

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

LETTER OF NOTIFICATION

**PINE-WADSWORTH MUNI 138 kV TRANSMISSION
LINE-STRUCTURE REPLACEMENT AND REROUTE
PROJECT**

OPSB Case No. : 26-0140-EL-BLN

June 30, 2026

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

**LETTER OF NOTIFICATION
PINE-WADSWORTH MUNI 138 kV TRANSMISSION LINE-
STRUCTURE REPLACEMENT AND REROUTE PROJECT**

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

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

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

Name of Project: Pine-Wadsworth Muni 138 kV Transmission Line-Structure Replacement and Reroute Project (“Project”)

Reference Number: 2051-1 (Pine-Wadsworth Muni (“P-WM”)), 2050 (Barberton-West Akron (“B-WA”))

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

In this project, American Transmission Systems, Incorporated (“ATSI”), a FirstEnergy company, proposes to relocate and replace Structures No. 6697 through 6700 that support both the Pine-Wadsworth Muni 138 kV and Barberton-West Akron 138 kV transmission lines. The existing steel lattice towers have sustained significant deterioration, especially on Structures No. 6698 and 6699, where the legs show advanced structural degradation. In addition, a railroad spur that carries tank cars carrying hazardous and flammable materials passes beneath the energized conductors and a multi-story metal building located within the transmission line right-of-way (“ROW”) increases safety risk in the event of a conductor failure. To address these issues and maintain system reliability, four new double-circuit single steel monopole structures on drilled concrete pier foundations along with new conductor and shield wire will be installed. Structures 6698 and 6699 will be installed approximately 222 feet to the west of their existing locations. Structures 6697 and 6700 will be approximately 20

and 28 feet south of their current locations, respectively. Upon completion of installation, the existing lattice towers will be removed.

The Project is located in Copley Township, Summit County, Ohio. The general location of the Project is shown in **Exhibit 1**, a partial copy of the United States Geologic Survey (“USGS”) Topographic Map, Summit County, OH, Quad Map. **Exhibit 2** is a partial copy of ESRI aerial imagery. The general layout of the Project is shown in **Exhibit 3**.

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

The Project meets the requirements for a Letter of Notification application because the Project is within the types of projects defined by Item (1)(b) of the Application Requirement Matrix for Electric Power Transmission Lines. Appendix A of Adm.Code 4906-1-01. This item states:

(1) New construction, extension, or relocation of single or multiple circuit electric power transmission line(s), or upgrading existing transmission or distribution line(s), for operation at a higher transmission voltage, as follows:

(b) Lines(s) greater than 0.2 miles in length but not greater than two miles in length.

The proposed Project is within the requirements of Item (1)(b) because it involves the relocation of a transmission line for a distance of approximately 0.4 miles.

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

The Project is needed as a result of a 2022 steel structure inspection. Two legs on Tower No. 6699 are showing greater than 50% loss of steel and the other two legs are showing greater than 25% loss of steel due to deterioration. All four legs on Tower No. 6698 are showing similar corrosion, rust, and some minor pitting. Given that these towers are on PVS Chemical Solutions property, it is believed that the soil contains high concentrations of unnatural elements causing accelerated steel loss on the tower

legs; see **Exhibit A**. Additionally, a railroad spur with tank cars carrying hazardous and flammable materials passes beneath the energized conductors, and a multi-story metal building is located within the transmission line corridor, increasing safety risk in the event of a conductor failure. To alleviate the combination of degradation due to the soil conditions as well as the inclusions in the transmission line ROW, the realignment of the 0.4 miles of transmission line provides a safe and reliable solution. As compared to the existing steel lattice structures, in which two were installed in 1924 (#6700, #6697) and the other two in 1954 (#6699, #6698), the proposed monopoles meets the statutory definition of “advanced transmission technology” because it is “hardware technologies that increase the *** reliability or safety of an existing *** transmission system.” R.C. 4906.01(M) (as amended by House Bill 15).

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. 2026 Long-Term Forecast Report (“LTFR”). This map was submitted to the Public Utilities Commission of Ohio (“PUCO”) in Case No. 26-0504-EL-FOR under Adm.Code 4901:5-5:04 (C)(2)(b). The map is incorporated by reference only. This Project is not included in the 2026 LTFR because the Project does not entail any topology or rating change. The general location of the Project area is shown in **Exhibits 1** and **2**. The general layout is shown in **Exhibit 3**.

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

The only alternative considered was in-line replacement of the degraded structures at their current location. This option was not selected due to expected rapid degradation of structures in that location due to soil conditions as well as the railroad spur and metal building in the transmission line ROW.

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

ATSI's manager of External Affairs will advise local officials of the features and the status of the proposed Project as necessary. ATSI 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.

ATSI will publish notice of the Project in the 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).

Finally, during all phases of this Project, the public may contact ATSI through the transmission projects hotline at 1-888-311-4737 or via email at: transmissionprojects@firstenergycorp.com where the public may ask questions or leave comments on the Project for ATSI.

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

Construction on the Project is expected to begin as early as September 28, 2026, and be completed/in-service by December 29, 2026.

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

Exhibit 1 provides a partial copy of the USGS Topographic Map, 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 **Exhibit 3**.

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

The Project will be constructed on a relocated centerline to amended right-of-way easements. **Exhibit 3A** contains a list of properties affected by the project.

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

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

The transmission line construction will have the following characteristics:

Voltage:	138 kV
Conductors:	Current (P-WM) – (3) 605 kcmil 24/7 “Peacock” ACSR New (P-WM) - (3) 795 kcmil 26/7 “Drake” ACSR Current (B-WA) – (3) 477 kcmil 18/7 “Hawk” ACSS New (B-WA) - (3) 556.5 kcmil 26/7 “Dove” ACSS
Static Wire:	Current – (2) 7#8 Alumoweld shield wires New – (2) 7#8 Alumoweld shield wires
Insulators:	Porcelain
ROW Width:	100 feet
Land Requirements:	New
Structure Types:	Exhibit 4A: 138 kV Double Circuit Tubular Steel Deadend Structure, 0-50° Line Angle (2 Structures) Exhibit 4B: 138 kV Double Circuit Tubular Steel Suspension Structure, 5-30° Line Angle (2 Structures)

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

There are no occupied residences or institutions within 100 feet of the Project and therefore no Electric and Magnetic Field (“EMF”) calculations are required by this code provision.

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

The estimated cost for the proposed Project is \$4,256,753. Although not statutorily required for approval, at the request of OPSB Staff, ATSI confirms that the estimate is a Class 4 estimate and that ATSI’s costs will be captured and allocated via FERC formula rates for the ATSI Transmission Zone, Attachment H-21 in the PJM OATT.

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

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

The Project is located in Copley Township in Summit County, Ohio. The main land use in the Project area is industrial. Because the Project is relocating the existing transmission line near an industrial area, no significant changes or impacts to the current land uses 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 Environmental Corporation, ("TRC") requested database information from the Ohio Historic Preservation Office's ("OHPO") on October 1, 2025, for the Project Study Area (Area of Potential Effect or "APE") with a one (1)-mile search radius. On October 29, 2025, SHPO replied to the request and the response is attached as **Exhibit 5**. SHPO concurred that the Project, as proposed, will have no effect on historic properties and no cultural resource studies are warranted. 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 completion.

The OHPO database includes a catalog of all historic properties listed in or eligible for listing in the National Register of Historic Places (NRHP), including districts, sites, building, structures, and objects that are significant in American history, architecture, archeology, engineering, and culture. The results of the file search identified no NRHP-listed or -eligible historic properties or OHPO Determinations of Eligibility within one (1) mi of the proposed Project.

The OHPO database also includes listings on the Ohio Historic Inventory (OHI), the Ohio Archaeological Inventory (OAI), previous cultural resource surveys, and the Ohio

Genealogical Society (OGS) cemetery inventory. There are no OGS cemeteries recorded within one (1)-mi of the proposed Project. There are 20 above-ground historic resources that have been recorded but not yet formally evaluated for NRHP eligibility.

Five (5) archaeological surveys have been conducted within one (1)-mi of the proposed Project. None of the surveys overlap with portions of the Study Area with the nearest survey located 0.21 mi to the north of the western portion of the Study Area. Four (4) recorded archaeological sites and an additional seven (7) archaeological sites under review are recorded within one (1) mi. The four (4) recorded sites are historic domestic sites that date to the nineteenth and twentieth centuries. The seven (7) sites under review are presently unevaluated with no documented temporal affiliation.

The Project Study Area is comprised of an existing, maintained utility and railroad ROW within a combination of industrial and recreational (Copley Community Park) landscapes. 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. To date, TRC has not conducted any on-site cultural resources surveys.

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

The Limit of Disturbance (LOD), which corresponds to the APE, will be completely within the Project Study Area and will predominantly include all areas in which construction activities associated with the proposed Project will take place. No ROW permits will be necessary based on the proposed Project. If more than one (1) acre of earth disturbance is proposed in the Project scope, then submittal of a Notice of Intent (NOI) application to the Ohio EPA would be required for coverage under the general construction stormwater permit (OHC000006), and the Storm Water Pollution Prevention Plan (SWPPP) to the Summit County Soil and Water Conservation District and/or City of Akron. The Project Study Area crosses a Wheeling and Lake Erie Railway and will require coordination with the railroad company if access is deemed

necessary. The Project scope is not proposed within a 100-year FEMA floodplain and therefore will not require a Floodplain Hazard Development Permit. All permitting and/or coordination necessary to comply with local, state, and federal agencies with jurisdiction regarding this Project will be completed prior to the commencement of construction.

Table 1. List of Government Agency Requirements

Agency(s)	Requirement
Ohio EPA	General NPDES Construction Storm Water Permit OHC000006
Summit County SWCD	SWPPP Review

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

TRC submitted a request to the Ohio Department of Natural Resources (“ONDR”) Office of Real Estate to conduct an Environmental Review. As part of the Environmental Review, the Ohio Department of Natural Resources (ODNR) Office of Real Estate searches the ODNR Division of Wildlife (DOW) Natural Heritage Database in order 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 October 16, 2025, indicated that there is one (1) record located within a one (1) mile radius of the Project Study Area for the Low Umbrella-sedge (*Cyperus diandrus*), a state threatened plant species. In addition, the Project is within the range of thirteen (13) state and/or federally listed animal species. A copy of ODNR’s Office of Real Estate’s response is included as **Exhibit 6**. 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 2** and a list of all endangered, threatened, and rare species, as identified by ODNR, within the range of the Project is provided in **Table 3**.

Table 2. List of Endangered and Threatened Species within a One-Mile Radius Project Study Area

Common Name	Scientific Name	Federal Listed Status	State Listed Status	Affected Habitat
Plant				
Low Umbrella Sage	<i>Cyperus diandrus</i>	N/A	Threatened	Wetlands, marshes and pond margins

Table 3. List of Endangered and Threatened Species within range of Project Study Area

Common Name	Scientific Name	Federal Listed Status	State Listed Status	Affected Habitat
Mammals				
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.
Fish				
Iowa Darter	<i>Etheostoma exile</i>	N/A	Endangered	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
Lake Chubsucker	<i>Erimyzon sucetta</i>	N/A	Threatened	Perennial streams
Paddlefish	<i>Polyodon spathula</i>	N/A	Threatened	Perennial streams
Reptiles				
Smooth Greensnake	<i>Opheodrys vernalis</i>	N/A	Endangered	Prairie, marsh meadow, and roadside ditches
Spotted Turtle	<i>Clemmys guttata</i>	N/A	Threatened	Fens, bogs, and marshes
Birds				
Northern Harrier	<i>Circus hudsonius</i>	N/A	Endangered	Marshes and grasslands

Sandhill Crane	<i>Antigone canadensis</i>	N/A	Threatened	Grassland, prairie, and wetlands
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Based on the information received from correspondence with ODNR, the Project is within the range of the Indiana bat (*Myotis sodalis*), a state endangered and federally endangered species, the northern long-eared bat (*Myotis septentrionalis*), a state endangered and federally endangered species, the little brown bat (*Myotis lucifugus*), a state endangered species, and the tricolored bat (*Perimyotis subflavus*), a state endangered species. These bat species predominantly roost in trees behind loose, exfoliating bark, in crevices, and cavities, or in the leaves. These species are dependent on the forest structure surrounding the roost trees. The DOW recommended a desktop bat hibernaculum assessment be completed for the Project, which TRC completed for FirstEnergy and submitted to ODNR for concurrence on October 27, 2025. ODNR responded on October 28, 2025, **Exhibit 7**, concurring that no caves, cliffs, or mine openings occur in the Project Study Area; therefore, the Project is not likely to impact hibernating bats. In assessing compliance with NWP General Condition 18, TRC determined that tree clearing is not anticipated within the Project Study Area. If minor tree clearing is needed as a result of this Project, it will take place within the US Fish and Wildlife Service (USFWS) recommended tree clearing dates (October 1 – March 31); therefore, no impacts to bat species are anticipated as a result of the construction of this Project.

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

The Project is within the range of the spotted turtle (*Clemmys guttata*), a state threatened species. This reptile 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 range of the state endangered smooth greensnake (*Opheodrys vernalis*). This reptile species prefers prairie habitats 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 northern harrier (*Circus hudsonius*), a state endangered bird species. This species prefers marshes and grasslands where they often hunt and nest in loose colonies. Active construction will be avoided in this habitat during the species' nesting period of April 15 through July 31.

This Project lies within range of the sandhill crane (*Antigone canadensis*), a state threatened bird. This species is a primarily wetland dependent species and requires large tracts of wet meadow, shallow marsh, or bog for nesting. The sandhill crane nesting period is April 1 – August 31. 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.

In addition, TRC submitted a Technical Assistance request to the USFWS on September 18, 2025, to research the presence of any endangered, threatened, rare, or designated species within the Project Study Area. A copy of the USFWS' response, dated September 18, 2025, is included as **Exhibit 8**. Due to the Project type, size, location, and the proposed implementation of seasonal tree cutting (clearing of trees ≥ 3 inches diameter at breast height between October 1 and March 31) to avoid impacts to the Indiana bat, northern long-eared bat, and tricolored bat, no adverse effects to any 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 for the Project, as shown in **Exhibit 9**. One (1) palustrine emergent wetland (W-JMS-1) and one (1) intermittent stream (S-JMS-1) were identified and delineated within the Project Study Area.

The Project Study Area is 12.9 acres and comprised of existing, maintained utility and railroad right-of-way (ROW), within industrial and recreational (Copley Community Park) land use. TRC did not observe the presence of any of the ODNR or federally listed species during the field investigation due to the highly maintained nature of the utility ROW and surrounding land use. Therefore, no impacts are anticipated to any of the listed species detailed in the ODNR correspondence.

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

Nationwide Permit Regional General Conditions were reviewed regarding this Project. This Project is in the Tuscarawas River watershed (Hydrologic Unit Code 0504001) 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) (USACE, 2021), which triggers the need for a Section 404 Pre-Construction Notification (PCN) application to be submitted to the USACE when the proposed Project includes regulated activities within jurisdictional resources.

A review of the USGS Protected Areas Database (www.usgs.gov/programs/gap-analysis-project/science/protected-areas) revealed no conservation easements in the Project Study Area. The Nation 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): Other Information

Construction and operation of the proposed Project will be in accordance with the requirements specified in the latest revision of the National Electrical Safety Code (“NESC”) as adopted by the PUCO and will meet all applicable safety standards established by the Occupational Safety and Health Administration.

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

4906-6-07: Documentation of Letter of Notification Transmittal and Availability for Public Review

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

Summit County

Ilene Shapiro
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Scott Dressler
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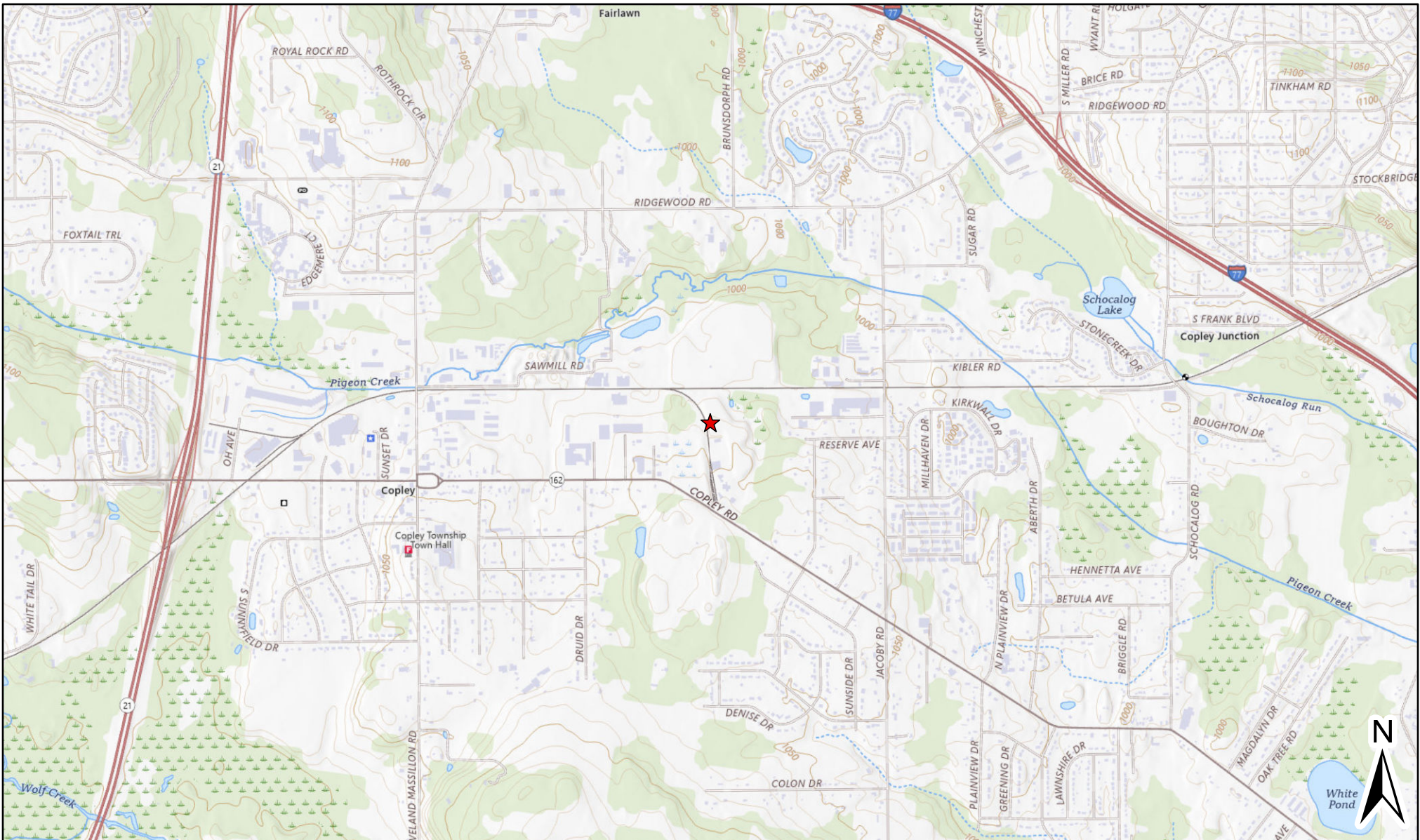
Library

Scott Schrade – Branch Manager
Fairlawn-Bath Branch Library
3101 Smith Road
Akron, OH 44333
sschrade@akronlibrary.org

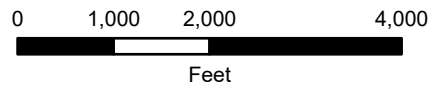
Copies of the transmittal letters to these officials have been included with this application as proof of compliance under Adm.Code 4906-6-07(B) to provide the Board with proof of notice to local officials as required by Adm.Code 4906-6-07(A)(1) and to libraries per Adm.Code 4906-6-07(A)(2).

Information is posted at:

https://www.firstenergycorp.com/about/transmission_projects/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 to meet the requirements of Adm.Code 4906-6-07(B) and to provide the Board with proof of compliance with the notice requirements in Adm.Code 4906-6-07(A)(3).



Legend
 ★ Project Location



Reference Scale: 1:24,000

References:
 ESRI Aerial Imagery, USGS National Map, ODOT

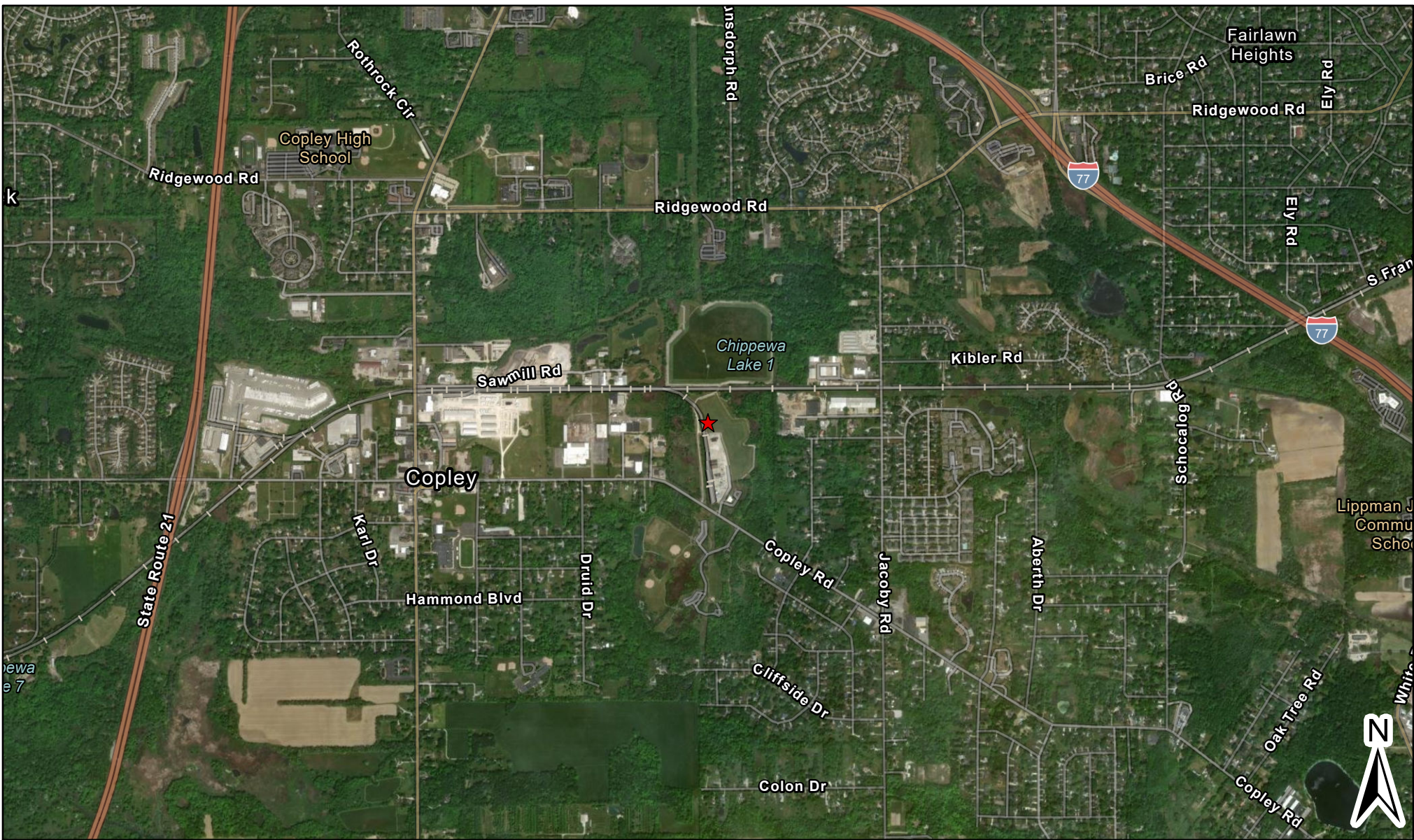
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American Transmission Systems, Inc.
 a subsidiary of FirstEnergy Corp.

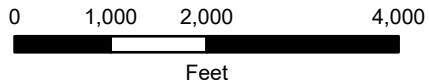
PINE-WADSWORTH MÜNI 138 KV
 TRANSMISSION LINE-STRUCTURE
 REPLACEMENT AND RELOCATION
 PROJECT

EXHIBIT 1



Legend

★ Project Location



Reference Scale: 1:24,000

References:
ESRI Aerial Imagery, USGS National Map, ODOT

Coordinate System:
NAD 1983 2011 StatePlane Ohio North FIPS 3401 Ft US



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PINE-WADSWORTH MUNI 138 KV
TRANSMISSION LINE-STRUCTURE
REPLACEMENT AND RELOCATION
PROJECT

EXHIBIT 2

BARBERTON-WEST AKRON 138KV & PINE-WARSWORTH MUNI 138KV, REPLACE TOWERS #6697-#6700 & REPLACE STRUCTURE #6391 EXHIBIT 4

COPLEY TOWNSHIP
SUMMIT COUNTY
STATE OF OHIO

WHEELING & LAKE ERIE RAILWAY

PINE & WEST AKRON
SUBSTATIONS

EXISTING #6697

#6697

PINE-WADSWORTH MUNI
138KV LINE

#6698

EXISTING #6698

BARBERTON-WEST AKRON
138KV LINE

#6699

EXISTING #6699

BARBERTON & WADSWORTH MUNI SILVERCREST AMP
SUBSTATIONS

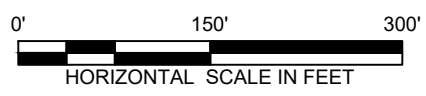
SR-162

EXISTING #6700

#6700

LEGEND

	- BUILDINGS		- RAILROAD		- PROPOSED STRUCTURE
	- PROPOSED TRANSMISSION LINE		- PAVED ROAD		- EXISTING TOWER TO BE REMOVED
	- EXISTING TRANSMISSION LINE		- FENCE		
	- EXISTING TRANSMISSION LINE TO BE REMOVED		- PROPERTY LINE		



PINE-WADSWORTH MUNI 138 KV
TRANSMISSION LINE-STRUCTURE
REPLACEMENT AND RELOCATION PROJECT

GENERAL PROJECT LAYOUT

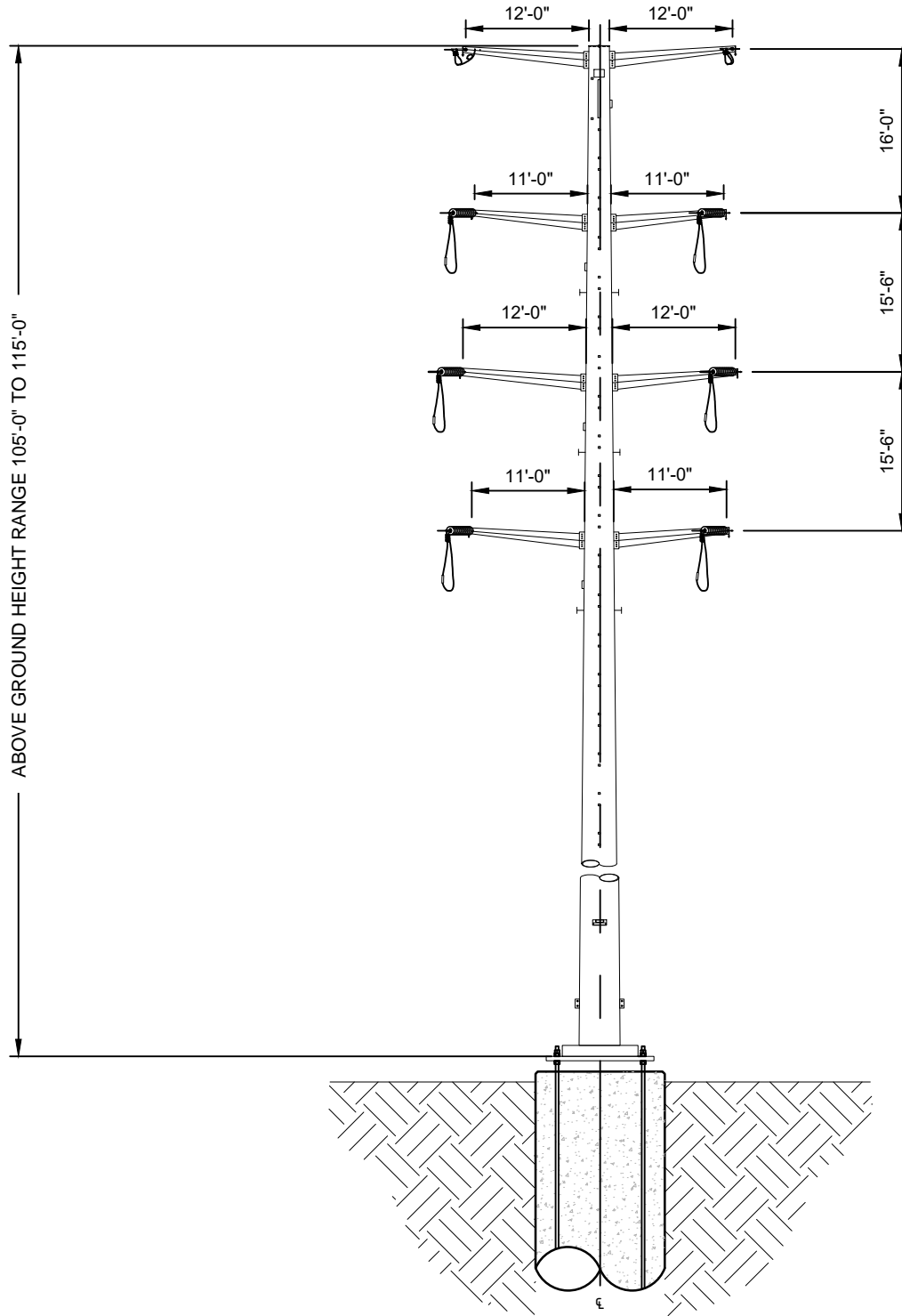
EXHIBIT 3

Parcel Number (APN)	Property Owner	Property Address/Mailing Address	Acreage	Easement Status	Agricultural District (Yes/No)	Agricultural District Expiration Year
Notification for Impacted Parcels Only						
138kV Pine-Wadsworth; OE-27-240514-093008						
1507104	Board of Trustees of Copley Township	1540 S. Cleveland-Massillon Rd. Akron, OH. 44321	15.0061	Supplementing Current Easement Rights of 60' ft. ROW Corridor for Additional Area	No	N/A
1505053	PVS Chemicals, Inc.	3149 Copley Rd. Akron, OH. 44321	20.00	Amending Current Easement Rights to a 100' ft. ROW Corridor	No	N/A
1506278	Minnesota Mining and Manufacturing	PO Box 51049 Fort Myers, FL. 33994	15.81	Amending Current Easement Rights to a 100' ft. ROW Corridor	No	N/A

>Relocating the easement from east to west side of PVS 60ft +40ft = 100 ft

>Parcel 1507104 60ft area (sq ft) not a corridor

BARBERTON-WEST AKRON 138KV & PINE-WARSWORTH MUNI 138KV, REPLACE TOWERS #6697-#6700



PINE-WADSWORTH MUNI 138 KV
TRANSMISSION LINE-STRUCTURE
REPLACEMENT AND RELOCATION PROJECT

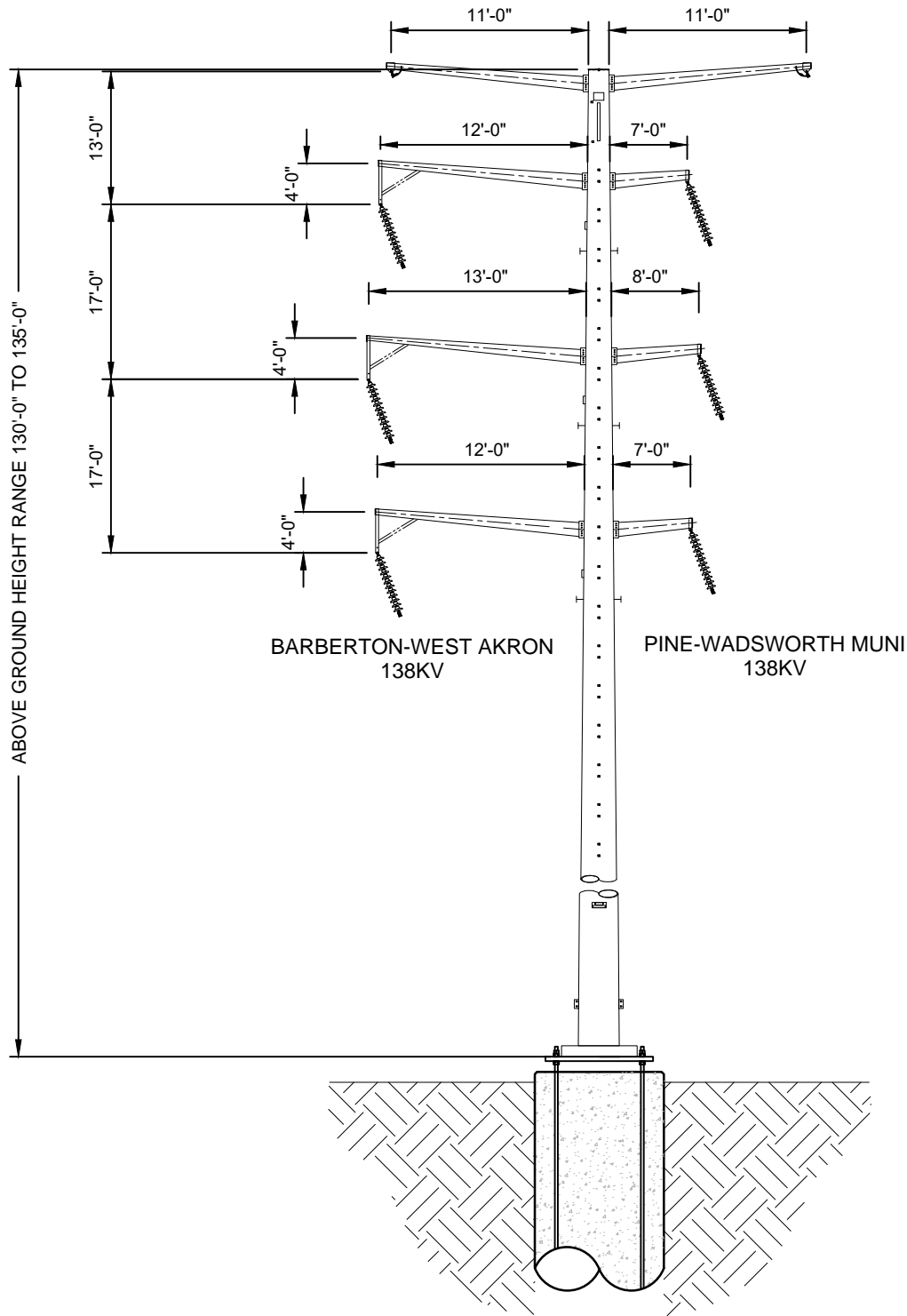
138 kV DOUBLE CIRCUIT STEEL TAPERED TUBE
DEADEND SINGLE POLE 0 DEG TO 50 DEG

SCALE N.T.S

REF: TR-138370

EXHIBIT 4A

BARBERTON-WEST AKRON 138KV & PINE-WADSWORTH MUNI 138KV, REPLACE TOWERS #6697-#6700



ATSI[®]
American Transmission Systems, Inc.
a subsidiary of FirstEnergy Corp.

PINE-WADSWORTH MUNI 138 KV
TRANSMISSION LINE-STRUCTURE
REPLACEMENT AND RELOCATION PROJECT

138 kV DOUBLE CIRCUIT STEEL TAPERED TUBE
SUSPENSION SINGLE POLE 5 DEG TO 30 DEG

EXHIBIT 4B

SCALE N.T.S

REF: TR-138365



In reply refer to:
2025-SUM-66578

October 29, 2025

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

RE: Section 106 Review: Pine-Wadsworth Structure Replacement Project, Copley Township and City
of Akron, Summit County, Ohio

Dear Mr. McKissick:

This letter is in response to the correspondence received on October 1, 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 proposed project consists of replacing structures along the Pine-Wadsworth Muni 138kV line and the Barberton-West Akron 138kV line. These two separate locations are located within existing maintained utility easements that course through a recently built housing development and an industrial and recreational area. These areas are previously disturbed, which greatly reduces the potential for intact archaeological deposits. The new structures will be similar in height as the existing ones and will therefore not introduce any new visual impacts. Based on information submitted, 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. Therefore, based on this, it is the SHPO's opinion that no cultural resource studies are warranted for the project. Furthermore, as proposed, the project will have no effect on historic properties. No further coordination is required for this project unless the scope of work changes or archaeological remains are discovered during the course of the project. In such a situation, this office should be contacted as required by 36 CFR § 800.13. If you have any questions concerning this review, please contact me via email at 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. 1111130



**Department of
Natural Resources**
ohiodnr.gov

EXHIBIT 6

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

October 16, 2025

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

Re: 25-1407_Pine-Wadsworth Structure Replacement

Project: The proposed project involves the replacement of several structures along FirstEnergy's Pine-Wadsworth Muni 138kV and Barberton-West Akron 138kV lines.

Location: The proposed project is located in the City of Akron and Copley 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:

Low Umbrella-sedge (*Cyperus diandrus*), T

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 is 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 project is within the vicinity of records for the little brown bat (*Myotis lucifugus*), a state endangered species. Because presence of state endangered bat species has been established in the area, summer tree clearing is not recommended, and additional summer surveys would not constitute presence/absence in the area. However, limited summer tree clearing inside this buffer may be acceptable after further consultation with DOW (contact Eileen Wyza at Eileen.Wyza@dnr.ohio.gov).

In addition, 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 bat species 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. 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.

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 [OHIO DIVISION OF WILDLIFE AND U.S. FISH AND WILDLIFE SERVICE \(OH-FIELD OFFICE\) JOINT GUIDANCE FOR BAT SURVEYS](#). 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 northern harrier (*Circus hudsonius*), a state endangered bird. This is a common migrant and winter species. Nesters are much rarer, although they occasionally breed in large marshes and grasslands. Harriers often nest in loose colonies. The female builds a nest out of sticks on the ground, often on top of a mound. Harriers hunt over grasslands. If this type of habitat will be impacted, construction should be avoided in this habitat during the species' nesting period of April 15 through July 31. If this habitat will not be impacted, 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 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.*

From: Eileen.Wyza@dnr.ohio.gov <Eileen.Wyza@dnr.ohio.gov>
Sent: Tuesday, October 28, 2025 8:02 AM
To: Given, Emma <EGiven@trccompanies.com>
Cc: Adolph, Kayla A <kaadolph@burnsmcd.com>; Molnar, Maggie <MMolnar@trccompanies.com>; Falkinburg, Brad <BFalkinburg@trccompanies.com>
Subject: RE: 25-1407 - TRC Pine-Wadsworth Structure Replacement Project - Desktop Hibernacula Assessment

Hello Emma,

Per review of the desktop survey provided for the TRC Pine-Wadsworth Structure Replacement Project, the Ohio Division of Wildlife concurs with your assessment that no caves, cliffs, or mine openings occur in the project area. Therefore, the project is not likely to impact hibernating bats.

Should any reported conditions change before or during construction, please contact me for additional guidance.

Thank you,

Eileen Wyza, Ph.D.

(she/her/hers)

Wildlife Biologist

Ohio Division of Wildlife

Phone: 614-265-6764

Email: Eileen.Wyza@dnr.ohio.gov



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From: Given, Emma <EGiven@trccompanies.com>
Sent: Monday, October 27, 2025 1:25 PM
To: Wyza, Eileen <Eileen.Wyza@dnr.ohio.gov>
Cc: kaadolph@burnsmcd.com; Molnar, Maggie <MMolnar@trccompanies.com>; Falkinburg, Brad <BFalkinburg@trccompanies.com>
Subject: 25-1407 - TRC Pine-Wadsworth Structure Replacement Project - Desktop Hibernacula Assessment

Hello Eileen,

In response to ODNR's DOW recommendations (attached), TRC completed a desktop habitat assessment to determine if potential hibernaculum is present within FirstEnergy's proposed Pine-Wadsworth Structure Replacement Project located in the City of Akron and Copley Township, Summit County, Ohio.

Please let us know if you have any questions on the provided desktop assessment.

Thank you,

Emma Given, Ph.D., PWS
Ecologist

Planning, Permitting, and Licensing



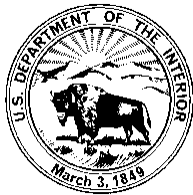
1382 W 9th St, Suite 400, Cleveland, OH 44113

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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



September 18, 2025

Project Code: 2025-0148735

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: Due to the project type, size, location, and the proposed implementation of seasonal tree cutting (clearing of trees ≥ 3 inches diameter at breast height between October 1 and March 31) to avoid impacts to the endangered Indiana bat (*Myotis sodalis*) and northern long-eared bat (*Myotis septentrionalis*), and the proposed endangered tricolored bat (*Perimyotis subflavus*) we do not anticipate adverse effects to any other federally endangered, threatened, or proposed species, or proposed or designated critical habitat. Should the project design change, or additional information on listed or proposed species or their critical habitat become available, or if new information reveals effects of the action that were not previously considered, coordination with the Service should be initiated to assess any potential impacts.

Section 7 Coordination: If there is a federal nexus for the project (e.g., federal funding provided, federal permits required to construct), then no tree clearing should occur on any portion of the project area until consultation under section 7 of the ESA, between the Service and the federal action agency, is completed. We recommend the federal action agency submit a determination of effects to this office, relative to the Indiana bat and northern long-eared bat, for our review and concurrence. This letter provides technical assistance only and does not serve as a completed section 7 consultation document.

Stream and Wetland Avoidance: Over 90% of the wetlands in Ohio have been drained, filled, or modified by human activities, thus is it important to conserve the functions and values of the remaining wetlands in Ohio (https://epa.ohio.gov/portals/47/facts/ohio_wetlands.pdf). We recommend avoiding and minimizing project impacts to all wetland habitats (e.g., forests, streams, vernal pools) to the maximum extent possible in order to benefit water quality and fish and wildlife habitat. Additionally, natural buffers around streams and wetlands should be preserved to enhance beneficial functions. If streams or wetlands will be impacted, the U.S. Army Corps of Engineers should be contacted to determine whether a Clean Water Act section 404 permit is required. Best management practices should be used to minimize erosion, especially on slopes. Disturbed areas should be mulched and revegetated with native plant species. In addition, prevention of non-native, invasive plant establishment is critical in maintaining high quality habitats.

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

Sincerely,

A handwritten signature in cursive script that reads "Erin Knoll".

Erin Knoll
Field Office Supervisor



Photo 1. Priority 1 condition on leg 1 of tower 6699.



Photo 2. Priority 1 condition on leg 3 of tower 6699.

Surface Water Delineation Report

Pine-Wadsworth Structure Replacement Project

Copley Township, Summit County,
Ohio

June 2026

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

Project Manager: Brad Falkinburg, PWS
Phone: (440) 666-2890
Email: BFalkinburg@trccompanies.com

TRC Project Number: 664675 Phase 23



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

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
HUC	Hydrologic Unit Code
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
PEM	Palustrine Emergent
Project	Pine-Wadsworth Structure Replacement Project
Project Study Area	13.134 acres, located in Copley Township, Summit County, Ohio
PWS	Professional Wetland Scientist
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
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
USGS	United States Geological Survey
USFWS	United States Fish and Wildlife Service
WPIT	Wetland Professional In Training

1.0 Introduction

On behalf of FirstEnergy Corporation (FirstEnergy), TRC Environmental Corporation (TRC) performed a surface water delineation for the Pine-Wadsworth Structure Replacement Project (Project). The proposed Project Study Area is 13.134 acres and is located in Copley Township, Summit County, Ohio. The proposed Project involves the replacement of several structures along the Pine-Wadsworth Muni 138kV and Barberton-West Akron 138kV transmission lines. 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**.

TRC personnel performed field investigations to evaluate and delineate surface water resources (i.e., wetlands and streams) located within the Project Study Area on September 16, 2025, and April 1, 2026. 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 between the approximate coordinates: 41.103984, -81.628763 (northern terminus) and 41.097081, -81.627279 (southeastern terminus); in Copley Township, Summit County, Ohio.

The Project Study Area is comprised of an existing, maintained utility and railroad right-of-way (ROW), within industrial and recreational (Copley Community Park) land use. Based upon review of available historic aerial imagery (1985-2015), land use surrounding the Project Study Area in years prior to the field investigations consisted of industrial land use that included excavated areas (pits/quarries). After 2003, the southern extent of the Project Study Area and south of OH-162 (Copley Rd) is community parkland. The Project Study Area is accessed via existing paved roadways. **Appendix A, Figure 1** and **Figure 2**, provide further information on the location of the proposed Project Study Area.

1.1 Statement of Qualifications

TRC has extensive experience managing and conducting wetland delineations and threatened and endangered species habitat surveys across the United States. TRC's biologists and ecologists have been trained to properly and consistently apply the methods set forth in the 1987 Corps of Engineers *Wetland Delineation Manual (1987 Manual)* (USACE, 1987) and applicable regional supplements. They have direct experience identifying and documenting indicators of hydrophytic vegetation, wetland hydrology, and hydric soil and are experienced in dealing with naturally problematic and disturbed conditions. Additionally, they are experienced in reviewing and identifying appropriate habitat conditions for threatened and endangered species.

Leah Cavanaugh, WPIT is a certified Wetland Professional in Training (WPIT) with three (3) years of experience in environmental restoration, habitat assessments, and wetland delineations. She has provided services for projects throughout Ohio, Indiana, South Carolina, New York,

Pennsylvania and Michigan. She has authored delineation reports, ecological survey reports, monitoring reports, and habitat assessment reports. Ms. Cavanaugh authored the Surface Water Delineation Report for this Project. Her experience includes working on projects for a variety of clients within the private and public sector including oil/gas industries, utility industries, non-profit corporations, and state agencies such as the Ohio Department of Transportation and Ohio Department of Natural Resources.

Emilee Sites is an Ecologist and Wetland Scientist with four (4) years of experience in aquatic and terrestrial ecology, wetland delineations, ecological surveys, water quality assessments, technical report writing, and NEPA documentation. Emilee is knowledgeable of reptiles, amphibians, fishes, and macroinvertebrates, as she has a strong ability to identify terrestrial species, macroinvertebrate communities, and other aquatic organisms. She has experience in performing annual monitoring on wetland and stream mitigation sites throughout Ohio. Emilee was a team lead during field investigations for this Project, Her work includes establishing and monitoring vegetation test plots, vegetation identification, vegetation assessments to determine the presence of invasive species as well as native plants using the Field Manual for the Vegetation Index of Biotic Integrity for Wetlands v. 1.5 (OEPA), invasive species treatments, hydrologic assessments, macroinvertebrate sampling and identification, wetland delineations, and production of associated reporting. Mrs. Sites has extensive experience in wetland delineations, including the ability to identify and delineate streams and wetlands in accordance with the most current US Army Corps of Engineers (USACE) Wetlands Delineation Manual throughout Ohio, Indiana, Michigan, and West Virginia.

Erin Van Nort, PWS is a Senior Wetland Scientist with over 20 years of experience working in natural resources and was the principal investigator for this Project. Her credentials include Professional Wetland Scientist (3406) and Pre-Qualified Consultant with the Ohio Department of Transportation for Waterway Permitting and Ecological Services. She is adept at determining wetland and stream quality using the Ohio Environmental Protection Agency (OEPA) methodologies and has negotiated hundreds of permit approvals for Federal §404 Individual, Nationwide Permits, and Ohio §401 permits. She has served as a lead wetland delineator and biologist on a broad array of projects, including solar, gas, transmission line, transportation, and commercial and residential developments, and has authored numerous wetland reports, watershed plans, and grant applications.

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

Delineations were completed following the *1987 Manual* (USACE, 1987) Level 2 Routine Approach (*Part IV, Section D., Subsection 2 - Onsite Inspection Necessary*), including the

determination that normal environmental conditions are present as well as the means and methods laid out within the *Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Northcentral and Northeast Region* (USACE, 2012).

Furthermore, the March 6, 1992, guidance memorandum (Williams, 1992) emphasizes 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 *2022 National Wetland Plant List* (USACE, 2023).

Positive indicators of all three (3) 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 Supplements* provide 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 United States Department of Agriculture – Natural Resources Conservation Service’s (USDA-NRCS) *Field Indicators of Hydric Soils in the United States: A Guide for Identifying and Delineating Hydric Soils Version 9.2* (USDA, NRCS, 2025) were used to identify and document hydric soils per the *Regional Supplements*.

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 (5) 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 September 16, 2025, and April 1, 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. The Surface water delineations were conducted using the Level 2 Federal Routine Determination Method presented in the *1987 Manual and Regional Supplements*, including clarifications and interpretations provided in the March 6, 1992 guidance memorandum (Williams, 1992), and the USACE and Environmental Protection Agency (EPA) guidance on jurisdictional forms (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 and/or auger, generally to a depth of at least 22 inches below the soil surface, until refusal, or positive hydric soil indicators were met above 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 Supplements* 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 Supplements*, 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 Supplements*, 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 (2) 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 (OHWM) and scoured channel or defined bed and banks. The OHWM was delineated based on the OHWM as defined in 33 CFR Part 328.3 and 33 CFR 329.4 (as applicable), in accordance with the Regulatory Guidance Letter No. 05-05 and the *National Ordinary High Water Mark Field Delineation Manual for Rivers and Streams* (USACE, 2005; USACE and EPA, 2025). 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. 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 Huntington District.

The Project Study Area was also investigated for areas that were considered “open water” by the USACE. Open waters within the Project Study Area were delineated based on the USACE, *Regulatory Guidance Letter No. 05-05: Ordinary High Water Mark Identification* (USACE, 2005). According to the USACE, an open water is an area that in a year with normal patterns of precipitation has water flowing or standing above ground to the extent that an OHWM 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.

2.5 OEPA Waterbody Quality Quantification

In addition, 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. 4.33.0 (USGS, 2026).

2.5.1 Qualitative Habitat Evaluation Index

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 upon stream size; for smaller streams (≤ 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 .

2.5.2 Headwater Habitat Evaluation Index

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.

3.0 Results

3.1 Site Description

The Project Study Area is 13.134 acres located in Copley Township, Summit County, Ohio. The Project Study Area is located within the Pigeon Creek (Tuscarawas River) watershed (12-Digit Hydrologic Unit Code: 050400001 0102) (USGS, 2022).

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

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, 2023).

The USGS National Hydrography Dataset (NHD) (USGS, 2018) Downloadable Data Collection from The National Map 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 Flood Insurance Rate Map Panel 39153C0157F (eff. 4/19/2016), the proposed Project is not located within a mapped 100-year floodplain (**Appendix A, Figure 4**) (FEMA, 2024).

The USACE Antecedent Precipitation Tool (APT) Version 3.0 (USACE, 2025) was used to collect 90-day antecedent precipitation data. The following nearby (~9.5 miles or less) weather stations were used for collecting data: 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. This precipitation data, for the approximately 90-day period prior to the field investigation was compared to historical data. Based on this analysis, the antecedent hydrologic conditions were considered to be drier than normal for the September 2025 field visit. Typical conditions for the time of year (dry season) were observed in September 2025, with the drought index indicating a mild drought. Typical conditions for the time of year (wet season) were observed in April 2026, with the drought index indicating a mild drought, but normal conditions. (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 in Project Study Area
CdB	Canfield silt loam, 2 to 6 percent slopes	Non-Hydric	0.305	2.3%
Pq	Pits, quarry	Non-Hydric	1.484	11.3%
ReB	Ravenna silt loam, 2 to 6 percent slopes	Non-Hydric with Hydric Inclusions	0.186	1.4%
Uf	Udorthents, sanitary landfill	Non-Hydric	11.081	84.4%
W	Water	Non-Hydric	0.077	0.6%
Total			13.134	100.0%
Notes: Accessed online June 2026 at: http://websoilsurvey.sc.egov.usda.gov .				

3.2 Surface Water Resource Field Delineations

TRC performed field investigations on September 16, 2025, and April 1, 2026. Weather conditions were considered normal for the dry season in 2025 and wet season in 2026. During the field investigations, overall on-site observations of hydrology revealed normal conditions. The results of the APT are discussed in Section 3.1 and can be found in **Appendix B**. 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 EPA.

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 were 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 ¹	Latitude, Longitude	Delineation Date	Extends Outside Project Study Area (Y/N)?	Cowardin Classification within Study Area ²	Water Regime Modifier ³	Connection ⁴	Apparent Downstream Connectivity ⁵	Provisional Jurisdictional Status ⁶	ORAM Score	ORAM Category ⁷	Approximate Delineated Area within Project Study Area ⁸ (acres)
W-EVN-1	41.099723, -81.629470	09/16/2025	Y	PEM	Seasonally Flooded	Abutting	W-EVN-1 → UNT to Pigeon Creek → Pigeon Creek → Wolf Creek → Tuscarawas River (TNW)	USACE Jurisdictional Wetland	8	Cat. 1	0.171
W-EAS-1	41.097069, -81.628762	04/01/2026	Y	PEM	Seasonally Flooded	Abutting	W-EAS-1 → UNT to Chippewa Creek → Chippewa Creek → Pigeon Creek → Wolf Creek → Tuscarawas River (TNW)	USACE Jurisdictional Wetland	15.5	Cat. 1	0.057
Total:											0.228

NOTES:

¹TRC resource identification.

²Cowardin Wetland Classification within Project Study Area (approximation based upon field identification and delineation) (Cowardin, Carter, Golet, & LaRoe, 1979): PEM – Palustrine Emergent,

³National Wetland Inventory Wetlands and Deepwater Map Code Diagram – Modifiers for non-tidal waters (USFWS, 2019)

⁴Connection to a jurisdictional waterway: Isolated or Abutting as determined by TRC; subject to USACE verification. Wetland connection is pending an update from EPA and USACE based on the EPA vs. Sackett case.

⁵TNW=Traditional Navigable Waterway

⁶Jurisdiction 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.

⁷ORAM Category assigned based on scoring breakpoints from Table 2 of the ORAM v. 5.0 Quantitative Score Calibration.

⁸Area is rounded to nearest 0.001-acre, based upon GPS data.

3.2.2 Streams and Waterbodies

During the field investigations, no streams or waterbodies were delineated 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 will 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, 2026). This Project is located in Copley Township, Summit County, Ohio, within the USACE Huntington Regulatory District. Copley Township in Summit County, Ohio is not listed in Table 1 to Regional General Condition 6(a) (Threatened and Endangered Species), therefore, Regional General Condition 6(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, 2026), a PCN might not be required. NWP 57 under the 2026 program is subject to 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 ≥ 0.10 -acre of wetland. TRC has scored the on-site wetlands as Category 1 and as currently designed temporary impacts are not proposed to be over ≥ 0.10 -acre of wetland.

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.

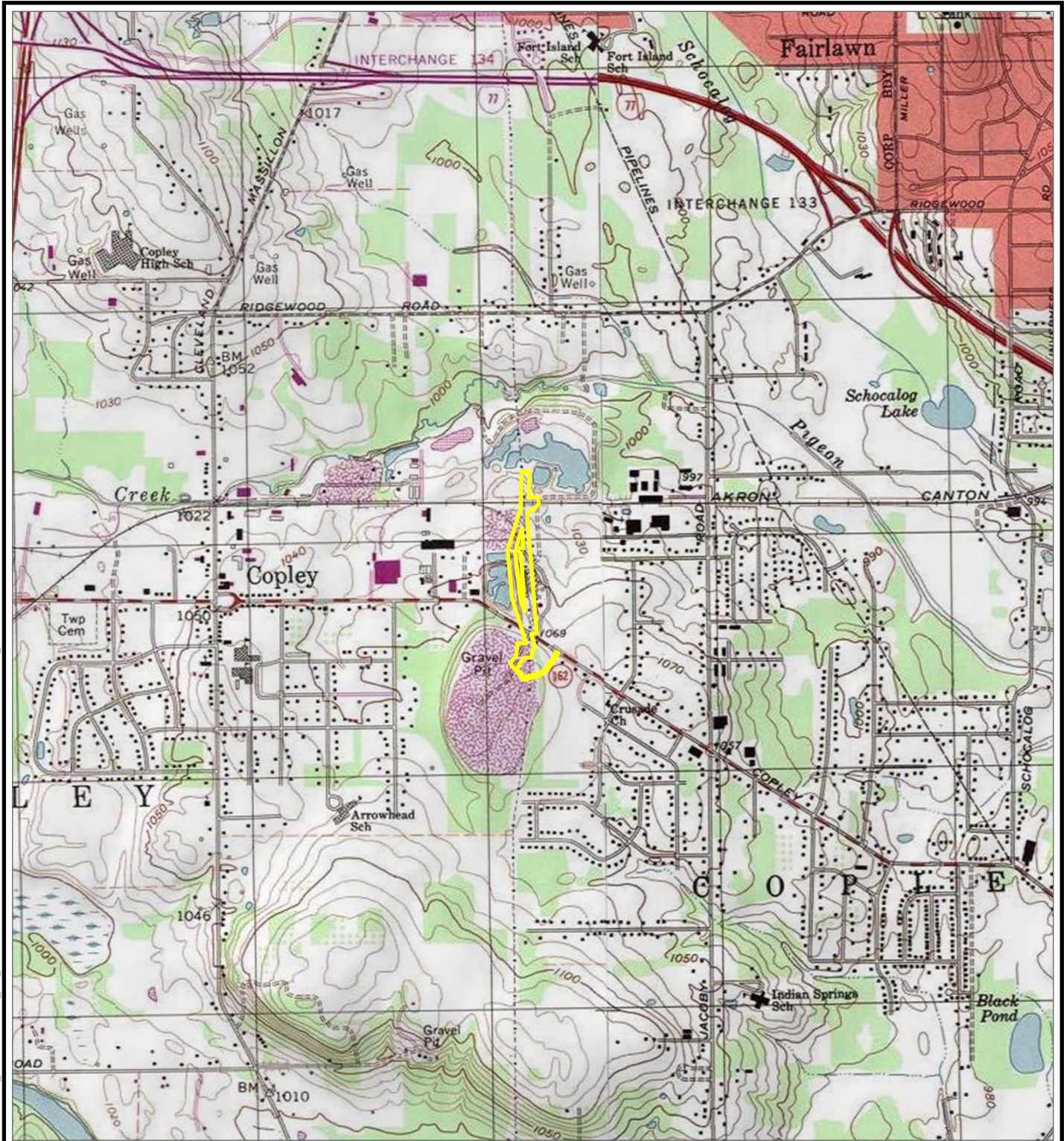
6.0 References

- Cowardin, L., Carter, V., Golet, F., & LaRoe, E. (1979). *Classification of Wetland and Deepwater Habitats of the United States*. 103 pp. U.S. Fish and Wildlife Service.
- Federal Register. (1994, July 13). Changes in hydric soils of the United States.
- FEMA. (2024, March). *FEMA Flood Map Service Center*. Retrieved June 2026, from U.S. Department of Homeland Security: Federal Emergency Management Agency: <https://msc.fema.gov/portal>
- Mack, J. (2000). ORAM v. 5.0 Quantitative Score Calibration. Columbus, Ohio: Ohio Environmental Protection Agency, Division of Surface Water, 401/Wetland Ecology Unit.
- Munsell Color Company. (2009). *X-Rite Munsell Soil Color Book 2009 Revised Edition*.
- OEPA. (2006). *Methods for Assessing Habitat in Flowing Waters: Using the Qualitative Habitat Evaluation Index (QHEI)*. Columbus, OH: Division of Surface Water, Ohio Environmental Protection Agency.
- OEPA. (2020). *Field Methods for Evaluating Primary Headwater Streams in Ohio (Version 4.1) (HHEI)*. Columbus, OH: Division of Surface Water, Ohio Environmental Protection Agency.
- Rankin, E. T. (1989, November 6). *The Qualitative Habitat Evaluation Index (QHEI): Rationale, Methods, and Application*. Columbus, Ohio: Ohio Environmental Protection Agency, Division of Surface Water.
- USACE. (1987). *Corps of Engineers Wetlands Delineation Manual*. Vicksburg, MS: Environmental Laboratory U.S. Army Corps of Engineers.
- USACE. (2005, December 7). Regulatory Guidance Letter No. 05-05: Ordinary High Water Mark Identification.
- USACE. (2008, June 26). Regulatory Guidance Letter, Subject: Jurisdictional Determinations.
- USACE. (2012). *Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Northcentral and Northeast Region (Version 2.0)*. Vicksburg: U.S. Army Engineer Research and Development Center Environmental Laboratory: U.S. Army Corps of Engineers.
- USACE. (2023). *The 2022 National Wetland Plant List, version 3.6*. Retrieved from <http://wetland-plants.usace.army.mil/>
- USACE. (2025). *Antecedent Precipitation Tool (APT) Version 3.0.8. ERDC/TN WRAP-25-1*. Vicksburg, MS: USACE Engineer Research and Development Center. Retrieved June 2026, from APT GitHub repository
- USACE. (2026, January). 91 FR 768. *Nationwide Permits, Regional Conditions and Water Quality Certifications for the State of Ohio*.
- USACE and EPA. (2025, January). *National Ordinary High Water Mark Field Delineation Manual for Rivers and Streams*. (C. R. Laboratory, Ed.) Hanover, NH 03755-1290: The US Army Engineer Research and Development Center.
- USDA, NRCS. (2025). *Field Indicators of Hydric Soils in the United States, Version 9.2*. (L. Vasilas, G. Hurt, & C. Noble, Eds.) USDA, NRCS in cooperation with the National Technical Committee for Hydric Soils.

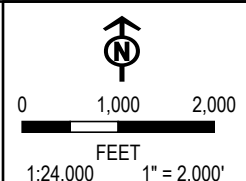
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- USDA-NRCS. (2016). Web Soil Survey. Retrieved June 2026, from <http://websoilsurvey.sc.egov.usda.gov/App/WebSoilSurvey.aspx>
- USFWS. (2019, February 1). Wetlands and Deepwater Habitat Classification Diagram. Retrieved from <https://www.fws.gov/sites/default/files/documents/wetlands-and-deepwater-map-code-diagram.pdf>
- USFWS. (2023). National Wetlands Inventory. Retrieved June 2026, from <http://www.fws.gov/wetlands/Data/Mapper.html>
- USGS. (2018). National Hydrography Dataset. Retrieved June 2026, from <https://nhd.usgs.gov/data.html>
- USGS. (2022, February). *The National Map (TNM)*. Retrieved June 2026, from <https://apps.nationalmap.gov/viewer/>
- USGS. (2023). Topographical Quadrangle Maps (7.5 minute series). *Wadsworth, OH 7.5 minute Quadrangle*. U.S. Geological Survey.
- USGS. (2026). *The StreamStats Program, v 4.33.0*. (U.S. Geological Survey) Retrieved June 2026, from StreamStats Ohio: <https://streamstats.usgs.gov/ss/>
- Williams, A. (1992). Memorandum: Clarification and Interpretation of the 1987 Manual. U.S. Army Corps of Engineers.

Appendix A

Figures



 PROJECT STUDY AREA



BASE MAP: USA TOPO MAPS MAP SERVICE, WADSWORTH QUAD

PROJECT: **FIRSTENERGY - PINE-WADSWORTH
STRUCTURE REPLACEMENT PROJECT
SUMMIT COUNTY, OH**

TITLE: **SITE LOCATION MAP**

DRAWN BY: M. OPEL	PROJ. NO.: 664675 P23
CHECKED BY: M. MOLNAR	FIGURE 1
APPROVED BY: B. FALKINBURG	
DATE: JUNE 2026	

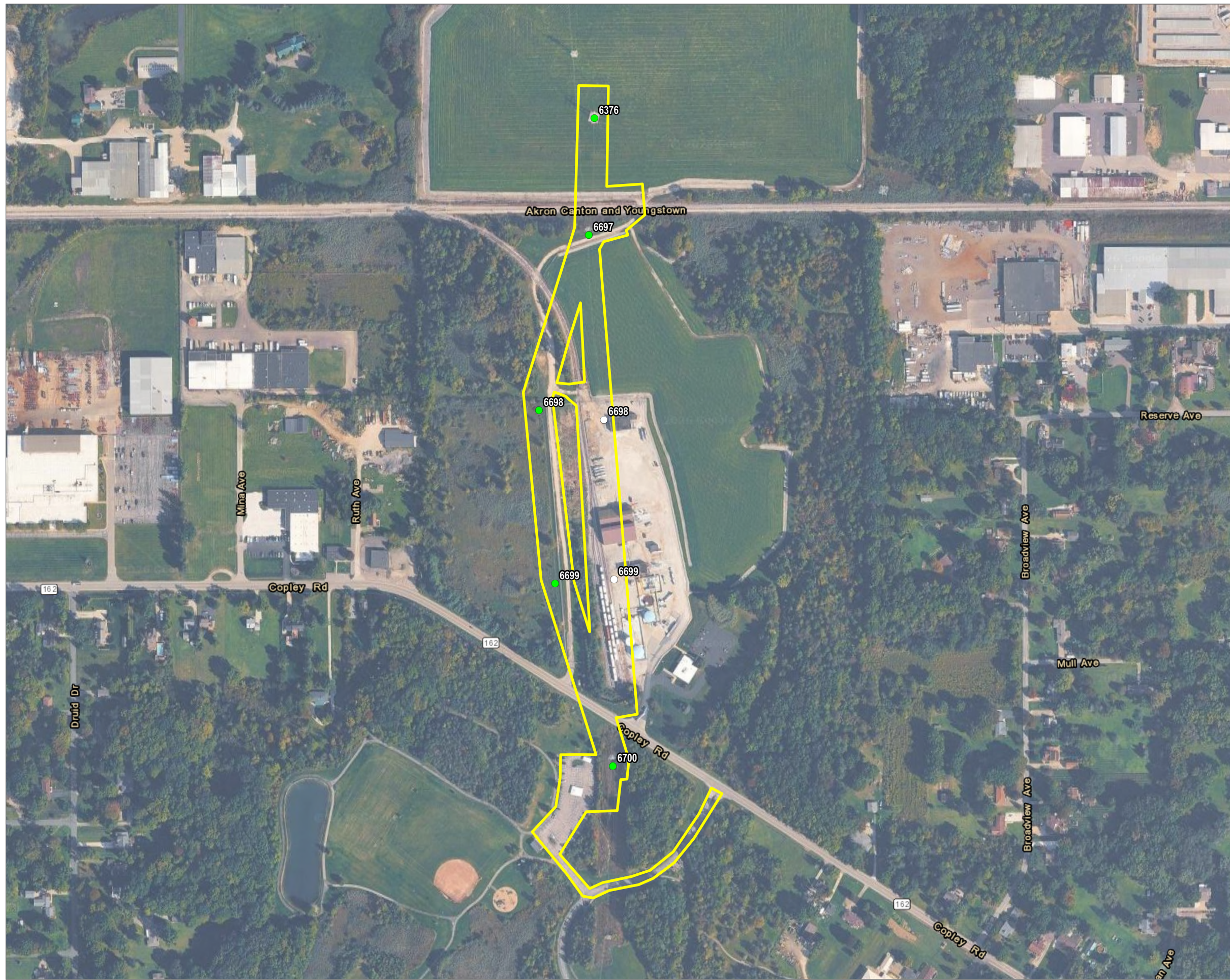


1382 WEST NINTH STREET
SUITE 400
CLEVELAND, OH 44113
PHONE: 216-344-3072

FILE: WDRV2

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- PROJECT STUDY AREA
- EXISTING STRUCTURE
- PROPOSED STRUCTURE

BASE MAP: GOOGLE MAPS.

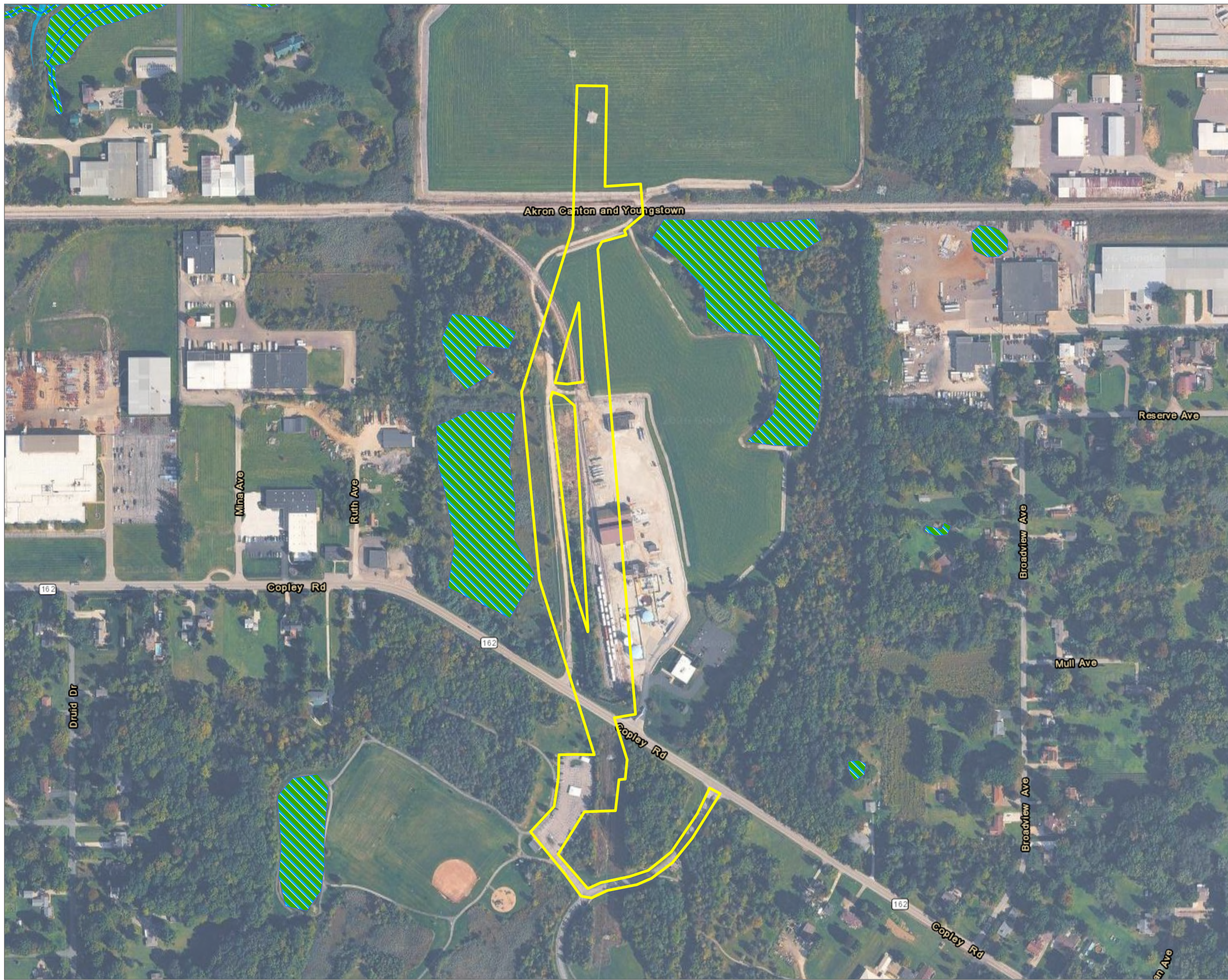


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 1" = 350'



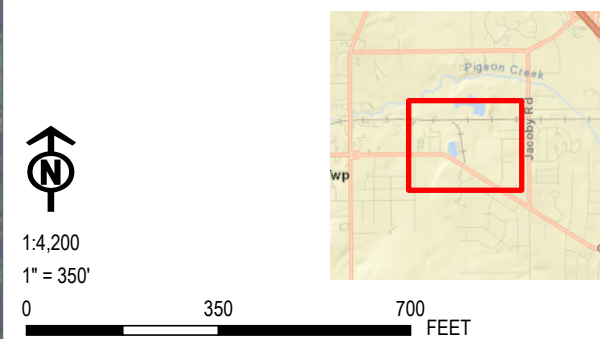
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TITLE: AERIAL MAP	
DRAWN BY: M. OPEL	PROJ. NO.: 664675 P23
CHECKED BY: M. MOLNAR	FIGURE 2
APPROVED BY: B. FALKINBURG	
DATE: JUNE 2026	
1382 WEST NINTH STREET SUITE 400 CLEVELAND, OH 44113 PHONE: 216-344-3072	
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- 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).



PROJECT: FIRSTENERGY - PINE-WADSWORTH STRUCTURE REPLACEMENT PROJECT SUMMIT COUNTY, OH	
TITLE: NHD, NWI AND FEMA FLOODPLAIN MAP	
DRAWN BY: M. OPEL	PROJ. NO.: 664675 P23
CHECKED BY: M. MOLNAR	FIGURE 4
APPROVED BY: B. FALKINBURG	
DATE: JUNE 2026	
1382 WEST NINTH STREET SUITE 400 CLEVELAND, OH 44113 PHONE: 216-344-3072	
FILE:	WDRv2.aprx

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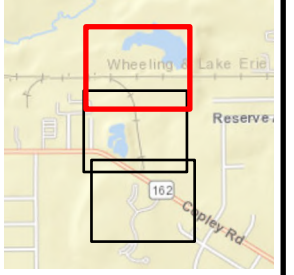
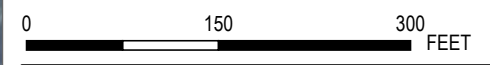


- PROJECT STUDY AREA
- EXISTING STRUCTURE
- PROPOSED STRUCTURE
- ▲ CULVERT
- PEM WETLAND
- WETLAND CONTINUES
- WETLAND DATA POINT
- UPLAND DATA POINT

BASE MAP: GOOGLE MAPS.
 DATA SOURCES: TRC WETLAND DELINEATION COMPLETED SEPTEMBER 16, 2025 & APRIL 1, 2026.



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 1" = 150'



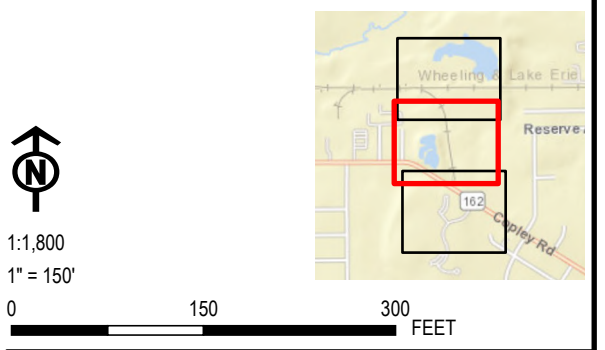
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TITLE: DELINEATED RESOURCES MAP	
DRAWN BY: M. OPEL	PROJ. NO.: 664675 P23
CHECKED BY: M. MOLNAR	FIGURE 5 (PAGE 1 OF 3)
APPROVED BY: B. FALKINBURG	
DATE: JUNE 2026	
TRC	
1382 WEST NINTH STREET SUITE 400 CLEVELAND, OH 44113 PHONE: 216-344-3072	
FILE:	WDRv2.aprx

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- PROJECT STUDY AREA
- EXISTING STRUCTURE
- PROPOSED STRUCTURE
- ▲ CULVERT
- PEM WETLAND
- WETLAND CONTINUES
- WETLAND DATA POINT
- UPLAND DATA POINT

BASE MAP: GOOGLE MAPS.
 DATA SOURCES: TRC WETLAND DELINEATION COMPLETED SEPTEMBER 16, 2025 & APRIL 1, 2026.



PROJECT: FIRSTENERGY - PINE-WADSWORTH STRUCTURE REPLACEMENT PROJECT SUMMIT COUNTY, OH	
TITLE: DELINEATED RESOURCES MAP	
DRAWN BY: M. OPEL	PROJ. NO.: 664675 P23
CHECKED BY: M. MOLNAR	FIGURE 5 (PAGE 2 OF 3)
APPROVED BY: B. FALKINBURG	
DATE: JUNE 2026	
TRC	
1382 WEST NINTH STREET SUITE 400 CLEVELAND, OH 44113 PHONE: 216-344-3072	
FILE:	WDRv2.aprx

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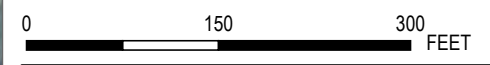


- PROJECT STUDY AREA
- EXISTING STRUCTURE
- PROPOSED STRUCTURE
- ▲ CULVERT
- PEM WETLAND
- WETLAND CONTINUES
- WETLAND DATA POINT
- UPLAND DATA POINT

BASE MAP: GOOGLE MAPS.
 DATA SOURCES: TRC WETLAND DELINEATION COMPLETED SEPTEMBER 16, 2025 & APRIL 1, 2026.



1:1,800
 1" = 150'

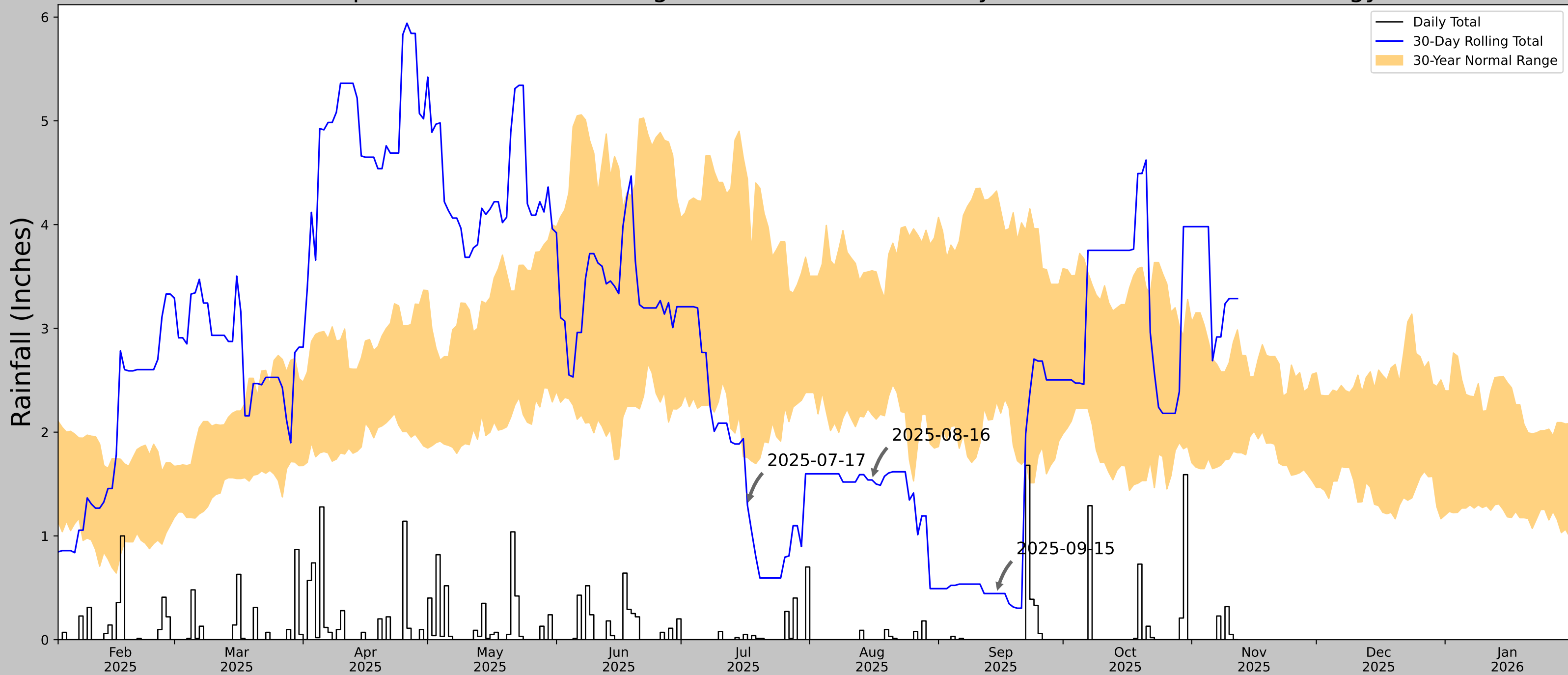


PROJECT: FIRSTENERGY - PINE-WADSWORTH STRUCTURE REPLACEMENT PROJECT SUMMIT COUNTY, OH	
TITLE: DELINEATED RESOURCES MAP	
DRAWN BY: M. OPEL	PROJ. NO.: 664675 P23
CHECKED BY: M. MOLNAR	FIGURE 5 (PAGE 3 OF 3)
APPROVED BY: B. FALKINBURG	
DATE: JUNE 2026	
TRC	
1382 WEST NINTH STREET SUITE 400 CLEVELAND, OH 44113 PHONE: 216-344-3072	
FILE:	WDRv2.aprx

Appendix B

Antecedent Precipitation Tables

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




Coordinates	41.09709, -81.62727
Observation Date	2025-09-15
Elevation (ft)	1067.959
Drought Index (PDSI)	Mild drought (2025-08)
WebWIMP H ₂ O Balance	Dry Season


30 Days Ending	30 th %ile (in)	70 th %ile (in)	Observed (in)	Wetness Condition	Condition Value	Month Weight	Product
2025-09-15	2.293307	4.324016	0.444882	Dry	1	3	3
2025-08-16	2.169685	3.555512	1.53937	Dry	1	2	2
2025-07-17	1.756693	4.438583	1.295276	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	9.491	23.996	4.499	9191	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	3	0
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



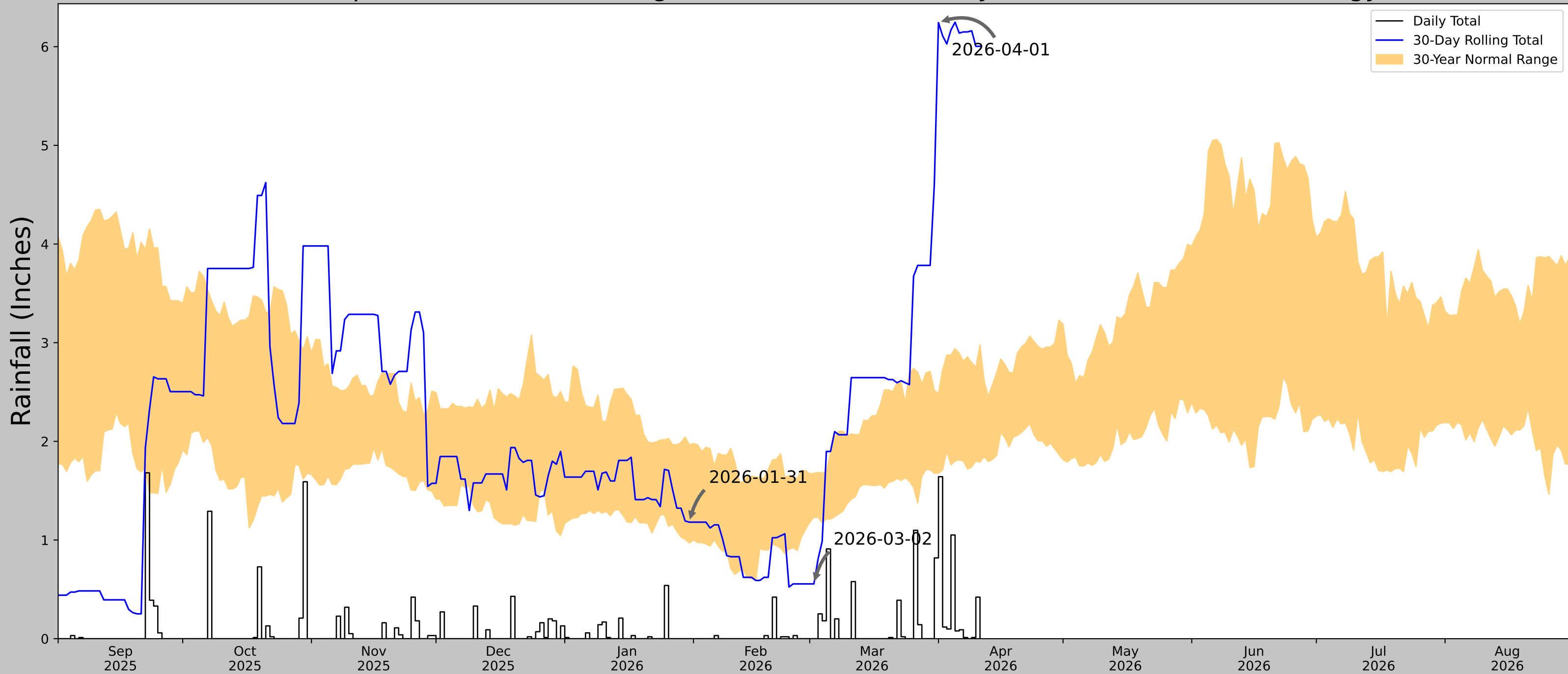
US Army Corps of Engineers



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




Coordinates	41.09715, -81.62875
Observation Date	2026-04-01
Elevation (ft)	1072.557
Drought Index (PDSI)	Mild drought (2026-03)
WebWIMP H ₂ O Balance	Wet Season


30 Days Ending	30 th %ile (in)	70 th %ile (in)	Observed (in)	Wetness Condition	Condition Value	Month Weight	Product
2026-04-01	1.677559	2.483858	6.244095	Wet	3	3	9
2026-03-02	1.230709	1.675984	0.555118	Dry	1	2	2
2026-01-31	0.969685	1.964567	1.181102	Normal	2	1	2
Result							Normal Conditions - 13

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	9.562	28.594	4.576	9550	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	9	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 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

Appendix C

Photographic Record

Client Name: FirstEnergy Corporation	Site Location: Copley Township, Summit County, Ohio	Project No.: 664675 Phase 23
--	---	--

Photo No. 1.

Photo Date:
9/16/2025

Description:
Photo of Wetland W-EVN-1, facing north.



Photo No. 2.

Photo Date:
9/16/2025

Description:
Photo of Wetland W-EVN-1, facing east.



Client Name: FirstEnergy Corporation	Site Location: Copley Township, Summit County, Ohio	Project No.: 664675 Phase 23
--	---	--

Photo No. 3.

Photo Date:
9/16/2025

Description:
Photo of Wetland W-EVN-1, facing south.



Photo No. 4.

Photo Date:
9/16/2025

Description:
Photo of Wetland W-EVN-1, facing west.



Client Name: FirstEnergy Corporation	Site Location: Copley Township, Summit County, Ohio	Project No.: 664675 Phase 23
--	---	--

Photo No. 5.

Photo Date:
4/1/2026

Description:
Photo of Wetland W-EAS-1, facing north.



Photo No. 6.

Photo Date:
4/1/2026

Description:
Photo of Wetland W-EAS-1, facing east.



Client Name: FirstEnergy Corporation	Site Location: Copley Township, Summit County, Ohio	Project No.: 664675 Phase 23
--	---	--

Photo No. 7.

Photo Date:
4/1/2026

Description:
Photo of Wetland W-EAS-1, facing south.



Photo No. 8.

Photo Date:
9/16/2025

Description:
Photo of Wetland W-EAS-1, facing west.



Client Name: FirstEnergy Corporation	Site Location: Copley Township, Summit County, Ohio	Project No.: 664675 Phase 23
--	---	--

Photo No. 9.

Photo Date:
9/16/2025

Description:
Representative photo of the Project Study Area along the northernmost railroad, facing north.



Photo No. 10.

Photo Date:
9/16/2025

Description:
View looking south from the northernmost extent of the Project Study Area.



Client Name: FirstEnergy Corporation	Site Location: Copley Township, Summit County, Ohio	Project No.: 664675 Phase 23
--	---	--

Photo No. 11.

Photo Date:
9/16/2025

Description:
Representative photo of existing access (PVS Chemical Solutions) in the Project Study Area, looking north.



Photo No. 12.

Photo Date:
9/16/2025

Description:
View looking south within the PVS Chemical Solutions property located in the Project Study Area.



Client Name: FirstEnergy Corporation	Site Location: Copley Township, Summit County, Ohio	Project No.: 664675 Phase 23
--	---	--

Photo No. 13.

Photo Date:
4/1/2026

Description:

Representative photograph of upland community within the right-of-way, adjacent to the Copley Township Park parking lot, facing north.



Photo No. 14.

Photo Date:
9/16/2025

Description:

Representative photograph of upland community within the right-of-way, adjacent to the Copley Township Park parking lot, facing north.



Client Name: FirstEnergy Corporation	Site Location: Copley Township, Summit County, Ohio	Project No.: 664675 Phase 23
--	---	--

Photo No. 15.

Photo Date:
9/16/2025

Description:
View of the existing paved lot at Copley Community Park within the Project Study Area, facing west.



Photo No. 16.

Photo Date:
9/16/2025

Description:
Existing access road within Copley Community Park in the Project Study Area, facing east.



Appendix D

Data Forms



**USACE Wetland Determination Data Forms – Northcentral and
Northeast Region**

U.S. Army Corps of Engineers
WETLAND DETERMINATION DATA SHEET – Northcentral and Northeast Region
 See ERDC/EL TR-12-1; the proponent agency is CECW-COR

OMB Control #: 0710-0024, Exp: 09/30/2027
 Requirement Control Symbol EXEMPT:
 (Authority: AR 335-15, paragraph 5-2a)

Project/Site: Pine-Wadsworth Structure Replacement City/County: Copley, Summit County Sampling Date: 2025-9-16
 Applicant/Owner: FirstEnergy State: OH Sampling Point: W-EVN-01_PEM-1
 Investigator(s): Erin Van Nort, William Haas Section, Township, Range: NA
 Landform (hillslope, terrace, etc): Flat Local relief (concave, convex, none): Undulating Slope (%): 0 to 1
 Subregion (LRR or MLRA): MLRA 139 of LRR R Lat: 41.0996475167 Long: -81.6294478 Datum: WGS84
 Soil Map Unit Name: Udorthents, sanitary landfill NWI Classification: None

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

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

Hydrophytic Vegetation Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Is the Sampled Area within a Wetland? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
Hydric Soil Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	
Wetland Hydrology Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	If yes, optional Wetland Site ID: <u>W-EVN-01</u>

Remarks: (Explain alternative procedures here or in a separate report.)
 Covertypes is PEM. Based on the presence of all three parameters, this area is a wetland.

HYDROLOGY

Wetland Hydrology Indicators: Primary Indicators (minimum of one is required; check all that apply)	Secondary Indicators (minimum of two required)
<input type="checkbox"/> Surface Water (A1) <input type="checkbox"/> Water-Stained Leaves (B9) <input type="checkbox"/> High Water Table (A2) <input type="checkbox"/> Aquatic Fauna (B13) <input type="checkbox"/> Saturation (A3) <input type="checkbox"/> Marl Deposits (B15) <input type="checkbox"/> Water Marks (B1) <input type="checkbox"/> Hydrogen Sulfide Odor (C1) <input type="checkbox"/> Sediment Deposits (B2) <input type="checkbox"/> Oxidized Rhizospheres on Living Roots (C3) <input type="checkbox"/> Drift Deposits (B3) <input type="checkbox"/> Presence of Reduced Iron (C4) <input type="checkbox"/> Algal Mat or Crust (B4) <input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6) <input type="checkbox"/> Iron Deposits (B5) <input type="checkbox"/> Thin Muck Surface (C7) <input type="checkbox"/> Inundation Visible on Aerial Imagery (B7) <input type="checkbox"/> Other (Explain in Remarks) <input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)	<input type="checkbox"/> Surface Soil Cracks (B6) <input checked="" type="checkbox"/> Drainage Patterns (B10) <input type="checkbox"/> Moss Trim Lines (B16) <input type="checkbox"/> Dry-Season Water Table (C2) <input type="checkbox"/> Crayfish Burrows (C8) <input type="checkbox"/> Saturation Visible on Aerial Imagery (C9) <input type="checkbox"/> Stunted or Stressed Plants (D1) <input type="checkbox"/> Geomorphic Position (D2) <input type="checkbox"/> Shallow Aquitard (D3) <input type="checkbox"/> Microtopographic Relief (D4) <input checked="" type="checkbox"/> FAC-Neutral Test (D5)

Field Observations: Surface Water Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): _____ Water Table Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): _____ Saturation Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): _____ (includes capillary fringe)	Wetland Hydrology Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
--	---

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

Remarks:
 The criterion for wetland hydrology is met.

VEGETATION – Use scientific names of plants.

Sampling Point: W-EVN-01_PEM-1

Tree Stratum (Plot size: <u>30 ft radius</u>)	Absolute % Cover	Dominant Species?	Indicator Status
1. _____			
2. _____			
3. _____			
4. _____			
5. _____			
6. _____			
7. _____			

Dominance Test worksheet:

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

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

Percent of Dominant Species That Are OBL, FACW, or FAC: 100% (A/B)

	<u>0</u>	= Total Cover	
Sapling/Shrub Stratum (Plot size: <u>15 ft radius</u>)	Absolute % Cover	Dominant Species?	Indicator Status
1. _____			
2. _____			
3. _____			
4. _____			
5. _____			
6. _____			
7. _____			

Prevalence Index worksheet:

Total % Cover of:	Multiply by:
OBL species <u>10</u>	x 1 = <u>10</u>
FACW species <u>75</u>	x 2 = <u>150</u>
FAC species <u>15</u>	x 3 = <u>45</u>
FACU species <u>0</u>	x 4 = <u>0</u>
UPL species <u>0</u>	x 5 = <u>0</u>
Column Totals: <u>100</u> (A)	<u>205</u> (B)

Prevalence Index = B/A = 2.1

	<u>0</u>	= Total Cover	
Herb Stratum (Plot size: <u>5 ft radius</u>)	Absolute % Cover	Dominant Species?	Indicator Status
1. <u>Phragmites australis</u>	<u>50</u>	<u>Yes</u>	<u>FACW</u>
2. <u>Agrostis gigantea</u>	<u>20</u>	<u>Yes</u>	<u>FACW</u>
3. <u>Juncus tenuis</u>	<u>15</u>	<u>No</u>	<u>FAC</u>
4. <u>Carex vulpinoidea</u>	<u>10</u>	<u>No</u>	<u>OBL</u>
5. <u>Juncus torreyi</u>	<u>5</u>	<u>No</u>	<u>FACW</u>
6. _____			
7. _____			
8. _____			
9. _____			
10. _____			
11. _____			
12. _____			

Hydrophytic Vegetation Indicators:

1 - Rapid Test for Hydrophytic Vegetation

2 - Dominance Test is >50%

3 - Prevalence Index is ≤3.0¹

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

Problematic Hydrophytic Vegetation¹ (Explain)

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

	<u>100</u>	= Total Cover	
Woody Vine Stratum (Plot size: <u>30 ft radius</u>)	Absolute % Cover	Dominant Species?	Indicator Status
1. _____			
2. _____			
3. _____			
4. _____			

Definitions of Vegetation Strata:

Tree – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.

Sapling/shrub – Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.

Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.

Woody vines – All woody vines greater than 3.28 ft in height.

Hydrophytic Vegetation Present? Yes No

Remarks: (Include photo numbers here or on a separate sheet.)
The criterion for hydrophytic vegetation is met.

U.S. Army Corps of Engineers
WETLAND DETERMINATION DATA SHEET – Northcentral and Northeast Region
 See ERDC/EL TR-12-1; the proponent agency is CECW-COR

OMB Control #: 0710-0024, Exp: 09/30/2027
 Requirement Control Symbol EXEMPT:
 (Authority: AR 335-15, paragraph 5-2a)

Project/Site: Pine-Wadsworth Structure Replacement City/County: Copley, Summit County Sampling Date: 2025-9-16
 Applicant/Owner: FirstEnergy State: OH Sampling Point: W-EVN-01_UPL-1
 Investigator(s): Erin Van Nort, William Haas Section, Township, Range: NA
 Landform (hillslope, terrace, etc): Flat Local relief (concave, convex, none): None Slope (%): 0 to 1
 Subregion (LRR or MLRA): MLRA 139 of LRR R Lat: 41.0995288167 Long: -81.6294476833 Datum: WGS84
 Soil Map Unit Name: Udorthents, sanitary landfill NWI Classification: None

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

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

Hydrophytic Vegetation Present? Yes No
 Hydric Soil Present? Yes No
 Wetland Hydrology Present? Yes No

Is the Sampled Area within a Wetland? Yes No

If yes, optional Wetland Site ID: W-EVN-01

Remarks: (Explain alternative procedures here or in a separate report.)
 Covertypes is UPL. Based on the absence of all three parameters, this area is an upland.

HYDROLOGY

Wetland Hydrology Indicators:

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

- Surface Water (A1) Water-Stained Leaves (B9)
- High Water Table (A2) Aquatic Fauna (B13)
- Saturation (A3) Marl Deposits (B15)
- Water Marks (B1) Hydrogen Sulfide Odor (C1)
- Sediment Deposits (B2) Oxidized Rhizospheres on Living Roots (C3)
- Drift Deposits (B3) Presence of Reduced Iron (C4)
- Algal Mat or Crust (B4) Recent Iron Reduction in Tilled Soils (C6)
- Iron Deposits (B5) Thin Muck Surface (C7)
- Inundation Visible on Aerial Imagery (B7) Other (Explain in Remarks)
- Sparsely Vegetated Concave Surface (B8)

Secondary Indicators (minimum of two required)

- Surface Soil Cracks (B6)
- Drainage Patterns (B10)
- Moss Trim Lines (B16)
- Dry-Season Water Table (C2)
- Crayfish Burrows (C8)
- Saturation Visible on Aerial Imagery (C9)
- Stunted or Stressed Plants (D1)
- Geomorphic Position (D2)
- Shallow Aquitard (D3)
- Microtopographic Relief (D4)
- FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes No Depth (inches): _____
 Water Table Present? Yes No Depth (inches): _____
 Saturation Present? Yes No Depth (inches): _____
 (includes capillary fringe)

Wetland Hydrology Present? Yes No

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

Remarks:
 The criterion for wetland hydrology is not met.

VEGETATION – Use scientific names of plants.

Sampling Point: W-EVN-01_UPL-1

	Absolute % Cover	Dominant Species?	Indicator Status															
Tree Stratum (Plot size: <u>30 ft radius</u>)				Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: <u>1</u> (A) Total Number of Dominant Species Across All Strata: <u>4</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>25%</u> (A/B)														
1. _____	_____	_____	_____															
2. _____	_____	_____	_____															
3. _____	_____	_____	_____															
4. _____	_____	_____	_____															
5. _____	_____	_____	_____															
6. _____	_____	_____	_____															
7. _____	_____	_____	_____															
0 = Total Cover				Prevalence Index worksheet: <table style="width:100%; border-collapse: collapse;"> <tr> <td style="width:50%; text-align: center;">Total % Cover of:</td> <td style="width:50%; text-align: center;">Multiply by:</td> </tr> <tr> <td>OBL species <u>0</u></td> <td>x 1 = <u>0</u></td> </tr> <tr> <td>FACW species <u>5</u></td> <td>x 2 = <u>10</u></td> </tr> <tr> <td>FAC species <u>40</u></td> <td>x 3 = <u>120</u></td> </tr> <tr> <td>FACU species <u>55</u></td> <td>x 4 = <u>220</u></td> </tr> <tr> <td>UPL species <u>0</u></td> <td>x 5 = <u>0</u></td> </tr> <tr> <td>Column Totals: <u>100</u> (A)</td> <td><u>350</u> (B)</td> </tr> </table> Prevalence Index = B/A = <u>3.5</u>	Total % Cover of:	Multiply by:	OBL species <u>0</u>	x 1 = <u>0</u>	FACW species <u>5</u>	x 2 = <u>10</u>	FAC species <u>40</u>	x 3 = <u>120</u>	FACU species <u>55</u>	x 4 = <u>220</u>	UPL species <u>0</u>	x 5 = <u>0</u>	Column Totals: <u>100</u> (A)	<u>350</u> (B)
Total % Cover of:	Multiply by:																	
OBL species <u>0</u>	x 1 = <u>0</u>																	
FACW species <u>5</u>	x 2 = <u>10</u>																	
FAC species <u>40</u>	x 3 = <u>120</u>																	
FACU species <u>55</u>	x 4 = <u>220</u>																	
UPL species <u>0</u>	x 5 = <u>0</u>																	
Column Totals: <u>100</u> (A)	<u>350</u> (B)																	
Sapling/Shrub Stratum (Plot size: <u>15 ft radius</u>)																		
1. <u>Malus sp.</u>	<u>5</u>	<u>Yes</u>	<u>NI</u>															
2. _____	_____	_____	_____															
3. _____	_____	_____	_____															
4. _____	_____	_____	_____															
5. _____	_____	_____	_____															
6. _____	_____	_____	_____															
7. _____	_____	_____	_____															
5 = Total Cover																		
Herb Stratum (Plot size: <u>5 ft radius</u>)																		
1. <u>Panicum virgatum</u>	<u>25</u>	<u>Yes</u>	<u>FAC</u>															
2. <u>Solidago altissima</u>	<u>20</u>	<u>Yes</u>	<u>FACU</u>															
3. <u>Solidago canadensis</u>	<u>20</u>	<u>Yes</u>	<u>FACU</u>															
4. <u>Euthamia graminifolia</u>	<u>15</u>	<u>No</u>	<u>FAC</u>															
5. <u>Lotus corniculatus</u>	<u>15</u>	<u>No</u>	<u>FACU</u>															
6. <u>Phalaris arundinacea</u>	<u>5</u>	<u>No</u>	<u>FACW</u>															
7. _____	_____	_____	_____															
8. _____	_____	_____	_____															
9. _____	_____	_____	_____															
10. _____	_____	_____	_____															
11. _____	_____	_____	_____															
12. _____	_____	_____	_____															
100 = Total Cover																		
Woody Vine Stratum (Plot size: <u>30 ft radius</u>)																		
1. _____	_____	_____	_____															
2. _____	_____	_____	_____															
3. _____	_____	_____	_____															
4. _____	_____	_____	_____															
0 = Total Cover																		
Definitions of Vegetation Strata: Tree – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height. Sapling/shrub – Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vines – All woody vines greater than 3.28 ft in height.																		
Hydrophytic Vegetation Present? Yes _____ No <input checked="" type="checkbox"/>																		

Remarks: (Include photo numbers here or on a separate sheet.)
 The criterion for hydrophytic vegetation is not met.

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

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²		
0 to 2	10YR 5/3	100					Silt Loam	

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

- | | | |
|---|--|--|
| <p>Hydric Soil Indicators:</p> <ul style="list-style-type: none"> <input type="checkbox"/> Histosol (A1) <input type="checkbox"/> Histic Epipedon (A2) <input type="checkbox"/> Black Histic (A3) <input type="checkbox"/> Hydrogen Sulfide (A4) <input type="checkbox"/> Stratified Layers (A5) <input type="checkbox"/> Depleted Below Dark Surface (A11) <input type="checkbox"/> Thick Dark Surface (A12) <input type="checkbox"/> Iron Monosulfide (A18) <input type="checkbox"/> Mesic Spodic (A17) <input type="checkbox"/> (MLRA 144A, 145, 149B) <input type="checkbox"/> Sandy Mucky Mineral (S1) <input type="checkbox"/> Sandy Gleyed Matrix (S4) <input type="checkbox"/> Sandy Redox (S5) <input type="checkbox"/> Stripped Matrix (S6) | <ul style="list-style-type: none"> <input type="checkbox"/> Dark Surface (S7) <input type="checkbox"/> Polyvalue Below Surface (S8) (LRR R, MLRA 149B) <input type="checkbox"/> Thin Dark Surface (S9) (LRR R, MLRA 149B) <input type="checkbox"/> High Chroma Sands (S11) (LRR K, L) <input type="checkbox"/> Loamy Mucky Mineral (F1) (LRR K, L) <input type="checkbox"/> Loamy Gleyed Matrix (F2) <input type="checkbox"/> Depleted Matrix (F3) <input type="checkbox"/> Redox Dark Surface (F6) <input type="checkbox"/> Depleted Dark Surface (F7) <input type="checkbox"/> Redox Depressions (F8) <input type="checkbox"/> Marl (F10) (LRR K, L) <input type="checkbox"/> Red Parent Material (F21) (MLRA 145) | <p>Indicators for Problematic Hydric Soils³:</p> <ul style="list-style-type: none"> <input type="checkbox"/> 2 cm Muck (A10) (LRR K, L, MLRA 149B) <input type="checkbox"/> 5 cm Muck Peat or Peat (S3) (LRR K, L, R) <input type="checkbox"/> Polyvalue Below Surface (S8) (LRR K, L) <input type="checkbox"/> Thin Dark Surface (S9) (LRR K, L) <input type="checkbox"/> Iron-Manganese Masses (F12) (LRR K, L, R) <input type="checkbox"/> Piedmont Floodplain Soils (F19) (MLRA 149B) <input type="checkbox"/> Red Parent Material (F21) (outside MLRA 145) <input type="checkbox"/> Very Shallow Dark Surface (F22) <input type="checkbox"/> Other (Explain in Remarks) |
|---|--|--|

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

<p>Restrictive Layer (if present): Type: <u>Fill</u> Depth (inches): <u>2</u></p>	<p>Hydric Soil Present? Yes _____ No <input checked="" type="checkbox"/></p>
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Remarks:
 The criterion for hydric soil is not met.

U.S. Army Corps of Engineers
WETLAND DETERMINATION DATA SHEET – Northcentral and Northeast Region
 See ERDC/EL TR-12-1; the proponent agency is CECW-COR

OMB Control #: 0710-0024, Exp: 09/30/2027
 Requirement Control Symbol EXEMPT:
 (Authority: AR 335-15, paragraph 5-2a)

Project/Site: Pine-Wadsworth Structure Replacement City/County: Copley, Summit County Sampling Date: 2026-4-1
 Applicant/Owner: FirstEnergy State: OH Sampling Point: W-EAS-01_PEM-1
 Investigator(s): Emilee Sites, Jeff Vandever Section, Township, Range: NA
 Landform (hillslope, terrace, etc): Depression Local relief (concave, convex, none): Concave Slope (%): 1 to 10
 Subregion (LRR or MLRA): MLRA 139 of LRR R Lat: 41.0970529935 Long: -81.6287664022 Datum: WGS84
 Soil Map Unit Name: Pits, quarry NWI Classification: None

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

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

Hydrophytic Vegetation Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Is the Sampled Area within a Wetland? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
Hydric Soil Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	
Wetland Hydrology Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	If yes, optional Wetland Site ID: <u>W-EAS-01</u>

Remarks: (Explain alternative procedures here or in a separate report.)
 Covertypes is PEM. Based on the presence of the wetland hydrology and hydrophytic vegetation parameters, this area is a wetland.

HYDROLOGY

Wetland Hydrology Indicators: Primary Indicators (minimum of one is required; check all that apply)	Secondary Indicators (minimum of two required)
<input checked="" type="checkbox"/> Surface Water (A1)	<input type="checkbox"/> Surface Soil Cracks (B6)
<input checked="" type="checkbox"/> High Water Table (A2)	<input checked="" type="checkbox"/> Drainage Patterns (B10)
<input checked="" type="checkbox"/> Saturation (A3)	<input type="checkbox"/> Moss Trim Lines (B16)
<input checked="" type="checkbox"/> Water Marks (B1)	<input type="checkbox"/> Dry-Season Water Table (C2)
<input type="checkbox"/> Sediment Deposits (B2)	<input type="checkbox"/> Crayfish Burrows (C8)
<input type="checkbox"/> Drift Deposits (B3)	<input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)
<input type="checkbox"/> Algal Mat or Crust (B4)	<input type="checkbox"/> Stunted or Stressed Plants (D1)
<input type="checkbox"/> Iron Deposits (B5)	<input checked="" type="checkbox"/> Geomorphic Position (D2)
<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)	<input type="checkbox"/> Shallow Aquitard (D3)
<input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)	<input type="checkbox"/> Microtopographic Relief (D4)
<input checked="" type="checkbox"/> Water-Stained Leaves (B9)	<input checked="" type="checkbox"/> FAC-Neutral Test (D5)
<input type="checkbox"/> Aquatic Fauna (B13)	
<input type="checkbox"/> Marl Deposits (B15)	
<input type="checkbox"/> Hydrogen Sulfide Odor (C1)	
<input type="checkbox"/> Oxidized Rhizospheres on Living Roots (C3)	
<input type="checkbox"/> Presence of Reduced Iron (C4)	
<input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)	
<input type="checkbox"/> Thin Muck Surface (C7)	
<input type="checkbox"/> Other (Explain in Remarks)	

Field Observations:	Wetland Hydrology Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
Surface Water Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Depth (inches): <u>6</u>	
Water Table Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Depth (inches): <u>0</u>	
Saturation Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Depth (inches): <u>0</u> (includes capillary fringe)	

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

Remarks:
 The criterion for wetland hydrology is met.

VEGETATION – Use scientific names of plants.

Sampling Point: W-EAS-01_PEM-1

	Absolute % Cover	Dominant Species?	Indicator Status															
Tree Stratum (Plot size: <u>30 ft radius</u>)				Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: <u>1</u> (A) Total Number of Dominant Species Across All Strata: <u>1</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>100%</u> (A/B)														
1. _____																		
2. _____																		
3. _____																		
4. _____																		
5. _____																		
6. _____																		
7. _____																		
	<u>0</u>	= Total Cover																
Sapling/Shrub Stratum (Plot size: <u>15 ft radius</u>)					Prevalence Index worksheet: <table style="width:100%; border-collapse: collapse;"> <tr> <td style="width:50%; text-align: center;">Total % Cover of:</td> <td style="width:50%; text-align: center;">Multiply by:</td> </tr> <tr> <td>OBL species <u>7</u></td> <td>x 1 = <u>7</u></td> </tr> <tr> <td>FACW species <u>93</u></td> <td>x 2 = <u>186</u></td> </tr> <tr> <td>FAC species <u>0</u></td> <td>x 3 = <u>0</u></td> </tr> <tr> <td>FACU species <u>0</u></td> <td>x 4 = <u>0</u></td> </tr> <tr> <td>UPL species <u>0</u></td> <td>x 5 = <u>0</u></td> </tr> <tr> <td>Column Totals: <u>100</u> (A)</td> <td><u>193</u> (B)</td> </tr> </table> Prevalence Index = B/A = <u>1.9</u>	Total % Cover of:	Multiply by:	OBL species <u>7</u>	x 1 = <u>7</u>	FACW species <u>93</u>	x 2 = <u>186</u>	FAC species <u>0</u>	x 3 = <u>0</u>	FACU species <u>0</u>	x 4 = <u>0</u>	UPL species <u>0</u>	x 5 = <u>0</u>	Column Totals: <u>100</u> (A)
Total % Cover of:	Multiply by:																	
OBL species <u>7</u>	x 1 = <u>7</u>																	
FACW species <u>93</u>	x 2 = <u>186</u>																	
FAC species <u>0</u>	x 3 = <u>0</u>																	
FACU species <u>0</u>	x 4 = <u>0</u>																	
UPL species <u>0</u>	x 5 = <u>0</u>																	
Column Totals: <u>100</u> (A)	<u>193</u> (B)																	
1. _____																		
2. _____																		
3. _____																		
4. _____																		
5. _____																		
6. _____																		
7. _____																		
	<u>0</u>	= Total Cover																
Herb Stratum (Plot size: <u>5 ft radius</u>)																		
1. <i>Phragmites australis</i>	90	Yes	FACW															
2. <i>Juncus effusus</i>	7	No	OBL															
3. <i>Poa palustris</i>	3	No	FACW															
4. _____																		
5. _____																		
6. _____																		
7. _____																		
8. _____																		
9. _____																		
10. _____																		
11. _____																		
12. _____																		
	<u>100</u>	= Total Cover																
Woody Vine Stratum (Plot size: <u>30 ft radius</u>)																		
1. _____																		
2. _____																		
3. _____																		
4. _____																		
	<u>0</u>	= Total Cover																
Definitions of Vegetation Strata: Tree – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height. Sapling/shrub – Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vines – All woody vines greater than 3.28 ft in height.																		
Hydrophytic Vegetation Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>																		

Remarks: (Include photo numbers here or on a separate sheet.)
 The criterion for hydrophytic vegetation is met.

U.S. Army Corps of Engineers
WETLAND DETERMINATION DATA SHEET – Northcentral and Northeast Region
 See ERDC/EL TR-12-1; the proponent agency is CECW-COR

OMB Control #: 0710-0024, Exp: 09/30/2027
 Requirement Control Symbol EXEMPT:
 (Authority: AR 335-15, paragraph 5-2a)

Project/Site: Pine-Wadsworth Structure Replacement City/County: Copley, Summit County Sampling Date: 2026-4-1
 Applicant/Owner: FirstEnergy State: OH Sampling Point: W-EAS-01_UPL-1
 Investigator(s): Emilee Sites, Jeff Vandever Section, Township, Range: NA
 Landform (hillslope, terrace, etc): Hillslope Local relief (concave, convex, none): Undulating Slope (%): 10 to 20
 Subregion (LRR or MLRA): MLRA 139 of LRR R Lat: 41.0970458023 Long: -81.6286421601 Datum: WGS84
 Soil Map Unit Name: Canfield silt loam, 2 to 6 percent slopes NWI Classification: _____

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

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

Hydrophytic Vegetation Present? Yes _____ No <input checked="" type="checkbox"/>	Is the Sampled Area within a Wetland? Yes _____ No <input checked="" type="checkbox"/> If yes, optional Wetland Site ID: _____
Hydric Soil Present? Yes _____ No <input checked="" type="checkbox"/>	
Wetland Hydrology Present? Yes _____ No <input checked="" type="checkbox"/>	

Remarks: (Explain alternative procedures here or in a separate report.)
 Covertypes is UPL. Based on the absence of all three parameters, this area is an upland. Soil has been disturbed through grading and recent construction.

HYDROLOGY

Wetland Hydrology Indicators: Primary Indicators (minimum of one is required; check all that apply) <input type="checkbox"/> Surface Water (A1) <input type="checkbox"/> Water-Stained Leaves (B9) <input type="checkbox"/> High Water Table (A2) <input type="checkbox"/> Aquatic Fauna (B13) <input type="checkbox"/> Saturation (A3) <input type="checkbox"/> Marl Deposits (B15) <input type="checkbox"/> Water Marks (B1) <input type="checkbox"/> Hydrogen Sulfide Odor (C1) <input type="checkbox"/> Sediment Deposits (B2) <input type="checkbox"/> Oxidized Rhizospheres on Living Roots (C3) <input type="checkbox"/> Drift Deposits (B3) <input type="checkbox"/> Presence of Reduced Iron (C4) <input type="checkbox"/> Algal Mat or Crust (B4) <input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6) <input type="checkbox"/> Iron Deposits (B5) <input type="checkbox"/> Thin Muck Surface (C7) <input type="checkbox"/> Inundation Visible on Aerial Imagery (B7) <input type="checkbox"/> Other (Explain in Remarks) <input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)	Secondary Indicators (minimum of two required) <input type="checkbox"/> Surface Soil Cracks (B6) <input type="checkbox"/> Drainage Patterns (B10) <input type="checkbox"/> Moss Trim Lines (B16) <input type="checkbox"/> Dry-Season Water Table (C2) <input type="checkbox"/> Crayfish Burrows (C8) <input type="checkbox"/> Saturation Visible on Aerial Imagery (C9) <input type="checkbox"/> Stunted or Stressed Plants (D1) <input type="checkbox"/> Geomorphic Position (D2) <input type="checkbox"/> Shallow Aquitard (D3) <input type="checkbox"/> Microtopographic Relief (D4) <input type="checkbox"/> FAC-Neutral Test (D5)
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Field Observations: Surface Water Present? Yes _____ No <input checked="" type="checkbox"/> Depth (inches): _____ Water Table Present? Yes _____ No <input checked="" type="checkbox"/> Depth (inches): _____ Saturation Present? Yes _____ No <input checked="" type="checkbox"/> Depth (inches): _____ (includes capillary fringe)	Wetland Hydrology Present? Yes _____ No <input checked="" type="checkbox"/>
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Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:
 The criterion for wetland hydrology is not met.

VEGETATION – Use scientific names of plants.

Sampling Point: W-EAS-01_UPL-1

Tree Stratum (Plot size: <u>30 ft radius</u>)	Absolute % Cover	Dominant Species?	Indicator Status
1. _____	_____	_____	_____
2. _____	_____	_____	_____
3. _____	_____	_____	_____
4. _____	_____	_____	_____
5. _____	_____	_____	_____
6. _____	_____	_____	_____
7. _____	_____	_____	_____

Dominance Test worksheet:
 Number of Dominant Species That Are OBL, FACW, or FAC: 0 (A)
 Total Number of Dominant Species Across All Strata: 3 (B)
 Percent of Dominant Species That Are OBL, FACW, or FAC: 0% (A/B)

Sapling/Shrub Stratum (Plot size: <u>15 ft radius</u>)	Absolute % Cover	Dominant Species?	Indicator Status
1. <u>Lonicera morrowii</u>	<u>10</u>	<u>Yes</u>	<u>FACU</u>
2. <u>Lonicera japonica</u>	<u>10</u>	<u>Yes</u>	<u>FACU</u>
3. _____	_____	_____	_____
4. _____	_____	_____	_____
5. _____	_____	_____	_____
6. _____	_____	_____	_____
7. _____	_____	_____	_____

Prevalence Index worksheet:

Total % Cover of:	Multiply by:
OBL species <u>0</u>	x 1 = <u>0</u>
FACW species <u>0</u>	x 2 = <u>0</u>
FAC species <u>0</u>	x 3 = <u>0</u>
FACU species <u>95</u>	x 4 = <u>380</u>
UPL species <u>10</u>	x 5 = <u>50</u>
Column Totals: <u>105</u> (A)	<u>430</u> (B)

Prevalence Index = B/A = 4.1

Herb Stratum (Plot size: <u>5 ft radius</u>)	Absolute % Cover	Dominant Species?	Indicator Status
1. <u>Poa annua</u>	<u>70</u>	<u>Yes</u>	<u>FACU</u>
2. <u>Verbascum thapsus</u>	<u>10</u>	<u>No</u>	<u>UPL</u>
3. <u>Rubus allegheniensis</u>	<u>5</u>	<u>No</u>	<u>FACU</u>
4. _____	_____	_____	_____
5. _____	_____	_____	_____
6. _____	_____	_____	_____
7. _____	_____	_____	_____
8. _____	_____	_____	_____
9. _____	_____	_____	_____
10. _____	_____	_____	_____
11. _____	_____	_____	_____
12. _____	_____	_____	_____

Hydrophytic Vegetation Indicators:

 1 - Rapid Test for Hydrophytic Vegetation
 2 - Dominance Test is >50%
 3 - Prevalence Index is ≤3.0¹
 4 - Morphological Adaptations¹ (Provide supporting data in Remarks or on a separate sheet)
 Problematic Hydrophytic Vegetation¹ (Explain)

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

Woody Vine Stratum (Plot size: <u>30 ft radius</u>)	Absolute % Cover	Dominant Species?	Indicator Status
1. _____	_____	_____	_____
2. _____	_____	_____	_____
3. _____	_____	_____	_____
4. _____	_____	_____	_____

Definitions of Vegetation Strata:

Tree – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.
Sapling/shrub – Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.
Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.
Woody vines – All woody vines greater than 3.28 ft in height.

Hydrophytic Vegetation Present? Yes _____ No

Remarks: (Include photo numbers here or on a separate sheet.)
 The criterion for hydrophytic vegetation is not met.

U.S. Army Corps of Engineers
WETLAND DETERMINATION DATA SHEET – Northcentral and Northeast Region
 See ERDC/EL TR-12-1; the proponent agency is CECW-COR

OMB Control #: 0710-0024, Exp: 09/30/2027
 Requirement Control Symbol EXEMPT:
 (Authority: AR 335-15, paragraph 5-2a)

Project/Site: Pine-Wadsworth Structure Replacement City/County: Copley, Summit County Sampling Date: 2025-9-16
 Applicant/Owner: FirstEnergy State: OH Sampling Point: U-EVN-01
 Investigator(s): Erin Van Nort, William Haas Section, Township, Range: NA
 Landform (hillslope, terrace, etc): Back slope Local relief (concave, convex, none): None Slope (%): 1 to 3
 Subregion (LRR or MLRA): MLRA 139 of LRR R Lat: 41.0980688987 Long: -81.6286455778 Datum: WGS84
 Soil Map Unit Name: Udorthents, sanitary landfill NWI Classification: None

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

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

Hydrophytic Vegetation Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Is the Sampled Area within a Wetland? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
Hydric Soil Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	
Wetland Hydrology Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	If yes, optional Wetland Site ID: <u>U-EVN-01</u>

Remarks: (Explain alternative procedures here or in a separate report.)
 Covertypes is UPL. Based on the absence of all three parameters, this area is an upland.

HYDROLOGY

Wetland Hydrology Indicators: Primary Indicators (minimum of one is required; check all that apply) <input type="checkbox"/> Surface Water (A1) <input type="checkbox"/> Water-Stained Leaves (B9) <input type="checkbox"/> High Water Table (A2) <input type="checkbox"/> Aquatic Fauna (B13) <input type="checkbox"/> Saturation (A3) <input type="checkbox"/> Marl Deposits (B15) <input type="checkbox"/> Water Marks (B1) <input type="checkbox"/> Hydrogen Sulfide Odor (C1) <input type="checkbox"/> Sediment Deposits (B2) <input type="checkbox"/> Oxidized Rhizospheres on Living Roots (C3) <input type="checkbox"/> Drift Deposits (B3) <input type="checkbox"/> Presence of Reduced Iron (C4) <input type="checkbox"/> Algal Mat or Crust (B4) <input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6) <input type="checkbox"/> Iron Deposits (B5) <input type="checkbox"/> Thin Muck Surface (C7) <input type="checkbox"/> Inundation Visible on Aerial Imagery (B7) <input type="checkbox"/> Other (Explain in Remarks) <input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)	Secondary Indicators (minimum of two required) <input type="checkbox"/> Surface Soil Cracks (B6) <input type="checkbox"/> Drainage Patterns (B10) <input type="checkbox"/> Moss Trim Lines (B16) <input type="checkbox"/> Dry-Season Water Table (C2) <input type="checkbox"/> Crayfish Burrows (C8) <input type="checkbox"/> Saturation Visible on Aerial Imagery (C9) <input type="checkbox"/> Stunted or Stressed Plants (D1) <input type="checkbox"/> Geomorphic Position (D2) <input type="checkbox"/> Shallow Aquitard (D3) <input type="checkbox"/> Microtopographic Relief (D4) <input type="checkbox"/> FAC-Neutral Test (D5)
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Field Observations: Surface Water Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): _____ Water Table Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): _____ Saturation Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): _____ (includes capillary fringe)	Wetland Hydrology Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
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Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:
 The criterion for wetland hydrology is not met.

VEGETATION – Use scientific names of plants.

Sampling Point: U-EVN-01

	Absolute % Cover	Dominant Species?	Indicator Status																																								
Tree Stratum (Plot size: <u>30 ft radius</u>)				Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: <u>0</u> (A) Total Number of Dominant Species Across All Strata: <u>5</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>0%</u> (A/B)																																							
1. _____	_____	_____	_____																																								
2. _____	_____	_____	_____																																								
3. _____	_____	_____	_____																																								
4. _____	_____	_____	_____																																								
5. _____	_____	_____	_____																																								
6. _____	_____	_____	_____																																								
7. _____	_____	_____	_____																																								
0 = Total Cover				Prevalence Index worksheet: <table style="width:100%; border-collapse: collapse;"> <thead> <tr> <th style="width:40%;"></th> <th style="width:10%;">Total % Cover of:</th> <th style="width:10%;"></th> <th style="width:10%;">Multiply by:</th> <th style="width:10%;"></th> </tr> </thead> <tbody> <tr> <td>OBL species</td> <td><u>5</u></td> <td>x 1 =</td> <td><u>5</u></td> <td></td> </tr> <tr> <td>FACW species</td> <td><u>0</u></td> <td>x 2 =</td> <td><u>0</u></td> <td></td> </tr> <tr> <td>FAC species</td> <td><u>0</u></td> <td>x 3 =</td> <td><u>0</u></td> <td></td> </tr> <tr> <td>FACU species</td> <td><u>95</u></td> <td>x 4 =</td> <td><u>380</u></td> <td></td> </tr> <tr> <td>UPL species</td> <td><u>0</u></td> <td>x 5 =</td> <td><u>0</u></td> <td></td> </tr> <tr> <td>Column Totals:</td> <td><u>100</u> (A)</td> <td></td> <td><u>385</u> (B)</td> <td></td> </tr> <tr> <td colspan="4" style="text-align: right;">Prevalence Index = B/A = <u>3.9</u></td> </tr> </tbody> </table>		Total % Cover of:		Multiply by:		OBL species	<u>5</u>	x 1 =	<u>5</u>		FACW species	<u>0</u>	x 2 =	<u>0</u>		FAC species	<u>0</u>	x 3 =	<u>0</u>		FACU species	<u>95</u>	x 4 =	<u>380</u>		UPL species	<u>0</u>	x 5 =	<u>0</u>		Column Totals:	<u>100</u> (A)		<u>385</u> (B)		Prevalence Index = B/A = <u>3.9</u>			
	Total % Cover of:		Multiply by:																																								
OBL species	<u>5</u>	x 1 =	<u>5</u>																																								
FACW species	<u>0</u>	x 2 =	<u>0</u>																																								
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UPL species	<u>0</u>	x 5 =	<u>0</u>																																								
Column Totals:	<u>100</u> (A)		<u>385</u> (B)																																								
Prevalence Index = B/A = <u>3.9</u>																																											
Sapling/Shrub Stratum (Plot size: <u>15 ft radius</u>)																																											
1. <u>Lonicera morrowii</u>	<u>35</u>	<u>Yes</u>	<u>FACU</u>																																								
2. <u>Rubus allegheniensis</u>	<u>10</u>	<u>Yes</u>	<u>FACU</u>																																								
3. _____	_____	_____	_____																																								
4. _____	_____	_____	_____																																								
5. _____	_____	_____	_____																																								
6. _____	_____	_____	_____																																								
7. _____	_____	_____	_____																																								
45 = Total Cover																																											
Herb Stratum (Plot size: <u>5 ft radius</u>)																																											
1. <u>Solidago canadensis</u>	<u>20</u>	<u>Yes</u>	<u>FACU</u>																																								
2. <u>Solidago altissima</u>	<u>15</u>	<u>Yes</u>	<u>FACU</u>																																								
3. <u>Dipsacus fullonum</u>	<u>15</u>	<u>Yes</u>	<u>FACU</u>																																								
4. <u>Isoetes novae-angliae</u>	<u>5</u>	<u>No</u>	<u>OBL</u>																																								
5. _____	_____	_____	_____																																								
6. _____	_____	_____	_____																																								
7. _____	_____	_____	_____																																								
8. _____	_____	_____	_____																																								
9. _____	_____	_____	_____																																								
10. _____	_____	_____	_____																																								
11. _____	_____	_____	_____																																								
12. _____	_____	_____	_____																																								
55 = Total Cover																																											
Woody Vine Stratum (Plot size: <u>30 ft radius</u>)																																											
1. _____	_____	_____	_____																																								
2. _____	_____	_____	_____																																								
3. _____	_____	_____	_____																																								
4. _____	_____	_____	_____																																								
0 = Total Cover																																											
Definitions of Vegetation Strata: Tree – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height. Sapling/shrub – Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vines – All woody vines greater than 3.28 ft in height.																																											
Hydrophytic Vegetation Present? Yes _____ No <input checked="" type="checkbox"/>																																											

Remarks: (Include photo numbers here or on a separate sheet.)
 The criterion for hydrophytic vegetation is not met.

U.S. Army Corps of Engineers
WETLAND DETERMINATION DATA SHEET – Northcentral and Northeast Region
 See ERDC/EL TR-12-1; the proponent agency is CECW-COR

OMB Control #: 0710-0024, Exp: 09/30/2027
 Requirement Control Symbol EXEMPT:
 (Authority: AR 335-15, paragraph 5-2a)

Project/Site: Pine-Wadsworth Structure Replacement City/County: Copley, Summit County Sampling Date: 2025-9-16
 Applicant/Owner: FirstEnergy State: OH Sampling Point: U-EVN-02
 Investigator(s): Erin Van Nort, William Haas Section, Township, Range: NA
 Landform (hillslope, terrace, etc): Back slope Local relief (concave, convex, none): None Slope (%): 1 to 10
 Subregion (LRR or MLRA): MLRA 139 of LRR R Lat: 41.0986264833 Long: -81.6288609667 Datum: WGS84
 Soil Map Unit Name: Udorthents, sanitary landfill NWI Classification: None

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

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

Hydrophytic Vegetation Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Hydric Soil Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Wetland Hydrology Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Is the Sampled Area within a Wetland? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> If yes, optional Wetland Site ID: <u>U-EVN-02</u>
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Remarks: (Explain alternative procedures here or in a separate report.)
 Covertypes is UPL. Based on the absence of all three parameters, this area is an upland.

HYDROLOGY

Wetland Hydrology Indicators: Primary Indicators (minimum of one is required; check all that apply) <input type="checkbox"/> Surface Water (A1) <input type="checkbox"/> Water-Stained Leaves (B9) <input type="checkbox"/> High Water Table (A2) <input type="checkbox"/> Aquatic Fauna (B13) <input type="checkbox"/> Saturation (A3) <input type="checkbox"/> Marl Deposits (B15) <input type="checkbox"/> Water Marks (B1) <input type="checkbox"/> Hydrogen Sulfide Odor (C1) <input type="checkbox"/> Sediment Deposits (B2) <input type="checkbox"/> Oxidized Rhizospheres on Living Roots (C3) <input type="checkbox"/> Drift Deposits (B3) <input type="checkbox"/> Presence of Reduced Iron (C4) <input type="checkbox"/> Algal Mat or Crust (B4) <input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6) <input type="checkbox"/> Iron Deposits (B5) <input type="checkbox"/> Thin Muck Surface (C7) <input type="checkbox"/> Inundation Visible on Aerial Imagery (B7) <input type="checkbox"/> Other (Explain in Remarks) <input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)	Secondary Indicators (minimum of two required) <input type="checkbox"/> Surface Soil Cracks (B6) <input type="checkbox"/> Drainage Patterns (B10) <input type="checkbox"/> Moss Trim Lines (B16) <input type="checkbox"/> Dry-Season Water Table (C2) <input type="checkbox"/> Crayfish Burrows (C8) <input type="checkbox"/> Saturation Visible on Aerial Imagery (C9) <input type="checkbox"/> Stunted or Stressed Plants (D1) <input type="checkbox"/> Geomorphic Position (D2) <input type="checkbox"/> Shallow Aquitard (D3) <input type="checkbox"/> Microtopographic Relief (D4) <input type="checkbox"/> FAC-Neutral Test (D5)
---	--

Field Observations: Surface Water Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): _____ Water Table Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): _____ Saturation Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): _____ (includes capillary fringe)	Wetland Hydrology Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
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Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:
 The criterion for wetland hydrology is not met.

VEGETATION – Use scientific names of plants.

Sampling Point: U-EVN-02

	Absolute % Cover	Dominant Species?	Indicator Status															
Tree Stratum (Plot size: <u>30 ft radius</u>)				Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: <u>1</u> (A) Total Number of Dominant Species Across All Strata: <u>4</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>25%</u> (A/B)														
1. <u><i>Pinus strobus</i></u>	35	Yes	FACU															
2. <u><i>Fraxinus americana</i></u>	15	Yes	FACU															
3. <u><i>Prunus serotina</i></u>	15	Yes	FACU															
4. <u><i>Elaeagnus umbellata</i></u>	10	No	NI															
5. <u><i>Frangula alnus</i></u>	10	No	FAC															
6. <u><i>Betula papyrifera</i></u>	5	No	FACU															
7. _____	90	= Total Cover																
Sapling/Shrub Stratum (Plot size: <u>15 ft radius</u>)				Prevalence Index worksheet: <table style="width:100%; border-collapse: collapse;"> <thead> <tr> <th style="width:50%; text-align:center;">Total % Cover of:</th> <th style="width:50%; text-align:center;">Multiply by:</th> </tr> </thead> <tbody> <tr> <td>OBL species <u>0</u></td> <td>x 1 = <u>0</u></td> </tr> <tr> <td>FACW species <u>0</u></td> <td>x 2 = <u>0</u></td> </tr> <tr> <td>FAC species <u>25</u></td> <td>x 3 = <u>75</u></td> </tr> <tr> <td>FACU species <u>70</u></td> <td>x 4 = <u>280</u></td> </tr> <tr> <td>UPL species <u>0</u></td> <td>x 5 = <u>0</u></td> </tr> <tr> <td>Column Totals: <u>95</u> (A)</td> <td><u>355</u> (B)</td> </tr> </tbody> </table> Prevalence Index = B/A = <u>3.7</u>	Total % Cover of:	Multiply by:	OBL species <u>0</u>	x 1 = <u>0</u>	FACW species <u>0</u>	x 2 = <u>0</u>	FAC species <u>25</u>	x 3 = <u>75</u>	FACU species <u>70</u>	x 4 = <u>280</u>	UPL species <u>0</u>	x 5 = <u>0</u>	Column Totals: <u>95</u> (A)	<u>355</u> (B)
Total % Cover of:	Multiply by:																	
OBL species <u>0</u>	x 1 = <u>0</u>																	
FACW species <u>0</u>	x 2 = <u>0</u>																	
FAC species <u>25</u>	x 3 = <u>75</u>																	
FACU species <u>70</u>	x 4 = <u>280</u>																	
UPL species <u>0</u>	x 5 = <u>0</u>																	
Column Totals: <u>95</u> (A)	<u>355</u> (B)																	
1. _____																		
2. _____																		
3. _____																		
4. _____																		
5. _____																		
6. _____																		
7. _____																		
_____	0	= Total Cover																
Herb Stratum (Plot size: <u>5 ft radius</u>)				Hydrophytic Vegetation Indicators: ___ 1 - Rapid Test for Hydrophytic Vegetation ___ 2 - Dominance Test is >50% ___ 3 - Prevalence Index is ≤3.0 ¹ ___ 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) ___ Problematic Hydrophytic Vegetation ¹ (Explain) ¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.														
1. <u><i>Toxicodendron radicans</i></u>	15	Yes	FAC															
2. _____																		
3. _____																		
4. _____																		
5. _____																		
6. _____																		
7. _____																		
8. _____																		
9. _____																		
10. _____																		
11. _____																		
12. _____																		
_____	15	= Total Cover																
Woody Vine Stratum (Plot size: <u>30 ft radius</u>)				Definitions of Vegetation Strata: Tree – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height. Sapling/shrub – Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vines – All woody vines greater than 3.28 ft in height.														
1. _____																		
2. _____																		
3. _____																		
4. _____																		
_____	0	= Total Cover																
				Hydrophytic Vegetation Present? Yes _____ No <input checked="" type="checkbox"/>														

Remarks: (Include photo numbers here or on a separate sheet.)
 The criterion for hydrophytic vegetation is not met.

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

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²		
0 to 2	10YR 6/3	100					Silt Loam	

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

- | | | |
|---|--|--|
| <p>Hydric Soil Indicators:</p> <ul style="list-style-type: none"> <input type="checkbox"/> Histosol (A1) <input type="checkbox"/> Histic Epipedon (A2) <input type="checkbox"/> Black Histic (A3) <input type="checkbox"/> Hydrogen Sulfide (A4) <input type="checkbox"/> Stratified Layers (A5) <input type="checkbox"/> Depleted Below Dark Surface (A11) <input type="checkbox"/> Thick Dark Surface (A12) <input type="checkbox"/> Iron Monosulfide (A18) <input type="checkbox"/> Mesic Spodic (A17) <input type="checkbox"/> (MLRA 144A, 145, 149B) <input type="checkbox"/> Sandy Mucky Mineral (S1) <input type="checkbox"/> Sandy Gleyed Matrix (S4) <input type="checkbox"/> Sandy Redox (S5) <input type="checkbox"/> Stripped Matrix (S6) | <ul style="list-style-type: none"> <input type="checkbox"/> Dark Surface (S7) <input type="checkbox"/> Polyvalue Below Surface (S8) (LRR R, MLRA 149B) <input type="checkbox"/> Thin Dark Surface (S9) (LRR R, MLRA 149B) <input type="checkbox"/> High Chroma Sands (S11) (LRR K, L) <input type="checkbox"/> Loamy Mucky Mineral (F1) (LRR K, L) <input type="checkbox"/> Loamy Gleyed Matrix (F2) <input type="checkbox"/> Depleted Matrix (F3) <input type="checkbox"/> Redox Dark Surface (F6) <input type="checkbox"/> Depleted Dark Surface (F7) <input type="checkbox"/> Redox Depressions (F8) <input type="checkbox"/> Marl (F10) (LRR K, L) <input type="checkbox"/> Red Parent Material (F21) (MLRA 145) | <p>Indicators for Problematic Hydric Soils³:</p> <ul style="list-style-type: none"> <input type="checkbox"/> 2 cm Muck (A10) (LRR K, L, MLRA 149B) <input type="checkbox"/> 5 cm Muck Peat or Peat (S3) (LRR K, L, R) <input type="checkbox"/> Polyvalue Below Surface (S8) (LRR K, L) <input type="checkbox"/> Thin Dark Surface (S9) (LRR K, L) <input type="checkbox"/> Iron-Manganese Masses (F12) (LRR K, L, R) <input type="checkbox"/> Piedmont Floodplain Soils (F19) (MLRA 149B) <input type="checkbox"/> Red Parent Material (F21) (outside MLRA 145) <input type="checkbox"/> Very Shallow Dark Surface (F22) <input type="checkbox"/> Other (Explain in Remarks) |
|---|--|--|

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

Restrictive Layer (if present):

Type: Fill
 Depth (inches): 2

Hydric Soil Present? Yes _____ No

Remarks:

The criterion for hydric soil is not met.

U.S. Army Corps of Engineers
WETLAND DETERMINATION DATA SHEET – Northcentral and Northeast Region
 See ERDC/EL TR-12-1; the proponent agency is CECW-COR

OMB Control #: 0710-0024, Exp: 09/30/2027
 Requirement Control Symbol EXEMPT:
 (Authority: AR 335-15, paragraph 5-2a)

Project/Site: Pine-Wadsworth Structure Replacement City/County: Copley, Summit County Sampling Date: 2025-9-16
 Applicant/Owner: FirstEnergy State: OH Sampling Point: U-EVN-03
 Investigator(s): Erin Van Nort, William Haas Section, Township, Range: NA
 Landform (hillslope, terrace, etc): Mid slope Local relief (concave, convex, none): None Slope (%): 0 to 1
 Subregion (LRR or MLRA): MLRA 139 of LRR R Lat: 41.0973397833 Long: -81.6285862667 Datum: WGS84
 Soil Map Unit Name: Udorthents, sanitary landfill NWI Classification: None

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

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

Hydrophytic Vegetation Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Is the Sampled Area within a Wetland? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
Hydric Soil Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	
Wetland Hydrology Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	If yes, optional Wetland Site ID: <u>U-EVN-03</u>

Remarks: (Explain alternative procedures here or in a separate report.)
 Covertypes is UPL. Based on the absence of all three parameters, this area is an upland.

HYDROLOGY

Wetland Hydrology Indicators: Primary Indicators (minimum of one is required; check all that apply) <input type="checkbox"/> Surface Water (A1) <input type="checkbox"/> Water-Stained Leaves (B9) <input type="checkbox"/> High Water Table (A2) <input type="checkbox"/> Aquatic Fauna (B13) <input type="checkbox"/> Saturation (A3) <input type="checkbox"/> Marl Deposits (B15) <input type="checkbox"/> Water Marks (B1) <input type="checkbox"/> Hydrogen Sulfide Odor (C1) <input type="checkbox"/> Sediment Deposits (B2) <input type="checkbox"/> Oxidized Rhizospheres on Living Roots (C3) <input type="checkbox"/> Drift Deposits (B3) <input type="checkbox"/> Presence of Reduced Iron (C4) <input type="checkbox"/> Algal Mat or Crust (B4) <input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6) <input type="checkbox"/> Iron Deposits (B5) <input type="checkbox"/> Thin Muck Surface (C7) <input type="checkbox"/> Inundation Visible on Aerial Imagery (B7) <input type="checkbox"/> Other (Explain in Remarks) <input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)	Secondary Indicators (minimum of two required) <input type="checkbox"/> Surface Soil Cracks (B6) <input type="checkbox"/> Drainage Patterns (B10) <input type="checkbox"/> Moss Trim Lines (B16) <input type="checkbox"/> Dry-Season Water Table (C2) <input type="checkbox"/> Crayfish Burrows (C8) <input type="checkbox"/> Saturation Visible on Aerial Imagery (C9) <input type="checkbox"/> Stunted or Stressed Plants (D1) <input type="checkbox"/> Geomorphic Position (D2) <input type="checkbox"/> Shallow Aquitard (D3) <input type="checkbox"/> Microtopographic Relief (D4) <input type="checkbox"/> FAC-Neutral Test (D5)
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Field Observations: Surface Water Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): _____ Water Table Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): _____ Saturation Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): _____ (includes capillary fringe)	Wetland Hydrology Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
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Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:
 The criterion for wetland hydrology is not met.

VEGETATION – Use scientific names of plants.

Sampling Point: U-EVN-03

Tree Stratum (Plot size: 30 ft radius)	Absolute % Cover	Dominant Species?	Indicator Status
1. _____	_____	_____	_____
2. _____	_____	_____	_____
3. _____	_____	_____	_____
4. _____	_____	_____	_____
5. _____	_____	_____	_____
6. _____	_____	_____	_____
7. _____	_____	_____	_____

Dominance Test worksheet:
 Number of Dominant Species That Are OBL, FACW, or FAC: 0 (A)
 Total Number of Dominant Species Across All Strata: 4 (B)
 Percent of Dominant Species That Are OBL, FACW, or FAC: 0% (A/B)

0 = Total Cover			
Sapling/Shrub Stratum (Plot size: 15 ft radius)	Absolute % Cover	Dominant Species?	Indicator Status
1. _____	_____	_____	_____
2. _____	_____	_____	_____
3. _____	_____	_____	_____
4. _____	_____	_____	_____
5. _____	_____	_____	_____
6. _____	_____	_____	_____
7. _____	_____	_____	_____

Prevalence Index worksheet:

Total % Cover of:	Multiply by:
OBL species <u>0</u>	x 1 = <u>0</u>
FACW species <u>0</u>	x 2 = <u>0</u>
FAC species <u>10</u>	x 3 = <u>30</u>
FACU species <u>65</u>	x 4 = <u>260</u>
UPL species <u>25</u>	x 5 = <u>125</u>
Column Totals: <u>100</u> (A)	<u>415</u> (B)

Prevalence Index = B/A = 4.2

0 = Total Cover			
Herb Stratum (Plot size: 5 ft radius)	Absolute % Cover	Dominant Species?	Indicator Status
1. <i>Senecio hieraciifolius</i>	25	Yes	FACU
2. <i>Verbascum thapsus</i>	25	Yes	UPL
3. <i>Erigeron canadensis</i>	20	Yes	FACU
4. <i>Holcus lanatus</i>	20	Yes	FACU
5. <i>Toxicodendron radicans</i>	10	No	FAC
6. _____	_____	_____	_____
7. _____	_____	_____	_____
8. _____	_____	_____	_____
9. _____	_____	_____	_____
10. _____	_____	_____	_____
11. _____	_____	_____	_____
12. _____	_____	_____	_____

Hydrophytic Vegetation Indicators:

 1 - Rapid Test for Hydrophytic Vegetation

 2 - Dominance Test is >50%

 3 - Prevalence Index is ≤3.0¹

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

 Problematic Hydrophytic Vegetation¹ (Explain)

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

100 = Total Cover			
Woody Vine Stratum (Plot size: 30 ft radius)	Absolute % Cover	Dominant Species?	Indicator Status
1. _____	_____	_____	_____
2. _____	_____	_____	_____
3. _____	_____	_____	_____
4. _____	_____	_____	_____

Definitions of Vegetation Strata:

Tree – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.

Sapling/shrub – Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.

Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.

Woody vines – All woody vines greater than 3.28 ft in height.

Hydrophytic Vegetation Present? Yes _____ No

Remarks: (Include photo numbers here or on a separate sheet.)
 The criterion for hydrophytic vegetation is not met.

OEPA ORAM Field Forms

Background Information

Name: Erin Van Nort, William Haas	
Date: 9/16/2025	
Affiliation: TRC Environmental Corporation	
Address: 1382 West Ninth Street, Suite 400 Cleveland, OH 44113	
Phone Number: (216) 347-3342	
e-mail address: evannort@trccompanies.com	
Name of Wetland: W-EVN-1	
Vegetation Communit(ies): PEM	
HGM Class(es): Depression	
Location of Wetland: include map, address, north arrow, landmarks, distances, roads, etc. Wetland W-EVN-01 is located north of OH-162 (Copley Rd) in Copley Township, Summit County, Ohio.	
Lat/Long or UTM Coordinate	41.099872, -81.629513
USGS Quad Name	Wadsworth
County	Summit
Township	Copley
Section and Subsection	T2N R12W
Hydrologic Unit Code	050400001 0102
Site Visit	9/16/2025
National Wetland Inventory Map	None
Ohio Wetland Inventory Map	N/A
Soil Survey	Uf
Delineation report/map	See Report

Name of Wetland: W-EVN-1		On-site acreage (~total acreage)
Wetland Size (acres, hectares):	Acreage on-site (Estimated Acreage of Contiguous Wetland)	0.171-acre (~3-acre)
<p>Sketch: Include north arrow, relationship with other surface waters, vegetation zones, etc.</p> <p>Please see the Surface Water Delineation Report for the Pine-Wadsworth Structure Replacement Project, Attachment A, Figure 5 Delineated Resource Map for further details.</p>		
<p>Comments, Narrative Discussion, Justification of Category Changes:</p>		
Final score : 8	Category:	1

Scoring Boundary Worksheet

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

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

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

Narrative Rating

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

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

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

Table 1. Characteristic plant species.

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

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

Site: FirstEnergy , Pine-Wadsworth Structure Replacement Rater(s): Erin Van Nort, Will Haas Date: 2025-09-16

2 2
max 6 pts. subtotal

Metric 1. Wetland Area (size).

Select one size class and assign score.

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

2 4
max 14 pts. subtotal

Metric 2. Upland buffers and surrounding land use.

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

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

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

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

5 9
max 30 pts. subtotal

Metric 3. Hydrology.

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

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

3b. Connectivity. Score all that apply.

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

3c. Maximum water depth. Select only one and assign score.

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

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

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

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

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

Check all disturbances observed

- | | |
|--|---|
| <input type="checkbox"/> ditch | <input type="checkbox"/> point source (nonstormwater) |
| <input type="checkbox"/> tile | <input checked="" type="checkbox"/> filling/grading |
| <input type="checkbox"/> dike | <input checked="" type="checkbox"/> road bed/RR track |
| <input type="checkbox"/> weir | <input type="checkbox"/> dredging |
| <input checked="" type="checkbox"/> stormwater input | <input type="checkbox"/> other |

3 12
max 20 pts. subtotal

Metric 4. Habitat Alteration and Development.

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

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

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

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

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

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

Check all disturbances observed

- | | |
|---|---|
| <input checked="" type="checkbox"/> mowing | <input type="checkbox"/> shrub/sapling removal |
| <input type="checkbox"/> grazing | <input type="checkbox"/> herbaceous/aquatic bed removal |
| <input type="checkbox"/> clearcutting | <input checked="" type="checkbox"/> sedimentation |
| <input checked="" type="checkbox"/> selective cutting | <input type="checkbox"/> dredging |
| <input type="checkbox"/> woody debris removal | <input type="checkbox"/> farming |
| <input type="checkbox"/> toxic pollutants | <input type="checkbox"/> nutrient enrichment |

12
subtotal this page

Site: FirstEnergy , Pine-Wadsworth Structure Replacement **Rater(s):** Erin Van Nort, Will Haas **Date:** 2025-09-16

12

subtotal first page

0 12

max 10 pts. subtotal

Metric 5. Special Wetlands.

Check all that apply and score as indicated.

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

-4 8

max 20 pts. subtotal

Metric 6. Plant communities, interspersions, microtopography.

6a. Wetland Vegetation Communities.

Score all present using 0 to 3 scale.

- Aquatic Bed
- 1 Emergent
- Shrub
- Forest
- Mudflats
- Open water
- Other _____

6b. horizontal (plan view) Interspersion.

Select only one.

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

Invasive Species Present:
phragmites

6c. Coverage of invasive plants. Refer to Table 1 ORAM long form for list. Add or deduct points for coverage

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

6d. Microtopography.

Score all present using 0 to 3 scale.

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

Vegetation Community Cover Scale

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

Narrative Description of Vegetation Quality

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

Mudflat and Open Water Class Quality

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

Microtopography Cover Scale

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

8

CATEGORY 1

End of Quantitative Rating. Complete Categorization Worksheets.

ORAM Summary Worksheet

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

Complete Wetland Categorization Worksheet.

Wetland Categorization Worksheet

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

Final Category

Choose one
Category 1
Category 2
Category 3

End of Ohio Rapid Assessment Method for Wetlands.

Background Information

Name: Emilee Sites, Jeff Vandever	
Date: 4/1/2026	
Affiliation: TRC Environmental Corporation	
Address: 781 Science Blvd, Suite 200, Gahanna, OH 43230	
Phone Number: 1+ (740) 501-5546	
e-mail address: esites@trccompanies.com	
Name of Wetland: W-EAS-1	
Vegetation Communit(ies): PEM	
HGM Class(es): Depression	
Location of Wetland: include map, address, north arrow, landmarks, distances, roads, etc. Wetland W-EAS-01 is located south of OH-162 (Copley Rd) in Copley Township, Summit County, Ohio.	
Lat/Long or UTM Coordinate	41.097089°, -81.628747°
USGS Quad Name	Wadsworth
County	Summit
Township	Copley
Section and Subsection	T2N R12W
Hydrologic Unit Code	050400001 0102
Site Visit	4/1/2026
National Wetland Inventory Map	None
Ohio Wetland Inventory Map	N/A
Soil Survey	NRCS, 2026
Delineation report/map	See Report

Name of Wetland: W-EAS-1	
Wetland Size (acres, hectares):	~0.06 acre (0.024 hectare)
Sketch: Include north arrow, relationship with other surface waters, vegetation zones, etc. Please see the Surface Water Delineation Report for the Pine-Wadsworth Structure Replacement Project, Attachment A, Figure 5 Delineated Resource Map for further details.	
Comments, Narrative Discussion, Justification of Category Changes:	
Final score : 15.5	Category: 1

Scoring Boundary Worksheet

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

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

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

Narrative Rating

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

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

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

Table 1. Characteristic plant species.

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

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

Site: FirstEnergy , Pine-Wadsworth Rebuild Project **Rater(s):** Emilee Sites, Jeff Vandevveer **Date:** 2026-04-01

0 **0**
max 6 pts. subtotal

Metric 1. Wetland Area (size).

Select one size class and assign score.

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

3 **3**
max 14 pts. subtotal

Metric 2. Upland buffers and surrounding land use.

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

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

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

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

7 **10**
max 30 pts. subtotal

Metric 3. Hydrology.

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

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

3b. Connectivity. Score all that apply.

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

3c. Maximum water depth. Select only one and assign score.

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

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

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

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

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

Check all disturbances observed	
<input checked="" type="checkbox"/> ditch	<input type="checkbox"/> point source (nonstormwater)
<input type="checkbox"/> tile	<input checked="" type="checkbox"/> filling/grading
<input type="checkbox"/> dike	<input checked="" type="checkbox"/> road bed/RR track
<input type="checkbox"/> weir	<input type="checkbox"/> dredging
<input type="checkbox"/> stormwater input	<input checked="" type="checkbox"/> other: powerline ROW

6.5 **16.5**
max 20 pts. subtotal

Metric 4. Habitat Alteration and Development.

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

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

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

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

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

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

Check all disturbances observed	
<input type="checkbox"/> mowing	<input type="checkbox"/> shrub/sapling removal
<input type="checkbox"/> grazing	<input type="checkbox"/> herbaceous/aquatic bed removal
<input checked="" type="checkbox"/> clearcutting	<input checked="" type="checkbox"/> sedimentation
<input type="checkbox"/> selective cutting	<input type="checkbox"/> dredging
<input checked="" type="checkbox"/> woody debris removal	<input type="checkbox"/> farming
<input checked="" type="checkbox"/> toxic pollutants	<input type="checkbox"/> nutrient enrichment

16.5
subtotal this page

Site: FirstEnergy , Pine-Wadsworth Rebuild Project **Rater(s):** Emilee Sites, Jeff Vandever **Date:** 2026-04-01

16.5

subtotal first page

0

16.5
max 10 pts. subtotal

Metric 5. Special Wetlands.

Check all that apply and score as indicated.

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

-1

15.5
max 20 pts. subtotal

Metric 6. Plant communities, interspersions, microtopography.

6a. Wetland Vegetation Communities.

Score all present using 0 to 3 scale.

- Aquatic Bed
- Emergent
- Shrub
- Forest
- Mudflats
- Open water
- Other _____

6b. horizontal (plan view) Interspersion.

Select only one.

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

Invasive Species Present:
phragmites

6c. Coverage of invasive plants. Refer to Table 1 ORAM long form for list. Add or deduct points for coverage

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

6d. Microtopography.

Score all present using 0 to 3 scale.

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

Vegetation Community Cover Scale

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

Narrative Description of Vegetation Quality

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

Mudflat and Open Water Class Quality

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

Microtopography Cover Scale

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

15.5

CATEGORY 1

End of Quantitative Rating. Complete Categorization Worksheets.

ORAM Summary Worksheet

		circle answer or insert score	Result
Narrative Rating	Question 1. Critical Habitat	YES <input type="radio"/> NO <input checked="" type="radio"/>	If yes, Category 3.
	Question 2. Threatened or Endangered Species	YES <input type="radio"/> NO <input checked="" type="radio"/>	If yes, Category 3.
	Question 3. High Quality Natural Wetland	YES <input type="radio"/> NO <input checked="" type="radio"/>	If yes, Category 3.
	Question 4. Significant bird habitat	YES <input type="radio"/> NO <input checked="" type="radio"/>	If yes, Category 3.
	Question 5. Category 1 Wetlands	YES <input type="radio"/> NO <input checked="" type="radio"/>	If yes, Category 1.
	Question 6. Bogs	YES <input type="radio"/> NO <input checked="" type="radio"/>	If yes, Category 3.
	Question 7. Fens	YES <input type="radio"/> NO <input checked="" type="radio"/>	If yes, Category 3.
	Question 8a. Old Growth Forest	YES <input type="radio"/> NO <input checked="" type="radio"/>	If yes, Category 3.
	Question 8b. Mature Forested Wetland	YES <input type="radio"/> NO <input checked="" type="radio"/>	If yes, evaluate for Category 3; may also be 1 or 2.
	Question 9b. Lake Erie Wetlands - Restricted	YES <input type="radio"/> NO <input checked="" type="radio"/>	If yes, evaluate for Category 3; may also be 1 or 2.
	Question 9d. Lake Erie Wetlands – Unrestricted with native plants	YES <input type="radio"/> NO <input checked="" type="radio"/>	If yes, Category 3
	Question 9e. Lake Erie Wetlands - Unrestricted with invasive plants	YES <input type="radio"/> NO <input checked="" type="radio"/>	If yes, evaluate for Category 3; may also be 1 or 2.
	Question 10. Oak Openings	YES <input type="radio"/> NO <input checked="" type="radio"/>	If yes, Category 3
Question 11. Relict Wet Prairies	YES <input type="radio"/> NO <input checked="" type="radio"/>	If yes, evaluate for Category 3; may also be 1 or 2.	
Quantitative Rating	Metric 1. Size	0	
	Metric 2. Buffers and surrounding land use	3	
	Metric 3. Hydrology	7	
	Metric 4. Habitat	6.5	
	Metric 5. Special Wetland Communities	0	
	Metric 6. Plant communities, interspersed, microtopography	-1	
	TOTAL SCORE	15.5	Category based on score breakpoints 1

Complete Wetland Categorization Worksheet.

Wetland Categorization Worksheet

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

Final Category

Choose one
Category 1
Category 2
Category 3

End of Ohio Rapid Assessment Method for Wetlands.