AMERICAN TRANSMISSION SYSTEMS, INCORPORATED
A FIRSTENERGY COMPANY

CONSTRUCTION NOTICE

LONDON–TANGY 138 kV TRANSMISSION LINE TAP TO NATIONAL MOD SUBSTATION PROJECT

OPSB Case No. 23-0952-EL-BNR

December 11, 2023

American Transmission Systems, Incorporated
76 South Main Street
Akron, Ohio 44308

CONSTRUCTION NOTICE
LONDON - TANGY 138 kV TRANSMISSION LINE
TAP TO NATIONAL MOD SUBSTATION PROJECT

The following information is being provided in accordance with the procedures in the Ohio Administrative Code (OAC) Chapter 4906-6 for the application and review of Accelerated Certificate Applications. Based upon the requirements found in Appendix A to OAC Rule 4906-1-01, this Project qualifies for submittal to the Ohio Power Siting Board ("Board") as a Construction Notice application.

4906-6-05: ACCELERATED APPLICATION REQUIREMENTS

4906-6-05 (B)(1): Name and Reference Number

Name of Project:	London-Tangy 138 kV Transmission Line Tap to National Mod Substation ("Project")
Reference Number:	3216

4906-6-05 (B)(1): Brief Description of the Project

American Transmission Systems, Incorporated ("ATSI"), a FirstEnergy company, is proposing to construct an approximately 300-foot (0.06 mile) transmission line tap from the existing London-Tangy 138 kV Transmission Line to Ohio Edison Company's proposed National Mod Substation. The proposed tap location will require the installation of a new 138 kV wood vertical single pole tap structure, approximately 50 feet south of the existing transmission line tap to the existing National Substation. Along with the transmission line tap structure, the Project will also require the installation of one new mid-span structure between the proposed tap structure and the new National Mod Substation and one wood pole on the east side of the substation solely needed to support the shield wire extending over the mod substation. In addition to the transmission line tap, the Project will install one single-circuit steel switch structure along the existing centerline of the London-Tangy 138 kV Transmission Line.

The general location of the Project is shown in Exhibit 1, a partial copy of the United States Geologic Survey Topographic Map, Madison County OH, Quad Map. Exhibit 2 is a partial copy of ESRI aerial imagery showing the Project area. The Project will be located in West Jefferson, Madison County, Ohio. The general layout is shown in Exhibit 3.

4906-6-05 (B)(1): Construction Notice Requirement

The Project meets the requirements for a Construction Notice because the Project is within the types of projects defined by Items (1)(a), (1)(d)(i) and (2)(a) of the Application Requirement Matrix for Electric Power Transmission Lines, Appendix A of OAC Rule 4906-1-02. These items state:

> *(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 operating at a higher transmission voltage, as follows:*
>
> *(a) Line(s) not greater than 0.2 miles in length*
>
> *&*
>
> *(d) Line(s) primarily needed to attract or meet the requirements of a specific customer or customer(s), as follows:*
>
> *(i) The line is completely on property owned by the specific customer or the applicant.*
>
> *&*
>
> *(2) Adding new circuits on existing structures designed for multiple circuit use, replacing conductors on existing structures with larger or bundled conductors, adding structures to an existing transmission line, or replacing structures with a different type of structure, for a distance of:*

(a) Two miles or less

The proposed Project is within the requirements of Item (1)(a) as it involves the extension of a single-circuit transmission line for a distance of less than 0.2 miles solely on property owned by the customer and adding a structure to an existing transmission line for a distance of less than two miles.

4906-6-05 (B)(2): Need For the Project

The proposed Project is needed to provide a second 138 kV service to an existing wholesale load interconnection requested by the Ohio Edison Company. This Project requires tapping the existing London-Tangy 138 kV Transmission Line and constructing two spans to the customer's proposed National Mod Substation. The Project will serve the continued load growth in the area and provide additional capacity to serve Ohio Edison Company's retail customers.

The need for the Project and the proposed solution was presented by ATSI at the March 17, 2023, and the May 19, 2023, Subregional Regional Transmission Expansion Plan (SRRTEP) Committee Western meetings and has been assigned PJM supplemental RTEP number s2999. The PJM SRRTEP-Western presentation slides are included as Exhibit 12 and includes additional details of the Project drivers.

4906-6-05 (B)(3): Location of the Project Relative to Existing or Proposed Lines

The location of the Project relative to existing or proposed lines is shown in the ATSI Transmission Network Map, included as part of the confidential portion of the FirstEnergy Corp. 2023 Long-Term Forecast Report. This map was submitted to the Public Utilities Commission of Ohio ("PUCO") in Case No. 23-0504-EL-FOR under Rule 4901:5-5:04 (C)(2)(b) of the Ohio Administrative Code. This map is incorporated by reference only. This Project is included on page 95 of the 2023 LTFR. The general location and layout of the project area is shown in Exhibits 1 and 2. The general layout is shown in Exhibit 3.

4906-6-05 (B)(4): Alternatives Considered

Due to the nature of the project and the specific customer need, there are no reasonable or practical alternatives to the proposed Project.

4906-6-05 (B)(5): Public Information Program

ATSI's manager of External Affairs will advise local officials of the features and the status of the proposed Project, as necessary. ATSI has also established a Project website, through which a copy of this Construction Notice application can be accessed: https://www.firstenergycorp.com/about/transmission_projects/ohio.html. During all phases of this Project, the public may ask questions, submit comments or contact ATSI through the transmission projects hotline at 1-888-311-4737 or via email at: transmissionprojects@firstenergycorp.com.

4906-6-05 (B)(6): Construction Schedule

The construction schedule for this Project is expected to begin as early as April 1, 2024 and completed by September 1, 2024.

4906-6-05 (B)(7): Area Map

Exhibit 1 and 2 depict the general location of the Project. Exhibit 1 provides a partial copy of the United States Geologic Survey, Maddison County, OH, Quad Map. Exhibit 2 is a copy of ESRI aerial imagery of the Project area.

4906-6-05 (B)(8): Property Owner List

The Project is located on a parcel (PID: 05-00296.002) owned by the customer, Ohio Edison Company, a FirstEnergy Company. No new right-of-way is required.

4906-6-05 (B)(9): TECHNICAL FEATURES OF THE PROJECT

4906-6-05 (B)(9)(a): Operating Characteristics

The transmission line construction will have the following characteristics:

Voltage:	138 kV
Conductors:	605 kcmil 24/7 ACSR
Static Wire:	7#8 Alumoweld
Insulators:	Porcelain and Glass
ROW Width:	65 ft
Structure Types:	Exhibit 4: 138 kV Steel Single Circuit Tubular Structure (Str. 13514B) Exhibit 5: 138 kV Wood Single Circuit Tap Structure (Str. 13514C) Exhibit 6: 138 kV Wood Single Circuit Horizontal Post Delta Structure (Str. 13514D) Exhibit 7: 138 kV Wood Shield Wire Structure (Str. 13514E)

4906-6-05 (B)(9)(b): Electric and Magnetic Fields

There are no occupied residences or institutions within 100 feet from the proposed transmission line centerline and therefore no Electric and Magnetic Field ("EMF") calculations are required by this subsection.

4906-6-05 (B)(9)(c): Estimated Cost

The estimated cost for the proposed Project is $1,026,000. Although not statutorily required for approval, at the request of OPSB Staff, ATSI confirms that ATSI's costs will be captured and allocated via FERC formula rates for the ATSI Transmission Zone, Attachment H-21 in the PJM OATT.

4906-6-05 (B)(10): SOCIAL AND ECOLOGICAL IMPACTS

4906-6-05 (B)(10)(a): Land Uses

The Project is located in West Jefferson, Madison County, Ohio. The Project area is zoned for commercial use land. No significant changes or impacts to the current or future land use are anticipated.

4906-6-05 (B)(10)(b): Agricultural Land

Agricultural land is not present within the Project's disturbance area.

4906-6-05 (B)(10)(c): Archaeological or Cultural Resources

As part of the investigation for this Construction Notice, AECOM performed a desktop review based on information received from the Ohio Historic Preservation Office's ("OHPO") online database on February 21, 2023 to identify the existence of any significant archeological or cultural resource sites within 0.5 mile of the Project Area. A map of the results of the search is shown in Exhibit 8.

The OHPO database includes all Ohio listings on the National Register of Historic Places ("NRHP"), including districts, sites, building, structures, and objects that are significant in American history, architecture, archeology, engineering, and culture. The results of the search did not identify any listed NRHP sites or NRHP Districts within the Project Area.

The OHPO database also includes listing of the Ohio Archaeological Inventory ("OAI"), the Ohio Historic Inventory ("OHI"), previous cultural resource surveys, and the Ohio Genealogical Society ("OGS") cemetery inventory. Eleven (11) OAI resources have been previously inventoried within 0.5 mile of the Project and are shown in Table 1 below. Seven (7) OHI structures are located within 0.5 mile of the Project and are shown in Table 2 below. Four (4) previous cultural resource surveys were conducted within 0.5 mile of the Project and are identified in Table 3. No OAI, OHI or cemetery sites are in the disturbance area of the Project. The proposed Project is not expected to have an adverse visual or direct effect on any of the resources identified in the 0.5-mile area of potential effect.

Table 1. List of OAI Listed Archeological Resources

OAI Number	Affiliation	Description	County	Quad Name
MA0239	Historic	Unknown Historic	Madison	West Jefferson
MA0279	Prehistoric	Unknown Prehistoric	Madison	West Jefferson
MA0736	Prehistoric	Unknown Prehistoric	Madison	West Jefferson
MA0737	Prehistoric	Unknown Prehistoric	Madison	West Jefferson
MA0746	Prehistoric	Unknown Prehistoric	Madison	West Jefferson
MA0738	Prehistoric	Unknown Prehistoric	Madison	West Jefferson
MA0739	Prehistoric	Unknown Prehistoric	Madison	West Jefferson
MA0740	Prehistoric	Unknown Prehistoric	Madison	West Jefferson
MA0741	Prehistoric	Unknown Prehistoric	Madison	West Jefferson
MA0744	Prehistoric	Unknown Prehistoric	Madison	West Jefferson
MA0745	Prehistoric	Unknown Prehistoric	Madison	West Jefferson

Table 2. List of OHI Structural Resources

OHI Number	Present Name	Historic Use	County	Municipality

MAD0031706	Charles & Linda Kollar House	Single Dwelling	Madison	West Jefferson
MAD0031406	Janette & Vaughn Viator House	Single Dwelling	Madison	West Jefferson
MAD0031506	Arnold Hoyne House	Single Dwelling	Madison	West Jefferson
MAD0031806	House, 4690 US Route 40	Single Dwelling	Madison	West Jefferson
MAD0031306	Picket Fences Trailer Park	Residential/ Domestic	Madison	West Jefferson
MAD0025707	US 40 Concrete Culvert		Madison	West Jefferson
MAD0031606	Glen & Martin Nitchman House	Single Dwelling	Madison	West Jefferson

Table 3. List of Previous Cultural & Historic Resource Survey

Year	Name	County	Municipality
1980	An Archaeological Survey of the Central Darby Creek River Drainage, Franklin And Madison Counties, Ohio	Madison	West Jefferson
2007	Phase I Cultural Resource Management Investigations for a 112.1 ha (277 ac) Industrial Development Site in Deer Creek and Jefferson Townships, Madison County, Ohio	Madison	West Jefferson
2013	Phase I Archaeological Survey for the London-Tangy Electric Transmission Line Project, (Survey Segments 1-5 in Canaan, Deer Creek, Jefferson, Monroe, & Union Townships) Madison County, Ohio	Franklin	West Jefferson
2021	Phase I Archaeological Field Reconnaissance of the Proposed Ambrose Development in West Jefferson, Madison County, Ohio	Madison	West Jefferson

4906-6-05 (B)(10)(d): Local, State, and Federal Requirements

No additional government agency authorizations are expected to be needed for this Project.

4906-6-05 (B)(10)(e): Endangered, Threatened, and Rare Species Investigation

AECOM submitted a request to the Ohio Department of Natural Resources ("ODNR") to conduct an Environmental Review of the Project area on November 17, 2022. As part of the Environmental Review, the ODNR conducted a search of the ODNR Division of Wildlife's Natural Heritage Database to research the presence of any endangered, threatened, or rare species within one (1) mile of the Project area. The ODNR's response on December 16, 2022, stated that the Natural Heritage Database indicates there are no records of state or federally listed plants or animals within 1 mile of the Project area. Furthermore, the ODNR's Division of Wildlife (DOW) commented that the Project is within range of nine species (four [4] federally endangered species, one [1] federally threatened species, three [3] state endangered species, and one [1] state threatened species. A copy of ODNR's response is included as Exhibit 9.

AECOM also submitted a request to the U.S. Fish and Wildlife Service ("USFWS") requesting their technical assistance regarding federal listed endangered or threatened species within the Project area on November 17, 2022. On November 19, 2022, the USFWS identified that the Project is within range of the federal and state endangered Indiana bat (*Myotis sodalis*) and federally threatened northern long-eared bat (*Myotis septentrionalis*). A copy of the USFWS's response is included in Exhibit 10.

A list of all endangered, threatened, and rare species, as identified by ODNR DOW and USFWS, is provided in Table 5.

Table 5. List of Endangered, Threatened, and Rare Species

Common Name	Scientific Name	Federal and State Listing Status	Affected Habitat
Mammals			
Indiana bat	*Myotis sodalis*	Federally and State Endangered	Trees and forests
Northern long-eared bat	*Myotis septentrionalis*	Federally and state endangered	Trees and forests

Little Brown Bat	*Myotis lucifugus*	State Endangered	Trees and forests
Tricolored Bat	*Perimyotis subflavus*	State endangered	Trees and forests
Mussels			
Clubshell	*Pleurobema claba*	Federally endangered	Perennial streams
Northern riffleshell	*Epioblasma torulosa rangiana*	Federally endangered	Perennial streams
Rayed bean	*Villosa fabalis*	Federally endangered	Perennial streams
snuffbox	*Epioblasma triquetra*	Federally endangered	Perennial streams
Rabbitsfoot	*Quadrula cylindrica crassidens*	Federally Threatened	Perennial streams
Elephant-ear	*Elliptio crassidens*	State Endangered	Perennial streams
Salamander mussel	*Simpsonaias ambigua*	State Threatened	Perennial streams
Fish			
Spotted darter	*Etheostoma maculatum*	State Endangered	Perennial streams
Bird			
Northern harrier	*Circus hudsonius*	State Endangered	large marshes and grasslands and hunt over grasslands.

Both the ODNR and USFWS indicated the Project was within range of the Indiana bat and northern long-eared bat. Additionally, the ODNR also identified the Project as being within range of the little brown bat and the tricolored bat. The ODNR and USFWS recommended adherence to seasonal tree cutting between October 1st and March 31 to avoid adversely impacting the listed bat species. As the Project is situated within a landscape yard associated with the existing substation parcel and existing transmission line right-of-way, there will be no tree clearing for this Project. Furthermore, on April 11, 2023, a desktop review was completed to determine if potential hibernacula are present within the Project area utilizing the ODNR's Mines of Ohio and Karst Features. As a result of this review, no surface mines and/or karst features are located within 0.25-mile of the Project area and in accordance with ODNR/USFWS joint guidance for Bat Surveys and

Tree Clearing dated May 2022, no further coordination is warranted, and the Project will not have an adverse effect on these listed bat species.

The ODNR identified the Project to be within range of several listed mussel species and one listed fish species: clubshell, northern riffleshell, rayed bean, snuffbox, rabbitsfoot, elephant-ear, salamander mussel, and spotted darter. No perennial streams were identified within the Project area; therefore, this Project will not impact these species and no further coordination with the ODNR is warranted.

The ODNR indicated the Project is within range of the northern harrier. No large marshes or grasslands are present in the Project area; therefore, the Project will not impact this species and no further coordination is warranted for this species.

4906-6-05 (B)(10)(f): Areas of Ecological Concern

AECOM, on behalf of ATSI, completed field surveys for the Project area in November 2022 and February 2023. The extent of the survey area included the extent of the ATSI owned property at the substation. Based on the field surveys, one wetland complex comprised of a Palustrine shrub scrub (PSS) and Palustrine forested (PFO) community was identified within the Project area. No streams were identified within the entire extent of the Project survey area. A copy of the Wetland and Waterbody Delineation Report is included as Exhibit 11. As a result, the Project will not result in any disturbances to wetlands and/or streams.

A review of the National Conservation Easement Database (www.conservationeasement.us) revealed no conservation easements in the Project area.

4906-6-05(B)(10)(g): Other Information

Construction and operation of the proposed Project will be in accordance with the requirements specified in the latest revision of the National Electrical Safety Code as

adopted by the PUCO and will meet all applicable safety standards established by the Occupational Safety and Health Administration.

No other or unusual conditions are expected that will result in significant environmental, social, health or safety impacts.

4906-6-07: Documentation of Construction Notice Transmittal and Availability for Public Review

This Construction Notice is being sent concurrently with docketing to the following officials in West Jefferson, Madison County, Ohio. A copy will also be provided to the Hurt/Battelle Memorial Library of West Jefferson for public review/reference.

Madison County

Mr. Antonios Xenikis
Madison County Commissioners
1 N. Main St.
London, OH 43140

Mr. Mark Forrest
Madison County Commissioners
1 N. Main St.
London, OH 43140

Mr. Chris Wallace
Mr. Bryan Dhume
Madison County Engineer
825 N.E. U.S. HWY 42
London, OH 43140

Madison County Commissioners
1 N. Main St.
London, OH 43140

Ms. Stacey Mckenzie
Madison County Treasurer
1 N. Main St.
P.O. Box 675
London, OH 43140

West Jefferson

Mr. Ray Martin
West Jefferson Mayor
28 W. Main St.
West Jefferson, OH 43162

Mr. Jimmy Little
Village Council
28 E Main St.
West Jefferson, OH 43162

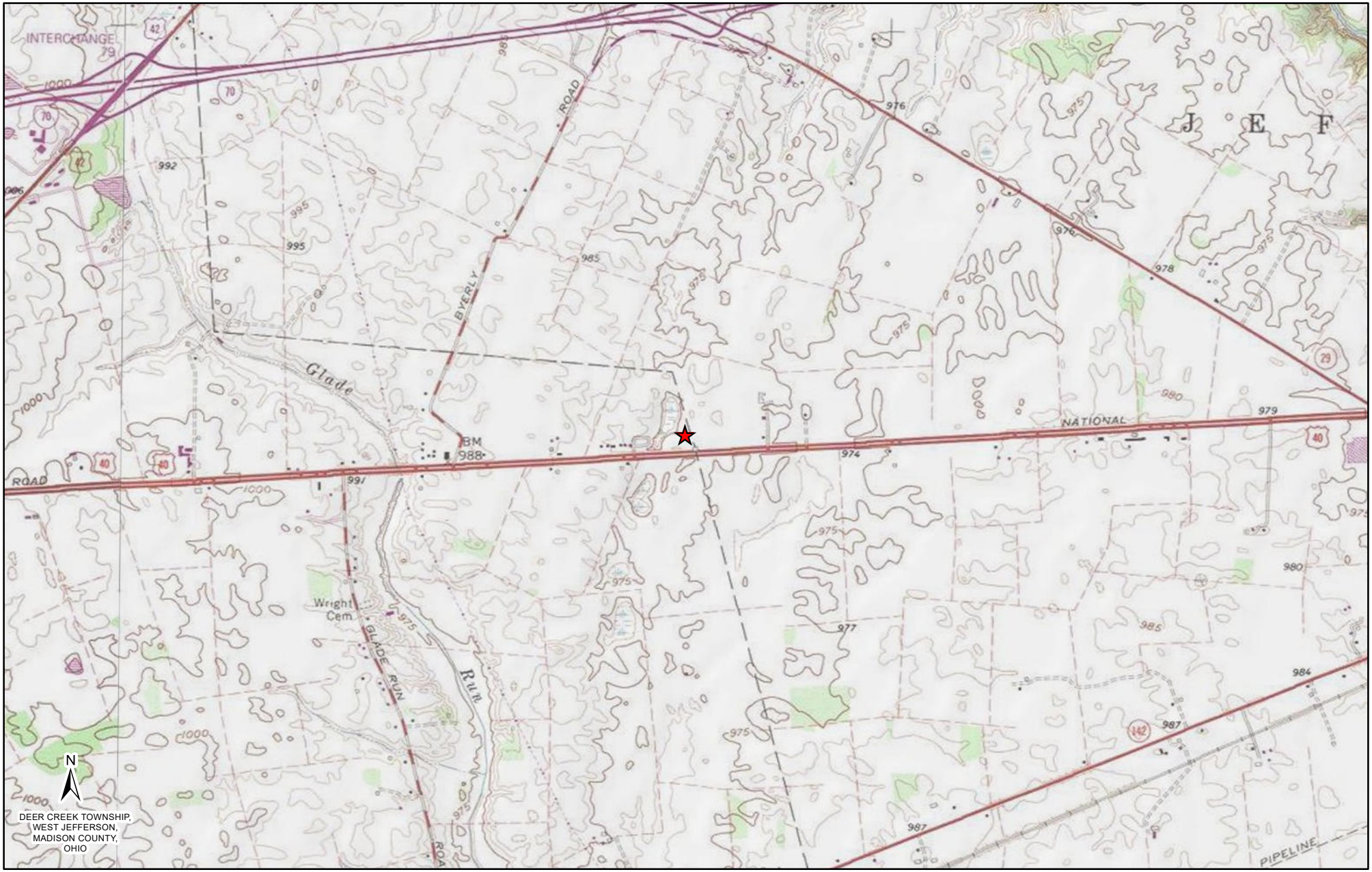
Ms. Erica Bogner
Village Council
28 E. Main St.
West Jefferson, OH 43162

Mr. Jeffery Patterson
Village Council
28 E Main St.
West Jefferson, OH 43162

Library
Ms. Janine Conway, President
Hurt/Battelle Memorial Library of West Jefferson
270 Lilly Chapel Road
West Jefferson OH, 43162

Per OAC Rule 4906-6-07(B), an exemplar copy of notice letters sent to local government officials and to the library have been included with this application as proof of compliance with requirements of OAC Rules 4906-6-07(A)(1) and 4906-6-07(A)(2).

Information is posted at www.firstenergycorp.com/about/transmission_project/ohio.html on how to request an electronic or paper copy of this Construction Notice application. The link to this website is being provided in accordance with OAC Rule 4906-6-07(B), which requires ATSI to provide the Board with proof of compliance for OAC Rule 4906-6-07(A)(3).



LEGEND:

★ Project Location

0 1,000 2,000 4,000

Feet

Reference:
USGS Topographical Overlay;

Coordinate System:
NAD 1983 StatePlane Ohio South FIPS 3402 Feet
Projection: Lambert Conformal Conic; Units: Foot US

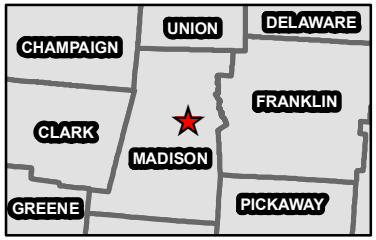


EXHIBIT 1

ATSI®
American Transmission Systems, Inc.
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London-Tangy 138 kV Transmission Line Tap
To National Mod Sub Project

LEGEND:

★ Project Location

— Roads

0 1,000 2,000 4,000

Feet

Reference:
ESRI Aerial Imagery; ODOT

Coordinate System:
NAD 1983 StatePlane Ohio South FIPS 3402 Feet
Projection: Lambert Conformal Conic; Units: Foot US

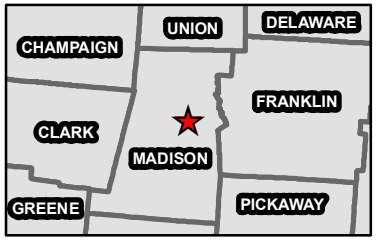

EXHIBIT 2

ATSI®
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London-Tangy 138 kV Transmission Line Tap
To National Mod Sub Project

#13513

TO LONDON SUB

#13514

#13514B
SWITCH A-639

#13514C

#13514A

#13515

#13515A

#13514D

#13515B

LONDON-TANGY 138kV

#13516

TO TANGY SUB

STATE HWY 40 EAST BOUND

STATE HWY 40 WEST BOUND

NATIONAL SUB

#13514E

#13515C

MADISON COUNTY
STATE OF OHIO

LEGEND

- SUBSTATION
- PROPOSED WOOD POLE
- EXISTING STRUCTURE
- PROPOSED STEEL POLE
- LONDON-tANGY 138 kV TRANSMISSION LINE
- FENCE
- PROPOSED TRANSMISSION LINE TAP

PRELIMINARY NOT
FOR CONSTRUCTION

LONDON-TANGY 138 KV TRANSMISSION LINE TAP TO NATIONAL MOD SUB PROJECT

ATSI
American Transmission Systems, Inc.
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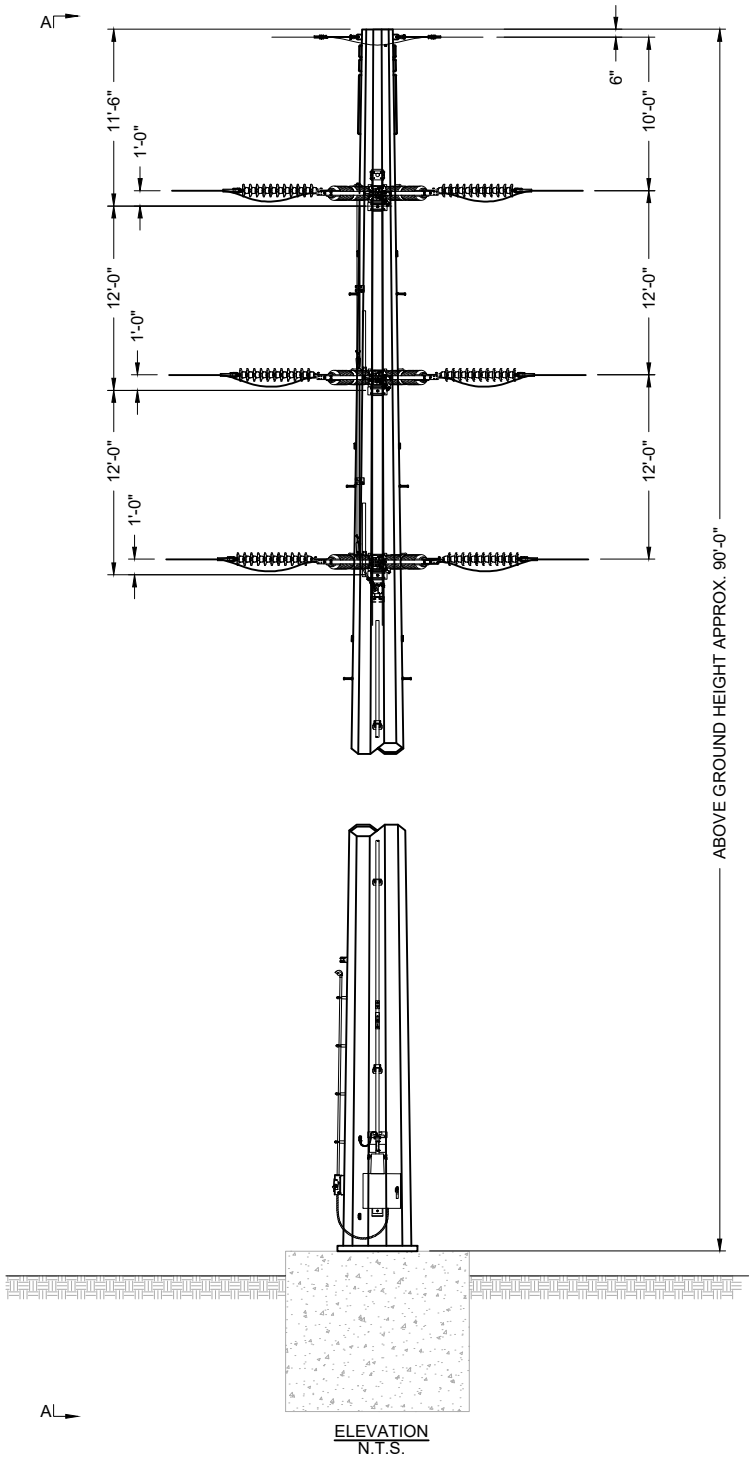
EXHIBIT 3

PAPER SIZE: 17X11



ELEVATION
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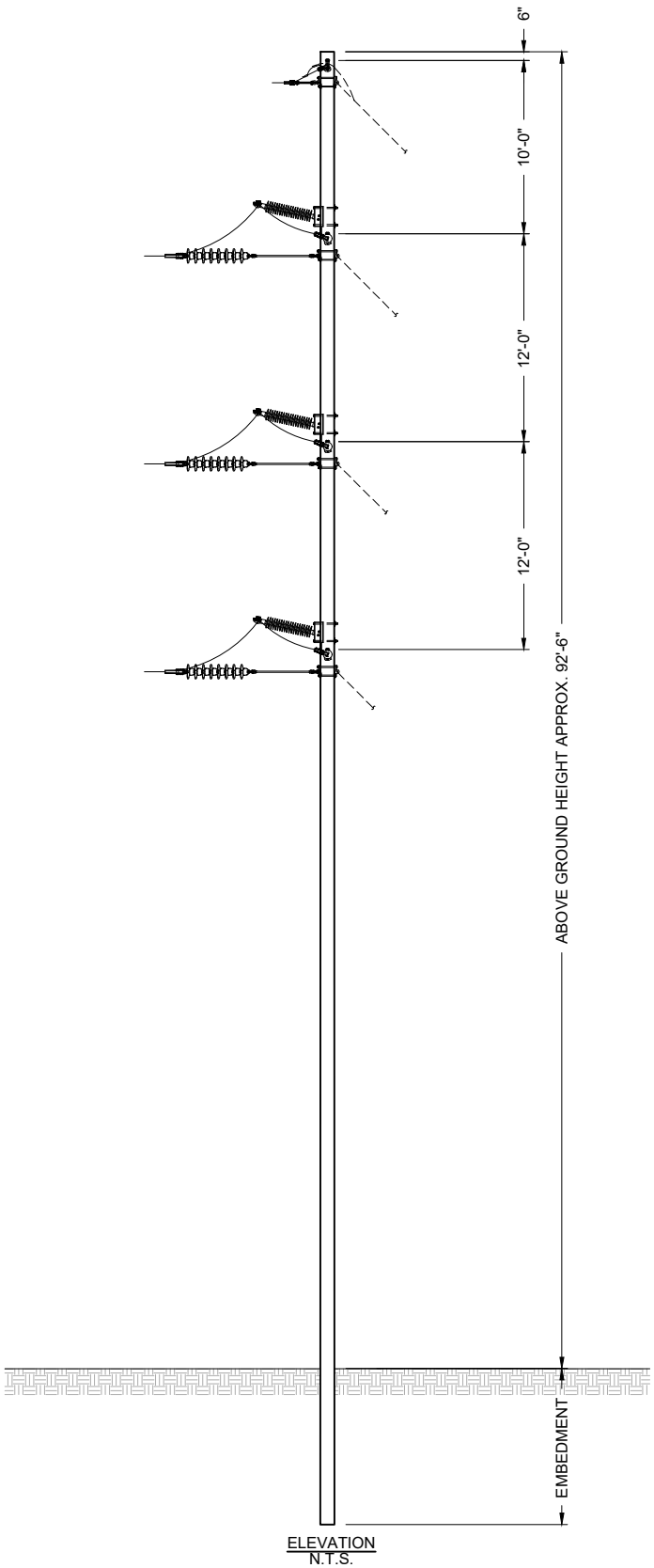
LONDON-TANGY 138 KV TRANSMISSION LINE TAP TO NATIONAL MOD SUB PROJECT

138kV SINGLE CIRCUIT TUBULAR STEEL STRUCTURE
2000A UNITIZED SWITCH SWITCH WITH WHIP INTERRUPTER
STRUCTURE #13514B

Exhibit 4



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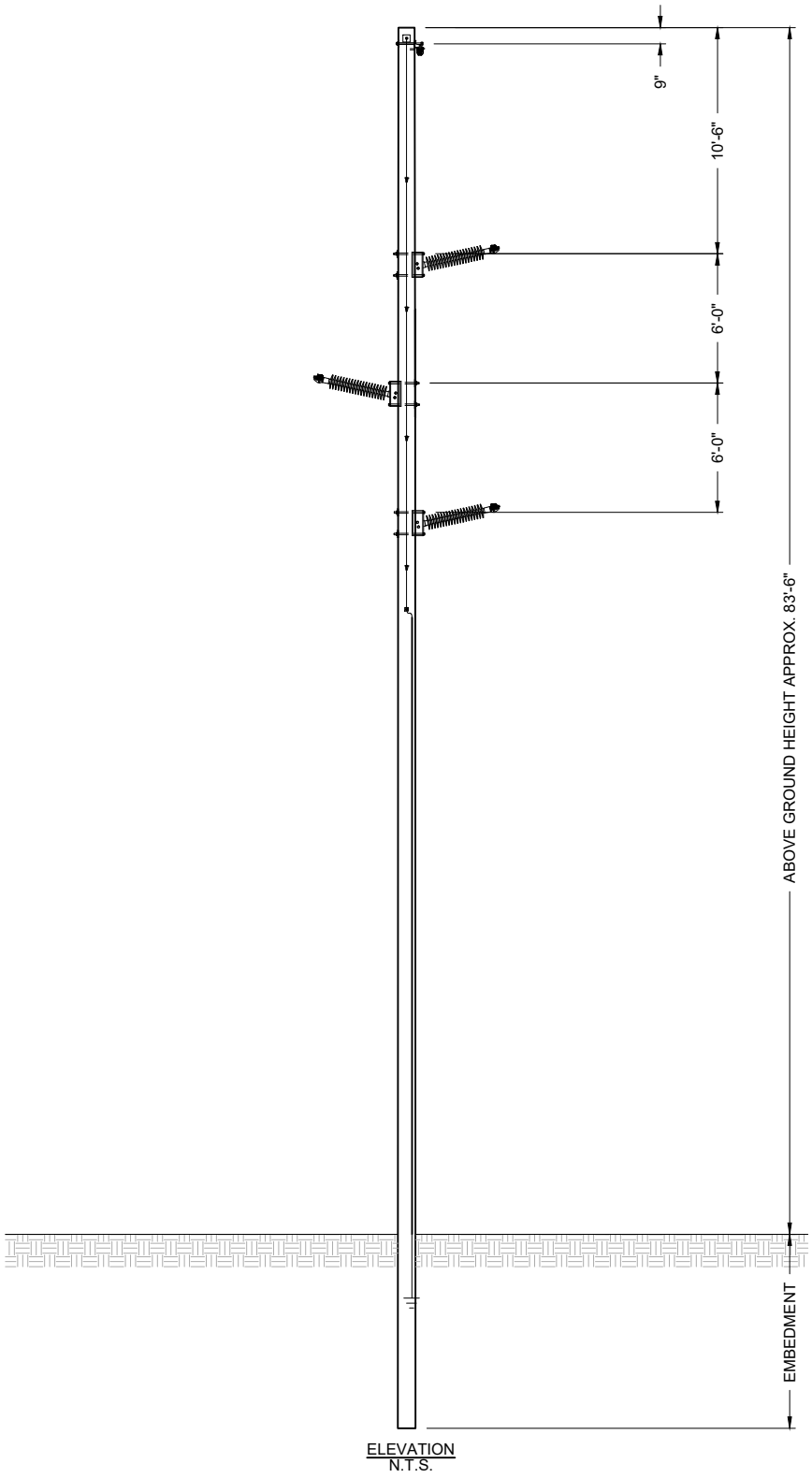
LONDON-TANGY 138 KV TRANSMISSION LINE TAP TO NATIONAL MOD SUB PROJECT

138kV SINGLE CIRCUIT WOOD TAP STRUCTURE
VERTICAL SINGLE POLE
STRUCTURE #13514C

Exhibit 5



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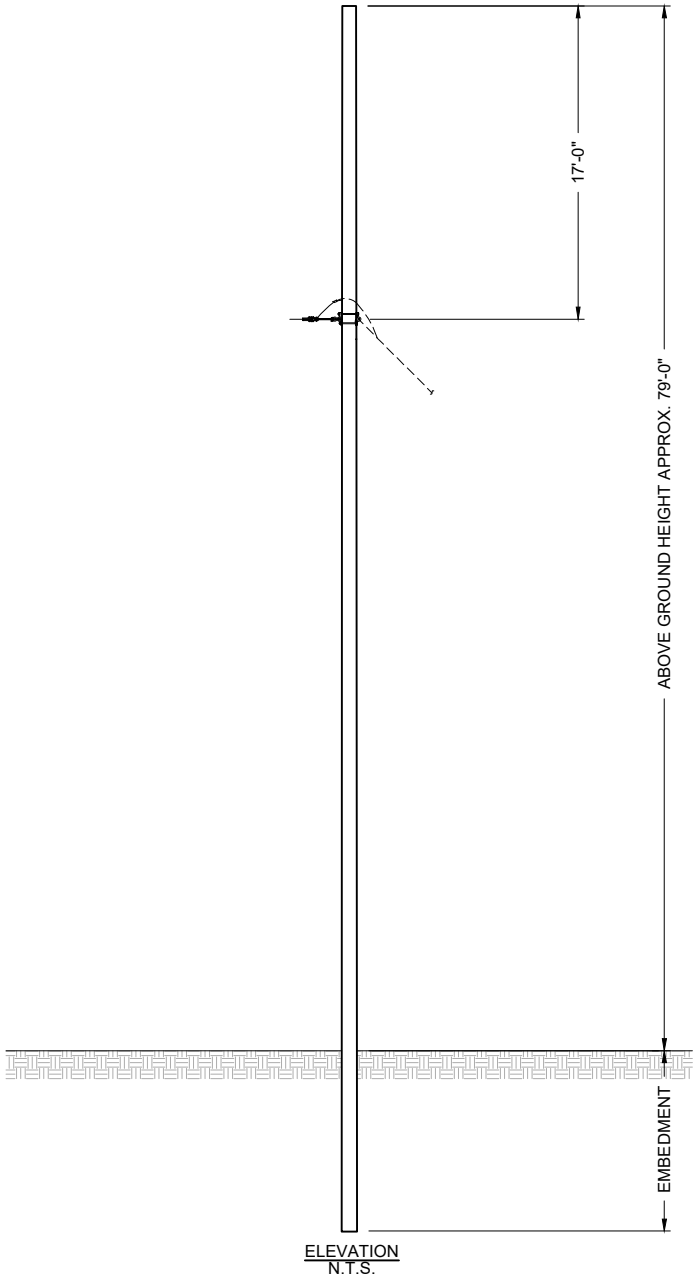
LONDON-TANGY 138 KV TRANSMISSION LINE TAP TO NATIONAL MOD SUB PROJECT

138kV SINGLE CIRCUIT WOOD POLE STRUCTURE
HORIZONTAL POST DELTA SINGLE POLE
STRUCTURE #13514D

Exhibit 6



ELEVATION
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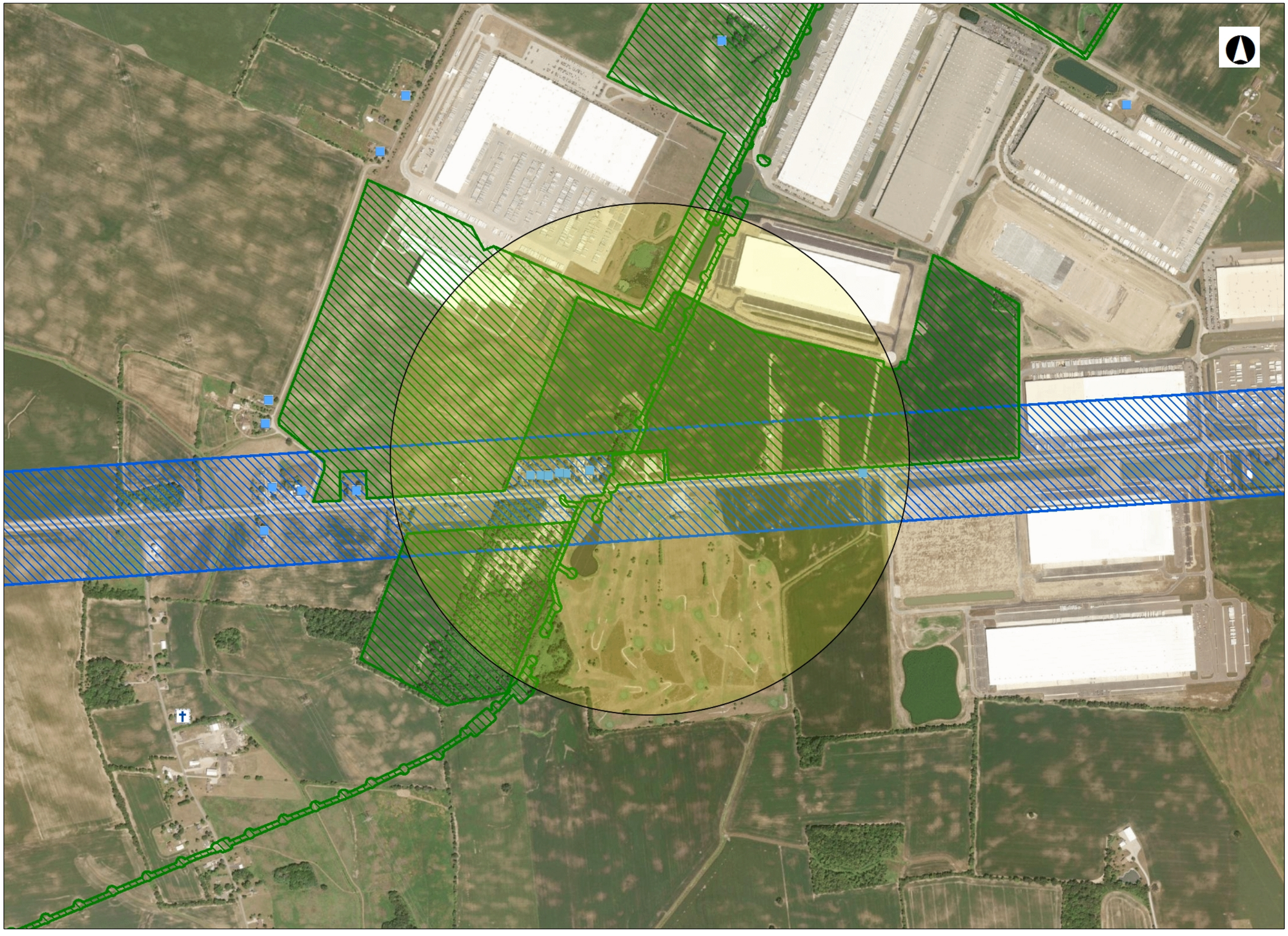
LONDON-TANGY 138 KV TRANSMISSION LINE TAP TO NATIONAL MOD SUB PROJECT

SHIELD WIRE WOOD POLE STRUCTURE
STRUCTURE #13514E

Exhibit 7

Exhibit 8

OHIO HISTORY CONNECTION
State Historic Preservation Office



Legend

- NR Listings
  - Listed
  - National Historic Landmark
  - Delisted
- Determinations of Eligibility
  - DOE
  - Demolished
- Historic Structures
- Historic Bridges
- Historic Tax Credit Projects
- Local Designations
- OGS Cemeteries
  - Confident
  - Not Confident
- Historic Markers
- Dams
- UTM Zone Split
- NR Boundaries
- Local Districts
- Previously Surveyed Areas
  - Phase 1
  - Phase 2
  - Phase 3
- Historic Previously Surveyed
- Highways
- Counties
- NPS Parks
- Wayne National Forest

0 0.19 0.4 Miles

1: 15,000

Copyright/Disclaimer

Datum:	[Datum]
Projection:	WGS_1984_Web_Mercator_Auxiliary_Sphere

Exhibit 9

Ohio Department of Natural Resources

MIKE DEWINE, GOVERNOR MARY MERTZ, DIRECTOR

Office of Real Estate
John Kessler, Chief
2045 Morse Road – Bldg. E-2
Columbus, OH 43229
Phone: (614) 265-6621
Fax: (614) 267-4764

December 16, 2022

Joshua Holmes
AECOM
Foster Plaza 6
681 Anderson Drive, Suite 120
Pittsburgh, Pennsylvania 15220

Re: 22-1187; ATSI National ModSub Tap Project

Project: The proposed project includes the mod substation to be built south of the National Substation and the installation of three new switches be installed within the existing Long-Tangy 69kV and 138kV transmission lines Right of Ways.

Location: The proposed project is located in Deer Creek Township, Madison County, Ohio.

The Ohio Department of Natural Resources (ODNR) has completed a review of the above referenced project. These comments were generated by an inter-disciplinary review within the Department. These comments have been prepared under the authority of the Fish and Wildlife Coordination Act (48 Stat. 401, as amended; 16 U.S.C. 661 et seq.), the National Environmental Policy Act, the Coastal Zone Management Act, Ohio Revised Code and other applicable laws and regulations. These comments are also based on ODNR's experience as the state natural resource management agency and do not supersede or replace the regulatory authority of any local, state or federal agency nor relieve the applicant of the obligation to comply with any local, state or federal laws or regulations.

Natural Heritage Database: A review of the Ohio Natural Heritage Database indicates there are no records of state or federally listed plants or animals within one mile of the specified project area. Records searched date from 1980.

Please note that Ohio has not been completely surveyed and we rely on receiving information from many sources. Therefore, a lack of records for any particular area is not a statement that rare species or unique features are absent from that area.

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

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

The entire state of Ohio is within the range of the Indiana bat (*Myotis sodalis*), a state endangered and federally endangered species, the northern long-eared bat (*Myotis septentrionalis*), a state endangered and federally threatened species, the little brown bat (*Myotis lucifugus*), a state endangered species, and the tricolored bat (*Perimyotis subflavus*), a state endangered species.

During the spring and summer (April 1 through September 30), these species of bats predominately roost in trees behind loose, exfoliating bark, in crevices and cavities, or in the leaves. However, these species are also dependent on the forest structure surrounding roost trees. If trees are present within the project area, and trees must be cut, the DOW recommends cutting only occur from October 1 through March 31, conserving trees with loose, shaggy bark and/or crevices, holes, or cavities, as well as trees with DBH ≥ 20 if possible. If trees are present within the project area, and trees must be cut during the summer months, the DOW recommends a mist net survey or acoustic survey be conducted from June 1 through August 15, prior to any cutting. Mist net and acoustic surveys should be conducted in accordance with the most recent version of the "*OHIO DIVISION OF WILDLIFE GUIDANCE FOR BAT SURVEYS AND TREE CLEARING*". If state listed bats are documented, DOW recommends cutting only occur from October 1 through March 31. However, limited summer tree cutting may be acceptable after consultation with the DOW (contact Eileen Wyza at Eileen.Wyza@dnr.ohio.gov).

The DOW also recommends that a desktop habitat assessment is conducted, followed by a field assessment if needed, to determine if a potential hibernaculum is present within the project area. Direction on how to conduct habitat assessments can be found in the current USFWS "*RANGE-WIDE INDIANA BAT & NORTHERN LONG-EARED BAT SURVEY GUIDELINES*." If a habitat assessment finds that a potential hibernaculum is present within 0.25 miles of the project area, please send this information to Eileen Wyza for project recommendations. If a potential or known hibernaculum is found, the DOW recommends a 0.25-mile tree cutting and subsurface disturbance buffer around the hibernaculum entrance, however, limited summer or winter tree cutting may be acceptable after consultation with the DOW. If no tree cutting or subsurface impacts to a hibernaculum are proposed, this project is not likely to impact these species.

The project is within the range of the following listed mussel species.
Federally Endangered
clubshell (*Pleurobema clava*)
Northern riffleshell (*Epioblasma torulosa rangiana*)
rayed bean (*Villosa fabalis*)
snuffbox (*Epioblasma triquetra*)

Federally Threatened
rabbitsfoot (*Quadrula cylindrica cylindrica*)

State Endangered
elephant-ear (*Elliptio crassidens crassidens*)

State Threatened
Salamander Mussel (*Simpsonaias ambigua*)

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

The project is within the range of the following listed fish species.
State Endangered
spotted darter *(Etheostoma maculatum)*

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

The project is within the range of the northern harrier (*Circus hudsonis*), a state endangered bird. This is a common migrant and winter species. Nesters are much rarer, although they occasionally breed in large marshes and grasslands. Harriers often nest in loose colonies. The female builds a nest out of sticks on the ground, often on top of a mound. Harriers hunt over grasslands. If this type of habitat will be impacted, construction should be avoided in this habitat during the species' nesting period of April 15 through July 31. If this habitat will not be impacted, the project is not likely to impact this species.

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

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

The local floodplain administrator should be contacted concerning the possible need for any floodplain permits or approvals for this project.

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

Mike Pettegrew
Environmental Services Administrator

United States Department of the Interior

Exhibit 10

FISH AND WILDLIFE SERVICE

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

November 17, 2022

Project Code: 2023-0014697

Dear Mr. Miller:

The U.S. Fish and Wildlife Service (Service) has received your recent correspondence requesting information about the subject proposal. We offer the following comments and recommendations to assist you in minimizing and avoiding adverse impacts to threatened and endangered species pursuant to the Endangered Species Act of 1973 (16 U.S.C. 1531 et seq), as amended (ESA).

Federally Threatened and Endangered Species: Due to the project type, size, location, and the proposed implementation of seasonal tree cutting (clearing of trees ≥3 inches diameter at breast height between October 1 and March 31) to avoid impacts to the endangered Indiana bat (*Myotis sodalis*) and threatened northern long-eared bat (*Myotis septentrionalis*), we do not anticipate adverse effects to any other federally endangered, threatened, or proposed species, or proposed or designated critical habitat. Should the project design change, or 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, coordination with the Service should be initiated to assess any potential impacts.

Section 7 Coordination: If there is a federal nexus for the project (e.g., federal funding provided, federal permits required to construct), then 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 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. This letter provides technical assistance only and does not serve as a completed section 7 consultation document.

Stream and Wetland Avoidance: Over 90% of the wetlands in Ohio have been drained, filled, or modified by human activities, thus is it important to conserve the functions and values of the remaining wetlands in Ohio (https://epa.ohio.gov/portals/47/facts/ohio_wetlands.pdf). We recommend avoiding and minimizing project impacts to all wetland habitats (e.g., forests, streams, vernal pools) to the maximum extent possible in order to benefit water quality and fish and wildlife habitat. Additionally, natural buffers around streams and wetlands should be preserved to enhance beneficial functions. If streams or wetlands will be impacted, the U.S. Army 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. Disturbed areas should be mulched and revegetated with native plant species. In addition, prevention of non-native, invasive plant establishment is critical in maintaining high quality habitats.

Thank you for your efforts to conserve listed species and sensitive habitats in Ohio. We recommend coordinating with the Ohio Department of Natural Resources due to the potential for the proposed project to affect state listed species and/or state lands. Contact Mike Pettegrew, Acting Environmental Services Administrator, at (614) 265-6387 or at mike.pettegrew@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,

Patrice Ashfield
Field Office Supervisor

Exhibit 11

NATIONAL MOD SUBSTATION PROJECT

WETLAND DELINEATION AND STREAM ASSESSMENT REPORT

Prepared for:
American Transmission Systems, Incorporated
a FirstEnergy Company
76 South Main Street
Akron, Ohio 44308

707 Grant Street, 5th Floor
Pittsburgh, Pennsylvania 15219, USA

APRIL 2023

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APPENDICES

1.0 INTRODUCTION

American Transmission Systems, Incorporated (ATSI), a FirstEnergy Company (FirstEnergy), is proposing to expand an existing substation as part of the National Mod Substation Project (Project) in (West Jefferson), Madison County, Ohio (**Figure 1**). ATSI is proposing a new 0.1-mile long 138kV transmission line tap from the Existing London-Tangy 138kV Transmission Line to a new 14 MVA Mod Substation located immediately adjacent to the existing National Substation. The proposed 138kV transmission line tap will include one new tap structure and one new switch structure along the existing London-Tangy 138kV Transmission Line as well as one new structure between the tap structure and the new Mod Substation. Furthermore, a new distribution line will exit the new Mod Substation to provide service to the new industrial development located north of the existing National Substation.

AECOM Technical Services, Inc. (AECOM) was retained by ATSI to complete the initial wetland delineation and stream assessment within a 15.54-acre Project survey boundary as further defined in **Section 2.0**, which encompasses the Project extent. The purpose of the field survey was to assess for the presence of wetlands, streams, and other waterbodies that may occur within the Project's survey boundary. Additionally, this report has been prepared to preliminary identify the aquatic features that would likely be considered as either jurisdictional and/or non-jurisdictional "Waters of the United States". However, determination of jurisdictional status of any aquatic features are solely the opinion of AECOM and only the United States Army Corps of Engineers (USACE) are authorized to determine any jurisdiction over WOTUS.

2.0 METHODOLOGY

The wetland delineation and stream assessment were completed within a 15.54-acre Project survey boundary, which was comprised of the existing National Substation and surrounding developed areas associated with the existing substation, which includes the existing transmission line Right of Way, and locations of the switch replacement and install, as well as the proposed transmission line Right of Way.

On November 3rd, 2022 and February 3rd, 2023, AECOM ecologists walked the Project survey boundary, access roads, and work areas to conduct the wetland delineation and stream assessment. During the field survey, the physical boundaries of observed water features, if identified, were recorded using sub-meter capable Trimble Global Positioning System (GPS) units or equivalent sub-meter capable GPS unit. The GPS data was imported into ArcMap Geographic Information System (GIS) software, where the data was then reviewed, edited for accuracy, and compiled in a format suitable for inclusion on figures within this report.

2.1 BACKROUND AND EXISTING DATA REVIEW

Prior to conducting field surveys, digital and available published information were reviewed to identify the potential occurrence and location of wetlands and other WOTUS, general land use, stream

classifications, and watershed characteristics within the Project's survey boundary. The digital and available published information includes:

- Natural Resources Conservation Service (NRCS) soil surveys (USDA NRCS, 2017),
- Aerial Imagery (Historical and Current)
- U.S. Fish and Wildlife Service (USFWS) National Wetland Inventory (NWI) maps (USFWS, 2018),
- U.S. Geological Survey (USGS) 7.5-minute topographic maps (NGS, 2013),
- Section 401 Water Quality Certification (WQC) for Nationwide Permit and Stream Eligibility Web Map (OEPA, 2023a),
- Aquatic Life Habitat Use Designation under Ohio Administrative Code (OAC) Chapter 3745-1 (OEPA, 2023b and State of Ohio, 2018),
- USACE Antecedent Precipitation Tool V1.020 (USACE, 2022), and
- WETS Climatic Data (USDA, 2017)

2.2 WETLAND DELINEATION

AECOM completed the wetland delineation in accordance with 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)*. Wetlands were identified due to the presence of three environmental criteria: wetland hydrology, hydrophytic vegetation, and hydric soils. If a wetland was identified, AECOM completed a USACE Wetland Determination Data form (USACE Data form) within each unique wetland habitat to serve as a representative of the wetland hydrology, vegetative community, and soil characteristics. The unique wetland habitats were classified as palustrine emergent (PEM), palustrine forested (PFO), palustrine unconsolidated bottom (PUB), palustrine scrub-shrub (PSS), or other classifications as defined by adhering to the methodology within the Wetlands and Deepwater Habitats of the United States (Cowardin et al. 1979). Adjacent to each wetland complex, AECOM completed an additional USACE Data form as a representative of the upland community. At each wetland data point, AECOM collected photographs in each cardinal direction and of the soil profile. Additionally, USACE Data forms and representative photographs were also taken to represent upland communities where either areas indicated the potential presence of an aquatic feature based on aerial imagery, two or less wetland criteria were observed, and/or an absence of an aquatic features was observed for areas mapped by United States Fish and Wildlife Service (USFWS) National Wetland Inventory (NWI) and/or National Hydrology Dataset (NHD).

In accordance with Ohio Environmental Protection Agency (OEPA), all wetlands were also classified during the wetland delineation utilizing the *Ohio Rapid Assessment Method for Wetlands v. 5.0* (ORAM) and associated 10-page ORAM forms were completed for each wetland community. 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). The ORAM scoring boundaries of the assessed wetlands were identified during the site assessment and separate wetlands scored together in accordance with the ORAM manual. The limits of these ORAM scoring boundaries within this report on the 10-page ORAM forms.

Additionally, AECOM completed the initial coordination with the USFWS and Ohio Division of Natural Resources (ODNR) to identify the potential of any state and/or federal listed endangered and/or threatened species "known" to occur within the wetland habitats. Upon receipt of these agencies' technical assistance, AECOM reviewed the agencies responses with the delineated resources and updated the ORAM forms regarding the agencies' responses. The formal coordination letters from the USFWS and ODNR are provided under separate cover and can be provided upon request.

2.3 STREAM CROSSINGS

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). Upon identification of a stream, they were assessed using the methods described in the OEPA's Methods for Assessing Habitat in Flowing Waters: Using OEPA's *Qualitative Habitat Evaluation Index(QHEI)* (Rankin, 2006) and *Field Evaluation Manual for Ohio's Primary Headwater Habitat Streams, Version 4.1* (Ohio EPA, 2020a). Streams associated with watershed area less than or equal to 1.0 mi^2 (259ha), *and* a maximum depth of water pools equal to or less than 15.75 inches were evaluated utilizing the HHEI methodology and all other streams assessed as QHEI.

2.4 UPLAND DRAINAGE FEATURES

An upland drainage feature (UDF) is a non-jurisdictional drainage that does not meet the criteria of either a jurisdictional stream and/or wetland community. A UDF generally lacks an OHWM (USACE, 2005) and are equivalent to a swale or an erosional feature as described by the USACE as a generally shallow feature in a landscape that may convey water across upland areas during and/or following storm events. A roadside ditch may also be documented as a UDF if it meets the "not potentially jurisdictional" characterization as described in the Office of Environmental Services Roadway Ditch Characterization Flowchart (ODOT, 2014). Areas identified during the wetland delineation and stream assessments as UDFs were photographed and documented utilizing GPS unit and provided within this report, if observed.

3.0 RESULTS

3.1 BACKGROUND AND EXISTING DATA REVIEW

3.1.1 Description of Project Area's Land Use, Watershed, and Existing Use Classifications

Land uses of the Project area were assigned a general classification based upon the principal land characteristics as observed through aerial photography review and observations during the field surveys. General land use types in the vicinity of the proposed Project include old field, urban, wetland (PFO and PSS) and agricultural land. Urban land (commercial development) and agricultural land are the dominant land uses in the vicinity of the Project.

The Project area drains into an unnamed tributary to Little Darby Creek, which flows to Big Darby Creek, and eventually into the Scioto River. Little Darby Creek and its unnamed tributaries are located within the Scioto River drainage basin. The watershed identified in the Project area include Thomas Ditch-Little Darby Creek Watershed [Hydrologic Unit Code (HUC): 050600012006]. As per the Section 401 Water Quality Certification (WQC) for Nationwide Permit and Stream Eligibility Web Map website (Ohio Environmental Protection Agency (OEPA)), the Project is located within an Ineligible area, an individual 401 water quality certification is required. Little Darby Creek has an Ohio Administrative Code (OAC) Chapter 3745-1 aquatic life habitat use designation of Exceptional Warmwater Habitat (EWH) (State of Ohio, 2018).

3.1.2 USFWS National Wetland Inventory and National Hydrology Dataset Review

According to the NWI mapped wetlands and NHD located within the West Jefferson quadrangle, one mapped wetland and no mapped streams crossings were identified within the Project survey boundary. During the field review of these resources, AECOM identified the following conditions of the existing mapped resources.

- One (1) palustrine, scrub-shrub, broad-leaved deciduous, seasonally flooded (PSS1C) waterbody was field verified as W-MRK-001.

The location of NWI and NHD mapped resources overlayed with the delineated wetlands, streams, and other waterbodies identified during the site visit are provided on **Figure 2**.

3.1.3 Growing Season and USACE Antecedent Precipitation Tool

The Regional Supplement states 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 Madison County (USDA NRCS, 2017) growing season lasts from April 16 to October 24, or about 191 days. In

the Project area, five percent of the growing season equates to approximately 10 days (USDA NRCS, 2017).

In accordance with the Executive Order 13788 on January 23, 2020 and the adjustment of the Navigable Waters Protection Rule by the U.S. Environmental Protection Agency (EPA) and Department of Army (Army), AECOM evaluated the "Typical Year" or normal periodic range of precipitation occurring during the site assessment utilizing the USACE Antecedent Precipitation Tool on November 3rd, 2022 and February 3, 2023 for the area located within the Project area. The results of the tool indicated that the field assessment on November 3, 2022 was completed during drier than normal conditions and the field assessment on February 3, 2023 was completed during normal conditions typically present during the time of year of the survey. Results of the Antecedent Precipitation Tool are provided within Appendix D.

3.1.4 Preliminary Soils Evaluation

According to the United States Department of Agricultural (USDA) Natural Resource Conservation (NRCS) Web Soil Surveys, a total of five (5) soil map units are identified within the Project area. Of these five soil map units, a total of two soil map units are identified as hydric soils. Additionally, three soil map units are not generally considered hydric, but has hydric inclusions based on specific landforms identified within depressions, water-lain moraines, and swales that contribute to the collection of hydrology. During the field assessment of the Project survey boundary, AECOM evaluated the locations of hydric soils and hydric inclusions to document the potential of wetlands, waterbodies, and streams. The results of the delineation of these resources are presented in **Section 3.2**. Additionally, a table that provides a detailed overview of all soil series and soil map units is provide in **Table 1** and boundaries of map units are displayed on **Figure 2**.

TABLE 1
SOIL MAP UNITS AND DESCRIPTIONS WITHIN PROJECT SURVEY BOUNDARY

Soil Series[1]	Symbol[1]	Map Unit Description[1]	Topographic Setting	Hydric[2]	Hydric Component (%)
Carlisle	Ca	Carlisle muck	Depressions	Yes	Carlisle (100%)
Crosby	CrA	Crosby silt loam, Southern Ohio Till Plain, 0 to 2 percent slopes	Depressions	Yes*	Kokomo, drained (5%)
	CsA	Crosby-Lewisburg silt loam, 0 to 2 percent slopes	Depressions	Yes*	Kokomo, drained (5%)
	CsB	Crosby-Lewisburg silt loams, 2 to 6 percent slopes	Depressions	Yes*	Kokomo, drained (7%)
Kokomo	Ko	Kokomo silty clay loam, 0 to 2 percent slopes	Depressions	Yes	Kokomo (90%)

NOTES:
[1] :Data sources include: USDA, NRCS Web Soil Survey. Available at: https://websoilsurvey.sc.egov.usda.gov/App/HomePage.htm. Accessed February, 2023.
[2] : Soils that are identified as hydric with an asterisk represent soils with hydric inclusions within the identified topographic settings.

3.2 WETLAND DELINEATION AND STREAM ASSESSMENT

3.2.1 Delineated Wetlands

During the delineation, AECOM identified a total of one, Category 1 wetland complex comprised of PFO and PSS wetland habitat types. The total extent of the wetland was considered during the analysis of the ORAM classification and included within the scoring boundaries as displayed on the ORAM forms in **Appendix B**.

Construction activities by others is occurring within the vicinity of the Project and a previous wetland/stream delineation was completed by Earth Sources Inc (Earth Sources) for the Ambrose Property Group, LLC (Ambrose) on June 8th, 2021. During AECOM delineation of the Project area, AECOM has confirmed that the boundary of the Earth Sources delineation (Section 1 Wetland; **Figure 3**) aligns/confirms with the boundary delineated by AECOM (Wetland W-MRK-001). Upon AECOM further review of online available data, AECOM confirmed that Section 1/W-MRK-001 wetland was reviewed and confirmed to be isolated by USACE under file number LRH-2021-542-SCR and Ambrose is permitted to remove the entire portion of the wetland located within their property as authorized under a Level Two Isolated Wetland Permit (Ohio EPA ID No: 227913W) (**Appendix E**).

The USFWS and ODNR provided their responses regarding "know" occurrences of state and/or federal listed endangered and/or threatened species. Based on the review of the Natural Heritage Database (NHD) and USFWS response, there are no records of known listed species occurring with the Project area or within the delineated resources. No Category 3 wetlands were identified within the Project survey boundary.

Table 2 provides a summary of the delineated wetlands within the Project survey boundary. The locations and approximate extent of the wetlands identified within the Project survey boundary are shown on **Figure 3**. Completed USACE wetland determination and ORAM forms are provided in **Appendices A and B**, respectively. Color photographs taken of each wetland habitat have been provided in **Appendix C.**

Table 2 Delineated Wetlands within Project Survey Boundary and Right-of-Way

Wetland Name	Latitude	Longitude	Provisional Jurisdictional Status	NWI Classification	ORAM Score	ORAM Category[1]	Cowardin Classification[2]	Acreage Surveyed
W-MRK-001	39.941690	-83.345140	No	PSS1C	24	Category 1	PFO	2.61
	39.941470	-83.345616					PSS	0.63

Notes:
1): The Ohio Rapid Assessment Method for Wetlands v. 5.0, User's Manual and Scoring Forms
2): PEM = palustrine emergent; PSS = Palustrine scrub/shrub, and PFO=palustrine forested

Wetland Categories[1,2]	Category 1	Category 2	Category 3	Acreage Surveyed
PEM	-	-	-	-
PSS	-	-	-	-
PFO	-	-	-	-
PUB	-	-	-	-
PFO/PSS	1	-	-	3.24
Total	**1**	**-**	**-**	**3.24**

3.3 STREAM CROSSINGS

No stream crossings were delineated within the Project survey boundary.

3.4 UPLAND DRAINAGE FEATURE

Two upland drainage features (UDF-HLA-001 and UDF-HLA-002) were identified within the Project survey area for a total of 893 linear feet. Based on the site assessment of these drainage features, none displayed an OWHM and/or substrate. Therefore, these features do not meet the definition of stream but may contribute to drainage and/or runoff of the Project area. The location of these areas is displayed on **Figure 3** and photographs provided within **Appendix C**.

3.5 PONDS

Approximately 0.048-acre of one pond (P-HLA-001) was delineated within the Project survey boundary. This feature is a manmade sediment/stormwater pond. The location of this feature is displayed on **Figure 3** and photographs provided within **Appendix C**.

4.0 SUMMARY

The wetland delineation and stream assessment were completed on November 3rd, 2022 and February 3rd, 2023 within the 15.54-acre survey area associated with the Project. During the survey, one PSS/PFO wetland complex, identified as ORAM Category 1 wetland, and one manmade sediment/stormwater pond was identified within the Project survey boundary.

On June 22, 2020, the Navigable Waters Protection Rule under the Clean Water Act (CWA) was modified and in most cases, excluded ephemeral stream as being jurisdictional waters of the United States. Therefore, the jurisdictional status of ephemeral streams shall be left to the federal review, if required, and AECOM has preliminarily determined that all assessed streams and wetlands within the Project survey boundary appear to be jurisdictional (i.e., waters of the U.S.). The locations of the streams and wetlands identified within the survey boundary are shown on **Figure 3**.

The information contained in this wetland delineation report is for a study boundary 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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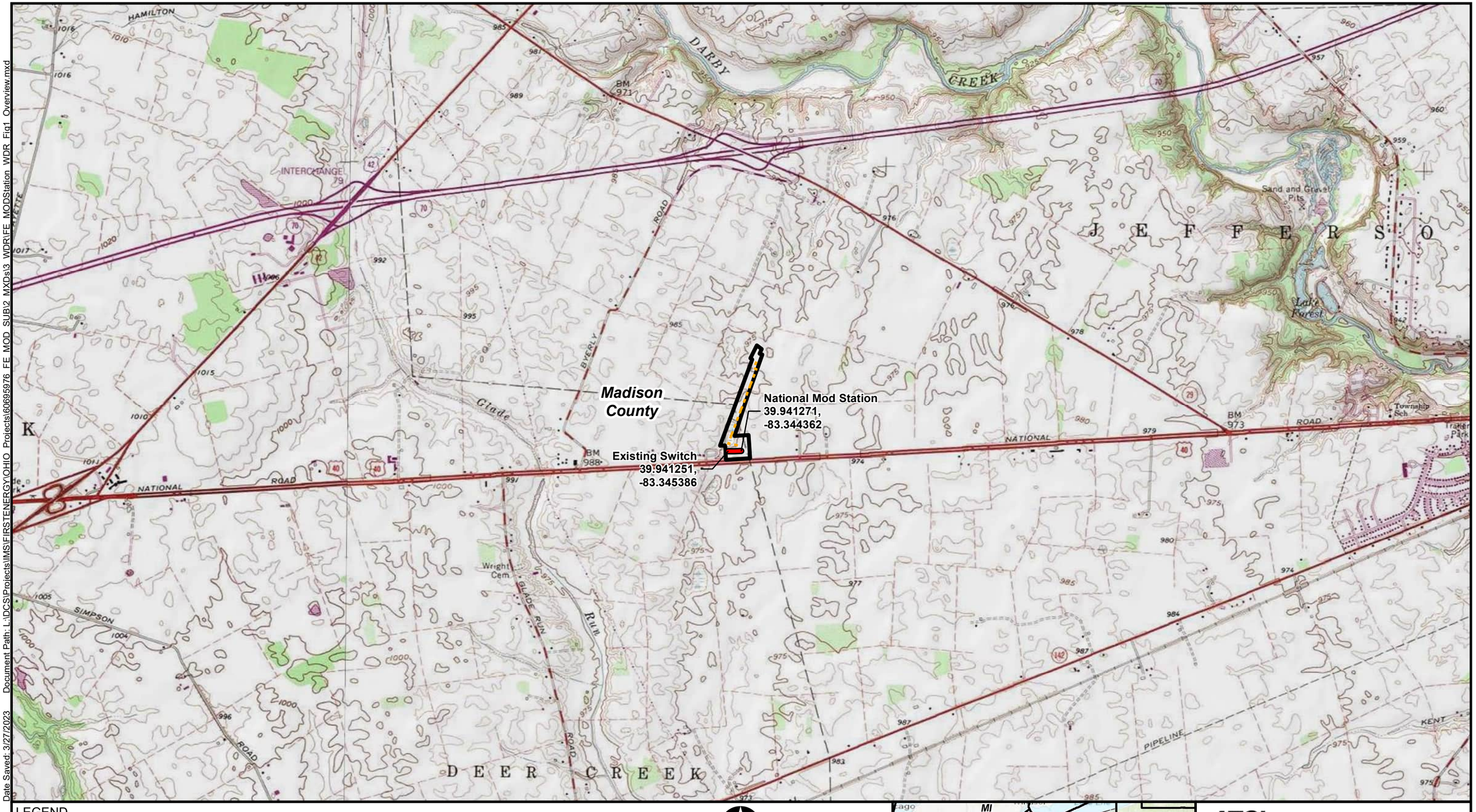
FIGURES

Date Saved: 3/27/2023 Document Path: L:\DCS\Projects\IMS\FIRSTENERGY\OHIO_Projects\60695976_FE_MOD_SUB\2_MXDs\3_WDR\FE_MODStation_WDR_Fig1_Overview.mxd



LEGEND

- Proposed National Mod Tap Line
- Proposed Distribution Line
- AECOM Survey Area

0 0.5 1
Miles

BASE MAP SOURCE:
ArcGIS Online, USA Topo Maps

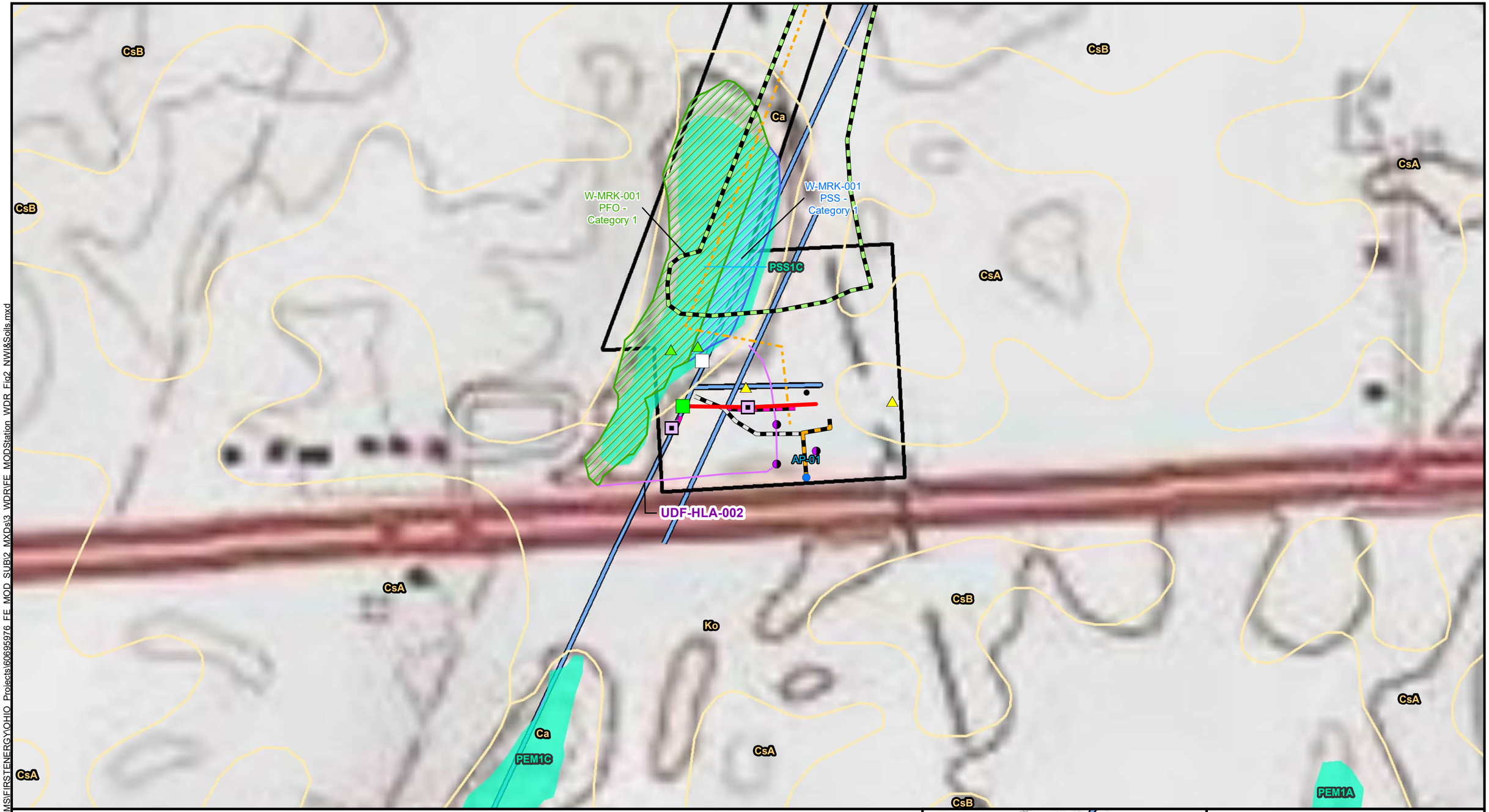
ATSI

National Mod Substation Project

FIGURE 1
OVERVIEW MAP

JOB NO. 60663816

AECOM

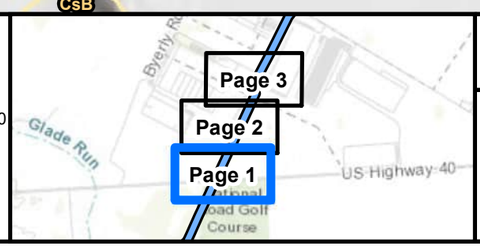


LEGEND

- Existing Switch
- Existing Switch (to be Replaced)
- New Switch
- Proposed National Mod Tap Line
- Access Entrance
- Existing Gravel Access Road
- Existing Gravel/Paved Access Road
- Future Paved Private Road by Others
- Proposed Temporary Access
- Existing Transmission Line
- Proposed Distribution Line
- Culvert
- Upland Point
- Wetland Point
- Upland Drainage Feature
- Delineated PFO Wetland
- Delineated PSS Wetland
- NHD Stream
- Soil Map Unit
- National Wetland Inventory (NWI)
- AECOM Survey Area

0 200 400
Feet

BASE MAP SOURCE:
ArcGIS Online, ESRI World Imagery (Clarity)



ATSI

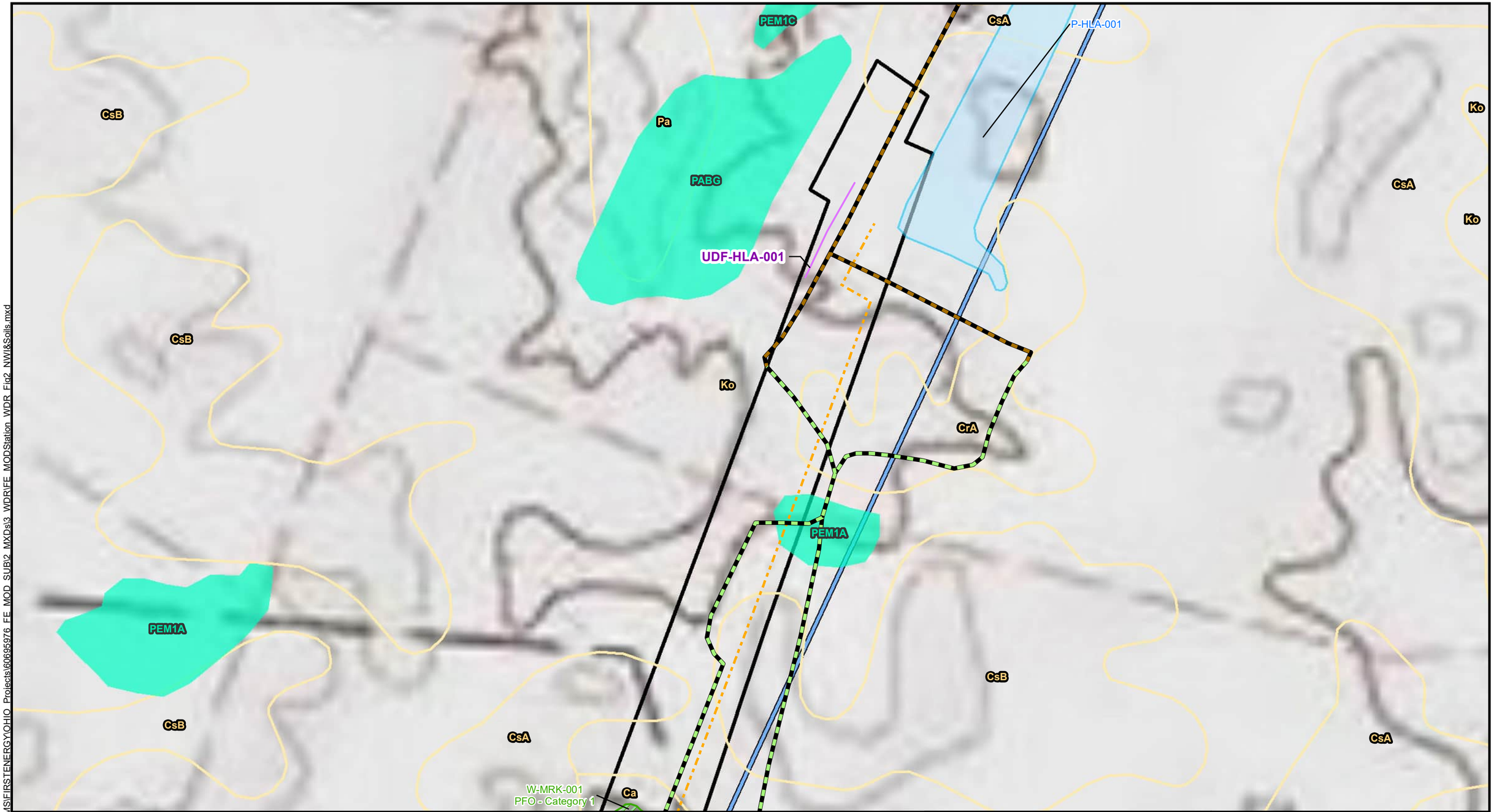
National Mod Substation Project

FIGURE 2-1
SOIL MAP UNIT AND NATIONAL WETLAND INVENTORY MAP

JOB NO. 60663812

AECOM

Date Saved: 3/27/2023
Document Path: L:\DCS\Projects\IMS\FIRSTENERGY\OHIO_Projects\60695976_FE_MOD_SUB\2_MXDs\3_WDRIFE_MODStation_WDR_Fig2_NWI&Soils.mxd

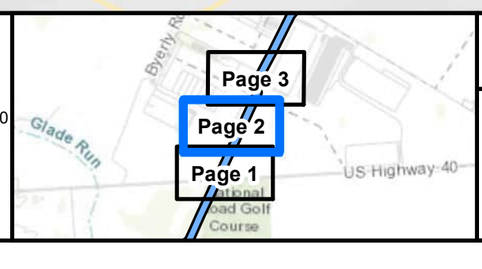


LEGEND

- Existing Switch
- Existing Switch (to be Replaced)
- New Switch
- Proposed National Mod Tap Line
- Access Entrance
- Existing Paved Access Road
- Future Paved Private Road by Others
- Existing Transmission Line
- Proposed Distribution Line
- Culvert
- Upland Point
- Wetland Point
- Upland Drainage Feature
- Delineated PFO Wetland
- Delineated PSS Wetland
- NHD Stream
- Soil Map Unit
- National Wetland Inventory (NWI)
- AECOM Survey Area

0 200 400
Feet

BASE MAP SOURCE:
ArcGIS Online, ESRI World Imagery (Clarity)



ATSI

National Mod Substation Project

FIGURE 2-2
SOIL MAP UNIT AND NATIONAL WETLAND INVENTORY MAP

JOB NO. 60663812

AECOM

Date Saved: 3/27/2023
Document Path: L:\DCS\Projects\IMS\FIRSTENERGY\OHIO_Projects\60695976_FE_MOD_SUB\2_MXDs\3_WDR\FE_MODStation_WDR_Fig2_NWI&Soils.mxd

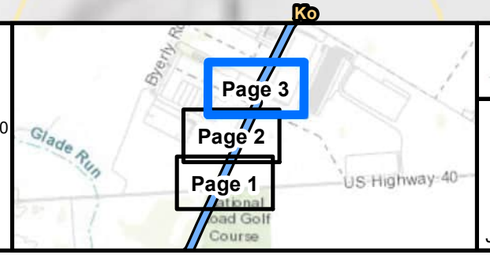
CsB
CsB
Ko
CsB
AP-05
CsA
Ko
CsA
CsB
Ko
P-HLA-001
PEM1C
Ko
Pa
CsA
PABG
Ko

LEGEND

- Existing Switch
- Existing Switch (to be Replaced)
- New Switch
- Proposed National Mod Tap Line
- Access Entrance
- Existing Paved Access Road
- Existing Transmission Line
- Proposed Distribution Line
- Culvert
- Upland Point
- Wetland Point
- Upland Drainage Feature
- Delineated PFO Wetland
- Delineated PSS Wetland
- NHD Stream
- Soil Map Unit
- National Wetland Inventory (NWI)
- AECOM Survey Area

0 200 400
Feet

BASE MAP SOURCE:
ArcGIS Online, ESRI World Imagery (Clarity)



ATSI

National Mod Substation Project

FIGURE 2-3
SOIL MAP UNIT AND NATIONAL WETLAND INVENTORY MAP

JOB NO. 60663812

AECOM

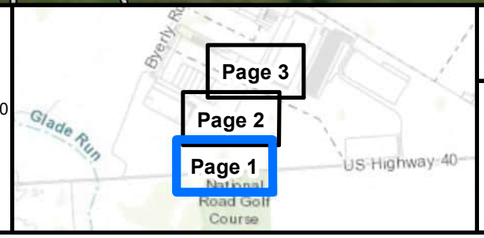
Date Saved: 3/27/2023
Document Path: L:\DCS\Projects\MS\FIRSTENERGY\OHIO_Projects\60695976_FE_MOD_SUB\2_MXDs\3_WDR\FE_MODStation_WDR_Fig2_NWI&Soils.mxd

LEGEND

- Existing Switch
- Existing Switch (to be Replaced)
- New Switch
- Access Entrance
- Proposed National Mod Tap Line
- Proposed Distribution Line
- Culvert
- Upland Point
- Wetland Point
- Existing Gravel Access Road
- Existing Gravel/Paved Access Road
- Future Paved Private Road by Others
- Proposed Temporary Access Road
- Existing Transmission Line
- Upland Drainage Feature
- AECOM Delineated PFO Wetland
- AECOM Delineated PSS Wetland
- Section 1 Wetland
- Delineated Pond
- AECOM Survey Area
- Parcel Boundary

0 200 400
Feet

BASE MAP SOURCE:
ArcGIS Online, ESRI World Imagery (Clarity)



ATSI

National Mod Substation Project

FIGURE 3-1
WETLAND DELINEATION AND STREAM ASSESSMENT MAP

JOB NO. 60695976

AECOM

Date Saved: 3/27/2023
Document Path: L:\DCS\Projects\MSIE\RSTENERGY\OHIO_Projects\60695976_FE_MOD_SUB\2_MXDs\3_WDR\FE_MODStation_WDR_Fig3_DelineatedFeatures.mxd

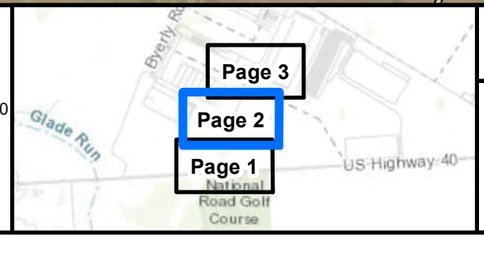
LEGEND

- Existing Switch
- Existing Switch (to be Replaced)
- New Switch
- Access Entrance
- Proposed National Mod Tap Line
- Proposed Distribution Line
- Culvert
- Upland Point
- Wetland Point
- Existing Paved Access Road
- Future Paved Private Road by Others
- Existing Transmission Line
- Upland Drainage Feature
- AECOM Delineated PFO Wetland
- AECOM Delineated PSS Wetland
- Section 1 Wetland
- Delineated Pond
- AECOM Survey Area
- Parcel Boundary

0 200 400

Feet

BASE MAP SOURCE:
ArcGIS Online, ESRI World Imagery (Clarity)



ATSI

National Mod Substation Project

FIGURE 3-2
WETLAND DELINEATION AND STREAM ASSESSMENT MAP

JOB NO. 60695976

AECOM

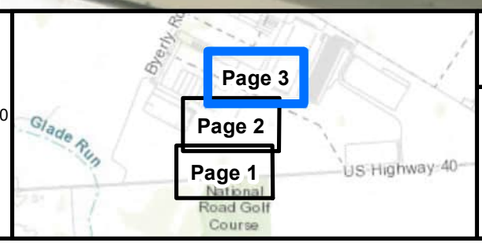
Date Saved: 3/27/2023
Document Path: L:\DCS\Projects\MS\FIRSTENERGY\OHIO_Projects\60695976_FE_MOD_SUB\2_MXDs\3_WDR\FE_MODStation_WDR_Fig3_DelineatedFeatures.mxd

LEGEND

- Existing Switch
- Existing Switch (to be Replaced)
- New Switch
- Access Entrance
- Proposed National Mod Tap Line
- Proposed Distribution Line
- Culvert
- Upland Point
- Wetland Point
- Existing Paved Access Road
- Existing Transmission Line
- Upland Drainage Feature
- AECOM Delineated PFO Wetland
- AECOM Delineated PSS Wetland
- Section 1 Wetland
- Delineated Pond
- AECOM Survey Area
- Parcel Boundary

0 200 400
Feet

BASE MAP SOURCE:
ArcGIS Online, ESRI World Imagery (Clarity)



ATSI

National Mod Substation Project

FIGURE 3-3
WETLAND DELINEATION AND STREAM ASSESSMENT MAP

JOB NO. 60695976

AECOM

Date Saved: 3/27/2023
Document Path: L:\DCS\Projects\IMS\FIRSTENERGY\OHIO_Projects\60695976_FE_MOD_SUB\2_MXDs\3_WDR\FE_MODStation_WDR_Fig3_DelineatedFeatures.mxd

APPENDIX A

U.S. ARMY CORPS OF ENGINEERS WETLAND AND UPLAND FORMS

WETLAND DETERMINATION DATA FORM - Midwest Region

Project/Site: National Mod Sub | City/County: Madison | Sampling Date: 03-Nov-22

Applicant/Owner: FirstEnergy | State: OH | Sampling Point: W-MRK-001 PFO

Investigator(s): MRK, AJH | Section, Township, Range: S ____ T ____ R ____

Landform (hillslope, terrace, etc.): Flat | Local relief (concave, convex, none): concave

Slope: 1.0% / 0.6 ° | Lat.: 39.941596 | Long.: -83.345487 | Datum: NAD83

Soil Map Unit Name: Ca: Carlisle muck | NWI classification: PSS1C

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:
This PFO section of a PSS/PFO wetland complex is located in a depression within a forested area. Water drains off the surrounding agricultural fields and flows into a forested section of wetland which continues outside of the current study area.

VEGETATION - Use scientific names of plants.

Tree Stratum (Plot size: 30' radius)	Absolute % Cover	Dominant Species?	Rel.Strat. Cover	Indicator Status
1. Acer saccharinum	60	☑	85.7%	FACW
2. Populus deltoides	10	☐	14.3%	FAC
3.	0	☐	0.0%	
4.	0	☐	0.0%	
5.	0	☐	0.0%	0
	70	= Total Cover		

Sapling/Shrub Stratum (Plot size: 15' radius)				
1. Acer saccharinum	10	☑	40.0%	FACW
2. Ulmus rubra	10	☑	40.0%	FAC
3. Salix nigra	5	☑	20.0%	OBL
4.	0	☐	0.0%	
5.	0	☐	0.0%	
	25	= Total Cover		

Herb Stratum (Plot size: 5' radius)				
1. Euthamia graminifolia	5	☑	100.0%	FACW
2.	0	☐	0.0%	
3.	0	☐	0.0%	
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%	
	5	= Total Cover		

Woody Vine Stratum (Plot size: 30' radius)				
1.	0	☐	0.0%	
2.	0	☐	0.0%	
	0	= Total Cover		

Dominance Test worksheet:

Number of Dominant Species That are OBL, FACW, or FAC: 5 (A)

Total Number of Dominant Species Across All Strata: 5 (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	5	x 1 =	5
FACW species	75	x 2 =	150
FAC species	20	x 3 =	60
FACU species	0	x 4 =	0
UPL species	0	x 5 =	0
Column Totals:	100 (A)		215 (B)

Prevalence Index = B/A = 2.150

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.

Hydrophytic Vegetation Present? Yes ◉ No ○

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

Wetland boundary follows edge of depression and hydrophytic vegetation dominated by Acer saccharinum.

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

SOIL

Sampling Point: **W-MRK-001 PFO**

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

Depth (inches)	Matrix Color (moist)		%	Redox Features Color (moist)		%	Type[1]	Loc[2]	Texture	Remarks
0-18	2.5Y	2.5/1	95	10YR	3/4	5	C	PL	Silty Clay 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:

- ☐ 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 Soils [3]:

- ☐ 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:

Soils are black in color to bottom of soil profile.

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:

NA

Remarks:

The source of hydrology is surface runoff and seasonal flooding.

WETLAND DETERMINATION DATA FORM - Midwest Region

Project/Site: National Mod Sub | City/County: Madison | Sampling Date: 03-Nov-22

Applicant/Owner: FirstEnergy | State: OH | Sampling Point: W-MRK-001 PSS

Investigator(s): MRK, AJH | Section, Township, Range: S ____ T ____ R ____

Landform (hillslope, terrace, etc.): Flat | Local relief (concave, convex, none): concave

Slope: 1.0% / 0.6 ° | Lat.: 39.941615 | Long.: -83.345281 | Datum: NAD83

Soil Map Unit Name: Ca: Carlisle muck | NWI classification: PSS1C

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:
This PSS section of a PSS/PFO wetland complex is located in a depression near the edge of an existing transmission line right-of-way (ROW). Water drains off the ROW and flows into a forested section of wetland and outside of the current study area.

VEGETATION - Use scientific names of plants.

Tree Stratum (Plot size: 30' radius)	Absolute % Cover	Dominant Species? Rel.Strat. Cover	Indicator Status
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: 15' radius)			
1. Acer saccharinum	50	☑ 76.9%	FACW
2. Populus deltoides	10	☐ 15.4%	FAC
3. Salix nigra	5	☐ 7.7%	OBL
4.	0	☐ 0.0%	
5.	0	☐ 0.0%	
	65	= Total Cover	
Herb Stratum (Plot size: 5' radius)			
1. Cyperus esculentus	40	☑ 66.7%	FACW
2. Echinochloa crusgalli	15	☑ 25.0%	FACU
3. Setaria pumila	5	☐ 8.3%	FAC
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%	
	60	= Total Cover	
Woody Vine Stratum (Plot size: 30' radius)			
1.	0	☐ 0.0%	
2.	0	☐ 0.0%	
	0	= Total Cover	

Dominance Test worksheet:

Number of Dominant Species That are OBL, FACW, or FAC: 2 (A)

Total Number of Dominant Species Across All Strata: 3 (B)

Percent of dominant Species That Are OBL, FACW, or FAC: 66.7% (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	5	x 1 =	5
FACW species	90	x 2 =	180
FAC species	15	x 3 =	45
FACU species	15	x 4 =	60
UPL species	0	x 5 =	0
Column Totals:	125 (A)		290 (B)

Prevalence Index = B/A = 2.320

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.

Hydrophytic Vegetation Present? Yes ◉ No ○

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

Wetland boundary follows edge of depression and hydrophytic vegetation dominated by Acer saccharinum.

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

SOIL

Sampling Point: **W-MRK-001 PSS**

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

Depth (inches)	Matrix Color (moist)		%	Redox Features Color (moist)		%	Type[1]	Loc[2]	Texture	Remarks
0-18	2.5Y	2.5/1	95	10YR	3/4	5	C	PL	Silty Clay 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:

- ☐ 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 Soils [3]:

- ☐ 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:

Soils are black in color to bottom of soil profile.

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:

NA

Remarks:

The source of hydrology is surface runoff and seasonal flooding.

WETLAND DETERMINATION DATA FORM - Midwest Region

Project/Site: National Mod Sub | City/County: Madison | Sampling Date: 03-Nov-22

Applicant/Owner: FirstEnergy | State: OH | Sampling Point: W-MRK-001 UPL

Investigator(s): MRK, AJH | Section, Township, Range: S ____ T ____ R ____

Landform (hillslope, terrace, etc.): Flat | Local relief (concave, convex, none): flat

Slope: 1.0% / 0.6 ° | Lat.: 39.941376 | Long.: -83.344909 | Datum: NAD83

Soil Map Unit Name: Ko: Kokomo silty clay loam, 0 to 2 percent slopes | 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:
Upland data point for W-MRK-001. Upland data was collected in a fallow field adjacent to an existing substation. Area is surrounded by agriculture.

VEGETATION - Use scientific names of plants.

Tree Stratum (Plot size: 30' radius)	Absolute % Cover	Dominant Species?	Rel.Strat. Cover	Indicator Status
1.	0	☐	0.0%	
2.	0	☐	0.0%	
3.	0	☐	0.0%	
4.	0	☐	0.0%	
5.	0	☐	0.0%	0
	0	= Total Cover		
Sapling/Shrub Stratum (Plot size: 15' radius)				
1. Elaeagnus umbellata	5	☑	50.0%	UPL
2. Rosa multiflora	5	☑	50.0%	FACU
3.	0	☐	0.0%	
4.	0	☐	0.0%	
5.	0	☐	0.0%	
	10	= Total Cover		
Herb Stratum (Plot size: 5' radius)				
1. Solidago canadensis	75	☑	60.0%	FACU
2. Daucus carota	15	☐	12.0%	UPL
3. Dactylis glomerata	15	☐	12.0%	FACU
4. Cirsium arvense	15	☐	12.0%	FACU
5. Setaria pumila	5	☐	4.0%	FAC
6.	0	☐	0.0%	
7.	0	☐	0.0%	
8.	0	☐	0.0%	
9.	0	☐	0.0%	
10.	0	☐	0.0%	
	125	= Total Cover		
Woody Vine Stratum (Plot size: 30' radius)				
1.	0	☐	0.0%	
2.	0	☐	0.0%	
	0	= Total Cover		

Dominance Test worksheet:

Number of Dominant Species That are OBL, FACW, or FAC: 0 (A)

Total Number of Dominant Species Across All Strata: 3 (B)

Percent of dominant Species That Are OBL, FACW, or FAC: 0.0% (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	0	x 2 =	0
FAC species	5	x 3 =	15
FACU species	110	x 4 =	440
UPL species	20	x 5 =	100
Column Totals:	135 (A)		555 (B)

Prevalence Index = B/A = 4.111

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.

Hydrophytic Vegetation Present? Yes ○ No ◉

Remarks: (Include photo numbers here or on a separate sheet.)
Vegetation does not meet hydrophytic criteria.

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

SOIL

Sampling Point: **W-MRK-001 UPL**

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

Depth (inches)	Matrix Color (moist)		%	Redox Features Color (moist)		%	Type[1]	Loc[2]	Texture	Remarks
0-16	2.5Y	5/4	50	2.5Y	4/1	50			Silt Loam	25% mixed rock

[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 Soils [3]:

- ☐ 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:

Soils are mixed from past construction.

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:

NA

Remarks:

No source of hydrology was observed.

WETLAND DETERMINATION DATA FORM - Midwest Region

Project/Site: National Mod Sub | City/County: Madison | Sampling Date: 03-Nov-22

Applicant/Owner: FirstEnergy | State: OH | Sampling Point: UPL-MRK-001

Investigator(s): MRK, AJH | Section, Township, Range: S ____ T ____ R ____

Landform (hillslope, terrace, etc.): Flat | Local relief (concave, convex, none): flat

Slope: 1.0% / 0.6 ° | Lat.: 39.941301 | Long.: -83.343780 | Datum: NAD83

Soil Map Unit Name: Ko: Kokomo silty clay loam, 0 to 2 percent slopes | 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:
Upland data point collected to characterize the area in a fallow field adjacent to an existing sub station. Fallow field and sub station are also surrounded by agriculture.

VEGETATION - Use scientific names of plants.

Tree Stratum (Plot size: 30' radius)	Absolute % Cover	Dominant Species?	Rel.Strat. Cover	Indicator Status
1.	0	☐	0.0%	
2.	0	☐	0.0%	
3.	0	☐	0.0%	
4.	0	☐	0.0%	
5.	0	☐	0.0%	0
	0	= Total Cover		
Sapling/Shrub Stratum (Plot size: 15' radius)				
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: 5' radius)				
1. Dactylis glomerata	40	☑	30.8%	FACU
2. Setaria pumila	30	☑	23.1%	FAC
3. Solidago canadensis	20	☐	15.4%	FACU
4. Trifolium pratense	20	☐	15.4%	FACU
5. Daucus carota	5	☐	3.8%	UPL
6. Symphyotrichum pilosum	5	☐	3.8%	FACU
7. Cirsium arvense	5	☐	3.8%	FACU
8. Taraxacum officinale	5	☐	3.8%	FACU
9.	0	☐	0.0%	
10.	0	☐	0.0%	
	130	= Total Cover		
Woody Vine Stratum (Plot size: 30' radius)				
1.	0	☐	0.0%	
2.	0	☐	0.0%	
	0	= Total Cover		

Dominance Test worksheet:

Number of Dominant Species That are OBL, FACW, or FAC: 1 (A)

Total Number of Dominant Species Across All Strata: 2 (B)

Percent of dominant Species That Are OBL, FACW, or FAC: 50.0% (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	0	x 2 =	0
FAC species	30	x 3 =	90
FACU species	95	x 4 =	380
UPL species	5	x 5 =	25
Column Totals:	130 (A)		495 (B)

Prevalence Index = B/A = 3.808

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.

Hydrophytic Vegetation Present? Yes ○ No ◉

Remarks: (Include photo numbers here or on a separate sheet.)
Vegetation does not meet hydrophytic criteria.

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

SOIL

Sampling Point: **UPL-MRK-001**

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

Depth (inches)	Matrix Color (moist)		%	Redox Features Color (moist)		%	Type[1]	Loc[2]	Texture	Remarks
0-16	10YR	4/4	100						Silty Clay Loam	25% mixed rock

[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 Soils [3]:

- ☐ 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:

NA

Remarks:

No source of hydrology was observed.

APPENDIX B

OEPA WETLAND ORAM FORMS

Background Information	
Name:	**MRK, AJH**
Date:	**11/3/2022**
Affiliation:	**AECOM**
Address:	**Foster Plaza 6, 681 Anderson Drive, Suite 120, Pittsburgh, PA 15220**
Phone Number:	**814-516-1130**
e-mail address:	matthew.kline@aecom.com
Name of Wetland:	**W-MRK-001 PSS/PFO**
Vegetation Communit(ies):	**PSS/PFO**
HGM Class(es):	**Depressed**

Location of Wetland: include map, address, north arrow, landmarks, distances, roads, etc.

See Figures 1, 2, and 3 of Wetland Delineation and Stream Assessment Report.

Lat/Long or UTM Coordinate:	**39.941596, -83.345487**
USGS Quad Name:	**West Jefferson**
County:	**Madison**
Township:	**West Jefferson**
Section and Subsection:	**N/A**
Hydrologic Unit Code:	**050600012006 - Thomas Ditch-Little Darby Creek**
Site Visit:	**11/3/2022**
National Wetland Inventory Map:	**See Figure 2**
Ohio Wetland Inventory Map:	**See Figure 2**
Soil Survey:	**See Figure 2**
Delineation report/map:	**See Figure 3**

Name of Wetland:	W-MRK-001 PSS/PFO		
Wetland Size (delineated acres):	0.40	Wetland Size (Estimated total acres):	2.50

Sketch: Include north arrow, relationship with other surface waters, vegetation zones, etc.

Comments, Narrative Discussion, Justification of Category Changes:

This PSS/PFO wetland complex is located in a depression within a forested area with a PSS bordering the forseted area. Water drains off the surrounding agricultural fields and flows into a forested section of wetland which continues outside of the current study area.

Final score:	24	Category:	1

Wetland ID:	W-MRK-001 PSS/PFO

Scoring Boundary Worksheet

INSTRUCTIONS. The initial step in completing the ORAM is to identify the "scoring boundaries" of the wetland being rated. In many instances this determination will be relatively easy and the scoring boundaries will coincide with the "jurisdictional boundaries." For example, the scoring boundary of an isolated cattail marsh located in the middle of a farm field will likely be the same as that wetland's jurisdictional boundaries. In other instances, however, the scoring boundary will not be as easily determined. Wetlands that are small or isolated from other surface waters often form large contiguous areas or heterogeneous complexes of wetland and upland. In separating wetlands for scoring purposes, the hydrologic regime of the wetland is the main criterion that should be used. Boundaries between contiguous or connected wetlands should be established where the volume, flow, or velocity of water moving through the wetland changes significantly. Areas with a high degree of hydrologic interaction should be scored as a single wetland. In determining a wetland's scoring boundaries, use the guidelines in the ORAM Manual Section 5.0. In certain instances, it may be difficult to establish the scoring boundary for the wetland being rated. These problem situations include wetlands that form a patchwork on the landscape, wetlands divided by artificial boundaries like property fences, roads, or railroad embankments, wetlands that are contiguous with streams, lakes, or rivers, and estuarine or coastal wetlands. These situations are discussed below, however, it is recommended that Rater contact Ohio EPA, Division of Surface Water, 401/Wetlands Section if there are additional questions or a need for further clarification of the appropriate scoring boundaries of a particular wetland.

#	Steps in properly establishing scoring boundaries	done?	not applicable
Step 1	Identify the wetland area of interest. This may be the site of a proposed impact, a reference site, conservation site, etc.	X	
Step 2	Identify the locations where there is physical evidence that hydrology changes rapidly. Such evidence includes both natural and human- induced changes including, constrictions caused by berms or dikes, points where the water velocity changes rapidly at rapids or falls, points where significant inflows occur at the confluence of rivers, or other factors that may restrict hydrologic interaction between the wetlands or parts of a single wetland.	X	
Step 3	Delineate the boundary of the wetland to be rated such that all areas of interest that are contiguous to and within the areas where the hydrology does not change significantly, i.e. areas that have a high degree of hydrologic interaction are included within the scoring boundary.	X	
Step 4	Determine if artificial boundaries, such as property lines, state lines, roads, railroad embankments, etc., are present. These should not be used to establish scoring boundaries unless they coincide with areas where the hydrologic regime changes.	X	
Step 5	In all instances, the Rater may enlarge the minimum scoring boundaries discussed here to score together wetlands that could be scored separately.		X
Step 6	Consult ORAM Manual Section 5.0 for how to establish scoring boundaries for wetlands that form a patchwork on the landscape, divided by artificial boundaries, contiguous to streams, lakes or rivers, or for dual classifications.		X

End of Scoring Boundary Determination. Begin Narrative Rating on next page.

Wetland ID:	W-MRK-001 PSS/PFO

Narrative Rating

INSTRUCTIONS. Answer each of the following questions. Questions 1, 2, 3 and 4 should be answered based on information obtained from the site visit or the literature and by submitting a Data Services Request to the Ohio Department of Natural Resources, Division of Natural Areas and Preserves, Natural Heritage Data Services, 1889 Fountain Square Court, Building F-1, Columbus, Ohio 43224, 614-265-6453 (phone), 614-265-3096 (fax), http://www.dnr.state.oh.us/dnap . The remaining questions are designed to be answered primarily by the results of the site visit. Refer to the User's Manual for descriptions of these wetland types. Note: "Critical habitat" is legally defined in the Endangered Species Act and is the geographic area containing physical or biological features essential to the conservation of a listed species or as an area that may require special management considerations or protection. The Rater should contact the Region 3 Headquarters or the Columbus Ecological Services Office for updates as to whether critical habitat has been designated for other federally listed threatened or endangered species. "Documented" means the wetland is listed in the appropriate State of Ohio database.

#	Question	Circle one	
1	**Critical Habitat.** Is the wetland in a township, section, or subsection of a United States Geological Survey 7.5 minute Quadrangle that has been designated by the U.S. Fish and Wildlife Service as "critical habitat" for any threatened or endangered plant or animal species? Note: as of January 1, 2001, of the federally listed endangered or threatened species which can be found in Ohio, the Indiana Bat has had critical habitat designated (50 CFR 17.95(a)) and the piping plover has had critical habitat proposed (65 FR 41812 July 6, 2000).	YES Wetland should be evaluated for possible Category 3 status Go to Question 2	***NO** Go to Question 2
2	**Threatened or Endangered Species.** Is the wetland known to contain an individual of, or documented occurrences of federal or state-listed threatened or endangered plant or animal species?	YES Wetland is a Category 3 wetland. Go to Question 3	***NO** Go to Question 3
3	**Documented High Quality Wetland.** Is the wetland on record in Natural Heritage Database as a high quality wetland?	YES Wetland is a Category 3 wetland Go to Question 4	***NO** Go to Question 4
4	**Significant Breeding or Concentration Area.** Does the wetland contain documented regionally significant breeding or nonbreeding waterfowl, neotropical songbird, or shorebird concentration areas?	YES Wetland is a Category 3 wetland Go to Question 5	***NO** Go to Question 5
5	**Category 1 Wetlands.** Is the wetland less than 0.5 hectares (1 acre) in size and **hydrologically isolated** and either 1) comprised of vegetation that is dominated (greater than eighty per cent areal cover) by *Phalaris arundinacea, Lythrum salicaria,* or *Phragmites australis* , or 2) an acidic pond created or excavated on mined lands that has little or no vegetation?	YES Wetland is a Category 1 wetland Go to Question 6	***NO** Go to Question 6
6	**Bogs.** Is the wetland a peat-accumulating wetland that 1) has no significant inflows or outflows, 2) supports acidophilic mosses, particularly *Sphagnum* spp., 3) the acidophilic mosses have >30% cover, 4) at least one species from Table 1 is present, and 5) the cover of invasive species (see Table 1) is <25%?	YES Wetland is a Category 3 wetland Go to Question 7	***NO** Go to Question 7
7	**Fens.** Is the wetland a carbon accumulating (peat, muck) wetland that is saturated during most of the year, primarily by a discharge of free flowing, mineral rich, ground water with a circumneutral ph (5.5-9.0) and with one or more plant species listed in Table 1 and the cover of invasive species listed in Table 1 is <25%?	YES Wetland is a Category 3 wetland Go to Question 8a	***NO** Go to Question 8a
8a	**"Old Growth Forest."** Is the wetland a forested wetland and is the forest characterized by, but not limited to, the following characteristics: overstory canopy trees of great age (exceeding at least 50% of a projected maximum attainable age for a species); little or no evidence of human-caused understory disturbance during the past 80 to 100 years; an all-aged structure and multilayered canopies; aggregations of canopy trees interspersed with canopy gaps; and significant numbers of standing dead snags and downed logs?	YES Wetland is a Category 3 wetland. Go to Question 8b	***NO** Go to Question 8b

Wetland ID:	W-MRK-001 PSS/PFO

8b	**Mature forested wetlands**. Is the wetland a forested wetland with 50% or more of the cover of upper forest canopy consisting of deciduous trees with large diameters at breast height (dbh), generally diameters greater than 45cm (17.7in) dbh?	YES Wetland should be evaluated for possible Category 3 status. Go to Question 9a	***NO** Go to Question 9a
9a	**Lake Erie coastal and tributary wetlands**. Is the wetland located at an elevation less than 575 feet on the USGS map, adjacent to this elevation, or along a tributary to Lake Erie that is accessible to fish?	YES Go to Question 9b	***NO** Go to Question 10
9b	Does the wetland's hydrology result from measures designed to prevent erosion and the loss of aquatic plants, i.e. the wetland is partially hydrologically restricted from Lake Erie due to lakeward or landward dikes or other hydrological controls?	YES Wetland should be evaluated for possible Category 3 status Go to Question 10	***NO** Go to Question 9c
9c	Are Lake Erie water levels the wetland's primary hydrological influence, i.e. the wetland is hydrologically unrestricted (no lakeward or upland border alterations), or the wetland can be characterized as an "estuarine" wetland with lake and river influenced hydrology. These include sandbar deposition wetlands, estuarine wetlands, river mouth wetlands, or those dominated by submersed aquatic vegetation.	YES Go to Question 9d	***NO** Go to Question 10
9d	Does the wetland have a predominance of native species within its vegetation communities, although non-native or disturbance tolerant native species can also be present?	YES Wetland is a Category 3 wetland Go to Question 10	NO Go to Question 9e
9e	Does the wetland have a predominance of non-native or disturbance tolerant native plant species within its vegetation communities?	YES Wetland should be evaluated for possible Category 3 status Go to Question 10	NO Go to Question 10
10	**Lake Plain Sand Prairies (Oak Openings)** Is the wetland located in Lucas, Fulton, Henry, or Wood Counties and can the wetland be characterized by the following description: the wetland has a sandy substrate with interspersed organic matter, a water table often within several inches of the surface, and often with a dominance of the gramineous vegetation listed in Table 1 (woody species may also be present). The Ohio Department of Natural Resources Division of Natural Areas and Preserves can provide assistance in confirming this type of wetland and its quality.	YES Wetland is a Category 3 wetland. Go to Question 11	***NO** Go to Question 11
11	**Relict Wet Prairies**. Is the wetland a relict wet prairie community dominated by some or all of the species in Table 1. Extensive prairies were formerly located in the Darby Plains (Madison and Union Counties), Sandusky Plains (Wyandot, Crawford, and Marion Counties), northwest Ohio (e.g. Erie, Huron, Lucas, Wood Counties), and portions of western Ohio Counties (e.g. Darke, Mercer, Miami, Montgomery, Van Wert etc.).	YES Wetland should be evaluated for possible Category 3 status Complete Quantitative Rating	***NO** Complete Quantitative Rating

Wetland ID:	W-MRK-001 PSS/PFO

Table 1. Characteristic plant species.

invasive/exotic spp	fen species	bog species	oak opening species	wet prairie species
Lythrum salicaria	*Zygadenus elegans var. glaucus*	*Calla palustris*	*Carex cryptolepis*	*Calamagrostis canadensis*
Myriophyllum spicatum	*Cacalia plantaginea*	*Carex atlantica var. capillacea*	*Carex lasiocarpa*	*Calamogrostis stricta*
Najas minor	*Carex flava*	*Carex echinata*	*Carex stricta*	*Carex atherodes*
Phalaris arundinacea	*Carex sterilis*	*Carex oligosperma*	*Cladium mariscoides*	*Carex buxbaumii*
Phragmites australis	*Carex stricta*	*Carex trisperma*	*Calamagrostis stricta*	*Carex pellita*
Potamogeton crispus	*Deschampsia caespitosa*	*Chamaedaphne calyculata*	*Calamagrostis canadensis*	*Carex sartwellii*
Ranunculus ficaria	*Eleocharis rostellata*	*Decodon verticillatus*	*Quercus palustris*	*Gentiana andrewsii*
Rhamnus frangula	*Eriophorum viridicarinatum*	*Eriophorum virginicum*		*Helianthus grosseserratus*
Typha angustifolia	*Gentianopsis spp.*	*Larix laricina*		*Liatris spicata*
Typha xglauca	*Lobelia kalmii*	*Nemopanthus mucronatus*		*Lysimachia quadriflora*
	Parnassia glauca	*Schechzeria palustris*		*Lythrum alatum*
	Potentilla fruticosa	*Sphagnum spp.*		*Pycnanthemum virginianum*
	Rhamnus alnifolia	*Vaccinium macrocarpon*		*Silphium terebinthinaceum*
	Rhynchospora capillacea	*Vaccinium corymbosum*		*Sorghastrum nutans*
	Salix candida	*Vaccinium oxycoccos*		*Spartina pectinata*
	Salix myricoides	*Woodwardia virginica*		*Solidago riddellii*
	Salix serissima	*Xyris difformis*		
	Solidago ohioensis			
	Tofieldia glutinosa			
	Triglochin maritimum			
	Triglochin palustre			

End of Narrative Rating. Begin Quantitative Rating on next page.

Wetland ID:	W-MRK-001 PSS/PFO

Site:	FirstEnergy/National Mod Sub	Rater(s):	MRK, AJH	Date:	11/3/2022

Field ID:

W-MRK-001 PSS/PFO

Delineated acres:	0.40
Total acres:	2.50

Metric 1. Wetland Area (size).

2.0 (max 6 pts) | 2.0 (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)
- [x] 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)

Metric 2. Upland buffers and surrounding land use.

1.0 (max 14 pts.) | 3.0 (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)
- [x] 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)
- [x] HIGH. Urban, industrial, open pasture, row cropping, mining, construction. (1)

Metric 3. Hydrology.

7.0 (max 30 pts.) | 10.0 (subtotal)

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

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

3b. Connectivity. Score all that apply.

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

3c. Maximum water depth. Select one.

- [ ] >0.7 (27.6in) (3)
- [ ] 0.4 to 0.7m (15.7 to 27.6in) (2)
- [x] <0.4m (<15.7in) (1)

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

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

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

- [ ] None or none apparent (12)
- [ ] Recovered (7)
- [x] Recovering (3)
- [ ] Recent or no recovery (1)

Check all disturbances observed

- [ ] ditch
- [ ] tile
- [ ] dike
- [ ] weir
- [ ] stormwater input
- [ ] point source (nonstormwater)
- [x] filling/grading
- [ ] road bed/RR track
- [ ] dredging
- [ ] Other:

Metric 4. Habitat Alteration and Development.

8.0 (max 20 pts.) | 18.0 (subtotal)

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

- [ ] None or none apparent (4)
- [ ] Recovered (3)
- [x] 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)
- [x] 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)
- [x] Recovering (3)
- [ ] Recent or no recovery (1)

Check all disturbances observed

- [x] mowing
- [ ] grazing
- [x] clearcutting
- [ ] selective cutting
- [x] woody debris removal
- [ ] toxic pollutants
- [x] shrub/sapling removal
- [ ] herbaceous/aquatic bed removal
- [ ] sedimentation
- [ ] dredging
- [x] farming
- [ ] nutrient enrichment

18.0 (subtotal this page)

ORAM v. 5.0 Field Form Quantitative Rating

Wetland ID:	W-MRK-001 PSS/PFO

Site:	FirstEnergy/National Mod Sub	Rater(s):	MRK, AJH	Date:	11/3/2022

Field ID:
W-MRK-001 PSS/PFO

18.0
subtotal this page

0.0 max 10 pts. **18.0** 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 Praires (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)

6.0 max 20pts. **24.0** subtotal

Metric 6. Plant communities, interspersion, microtopography.

6a. Wetland Vegetation Communities.
Score all present using 0 to 3 scale.

- [ ] Aquatic bed
- [1] Emergent
- [1] Shrub
- [1] Forest
- [ ] Mudflats
- [ ] Open water
- [ ] Other_____

6b. horizontal (plan view) Interspersion.
Select only one.

- [ ] High (5)
- [ ] Moderately high(4)
- [ ] Moderate (3)
- [x] 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)
- [x] Nearly absent <5% cover (0)
- [ ] Absent (1)

6d. Microtopography.
Score all present using 0 to 3 scale.

- [0] Vegetated hummucks/tussucks
- [1] Coarse woody debris >15cm (6in)
- [0] Standing dead >25cm (10in) dbh
- [0] Amphibian breeding pools

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 generallyw/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

24.0 **TOTAL (Max 100 pts)**
1 **Category**

Wetland ID:	W-MRK-001 PSS/PFO

ORAM Summary Worksheet

		Circle answer or insert score		Result
Narrative Rating	Question 1 Critical Habitat	YES	*NO	If yes, Category 3.
	Question 2. Threatened or Endangered Species	YES	*NO	If yes, Category 3.
	Question 3. High Quality Natural Wetland	YES	*NO	If yes, Category 3.
	Question 4. Significant bird habitat	YES	*NO	If yes, Category 3.
	Question 5. Category 1 Wetlands	YES	*NO	If yes, Category 1.
	Question 6. Bogs	YES	*NO	If yes, Category 3.
	Question 7. Fens	YES	*NO	If yes, Category 3.
	Question 8a. Old Growth Forest	YES	*NO	If yes, Category 3.
	Question 8b. Mature Forested Wetland	YES	*NO	If yes, evaluate for Category 3; may also be 1 or 2.
	Question 9b. Lake Erie Wetlands - Restricted	YES	*NO	If yes, evaluate for Category 3; may also be 1 or 2.
	Question 9d. Lake Erie Wetlands – Unrestricted with native plants	YES	NO	If yes, Category 3
	Question 9e. Lake Erie Wetlands - Unrestricted with invasive plants	YES	NO	If yes, evaluate for Category 3; may also be 1 or 2.
	Question 10. Oak Openings	YES	*NO	If yes, Category 3
	Question 11. Relict Wet Prairies	YES	*NO	If yes, evaluate for Category 3; may also be 1 or 2.
Quantitative Rating	Metric 1. Size	**2**		
	Metric 2. Buffers and surrounding land use	**1**		
	Metric 3. Hydrology	**7**		
	Metric 4. Habitat	**8**		
	Metric 5. Special Wetland Communities	**0**		
	Metric 6. Plant communities, interspersion, microtopography	**6**		
	TOTAL SCORE	**24**		Category based on score breakpoints

Complete Wetland Categorization Worksheet.

Wetland ID:	W-MRK-001 PSS/PFO

Wetland Categorization Worksheet

Choices	Circle one		Evaluation of Categorization Result of ORAM
Did you answer "Yes" to any of the following questions: Narrative Rating Nos. 2, 3, 4, 6, 7, 8a, 9d, 10	YES Wetland is categorized as a Category 3 wetland	***NO**	Is quantitative rating score *less* than the Category 2 scoring threshold (*excluding* gray zone)? If yes, reevaluate the category of the wetland using the narrative criteria in OAC Rule 3745-1-54(C) and biological and/or functional assessments to determine if the wetland has been over- categorized by the ORAM
Did you answer "Yes" to any of the following questions: Narrative Rating Nos. 1, 8b, 9b, 9e, 11	YES Wetland should be evaluated for possible Category 3 status	***NO**	Evaluate the wetland using the 1) narrative criteria in OAC Rule 3745-1-54(C) and 2) the quantitative rating score. If the wetland is determined to be a Category 3 wetland using either of these, it should be categorized as a Category 3 wetland. Detailed biological and/or functional assessments may also be used to determine the wetland's category.
Did you answer "Yes" to Narrative Rating No. 5	YES Wetland is categorized as a Category 1 wetland	***NO**	Is quantitative rating score *greater* than the Category 2 scoring threshold *(including* any gray zone)? If yes, reevaluate the category of the wetland using the narrative criteria in OAC Rule 3745-1-54(C) and biological and/or functional assessments to determine if the wetland has been under-categorized by the ORAM
Does the quantitative score fall within the scoring range of a Category 1, 2, or 3 wetland?	***YES** Wetland is assigned to the appropriate category based on the scoring range	NO	If the score of the wetland is located within the scoring range for a particular category, the wetland should be assigned to that category. In all instances however, the narrative criteria described in OAC Rule 3745-1-54(C) can be used to clarify or change a categorization based on a quantitative score.
Does the quantitative score fall with the *"gray zone"* for Category 1 or 2 or Category 2 or 3 wetlands?	YES Wetland is assigned to the higher of the two categories or assigned to a category based on detailed assessments and the narrative criteria	***NO**	Rater has the option of assigning the wetland to the higher of the two categories or to assign a category based on the results of a nonrapid wetland assessment method, e.g. functional assessment, biological assessment, etc, and a consideration of the narrative criteria in OAC rule 3745-1- 54(C).
Does the wetland otherwise exhibit *moderate OR superior* hydrologic OR habitat, OR recreational functions AND the wetland was *not* categorized as a Category 2 wetland (in the case of moderate functions) or a Category 3 wetland (in the case of superior functions) by this method?	YES Wetland was undercategorized by this method. A written justification for recategorization should be provided on Background Information Form	***NO** Wetland is assigned to category as determined by the ORAM.	A wetland may be undercategorized using this method, but still exhibit one or more superior functions, e.g. a wetland's biotic communities may be degraded by human activities, but the wetland may still exhibit superior hydrologic functions because of its type, landscape position, size, local or regional significance, etc. In this circumstance, the narrative criteria in OAC Rule 3745-1-54(C)(2) and (3) are controlling, and the under-categorization should be corrected. A written justification with supporting reasons or information for this determination should be provided.

Final Category

Choose one	***Category 1**	Category 2	Category 3	

End of Ohio Rapid Assessment Method for Wetlands.

APPENDIX C

DELINEATED FEATURES REPRESENTATIVE PHOTOGRPAHS

AECOM

PHOTOGRAPHIC RECORD
Delineated Features

Client Name:	Site Location:	Project No.
American Transmission Systems, Inc, a FirstEnergy Company	National Mod Substation	60695976

Date:

November 3, 2022

Description:

W-MRK-001

PFO

North

Date:

November 3, 2022

Description:

W-MRK-001

PFO

South

AECOM

PHOTOGRAPHIC RECORD
Delineated Features

Client Name:	Site Location:	Project No.
American Transmission Systems, Inc, a FirstEnergy Company	National Mod Substation	60695976

Date:

November 3, 2022

Description:

W-MRK-001

PFO

East

Date:

November 3, 2022

Description:

W-MRK-001

PFO

West

AECOM

PHOTOGRAPHIC RECORD
Delineated Features

Client Name:	Site Location:	Project No.
American Transmission Systems, Inc, a FirstEnergy Company	National Mod Substation	60695976

Date:
November 3, 2022

Description:

W-MRK-001

PFO

Soil

Date:

November 3, 2022

Description:

W-MRK-001

PSS

North

AECOM

PHOTOGRAPHIC RECORD
Delineated Features

Client Name:	Site Location:	Project No.
American Transmission Systems, Inc, a FirstEnergy Company	National Mod Substation	60695976

Date: November 3, 2022

Description:

W-MRK-001

PSS

South

Date:

November 3, 2022

Description:

W-MRK-001

PSS

East

AECOM

PHOTOGRAPHIC RECORD
Delineated Features

Client Name:	Site Location:	Project No.
American Transmission Systems, Inc, a FirstEnergy Company	National Mod Substation	60695976

Date: November 3, 2022

Description: W-MRK-001 PSS

West

Date: November 3, 2022

Description: W-MRK-001 PSS

Soil

AECOM

PHOTOGRAPHIC RECORD
Delineated Features

Client Name:	Site Location:	Project No.
American Transmission Systems, Inc, a FirstEnergy Company	National Mod Substation	60695976

Date: November 3, 2022

Description:

W-MRK-001

UPL

North

Date:

November 3, 2022

Description:

W-MRK-001

UPL

South

AECOM

PHOTOGRAPHIC RECORD
Delineated Features

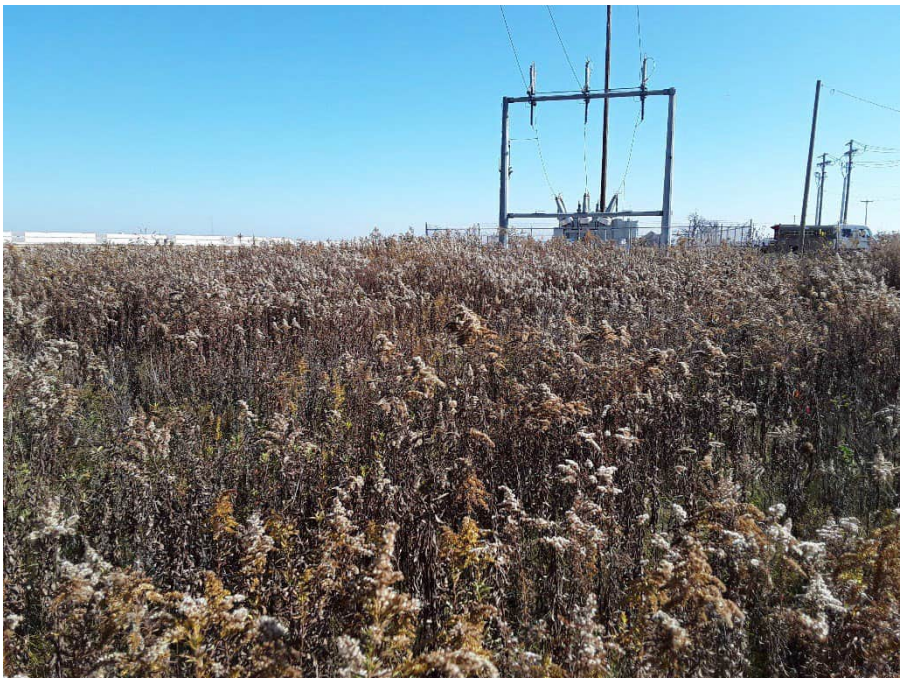
Client Name:	Site Location:	Project No.
American Transmission Systems, Inc, a FirstEnergy Company	National Mod Substation	60695976

Date:
November 3, 2022

Description:

W-MRK-001

UPL



East

Date:

November 3, 2022

Description:

W-MRK-001

UPL

West

AECOM

PHOTOGRAPHIC RECORD
Delineated Features

Client Name:	Site Location:	Project No.
American Transmission Systems, Inc, a FirstEnergy Company	National Mod Substation	60695976

Date: November 3, 2022

Description:

W-MRK-001

UPL

Soil

Date:

November 3, 2022

Description:

UPL-MRK-001

North

AECOM

PHOTOGRAPHIC RECORD
Delineated Features

Client Name:	Site Location:	Project No.
American Transmission Systems, Inc, a FirstEnergy Company	National Mod Substation	60695976

Date:
November 3, 2022

Description:

UPL-MRK-001

South

Date:

November 3, 2022

Description:

UPL-MRK-001

East

AECOM

PHOTOGRAPHIC RECORD
Delineated Features

Client Name:	Site Location:	Project No.
American Transmission Systems, Inc, a FirstEnergy Company	National Mod Substation	60695976

Date: November 3, 2022

Description: UPL-MRK-001

West

Date: November 3, 2022

Description: UPL-MRK-001

Soil

AECOM

PHOTOGRAPHIC RECORD
Delineated Features

Client Name:	Site Location:	Project No.
American Transmission Systems, Inc, a FirstEnergy Company	National Mod Substation	60695976

Date: November 3, 2022

Description: UDF-MRK-001

Upstream

Date: November 3, 2022

Description: UDF-MRK-001

Downstream

AECOM

PHOTOGRAPHIC RECORD
Delineated Features

Client Name:	Site Location:	Project No.
American Transmission Systems, Inc, a FirstEnergy Company	National Mod Substation	60695976

Date:
November 3, 2022

Description:

UDF-MRK-001

Substrate

Date:

November 3, 2022

Description:

Old Field

South

AECOM

PHOTOGRAPHIC RECORD
Delineated Features

Client Name:	Site Location:	Project No.
American Transmission Systems, Inc, a FirstEnergy Company	National Mod Substation	60695976

Date:
November 3, 2022

Description:

Urban

North

Date:

February 3, 2023

Description:

P-HLA-001

North

AECOM

PHOTOGRAPHIC RECORD
Delineated Features

Client Name:	Site Location:	Project No.
American Transmission Systems, Inc, a FirstEnergy Company	National Mod Substation	60695976

Date:
February 3, 2023

Description:

P-HLA-001

East

Date:

February 3, 2023

Description:

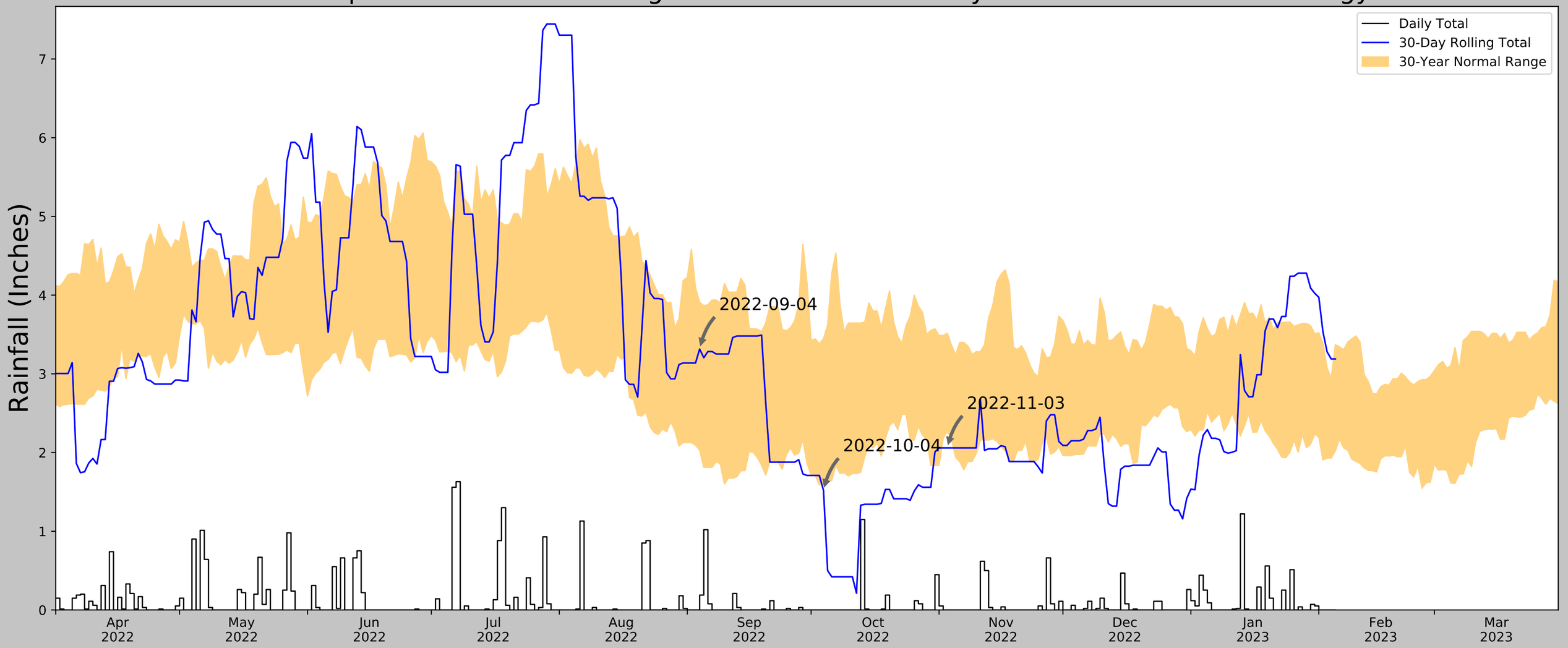
P-HLA-001

South

APPENDIX D

ANTECEDENT PRECIPITATION TOOL

Antecedent Precipitation vs Normal Range based on NOAA's Daily Global Historical Climatology Network



Coordinates	39.94210, -83.34493
Observation Date	2022-11-03
Elevation (ft)	965.76
Drought Index (PDSI)	Mild wetness
WebWIMP H_2O Balance	Wet Season

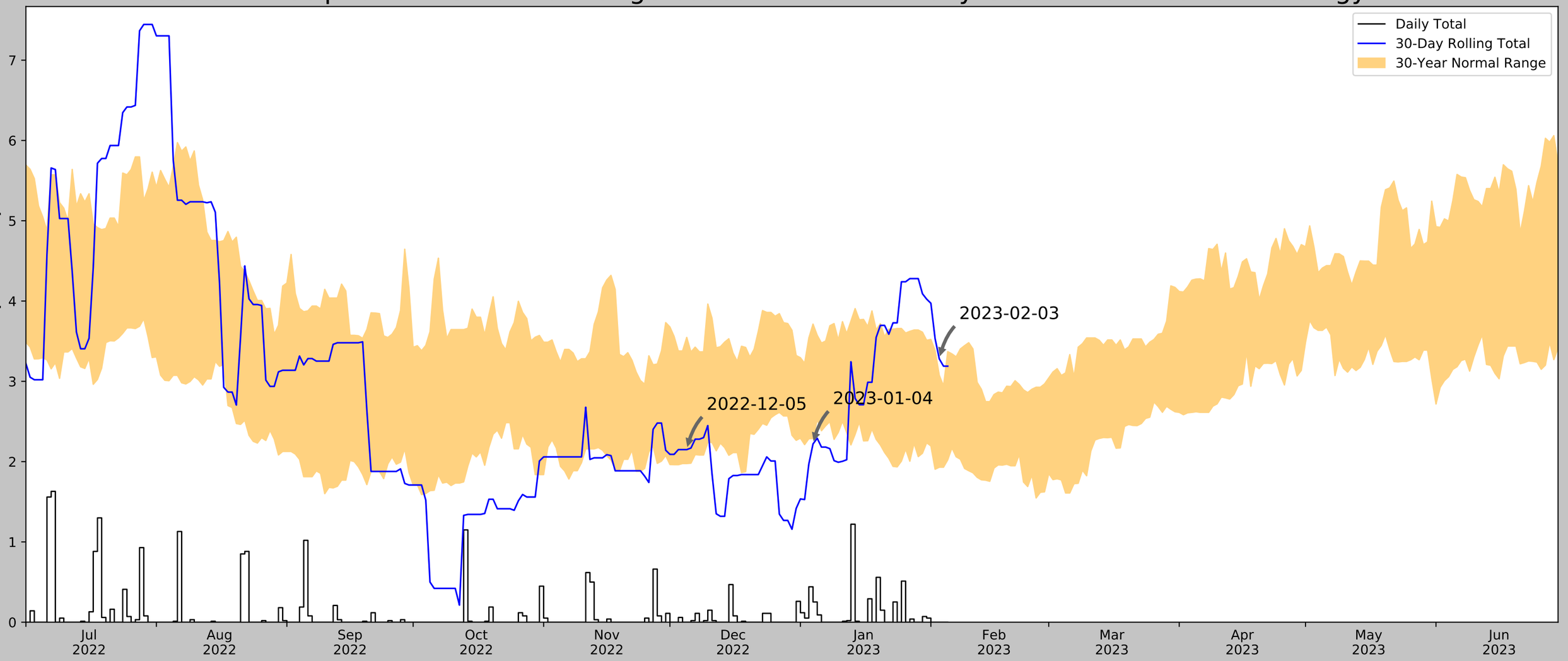
30 Days Ending	30^{th} %ile (in)	70^{th} %ile (in)	Observed (in)	Wetness Condition	Condition Value	Month Weight	Product
2022-11-03	2.271654	3.515748	2.059055	Dry	1	3	3
2022-10-04	1.602362	3.447638	1.519685	Dry	1	2	2
2022-09-04	2.028347	3.908268	3.314961	Normal	2	1	2
Result							Drier than Normal: 7

Weather Station Name	Coordinates	Elevation (ft)	Distance (mi)	Elevation Δ	Weighted Δ	Days Normal	Days Antecedent
LONDON FISH HATCHERY	39.8972, -83.5097	1120.079	9.266	154.319	5.6	8136	90
LONDON 1.2 N	39.9062, -83.4367	1041.995	3.919	78.084	2.07	14	0
LONDON 3.9 N	39.9462, -83.442	1028.871	4.933	91.208	2.67	1	0
SOUTH CHARLESTON 0.3 ENE	39.8264, -83.6395	1118.11	8.445	1.969	3.817	1	0
SEDALIA	39.7339, -83.4775	1069.882	11.412	50.197	5.708	2235	0
MECHANICSBURG 5.0 WSW	40.0412, -83.6415	1079.068	12.153	41.011	5.967	1	0
SPRINGFIELD 3.5 NNE	39.9761, -83.7801	1046.916	15.327	73.163	8.019	2	0
WOODSTOCK 1.5 WSW	40.1656, -83.5536	1096.129	18.69	23.95	8.858	1	0
CEDARVILLE 3.6 ESE	39.7203, -83.75	1064.961	17.665	55.118	8.923	45	0
JEFFERSONVILLE 0.1 SSE	39.6509, -83.5563	1044.948	17.197	75.131	9.031	21	0
SPRINGFIELD 1.1 NNW	39.942, -83.8051	997.047	15.957	123.032	9.144	721	0
SPRINGFIELD BECKLEY AP	39.8403, -83.84	1050.853	17.952	69.226	9.321	138	0
HARRISBURG 3.7 WNW	39.8378, -83.2321	952.1	15.283	167.979	9.445	2	0
YELLOW SPRINGS 2.5 ENE	39.8133, -83.8511	1039.042	19.013	81.037	10.097	6	0

Figure and tables made by the
Antecedent Precipitation Tool
Version 1.0

Written by Jason Deters
U.S. Army Corps of Engineers

Antecedent Precipitation vs Normal Range based on NOAA's Daily Global Historical Climatology Network



Coordinates	39.94210, -83.34493
Observation Date	2023-02-03
Elevation (ft)	965.76
Drought Index (PDSI)	Not available
WebWIMP H_2O Balance	Wet Season

30 Days Ending	30th %ile (in)	70th %ile (in)	Observed (in)	Wetness Condition	Condition Value	Month Weight	Product
2023-02-03	1.929921	3.075591	3.279528	Wet	3	3	9
2023-01-04	2.288583	3.713386	2.220473	Dry	1	2	2
2022-12-05	1.975591	3.547638	2.149606	Normal	2	1	2
Result							Normal Conditions, 13

Figure and tables made by the
Antecedent Precipitation Tool
Version 1.0

Written by Jason Deters
U.S. Army Corps of Engineers

Weather Station Name	Coordinates	Elevation (ft)	Distance (mi)	Elevation Δ	Weighted Δ	Days Normal	Days Antecedent
LONDON FISH HATCHERY	39.8972, -83.5097	1120.079	9.266	154.319	5.6	8136	90
LONDON 1.2 N	39.9062, -83.4367	1041.995	3.919	78.084	2.07	14	0
LONDON 3.9 N	39.9462, -83.442	1028.871	4.933	91.208	2.67	1	0
SOUTH CHARLESTON 0.3 ENE	39.8264, -83.6395	1118.11	8.445	1.969	3.817	1	0
SEDALIA	39.7339, -83.4775	1069.882	11.412	50.197	5.708	2235	0
MECHANICSBURG 5.0 WSW	40.0412, -83.6415	1079.068	12.153	41.011	5.967	1	0
SPRINGFIELD 3.5 NNE	39.9761, -83.7801	1046.916	15.327	73.163	8.019	2	0
WOODSTOCK 1.5 WSW	40.1656, -83.5536	1096.129	18.69	23.95	8.858	1	0
CEDARVILLE 3.6 ESE	39.7203, -83.75	1064.961	17.665	55.118	8.923	45	0
JEFFERSONVILLE 0.1 SSE	39.6509, -83.5563	1044.948	17.197	75.131	9.031	21	0
SPRINGFIELD 1.1 NNW	39.942, -83.8051	997.047	15.957	123.032	9.144	721	0
SPRINGFIELD BECKLEY AP	39.8403, -83.84	1050.853	17.952	69.226	9.321	138	0
HARRISBURG 3.7 WNW	39.8378, -83.2321	952.1	15.283	167.979	9.445	2	0
YELLOW SPRINGS 2.5 ENE	39.8133, -83.8511	1039.042	19.013	81.037	10.097	6	0

APPENDIX E

AMBROSE JURISDICTIONAL DETERMINATION AND ISOLATED WETLAND PERMIT APPROVALS

DEPARTMENT OF THE ARMY
HUNTINGTON DISTRICT, CORPS OF ENGINEERS
502 EIGHTH STREET
HUNTINGTON, WEST VIRGINIA 25701-2070

REPLY TO
ATTENTION OF

August 12, 2021

Regulatory Division
North Branch
LRH-2021-542-SCR

APPROVED JURISDICTIONAL DETERMINATION

Mr. Grant Goldman
Ambrose Property Group, LLC
8888 Keystone Crossing, Suite 1150
Indianapolis, Indiana 46240

Dear Mr. Goldman:

I refer to the report titled *Wetland Delineation Report, West Jefferson, Ohio* (report) dated July 1, 2021, concerning the Goldman West Jefferson Project. You have requested an approved jurisdictional determination (AJD) for features within the approximately 170-acre site located north of U.S. Route 40, in Jefferson Township, Madison County, Ohio (Latitude: 39.943509° N, Longitude: 83.340701° W). Your JD request has been assigned the following file number to your PCN: LRH-2021-542-SCR. Please reference this file number on all future correspondence related to this subject proposal.

The United States Army Corps of Engineers' (Corps) authority to regulate waters of the United States is based on the definitions and limits of jurisdiction contained in 33 CFR 328, including the amendment to 33 CFR 328.3 (85 Federal Register 22250), and 33 CFR 329. Section 404 of the Clean Water Act (Section 404) requires a Department of the Army (DA) permit be obtained prior to the discharge of dredged or fill material into waters of the United States, including wetlands. Section 10 of the Rivers and Harbors Act of 1899 requires a DA permit be obtained for any work in, on, over or under navigable water.

The Navigable Waters Protection Rule, which became effective on June 22, 2020, was followed in this verification of Section 404 jurisdiction for the features located within the AJD boundary. Based upon a review of the submitted report and additional information available to us, this office has determined the site contains 2,242 linear feet of one (1) stormwater control feature (Stormwater Conveyance) that was created in uplands and does not meet the definitions of a water of the United States per 33 CFR 328.3(b)(10). The site also contains 1.95 acres of one (1) emergent/forested wetland (Section I) that does not abut an (a)(1), (a)(2), or (a)(3) water, is not inundated by flooding from an (a)(1), (a)(2), or (a)(3) water in a typical year and is not physically separated from an (a)(1), (a)(2), or (a)(3) water by a natural or artificial barrier. Therefore, Section I is not considered waters of the United States per 33 CFR 328.3(b)(1). However, you should contact the Ohio Environmental Protection Agency, Division of Surface Water, at (614) 664-2001 to determine state permit requirements.

This jurisdictional verification is valid for a period of five (5) years from the date of this letter unless new information warrants revision of the delineation prior to the expiration date. This letter contains an AJD for the subject site within the AJD boundary. If you object to this determination, you may request an administrative appeal under Corps regulations at 33 CFR 331. Enclosed you will find a Notification of Appeal Process (NAP) fact sheet and Request for Appeal (RFA) form. If you request to appeal this determination you must submit a completed RFA form to the Great Lakes and Ohio River Division Office at the following address:

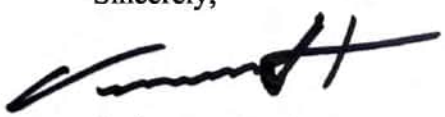
Appeal Review Officer
United States Army Corps of Engineers
Great Lakes and Ohio River Division
550 Main Street, Room 10-714
Cincinnati, Ohio 45202-3222
Phone: (513) 684-2699
Fax: (513) 684-2460

In order for an RFA to be accepted by the Corps, the Corps must determine that it is complete, that it meets the criteria for appeal under 33 CFR 331.5, and that it has been received by the Division Office within 60 days of the date of the NAP. Should you decide to submit an RFA form, it must be received at the above address by **October 11, 2021**. **It is not necessary to submit an RFA form to the Division office if you do not object to the determination in this letter.** It is not necessary to submit an RFA form to the Division office if you do not object to the determination in this letter.

This determination has been conducted to identify the limits of the Corps' Section 404 jurisdiction for the particular site identified in this request. This determination may not be valid for the wetland conservation provisions of the Food Security Act of 1985. If you or your tenant are United States Department of Agriculture (USDA) program participants, or anticipate participation in USDA programs, you should request a certified wetland determination from the local office of the Natural Resources Conservation Service prior to starting work.

A copy of this letter will be provided to the Ohio Environmental Protection Agency at Lazarus Government Building, Post Office Box 1049 Columbus, Ohio 43216-3669. If you have any questions concerning the above, please contact Kyle Moore at (606) 202-0861, by mail at the above address, or by email at kyle.m.moore@usace.army.mil.

Sincerely,



Andrew J. Wendt
Regulatory Project Manager
North Branch

Enclosures
cc: via email
Ms. Ashlee Nichter
EarthSource, Inc.
anichter@earthsourceinc.net

NOTIFICATION OF ADMINISTRATIVE APPEAL OPTIONS AND PROCESS AND REQUEST FOR APPEAL

Applicant: Ambrose Property Group, LLC		File Number: 2021-542-SCR	Date: 8-12-2021
Attached is:			See Section below
	INITIAL PROFFERED PERMIT (Standard Permit or Letter of permission)		A
	PROFFERED PERMIT (Standard Permit or Letter of permission)		B
	PERMIT DENIAL		C
X	APPROVED JURISDICTIONAL DETERMINATION		D
	PRELIMINARY JURISDICTIONAL DETERMINATION		E

SECTION I - The following identifies your rights and options regarding an administrative appeal of the above decision. Additional information may be found at http://usace.army.mil/inet/functions/cw/cecwo/reg or Corps regulations at 33 CFR Part 331.

A: INITIAL PROFFERED PERMIT: You may accept or object to the permit.

- ACCEPT: If you received a Standard Permit, you may sign the permit document and return it to the district engineer for final authorization. If you received a Letter of Permission (LOP), you may accept the LOP and your work is authorized. Your signature on the Standard Permit or acceptance of the LOP means that you accept the permit in its entirety, and waive all rights to appeal the permit, including its terms and conditions, and approved jurisdictional determinations associated with the permit.
- OBJECT: If you object to the permit (Standard or LOP) because of certain terms and conditions therein, you may request that the permit be modified accordingly. You must complete Section II of this form and return the form to the district engineer. Your objections must be received by the district engineer within 60 days of the date of this notice, or you will forfeit your right to appeal the permit in the future. Upon receipt of your letter, the district engineer will evaluate your objections and may: (a) modify the permit to address all of your concerns, (b) modify the permit to address some of your objections, or (c) not modify the permit having determined that the permit should be issued as previously written. After evaluating your objections, the district engineer will send you a proffered permit for your reconsideration, as indicated in Section B below.

B: PROFFERED PERMIT: You may accept or appeal the permit

- ACCEPT: If you received a Standard Permit, you may sign the permit document and return it to the district engineer for final authorization. If you received a Letter of Permission (LOP), you may accept the LOP and your work is authorized. Your signature on the Standard Permit or acceptance of the LOP means that you accept the permit in its entirety, and waive all rights to appeal the permit, including its terms and conditions, and approved jurisdictional determinations associated with the permit.
- APPEAL: If you choose to decline the proffered permit (Standard or LOP) because of certain terms and conditions therein, you may appeal the declined permit under the Corps of Engineers Administrative Appeal Process by completing Section II of this form and sending the form to the division engineer. This form must be received by the division engineer within 60 days of the date of this notice.

C: PERMIT DENIAL: You may appeal the denial of a permit under the Corps of Engineers Administrative Appeal Process by completing Section II of this form and sending the form to the division engineer. This form must be received by the division engineer within 60 days of the date of this notice.

D: APPROVED JURISDICTIONAL DETERMINATION: You may accept or appeal the approved JD or provide new information.

- ACCEPT: You do not need to notify the Corps to accept an approved JD. Failure to notify the Corps within 60 days of the date of this notice means that you accept the approved JD in its entirety, and waive all rights to appeal the approved JD.
- APPEAL: If you disagree with the approved JD, you may appeal the approved JD under the Corps of Engineers Administrative Appeal Process by completing Section II of this form and sending the form to the division engineer. This form must be received by the division engineer within 60 days of the date of this notice.

E: PRELIMINARY JURISDICTIONAL DETERMINATION: You do not need to respond to the Corps regarding the preliminary JD. The Preliminary JD is not appealable. If you wish, you may request an approved JD (which may be appealed), by contacting the Corps district for further instruction. Also you may provide new information for further consideration by the Corps to reevaluate the JD.

SECTION II - REQUEST FOR APPEAL or OBJECTIONS TO AN INITIAL PROFFERED PERMIT

REASONS FOR APPEAL OR OBJECTIONS: (Describe your reasons for appealing the decision or your objections to an initial proffered permit in clear concise statements. You may attach additional information to this form to clarify where your reasons or objections are addressed in the administrative record.)

ADDITIONAL INFORMATION: The appeal is limited to a review of the administrative record, the Corps memorandum for the record of the appeal conference or meeting, and any supplemental information that the review officer has determined is needed to clarify the administrative record. Neither the appellant nor the Corps may add new information or analyses to the record. However, you may provide additional information to clarify the location of information that is already in the administrative record.

POINT OF CONTACT FOR QUESTIONS OR INFORMATION:

If you have questions regarding this decision and/or the appeal process you may contact:
Mike Hatten, Chief, Regulatory Division, 304-399-5610
Teresa Spagna, Chief, North Regulatory Branch 304-399-6910
Susan Porter, Chief, South Regulatory Branch, 304 399-5325
Lee Robinette, Chief, Energy Resource Branch, 304-399-5930
Address: U.S. Army Corps of Engineers
Regulatory Branch
502 8th Street
Huntington, WV 25701

If you only have questions regarding the appeal process you may also contact:

U.S. Army Corps of Engineers
Great Lakes and Ohio River Division
550 Main Street, Room 10-714
Cincinnati, OH 45202-3222
Phone: (513) 684-2699
Fax: (513) 684-2460

RIGHT OF ENTRY: Your signature below grants the right of entry to Corps of Engineers personnel, and any government consultants, to conduct investigations of the project site during the course of the appeal process. You will be provided a 15 day notice of any site investigation, and will have the opportunity to participate in all site investigations.

	Date:	Telephone number:
_____ Signature of appellant or agent.		

Project Name: WEST JEFFERSON	
Agent: Earth-Source Inc 14921 Hand Road, Fort Wayne, IN 46818 (260) 489-8511 Fax (260) 489-8607	

DATA POINT LOCATION MAP

0 800 FT 1,600 FT

Scale 1 IN = 800 FT

Applicant:

COLUMBUS LOGISTICS PARK WEST BUILDING II, LLC
8888 KEYSTONE CROSSING, SUITE 1150
INDIANAPOLIS, INDIANA 46240

State: OHIO	County: MADISON
Township Name: JEFFERSON	
Quadrangle: WEST JEFFERSON (OH)	
Latitude/Longitude (WGS 84): 39.943509°, -83.340701°	
Date: 6-22-2021	Attachment: W7

Basemap: Farm Service Agency. 2019 Aerial. National Agriculture Imagery Program. U.S. Department of Agriculture. Salt Lake City, Utah.

U.S. ARMY CORPS OF ENGINEERS
REGULATORY PROGRAM
APPROVED JURISDICTIONAL DETERMINATION FORM (INTERIM)
NAVIGABLE WATERS PROTECTION RULE

I. ADMINISTRATIVE INFORMATION

Completion Date of Approved Jurisdictional Determination (AJD): 8/12/2021
ORM Number: LRH-2021-00542-SCR
Associated JDs: N/A.
Review Area Location[1]: State/Territory: Ohio City: West Jefferson County/Parish/Borough: Madison County
Center Coordinates of Review Area: Latitude 39.943509 Longitude -83.340701

II. FINDINGS

A. Summary: Check all that apply. At least one box from the following list MUST be selected. Complete the corresponding sections/tables and summarize data sources.

- ☐ The review area is comprised entirely of dry land (i.e., there are no waters or water features, including wetlands, of any kind in the entire review area). Rationale: N/A or describe rationale.
- ☐ There are "navigable waters of the United States" within Rivers and Harbors Act jurisdiction within the review area (complete table in Section II.B).
- ☐ There are "waters of the United States" within Clean Water Act jurisdiction within the review area (complete appropriate tables in Section II.C).
- ☒ There are waters or water features excluded from Clean Water Act jurisdiction within the review area (complete table in Section II.D).

B. Rivers and Harbors Act of 1899 Section 10 (§ 10)[2]

§ 10 Name	§ 10 Size		§ 10 Criteria	Rationale for § 10 Determination
N/A.	N/A.	N/A	N/A.	N/A.

C. Clean Water Act Section 404

Territorial Seas and Traditional Navigable Waters ((a)(1) waters):[3]				
(a)(1) Name	(a)(1) Size		(a)(1) Criteria	Rationale for (a)(1) Determination
N/A.	N/A.	N/A.	N/A.	N/A.

Tributaries ((a)(2) waters):				
(a)(2) Name	(a)(2) Size		(a)(2) Criteria	Rationale for (a)(2) Determination
N/A.	N/A.	N/A.	N/A.	N/A.

Lakes and ponds, and impoundments of jurisdictional waters ((a)(3) waters):				
(a)(3) Name	(a)(3) Size		(a)(3) Criteria	Rationale for (a)(3) Determination
N/A.	N/A.	N/A.	N/A.	N/A.

Adjacent wetlands ((a)(4) waters):				
(a)(4) Name	(a)(4) Size		(a)(4) Criteria	Rationale for (a)(4) Determination
N/A.	N/A.	N/A.	N/A.	N/A.

[1] Map(s)/figure(s) are attached to the AJD provided to the requestor.
[2] If the navigable water is not subject to the ebb and flow of the tide or included on the District's list of Rivers and Harbors Act Section 10 navigable waters list, do NOT use this document to make the determination. The District must continue to follow the procedure outlined in 33 CFR part 329.14 to make a Rivers and Harbors Act Section 10 navigability determination.
[3] A stand-alone TNW determination is completed independently of a request for an AJD. A stand-alone TNW determination is conducted for a specific segment of river or stream or other type of waterbody, such as a lake, where upstream or downstream limits or lake borders are established. A stand-alone TNW determination should be completed following applicable guidance and should NOT be documented on the AJD Form.

D. Excluded Waters or Features

Excluded waters ((b)(1) – (b)(12)):[4]				
Exclusion Name	Exclusion Size		Exclusion[5]	Rationale for Exclusion Determination
Section I	1.95	linear feet	(b)(1) Non-adjacent wetland.	Section I does not abut an (a)(1), (a)(2), or (a)(3) water, is not inundated by flooding from an (a)(1), (a)(2), or (a)(3) water in a typical year, and is not physically separated from an (a)(1), (a)(2), or (a)(3) water by a natural or artificial barrier.
Stormwater Conveyance	2,242	acre(s)	(b)(10) Stormwater control feature constructed or excavated in upland or in a non-jurisdictional water to convey, treat, infiltrate, or store stormwater runoff.	Stormwater Conveyance is a manmade ditch created in uplands between 2019-2020 that captures stormwater runoff from an adjacent commercial development.

III. SUPPORTING INFORMATION

A. Select/enter all resources that were used to aid in this determination and attach data/maps to this document and/or references/citations in the administrative record, as appropriate.

☒ Information submitted by, or on behalf of, the applicant/consultant: The applicant submitted the Wetland Delineation Report, West Jefferson, Ohio (Report) dated July 1, 2021.

This information is sufficient for purposes of this AJD.

Rationale: The information provided by or on behalf of the applicant accurately reflects the district's conclusions on the AJD.

☐ Data sheets prepared by the Corps: Title(s) and/or date(s).

☒ Photographs: Aerial and Other: Appendix D in Report referenced above.

☐ Corps site visit(s) conducted on: Date(s).

☐ Previous Jurisdictional Determinations (AJDs or PJDs): ORM Number(s) and date(s).

☐ Antecedent Precipitation Tool: *provide detailed discussion in Section III.B*.

☒ USDA NRCS Soil Survey: Attachment W4 in Report.

☒ USFWS NWI maps: Attachment W3 in Report.

☒ USGS topographic maps: Ohio 1:24K – Wilmington

Other data sources used to aid in this determination:

Data Source (select)	Name and/or date and other relevant information
USGS Sources	N/A.
USDA Sources	N/A.

[4] Some excluded waters, such as (b)(2) and (b)(4), may not be specifically identified on the AJD form unless a requestor specifically asks a Corps district to do so. Corps districts may, in case-by-case instances, choose to identify some or all of these waters within the review area.
[5] Because of the broad nature of the (b)(1) exclusion and in an effort to collect data on specific types of waters that would be covered by the (b)(1) exclusion, four sub-categories of (b)(1) exclusions were administratively created for the purposes of the AJD Form. These four sub-categories are not new exclusions, but are simply administrative distinctions and remain (b)(1) exclusions as defined by the NWPR.

Data Source (select)	Name and/or date and other relevant information
NOAA Sources	N/A.
USACE Sources	N/A.
State/Local/Tribal Sources	N/A.
Other Sources	N/A.

B. Typical year assessment(s): N/A

C. Additional comments to support AJD: The proposed project area is located outside of the 100 year floodplain.

SITE PHOTOGRAPHS
COLUMBUS LOGISTICS PARK WEST LAND: MADISON COUNTY, OHIO

1. View south of Section I at data point T2P7. 6/8/2021.

2. View east of Section I. 6/8/2021.

Ohio Environmental Protection Agency

Mike DeWine, Governor
Jon Husted, Lt. Governor
Laurie A. Stevenson, Director

Re: Columbus Logistics Park West Land
Permit - Intermediate
Approval
401 Wetlands
Madison
DSW401227913W

November 30, 2022

Clay Smith
Columbus Logistics Park West Land, LLC
8888 Keystone Crossing, Suite 1150
Indianapolis, Indiana 46240
csmith@ambrosepg.com

Subject: Columbus Logistics Park West Land
Madison County / Jefferson Township / Columbus
Grant of a Level Two Isolated Wetland Permit
Ohio EPA ID No. 227913W

Dear Stakeholders:

I hereby authorize the above referenced project under the following authorities, and it is subject to the following modifications and/or conditions:

Ohio Isolated Wetland Permit

Pursuant to Ohio Revised Code Chapter 6111, I hereby conclude that the above-referenced project will comply with the applicable provisions of Ohio Revised Code Sections 6111.02 through 6111.028. This authorization is specifically limited to an Ohio Isolated Wetlands Permit (here after referred to as "permit") with respect to water pollution and does not relieve the Permittee of further Certifications or Permits as may be necessary under the law. I have determined that a lowering of water quality in the Upper Scioto (HUC 050600012006) as authorized by this permit is necessary. I have made this determination based upon the consideration of all public comments, if submitted, and the requirements set forth in Ohio Revised Code Sections 6111.02 through 6111.028. In accordance with ORC Section 6111.021(C), this permit shall serve as the state's 401 water quality certification to the extent that any of these waters are deemed jurisdictional under the Federal Water Pollution Control Act.

PART I ON-SITE WATER RESOURCES AND IMPACTS

A. Watershed Setting

The watershed in where this project is located, Thomas Ditch-Little Darby Creek (HUC 050600012006), has an area of 36.19 square miles. The Little Darby Creek is an exceptional warmwater habitat (EWH) stream and primary contact recreation water. As found in OAC rule 3745-1-09, the water supply is listed agricultural water supply (AWS) and industrial water supply (IWS).

B. Project Description

The Columbus Logistics Park West Land project area is located at 5270 US 40 West in West Jefferson, Jefferson Township, Madison County. The proposed project is to construct an industrial complex, which will include two buildings, detention basins, internal roads, and parking/loading areas. The preferred alternative includes filling of an isolated wetland to construct the far west building/docks resulting in permanent impacts to approximately 1.95 acres of Category 1 wetlands.

C. Impacts

Impacts to isolated wetlands are as follows:

A 1.95-acre wetland, identified as Section I, was delineated within the limits of the project north of US 40 near the southwest corner of the project site. An ORAM verification determined the wetland is a Category 1. Section I is an isolated, forested wetland.

Wetland ID	Isolated or Non-isolated?	Forested or Non-Forested	Category	Total Acreage on Site	Total Acreage Impacted	Percent Avoided
Section I	Isolated	Forested	1	1.95	1.95	0%
			Totals	1.95	1.95	0%

PART II TERMS & CONDITIONS

A. Terms and conditions outlined in this section apply to project as described in this permit.

B. This permit shall be valid for a period of 5 years from the date of issuance.

C. The Permittee shall notify Ohio EPA, in writing, and in accordance with *Part IV* (*NOTIFICATIONS TO OHIO EPA*) of this permit, upon the start and completion of site development construction.

D. A copy of this permit shall remain on-site for the duration of the project construction activities.

E. In the event of an inadvertent spill, the Permittee must immediately call the Ohio EPA Spill Hotline at 1-800-282-9378, as well as the Ohio EPA Section 401 Manager (614-644-2001).

F. Unpermitted impacts to surface water resources and/or their buffers occurring as a result of this project must be reported within 24 hours of occurrence to Ohio EPA, Division of Surface Water, Section 401 Manager (614-644-2001), for further evaluation.

G. This project may affect the public water systems for the Picket Fences MHP and National Road Golf Course. Precautions must be taken to limit any effect on the water supply. Spills during construction do have the potential to impact the source of drinking water given the proximity of the wells and the SWAP area to the project site. Contractors working on the project should prepare a spill response and notification plan in the event a spill occurs. To minimize the chance of a spill, fuel should be stored, and equipment maintenance or repair should be conducted either outside the inner management zone and drinking water source protection area or in a manner which will prevent the release of fluids into ground water. Officials at the Picket Fences MHP and National Road Golf Course must be notified before beginning the project and contact maintained, and activities shall be coordinated with them. At present the Picket Fences PWS contact is Aleksandr Dresvyannikov at (614) 256-7012 or drsvankv@gmail.com. The National Road Golf Course PWS contact is Brent Wohrle at (614) 879-7880 or wbgolfcenter@msn.com. Contact information for local water authorities may be obtained by contacting Ohio EPA's Division of Drinking and Groundwater at: https://epa.ohio.gov/wps/portal/gov/epa/divisions-and-offices/drinking-ground-and-waters/public-water-systems or 614-644-2752.

H. Pesticide application(s) for the control of plants and animals shall be applied in accordance with the NPDES General Permit to Discharge Pesticides In, Over or Near Waters of the State available at: https://epa.ohio.gov/static/Portals/35/permits/OHG870002_FINAL_PERMIT.pdf and may require a pesticide applicator license from the Ohio Department of Agriculture.

I. Any authorized representative of the director shall be allowed to inspect the authorized activity at reasonable times to ensure that it is being or has been accomplished in accordance with the terms and conditions of this permit.

J. In the event that there is a conflict between the permit application, and the conditions within this permit, the condition shall prevail unless Ohio EPA agrees, in writing, that the permit application or other provision prevails.

K. The Permittee shall provide electronic maps of the development area to Ohio EPA 401 WQC and Isolated Wetland Permitting Section within 30 days of the date of this permit. When sending the electronic files, include the Ohio EPA ID Number and the Army Corps of Engineers Number (if applicable). If possible, these electronic maps shall be GIS shape files or Geodatabase files. If this is not possible, the electronic maps shall be in another electronic format readable in GIS (GIF, TIF, etc). The electronic files shall be sent to the following e-mail address: EPA.401Webmail@epa.ohio.gov

If the files are too large to send by e-mail (over 25 MB), a disk containing the electronic files shall be mailed to the following address:

Ohio Environmental Protection Agency
Division of Surface Water
Attn: 401 Section Manager
50 West Town Street, Suite 700
PO Box 1049
Columbus, OH 43216-1049

L. This proposal may require other permits from Ohio EPA. For information concerning application procedures, contact the Ohio EPA District Office as follows:

Ohio Environmental Protection Agency
Central District Office
50 W. Town Street, Suite 700
Columbus, Ohio 43215-1049
614-728-3778

Additional information regarding environmental permitting assistance at Ohio EPA can be found at https://epa.ohio.gov/wps/portal/gov/epa/stay-compliant/get-help/permit-assistance

M. Best Management Practices (BMPs)

1. All water resources and their buffers which are to be avoided shall be clearly indicated on site drawings, demarcated in the field and protected with suitable materials (e.g., silt fencing) prior to site disturbance. These materials shall remain in place and be maintained throughout the construction process.

2. All BMPs for stormwater management shall be designed and implemented in accordance with the most current edition of the Ohio Department of Natural Resources Rainwater and Land Development Manual, unless otherwise required by the National Pollutant Discharge Elimination System (NPDES) general permit for stormwater discharges associated with construction activities (construction general permit), if required.

   A copy of the Rainwater and Land Development Manual is available at: https://epa.ohio.gov/wps/portal/gov/epa/divisions-and-offices/surface-water/guides-manuals/rainwater-and-land-development

   A copy of the NPDES construction general permit is available at: https://epa.ohio.gov/static/Portals/35/permits/OHC000005/Final_OHC000005.pdf

3. Straw bales shall not be used as a form of erosion/sediment control.

4. Grass filter strips shall be established adjacent to all avoided/relocated and un-culverted waters of the state, including wetlands and existing buffer areas. Filter strips shall be vegetated with non-invasive species native to Ohio and shall be designed and implemented in accordance with the most current edition of the Rainwater and Land Development Manual.

5. Fill material shall consist of suitable non-erodible material and shall be stabilized to prevent erosion.

6. Materials used for fill or bank protection shall consist of suitable material free from toxic contaminants in other than trace quantities. Broken asphalt is specifically excluded from use as fill or bank protection.

7. Concrete rubble used for fill or bank stabilization shall be in accordance with ODOT specifications; free of exposed re-bar; and, free of all debris, soil and fines.

8. Chemically treated lumber which may include, but is not limited to, chromated copper arsenate (CCA) and creosote treated lumber shall not be used in structures that come into contact with waters of the state.

9. Trees removed from temporary impact areas to facilitate construction shall be replaced with appropriate tree species native to Ohio.

N. Wildlife Protection

1. In the event that an eastern massasauga rattlesnake (*Sistrurus catenatus catenatus*) is encountered during construction of the project, work should

immediately cease and the Ohio Department of Natural Resources, Division of Wildlife contacted. Caution should be employed during construction and during the snakes' active season (March 15 - November 15).

2. Should the project site contain trees ≥3 inches dbh, avoidance is recommended wherever possible; however, for trees ≥3 inches dbh that cannot be avoided, removal is recommended to only occur between October 1 and March 31. Seasonal clearing is recommended to avoid adverse effects to Indiana bats and northern long-eared bats.

PART III MITIGATION

A. Description of Required Mitigation

As mitigation for 1.95 acres of wetland impact including 1.95 acres of Category 1 Forested wetland, the certification holder shall purchase 3.90 credits from Green Camp Mitigation Bank located in Marion County within the Upper Scioto Watershed (HUC 05060001).

B. Timing of Mitigation Requirements

1. Within 30 days of the date of permit, a copy of the fully executed mitigation bank agreement with the Green Camp Mitigation Bank shall be provided to Ohio EPA. **Impacts to waters of the state shall not occur until the terms of this condition have been met**.

C. Reporting

1. Annual Update Reports

A project construction update report shall be submitted to Ohio EPA by December 31 of each year following the date of this permit and until project construction is complete. Each update report shall contain, at a minimum, the following information:

a. The status of the filling activities at the development site including dates filling was started and completed, or are expected to be started and completed. If filling activities have not been completed, a drawing shall be provided, which shows the locations and acreage/feet of wetlands/streams that have not yet been filled. If filling activities have been completed, then as-built drawings shall be submitted, which show where fill was placed.

b. Current contact information for all responsible parties including phone number, e-mail, and mailing addresses. For the purposes of this condition, responsible parties include, but may not be limited to the Permittee, consultant, and project construction manager.

c. As-built drawings sized 11" by 17" (to scale) of each of the construction areas, once construction is complete.

PART IV NOTIFICATIONS TO OHIO EPA

All notifications, correspondence, and reports regarding this permit shall reference the following information:

Permittee Name:	Columbus Logistics Park West Land, LLC
Project Name:	Columbus Logistics Park West Land
Ohio EPA ID No.:	227913W

and shall be sent to:

Ohio Environmental Protection Agency
Division of Surface Water, 401/IWP Unit
Lazarus Government Center
50 West Town Street
P.O. Box 1049
Columbus, Ohio 43216-1049

You are hereby notified that this action of the director is final and may be appealed to the Environmental Review Appeals Commission pursuant to Section 3745.04 of the Ohio Revised Code. The appeal must be in writing and set forth the action complained of and the grounds upon which the appeal is based. The appeal must be filed with the Commission within 30 days after notice of the director's action. The appeal must be accompanied by a filing fee of $70.00, made payable to "Treasurer, State of Ohio," which the Commission, in its discretion, may reduce if by affidavit you demonstrate that payment of the full amount of the fee would cause extreme hardship. Notice of the filing of the appeal shall be filed with the director within three days of filing with the Commission. Ohio EPA requests that a copy of the appeal be served upon the Ohio Attorney General's Office, Environmental Enforcement Section. An appeal may be filed with the Environmental Review Appeals Commission at the following address:

Environmental Review Appeals Commission
30 East Broad Street, 4th Floor
Columbus, Ohio 43215

Sincerely,

Laurie A. Stevenson
Director

ec: Andrew Wendt, andrew.j.wendt@usace.army.mil, Department of the Army, Huntington District, Corps of Engineers
Wes Barnett, wes.barnett@usace.army.mil, Department of the Army, Huntington District, Corps of Engineers
Kerryann Weaver, R5Wetlands@epa.gov, U.S. EPA, Region 5
Patrice Ashfield, Ohio@fws.gov, U.S. Fish & Wildlife Service
Mike Pettegrew, Mike.Pettegrew@dnr.state.oh.us, ODNR, Office of Real Estate
Diana Welling, dwelling@ohiohistory.org, Ohio Historical Preservation Office
Jacqueline Luzar, Jacqueline.Luzar@epa.ohio.gov, Ohio EPA, DSW, 401/Wetlands/Mitigation Section
Andrea Kilbourne, Andrea.Kilbourne@epa.ohio.gov, Ohio EPA, DSW, Mitigation Coordinator
Mike Gallaway, Michael.Gallaway@epa.ohio.gov, Ohio EPA CO District
Cal Miller, wetlandsresource@aol.com, The Wetlands Resource Center
Eric Ellingson, eric@earthsourceinc.net, Earth Source, Inc.

Attachment: Site Location Map (project)

Ohio EPA has developed a customer service survey to get feedback from regulated entities that have contacted Ohio EPA for regulatory assistance, or worked with the Agency to obtain a permit, license or other authorization. Ohio EPA's goal is to provide our customers with the best possible customer service, and your feedback is important to us in meeting this goal. Please take a few minutes to complete this survey and share your experience with us at http://www.surveymonkey.com/s/ohioepacustomersurvey.


PROJECT
SITE

ATSI Transmission Zone M-3 Process
London-Tangy 138 kV Customer

Need Number: ATSI-2023-004

Process Stage: Need Meeting – 03/17/2023

Project Driver:

Customer Service

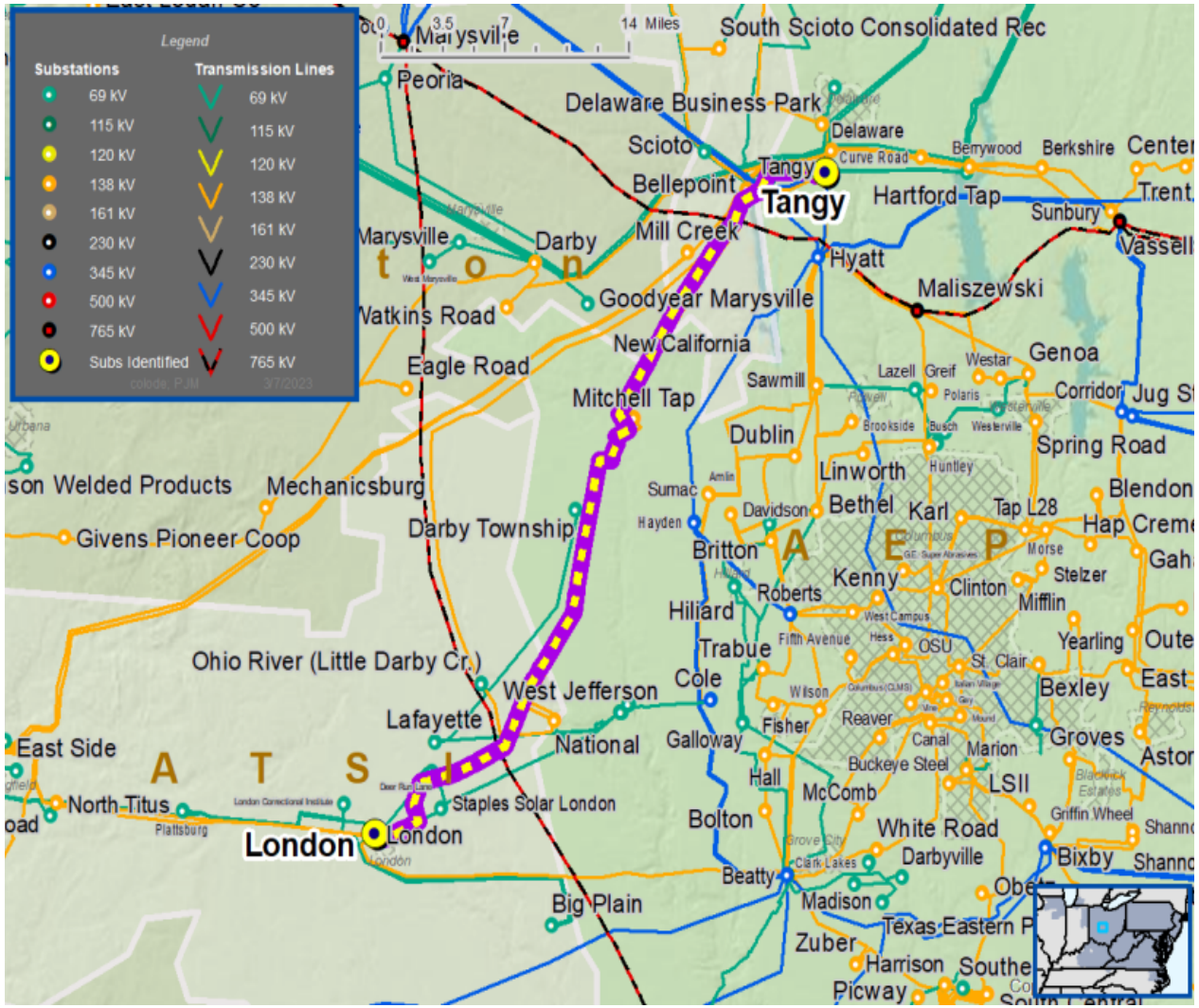
Specific Assumption Reference:

Customer request will be evaluated per FirstEnergy's "Requirements for Transmission Connected Facilities" document and "Transmission Planning Criteria" document.

Problem Statement:

Modified Customer Connection – Ohio Edison Distribution has requested to provide a second 138 kV service to an existing delivery point served from the London-Tangy 138 kV line due to load growth in the area. The anticipated load is approximately 14 MVA.

Requested in-service date is 6/1/2024



ATSI Transmission Zone M-3 Process
London - Tangy 138 kV Line Customer Connection

Need Number: ATSI-2023-004
Process Stage: Solution Meeting – 05/19/2023
Previously Presented: Need Meeting – 3/17/2023

Project Driver(s):
Customer Service

Specific Assumption Reference(s)

Customer connection request will be evaluated per FirstEnergy's "Requirements for Transmission Connected Facilities" document and "Transmission Planning Criteria" document.

Problem Statement

Modified Customer Connection – Ohio Edison Distribution has requested to provide a second 138 kV service to an existing delivery point served from the London-Tangy 138 kV line due to load growth in the area. The anticipated load is approximately 14 MVA.

Requested in-service date is 6/1/2024

ATSI Transmission Zone M-3 Process
London - Tangy 138 kV Line Customer Connection

Need Number: ATSI-2023-004
Process Stage: Solution Meeting – 05/19/2023
Previously Presented: Need Meeting – 3/17/2023

Proposed Solution:

138 kV Transmission Line Tap

- Install one SCADA controlled switch
- Relocate one existing main-line SCADA controlled switch
- Construct approximately 0.1 miles of 795 kcmil 26/7 ASCR transmission line
- Adjust relay settings at London and Tangy substations

Alternatives Considered:

- No feasible alternatives to meet customer's request

Estimated Project Cost: $0.8M

Projected In-Service: 06/01/2024
Status: Engineering