

**AMERICAN TRANSMISSION SYSTEMS, INCORPORATED  
A FIRSTENERGY COMPANY**

**LETTER OF NOTIFICATION**

**GLENMOUNT SUBSTATION AND  
138 kV TRANSMISSION LINES PROJECT**

**OPSB CASE No. 26-0487-EL-BLN**

**June 1, 2026**

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

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138 kV TRANSMISSION LINES PROJECT  
OPSB CASE No. 26-0487-EL-BLN**

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 (“OPSB”) as a Letter of Notification application.

**4906-6-05(B): LETTER OF NOTIFICATION REQUIREMENTS**

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

Name of Project: Glenmount Substation and 138 kV Transmission Lines Project(“Project”)

Reference Numbers: 1329 (Glenmount Substation)  
2063 (Firestone–South Akron 138 kV Transmission Line)  
2001-2 (South Akron-Toronto 138 kV Transmission Line)  
2065-2 (Lakemore-South Akron 138 kV Transmission Line)  
2066 (Dale-South Akron 138 kV Transmission Line)

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

American Transmission Systems, Incorporated, (“ATSI”), a FirstEnergy company, is proposing to construct a new 138 kV Substation and connect existing associated transmission lines to the new substation. The proposed substation will be owned by ATSI and named “Glenmount Substation.” The substation will be approximately 81,400 square feet and located approximately 85 feet south of the existing South Akron Substation.

To facilitate the Project, four existing 138 kV transmission lines that connect to the existing South Akron Substation will be reconfigured to connect to the Glenmount Substation. The affected transmission lines are the Firestone-South Akron 138 kV Transmission Line, South Akron- Toronto 138 kV Transmission Line, Lakemore-South Akron 138 kV Transmission Line and the Dale-South Akron 138 kV Transmission Line. After the reconfiguration the transmission lines will be renamed to the Firestone-Glenmount 138 kV Transmission Line, Glenmount-Toronto 138 kV Transmission Line, Glenmount-Lakemore 138 kV Transmission Line and the Dale-Glenmount 138 kV Transmission Line, respectively. The reconfiguration will also create the new Glenmount-South Akron #1 and Glenmount-South Akron #2 138 kV transmission lines that will connect the new Glenmount Substation to the existing South Akron Substation.

The proposed project will include the following:

- Firestone-Glenmount 138 kV Transmission Line (formerly Firestone – South Akron 138 kV Transmission Line)
  - Two new relocated structures
  - Two existing structure removals
  - Install 0.12 miles 7#8 Alumoweld (Shield Wire) and 795 kcmil 26/7 ACSR (Conductor)
- Glenmount-Toronto 138 kV Transmission Line (formerly South Akron-Toronto 138 kV Transmission Line)
  - One double circuit structure installation. (shares structure with Glenmount-Lakemore 138 kV Transmission Line)
  - Three existing structure removals
  - Install 0.19 miles of 7#8 Alumoweld (Shield Wire) and 795 kcmil 26/7 ACSR (Conductor)
- Glenmount-Lakemore 138 kV Transmission Line (formerly Lakemore-South Akron 138 kV Transmission Line)
  - One double circuit structure installation. (shares structure with Glenmount-Toronto line)
  - One new relocated structure

- One existing structure removal
- Install 0.19 miles of 7#8 Alumoweld (Shield Wire) and 795 kcmil 26/7 ACSR (Conductor) from existing structure 7997 into the Glenmount Substation
- Dale-Glenmount 138 kV Transmission Line (Proposed) – Dale-South Akron 138 kV Transmission Line (Existing)
  - One new relocated structure
  - One existing structure replacement
  - One existing structure removal
  - Install 0.12 miles of 7#8 Alumoweld (Shield Wire) and 795 kcmil 26/7 ACSR (Conductor) from existing structure 7997 into the Glenmount Substation
- Glenmount-South Akron #1 and #2 138 kV Transmission Lines
  - Two new structures installed
  - Install 0.10 miles of 7#8 Alumoweld (Shield Wire) and 795 kcmil 26/7 ACSR (Conductor) per transmission line.

The Project is in the city of Akron, Summit County, Ohio. The general location of the Project is shown in **Exhibit 1**, a partial copy of the United States Geologic Survey, Summit County, OH, Quad Map. **Exhibit 2** is a copy of ESRI aerial imagery of the Project area. The general layout of the Project is shown in **Exhibits 3** and **3A**.

**4906-6-05(B)(1): Letter of Notification Requirement**

The Project meets the requirements for a Letter of Notification because the Project is within the types of projects defined by Items (2)(a) and (3) of the Application Requirement Matrix for Electric Power Transmission Lines, Appendix A of Adm. Code 4906-1-01. These items state:

*(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 line or replacing structures with a different type of structure, for a distance of:*

*(a) two miles or less,*

*and;*

*(3) Constructing a new electric power transmission station.*

The proposed Project is within the requirements of Item (2)(a) because it involves replacing existing structures with new structures on existing transmission lines for a distance of approximately 0.1-mile, as well as Item (3) because it involves the construction of a new electric power transmission station.

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

The existing South Akron Substation is located in Summit County, Ohio, and serves as the transmission and distribution substation to the surrounding area. The South Akron 138 kV Substation is currently configured as a main and transfer bus configuration, where the breakers for multiple elements are normally connected to the main bus, which is a straight bus configuration. ATSI identified a need to convert the main and transfer bus configuration to a more resilient breaker-and-a-half configuration. The breaker-and-a-half configuration consists of two main buses, such that a fault on either of the main buses will not result in any 138 kV circuit interruptions. To construct this reconfiguration, all four transmission lines that connect to South Akron Substation would need to take a simultaneous outage for extended periods of time. Because all four transmission lines cannot be outaged simultaneously, ATSI is proposing construction of the proposed Glenmount Substation and associated transmission line reconfigurations to solve outage constraint issues at the existing South Akron Substation. By constructing the new Glenmount Substation adjacent to the existing South Akron Substation, the affected transmission lines can take outages on one line at a time for less duration. The existing line entrances/exits of the existing Firestone-South Akron 138 kV Transmission Line, South Akron-Toronto 138 kV

Transmission Line, Lakemore-South Akron 138 kV Transmission Line, and the Dale-South Akron 138 kV Transmission Line will be reconfigured, as shown in **Exhibit 3**.

The Project is needed to: (i) reduce the risk of area-wide power disruptions to residential and commercial customers due to transmission bus outages, (ii) improve the reliability of the transmission and the local distribution network by upgrading the substation with a redundant breaker and protection scheme, (iii) decrease the occurrence of simultaneous outages of multiple transmission facilities in the area.

The proposed Project will benefit a significant number of customers, especially in the South Akron area. The South Akron Substation is currently configured as a main and transfer bus configuration connecting four 138 kV transmission lines, two 138-23 kV transformers, and one capacitor bank. South Akron Substation serves approximately 55 Megawatts (“MW”) of load and 17,000 Ohio Edison customers. In the existing 138 kV main and transfer bus configuration, a fault on the main bus or between the main bus and the circuit breaker will result in an outage of the entire main bus and subsequently the substation. Similarly, a failure of a single circuit breaker or a failure of a relay to trip a circuit breaker will result in an outage of the entire 138 kV bus and substation, which would result in a loss of approximately 55 MW of load and 17,000 customers.

ATSI’s transmission planning is based on deterministic criteria, and not probabilistic criteria. In other words, ATSI transmission planning assessments result in recommendations to reinforce the transmission system based on an adverse planning event occurring and not based on the probability of the event occurring. ATSI cannot know or predict when a failure or fault will occur.

The proposed Project will significantly reduce the likelihood of a simultaneous outage of multiple transmission facilities and increase the reliability and operational flexibility of the transmission system in the South Akron Substation area. The proposed breaker-and-a-half bus arrangement ensures that no more than two transmission elements would be interrupted due to a breaker failure condition.

In the last five years, there have been eight unscheduled outages at the South Akron Substation impacting the 138 kV bus, the associated 138 kV lines, and the 138-23 kV transformers connected at the substation. **Table 1** below identifies the details of these outages. This Project was identified as the best solution to address these outages.

**Table 1. Reliability outage history for 138 kV Substation.**

Equipment	Actual Out	Actual In	Duration	Type	Cause	Number of Customers Impacted
South Akron 138 kV Main Bus	06/18/2020 7:24:00 PM	06/19/2020 2:39:00 AM	435m	Sustained	Failed AC Circuit Equipment	0
South Akron NO. 1 TR 138-23 kV	06/18/2020 7:24:00 PM	06/18/2020 8:18:00 PM	54m	Sustained	Failed AC Substation Equipment	0
South Akron NO. 3 TR 138-23 kV	06/18/2020 7:24:00 PM	06/19/2020 2:39:00 AM	435m	Sustained	Failed AC Substation Equipment	0
South Akron 138 kV NO 3 Cap Bank	06/29/2020 6:25:00 PM	06/30/2020 3:49:00 PM	1284m	Sustained	Failed Protection System Equipment	0
South Akron 138 kV Transfer Bus	04/16/2023 6:54:40 PM	04/26/2024 2:55:00 PM	541,200 m	Sustained	Foreign Interference	0
South Akron-Toronto 138 kV Line	08/21/2022 7:36:37 AM	08/21/2022 7:36:37 AM	0m	Momentary	Lightning	0
South Akron NO. 3 TR 138-23 kV	04/13/2023 9:40:30 AM	04/13/2023 11:31:34 AM	111m	Sustained	Unknown	0
South Akron-Toronto 138 kV Line	05/16/2025 11:25:25 PM	05/17/2025 12:05:56 PM	760m	Sustained	Weather, excluding lightning	3,179

Upgrading the South Akron Substation 138 kV bus from the existing main and transfer bus configuration to a more robust breaker-and-a-half configuration will improve reliability, provide redundancy, eliminate the single contingency risk associated with a 138 kV bus fault, and reduce the potential of radializing the transmission system in the area. Note that the proposed substation project is not needed to address a NERC, PJM, or FE Planning Criteria violation and is not part of a larger project. The Project is a supplemental project driven by the FE System Performance Excellence methodology based on the existing

substation configuration and its impact on the reliability of electric service to the residents and businesses in the area.

The Project will make the power system in the area more resilient and reliable. The new breaker-and-a-half configuration of the Glenmount Station will greatly reduce the potential for widespread outages in the area.

Some examples of advanced transmission technologies that ATSI considers while proposing reliability enhancement projects are the use of Dynamic Line Rating technologies and/or the use of advanced conductors. Dynamic Line Rating technologies include the use of software and hardware to determine the thermal limits of a transmission line in real time based on rating methodologies and ambient conditions within a given area, which can either increase or decrease the thermal ratings (i.e., loadability) of the transmission line. Advanced conductors include present and future transmission line technologies whose power-flow capacities exceed those of conventional aluminum conductor/steel reinforced conductors. Advanced conductors include, but are not limited to, superconducting cables, advanced composite conductors, advanced steel cores, high temperature low-sag conductors, fiber-optic temperature sensing conductors, and advanced overhead conductors. These advanced conductors allow for increased capacity on a given transmission line due to the reduced sagging of the transmission line at higher temperatures. These advanced technologies were not implemented in connection with this Project because the transmission lines connecting to the substation as it is designed today do not have any capacity constraints and are not planned to be upgraded as part of this Project. The new Glenmount Substation proposed as part of this Project will include hardware designed to increase the reliability of the transmission system pursuant to the definition of advanced transmission technology in R.C. 4906.01(M), because, as noted above, the breaker-and-a-half configuration of the Substation will provide redundancy, eliminate the single contingency risk associated with a 138 kV bus fault, and reduce the potential of radializing the transmission system in the area.

The Project Need was presented as a Supplemental Project at the PJM Subregional RTEP-Western Committee (“SRRTEP-Western”) meeting on April 21, 2023. The Solution was presented at the PJM SRRTEP-Western meeting on September 20, 2024. PJM assigned the Project supplemental upgrade identification number s3546.1. The PJM SSRTEP-Western meeting presentation slides are included as **Exhibit 4**.

**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 transmission lines is shown in the ATSI Transmission Network Map, included as part of the confidential portion of the FirstEnergy Corp. 2025 Long-Term Forecast Report (“LTFR”). This map was submitted to the PUCO in Case No. 25-0504-EL-FOR under Rule 4901:5-5:04 (C)(2)(b) of the Ohio Administrative Code. The map is incorporated by reference only. This map shows ATSI’s 345 kV and 138 kV transmission lines and transmission substations. This Project is included on page 48 in the 2025 LTFR. The general location of the Project area is shown in **Exhibits 1 and 2**. The Project layout is shown in **Exhibit 3**.

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

The alternative to the proposed upgrade is to continue operating the system with the existing configuration and the risks as described above.

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

Applicant’s manager of External Affairs will advise local officials of features and the status of the proposed Project as necessary. Applicant will maintain a copy of this Letter of Notification, 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).

Applicant will publish notice of the Project in Akron Beacon Journal within 7 days of filing this Letter of Notification application. The notice will comply with Adm. Code 4906-6-08(A)(1)-(6).

During all phases of this Project, Applicants will maintain the transmission projects hotline at 1-888-311-4737 or via email at: [transmissionprojects@firstenergycorp.com](mailto:transmissionprojects@firstenergycorp.com) where the public may ask questions or leave comments on the Project for Applicants.

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

Construction on the Project is expected to begin as early as September 1, 2026, and be completed/in-service by December 27, 2027.

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

**Exhibit 1** depicts the general location of the Project. This Exhibit provides a partial copy of the United States Geologic Survey, Summit County OH, Quad Map. **Exhibit 2** is a copy of ESRI aerial imagery of the Project area.

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

This Project is located entirely on one parcel owned in fee by Ohio Edison Co. The parcel number is 73000631.

**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: 795.0 kcmil 26/7 strand ACSR conductor
- Static Wire: 7#8 Alumoweld
- Insulators: Porcelain/Glass
- ROW Width: 60'
- Structure Types: **Exhibit 5:** Double Circuit Tubular Steel Dead End Single Pole Structure (Qty. 2)  
**Exhibit 6:** Single Circuit Tubular Steel Delta Dead-End Single Pole Structure (Qty. 1)  
**Exhibit 7:** Double Circuit Tubular Steel Dead-End Double Steel Pole Structure (Qty. 2)

**Exhibit 8: Single Circuit Tubular Steel Dead-End Single Steel Pole Structure (Qty. 3)**

The equipment and facilities described below are associated with the substation component of the proposed Project:

Voltage:	138 kV Max System Voltage (550 kV BIL)
Bus Conductor:	4" Aluminum Pipe (2) 1590 KCMIL 61str AAC
Insulators:	Porcelain
Breakers:	Eleven (11) 138 kV 3000 A Breakers
Switches:	Twenty-Two (22) 138 kV 2000 A Group-Operated V-Type Switches Six (6) 138 kV 2000 A Motor Operated Line Disconnect Switches One (1) 138 kV 2000 A Motor Operated Cap Bank Disconnect Switch
CVT's:	Twenty-Seven (27) 138 kV Single Phase Capacitor Voltage Transformers
WT's:	Three (3) 138 kV 2000 A Single-Phase Wideband Wave Trap
Arresters:	Eighteen (18) 108 kV (84kV MCOV) Arresters
Structures:	Six (6) 138 kV Bus Support Structures Ten (10) 138 kV 3 Phase B-Level Support Structures Twenty-four (24) 138 kV 1 Phase CCVT Stands Seventeen (17) 138 kV 3 Phase Switch Structures One (1) 138 kV four bay A-Frame Structure Three (3) 138 kV 1 Phase CCVT/WT Stands Three (3) 138 kV Circuit Switcher Stands Two (2) 138 kV 1 Phase SSVT Stands One (1) 138 kV 1 Phase CT Stand One (1) 44' x 28' Packaged Control Enclosure One (1) 60' Static Mast Four (4) Security Pole Structures
Capacitor Bank:	One (1) 138 kV, (51.84-MVAR) Capacitor Bank
Circuit Switch:	One (1) 138 kV, 650A, 40kA, SF6 Capacitor Switcher

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

There are zero (0) occupied residences or institutions within 100 feet from the edge of right-of-way containing the affected 138 kV Transmission Lines. Therefore, Electric and Magnetic Field ("EMF") calculations are not needed for the Project.

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

The estimated cost for the proposed Project is \$29,973,000. The substation portion will cost \$25,791,000. The transmission line portion will cost 4,182,000. 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 in the city of Akron, Summit County, Ohio. There are various land uses in the vicinity of the project, mainly commercial and residential uses. No significant changes or impacts to the current land use are anticipated.

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

Agricultural land does not exist within the Project’s Area of Potential Effect (“APE”).

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

As part of the investigation for this Letter of Notification, TRC Companies, Inc. (“TRC”) requested database information from the Ohio Historic Preservation Office (OHPO) on June 26, 2025, for the Project Study Area (Area of Potential Effects or APE) with a one (1)-mile search radius. On July 24, 2025, SHPO replied to the request, attached as **Exhibit 9**. SHPO’s concurred that no cultural resource studies are warranted for the Project. Therefore, as proposed, the Project will have no effect on historic properties. No further coordination is required for the Project unless the scope of work changes or archaeological resources are discovered during the course of the Project. To date, TRC has not conducted any on-site cultural resources surveys.

The SHPO 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 no historic properties recorded within one (1)-mi of the proposed Project; however, two (2) SHPO Determination of Eligibility (DOE) are mapped to the north and northwest. The Firestone Park Historic District (DOE ID: 2056) was recorded 0.92 mi to the north and the Firestone Central Research Laboratories (DOE ID: 749) was recorded 0.99 mi to the northwest.

The SHPO 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 search identified six (6) above-ground historic resources that have yet to be formally evaluated for NRHP eligibility are recorded within one (1)-mi of the proposed Project. The nearest of these are situated 0.35 mi to the northeast.

There are five (5) Ohio Genealogical Society (OGS) cemeteries recorded within one (1)-mi. The nearest, Holy Cross Cemetery, borders the proposed Project to the west. Four (4) archaeological surveys have been conducted within one (1)-mi of the proposed Project And none are within the proposed Study Area. One (1) archaeological site form is currently under review and has been recorded 0.66 mi to the north. This resource has not been formally accepted or assessed for NRHP eligibility.

The Project Study Area consists of an open, maintained field with three (3) overhead utility line corridors. Currently, as proposed, no new tree clearing is anticipated within or outside the Project Study Area. The proposed Project is not expected to have any adverse effects on known historic properties.

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

Coordination with the Ohio Department of Transportation (ODOT) will be required to obtain the necessary right-of-way (ROW) permits for aerial crossings over I-277/US-224 for the proposed Project. If more than one (1) acre of earth disturbance is proposed in the Project scope, then 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 (SWP3) will be submitted to the City of Akron Engineer. The Project scope is not proposed within a special FEMA floodplain and therefore will not require a Floodplain 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. A list of potential government agency requirements is provided in Table 2 below.

**Table 2. List of Government Agency Requirements**

Agency	Requirement
Ohio EPA	General NPDES Construction Storm Water Permit OHC000006; NOI (if >1 acre disturbance)
City of Akron Engineering Department	SWP3 Review

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

As part of the investigation, TRC conducted the necessary environmental 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 (“DOW”) 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 dated November 7, 2025, indicated that there are 11 records of state and/or federally listed plants, animals, and/or communities located within a one-mile radius of the Project Study Area. However, the response noted that the 11 species mentioned above are not recorded within the specific boundaries of the Project Study Area. Additionally, the Project is within the range of 12 state and/or federally listed animal species. A copy of ODNR’s Office of Real Estate’s response is included as **Exhibit 10**. A list of all endangered, threatened, and rare species, as identified by ODNR, within a one-mile radius of the Project is provided in Table 3 and a list of all endangered, threatened,

and rare species, as identified by ODNR, within the range of the Project is provided in Table 4.

**Table 3. List of Endangered, Threatened, and Rare Species within a One-mile Radius of Project Study Area**

Common Name	Scientific Name	Federal Listed Status	State Listed Status	Affected Habitat
<b>Bird</b>				
Sedge wren	<i>Cistothorus platensis</i>	N/A	Species of Concern	Wet grasslands, upper parts of marshes, hayfields, tallgrass prairie, sphagnum bogs, and similar shallow wetlands with taller vegetation, but not reeds such as cattails.
<b>Mammal</b>				
Star-nosed mole	<i>Condylura cristata</i>	N/A	Species of Concern	Low, wet soil near lakes or streams.
<b>Plants</b>				
Bebb's sedge	<i>Carex bebbii</i>	N/A	Potentially Threatened	A variety of moist situations in sun or semi-shade, often in sandy soil; woods borders and clearings, lake margins, bogs, fens, prairies, thickets.
Leather-leaf	<i>Chamaedaphne calyculata</i>	N/A	Threatened	Peat bogs and lakeshores.
Canada frostweed	<i>Crocianthemum canadense</i>	N/A	Threatened	Dry sandy soil in oak openings, open upland woods, dunes, clearings and sandy riverbanks.
American reed grass	<i>Phragmites americanus</i>	N/A	Potentially Threatened	Variety of natural wetland habitats such as marshes, fens, wet prairie, lake margins.
Blue-leaved willow	<i>Salix myricoides</i>	N/A	Potentially Threatened	Open areas in fens, usually in marl or along streamlets; beaches and dunes along the shores of Lake Erie.
Autumn willow	<i>Salix serissima</i>	N/A	Potentially Threatened	Fens and shrub seepage swamps.
Carolina catchfly	<i>Silene caroliniana</i> ssp. <i>pennsylvanica</i>	N/A	Threatened	Dry open woods, gravelly, rocky or shaley banks and clearings.

<b>Reptiles</b>				
Smooth greensnake	<i>Opheodrys vernalis</i>	N/A	Endangered	Prairies, marshy meadows, and roadside ditches.
Woodland box turtle	<i>Terrapene carolina carolina</i>	N/A	Species of Concern	Found in woodlands throughout Ohio.

**Table 4. 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>Bird</b>				
Sandhill crane	<i>Antigone canadensis</i>	N/A	Threatened	Grassland, prairie, or large tracts of wetland habitat.
<b>Fish</b>				
Iowa darter	<i>Etheostoma exile</i>	N/A	Endangered	Perennial streams.
Lake chubsucker	<i>Erimyzon sucetta</i>	N/A	Threatened	Perennial streams.
Paddlefish	<i>Polyodon spathula</i>	N/A	Threatened	Perennial streams.
Pugnose minnow	<i>Opsopoeodus emiliae</i>	N/A	Endangered	Perennial streams.
Western banded killifish	<i>Fundulus diaphanus menona</i>	N/A	Endangered	Perennial streams.
<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>Reptiles</b>				
Smooth greensnake	<i>Opheodrys vernalis</i>	N/A	Endangered	Prairies, marshy meadows, and roadside ditches.
Spotted turtle	<i>Clemmys guttata</i>	N/A	Threatened	Fens, bogs and marshes, wet prairies, meadows, pond edges, wet woods, and the shallow sluggish waters of small streams and ditches.

The response from ODNR, DOW indicated the Project is within the ranges the federally and state endangered Indiana bat (*Myotis sodalis*), northern long-eared bat (*Myotis septentrionalis*), the state endangered little brown bat (*Myotis lucifugus*) and tricolored bat (*Perimyotis subflavus*). 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 and submitted to ODNR for concurrence. ODNR responded on November 20, 2025, attached as **Exhibit 11**, concurring that no caves, cliffs, or mine openings occur in the Project Study Area; therefore, seasonal tree clearing (October 1 – March 31) is not likely to impact hibernating bats. Additionally, ODNR stated that since potential hibernacula is present within 5 miles of the Project Study Area and that subsurface disturbance is planned, the DOW recommends that subsurface disturbance occur between April 1 and September 30 if possible. If subsurface disturbance must occur outside of this period, DOW approves of this plan as long as bedrock is not impacted. In assessing compliance with NWP General Condition 18, TRC determined that tree clearing is minimal within the Project Study Area and no bedrock will be impacted by Project activities. If minor tree clearing is needed as a result of this Project, it will take place within the U.S. Fish and Wildlife Service (USFWS) recommended tree clearing dates (October 1 – March 31). If clearing will need to occur outside of the USFWS recommended tree clearing dates, additional coordination and surveys will be used to best monitor and protect habitat for listed species; therefore, no impacts to bat species are anticipated as a result of the construction of this Project.

The Project is within the range of the Iowa darter (*Etheostoma exile*), a state endangered fish, the pugnose minnow (*Opsopoeodus emiliae*), a state endangered fish, the western banded killifish (*Fundulus diaphanus menona*), a state endangered fish, the lake chubsucker (*Erimyzon sucetta*), a state threatened fish, and the paddlefish (*Polyodon spathula*) a state threatened fish. The DOW recommends no in-water work in perennial streams from March 15 to June 30 to reduce impacts to indigenous aquatic species and their habitat. Since no in-water work is proposed in a perennial stream, this Project is not likely to impact these or other aquatic species.

The Project is within the range of the smooth greensnake (*Opheodrys vernalis*), a state endangered species. This species is primarily a prairie inhabitant but can also be found in marshy meadows and roadside ditches. Due to the location, the type of habitat within the Project Study Area, and the type of work proposed, this Project is not likely to impact this species.

The Project is within the range of the spotted turtle (*Clemmys guttata*), a state threatened species. This species prefers fens, bogs, and marshes, but also is known to inhabit wet prairies, meadows, pond edges, wet woods, and the shallow sluggish waters of small streams and ditches. Due to the location, the type of habitat within the Project Study Area, and the type of work proposed, this Project is not likely to impact this species.

The Project is within the range of the sandhill crane (*Antigone canadensis*), a state threatened species. Sandhill cranes are primarily a wetland-dependent species. On their wintering grounds, they will utilize agricultural fields; however, they roost in shallow, standing water or moist bottomlands. On breeding grounds, they require a rather large tract of wet meadow, shallow marsh, or bog for nesting. Due to the existing, developed land use and a lack of suitable habitat within the Project Study Area, this species is not likely to be impacted by the proposed activities.

In addition, TRC submitted a request to the US Fish and Wildlife Service (USFWS”) for an Ecological Review to research the presence of any endangered, threatened, rare, or designated species within one (1) mile of the Project area. A copy of USFWS’s Ecological Review response, dated November 17, 2025, is included as **Exhibit 12**. The USFWS response indicated that the proposed Project is in the vicinity of one or more recent confirmed records of tricolored bats. USFWS’ response stated that should the proposed Project Study Area contain trees  $\geq 3$  inches diameter at breast height (DBH), they recommend avoiding tree removal wherever possible. If any caves or abandoned mines may be disturbed, further coordination is requested to determine if fall or spring portal surveys are warranted. If no caves or abandoned mines are present and trees  $\geq 3$  inches DBH cannot be avoided, USFWS recommends the removal of any trees  $\geq 3$  inches DBH only

occur between October 1 and March 31. If bridges or culverts will be impacted, USFWS recommends reviewing Appendix K in the most recent “Range-Wide Indiana Bat & Northern Long-Eared Bat Survey Guidelines” to determine if the bridge/culvert may be suitable roost habitat. To avoid adverse effects, USFWS recommends impacts to suitable bridges and culverts only occur from October 1 and March 31. Since tree clearing should be minimal, and that there will be no impacts to bridges, culverts, or underground mines or caves, this Project is not likely to impact these species.

USFWS has proposed to list the monarch butterfly (*Danaus plexippus*) as threatened under the Endangered Species Act. This species is found throughout the state of Ohio. Threats include habitat loss – particularly the loss of milkweed, the monarch caterpillar’s sole food source – and mortality resulting from pesticide use. USFWS recommends the following actions to maintain habitat and avoid impacts to monarchs in Ohio: revegetate disturbed areas with native plant species including nectar-producing plants and milkweed endemic to the area; limit mowing monarch habitat from March 15 to August 31 when monarchs are breeding and from September 1 to October 31 when large numbers of monarchs are migrating; and avoid the use of pesticides and herbicides in and near monarch habitat. To avoid impacts to this species, any mowing in monarch habitat will be limited to the USFWS restriction dates outlined above and no spraying will occur within or near monarch habitat. USFWS also stated that due to the Project type, size, and location, no adverse effects to any other federally endangered, threatened, or proposed species, or proposed or designated critical habitat are anticipated.

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

TRC performed field investigations to identify and delineate wetlands and waterbodies located within the Project Study Area on July 13, 2023, June 5, 2025, and February 18, 2026. The Project Study Area is a total of 6.69 acres and located in the city of Akron, Summit County, Ohio. Two (2) palustrine emergent wetlands were identified and delineated within the Project Study Area north of I-277/US-224. A Surface Water Delineation Report for the Project Study Area is included in **Exhibit 13**. No impacts or ground disturbance are anticipated within the Project Study Area.

The Project Study Area is comprised of an existing, maintained utility ROW and developed (mowed) open space. The Project Study Area is accessed from an existing access drive and Glenmount Avenue. TRC did not observe the presence of any of the state or federally listed species during the field investigation due to the highly maintained nature of the utility ROW and mowed open space. Therefore, no impacts are anticipated to any of the listed species detailed in the ODNR or USFWS correspondence.

The Limits of Disturbance (LOD) will be completely within the Project Study Area and will include using an existing utility ROW and developed (mowed) open space for the proposed construction of the substation. There will be no ground disturbance within the southern portion of the Project Study Area surrounding Structure 7997. A 50x50 foot matted workspace will be placed around Structure 7997 for access purposes and to facilitate the pulling of wires for the new substation that will be built north of I-277/US-224. NWP 57 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 the city of Akron, in Summit 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). A total of 0.03-acre of palustrine emergent wetland will be permanently impacted for the construction of the new substation and its associated facilities. Current regulations allow impacts up to 0.5-acre to jurisdictional resources under NWP 57, therefore, a Section 404 PCN is not required as long as NWP 57 thresholds are met and not exceeded.

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)) (Version 4.1, March, 2025) revealed no conservation easements within the Project Study Area. The National Conservation Easement Database is no longer used; this is due to the National Conservation Easement Database no longer being actively updated and supported.

**4906-6-05(B)(10)(g): Additional 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 Public Utilities Commission of Ohio (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 Letter of Notification Transmittal and Availability for Public Review**

This Letter of Notification application is being provided concurrently with its docketing with the Board to the following officials.

**Summit County**

Ms. Erin Dickinson  
Summit County Council President  
175 South Main St  
Akron, OH 44308  
[edickinson@summitoh.net](mailto:edickinson@summitoh.net)

Mr. B. Alan Brubaker, P.E., P.S.  
Summit County Engineer's Office  
538 East South Street  
Akron, Ohio 44311  
[bbrubaker@summitoh.net](mailto:bbrubaker@summitoh.net)

Ms. Christine Higham  
Summit County Council VP  
175 South Main St  
Akron, OH 44308  
[chigham@summitoh.net](mailto:chigham@summitoh.net)

Mr. Brian Prunty  
County Soil & Water District  
Administrator  
1180 S Main St. STE#230  
Akron, OH 44301  
[bprunty@summitoh.net](mailto:bprunty@summitoh.net)

Mr. Jeff Wilhite  
Summit County Council District 4  
175 South Main St  
Akron, OH 44308  
[jwilhite@summitoh.net](mailto:jwilhite@summitoh.net)

**City of Akron**

Mr. Shammias Malik, Mayor  
City of Akron  
166 S. High St.  
Akron, OH 44308  
[mayor@akronohio.gov](mailto:mayor@akronohio.gov)

Mr. Donnie Kammer  
City of Akron Council Ward 7  
166 S. High St. Rm 301  
Akron, OH 44308  
[rmack@cityofdefiance.com](mailto:rmack@cityofdefiance.com)

Mr. Steve Fricker, Finance  
Director  
City of Akron  
166 S. High St.  
Akron, OH 44308  
[SFricker@akronohio.gov](mailto:SFricker@akronohio.gov)

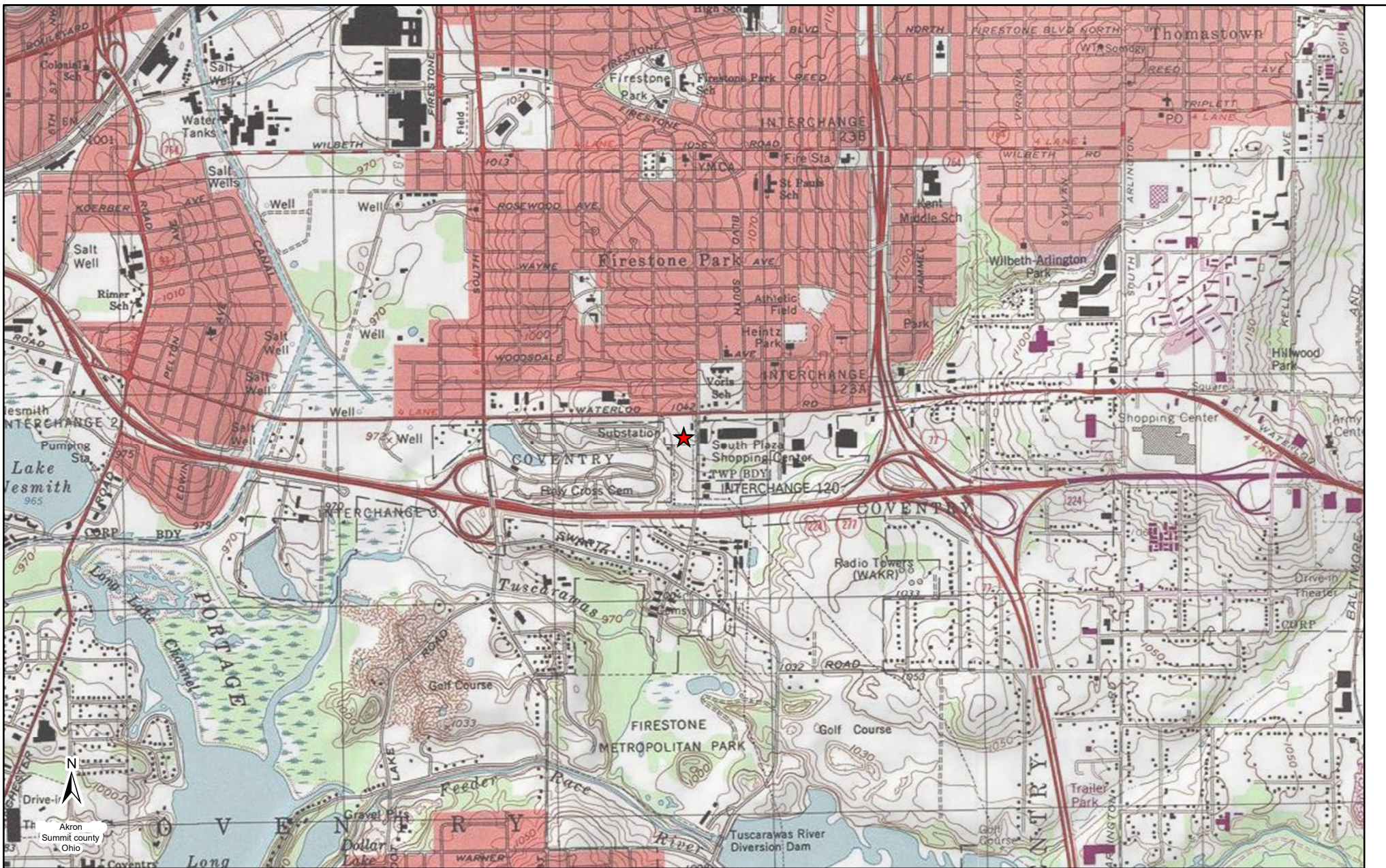
Kyle Julien, Director of Planning  
City of Akron  
166 S. High St.  
Akron, OH 44308  
[kjulien@akronohio.gov](mailto:kjulien@akronohio.gov)

**Library**

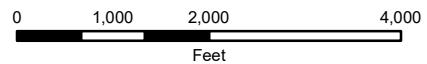
Ms. Pam Hickson-Stevenson  
Akron Public Library  
60 S. High St.  
Akron, OH 44308

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

Information is posted at [www.firstenergycorp.com/about/transmission\\_project/ohio.html](http://www.firstenergycorp.com/about/transmission_project/ohio.html) on how to request an electronic or paper copy of this Letter of Notification application. The link to this website is being provided in accordance with Adm.Code 4906-6-07(B), which requires ATSI to provide the OPSB with proof of compliance with Adm.Code 4906-6-07(A)(3)



**LEGEND:**  
 ★ Project Location



**Reference:**  
 USGS Topographical Overlay

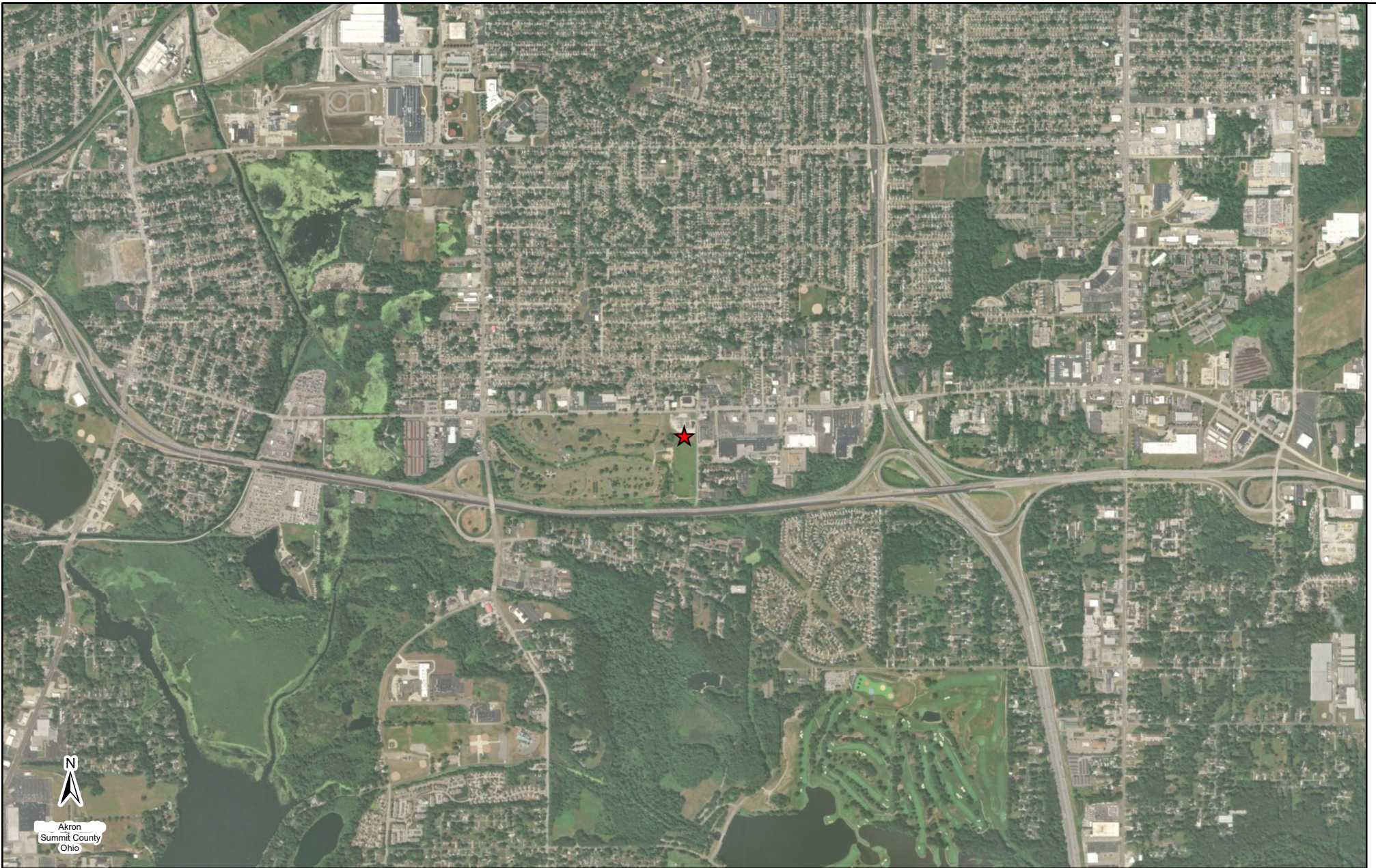
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 NAD\_1983\_StatePlane\_Ohio\_North\_FIPS\_3401\_Feet  
 WKID: 3734 Authority: EPSG



## EXHIBIT 1

**ATSI**  
 American Transmission Systems, Inc.  
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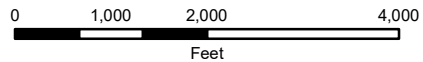
### GLENMOUNT SUBSTATION AND 138 KV TRANSMISSION LINES PROJECT



Akron  
Summit County  
Ohio

**LEGEND:**

★ Project Location



**Reference:**  
USGS Topographical Overlay

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



**EXHIBIT 2**



**GLENMOUNT SUBSTATION AND  
138 kV TRANSMISSION LINES PROJECT**

CITY OF AKRON  
SUMMIT CO., OHIO

GLENMOUNT AVE

DALE -  
SOUTH AKRON  
138KV LINE

DALE - GLENMOUNT  
138KV LINE

LAKEMORE -  
SOUTH AKRON  
138KV LINE

SOUTH AKRON -  
TORONTO  
138KV LINE

GLENMOUNT -  
SOUTH AKRON  
NO. 1 LINE

GLENMOUNT -  
SOUTH AKRON  
NO. 2 LINE

GLENMOUNT  
SUBSTATION

GLENMOUNT - LAKEMORE  
138KV LINE

GLENMOUNT - TORONTO  
138KV LINE

FIRESTONE - GLENMOUNT  
138KV LINE

FIRESTONE -  
SOUTH AKRON  
138KV LINE

THREE (3) 23KV CIRCUITS

I-277 (WESTBOUND)

I-277 (EASTBOUND)

GLENMOUNT AVE

SOUTH AKRON SUB

#16630

#16631

#6802

#7999

#6779

#6803

#7998

#6778

#6777

#6804

#6805

#7997

#1











#2


#3

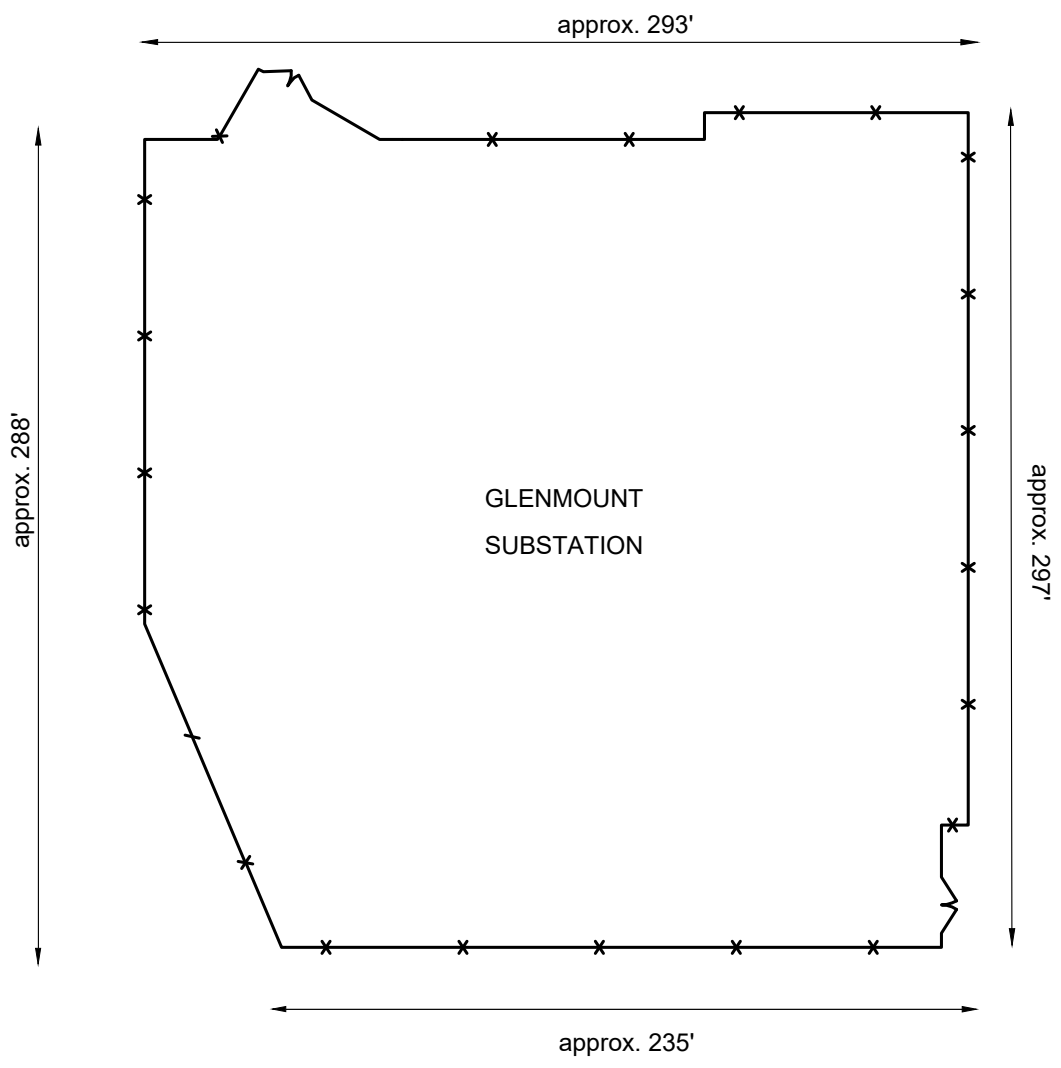
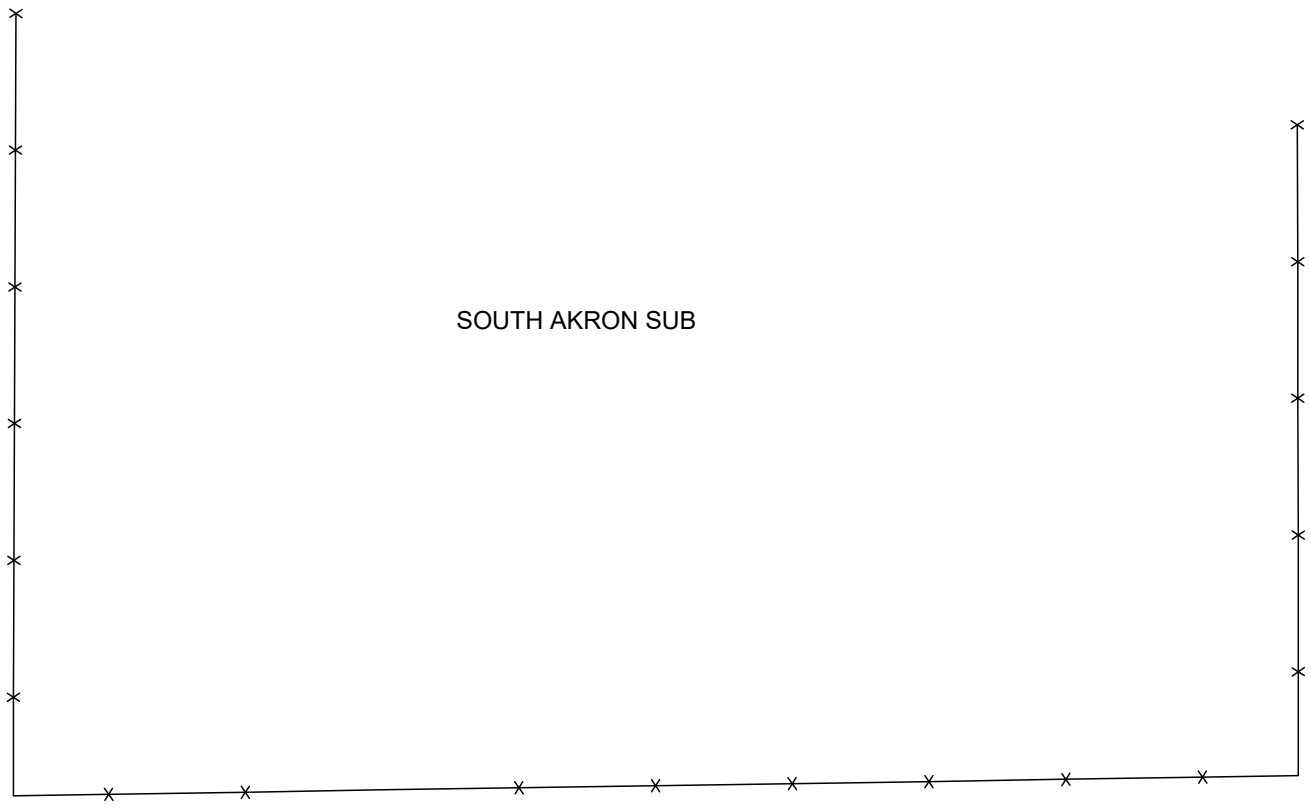
#4

#5

**LEGEND**

-  - OTHER UTILITY POLE
-  - NEW OR REPLACED STRUCTURE
-  - EXISTING STRUCTURE
-  - STRUCTURE TO BE REMOVED
-  - TOWER TO BE REMOVED
-  - EXISTING TOWER
-  - SUBSTATION
-  - NEW TRANSMISSION CENTERLINE
-  - TRANSMISSION LINE TBR
-  - EXISTING CENTERLINE

 <small>American Transmission Systems, Inc. a subsidiary of FirstEnergy Corp.</small>	<p>GLENMOUNT SUBSTATION AND 138 KV TRANSMISSION LINES PROJECT</p>
	<p>GENERAL LAYOUT</p>
	<p>EXHIBIT 3</p>



**LEGEND**

x — x — x - SUBSTATION FENCE

**ATSI**  
American Transmission Systems, Inc.  
A Subsidiary of FirstEnergy Corp.

**GLENMOUNT SUBSTATION AND 138 KV  
TRANSMISSION LINES PROJECT**

**GENERAL LAYOUT**

**EXHIBIT 3A**



**Need Number:** ATSI-2023-009  
**Process Stage:** Submission of Supplemental Projects for Inclusion in the Local Plan - 3/7/2025  
**Previously Presented:** Need Meeting – 04/21/2023  
Solution Meeting – 09/20/2024

**Supplemental Project Driver(s):**  
*Operational Flexibility and Efficiency*  
*Equipment Material Condition, Performance and Risk*  
*Infrastructure Resilience*

**Specific Assumption Reference(s):**

**Global Considerations**

- System reliability and performance
- Load at risk in planning and operational scenarios

**Substation Condition Rebuild/Replacement**

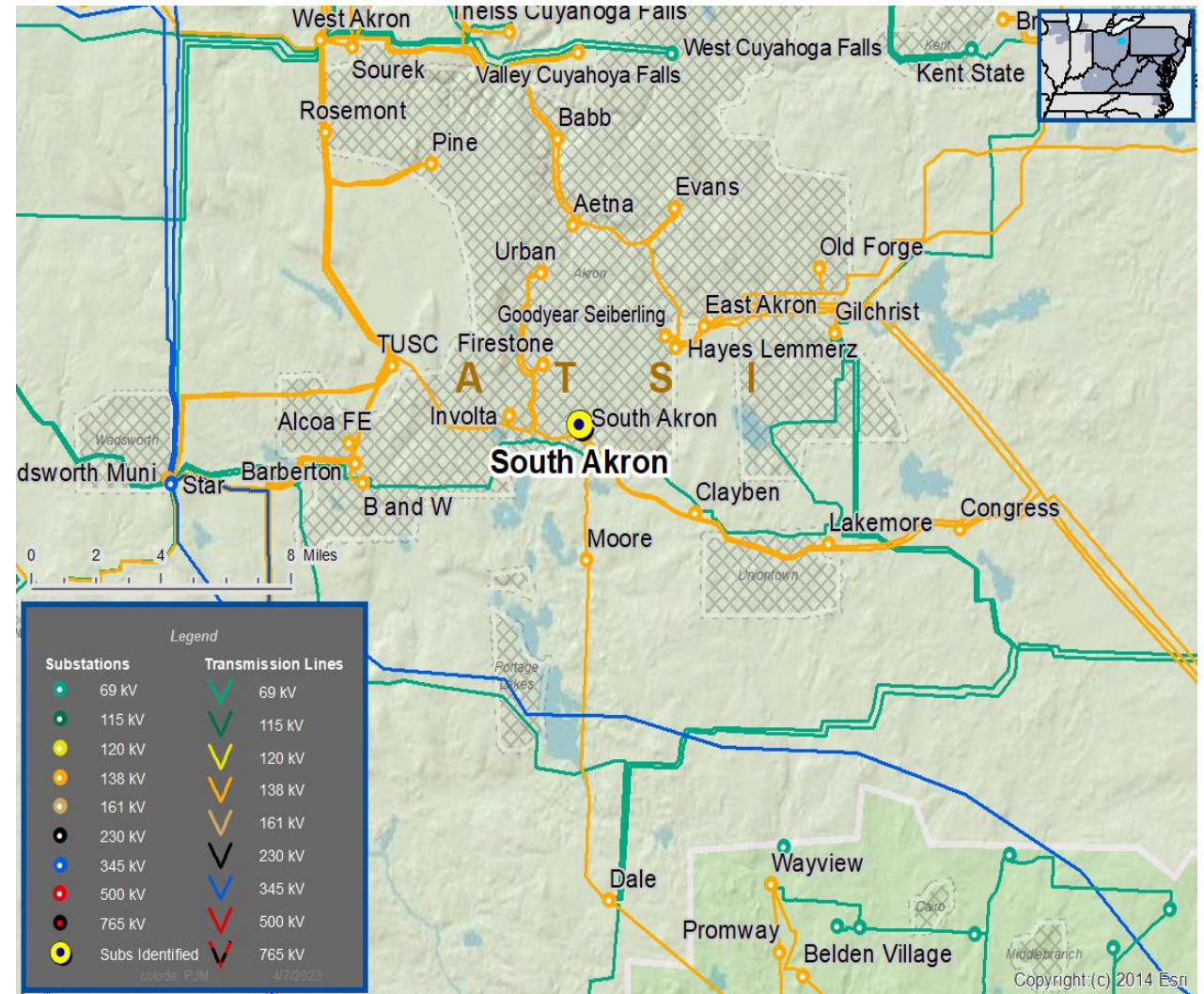
- Increasing negative trend in maintenance findings and/or costs.
- Expected service life (at or beyond) or obsolescence

**Add/Expand Bus Configuration**

- Loss of substation bus adversely impacts transmission system performance
- Eliminate simultaneous outages to multiple networked elements under N-1 analysis
- Capability to perform system maintenance

EXHIBIT 4

# ATSI Transmission Zone M-3 Process Glenmount 138 kV Substation



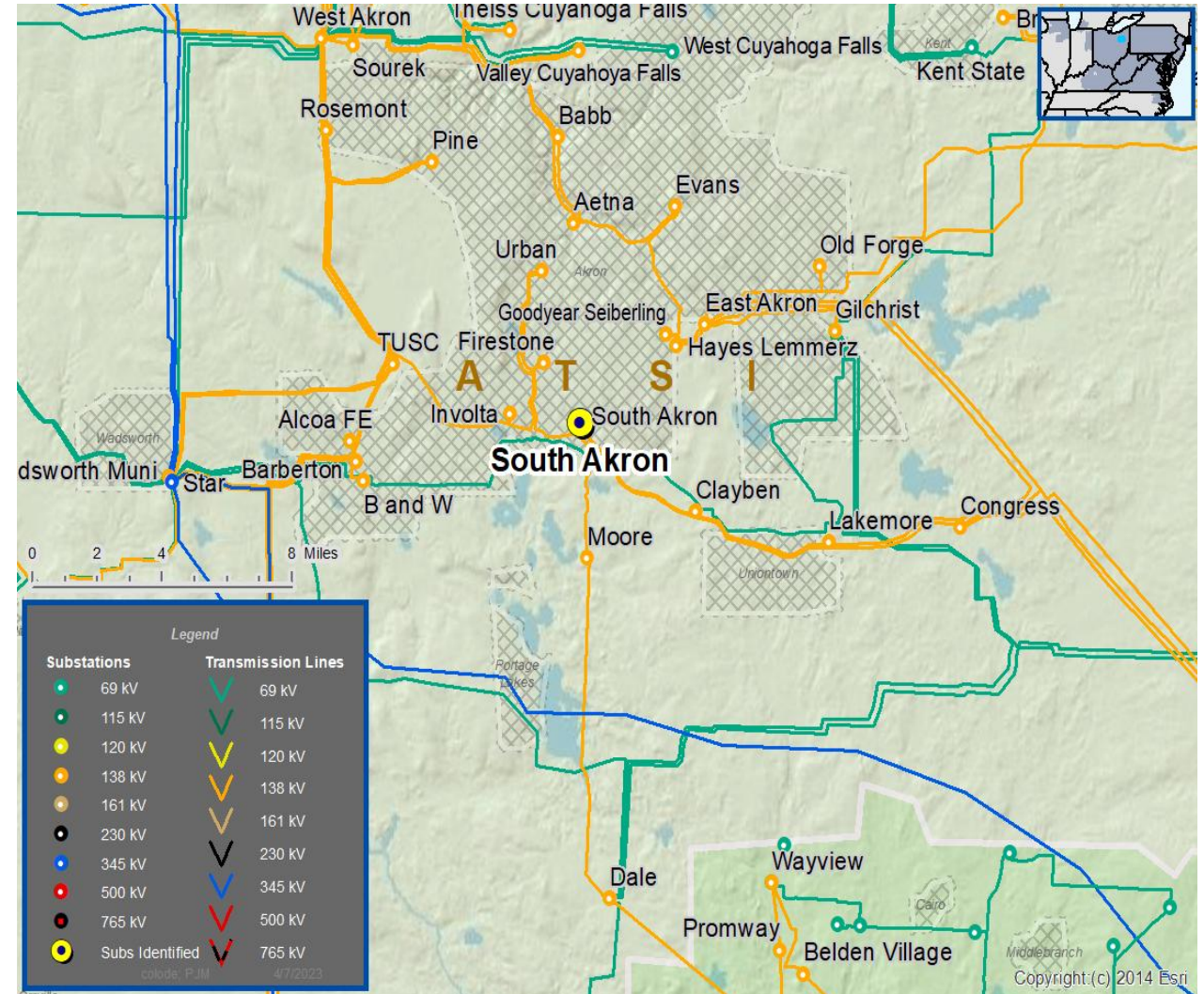
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# ATSI Transmission Zone M-3 Process Glenmount 138 kV Substation

**Need Number:** ATSI-2023-009  
**Process Stage:** Submission of Supplemental Projects for Inclusion in the Local Plan - 3/7/2025  
**Previously Presented:** Need Meeting – 04/21/2023  
 Solution Meeting – 09/20/2024

**Problem Statement**

- An N-1 bus outage at South Akron Substation results in the loss of approximately 55 MW and 17,000 customers.
- An N-1 bus outage at South Akron Substation results in several sub-transmission 23 kV lines overloaded beyond the summer emergency rating.
- The South Akron 138 kV bus protection consists of a non-redundant electromechanical (PVD) scheme
- 138 kV Breaker B-30 is 66 years old with increasing maintenance concerns; compressor issues, deteriorated operating mechanisms and increasing maintenance trends.
- 138 kV Breaker B-1 has a pneumatic mechanism
  - Manufacture date is 1952
  - Several corrective maintenance and preventive issues (magnetic loader failed, valve for pneumatic mechanism failed, replaced 52Y relay) and expected reoccurring failure
- 138 kV breaker B-10 has a pneumatic mechanism
  - Manufacture date is 1951
  - Several corrective maintenance and preventive issues (high ductor reading (high resistance on contact, air compressor for pneumatic mechanism failed, lower control valve failed for air charged to trip breaker) and anticipated reoccurring failures



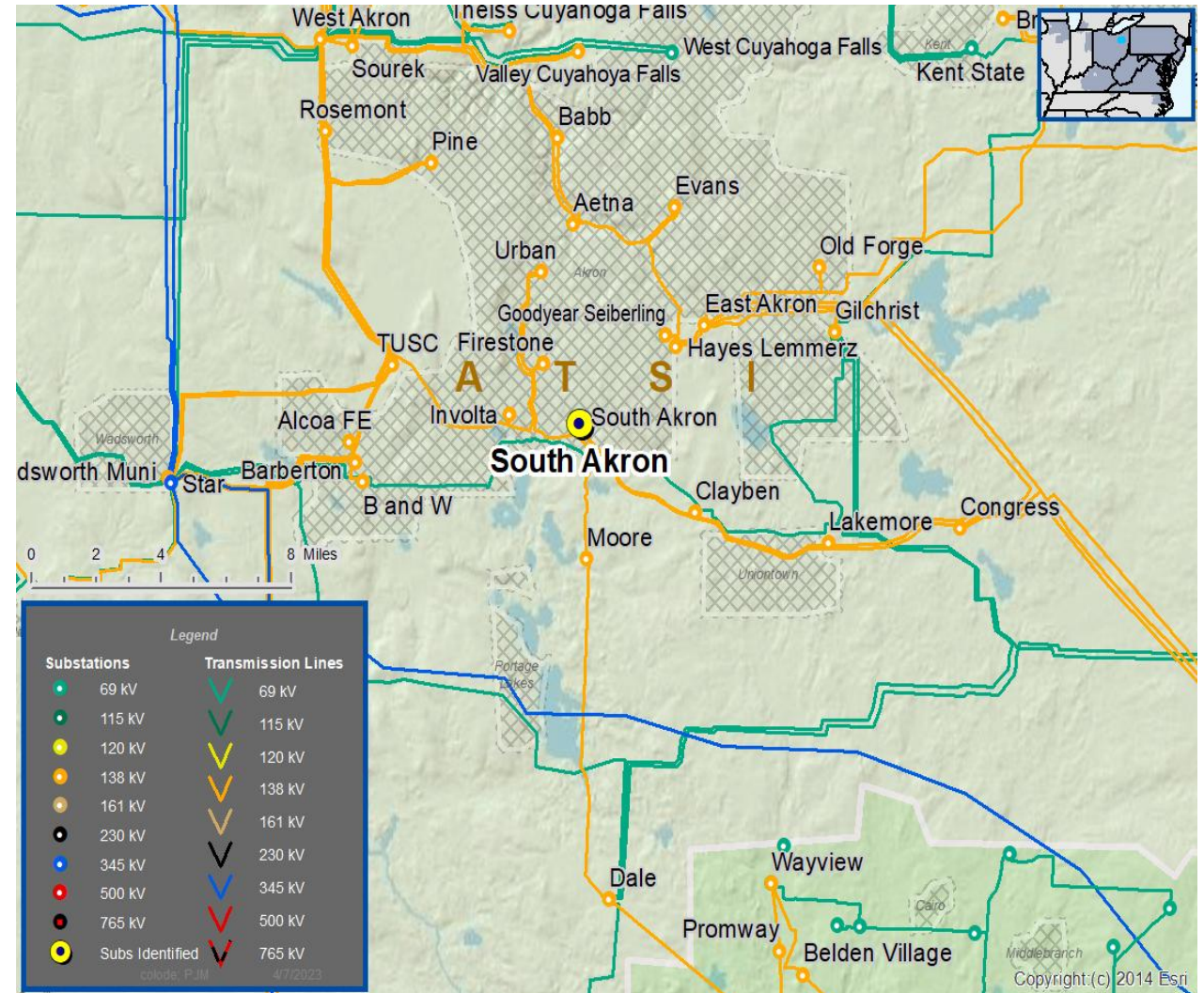
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# ATSI Transmission Zone M-3 Process Glenmount 138 kV Substation

**Need Number:** ATSI-2023-009  
**Process Stage:** Submission of Supplemental Projects for Inclusion in the Local Plan - 3/7/2025  
**Previously Presented:** Need Meeting – 04/21/2023  
 Solution Meeting – 09/20/2024

**Problem Statement**

- Since 2017, the South Akron 138 kV lines have experienced the following unscheduled outages:
  - The Dale-South Akron 138 kV line has one momentary and one sustained outage.
  - The Firestone-South Akron 138 kV line has one sustained outage.
  - The Lakemore-South Akron 138 kV line has one sustained outage.
  - The South Akron-Toronto 138 kV has five momentary and two sustained outages.

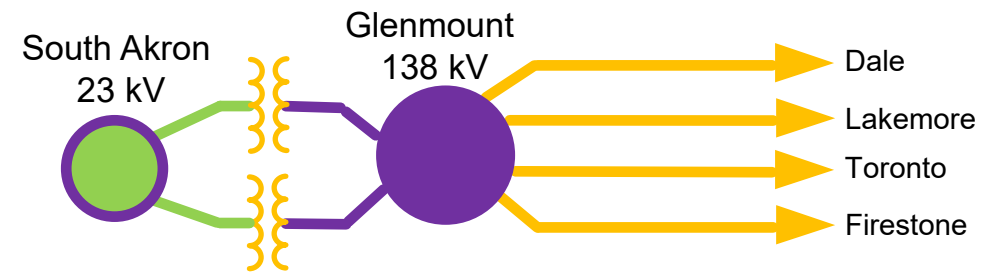


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**Need Number:** ATSI-2023-009  
**Process Stage:** Submission of Supplemental Projects for  
 Inclusion in the Local Plan - 3/7/2025

**Selected Solution:**

- Install new 138 kV BAAH substation (Glenmount) adjacent to South Akron substation on existing FE property
  - Install (11) new 138 kV breakers, (23) GOAB switches, (4) Motor Operated Line Switches, (6) Sets of CCVTs (4) A frames, (2) SSVTs, (1) control house w/ (21) relay panels, (1) 138kV Cap Switcher & Cap Bank, (3) 138kV free standing CTs
  - Re-terminate the Glenmount-Firestone 138 kV Line, Glenmount-Toronto 138 kV Line, Glenmount-Lakemore 138 kV Line, and the Glenmount-Dale 138 kV Line (previously connected to South Akron).
  - Install (2) new 138kV T Lines from Glenmount to South Akron using 795 kcmil ACSR conductor (0.2 miles each)
  - Add fencing, ground grid, stormwater detention pond ( ~ 143,000 ft2)
- Modify South Akron substation
  - Replace (2) Breakers
  - Remove (4) 138kV breakers & associated equipment
  - Demo (1) 138kV Cap Bank
- Replace previous equipment noted to be “relocated” from South Akron (breakers, cap switcher & bank, auxiliary equipment) to reduce construction constraints within outages
- Modify (4) incoming 138kV T Lines to South Akron, temporarily, to open space for construction of new substation
- Update relay settings at (4) Remote Ends
- Install new MPLS Equipment for SCADA Transport at Glenmount
- Run ADSS from Existing South Akron to Glenmount



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

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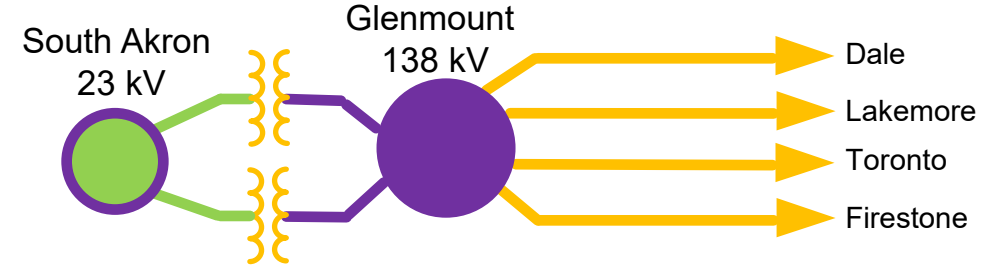
**Need Number:** ATSI-2023-009  
**Process Stage:** Submission of Supplemental Projects for  
 Inclusion in the Local Plan - 3/7/2025

**Selected Solution (continued)...**

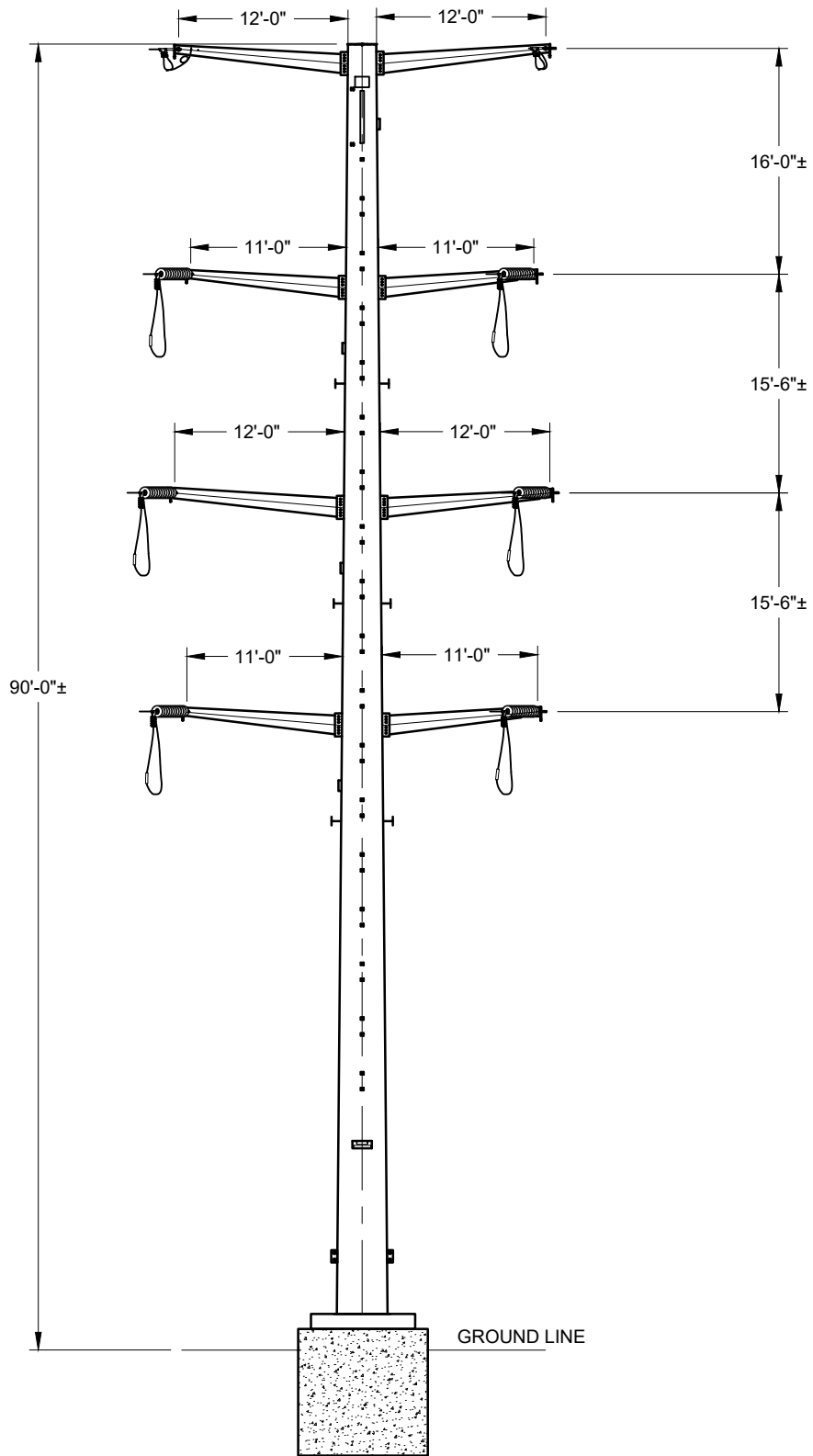
**Transmission Line Ratings:**

- Glenmount (previously South Akron) 138 kV-South Akron 23 kV TR1:
  - Before Proposed Solution: 55/69/72/83 MVA (SN/SE/WN/WE)
  - After Proposed Solution: 74/80/93/98 MVA (SN/SE/WN/WE)
- Glenmount (previously South Akron) 138 kV-South Akron 23 kV TR3:
  - Before Proposed Solution: 79/85/96/96 MVA (SN/SE/WN/WE)
  - After Proposed Solution: 79/85/99/105 MVA (SN/SE/WN/WE)
- Glenmount (previously South Akron)-Dale 138 kV Line (Glenmount-Moore 138 kV Branch):
  - Before Proposed Solution: 225/282/263/333 MVA (SN/SE/WN/WE)
  - After Proposed Solution: 233/282/263/333 MVA (SN/SE/WN/WE)
- Glenmount (previously South Akron)-Firestone 138 kV Line:
  - Before Proposed Solution: 225/282/263/333 MVA (SN/SE/WN/WE)
  - After Proposed Solution: 233/282/263/333 MVA (SN/SE/WN/WE)

**Estimated Project Cost:** \$23.54 M  
**Projected In-Service:** 12/31/2027  
**Supplemental Project ID:** s3546.1



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



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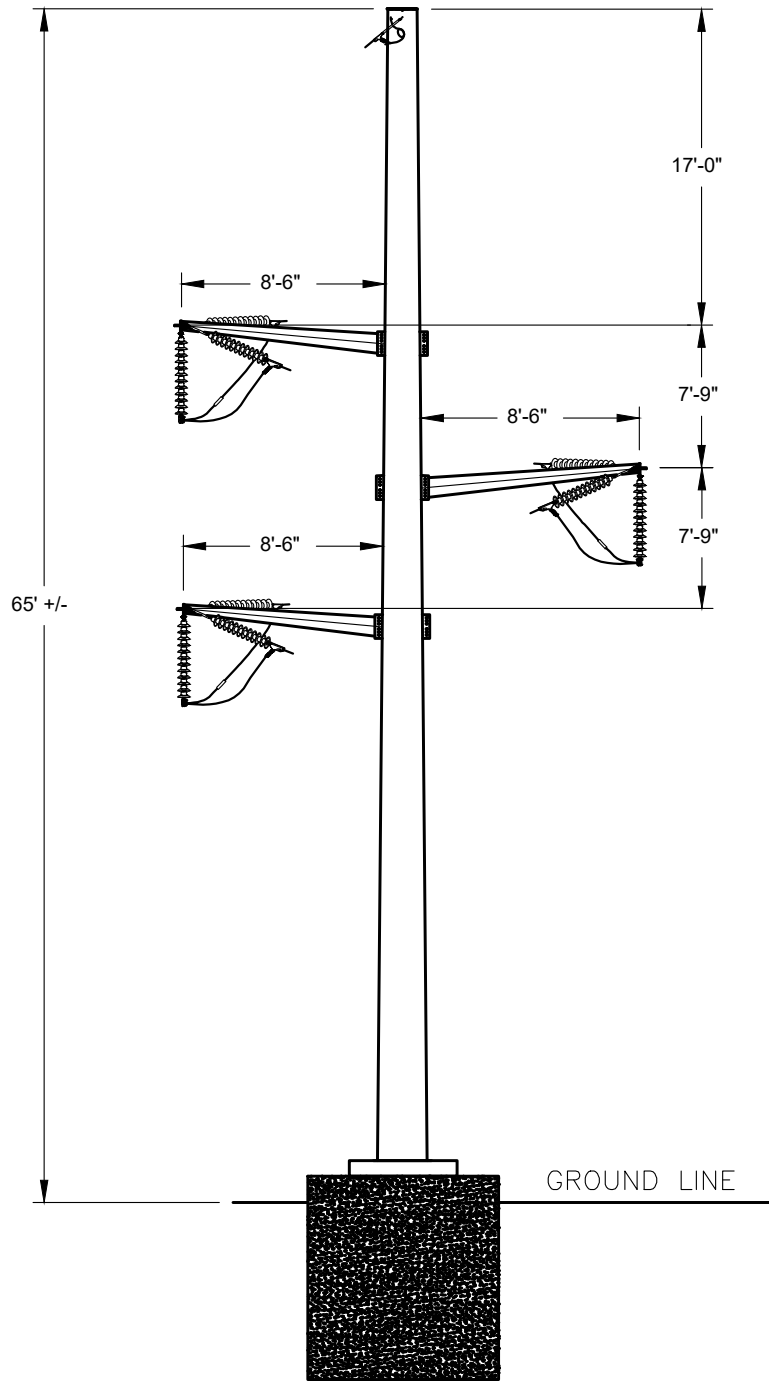
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**ATSI**  
American Transmission Systems, Inc.  
 a subsidiary of FirstEnergy Corp.

GLENMOUNT SUBSTATION AND 138 KV  
 TRANSMISSION LINES PROJECT

138kV DOUBLE CIRCUIT TUBULAR STEEL STRUCTURE  
 DEAD-END SINGLE STEEL POLE ANGLES 0° TO 50°

EXHIBIT 5



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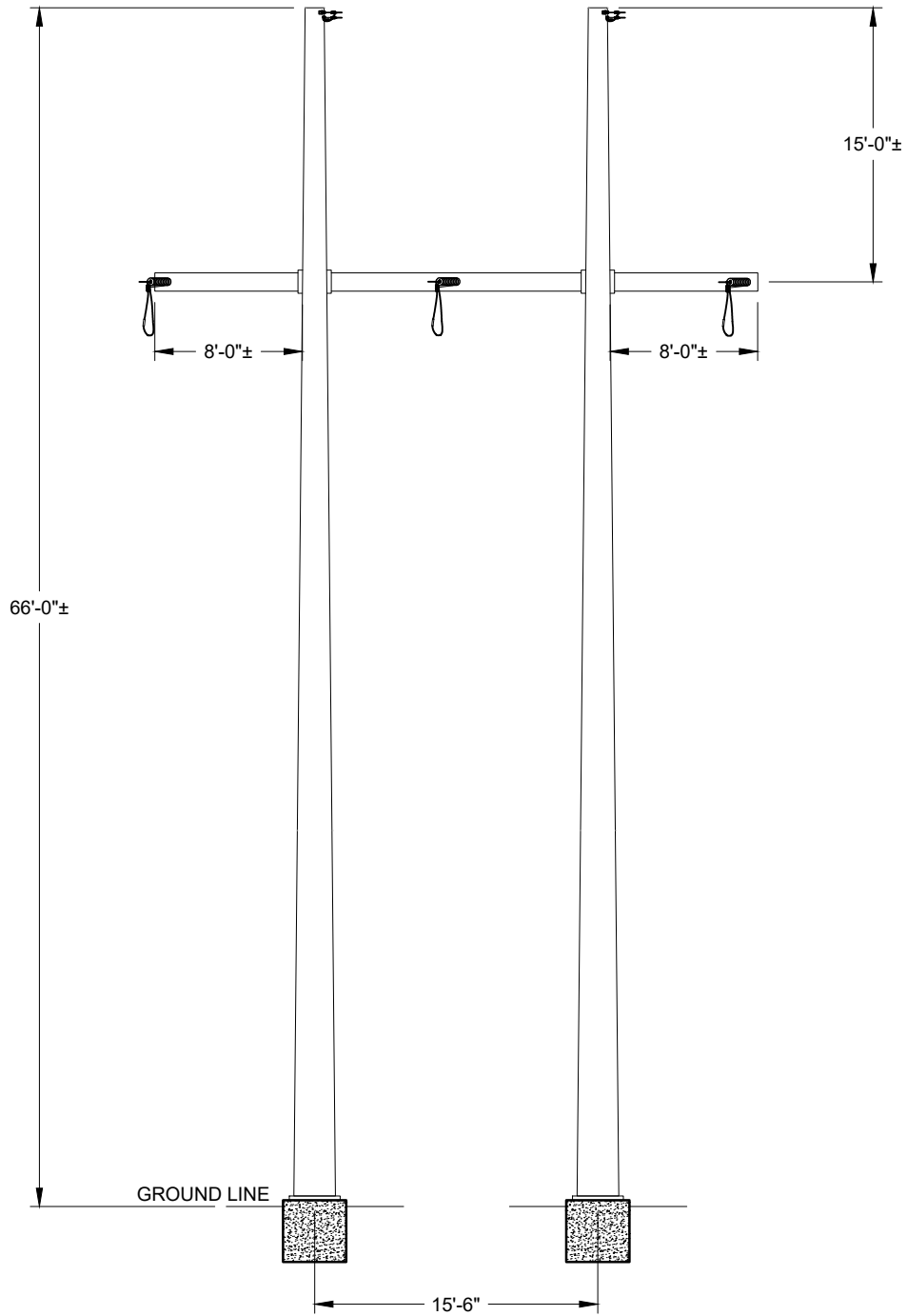
**ATSI**

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

GLENMOUNT SUBSTATION AND 138 KV  
TRANSMISSION LINES PROJECT

138KV SINGLE CIRCUIT TUBULAR STEEL STRUCTURE  
DELTA DEAD-END SINGLE STEEL POLE ANGLE 0° TO 50°

EXHIBIT 6



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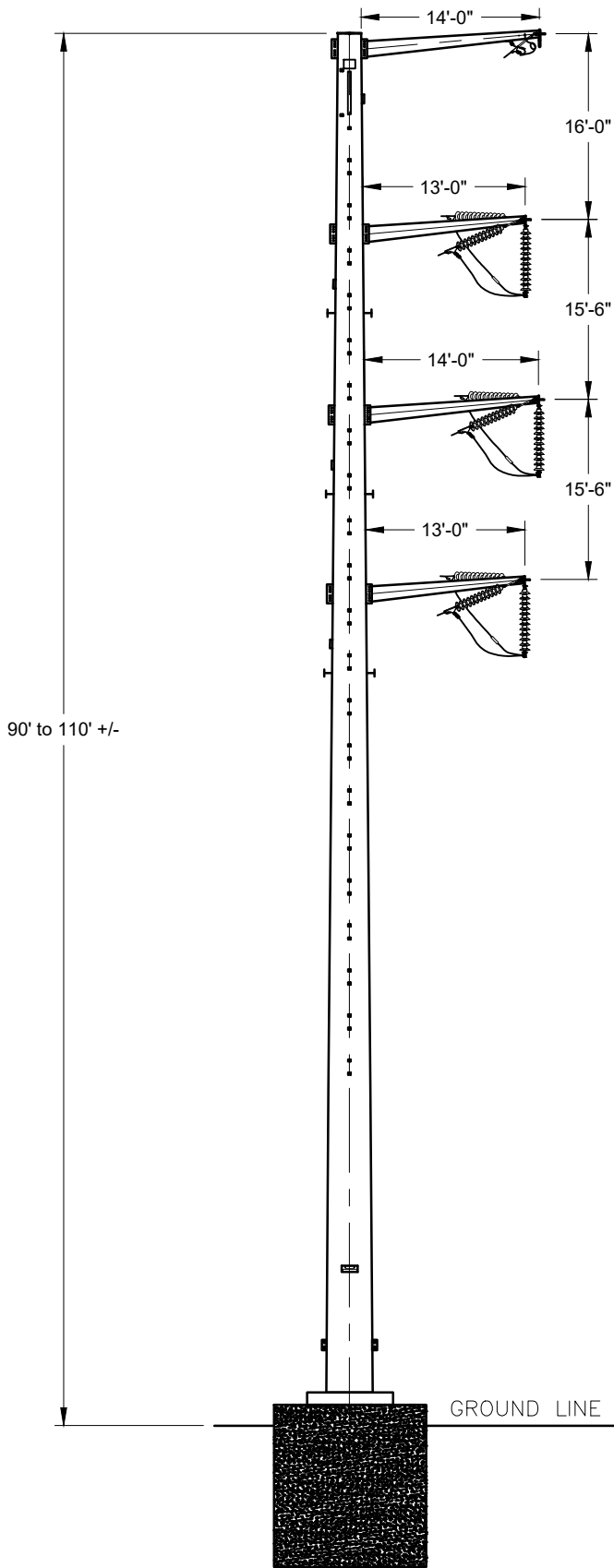
**ATSI**

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

GLENMOUNT SUBSTATION AND 138 KV  
TRANSMISSION LINES PROJECT

138kV DOUBLE CIRCUIT TUBULAR STEEL STRUCTURE  
DEAD-END DOUBLE STEEL POLE ANGLES 0° TO 50°

EXHIBIT 7



PAPER SIZE: 8.5X11

SCALE: NTS

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

GLENMOUNT SUBSTATION AND 138 KV  
 TRANSMSSION LINES PROJECT

138KV SINGLE CIRCUIT TUBULAR STEEL STRUCTURE  
 DEAD-END SINGLE STEEL POLE ANGLE 0° TO 50°

EXHIBIT 8



In reply refer to:  
2025-SUM-65558

July 24, 2025

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

RE: Section 106 Review: Glenmount Substation Project, Akron, Summit County, Ohio

Dear Mr. McKissick:

This letter is in response to the correspondence received on June 26, 2025, regarding the above-referenced project in Summit 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 require a Nationwide Permit 57 which is issued by the U.S. Army Corps of Engineers, Huntington District (Corps). The Corps is the lead federal agency for the undertaking.

The proposed project will involve the construction of a new substation within an 8.46-acre parcel. This parcel is adjacent to an existing substation and contains three separate powerline corridors traversing through it. According to the information submitted by you, which included a Project Summary Form, no historic properties, districts, or archaeological sites are located within the direct Area of Potential Effect (APE), as defined by you. Based on this information, it is the SHPO's opinion that no cultural resource studies are warranted for the project. Therefore, 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 as required by 36 CFR § 800.13. 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. 1109679

*"Please be advised that this is a Section 106 decision. This review decision may not extend to other SHPO programs."*



**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 7, 2025

Jenna Slabe  
TRC Companies, Inc.  
1382 West 9th Street, Suite 400  
Cleveland, Ohio 44113

**Re:** 25-1511\_Glenmount Substation

**Project:** The proposed project involves the expansion of the existing South Akron substation.

**Location:** The proposed project is located in Coventry Township, Summit County, Ohio.

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

**Natural Heritage Database:** The Natural Heritage Database has the following data within one mile of the project area:

Bebb's Sedge (*Carex bebbii*), P  
Leather-leaf (*Chamaedaphne calyculata*), T  
Canada Frostweed (*Crocianthemum canadense*), T  
American Reed Grass (*Phragmites americanus*), P  
Blue-leaved Willow (*Salix myricoides*), P  
Autumn Willow (*Salix serissima*), P  
Carolina Catchfly (*Silene caroliniana* ssp. *pensylvanica*), T  
Sedge Wren (*Cistothorus platensis*), SC  
Star-nosed Mole (*Condylura cristata*), SC  
Smooth Greensnake (*Opheodrys vernalis*), E  
Woodland Box Turtle (*Terrapene carolina carolina*), SC

Conservation status abbreviations are as follows: E = state endangered; T = state threatened; P = state potentially threatened; SC = state species of concern; SI = state special interest; U = state status under review; X = presumed extirpated in Ohio; FE = federally endangered, and FT = federally threatened. The review was performed on the specified project area as well as an additional one-mile radius. Records

searched date from 1980. Features searched include locations of rare and endangered plants and animals determined to be of value to the conservation of their species, high quality plant communities, animal breeding assemblages, and outstanding geological features.

The species listed above are not recorded within the boundaries of the specified project area. However, please note that Ohio has not been completely surveyed and we rely on receiving information from many sources. Therefore, a lack of records for an 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 Iowa darter (*Etheostoma exile*), a state endangered fish, the pugnose minnow (*Opsopoeodus emiliae*), a state endangered fish, the western banded killifish (*Fundulus diaphanus menona*), a state endangered fish, the lake chubsucker (*Erimyzon sucetta*), a state threatened fish, and the paddlefish (*Polyodon spathula*) a state threatened fish. The DOW recommends no in-water work in perennial streams from March 15 to 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.

The project is within the range of the smooth greensnake (*Opheodrys vernalis*), a state endangered species. This species is primarily a prairie inhabitant but can also be found in marshy meadows and roadside ditches. Due to the location, the type of habitat within the project area, and the type of work proposed, this project is not likely to impact this species.

The project is within the range of the spotted turtle (*Clemmys guttata*), a state threatened species. This species prefers fens, bogs and marshes, but also is known to inhabit wet prairies, meadows, pond edges, wet woods, and the shallow sluggish waters of small streams and ditches. Due to the location, the type of habitat within the project area, and the type of work proposed, this project is not likely to impact this species.

The project is within the range of the sandhill crane (*Antigone canadensis*), a state threatened species. Sandhill cranes are primarily a wetland-dependent species. On their wintering grounds, they will utilize agricultural fields; however, they roost in shallow, standing water or moist bottomlands. On breeding grounds, they require a rather large tract of wet meadow, shallow marsh, or bog for nesting. If grassland, prairie, or wetland habitat will be impacted, construction should be avoided in this habitat during the species' nesting period of April 1 through August 31. If this habitat will not be impacted, this project is not likely to have an impact on this 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.*



November 20, 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 for the Glenmount Substation Project located in Coventry Township and the city of Akron, Summit County, Ohio. (TRC Project No. 664674 Phase 2)**

To Whom It May Concern,

In response to Ohio Department of Natural Resources (ODNR), Division of Wildlife's (DOW) recommendations received on November 7, 2025 (25-1511\_Glenmount Substation), TRC Environmental Corporation (TRC) on behalf of FirstEnergy Corporation (FirstEnergy), completed an updated desktop habitat assessment to determine if potential hibernaculum is present within the updated Glenmount Substation Project (Project) Study Area. The Glenmount Substation Project Study Area has been expanded from 6.52 acres to approximately 12.76 acres in size. Previous coordination with ODNR DOW was submitted on September 8, 2023, and desktop hibernacula assessment concurrence was received on September 18, 2023. Due to the expanded Project Study Area, updated coordination with ODNR DOW was submitted on October 7, 2025, via an Environmental Review Request. The updated Project Study Area consists of an existing, maintained utility right-of-way (ROW) within developed open space (mowed), surrounded by commercial, residential, and semi-public land use (**Appendix A, Figure 3**). The proposed Project is located in Coventry Township and the city of Akron, Summit County, Ohio (**Appendix A, Figure 1 and Figure 2**). The Project involves work and expansion activities related to the existing South Akron Substation.

During the recommended desktop habitat assessment, secondary source information was utilized 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 land cover dataset mapping (USGS, 2023).

No historic surface mine, surface industrial 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 approximately 22 miles east of the Project Study Area; the nearest surface industrial mine is located 0.5-mile southwest of the Project Study Area; the nearest underground industrial mine is located 6 miles west of the Project Study Area; the nearest surface coal mine is located 8 miles southeast of the Project Study Area; and the nearest abandoned underground coal mine is located 1 mile east of the Project Study Area. The Project Study Area is not located within a karst region; the nearest karst topographic region is 63 miles west (**Appendix A, Figure 4A**).

In addition, a surface water delineation was conducted by TRC on July 13, 2023, and June 5, 2025, at which time winter bat habitat was concurrently assessed. During the field investigations,



no winter bat habitat or caves were identified within the Project Study Area and photographs were taken depicting site conditions within the Project Study Area (**Appendix B**).

Subsurface disturbance up to 20 feet deep for the substation foundation 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. In addition, blasting is not proposed for the construction of this proposed Project. If tree clearing is needed as a result of this Project, it will take place within the USFWS recommended tree clearing dates (October 1-March 31).

Due to the surrounding developed land use, that no winter bat habitat, caves, or caverns were observed within the Project Study Area during field surveys, and that the Project involves no bedrock disturbance, it is TRC's opinion that federally- or state- listed hibernating bat species are not likely to be impacted by the proposed Project. We kindly request your concurrence that potential bat hibernaculum is not likely to be present within 0.25-mile of the Project Study Area.

Please do not hesitate to contact me at (330) 998-0481 or via email at [JSlabe@trccompanies.com](mailto:JSlabe@trccompanies.com) if you have any questions or require additional information.

Regards,

A handwritten signature in black ink, appearing to read "JSlabe", is positioned above the typed name.

Jenna Slabe  
Ecologist

**Appendices:**

Appendix A: Figures

Figure 1: Site Location Map

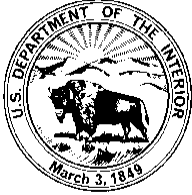
Figure 2: Aerial Map

Figure 3: National Land Cover Database Map

Figure 4: Mine/Karst Map

Appendix B: Photographic Record

# 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: 2023-0106416

Re: Glenmount Substation Project

Dear Ms. Slabe:

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: The endangered Indiana bat (*Myotis sodalis*) and northern long-eared bat (*Myotis septentrionalis*) occur throughout the State of Ohio. The Indiana bat and northern long-eared bat may be found wherever suitable habitat occurs unless a presence/absence survey has been performed to document absence. Suitable summer habitat for Indiana bats and northern long-eared bats consists of a wide variety of forested/wooded habitats where they roost, forage, and breed that may also include adjacent and interspersed non-forested habitats such as emergent wetlands and adjacent edges of agricultural fields, woodlots, fallow fields, and pastures. Roost trees for both species include live and standing dead trees  $\geq 3$  inches diameter at breast height (dbh) that have any exfoliating bark, cracks, crevices, hollows and/or cavities. These roost trees may be located in forested habitats as well as linear features such as fencerows, riparian forests, and other wooded corridors. Individual trees may be considered suitable habitat when they exhibit the characteristics of a potential roost tree and are located within 1,000 feet of other forested/wooded habitat. Bridges and culverts have also been used as roosts. Additionally, northern long-eared bats have been observed roosting in other human-made structures, such as buildings, barns, and bat houses; therefore, these structures should also be considered potential summer habitat. In the winter, Indiana bats and northern long-eared bats hibernate in caves, rock crevices and abandoned mines.

*Seasonal Restrictions for Federally Listed Bat Species:* Should the proposed project site contain trees  $\geq 3$  inches dbh, we recommend avoiding tree removal wherever possible. If any caves or abandoned mines may be disturbed, further coordination with this office is requested to determine if fall or spring portal surveys are warranted. If no caves or abandoned mines are present and trees  $\geq 3$  inches dbh cannot be avoided, we recommend removal of any trees  $\geq 3$  inches dbh only occur between October 1 and March 31. If bridges or culverts will be impacted, we recommend reviewing Appendix K in the most recent "Range-Wide Indiana Bat & Northern Long-Eared Bat Survey Guidelines" to determine if the bridge/culvert may be suitable roost habitat. We recommend impacts to suitable bridges and culverts only occur from October 1 and

March 31. These seasonal restrictions are recommended to avoid adverse effects to Indiana bats and northern long-eared bats.

If implementation of this seasonal restriction on tree cutting and impacting suitable bridge/culvert roosts is not possible, because the proposed project is  $\geq 2.5$  miles from the Indiana capture/detection location(s), a summer survey may be conducted to document the presence or absence of Indiana bats and northern long-eared bats at the project site. The summer survey must be conducted by an approved surveyor (list attached) and be designed and conducted in coordination with the Ohio Field Office. In Ohio, summer mist net surveys may only be conducted between June 1 and August 15. We recommend that any Indiana bats and northern long-eared bats captured during the survey, especially reproductively active females and juveniles, be monitored through radio-tracking to determine roost locations.

If any caves or abandoned mines may be disturbed, further coordination with this office is requested to determine if fall or spring portal surveys are also warranted. Portal surveys must be conducted by an approved surveyor and be designed and conducted in coordination with the Ohio Field Office.

Survey results should be coordinated with this office prior to initiation of any work at the project area. Based on the results of the survey(s), we will evaluate potential impacts to the Indiana bat from the proposed project. If Indiana bats are not detected during the survey, then tree clearing and impacts to bridge/culvert roosts may occur at any time of the year.

Federally Proposed Species: On September 14, 2022, the Service proposed to list the tricolored bat (*Perimyotis subflavus*) as endangered under the ESA. The proposed project is in the vicinity of one or more recent confirmed records of tricolored bats. The bat faces extinction due to the impacts of white-nose syndrome, a deadly disease affecting cave-dwelling bats across the continent. During spring, summer, and fall, this species roosts primarily among leaf clusters of live or recently dead trees, emerging at dusk to hunt for insects over waterways and forest edges. While white-nose syndrome is by far the most serious threat to the tricolored bat, other threats now have an increased significance due to the dramatic decline in the species' population. These threats include disturbance to bats in roosting, foraging, commuting, and over-wintering habitats. Mortality due to collision with wind turbines, especially during migration, has also been documented across their range. Conservation measures for the Indiana bat and northern long-eared bat will also help to conserve the tricolored bat.

On December 12, 2024 the Service proposed to list the monarch butterfly (*Danaus plexippus plexippus*) as threatened under the ESA. Monarch butterflies are found throughout Ohio and some populations migrate vast distances across multiple generations each year. Many monarchs fly between the U.S., Mexico and Canada – a journey of over 3,000 miles. Monarch populations have declined significantly in recent years. Threats include habitat loss – particularly the loss of milkweed, the monarch caterpillar's sole food source – and mortality resulting from pesticide use. The Service recommends the following actions to maintain habitat and avoid impacts to monarchs in Ohio: revegetate disturbed areas with native plant species including nectar-producing plants and milkweed endemic to the area; limit mowing monarch habitat from March 15 to August 31 when monarchs are breeding and from September 1 to October 31 when large numbers of monarchs are migrating; and avoid the use of pesticides and herbicides in and near monarch habitat.

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 it is important to conserve the functions and values of the remaining wetlands in Ohio ([https://epa.ohio.gov/portals/47/facts/ohio\\_wetlands.pdf](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.

Due to the project type, size, and location, 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.

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, Environmental Services Administrator, at (614) 265-6387 or at [mike.pettegrew@dnr.ohio.gov](mailto:mike.pettegrew@dnr.ohio.gov).

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

cc: Matthew.Stooksbury@dnr.ohio.gov  
Eileen.Wyza@dnr.ohio.gov

# Surface Water Delineation Report

Glenmount Substation Project

February 2026

City of Akron, Summit County, Ohio

Prepared For:



**FirstEnergy Corporation**  
341 White Pond Drive, Building B3  
Akron, Ohio 44320

Prepared By:  
**TRC Environmental Corporation**  
1382 West Ninth Street, Suite 400  
Cleveland, Ohio 44113

TRC Project Number: 664674 Phase 2



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- Appendix B Antecedent Precipitation Tables
- Appendix C Photographic Record
- Appendix D Data Forms

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## ACRONYMS AND DEFINITIONS

1987 Manual	United States Army Corps of Engineers 1987 Wetland Delineation Manual
APT	Antecedent Precipitation Tool
CFR	Code of Federal Regulations
EPA	Environmental Protection Agency
FAC	Facultative
FACU	Facultative Upland
FACW	Facultative Wetland
FEMA	Federal Emergency Management Agency
FirstEnergy	FirstEnergy Corporation
GPS	Global Positioning System
HHEI	Headwater Habitat Evaluation Index
NHD	National Hydrography Dataset
NWI	National Wetlands Inventory
NWP	Nationwide Permit
OAC	Ohio Administrative Code
OBL	Obligate Wetland
OEPA	Ohio Environmental Protection Agency
OHWM	Ordinary High Water Mark
ORAM	Ohio Rapid Assessment Method
PCN	Preconstruction Notification
Project	Glenmount Substation Project
PEM	Palustrine Emergent
Project Study Area	6.69-acres, located in the City of Akron, Summit County, Ohio
QHEI	Qualitative Habitat Evaluation Index
Redox	Redoximorphic
Regional Supplement	Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Northcentral and Northeast Region (Version 2.0)
Report	Surface Water Delineation Report
TNM	The National Map
TNW	Traditional Navigable Waterway
TRC	TRC Environmental Corporation
UNT	Unnamed Tributary
UPL	Obligate Upland
USACE	United States Army Corps of Engineers
USDA-NRCS	United States Department of Agriculture – Natural Resources Conservation Service
USFWS	United States Fish and Wildlife Service
USGS	United States Geological Survey

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## 1.0 Introduction

On behalf of FirstEnergy Corporation (FirstEnergy), TRC Environmental Corporation (TRC) performed a surface water delineation for the Glenmount Substation Project (Project). The proposed Project Study Area is 6.69 acres, located in the City of Akron, Summit County, Ohio. This Project involves the work and expansion activities for the existing South Akron substation. On behalf of FirstEnergy, TRC has prepared this Surface Water Delineation Report (Report) for the Project. A Site Location Map of the Project Study Area can be found in **Appendix A, Figure 1**.

On July 13, 2023, June 5, 2025, and February 18, 2026, TRC personnel performed field investigations to evaluate and delineate surface water resources (i.e., wetlands and streams) located within the Project Study Area. The delineations were conducted by qualified wetland scientists 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. This Report describes the surface water delineation methodology implemented and the existing surface water resources identified within the Project Study Area during field investigations.

The Project Study Area is located at the following approximate centroid coordinates: 41.026830, -81.515912; located in the City of Akron, Summit County, Ohio. The Project Study Area occurs in a maintained utility right-of-way within developed open space (mowed), surrounded by commercial, residential, and semi-public land use. **Appendix A, Figure 1** and **Figure 2**, provides further information on the location of the proposed Project Study Area.

## 2.0 Methodology

To complete the surface water delineation and evaluation of the Project Study Area, TRC followed the guidelines and methods outlined by the USACE and Ohio Environmental Protection Agency (OEPA), as described within this section.

### 2.1 Wetland Parameters

The *USACE 1987 Wetland Delineation Manual (1987 Manual)* (USACE, 1987) and *Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Northcentral and Northeast Region (Version 2.0) (Regional Supplement)* (USACE, 2012), and the March 6, 1992 guidance memorandum (Williams, 1992) emphasize a three parameter approach to wetland boundary determination in the field. This approach involves the following:

- i. Evidence of wetland hydrology;
- ii. Presence of hydric soils; and
- iii. Predominance of hydrophytic vegetation as defined by *The National Wetland Plant List: 2022 Wetland Ratings* (USACE, 2023).

---

Positive indicators of all three parameters are normally present in wetlands and serve to distinguish between both dry land and transitional plant communities.

### **2.1.1 Hydrology**

The *1987 Manual and Regional Supplement* provides guidelines for determining the presence of wetland hydrology. Criteria for wetland hydrology are met if the area is inundated or saturated at the soil surface during the growing season for a time sufficient to develop hydric soils and to support hydrophytic vegetation.

### **2.1.2 Hydric Soils**

Hydric soils are defined as soils “that formed under conditions of saturation, flooding, or ponding long enough during the growing season to develop anaerobic conditions in the upper part of the soil” (Federal Register, 1994). Hydric soil indicators described in the *Field Indicators of Hydric Soils in the United States: A Guide for Identifying and Delineating Hydric Soils Version 9.0* (USDA, NRCS, 2024) were used to identify and document hydric soils as described in the *Regional Supplement*.

### **2.1.3 Hydrophytic Vegetation**

To determine the presence of hydrophytic vegetation, the dominant and non-dominant species in each major vegetative stratum (e.g., tree, shrub/sapling, herbaceous, and woody vine) were identified and recorded.

Plants are placed into indicator status categories depending on their probability of occurring in a wetland in accordance with the USACE’s *The National Wetland Plant List: 2022 wetland ratings* (USACE, 2023). There are five indicator status categories for plants:

1. Obligate wetland plants (OBL): plants that occur almost always (>99%) in wetlands in natural conditions, but which may also occur rarely (<1%) in non-wetlands;
2. Facultative wetland plants (FACW): plants that occur usually (>67-99%) in wetlands but also occur (1-33%) in non-wetlands;
3. Facultative plants (FAC): plants with a similar likelihood (33-67%) of occurring in both wetlands and non-wetlands;
4. Facultative upland plants (FACU): plants that occur sometimes (1-<33%) in wetlands, but occur more often (>67-99%) in non-wetlands; and
5. Obligate upland plants (UPL): plants that occur rarely (<1%) in wetlands but occur almost always (>99%) in non-wetlands under natural conditions.

A prevalence of dominant species that are FAC, FACW, and/or OBL indicates the presence of hydrophytic vegetation.

---

## 2.2 USACE Wetland Delineation

Qualified wetland scientists from TRC conducted surface water field investigations on July 13, 2023, June 5, 2025, and February 18, 2026. The surface water field investigations were conducted within the predetermined Project Study Area (**Appendix A, Figure 1**) that was developed in accordance with the Project location information provided by FirstEnergy. Surface water delineations were conducted using the Federal Routine Determination Method presented in the *1987 Manual and Regional Supplement*, including clarifications and interpretations provided in the March 6, 1992, guidance memorandum, and the USACE and Environmental Protection Agency (EPA) guidance on jurisdictional forms (EPA and USACE, 2007 and USACE, 2008). USACE Wetland Determination Data Forms – Northcentral and Northeast Region are provided within **Appendix D**.

Hydrology was determined based on a number of indicators that are divided into two categories, primary and secondary. The 1987 Manual defines hydrology as present when at least one primary indicator or two secondary indicators are identified. One primary indicator is sufficient to determine if hydrology is present; however, if these are absent then two or more of the secondary indicators are required to determine hydrology. If other probable hydrologic evidence was found, then this was subsequently documented on the data form.

Soils were examined in the field by using a tile spade, generally to a depth of at least 22 inches below the soil surface, until refusal, or positive hydric soil indicators were met below 22 inches, whichever was shallower. Soil coloration was identified using a Munsell Soil Color Chart (Munsell Color Company, 2009). Other characteristics, such as the presence of redoximorphic (Redox) concentrations and depletions and soil texture were also recorded. Redox concentrations and depletions are created when the soil is saturated and has anaerobic conditions (without oxygen gas) which leads to changes in the chemical processes in the soil that produce visible color changes in the soil. Hydric characteristics such as organic soil layers, depleted matrix, gleying, and hydrogen sulfide odor, were noted when observed. Soils at both wetland (if present) and dry land data plot locations were characterized and recorded on the data form.

The presence of hydrophytic vegetation was determined using the procedures described in the *Regional Supplement* and recorded on the data form. Vegetation in both dry land and wetland communities was characterized using a real dominance method, with a radius of 30-feet around the soil sample location for trees and woody vines, 15-foot radius for saplings and shrubs, and a 5-foot radius for herbaceous plants. Plant communities meeting the “50/20” Rule or meeting one of the other indicators set forth in the *1987 Manual, Regional Supplement*, and guidance memorandums are considered hydrophytic for the purposes of the wetland classification criteria. In areas where the vegetation was disturbed or not identifiable due to seasonal conditions, soil and hydrology characteristics, and professional judgment/experience were utilized in assessing the primary determining factors for classification as wetlands.

If the soils, hydrology, and vegetation characteristics at a survey point indicated that it was within a wetland, the boundary of the wetland was determined, and the approximate boundary was flagged using wetland flagging and recorded using a handheld Juniper Systems Geode with sub-

meter accuracy. Areas observed to have problematic or difficult situations were delineated utilizing the procedures identified in the *Regional Supplement*, Section 5 – “Difficult Wetland Situations in the Northcentral and Northeast Region.” Data from the Global Positioning System (GPS) survey was downloaded and integrated into a Geographic Information System database for the proposed work areas and used to make the accompanying figures. Identified wetlands were classified according to Cowardin et al. (Cowardin, Carter, Golet, & LaRoe, 1979). Photographs are included in **Appendix C**.

### **2.3 Ohio Environmental Protection Agency’s Ohio Rapid Assessment Method**

According to the Ohio Wetland Water Quality Standards, a wetland quality category (Category 1, Category 2, or Category 3) must be assigned for each wetland if a project will require discharge of dredged or fill material into jurisdictional wetlands. In general, Category 1 wetlands are considered to be of “low quality”, Category 2 wetlands are considered to be of “moderate quality,” and Category 3 wetlands are considered to be of “high quality.”

The OEPA has developed the Ohio Rapid Assessment Method (ORAM), which can be utilized to evaluate wetland habitat quality based on the apparent functions and values of the wetland resource. The two primary components of the ORAM are the Narrative Rating and the Quantitative Rating. TRC completed ORAM (Version 5.0) Quantitative Rating forms for all the wetland resources identified within the Project Study Area. Each delineated wetland resource received a provisional category designation based on the results of the ORAM Narrative and Quantitative Ratings and review of narrative criteria in the Ohio Administrative Code (OAC) 3745-1-54(C) (Mack, 2000). OEPA ORAM Rating and Categorization Forms are provided within **Appendix D**.

### **2.4 USACE Waterbody Identification**

During field investigations, other waterbody features including streams, ponds, lakes, etc. were investigated. Streams within the Project Study Area were identified by the presence of an ordinary high water mark and scoured channel or defined bed and banks. All streams identified in the Project Study Area that were wider than five feet were demarcated via GPS from bank-to-bank. Streams that were less than five feet wide had the centerline demarcated.

Identified streams were evaluated utilizing OEPA approved methods for stream habitat assessment which include the Qualitative Habitat Evaluation Index (QHEI) (OEPA, 2006) (Rankin, 1989) and/or the Headwater Habitat Evaluation Index (HHEI) (OEPA, 2020) assessment method. These approved assessment methods provide an empirical, quantified evaluation of streams as required by the State of Ohio for permitting and mitigation purposes. These methods assess stream habitat to provide a qualitative index (or score) to determine the level of compensatory mitigation that may be needed for impacts to waters of the United States (i.e., streams).

Use of the QHEI or HHEI assessment method is determined based on the size of the stream’s drainage area and/or the stream’s pool depths. Where coverage was available, the drainage area was calculated using automated basin characteristics from StreamStats v 4.31.0 (USGS, 2026).

Following OEPA guidance, streams with a drainage area of greater than 1.0 square mile (2.6 square kilometers) or which have pools with maximum depths over 15.8 inches (40.0 centimeters), as determined by measuring pool depth within the stream, were evaluated using the QHEI. Data on these streams were collected on the QHEI form provided by the OEPA. The QHEI is composed of six principal metrics: substrate, instream cover, channel morphology, riparian zone and bank erosion, pool/glide and riffle-run quality, and map gradient. Each metric is scored separately and summed to obtain the total QHEI score. Using the scoring methods associated with these forms, the stream is placed into the following general narrative ranges, dependent on-stream size; for smaller streams ( $\leq 20$  sq. mi): Excellent  $>70$ , Good 55-69, Fair 43-54, Poor 30-42, and Very Poor  $<30$ ; for larger streams ( $>20$  sq. mi): Excellent  $>75$ , Good 60-74, Fair 45-59, Poor 30-44, and Very Poor  $<30$ .

The HHEI was utilized to score streams with a drainage area of  $<1.0$  square mile (2.6 square kilometers). Data on these streams was collected on the HHEI forms, provided by the OEPA (OEPA, 2020). Observational data regarding the physical nature of the stream corridor including stream flow, riparian zone land use and buffer width, and channel modification was recorded. Measurements included bankfull width, maximum pool depth and substrate composition.

Streams identified during the course of the investigation were classified as perennial, intermittent, or ephemeral waterways in accordance with the rationale defined by the USACE.

The Project Study Area was also investigated for areas that were considered “open water” by the USACE. According to the USACE an open water is any area that in a year with normal patterns of precipitation has water flowing or standing above ground to the extent that an ordinary high-water mark can be determined. Aquatic vegetation within the area of flowing or standing water is either non-emergent, sparse, or absent. Vegetated shallows are considered to be open waters. Examples of “open waters” may include rivers, lakes, and ponds. Artificial “open water” features may include stormwater retention basins, fish hatchery ponds, drainage tile pump stations, etc.

## 3.0 Results

### 3.1 Site Description

The Project Study Area is 6.69-acres located in the City of Akron, Summit County, Ohio; within the Portage Lakes-Tuscarawas River watershed (12-Digit Hydrologic Unit Code: 050400010105) (USGS, 2022).

The Project Study Area is shown on the Akron West, Ohio United States Geological Survey (USGS) 7.5-minute series topographic quadrangle (**Appendix A, Figure 1**) (USGS, 2023).

The USACE Antecedent Precipitation Tool (APT) Version 3.0 (USACE, 2025) was used to collect 90-day antecedent precipitation data. The following nearby (~8 miles or less) weather stations were used for collecting APT data for the July 13, 2023, June 5, 2025, and February 18, 2026 field investigations: Akron Fulton Intl AP, Akron 3.6 ESE, Akron 2.9 S, Akron 2.6 E, Akron, Akron 7.0 S, Stow 4 SE, and Akron Canton AP. Compared to historical data, antecedent hydrologic conditions were considered to be drier than normal in 2023 and 2026 and wetter than normal

during the 2025 field investigation. Typical conditions for the time of year (dry season in 2023 and 2025; wet season in 2026) were observed, although the drought index data reported incipient wetness in 2023, mild wetness in 2025, and a mild drought in 2026 (USACE, 2025). APT results are provided within **Appendix B**.

The USDA-NRCS Web Soil Survey (USDA-NRCS, 2016) was used to identify the soil types contained within the Project Study Area (**Appendix A, Figure 3**). **Table 1** provides a summary of the soils identified within proposed Project Study Area.

**Table 1. Soils Type Summary**

Map Unit Symbol	Map Unit Name	Hydric Status	Acres Within Project Study Area	Percent Cover Within Project Study Area
CuC	Chili-Urban land complex, rolling	Non-Hydric	2.796	41.80%
CuB	Chili-Urban land complex, undulating	Non-Hydric	3.698	55.27%
OsB	Oshtemo sandy loam, 2 to 6 percent slopes	Non-Hydric	0.196	2.93%
Ur	Urban land	Non-Hydric	< 0.000	< 0.00%
<b>TOTAL</b>			<b>6.690</b>	<b>100.00%</b>
<b>Notes:</b> Accessed online February 2026 at: <a href="http://websoilsurvey.sc.egov.usda.gov">http://websoilsurvey.sc.egov.usda.gov</a> .				

There are no United States Fish and Wildlife Service (USFWS) National Wetlands Inventory (NWI) features mapped within the Project Study Area (**Appendix A, Figure 4**) (USFWS, 2022).

The USGS National Hydrography Dataset (NHD) (USGS, 2018) Downloadable Data Collection from The National Map (TNM) is a comprehensive set of digital spatial data that encodes information about naturally occurring and constructed bodies of surface water (e.g., lakes, ponds, and reservoirs), paths through which water flows (e.g., canals, ditches, streams, and rivers) and related entities such as point features (e.g., springs, wells, stream gages, and dams). There are no NHD streams mapped within the Project Study Area (**Appendix A, Figure 4**).

According to Federal Emergency Management Agency's (FEMA) Flood Insurance Rate Map (Panel No.: 39153C0195F; eff. 4/19/2016), the proposed Project is not located within a regulated 100-year floodplain (**Appendix A, Figure 4**) (FEMA, 2021).

### 3.2 Surface Water Resource Field Delineations

TRC performed the field investigations on July 13, 2023, June 5, 2025, and February 18, 2026. Weather conditions were normal for the seasons. Native and non-native herbaceous vegetation was observed within the Project Study Area. The USACE maintains the final authority that determines jurisdiction; therefore, statements about jurisdiction within this Report are preliminary and subject to final determination by the USACE and OEPA.

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### 3.2.1 Wetlands

During the field investigations, two (2) wetlands were identified and delineated within the Project Study Area. The delineated wetland boundaries and sample points are shown on **Figure 5** in **Appendix A**. Representative photographs of sample points and other areas of interest are provided in **Appendix C**. Data was collected and recorded on the USACE Wetland Determination Data Forms – Northcentral and Northeast Region (**Appendix D**) and wetland functional assessments were completed for each delineated wetland using the ORAM (**Appendix D**). Delineated wetlands within the Project Study Area are summarized in **Table 2**.

**Table 2: Delineated Wetland Features Summary**

Wetland ID <sup>1</sup>	Latitude, Longitude	Delineation Date	Extends Outside Project Study Area (Y/N)?	Cowardin Classification within Study Area <sup>2</sup>	Water Regime Modifier <sup>3</sup>	Connection <sup>4</sup>	Apparent Downstream Connectivity <sup>5</sup>	Provisional Jurisdictional Status <sup>6</sup>	ORAM Score	ORAM Category <sup>7</sup>	Approximate Delineated Area within Project Study Area <sup>8</sup> (acres)
W-TPT-1	41.026206, -81.516347	7/13/2023	Y	PEM	Seasonally Saturated	Abutting/ Adjacent	W-TPT-1→ Cove River 2 →Shore Holy Cross Lake →Cove River 1→Tuscarawas River (TNW)	USACE Jurisdictional Wetland	16	Cat. 1	0.520
W-TPT-2	41.027450, -81.516243	7/13/2023	Y	PEM	Seasonally Saturated	Abutting/ Adjacent	W-TPT-2→ Cove River 2 →Shore Holy Cross Lake →Cove River 1→Tuscarawas River (TNW)	USACE Jurisdictional Wetland	16	Cat. 1	0.520
<b>Total:</b>											0.249
<b>NOTES:</b>											
<sup>1</sup> TRC resource identification. <sup>2</sup> Cowardin Wetland Classification within Project Study Area (approximation based upon field identification and delineation) (Cowardin, Carter, Golet, & LaRoe, 1979): PEM – Palustrine Emergent. <sup>3</sup> National Wetland Inventory Wetlands and Deepwater Map Code Diagram – Modifiers for non-tidal waters (USFWS, 2019) <sup>4</sup> Connection to a jurisdictional waterway: Isolated or Abutting/Adjacent as determined by TRC; subject to USACE verification. Wetland connection is pending a finalized WOTUS definition from EPA and USACE based upon the EPA vs. Sackett case. <sup>5</sup> UNT=Unnamed Tributary; TNW=Traditional Navigable Waterway <sup>6</sup> Jurisdiction status is based upon field observations and mapping review of apparent connectivity or adjacency of the resource to Waters of the United States and the assumption that a preliminary jurisdictional determination process will be utilized for the project. <sup>7</sup> ORAM Category assigned based on scoring breakpoints from Table 2 of the ORAM v. 5.0 Quantitative Score Calibration <sup>8</sup> Area is rounded to nearest 0.001-acre, based upon GPS data.											

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### 3.2.2 Waterbodies

During the field investigations, no waterbodies were delineated or identified within the Project Study Area. Representative photographs of the Project Study Area can be found in **Appendix C**.

## 4.0 Permitting Considerations

It is anticipated that due to the nature of the Project, jurisdictional resources may be impacted by the proposed Project activities. It is TRC's understanding that this Project would fall under Nationwide Permit (NWP) 57 - Electric Utility Line and Telecommunications Activities (USACE, 2022). This Project is located in the City of Akron, Summit County, Ohio within the USACE Huntington Regulatory District. The Project location and/or waterway is not listed in Appendix 1 to Regional General Condition 5(a) (Endangered Species and Threatened Species), therefore, Regional General Condition 5(a) does not trigger the need for Section 404 Pre-Construction Notification (PCN), assuming all other NWP 57 thresholds are met and not exceeded (USACE, 2021). The current NWP program is set to expire on March 14, 2026. At which time, NWP 57 will once again be subject OEPA's General Limitations and Conditions for 401 Water Quality Certification. When a PCN is not required by the USACE, notification to OEPA is required for impacts to Category 3 wetlands and/or impacts to  $\geq 0.10$ -acre of wetland. TRC has scored the on-site wetlands as Category 1.

### 4.1 USACE Verification

The USACE has the authority to determine and/or verify the geographical boundaries of Waters of the United States in accordance with 33 Code of Federal Regulations (CFR) 328 and 33 CFR 329; therefore, the results of this Report are termed "preliminary" until verified and accepted by the USACE. This verification is part of the Jurisdictional Determination process, which is required for approval under Section 404 Clean Water Act, Section 401 Water Quality Certification, and/or isolated wetland permitting process through OEPA. It is the responsibility of any party that intends to discharge dredge or fill material into Waters of the United States to comply with all applicable regulations.

## 5.0 Limitations

This Report is limited in scope to the specific terms of the Agreement previously entered into between TRC and FirstEnergy. This Report represents the conditions within the Project Study Area identified herein, as of the inspection dates.

Should the Project change from the scope described herein, TRC should be immediately notified such that additional investigations may be conducted to amend the content of the Report herein. Human-induced and/or natural changes within the Project Study Area may occur after the date of this investigation and may result in changes to the presence, extent, and classification of the surface water resources identified within this Report.

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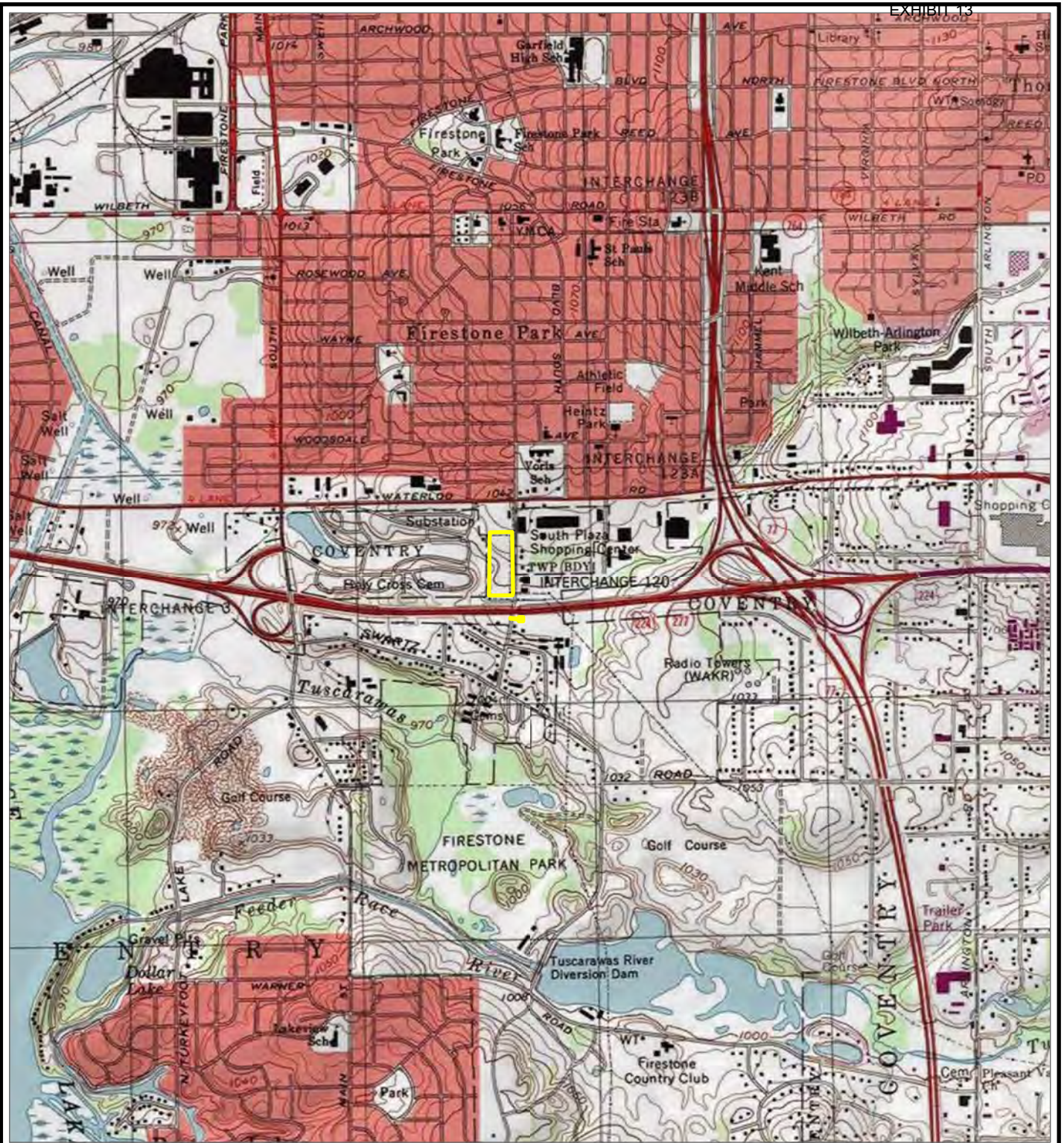
## 6.0 References

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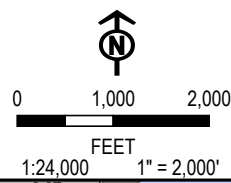
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## **Appendix A**

### **Figures**



 PROJECT STUDY AREA



BASE MAP: USA TOPO MAPS MAP SERVICE , AKRON WEST QUAD

PROJECT: **FIRSTENERGY  
GLENMOUNT SUBSTATION EXPANSION PROJECT  
SUMMIT COUNTY, OH**

TITLE: **SITE LOCATION MAP**

DRAWN BY: M. OPEL      PROJ. NO.: 664674 P2

CHECKED BY: M. MOLNAR

APPROVED BY: B. FALKINBURG

DATE: FEBRUARY 2026

**FIGURE 1**



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

FILE: WDRV4

PROJECT STUDY AREA

EXISTING STRUCTURE



BASE MAP: GOOGLE MAPS.



1:1,800  
1" = 150'



PROJECT: **FIRSTENERGY  
GLENMOUNT SUBSTATION EXPANSION PROJECT  
SUMMIT COUNTY, OH**

TITLE: **AERIAL MAP**

DRAWN BY: M. OPEL      PROJ. NO.: 664674 P2

CHECKED BY: M. MOLNAR

APPROVED BY: B. FALKINBURG      **FIGURE 2**

DATE: FEBRUARY 2026

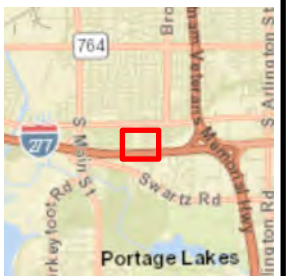
**TRC**      1382 WEST NINTH STREET  
SUITE 400  
CLEVELAND, OH 44113  
PHONE: 216-344-3072

FILE: WDRv4.aprx

- 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.



1:1,800  
 1" = 150'



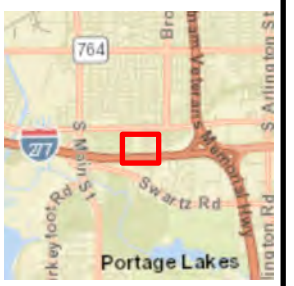
PROJECT: <b>FIRSTENERGY GLENMOUNT SUBSTATION EXPANSION PROJECT SUMMIT COUNTY, OH</b>	
TITLE: <b>SOILS MAP</b>	
DRAWN BY: M. OPEL	PROJ. NO.: 664674 P2
CHECKED BY: M. MOLNAR	<b>FIGURE 3</b>
APPROVED BY: B. FALKINBURG	
DATE: FEBRUARY 2026	
1382 WEST NINTH STREET SUITE 400 CLEVELAND, OH 44113 PHONE: 216-344-3072	
FILE:	WDRv4.aprx

Coordinate System: NAD 1983 StatePlane Ohio North FIPS 3401 Feet; Map Rotation: 0  
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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).



1:1,800  
 1" = 150'



PROJECT: <b>FIRSTENERGY GLENMOUNT SUBSTATION EXPANSION PROJECT SUMMIT COUNTY, OH</b>	
TITLE: <b>NHD, NWI AND FEMA FLOODPLAIN MAP</b>	
DRAWN BY: M. OPEL	PROJ. NO.: 664674 P2
CHECKED BY: M. MOLNAR	<b>FIGURE 4</b>
APPROVED BY: B. FALKINBURG	
DATE: FEBRUARY 2026	
1382 WEST NINTH STREET SUITE 400 CLEVELAND, OH 44113 PHONE: 216-344-3072	
FILE:	WDRv4.aprx

Coordinate System: NAD 1983 StatePlane Ohio North FIPS 3401 Feet; Map Rotation: 0  
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- PROJECT STUDY AREA
- EXISTING STRUCTURE
- ▲ CULVERT
- NON-JURISDICTIONAL DITCH
- PEM WETLAND
- WETLAND CONTINUES
- WETLAND DATA POINT
- UPLAND DATA POINT

BASE MAP: GOOGLE MAPS.  
 DATA SOURCES: TRC WETLAND DELINEATION COMPLETED JULY 13, 2023 AND JUNE 5, 2025 AND FEBRUARY 18, 2026.



1:1,800  
 1" = 150'



PROJECT: <b>FIRSTENERGY GLENMOUNT SUBSTATION EXPANSION PROJECT SUMMIT COUNTY, OH</b>	
TITLE: <b>DELINEATED RESOURCES MAP</b>	
DRAWN BY: M. OPEL	PROJ. NO.: 664674 P2
CHECKED BY: M. MOLNAR	<b>FIGURE 5</b>
APPROVED BY: B. FALKINBURG	
DATE: FEBRUARY 2026	
1382 WEST NINTH STREET SUITE 400 CLEVELAND, OH 44113 PHONE: 216-344-3072	
FILE:	WDRv4.aprx

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## **Appendix B**

### **Antecedent Precipitation Tables**

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

Rainfall (Inches)

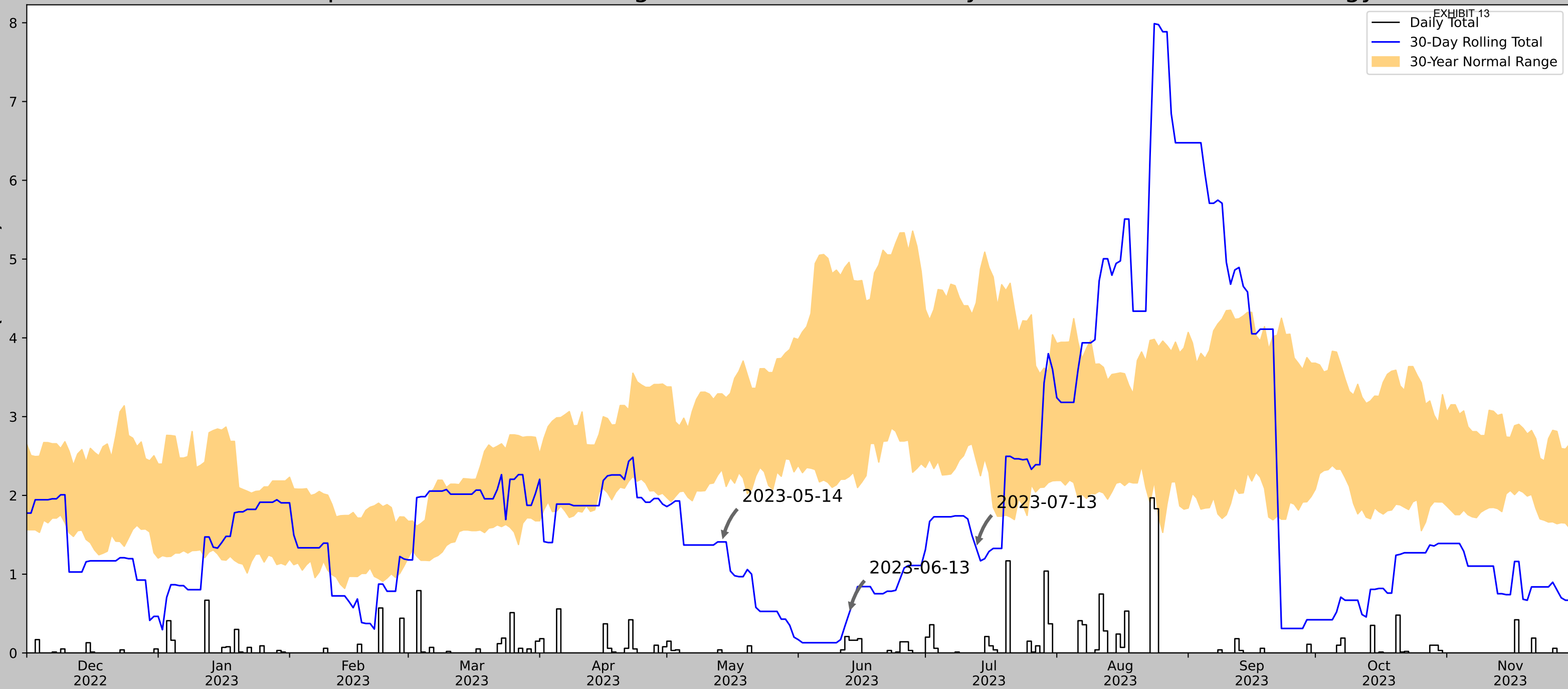


EXHIBIT 13  
 — Daily Total  
 — 30-Day Rolling Total  
 30-Year Normal Range

Coordinates	41.02683, -81.51591
Observation Date	2023-07-13
Elevation (ft)	1016.286
Drought Index (PDSI)	Incipient wetness
WebWIMP H <sub>2</sub> O Balance	Dry Season

30 Days Ending	30 <sup>th</sup> %ile (in)	70 <sup>th</sup> %ile (in)	Observed (in)	Wetness Condition	Condition Value	Month Weight	Product
2023-07-13	2.444882	4.445276	1.330709	Dry	1	3	3
2023-06-13	2.238583	4.959055	0.5	Dry	1	2	2
2023-05-14	2.329134	3.288976	1.409449	Dry	1	1	1
Result							Drier than Normal - 6

Weather Station Name	Coordinates	Elevation (ft)	Distance (mi)	Elevation Δ	Weighted Δ	Days Normal	Days Antecedent
AKRON FULTON INTL AP	41.0372, -81.4633	1043.963	2.834	27.677	1.354	8461	90
AKRON 3.6 ESE	41.0652, -81.4557	1113.845	1.975	69.882	1.027	3	0
AKRON 2.9 S	41.0388, -81.5248	1020.013	3.207	23.95	1.52	3	0
AKRON 2.6 E	41.0798, -81.471	1105.971	2.971	62.008	1.521	2	0
AKRON	41.0803, -81.5169	1080.053	4.082	36.09	1.984	2753	0
AKRON 7.0 S	40.9812, -81.5407	1007.874	5.591	36.089	2.718	1	0
STOW 4 SE	41.1314, -81.4492	1060.039	6.55	16.076	3.053	12	0
AKRON CANTON AP	40.9181, -81.4433	1209.974	8.295	166.011	5.11	118	0

Figures and tables made by the Antecedent Precipitation Tool Version 3.0



US Army Corps of Engineers



ERDC

Developed by:  
 U.S. Army Corps of Engineers and  
 U.S. Army Engineer Research and Development Center

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

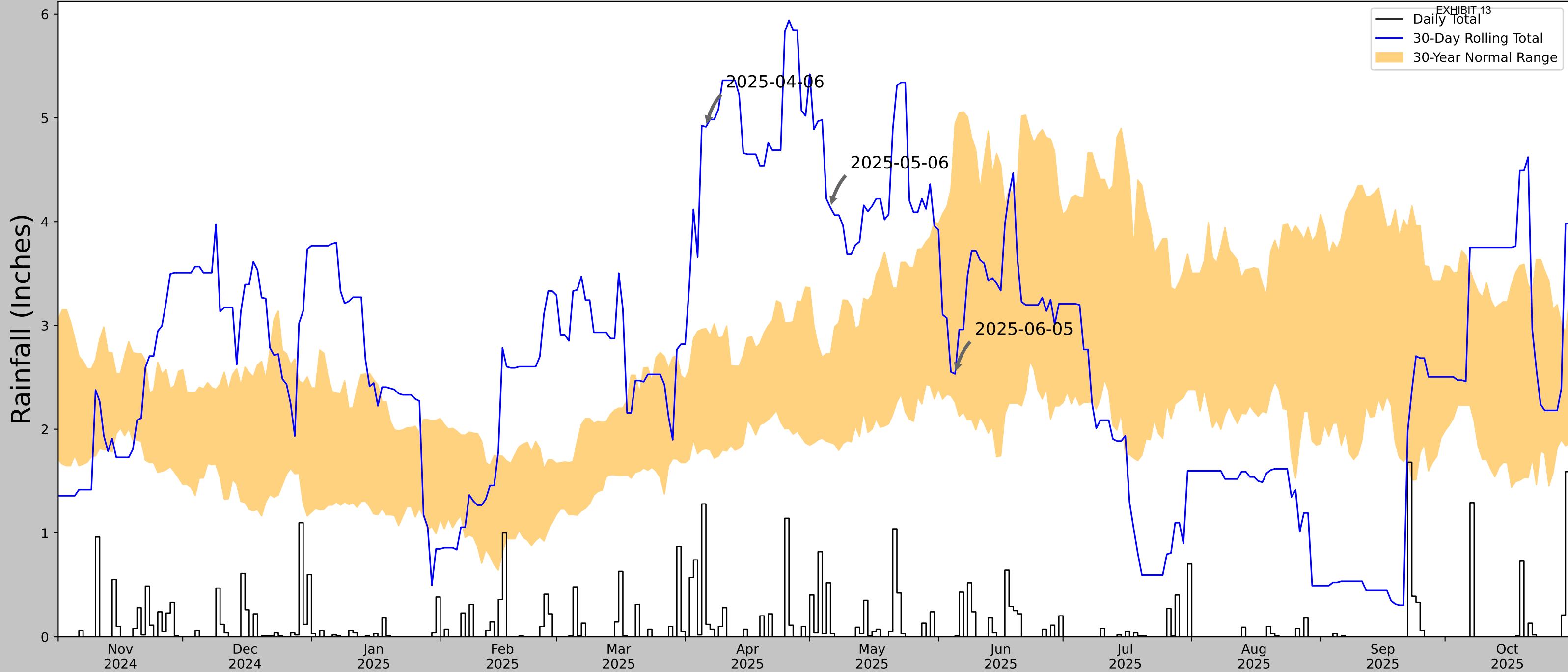



EXHIBIT 13  
 — Daily Total  
 — 30-Day Rolling Total  
 30-Year Normal Range

Coordinates	41.02683, -81.51591
Observation Date	2025-06-05
Elevation (ft)	1016.286
Drought Index (PDSI)	Mild wetness
WebWIMP H <sub>2</sub> O Balance	Dry Season

30 Days Ending	30 <sup>th</sup> %ile (in)	70 <sup>th</sup> %ile (in)	Observed (in)	Wetness Condition	Condition Value	Month Weight	Product
2025-06-05	2.26063	4.943701	2.531496	Normal	2	3	6
2025-05-06	1.872835	2.727559	4.133858	Wet	3	2	6
2025-04-06	1.812598	2.969291	4.913386	Wet	3	1	3
Result							<b>Wetter than Normal - 15</b>

Weather Station Name	Coordinates	Elevation (ft)	Distance (mi)	Elevation Δ	Weighted Δ	Days Normal	Days Antecedent
AKRON FULTON INTL AP	41.0372, -81.4633	1043.963	2.834	27.677	1.354	9191	89
AKRON 3.6 ESE	41.0652, -81.4557	1113.845	1.975	69.882	1.027	3	0
AKRON 2.9 S	41.0388, -81.5248	1020.013	3.207	23.95	1.52	3	0
AKRON 2.6 E	41.0798, -81.471	1105.971	2.971	62.008	1.521	3	1
AKRON	41.0803, -81.5169	1080.053	4.082	36.09	1.984	2037	0
AKRON 7.0 S	40.9812, -81.5407	1007.874	5.591	36.089	2.718	1	0
STOW 4 SE	41.1314, -81.4492	1060.039	6.55	16.076	3.053	12	0
AKRON CANTON AP	40.9181, -81.4433	1209.974	8.295	166.011	5.11	103	0

Figures and tables made by the  
 Antecedent Precipitation Tool  
 Version 3.0



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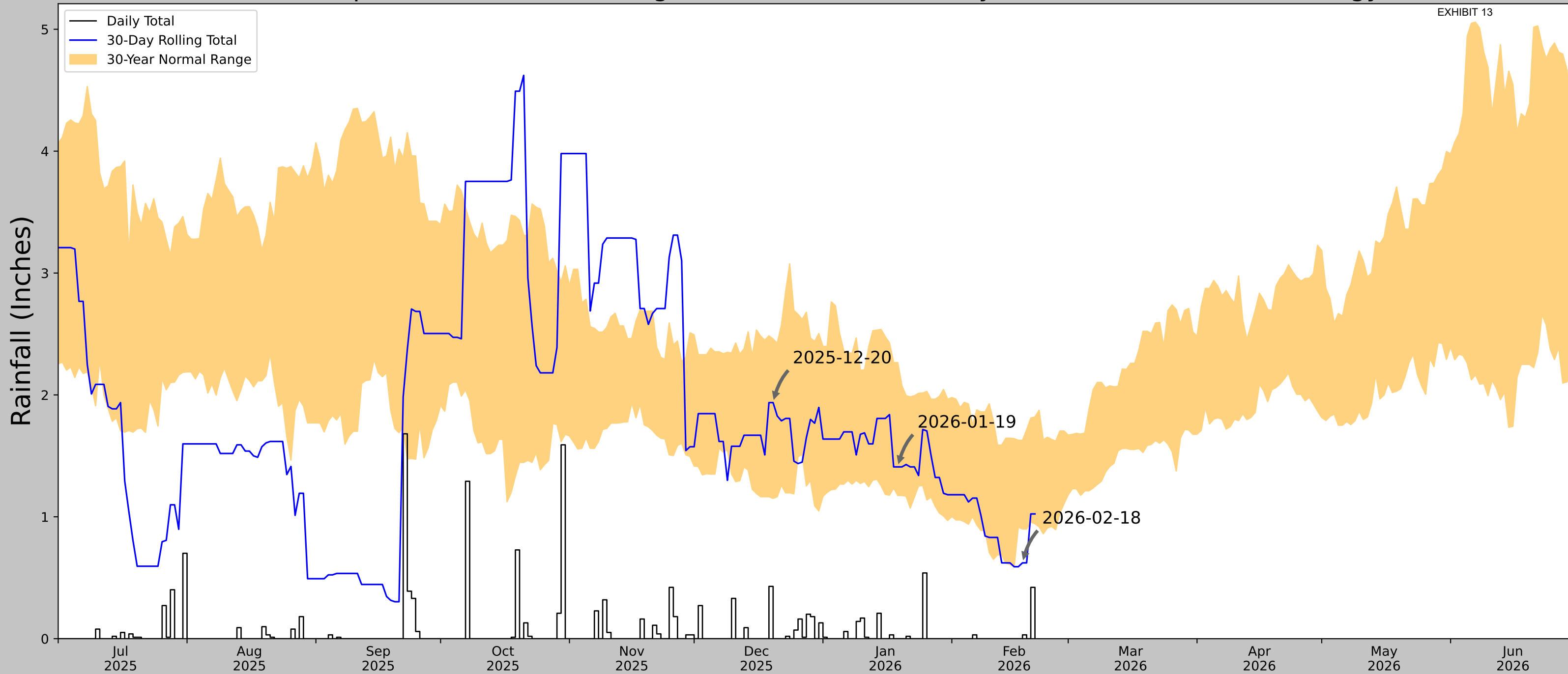


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# Antecedent Precipitation vs Normal Range based on NOAA's Daily Global Historical Climatology Network

EXHIBIT 13



Coordinates	41.02683, -81.51591
Observation Date	2026-02-18
Elevation (ft)	1016.286
Drought Index (PDSI)	Mild drought (2026-01)
WebWIMP H <sub>2</sub> O Balance	Wet Season

30 Days Ending	30 <sup>th</sup> %ile (in)	70 <sup>th</sup> %ile (in)	Observed (in)	Wetness Condition	Condition Value	Month Weight	Product
2026-02-18	0.899606	1.627165	0.622047	Dry	1	3	3
2026-01-19	1.175197	2.264961	1.409449	Normal	2	2	4
2025-12-20	1.151181	2.458661	1.937008	Normal	2	1	2
Result							Drier than Normal - 9

Weather Station Name	Coordinates	Elevation (ft)	Distance (mi)	Elevation Δ	Weighted Δ	Days Normal	Days Antecedent
AKRON FULTON INTL AP	41.0372, -81.4633	1043.963	2.834	27.677	1.354	9555	90
AKRON 3.6 ESE	41.0652, -81.4557	1113.845	1.975	69.882	1.027	3	0
AKRON 2.9 S	41.0388, -81.5248	1020.013	3.207	23.95	1.52	3	0
AKRON 2.6 E	41.0798, -81.471	1105.971	2.971	62.008	1.521	4	0
AKRON	41.0803, -81.5169	1080.053	4.082	36.09	1.984	1672	0
AKRON 7.0 S	40.9812, -81.5407	1007.874	5.591	36.089	2.718	1	0
STOW 4 SE	41.1314, -81.4492	1060.039	6.55	16.076	3.053	12	0
AKRON CANTON AP	40.9181, -81.4433	1209.974	8.295	166.011	5.11	103	0

Figures and tables made by the  
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## **Appendix C**

### **Photographic Record**

<b>Client Name:</b> FirstEnergy	<b>Site Location:</b> City of Akron, Summit County, Ohio	<b>Project No.:</b> 664674 Phase 2
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<b>Photo No. 1.</b>
<b>Photo Date:</b> 7/13/2023
<b>Description:</b>  Wetland W-TPT-1, facing north.



<b>Photo No. 2.</b>
<b>Photo Date:</b> 7/13/2023
<b>Description:</b>  Wetland W-TPT-1, facing east.



<b>Client Name:</b> FirstEnergy	<b>Site Location:</b> City of Akron, Summit County, Ohio	<b>Project No.:</b> 664674 Phase 2
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<b>Photo No. 3.</b>
<b>Photo Date:</b> 7/13/2023
<b>Description:</b>  Wetland W-TPT-1, facing south.



<b>Photo No. 4.</b>
<b>Photo Date:</b> 7/13/2023
<b>Description:</b>  Wetland W-TPT-1, facing west.



<b>Client Name:</b> FirstEnergy	<b>Site Location:</b> City of Akron, Summit County, Ohio	<b>Project No.:</b> 664674 Phase 2
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<b>Photo No. 5.</b>
<b>Photo Date:</b> 7/13/2023
<b>Description:</b>  Wetland W-TPT-2, facing north.



<b>Photo No. 6.</b>
<b>Photo Date:</b> 7/13/2023
<b>Description:</b>  Wetland W-TPT-2, facing east.



<b>Client Name:</b> FirstEnergy	<b>Site Location:</b> City of Akron, Summit County, Ohio	<b>Project No.:</b> 664674 Phase 2
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**Photo No. 7.**

**Photo Date:**  
7/13/2023

**Description:**  
  
Wetland W-TPT-2,  
facing south.



**Photo No. 8.**

**Photo Date:**  
7/13/2023

**Description:**  
  
Wetland W-TPT-2,  
facing west.



<b>Client Name:</b> FirstEnergy	<b>Site Location:</b> City of Akron, Summit County, Ohio	<b>Project No.:</b> 664674 Phase 2
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**Photo No. 9.**

**Photo Date:**  
7/13/2023

**Description:**  
  
 Representative photo of the Project Study Area, facing north.



**Photo No. 10.**

**Photo Date:**  
7/13/2023

**Description:**  
  
 Representative photo of the Project Study Area, facing east.



<b>Client Name:</b> FirstEnergy	<b>Site Location:</b> City of Akron, Summit County, Ohio	<b>Project No.:</b> 664674 Phase 2
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<b>Photo No. 12.</b>
<b>Photo Date:</b> 7/13/2023
<b>Description:</b>  Representative photo of the Project Study Area, facing south.



<b>Photo No. 13.</b>
<b>Photo Date:</b> 7/13/2023
<b>Description:</b>  Representative photo of the Project Study Area, facing west.

