

**AMERICAN TRANSMISSION SYSTEMS,  
INCORPORATED AND OHIO EDISON  
FIRSTENERGY COMPANIES,**

**CONSTRUCTION NOTICE**

**LONDON-TANGY 138 kV  
TRANSMISSION LINE TAP TO HARRIOT  
SUBSTATION PROJECT**

**OPSB CASE NO.: 26-0015-EL-BNR**

**June 16, 2026**

**American Transmission Systems, Incorporated  
341 White Pond Dr.  
Akron, Ohio 44320**

**CONSTRUCTION NOTICE  
LONDON-TANGY 138 kV TRANSMISSION LINE  
TAP TO HARRIOT SUBSTATION PROJECT  
OHIO POWER SITING BOARD CASE NO. 26-0015-EL-BNR**

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

**4906-6-05: ACCELERATED APPLICATION REQUIREMENTS**

**4906-6-05: Name and Reference Number**

Name of Project: London-Tangy 138 kV Transmission Line Tap to Harriot Substation Project

Reference Number: 3216

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

American Transmission Systems, Incorporated (“ATSI”), and Ohio Edison, First Energy Companies (collectively, “Applicants”) propose to construct an approximately 200-foot (0.03 mile) transmission line tap from the existing London-Tangy 138 kV Transmission Line to the new Ohio Edison owned Harriot Substation. The Project will require the replacement of three (3) existing structures (13825, 13827, 13828) along the current London-Tangy 138 kV Transmission Line centerline. In addition, two (2) new structures (HA1, HA2) will be installed between the existing transmission line and the new, Ohio Edison-owned distribution substation named Harriott Substation. These structures are needed to create the new transmission line tap into the substation. One (1) additional new structure (HA3) will be installed outside of the substation, on the northwest side, to support the shield wire extending over the Harriot Substation. Three new SCADA controlled switches will be installed. Two of the switches will be installed along the existing transmission line on structures 13825 and 13828, and one switch will be installed on the

new transmission line tap on structure HA1. The existing conductor on the London-Tangy 138 kV Transmission Line will be transferred to the new structures being replaced on the existing centerline. Approximately 200 ft of new 605.0 kcmil 24/7 Peacock ACSR conductor and 7#8 Alumoweld shield wire will be used on the transmission line tap to the Harriot Substation.

The general location of the Project is shown in **Exhibit 1**, a partial copy of the United States Geologic Survey, Union county OH, Quad Map. **Exhibit 2** provides a partial copy of ESRI aerial imagery of the Project area. The General Layout is attached as **Exhibit 3**. The Project is located in Millcreek Township, Union County, Ohio.

**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 Adm.Code 4906-1-01. 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 Project is within the requirements of Items (1)(a) and (1)(d)(i) as it involves the extension of a single-circuit transmission line for a distance of less than 0.2 miles, and the new segment of transmission line is solely on property owned by the applicant. It also meets the requirements of Item (2)(a) because it involves replacing a structure with a different type of structure for a distance of less than two miles.

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

The Project is needed to provide a new 138 kV wholesale delivery point to Ohio Edison (the “Customer”). The Customer requested the proposed delivery point for electric service to a new substation. The proposed load addition is approximately 12 MVA. The Project is not part of a larger project/initiative and is solely needed to provide the requested new 138 kV wholesale delivery point.

The need for the proposed Project was presented at the February 15, 2024, Subregional Regional Transmission Expansion Plan (“RTEP”) Committee – Western meeting. The solution for the proposed Project was presented at the July 19, 2024, Subregional RTEP Committee – Western meeting. PJM assigned the Upgrade ID number of s3521.1 to the Project. The PJM presentation slides are included as **Exhibit 4**.

The implementation of advanced transmission technologies was considered as part of this Project. A SCADA controlled switch will replace an existing air switch. SCADA switches offer significant advantages over traditional air switches, primarily due to their enhanced remote control, monitoring, and automation capabilities. SCADA systems allow for real-time data collection and analysis, enabling remote monitoring of multiple devices,

troubleshooting problems, and even controlling equipment from anywhere. Air switches, while simple, lack these advanced features and are typically manually operated.

**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. 2026 Long-Term Forecast Report. This map was submitted to the Public Utility Commission of Ohio (“PUCO”) in Case No. 26-0504-EL-FOR under Adm.Code 4901:5-5:04 (C)(2)(b). This Project was included on page 58 in the 2026 Long Term Forecast Report.

**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 features and the status of the proposed Project as necessary. ATSI will maintain a copy of this Construction Notice, along with other Project information, on FirstEnergy’s website:

[https://www.firstenergycorp.com/about/transmission\\_projects/ohio.html](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](mailto:transmissionprojects@firstenergycorp.com).

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

Construction on this Project is expected to begin as early as April 20, 2027 and be completed and placed in service by May 28, 2027.

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

**Exhibit 1** provides a partial copy of the USGS Topographic Map, Union County, Ohio, Quad Map. **Exhibit 2** provides a partial copy of ESRI aerial imagery.

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

The new tap segment of the proposed Project is located wholly on one parcel owned by ATSI. The parcel number is 2500130250010. The rest of the Project will take place within existing ROW on two separate parcels owned by ATSI(2500130250000, 1400100022000). No new easements will be required for the Project.

**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

ROW Width: 100 ft

Conductors: 605.0 kcmil 24/7 Peacock ACSR

Static Wire: 7#8 Alumoweld

Insulators: Porcelain

Structure Type: **Exhibit 5:** Single circuit tubular steel switch structure single pole with shield wire (structures HA1,13825,13828)

**Exhibit 6:** Single circuit tubular steel tap structure single pole with shield wire (structure 13827)

**Exhibit 7:** Single circuit direct embed steel strain structure single pole with shield wire (structure HA2)

**Exhibit 8:** Direct embed steel single pole with shield wire (HA3)

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

There are no occupied residences or institutions within 100 feet from the existing transmission line centerline. Electric and Magnetic Field (“EMF”) calculations are not required by this code provision.

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

The estimated cost for the proposed Project is \$4,346,000. 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 Millcreek Township, Union County, Ohio. The land use within the vicinity of the proposed Project is primarily agricultural use with residential use to a lesser extent. This Project will take place in existing right of way and on a parcel owned by ATSI.

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

There are no parcels within the Project Area designated as Agricultural District property, therefore there will be no impact to any agricultural land.

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

As part of the investigation for this Construction Notice, TRC Companies, Inc. ("TRC") submitted a request to the Ohio Historic Preservation Office (SHPO) on behalf of ATSI to review the Project Study Area (Area of Potential Effects or APE) with a one (1)-mile search radius. On November 21, 2025, SHPO replied to the request and the response is attached as **Exhibit 9**. SHPO concurred that the Project, as proposed, will not affect any historic properties or cultural resources. No further coordination is required unless the scope of

work changes or archaeological remains are discovered during the course of the Project completion.

The OHPO database includes a catalog of all historic properties listed in or eligible for listing in 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 revealed there are no historic properties within one (1)-mi of the proposed Project.

The OHPO database also includes listings on the Ohio Historic Inventory (OHI), the Ohio Archaeological Inventory (OAI), previous cultural resource surveys, and the Ohio Genealogical Society (OGS) cemetery inventory. The file search revealed that there are no above-ground historic resources, or Ohio Genealogical Society (OGS) cemeteries recorded within one (1)-mi of the Study Area.

Four (4) archaeological surveys have been completed within one (1) mi of the proposed Project, of which three (3) have portions that overlap with the Study Area. One (1) previously recorded pre-contact archaeological isolated find and four (4) recently recorded archaeological sites still under review, have been recorded within one (1) mi. All four (4) of the sites are recorded as isolated finds, one (1) of which is within the approximate center of the proposed Project.

The Project Study Area is comprised of an existing, maintained, utility right-of-way (ROW), and agricultural fields. The regional landscape is predominantly agricultural, industrial and wooded with large-scale residential areas to the southeast. The proposed Project is not expected to have any adverse effects on known historic properties. To date, TRC has not conducted any on-site cultural resources surveys.

**4906-6-05 (B)(10)(d): Construction Filings with Local, State and Federal Governmental Agencies**

Coordination with the Union County Engineer’s office will be completed to obtain right of way (ROW) permit(s) necessary for work along and across Harriott Road based on the proposed Project. More than one (1) acre of earth disturbance is proposed in the Project scope, therefore a submittal of a Notice of Intent (NOI) application to the Ohio EPA will be required for coverage under the general construction stormwater permit (OHC000006), and a Storm Water Pollution Prevention Plan (SWPPP) submitted to the Union Soil & Water Conservation District (USWCD) and the Union County Engineer’s office. The Project scope is not proposed within a 100-year FEMA floodplain and therefore will not require a Floodplain Hazard Development Permit. All permitting and/or coordination necessary to comply with local, state, and federal agencies with jurisdiction regarding this Project will be completed prior to the commencement of construction. Table 1 shows a list of government agency requirements.

**Table 1. List of Government Agency Requirements**

Agency	Requirement
Ohio EPA	General NPDES Construction Storm Water Permit OHC000006
Union County Engineer Office	ROW Permit
Union County Engineer’s Office and Union County Soil & Water Conservation District (USWCD)	SWPPP Review

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

As part of the investigation, ATSI retained TRC to conduct necessary surveys. TRC submitted a request to the Ohio Department of Natural Resources (“ODNR”) Office of Real Estate to conduct an Environmental Review. As part of the Environmental Review, the ODNR Office of Real Estate 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 Study Area. The ODNR’s Office of Real Estate’s response on November 21, 2025 indicated that there are no records of state and/or federally listed plants or animals located within one mile of the Project Area. ODNR’s response indicated that the Project is within the range of 11 state and/or federally listed animal species. A list of all endangered, threatened, and rare species, as identified by ODNR, within the range of the Project is provided in Table 2. A copy of ODNR’s Office of Real Estate’s response is included as **Exhibit 10**.

**Table 2. List of Endangered and Threatened Species within Range of Project Study Area**

<b>Common Name</b>	<b>Scientific Name</b>	<b>Federal Listed Status</b>	<b>State Listed Status</b>	<b>Affected Habitat</b>
<b>Mammals</b>				
Indiana Bat	<i>Myotis sodalis</i>	Endangered	Endangered	Trees, forests, caves, and caverns.
Little Brown Bat	<i>Myotis lucifugus</i>	N/A	Endangered	Trees, forests, caves, and caverns.
Northern Long-eared Bat	<i>Myotis septentrionalis</i>	Endangered	Endangered	Trees, forests, caves, and caverns.
Tricolored Bat	<i>Perimyotis subflavus</i>	Proposed Endangered	Endangered	Trees, forests, caves, and caverns.
<b>Mussels</b>				
Snuffbox	<i>Epioblasma triquetra</i>	Endangered	N/A	Perennial streams.
Northern riffleshell	<i>Epioblasma torulosa rangiana</i>	Endangered	N/A	Perennial streams.
Clubshell	<i>Pleurobema clava</i>	Endangered	N/A	Perennial streams.
Rayed bean	<i>Villosa fabalis</i>	Endangered	N/A	Perennial streams.

Common Name	Scientific Name	Federal Listed Status	State Listed Status	Affected Habitat
Rabbitsfoot	<i>Theliderma cylindrica</i>	Threatened	N/A	Perennial streams.
Elephant-ear	<i>Elliptio crassidens crassidens</i>	N/A	Endangered	Perennial streams.
Pondhorn	<i>Uniomereus tetralasmus</i>	N/A	Threatened	Perennial streams.

Based on the information received from correspondence with ODNR, the Project 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 endangered species, the little brown bat (*Myotis lucifugus*), a state endangered species, and the tricolored bat (*Perimyotis subflavus*), a state endangered species. These bat species predominantly roost in trees behind loose, exfoliating bark, in crevices, and cavities, or in the leaves. These species are dependent on the forest structure surrounding the roost trees. The DOW recommended a desktop bat hibernaculum assessment be completed for the Project, which TRC completed for ATSI and submitted to ODNR for concurrence on December 3, 2025. ODNR responded on December 4, 2025, attached as **Exhibit 11**, concurring that no caves, cliffs, or mine openings occur in the Project Study Area. In addition, because the Project does not involve blasting or impacting the bedrock, the Project is not likely to impact hibernating bats that may be present in nearby underground mines. In assessing compliance with NWP General Condition 18, TRC determined that tree clearing is not anticipated within the Project Study Area; therefore, no impacts to bat species are anticipated as a result of the construction of this Project.

The Project is also within the range of the following listed mussel species: snuffbox (*Epioblasma triquetra*), Northern riffleshell (*Epioblasma torulosa rangiana*), clubshell (*Pleurobema clava*), and rayed bean (*Villosa fabalis*), federally endangered mussel species; rabbitsfoot (*Theliderma cylindrica*), a federally threatened mussel; elephant-ear (*Elliptio crassidens crassidens*), a state endangered mussel; and the pondhorn (*Uniomereus*

*tetralasmus*), a state threatened mussel. Due to the location, and that there is no in-water work proposed in a perennial stream of sufficient size, this Project will not impact these species.

As part of the investigation, TRC submitted a Technical Assistance request to USFWS on October 28, 2025, to research the presence of any endangered, threatened, rare, or designated species within the Project Study Area. A copy of the USFWS' response, dated November 17, 2025, is included as **Exhibit 12**. The response indicated that due to the Project, type, size, and location, no adverse effects are anticipated to federally endangered, threatened, or proposed species or proposed or designated critical habitat.

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

TRC performed field investigations to identify and delineate wetlands and waterbodies located within the 11.59-acre Project Study Area on December 7, 2023, and October 29, 2024. Two (2) palustrine emergent wetlands (W-MMM-1, W-MMM-2) were identified and delineated within the Project Study Area. A Technical Memorandum for the Surface Water Delineation of the Project Study Area is included in **Attachment 13**.

The Project Study Area consists of an existing, maintained utility ROW within agricultural land use. TRC did not observe the presence of any of the ODNR or federally listed species during the field investigations due to the highly maintained nature of the utility ROW and agricultural land use; therefore, no impacts are anticipated to any of the listed species detailed in the ODNR correspondence.

The Limits of Disturbance (LOD) will be completely within the Project Study Area and will avoid all delineated features. Nationwide Permit (NWP) 57 - Electric Utility Line and Telecommunications Activities (effective March 15, 2026, valid through March 14, 2031), authorizes the construction of access roads for the construction and maintenance of electric utility lines or telecommunication lines, including overhead lines and substations, in nontidal waters of the United States, provided the activity does not cause the loss of greater than 0.5-acre of waters of the United States. Nationwide Permit Regional General

Conditions were reviewed regarding this Project. This Project is located in Mill Creek Township, Union County, Ohio which is within the USACE Huntington Regulatory District. The Project location is not listed in Appendix 1 to Regional General Condition 5(a) (Endangered Species and Threatened Species). It is anticipated that due to the nature of the Project, jurisdictional resources will not be impacted by the proposed Project activity. Therefore, NWP 57 conditions are met and there is no potential trigger for a Section 404 PCN to USACE.

A review of the USGS Protected Areas Database ([www.usgs.gov/programs/gap-analysis-project/science/protected-areas](http://www.usgs.gov/programs/gap-analysis-project/science/protected-areas)) revealed no conservation easements within the Project Study Area. The National Conservation Easement Database is no longer in use due to the database no longer being actively updated and supported.

**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 application is being provided concurrently with its docketing with the Board to the following officials in Millcreek Township and Union County, Ohio. A copy will also be provided to the Marysville Public Library for public review/reference.

## **Union County**

Dave Lawrence  
Union County Commissioner  
[commissioners@unioncountyohio.gov](mailto:commissioners@unioncountyohio.gov)  
233 W. 6th Street  
Marysville, OH 43040

Steve Robinson  
Union County Commissioner  
[commissioners@unioncountyohio.gov](mailto:commissioners@unioncountyohio.gov)  
233 W. 6th Street  
Marysville, OH 43040

USWCD  
[smaisenbacher@unioncountyohio.gov](mailto:smaisenbacher@unioncountyohio.gov)  
18000 State Route 4, Suite D  
Marysville, OH 43040

### **Millcreek Township**

Keith Conroy  
Millcreek Township Trustee  
[Millcreektwpohio.us](http://Millcreektwpohio.us)  
10420 Watkins Rd.  
PO Box 157  
Marysville, OH 43040

Bill Jordan  
Millcreek Township Trustee  
[Millcreektwpohio.us](http://Millcreektwpohio.us)  
10420 Watkins Rd.  
PO Box 157

### **Library**

Nieca Nowels, Director  
Marysville Public Library  
231 S Plum St.  
Marysville, OH 43040  
[nnowels@marysvillelib.org](mailto:nnowels@marysvillelib.org)

Tom McCarthy  
Union County Commissioner  
[commissioners@unioncountyohio.gov](mailto:commissioners@unioncountyohio.gov)  
233 W. 6th Street  
Marysville, OH 43040

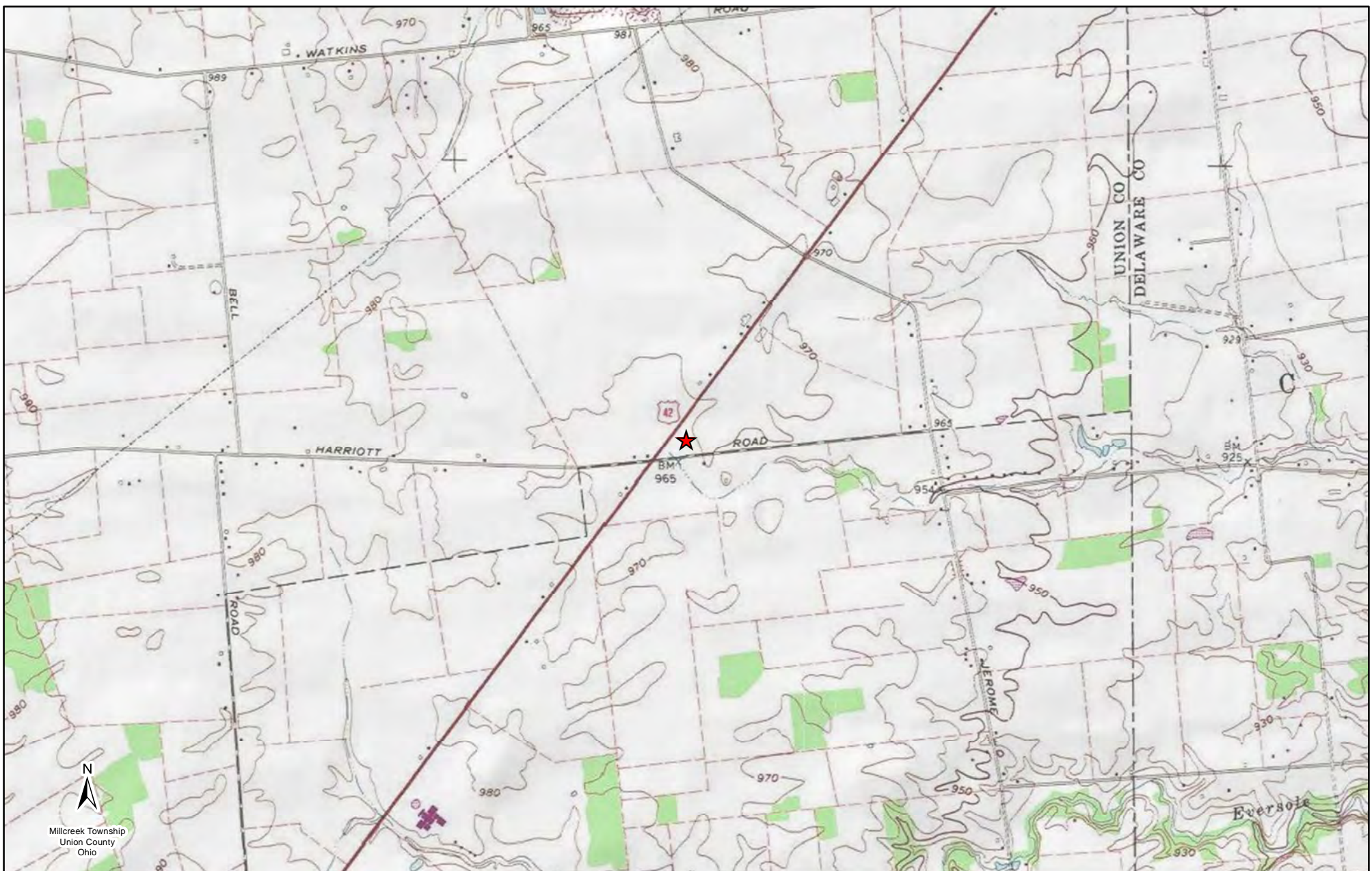
Jeff Stauch  
Union County Engineer  
[engineer@unioncountyohio.gov](mailto:engineer@unioncountyohio.gov)  
233 W. 6<sup>th</sup> Street  
Marysville, OH 43040

David Long  
Millcreek Township Trustee  
[Millcreektwpohio.us](http://Millcreektwpohio.us)  
10420 Watkins Rd.  
PO Box 157  
Marysville, OH 43040

Scott Brackenridge  
Millcreek Township Fiscal Officer  
[Millcreektwpohio.us](http://Millcreektwpohio.us)  
10420 Watkins Rd.  
PO Box 157  
Marysville, OH 43040

Copies of the transmittal letters to these officials have been included with this application as proof of compliance under Adm.Code 4906-6-07 (B) to provide the Board with proof of notice to local officials as required by Adm.Code 4906-6-07 (A)(1) and to the library per Adm.Code 4906-6-07 (A)(2).

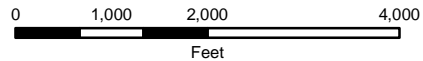
Information is posted at [www.firstenergycorp.com/about/transmission\\_projects/ohio.html](http://www.firstenergycorp.com/about/transmission_projects/ohio.html) on how to request an electronic or paper copy of this Construction Notice application. The link to this website is being provided to meet the requirements of Adm.Code 4906-6-07 (B) and to provide the Board with proof of compliance with the notice requirements in Adm.Code 4906-6-07 (A)(3).



Millcreek Township  
Union County  
Ohio

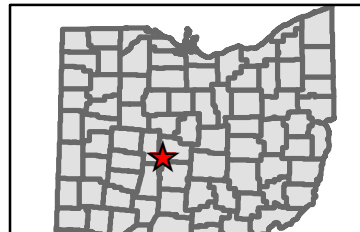
**LEGEND:**

★ Project



**Reference:**  
USGS Topographical Overlay

**Coordinate System:**  
NAD\_1983\_StatePlane\_Ohio\_North\_FIPS\_3401\_Feet  
WKID: 3734 Authority: EPSG



**EXHIBIT 1**



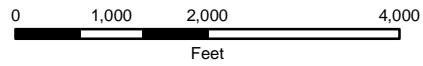
**London-Tangy 138 kV  
Transmission Line Tap to  
Harriot Substation Project**



N  
Millcreek Township  
Union County  
Ohio

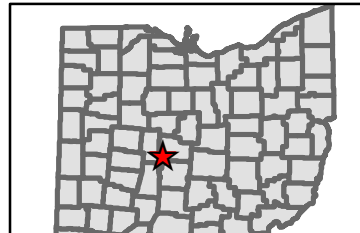
**LEGEND:**

★ Project



**Reference:**  
USGS Topographical Overlay

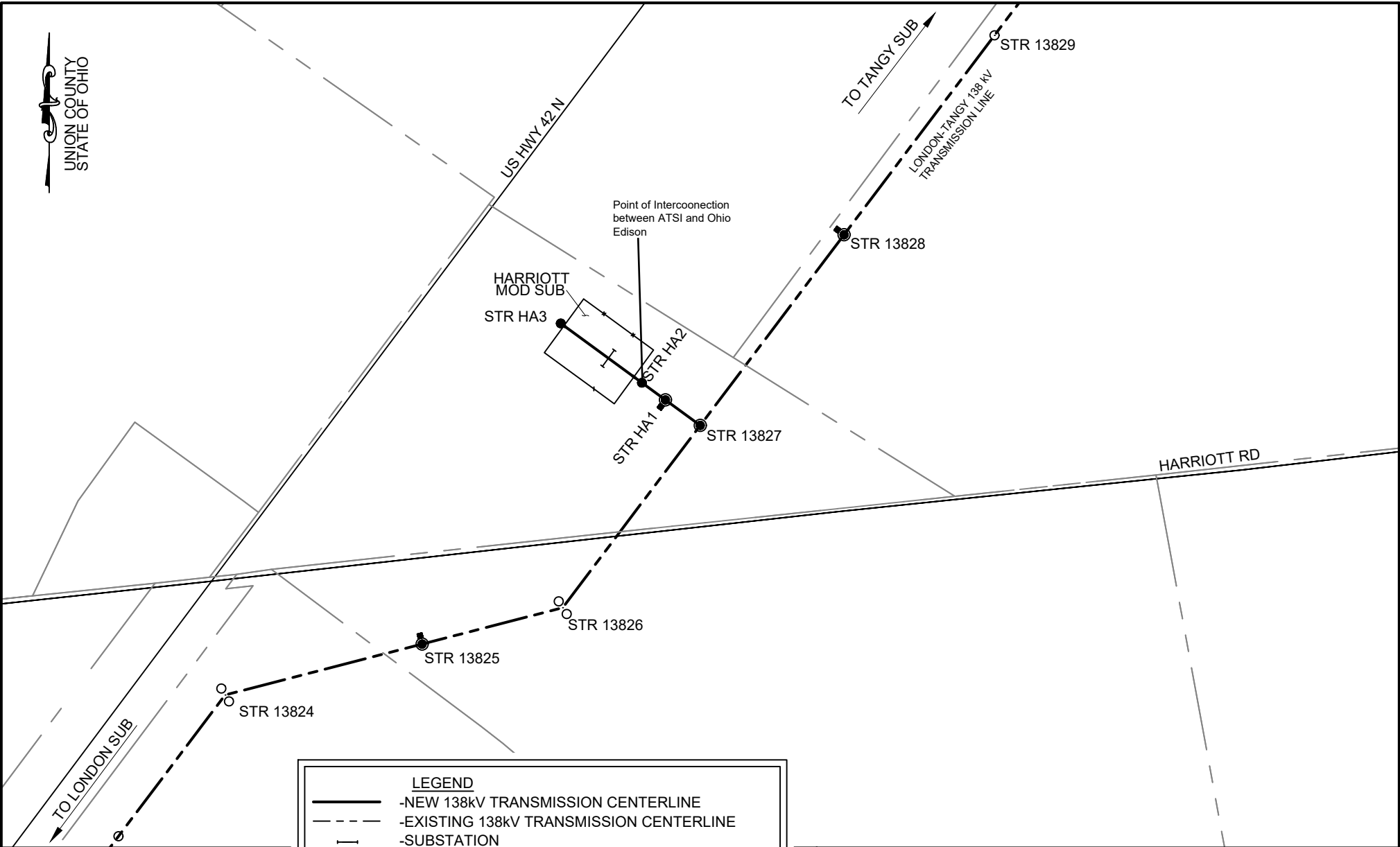
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NAD\_1983\_StatePlane\_Ohio\_North\_FIPS\_3401\_Feet  
WKID: 3734 Authority: EPSG



**EXHIBIT 2**



**London-Tangy 138 kV  
Transmission Line Tap to  
Harriot Substation Project**



**LEGEND**

- NEW 138kV TRANSMISSION CENTERLINE
- - - EXISTING 138kV TRANSMISSION CENTERLINE
- ⌈ — ▭ — SUBSTATION
- NEW STEEL SWITCH STRUCTURE ON FOUNDATION
- ⊙ NEW STEEL STRUCTURE ON FOUNDATION
- NEW DIRECT EMBED STEEL STRUCTURE
- EXISTING STRUCTURE (TO REMAIN)
- - - PROPERTY LINE
- PAVED ROAD
- \* — FENCE

**ATSI**  
American Transmission Systems, Inc.  
a subsidiary of FirstEnergy Corp.

LONDON-TANGY 138 kV TRANSMISSION LINE  
TAP TO HARRIOTT SUBSTATION PROJECT

GENERAL LAYOUT

EXHIBIT 3

PAPER SIZE: 11X8.5

SCALE: NTS



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

**Need Number:** ATSI-2024-020  
**Process Stage:** Solution Meeting – 07/19/2024  
**Previously Presented:** Need Meeting – 02/15/2024

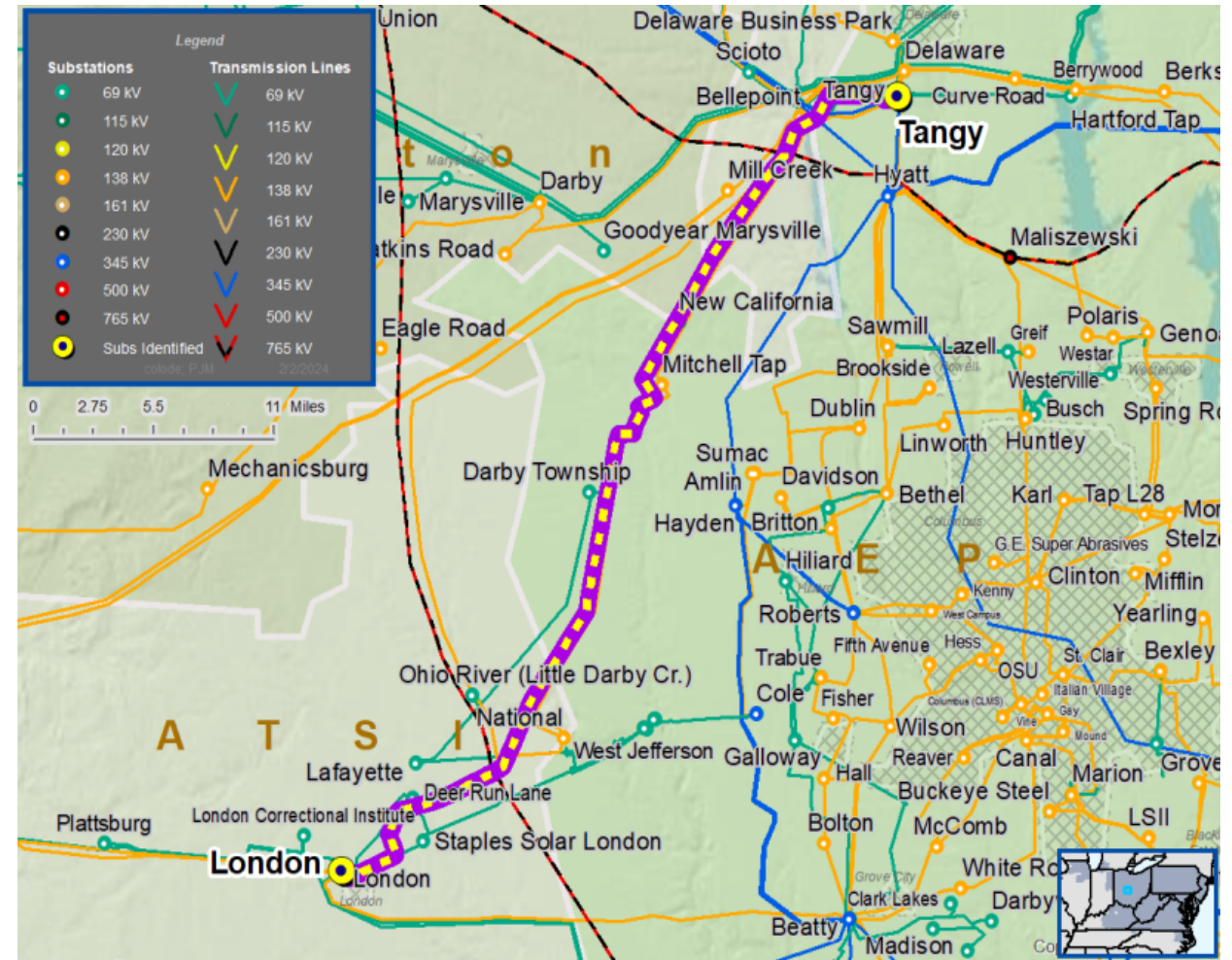
**Supplemental Project Driver(s):**  
*Customer Service*

**Specific Assumption Reference(s):**  
 New customer connection request will be evaluated per FirstEnergy’s “Requirements for Transmission Connected Facilities” document and “Transmission Planning Criteria” document.

**Problem Statement**

New Customer Connection – Ohio Edison Distribution has requested a new 138 kV delivery point near the London - Tangy 138 kV Line. The anticipated load of the new customer connection is 12 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-2024-020  
**Process Stage:** Solution Meeting – 07/19/2024

**Proposed Solution:**

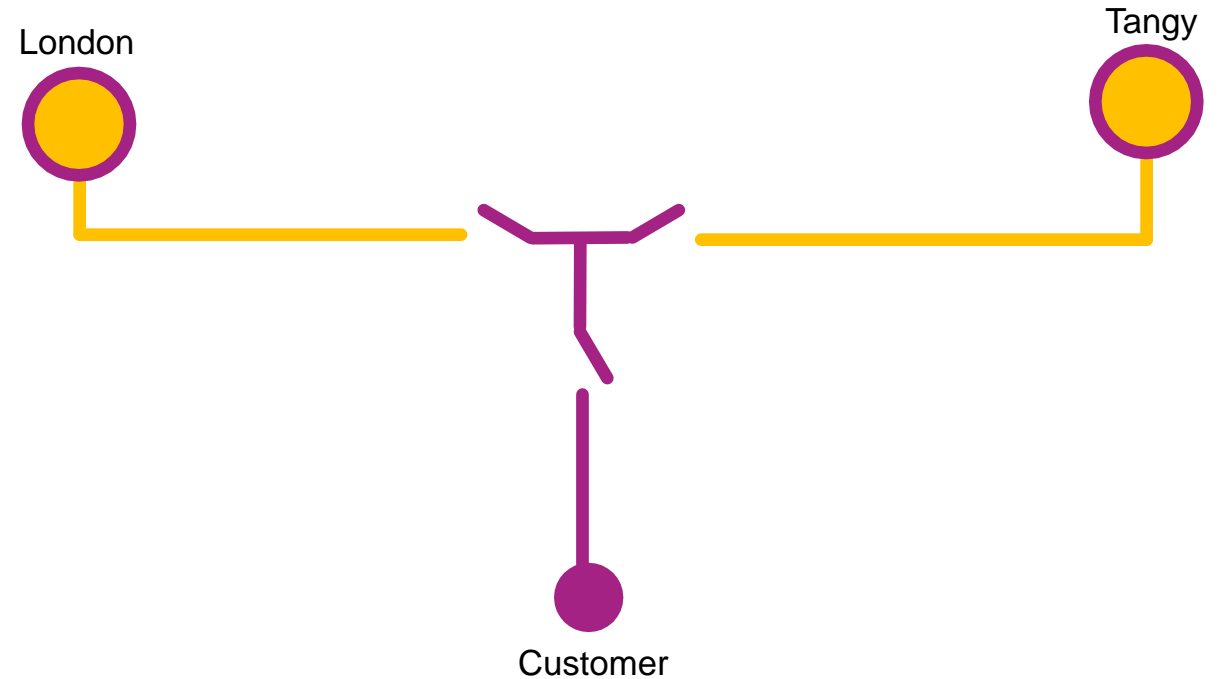
**138 kV Transmission Line Tap**

- Install two main-line SCADA controlled switches
- Install one tap-line SCADA controlled switch
- Construct 0.1 miles of 138 kV line extension.
- Adjust relay settings at London and Tangy substations
- Install revenue metering

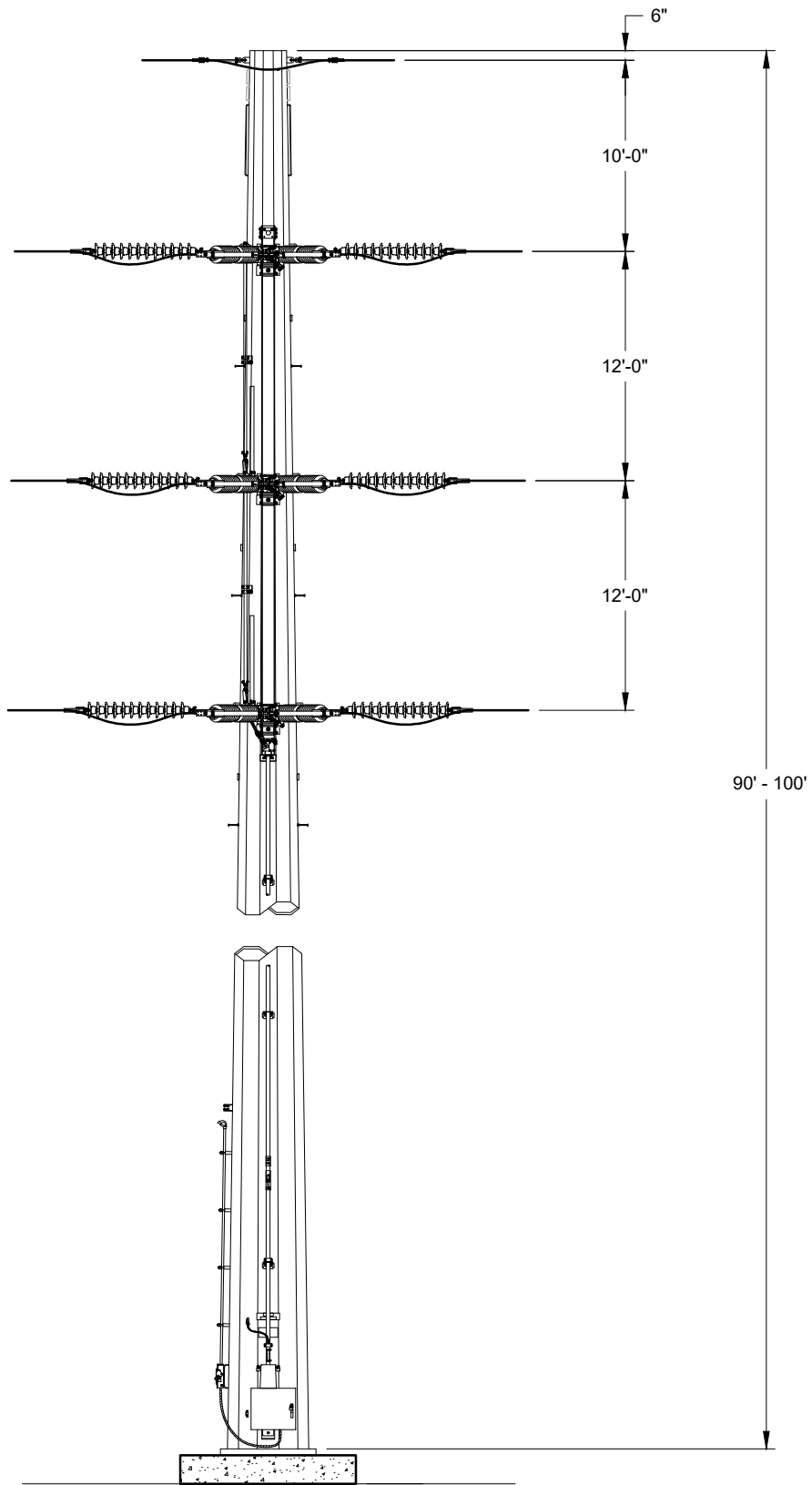
**Alternatives Considered:**

- No reasonable alternatives to meet the customer’s request near the London - Tangy 138 kV Line.

**Estimated Project Cost:** \$1.6M  
**Projected In-Service:** 6/3/2026  
**Status:** Engineering  
**Model:** 2023 RTEP model for the 2028 Summer (50/50)



Legend	
500 kV	
345 kV	
138 kV	
69 kV	
34.5 kV	
23 kV	
New	



PAPER SIZE: 8.5X11

SCALE: NTS

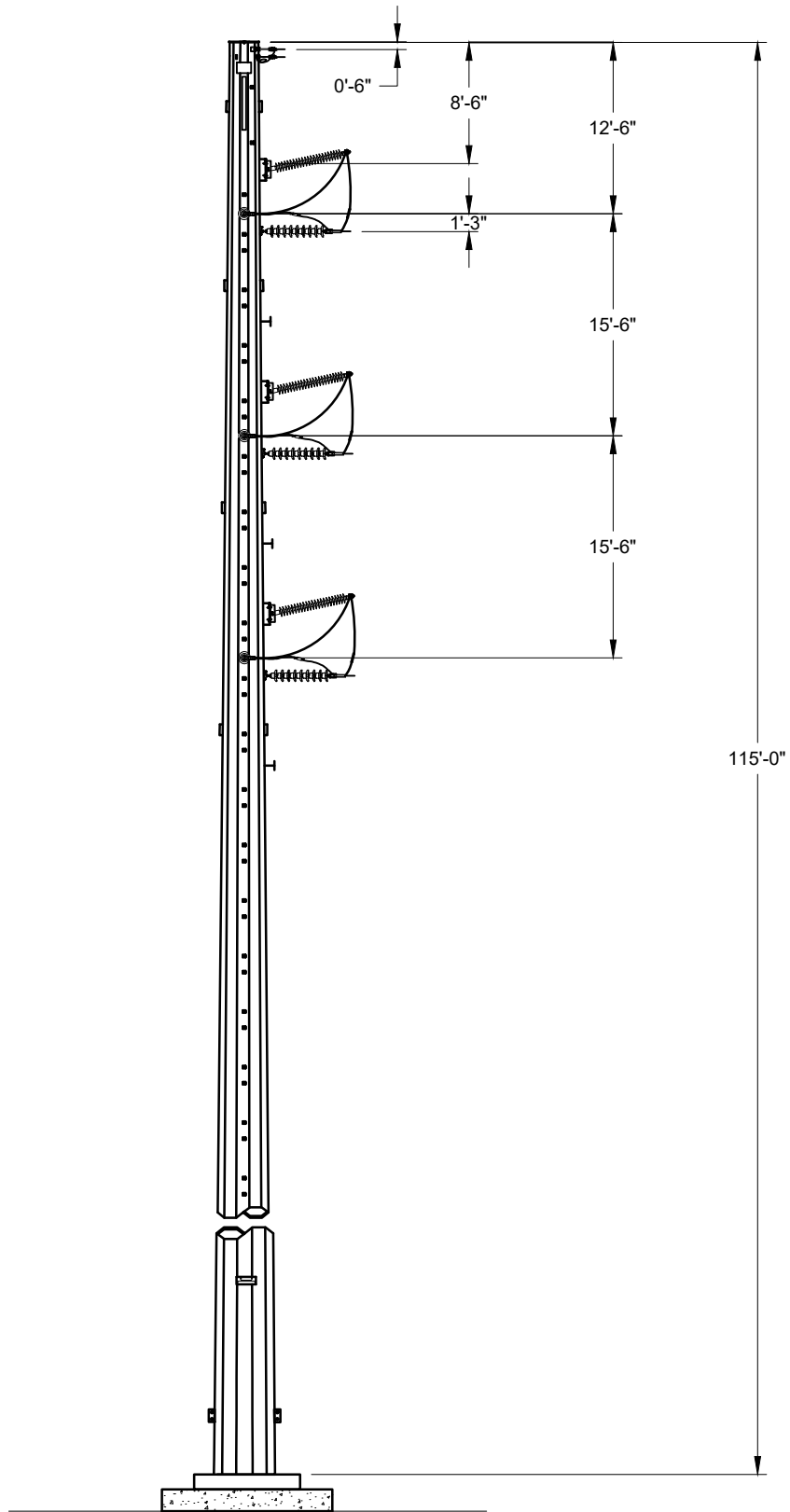
**ATSI**<sup>®</sup>

American Transmission Systems, Inc.  
a subsidiary of FirstEnergy Corp.

LONDON-TANGY 138 kV TRANSMISSION LINE  
TAP TO HARRIOT SUBSTATION PROJECT

SINGLE CIRCUIT  
TUBULAR STEEL SWITCH STRUCTURE  
SINGLE POLE WITH SHIELD WIRE

EXHIBIT 5



PAPER SIZE: 8.5X11

SCALE: NTS

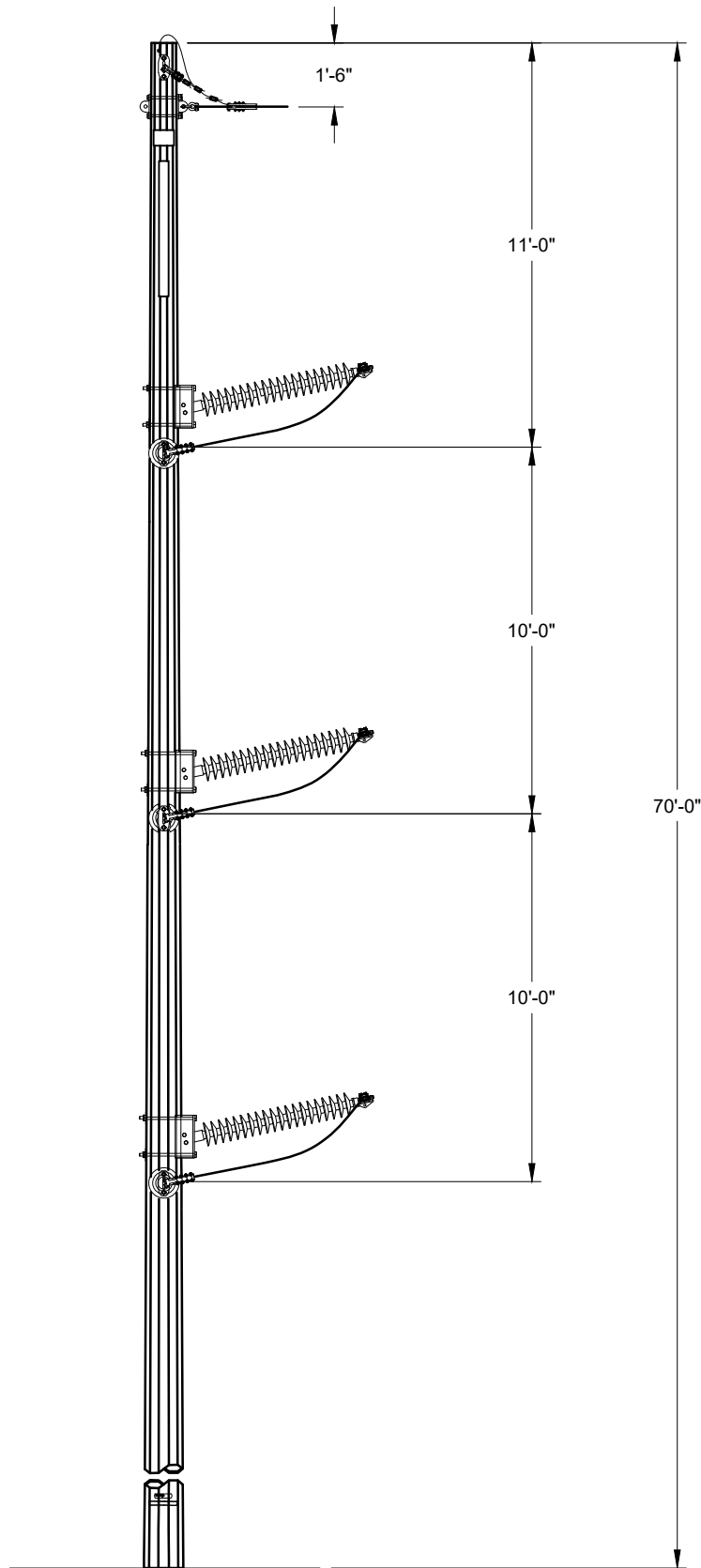
**ATSI**

American Transmission Systems, Inc.  
a subsidiary of FirstEnergy Corp.

LONDON-TANGY 138 kV TRANSMISSION LINE  
TAP TO HARRIOT SUBSTATION PROJECT

SINGLE CIRCUIT  
TUBULAR STEEL TAP STRUCTURE  
SINGLE POLE WITH SHIELD WIRE

EXHIBIT 6



PAPER SIZE: 8.5X11

SCALE: NTS

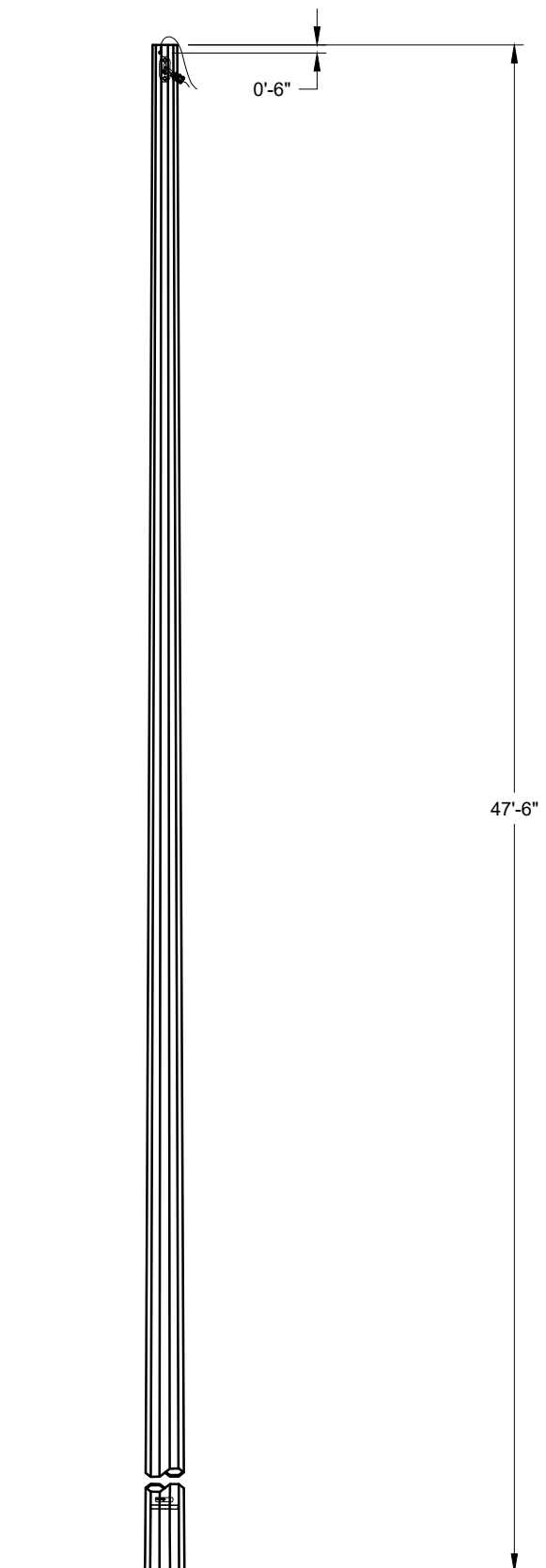
**ATSI**

American Transmission Systems, Inc.  
a subsidiary of FirstEnergy Corp.

LONDON-TANGY 138 KV TRANSMISSION LINE  
TAP TO HARRIOT SUBSTATION PROJECT

SINGLE CIRCUIT  
DIRECT EMBED STEEL STRAIN STRUCTURE  
SINGLE POLE WITH SHIELD WIRE

EXHIBIT 7



PAPER SIZE: 8.5X11

SCALE: NTS

<b>ATSI</b> <small>American Transmission Systems, Inc. a subsidiary of FirstEnergy Corp.</small>	LONDON-TANGY 138 kV TRANSMISSION LINE TAP TO HARRIOT SUBSTATION PROJECT
DIRECT EMBED STEEL SINGLE POLE WITH SHIELD WIRE	
EXHIBIT 8	



In reply refer to:  
2025-UNI-66814

November 21, 2025

Justin McKissick, MA, RPA  
Senior Archaeologist/Project Manager  
TRC Environmental Corporation  
317 E Carson Street, Suite 113  
Pittsburgh, PA 15219  
Email: [JMcKissick@trccompanies.com](mailto:JMcKissick@trccompanies.com)

RE: Section 106 Review: Harriot Mod Substation Project, Mill Creek and Jerome Townships, Union County, Ohio

Dear Mr. McKissick:

This letter is in response to the correspondence received on October 24, 2025, regarding the above-referenced project in Union County, Ohio. We appreciate the opportunity to comment on this project. The comments of the Ohio State Historic Preservation Office (SHPO) are made pursuant to Section 149.53 of the Ohio Revised Code (O.R.C.) and the Ohio Power Siting Board rules for siting this project. The comments of the Ohio SHPO are also submitted in accordance with the provisions of Section 106 of the National Historic Preservation Act of 1966, as amended (54 U.S.C. 306108 [36 CFR 800]).

The project will involve the construction of a new substation within an approximately 11.59-acre parcel of land, which is defined as the Area of Potential Effect (APE). A review of our files indicates no historic properties, districts, or previously documented above-ground resources within or adjacent to the APE. However, our records indicate three previous cultural resource surveys partially overlap the APE. Combined, these surveys cover nearly 70% of the current APE. One of these surveys recorded an archaeological site within the APE. Site 33UN577 is documented as an isolated find and was determined not to be eligible for the National Register of Historic Places (NRHP). The SHPO continues to agree with this determination.

After careful review, it is the SHPO's opinion that no cultural resource studies are warranted for the project. Furthermore, as proposed, the project will have no effect on historic properties. No further coordination is required for this project unless the scope of work changes or archaeological remains are discovered during the course of the project. In such a situation, this office should be contacted. If you have any questions concerning this review, please contact me via email at [sbiehl@ohiohistory.org](mailto:sbiehl@ohiohistory.org). Thank you for your cooperation.

Sincerely,

A handwritten signature in blue ink that reads "Stephen M. Biehl".

Stephen M. Biehl, Project Reviews Manager-Archaeology  
Resource Protection and Review  
State Historic Preservation Office

RPR Serial No. 1111483



**Department of  
Natural Resources**

ohiodnr.gov

**EXHIBIT 10**

Mike DeWine, *Governor*  
Jim Tressel, *Lt. Governor*  
Mary Mertz, *Director*

**Office of Real Estate & Land Management**

Tara Paciorek - Chief  
2045 Morse Road – E-2  
Columbus, Ohio 43229-6693

November 21, 2025

Emma Given  
TRC Companies, Inc.  
1382 W 9th St, Suite 400  
Cleveland, Ohio 44113

**Re:** 25-1644\_Harriott Mod Substation

**Project:** The proposed project involves the construction of the proposed Harriott Mod Substation.

**Location:** The proposed project is located in Jerome and Mill Creek townships, Union 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 endangered 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 clusters of dead leaves on tree limbs. 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 cleared, the DOW recommends tree and/or tree limb clearing 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 a Diameter Breast Height (DBH)  $\geq 20''$  if possible. If trees are present within the project area, and trees and/or tree limbs must be cleared 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 clearing. Mist net and acoustic surveys should be conducted in accordance with the most recent version of the [OHIO DIVISION OF WILDLIFE AND U.S. FISH AND WILDLIFE SERVICE \(OH-FIELD OFFICE\) JOINT GUIDANCE FOR BAT SURVEYS](#). If state-listed bats are documented, DOW recommends tree clearing only occur from October 1 through March 31. However, limited summer tree clearing may be acceptable after consultation with the DOW (contact Eileen Wyza at [Eileen.Wyza@dnr.ohio.gov](mailto:Eileen.Wyza@dnr.ohio.gov)).

For every project, the DOW also recommends that a winter bat habitat assessment is conducted to determine if potential hibernacula are present within the project area. This is to limit possible disturbances that seasonal tree clearing and/or subsurface work (e.g., trenching, blasting, etc.) may cause to hibernating bats. Potential hibernacula include rocky outcroppings, caves, and underground mines. Direction on how to conduct winter habitat assessments can be found in the joint guidance linked above. If a potential or known hibernaculum is found, the DOW recommends a 0.25-mile permanent tree clearing buffer around the hibernaculum entrance. Limited summer or winter tree clearing may be acceptable after consultation with the DOW. If a habitat assessment for projects involving subsurface disturbance finds that a potential hibernaculum is present within 5 miles of the project area, please consult with Eileen Wyza for project recommendations. If no tree clearing 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

snuffbox (*Epioblasma triquetra*)

Northern riffleshell (*Epioblasma torulosa rangiana*)

clubshell (*Pleurobema clava*)

rayed bean (*Villosa fabalis*)

Federally Threatened

rabbitsfoot (*Theliderma cylindrica*)

State Endangered

elephant-ear (*Elliptio crassidens crassidens*)

State Threatened

pondhorn (*Unio merus tetralasmus*)

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

The DOW recommends no in-water work in perennial streams from March 15 through June 30 to reduce impacts to indigenous aquatic species and their habitat. If no in-water work is proposed in a perennial stream, this project is not likely to impact these or other aquatic species.

Due to the potential for 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 not conducted a project specific review and/or comments, however, the guidance provided below should be reviewed by the Environmental Review applicant for applicability on this project and subsequent compliance.

If the subject project is in a floodplain regulated by the Federal Emergency Management Agency (FEMA), the [local floodplain administrator](#) should be contacted concerning the possible need for any floodplain permits or approvals. The FEMA National Flood Hazard Layer (NHFL) Viewer [website](#) can be utilized to see if the project is in a FEMA regulated floodplain. If the project is not in a FEMA regulated floodplain, then no further action is required.

Ohio Revised Code (ORC) Section 1521.16 mandates that any owner of a property or a facility that has the capacity of withdrawing 100,000 gallons per day (gpd) of water from groundwater, surface water, or both must register with the Division of Water Resources' [Water Withdrawal Facilities Registration \(WWFR\) Program](#) and report their withdrawals annually.

Additional coordination may be required depending on the location of the withdrawal and consumptive use. Restrictions or permitting may be required for:

- New or increased consumptive use of water averaging 2 million gallons per day (mgd) within 30 days within the Ohio River basin.
- New or increased withdrawal and consumptive water use in the Lake Erie watershed averaging 1 million gallons per day (mgd) or more in 90 days.
- New or increased water withdrawal directly from Lake Erie averaging 2.5 million gallons per day (mgd) or more in 90 days.
- Diversion or movement of water across the Ohio River and Lake Erie basin divide.

If the project does not involve activities that are subject to water withdrawal regulatory requirements as described above, then no further action is required. For more information, visit the [Water Inventory & Planning website](#).

ODNR appreciates the opportunity to provide these comments. Please contact Mike Pettegrew (Environmental Services Administrator) at [mike.pettegrew@dnr.ohio.gov](mailto:mike.pettegrew@dnr.ohio.gov) if you have questions about these comments or need additional information.

**Expiration:** *ODNR Environmental Reviews are typically valid for 2 years from the issuance date. If the scope of work, project area, construction limits, and/or anticipated impacts to natural resources have changed significantly from the original project submittal, then a new Environmental Review request should be submitted.*



December 1, 2025

Ohio Department of Natural Resources  
Office of Real Estate & Land Management  
2045 Morse Road, Building E-2  
Columbus, OH 43229-6693

**Re: Desktop Assessment for potential hibernaculum of the Harriott Mod Substation Project located in Mill Creek and Jerome Townships, in Union County, Ohio. (TRC Project No. 664674 Phase 5)**

To Whom It May Concern,

In response to the Ohio Department of Natural Resources (ODNR), Division of Wildlife's (DOW) recommendations, TRC Environmental Corporation (TRC) completed a desktop habitat assessment, on behalf of FirstEnergy Corporation to determine if potential hibernaculum is present within the proposed Harriott Mod Substation Project (Project) Study Area. The proposed Project is located in Mill Creek and Jerome Townships, in Union County, Ohio (**Appendix A, Figure 1**). The proposed Project involves the construction of the proposed Harriott Mod Substation. The Project Study Area is 11.59 acres in size and consists of an existing, maintained utility right-of-way within agricultural land use (**Appendix A, Figure 2**). Tree clearing will not be required as a result of the proposed Project.

Based on the regulations from the 2025 Joint Guidance for Bat Surveys (ODOW & USFWS, 2025), the recommended desktop habitat assessment utilized secondary source information to determine if past or present underground resources were present within 0.25-mile of the Project Study Area. The secondary source information utilized included but was not limited to: aerial imagery mapping (Google Earth, 2025), karst topography mapping (ODNR, 2024a), mine data mapping (ODNR, 2024b), and National Land Cover Database mapping (USGS, 2023) (**Appendix A, Figure 3**).

No historic surface mine, underground industrial mine, surface coal mine, and/or abandoned underground coal mine were identified within 0.25-mile of the Project Study Area (**Appendix A, Figures 4A and 4B**). The nearest historic surface mine is located 1 mile north of the Project Study Area; the nearest underground industrial mine is located 22 miles south of the Project Study Area; the nearest surface coal mine is located 51 miles east of the Project Study Area; and the nearest abandoned underground coal mine is located 10 miles northeast of the Project Study Area. A surface industrial mine is located 0.25-mile north of the Project Study Area. The Project Study Area is also located within a karst region. However, bedrock-impacting subsurface disturbance is not anticipated, and no karst features such as caves or caverns were observed during field surveys within the Project Study Area.

Field investigations were conducted by TRC on December 7, 2023, and October 29, 2024, at which time summer and winter bat habitat was concurrently assessed. Based on the field investigations, no summer or winter bat habitat was identified within the Project Study Area.

Photographs of the Project Study Area were taken, which depict the site conditions at the time of the field investigations (**Appendix B: Photographic Record**).

Due to no required tree clearing, no impacts to bedrock due to subsurface disturbance are anticipated, and that no winter bat habitat, including caves or caverns, are present within the Project Study Area, it is TRC's opinion that federally- or state- listed bat species are not likely to be impacted by this proposed Project. Subsurface disturbance may be required for the construction of this Project; however, bedrock will not be impacted as a result of the proposed Project. If bedrock is met, no disturbance to the bedrock will be required. We kindly request your concurrence that potential bat hibernaculum is not likely to be present within the Project Study Area and that this Project is not likely to impact these listed species.

Please do not hesitate to contact me at (330) 446-0265 or via email at [EGiven@trccompanies.com](mailto:EGiven@trccompanies.com) if you have any questions or require additional information.

Regards,

**TRC Environmental Corporation**

A handwritten signature in cursive script that reads "Emma Given".

Emma Given, Ph.D., PWS  
Ecologist

**Appendices:**

Appendix A: Figures

- Figure 1: Site Location Map
- Figure 2: Aerial Map
- Figure 3: National Land Cover Database Map
- Figure 4A: Karst Map
- Figure 4B: Mine Map

Appendix B: Photographic Record

## References

Google Earth. (2025). Google Earth Images of Project Area. *Date accessed November, 2025.*

ODNR. (2024a). *Karst Interactive Map, ODNR Division of Geological Survey.* Retrieved from OhioDNR: [https://gis.ohiodnr.gov/website/dgs/karst\\_interactivemap/](https://gis.ohiodnr.gov/website/dgs/karst_interactivemap/)

ODNR. (2024b). *Mines of Ohio, ODNR Division of Mineral Resources.* Retrieved from OhioDNR: <https://gis.ohiodnr.gov/MapView/?config=OhioMines>

ODOW & USFWS. (2025, May). Ohio Division of Wildlife and U.S. Fish and Wildlife Service (OH-Field Office) Joint Guidance for Bat Surveys.

USGS. (2023). *National Land Cover Database.* Retrieved from [https://www.usgs.gov/centers/eros/science/national-land-cover-database?qt-science\\_center\\_objects=0#qt-science\\_center\\_objects](https://www.usgs.gov/centers/eros/science/national-land-cover-database?qt-science_center_objects=0#qt-science_center_objects)



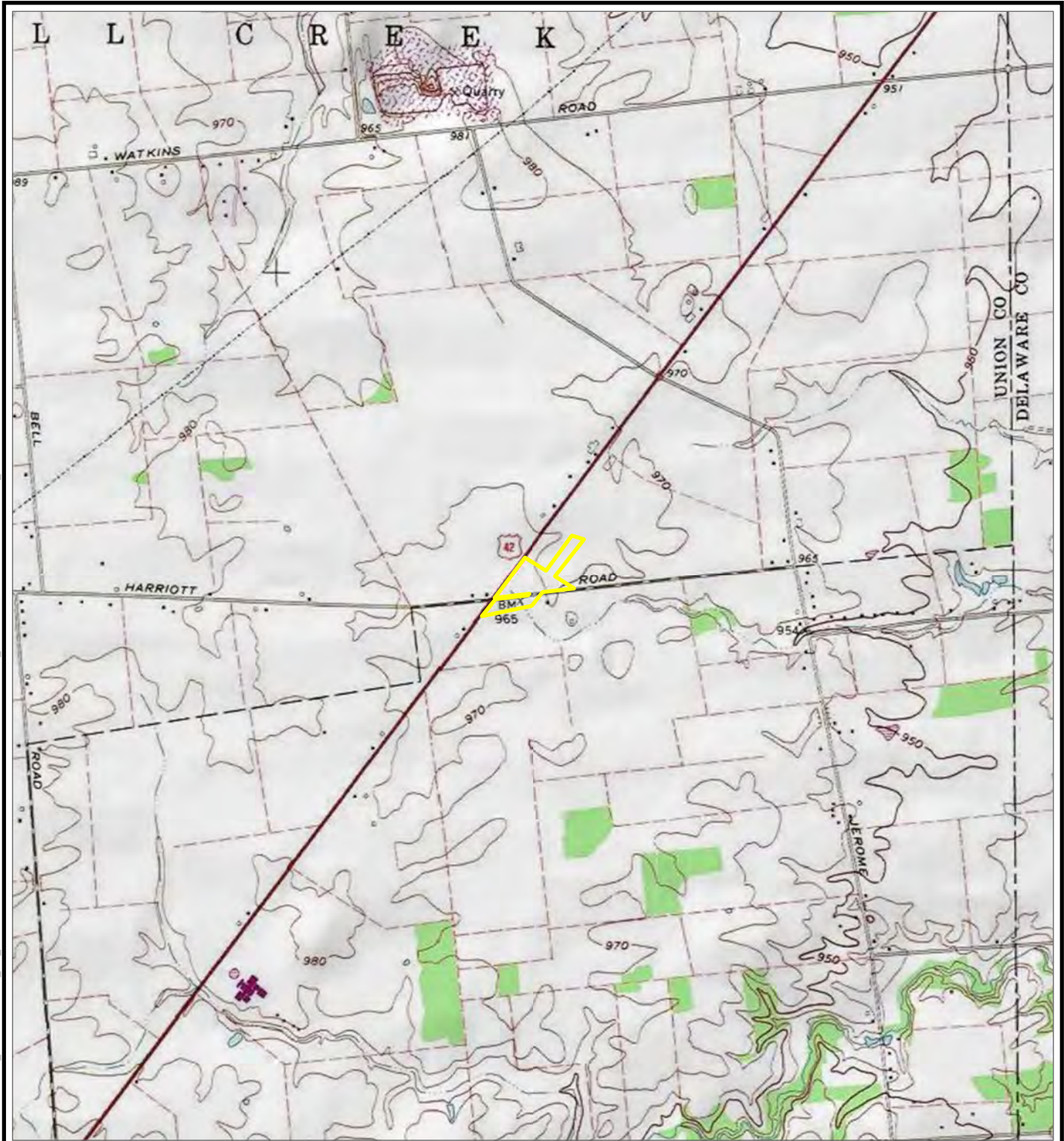
1382 W Ninth St., Suite 400  
Cleveland, OH 44113

T 216.344.3072  
[TRCcompanies.com](http://TRCcompanies.com)

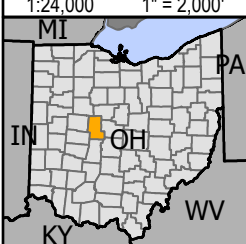
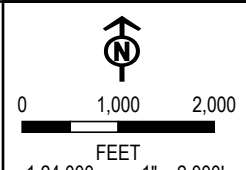
## **APPENDIX A**

### **Figures**

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 PROJECT STUDY AREA



BASE MAP: USA TOPO MAPS MAP SERVICE, SHAWNEE HILLS QUAD

PROJECT: **FIRSTENERGY  
HARRIOTT SUBSTATION PROJECT  
UNION COUNTY, OH**

TITLE: **SITE LOCATION MAP**

DRAWN BY: M. OPEL	PROJ. NO.: 664674 P5
CHECKED BY: M. MOLNAR	<b>FIGURE 1</b>
APPROVED BY: B. FALKINBURG	
DATE: NOVEMBER 2025	



1382 WEST NINTH STREET  
SUITE 400  
CLEVELAND, OH 44113  
PHONE: 216-344-3072

FILE: HIBERNACULAASSESSMENT\_2025

Coordinate System: NAD 1983 StatePlane Ohio North FIPS 3401 Feet, Map Rotation: 0  
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 PROJECT STUDY AREA


BASE MAP: GOOGLE MAPS.



1:2,400  
1" = 200'

0 200 400 FEET



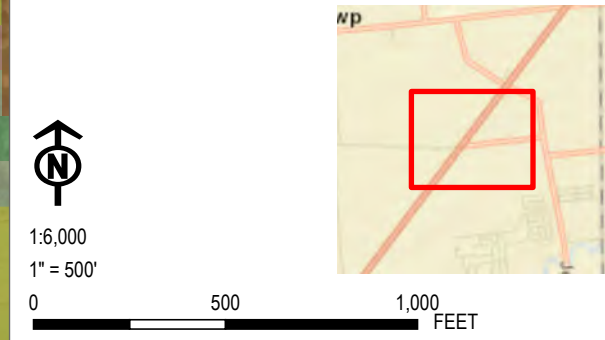
PROJECT:		<b>FIRSTENERGY HARRIOTT SUBSTATION PROJECT UNION COUNTY, OH</b>	
TITLE:		<b>AERIAL MAP</b>	
DRAWN BY:	M. OPEL	PROJ. NO.:	664674 P5
CHECKED BY:	M. MOLNAR	<b>FIGURE 2</b>	
APPROVED BY:	B. FALKINBURG		
DATE:	NOVEMBER 2025		
		1382 WEST NINTH STREET SUITE 400 CLEVELAND, OH 44113 PHONE: 216-344-3072	
FILE:	HibernaculaAssessment_2025.aprx		

Coordinate System: NAD 1983 StatePlane Ohio North FIPS 3401 Feet; Map Rotation: 0  
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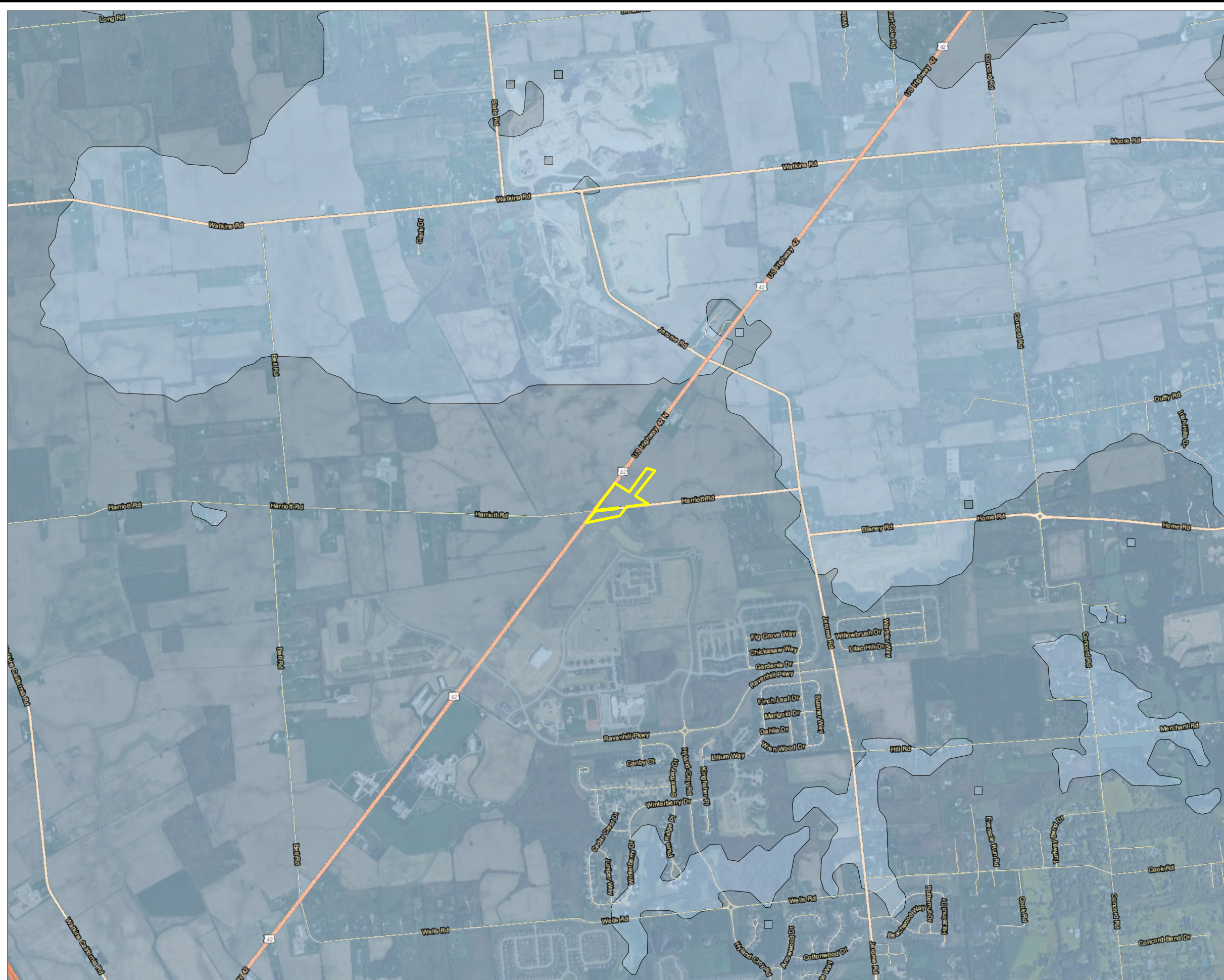
- PROJECT STUDY AREA
- NLCD LAND COVER CLASSIFICATION
- BARREN LAND
- CULTIVATED CROPS
- DECIDUOUS FOREST
- DEVELOPED, HIGH INTENSITY
- DEVELOPED, LOW INTENSITY
- DEVELOPED, MEDIUM INTENSITY
- DEVELOPED, OPEN SPACE
- EMERGENT HERBACEOUS WETLANDS
- EVERGREEN FOREST
- GRASSLAND/HERBACEOUS
- MIXED FOREST
- OPEN WATER
- PASTURE/HAY
- WOODY WETLANDS

BASE MAP: GOOGLE MAPS.  
 DATA SOURCES: NATIONAL LAND COVER DATABASE (NLCD) 2023 DATA  
 ACQUIRED FROM THE USGS.



<b>PROJECT: FIRSTENERGY HARRIOTT SUBSTATION PROJECT UNION COUNTY, OH</b>	
<b>TITLE: NATIONAL LAND COVER DATABASE MAP</b>	
DRAWN BY: M. OPEL	PROJ. NO.: 664674 P5
CHECKED BY: M. MOLNAR	<b>FIGURE 3</b>
APPROVED BY: B. FALKINBURG	
DATE: NOVEMBER 2025	
<span style="float: right; font-size: small;">1382 WEST NINTH STREET SUITE 400 CLEVELAND, OH 44113 PHONE: 216-344-3072</span>	
FILE: HibernaculaAssessment_2025.aprx	

Coordinate System: NAD 1983 StatePlane Ohio North FIPS 3401 Feet; Map Rotation: 0  
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- PROJECT STUDY AREA
- KARST GEOLOGY**
- SILURIAN- AND DEVONIAN-AGE CARBONATE BEDROCK OVERLAIN BY LESS THAN 20 FEET OF GLACIAL DRIFT AND/OR ALLUVIUM
- SILURIAN- AND DEVONIAN-AGE CARBONATE BEDROCK OVERLAIN BY MORE THAN 20 FEET OF GLACIAL DRIFT AND/OR ALLUVIUM

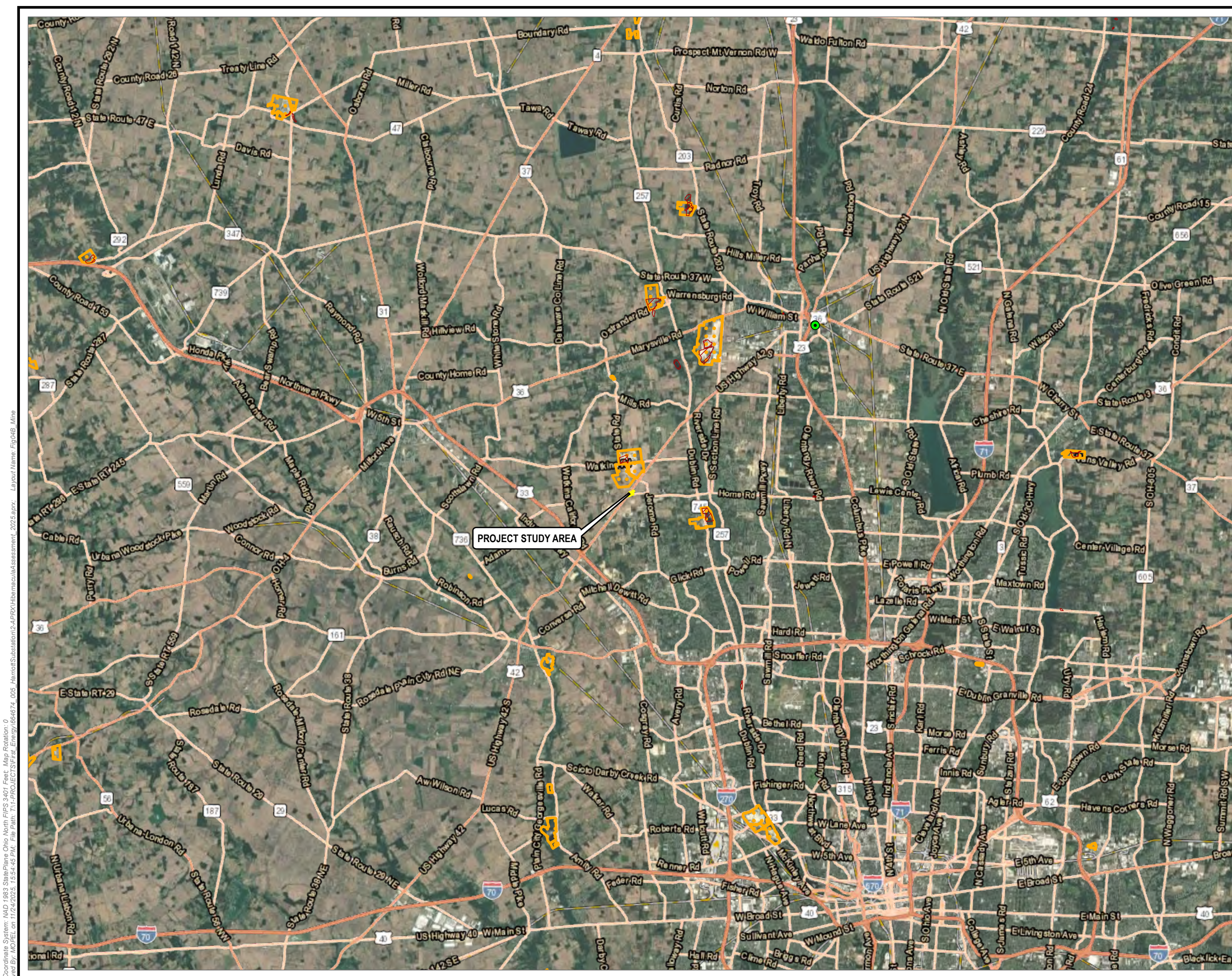
BASE MAP: GOOGLE MAPS.  
 DATA SOURCES: KARST DATA ACQUIRED FROM THE OHIO DEPARTMENT OF NATURAL RESOURCES-DIVISION OF GEOLOGICAL SURVEY, MAY 2024.



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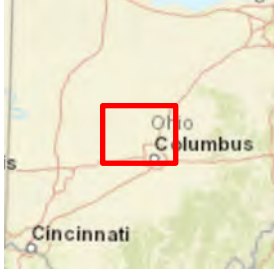


<b>PROJECT: FIRSTENERGY HARRIOTT SUBSTATION PROJECT UNION COUNTY, OH</b>	
<b>TITLE: KARST MAP</b>	
DRAWN BY: M. OPEL	PROJ. NO.: 664674 P5
CHECKED BY: M. MOLNAR	<b>FIGURE 4A</b>
APPROVED BY: B. FALKINBURG	
DATE: NOVEMBER 2025	
1382 WEST NINTH STREET SUITE 400 CLEVELAND, OH 44113 PHONE: 216-344-3072	
FILE:	HibernaculaAssessment_2025.aprx



- PROJECT STUDY AREA
- ABANDONED MINE OPENING
- ▲ ABANDONED MINE - MINE POINT EXTENT UNKNOWN
- SURFACE COAL MINE
- HISTORIC SURFACE MINE
- ABANDONED UNDERGROUND COAL MINE
- SURFACE INDUSTRIAL MINE
- UNDERGROUND INDUSTRIAL MINE

BASE MAP: GOOGLE MAPS.  
 DATA SOURCES: MINE DATA ACQUIRED FROM THE OHIO DEPARTMENT OF NATURAL RESOURCES-DIVISION OF MINERAL RESOURCES, MAY 2024.



1:240,000  
 1" = 20,000'



<b>PROJECT: FIRSTENERGY HARRIOTT SUBSTATION PROJECT UNION COUNTY, OH</b>	
<b>TITLE: MINE MAP</b>	
DRAWN BY: M. OPEL	PROJ. NO.: 664674 P5
CHECKED BY: M. MOLNAR	<b>FIGURE 4B</b>
APPROVED BY: B. FALKINBURG	
DATE: NOVEMBER 2025	
	1382 WEST NINTH STREET SUITE 400 CLEVELAND, OH 44113 PHONE: 216-344-3072
FILE:	HibernaculaAssessment_2025.aprx

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1382 W Ninth St., Suite 400  
Cleveland, OH 44113

T 216.344.3072  
[TRCcompanies.com](http://TRCcompanies.com)

**APPENDIX B**  
**Photographic Record**

<b>Client Name:</b> FirstEnergy Corporation	<b>Site Location:</b> Mill Creek & Jerome Townships, Union County, Ohio	<b>Project No.</b> 664674 Phase 5
--	--	--------------------------------------

**Photo No. 1.**

**Photo Date:**  
12/7/2023

**Description:**  
Representative photo of the agricultural land use within the Project Study Area, facing south.



**Photo No. 2.**

**Photo Date:**  
12/7/2023

**Description:**  
Representative photo of the agricultural land use within the Project Study Area, facing west.



<b>Client Name:</b> FirstEnergy Corporation	<b>Site Location:</b> Mill Creek & Jerome Townships, Union County, Ohio	<b>Project No.</b> 664674 Phase 5
--	--	--------------------------------------

**Photo No. 3.**

**Photo Date:**  
 12/7/2023

**Description:**

Representative photo of the mowed open space within the Project Study Area, facing north.



**Photo No. 4.**

**Photo Date:**  
 12/7/2023

**Description:**

Representative photo of the mowed open space within the Project Study Area, facing east.



<b>Client Name:</b> FirstEnergy Corporation	<b>Site Location:</b> Mill Creek & Jerome Townships, Union County, Ohio	<b>Project No.</b> 664674 Phase 5
--	--	--------------------------------------

**Photo No. 5.**

**Photo Date:**  
 10/29/2024

**Description:**

Representative photo of the existing right-of-way within the southern extent of the Project Study Area, facing south.



**Photo No. 6.**

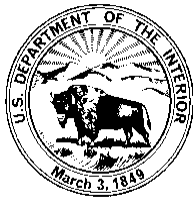
**Photo Date:**  
 10/29/2024

**Description:**

Representative photo of agricultural land use within the northern extent of the Project Study Area, facing south.



## United States Department of the Interior



## FISH AND WILDLIFE SERVICE

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



November 17, 2025

Project Code: 2026-0006810

Dear Ms. Given:

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

Federally Threatened and Endangered Species: Due to the project, type, size, and location, we do not anticipate any effect to federally endangered, threatened, or proposed species or proposed or designated critical habitat. If there are any project modifications during the term of this action, or additional information for listed or proposed species or their critical habitat becomes available, or if new information reveals effects of the action that were not previously considered, then please contact us for additional project review.

If you have questions, or if we can be of further assistance in this matter, please contact our office at (614) 416-8993 or [ohio@fws.gov](mailto:ohio@fws.gov).

Sincerely,

Erin Knoll  
Field Office Supervisor



1382 West Ninth St.  
Suite 400  
Cleveland, OH 44113

T 216.344.3072  
TRCcompanies.com

November 20, 2025

Mr. Auggie Ruggiero  
FirstEnergy Corporation  
341 White Pond Drive  
Akron, OH 44320

Reference: Technical Memorandum for the Surface Water Delineation of the Harriott Mod Substation Project located in Mill Creek and Jerome Townships, Union County, Ohio.  
**(TRC Project No. 664674 Phase 5)**

Dear Mr. Ruggiero:

On behalf of FirstEnergy Corporation (FirstEnergy), TRC Environmental Corporation (TRC) conducted a surface water delineation for Harriott Mod Substation Project (Project). The Project is in Mill Creek and Jerome Townships, Union County, Ohio and the Study Area is 11.59 acres in size (**Attachment A, Figures 1 and 2**). The Project Study Area is located at the following approximate coordinates: 40.198291, -83.193163 (northeastern terminus) and 40.195594, -83.197528 (southwestern terminus). This Project involves the construction of the proposed Harriott Mod Substation.

The delineation was conducted by qualified wetland scientists on December 7<sup>th</sup>, 2023, and October 29<sup>th</sup>, 2024, in accordance with the United States Army Corps of Engineers (USACE) parameters. The objective was to evaluate and delineate potential surface water resources within the Project Study Area, such that the resources could be considered during each phase of the Project. Prior to the site visit, TRC reviewed available secondary source information such as the National Wetlands Inventory (NWI), National Hydrography Dataset (NHD), United States Geological Survey (USGS) topographic maps, County Soil Survey maps, and aerial imagery of the Project Study Area to use in addition to the field investigation.

The Project Study Area is shown on the attached map (**Attachment A, Figure 1**), which was derived from the USGS Shawnee Hills, Ohio 7.5-minute quadrangle topographic map. Soils mapped within the Project Study Area include hydric soil and non-hydric with hydric inclusions soil (**Attachment A, Figure 3**). The proposed Project Study Area includes one (1) mapped NWI feature (riverine [R4SBC]), and one (1) mapped NHD feature (**Attachment A, Figure 4**). According to Federal Emergency Management Agency (FEMA) Flood Insurance Rate Map panel, 39159C0380D (eff. 12/16/2008), the proposed Project is not located within a FEMA mapped 100-Year Flood Zone. During the field investigation, land use within the Project Study Area was observed to be an existing utility right-of-way within agricultural land use. See attached mapping in **Attachment A** and the Photographic Record in **Attachment B** for further details of the Project Study Area.

During the field investigation, two (2) palustrine emergent wetlands (W-MMM-1 and W-MMM-2), and two (2) non-jurisdictional ditches (NJD-MMM-1 and NJD-MMM-2) were identified and delineated within the Project Study Area. No other ecological resources were observed within the Project Study Area. See **Table 1** on the following page for a summary of wetlands observed. The delineated wetland boundaries and USACE sample points are shown on **Figure 5** in **Attachment A**. Data was collected and recorded on the USACE Wetland Determination Data Sheets – Midwest Region and the Ohio Environmental Protection Agency's (Ohio EPA) Ohio Rapid Assessment Method (ORAM) data form. The USACE Wetland Determination Data Sheets and the Ohio EPA ORAM are provided in **Attachment C**.

**Table 1. Wetland**

Wetland ID	Cowardin Classification within Project Study Area <sup>1</sup>	Connection <sup>2</sup>	ORAM Score and Category <sup>3</sup>	Approximate Delineated Area within Project Study Area <sup>4</sup> (acres)
W-MMM-1	PEM	Adjacent	13.5 (Cat.1)	0.111
W-MMM-2	PEM	Adjacent	14.0 (Cat.1)	0.067

<sup>1</sup>Cowardin Wetland Classification (approximation based upon field identification and delineation) (Cowardin, Carter, Golet, & LaRoe, 1979): PEM – Palustrine Emergent.

<sup>2</sup>Wetland connection is pending an update from Ohio EPA and USACE based on the USA vs. Sackett case.

<sup>3</sup>ORAM Category based on scoring breakpoints from Table 2 of the ORAM v. 5.0 Quantitative Score Calibration.

<sup>4</sup>Area is rounded to nearest 0.01-acre, based upon GPS data.

This Technical Memorandum represents the conditions within the Project Study Area identified herein, as of the inspection dates. Should you require any additional information or have any questions concerning this letter, please feel free to contact me at (440) 666-2890 or by email at [BFalkinburg@TRCCompanies.com](mailto:BFalkinburg@TRCCompanies.com).

Kind Regards,

TRC



Brad M. Falkinburg, PWS  
Ecological Office Practice Leader

cc: Maggie Molnar, PWS – TRC Environmental Corporation  
Jenna Slabe, PWS – TRC Environmental Corporation

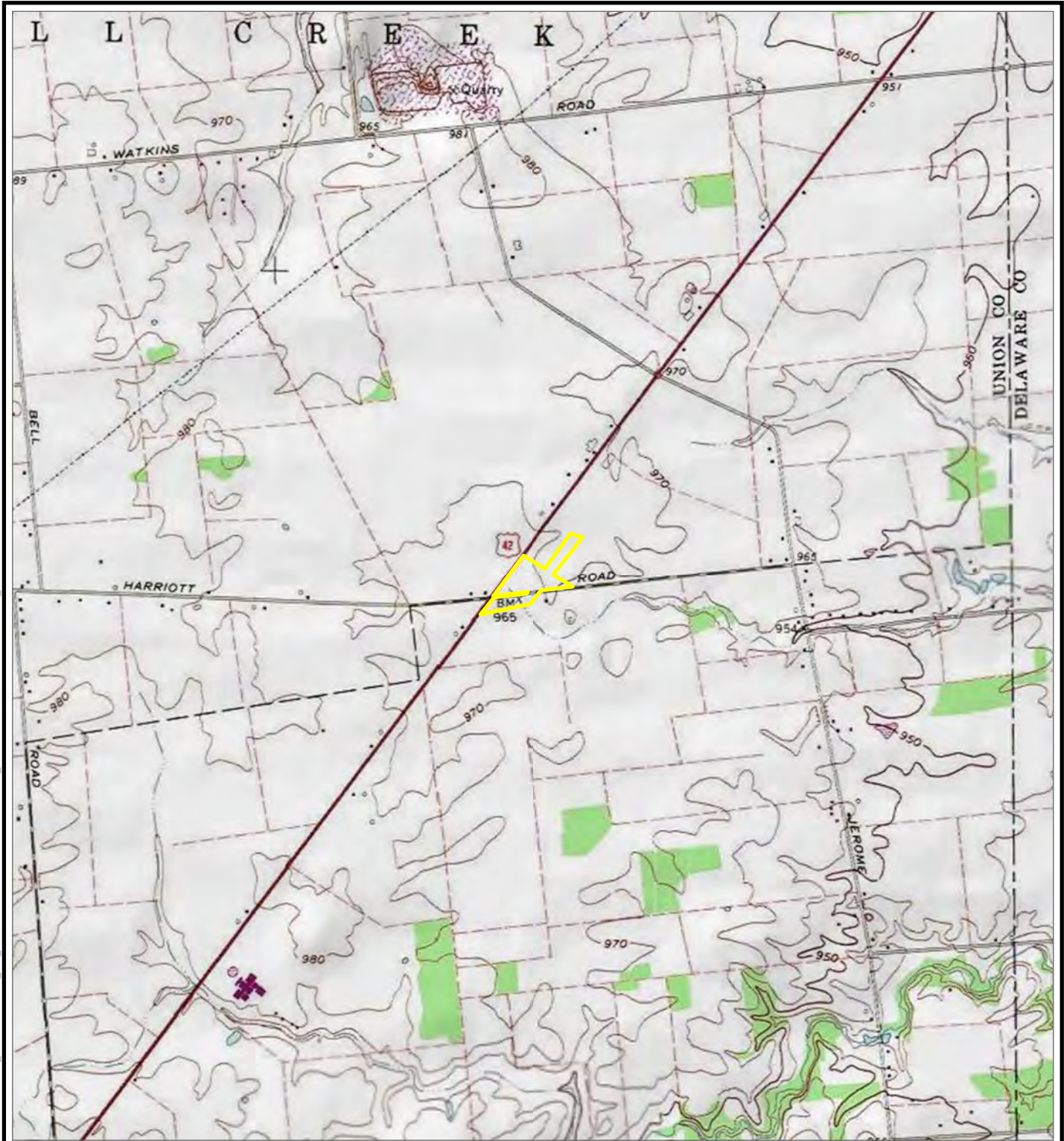
**Attachments**


Attachment A: Figures

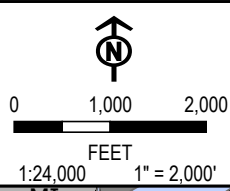
Attachment B: Photographic Record

Attachment C: Data Sheets


## **ATTACHMENT A – Figures**



 PROJECT STUDY AREA



BASE MAP: USA TOPO MAPS MAP SERVICE , SHAWNEE HILLS QUAD

PROJECT: <b>FIRSTENERGY HARRIOTT SUBSTATION PROJECT UNION COUNTY, OH</b>	
TITLE: <b>SITE LOCATION MAP</b>	
DRAWN BY: M. OPEL	PROJ. NO.: 664674 P5
CHECKED BY: M. MOLNAR	<b>FIGURE 1</b>
APPROVED BY: B. FALKINBURG	
DATE: OCTOBER 2025	
	
1382 WEST NINTH STREET SUITE 400 CLEVELAND, OH 44113 PHONE: 216-344-3072	
FILE:	WDR_2025

COORDINATE SYSTEM: NAD 1983 STATEPLANE OHIO NORTH FIPS 3401 FEET; MAP ROTATION: 0  
 - SAVED BY: MOPEL ON 10/21/2025, 14:29:18 PM. - FILE PATH: T:\PROJECTS\FIRST ENERGY\664674\_005\_HARRIOTT\SUBSTATION2-APRX\WDR\_2025.APRX - LAYOUT NAME: FIG01\_SLM

Coordinate System: NAD 1983 StatePlane Ohio North FIPS 3401 Feet; Map Rotation: 0  
- Saved By: MOPEL on 10/21/2025, 14:29:18 PM; File Path: T:\1-PROJECTS\First\_Energy\664674\_005\_HarriottSubstation2-APRX\WDR\_2025.aprx; Layout Name: Fig02\_Aerial

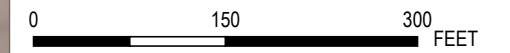



 PROJECT STUDY AREA

BASE MAP: GOOGLE MAPS.



1:1,800  
1" = 150'



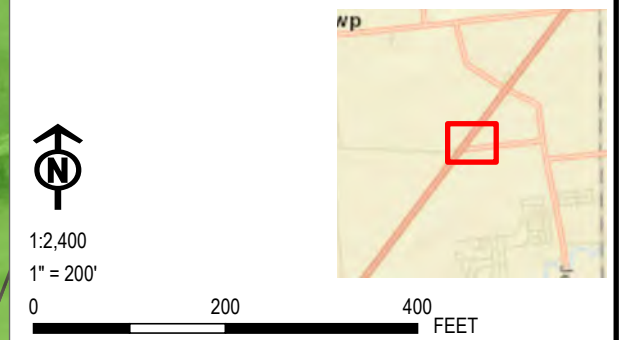
PROJECT:		<b>FIRSTENERGY HARRIOTT SUBSTATION PROJECT UNION COUNTY, OH</b>	
TITLE:		<b>AERIAL MAP</b>	
DRAWN BY:	M. OPEL	PROJ. NO.:	664674 P5
CHECKED BY:	M. MOLNAR	<b>FIGURE 2</b>	
APPROVED BY:	B. FALKINBURG		
DATE:	OCTOBER 2025		
		1382 WEST NINTH STREET SUITE 400 CLEVELAND, OH 44113 PHONE: 216-344-3072	
FILE:	WDR_2025.aprx		

Coordinate System: NAD 1983 StatePlane Ohio South FIPS 3402 Feet; Map Rotation: 0  
- Saved By: MOPEL on 11/18/2025, 08:45:13 AM; File Path: T:\1-PROJECTS\First\_Energy\664674\_005\_HarriottSubstation2-APRX\WDR\_2025.aprx; Layout Name: Fig03\_Soils



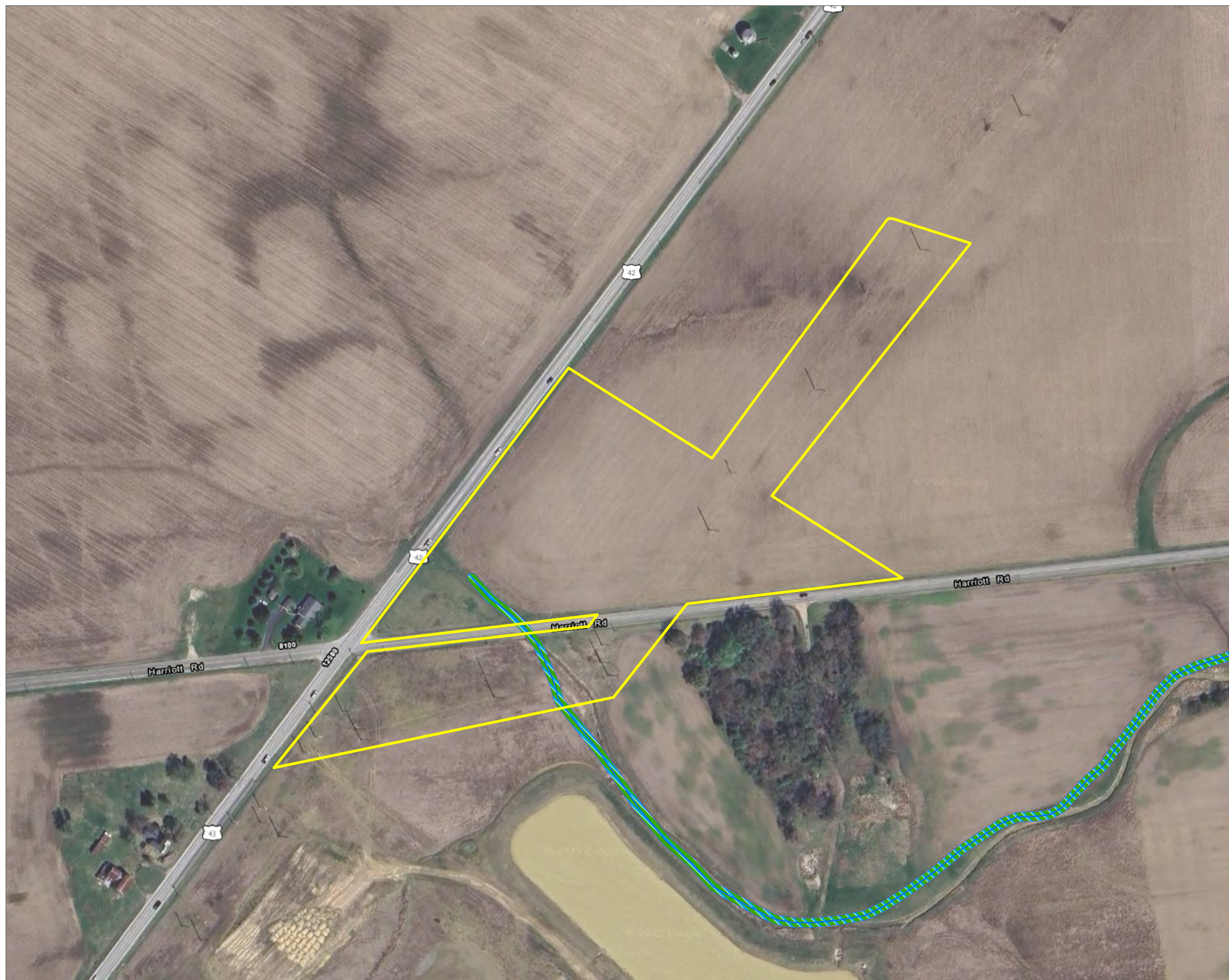
- PROJECT STUDY AREA
- HYDRIC SOIL
- NON-HYDRIC W/ HYDRIC INCLUSIONS SOIL
- NON-HYDRIC SOIL

BASE MAP: GOOGLE MAPS.  
DATA SOURCES: SOILS DATA ACQUIRED FROM USDA/NRCS SSURGO DATABASE.



PROJECT:		<b>FIRSTENERGY HARRIOTT SUBSTATION PROJECT UNION COUNTY, OH</b>	
TITLE:		<b>SOILS MAP</b>	
DRAWN BY:	M. OPEL	PROJ. NO.:	664674 P5
CHECKED BY:	M. MOLNAR	<b>FIGURE 3</b>	
APPROVED BY:	B. FALKINBURG		
DATE:	NOVEMBER 2025		
		1382 WEST NINTH STREET SUITE 400 CLEVELAND, OH 44113 PHONE: 216-344-3072	
FILE:	WDR_2025.aprx		

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- PROJECT STUDY AREA
- NATIONAL HYDROGRAPHY DATASET (NHD) STREAM
- NATIONAL WETLANDS INVENTORY (NWI) FEATURE
- 100-YEAR FLOOD ZONE

BASE MAP: GOOGLE MAPS.  
DATA SOURCES: WETLAND DATA ACQUIRED FROM U.S. FISH & WILDLIFE SERVICE, NATIONAL WETLANDS INVENTORY (NWI). STREAM DATA ACQUIRED FROM USGS, NATIONAL HYDROGRAPHY DATASET (NHD). FLOOD DATA ACQUIRED FROM FEMA, NATIONAL FLOOD HAZARD LAYER (NFHL).

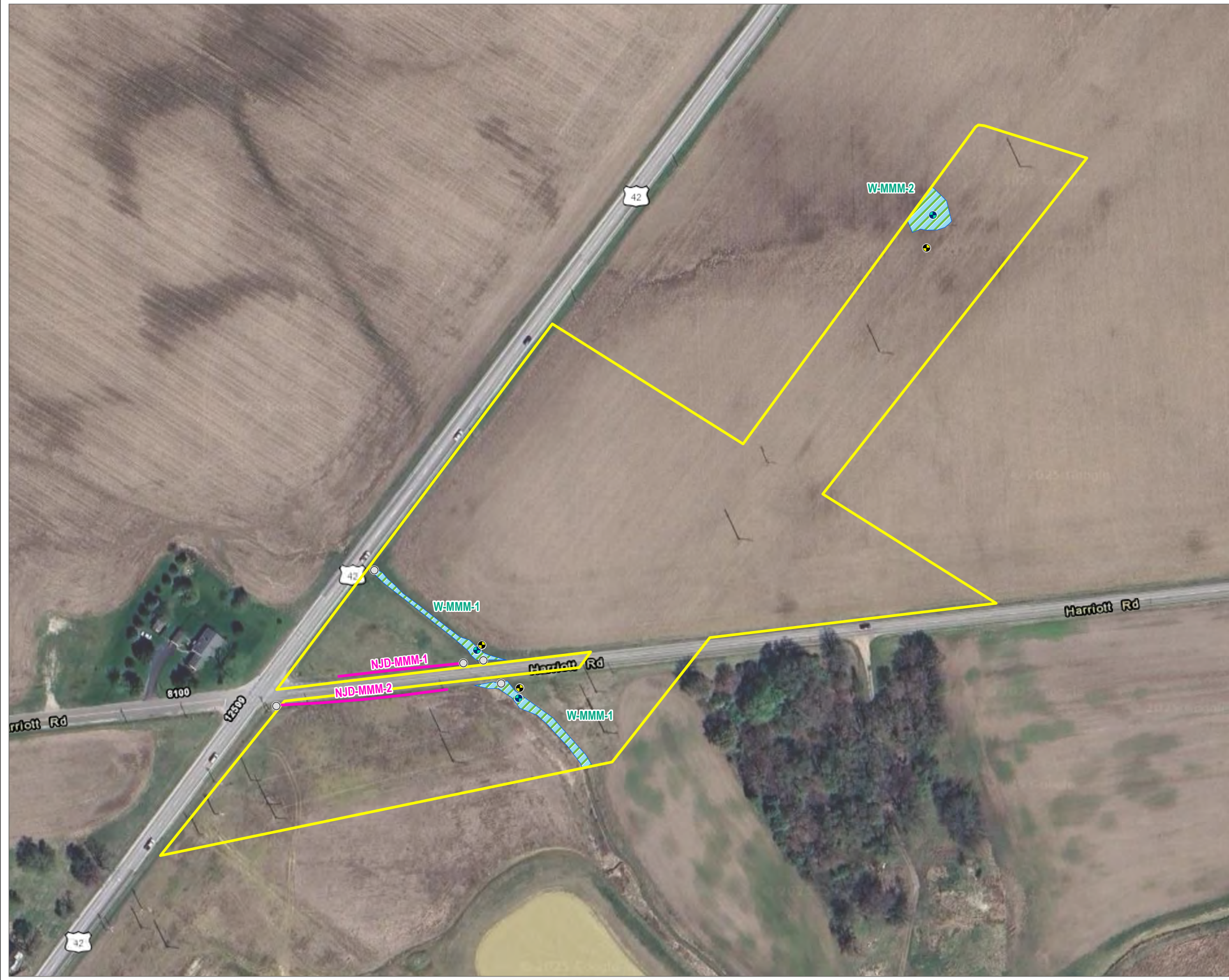


1:2,400  
1" = 200'



PROJECT:		<b>FIRSTENERGY HARRIOTT SUBSTATION PROJECT UNION COUNTY, OH</b>	
TITLE: <b>NHD, NWI AND FEMA FLOODPLAIN MAP</b>			
DRAWN BY:	M. OPEL	PROJ. NO.:	664674 P5
CHECKED BY:	M. MOLNAR	<b>FIGURE 4</b>	
APPROVED BY:	B. FALKINBURG		
DATE:	NOVEMBER 2025		
		1382 WEST NINTH STREET SUITE 400 CLEVELAND, OH 44113 PHONE: 216-344-3072	
FILE:	WDR_2025.aprx		

Coordinate System: NAD 1983 StatePlane Ohio South FIPS 3402 Feet; Map Rotation: 0  
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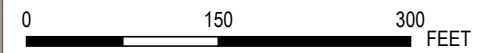


- PROJECT STUDY AREA
- CULVERT
- NON-JURISDICTIONAL DRAINAGE
- PEM WETLAND
- WETLAND DATA POINT
- UPLAND DATA POINT

BASE MAP: GOOGLE MAPS.  
 DATA SOURCES: TRC WETLAND DELINEATION COMPLETED DECEMBER 7, 2023 & OCTOBER 29, 2024.

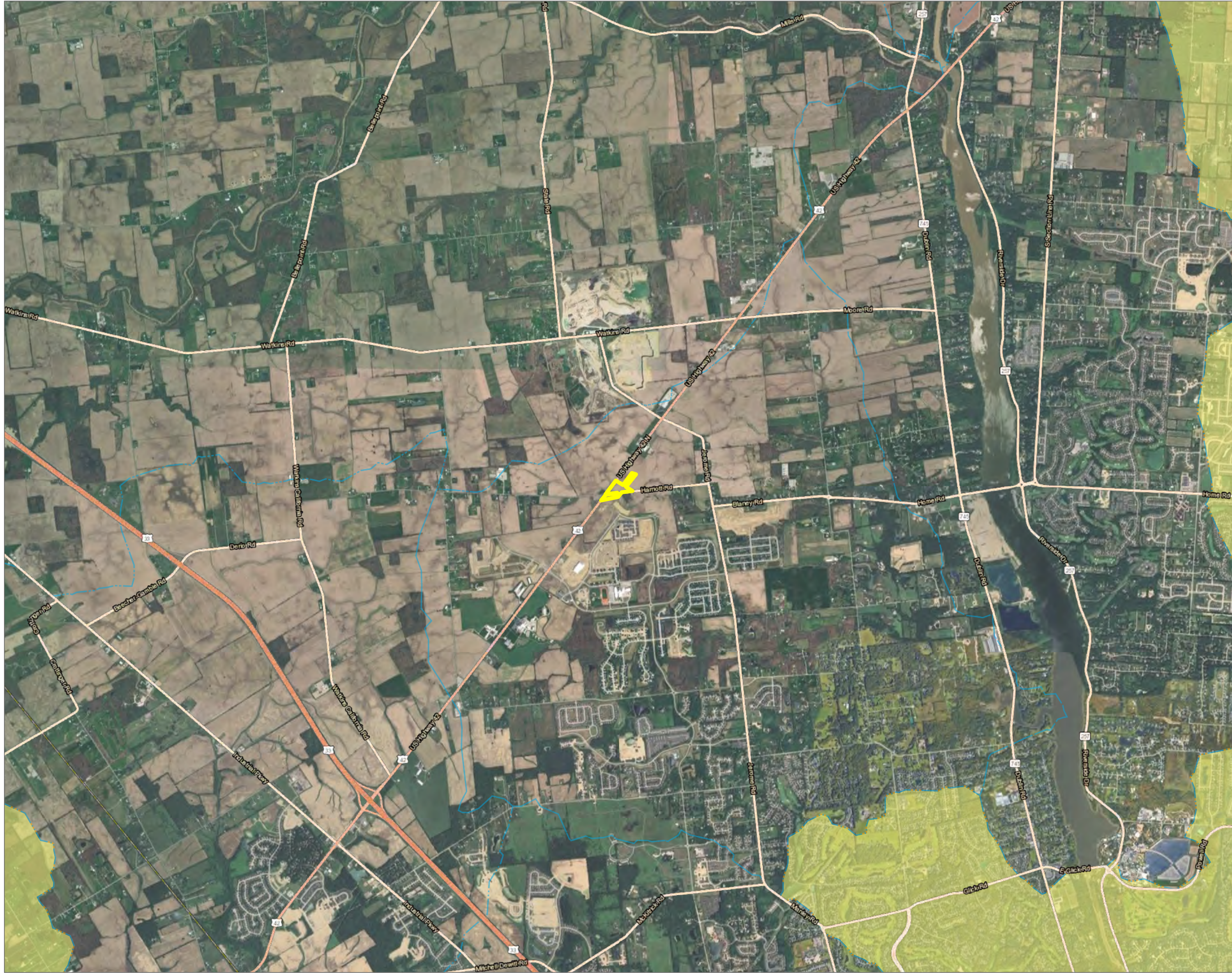


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 1" = 150'



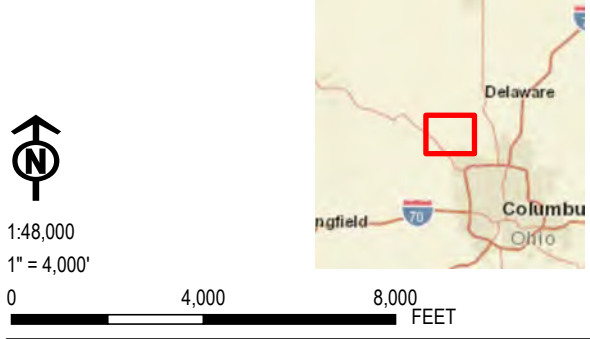
<b>PROJECT:</b>		<b>FIRSTENERGY HARRIOTT SUBSTATION PROJECT UNION COUNTY, OH</b>
<b>TITLE:</b>		<b>DELINEATED RESOURCES MAP</b>
DRAWN BY:	M. OPEL	PROJ. NO.: 664674 P5
CHECKED BY:	M. MOLNAR	<b>FIGURE 5</b>
APPROVED BY:	B. FALKINBURG	
DATE:	NOVEMBER 2025	
		1382 WEST NINTH STREET SUITE 400 CLEVELAND, OH 44113 PHONE: 216-344-3072
FILE:		WDR_2025.aprx

Coordinate System: NAD 1983 StatePlane Ohio North FIPS 3401 Feet; Map Rotation: 0  
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- PROJECT STUDY AREA
- OHIO EPA 401 WATER QUALITY CERTIFICATION FOR NATIONWIDE PERMIT ELIGIBILITY
- INELIGIBLE
- POSSIBLY ELIGIBLE
- ELIGIBLE

BASE MAP: GOOGLE MAPS.  
 DATA SOURCES: NATIONWIDE PERMITS STREAM DATA ACQUIRED FROM THE OHIO EPA.



<b>PROJECT:</b>		<b>FIRSTENERGY HARRIOTT SUBSTATION PROJECT UNION COUNTY, OH</b>	
<b>TITLE:</b>		<b>NATIONWIDE PERMITS STREAM ELIGIBILITY MAP</b>	
<b>DRAWN BY:</b>	M. OPEL	<b>PROJ. NO.:</b>	664674 P5
<b>CHECKED BY:</b>	M. MOLNAR	<b>FIGURE 6</b>	
<b>APPROVED BY:</b>	B. FALKINBURG		
<b>DATE:</b>	NOVEMBER 2025	1382 WEST NINTH STREET SUITE 400 CLEVELAND, OH 44113 PHONE: 216-344-3072	
<b>FILE:</b>		WDR_2025.aprx	

## **ATTACHMENT B – Photographic Record**

<b>Client Name:</b> FirstEnergy	<b>Site Location:</b> Mill Creek & Jerome Townships, Union County, Ohio	<b>Project No.</b> 664674 Phase 5
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**Photo No. 1.**

**Photo Date:**  
12/7/2023

**Description:**  
Wetland W-MMM-1,  
north of Harriott  
Road, facing  
northwest.



**Photo No. 2.**

**Photo Date:**  
12/7/2023

**Description:**  
Wetland W-MMM-1,  
north of Harriott  
Road, facing  
southeast.



<b>Client Name:</b> FirstEnergy	<b>Site Location:</b> Mill Creek & Jerome Townships, Union County, Ohio	<b>Project No.</b> 664674 Phase 5
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**Photo No. 3.**

**Photo Date:**  
12/7/2023

**Description:**  
Wetland W-MMM-1, north of Harriott Road, facing southeast.



**Photo No. 4.**

**Photo Date:**  
12/7/2023

**Description:**  
Overview photo of wetland W-MMM-1, north of Harriott Road, facing east.

