey area were identified as existing transmission station (urban area), landscaped areas, successional woodland, and agricultural land. Habitat descriptions, applicable to the Project, and details on the expected impacts of construction are provided below. Vegetated land cover can be seen visually from aerial photography provided on Figure 4.

TABLE 3
VEGETATIVE COMMUNITIES WITHIN THE PROJECT AREA

Vegetative Community	Description	Approximate Acreage Within the Project Survey Area	Approximate Percentage within the Project Survey Area
Agricultural Land	Agricultural land consisting of soybean and corn fields was present along the Project survey area. The agricultural land contains row crops and is not used for pasture or hay fields.	30.1	59%
Landscaped Areas	Landscaped areas, including residential properties and commercial properties, were observed within the Project vicinity. These landscaped areas within the Project survey area and adjacent areas are frequently mowed grasses and forbs.	7.2	14%
Successional Woodland	Successional mixed woodlands are present in the Project survey area. Woody species dominating these areas included American Beech (<i>Fagus grandifolia</i>), red oak (<i>Quercus rubra</i>), white oak (<i>Quercus alba</i>), sugar maple (<i>Acer saccharum</i>), red maple (<i>Acer rubrum</i>), box elder (<i>Acer negundo</i>), shagbark hickory (<i>Carya ovata</i>), and black cherry (<i>Prunus serotina</i>). The dominant shrub-layer species included spicebush (<i>Lindera benzoin</i>), poison ivy (<i>Toxicodendron radicans</i>), honeysuckle (<i>Lonicera japonica</i>), and blackberry (<i>Rubus occidentalis</i>).	2.7	5%
Urban	Urban areas are areas developed with residential and commercial land uses, including roads, buildings and parking lots. These areas are generally devoid of significant woody and herbaceous vegetation.	11.0	22%
Totals:		51.0	100%

3.5 THREATENED AND ENDANGERED SPECIES AGENCY COORDINATION

Protected Species Agency Consultation –

AECOM conducted a rare, threatened, and endangered species review for areas crossed by the Project survey corridor. The first phase of the evaluation involved a review of online lists of federal and state species of concern. Coordination letters to the USFWS, ODNR – DOW, and ODNR – DSWR soliciting comments on the project were submitted. A summary of the agency coordination is provided below. Correspondence letters from the USFWS are included as Appendix E. The response letter from ODNR has not been received at the time of this report. Table 3 provides a list of these species of concern identified in the Project area during the rare, threatened, and endangered species review by USFWS and species identified by ODNR for a similar project in Allen County, Ohio.

TABLE 3
ODNR AND USFWS LISTED SPECIES WITHIN THE PROJECT AREA

Common Name (Scientific Name)	State Status	Federal Status	Habitat Description	Potential Habitat Observed in the Project Survey Area	Impact Assessment	Agency Comments
Mammals						
Indiana bat (<i>Myotis sodalis</i>)	Endangered	Endangered	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 (<i>Carya</i> spp.), oak (<i>Quercus</i> spp.), ash (<i>Fraxinus</i> spp.), birch (<i>Betula</i> spp.), and elm (<i>Ulmus</i> 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.	No	No woodlots were observed within the Project survey area.	USFWS commented that due to the project type, size, and location, plus the project proposal for seasonal cutting tree cutting between October 1 and March 31, there should be no expected impacts to the Indiana bat. ODNR requested that suitable Indiana bat habitat should be conserved or cut between October 1 and March 31.

TABLE 3
ODNR AND USFWS LISTED SPECIES WITHIN THE PROJECT AREA

Common Name (Scientific Name)	State Status	Federal Status	Habitat Description	Potential Habitat Observed in the Project Survey Area	Impact Assessment	Agency Comments
Northern long-eared bat (<i>Myotis septentrionalis</i>)	Threatened	Threatened	Winter 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 (<i>Carya</i> spp.), oak (<i>Quercus</i> spp.), ash (<i>Fraxinus</i> spp.), birch (<i>Betula</i> spp.), and elm (<i>Ulmus</i> spp.) have been found to be utilized by northern long-eared bats. 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. Northern long-eared bats have also been found, albeit rarely, roosting in structures like barns and sheds.	No	No woodlots were observed within the Project survey area	USFWS commented that due to the project type, size, and location, plus the project proposal for seasonal cutting tree cutting between October 1 and March 31, there should be no expected impacts to the northern long-eared bat.
Mussels						
Clubshell (<i>Pleurobema clava</i>)	Endangered	Endangered	This mussel prefers clean, loose sand and gravel in medium to small rivers and streams. This mussel will bury itself in the bottom substrate to depths of up to four inches.	Yes	No in-water work is planned as part of the Project. No impacts to mussel species and their habitat are anticipated.	ODNR stated that 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.

TABLE 3
ODNR AND USFWS LISTED SPECIES WITHIN THE PROJECT AREA

Common Name (Scientific Name)	State Status	Federal Status	Habitat Description	Potential Habitat Observed in the Project Survey Area	Impact Assessment	Agency Comments
Pondhorn (<i>Uniomerus tetralasmus</i>)	Threatened	None	This mussel prefers ponds, small creeks, and the headwaters of larger streams in mud and sand. This mussel can withstand periods of desiccation and is often present in areas where few other mussels are found.	Yes	No in-water work is planned as part of the Project. No impacts to mussel species and their habitat are anticipated.	ODNR stated that 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.
Northern Riffleshell (<i>Epioblasma torulosa rangiana</i>)	Endangered	Endangered	This mussel prefers stable, undisturbed habitat and a sufficient population of host fish to complete the mussel's larval development. Adult mussels require gravel and sand habitat.	Yes	No in-water work is planned as part of the Project. No impacts to mussel species and their habitat are anticipated.	ODNR stated that 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.
Fish						
Greater redhorse (<i>Moxostoma valenciennesi</i>)	Threatened	Species of Concern	Found in medium to large rivers in the Lake Erie drainage system. Only found in limited portions of the Sandusky, Maumee, and Grand River systems. Greater redhorse are typically found in pools with clean sand or gravel substrate, but are intolerant of pollution and turbid water.	Yes	No in-water work is planned as part of the Project. No impacts to fish species and their habitat are anticipated.	ODNR stated that 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.
Birds						
Upland sandpiper (<i>Bartramia longicauda</i>)	Endangered	None	Nesting upland sandpipers utilize dry grasslands including native grasslands, seeded grasslands, grazed and ungrazed pasture, hayfields, and grasslands established through the Conservation Reserve Program (CRP).	Yes	Some potentially suitable habitat is present within the Project area (old field; pasture; emergent wetland habitats).	If grassland habitat will be impacted, ODNR requests construction should be avoided in this habitat during the species' nesting period of April 15 to July 31. If this type of habitat will not be impacted, this project is not likely to impact this species.

ODNR-DOW Coordination –

Coordination with the ODNR-DOW was initiated during the planning stages of the Project to obtain records located in the vicinity of the project. Response letters have not been received by AECOM from ODNR at the time of this report. AECOM's analysis of potential habitat for rare, threatened, or endangered species is based on recent agency comments for Allen County, Ohio from another nearby utility project (as summarized in Table 3), as well as from AECOM's field evaluation of the Project on September 6, 2017.

Based on recent correspondence with the ODNR in Allen County, the upland sandpiper was listed as being potential species found within Allen County, Ohio; however, based on the ODNR's state listed wildlife species, the upland sandpiper has never been recorded in the county. ODNR has also indicated that the potential habitat ground cover types that are smaller than one acre in size and commercial or residential landscaped areas do not constitute adequate nesting habitat for this species.

AECOM ecologists walked the Project survey area to classify the general vegetative communities crossed by the Project. The field survey was supplemented through the review of aerial photography. Based on ODNR-DOW guidance and the field survey, upland sandpiper nesting habitat within areas crossed by the Project were not identified. Agricultural land, residential landscaped areas, and urban areas are frequently mechanically maintained and do not provide suitable grassland habitat for nesting. These areas were observed to be disturbed and devoid of grasses or maintained such that grasses were too short to provide nesting habitat. Similarly, forested and wetland areas were observed with insufficient open grasslands to provide suitable habitat.

USFWS Coordination –

In an e-mail dated September 18, 2017, the USFWS provided comments on the Project with regard to federally-listed threatened and endangered species that may occur within the project vicinity. The USFWS indicated that there are no Federal wildlife refuges, wilderness areas, or critical habitat within the vicinity of the Project.

The USFWS noted that the Project lies within the range of the federally endangered Indiana bat (*Myotis sodalis*), and the federally threatened northern long-eared bat (*Myotis septentrionalis*). USFWS recommends that should the proposed site contain trees ≥ 3 inches dbh, that trees be saved wherever possible. If tree clearing cannot be avoided, USFWS recommends that tree removal occur between October 1st and March 31st to avoid adverse effects to Indian bats and northern long-eared bats during the brood-rearing months. Due to the project type, size, and location, the USFWS does not anticipate adverse effects to any other federally endangered, threatened, proposed, or candidate species.

4.0 SUMMARY

The ecological survey of the Project survey area identified two wetlands and one perennial stream. The Little Ottawa River was assessed using the QHEI methodology (drainage area greater than 1 mi²) and was identified as warmwater habitat.

Three wetlands were identified within the Project survey area. Wetland 1 is a Category 1, PEM wetland. Wetland 02a is a Category 1, PEM wetland, and Wetland 02b is a Category 1, PFO wetland.

Response letters have not been received by AECOM from the USFWS or ODNR at the time of this report. AECOM's analysis of potential habitat for rare, threatened, or endangered species is based on recent agency comments for Allen County, Ohio from another nearby utility project, as well as from AECOM's field evaluation of the Project on September 6, 2017.

Based on recent correspondence with ODNR, the upland sandpiper is a species potentially found within Allen County, Ohio. Based on ODNR-DOW guidance and the field survey, no potential upland sandpiper nesting habitat areas were identified within the Project survey area; therefore, the Project is not likely to impact the species.

Based on general observations during the ecology survey, a small portion of the Project survey area contained potential summer habitat for the Indiana bat and the northern long-eared bat. The USFWS, however, does not anticipate impacts to the species due to the project type, size, location, and proposed implementation of seasonal tree cutting (during October 1st and March 31st) to avoid impacts to these bat species.

The reported results of the ecological survey conducted by AECOM on this Project are limited to the areas within the Project survey boundary provided in Figure 3: Wetland Delineation and Stream Assessment Map. Areas that fall outside of the Project survey boundary, including any portion of work pads or access roads, were not evaluated in the field and are not included in the reporting of this survey.

The information contained in this wetland delineation report is for a study area that may be much larger than the actual Project limits-of-disturbance; therefore, lengths and acreages listed in this report may not constitute the actual impacts of the Project defined in subsequent permit applications. If necessary, a separate report that identifies the actual Project impacts will be provided with agency submittals.

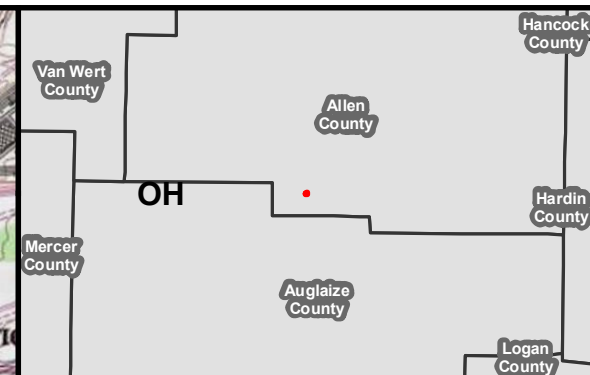
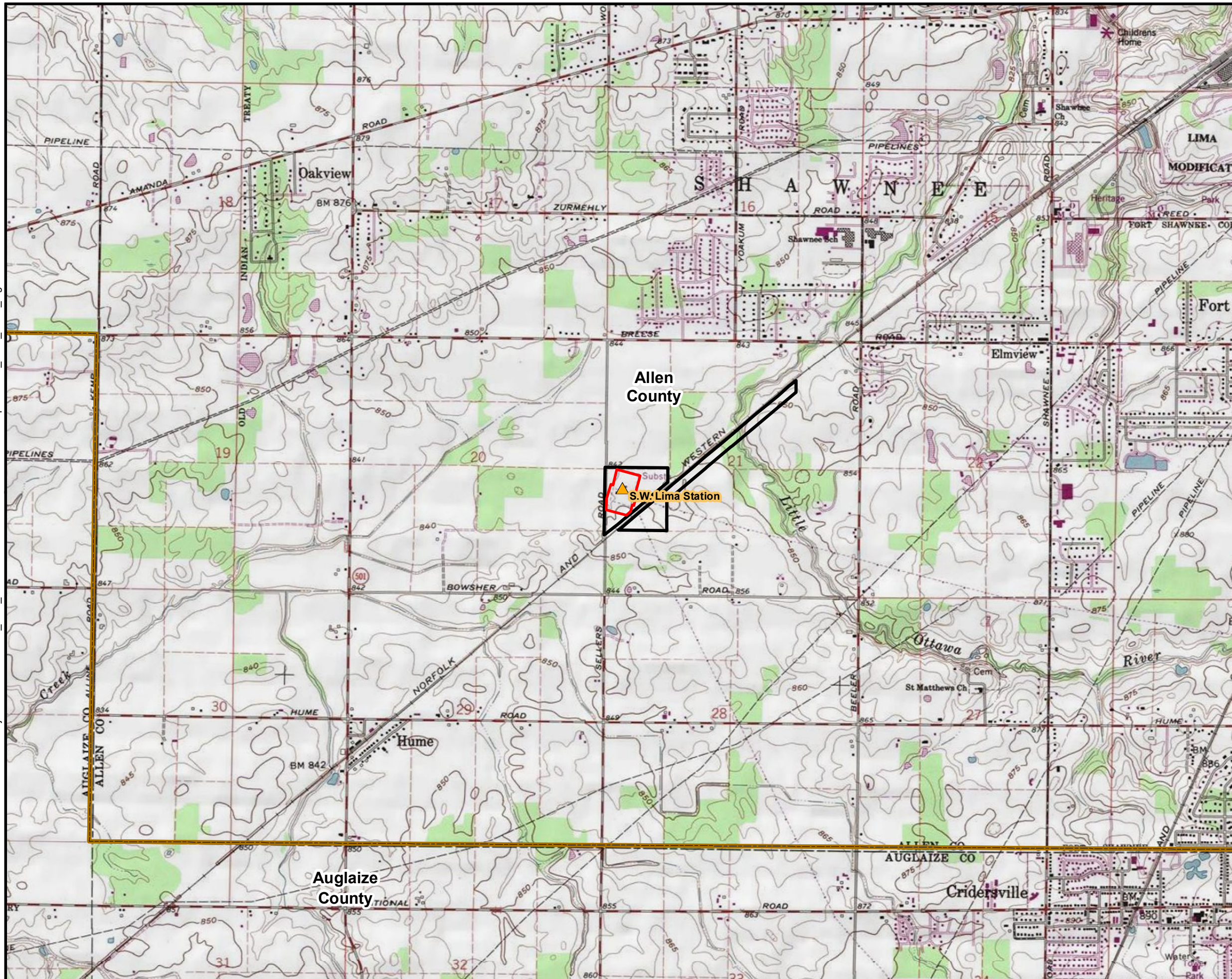
The field survey results presented herein apply to the existing and reasonably foreseeable site conditions at the time of our assessment. They cannot apply to site changes of which AECOM is unaware and has not had the opportunity to review. Changes in the condition of a property may occur with time due to natural processes or human impacts at the project site or on adjacent properties. Changes in applicable standards may also occur as a result of legislation or the expansion of knowledge over time. Accordingly,

the findings of this report may be invalidated, wholly or in part, by changes beyond the control of AECOM.

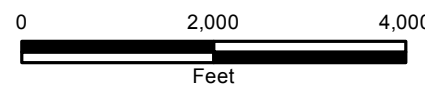
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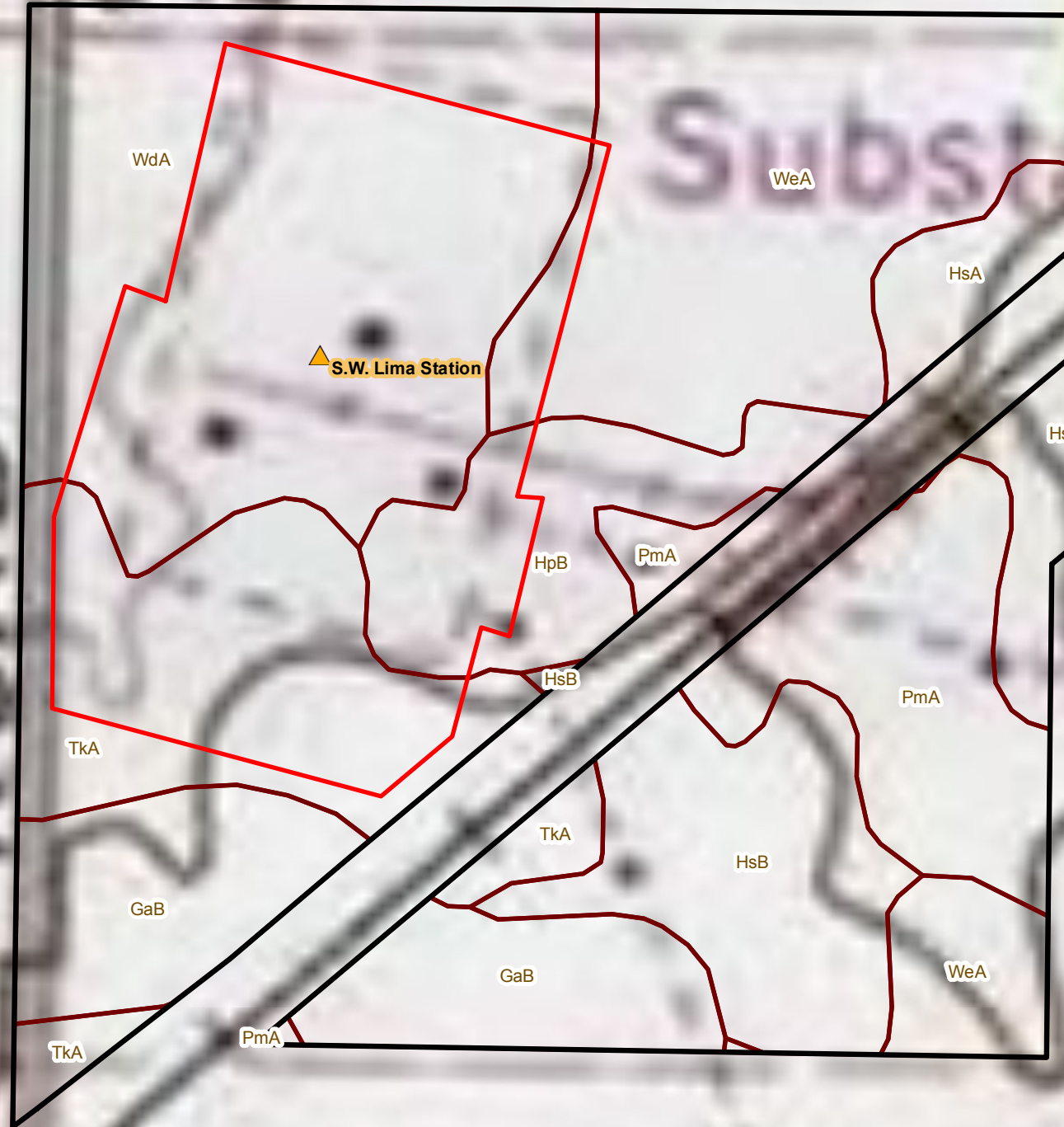
- LEGEND:
- Existing Station
 - Existing Southwest Lima Station Fence
 - Project Survey Corridor



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AEP OHIO TRANSMISSION COMPANY S.W. Lima 69 kV Transmission Line

FIGURE 1
OVERVIEW MAP



Allen County OH

Auglaize County

LEGEND:

- Existing Southwest Lima Station Fence
- Project Survey Corridor
- Soil Map Unit

Soil Map Unit Symbol

- GaA, Gallman loam, 0 to 2 percent slopes
- GaB, Gallman loam, 2 to 6 percent slopes
- HpB, Houcktown sandy loam, 2 to 4 percent slopes
- HsA, Houcktown silt loam, 0 to 2 percent slopes
- HsB, Houcktown silt loam, 2 to 4 percent slopes
- PmA, Pewamo silty clay loam, 0 to 1 percent slopes
- TKA, Thackery loam, sandy substratum, 0 to 2 percent slopes
- WdA, Westland clay loam, 0 to 1 percent slopes
- WeA, Westland-Rensselaer complex, 0 to 1 percent slopes

N

0200400

Feet

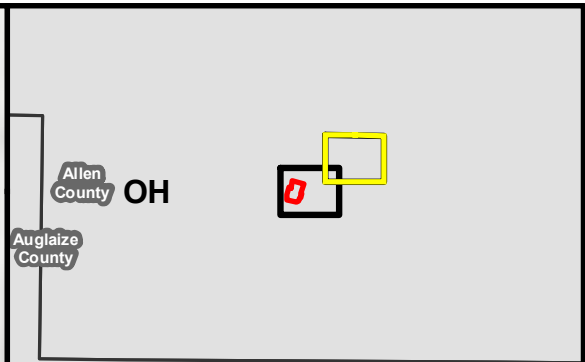
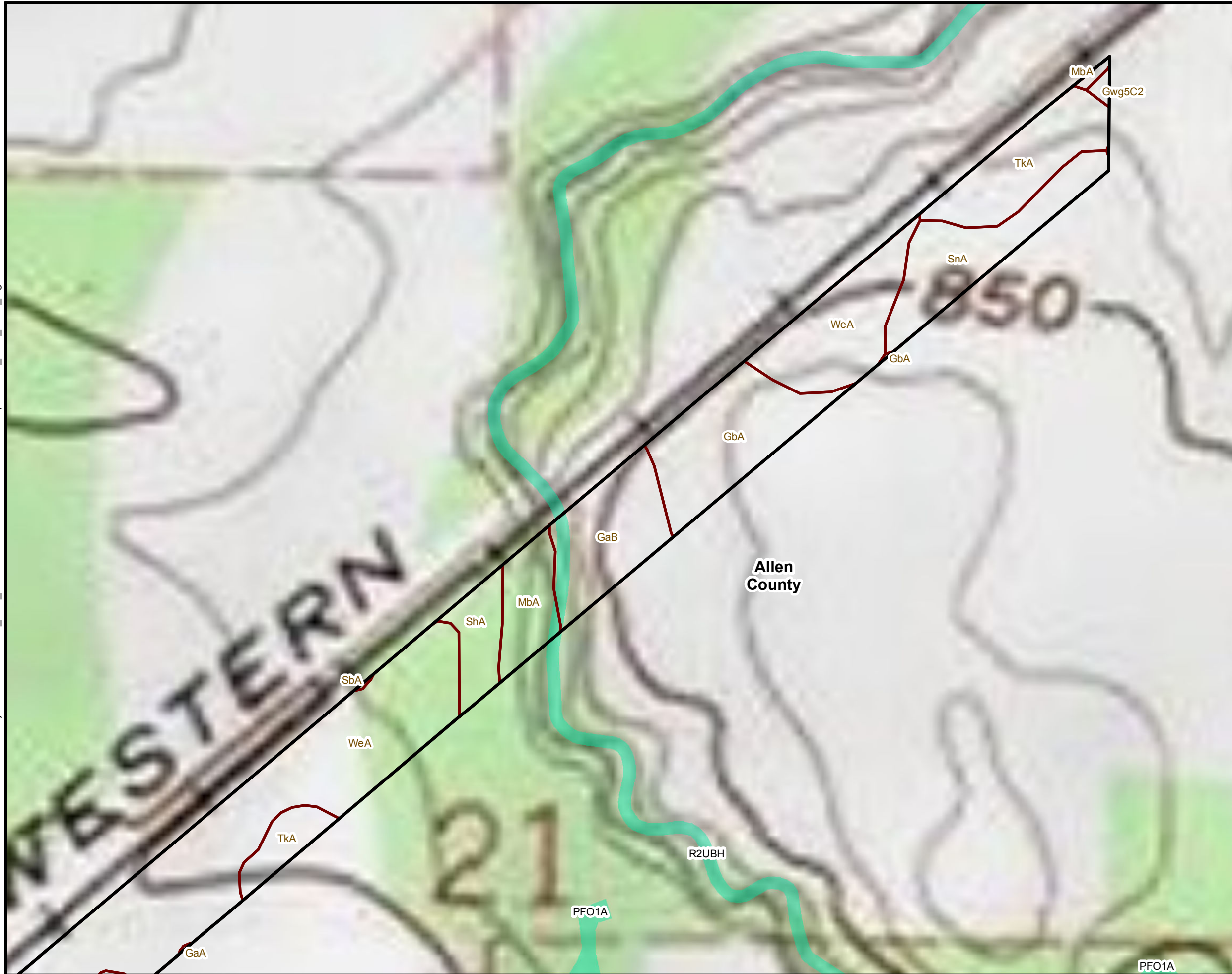
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OHIO TRANSMISSION COMPANY

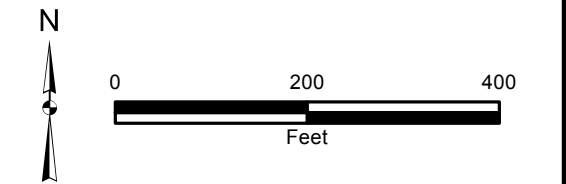
Southwest Lima Expansion Project

FIGURE 2A
SOIL MAP UNIT AND
NATIONAL WETLAND INVENTORY MAP

JOB NO. 60553292



- LEGEND:
- Project Survey Corridor
 - NWI Wetland
 - Soil Map Unit
- Soil Map Unit Symbol**
- GaA, Gallman loam, 0 to 2 percent slopes
 - GaB, Gallman loam, 2 to 6 percent slopes
 - GbA, Gallman silt loam, 0 to 2 percent slopes
 - Gwg5C2, Glynwood clay loam, ground moraine, 6 to 12 percent slopes, eroded
 - MbA, Medway silt loam, 0 to 2 percent slopes, occasionally flooded
 - PmA, Pewamo silty clay loam, 0 to 1 percent slopes
 - SbA, Saranac silty clay loam, 0 to 1 percent slopes, rarely flooded
 - ShA, Shoals silt loam, 0 to 2 percent slopes, occasionally flooded
 - SnA, Sleeth silt loam, 0 to 2 percent slopes
 - TKA, Thackery loam, sandy substratum, 0 to 2 percent slopes
 - WeA, Westland-Rensselaer complex, 0 to 1 percent slopes

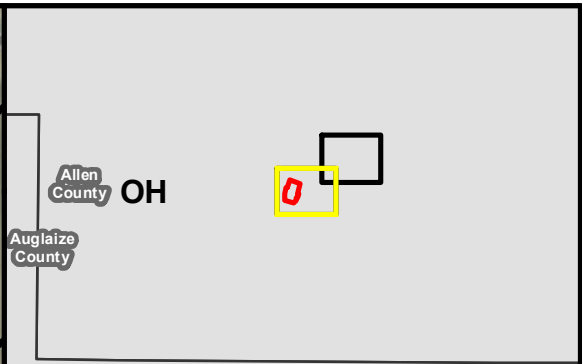


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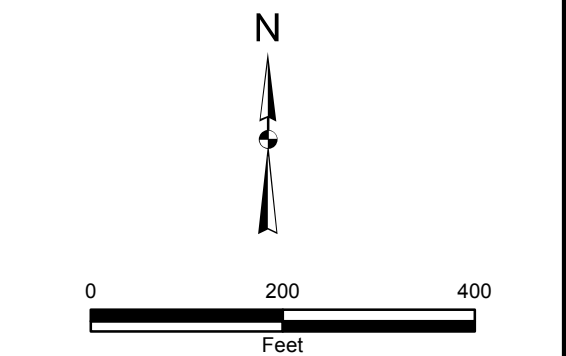


FIGURE 2B
SOIL MAP UNIT AND
NATIONAL WETLAND INVENTORY MAP

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- LEGEND:
- Existing Station
 - Existing Southwest Lima Station Fence
 - Project Survey Corridor
 - Delineated Wetland



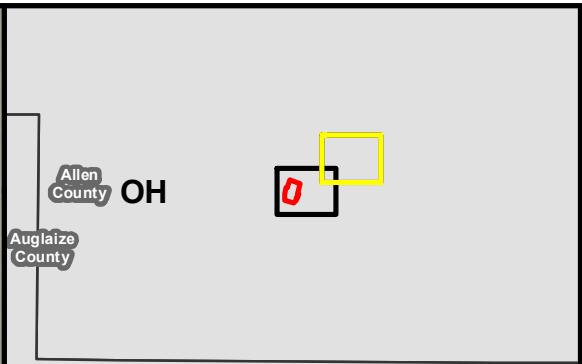
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AEP OHIO TRANSMISSION COMPANY Southwest Lima Expansion Project

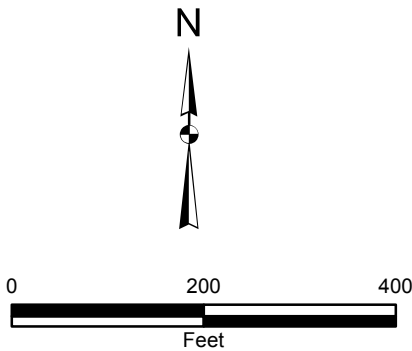
FIGURE 3A
WETLAND DELINEATION AND
STREAM ASSESSMENT MAP

JOB NO. 60553292

AECOM



- LEGEND:
- Project Survey Corridor
 - Delineated Perennial Stream
 - Approximate Stream Location

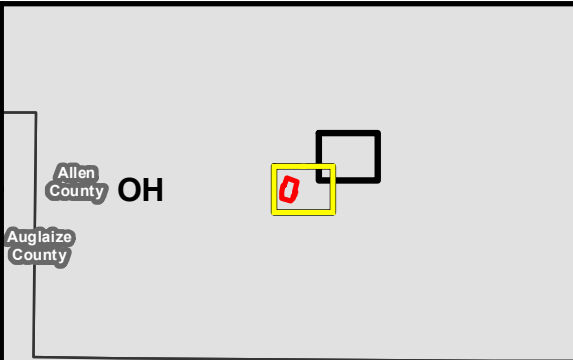
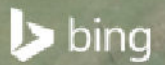


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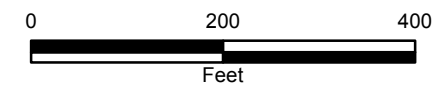
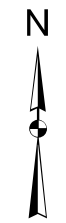
AEP OHIO TRANSMISSION COMPANY Southwest Lima Expansion Project

FIGURE 3B
WETLAND DELINEATION AND
STREAM ASSESSMENT MAP

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- LEGEND:
- Existing Southwest Lima Station Fence
 - Project Survey Corridor
 - Agricultural Land
 - Landscaped
 - Successional Woodland
 - Urban



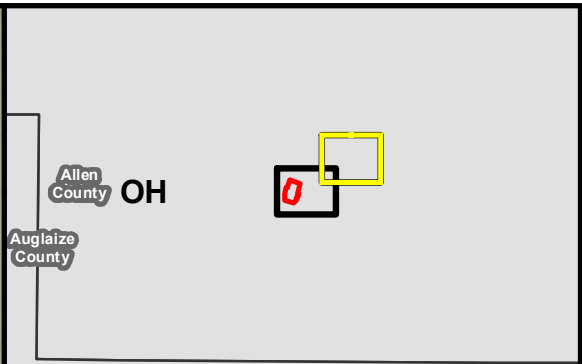
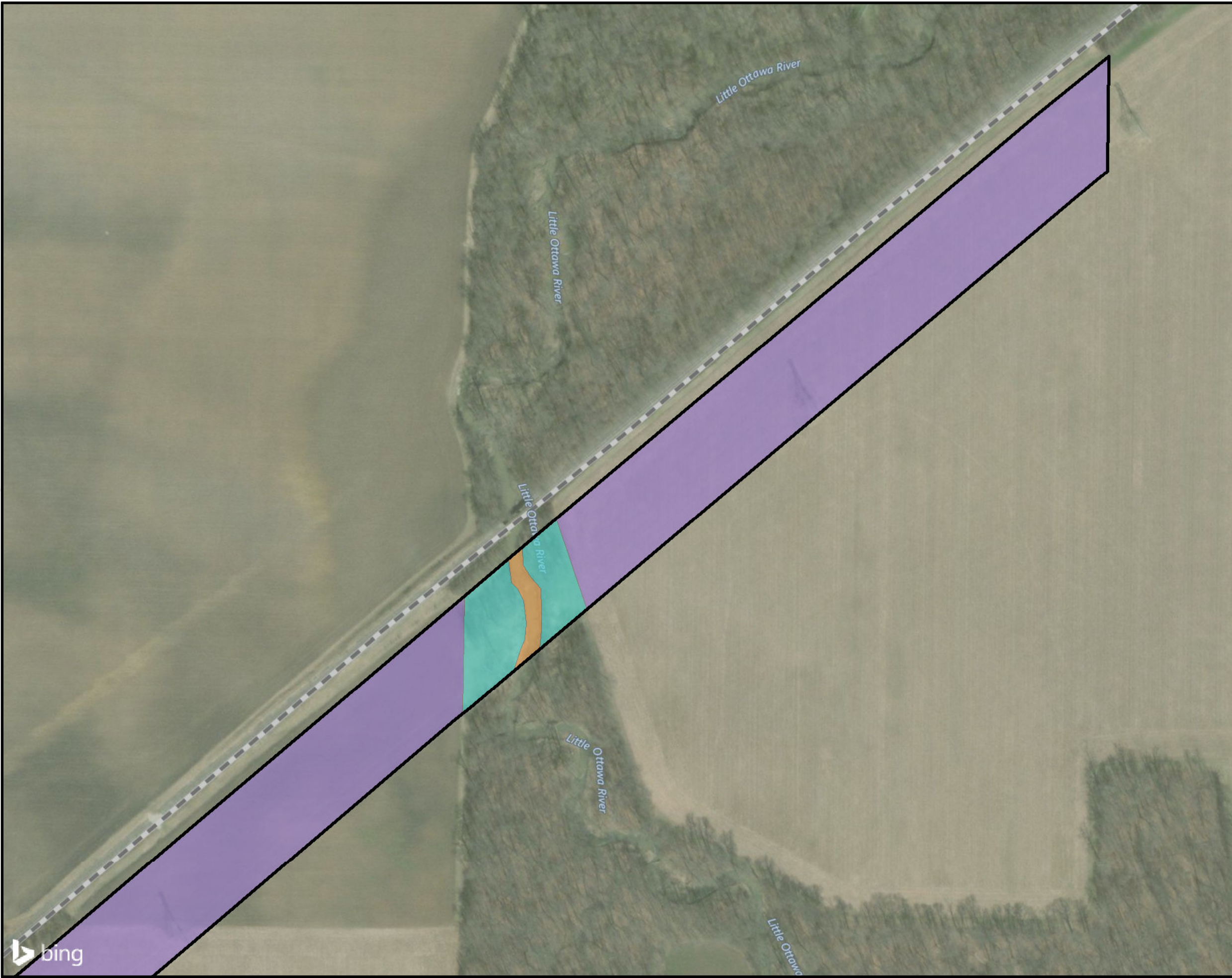
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AEP OHIO TRANSMISSION COMPANY

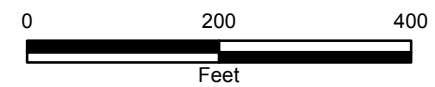
Southwest Lima
Expansion Project

FIGURE 4A
VEGETATIVE COMMUNITIES
ASSESSMENT MAP

JOB NO. 60553292



- LEGEND:
- Project Survey Corridor
 - Agricultural Land
 - Stream
 - Successional Woodland



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FIGURE 4B
VEGETATIVE COMMUNITIES
ASSESSMENT MAP

APPENDIX A**U.S. ARMY CORPS OF ENGINEERS WETLAND FORMS**

WETLAND DETERMINATION DATA FORM - Midwest Region

Project/Site: Southwest Lima Station Expansion City/County: Allen County Sampling Date: 06-Sep-17
 Applicant/Owner: AEP State: OH Sampling Point: w-jbl-090617-01
 Investigator(s): JBL, JTT Section, Township, Range: S 21 T 4S R 6E
 Landform (hillslope, terrace, etc.): Lowland Local relief (concave, convex, none): concave
 Slope: 0.0% 0.0 ° Lat.: 40.676742 Long.: -84.182925 Datum: _____
 Soil Map Unit Name: HpB, TkA NWI classification: NA

Are climatic/hydrologic conditions on the site typical for this time of year? Yes ☒ No ☐ (If no, explain in Remarks.)

Are Vegetation ☐ , Soil ☐ , or Hydrology ☐ significantly disturbed? Are "Normal Circumstances" present? Yes ☒ No ☐

Are Vegetation ☐ , Soil ☐ , or Hydrology ☐ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes ☒ No ☐	Is the Sampled Area within a Wetland? Yes ☒ No ☐
Hydric Soil Present?	Yes ☒ No ☐	
Wetland Hydrology Present?	Yes ☒ No ☐	
Remarks:		

VEGETATION - Use scientific names of plants.

	Absolute % Cover	Dominant Species? Rel.Strat. Cover	Indicator Status	
Tree Stratum (Plot size: _____)				
1. _____	0	☐ 0.0%		
2. _____	0	☐ 0.0%		
3. _____	0	☐ 0.0%		
4. _____	0	☐ 0.0%		
5. _____	0	☐ 0.0%		
	0	= Total Cover		
Sapling/Shrub Stratum (Plot size: _____)				
1. _____	0	☐ 0.0%		
2. _____	0	☐ 0.0%		
3. _____	0	☐ 0.0%		
4. _____	0	☐ 0.0%		
5. _____	0	☐ 0.0%		
	0	= Total Cover		
Herb Stratum (Plot size: _____)				
1. <u>Asclepias incarnata</u>	12	☒ 10.2%	OBL	
2. <u>Juncus tenuis</u>	35	☒ 29.7%	FAC	
3. <u>Juncus torreyi</u>	15	☒ 12.7%	FACW	
4. <u>Symphotrichum ericoides</u> var. <u>ericoides</u>	11	☐ 9.3%	FACU	
5. <u>Euthamia graminifolia</u>	10	☐ 8.5%	FACW	
6. <u>Calamagrostis canadensis</u>	5	☐ 4.2%	OBL	
7. <u>Apocynum cannabinum</u>	8	☐ 6.8%	FAC	
8. <u>Cyperus esculentus</u>	10	☐ 8.5%	FACW	
9. <u>Typha angustifolia</u>	12	☒ 10.2%	OBL	
10. _____	0	☐ 0.0%		
	118	= Total Cover		
Woody Vine Stratu (Plot size: _____)				
1. _____	0	☐ 0.0%		
2. _____	0	☐ 0.0%		
	0	= Total Cover		

Dominance Test worksheet:

Number of Dominant Species That are OBL, FACW, or FAC: 4 (A)

Total Number of Dominant Species Across All Strata: 4 (B)

Percent of dominant Species That Are OBL, FACW, or FAC: 100.0% (A/B)

Prevalence Index worksheet:

Total % Cover of:	Multiply by:
OBL species <u>29</u>	x 1 = <u>29</u>
FACW species <u>35</u>	x 2 = <u>70</u>
FAC species <u>43</u>	x 3 = <u>129</u>
FACU species <u>11</u>	x 4 = <u>44</u>
UPL species <u>0</u>	x 5 = <u>0</u>
Column Totals: <u>118</u>	(A) <u>272</u> (B)

Prevalence Index = B/A = 2.305

Hydrophytic Vegetation Indicators:

☐ 1 - Rapid Test for Hydrophytic Vegetation

☒ 2 - Dominance Test is > 50%

☒ 3 - Prevalence Index is ≤ 3.0¹

☐ 4 - Morphological Adaptations¹ (Provide supporting data in Remarks or on a separate sheet)

☐ Problematic Hydrophytic Vegetation¹ (Explain)

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

Hydrophytic Vegetation Present? Yes ☒ No ☐

Remarks: (Include photo numbers here or on a separate sheet.)

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

SOIL

Sampling Point: w-ibl-090617-01

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

Depth (inches)	Matrix		Redox Features				Texture	Remarks		
	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²				
0-4	10YR	4/2	98	10YR	4/4	2	C	M	Loam	
4-12	10YR	5/2	95	10YR	4/6	5	C		Clay Loam	disturbed fill

¹ Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains.

² Location: PL=Pore Lining. M=Matrix.

Hydric Soil Indicators:

☐ Histosol (A1)

☐ Histic Epipedon (A2)

☐ Black Histic (A3)

☐ Hydrogen Sulfide (A4)

☐ Stratified Layers (A5)

☐ 2 cm Muck (A10)

☐ Depleted Below Dark Surface (A11)

☐ Thick Dark Surface (A12)

☐ Sandy Muck Mineral (S1)

☐ 5 cm Mucky Peat or Peat (S3)

☐ Sandy Gleyed Matrix (S4)

☐ Sandy Redox (S5)

☐ Stripped Matrix (S6)

☐ Loamy Mucky Mineral (F1)

☐ Loamy Gleyed Matrix (F2)

☒ Depleted Matrix (F3)

☐ Redox Dark Surface (F6)

☐ Depleted Dark Surface (F7)

☐ Redox Depressions (F8)

Indicators for Problematic Hydric Soils³:

☐ Coast Prairie Redox (A16)

☐ Dark Surface (S7)

☐ Iron Manganese Masses (F12)

☐ Very Shallow Dark Surface (TF12)

☐ Other (Explain in Remarks)

³ Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type:

Depth (inches):

Hydric Soil Present?

Yes ☒

No ☐

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

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

☐ Surface Water (A1)

☐ High Water Table (A2)

☐ Saturation (A3)

☐ Water Marks (B1)

☐ Sediment Deposits (B2)

☐ Drift Deposits (B3)

☐ Algal Mat or Crust (B4)

☐ Iron Deposits (B5)

☐ Inundation Visible on Aerial Imagery (B7)

☐ Sparsely Vegetated Concave Surface (B8)

☐ Water-Stained Leaves (B9)

☐ Aquatic Fauna (B13)

☐ True Aquatic Plants (B14)

☐ Hydrogen Sulfide Odor (C1)

☐ Oxidized Rhizospheres on Living Roots (C3)

☐ Presence of Reduced Iron (C4)

☐ Recent Iron Reduction in Tilled Soils (C6)

☐ Thin Muck Surface (C7)

☐ Gauge or Well Data (D9)

☐ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

☒ Surface Soil Cracks (B6)

☐ Drainage Patterns (B10)

☐ Dry Season Water Table (C2)

☐ Crayfish Burrows (C8)

☐ Saturation Visible on Aerial Imagery (C9)

☐ Stunted or Stressed Plants (D1)

☒ Geomorphic Position (D2)

☒ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present?

Yes ☐

No ☒

Depth (inches):

Water Table Present?

Yes ☐

No ☒

Depth (inches):

Saturation Present?
(includes capillary fringe)

Yes ☐

No ☒

Depth (inches):

Wetland Hydrology Present?

Yes ☒

No ☐

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

WETLAND DETERMINATION DATA FORM - Midwest Region

Project/Site: Southwest Lima Station Expansion City/County: Allen County Sampling Date: 06-Sep-17
 Applicant/Owner: AEP State: OH Sampling Point: w-jbl-090617-02a,b
 Investigator(s): JBL, JTT Section, Township, Range: S 21 T 4S R 6E
 Landform (hillslope, terrace, etc.): Lowland Local relief (concave, convex, none): concave
 Slope: 0.0% 0.0 ° Lat.: 40.675391 Long.: -84.184715 Datum: _____
 Soil Map Unit Name: GaB, TkA NWI classification: NA

Are climatic/hydrologic conditions on the site typical for this time of year? Yes ☒ No ☐ (If no, explain in Remarks.)

Are Vegetation ☐ , Soil ☐ , or Hydrology ☐ significantly disturbed? Are "Normal Circumstances" present? Yes ☒ No ☐

Are Vegetation ☐ , Soil ☐ , or Hydrology ☐ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes ☒ No ☐	Is the Sampled Area within a Wetland? Yes ☒ No ☐
Hydric Soil Present?	Yes ☒ No ☐	
Wetland Hydrology Present?	Yes ☒ No ☐	
Remarks: 2a is pem 2b is pfo		

VEGETATION - Use scientific names of plants.

Tree Stratum (Plot size: _____)	Absolute % Cover	Dominant Species? Rel.Strat. Cover	Indicator Status	Dominance Test worksheet: Number of Dominant Species That are OBL, FACW, or FAC: <u>7</u> (A) Total Number of Dominant Species Across All Strata: <u>7</u> (B) Percent of dominant Species That Are OBL, FACW, or FAC: <u>100.0%</u> (A/B)
1. <u>Populus deltoides</u>	40	☒ 80.0%	FAC	
2. <u>Quercus palustris</u>	10	☒ 20.0%	FACW	
3. _____	0	☐ 0.0%		
4. _____	0	☐ 0.0%		
5. _____	0	☐ 0.0%		
	50	= Total Cover		
Sapling/Shrub Stratum (Plot size: _____)				Prevalence Index worksheet: Total % Cover of: Multiply by: OBL species <u>0</u> x 1 = <u>0</u> FACW species <u>85</u> x 2 = <u>170</u> FAC species <u>130</u> x 3 = <u>390</u> FACU species <u>5</u> x 4 = <u>20</u> UPL species <u>0</u> x 5 = <u>0</u> Column Totals: <u>220</u> (A) <u>580</u> (B) Prevalence Index = B/A = <u>2.636</u>
1. <u>Rhamnus cathartica</u>	30	☒ 66.7%	FAC	
2. <u>Cornus alternifolia</u>	15	☒ 33.3%	FAC	
3. _____	0	☐ 0.0%		
4. _____	0	☐ 0.0%		
5. _____	0	☐ 0.0%		
	45	= Total Cover		
Herb Stratum (Plot size: _____)				Hydrophytic Vegetation Indicators: ☐ 1 - Rapid Test for Hydrophytic Vegetation ☒ 2 - Dominance Test is > 50% ☒ 3 - Prevalence Index is ≤ 3.0 ¹ ☐ 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) ☐ Problematic Hydrophytic Vegetation ¹ (Explain) ¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
1. <u>Carex vulpinoidea</u>	35	☒ 31.8%	FACW	
2. <u>Marrubium vulgare</u>	30	☒ 27.3%	FAC	
3. <u>Agrostis stolonifera</u>	15	☐ 13.6%	FACW	
4. <u>Euthamia graminifolia</u>	10	☐ 9.1%	FACW	
5. <u>Dipsacus fullonum</u>	5	☐ 4.5%	FACU	
6. <u>Persicaria pensylvanica</u>	15	☐ 13.6%	FACW	
7. _____	0	☐ 0.0%		
8. _____	0	☐ 0.0%		
9. _____	0	☐ 0.0%		
10. _____	0	☐ 0.0%		
	110	= Total Cover		
Woody Vine Stratu (Plot size: _____)				Hydrophytic Vegetation Present? Yes ☒ No ☐
1. <u>Toxicodendron radicans</u>	15	☐ 100.0%	FAC	
2. _____	0	☐ 0.0%		
	15	= Total Cover		

Remarks: (Include photo numbers here or on a separate sheet.)

¹Indicator suffix = National status or professional decision assigned because Regional status not defined by FWS.

SOIL

Sampling Point: w-ibl-090617-02a.b

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

Depth (inches)	Matrix			Redox Features					Texture	Remarks
	Color (moist)		%	Color (moist)	%	Type ¹	Loc ²			
0-7	10YR	3/3	95	10YR	3/6	5	C	M	Loam	
7-12	10YR	5/3	80	7.5YR	3/6	20	C	M	Sandy Clay Loam	

¹ Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains.

²Location: PL=Pore Lining. M=Matrix.

Hydric Soil Indicators:

☐ Histosol (A1)

☐ Histic Epipedon (A2)

☐ Black Histic (A3)

☐ Hydrogen Sulfide (A4)

☐ Stratified Layers (A5)

☐ 2 cm Muck (A10)

☐ Depleted Below Dark Surface (A11)

☐ Thick Dark Surface (A12)

☐ Sandy Muck Mineral (S1)

☐ 5 cm Mucky Peat or Peat (S3)

☐ Sandy Gleyed Matrix (S4)

☐ Sandy Redox (S5)

☐ Stripped Matrix (S6)

☐ Loamy Mucky Mineral (F1)

☐ Loamy Gleyed Matrix (F2)

☐ Depleted Matrix (F3)

☐ Redox Dark Surface (F6)

☐ Depleted Dark Surface (F7)

☒ Redox Depressions (F8)

Indicators for Problematic Hydric Soils³:

☐ Coast Prairie Redox (A16)

☐ Dark Surface (S7)

☐ Iron Manganese Masses (F12)

☐ Very Shallow Dark Surface (TF12)

☐ Other (Explain in Remarks)

³ Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type:

Depth (inches):

Hydric Soil Present?

Yes ☒

No ☐

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

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

☐ Surface Water (A1)

☐ High Water Table (A2)

☐ Saturation (A3)

☐ Water Marks (B1)

☐ Sediment Deposits (B2)

☐ Drift Deposits (B3)

☐ Algal Mat or Crust (B4)

☐ Iron Deposits (B5)

☐ Inundation Visible on Aerial Imagery (B7)

☐ Sparsely Vegetated Concave Surface (B8)

☐ Water-Stained Leaves (B9)

☐ Aquatic Fauna (B13)

☐ True Aquatic Plants (B14)

☐ Hydrogen Sulfide Odor (C1)

☐ Oxidized Rhizospheres on Living Roots (C3)

☐ Presence of Reduced Iron (C4)

☐ Recent Iron Reduction in Tilled Soils (C6)

☐ Thin Muck Surface (C7)

☐ Gauge or Well Data (D9)

☐ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

☒ Surface Soil Cracks (B6)

☐ Drainage Patterns (B10)

☐ Dry Season Water Table (C2)

☐ Crayfish Burrows (C8)

☐ Saturation Visible on Aerial Imagery (C9)

☐ Stunted or Stressed Plants (D1)

☒ Geomorphic Position (D2)

☒ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present?

Yes ☐

No ☒

Depth (inches):

Water Table Present?

Yes ☐

No ☒

Depth (inches):

Saturation Present?
(includes capillary fringe)

Yes ☐

No ☒

Depth (inches):

Wetland Hydrology Present?

Yes ☒

No ☐

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

Remarks:

US Army Corps of Engineers

Midwest Region - Version 2.0

WETLAND DETERMINATION DATA FORM - Midwest Region

Project/Site: Southwest Lima Station Expansion City/County: Allen County Sampling Date: 06-Sep-17
 Applicant/Owner: AEP State: OH Sampling Point: upl-jbl-090617-01
 Investigator(s): JBL, JTT Section, Township, Range: S 21 T 4S R 6E
 Landform (hillslope, terrace, etc.): Hillside Local relief (concave, convex, none): none
 Slope: 0.0% 0.0 ° Lat.: 40.676264 Long.: -84.182530 Datum: _____
 Soil Map Unit Name: TkA NWI classification: NA

Are climatic/hydrologic conditions on the site typical for this time of year? Yes ☒ No ☐ (If no, explain in Remarks.)

Are Vegetation ☐ , Soil ☐ , or Hydrology ☐ significantly disturbed? Are "Normal Circumstances" present? Yes ☒ No ☐

Are Vegetation ☐ , Soil ☐ , or Hydrology ☐ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes ☐ No ☒	Is the Sampled Area within a Wetland? Yes ☐ No ☒
Hydric Soil Present?	Yes ☐ No ☒	
Wetland Hydrology Present?	Yes ☐ No ☒	
Remarks:		

VEGETATION - Use scientific names of plants.

	Absolute % Cover	Dominant Species? Rel.Strat. Cover	Indicator Status	
Tree Stratum (Plot size: _____)				
1. <u>Acer saccharum</u>	40	☒ 50.0%	FACU	Dominance Test worksheet: Number of Dominant Species That are OBL, FACW, or FAC: <u>1</u> (A) Total Number of Dominant Species Across All Strata: <u>6</u> (B) Percent of dominant Species That Are OBL, FACW, or FAC: <u>16.7%</u> (A/B)
2. <u>Prunus serotina</u>	30	☒ 37.5%	FACU	
3. <u>Populus deltoides</u>	10	☐ 12.5%	FAC	
4. _____	0	☐ 0.0%		
5. _____	0	☐ 0.0%		
	80	= Total Cover		
Sapling/Shrub Stratum (Plot size: _____)				
1. <u>Elaeagnus umbellata</u>	20	☒ 57.1%	UPL	Prevalence Index worksheet: Total % Cover of: Multiply by: OBL species <u>0</u> x 1 = <u>0</u> FACW species <u>5</u> x 2 = <u>10</u> FAC species <u>55</u> x 3 = <u>165</u> FACU species <u>100</u> x 4 = <u>400</u> UPL species <u>35</u> x 5 = <u>175</u> Column Totals: <u>195</u> (A) <u>750</u> (B) Prevalence Index = B/A = <u>3.846</u>
2. <u>Lonicera maackii</u>	15	☒ 42.9%	UPL	
3. _____	0	☐ 0.0%		
4. _____	0	☐ 0.0%		
5. _____	0	☐ 0.0%		
	35	= Total Cover		
Herb Stratum (Plot size: _____)				
1. <u>Equisetum arvense</u>	45	☒ 56.3%	FAC	Hydrophytic Vegetation Indicators: ☐ 1 - Rapid Test for Hydrophytic Vegetation ☐ 2 - Dominance Test is > 50% ☐ 3 - Prevalence Index is ≤ 3.0 ¹ ☐ 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) ☐ Problematic Hydrophytic Vegetation ¹ (Explain) ¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
2. <u>Parthenocissus quinquefolia</u>	30	☒ 37.5%	FACU	
3. <u>Solidago gigantea</u>	5	☐ 6.3%	FACW	
4. _____	0	☐ 0.0%		
5. _____	0	☐ 0.0%		
6. _____	0	☐ 0.0%		
7. _____	0	☐ 0.0%		
8. _____	0	☐ 0.0%		
9. _____	0	☐ 0.0%		
10. _____	0	☐ 0.0%		
	80	= Total Cover		
Woody Vine Stratu (Plot size: _____)				
1. _____	0	☐ 0.0%		Hydrophytic Vegetation Present? Yes ☐ No ☒
2. _____	0	☐ 0.0%		
	0	= Total Cover		

Remarks: (Include photo numbers here or on a separate sheet.)

¹Indicator suffix = National status or professional decision assigned because Regional status not defined by FWS.

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

Depth (inches)	Matrix		Redox Features					Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²			
0-11	10YR	3/3	100					Silt Loam	

¹ Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains.

² Location: PL=Pore Lining. M=Matrix.

Hydric Soil Indicators:		Indicators for Problematic Hydric Soils ³ :
☐ Histosol (A1)	☐ Sandy Gleyed Matrix (S4)	☐ Coast Prairie Redox (A16)
☐ Histic Epipedon (A2)	☐ Sandy Redox (S5)	☐ Dark Surface (S7)
☐ Black Histic (A3)	☐ Stripped Matrix (S6)	☐ Iron Manganese Masses (F12)
☐ Hydrogen Sulfide (A4)	☐ Loamy Mucky Mineral (F1)	☐ Very Shallow Dark Surface (TF12)
☐ Stratified Layers (A5)	☐ Loamy Gleyed Matrix (F2)	☐ Other (Explain in Remarks)
☐ 2 cm Muck (A10)	☐ Depleted Matrix (F3)	
☐ Depleted Below Dark Surface (A11)	☐ Redox Dark Surface (F6)	
☐ Thick Dark Surface (A12)	☐ Depleted Dark Surface (F7)	
☐ Sandy Muck Mineral (S1)	☐ Redox Depressions (F8)	
☐ 5 cm Mucky Peat or Peat (S3)		

³ Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed): Type: _____ Depth (inches): _____	Hydric Soil Present? Yes ☐ No ☒
Remarks:	

HYDROLOGY

Wetland Hydrology Indicators:		
Primary Indicators (minimum of one is required; check all that apply)		Secondary Indicators (minimum of two required)
☐ 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 (C3)	☐ 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 Soils (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 (B8)	☐ Other (Explain in Remarks)	

Field Observations:				
Surface Water Present?	Yes ☐	No ☒	Depth (inches): _____	
Water Table Present?	Yes ☐	No ☒	Depth (inches): _____	
Saturation Present? (includes capillary fringe)	Yes ☐	No ☒	Depth (inches): _____	
			Wetland Hydrology Present?	Yes ☐ No ☒

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

Remarks:

WETLAND DETERMINATION DATA FORM - Midwest Region

Project/Site: Southwest Lima Station Expansion City/County: Allen County Sampling Date: 06-Sep-17
 Applicant/Owner: AEP State: OH Sampling Point: upl-jbl-090617-02a,b
 Investigator(s): JBL, JTT Section, Township, Range: S 21 T 4S R 6E
 Landform (hillslope, terrace, etc.): _____ Local relief (concave, convex, none): _____
 Slope: 0.0% 0.0 ° Lat.: 40.675142 Long.: -84.184237 Datum: _____
 Soil Map Unit Name: TkA NWI classification: NA

Are climatic/hydrologic conditions on the site typical for this time of year? Yes ☒ No ☐ (If no, explain in Remarks.)
 Are Vegetation ☐ , Soil ☐ , or Hydrology ☐ significantly disturbed? Are "Normal Circumstances" present? Yes ☒ No ☐
 Are Vegetation ☐ , Soil ☐ , or Hydrology ☐ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes ☐ No ☒	Is the Sampled Area within a Wetland? Yes ☐ No ☒
Hydric Soil Present?	Yes ☐ No ☒	
Wetland Hydrology Present?	Yes ☐ No ☒	
Remarks:		

VEGETATION - Use scientific names of plants.

	Absolute % Cover	Dominant Species? Rel.Strat. Cover	Indicator Status	
Tree Stratum (Plot size: _____)				
1. _____	0	☐ 0.0%		Dominance Test worksheet: Number of Dominant Species That are OBL, FACW, or FAC: <u>0</u> (A) Total Number of Dominant Species Across All Strata: <u>2</u> (B) Percent of dominant Species That Are OBL, FACW, or FAC: <u>0.0%</u> (A/B)
2. _____	0	☐ 0.0%		
3. _____	0	☐ 0.0%		
4. _____	0	☐ 0.0%		
5. _____	0	☐ 0.0%		
	0	= Total Cover		
Sapling/Shrub Stratum (Plot size: _____)				
1. _____	0	☐ 0.0%		Prevalence Index worksheet: Total % Cover of: Multiply by: OBL species <u>0</u> x 1 = <u>0</u> FACW species <u>0</u> x 2 = <u>0</u> FAC species <u>0</u> x 3 = <u>0</u> FACU species <u>100</u> x 4 = <u>400</u> UPL species <u>0</u> x 5 = <u>0</u> Column Totals: <u>100</u> (A) <u>400</u> (B) Prevalence Index = B/A = <u>4.000</u>
2. _____	0	☐ 0.0%		
3. _____	0	☐ 0.0%		
4. _____	0	☐ 0.0%		
5. _____	0	☐ 0.0%		
	0	= Total Cover		
Herb Stratum (Plot size: _____)				
1. <u>Cirsium arvense</u>	15	☐ 15.0%	FACU	Hydrophytic Vegetation Indicators: ☐ 1 - Rapid Test for Hydrophytic Vegetation ☐ 2 - Dominance Test is > 50% ☐ 3 - Prevalence Index is ≤ 3.0¹ ☐ 4 - Morphological Adaptations¹ (Provide supporting data in Remarks or on a separate sheet) ☐ Problematic Hydrophytic Vegetation¹ (Explain) ¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
2. <u>Solidago altissima</u>	60	☒ 60.0%	FACU	
3. <u>Bromus arvensis</u>	25	☒ 25.0%	FACU	
4. _____	0	☐ 0.0%		
5. _____	0	☐ 0.0%		
6. _____	0	☐ 0.0%		
7. _____	0	☐ 0.0%		
8. _____	0	☐ 0.0%		
9. _____	0	☐ 0.0%		
10. _____	0	☐ 0.0%		
	100	= Total Cover		
Woody Vine Stratu (Plot size: _____)				
1. _____	0	☐ 0.0%		Hydrophytic Vegetation Present? Yes ☐ No ☒
2. _____	0	☐ 0.0%		
	0	= Total Cover		

Remarks: (Include photo numbers here or on a separate sheet.)

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

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

Depth (inches)	Matrix		Redox Features					Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²			
0-11	10YR	3/2	100					Sandy Loam	

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

Hydric Soil Indicators:		Indicators for Problematic Hydric Soils ³ :
☐ Histosol (A1)	☐ Sandy Gleyed Matrix (S4)	☐ Coast Prairie Redox (A16)
☐ Histic Epipedon (A2)	☐ Sandy Redox (S5)	☐ Dark Surface (S7)
☐ Black Histic (A3)	☐ Stripped Matrix (S6)	☐ Iron Manganese Masses (F12)
☐ Hydrogen Sulfide (A4)	☐ Loamy Mucky Mineral (F1)	☐ Very Shallow Dark Surface (TF12)
☐ Stratified Layers (A5)	☐ Loamy Gleyed Matrix (F2)	☐ Other (Explain in Remarks)
☐ 2 cm Muck (A10)	☐ Depleted Matrix (F3)	
☐ Depleted Below Dark Surface (A11)	☐ Redox Dark Surface (F6)	
☐ Thick Dark Surface (A12)	☐ Depleted Dark Surface (F7)	
☐ Sandy Muck Mineral (S1)	☐ Redox Depressions (F8)	
☐ 5 cm Mucky Peat or Peat (S3)		

³ Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed): Type: _____ Depth (inches): _____	Hydric Soil Present? Yes ☐ No ☒
Remarks:	

HYDROLOGY

Wetland Hydrology Indicators:		
Primary Indicators (minimum of one is required; check all that apply)		Secondary Indicators (minimum of two required)
☐ 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 (C3)	☐ Saturation Visible on Aerial Imagery (C9)
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☐ Algal Mat or Crust (B4)	☐ Recent Iron Reduction in Tilled Soils (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 (B8)	☐ Other (Explain in Remarks)	

Field Observations:				
Surface Water Present?	Yes ☐	No ☒	Depth (inches): _____	
Water Table Present?	Yes ☐	No ☒	Depth (inches): _____	
Saturation Present? (includes capillary fringe)	Yes ☐	No ☒	Depth (inches): _____	
			Wetland Hydrology Present?	Yes ☐ No ☒

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

Remarks:

APPENDIX B**OEPA WETLAND ORAM FORMS**

Wetland 01

Site: AEP Southwest Lima Station

Rater(s): J.Lubbers, J. Tucker

Date:

9/6/2017

Field Id:

w-jbl-090617-01

1

1

Metric 1. Wetland Area (size).

max 6 pts

subtotal

Select one size class and assign score.

- ☐ >50 acres (>20.2ha) (6 pts)
☐ 25 to <50 acres (10.1 to <20.2ha) (5 pts)
☐ 10 to <25 acres (4 to <10.1ha) (4 pts)
☐ 3 to <10 acres (1.2 to <4ha) (3 pts)
☐ 0.3 to <3 acres (0.12 to <1.2ha) (2pts)
☒ 0.1 to <0.3 acres (0.04 to <0.12ha) (1 pt)
☐ <0.1 acres (0.04ha) (0 pts)

0.27 acres

2

3

Metric 2. Upland buffers and surrounding land use.

max 14 pts.

subtotal

2a. Calculate average buffer width. Select only one and assign score. Do not double check.

- ☐ WIDE. Buffers average 50m (164ft) or more around wetland perimeter (7)
☐ MEDIUM. Buffers average 25m to <50m (82 to <164ft) around wetland perimeter (4)
☐ NARROW. Buffers average 10m to <25m (32ft to <82ft) around wetland perimeter (1)
☒ VERY NARROW. Buffers average <10m (<32ft) around wetland perimeter (0)

2b. Intensity of surrounding land use. Select one or double check and average.

- ☐ VERY LOW. 2nd growth or older forest, prairie, savannah, wildlife area, etc. (7)
☐ LOW. Old field (>10 years), shrubland, young second growth forest. (5)
☒ MODERATELY HIGH. Residential, fenced pasture, park, conservation tillage, new fallow field. (3)
☒ HIGH. Urban, industrial, open pasture, row cropping, mining, construction. (1)

6.0

9.0

Metric 3. Hydrology.

max 30 pts.

subtotal

3a. Sources of Water. Score all that apply.

- ☐ High pH groundwater (5)
☐ Other groundwater (3)
☒ Precipitation (1)
☐ Seasonal/Intermittent surface water (3)
☐ Perennial surface water (lake or stream) (5)

3c. Maximum water depth. Select one.

- ☐ >0.7 (27.6in) (3)
☐ 0.4 to 0.7m (15.7 to 27.6in) (2)
☒ <0.4m (<15.7in) (1)

3e. Modifications to natural hydrologic regime. Score one or double check and average.

- ☐ None or none apparent (12)
☐ Recovered (7)
☐ Recovering (3)
☒ Recent or no recovery (1)

3b. Connectivity. Score all that apply.

- ☐ 100 year floodplain (1)
☒ Between stream/lake and other human use (1)
☐ Part of wetland/upland (e.g. forest), complex (1)
☐ Part of riparian or upland corridor (1)

3d. Duration inundation/saturation. Score one or dbl check.

- ☐ Semi- to permanently inundated/saturated (4)
☒ Regularly inundated/saturated (3)
☐ Seasonally inundated (2)
☒ Seasonally saturated in upper 30cm (12in) (1)

Check all disturbances observed

- | | |
|---|---|
| ☒ ditch | ☐ point source (nonstormwater) |
| ☒ tile | ☒ filling/grading |
| ☒ dike | ☒ road bed/RR track |
| ☐ weir | ☐ dredging |
| ☐ stormwater input | ☐ Other: |

5.5

14.5

Metric 4. Habitat Alteration and Development.

max 20 pts.

subtotal

4a. Substrate disturbance. Score one or double check and average.

- ☐ None or none apparent (4)
☐ Recovered (3)
☒ Recovering (2)
☒ Recent or no recovery (1)

4b. Habitat development. Select only one and assign score.

- ☐ Excellent (7)
☐ Very good (6)
☐ Good (5)
☐ Moderately good (4)
☐ Fair (3)
☒ Poor to fair (2)
☐ Poor (1)

4c. Habitat alteration. Score one or double check and average.

- ☐ None or none apparent (9)
☐ Recovered (6)
☒ Recovering (3)
☒ Recent or no recovery (1)

Check all disturbances observed

- | | |
|---|---|
| ☒ mowing | ☒ shrub/sapling removal |
| ☐ grazing | ☐ herbaceous/aquatic bed removal |
| ☒ clearcutting | ☒ sedimentation |
| ☒ selective cutting | ☐ dredging |
| ☐ woody debris removal | ☐ farming |
| ☐ toxic pollutants | ☐ nutrient enrichment |

14.5

subtotal this page ORAM v. 5.0 Field Form Quantitative Rating

Wetland 01

Site: AEP Southwest Lima Station

Rater(s): J.Lubbers, J. Tucker

Date:

9/6/2017

14.5

subtotal this page

0 14.5

max 10 pts.

subtotal

Metric 5. Special Wetlands.

Check all that apply and score as indicated.

- ☐ Bog (10)
- ☐ Fen (10)
- ☐ Old growth forest (10)
- ☐ Mature forested wetland (5)
- ☐ Lake Erie coastal/tributary wetland-unrestricted hydrology (10)
- ☐ Lake Erie coastal/tributary wetland-restricted hydrology (5)
- ☐ Lake Plain Sand Prairies (Oak Openings) (10)
- ☐ Relict Wet Prairies (10)
- ☐ Known occurrence state/federal threatened or endangered species (10)
- ☐ Significant migratory songbird/water fowl habitat or usage (10)
- ☐ Category 1 Wetland. See Question 5 Qualitative Rating (-10)

0 14.5

max 20pts.

subtotal

Metric 6. Plant communities, interspersions, microtopography.

6a. Wetland Vegetation Communities.

Score all present using 0 to 3 scale.

- ☐ Aquatic bed
- ☒ 1 Emergent
- ☐ Shrub
- ☐ Forest
- ☐ Mudflats
- ☐ Open water
- ☐ Other

6b. horizontal (plan view) Interspersion.

Select only one.

- ☐ High (5)
- ☐ Moderately high(4)
- ☐ Moderate (3)
- ☐ Moderately low (2)
- ☒ x Low (1)
- ☐ None (0)

6c. Coverage of invasive plants. Refer

Table 1 ORAM long form for list. Add or deduct points for coverage

- ☐ Extensive >75% cover (-5)
- ☒ x Moderate 25-75% cover (-3)
- ☐ Sparse 5-25% cover (-1)
- ☐ Nearly absent <5% cover (0)
- ☐ Absent (1)

6d. Microtopography.

Score all present using 0 to 3 scale.

- ☐ Vegetated hummocks/tussucks
- ☐ Coarse woody debris >15cm (6in)
- ☐ Standing dead >25cm (10in) dbh
- ☒ 1 Amphibian breeding pools

Field Id:

w-jbl-090617-01

Vegetation Community Cover Scale

- 0 Absent or comprises <0.1ha (0.2471 acres) contiguous area
- 1 Present and either comprises small part of wetland's 1 vegetation and is of moderate quality, or comprises a significant part but is of low quality
- 2 Present and either comprises significant part of wetland's 2 vegetation and is of moderate quality or comprises a small part and is of high quality
- 3 Present and comprises significant part, or more, of wetland's 3 vegetation and is of high quality

Narrative Description of Vegetation Quality

Low spp diversity and/or predominance of nonnative or low disturbance tolerant native species

Native spp are dominant component of the vegetation, mod although nonnative and/or disturbance tolerant native spp can also be present, and species diversity moderate to moderately high, but generally w/o presence of rare threatened or endangered spp to

A predominance of native species, with nonnative spp high and/or disturbance tolerant native spp absent or virtually absent, and high spp diversity and often, but not always, the presence of rare, threatened, or endangered spp

Mudflat and Open Water Class Quality

- 0 Absent <0.1ha (0.247 acres)
- 1 Low 0.1 to <1ha (0.247 to 2.47 acres)
- 2 Moderate 1 to <4ha (2.47 to 9.88 acres)
- 3 High 4ha (9.88 acres) or more

Microtopography Cover Scale

- 0 Absent
- 1 Present very small amounts or if more common of marginal quality
- 2 Present in moderate amounts, but not of highest quality or in small amounts of highest quality
- 3 Present in moderate or greater amounts and of highest quality

Category 1

14.5 GRAND TOTAL(max 100 pts)

Wetland 02ab

Site: AEP Southwest Lima Station

Rater(s): J.Lubbers, J. Tucker

Date:

9/6/2017

1 **1**

max 6 pts

subtotal

Metric 1. Wetland Area (size).

Select one size class and assign score.

- ☐ >50 acres (>20.2ha) (6 pts)
☐ 25 to <50 acres (10.1 to <20.2ha) (5 pts)
☐ 10 to <25 acres (4 to <10.1ha) (4 pts)
☐ 3 to <10 acres (1.2 to <4ha) (3 pts)
☐ 0.3 to <3 acres (0.12 to <1.2ha) (2pts)
☒ 0.1 to <0.3 acres (0.04 to <0.12ha) (1 pt)
☐ <0.1 acres (0.04ha) (0 pts)

Field Id:

w-jbl-090617-02a,b

0.20 acres

7 **8**

max 14 pts.

subtotal

Metric 2. Upland buffers and surrounding land use.

2a. Calculate average buffer width. Select only one and assign score. Do not double check.

- ☐ WIDE. Buffers average 50m (164ft) or more around wetland perimeter (7)
☒ MEDIUM. Buffers average 25m to <50m (82 to <164ft) around wetland perimeter (4)
☐ NARROW. Buffers average 10m to <25m (32ft to <82ft) around wetland perimeter (1)
☐ VERY NARROW. Buffers average <10m (<32ft) around wetland perimeter (0)

2b. Intensity of surrounding land use. Select one or double check and average.

- ☐ VERY LOW. 2nd growth or older forest, prairie, savannah, wildlife area, etc. (7)
☒ LOW. Old field (>10 years), shrubland, young second growth forest. (5)
☐ MODERATELY HIGH. Residential, fenced pasture, park, conservation tillage, new fallow field. (3)
☒ HIGH. Urban, industrial, open pasture, row cropping, mining, construction. (1)

6.5 **14.5**

max 30 pts.

subtotal

Metric 3. Hydrology.

3a. Sources of Water. Score all that apply.

- ☐ High pH groundwater (5)
☐ Other groundwater (3)
☒ Precipitation (1)
☐ Seasonal/Intermittent surface water (3)
☐ Perennial surface water (lake or stream) (5)

3c. Maximum water depth. Select one.

- ☐ >0.7 (27.6in) (3)
☐ 0.4 to 0.7m (15.7 to 27.6in) (2)
☒ <0.4m (<15.7in) (1)

3e. Modifications to natural hydrologic regime. Score one or double check and average.

- ☐ None or none apparent (12)
☐ Recovered (7)
☒ Recovering (3)
☒ Recent or no recovery (1)

3b. Connectivity. Score all that apply.

- ☐ 100 year floodplain (1)
☒ Between stream/lake and other human use (1)
☐ Part of wetland/upland (e.g. forest), complex (1)
☐ Part of riparian or upland corridor (1)

3d. Duration inundation/saturation. Score one or dbl check.

- ☐ Semi- to permanently inundated/saturated (4)
☐ Regularly inundated/saturated (3)
☒ Seasonally inundated (2)
☒ Seasonally saturated in upper 30cm (12in) (1)

Check all disturbances observed

- | | |
|---|---|
| ☒ ditch | ☐ point source (nonstormwater) |
| ☐ tile | ☒ filling/grading |
| ☐ dike | ☒ road bed/RR track |
| ☐ weir | ☐ dredging |
| ☐ stormwater input | ☐ Other: |

6 **20.5**

max 20 pts.

subtotal

Metric 4. Habitat Alteration and Development.

4a. Substrate disturbance. Score one or double check and average.

- ☐ None or none apparent (4)
☐ Recovered (3)
☒ Recovering (2)
☐ Recent or no recovery (1)

4b. Habitat development. Select only one and assign score.

- ☐ Excellent (7)
☐ Very good (6)
☐ Good (5)
☐ Moderately good (4)
☐ Fair (3)
☒ Poor to fair (2)
☐ Poor (1)

4c. Habitat alteration. Score one or double check and average.

- ☐ None or none apparent (9)
☐ Recovered (6)
☒ Recovering (3)
☒ Recent or no recovery (1)

Check all disturbances observed

- | | |
|---|---|
| ☒ mowing | ☒ shrub/sapling removal |
| ☐ grazing | ☐ herbaceous/aquatic bed removal |
| ☒ clearcutting | ☒ sedimentation |
| ☒ selective cutting | ☐ dredging |
| ☐ woody debris removal | ☐ farming |
| ☐ toxic pollutants | ☐ nutrient enrichment |

20.5

subtotal this page ORAM v. 5.0 Field Form Quantitative Rating

Wetland 02ab

Site: AEP Southwest Lima Station

Rater(s): J.Lubbers, J. Tucker

Date:

9/6/2017

20.5

subtotal this page

0 20.5

max 10 pts.

subtotal

Metric 5. Special Wetlands.

Check all that apply and score as indicated.

- ☐ Bog (10)
☐ Fen (10)
☐ Old growth forest (10)
☐ Mature forested wetland (5)
☐ Lake Erie coastal/tributary wetland-unrestricted hydrology (10)
☐ Lake Erie coastal/tributary wetland-restricted hydrology (5)
☐ Lake Plain Sand Prairies (Oak Openings) (10)
☐ Relict Wet Prairies (10)
☐ Known occurrence state/federal threatened or endangered species (10)
☐ Significant migratory songbird/water fowl habitat or usage (10)
☐ Category 1 Wetland. See Question 5 Qualitative Rating (-10)

2 22.5

max 20pts.

subtotal

Metric 6. Plant communities, interspersions, microtopography.

6a. Wetland Vegetation Communities.

Score all present using 0 to 3 scale.

- ☐ Aquatic bed
☐ Emergent
☐ Shrub
☒ 2 Forest
☐ Mudflats
☐ Open water
☐ Other

6b. horizontal (plan view) Interspersion.

Select only one.

- ☐ High (5)
☐ Moderately high(4)
☐ Moderate (3)
☒ Moderately low (2)
☐ Low (1)
☐ None (0)

6c. Coverage of invasive plants. Refer

Table 1 ORAM long form for list. Add or deduct points for coverage

- ☐ Extensive >75% cover (-5)
☒ Moderate 25-75% cover (-3)
☒ Sparse 5-25% cover (-1)
☐ Nearly absent <5% cover (0)
☐ Absent (1)

6d. Microtopography.

Score all present using 0 to 3 scale.

- ☐ Vegetated hummocks/tussucks
☒ 1 Coarse woody debris >15cm (6in)
☒ 1 Standing dead >25cm (10in) dbh
☐ Amphibian breeding pools

Field Id:

w-jbl-090617-02a,b

Vegetation Community Cover Scale

- 0 Absent or comprises <0.1ha (0.2471 acres) contiguous area
1 Present and either comprises small part of wetland's 1 vegetation and is of moderate quality, or comprises a significant part but is of low quality
2 Present and either comprises significant part of wetland's 2 vegetation and is of moderate quality or comprises a small part and is of high quality
3 Present and comprises significant part, or more, of wetland's 3 vegetation and is of high quality

Narrative Description of Vegetation Quality

Low spp diversity and/or predominance of nonnative or low disturbance tolerant native species
Native spp are dominant component of the vegetation, mod although nonnative and/or disturbance tolerant native spp can also be present, and species diversity moderate to moderately high, but generally w/o presence of rare threatened or endangered spp to
A predominance of native species, with nonnative spp high and/or disturbance tolerant native spp absent or virtually absent, and high spp diversity and often, but not always, the presence of rare, threatened, or endangered spp

Mudflat and Open Water Class Quality

- 0 Absent <0.1ha (0.247 acres)
1 Low 0.1 to <1ha (0.247 to 2.47 acres)
2 Moderate 1 to <4ha (2.47 to 9.88 acres)
3 High 4ha (9.88 acres) or more

Microtopography Cover Scale

- 0 Absent
1 Present very small amounts or if more common of marginal quality
2 Present in moderate amounts, but not of highest quality or in small amounts of highest quality
3 Present in moderate or greater amounts and of highest quality

Category 1

22.5 GRAND TOTAL(max 100 pts)

APPENDIX C**DELINEATED FEATURES PHOTOGRAPHS**



PHOTOGRAPHIC RECORD

DELINEATED FEATURES

Client Name: AEP	Site Location: Southwest Lima Station Expansion Project	Project No. 60553292
----------------------------	---	--------------------------------

Photo No. 1	
Date: September 16, 2017	
Description: Little Ottawa River QHEI Stream Perennial stream Facing downstream	

Photo No. 2	
Date: September 16, 2017	
Description: Little Ottawa River QHEI Stream Perennial stream Facing upstream	



PHOTOGRAPHIC RECORD

DELINEATED FEATURES

Client Name: AEP	Site Location: Southwest Lima Station Expansion Project	Project No. 60553292
----------------------------	---	--------------------------------

Photo No. 3	
Date: September 16, 2017	
Description: Wetland 01 PEM Habitat Facing north	

Photo No. 4	
Date: September 16, 2017	
Description: Wetland 01 PEM Habitat Facing east	



PHOTOGRAPHIC RECORD

DELINEATED FEATURES

Client Name: AEP	Site Location: Southwest Lima Station Expansion Project	Project No. 60553292
----------------------------	---	--------------------------------

Photo No. 5	
Date: September 16, 2017	
Description: Wetland 01 PEM Habitat Facing south	

Photo No. 6	
Date: September 16, 2017	
Description: Wetland 01 PEM Habitat Facing west	



PHOTOGRAPHIC RECORD

DELINEATED FEATURES

Client Name:

AEP

Site Location:

Southwest Lima Station Expansion Project

Project No.

60553292

Photo No. 7

Date:

September 16, 2017

Description:

Wetland 01

Soil Profile



Photo No. 8

Date:

September 16, 2017

Description:

Upland area

Facing west





PHOTOGRAPHIC RECORD

DELINEATED FEATURES

Client Name: AEP	Site Location: Southwest Lima Station Expansion Project	Project No. 60553292
----------------------------	---	--------------------------------

Photo No. 9	
Date: September 16, 2017	
Description: Upland area Soil profile	

Photo No. 10	
Date: September 16, 2017	
Description: Wetland 02a PEM Habitat Facing north	



PHOTOGRAPHIC RECORD

DELINEATED FEATURES

Client Name: AEP	Site Location: Southwest Lima Station Expansion Project	Project No. 60553292
----------------------------	---	--------------------------------

Photo No. 11	
Date: September 16, 2017	
Description: Wetland 02a PEM Habitat Facing east	

Photo No. 12	
Date: September 16, 2017	
Description: Wetland 02a PEM Habitat Facing south	



PHOTOGRAPHIC RECORD

DELINEATED FEATURES

Client Name: AEP	Site Location: Southwest Lima Station Expansion Project	Project No. 60553292
----------------------------	---	--------------------------------

Photo No. 13	 A photograph showing a dense, lush wetland area with tall, green grasses and various shrubs. A fallen log is visible in the upper left portion of the frame.
Date: September 16, 2017	
Description: Wetland 02a PEM Habitat Facing west	

Photo No. 14	 A close-up photograph of a soil profile in a wetland. The soil is dark brown and appears moist, with some roots visible. Green grasses and other vegetation are growing around the exposed soil.
Date: September 16, 2017	
Description: Wetland 02a Soil profile	



PHOTOGRAPHIC RECORD

DELINEATED FEATURES

Client Name: AEP	Site Location: Southwest Lima Station Expansion Project	Project No. 60553292
----------------------------	---	--------------------------------

Photo No. 15	
Date: September 16, 2017	
Description: Wetland 02b PFO Habitat Facing east	

Photo No. 16	
Date: September 16, 2017	
Description: Wetland 02b PFO Habitat Facing south	



PHOTOGRAPHIC RECORD

DELINEATED FEATURES

Client Name: AEP	Site Location: Southwest Lima Station Expansion Project	Project No. 60553292
----------------------------	---	--------------------------------

Photo No. 17	
Date: September 16, 2017	
Description: Upland 02 Facing east	

Photo No. 18	
Date: September 16, 2017	
Description: Upland 02 Soil profile	

APPENDIX D**CORRESPONDENCE LETTER FROM USFWS**

Geckle, Aaron

From: susan_zimmermann@fws.gov on behalf of Ohio, FW3 <ohio@fws.gov>
Sent: Monday, September 18, 2017 12:46 PM
To: Geckle, Aaron
Cc: nathan.reardon@dnr.state.oh.us; kate.parsons@dnr.state.oh.us
Subject: Southwest Lima Station Expansion Project, Allen Co. OH



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-1936

Dear Mr. Geckle,

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.

Should the proposed site contain trees •3 inches dbh, we recommend that trees be saved wherever possible. If any caves or abandoned mines may be disturbed, further coordination with this office is requested to determine if fall or spring portal surveys are warranted. If no caves or abandoned mines are present and trees •3 inches dbh cannot be avoided, we recommend that removal of any trees •3 inches dbh only occur between October 1 and March 31. Seasonal clearing is being recommended to avoid adverse effects to Indiana bats and northern long-eared bats. While incidental take of northern long-eared bats from most tree clearing is exempted by a 4(d) rule (see <http://www.fws.gov/midwest/endangered/mammals/nleb/index.html>), incidental take of Indiana bats is still prohibited without a project-specific exemption. Thus, seasonal clearing is recommended where Indiana bats are assumed present.

If implementation of this seasonal tree cutting recommendation is not possible, summer surveys may be conducted to document the presence or probable absence of Indiana bats within the project area during the summer. If a summer survey documents probable absence of Indiana bats, the 4(d) rule for the northern long-eared bat could be applied. Surveys must be conducted by an approved surveyor and be designed and conducted in coordination with the Endangered Species Coordinator for this office. Surveyors must have a valid federal permit. Please note that summer surveys may only be conducted between June 1 and August 15.

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,

A handwritten signature in blue ink, appearing to read "Dan Everson". The signature is fluid and cursive, with the first name "Dan" being more prominent.

Dan Everson

Field Supervisor

cc: Nathan Reardon, ODNR-DOW

Kate Parsons, ODNR-DOW

Appendix C Agency Correspondence

Geckle, Aaron

From: susan_zimmermann@fws.gov on behalf of Ohio, FW3 <ohio@fws.gov>
Sent: Monday, September 18, 2017 12:46 PM
To: Geckle, Aaron
Cc: nathan.reardon@dnr.state.oh.us; kate.parsons@dnr.state.oh.us
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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

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Dan Everson

Field Supervisor

cc: Nathan Reardon, ODNR-DOW

Kate Parsons, ODNR-DOW



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 1, 2017

Aaron Geckle
AECOM
525 Vine Street, Suite 1800
Cincinnati, Ohio 45202

Re: 17-694; Southwest Lima Station Expansion Project

Project: The proposed project involves the expansion of the existing Southwest Lima Station.

Location: The proposed project is located in Shawnee Township, Allen 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 no records at or within a one-mile radius of the project area:

A review of the Ohio Natural Heritage Database indicates there are no records of state endangered or threatened plants or animals within the project area. There are also no records of state potentially threatened plants, special interest or species of concern animals, or any federally listed species. In addition, we are unaware of any unique ecological sites, geologic features, animal assemblages, scenic rivers, state wildlife areas, state nature preserves, state or national parks, state or national forests, national wildlife refuges, or other protected natural areas within the project area. The review was performed on the project area you specified in your request 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 any particular area is not a statement that rare species or unique features are absent from that area. Although all types of plant communities have been surveyed, we only maintain records on the highest quality areas.

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 range of the Indiana bat (*Myotis sodalis*), a state endangered and federally endangered species. 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 suitable trees must be cut during the summer months, the DOW recommends a net survey be conducted between June 1 and August 15, prior to any cutting. Net surveys should incorporate either nine net nights per square 0.5 kilometer of project area, or four net nights per kilometer for linear projects. If no tree removal is proposed, this project is not likely to impact this species.

The project is within the range of the clubshell (*Pleurobema clava*), a state endangered and federally endangered mussel, the northern riffleshell (*Epioblasma torulosa rangiana*), a state endangered and federally endangered mussel, and the pondhorn (*Unio merus tetralasmus*), a state threatened mussel. 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 greater redhorse (*Moxostoma valenciennesi*), a state threatened fish. 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 upland sandpiper (*Bartramia longicauda*), a state endangered bird. Nesting upland sandpipers utilize dry grasslands including native grasslands, seeded grasslands, grazed and ungrazed pasture, hayfields, and grasslands established through the Conservation Reserve Program (CRP). If this type of habitat will be impacted, construction should be avoided in this habitat during the species' nesting period of April 15 to July 31. If this type of habitat will not be impacted, this project is not likely to impact this species.

Due to the potential of impacts to federally listed species, as well as to state listed species, we recommend that this project be coordinated with the 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/portals/soilwater/pdf/floodplain/Floodplain%20Manager%20Community%20Contact%20List_8_16.pdf

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



In reply, refer to
2017-ALL-40509

August 30, 2018

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

RE: Southwest Lima Transmission Line Extension, Shawnee Township, Allen County, Ohio

Dear Mr. Weller:

This letter is in response to the correspondence received on August 30, 2018 regarding the proposed Southwest Lima Transmission Line Extension, Shawnee Township, Allen 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 4906-4). 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 letter report provided to our office details the need to correct a design and installation error of the Southwest Lima Extension 345kV Line by the construction of new transmission line steel pole support structures. The project area has been previously surveyed and no archaeological sites were identified within the project area.

Based on the information provided, we agree the project will not affect 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 blue ink handwritten signature, likely of Krista Horrocks, is written over a horizontal line.

Krista Horrocks, Project Reviews Manager
Resource Protection and Review

cc: Ron Howard, AEP (rmhoward@aeep.com)

RPR Serial No: 1075461

This foregoing document was electronically filed with the Public Utilities

Commission of Ohio Docketing Information System on

8/31/2018 11:42:14 AM

in

Case No(s). 18-1333-EL-BNR

Summary: Application (Construction Notice) electronically filed by Ms. Christen M. Blend on behalf of AEP Ohio Transmission Power Company, Inc.