

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

**CONSTRUCTION NOTICE**

**138 kV TRANSMISSION LINE RELCOATIONS AT  
RICHLAND SUBSTATION PROJECT**

**OPSB CASE NO.: 18-1661-EL-BNR**

**December 21, 2018**

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

**CONSTRUCTION NOTICE  
138 kV TRANSMISSION LINE  
RELOCATIONS AT RICHLAND SUBSTATION PROJECT**

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

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

**4906-6-05: Name**

Name of Project: 138 kV Transmission Line Project Relocations at Richland Substation Project (“Project”).

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

In this Project, American Transmission Systems, Incorporated (“ATSI”), a FirstEnergy company, is proposing to relocate 3 transmission line exits at the Richland Substation. The Project will involve the installation of 4 new wood pole structures and 1 new steel pole structure.

The Project will relocate the Lockwood-Richland 138 kV Transmission Line, the Midway-Richland-Wauseon 138 kV Transmission Line, and the Napoleon-Richland-Stryker 138 kV Transmission Line. For the Lockwood-Richland portion of the Project, the existing transmission line will be relocated to a new substation terminal. This portion of the Project will require the installation of one (1) 2-pole wood structure and the removal of one (1) existing 2-pole wood structure and one (1) 1-pole steel structure. Approximately 90 feet of transmission line will be removed and approximately 60 feet of new transmission line will be installed.

For the Midway-Richland-Wauseon portion of the Project, the existing transmission line will be relocated to the previous Lockwood-Richland substation terminal. This portion will require the installation of one (1) 2-pole wood structure, two (2) 1-pole wood structures, and one (1) 1-pole steel structure. New right-of-way will be needed for this portion of the Project. Existing conductors along approximately 400 feet of the transmission line will be repurposed and approximately 600 feet of new transmission line will be installed.

For the Napoleon-Richland-Stryker portion of the Project, the existing transmission line will be relocated to the old Midway-Richland-Wauseon substation terminal. This portion will use the approximately 400 feet of conductor that will be repurposed from the Midway-Richland-Wauseon 138 kV Transmission Line. Approximately 30 feet of the new transmission line is needed for installing a jumper to connect the existing transmission line to the repurposed transmission line on the new 1-pole steel structure.

The general location of the Project is shown in Exhibit 1, a partial copy of the United States Geologic Survey, Defiance County OH, Quad Map, ID number 41084-C3. Exhibit 2 is a partial copy of Bing aerial imagery. The Project is located at Richland Substation. The general layout depicting the Project details described above is shown in Exhibit 3. The Project will be located in the City of Defiance, Defiance County, Ohio.

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

The Project meets the requirements for a Construction Notice because the Project is within the types of projects defined by Item (1)(a) of the Application Requirement Matrix for Electric Power Transmission Lines, Appendix A of OAC Rule 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 operating at a higher transmission voltage, as follows:*

*(a) Line(s) not greater than 0.2 miles in length.*

The proposed Project is within the requirements of Item (1)(a) as it involves approximately 680 feet (0.13 miles) of relocated transmission line.

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

The Project is needed to mitigate a NERC Transmission Criteria Planning violation on the Richland-Naomi Jct. 138 kV Transmission Line. This line is overloaded to 101% of the Summer Emergency rating when a fault at the 138 kV L Bus at Richland Substation occurs. This Project is recommended by PJM and identified by the RTEP number b2875. This Project is listed in the FirstEnergy Corp. 2018 Long-Term Forecast Report.

**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. 2018 Long-Term Forecast Report. This map was submitted to the PUCO in Case No. 18-0449-EL-FOR under Rule 4901:5-5:04 (C)(2)(b) of the Ohio Administrative Code. The map is incorporated by reference only. This map shows ATSI's 345 kV and 138 kV transmission lines and transmission substations including the Richland Substation and the transmission lines associated with the Project. The project area is located approximately  $\frac{7}{10}$  inches (11" x 17" printed version) from the left edge of the map and  $2\frac{4}{5}$  inches (11" x 17" printed version) from the top of the map. The general location and layout of the project area is shown in Exhibit 1 and 2.

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

As the Project only involves switching the transmission connections at Richland Substation and the entire Project Area is located adjacent to the substation within maintained ROW, no alternative routes were considered.

**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 Transmission Line Project as necessary. ATSI will maintain a copy of this Construction Notice on FirstEnergy’s website. Letters will be sent to affected property owners at least 7 days before construction begins on the project informing them of the Project’s start and a proposed timeframe of construction and restoration activities.

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

The construction schedule for this Project is expected to begin as early as March 28, 2019 and completed by May 3, 2019.

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

Exhibit 1 depicts the general location of the Project. This Exhibit provides a partial copy of the United States Geological Survey, Defiance County OH, quadrangle map (Quad Order ID 41084-C3). Exhibit 2 provides a partial copy of Bing aerial imagery.

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

The Project is located on existing fee owned Toledo Edison property. The new right-of-way required for the Project will be obtained from Toledo Edison. Table 1 contains a list of property owners affected by the Project.

**Table 1: Property Owner List**

<b>Parcel Number</b>	<b>Property Owner</b>	<b>Property Address</b>	<b>Easement Status</b>
J050018001802	Toledo Edison	N/A	Owned in Fee

## **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:	Lockwood-Richland: 795 kcmil 26/7 ACSR Midway-Richland-Wauseon: 336.4 kcmil 30/7 ACSR Napoleon-Richland-Stryker: 336.4 kcmil 30/7 ACSR
Static Wire:	Lockwood-Richland: 3#6 Alumoweld Midway-Richland-Wauseon: 3#6 Alumoweld Napoleon-Richland-Stryker: 3#6 Alumoweld
Insulators:	Lockwood-Richland: Porcelain Midway-Richland-Wauseon: Porcelain & Polymer Napoleon-Richland-Stryker: Porcelain
ROW Width:	60 feet
Land Requirements:	N/A Parcel owed in Fee
Structure Types:	Exhibit 4: Single Wood Pole, Corner, Dead End Structure. One (1) structure is needed. Exhibit 5: Single Wood Pole, Tangent Structure. Two (2) structures are needed. Exhibit 6: Two Wood Pole, H-Frame, Dead End Structure. Two (2) structures are needed. Exhibit 7: Steel Monopole Dead End Structure. One (1) structure is needed.

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

The closest occupied residence or institution is approximately 780 feet from the proposed transmission line centerline therefore no Electric and Magnetic Field (“EMF”) calculations are required by this code provision.

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

The total estimated capital cost for the proposed project is approximately \$1,052,500. The breakdown of the estimated cost per transmission line relocation is as follows: cost for the Lockwood-Richland 138 kV Transmission Line is approximately \$140,400, cost for the Midway-Richland-Wauseon 138 kV Transmission Line is approximately \$788,800, and cost for the Napoleon-Richland-Stryker 138 kV Transmission Line is approximately \$123,300.

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

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

The Project is located in the City of Defiance, Defiance County, Ohio. The main land uses around the Project are a mixture of industrial and agricultural.

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

Agricultural land does exist within the Project's disturbance area, although Toledo Edison does rent part of the Project parcel out for agricultural purposes. The parcel, however, is not part of an agricultural district, and the proposed Project is not anticipated to impact existing farming activities.

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

As part of the investigation, a search of Ohio Historic Preservation Office ("OHPO") online database was conducted to identify the existence of any significant archeological or cultural resource sites within 0.5 miles of the Project Area. The results of the search are shown in Exhibit 8. The specific location of 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 there are zero (0) listed NRHP sites and one (1) NRHP eligible sites within 0.5 miles of the Project potential disturbance area. The NRHP eligible site is shown in Table 2.

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. Four (4) OAI listed archeological resources have been previously inventoried within 0.5 miles of the Project area and are shown in Table 3. Zero (0) OHI listed structural resources are located within 0.5 miles of the Project area. Six (6) previous cultural resource surveys were conducted within 0.5 miles of the Project area and are shown in Table 4. Zero (0) OSG cemeteries are located within 0.5 miles of the Project area.

**Table 2. List of Eligible National Historic Registered Places**

<b>Resource Name</b>	<b>Address</b>	<b>County</b>	<b>Eligibility</b>
Defiance ANR (DE0247)	N/A	Defiance	YD

**Table 3. List of OAI Listed Archeological Resources**

<b>OAI Number</b>	<b>Affiliation</b>	<b>Description</b>	<b>County</b>	<b>Quad Name</b>
DE0260	Prehistoric	Unknown Prehistoric	Defiance	Defiance East
DE0261	Prehistoric	Unknown Prehistoric	Defiance	Defiance East
DE0262	Prehistoric	Unknown Prehistoric	Defiance	Defiance East
DE0251	Prehistoric	Unknown Prehistoric	Defiance	Defiance East



**Table 4`. List of Previous Cultural & Historic Resource Survey**

<b>Year</b>	<b>Name</b>	<b>County</b>	<b>Municipality</b>
1994	Literature Review and Reconnaissance Survey for the Preliminary Alternatives Segment of the Proposed 3.7 Km U.S. 24 Expansion (Def-24-11.91) in Noble and Richland Townships, Defiance County, Ohio	Defiance	Richland Townships
1991	A Phase I, II, and III (Research, Survey and Testing) Cultural Resources Assessment of the Existing Gm Pipeline in Defiance County, Ohio	Defiance	Richland Township
1999	Richland Substation Expansion Project Archeological Investigation, Defiance Township, Defiance County, Ohio	Defiance	Defiance Township
2003	A Phase I Archaeological Survey of the DEF/HEN-24-11.91/0.00 Project in Adams and Richland Townships, Defiance County, Ohio and Napoleon Township, Henry County, Ohio (PID 19047)	Defiance	Richland Townships
2006	Phase I Cultural Resource Management Survey of a Proposed 3.7 ha (9.2a) Development in Richland Township, Defiance County, Ohio	Defiance	Richland Township
2015	Phase I Cultural Resources Survey of Three Parcels Totaling 4.7-Acres Associated with Horizontal Directional Drilling in Defiance County, Ohio	Defiance	Richland Township

The one NRHP eligible site is located approximately 0.5 miles away. Due to the distance from the Project no impacts to the site are expected.

The closest OAI resource is located approximately 0.13 miles away. The closest archeological survey, the 1999 Richland Substation Expansion Project Archeological Investigation, Defiance Township, Defiance County, Ohio was conducted immediately adjacent to the Project area. Based on the distance to known archeological resources and the fact that the closest surveyed area showed no known resources, impact to archeological features is not anticipated.

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

There are no other government agency requirements s at the time of filing.

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

The Project work limits associated with the structure replacements will be limited to an area located to the north of the existing Richland Substation and south of Commerce Drive. The construction site will be accessible via Commerce Drive. The Project area consists of herbaceous vegetation, actively farmed land, emergent wetland, and scrub/shrub wetland areas. The threatened and endangered species listed for Defiance County, Ohio are included in Table 5.

<b>Table 5: List of Endangered, Threatened, and Rare Species</b>				
<b>Common Name</b>	<b>Scientific Name</b>	<b>Federal Listed Status</b>	<b>State Listed Status</b>	<b>Affected Habitat</b>
Indiana bat	<i>Myotis sodalis</i>	Endangered	Endangered	Trees & Forest
Northern long-eared bat	<i>Myotis septentrionalis</i>	Threatened	Special Concern	Trees & Forest
Copperbelly Watersnake	<i>Nerodia erythrogaster neglecta</i>	Threatened	Endangered	Shallow wetlands or floodplain wetlands surrounded by forested uplands.
White Cat's Paw	<i>Epioblasma obliquata perobliqua</i>	Endangered	Endangered	Perennial stream
Northern Riffleshell	<i>Epioblasma torulosa rangiana</i>	Endangered	Endangered	Perennial stream
Long-solid	<i>Fusconaia maculata maculata</i>	N/A	Endangered	Perennial stream
Clubshell	<i>Pleurobema clava</i>	Endangered	Endangered	Perennial stream

<b>Table 5: List of Endangered, Threatened, and Rare Species</b>				
<b>Common Name</b>	<b>Scientific Name</b>	<b>Federal Listed Status</b>	<b>State Listed Status</b>	<b>Affected Habitat</b>
Rabbitsfoot	<i>Quadrula cylindrica cylindrica</i>	Threatened	Endangered	Perennial stream
Rayed Bean	<i>Villosa fabalis</i>	Endangered	Endangered	Perennial stream
Black Sandshell	<i>Ligumia recta</i>	N/A	Threatened	Perennial stream
Threehorn Wartyback	<i>Obliquaria reflexa</i>	N/A	Threatened	Perennial stream
Fawnsfoot	<i>Truncilla donaciformis</i>	N/A	Threatened	Perennial stream
Greater Redhorse	<i>Moxostoma valenciennesi</i>	N/A	Threatened	Perennial stream
Regal Fritillary	<i>Speyeria idalia</i>	N/A	Endangered	Tall-grass prairie and other open sites including damp meadows, marshes, wet fields, and mountain pastures.

The response from ODNR and USFWS indicated the federal and state endangered Indiana Bat (*Myotis sodalis*) and the federal threatened Northern Long-Eared Bat (*Myotis septentrionalis*) are within the range of the Project. No trees will be cleared as a result of the proposed project, therefore adverse impacts to listed bat species are not anticipated.

No streams are located within the project area. Therefore, no suitable habitat for any of the listed mussel or fish species are present within the Project area.

Of the other habitats for the listed species, potential habitat for the state-endangered Regal Fritillary is located within the Project area. Due to the prevalence of preferred habitat for the Regal Fritillary throughout this portion of northwestern Ohio (i.e., damp meadows, marshes, and wet fields) it is unlikely that the proposed project will have an adverse effect on this species as permanent impacts will be limited to the placement of three transmission poles within a maintained right-of-way.

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

ATSI hired TRC Environmental Corporation (“TRC”) to conduct a wetland and stream assessment of the Project area. The TRC investigation focused on an approximately 8-acre area located to the north of the existing substation. One feature (Wetland 1) was identified within the study area. Wetland 1 is an approximately 1.73-acre palustrine scrub-shrub (PSS) and palustrine emergent (PEM) wetland complex. Standing water (up to 5 inches) and microtopography was present throughout the wetland. The wetland did not appear to extend beyond the study area limits. No streams were identified within the project area. A copy of TRC’s results is shown in Exhibit 9.

Of the five (5) transmission poles that will be installed, only three (3) will be located outside the substation fence. These poles will consist of two (2) wooden poles and one (1) steel pole. One (1) of the wooden poles will be placed in the PEM portion of the delineated wetland area. Timber matting will be used to access this location, and excess soils generated during the installation this direct-embedded structure will be placed outside of the limits of the wetland.

The Project work limits do not encroach on any regulated flood plains based on a review of online FEMA Flood Insurance Rate Mapping.

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

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

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

This Construction Notice application is being provided concurrently with its docketing with the Board to the following officials in the City of Defiance, Defiance County, Ohio.

**Defiance County**

Commissioner Ryan Mack  
Board of County Commissioners  
500 Court Street, Suite A  
Defiance, OH 43512

Mr. Warren Schlatter, P.E., P.S.  
Defiance County Engineer  
510 Court Street, Suite 201  
Defiance, OH 43512

Commissioner Mick Pocratsky  
Board of County Commissioners  
500 Court Street, Suite A  
Defiance, OH 43512

Mr. Bill Moats, Chairperson  
Soil & Water Conservation District  
6879 Evansport Road, Suite C  
Defiance, OH 43512

Commissioner Gary Plotts  
Board of County Commissioners  
500 Court Street, Suite A  
Defiance, OH 43512

Mr. Keith Schroeder, Vice  
Chairperson  
Soil & Water Conservation District  
6879 Evansport Road, Suite C  
Defiance, OH 43512

**Defiance City**

Mayor Mike McCann  
City Administration  
631 Perry Street  
Defiance, OH 43512

Mr. Jeff Leonard,  
City Administrator  
631 Perry Street  
Defiance, OH 43512

Mr. David McMaster, President  
City Council  
631 Perry Street  
Defiance, OH 43512  
Ms. Melinda Sprow, P.E.

Defiance City Engineer  
631 Perry Street, Suite 102  
Defiance, OH 43512

Mr. Mark Hall, Chair  
Defiance City Planning Commission  
631 Perry Street, Suite 102  
Defiance, OH 43512

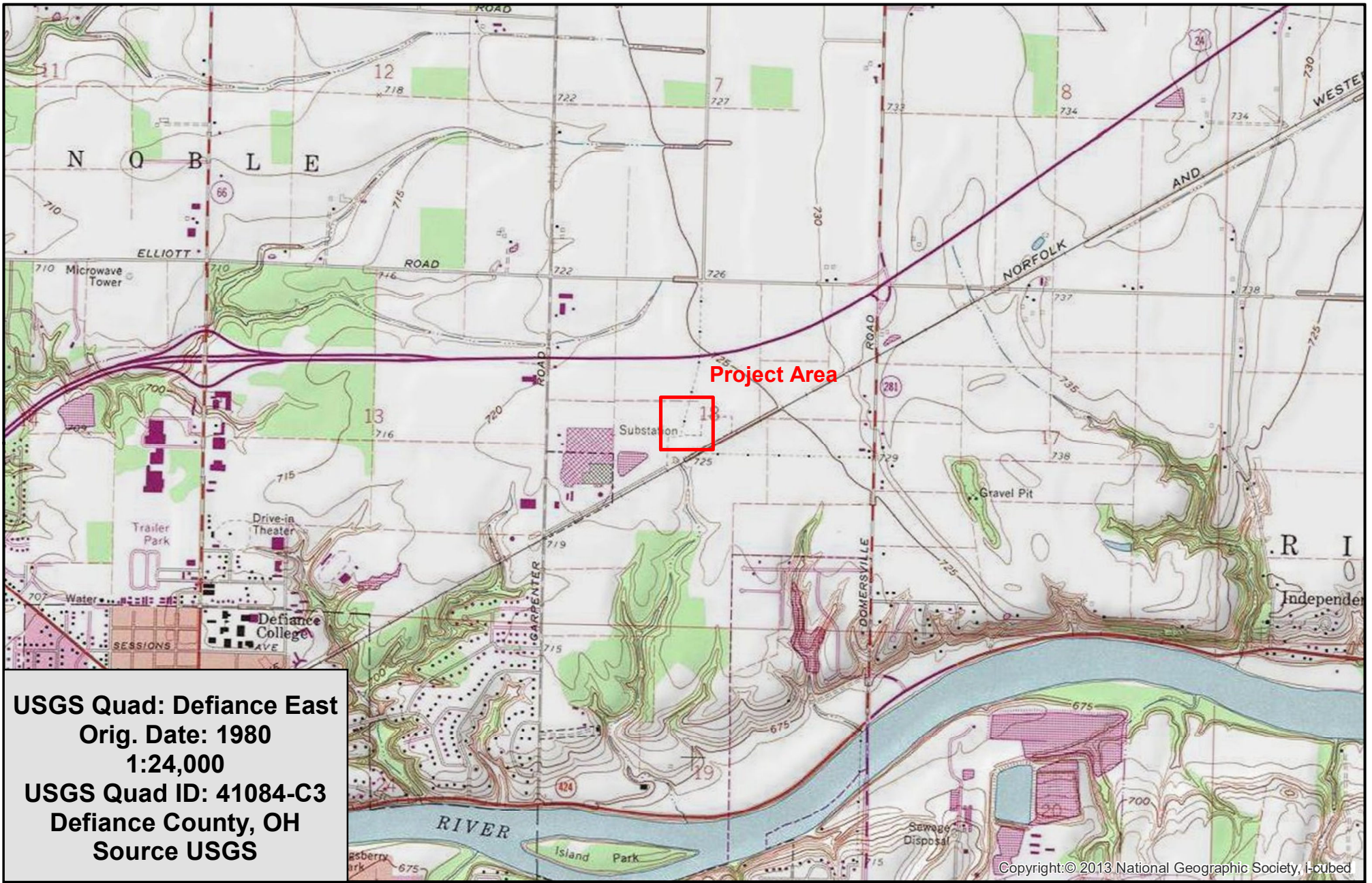
Ms. Jennifer English  
MS4 Coordinator  
631 Perry Street, Suite 102  
Defiance, OH 43512

**Library**

Mr. Michael Thornton, Director  
Defiance Library  
320 Fort Street  
Defiance, OH 43512

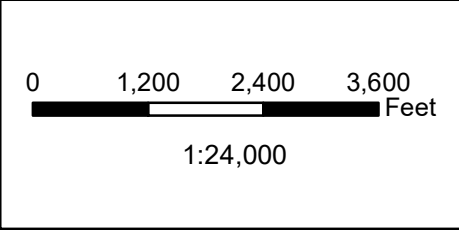
Copies of the transmittal letters to these officials have been included with this application as proof of compliance under OAC Rule 4906-6-07 (B) and to provide the Board with proof of notice to local officials as required by OAC Rule 4906-6-07 (A)(1) and to libraries per OAC Rule 4906-6-07 (A)(2).

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



**USGS Quad: Defiance East**  
**Orig. Date: 1980**  
**1:24,000**  
**USGS Quad ID: 41084-C3**  
**Defiance County, OH**  
**Source USGS**

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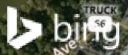
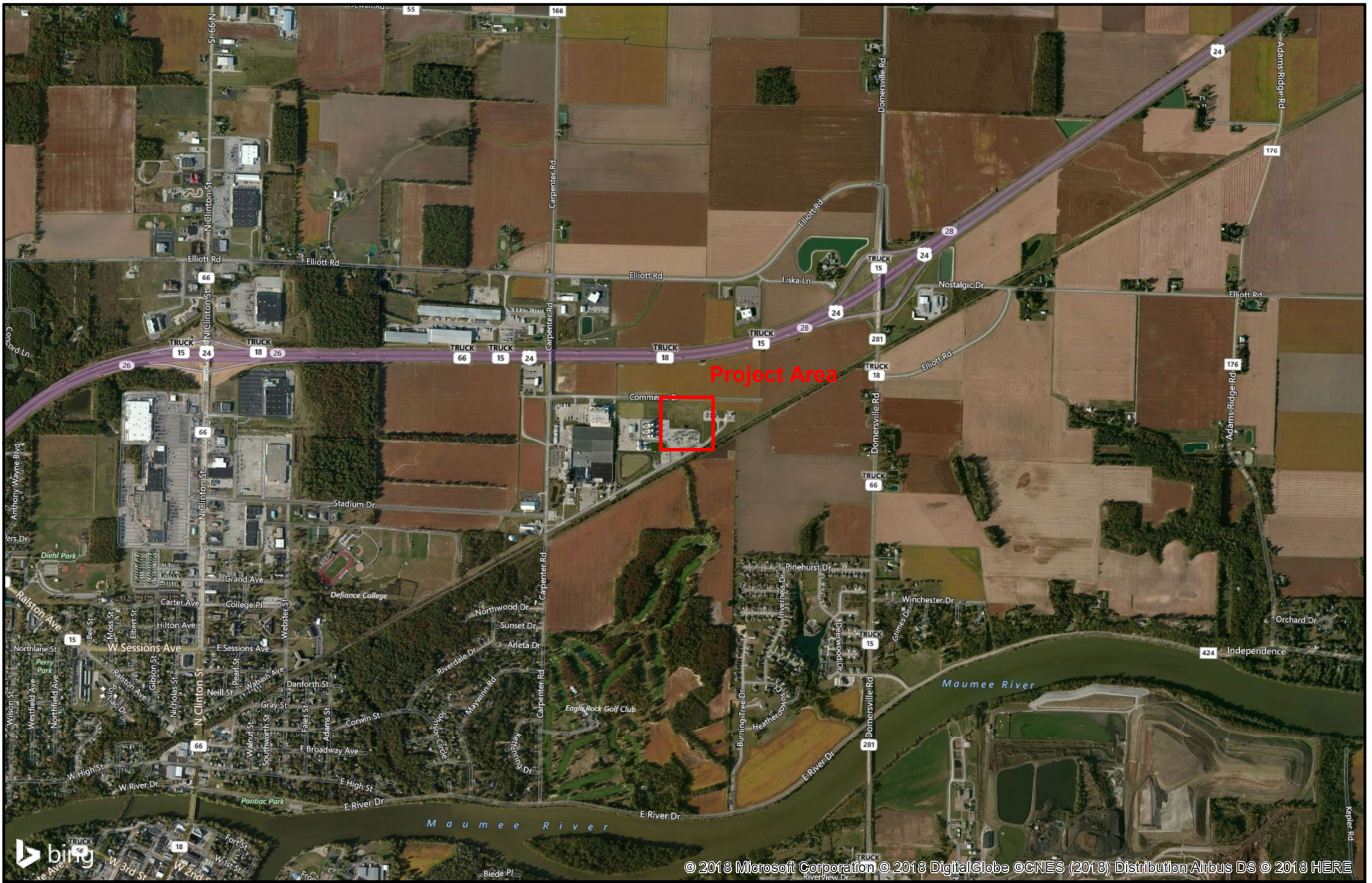
**138 kV Transmission Lines Relocations**  
**Near Richland Substation Project**

**Exhibit 1**

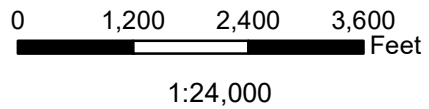


**FirstEnergy**

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## 138 kV Transmission Lines Relocations Near Richland Substation Project

### Exhibit 2

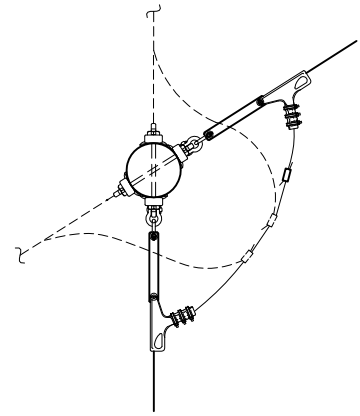
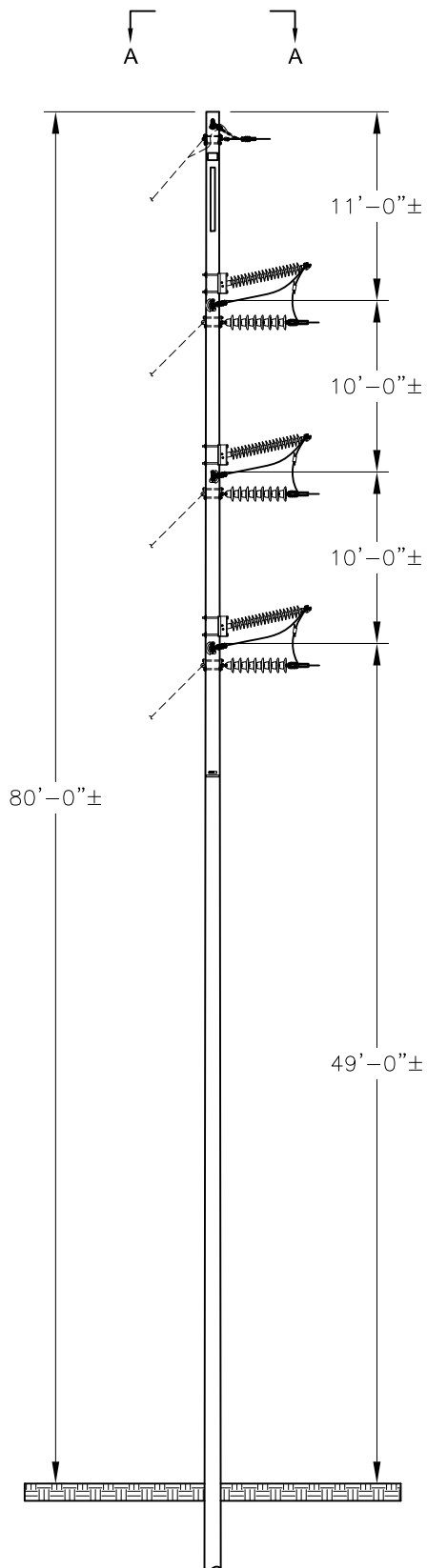


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**SECTION A-A**

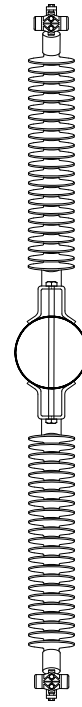
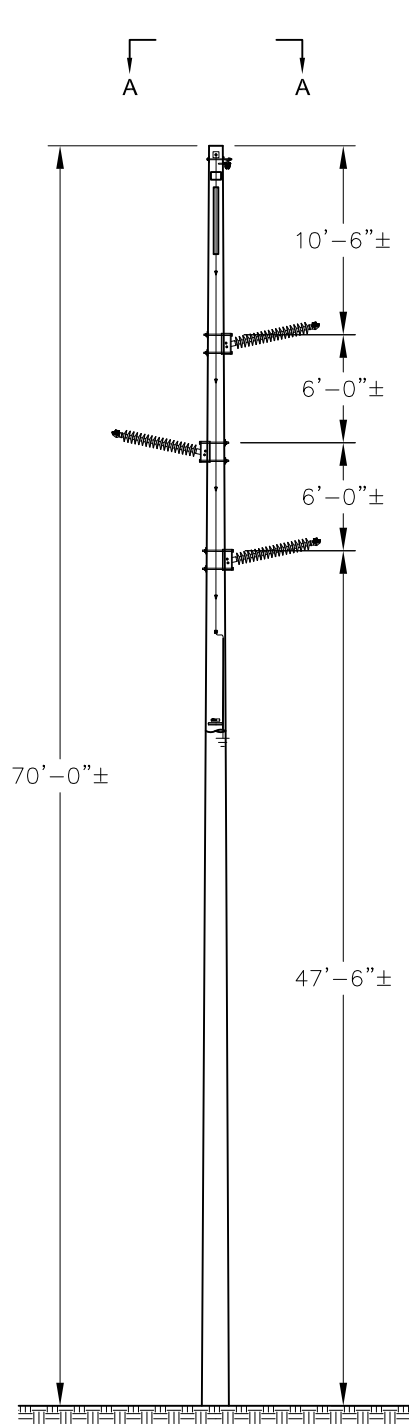
**\*\*NOT TO SCALE**

**ATSI**<sup>®</sup>  
 American Transmission Systems, Inc.  
a subsidiary of FirstEnergy Corp.

138kV TRANSMISSION POLE RELOCATIONS  
 AT RICHLAND SUBSTATION PROJECT

SINGLE WOOD POLE, CORNER, DEAD END STRUCTURE

**EXHIBIT 4**



**SECTION A-A**

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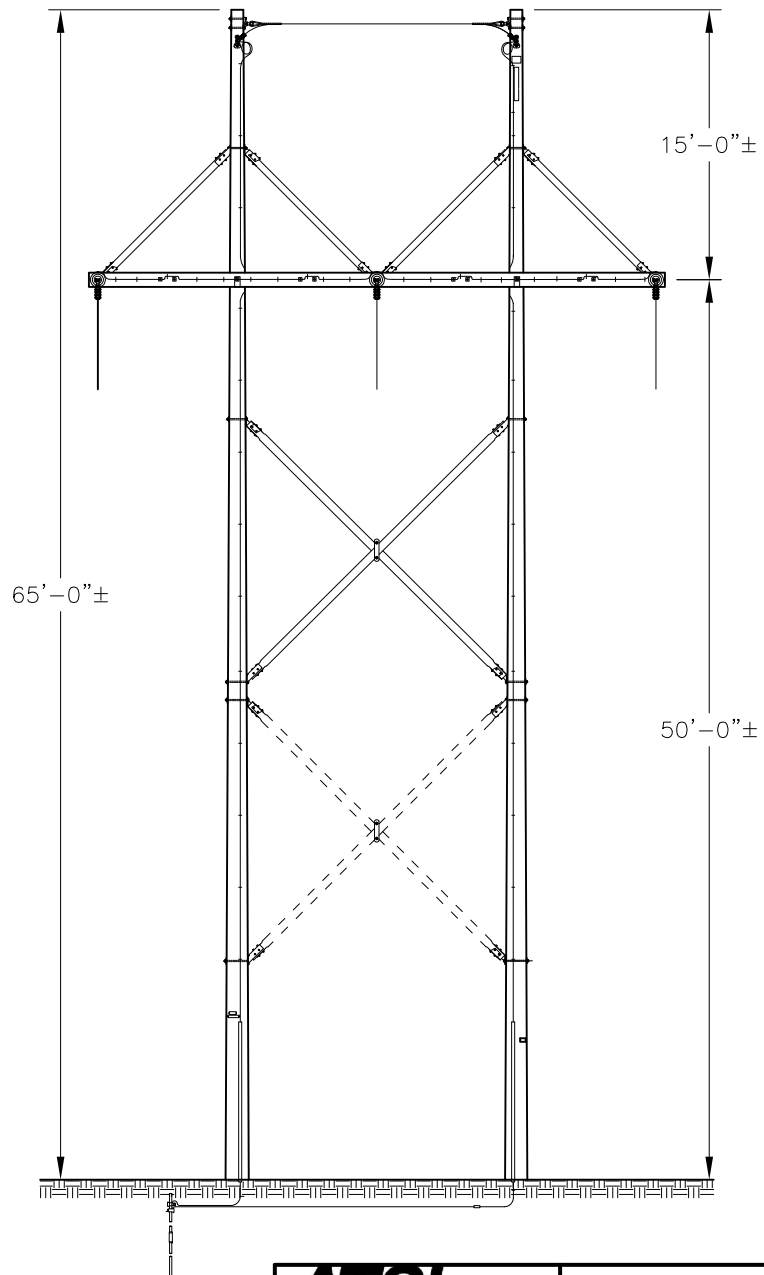
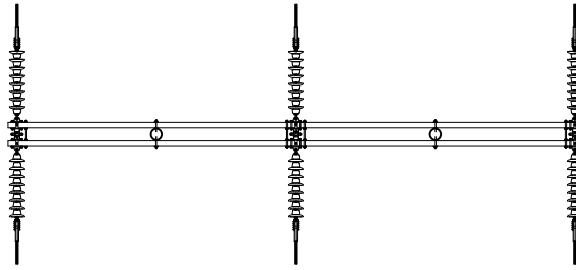
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138kV TRANSMISSION POLE RELOCATIONS  
AT RICHLAND SUBSTATION PROJECT

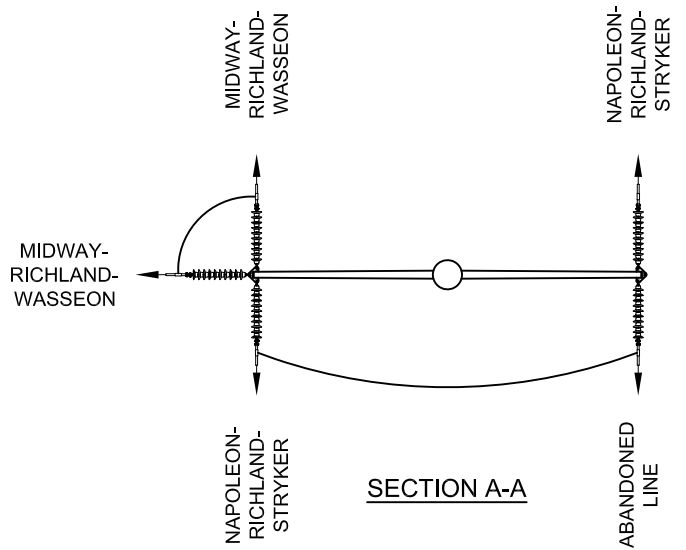
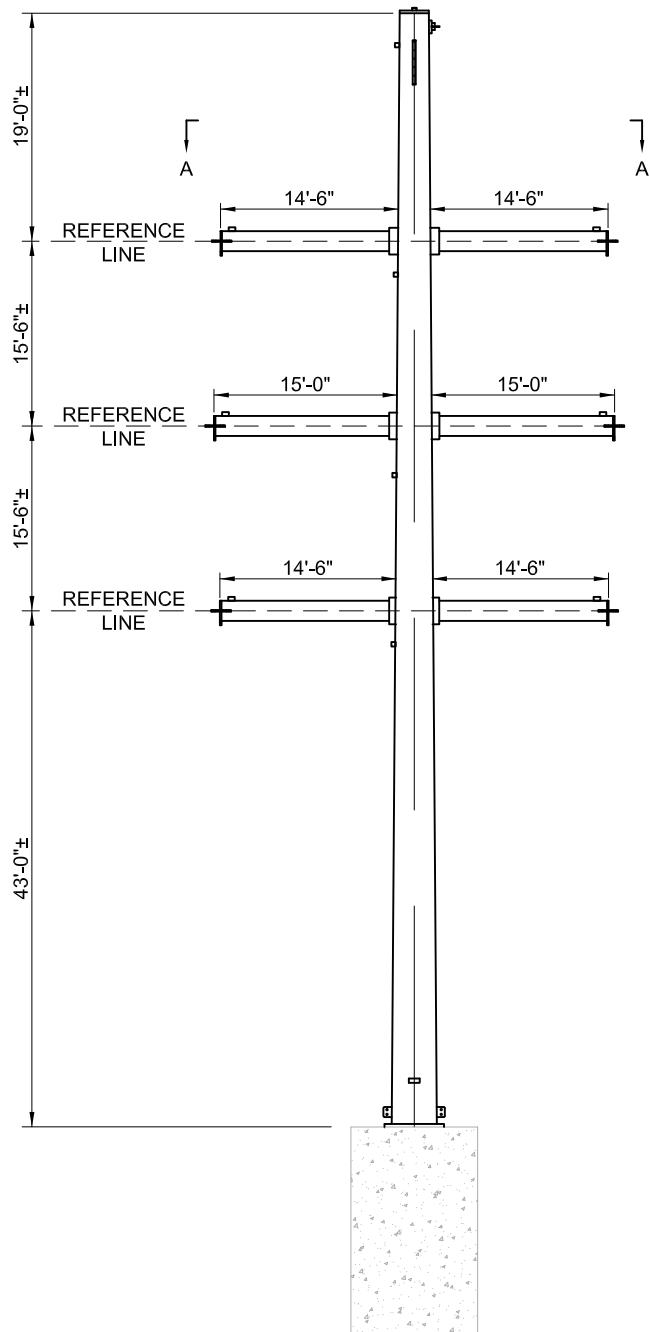
SINGLE WOOD POLE, TANGENT STRUCTURE

**EXHIBIT 5**



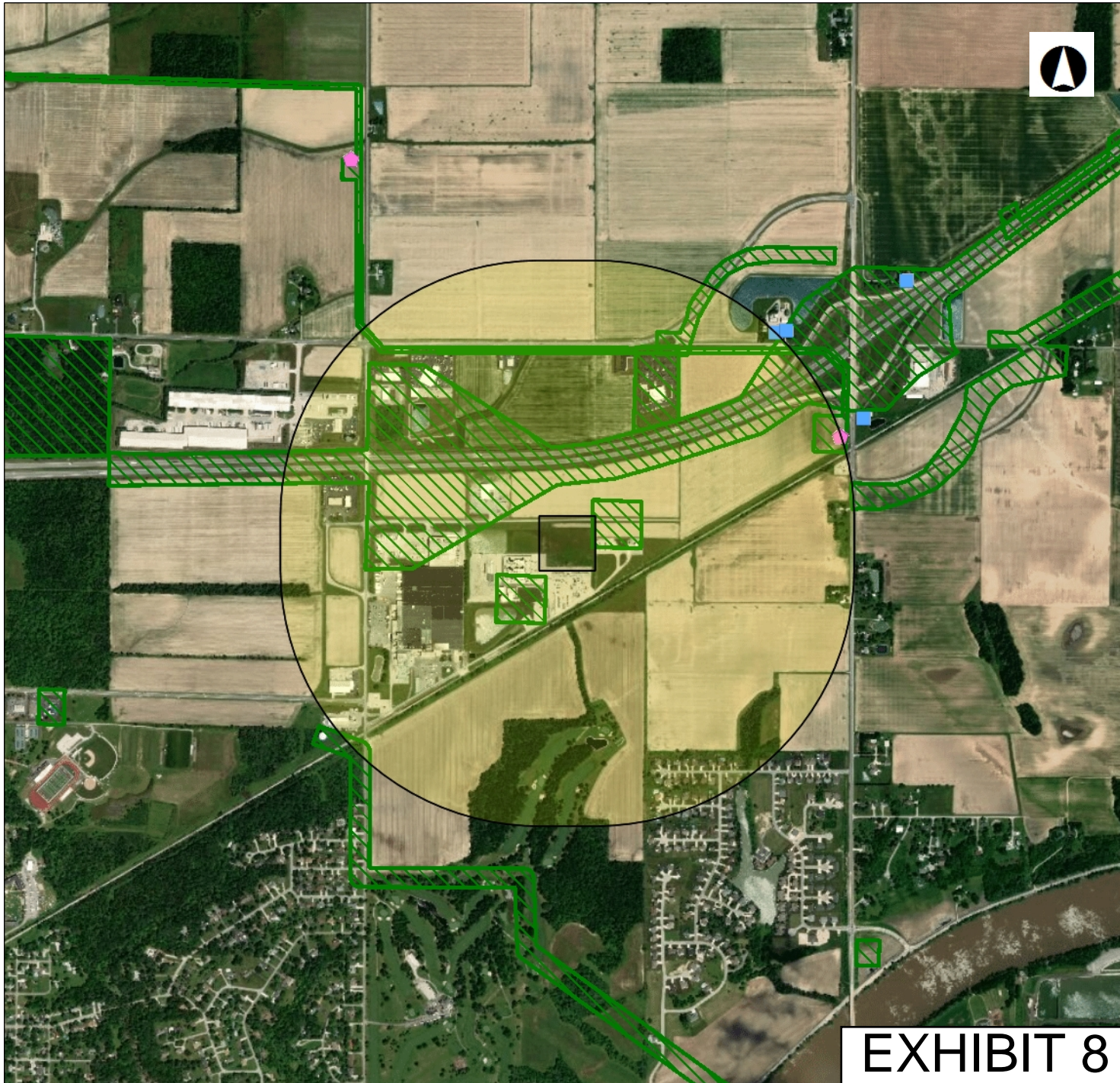
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<p>TWO WOOD POLE, H-FRAME, DEAD END STRUCTURE</p>	
<p><b>EXHIBIT 6</b></p>	



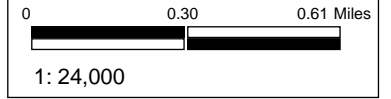
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<p>STEEL MONOPOLE DEAD END STRUCTURE</p>	
<p><b>EXHIBIT 7</b></p>	



**Legend**

- NR Listings**
  - Listed
  - ⊙ National Historic Landmark
  - ✕ Delisted
- ◆ NR Determinations of Eligibi
- Historic Structures
- Historic Bridges
- Historic Tax Credit Projects
- OGS Cemeteries**
  - ⊕ Confident
  - ⊕ Not Confident
- Dams
- UTM Zone Split
- ▨ NR Boundaries
- ▨ Phase1
- ▨ Phase2
- ▨ Phase3
- ▨ Historic Previously Surveyec



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 Projection: WGS\_1984\_Web\_Mercator\_Auxiliary\_Sphere



**EXHIBIT 8**

