AMERICAN TRANSMISSION SYSTEMS, INCORPORATED
A FIRSTENERGY COMPANY

LETTER OF NOTIFICATION

DELTA-WAUSEON 138 kV TRANSMISSION LINE TAP TO NOVA TUBE STEEL SUBSTATION PROJECT

OPSB CASE NO.: 22-0053-EL-BLN

February 11, 2022

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

LETTER OF NOTIFICATION
DELTA-WAUSEON 138 kV TRANSMISSION LINE
TAP TO NOVA TUBE STEEL SUBSTATION PROJECT

The following information is being provided in accordance with the requirements of Ohio Administrative Code (OAC) Chapter 4906-6 for Accelerated Certificate Applications. Per Appendix A to OAC Rule 4906-1-01, this Project qualifies for submittal to the Ohio Power Siting Board ("OPSB") as a Letter of Notification application.

4906-6-05: ACCELERATED APPLICATION REQUIREMENTS

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

Name of Project: Delta-Wauseon 138 kV Transmission Line Tap to Nova Tube Steel Project ("Project")
(Line Code 3016)

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

American Transmission Systems, Incorporated ("ATSI"), a FirstEnergy company, proposes to construct a new 0.66-mile transmission line tap to a new customer substation. The transmission line tap will extend from the Delta-Wauseon 138 kV Transmission Line to the customer-owned Nova Tube Steel Substation. The Project is located in Delta, York Township, Fulton County, Ohio. The general location of the proposed Project is shown in Exhibit 1 and Exhibit 2. Exhibit 1 is a partial copy of a USGS Topographic Map. Exhibit 2 provides a partial copy of ESRI aerial imagery.

As shown on Exhibit 3, the Project will begin at a new mid-span tap structure between Strs. #15997 and #15998 on the Delta-Wauseon 138 kV Transmission Line, located on the south side of Route 20A. The tap will cross Route 20A and then trend east paralleling Route 20A for approximately 400-feet, crossing the Indiana and Ohio Railway (IORY). The tap will then trend north, parallel to the rail line for approximately 3,000-feet before terminating into Nova Tube Steel Substation.

In addition, a new mid-span switch structure will be installed between Strs. #15999 and #16000. The new switch will add operational flexibility to the Delta-Wauseon 138 kV Transmission Line. Including the tap and switch structures, a total of 18 new structures will be installed for this Project. In order to minimize outage duration to the nearby substations connected to the Delta-Wauseon 138 kV Transmission Line, a temporary 0.21-mile long bypass will be constructed in order to safely de-energize the tap location work zone. This temporary bypass will be removed upon Project energization.

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

The Project meets the requirements for a Letter of Notification because the Project fits within the definition of Item (1)(d)(ii) of the Application Requirement Matrix for Electric Power Transmission Lines, in Appendix A of OAC Rule 4906-1-01 which states:

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

(d) Line(s) primarily needed to attract or meet the requirements of a specific customer or customers, as follows:

(ii) Any portion of the line is on property owned by someone other than the specific customer or applicant.

This Project meets requirement (1)(d)(ii) because the proposed transmission line tap from the existing Delta-Wauseon 138 kV Transmission Line to Nova Tube Steel Substation is primarily needed by ATSI's new retail transmission service customer, Nova Tube & Steel, LLC, and is located on property not owned by Nova Tube & Steel, LLC.

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

The new transmission delivery point is being added, by way of extension, to an existing radial tap on the Delta-Wauseon 138 kV Transmission Line. The existing radial tap

already serves two existing retail transmission customers, both industrial, and must be lengthened to support the demand for additional industrial growth in this area of Fulton County. The extension specifically covered by the scope of this Project will provide transmission service to a new retail transmission customer, Nova Tube & Steel, LLC, through a new delivery point.[1]

Of general significance, ATSI has received multiple requests for service in this specific area due to planned economic development. Therefore, this Project will serve the public interest by facilitating expeditious and cost-effective fulfillment of service requests from additional customers. Furthermore, ATSI has identified a future project to network the existing radial tap (including the line extension presented in this LON Application) to the Delta-Wauseon 138 kV Line to improve reliability, resiliency, and operational flexibility to all the customers connected to the radial tap and any future customers that may want to interconnect to the transmission system in the area.

The Project solution was presented to PJM Subregional RTEP-Western Committee on August 16, 2021. The presentation slides are attached as Exhibit 4. PJM assigned this Project supplemental number s2553.

[1] This Project involves the same radial tap as was approved for extension in Case No. 21-1012-EL-BLN due to another wholesale transmission customer request.

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

The location of the Project relative to existing or proposed lines is shown in the ATSI Transmission Network Map, included as part of the confidential portion of the FirstEnergy Corp 2021 Long-Term Forecast Report ("LTFR"). This map was submitted to the PUCO in Case No. 21-0504-EL-FOR under Rule 4901:5-5:04 (C)(2)(b) of the Ohio Administrative Code. The map is incorporated by reference only. This map shows ATSI's 345 kV and 138 kV transmission lines, including the Delta-Wauseon 138kV Transmission Line, and transmission substations. The Project is not included in ATSI's LTFR filed in 2021 because the agreement was finalized in June 2021, after the 2021 LTFR had already been released.

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

- No alternatives were considered for this Project because no other existing transmission lines are near Nova Tube Steel Substation. Therefore, the Delta-Wauseon 138 kV Transmission Line offers the most direct and economical, as well as the least environmentally impactful, solution for a transmission connection to Nova Tube Steel Substation.

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

ATSI's manager of External Affairs will advise local officials of features and the status of the proposed Project as necessary. ATSI will maintain a copy of this Letter of Notification, along with other Project information, on its project website.
https://www.firstenergycorp.com/about/transmission_projects/ohio.html

ATSI will publish notice of the Project in a newspaper of general circulation in the Project area within 7 days of filing this Letter of Notification application. The notice will comply with OAC Rules 4906-6-08(A) (1) through (6). In addition to the public notice, ATSI will mail letters to affected landowners and tenants within and contiguous to the Project.

Finally, during all phases of this Project, ATSI may be contacted with questions/comments about this Project through ATSI's transmission projects hotline at 1-888-311-4737 or via email at: transmissionprojects@firstenergycorp.com. ATSI remains committed to working with property owners and area residents concerning the proposed Project.

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

Construction for the Project is anticipated to begin on March 11, 2022, and to be completed in time for an in-service date by June 1, 2022.

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

Exhibits 1 and 2 depict the general location of the Project. Exhibit 1 provides a partial copy of the United States Geologic Survey, Fulton County, Ohio Quad Map. Exhibit 2 provides a partial copy of ESRI aerial imagery.

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

The Project will be constructed within existing and new right-of-way. ATSI is in the process of obtaining the rights necessary to construct and operate the transmission line. Table 1 contains a list of properties for which new right-of-way is necessary.

Table 1: Properties List

Parcel Number	Easement Status
29-056352-00.000	Existing
31-060734-00.000	To be Acquired
31-056064-00.000	Existing
31-056104-02.000	To be Acquired

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

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

The equipment and facilities described below are associated with the Project.

Voltage:	138 kV
Conductors:	954 kcmil 45/7 ACSR "Rail"
Static Wire:	7#8 Alumoweld
Insulators:	Deadend (Porcelain & Polymer); Suspension (Polymer); Tangent (Polymer)
ROW Width:	65 feet
Land Requirements:	New ROW required
Structure Types:	Eighteen (18) new structures will be installed: Exhibit 5 – Ten (10) Wood Pole Tangent Structures Exhibit 6 – One (1) Wood Pole Suspension Structures Exhibit 7 – One (1) Wood Pole Delta Strain Structure Exhibit 8 – One (1) Wood Pole Dead-End Structure (45°-60°) Exhibit 9 – Two (2) Wood Pole Dead-End Structures (60°-120°) Exhibit 10 – One (1) Wood Pole Tap Structure Exhibit 11 – Two (2) Wood Pole Switch Structures

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

Because the closest occupied residence or institution is greater than 100 feet from the proposed transmission line centerline, Electric and Magnetic Field ("EMF") calculations are not required for this Project.

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

The estimated capital cost for Project is approximately $2,131,000.

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

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

The Project is located in Delta, York Township, Fulton County, Ohio. The Project area is in agricultural/industrial zoned land. No significant changes or impacts to the current land use are anticipated as part of this Project.

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

One agricultural property exists within the Project's disturbance area and is shown in Table 2. This parcel is 46.35-acres and consists of active farmland. The Project route was chosen along the western edge of the property to avoid farmland impact to the greatest extent feasible.

Table 2: Agricultural Lands within the Project's Disturbance Area

Parcel Number	Agricultural District
31-060734-00.000	Yes, Expires in 2023

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

As part of the investigation, a search of the Ohio Historic Preservation Office ("OHPO") online database was conducted to identify the existence of any significant archeological or cultural resource sites within a 0.5-mile Area of Potential Effect ("APE"). The results of the search are shown in Exhibit 12. The specific location of any archeological resources are excluded from the map and are instead listed in Table 3.

The OHPO database includes all Ohio listings on the National Register of Historic Places ("NRHP"), including districts, sites, building, structures, and objects that are significant in American history, architecture, archeology, engineering, and culture. The results of the search indicate that no listed NRHP sites and no NRHP eligible sites were identified within the APE.

The OHPO database also includes listing of the Ohio Archaeological Inventory ("OAI"), the Ohio Historic Inventory ("OHI"), previous cultural resource surveys, and the Ohio Genealogical Society ("OGS") cemetery inventory. Nine (9) OAI listed archeological resource have been previously inventoried within the APE and are shown in Table 3. Four (4) listed structural resources are located within the APE and are shown in Table 4. Eight (8) previous cultural resource surveys were conducted within the APE and are provided in Table 5.

Table 3. List of OAI Listed Archeological Resources and Sites

OAI Number	Affiliation	Description	County	Quad Name
FU0238	Prehistoric	Unknown	Fulton	Delta
FU0155	Prehistoric	Unknown	Fulton	Delta
FU0180	Prehistoric	Unknown	Fulton	Delta
FU0239	Prehistoric	Unknown	Fulton	Delta
FU0156	Prehistoric	Unknown	Fulton	Delta
FU0237	Prehistoric	Unknown	Fulton	Delta
FU0154	Prehistoric	Unknown	Fulton	Delta
FU0226	Prehistoric	Unknown	Fulton	Delta
FU0240	Prehistoric	Unknown	Fulton	Delta

Table 4. List of OHI Listed Structural Resources

OHI Number	Present Name	Historic Use	County	Municipality
FUL0045911	Woodring Property	Single Dwelling	Fulton	York Township
FUL0046011	House	Single Dwelling	Fulton	Delta

FUL0044911	Nature Fresh Farms	Single Dwelling	Fulton	Delta
FUL0045711	House, 8900 US 20A	Single Dwelling	Fulton	York Township

Table 5. List of Previous Cultural & Historic Resource Survey

Year	Name	County	Municipality
2020	A Phase I Cultural Resources Survey of a 36.3-Acre Parcel for a Proposed Industrial Development in Section 11, York Township (Township 7 North Range 7 East), Fulton County, Ohio	Fulton	York Township
2013	Phase I Archaeological Survey of a Proposed 7.08ha (17.5a) Fulton County Processing, Ltd. Expansion in York Township, Fulton County, Ohio	Fulton	York Township
2016	Phase I Archaeological Investigation American Transmission Systems, Inc. & Toledo Edison Company (FirstEnergy Companies) Delta-Wauseon 138 kV Transmission Line Tap to Nature Fresh Farms Project, Fulton County, Ohio	Fulton	York Township
2016	Phase I Cultural Resource Management Survey of the Proposed 64.7ha (160a.) Nature Fresh Farm Development, York Township, Fulton County, Ohio	Fulton	York Township
2017	Phase I Cultural Resource Management Survey of a Proposed 12.4ha (30.7a.) ALPO Development in York Township, Fulton County, Ohio	Fulton	York Township
2017	Phase I Cultural Resource Management Survey of the Proposed 20.5ha (50.72a.) MetalX Scrap Processing Facility in York Township, Fulton County, Ohio	Fulton	York Township
2006	Phase I Archaeology Survey for the Proposed Delta Steel Products Development in Section 11, York Township, Fulton County, Ohio	Fulton	York Township

2001	Phase I Cultural Resources Reconnaissance Survey for the Proposed Fulton County Processing Facility, York Township Section 11, Fulton County, Ohio	Fulton	York Township

Based upon the results of the OHPO online database, there are neither historical nor cultural resources within the Project's right-of-way. Further, several of the Phase I investigations listed in Table 5 encompass a majority of the APE for this Project and the results of these studies recommended no further archaeological investigation. Therefore, no impacts to any historical or cultural resources are anticipated as a result of this Project.

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

This project requires an NPDES General Stormwater Permit from the Ohio EPA. This permit will be obtained prior to transmission line construction

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

As part of the investigation, ATSI hired TRC to conduct necessary environmental surveys for the Project. TRC submitted a request to the Ohio Department of Natural Resources ("ODNR") Office of Real Estate to conduct an Environmental Review on December 9, 2021. As part of the Environmental Review, the ODNR Office of Real Estate conducted a search of the ODNR Division of Wildlife's Natural Heritage Database to research the presence of any endangered, threatened, or rare species within one (1) mile of the Project area. The ODNR's Office of Real Estate's response, dated January 14, 2022, indicates that twelve state and/or federally listed endangered species are located within a one-mile radius of the Project Area. A copy of ODNR's Office of Real Estate's response is included as Exhibit 13.

As part of the investigation, TRC also submitted a request to the U.S. Fish and Wildlife Service ("USFWS") for an Ecological Review, to research the presence of any endangered, threatened, or rare species within one (1) mile of the Project area. A copy of USFWS's Ecological Review response, dated January 27, 2022, is included as Exhibit 14.

A list of all endangered, threatened, and rare species, as identified by ODNR and USFWS, within the range of the Project is provided in Table 8.

Table 8. List of Endangered, Threatened, and Rare Species.

Common Name	Scientific Name	Federal Listed Status	State Listed Status	Affected Habitat
Indiana bat	*Myotis sodalis*	Endangered	Endangered	Trees & Forest
Northern long-eared bat	*Myotis septentrionalis*	Threatened	Endangered	Trees & Forest
Little brown bat	*Myotis lucifugus*	N/A	Endangered	Trees & Forest
Tricolored bat	*Perimyotis subflavus*	N/A	Endangered	Trees & Forest
Rayed bean	*Villosa fabalis*	Endangered	Endangered	Streams/Rivers
Greater redhorse	*Moxostoma valenciennesi*	N/A	Threatened	Streams/Rivers
Kirtland's snake	*Clonophis kirtlandii*	N/A	Threatened	Wetlands / Wet Meadows
Blanding's turtle	*Emydoidea blandingii*	N/A	Threatened	Marshes, Ponds, Lakes & Streams
Blue-spotted salamander	*Ambystoma laterale*	N/A	Endangered	Small Ponds
Lark sparrow	*Chondestes grammacus*	N/A	Endangered	Grasslands
Northern harrier	*Circus hudsonis*	N/A	Endangered	Marshes & Grasslands
Trumpeter swan	*Cygnus buccinator*	N/A	Threatened	Wetlands

The responses from ODNR and USFWS indicate that the Project area is within the range of the federal and state endangered Indiana Bat, the federal threatened and state endangered Northern Long-Eared Bat, the state endangered Little Brown Bat, and the state

endangered Tricolored Bat. Field and desktop assessments yielded no evidence of hibernacula suited for these bat species within the Project area and ODNR concurs with this assessment. ODNR's January 24, 2022 concurrence is included as Exhibit 15. Since tree clearing associated with this Project will be completed prior to April 1, 2022, no impacts to these species are anticipated.

The response from ODNR indicates that the Project area is within the range of the Rayed Bean and Greater redhorse. No impacts to these species are expected because no work is proposed in streams. The ODNR also found that the Natural Heritage Database has records of state-threatened Kirtland's Snake and Blanding's Turtle at or within a one-mile radius of the Project area. Habitat for Kirtland's Snake and Blanding's Turtle include wetlands, wet meadows, lakes and streams. No in-water work or wetland work is proposed as part of this Project, so impacts to these species are not expected. The ODNR also determined that the Project area is within range of the state-endangered Lark sparrow, Northern harrier, and the state-threatened Trumpeter swan. These species can typically be found in grasslands, marshes, and wetlands. It is unlikely that these species are present within the Project area due to the existing site characteristics consisting of agricultural land.

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

The ODNR Office of Real Estate researched the presence of any unique ecological sites, geological features, animal assemblages, scenic rivers, state wildlife areas, nature preserves, parks or forest, national wildlife refuges, or other protected natural areas within one (1) mile of the project area. The ODNR's Office of Real Estate's response on January 14, 2022 indicated that they have no records of the aforementioned areas within one (1) mile of the identified Project area. The USFWS's response on January 27, 2022 made no mention of any federal wilderness areas, wildlife refuges, or designated critical habitat within the vicinity of the Project area.

TRC conducted a wetland and stream assessment of the Project area on December 14, 2021. The Project Study Area for this assessment was approximately 9.2-acres in size. The Project Study Area included the corridor for the Delta-Wauseon 138kV Transmission Line Tap with a 50-foot buffer. Land use surrounding the Project Study Area was observed to be agricultural, residential, and industrial. One (1) perennial stream (S-MRR-1) was identified within the Project Study Area during the field survey. No wetlands or other streams were identified within the Project Study Area. Further details and descriptions of delineated features located within the Project Study Area are included as Exhibit 16. Due to location of the transmission structures associated with this Project, construction matting will be used as temporary access, as needed, to perform work. The perennial stream located within the Project Area will be avoided during construction.

The Project work limits do not encroach on any regulated flood plains based on a review of online FEMA Flood Insurance Rate Mapping. Exhibit 17 depicts the location of the regulated flood plains in relation to the Project area.

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

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

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

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

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

This Letter of Notification application is being provided concurrently to the following public officials from Delta, York Township, and Fulton County.

Fulton County

Mr. Joe Short
Fulton County Commissioner
152 S. Fulton Street
Wauseon, OH 43567

Mr. Frank T. Onweller
Fulton County Engineer
9120 Co. Road 14
Wauseon, OH 43567-9669

Mr. Jeff Rupp
Fulton County Commissioner
152 S. Fulton Street
Wauseon, OH 43567

Ms. Alexis Luttrell, Planner
Fulton County Regional Planning Commission
152 S. Futon Street, Suite 100
Wauseon, OH 43567

Mr. John Rupp
Fulton County Commissioner
152 S. Fulton Street
Wauseon, OH 43567

Ms. Jackie Savage, District Admin.
Fulton County Soil & Water Conservation District
8770 State Route 108, Suite B
Wauseon, OH 43567

Delta

Mayor Frank Wilton
Village of Delta
401 Main Street
Delta, Ohio 43515

Mr. Tony Dawson
Delta Council Member
401 Main Street
Delta, Ohio 43515

Mr. Chad Johnson
Delta Council Member
401 Main Street
Delta, Ohio 43515

Mr. Michael Tanner
Delta Council Member
401 Main Street
Delta, Ohio 43515

York Township

Mr. Mark Jones
York Township Trustee
P.O. Box 248
Delta, OH 43515

Mr. Robert W. Trowbridge
York Township Trustee
P.O. Box 248
Delta, OH 43515

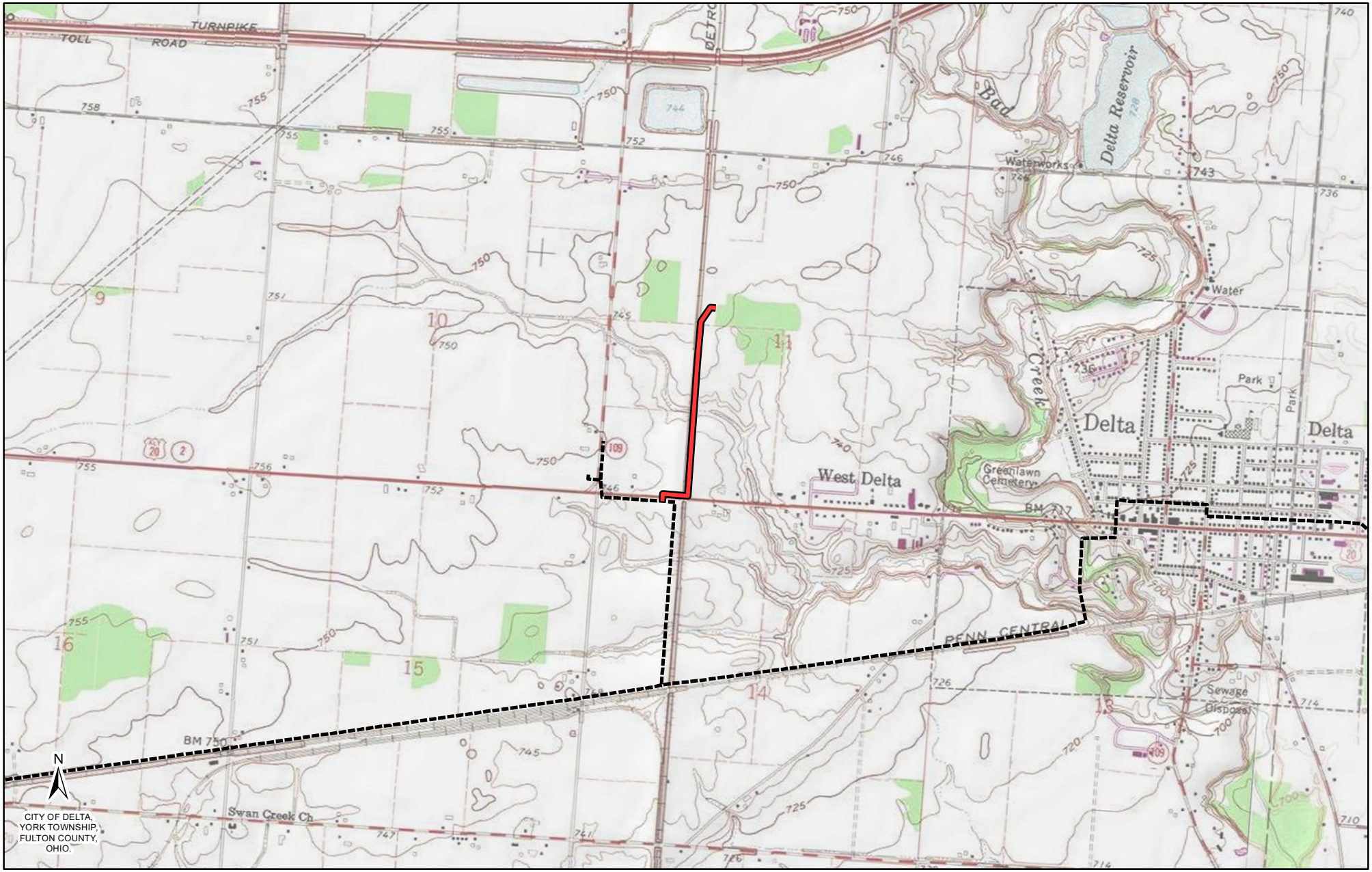
Mr. Jeffrey Mazurowsi
York Township Trustee
P.O. Box 248
Delta, OH 43515

Ms. Karen S. Miller
York Township Fiscal Officer
7614 Co Rd E.
Delta, OH 43515

Libraries
Ms. Candy Baird, Director
Delta Public Library
402 Main Street
Delta, OH 43515

Copies of the transmittal letters to these officials have been included with the package submitting this Letter of Notification application to the Ohio Power Siting Board and are being provided to meet the requirement of OAC Rule 4906-6-07 (B) to submit proof of compliance with the notice requirement to local officials found in OAC Rule 4906-6-07 (A)(1).

Information concerning this Letter of Notification application is posted at the link below along with an explanation of how to request an electronic or paper copy of the LON application. The link to the website is being provided to meet the requirement of OAC 4906-6-07 Rule (B) and to provide the OPSB with proof of compliance with the notice requirements in OAC 4906-6-Rule 07 (A)(3): https://www.firstenergycorp.com/about/transmission_projects/ohio.html



LEGEND:

- Tap to Nova Steel
- Delta-Wauseon 138kV

0 1,000 2,000 4,000

Feet

Reference:
USGS Topographical Map

Coordinate System:
NAD 1983 StatePlane Ohio North FIPS 3401 Feet
Projection: Lambert Conformal Conic; Units: Foot US

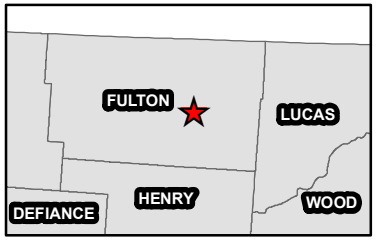
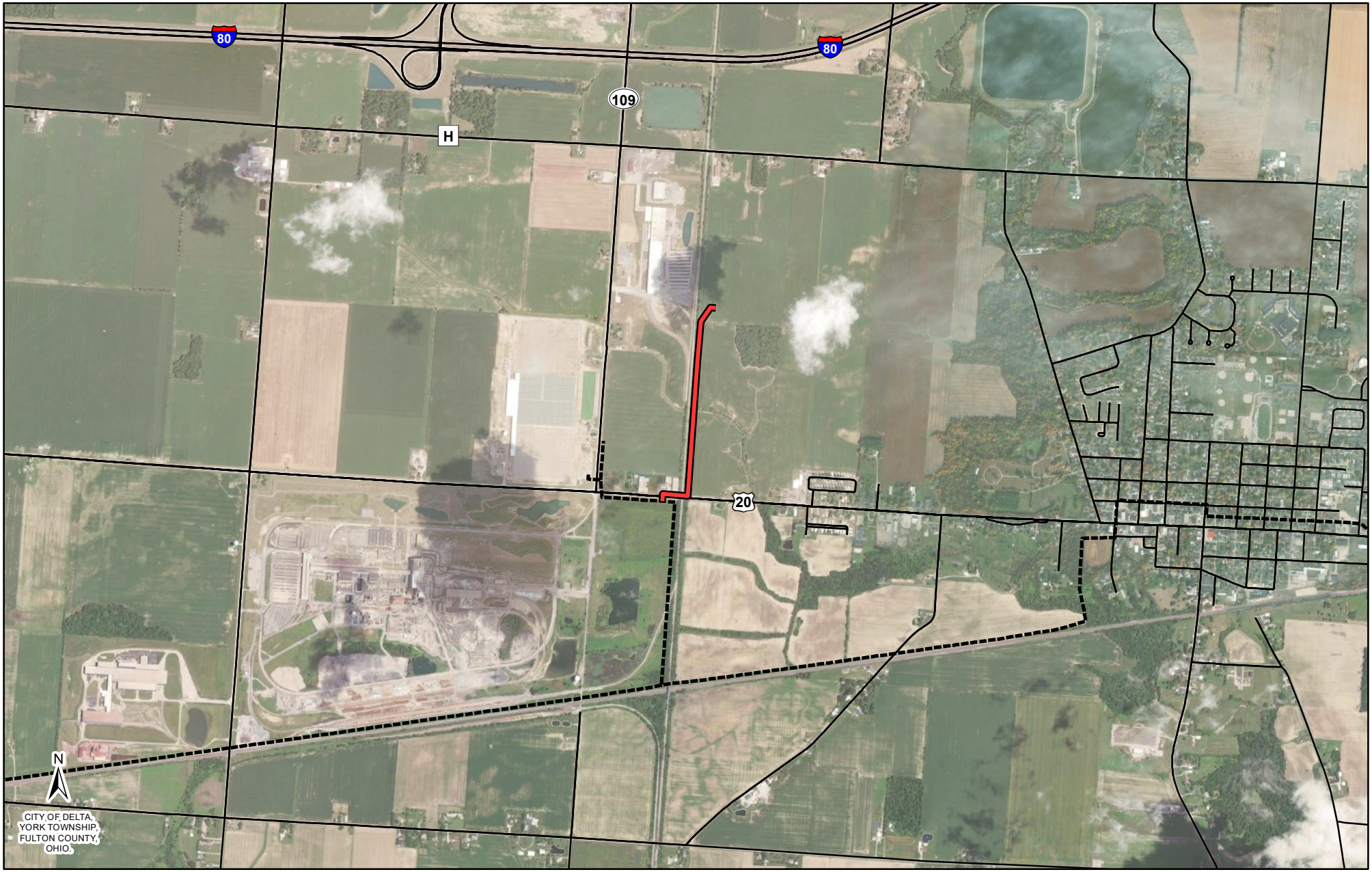


EXHIBIT 1

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

Delta-Wauseon 138 kV Transmission Line
Tap to Nova Tube Steel



LEGEND:

- Tap to Nova Steel
- Delta-Wauseon 138kV
- Roads

0 1,000 2,000 4,000

Feet

Reference:
ESRI Aerial Imagery; ODOT

Coordinate System:
NAD 1983 StatePlane Ohio North FIPS 3401 Feet
Projection: Lambert Conformal Conic; Units: Foot US

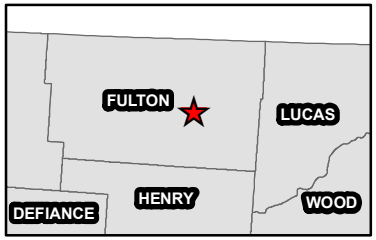


EXHIBIT 2

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

Delta-Wauseon 138 kV Transmission Line
Tap to Nova Tube Steel

#16000

TO NATURE FRESH FARMS TAP

#15999A
SWITCH A-581

#15999

#15998

#15997A

#16129

#16130

#15997

US HIGHWAY 20A

YORK TWP
CITY OF DELTA
FULTON COUNTY
STATE OF OHIO

INDIANA & OHIO RAILROAD

#16133

#16134

#16135

#16136

#16137

#16138

#16139

#16140

#16141

#16142

#16143

#16132
SWITCH A-582

#16131

US HIGHWAY 20A

#16144

NOVA TUBE STEEL
SUBSTATION

LEGEND

- PROPOSED TRANSMISSION STRUCTURE
- EXISTING TRANSMISSION STRUCTURE TO REMAIN
- PROPOSED SWITCH
- PROPOSED TRANSMISSION LINE
- EXISTING TRANSMISSION LINE TO REMAIN
- SUBSTATION
- RAILROAD
- FENCE
- ROADWAY
- TREE LINE
- BUILDING

PAPER SIZE: 17X11

SCALE: NTS

FirstEnergy Transmission Design

DELTA–WAUSEON 138KV TRANSMISSION LINE
TAP TO NOVA TUBE STEEL SUBSTATION

GENERAL LAYOUT

EXHIBIT 3

Exhibit 4

ATSI Transmission Zone M-3 Process
Delta – Wauseon 138 kV Line - New Customer

Need Number: ATSI-2021-019
Process Stage: Solution Meeting – 08/16/2021
Previously Presented: Need Meeting – 07/16/2021

Supplemental Project Driver(s):
Customer Service

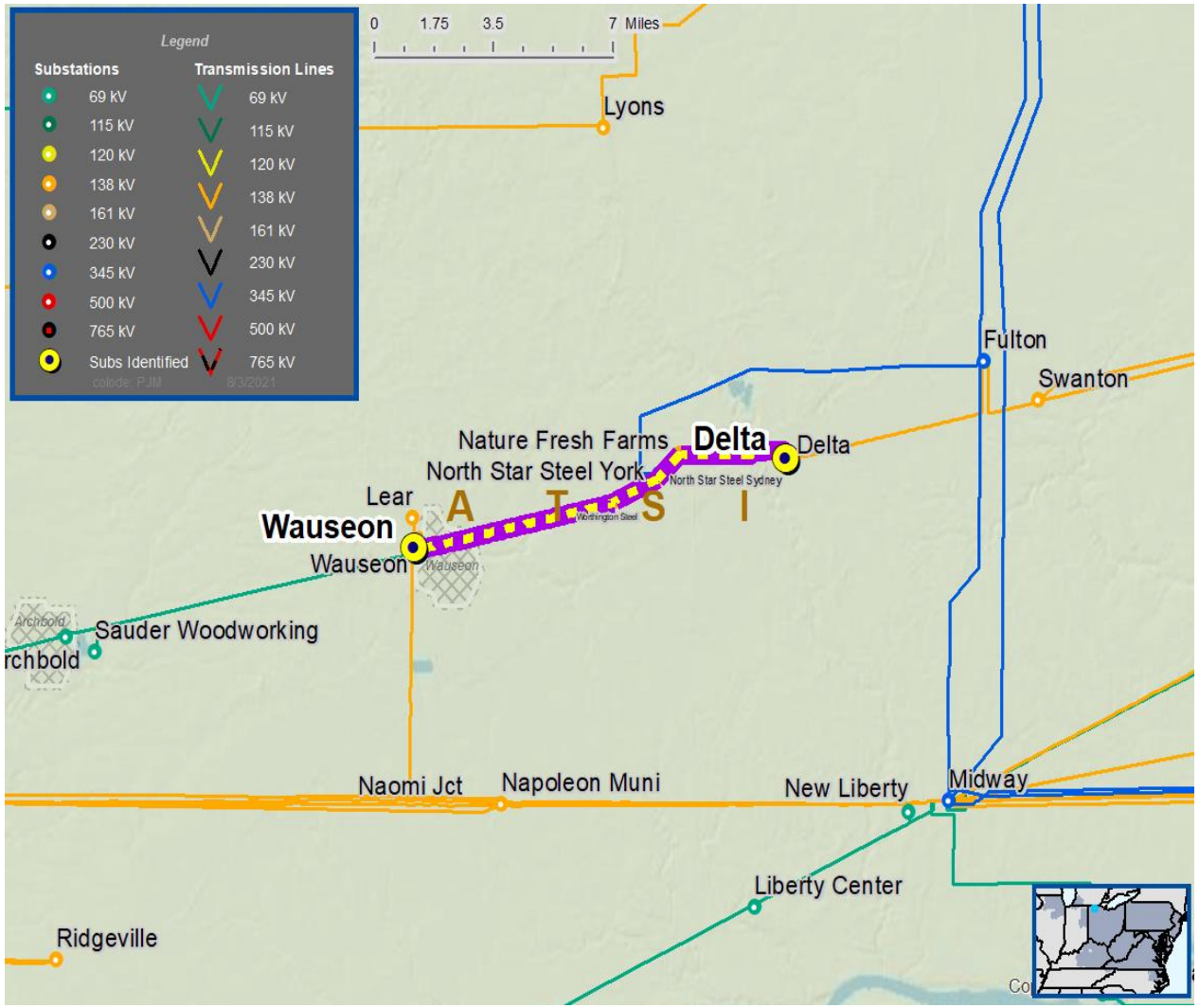
Specific Assumption Reference(s)

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

Problem Statement

New Customer Connection – A customer requested 138 kV transmission service for approximately 20 MVA of total load near the Delta – Wauseon 138 kV Line.

Requested In-Service Dates: 10 MVA by November 1, 2021
10 MVA increase by November 1, 2026



Continued on next page…

ATSI Transmission Zone M-3 Process
Delta – Wauseon 138 kV Line - New Customer

Need Number: ATSI-2021-019
Process Stage: Solution Meeting – 08/16/2021
Previously Presented: Need Meeting – 07/16/2021

Proposed Solution:

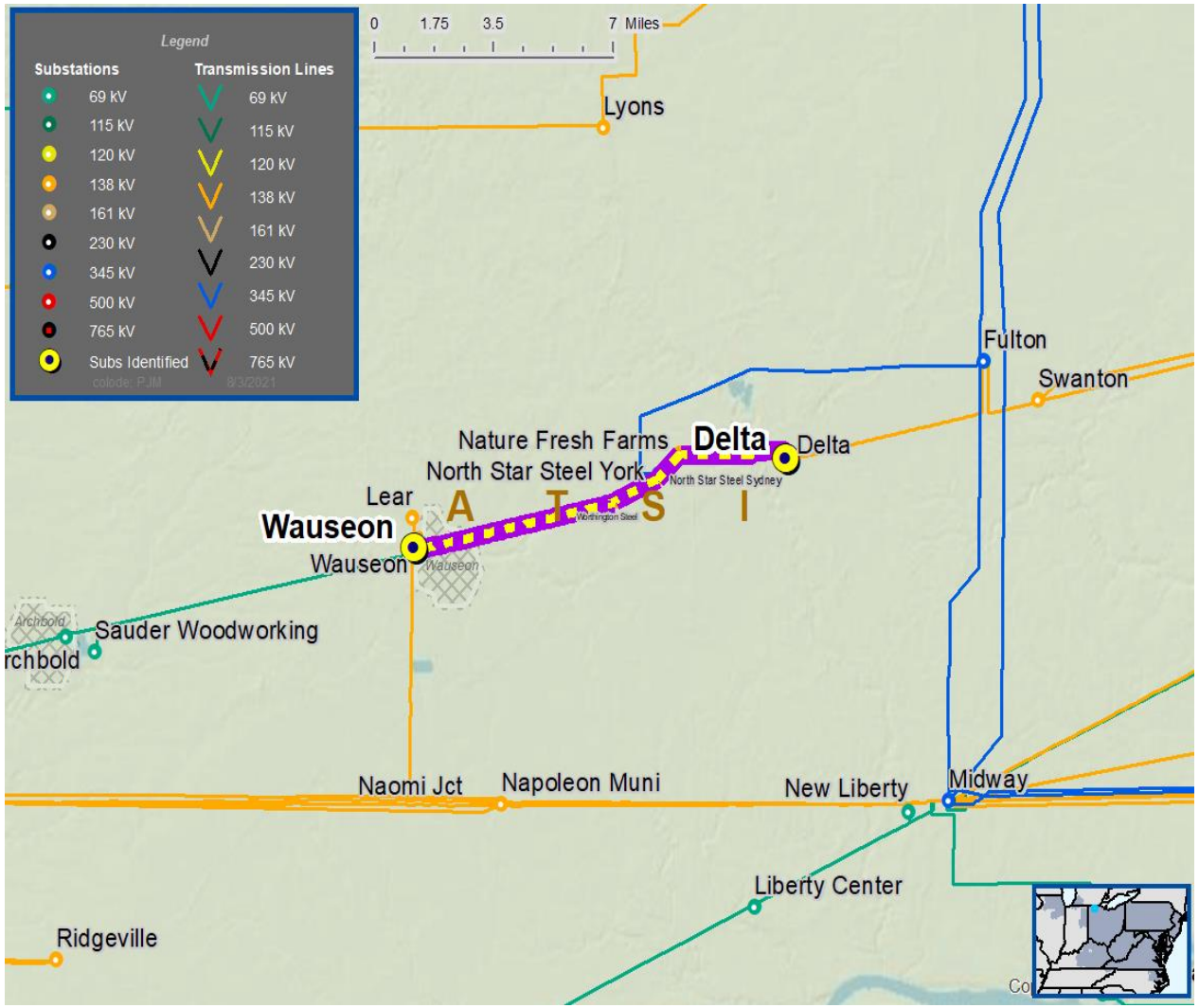
New 138 kV Customer

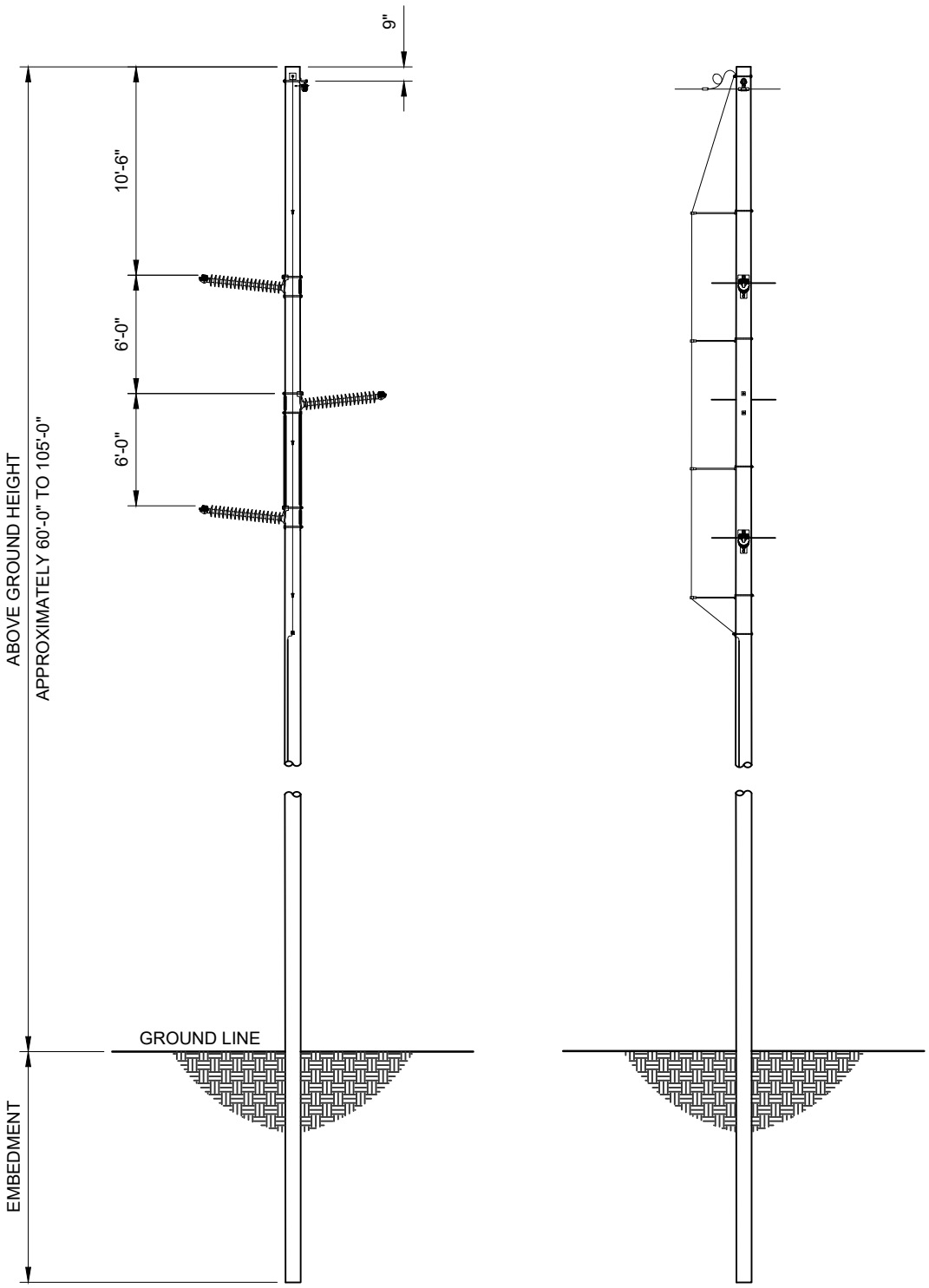
- Construct a 138 kV tap off the Delta – Wauseon 138 kV Line to the customer substation. The customer substation tap location is approximately a 0.9 mile extension from the existing structures to the new customer substation.
- Add MOAB and SCADA to two new switches on the Delta – Wauseon 138 kV Line.

Alternatives Considered:

- No alternatives considered for this project

Estimated Project Cost: $2.0M
Projected In-Service: 06/01/2022
Status: Engineering
Model: 2020 Series 2025 Summer RTEP 50/50





FirstEnergy Transmission Design

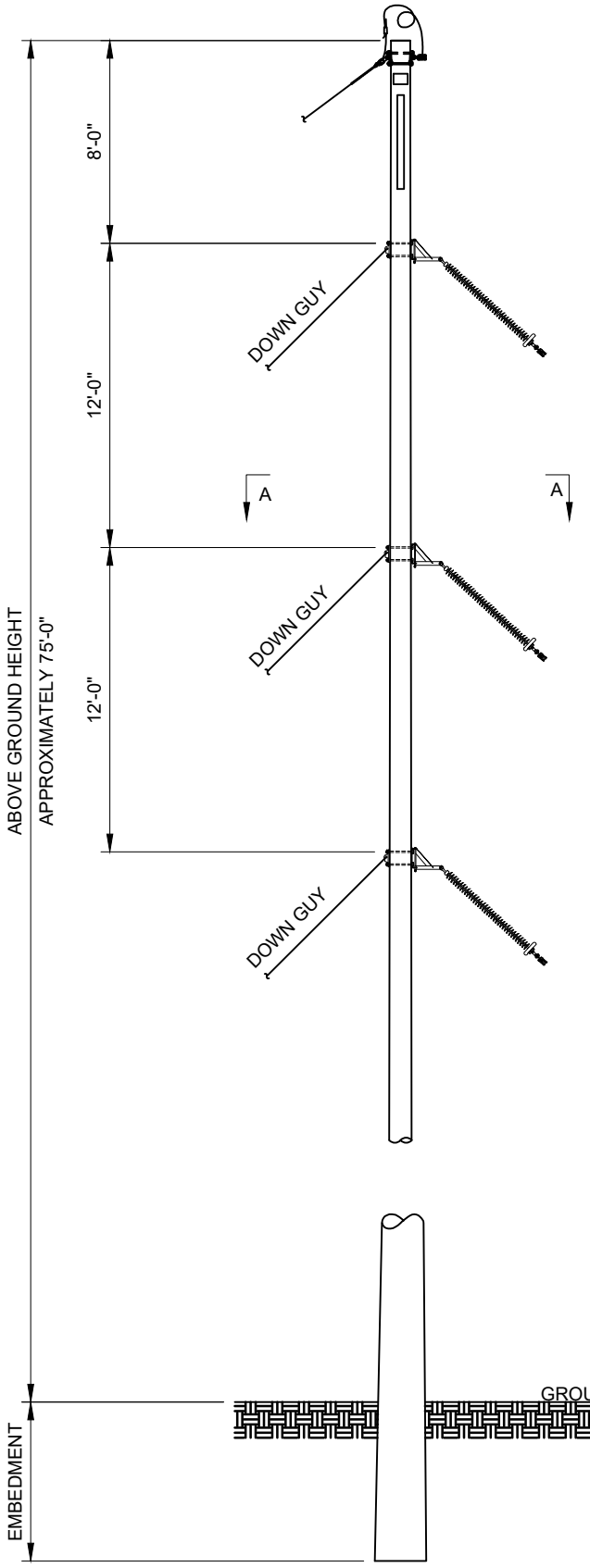
DELTA–WAUSEON 138KV TRANSMISSION LINE
TAP TO NOVA TUBE STEEL SUBSTATION

138KV SINGLE CIRCUIT WOOD POLE STRUCTURE
HORIZONTAL POST DELTA SINGLE POLE ANGLES 0° TO 2°

EXHIBIT 5

PAPER SIZE: 8.5X11

SCALE: NTS



SECTION A-A

FirstEnergy Transmission Design

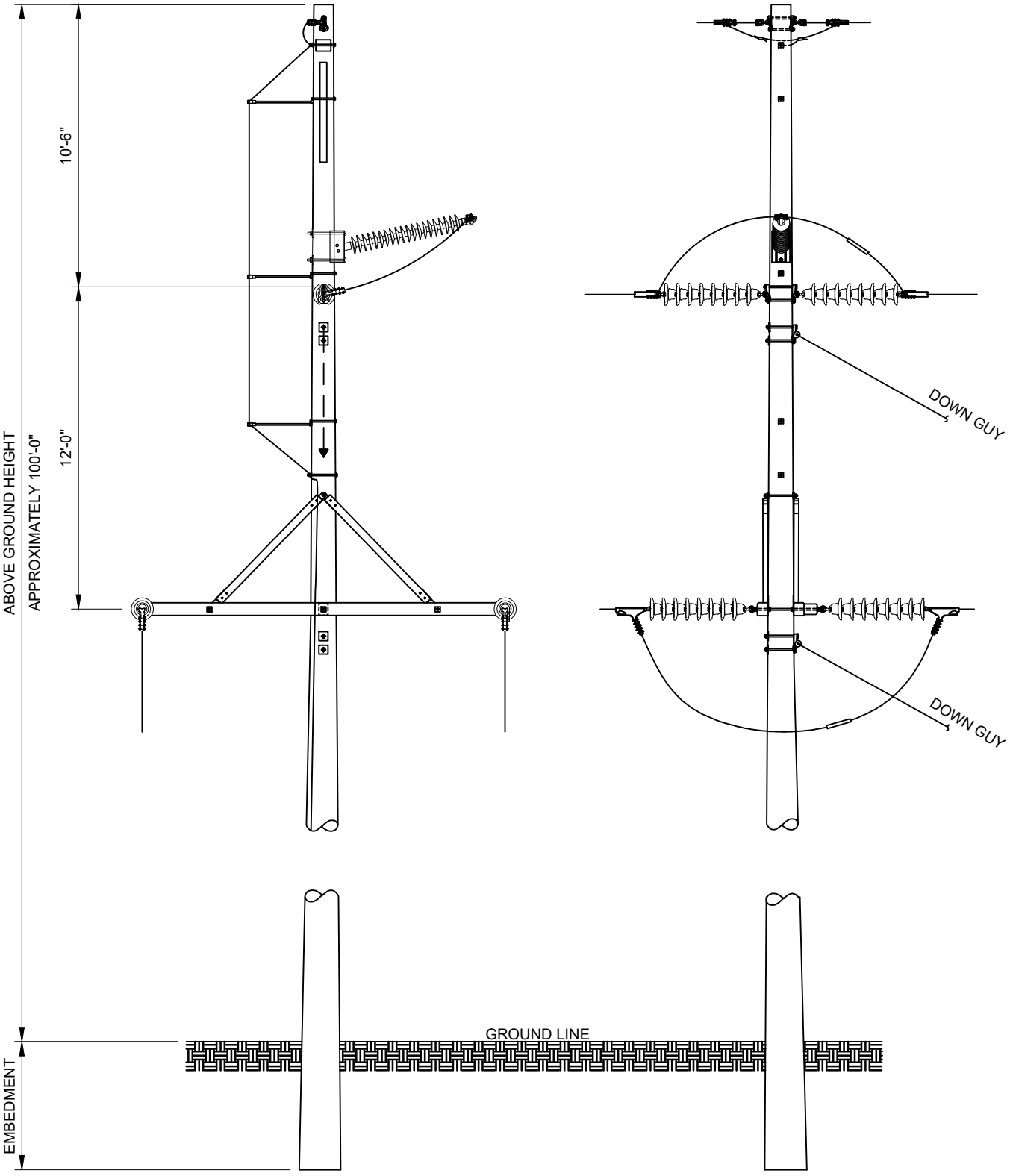
DELTA–WAUSEON 138KV TRANSMISSION LINE
TAP TO NOVA TUBE STEEL SUBSTATION

138KV SINGLE CIRCUIT WOOD POLE STRUCTURE
SUSPENSION VERTICAL SINGLE POLE ANGLES 20° TO 30°

EXHIBIT 6

PAPER SIZE: 8.5X11

SCALE: NTS



FirstEnergy Transmission Design

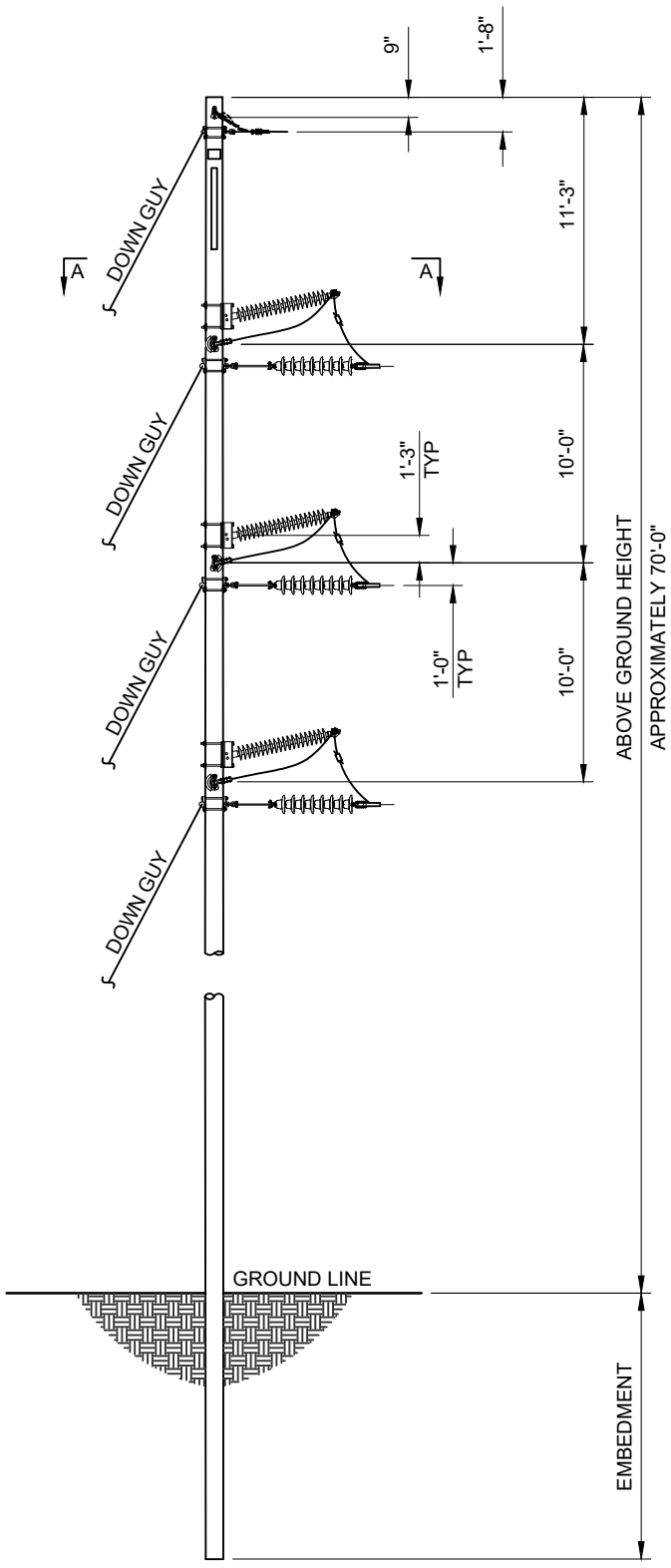
DELTA–WAUSEON 138KV TRANSMISSION LINE
TAP TO NOVA TUBE STEEL SUBSTATION

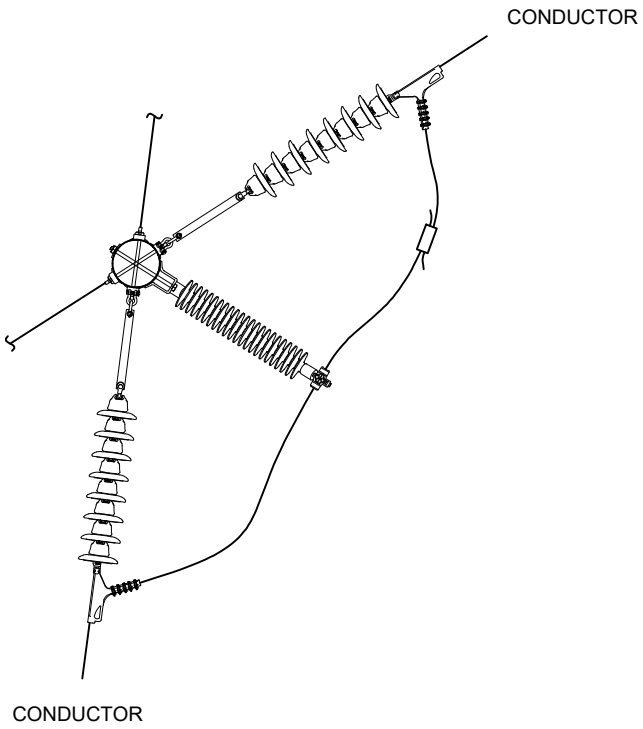
138KV SINGLE CIRCUIT WOOD POLE STRUCTURE
DELTA STRAIN SINGLE POLE ANGLES 0° TO 2°

EXHIBIT 7

SCALE: NTS

PAPER SIZE: 8.5X11





SECTION A-A

PAPER SIZE: 8.5X11

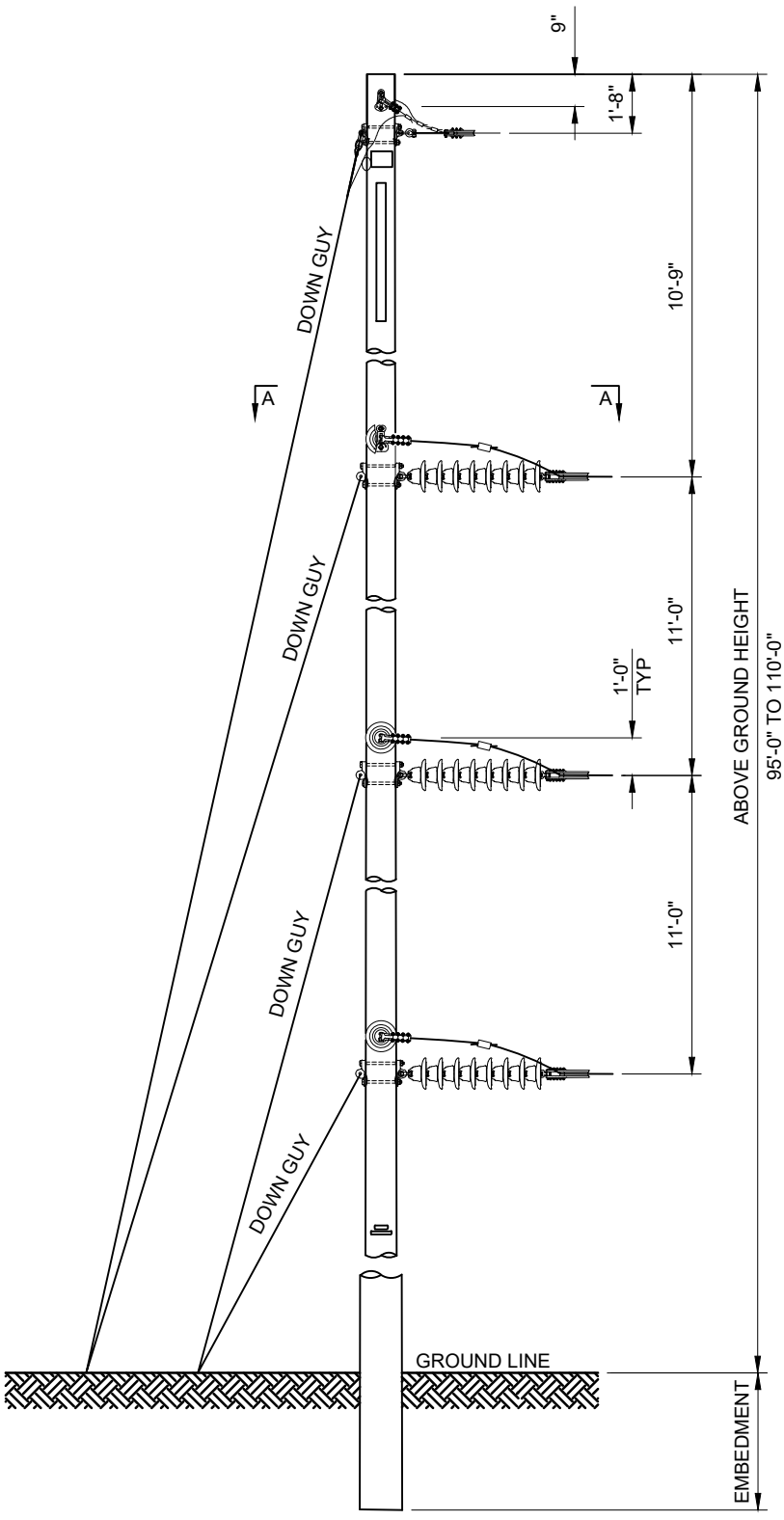
SCALE: NTS

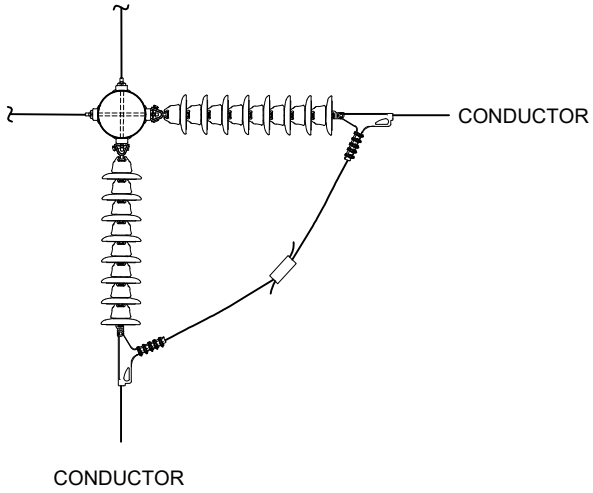
FirstEnergy Transmission Design

DELTA–WAUSEON 138KV LINE
TAP TO NOVA TUBE STEEL SUBSTATION

138KV SINGLE CIRCUIT WOOD POLE STRUCTURE
DEADEND VERTICAL SINGLE POLE ANGLES 45° TO 60°

EXHIBIT 8





SECTION A-A

FirstEnergy Transmission Design

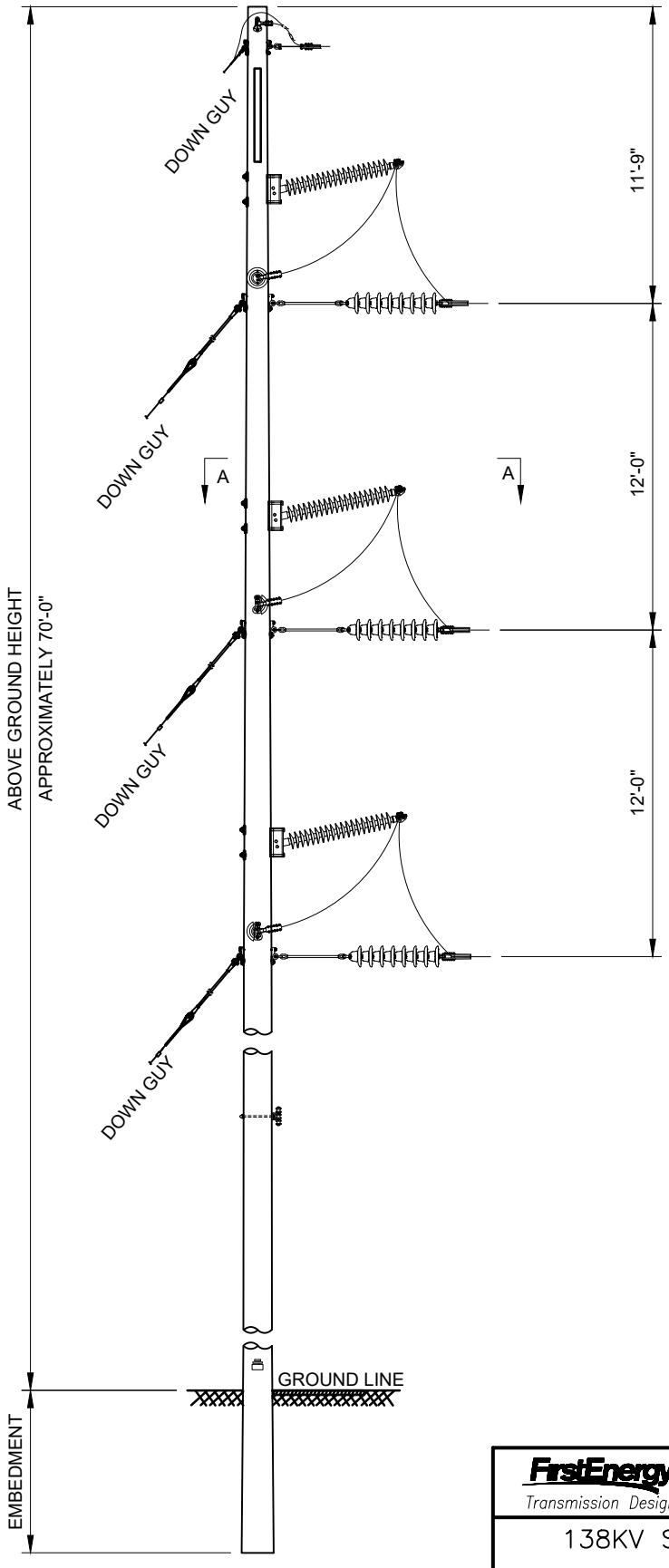
DELTA–WAUSEON 138KV TRANSMISSION LINE
TAP TO NOVA TUBE STEEL SUBSTATION

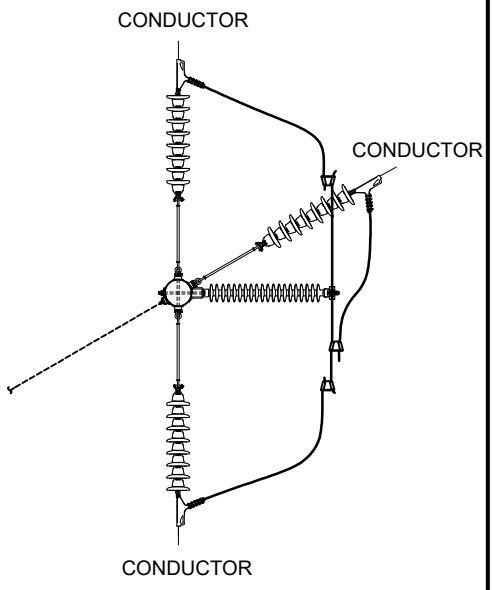
138KV SINGLE CIRCUIT WOOD POLE STRUCTURE
DEADEND VERTICAL SINGLE POLE ANGLES 60° TO 120°

EXHIBIT 9

PAPER SIZE: 8.5X11

SCALE: NTS





SECTION A-A

FirstEnergy Transmission Design

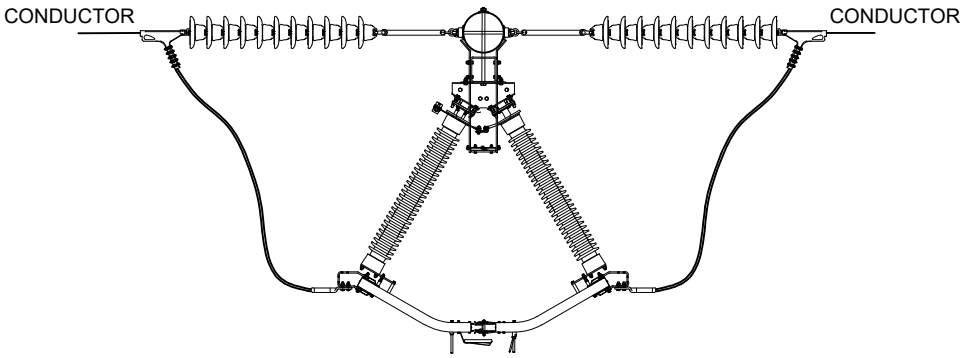
DELTA–WAUSEON 138KV TRANSMISSION LINE
TAP TO NOVA TUBE STEEL SUBSTATION

138KV SINGLE CIRCUIT WOOD TAP STRUCTURE
VERTICAL SINGLE POLE

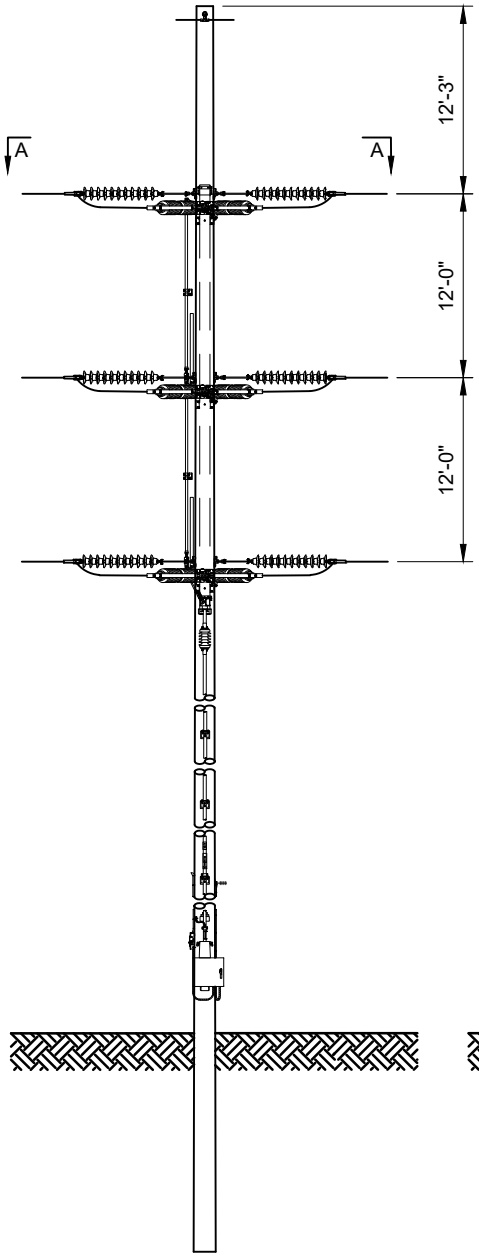
EXHIBIT 10

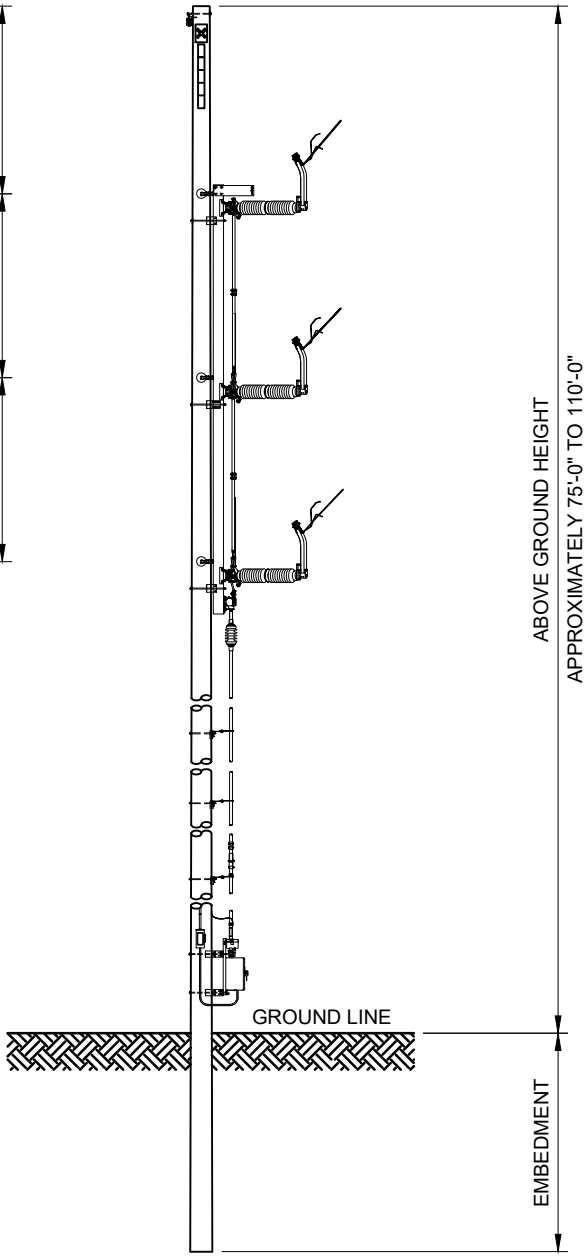
PAPER SIZE: 8.5X11

SCALE: NTS



SECTION A-A





FirstEnergy Transmission Design

DELTA–WAUSEON 138KV TRANSMISSION LINE
TAP TO NOVA TUBE STEEL SUBSTATION

138KV SINGLE CIRCUIT–WOOD–UNITIZED 1200A SWITCH STRUCTURE WITH WHIP OR SINGLE BOTTLE INTERRUPTER VERTICAL SINGLE POLE 0° TO 2°

EXHIBIT 11

PAPER SIZE: 8.5X11

SCALE: NTS

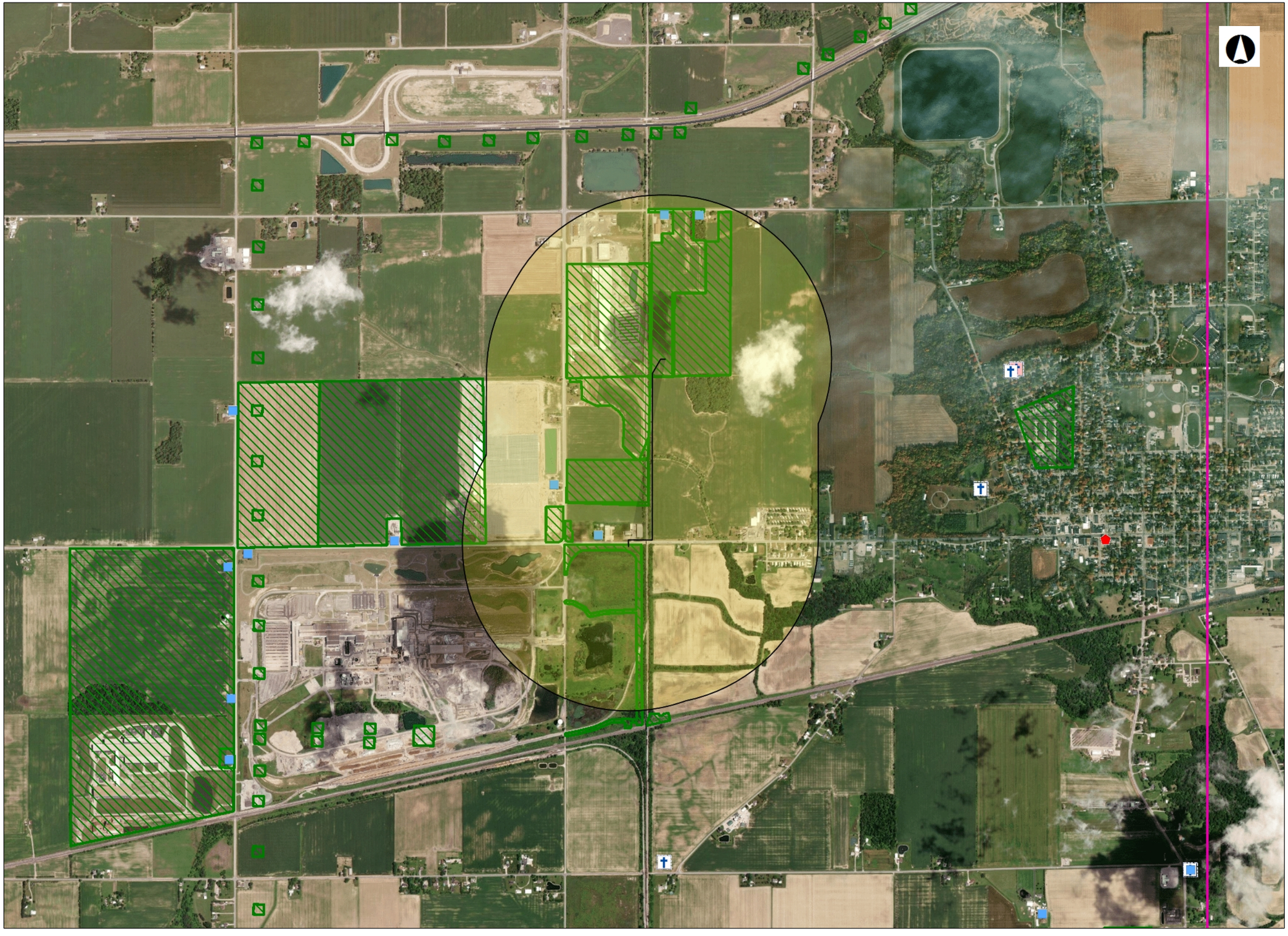


Exhibit 12

State Historic Preservation Office

OHIO HISTORY CONNECTION

Legend

- NR Listings
  - Listed
  - National Historic Landmark
  - Delisted
- Determinations of Eligibility
  - DOE
  - Demolished
- Historic Structures
- Historic Bridges
- Historic Tax Credit Projects
- Local Designations
- OGS Cemeteries
  - Confident
  - Not Confident
- Historic Markers
- Dams
- UTM Zone Split
- NR Boundaries
- Local Districts
- Phase1
- Phase2
- Phase3
- Historic Previously Surveyed
- Highways
- Counties
- NPS Parks
- Wayne National Forest
- World Imagery

0 0.30 0.6 Miles

1: 24,000

Copyright/Disclaimer

This map is a user generated static output from an Internet mapping site and is for generalThis map is a user generated static output from an Internet mapping site and is for general reference only. Data layers that appear on this map may or may not be accurate, current, or otherwise reliable. THIS MAP IS NOT TO BE USED FOR NAVIGATION.

Datum:	[Datum]
Projection:	WGS_1984_Web_Mercator_Auxiliary_Sphere

Ohio Department of Natural Resources

MIKE DEWINE, GOVERNOR MARY MERTZ, DIRECTOR

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

January 14, 2022

Matthew Ray
TRC Companies
1382 West Ninth Street, Suite 400
Cleveland, OH 44113

Re: 21-1111; FirstEnergy's Tap to Nova Tube Steel-Delta-Wauseon 138kV Project

Project: The proposed project involves the construction of a transmission line tap from the Delta-Wauseon 138kV transmission line to Nova Tube Steel.

Location: The proposed project is located in York Township, Fulton County, Ohio.

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

Natural Heritage Database: The Natural Heritage Database has no records at or within a one-mile radius of the project area.

A review of the Ohio Natural Heritage Database indicates there are no other records of state endangered or threatened plants or animals within the project area. There are also no records of state potentially threatened plants, special interest or species of concern animals, or any federally listed species. In addition, we are unaware of any unique ecological sites, geologic features, animal assemblages, scenic rivers, state wildlife areas, state nature preserves, state or national parks, state or national forests, national wildlife refuges, or other protected natural areas within the project area. The review was performed on the project area you specified in your request as well as an additional one-mile radius. Records searched date from 1980.

Please note that Ohio has not been completely surveyed and we rely on receiving information from many sources. Therefore, a lack of records for any particular area is not a statement that rare species or unique features are absent from that area. Although all types of plant communities have been surveyed, we only maintain records on the highest quality areas.

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

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

The entire state of Ohio is within the range of the Indiana bat (*Myotis sodalis*), a state endangered and federally endangered species, the northern long-eared bat (*Myotis septentrionalis*), a state endangered and federally threatened species, the little brown bat (*Myotis lucifugus*), a state endangered species, and the tricolored bat (*Perimyotis subflavus*), a state endangered species. During the spring and summer (April 1 through September 30), these species of bats predominately roost in trees behind loose, exfoliating bark, in crevices and cavities, or in the leaves. However, these species are also dependent on the forest structure surrounding roost trees. If trees are present within the project area, and trees must be cut, the DOW recommends cutting only occur from October 1 through March 31, conserving trees with loose, shaggy bark and/or crevices, holes, or cavities, as well as trees with DBH $\geq$ 20 if possible. If trees are present within the project area, and trees must be cut during the summer months, the DOW recommends a mist net survey or acoustic survey be conducted from June 1 through August 15, prior to any cutting. Mist net and acoustic surveys should be conducted in accordance with the most recent version of the "*OHIO DIVISION OF WILDLIFE GUIDANCE FOR BAT SURVEYS AND TREE CLEARING*". If state listed bats are documented, DOW recommends cutting only occur from October 1 through March 31. However, limited summer tree cutting may be acceptable after consultation with the DOW (contact Erin Hazelton at Erin.hazelton@dnr.ohio.gov).

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

The project is within the range of the rayed bean (*Villosa fabalis*), a state endangered and federally endangered mussel. Due to the location, and that there is no in-water work proposed in a perennial stream of sufficient size, this project is not likely to impact this species.

The project is within the range of the greater redhorse (*Moxostoma valenciennesi*), a 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. If no in-water work is proposed in a perennial stream, this project is not likely to impact this or other aquatic species.

The project is within the range of the Kirtland's snake (*Clonophis kirtlandii*), a state threatened species. This secretive species prefers wet meadows and other wetlands. 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 Blanding's turtle (*Emydoidea blandingii*), a state threatened species. This species inhabits marshes, ponds, lakes, streams, wet meadows, and swampy forests. Although essentially aquatic, the Blanding's turtle will travel over land as it moves from one wetland to the next. 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 blue-spotted salamander (*Ambystoma laterale)*, a state endangered species. 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 lark sparrow (*Chondestes grammacus*), a state endangered bird. This sparrow nests in grassland habitats with scattered shrub layers, disturbed open areas, as well as patches of bare soil. In the Oak Openings area west of Toledo, lark sparrows occupy open grass and shrubby fields along sandy beach ridges. These summer residents normally migrate out of Ohio shortly after their young fledge or leave the nest. If this type of habitat will be impacted, construction should be avoided in this habitat during the species' nesting period of May 1 through July 31. If this type of habitat will not be impacted, this project is not likely to impact this species.

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

The project is within the range of the trumpeter swan (*Cygnus buccinator*), a state threatened bird. Trumpeter swans prefer large marshes and lakes ranging in size from 40 to 150 acres. They like shallow wetlands one to three feet deep with a diverse mix of plenty of emergent and submergent vegetation and open water. If this type of habitat will be impacted, construction should be avoided in this habitat during the species' nesting period of April 15 through June 15. If this habitat will not be impacted, this project is not likely to have an impact on this species.

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

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

The local floodplain administrator should be contacted concerning the possible need for any floodplain permits or approvals for this project. Your local floodplain administrator contact information can be found at the website below.

http://water.ohiodnr.gov/portals/soilwater/pdf/floodplain/Floodplain%20Manager%20Community%20Contact%20List_8_16.pdf

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

 EXHIBIT 14

FW: FirstEnergy's Tap to Nova Tube Steel-Delta-Wauseon 138kV Project, City of Delta, York Township, Fulton County, Ohio

Ruggiero, Augustine <aruggiero@firstenergycorp.com>
Thu 1/27/2022 2:33 PM
To: Latina, Alex (Humphrys, Scott M) <alatina@firstenergycorp.com>

FirstEnergy
Auggie Ruggiero
Transmission Permitting
office: 330-315-6781 (8506781) | cell: 330-803-4304
aruggiero@firstenergycorp.com
341 White Pond Drive, Akron, OH 44320 | mailstop: AK-West Akron Campus

---

From: Falkinburg, Brad <BFalkinburg@trccompanies.com>
Sent: Thursday, January 27, 2022 2:11 PM
To: Ruggiero, Augustine <aruggiero@firstenergycorp.com>
Cc: Molnar, Maggie <MMolnar@trccompanies.com>; Ray, Matthew <MRay@trccompanies.com>
Subject: [EXTERNAL] FW: FirstEnergy's Tap to Nova Tube Steel-Delta-Wauseon 138kV Project, City of Delta, York Township, Fulton County, Ohio

Auggie, see below, USFWS response for Nova Tube Steel. No issues.

Regards,

Brad M. Falkinburg, PWS
Planning Permitting and Licensing
Office Practice Leader – Ecological Services

TRC
1382 West Ninth Street, Suite 400, Cleveland, OH 44113
D 216.352.6216 | **O** 216.344.3072 | **C** 440.666.2890
LinkedIn | Twitter | Blog | TRCcompanies.com

Please note that our domain name and email addresses have changed

---

From: Ohio, FW3 <ohio@fws.gov>
Sent: Thursday, January 27, 2022 12:36 PM
To: Ray, Matthew <MRay@trccompanies.com>
Cc: Falkinburg, Brad <BFalkinburg@trccompanies.com>; Molnar, Maggie <MMolnar@trccompanies.com>
Subject: [EXTERNAL] FirstEnergy's Tap to Nova Tube Steel-Delta-Wauseon 138kV Project, City of Delta, York Township, Fulton County, Ohio

UNITED STATES DEPARTMENT OF THE INTERIOR
U.S. Fish and Wildlife Service
Ecological Services Office
4625 Morse Road, Suite 104
Columbus, Ohio 43230
(614) 416-8993 / Fax (614) 416-8994

TAILS# 03E15000-2021-TA-2310

Dear Mr. Ray,

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

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

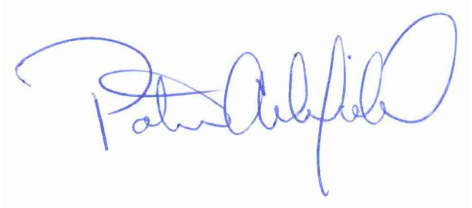
Section 7 Coordination: If there is a federal nexus for the project (e.g., federal funding provided, federal permits required to construct), then no tree clearing should occur on any portion of the project area until consultation under section 7 of the ESA, between the Service and the federal action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

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

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

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

Sincerely,



Patrice Ashfield
Field Office Supervisor

FW: RE: Desktop Hibernacula Assessment: Tap to Nova Tube Steel-Delta-Wauseon 138kV Project

Ruggiero, Augustine <aruggiero@firstenergycorp.com>
Mon 1/24/2022 2:07 PM
To: Latina, Alex (Humphrys, Scott M) <alatina@firstenergycorp.com>

FirstEnergy

Auggie Ruggiero
Transmission Permitting
office: 330-315-6781 (8506781) | cell: 330-803-4304
aruggiero@firstenergycorp.com
341 White Pond Drive, Akron, OH 44320 | mailstop: AK-West Akron Campus

---

From: Molnar, Maggie <MMolnar@trccompanies.com>
Sent: Monday, January 24, 2022 1:18 PM
To: Ruggiero, Augustine <aruggiero@firstenergycorp.com>
Cc: Falkinburg, Brad <BFalkinburg@trccompanies.com>
Subject: [EXTERNAL] FW: RE: Desktop Hibernacula Assessment: Tap to Nova Tube Steel-Delta-Wauseon 138kV Project

Auggie,
Please see ODNR's concurrence with our Desktop Hibernacula Assessment Report for the Tap to Nova Tube Steel-Delta-Wauseon 138kV Project below.

Regards,

Maggie Molnar, PWS
Ecologist

TRC

781 Science Boulevard, Suite 200, Gahanna, Ohio 43230
D 614.423-6342| **C** 614.949.2437
LinkedIn | Twitter | Blog | TRCcompanies.com

Please note that our address has changed.

From: Erin.Hazelton@dnr.ohio.gov <Erin.Hazelton@dnr.ohio.gov>
Sent: Monday, January 24, 2022 11:30 AM
To: Molnar, Maggie <MMolnar@trccompanies.com>
Cc: Falkinburg, Brad <BFalkinburg@trccompanies.com>
Subject: [EXTERNAL] RE: Desktop Hibernacula Assessment: Tap to Nova Tube Steel-Delta-Wauseon 138kV Project

Hi Maggie,

Per review of the desktop survey provided for the Nova Tube Steel-Delta-Wauseon, the Ohio Division of Wildlife concurs with your assessment that no caves, cliffs, or mine openings occur in the project area and 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,
Erin

Erin Hazelton (she/her/hers)

Wind Energy Administrator
ODNR Division of Wildlife
2045 Morse Rd. Bldg G-3
Columbus, OH 43229
1-800-WILDLIFE
Office: 614-265-6349
Email: erin.hazelton@dnr.ohio.gov

Support Ohio's wildlife. Buy a license or stamp at wildohio.gov.

From: Molnar, Maggie <MMolnar@trccompanies.com>
Sent: Wednesday, January 19, 2022 4:11 PM
To: Hazelton, Erin <Erin.Hazelton@dnr.ohio.gov>
Cc: Falkinburg, Brad <BFalkinburg@trccompanies.com>
Subject: Desktop Hibernacula Assessment: Tap to Nova Tube Steel-Delta-Wauseon 138kV Project

Erin,
In response to the ODNR's DOW recommendations (attached), TRC Companies, Inc. (TRC) completed a desktop habitat assessment, on behalf the ATSI, a FirstEnergy Company, to determine if potential hibernaculum is present within the proposed Tap to Nova Tube Steel-Delta-Wauseon 138kV Project (Project) Study Area (attached). The proposed Project is located in the City of Delta and York Township, Fulton County, Ohio.

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

Thanks in advance for your time.

Regards,

Maggie Molnar, PWS
Ecologist

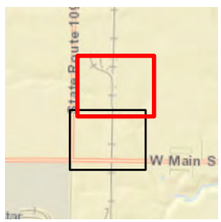
781 Science Boulevard, Suite 200, Gahanna, Ohio 43230
D 614.423-6342| **C** 614.949.2437
LinkedIn | Twitter | Blog | TRCcompanies.com

Please note that our address has changed.

PROJECT STUDY AREA
PERENNIAL STREAM
NON-JURISDICTIONAL DITCH
SAMPLE POINT
CULVERT

Exhibit 16

BASE MAP: GOOGLE MAPS.
DATA SOURCES: TRC



1:2,400
1" = 200'

0 200 400 FEET

PROJECT:
FIRSTENERGY
TAP TO NOVA TUBE STEEL - DELTA-WAUSEON 138KV

TITLE:
DELINEATED RESOURCES MAP

DRAWN BY:	M. OPEL	PROJ. NO.:	429847.0020
CHECKED BY:	M. RAY		
APPROVED BY:	B. FALKINBURG		**FIGURE 3** (PAGE 1 OF 2)
DATE:	DECEMBER 2021		

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

FILE: WDR.aprx

Coordinate System: NAD 1983 StatePlane Ohio North FIPS 3401 Feet. Map Rotation: 0
Saved By: MOPEL on 12/16/2021 1:59:42 PM. File Path: T:\Projects\Firstenergy\429847_0020_NovaTubeSteel\2-APRX\WDR.aprx Layout Name: Fig03_Resources

PROJECT STUDY AREA
PERENNIAL STREAM
NON-JURISDICTIONAL DITCH
RULE OUT POINT
CULVERT

BASE MAP: GOOGLE MAPS.
DATA SOURCES: TRC

1:2,400
1" = 200'

0 200 400 FEET

PROJECT:
FIRSTENERGY
TAP TO NOVA TUBE STEEL - DELTA-WAUSEON 138KV

TITLE:
DELINEATED RESOURCES MAP

DRAWN BY:	M. OPEL	PROJ. NO.:	429847.0020
CHECKED BY:	M. RAY		
APPROVED BY:	B. FALKINBURG		**FIGURE 3** (PAGE 2 OF 2)
DATE:	DECEMBER 2021		

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

FILE: WDR.aprx

Coordinate System: NAD 1983 StatePlane Ohio North FIPS 3401 Feet. Map Rotation: 0
Saved By: MOPEL on 12/16/2021 1:39:26 AM. File Path: T:\PROJECTS\Esri_Energy\429847_0020_NovaTubeSteel\2-APRX\WDR.aprx Layout Name: Fig03_Resources

OhioEPA Qualitative Habitat Evaluation Index and Use Assessment Field Sheet

QHEI Score: 32

Stream & Location: S-MRR-1, FE Nova Tube Steel Fulton County, OH **RM:** 1.6 **Date:** 12/14/21

Scorers Full Name & Affiliation: M. Ray

River Code: ___-___-___ **STORET #:** _____ **Lat./Long.:** (NAD 83 - decimal °) 41.5773 84.0322 **Office verified location** ☑

1] SUBSTRATE

Check *ONLY* Two substrate *TYPE BOXES*; estimate % or note every type present

BEST TYPES	POOL	RIFFLE	OTHER TYPES	POOL	RIFFLE
☐ ☐ BLDR /SLABS [10]			☐ ☐ HARDPAN [4]		
☐ ☐ BOULDER [9]			☐ ☐ DETRITUS [3]		
☐ ☐ COBBLE [8]			☐ ☐ MUCK [2]		
☐ ☐ GRAVEL [7]			☐ ☐ SILT [2]	5	
☐ ☒ SAND [6]	15		☒ ☐ ARTIFICIAL [0]	80	
☐ ☐ BEDROCK [5]			(Score natural substrates; ignore sludge from point-sources)		

NUMBER OF BEST TYPES: ☐ 4 or more [2] ☒ 3 or less [0]

ORIGIN (Check ONE (*Or 2 & average*))
☐ LIMESTONE [1]
☒ TILLS [1]
☐ WETLANDS [0]
☐ HARDPAN [0]
☐ SANDSTONE [0]
☐ RIP/RAP [0]
☐ LACUSTURINE [0]
☐ SHALE [-1]
☐ COAL FINES [-2]

QUALITY
SILT:
☐ HEAVY [-2]
☐ MODERATE [-1]
☒ NORMAL [0]
☐ FREE [1]
EMBEDDEDNESS:
☐ EXTENSIVE [-2]
☐ MODERATE [-1]
☒ NORMAL [0]
☐ NONE [1]

Substrate 7 *Maximum 20*

Comments

2] INSTREAM COVER

Indicate presence 0 to 3: **0**-Absent; **1**-Very small amounts or if more common of marginal quality; **2**-Moderate amounts, but not of highest quality or in small amounts of highest quality; **3**-Highest quality in moderate or greater amounts (e.g., very large boulders in deep or fast water, large diameter log that is stable, well developed rootwad in deep / fast water, or deep, well-defined, functional pools.

1 UNDERCUT BANKS [1]	0 POOLS > 70cm [2]	0 OXBOWS, BACKWATERS [1]
0 OVERHANGING VEGETATION [1]	0 ROOTWADS [1]	0 AQUATIC MACROPHYTES [1]
0 SHALLOWS (IN SLOW WATER) [1]	0 BOULDERS [1]	1 LOGS OR WOODY DEBRIS [1]
0 ROOTMATS [1]		

AMOUNT (Check ONE (*Or 2 & average*))
☐ EXTENSIVE >75% [11]
☐ MODERATE 25-75% [7]
☑ SPARSE 5-<25% [3]
☐ NEARLY ABSENT <5% [1]

Comments

Cover 5 *Maximum 20*

3] CHANNEL MORPHOLOGY

Check ONE in each category (*Or 2 & average*)

SINUOSITY
☐ HIGH [4]
☐ MODERATE [3]
☒ LOW [2]
☐ NONE [1]

DEVELOPMENT
☐ EXCELLENT [7]
☐ GOOD [5]
☐ FAIR [3]
☒ POOR [1]

CHANNELIZATION
☐ NONE [6]
☐ RECOVERED [4]
☒ RECOVERING [3]
☐ RECENT OR NO RECOVERY [1]

STABILITY
☐ HIGH [3]
☒ MODERATE [2]
☐ LOW [1]

Comments

Channel 8 *Maximum 20*

4] BANK EROSION AND RIPARIAN ZONE

Check ONE in each category for *EACH BANK* (*Or 2 per bank & average*) — River right looking downstream

EROSION (L R)
☒ ☒ NONE / LITTLE [3]
☐ ☐ MODERATE [2]
☐ ☐ HEAVY / SEVERE [1]

RIPARIAN WIDTH (L R)
☐ ☐ WIDE > 50m [4]
☐ ☐ MODERATE 10-50m [3]
☐ ☐ NARROW 5-10m [2]
☐ ☐ VERY NARROW < 5m [1]
☐ ☐ NONE [0]

FLOOD PLAIN QUALITY (L R)
☐ ☐ FOREST, SWAMP [3]
☐ ☐ SHRUB OR OLD FIELD [2]
☒ ☒ RESIDENTIAL, PARK, NEW FIELD [1]
☐ ☐ FENCED PASTURE [1]
☐ ☐ OPEN PASTURE, ROWCROP [0]

☐ ☐ CONSERVATION TILLAGE [1]
☐ ☐ URBAN OR INDUSTRIAL [0]
☐ ☐ MINING / CONSTRUCTION [0]

Indicate predominant land use(s) past 100m riparian.

Comments

Riparian 4 *Maximum 10*

5] POOL / GLIDE AND RIFFLE / RUN QUALITY

MAXIMUM DEPTH (Check ONE (*ONLY!*))
☐ > 1m [6]
☐ 0.7-<1m [4]
☑ 0.4-<0.7m [2]
☐ 0.2-<0.4m [1]
☐ < 0.2m [0]

CHANNEL WIDTH (Check ONE (*Or 2 & average*))
☐ POOL WIDTH > RIFFLE WIDTH [2]
☒ POOL WIDTH = RIFFLE WIDTH [1]
☐ POOL WIDTH < RIFFLE WIDTH [0]

CURRENT VELOCITY (Check ALL that apply)
☐ TORRENTIAL [-1]
☐ VERY FAST [1]
☐ FAST [1]
☒ MODERATE [1]
☐ SLOW [1]
☐ INTERSTITIAL [-1]
☐ INTERMITTENT [-2]
☐ EDDIES [1]
Indicate for reach - pools and riffles.

Recreation Potential
Primary Contact
Secondary Contact
(circle one and comment on back)

Comments

Pool / Current 4 *Maximum 12*

Indicate for functional riffles; Best areas must be large enough to support a population of riffle-obligate species: Check ONE (*Or 2 & average*). ☑ NO RIFFLE [metric=0]

RIFFLE DEPTH
☐ BEST AREAS > 10cm [2]
☐ BEST AREAS 5-10cm [1]
☐ BEST AREAS < 5cm [metric=0]

RUN DEPTH
☐ MAXIMUM > 50cm [2]
☐ MAXIMUM < 50cm [1]

RIFFLE / RUN SUBSTRATE
☐ STABLE (e.g., Cobble, Boulder) [2]
☐ MOD. STABLE (e.g., Large Gravel) [1]
☐ UNSTABLE (e.g., Fine Gravel, Sand) [0]

RIFFLE / RUN EMBEDDEDNESS
☐ NONE [2]
☐ LOW [1]
☐ MODERATE [0]
☐ EXTENSIVE [-1]

Comments

Riffle / Run 0 *Maximum 8*

6] GRADIENT (8.1 ft/mi)

DRAINAGE AREA (1.73 mi²)

☑ VERY LOW - LOW [2-4]
☐ MODERATE [6-10]
☐ HIGH - VERY HIGH [10-6]

%POOL: 20 %GLIDE: 0
%RUN: 80 %RIFFLE: 0

Gradient 4 *Maximum 10*

A] SAMPLED REACH

Check ALL that apply

METHOD

- [ ] BOAT
- [x] WADE
- [ ] L. LINE
- [ ] OTHER

STAGE

1st -sample pass-		2nd
☐	HIGH	☐
☑	UP	☑
☐	NORMAL	☐
☐	LOW	☐
☐	DRY	☐

DISTANCE

- [ ] 0.5 Km
- [ ] 0.2 Km
- [x] 0.15 Km
- [x] 0.12 Km
- [ ] OTHER

meters

CLARITY

1st --sample pass--		2nd
☐	< 20 cm	☐
☑	20-<40 cm	☑
☐	40-70 cm	☐
☐	> 70 cm/ CTB	☐
☐	SECCHI DEPTH	☐

CANOPY

- [ ] > 85%- OPEN
- [x] 55%-<85%
- [ ] 30%-<55%
- [ ] 10%-<30%
- [ ] <10%- CLOSED

pass 1st _____ cm

pass 2nd _____ cm

Comment RE: Reach consistency/ Is reach typical of steam?, *Recreation/* Observed - Inferred, *Other/* Sampling observations, Concerns, Access directions, etc.

Yes, Reach is typical of stream

Temp: 15.3°C

pH: 6.3

B] AESTHETICS

- [ ] NUISANCE ALGAE
- [ ] INVASIVE MACROPHYTES
- [ ] EXCESS TURBIDITY
- [ ] DISCOLORATION
- [ ] FOAM / SCUM
- [ ] OIL SHEEN
- [ ] TRASH / LITTER
- [ ] NUISANCE ODOR
- [ ] SLUDGE DEPOSITS
- [ ] CSOs/SSOs/OUTFALLS

C] RECREATION

AREA DEPTH

POOL: ☐ >100ft² ☐ >3ft

D] MAINTENANCE

Circle some & *COMMENT*

PUBLIC / PRIVATE / BOTH / NA
ACTIVE / HISTORIC / BOTH / NA
YOUNG-SUCCESSION-OLD
SPRAY / SNAG / REMOVED
MODIFIED / DIPPED OUT / NA
LEVEED / ONE SIDED
RELOCATED / CUTOFFS
MOVING-BEDLOAD-STABLE
ARMOURED / SLUMPS
ISLANDS / SCOURED
IMPOUNDED / DESICCATED
FLOOD CONTROL / DRAINAGE

E] ISSUES

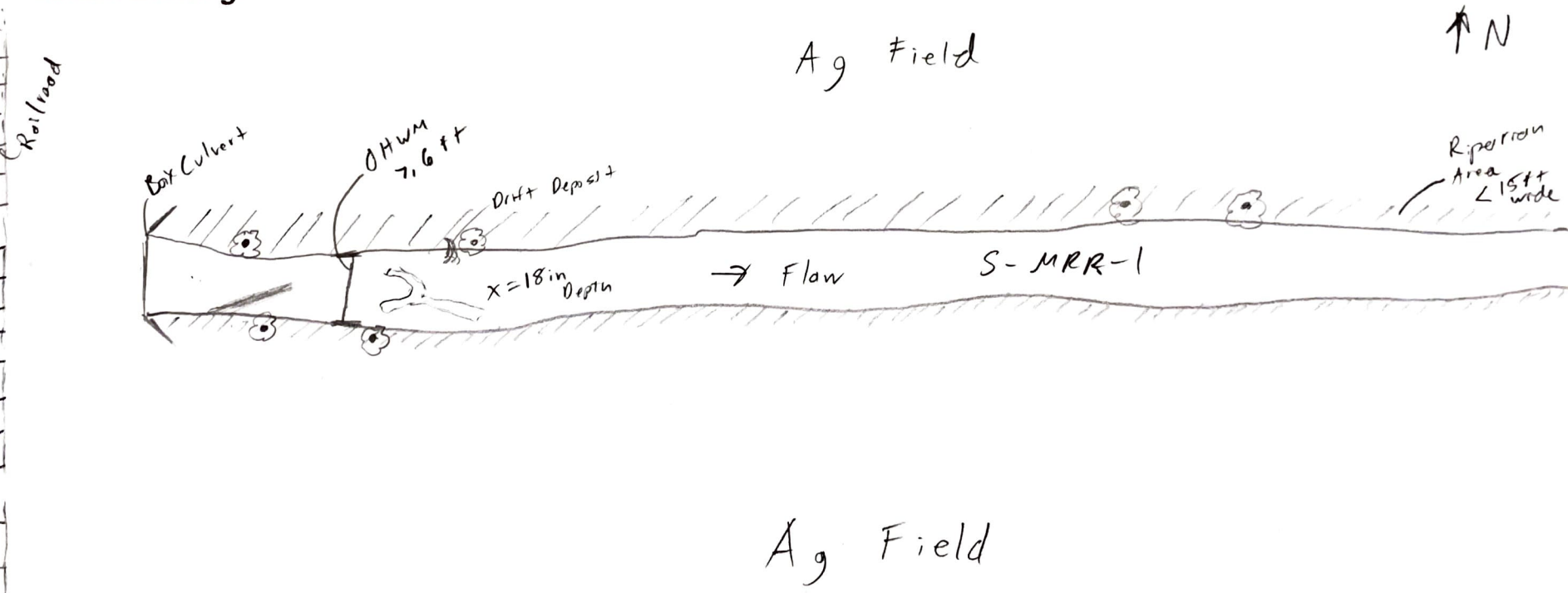
WWTP / CSO / NPDES / INDUSTRY
HARDENED / URBAN / DIRT&GRIME
CONTAMINATED / LANDFILL
BMPs-CONSTRUCTION-SEDIMENT
LOGGING / IRRIGATION / COOLING
BANK / EROSION / SURFACE
FALSE BANK / MANURE / LAGOON
WASH H_20 / TILE / H_20 TABLE
ACID / MINE / QUARRY / FLOW
NATURAL / WETLAND / STAGNANT
PARK / GOLF / LAWN / HOME
ATMOSPHERE / DATA PAUCITY

F] MEASUREMENTS

- $\bar{x}$ width
- $\bar{x}$ depth
- max. depth
- $\bar{x}$ bankfull width
- bankfull $\bar{x}$ depth
- W/D ratio
- bankfull max. depth
- floodprone x^2 width
- entrench. ratio

Legacy Tree:

Stream Drawing:



U.S. Army Corps of Engineers **WETLAND DETERMINATION DATA SHEET – Northcentral and Northeast Region** See ERDC/EL TR-07-24; the proponent agency is CECW-CO-R	***Requirement Control Symbol EXEMPT (Authority: AR 335-15, paragraph 5-2a)***

Project/Site: FE Tap to Nova Tube Steel - Delta-Wauseon 138kV City/County: Fulton County Sampling Date: 12/14/2021

Applicant/Owner: FirstEnergy State: OH Sampling Point: ROP-MRR-1

Investigator(s): Matthew Ray, PWS; Tom Radford Section, Township, Range: 11, T 7 N, R 3 E

Landform (hillside, terrace, etc.): Toeslope Local relief (concave, convex, none): Concave Slope %: 2

Subregion (LRR or MLRA): LRR R, MLRA 139 Lat: 41.57402 Long: -84.032408 Datum: WGS1984

Soil Map Unit Name: Hoytville clay loam, 0 to 1 percent slopes NWI classification: None

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

Are Vegetation Y, Soil N, or Hydrology N significantly disturbed? Are "Normal Circumstances" present? Yes ____ No X

Are Vegetation N, Soil N, or Hydrology N 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 X	**Is the Sampled Area**
Hydric Soil Present?	Yes ____	No X	**within a Wetland?** **Yes** ____ **No** X
Wetland Hydrology Present?	Yes X	No ____	If yes, optional Wetland Site ID: ____

Remarks: (Explain alternative procedures here or in a separate report.)
1 of 3 wetland criteria have been met. Area is not a wetland. Sample point was taken within an active agricultural field.

HYDROLOGY

Wetland Hydrology Indicators:

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

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

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)
- X Geomorphic Position (D2)
- ___ Shallow Aquitard (D3)
- ___ Microtopographic Relief (D4)
- X FAC-Neutral Test (D5)

Field Observations:

Surface Water Present?	Yes X	No ____	Depth (inches): 2
Water Table Present?	Yes ____	No X	Depth (inches): ____
Saturation Present? (includes capillary fringe)	Yes ____	No X	Depth (inches): ____

Wetland Hydrology Present? **Yes** X **No** ____

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

Remarks:
Hydrology citerion has been met. Tractor tire ruts were observed to contain surface water, in addition to the edge of the agricultural field at a toeslope.

VEGETATION – Use scientific names of plants.

Sampling Point: ROP-MRR-1

Tree Stratum (Plot size: 30ft radius)	Absolute % Cover	Dominant Species?	Indicator Status
1. N/A			
2.			
3.			
4.			
5.			
6.			
7.			
	=Total Cover		
Sapling/Shrub Stratum (Plot size: 15ft radius)			
1. N/A			
2.			
3.			
4.			
5.			
6.			
7.			
	=Total Cover		
Herb Stratum (Plot size: 5ft radius)			
1. *Poa annua*	95	Yes	FACU
2. *Taraxacum officinale*	5	No	FACU
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
11.			
12.			
	100 =Total Cover		
Woody Vine Stratum (Plot size: 30ft radius)			
1. N/A			
2.			
3.			
4.			
	=Total Cover		

Dominance Test worksheet:

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

Total Number of Dominant Species Across All Strata: 1 (B)

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

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	0	x 2 =	0
FAC species	0	x 3 =	0
FACU species	100	x 4 =	400
UPL species	0	x 5 =	0
Column Totals:	100 (A)		400 (B)

Prevalence Index = B/A = 4.00

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.

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** X **No** ___

Remarks: (Include photo numbers here or on a separate sheet.)
Vegetation criterion has not been met.

SOIL

Sampling Point: ROP-MRR-1

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

Depth (inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox Features %	Redox Features Type[1]	Redox Features Loc[2]	Texture	Remarks
0-16	10YR 3/2	100					Loamy/Clayey	
16-22	10YR 5/1	98	7.5YR 5/6	2	C	M	Loamy/Clayey	Prominent redox concentrations

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.

[2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7)
- ___ Polyvalue Below Surface (S8) (**LRR R, MLRA 149B**)
- ___ Thin Dark Surface (S9) (**LRR R, MLRA 149B**)
- ___ High Chroma Sands (S11) (**LRR K, L)**
- ___ Loamy Mucky Mineral (F1) (**LRR K, L**)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)
- ___ Marl (F10) (**LRR K, L**)
- ___ Red Parent Material (F21) **(MLRA 145)**

Indicators for Problematic Hydric Soils[3]:

- ___ 2 cm Muck (A10) (**LRR K, L, MLRA 149B**)
- ___ Coast Prairie Redox (A16) (**LRR K, L, R**)
- ___ 5 cm Mucky Peat or Peat (S3) (**LRR K, L, R**)
- ___ Polyvalue Below Surface (S8) (**LRR K, L**)
- ___ Thin Dark Surface (S9) (**LRR K, L**)
- ___ Iron-Manganese Masses (F12) (**LRR K, L, R**)
- ___ Piedmont Floodplain Soils (F19) (**MLRA 149B**)
- ___ Red Parent Material (F21) **(outside MLRA 145)**
- ___ Very Shallow Dark Surface (F22)
- ___ Mesic Spodic (TA6) (**MLRA 144A, 145, 149B**)
- ___ Other (Explain in Remarks)

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

Restrictive Layer (if observed):

Type: None

Depth (inches): ____

Hydric Soil Present? **Yes** ____ **No** X

Remarks:

Hydric soil criterion has not been met.

U.S. Army Corps of Engineers **WETLAND DETERMINATION DATA SHEET – Northcentral and Northeast Region** See ERDC/EL TR-07-24; the proponent agency is CECW-CO-R	***Requirement Control Symbol EXEMPT (Authority: AR 335-15, paragraph 5-2a)***

Project/Site: FE Tap to Nova Tube Steel - Delta-Wauseon 138kV City/County: Fulton County Sampling Date: 12/14/2021

Applicant/Owner: FirstEnergy State: OH Sampling Point: ROP-MRR-2

Investigator(s): Matthew Ray, PWS; Tom Radford Section, Township, Range: 11, T 7 N, R 3 E

Landform (hillside, terrace, etc.): Toeslope Local relief (concave, convex, none): Concave Slope %: 1

Subregion (LRR or MLRA): LRR R, MLRA 139 Lat: 41.577567 Long: -84.032343 Datum: WGS1984

Soil Map Unit Name: Sloan silty clay loam, frequently flooded NWI classification: None

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

Are Vegetation Y, Soil N, or Hydrology N significantly disturbed? Are "Normal Circumstances" present? Yes ____ No X

Are Vegetation N, Soil N, or Hydrology N 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 X	**Is the Sampled Area**
Hydric Soil Present?	Yes ____	No X	**within a Wetland?** **Yes** ____ **No** X
Wetland Hydrology Present?	Yes X	No ____	If yes, optional Wetland Site ID: ____

Remarks: (Explain alternative procedures here or in a separate report.)
1 of 3 wetland criteria have been met. Area is not a wetland. Sample point was taken within an active agricultural field.

HYDROLOGY

Wetland Hydrology Indicators:

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

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

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)
- X Geomorphic Position (D2)
- ___ Shallow Aquitard (D3)
- ___ Microtopographic Relief (D4)
- X FAC-Neutral Test (D5)

Field Observations:

Surface Water Present?	Yes X	No ____	Depth (inches): 2
Water Table Present?	Yes ____	No X	Depth (inches): ____
Saturation Present? (includes capillary fringe)	Yes ____	No X	Depth (inches): ____

Wetland Hydrology Present? **Yes** X **No** ____

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

Remarks:
Hydrology citerion has been met. Tractor tire ruts were observed to contain surface water, in addition to the edge of the agricultural field at a toeslope.

VEGETATION – Use scientific names of plants.

Sampling Point: ROP-MRR-2

Tree Stratum (Plot size: 30ft radius)	Absolute % Cover	Dominant Species?	Indicator Status
1. N/A			
2.			
3.			
4.			
5.			
6.			
7.			
	=Total Cover		
Sapling/Shrub Stratum (Plot size: 15ft radius)			
1. N/A			
2.			
3.			
4.			
5.			
6.			
7.			
	=Total Cover		
Herb Stratum (Plot size: 5ft radius)			
1. *Poa annua*	85	Yes	FACU
2. *Taraxacum officinale*	10	No	FACU
3. *Rumex crispus*	5	No	FAC
4.			
5.			
6.			
7.			
8.			
9.			
10.			
11.			
12.			
	100 =Total Cover		
Woody Vine Stratum (Plot size: 30ft radius)			
1. N/A			
2.			
3.			
4.			
	=Total Cover		

Dominance Test worksheet:

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

Total Number of Dominant Species Across All Strata: 1 (B)

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

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	0	x 2 =	0
FAC species	5	x 3 =	15
FACU species	95	x 4 =	380
UPL species	0	x 5 =	0
Column Totals:	100 (A)		395 (B)

Prevalence Index = B/A = 3.95

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.

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** X **No** ___

Remarks: (Include photo numbers here or on a separate sheet.)
Vegetation criterion has not been met.

SOIL

Sampling Point: ROP-MRR-2

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

Depth (inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox Features %	Type[1]	Loc[2]	Texture	Remarks
0-16	10YR 3/2	100					Loamy/Clayey	
16-22	10YR 5/1	98	10YR 5/8	2	C	M	Loamy/Clayey	Prominent redox concentrations

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.

[2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7)
- ___ Polyvalue Below Surface (S8) (**LRR R, MLRA 149B**)
- ___ Thin Dark Surface (S9) (**LRR R, MLRA 149B**)
- ___ High Chroma Sands (S11) (**LRR K, L)**
- ___ Loamy Mucky Mineral (F1) (**LRR K, L**)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)
- ___ Marl (F10) (**LRR K, L**)
- ___ Red Parent Material (F21) **(MLRA 145)**

Indicators for Problematic Hydric Soils[3]:

- ___ 2 cm Muck (A10) (**LRR K, L, MLRA 149B**)
- ___ Coast Prairie Redox (A16) (**LRR K, L, R**)
- ___ 5 cm Mucky Peat or Peat (S3) (**LRR K, L, R**)
- ___ Polyvalue Below Surface (S8) (**LRR K, L**)
- ___ Thin Dark Surface (S9) (**LRR K, L**)
- ___ Iron-Manganese Masses (F12) (**LRR K, L, R**)
- ___ Piedmont Floodplain Soils (F19) (**MLRA 149B**)
- ___ Red Parent Material (F21) **(outside MLRA 145)**
- ___ Very Shallow Dark Surface (F22)
- ___ Mesic Spodic (TA6) (**MLRA 144A, 145, 149B**)
- ___ Other (Explain in Remarks)

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

Restrictive Layer (if observed):

Type: None

Depth (inches): ___

Hydric Soil Present? **Yes** ___ **No** X

Remarks:

Hydric soil criterion has not been met.

PHOTOGRAPHIC RECORD

FirstEnergy Tap to Nova Tube Steel - Delta-Wauseon 138kV

Client Name:	Site Location:	Project No.
FirstEnergy	City of Delta and York Township, Fulton County, Ohio	429847.0020

Photo No. 1.

Date: 12/14/2021

Description:

Stream S-MRR-1 looking upstream, facing west.

Photo No. 2.

Date: 12/14/2021

Description:

Stream S-MRR-1 looking downstream, facing east.

PHOTOGRAPHIC RECORD

FirstEnergy Tap to Nova Tube Steel - Delta-Wauseon 138kV

Client Name:	**Site Location:**	**Project No.**
FirstEnergy	City of Delta and York Township, Fulton County, Ohio	429847.0020

Photo No. 3. **Date:** 12/14/2021 **Description:** View of the substrate within Stream S-MRR-1.	

Photo No. 4. **Date:** 12/14/2021 **Description:** Non-jurisdictional ditch D-MRR-1 within the northern portion of the Project Study Area, looking down gradient, facing south.	

PHOTOGRAPHIC RECORD

FirstEnergy Tap to Nova Tube Steel - Delta-Wauseon 138kV

Client Name:	Site Location:	Project No.
FirstEnergy	City of Delta and York Township, Fulton County, Ohio	429847.0020

Photo No. 5. **Date:** 12/14/2021 **Description:** Non-jurisdictional ditch D-MRR-1 within the northern portion of the Project Study Area, looking up gradient, facing north.	

Photo No. 6. **Date:** 12/14/2021 **Description:** Non-jurisdictional ditch D-MRR-2 within the northern portion of the Project Study Area, looking down gradient, facing southeast.	

PHOTOGRAPHIC RECORD

FirstEnergy Tap to Nova Tube Steel - Delta-Wauseon 138kV

Client Name:	Site Location:	Project No.
FirstEnergy	City of Delta and York Township, Fulton County, Ohio	429847.0020

Photo No. 7. **Date:** 12/14/2021 **Description:** Non-jurisdictional ditch D-MRR-2 within the northern portion of the Project Study Area, looking up gradient, facing northwest.	

Photo No. 8. **Date:** 12/14/2021 **Description:** Photo of sample point ROP-MRR-1, facing north.	

PHOTOGRAPHIC RECORD

FirstEnergy Tap to Nova Tube Steel - Delta-Wauseon 138kV

Client Name:	Site Location:	Project No.
FirstEnergy	City of Delta and York Township, Fulton County, Ohio	429847.0020

Photo No. 9. **Date:** 12/14/2021 **Description:** Photo of sample point ROP-MRR-1, facing south.	

Photo No. 10. **Date:** 12/14/2021 **Description:** Photo of sample point ROP-MRR-2, facing north.	

PHOTOGRAPHIC RECORD

FirstEnergy Tap to Nova Tube Steel - Delta-Wauseon 138kV

Client Name:	**Site Location:**	**Project No.**
FirstEnergy	City of Delta and York Township, Fulton County, Ohio	429847.0020

Photo No. 11. **Date:** 12/14/2021 **Description:** Photo of sample point ROP-MRR-2, facing south.	

Photo No. 12. **Date:** 12/14/2021 **Description:** Photo looking towards construction of substation within the northern portion of the Project Study Area, facing east.	

PHOTOGRAPHIC RECORD

FirstEnergy Tap to Nova Tube Steel - Delta-Wauseon 138kV

Client Name:	Site Location:	Project No.
FirstEnergy	City of Delta and York Township, Fulton County, Ohio	429847.0020

Photo No. 13. **Date:** 12/14/2021 **Description:** Southern portion of the Project Study Area along US-20A/State Route (SR)-2/SR-109 (W Main St), west of the railroad bridge, facing east.	

Photo No. 14. **Date:** 12/14/2021 **Description:** Southern portion of the Project Study Area along US-20A/State Route (SR)-2/SR-109 (W Main St), east of the railroad bridge, facing west.