

# Letter of Notification for the Hillsboro- Millbrook Park 138 kV Circuit Rebuild Adjustment Project



An **AEP** Company

BOUNDLESS ENERGY™

PUCO Case No. 22-0010-EL-BLN

Submitted to:  
The Ohio Power Siting Board  
Pursuant to Ohio Administrative Code  
Section 4906-6-05

Submitted by:  
AEP Ohio Transmission Company, Inc.

January 14, 2022

## Letter of Notification

### Hillsboro-Millbrook Park 138 kV Circuit Rebuild Adjustment Project

4906-6-05

AEP Ohio Transmission Company, Inc. (the “Company”) is providing the following information to the Ohio Power Siting Board (OPSB) in accordance with the accelerated application requirements of Ohio Administrative Code Section 4906-6-05.

#### 4906-6-05(B) General Information

##### B(1) Project Description

**The applicant shall provide the name of the project and applicant's reference number, names and reference number(s) of resulting circuits, a brief description of the project, and why the project meets the requirements for a Letter of Notification or Construction Notice application.**

The Company is proposing the Hillsboro – Millbrook Park 138 kV Circuit Rebuild Adjustment Project (the “Project”), located in Highland, Adams, Pike and Scioto counties, Ohio. The Project involves adjusting 28 transmission line structures locations, totaling approximately 6.3 miles, of the approved Hillsboro – Millbrook Park 138 kV Circuit Rebuild Project (Case No. 21-0268-EL-BLN). The adjustments are necessary due to the results of the Company’s right-of-way (ROW) negotiations with property owners. Exhibits 1 and 2 in Appendix A show the location of the Project in relation to the surrounding vicinity.

The Project meets the requirements for a LON because it is within the types of projects defined by Item (2)(b) of 4906-1-01 **Appendix A Application Requirement Matrix For Electric Power Transmission Lines** as it is replacing structures with a different type of structure for more than two miles. Item (2)(b) of 4906-1-01 *Appendix A* states:

(2) Adding new circuits on existing structures designed for multiple circuit use, replacing conductors on existing structures with larger or bundled conductors, adding structures to an existing transmission line, or replacing structures with a different type of structure, for a distance of:

(b) More than two miles.

The Project has been assigned PUCO Case No. 22-0010-EL-BLN.

##### B(2) Statement of Need

**If the proposed project is an electric power transmission line or natural gas transmission line, a statement explaining the need for the proposed facility.**

The Project involves adjustments in the approved alignment of approximately 6.3, nonconsecutive, miles of the Hillsboro – Millbrook Park 138 kV Circuit Rebuild project. The need of the project remains the same as what was reported in OPSB Case Number 21-0268-EL-BLN.

The Hillsboro – Millbrook Park 138 kV Circuit Rebuild Project involves rebuilding approximately 52 miles of 138 kV line between Ohio Power Company’s Hillsboro and Millbrook Park stations, as a single circuit line. Currently, the Hillsboro – Millbrook Park 138kV circuit is configured as two separate wood pole lines, six wired together. Fifty percent of the structures are original vintage from 1943 and the remaining structures were replaced between 1960-1980. The majority (93%) of the original conductor built in 1944 and 1948 is still in service. This line has significant asset renewal concerns, which includes 1342 open conditions on the line. These conditions include numerous pole, shielding, and grounding issues throughout the line.

South Central Power’s Sinking Springs delivery point is served from this line and has experienced over 3.5 million Customer Minutes of Interruption over the past five years. Sinking Springs serves approximately 1,500 customers with 4.6 MVA of peak load. Retiring the existing line is not viable as this line serves as an interconnection to Dayton Power & Light (“DPL”) zone and provides service to DP&L and Duke Energy Ohio (“Duke”). In addition, there have also been numerous IPP requests to interconnect in the area. Without the Project, customer minutes of interruptions will continue to get worse as the line asset deteriorates.

The need and solution for the Hillsboro – Millbrook Park 138 kV Circuit Rebuild Project was presented to PHM on 5/20/2019 and 2/21/2020, then subsequently assigned a PHM# of s2201. This Project was included in the Company’s most recent Long-Term Forecast Report on page 75 of 87, see Appendix B.

### **B(3) Project Location**

**The applicant shall provide the location of the project in relation to existing or proposed lines and substations shown on an area system map of sufficient scale and size to show existing and proposed transmission facilities in the project area.**

The Project is located in Highland, Adams, Pike and Scioto counties, Ohio. The Hillsboro – Millbrook Park 138 kV Circuit Rebuild Project begins at the Hillsboro Station located just northwest of County Road 7 in Highland County (near 39.173413 latitude, -83.677805 longitude) and extends 52 miles southeast terminating at the Millbrook Park Station located south of U.S. Route 52 in Scioto County (near 38.753218 latitude, -82.928937 longitude). This LON covers adjustments made to the locations of 28 structures along various sections of the 52 miles of transmission line.

Exhibit 1 in Appendix A shows the proposed Project relative to existing transmission facilities on a USGS topographic quadrangle map. Exhibit 2 in Appendix A identifies the Project components (the 28 structures proposed for a shift in location) on aerial imagery.

### **B(4) Alternatives Considered**

**The applicant shall describe the alternatives considered and reasons why the proposed location or route is best suited for the proposed facility. The discussion shall include, but not be limited to, impacts associated with socioeconomic, ecological, construction, or engineering aspects of the project.**

The overall 52-mile Project proposed to rebuild on or near the centerline of the existing transmission line and within existing ROW. Abandoning the existing ROW for a new greenfield route was neither practical nor necessary.

The proposed changes to 28 structure locations are the result of: 1) requests from specific landowners as the Company engaged in right-of-way and easement discussions and 2) for some parcels the Company decided to retain their existing easement rights after a more in-depth review of the easement conditions currently in place. In the latter cases, structure locations are proposed to be moved back to or near the centerline of the existing transmission line currently in operation.

#### **B(5) Public Information Program**

**The applicant shall describe its public information program to inform affected property owners and tenants of the nature of the project and the proposed timeframe for project construction and restoration activities.**

The Company will inform affected property owners and tenants about this Project through several different mediums. Within seven days of filing this LON, the Company will issue a public notice in a newspaper of general circulation in the Project area. The notice will comply with all requirements of Ohio Revised Code (“OAC”) Section 4906-6-08(A)(1-6). Further, the Company will mail a letter, via first class mail, to affected landowners, tenants, contiguous owners and any other landowner the Company may approach for an easement necessary for the construction, operation, or maintenance of the Project. The letter will comply with all requirements of OAC Section 4906-6-08(B).

The Company maintains a website (<http://aeptransmission.com/ohio/>) which provides the public access to an electronic copy of this LON and the public notice for this LON. An electronic copy of the LON will be served to the public library in each political subdivision for this Project. The Company retains ROW land agents that discuss Project timelines, construction and restoration activities and convey information to affected owners and tenants throughout the Project.

#### **B(6) Construction Schedule**

**The applicant shall provide an anticipated construction schedule and proposed in-service date of the project.**

Construction of the Hillsboro-Millbrook Park 138 kV Circuit Rebuild project began in November 2021, however, portions of the alignment included in this LON have not begun construction. Construction is planned to commence for this Project in April 2022 with a proposed in-service of July 2025.

#### **B(7) Area Map**

**The applicant shall provide a map of at least 1:24,000 scale clearly depicting the facility with clearly marked streets, roads, and highways, and an aerial image.**

Exhibit 1 in Appendix A identifies the location of the Project area on a USGS 1:24,000 quadrangle map. Exhibit 2 in Appendix A consists of an aerial imagery map from October 2019 of the Project Area.

To visit the Project starting point from Columbus, take I-70 W/I-71 S. Follow I-71 S to OH-72 S in Jefferson Township. Take exit 58 from I-71 S. Continue on OH-72 S. Take OH-729 to Mad River Road in New Market Township. Turn left onto OH-72 S, then continue for 10.1 miles. Turn right onto OH-729 S, then continue for 7.6 miles. Turn left onto OH-73 E, then continue for 3.1 miles. Turn right onto Mad River Road, then continue for 5.0 miles. Continue onto OH-124 E for 0.4 miles then turn right onto Mad River Road. You will arrive at the start of the Project at Hillsboro Station in 4.7 miles.

**B(8) Property Agreements**

**The applicant shall provide a list of properties for which the applicant has obtained easements, options, and/or land use agreements necessary to construct and operate the facility and a list of the additional properties for which such agreements have not been obtained.**

A table of property parcel numbers with an indication as to whether the easement/option necessary to construct and operate the facility is provide below.

Property Parcel Number	Easement Agreement/Option Obtained (Yes/No)	Agreement Type
03-27-000-018.00	Yes	Option
03-27-000-001.00	Yes	Existing Rights
120336000000	Yes	Existing Rights
120303000000	Yes	Option
121015000000	No	Option
004-00-00-010.000	Yes	Existing Rights
018-00-00-021.000	No	Option
018-00-00-020.001	No	Option
045-00-00-900.000	Yes	Existing Rights
13-0392.006	Yes	Existing Rights
13-0573.000	Yes	Existing Rights
13-0358.000	Yes	Existing Rights
13-0210.000	No	Option
13-0345.000	Yes	Option
13-0555.000	Yes	Option
24-1646.000	Yes	Existing Rights
24-1648.000	Yes	Existing Rights
24-0123.000	Yes	Existing Rights
24-0125.000	Yes	Existing Rights
08-0896.000	Yes	Existing Rights
05-0355.000	Yes	Existing Rights
05-0352.000	Yes	Existing Rights

**B(9) Technical Features**

**The applicant shall describe the following information regarding the technical features of the project:**

**B(9)(a) Operating characteristics, estimated number and types of structures required, and right-of-way and/or land requirements.**

The Project is estimated to include the following:

- Voltage: 138kV
- Conductors: 1033.5 kcmil 54/7 Strands CURLEW ACSR
- Static Wire: 7#8 Alumoweld & AFL OPGW 0.646” with up to 48 Fibers
- Insulators: Polymer
- ROW Width: 100 feet
- Structure Type: One (1) double circuit, steel monopole dead end  
Fourteen (14), double circuit, steel monopole suspension  
Twelve (12), single circuit, steel H-frame suspension  
One (1), single circuit, steel H-frame medium suspension

**B(9)(b) Electric and Magnetic Fields**

**For electric power transmission lines that are within one hundred feet of an occupied residence or institution, the production of electric and magnetic fields during the operation of the proposed electric power transmission line.**

Three loading conditions were examined: (1) Normal Maximum Loading, (2) Emergency Loading, and (3) Winter Normal Conductor Rating, consistent with the OPSB requirements. Normal Maximum Loading represents the peak flow expected with all system facilities in service; daily/hourly flows fluctuate below this level. Emergency loading is the maximum current flow during unusual (contingency) conditions, which exist only for short periods of time. Winter normal (WN) conductor rating represents the maximum current flow that a line, including its terminal equipment, can carry during winter conditions. It is not anticipated that this line would operate at its WN rating in the foreseeable future.

EMF levels were computed one meter above ground under the line and at the ROW edges (50/50 feet, left/right, of centerline).

Results calculated below use EPRI's EMF Workstation 2015 software.

<b>Hillsboro-Millbrook Park 138 kV Line</b>				
<b>Condition</b>	<b>Hillsboro-Millbrook</b>	<b>Ground Clearance (feet)</b>	<b>Electric Field (kV/m)*</b>	<b>Magnetic Field (mG)*</b>

	<b>Park line Load (A)</b>			
(1) Normal Max. Loading <sup>^</sup>	154.28	30.28	0.64/1.35/0.64	8.67/28.84/8.67
(2) Emergency Line Loading <sup>^^</sup>	167.37	24.58	0.66/1.84/0.66	10.51/44.76/10.51
(3) Winter Conductor Rating <sup>^^^</sup>	1568.89	30.28	0.64/1.349/0.64	88.12/293.3/88.12

\*EMF levels (left ROW edge/maximum/right ROW edge) computed one meter above ground at the point of minimum ground clearance, assuming balanced phase currents and 1.0 P.U. Voltages. ROW width is 50 feet (left) and 50 feet (right) of centerline, respectively.

<sup>^</sup>Peak line flow expected with all system facilities in service.

<sup>^^</sup>Maximum flow during a critical system contingency

<sup>^^^</sup>Maximum continuous flow that the line, including its terminal equipment, can withstand during winter conditions.

For power-frequency EMF, IEEE Standard C95.6TM-2002 recommends the following limits:

	General Public	Controlled Environment
	-----	-----
Electric Field Limit (kV/m)	5.0	20.0
Magnetic Field Limit (mG)	9040.0	27,100.0

The above EMF levels are well within the limits specified in IEEE Standard C95.6TM-2002. Those limits have been established to "prevent harmful effects in human beings exposed to electromagnetic fields in the frequency range of 0-3 kHz."

### **B(9)(c) Project Costs**

#### **The estimated capital cost of the project.**

The capital cost estimate for the entire Hillsboro-Millbrook Park 138 kV Circuit Rebuild project, which is comprised of applicable tangible and capital costs, is approximately \$160,000,000, using a Class 4 estimate. This cost has not changed from the original application. Pursuant to the PJM OATT, the costs for this Project will be recovered in the AEP Ohio Transmission Company's FERC formula rate (Attachment H-20 to the PJM OATT) and allocated to the AEP Zone.

### **B(10) Social and Economic Impacts**

#### **The applicant shall describe the social and ecological impacts of the project.**

##### **B(10)(a) Land Use Characteristics**

**Provide a brief, general description of land use within the vicinity of the proposed project, including a list of municipalities, townships, and counties affected.**

The Project is located in Highland, Adams, Pike and Scioto counties, Ohio. Land use and natural communities observed within the overall rebuild Project area include agricultural land, industrial, residential, old field, upland forest, existing roadways, upland scrub shrub, palustrine emergent (PEM) wetlands, palustrine scrub-shrub (PSS) wetlands, and palustrine forested wetlands (PFO).

The Project has no places of worship or airports identified within 1,000 feet and there are no residences identified within 100 feet. The Project will not cause any additional impacts to these land use characteristics.

#### **B(10)(b) Agricultural Land Information**

**Provide the acreage and a general description of all agricultural land, and separately all agricultural district land, existing at least sixty days prior to submission of the application within the potential disturbance area of the project.**

The Adams, Highland and Scioto County Auditor's Office provided a list of parcels registered as Agricultural District Land in March 2021. The Company contacted all four counties in December 2021. To date, Adams and Highland counties have responded and no changes have been made to agricultural district land within the Project area. In addition, these adjustments to the overall project filed in Case No. 21-0268-EL-BLN are not anticipated to cause any additional impacts to the Agricultural District Lands.

#### **B(10)(c) Archaeological and Cultural Resources**

**Provide a description of the applicant's investigation concerning the presence or absence of significant archeological or cultural resources that may be located within the potential disturbance area of the project, a statement of the findings of the investigation, and a copy of any document produced as a result of the investigation.**

A Phase I Archaeological Investigation was conducted for the Hillsboro-Millbrook Park 138 kV Circuit Rebuild Project as part of OPSB Case No. 21-0268-EL-BLN and the report was provided to the Ohio State Historic Preservation Office (SHPO) for consultation. SHPO correspondence was provided in October 2020, no additional coordination with SHPO was required for the proposed adjustments (refer to Appendix C).

#### **B(10)(d) Local, State, and Federal Agency Correspondence**

**Provide a list of the local, state, and federal governmental agencies known to have requirements that must be met in connection with the construction of the project, and a list of documents that have been or are being filed with those agencies in connection with siting and constructing the project.**

Local, state and federal agency coordination has been completed for this Project as part of OPSB Case No. 21-0268-EL-BLN. No new impacts are proposed as part of this Project. The information below provides the coordination to be completed for the entire Hillsboro-Millbrook Park 138 kV Circuit Rebuild Project.

Three (3) separate Notice of Intent's for the overall rebuild Project have been or will be filed with the Ohio Environmental Protection Agency for authorization of construction storm water discharges under General Permit OHC000004, and the Company will implement and maintain best management practices (BMPs), as outlined in the project-specific Storm Water Pollution Prevention Plan (SWPPP), to minimize erosion and control sediment to protect surface water quality during storm events.

The Company's consultant completed a wetland delineation and stream identification field review of the existing and planned ROW for the entire rebuild Project (Appendix D). A total of 72 wetlands, 219 streams, and 14 ponds were delineated within the environmental survey corridor for the overall rebuild Project. The identified wetlands and streams are located within or adjacent to the planned transmission line ROW and are proposed to be aerially spanned by the Project or avoided. Therefore, impacts to aquatic resources are not anticipated and Clean Water Act Section 401/404 permits will not be necessary.

The overall rebuild Project crosses the Federal Emergency Management Agency (FEMA) 100-year floodplains of seven (7) waterbodies including: Elm Run, Elk Run, Middle Fork Ohio Brush Creek, Baker Fork, Scioto River, Candy Run, and Munn Run. In addition, the Project crosses one (1) mapped FEMA floodway along the Scioto River. These resources are shown on Figure 2-1 to 2-110 in Appendix D. Coordination with the counties crossed by the Project have been conducted and no floodplain permits are required.

There are no other known local, state or federal requirements that must be met prior to commencement of the Project.

#### **B(10)(e) Threatened, Endangered, and Rare Species**

**Provide a description of the applicant's investigation concerning the presence or absence of federal and state designated species (including endangered species, threatened species, rare species, species proposed for listing, species under review for listing, and species of special interest) that may be located within the potential disturbance area of the project, a statement of the findings of the investigation, and a copy of any document produced as a result of the investigation.**

Coordination for information regarding threatened, endangered, and rare species was completed for the Project as part of the OPSB Case No. 21-0268-EL-BLN. No new impacts are proposed as part of this Project. The information below provides the coordination completed for the entire Hillsboro-Millbrook Park 138 kV Transmission Line.

Coordination with Ohio Department of Natural Resources-Division of Wildlife (ODNR-DOW) was initiated on September 9, 2019 to obtain Environmental Review and Ohio Natural Heritage Database records within a 1-mile buffer area around the overall Project. ODNR-DOW's response was received on January 22, 2020, see Appendix C. In addition, a consultation request was submitted to the U.S. Fish and Wildlife Service (USFWS) on September 9, 2019 with a response received on December 18, 2019. A copy of the Agency Correspondence letters are provided in Appendix C.

Based on consultation from the USFWS, portions of the southern Scioto County are in Indiana bat hibernaculum buffers and roost tree buffers. The northern section of the line in Highland County is within

many capture buffers of male and female Indiana bats (*Myotis sodalis*) and roost trees. Portions of the project are also within capture buffers of northern long-eared bats (*Myotis septentrionalis*). The Company anticipates completing tree clearing during the recommended timeframe (October 1 through March 31), but should implementation of the seasonal tree clearing recommendation not be feasible, proper agency coordination will be conducted. The Company has coordinated with the USFWS and provided the requested tree clearing acreages in Scioto and Highland counties, see Appendix C.

The endangered rayed bean is a freshwater mussel known to occur in Scioto Brush Creek and the Scioto River, both of which are spanned by the proposed transmission line. The rayed bean (*Villosa fabalis*) prefers substrates of gravel and sand, and they are often associated with, and buried under the roots of, vegetation, including water willow (*Justicia americana*) and water milfoil (*Myriophyllum sp.*). The endangered clubshell (*Pleurobema clava*) and northern riffleshell (*Epioblasma torulosa rangiana*) mussels are also known to occur in the Scioto River. USFWS states that if the project directly or indirectly impacts any of the mussel streams above, they recommend a presence/absence mussel survey. Additionally, if any impact to native riparian vegetation is proposed they recommend further coordination with USFWS. No impacts to the identified mussel species are anticipated as no in-water work is proposed for the Project.

Known populations of Virginia spiraea (*Spiraea virginiana*) occur in Ohio along long-established gravel bars in Scioto Brush Creek in Scioto County. The current alignment occurs in a township where this species is known to occur but does not cross the Scioto Brush Creek in this township. USFWS states that the current transmission line alignment does not impact this species; however, if the project proposes any re-alignments in this area then further coordination with USFWS will be required.

Lastly, the proposed Project also lies within the range of running buffalo clover (*Trifolium stoloniferum*). This species was recently proposed for delisting due to recovery. This species can potentially be found in partially shaded woodlots, mowed areas, and along streams, trails, and ROWs. During coordination with USFWS, no surveys were identified as necessary for the Project.

Consultation with USFWS is currently ongoing and recommendations for protection or minimization measures for federally listed species potentially present within the Project area have not been provided. The Company will follow up with the USFWS to further define the Project impact area and any minimization or avoidance efforts that are planned to be implemented.

Based on the consultation response from the ODNR, the western 15,000 feet of the Project route, and the portion of the Project route between the Ohio River and the Scioto River, are within the vicinity of Indiana bat records. ODNR stated that if suitable Indiana bat habitat occurs within these project areas, it is recommended that trees be conserved. If trees must be cut or removed, the ODNR recommended cutting to occur between October 1 and March 31. The remainder of the Project route may not have records of Indiana bat, however, is still within the range of Indiana bat. If suitable habitat occurs within the rest of the Project area and trees must be cut, ODNR recommended mist net surveys be conducted for the Indiana bat between June 1 and August 15, prior to any tree cutting. The Project anticipates tree clearing will take place between October 1 and March 31, to adhere to recommendations from USFWS and ODNR.

According to ODNR, the Project must not have an impact on freshwater native mussels within the Project area and per the Ohio Mussel Survey Protocol, all Group 2, 3, and 4 streams require mussel surveys. The

ODNR-DOW recommends no in-water work in any perennial stream from April 15 through June 30 to reduce impacts to indigenous species and their habitat. No in-stream work is currently proposed during construction activities and will not directly impact streams crossed by the Project area. Therefore, mussel surveys are not anticipated. Because no in-water work is proposed in any perennial stream within the Project area, the Project is not likely to impact threatened or endangered aquatic species.

The overall Project is within the range of timber rattlesnake, eastern spadefoot, and mud salamander. ODNR recommends that a DOW approved herpetologist conduct a habitat suitability survey along the Project route to determine if suitable habitat exists for these species. If suitable habitat is determined to be present, ODNR recommends that a presence/absence survey be conducted, or an avoidance/minimization plan be developed and implemented by an approved herpetologist. Habitat surveys were conducted for the timber rattlesnake, eastern spadefoot toad, and mud salamanders in January 2021. No suitable habitat was identified for the timber rattlesnake and mud salamander. The Project anticipates avoidance of the mud salamander habitat. A minimization and avoidance plan are currently being developed for the timber rattlesnake and coordination with ODNR is ongoing. Once coordination is complete, the Company will provide the results to OPSB.

Two bird species including the lark sparrow and loggerhead shrike are within the range of the Project. If lark sparrow habitat will be impacted, ODNR recommends that construction be avoided in their nesting habitat during the period of May 1 to June 30. If loggerhead shrike habitat is present, construction should be avoided in their nesting habitat during April 1 to August 1. The Company plans to conduct presence/absence surveys for the lark sparrow and loggerhead shrike as needed throughout Project construction in order to avoid impacts to these species. ODNR coordination is ongoing and the results will be provided to OPSB upon completion.

Based on the nature of the proposed project activities and habitat characteristics of the surrounding vicinity, construction impacts to protected species are not anticipated. As stated previously, tree clearing is currently proposed between October 1 and March 31 for the Project in order to reduce impacts to bat species and their habitat. The Company will coordinate with USFWS and ODNR regarding additional construction requirements, if required by these agencies.

#### **B(10)(f) Areas of Ecological Concern**

**Provide a description of the applicant's investigation concerning the presence or absence of areas of ecological concern (including national and state forests and parks, floodplains, wetlands, designated or proposed wilderness areas, national and state wild and scenic rivers, wildlife areas, wildlife refuges, wildlife management areas, and wildlife sanctuaries) that may be located within the potential disturbance area of the project, a statement of the findings of the investigation, and a copy of any document produced as a result of the investigation.**

Areas of ecological concerns were assessed for the Hillsboro-Millbrook Park 138 kV Transmission Line as part of OPSB Case No. 21-0268-EL-BLN. No new impacts are proposed as part of this Project. The information below provides the coordination completed for the entire Hillsboro-Millbrook Park 138 kV Transmission Line.

The coordination letter received from the USFWS did not indicate any federal wilderness areas, wildlife refuges, or designated critical habitat within the vicinity of the Project. The ODNR's response letter also indicated no known unique ecological sites, geologic features, scenic rivers, state wildlife areas, state natural preserves, state or national parks, national forests, or national wildlife refuges within the Project area. The overall Project alignment does cross Strait Creek Prairie Bluffs Conservation Area (Structures 128 – 129; 132-133) and Brush Creek State Forest (Structures 152, 245- 247). However, impacts to these areas are expected to be minimal as the Project will remain in the existing AEP ROW.

The Company's consultant prepared an Ecological Resource Inventory Report which outlines the presence or absence of areas of ecological concern, including but not limited to floodplains, wetlands, waterbodies and wildlife habitats. The Ecological Resource Inventory Report is provided in Appendix D. Wetland delineation, stream identification and general habitat field surveys were completed within the existing ROW from September through October 2019. Land use and natural communities that were encountered within the ROW consisted of maintained transmission line ROW, agricultural land, existing roadway, substations, industrial, residential, fallow-fields, upland forest, upland scrub shrub, PEM wetland, PSS wetland, PFO wetland, and waterbodies. A total of 70 wetlands, 214 streams, and 13 ponds were delineated within the environmental survey corridor. The Company will utilize erosion and sediment control best management practices to avoid or minimize impacts to natural resources where possible.

Based on the FEMA Flood Insurance Rate Maps (FIRM), the Project crosses FEMA-mapped 100-year floodplains of seven (7) waterbodies including: Elm Run, Elk Run, Middle Fork Ohio Brush Creek, Baker Fork, Scioto River, Candy Run, and Munn Run. In addition, the Project crosses one (1) mapped FEMA Floodway, the Scioto River. These resources are shown on Figure 2-1 to 2-110 in Appendix D.

No properties listed in the National Conservation Easement database (<http://www.conservationaleasement.us>) were identified in the immediate vicinity of the Project.

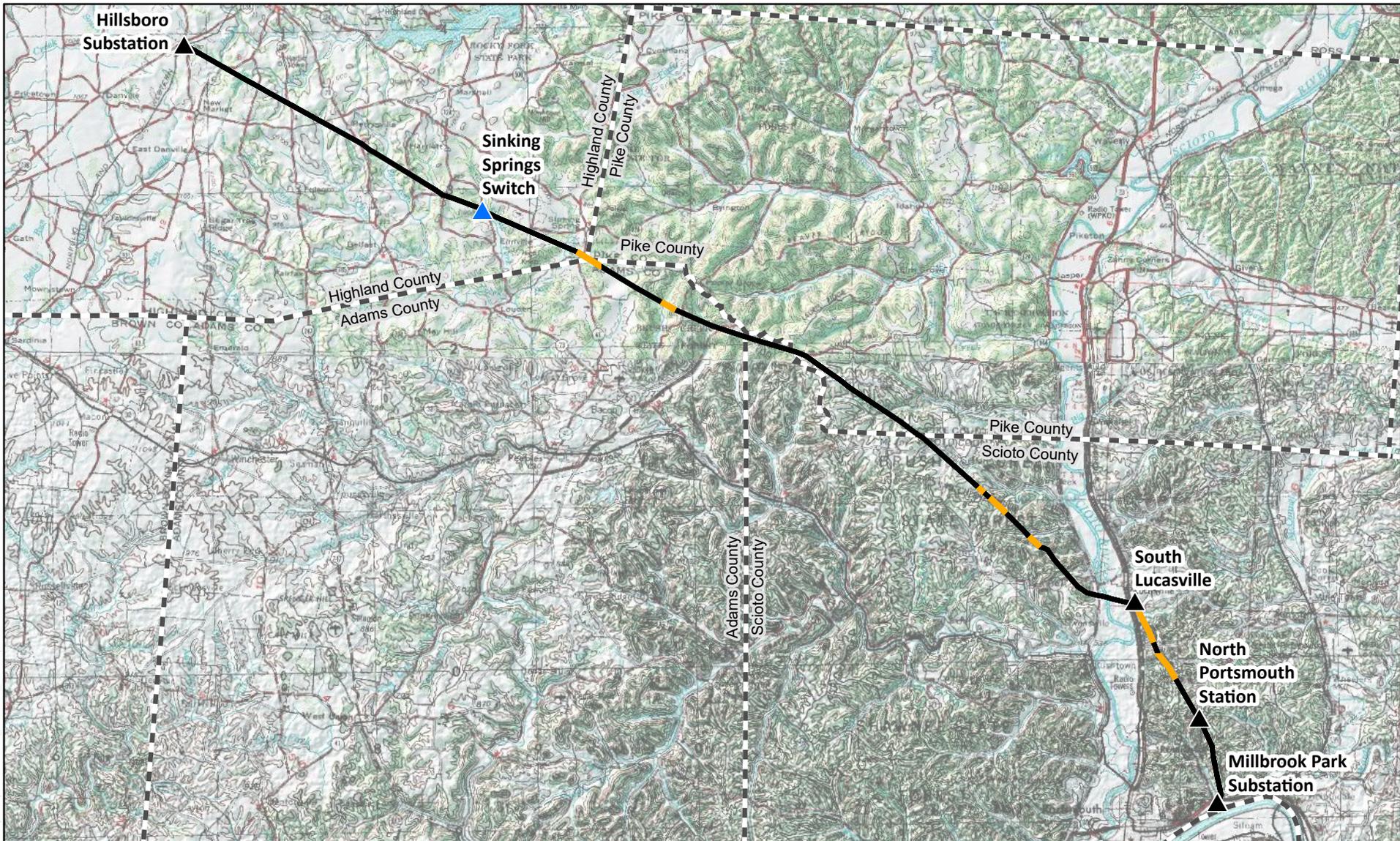
### **B(10)(g) Unusual Conditions**

**Provide any known additional information that will describe any unusual conditions resulting in significant environmental, social, health, or safety impacts.**

To the best of the Company's knowledge, no unusual conditions exist that would result in significant environmental, social, health, or safety impacts.

**LETTER OF NOTIFICATION FOR THE HILLSBORO-MILLBROOK PARK 138 KV CIRCUIT REBUILD  
ADJUSTMENT PROJECT**

**Appendix A            Project Maps**



<p><b>Legend</b></p> <ul style="list-style-type: none"> <li>▲ Existing Substation</li> <li>▲ Proposed Switch</li> <li>— Hillboro to Millbrook Park 138kV</li> <li>— Area of Proposed Transmission Structure Shifts</li> <li>- - - County Boundary</li> </ul>	<p>BASEMAP SOURCE: USGS 1:250,000 Topographic Map</p>	<p>LOCATOR MAP</p>	<p><b>Figure 1</b> <b>Vicinity Map</b></p> <p><b>AMERICAN ELECTRIC POWER</b></p> <p>BOUNDLESS ENERGY</p> <p>Hillboro to Millbrook Park 138 kV Transmission Line Rebuild Project</p> <p>0 2 4 6 8 Miles</p>
<p>NAD 1983 State Plane Ohio South FIPS 3402 Scale: 1:340,000</p>	<p>December 08, 2021</p>		

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**Legend**

- Structure Proposed for Shift
- OPSB-Approved Structure Location
- Hillsboro to Millbrook Park Proposed Centerline
- OPSB Approved Centerline
- County Boundary
- Existing Transmission Line
  - Below 69kV
  - 138kV
  - 345kV+

BASEMAP SOURCE:  
USGS 7.5-minute  
Topographic Quadrangle:  
Sinking Spring

NAD 1983 State Plane Ohio  
South FIPS 3402  
Scale: 1:12,000

December 13, 2021



**Exhibit 2.1**  
**Proposed Transmission Line Structure and Centerline Shifts**

Hillsboro to Millbrook Park  
138 kV Transmission Line  
Rebuild Project



**Legend**

- Structure Proposed for Shift
- OPSB-Approved Structure Location
- Hillsboro to Millbrook Park Proposed Centerline
- OPSB Approved Centerline
- County Boundary
- Existing Transmission Line
- Below 69kV
- 138kV
- 345kV+

BASEMAP SOURCE:  
USGS 7.5-minute  
Topographic Quadrangle:  
Byington

NAD 1983 State Plane Ohio  
South FIPS 3402  
Scale: 1:12,000

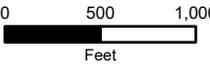
December 13, 2021



**Exhibit 2.2**  
**Proposed Transmission Line Structure and Centerline Shifts**



Hillsboro to Millbrook Park  
138 kV Transmission Line  
Rebuild Project



0 500 1,000  
Feet



**Legend**

- Structure Proposed for Shift
  - OPSB-Approved Structure Location
  - Hillsboro to Millbrook Park Proposed Centerline
  - OPSB Approved Centerline
  - County Boundary
- Existing Transmission Line
  - Below 69kV
  - 138kV
  - 345kV+

BASEMAP SOURCE:  
USGS 7.5-minute  
Topographic Quadrangle:  
Wakefield

NAD 1983 State Plane Ohio  
South FIPS 3402  
Scale: 1:12,000

December 13, 2021



**Exhibit 2.3**  
**Proposed Transmission Line Structure and Centerline Shifts**

AMERICAN ELECTRIC POWER

BOUNDLESS ENERGY

Hillsboro to Millbrook Park  
138 kV Transmission Line  
Rebuild Project

0 500 1,000  
Feet



**Legend**

- Structure Proposed for Shift
- OPSB-Approved Structure Location
- Hillsboro to Millbrook Park Proposed Centerline
- OPSB Approved Centerline
- County Boundary
- Existing Transmission Line
  - Below 69kV
  - 138kV
  - 345kV+

BASEMAP SOURCE:  
USGS 7.5-minute  
Topographic Quadrangle:  
Wakefield

NAD 1983 State Plane Ohio  
South FIPS 3402  
Scale: 1:12,000

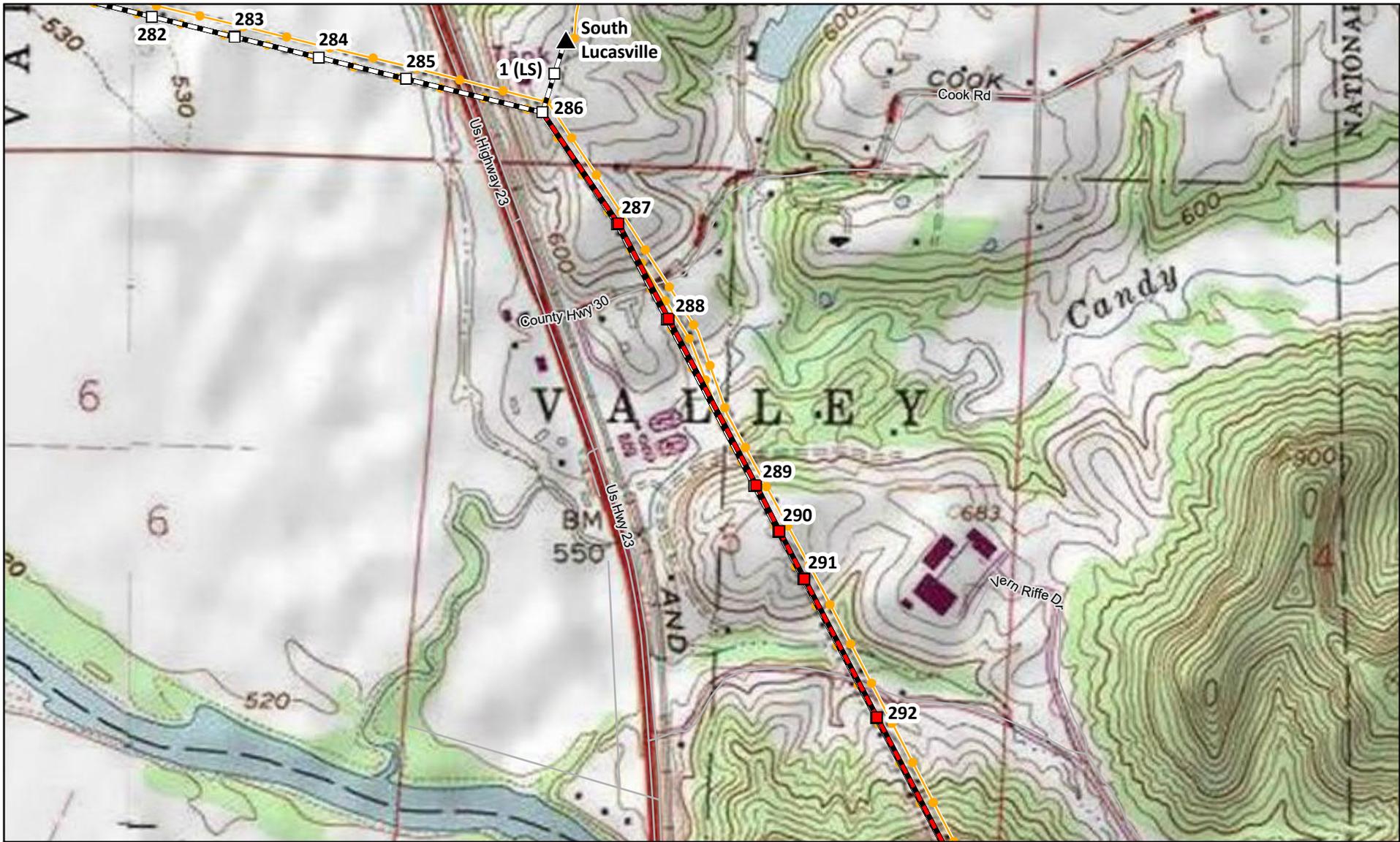
December 13, 2021



**Exhibit 2.4**  
**Proposed Transmission Line Structure and Centerline Shifts**

Hillsboro to Millbrook Park  
138 kV Transmission Line  
Rebuild Project

0 500 1,000  
Feet



**Legend**

- ▲ Existing Substation
  - Structure Proposed for Shift
  - OPSB-Approved Structure Location
  - Hillsboro to Millbrook Park Proposed Centerline
  - OPSB Approved Centerline
  - ▭ County Boundary
- Existing Transmission Line
  - Below 69kV
  - 138kV
  - 345kV+

BASEMAP SOURCE:  
USGS 7.5-minute  
Topographic Quadrangle:  
New Boston

NAD 1983 State Plane Ohio  
South FIPS 3402  
Scale: 1:12,000

December 13, 2021



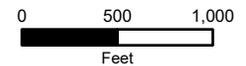
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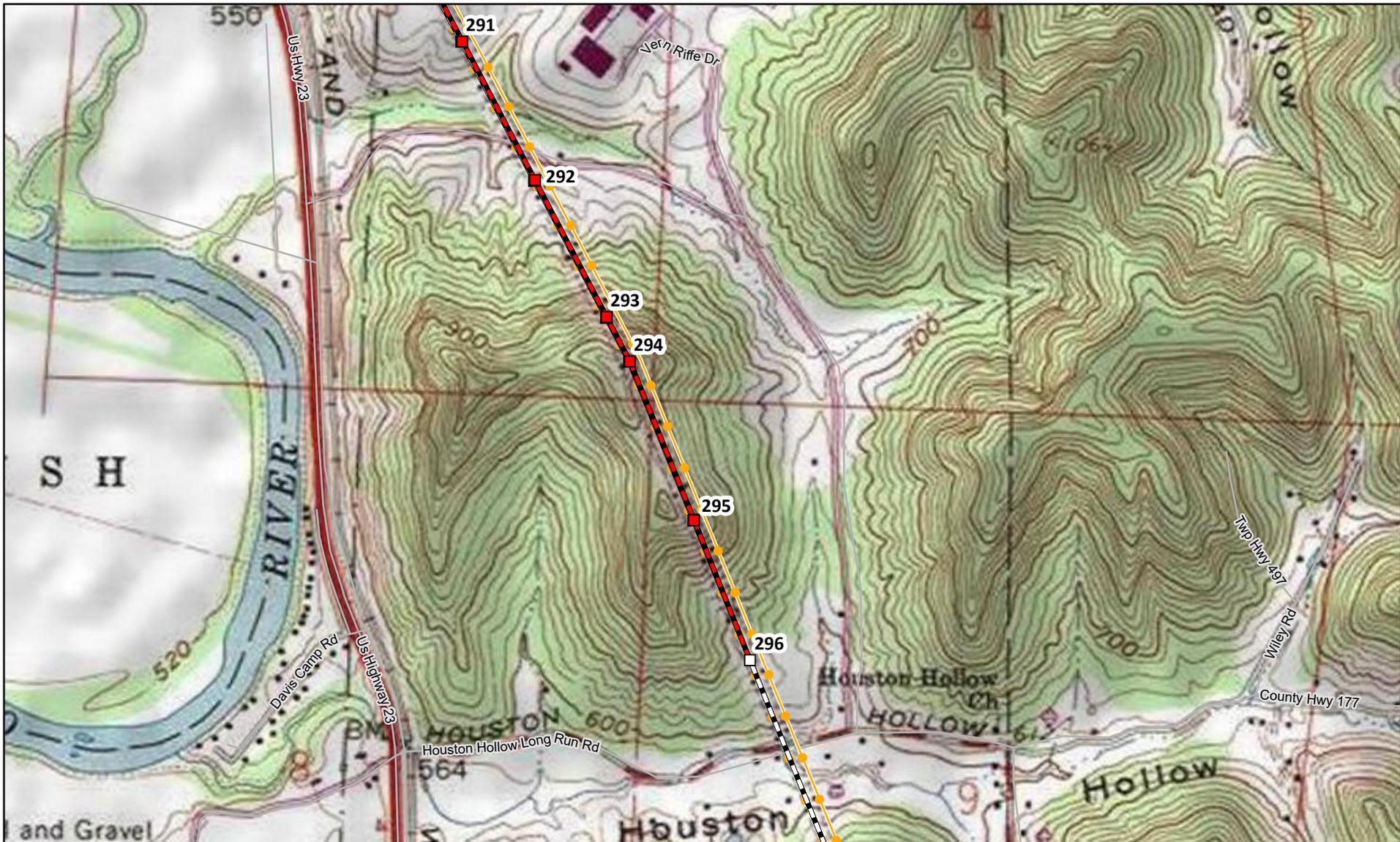


**Exhibit 2.5**  
**Proposed Transmission Line Structure**  
**and Centerline Shifts**



Hillsboro to Millbrook Park  
138 kV Transmission Line  
Rebuild Project





**Legend**

- Structure Proposed for Shift
- OPSB-Approved Structure Location
- Hillsboro to Millbrook Park Proposed Centerline
- OPSB Approved Centerline
- County Boundary
- Existing Transmission Line
  - Below 69kV
  - 138kV
  - 345kV+

BASEMAP SOURCE:  
USGS 7.5-minute  
Topographic Quadrangle:  
New Boston

NAD 1983 State Plane Ohio  
South FIPS 3402  
Scale: 1:12,000

December 13, 2021



**Exhibit 2.6**  
**Proposed Transmission Line Structure and Centerline Shifts**

AMERICAN ELECTRIC POWER

BOUNDLESS ENERGY

Hillsboro to Millbrook Park  
138 kV Transmission Line  
Rebuild Project

0 500 1,000  
Feet



**Legend**

- Structure Proposed for Shift
- OPSP-Approved Structure Location
- Hillsboro to Millbrook Park Proposed Centerline
- OPSP Approved Centerline
- County Boundary
- Existing Transmission Line
- Below 69kV
- 138kV
- 345kV+

BASEMAP SOURCE:  
USGS 7.5-minute  
Topographic Quadrangle:  
New Boston

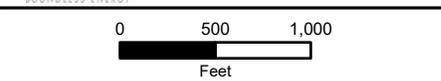
NAD 1983 State Plane Ohio  
South FIPS 3402  
Scale: 1:12,000

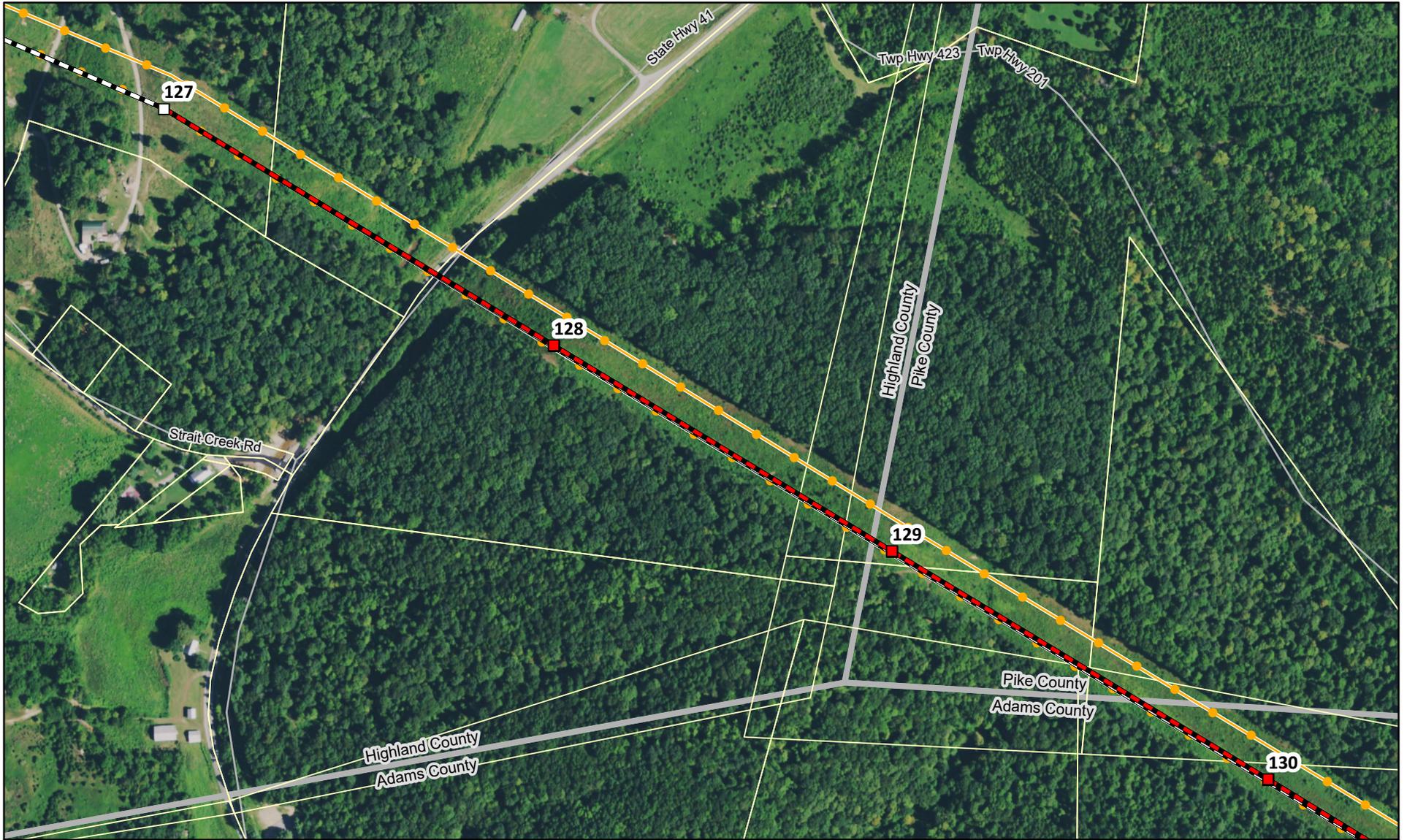
December 13, 2021



**Exhibit 2.7**  
**Proposed Transmission Line Structure**  
**and Centerline Shifts**

**AMERICAN ELECTRIC POWER**  
Hillsboro to Millbrook Park  
138 kV Transmission Line  
Rebuild Project





**Legend**

- Structure Proposed for Shift
- OPSB-Approved Structure Location
- Hillsboro to Millbrook Park Proposed Centerline
- OPSB Approved Centerline
- County Boundary
- Parcel Boundary
- Existing Transmission Line
- Below 69kV
- 138kV
- 345kV+

BASEMAP SOURCE:  
USDA National Aerial  
Imagery Program

NAD 1983 State Plane Ohio  
South FIPS 3402  
Scale: 1:4,800

January 07, 2022



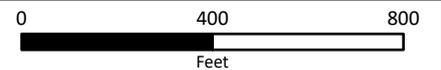
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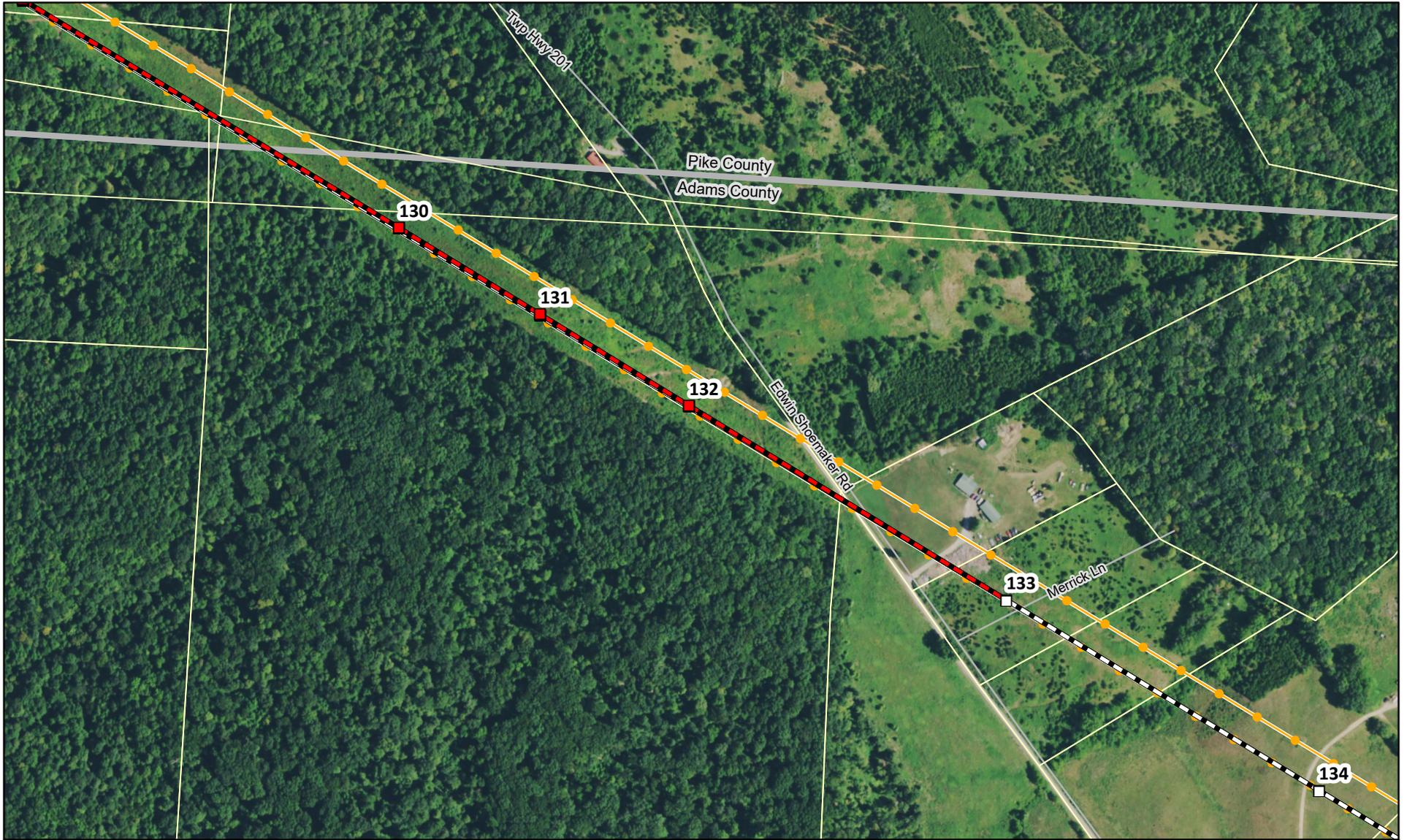


**Exhibit 3.1**  
**Proposed Transmission Line Structure**  
**and Centerline Shifts**



Hillsboro to Millbrook Park  
138 kV Transmission Line  
Rebuild Project





- Structure Proposed for Shift
  - OPSB-Approved Structure Location
  - Hillsboro to Millbrook Park Proposed Centerline
  - OPSB Approved Centerline
  - County Boundary
  - Parcel Boundary
- 
- Existing Transmission Line**
  - Below 69kV
  - 138kV
  - 345kV+

BASEMAP SOURCE:  
USDA National Aerial  
Imagery Program

NAD 1983 State Plane Ohio  
South FIPS 3402  
Scale: 1:4,800

January 07, 2022



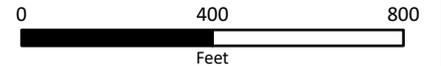
**LOCATOR MAP**



**Exhibit 3.2**  
**Proposed Transmission Line Structure**  
**and Centerline Shifts**



Hillsboro to Millbrook Park  
138 kV Transmission Line  
Rebuild Project





**Legend**

- Structure Proposed for Shift
  - OPSB-Approved Structure Location
  - Hillsboro to Millbrook Park Proposed Centerline
  - OPSB Approved Centerline
  - County Boundary
  - Parcel Boundary
- 
- Existing Transmission Line**
  - Below 69kV
  - 138kV
  - 345kV+

BASEMAP SOURCE:  
USDA National Aerial  
Imagery Program

NAD 1983 State Plane Ohio  
South FIPS 3402  
Scale: 1:4,800

January 07, 2022



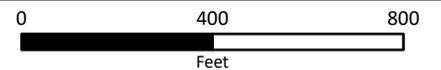
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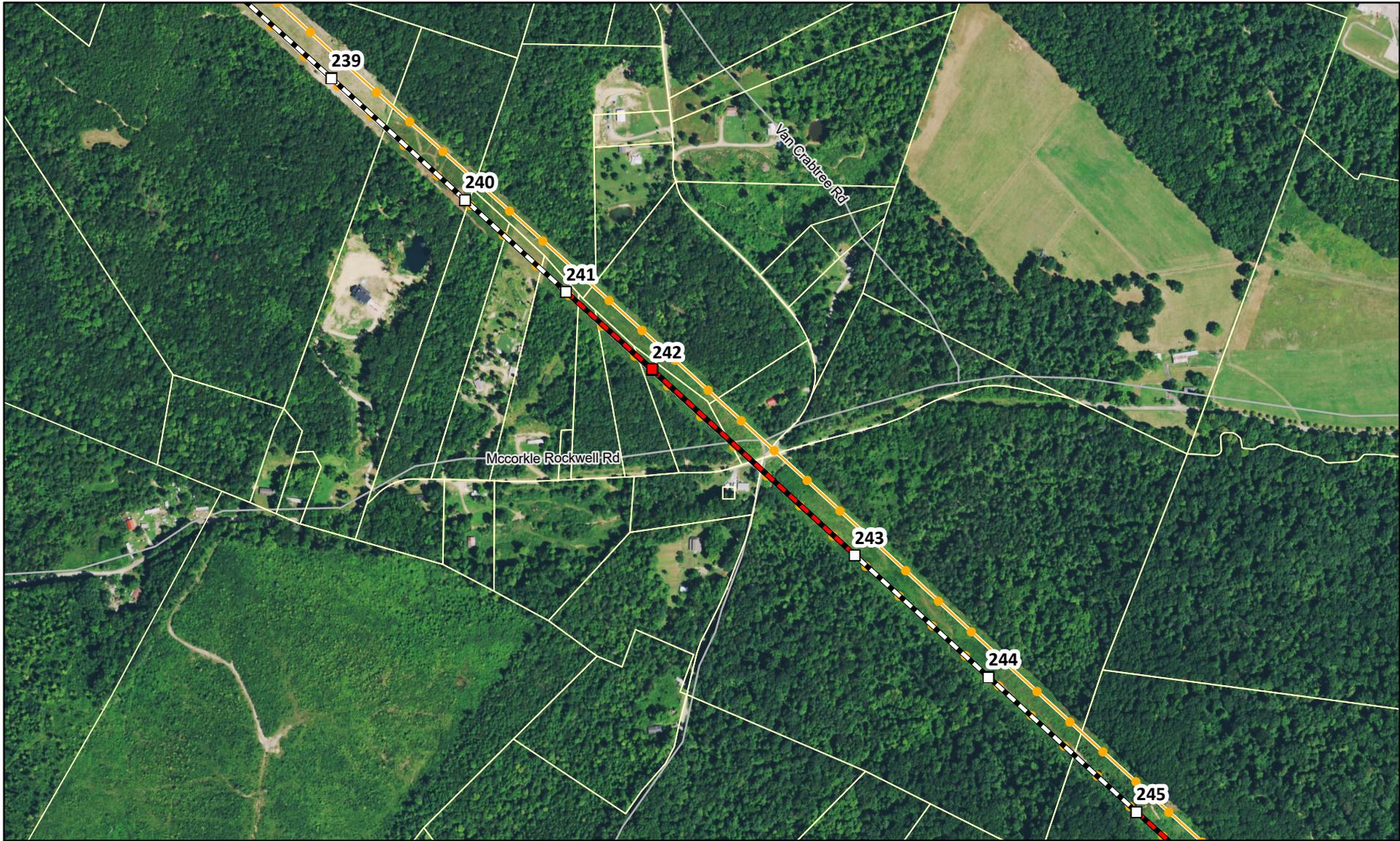


**Exhibit 3.3  
Proposed Transmission Line Structure  
and Centerline Shifts**

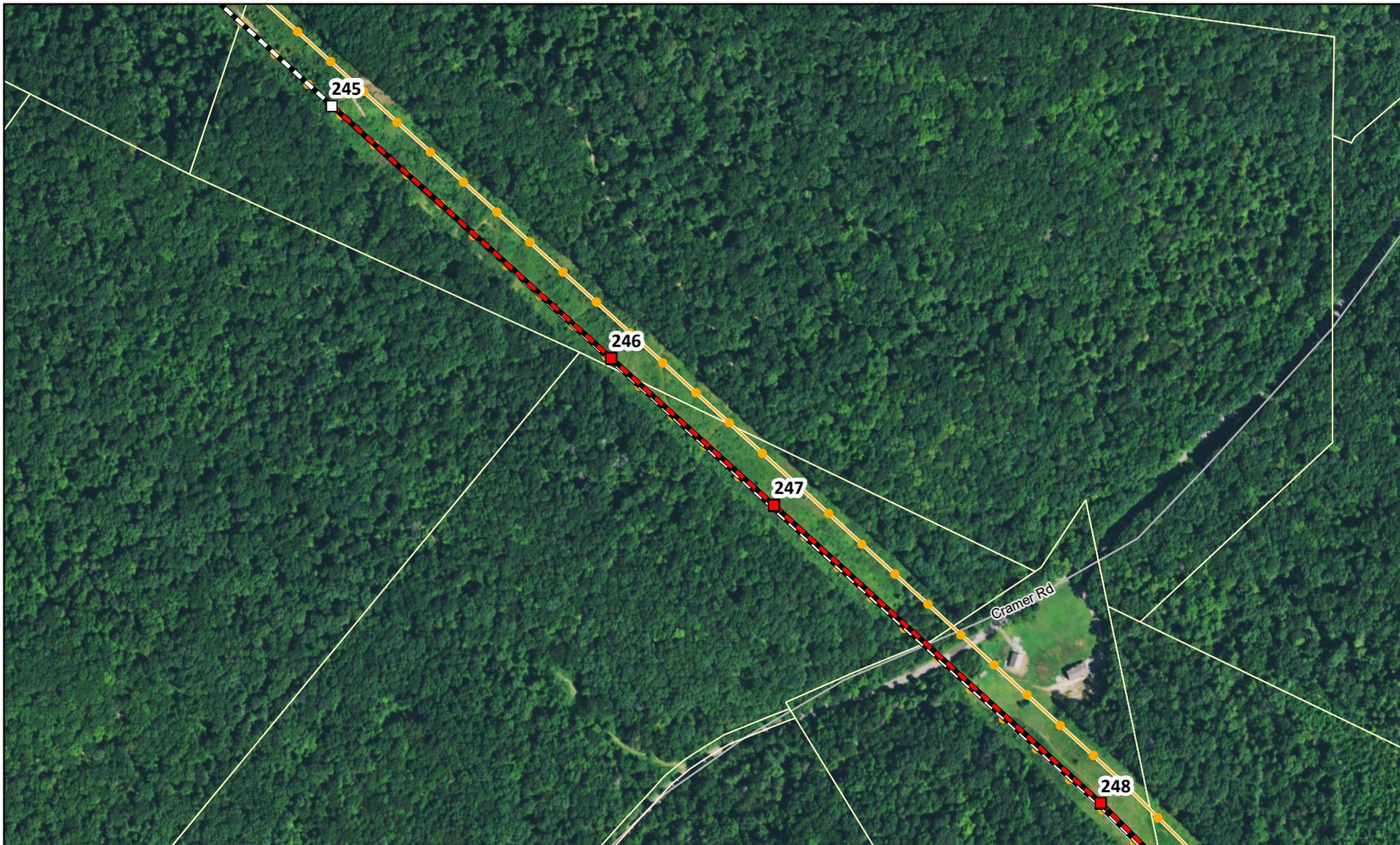


Hillsboro to Millbrook Park  
138 kV Transmission Line  
Rebuild Project





<p><b>Legend</b></p> <ul style="list-style-type: none"> <li><span style="color: red;">■</span> Structure Proposed for Shift</li> <li><span style="border: 1px solid black; display: inline-block; width: 10px; height: 10px;"></span> OPSB-Approved Structure Location</li> <li><span style="border-bottom: 2px dashed black; width: 20px; display: inline-block;"></span> Hillsboro to Millbrook Park Proposed Centerline</li> <li><span style="border-bottom: 2px dashed black; width: 20px; display: inline-block;"></span> OPSB Approved Centerline</li> <li><span style="border: 1px solid gray; display: inline-block; width: 20px; height: 10px;"></span> County Boundary</li> <li><span style="border: 1px solid yellow; display: inline-block; width: 20px; height: 10px;"></span> Parcel Boundary</li> </ul>	<p>Existing Transmission Line</p> <ul style="list-style-type: none"> <li><span style="border-bottom: 2px solid orange; width: 20px; display: inline-block;"></span> Below 69kV</li> <li><span style="border-bottom: 2px solid orange; width: 20px; display: inline-block; position: relative; top: -5px;"><span style="color: yellow; font-size: 8px;">●</span></span> 138kV</li> <li><span style="border-bottom: 2px solid orange; width: 20px; display: inline-block; position: relative; top: -5px;"><span style="color: yellow; font-size: 8px;">●</span></span> 345kV+</li> </ul>	<p>BASEMAP SOURCE: USDA National Aerial Imagery Program</p>	<p>LOCATOR MAP</p>	<p style="text-align: center;"><b>Exhibit 3.4</b> <b>Proposed Transmission Line Structure and Centerline Shifts</b></p> <p style="text-align: right;"><b>AMERICAN ELECTRIC POWER</b> <small>BOUNDLESS ENERGY</small></p> <p style="text-align: right;">Hillsboro to Millbrook Park 138 kV Transmission Line Rebuild Project</p> <div style="text-align: right;"> <p>0      400      800</p> <p>Feet</p> </div>
<p>NAD 1983 State Plane Ohio South FIPS 3402 Scale: 1:6,992</p> <div style="text-align: right;"> </div>		<p>January 07, 2022</p>		



**Legend**

- Structure Proposed for Shift
  - OPSB-Approved Structure Location
  - Hillsboro to Millbrook Park Proposed Centerline
  - OPSB Approved Centerline
  - County Boundary
  - Parcel Boundary
- 
- Existing Transmission Line
  - Below 69kV
  - 138kV
  - 345kV+

BASEMAP SOURCE:  
USDA National Aerial  
Imagery Program

NAD 1983 State Plane Ohio  
South FIPS 3402  
Scale: 1:4,800

January 07, 2022



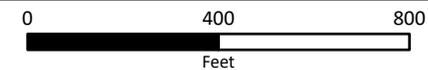
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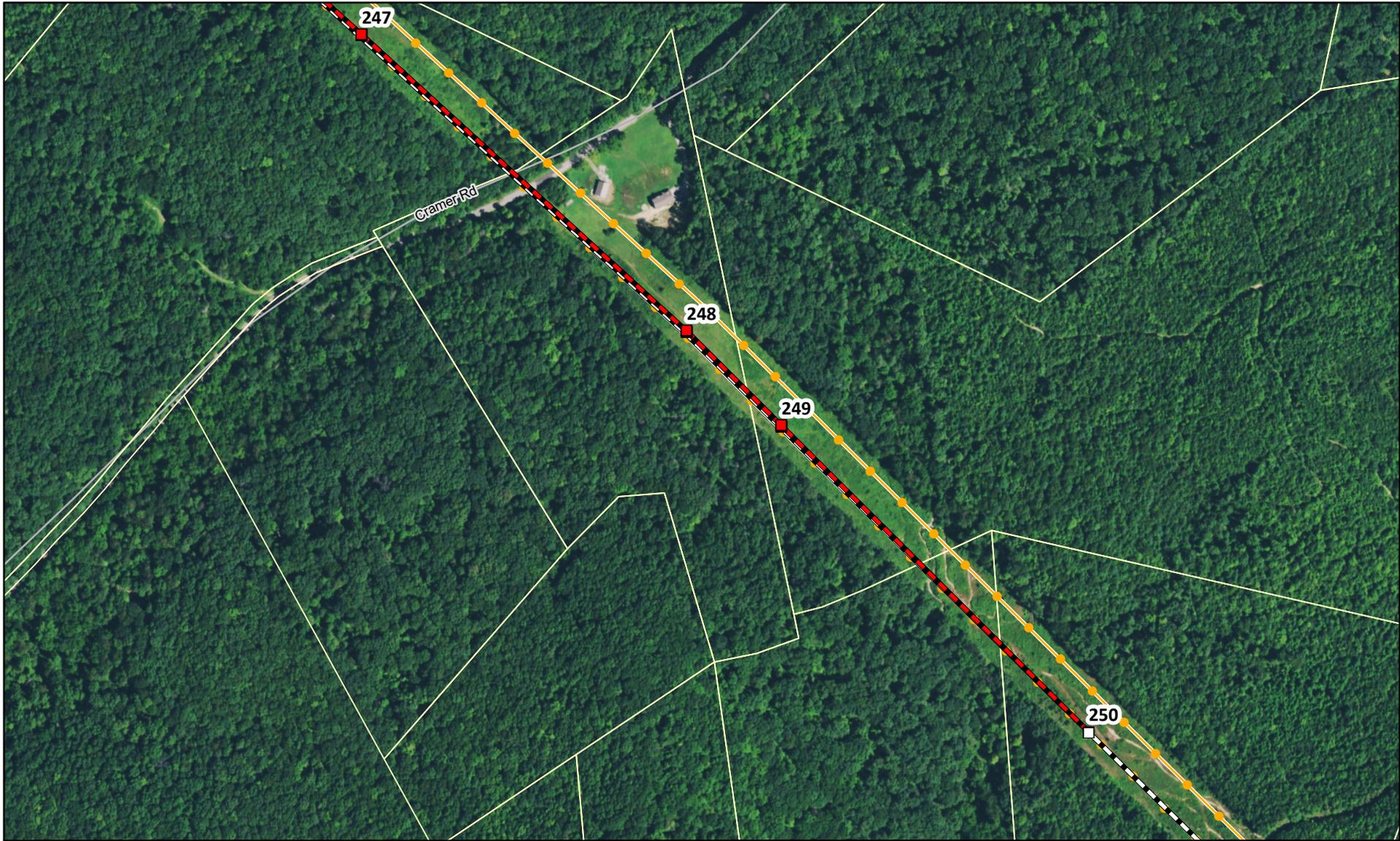


**Exhibit 3.5**  
**Proposed Transmission Line Structure**  
**and Centerline Shifts**



Hillsboro to Millbrook Park  
138 kV Transmission Line  
Rebuild Project





**Legend**

- Structure Proposed for Shift
- OPSB-Approved Structure Location
- Hillsboro to Millbrook Park Proposed Centerline
- OPSB Approved Centerline
- County Boundary
- Parcel Boundary
- Existing Transmission Line
  - Below 69kV
  - 138kV
  - 345kV+

BASEMAP SOURCE:  
USDA National Aerial  
Imagery Program

NAD 1983 State Plane Ohio  
South FIPS 3402  
Scale: 1:4,800

January 07, 2022



**Exhibit 3.6**  
**Proposed Transmission Line Structure and Centerline Shifts**

**AMERICAN  
ELECTRIC  
POWER**

BOUNDLESS ENERGY

Hillsboro to Millbrook Park  
138 kV Transmission Line  
Rebuild Project

0      400      800  
Feet



**Legend**

- Structure Proposed for Shift
  - OPSB-Approved Structure Location
  - Hillsboro to Millbrook Park Proposed Centerline
  - OPSB Approved Centerline
  - County Boundary
  - Parcel Boundary
- 
- Existing Transmission Line
  - Below 69kV
  - 138kV
  - 345kV+

BASEMAP SOURCE:  
USDA National Aerial  
Imagery Program

NAD 1983 State Plane Ohio  
South FIPS 3402  
Scale: 1:4,800

January 07, 2022



**LOCATOR MAP**

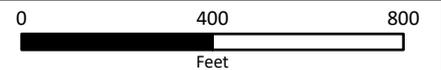


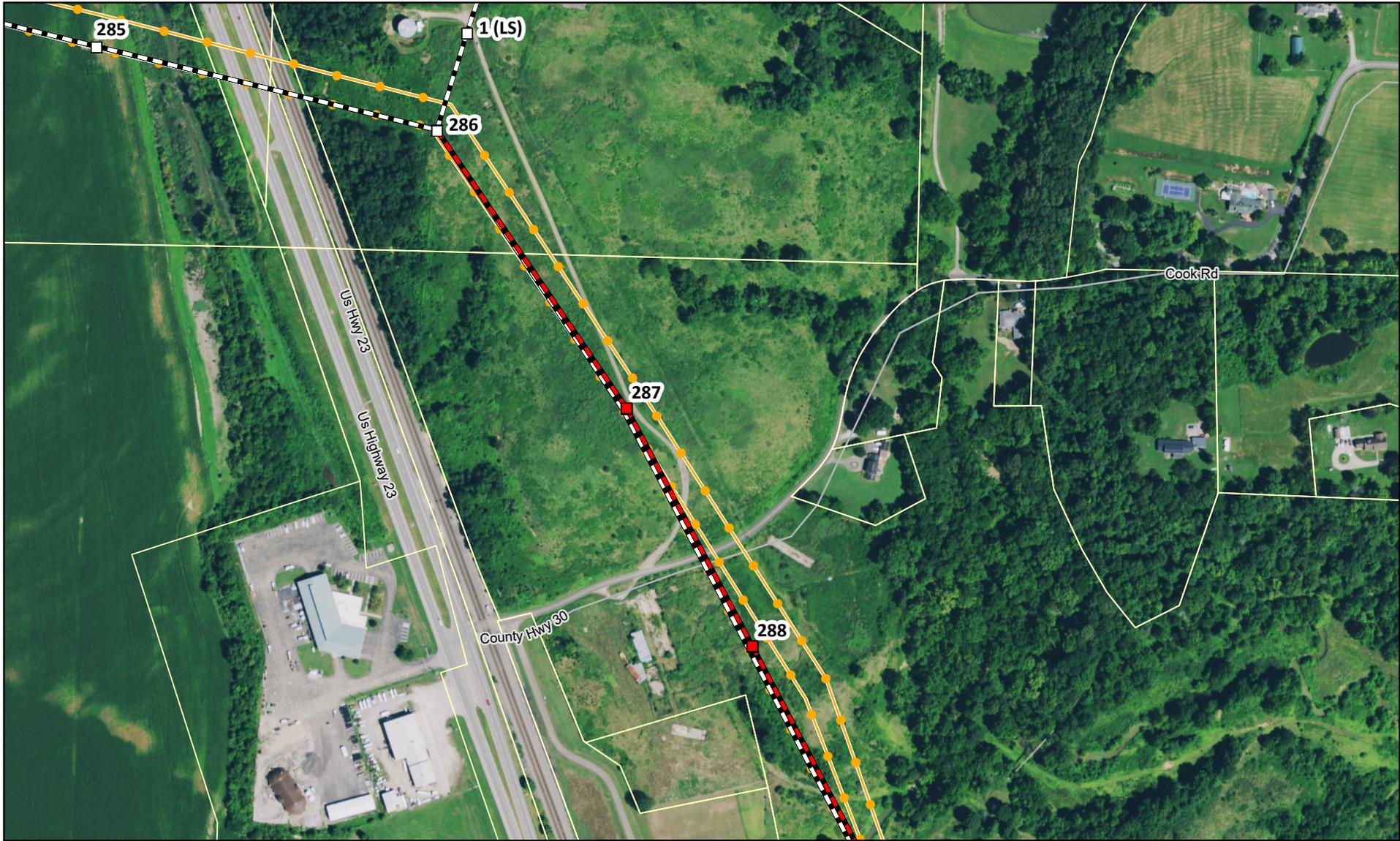
**Exhibit 3.7**

**Proposed Transmission Line Structure  
and Centerline Shifts**



Hillsboro to Millbrook Park  
138 kV Transmission Line  
Rebuild Project





**Legend**

- Structure Proposed for Shift
- OPSB-Approved Structure Location
- Hillsboro to Millbrook Park Proposed Centerline
- OPSB Approved Centerline
- County Boundary
- Parcel Boundary

**Existing Transmission Line**

- Below 69kV
- 138kV
- 345kV+

BASEMAP SOURCE:  
USDA National Aerial  
Imagery Program

NAD 1983 State Plane Ohio  
South FIPS 3402  
Scale: 1:4,800

January 07, 2022

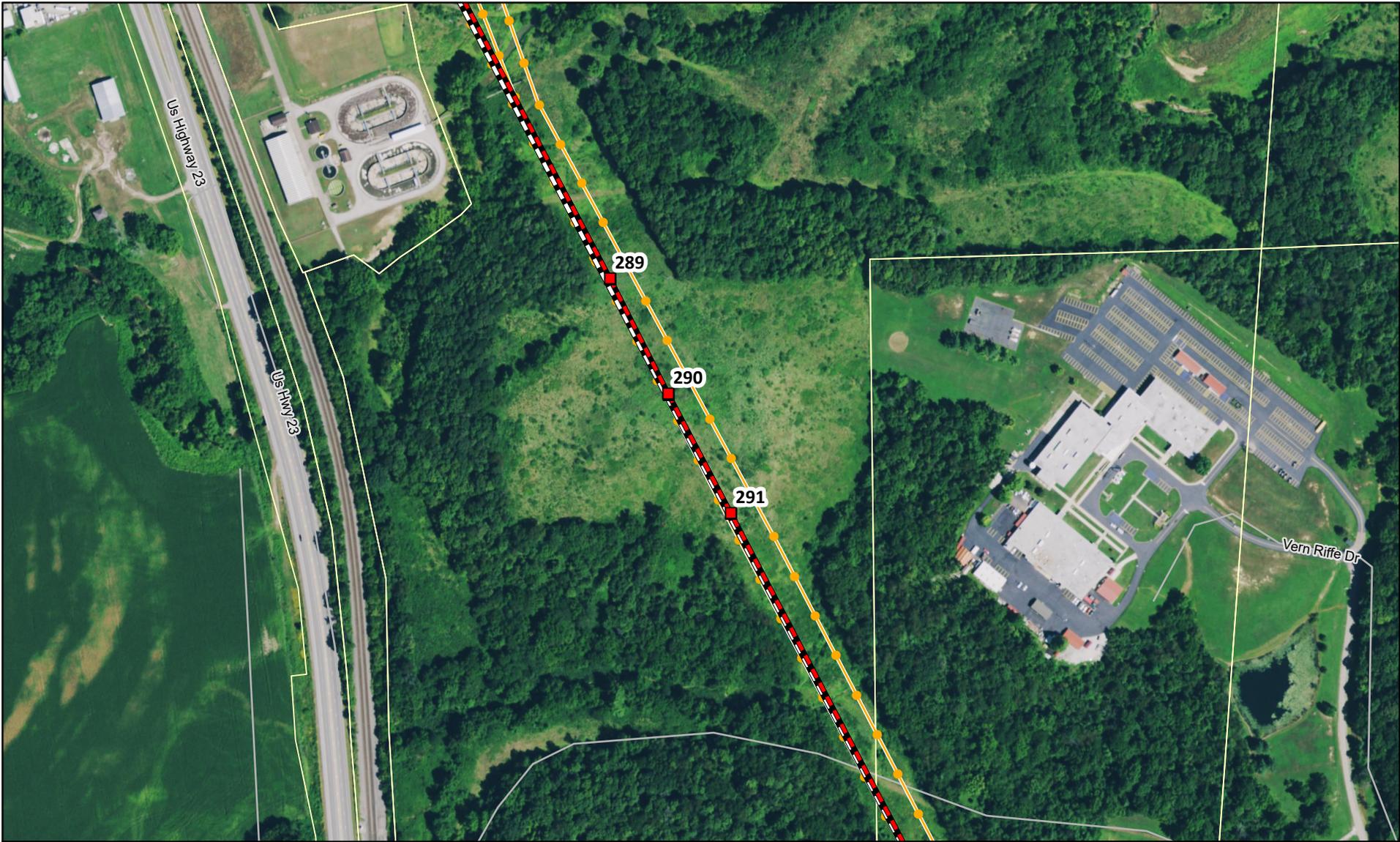


**Exhibit 3.8**  
**Proposed Transmission Line Structure  
and Centerline Shifts**

**AMERICAN  
ELECTRIC  
POWER**  
BOUNDLESS ENERGY

Hillsboro to Millbrook Park  
138 kV Transmission Line  
Rebuild Project

0      400      800  
Feet



**Legend**

- Structure Proposed for Shift
  - OPSB-Approved Structure Location
  - Hillsboro to Millbrook Park Proposed Centerline
  - OPSB Approved Centerline
  - County Boundary
  - Parcel Boundary
- 
- Existing Transmission Line
  - Below 69kV
  - 138kV
  - 345kV+

BASEMAP SOURCE:  
USDA National Aerial  
Imagery Program

NAD 1983 State Plane Ohio  
South FIPS 3402  
Scale: 1:4,800

January 07, 2022



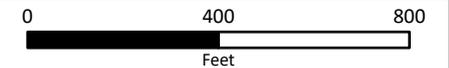
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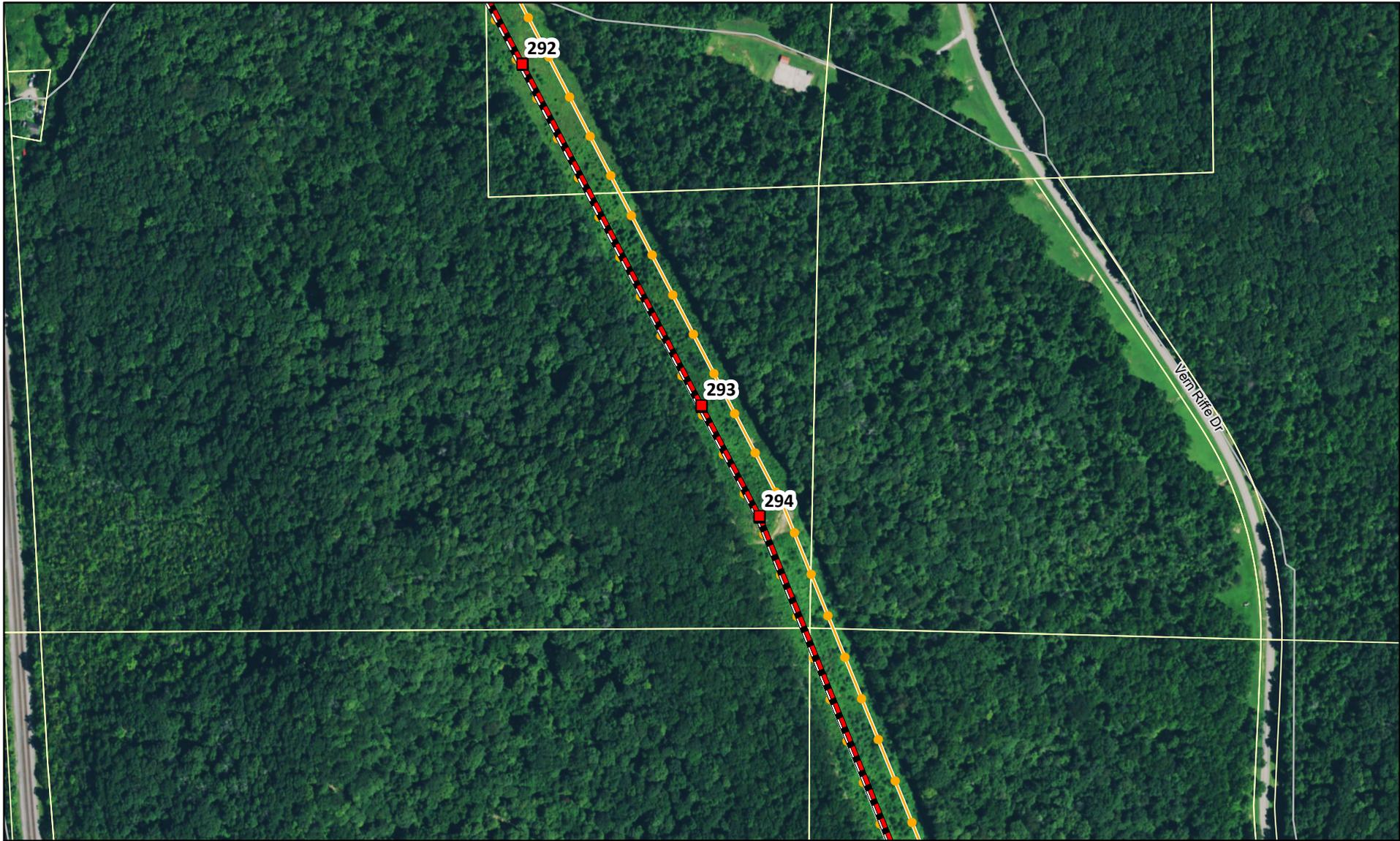


**Exhibit 3.9**  
**Proposed Transmission Line Structure**  
**and Centerline Shifts**



Hillsboro to Millbrook Park  
138 kV Transmission Line  
Rebuild Project





**Legend**

- Structure Proposed for Shift
- OPSSB-Approved Structure Location
- Hillsboro to Millbrook Park Proposed Centerline
- OPSSB Approved Centerline
- County Boundary
- Parcel Boundary

Existing Transmission Line

- Below 69kV
- 138kV
- 345kV+

BASEMAP SOURCE:  
USDA National Aerial  
Imagery Program

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NAD 1983 State Plane Ohio  
South FIPS 3402  
Scale: 1:4,800



January 07, 2022

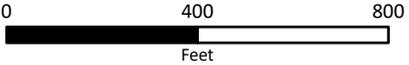


**Exhibit 3.10**  
**Proposed Transmission Line Structure  
and Centerline Shifts**

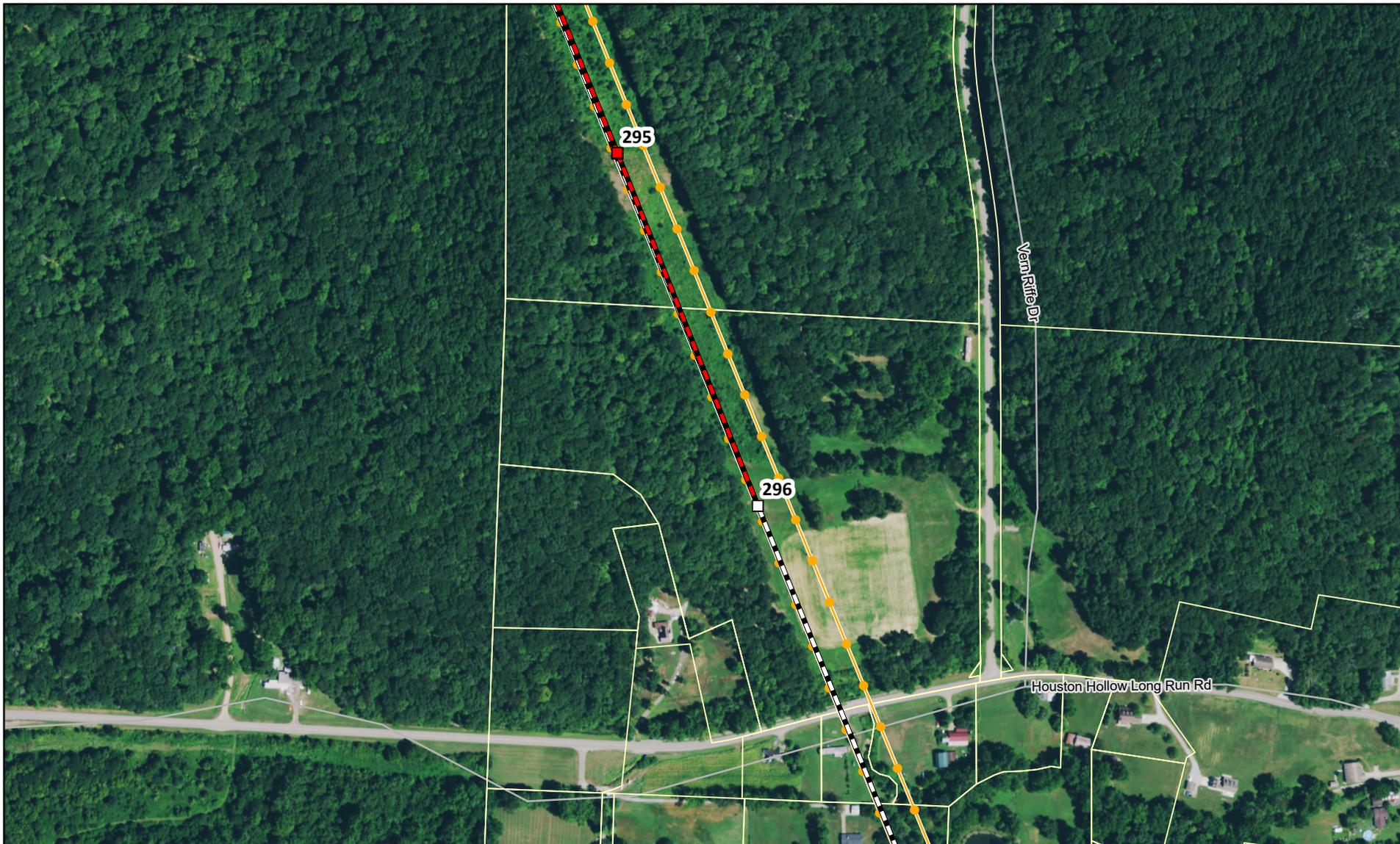


BOUNDLESS ENERGY

Hillsboro to Millbrook Park  
138 kV Transmission Line  
Rebuild Project



0      400      800  
Feet



**Legend**

- Structure Proposed for Shift
  - OPSB-Approved Structure Location
  - Hillsboro to Millbrook Park Proposed Centerline
  - OPSB Approved Centerline
  - County Boundary
  - Parcel Boundary
- 
- Existing Transmission Line
  - Below 69kV
  - 138kV
  - 345kV+

BASEMAP SOURCE:  
USDA National Aerial  
Imagery Program

NAD 1983 State Plane Ohio  
South FIPS 3402  
Scale: 1:4,800

January 07, 2022



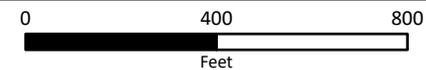
**LOCATOR MAP**

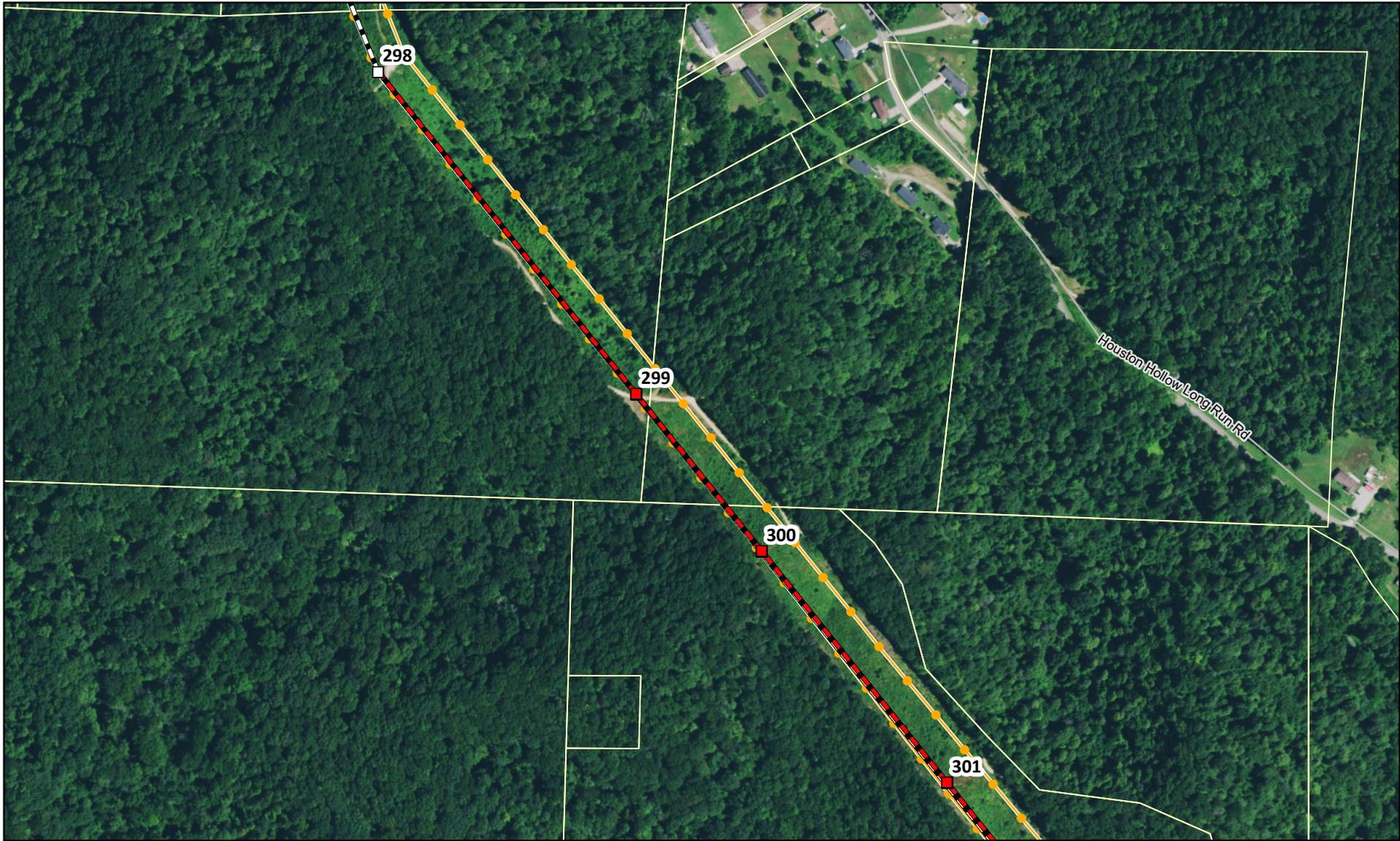


**Exhibit 3.11**  
**Proposed Transmission Line Structure**  
**and Centerline Shifts**



Hillsboro to Millbrook Park  
138 kV Transmission Line  
Rebuild Project





**Legend**

- Structure Proposed for Shift
  - OPSB-Approved Structure Location
  - Hillsboro to Millbrook Park Proposed Centerline
  - OPSB Approved Centerline
  - County Boundary
  - Parcel Boundary
- 
- Existing Transmission Line
  - Below 69kV
  - 138kV
  - 345kV+

BASEMAP SOURCE:  
USDA National Aerial  
Imagery Program

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NAD 1983 State Plane Ohio  
South FIPS 3402  
Scale: 1:4,800

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January 07, 2022

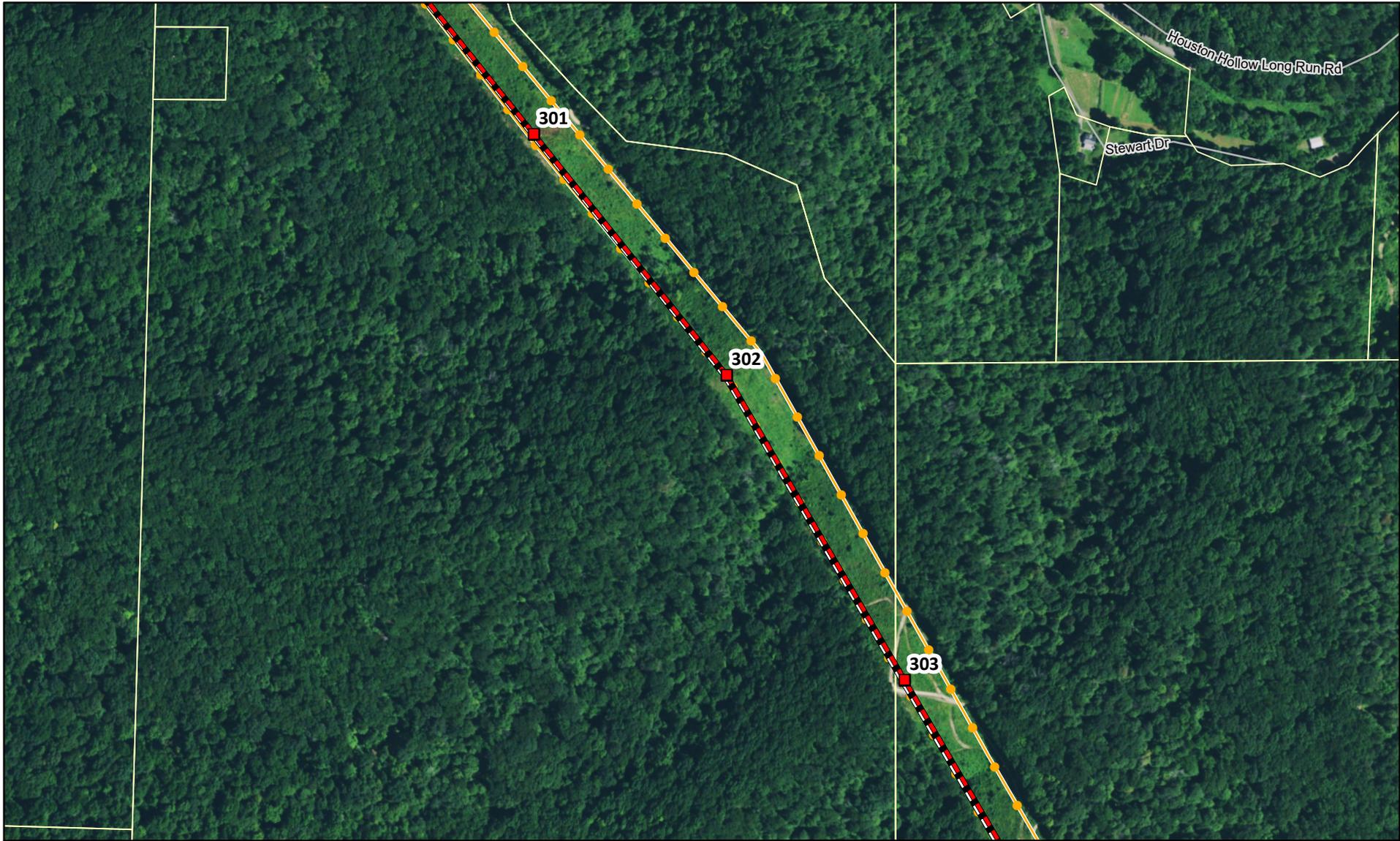


**Exhibit 3.12**  
**Proposed Transmission Line Structure and Centerline Shifts**

BOUNDLESS ENERGY

Hillsboro to Millbrook Park  
138 kV Transmission Line  
Rebuild Project

0      400      800  
Feet



**Legend**

- Structure Proposed for Shift
- OPSB-Approved Structure Location
- Hillsboro to Millbrook Park Proposed Centerline
- OPSB Approved Centerline
- County Boundary
- Parcel Boundary

**Existing Transmission Line**

- Below 69kV
- 138kV
- 345kV+

BASEMAP SOURCE:  
USDA National Aerial  
Imagery Program

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NAD 1983 State Plane Ohio  
South FIPS 3402  
Scale: 1:4,800



January 07, 2022



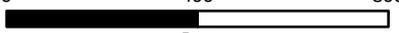
**Exhibit 3.13**  
**Proposed Transmission Line Structure  
and Centerline Shifts**



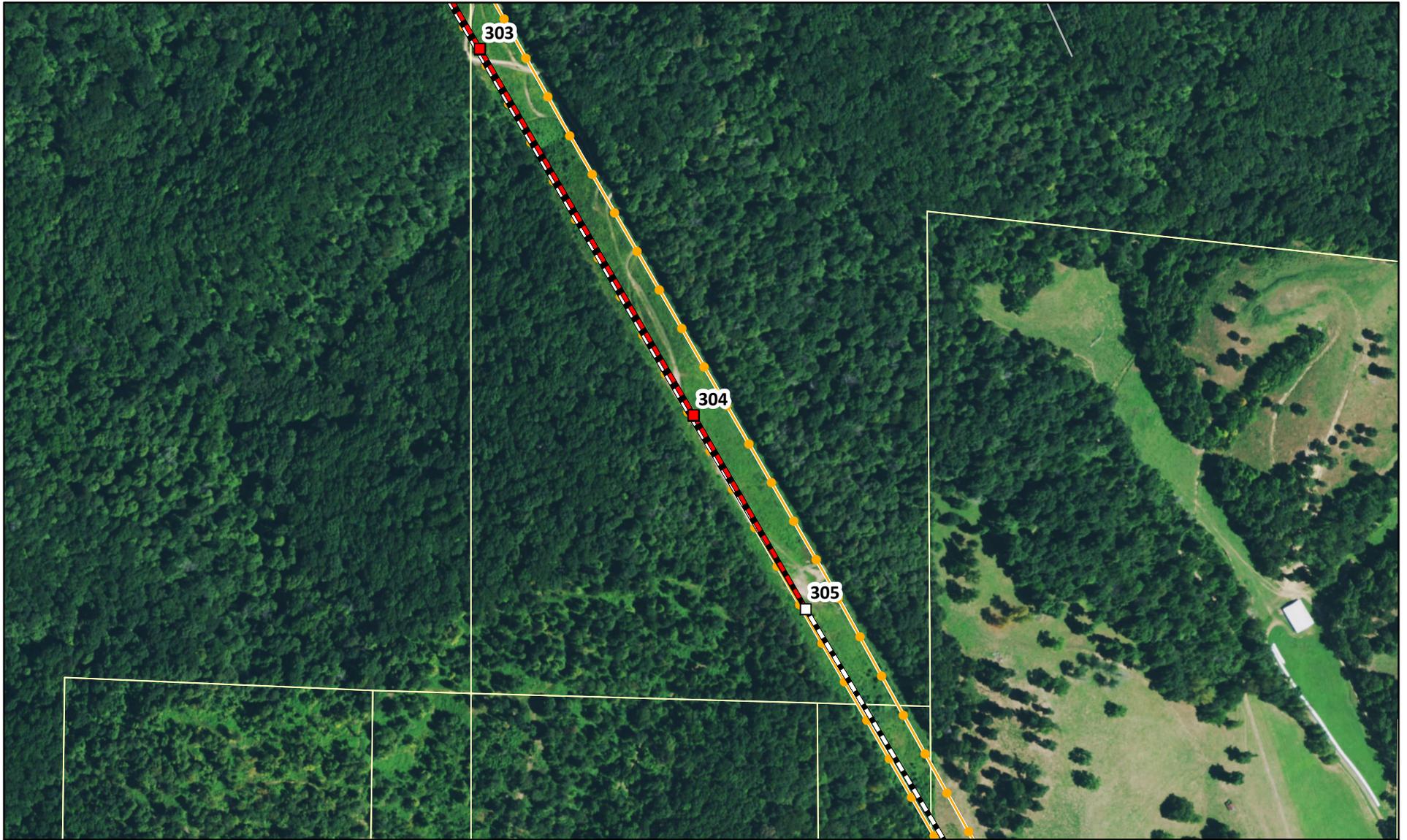
BOUNDLESS ENERGY™

Hillsboro to Millbrook Park  
138 kV Transmission Line  
Rebuild Project

0                      400                      800



Feet



**Legend**

- Structure Proposed for Shift
  - OPSB-Approved Structure Location
  - Hillsboro to Millbrook Park Proposed Centerline
  - OPSB Approved Centerline
  - County Boundary
  - Parcel Boundary
- Existing Transmission Line
  - Below 69kV
  - 138kV
  - 345kV+

BASEMAP SOURCE:  
USDA National Aerial  
Imagery Program

NAD 1983 State Plane Ohio  
South FIPS 3402  
Scale: 1:4,800

January 07, 2022



**Exhibit 3.14**  
**Proposed Transmission Line Structure  
and Centerline Shifts**

Hillsboro to Millbrook Park  
138 kV Transmission Line  
Rebuild Project

0                      400                      800  
Feet

**LETTER OF NOTIFICATION FOR THE HILLSBORO-MILLBROOK PARK 138 KV CIRCUIT REBUILD  
ADJUSTMENT PROJECT**

**Appendix B                    PJM Interconnection Submittal**

PUCO Form FE-T9  
AEP Ohio Transmission Company  
Specifications of Planned Transmission Lines

<b>LINE NAME AND NUMBER:</b>	Hillsboro - Millbrook Park 138 kV / Millbrook Park - South Lucasville 138 kV (s2251)
<b>POINTS OF ORIGIN AND TERMINATION</b>	Hillsboro, Millbrook Park; INTERMEDIATE STATION - Sinking Springs Sw., Millbrook Park, South Lucasville; INTERMEDIATE STATION - North Portsmouth
<b>RIGHTS-OF-WAY: LENGTH / WIDTH / CIRCUITS</b>	43.4 miles / 100ft / 1 circuit (of new construction), 8.5 miles / 100ft / 2 circuit (of new construction)
<b>VOLTAGE: DESIGN / OPERATE</b>	138V / 138kV
<b>APPLICATION FOR CERTIFICATE:</b>	LON, 2020/21
<b>CONSTRUCTION:</b>	2022-2024
<b>CAPITAL INVESTMENT:</b>	\$126.1M
<b>PLANNED SUBSTATION:</b>	NAME - N/A; TRANSMISSION VOLTAGE - N/A; ACREAGE - N/A; LOCATION - N/A
<b>SUPPORTING STRUCTURES:</b>	Overhead, Steel, Pole
<b>PARTICIPATION WITH OTHER UTILITIES</b>	N/A
<b>PURPOSE OF THE PLANNED TRANSMISSION LINE</b>	Rebuild of existing 138kV line, to address condition, performance, and risk issues
<b>CONSEQUENCES OF LINE CONSTRUCTION DEFERMENT OR TERMINATION</b>	Increased risk of further deterioration and performance issues
<b>MISCELLANEOUS:</b>	N/A

# AEP Transmission Zone M-3 Process Hillsboro – Millbrook Park 138 kV Line Rebuild

**Need Number:** AEP-2019-OH024

**Process Stage:** Solutions Meeting 02/21/2020

**Previously Presented:** Needs Meeting 05/20/2019

**Supplemental Project Driver:**

Equipment Condition/Performance/Risk

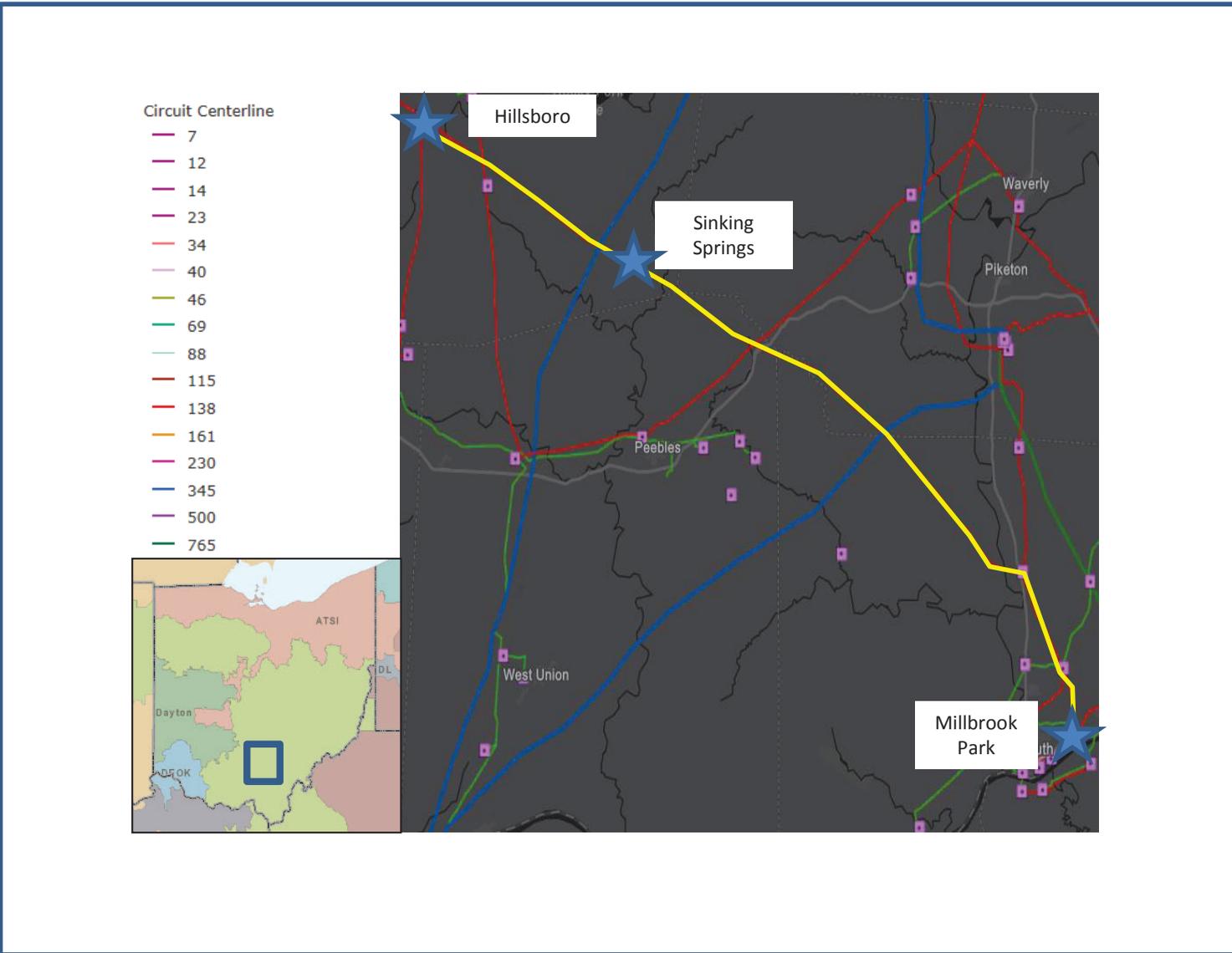
**Specific Assumption Reference:**

AEP Guidelines for Transmission Owner Identified Needs (AEP Assumptions Slide 8)

**Problem Statement:**

- The 1943 Hillsboro – Millbrook Park 138 kV circuit (~52 miles) is wood pole construction and has 1,342 open conditions.
- The majority (93%) of the original conductor (vintage 1944 & 1948) is 477 MCM (26/7) ACSR and is still in-service.
- Half of the wood pole structures from the 1940’s are still in-service; the remaining are a mixture from 1960’s – 1980’s.
- There are additional concerns with the shielding, grounding, and hardware along this 52 mile long line.
- Sinking Springs is in a remote part of AEP’s service territory making manual switching difficult.
- Originally installed in 1942-1943 timeframe. 98% of the line is on wood structures.
- Age Profile: 53% from 1940’s; 4.4% from 1960’s; 13% from 1970’s; 27% from 1980’s; 2.6% from 2000’s

**Model:** N/A



# AEP Transmission Zone M-3 Process Hillsboro – Millbrook Park 138 kV Line Rebuild

**Need Number:** AEP-2019-OH024

**Process Stage:** Solutions Meeting 02/21/2020

**Proposed Solution:**

Portsmouth – Trenton #1 & #2 138kV Cost: \$126.1M

Rebuild 43.4 miles single circuit line between Hillsboro – South Lucasville with 1033 ACSR. **Estimated Cost: \$92.5M**

Rebuild 8.5 miles double circuit between Millbrook Park – South Lucasville with 1033 ACSR. **Estimated Cost: \$33.6M**

Install a new 3-way 2000A 138kV, phase over phase switch at Sinking Springs. **Estimated Cost: \$0.7M**

**Total Estimated Transmission Cost:** \$126.8M

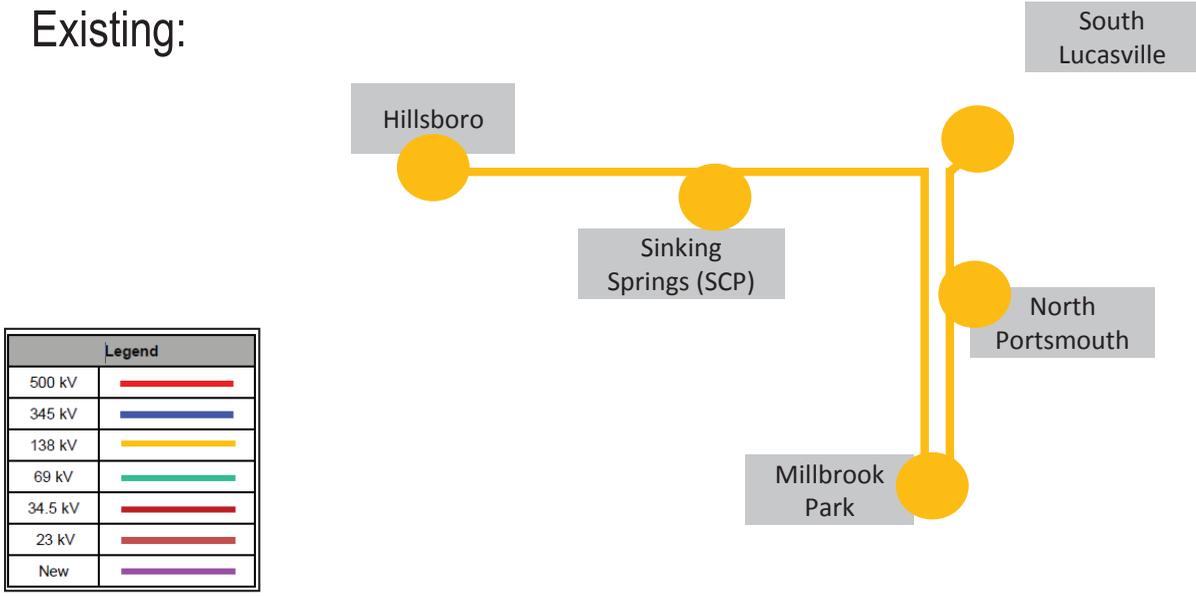
**Alternatives Considered:**

No viable cost-effective transmission alternative was identified.

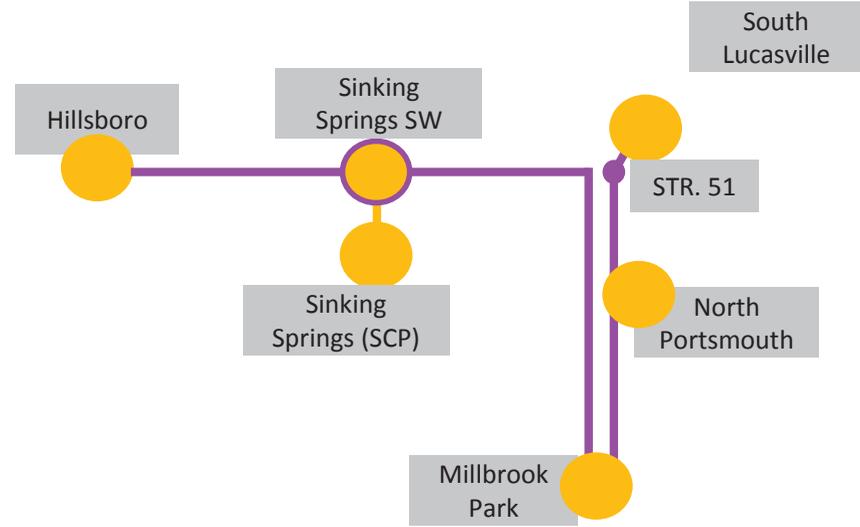
**Projected In-Service:** 09/30/2022

**Project Status:** Scoping

Existing:



Proposed:



**LETTER OF NOTIFICATION FOR THE HILLSBORO-MILLBROOK PARK 138 KV CIRCUIT REBUILD  
ADJUSTMENT PROJECT**

**Appendix C            Agency Correspondence**



# Ohio Department of Natural Resources

MIKE DEWINE, GOVERNOR

MARY MERTZ, DIRECTOR

**Office of Real Estate**  
Paul R. Baldrige, Chief  
2045 Morse Road – Bldg. E-2  
Columbus, OH 43229  
Phone: (614) 265-6649  
Fax: (614) 267-4764

January 22, 2020

Suzann Collins  
Jacobs  
400 E. Business Way, Suite 400  
Cincinnati, Ohio 45241

**Re:** 19-775; AEP Hillsboro to Millbrook Park Transmission Line Rebuild Project

**Project:** The proposed project involves the rebuild of approximately 52 miles of existing 138 kV transmission line.

**Location:** The proposed project is located in Highland, Adams, Pike, and Scioto Counties, Ohio.

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

**Natural Heritage Database:** The Natural Heritage Database has the following records at or within a one-mile radius of the project area:

Chaffweed (*Anagallis minima*), T  
Long tail moss (*Anomodon viticulosus*), E  
Southern hairy rock cress (*Arabis pycnocarpa* var. *adpressipilis*), P  
Wall-rue (*Asplenium ruta-muraria*), T  
Canada milk vetch (*Astragalus canadensis*), T  
Prairie brome (*Bromus kalmii*), P  
Bluehearts (*Buchnera americana*), T  
Villous panic grass (*Dichanthelium villosissimum*), P  
Wedge-leaved whitlow-grass (*Draba cuneifolia*), T  
Glade spurge (*Euphorbia purpurea*), E, FSC  
Sullivant's bark moss (*Forsstroemia producta*), E  
Milk-pea (*Galactia regularis*), P  
Ashy sunflower (*Helianthus mollis*), T  
Crested coral-root (*Hexalectris spicata*), P  
Michaux's glade-cress (*Leavenworthia uniflora*), T  
Narrow-leaved pinweed (*Lechea tenuifolia*), P

Slender blazing-star (*Liatris cylindracea*), T  
 Three-flowered melic (*Melica nitens*), T  
 Rock sandwort (*Minuartia michauxii*), P  
 Common prickly pear (*Opuntia cespitosa*), P  
 Mountain-rice (*Piptatherum racemosum*), P  
 Wolf's blue grass (*Poa wolfii*), E  
 Wherry's catchfly (*Silene caroliniana* ssp. *wherryi*), T  
 Shining ladies'-tresses (*Spiranthes lucida*), P  
 Mixed mesophytic forest plant community  
 Oak pine forest plant community  
 Blue sucker (*Cypleptus elongatus*), T, FSC  
 Tippecanoe darter (*Etheostoma tippecanoe*), T  
 Channel darter (*Percina copelandi*), T  
 River darter (*Percina shumardi*), T  
 Shovelnose sturgeon (*Scaphirhynchus platyrhynchus*), E  
 Henslow's sparrow (*Ammodramus henslowii*), SC, FSC  
 Chuck-will's-widow (*Caprimulgus carolinensis*), SI  
 Bewick's wren (*Thryomanes bewickii*), X, FSC  
 Brush Creek State Forest – ODNR Division of Forestry  
 Strait Creek Prairie Bluff State Nature Preserve – The Nature Conservancy

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. This information is provided to inform you of features present within your project area and vicinity.

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.

Statuses are defined as: E = state endangered; T = state threatened; P = state potentially threatened; SC = state species of concern; SI = state special interest; A = species recently added to state inventory, status not yet determined; X = presumed extirpated in Ohio; FE = federal endangered, FT = federal threatened, FSC = federal species of concern, FC = federal candidate species.

**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 western 15,000 feet of the project route, and the portion of the project route between the Ohio River and the Scioto River are within the vicinity of records for the Indiana bat (*Myotis sodalis*), a state endangered and federally endangered species. Presence of the Indiana bat has been established in the area, and therefore additional summer surveys would not constitute presence/absence in the area.** The following species of trees have relatively high value as potential Indiana bat roost trees to include: shagbark hickory (*Carya ovata*), shellbark hickory (*Carya laciniosa*), bitternut hickory (*Carya cordiformis*), black ash (*Fraxinus nigra*), green ash (*Fraxinus pennsylvanica*), white ash (*Fraxinus americana*), shingle oak (*Quercus imbricaria*), northern red oak (*Quercus rubra*), slippery elm (*Ulmus rubra*), American elm (*Ulmus americana*), eastern cottonwood (*Populus deltoides*), silver maple (*Acer*

saccharinum), sassafras (*Sassafras albidum*), post oak (*Quercus stellata*), and white oak (*Quercus alba*). Indiana bat roost trees consists of trees that include dead and dying trees with exfoliating bark, crevices, or cavities in upland areas or riparian corridors and living trees with exfoliating bark, cavities, or hollow areas formed from broken branches or tops. However, Indiana bats are also dependent on the forest structure surrounding roost trees. If suitable habitat occurs within the project area, the DOW recommends trees be conserved. If suitable habitat occurs within the project area and trees must be cut, the DOW recommends cutting occur between October 1 and March 31.

The remainder of the project route is within the range of the Indiana bat (*Myotis sodalis*), a state endangered and federally endangered species. If suitable habitat occurs within the project area, the DOW recommends trees be conserved. If suitable habitat occurs within the project area and trees must be cut, the DOW recommends cutting occur between October 1 and March 31. If suitable trees must be cut during the summer months, the DOW recommends a net survey be conducted between June 1 and August 15, prior any to cutting. Net surveys should incorporate either nine net nights per square 0.5 kilometer of project area, or four net nights per kilometer for linear projects. If no tree removal is proposed, this project is not likely to impact this species.

The project is within the range of the purple cat's paw (*Epioblasma o. obliquata*), a state endangered and federally endangered mussel, the sheepnose (*Plethobasus cyphus*), a state endangered and federally endangered mussel, the clubshell (*Pleurobema clava*), a state endangered and federally endangered mussel, the northern riffleshell (*Epioblasma torulosa rangiana*), a state endangered and federally endangered mussel, the rayed bean (*Villosa fabalis*), a state endangered and federally endangered mussel, the fanshell (*Cyprogenia stegaria*), a state endangered and federally endangered mussel, the pink mucket (*Lampsilis orbiculata*), a state endangered and federally endangered mussel, the snuffbox (*Epioblasma triquetra*), a state endangered and federally endangered mussel, the little spectaclecase (*Villosa lienosa*), a state endangered mussel, the long-solid (*Fusconaia maculata maculata*), a state endangered mussel, the elephant-ear (*Elliptio crassidens crassidens*), a state endangered mussel, the butterfly (*Ellipsaria lineolata*), a state endangered mussel, the ebonyshell (*Fusconaia ebena*), a state endangered mussel, the sharp-ridged pocketbook (*Lampsilis ovate*), a state endangered mussel, the washboard (*Megaloniais nervosa*), a state endangered mussel, the Ohio pigtoe (*Pleurobema cordatum*), a state endangered mussel, the pyramid pigtoe (*Pleurobema rubrum*), a state endangered mussel, the yellow sandshell (*Lampsilis teres*), a state endangered mussel, the monkeyface (*Quadrula metanevra*), a state endangered mussel, the wartyback (*Quadrula nodulata*), a state endangered mussel, the fawnsfoot (*Truncilla donaciformis*), a state threatened mussel, the black sandshell (*Ligumia recta*), a state threatened mussel, and the threehorn wartyback (*Obliquaria reflexa*), a state threatened mussel.

This project must not have an impact on freshwater native mussels along the project route. This applies to both listed and non-listed species. Per the Ohio Mussel Survey Protocol (2018), all Group 2, 3, and 4 streams (Appendix A) require a mussel survey. Per the Ohio Mussel Survey Protocol, Group 1 streams (Appendix A) and unlisted streams with a watershed of 10 square miles or larger above the point of impact should be assessed using the Reconnaissance Survey for Unionid Mussels (Appendix B) to determine if mussels are present. Mussel surveys may be recommended for these streams as well. This is further explained within the Ohio Mussel Survey Protocol. Therefore, if in-water work is planned in any stream that meets any of the above criteria, the DOW recommends the applicant provide information to indicate no mussel impacts will occur. If this is not possible, the DOW recommends a professional malacologist conduct a mussel survey in the project area. If mussels that cannot be avoided are found in the project area, as a last resort, the DOW recommends a professional malacologist collect and relocate the mussels to suitable and similar habitat upstream of the project site. Mussel surveys and any

subsequent mussel relocation should be done in accordance with the Ohio Mussel Survey Protocol. The Ohio Mussel Survey Protocol (2018) can be found at:

<http://wildlife.ohiodnr.gov/portals/wildlife/pdfs/licenses%20&%20permits/OH%20Mussel%20Survey%20Protocol.pdf>

The project is within the range of the popeye shiner (*Notropis ariommus*), a state endangered fish, the shortnose gar (*Lepisosteus platostomus*), a state endangered fish, the shovelnose sturgeon (*Scaphirhynchus platyrhynchus*), a state endangered fish, the mountain madtom (*Noturus eleutherus*), a state endangered fish, the northern madtom (*Noturus stigmosus*), a state endangered fish, the goldeye (*Hiodon alosoides*), a state endangered fish, the blue sucker (*Cycleptus elongatus*), a state threatened fish, the American eel (*Anguilla rostrata*), a state threatened fish, the channel darter (*Percina copelandi*), a state threatened fish, the bigeye shiner (*Notropis boops*), a state threatened fish, the Tippecanoe darter (*Etheostoma tippecanoe*), a state threatened fish, the paddlefish (*Polyodon spathula*), a state threatened fish, and the river darter (*Percina shumardi*), a state threatened fish. The DOW recommends no in-water work in perennial streams from April 15 to June 30 to reduce impacts to indigenous aquatic species and their habitat. If no in-water work is proposed in a perennial stream, this project is not likely to impact these or other aquatic species.

The project is within the range of the eastern hellbender (*Cryptobranchus alleganiensis alleganiensis*), a state endangered species and a federal species of concern. Due to the location, this project is not likely to impact this species.

The project is within the range of the timber rattlesnake (*Crotalus horridus horridus*), a state endangered species, and a federal species of concern. The timber rattlesnake is a woodland species. In addition to using wooded areas, the timber rattlesnake also utilizes sunlit gaps in the canopy for basking and deep rock crevices known as den sites for overwintering. The DOW recommends that a DOW approved herpetologist conducts a habitat suitability survey along the project route to determine if suitable habitat exists for the timber rattlesnake. If suitable habitat is determined to be present, the DOW recommends that a presence/absence survey be conducted, or an avoidance/minimization plan be developed and implemented by the approved herpetologist.

The project is also within the range of the eastern spadefoot toad (*Scaphiopus holbrookii*), a state endangered species. This species is found in areas of sandy soils that are associated with river valleys. Breeding habitats may include flooded agricultural fields or other water holding depressions. The DOW recommends that a DOW approved herpetologist conducts a habitat suitability survey along the project route to determine if suitable habitat exists for the eastern spadefoot toad. If suitable habitat is determined to be present, the DOW recommends that a presence/absence survey be conducted, or an avoidance/minimization plan be developed and implemented by the approved herpetologist.

The project is within the range of the mud salamander (*Pseudotriton montanus*), a state threatened species. The DOW recommends that a DOW approved herpetologist conducts a habitat suitability survey along the project route to determine if suitable habitat exists for the mud salamander. If suitable habitat is determined to be present, the DOW recommends that a presence/absence survey be conducted, or an avoidance/minimization plan be developed and implemented by the approved herpetologist.

The project is within the range of the green salamander (*Aneides aeneus*), a state endangered amphibian. Due to the location, this project is not likely to impact this species.

The project is within the range of the cave salamander (*Eurycea lucifuga*), a state endangered species. Due to the location, this project is not likely to impact this species.

The project is within the range of the Allegheny woodrat (*Neotoma magister*), a state endangered species. The Allegheny woodrat utilizes rocky outcrops such as cliffs and caves in forested areas. Due to the location, 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 to June 30. If this habitat will not be impacted, this project is not likely to impact this species.

The project is within the range of the loggerhead shrike (*Lanius ludovicianus*), a state endangered bird. The loggerhead shrike nests in hedgerows, thickets and fencerows. They hunt over hayfields, pastures, and other grasslands. If thickets or other types of dense shrubbery habitat will be impacted, construction should be avoided in this habitat during the species' nesting period of April 1 to August 1. If this habitat will not be impacted, this project is not likely to impact 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 U.S. 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](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 Sarah Tebbe, Environmental Specialist, at (614) 265-6397 or [Sarah.Tebbe@dnr.state.oh.us](mailto:Sarah.Tebbe@dnr.state.oh.us) if you have questions about these comments or need additional information.

Mike Pettegrew  
Environmental Services Administrator (Acting)



# Ohio Division of Wildlife

## APPROVED HERPETOLOGISTS

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The following individuals are approved to conduct habitat suitability surveys and presence/absence surveys for the state listed reptiles and amphibians specified below.

**Ramsey Langford**

3023 Colon Dr.  
Copley, Ohio 44321  
[ramseylangford@gmail.com](mailto:ramseylangford@gmail.com)  
330-447-4840

**Approved for:**

- Spotted turtle (*Clemmys guttata*)
- Blanding's turtle (*Emydoidea blandingii*)
- Smooth greensnake (*Opheodrys vernalis*)

**Teal Dimitrie**

3054 Kensington Rd.  
Cleveland Heights, Ohio 44118  
[trichards-dimitrie@enviroscienceinc.com](mailto:trichards-dimitrie@enviroscienceinc.com)  
586-846-0087

**Approved for:**

- Spotted turtle (*Clemmys guttata*)
- Blanding's turtle (*Emydoidea blandingii*)

**Michael Hoggarth**

Department of Biology and Earth Science  
Otterbein University  
Westerville, Ohio 43081  
[mhoggarth@otterbein.edu](mailto:mhoggarth@otterbein.edu)  
614-823-1667

**Approved for:**

- Green salamander (*Aneides aeneus*)
- Lake Erie watersnake (*Nerodia sipedon insularum*)
- Eastern hellbender (*Cryptobranchus alleganiensis*)

**Matthew Cross**

1736 C Dublin Ct.  
Bowling Green, Ohio 43402  
[eobsoleta01@gmail.com](mailto:eobsoleta01@gmail.com)  
616-240-6486

**Approved for:**

- Blanding's turtle (*Emydoidea blandingii*)
- Kirtland's snake (*Clonophis kirtlandii*)

**Thomas Pauley**

4525 Este Ave.  
Cincinnati, Ohio 45232  
[tpauley@envsi.com](mailto:tpauley@envsi.com)  
513-451-1777

**Approved for:**

- Green salamander (*Aneides aeneus*)
- Timber rattlesnake (*Crotalus horridus*)

**Bruce Kingsbury**

2224 Springfield Ave.  
Fort Wayne, Indiana 46805  
[bruce.kingsbury@ipfw.edu](mailto:bruce.kingsbury@ipfw.edu)  
260-341-2013

**Approved for:**

- Eastern massasauga (*Sistrurus catenatus catenatus*)
- Kirtland's snake (*Clonophis kirtlandii*)
- Blanding's turtle (*Emydoidea blandingii*)
- Spotted turtle (*Clemmys guttata*)
- Copper-bellied watersnake (*Nerodia erythrogaster neglecta*)

Please direct questions concerning this list to: [wildlife.permits@dnr.state.oh.us](mailto:wildlife.permits@dnr.state.oh.us)

April 2019

**Nicholas Smeenk**  
2158 Northern Rd.  
Columbus, Ohio 43221  
614-354-7890

**Approved for:** - Eastern massasauga (*Sistrurus catenatus catenatus*)  
- Eastern hellbender (*Cryptobranchus alleganiensis*)

**The following individuals are approved to conduct habitat suitability surveys and presence/absence surveys for all state listed reptiles and amphibians.**

**Kent Bekker**  
542 Centerfield Drive  
Maumee, Ohio 43537  
[kbekker@gmail.com](mailto:kbekker@gmail.com)  
419-376-4384

**Ralph Pfungsten**  
347 Pineview Circle  
Berea, Ohio 44017  
[rap347@wideopenwest.com](mailto:rap347@wideopenwest.com)  
440-243-7568

**Tim O. Matson**  
5696 Matson Rd  
Geneva, OH 44041  
[tmatson@cmnh.org](mailto:tmatson@cmnh.org)  
440-417-8196

**Jeff Davis**  
625 Crescent Road  
Hamilton, Ohio 45013  
[ohiofrogs@gmail.com](mailto:ohiofrogs@gmail.com)  
513-868-3154

**Gregory Lipps, LLC**  
1473 County Road 5-2  
Delta, Ohio 43515-9657  
[greglipps@gmail.com](mailto:greglipps@gmail.com)  
419-376-3441

**Doug Wynn**  
241 Chase Street, Apt. A1  
Russell's Point, Ohio 43348  
[Sistrurus@aol.com](mailto:Sistrurus@aol.com)  
614-306-0313

**Kristin Stanford**  
OSU Stone Laboratory  
P.O. Box 119  
Put-in-Bay, OH 43456  
[theislandsnakelady@yahoo.com](mailto:theislandsnakelady@yahoo.com)  
419-285-1847

Please direct questions concerning this list to: [wildlife.permits@dnr.state.oh.us](mailto:wildlife.permits@dnr.state.oh.us)

April 2019

# United States Department of the Interior



## FISH AND WILDLIFE SERVICE

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

March 4, 2021

Suzann Collins  
Jacobs

TAILS# 03E15000-2019-TA-2039

Re: AEP Hillsboro to Millbrook Park Transmission Line Rebuild Project, Highland, Adams, Pike and Scioto Counties, OH

Dear Ms. Collins,

We have received your recent correspondence requesting information about the subject proposal. There are no federal wilderness areas, wildlife refuges or designated critical habitat within the vicinity of the project area. The following comments and recommendations will assist you in fulfilling the requirements for consultation under section 7 of the Endangered Species Act of 1973, as amended (ESA).

The U.S. Fish and Wildlife Service (Service) recommends that proposed developments avoid and minimize water quality impacts and impacts to high quality fish and wildlife habitat (e.g., forests, streams, wetlands). Additionally, natural buffers around streams and wetlands should be preserved to enhance beneficial functions. If streams or wetlands will be impacted, the 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. All disturbed areas should be mulched and revegetated with native plant species. Prevention of non-native, invasive plant establishment is critical in maintaining high quality habitats.

**FEDERALLY LISTED SPECIES COMMENTS:** All projects in the State of Ohio lie within the range of the federally endangered Indiana bat (*Myotis sodalis*) and the federally threatened northern long-eared bat (*Myotis septentrionalis*). In Ohio, presence of the Indiana bat and northern long-eared bat is assumed wherever suitable habitat occurs unless a presence/absence survey has been performed to document absence. Suitable summer habitat for Indiana bats and northern long-eared bats consists of a wide variety of forested/wooded habitats where they roost, forage, and travel and may also include some adjacent and interspersed non-forested habitats such as emergent wetlands and adjacent edges of agricultural fields, old fields and pastures. This includes forests and woodlots containing potential roosts (i.e., live trees and/or snags  $\geq 3$  inches diameter at breast height (dbh) that have any exfoliating bark, cracks, crevices, hollows and/or cavities), as well as linear features such as fencerows, riparian forests, and other wooded corridors. These wooded areas may be dense or loose aggregates of trees with variable amounts of canopy closure. Individual trees may be considered suitable habitat when they exhibit the characteristics of a potential roost tree and are located within 1,000 feet (305 meters) of other

forested/wooded habitat. Northern long-eared bats have also been observed roosting in human-made structures, such as buildings, barns, bridges, and bat houses; therefore, these structures should also be considered potential summer habitat. In the winter, Indiana bats and northern long-eared bats hibernate in caves and abandoned mines.

**The proposed project is in the vicinity of one or more confirmed records of Indiana bats.** Portions of the line in southern Scioto County are in Indiana bat hibernaculum buffers and roost tree buffers; the northern section of the line in Highland County is within many capture buffers of male and female Indiana bats and roost trees of these bats; portions of the project are also within capture buffers of Northern long-eared bats. We understand that the majority of the transmission line rebuild is occurring on existing right-of way that is already cleared. However due to the numerous bat records in these portions of the project area, additional information is needed to evaluate this project. **The Service requests additional information on the extent of tree clearing proposed along portions of the line in Scioto and Highland Counties so that we may evaluate the potential for the project to effect the Indiana and northern long-eared bat and recommend appropriate minimization measures. Please provide estimated acreages of forest clearing as well as maps indicating areas to be cleared.**

The endangered rayed bean (*Villosa fabalis*), a freshwater mussel, is known to occur in Scioto Brush Creek and the Scioto River, both of which will be spanned by the transmission line. The rayed bean is usually found in or near shoal or riffle areas, and in the shallow, wave-washed areas of lakes. Substrates typically include gravel and sand, and they are often associated with, and buried under the roots of, vegetation, including water willow (*Justicia americana*) and water milfoil (*Myriophyllum* sp.). Additionally, the endangered clubshell (*Pleurobema clava*) and northern riffleshell (*Epioblasma torulosa rangiana*) mussels are also known to occur in the Scioto River. The clubshell and northern riffleshell inhabit areas with sand or gravel substrate and also prefer areas with riffles and runs.

Should the proposed project directly or indirectly impact any of the mussel streams listed above, we recommend that a survey be conducted to determine the presence or probable absence of rayed bean mussels in the vicinity of the proposed site. Any survey should be designed and conducted in coordination with the Ohio Field Office. Surveyors must have valid Federal and State permits to survey for federally listed mussels in Ohio. If any impact to native riparian vegetation is proposed we recommend further coordination with our office to determine if impacts to these mussel species may occur. Best management practices that minimize stormwater runoff and erosion should be diligently implemented in these areas.

The proposed project lies within the range of Virginia spiraea (*Spiraea virginiana*), a federally listed threatened species. This plant is generally found in riparian habitats along rocky streambanks or sandbars. This species requires a habitat characteristic of flooding and subsequent deposition for successful colonization. Known populations of Virginia spiraea in Ohio occur on large, long-established gravel bars in Scioto County, along Scioto Brush Creek. The current alignment occurs in a township where the species is known to occur, but does not cross the creek in this township. At this time it does not appear that the project will impact this species, however if the alignment were to be modified, further coordination with this office is requested.

The proposed project lies within the range of running buffalo clover (*Trifolium stoloniferum*), a federally listed endangered species that was recently proposed for delisting due to recovery. This species can be found in partially shaded woodlots, mowed areas (lawns, parks, cemeteries), and along streams and trails and in right-of-ways. Running buffalo clover requires periodic disturbance and a somewhat open habitat to successfully flourish, but cannot tolerate full-sun, full-shade, or severe disturbance.

If there is a federal nexus for the project (e.g., federal funding provided, federal permits required to construct), 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 that 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.

Due to the project type, size, and location, we do not anticipate adverse effects to any other federally endangered, threatened, proposed, or candidate species. Should the project design change, or during the term of this action, 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, consultation with the Service should be initiated to assess any potential impacts.#

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 ESA, and are consistent with the intent of the National Environmental Policy Act of 1969 and the Service's Mitigation Policy. This letter provides technical assistance only and does not serve as a completed section 7 consultation document. We recommend that the project be coordinated with the Ohio Department of Natural Resources due to the potential for the project to affect state listed species and/or state lands. Contact John Kessler, Environmental Services Administrator, at (614) 265-6621 or at [john.kessler@dnr.state.oh.us](mailto:john.kessler@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](mailto:ohio@fws.gov).

Sincerely,



Patrice M. Ashfield  
Field Supervisor

cc: Nathan Reardon, ODNR-DOW

Kate Parsons, ODNR-DOW



In reply, refer to  
2020-MLT-49570

October 22, 2020

Mr. Ryan J. Weller  
Weller & Associates, Inc.  
1395 West Fifth Avenue  
Columbus, Ohio 43212

**RE: Hillsboro-Millbrook 138kV Rebuild Project, Adams, Highland, Pike, and Scioto Counties, Ohio**

Dear Mr. Weller:

This letter is in response to the correspondence received on September 23, 2020 regarding the proposed Hillsboro-Millbrook 138kV Rebuild Project, Adams, Highland, Pike, and Scioto Counties, Ohio. We appreciate the opportunity to comment on this project. The comments of the Ohio State Historic Preservation Office (SHPO) are made pursuant to Section 149.53 of the Ohio Revised Code and the Ohio Power Siting Board rules for siting this project (OAC 4906-5). The comments of the Ohio SHPO are also submitted in accordance with the provisions of Section 106 of the National Historic Preservation Act of 1966, as amended (54 U.S.C. 306108 [36 CFR 800]).

The following comments pertain to the *Phase I Archaeological Investigations for the 83.7 km (52 mi) Hillsboro-Millbrook 138kV Rebuild Project in Highland, Adams, Pike, and Scioto Counties, Ohio* by Ryan J. Weller (Weller & Associates, Inc., 2020).

A literature review, visual inspection, surface collection, shovel probe and shovel test unit excavation was completed as part of the investigations. Five (5) previously identified archaeological sites are located within the project area, Ohio Archaeological Inventory (OAI) #33SC0523, 33HI0219, and 33HI0395-33HI0397. OAI#33HI0219 is recommended for avoidance or additional investigations. The four (4) other previously identified archaeological sites are recommended not eligible for listing in the National Register of Historic Places (NRHP). Our office agrees with this recommendation.

Twenty (20) new archaeological sites were identified during survey. OAI#33SC0653-33SC0657, 33PK0442-33PK0443, and 33HI0478-33HI0489 are recommended not eligible for listing in the NRHP. OAI#33SC0658 is recommended for avoidance or additional investigations. Our office agrees with these recommendations.

The following comments pertain to the *History/Architecture Investigations for the 83.7 km (52 mi) Hillsboro-Millbrook 138kV Rebuild Project in Highland, Adams, Pike, and Scioto Counties, Ohio* by Austin White and Scott McIntosh (Weller & Associates, Inc., 2020).

A literature review and field survey were completed as part of the investigations. A total of 282 resources fifty years of age or older were newly identified and four extant Ohio Historic Inventory (OHI) properties were identified within the Area of Potential Effects during the field survey.

It is Weller's recommendation that four of the properties identified are eligible for listing in the National Register of Historic Places: SCI0073513 (Criterion C); HIG0000317 (Criteria A and C); HIG0001417 (Criteria A and B); and HIG0001517 (Criterion B). Our office agrees with Weller's recommendations regarding eligibility. Due to the nature of the project as a rebuild and replacement of the existing transmission line, we agree that the project as proposed will have no adverse effect on these historic properties.

RPR Serial No: 1085659, 1085660

In summary, two (2) archaeological sites, OAI#33HI0219 and 33SC0658, are recommended for avoidance or additional investigations. It is our understanding that a portion of the project area was inaccessible for archaeology survey do to landowner restrictions. Testing is scheduled in February 2021. Our office looks forward to additional coordination after this testing can take place.

If you have any questions, please contact me at (614) 298-2022, or by e-mail at [khorricks@ohiohistory.org](mailto:khorricks@ohiohistory.org), or Joy Williams at [jwilliams@ohiohistory.org](mailto:jwilliams@ohiohistory.org). Thank you for your cooperation.

Sincerely,



Krista Horrocks, Project Reviews Manager  
Resource Protection and Review

RPR Serial No: 1085659, 1085660

**OHIO HISTORY CONNECTION**

800 E. 17th Ave., Columbus, OH 43211-2474 • 614.297.2300 • [ohiohistory.org](http://ohiohistory.org)



In reply, refer to  
2020-MLT-49570

November 25, 2020

Mr. Ryan J. Weller  
Weller & Associates, Inc.  
1395 West Fifth Avenue  
Columbus, Ohio 43212

**RE: Hillsboro-Millbrook 138kV Rebuild Project, Highland County, Ohio – Phase II Archaeological Assessment at Site 33HI0219**

Dear Mr. Weller:

This letter is in response to the correspondence received on November 20, 2020 regarding the proposed Hillsboro-Millbrook 138kV Rebuild Project, Highland County, Ohio, specifically the Phase II Archaeological Assessment at Site 33HI0219. We appreciate the opportunity to comment on this project. The comments of the Ohio State Historic Preservation Office (SHPO) are made pursuant to Section 149.53 of the Ohio Revised Code and the Ohio Power Siting Board rules for siting this project (OAC 4906-5). The comments of the Ohio SHPO are also submitted in accordance with the provisions of Section 106 of the National Historic Preservation Act of 1966, as amended (54 U.S.C. 306108 [36 CFR 800]).

The following comments pertain to the *Phase II Archaeological Assessment at Site 33HI0219 within the Proposed Hillsboro-Millbrook 138kV Rebuild Project in Highland County, Ohio* by Joshua Engle (Weller & Associates, Inc., 2020).

Our office reviewed and accepted the proposed Phase II scope of work on November 2, 2020. Geophysical investigation, close-interval shovel testing, and 1x1 meter test unit excavations was completed as part of the investigations. After additional investigations, Ohio Archaeological Inventory (OAI) #33HI0219 is recommended not eligible for listing in the National Register of Historic Places (NRHP). Our office agrees with this recommendation. Please ensure the OAI form for 33HI0219 has been updated for SHPO review.

One (1) archaeological site, OAI#33SC0658, is still recommended for avoidance or additional investigations. It is our understanding that a portion of the project area was inaccessible for archaeology survey do to landowner restrictions. Testing is scheduled in February 2021. Our office looks forward to additional coordination after this testing can take place.

If you have any questions, please contact me at (614) 298-2022, or by e-mail at [khorricks@ohiohistory.org](mailto:khorricks@ohiohistory.org). Thank you for your cooperation.

Sincerely,

A handwritten signature in blue ink, appearing to read "Krista Horrocks".

Krista Horrocks, Project Reviews Manager  
Resource Protection and Review

RPR Serial No: 1086349



**ENVIRONMENTAL SOLUTIONS & INNOVATIONS, INC.**

4300 Lynn Road, Suite 205  
Ravenna, OH 44266  
Phone: 513-451-1777 Fax: 513-451-3321

Pesi 1652

17 June 2021

USFWS Ecological Services  
4625 Morse Road, Suite 104  
Columbus, Ohio 43230

**RE: AEP Hillsboro to Millbrook Park Project, TAILS# 03E15000-2019-TA-2039  
Highland, Adams, Pike, and Scioto Counties, Ohio**

To whom it may concern:

This correspondence serves as an update regarding American Electric Power’s (AEP) proposed Hillsboro to Millbrook Park Transmission Line Rebuild Project (Project). Project correspondence from USFWS dated 9 March 2020 (Attachment 1) referenced federally listed species potentially occurring within the Project area; a request for additional information on estimated acreages of forest clearing was included.

As typically recommended to avoid impacts to listed bat species, AEP will conduct tree removal and trimming activities between 1 October and 31 March when tree roosting bats are considered absent from the landscape. As a rebuild Project primarily within existing right-of-way (ROW), limited tree clearing is anticipated. AEP’s clearing/trimming estimates in Scioto and Highland counties are provided in the table below. Of note, any proposed tree removal within the ROW is primarily young, successional growth. Mapping of clearing areas is provided as Attachment 2.

County	Access Road - Tree Trimming/Removal (Acres)	Existing ROW - Tree Trimming/Removal (Acres)
Scioto	24.5	57.9
Highland	1.6	9.7
<b>Total</b>	<b>26.1</b>	<b>67.6</b>

AEP seeks USFWS confirmation that limited acreage seasonal tree clearing is sufficient to allow the project to proceed as scheduled. USFWS will be notified if significant Project changes potentially affecting listed species are proposed.

Sincerely,

  
Valerie Clarkston, M.S.  
(513) 382-0925  
[vclarkston@envsi.com](mailto:vclarkston@envsi.com)

Attachments  
Attachment 1: USFWS Correspondence  
Attachment 2: Map of Clearing Areas

# United States Department of the Interior

## FISH AND WILDLIFE SERVICE



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

March 9, 2020

Suzann Collins  
Jacobs

TAILS# 03E15000-2019-TA-2039

Re: AEP Hillsboro to Millbrook Park Transmission Line Rebuild Project, Highland, Adams, Pike and Scioto Counties, OH

Dear Ms. Collins,

We have received your recent correspondence requesting information about the subject proposal. There are no federal wilderness areas, wildlife refuges or designated critical habitat within the vicinity of the project area. The following comments and recommendations will assist you in fulfilling the requirements for consultation under section 7 of the Endangered Species Act of 1973, as amended (ESA).

The U.S. Fish and Wildlife Service (Service) recommends that proposed developments avoid and minimize water quality impacts and impacts to high quality fish and wildlife habitat (e.g., forests, streams, wetlands). Additionally, natural buffers around streams and wetlands should be preserved to enhance beneficial functions. If streams or wetlands will be impacted, the 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. All disturbed areas should be mulched and revegetated with native plant species. Prevention of non-native, invasive plant establishment is critical in maintaining high quality habitats.

**FEDERALLY LISTED SPECIES COMMENTS:** All projects in the State of Ohio lie within the range of the federally endangered Indiana bat (*Myotis sodalis*) and the federally threatened northern long-eared bat (*Myotis septentrionalis*). In Ohio, presence of the Indiana bat and northern long-eared bat is assumed wherever suitable habitat occurs unless a presence/absence survey has been performed to document absence. Suitable summer habitat for Indiana bats and northern long-eared bats consists of a wide variety of forested/wooded habitats where they roost, forage, and travel and may also include some adjacent and interspersed non-forested habitats such as emergent wetlands and adjacent edges of agricultural fields, old fields and pastures. This includes forests and woodlots containing potential roosts (i.e., live trees and/or snags  $\geq 3$  inches diameter at breast height (dbh) that have any exfoliating bark, cracks, crevices, hollows and/or cavities), as well as linear features such as fencerows, riparian forests, and other wooded corridors. These wooded areas may be dense or loose aggregates of trees with variable amounts of canopy closure. Individual trees may be considered suitable habitat when they exhibit the characteristics of a potential roost tree and are located within 1,000 feet (305 meters) of other

forested/wooded habitat. Northern long-eared bats have also been observed roosting in human-made structures, such as buildings, barns, bridges, and bat houses; therefore, these structures should also be considered potential summer habitat. In the winter, Indiana bats and northern long-eared bats hibernate in caves and abandoned mines.

**The proposed project is in the vicinity of one or more confirmed records of Indiana bats.** Portions of the line in southern Scioto County are in Indiana bat hibernaculum buffers and roost tree buffers; the northern section of the line in Highland County is within many capture buffers of male and female Indiana bats and roost trees of these bats; portions of the project are also within capture buffers of Northern long-eared bats. We understand that the majority of the transmission line rebuild is occurring on existing right-of way that is already cleared. However due to the numerous bat records in these portions of the project area, additional information is needed to evaluate this project. **The Service requests additional information on the extent of tree clearing proposed along portions of the line in Scioto and Highland Counties so that we may evaluate the potential for the project to effect the Indiana and northern long-eared bat and recommend appropriate minimization measures. Please provide estimated acreages of forest clearing as well as maps indicating areas to be cleared.**

The endangered rayed bean (*Villosa fabalis*), a freshwater mussel, is known to occur in Scioto Brush Creek and the Scioto River, both of which will be spanned by the transmission line. The rayed bean is usually found in or near shoal or riffle areas, and in the shallow, wave-washed areas of lakes. Substrates typically include gravel and sand, and they are often associated with, and buried under the roots of, vegetation, including water willow (*Justicia americana*) and water milfoil (*Myriophyllum* sp.). Additionally, the endangered clubshell (*Pleurobema clava*) and northern riffleshell (*Epioblasma torulosa rangiana*) mussels are also known to occur in the Scioto River. The clubshell and northern riffleshell inhabit areas with sand or gravel substrate and also prefer areas with riffles and runs.

Should the proposed project directly or indirectly impact any of the mussel streams listed above, we recommend that a survey be conducted to determine the presence or probable absence of rayed bean mussels in the vicinity of the proposed site. Any survey should be designed and conducted in coordination with the Ohio Field Office. Surveyors must have valid Federal and State permits to survey for federally listed mussels in Ohio. If any impact to native riparian vegetation is proposed we recommend further coordination with our office to determine if impacts to these mussel species may occur. Best management practices that minimize stormwater runoff and erosion should be diligently implemented in these areas.

The proposed project lies within the range of Virginia spiraea (*Spiraea virginiana*), a federally listed threatened species. This plant is generally found in riparian habitats along rocky streambanks or sandbars. This species requires a habitat characteristic of flooding and subsequent deposition for successful colonization. Known populations of Virginia spiraea in Ohio occur on large, long-established gravel bars in Scioto County, along Scioto Brush Creek. The current alignment occurs in a township where the species is known to occur, but does not cross the creek in this township. At this time it does not appear that the project will impact this species, however if the alignment were to be modified, further coordination with this office is requested.

The proposed project lies within the range of running buffalo clover (*Trifolium stoloniferum*), a federally listed endangered species that was recently proposed for delisting due to recovery. This species can be found in partially shaded woodlots, mowed areas (lawns, parks, cemeteries), and along streams and trails and in right-of-ways. Running buffalo clover requires periodic disturbance and a somewhat open habitat to successfully flourish, but cannot tolerate full-sun, full-shade, or severe disturbance.

If there is a federal nexus for the project (e.g., federal funding provided, federal permits required to construct), 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 that 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.

Due to the project type, size, and location, we do not anticipate adverse effects to any other federally endangered, threatened, proposed, or candidate species. Should the project design change, or during the term of this action, 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, consultation with the Service should be initiated to assess any potential impacts.

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 ESA, and are consistent with the intent of the National Environmental Policy Act of 1969 and the Service's Mitigation Policy. This letter provides technical assistance only and does not serve as a completed section 7 consultation document. We recommend that the project be coordinated with the Ohio Department of Natural Resources due to the potential for the project to affect state listed species and/or state lands. Contact John Kessler, Environmental Services Administrator, at (614) 265-6621 or at [john.kessler@dnr.state.oh.us](mailto:john.kessler@dnr.state.oh.us).

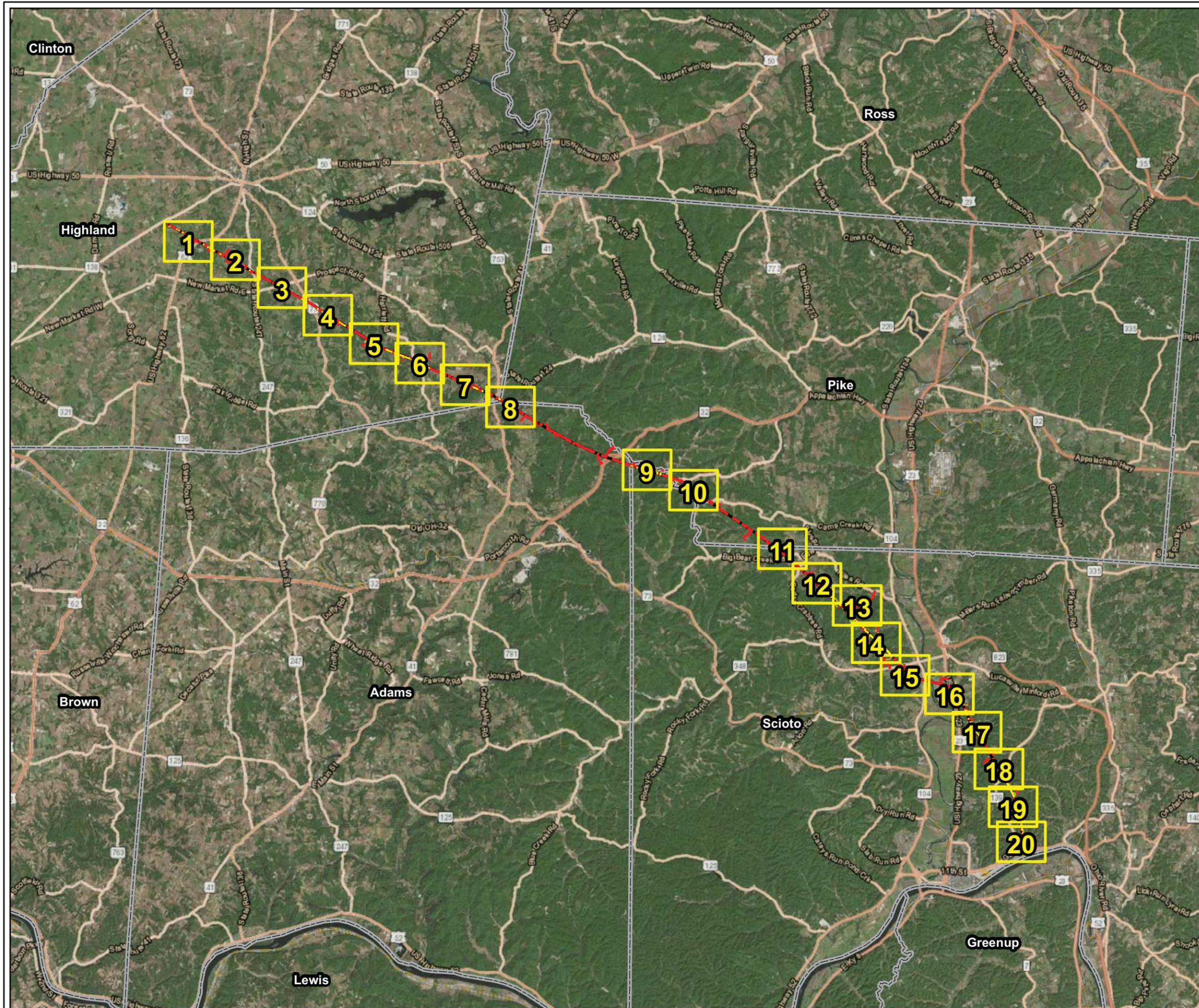
If you have questions, or if we can be of further assistance in this matter, please contact our office at (614) 416-8993 or [ohio@fws.gov](mailto:ohio@fws.gov).

Sincerely,



Patrice M. Ashfield  
Field Supervisor

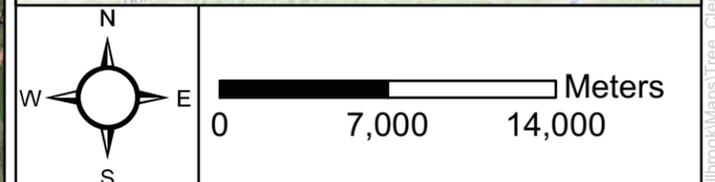
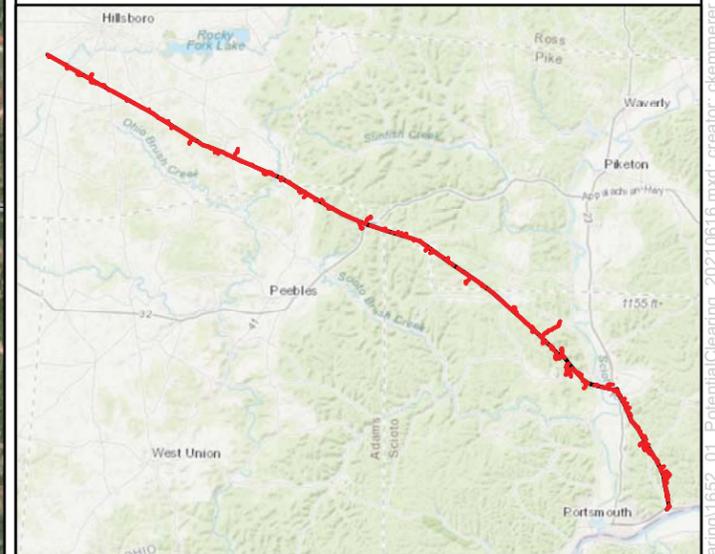
cc: Nathan Reardon, ODNR-DOW



Potential tree clearing/trimming in Scioto and Highland counties on the AEP Hillsboro - Millbrook Park Rebuild Project

Key map

- Potential Clearing/Trimming - ROW
- Potential Clearing/Trimming - Access Roads
- Limits of Disturbance (LOD)
- Right-of-Way (ROW)
- County Boundary



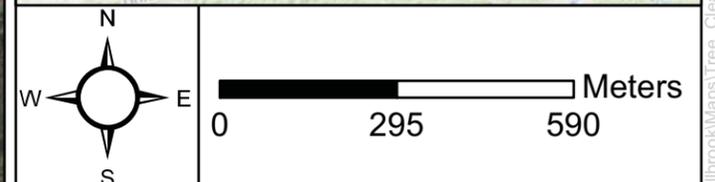
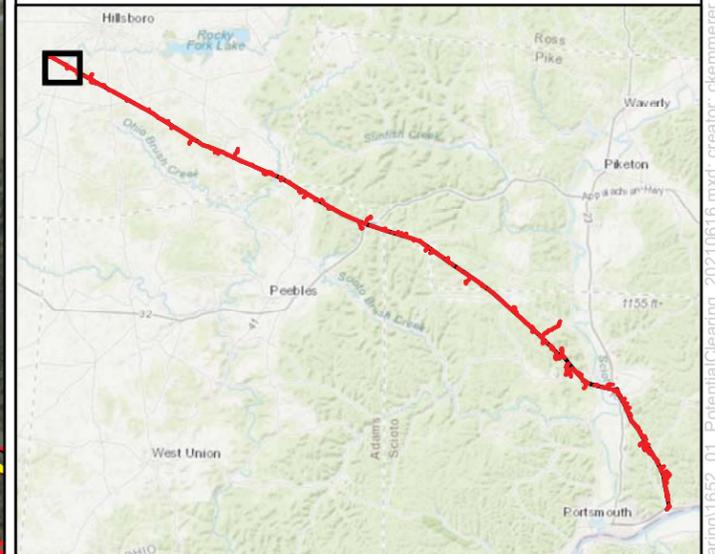
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 Project No. 1652.01

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Potential tree clearing/trimming in Scioto and Highland counties on the AEP Hillsboro - Millbrook Park Rebuild Project

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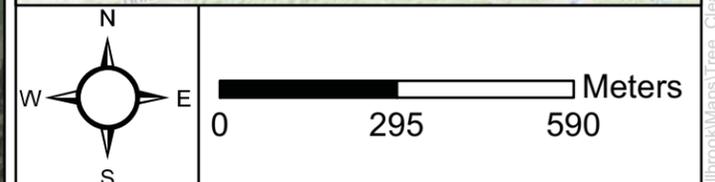
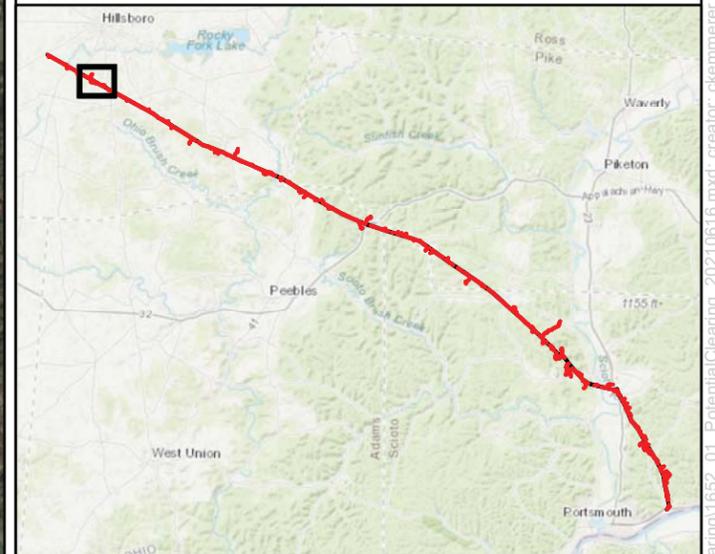
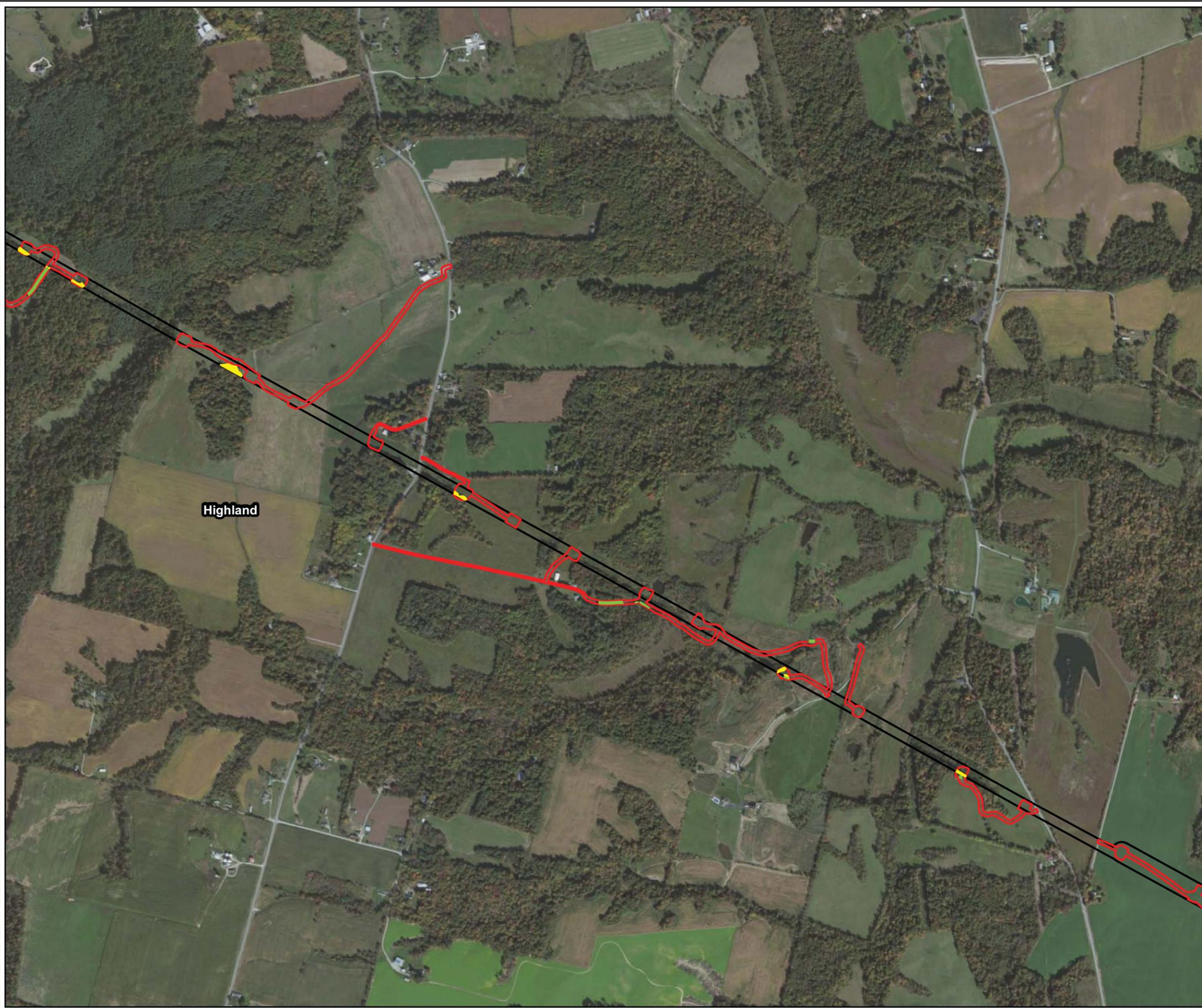


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Potential tree clearing/trimming in Scioto and Highland counties on the AEP Hillsboro - Millbrook Park Rebuild Project

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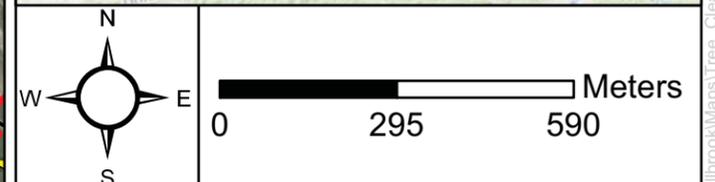
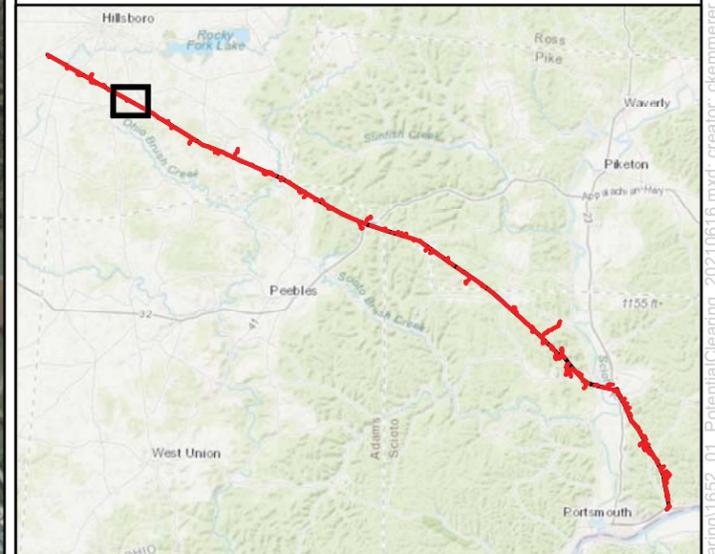
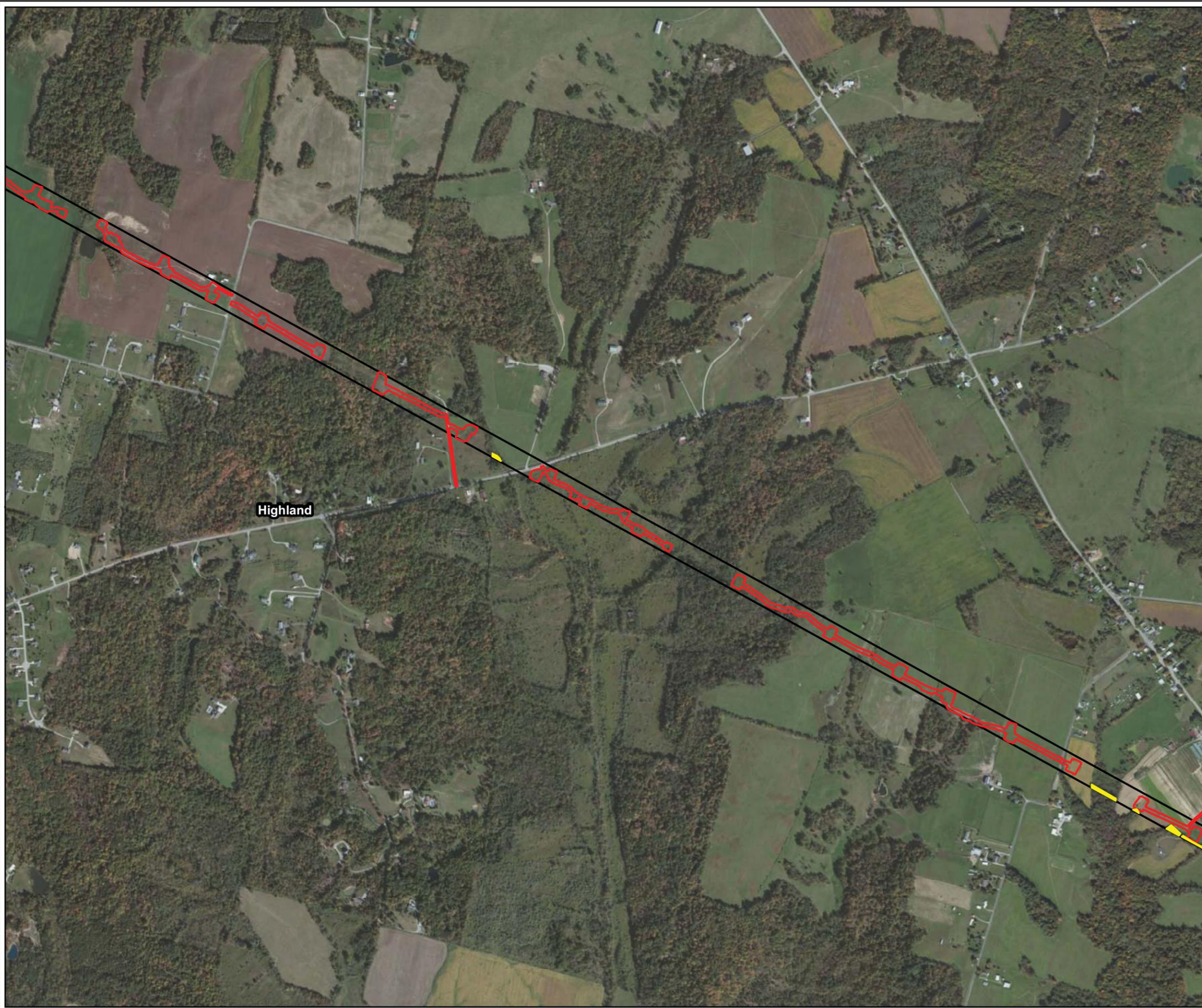


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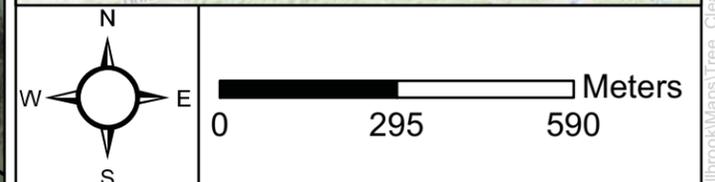
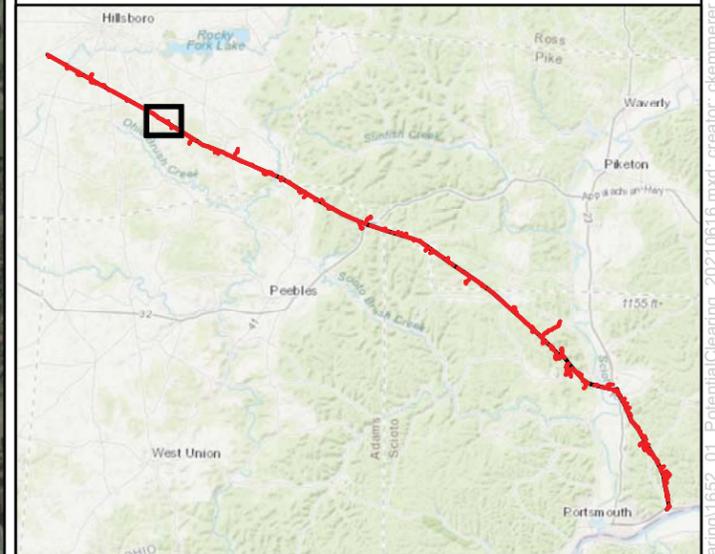
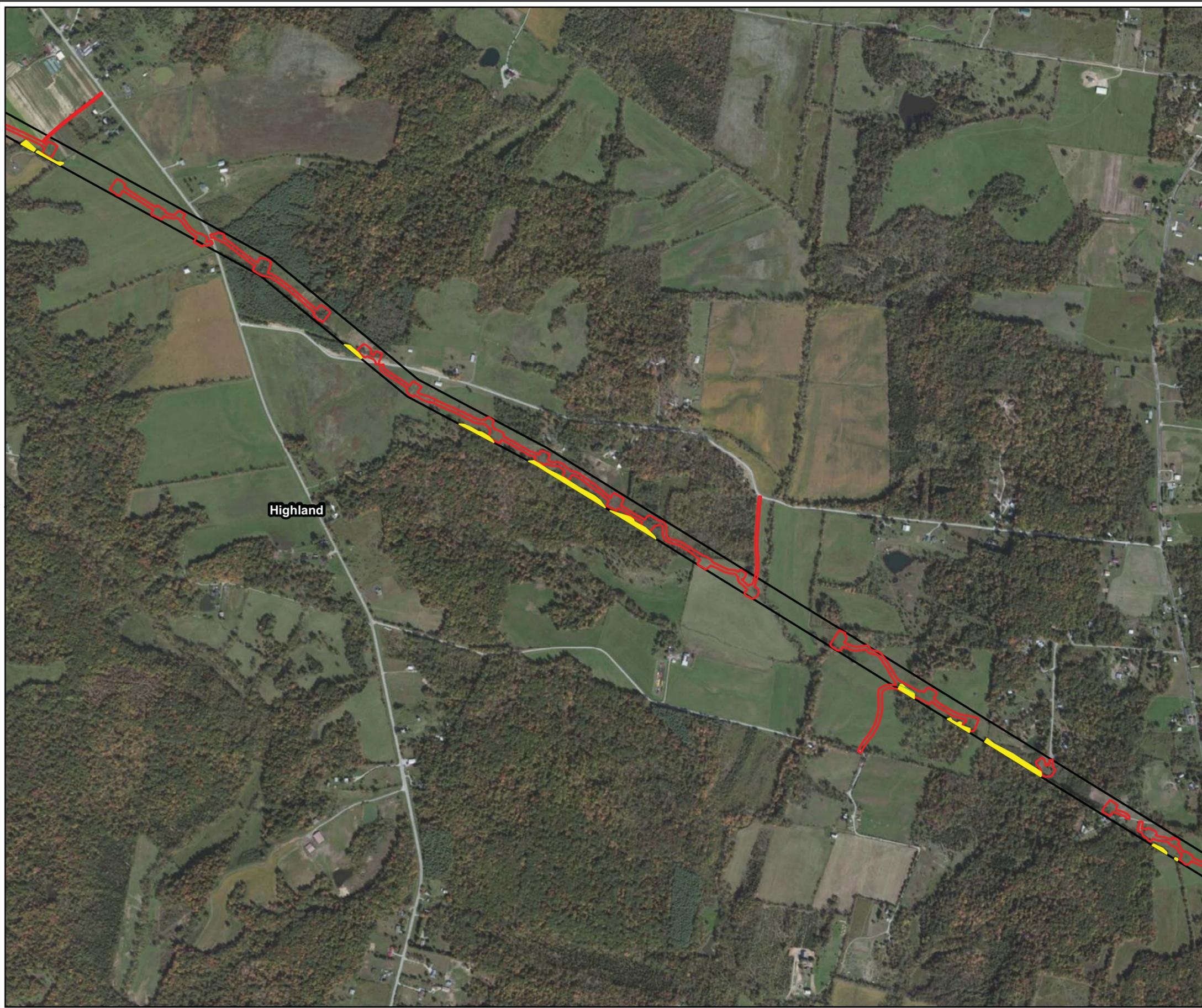
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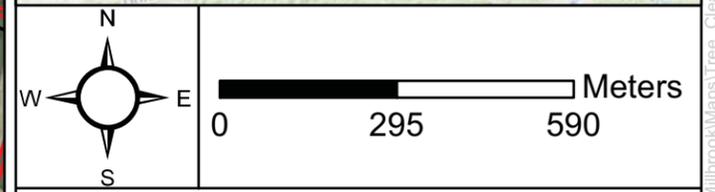
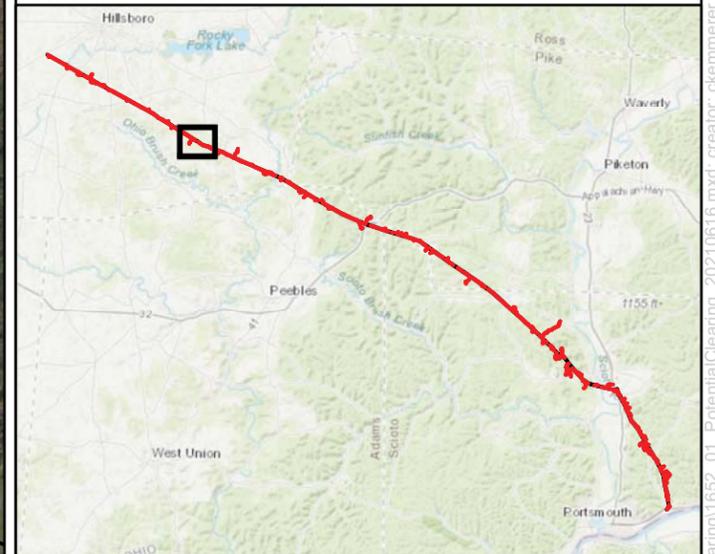
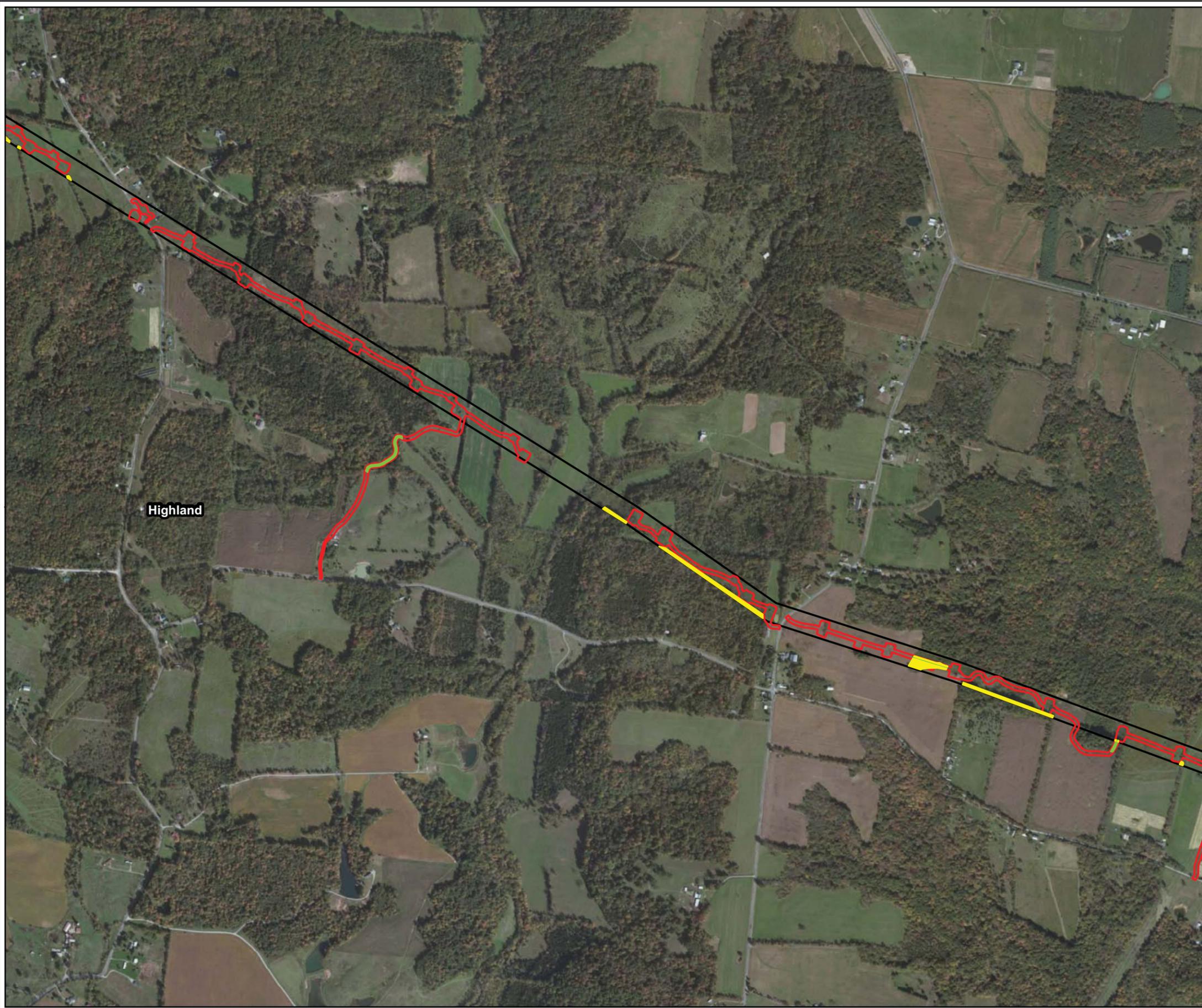


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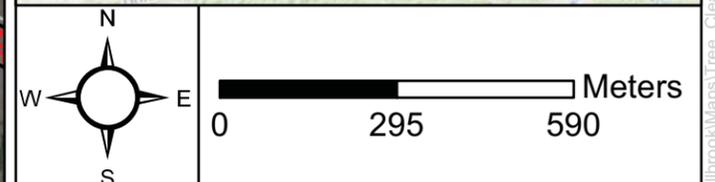
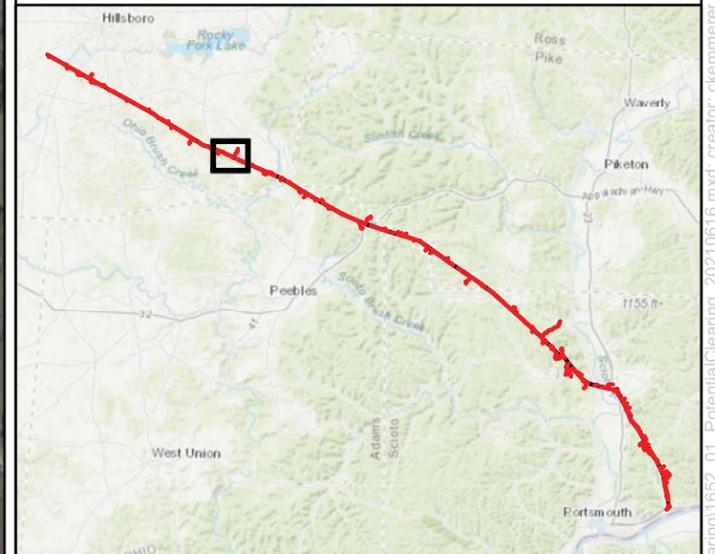
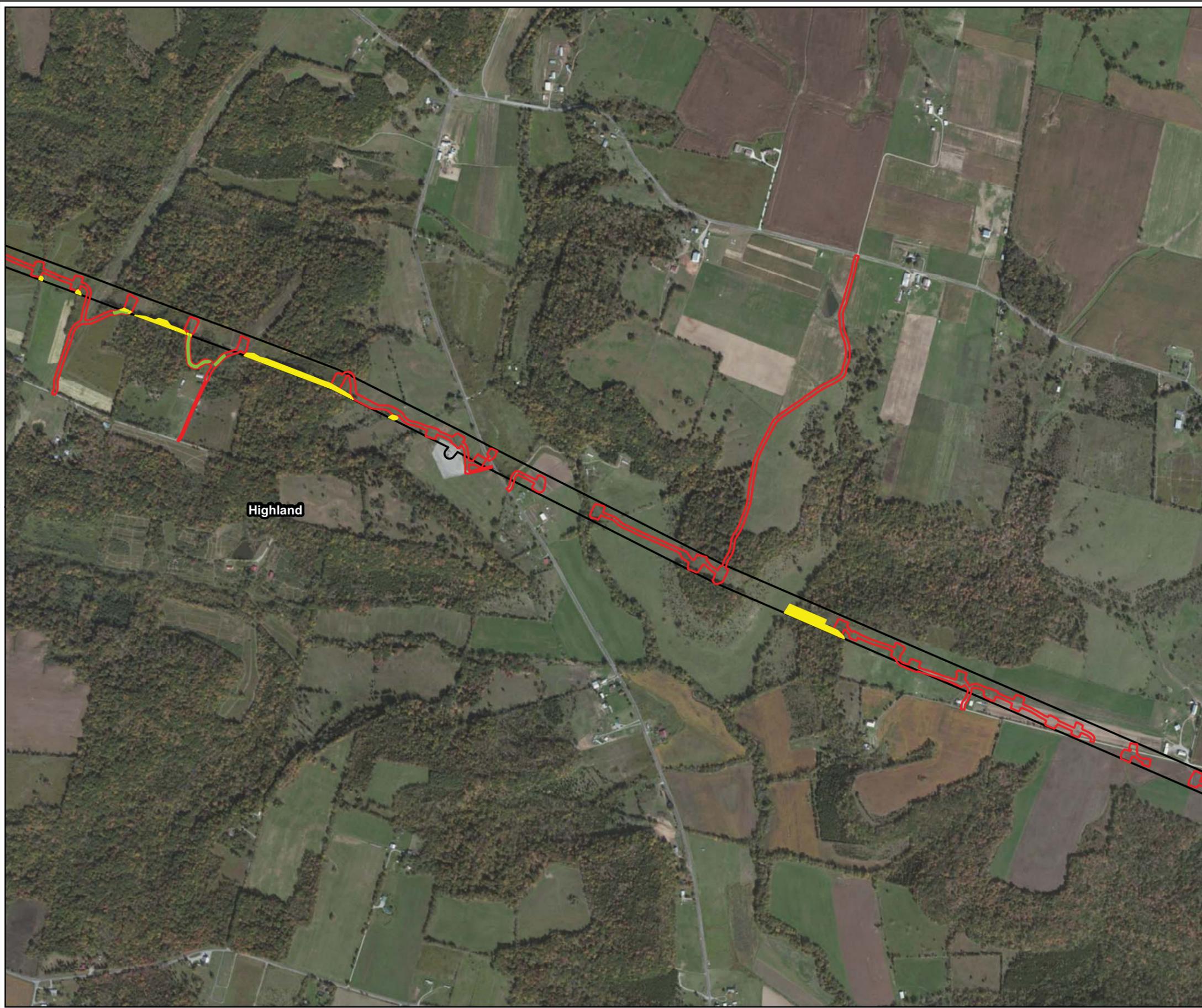


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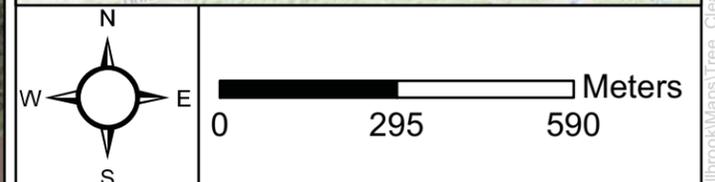
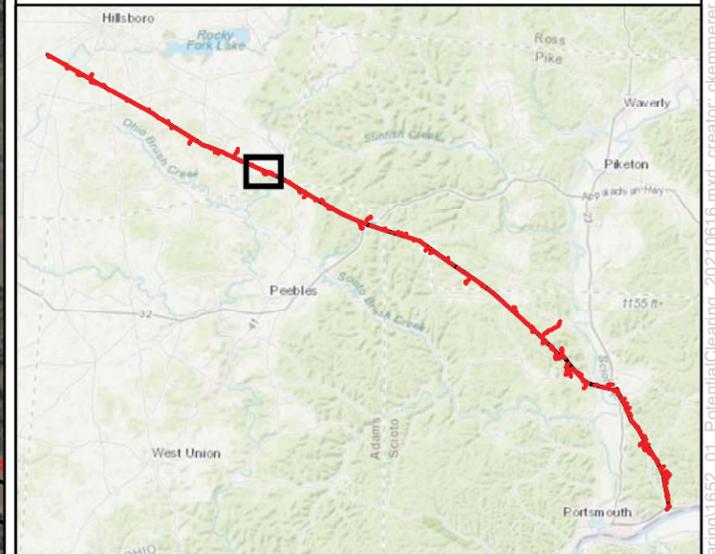
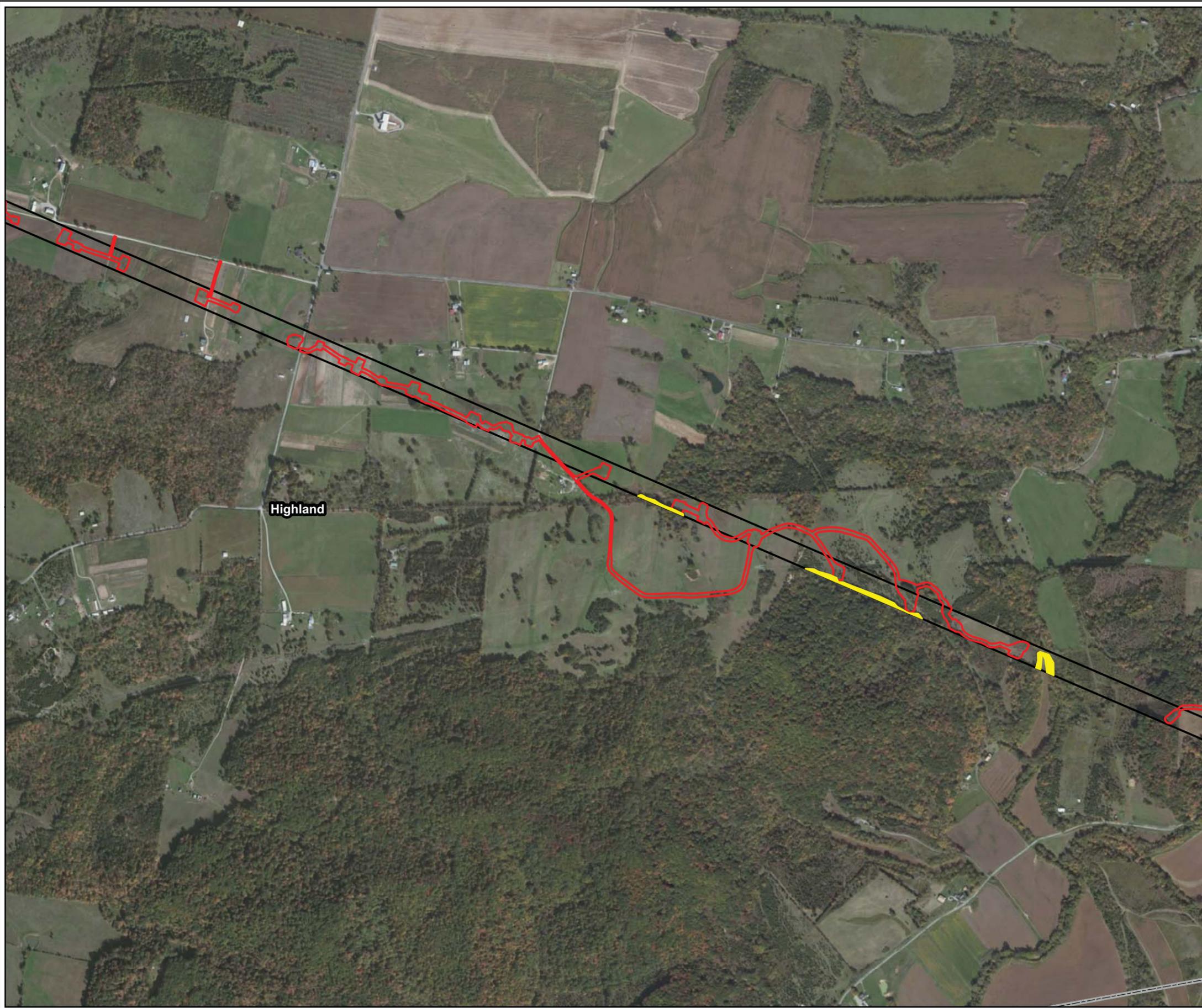


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Potential tree clearing/trimming in Scioto and Highland counties on the AEP Hillsboro - Millbrook Park Rebuild Project

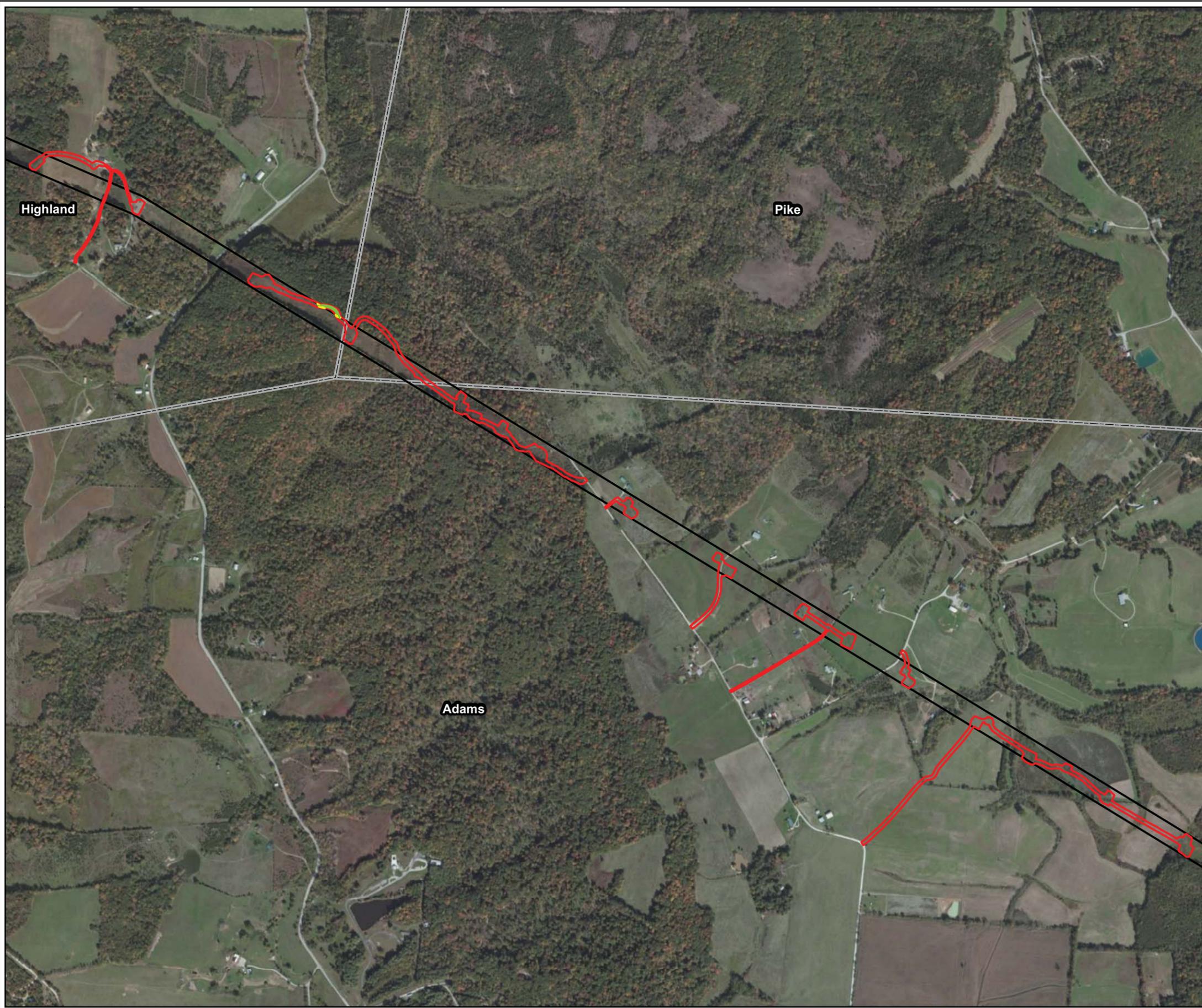
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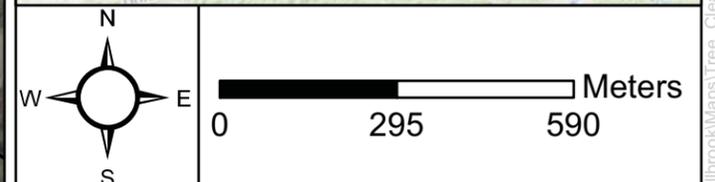
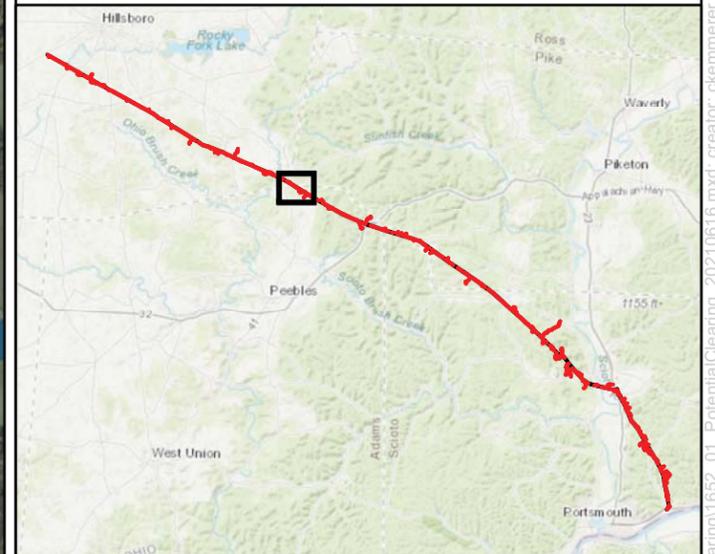
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Potential tree clearing/trimming in Scioto and Highland counties on the AEP Hillsboro - Millbrook Park Rebuild Project



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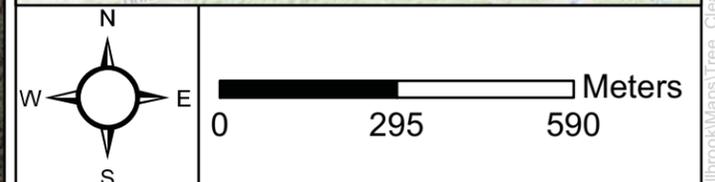
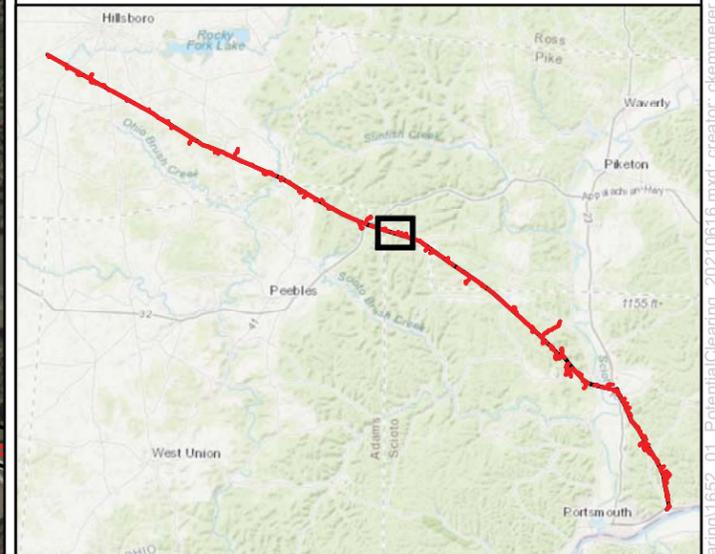
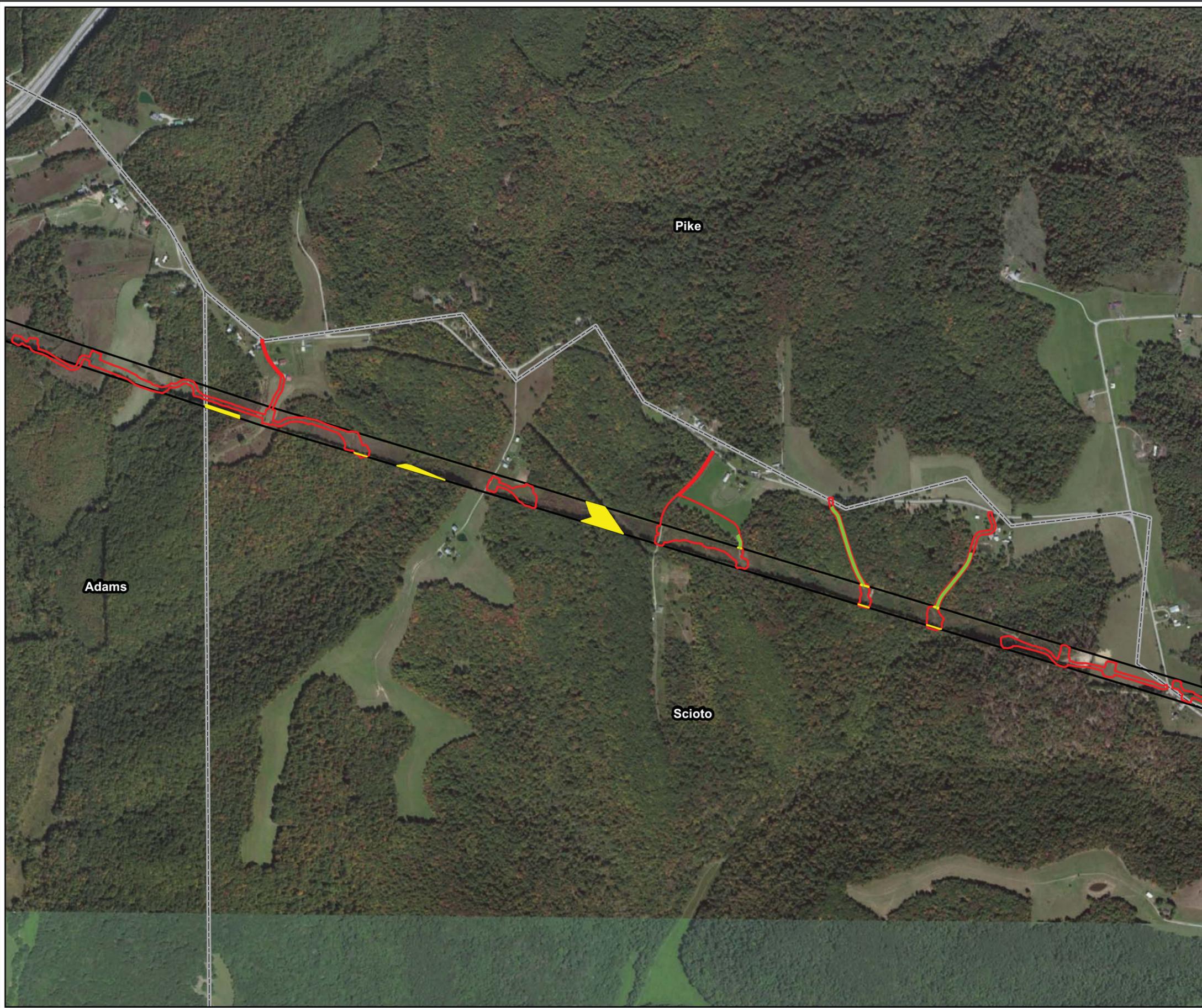
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Project No. 1652.01

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Potential tree clearing/trimming in Scioto and Highland counties on the AEP Hillsboro - Millbrook Park Rebuild Project

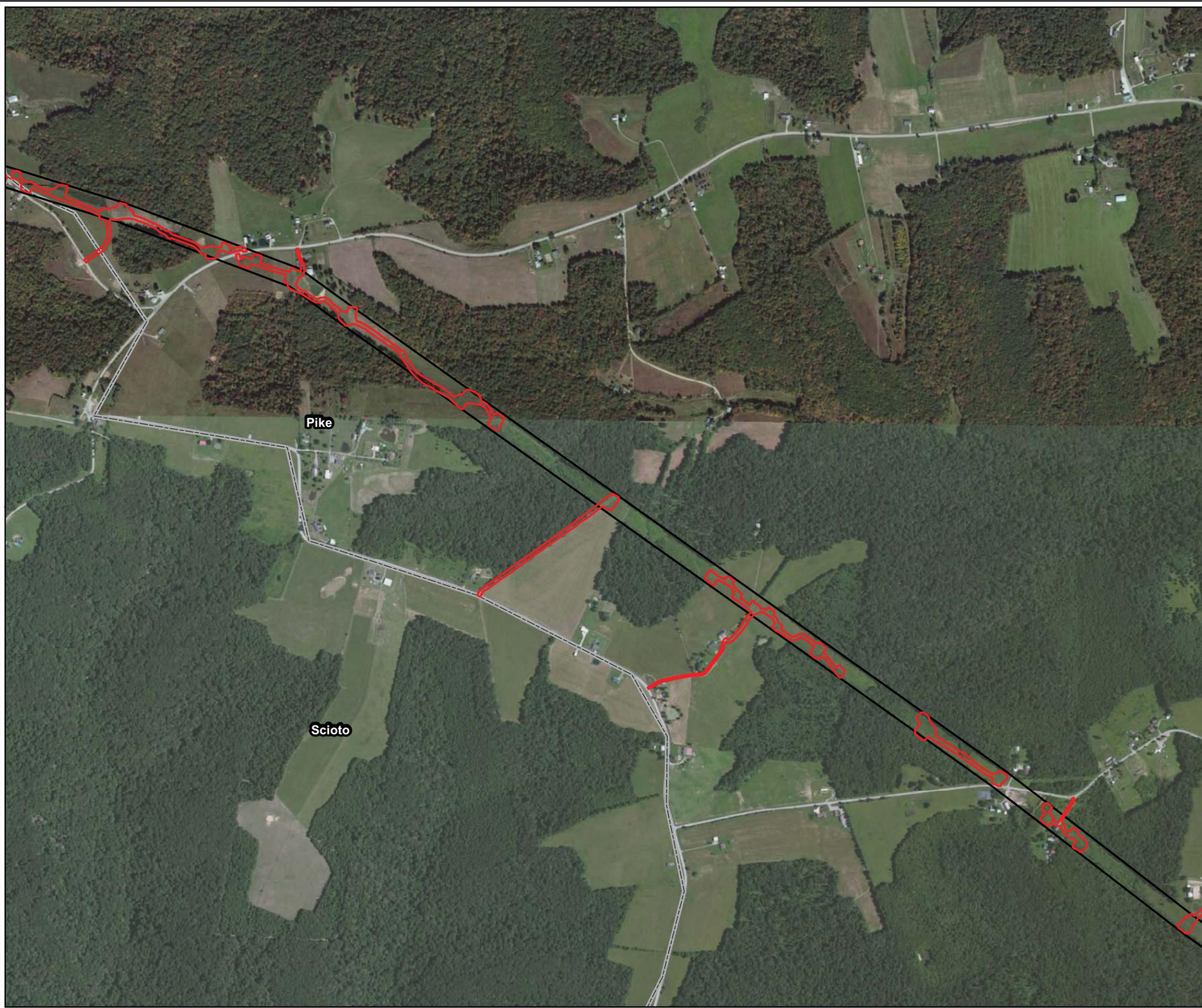
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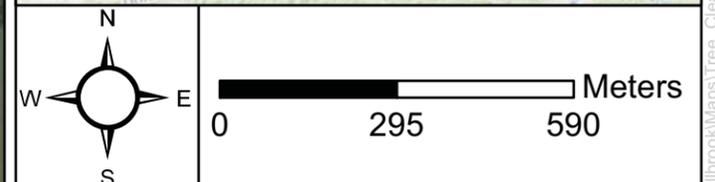
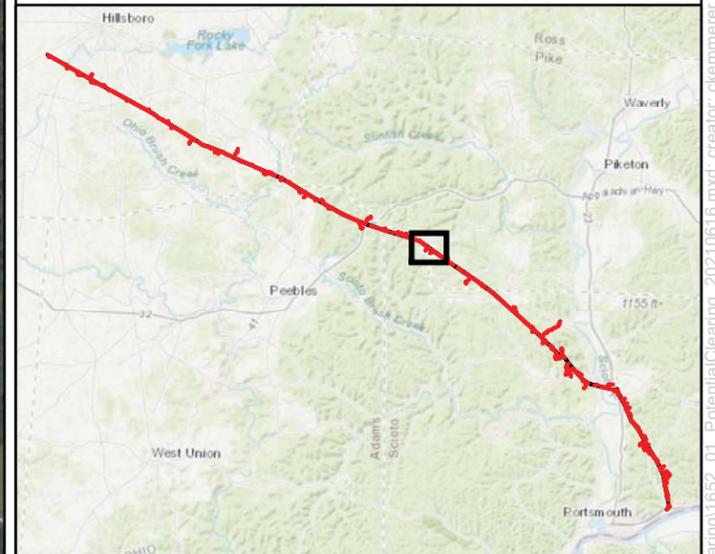
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Potential tree clearing/trimming in Scioto and Highland counties on the AEP Hillsboro - Millbrook Park Rebuild Project



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-  County Boundary



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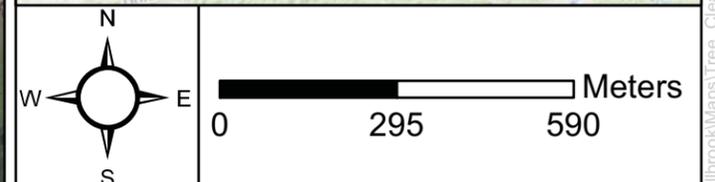
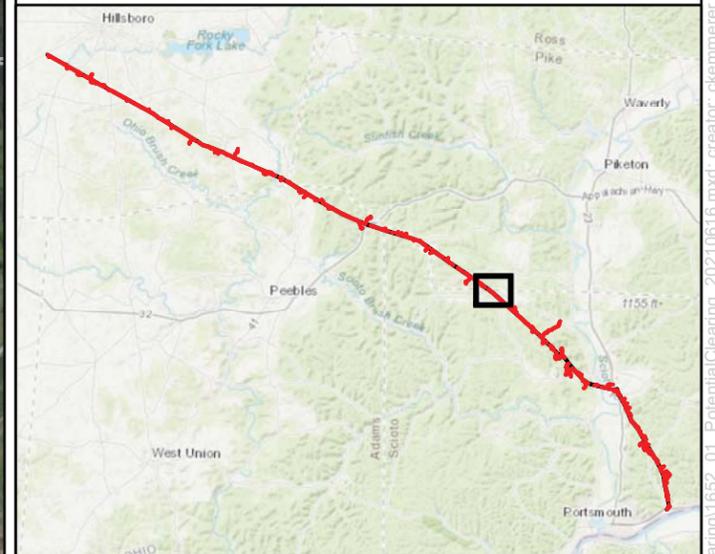
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Project No. 1652.01

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Potential tree clearing/trimming in Scioto and Highland counties on the AEP Hillsboro - Millbrook Park Rebuild Project



-  Potential Clearing/Trimming - ROW
-  Limits of Disturbance (LOD)
-  Right-of-Way (ROW)
-  County Boundary



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Sources: Esri, HERE, Garmin, Intermap, increment P

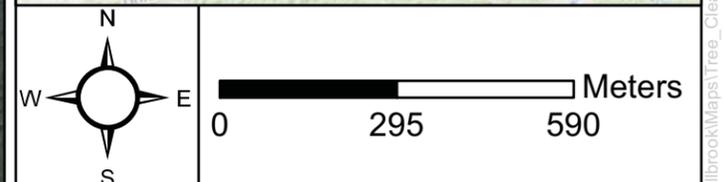
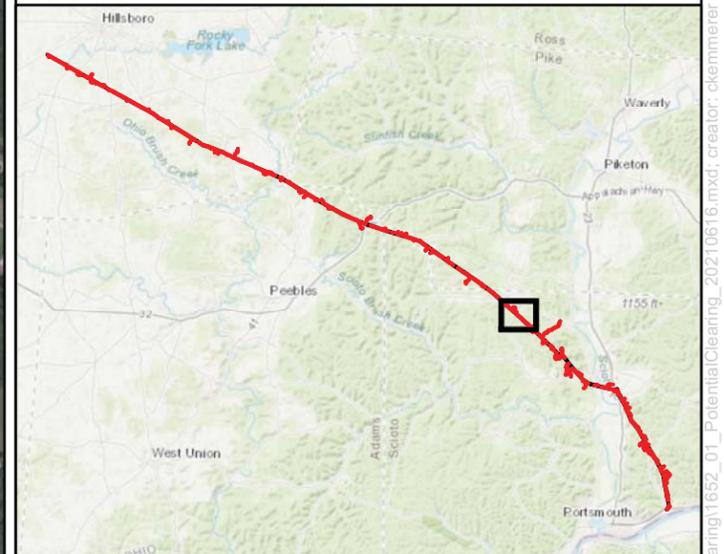
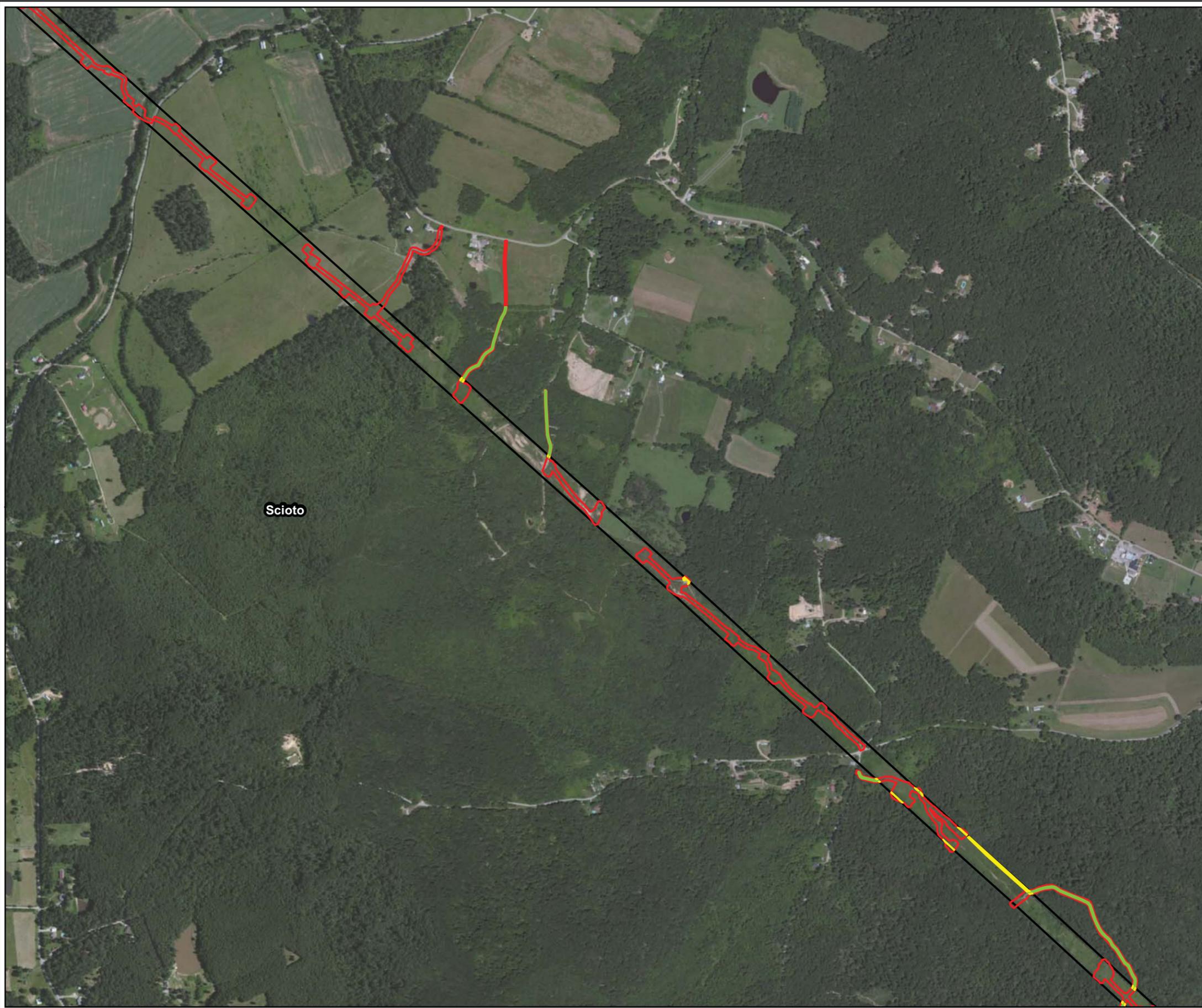
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Project No. 1652.01

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Potential tree clearing/trimming in Scioto and Highland counties on the AEP Hillsboro - Millbrook Park Rebuild Project

Map 12 of 20

-  Potential Clearing/Trimming - ROW
-  Potential Clearing/Trimming - Access Roads
-  Limits of Disturbance (LOD)
-  Right-of-Way (ROW)
-  County Boundary



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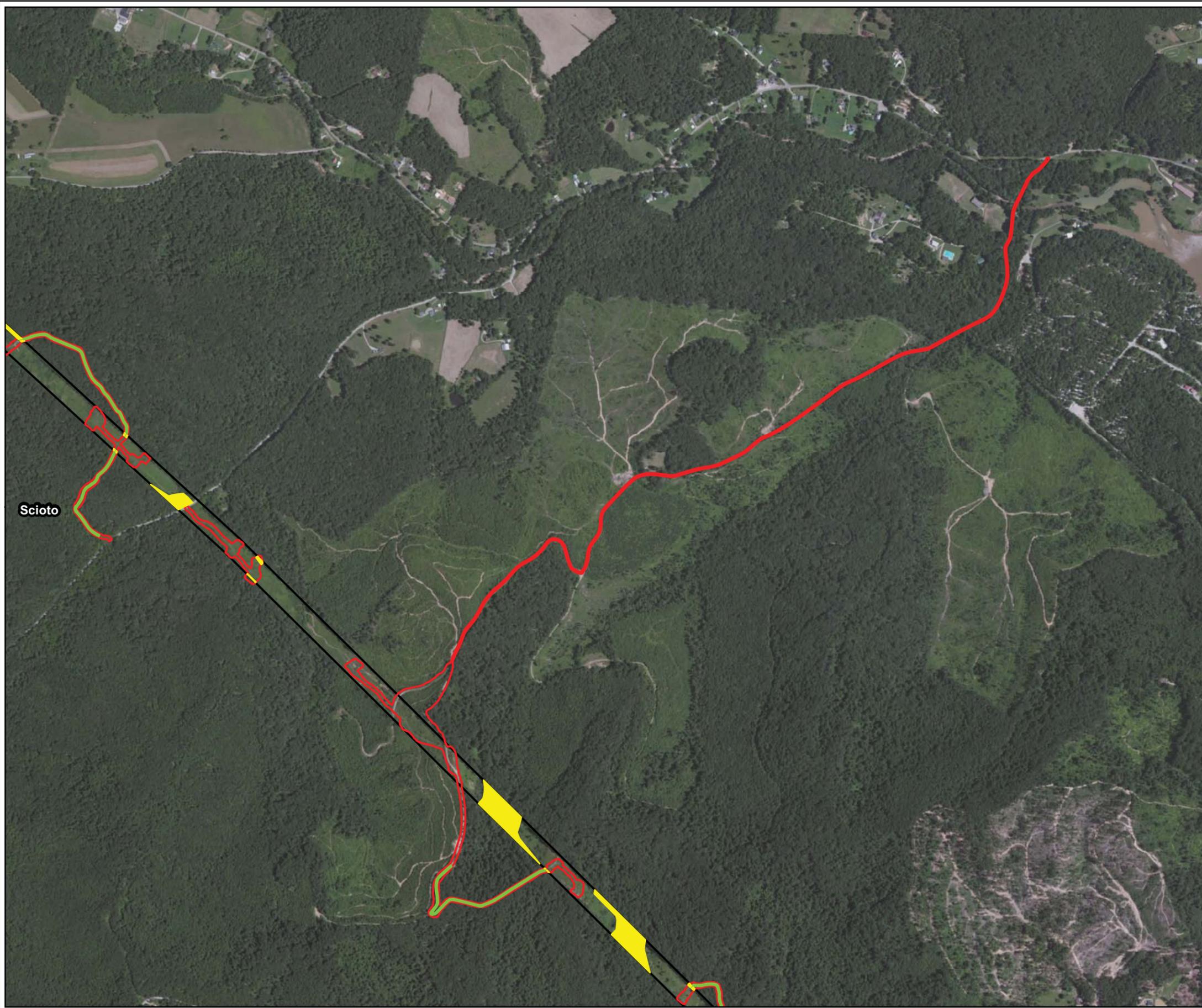
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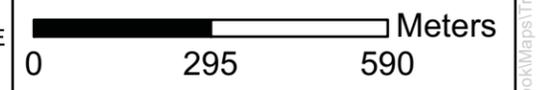
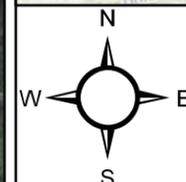
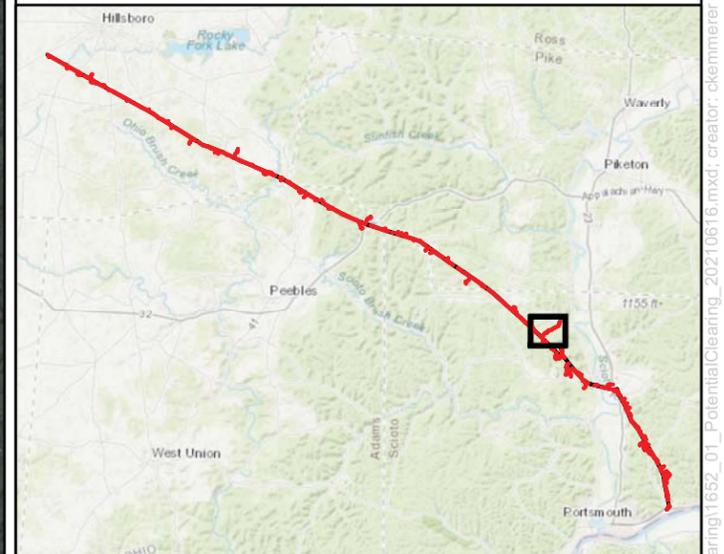
Potential tree clearing/trimming in Scioto and Highland counties on the AEP Hillsboro - Millbrook Park Rebuild Project

Map 13 of 20

-  Potential Clearing/Trimming - ROW
-  Potential Clearing/Trimming - Access Roads
-  Limits of Disturbance (LOD)
-  Right-of-Way (ROW)
-  County Boundary



Scioto



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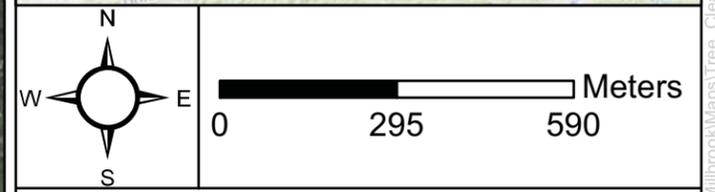
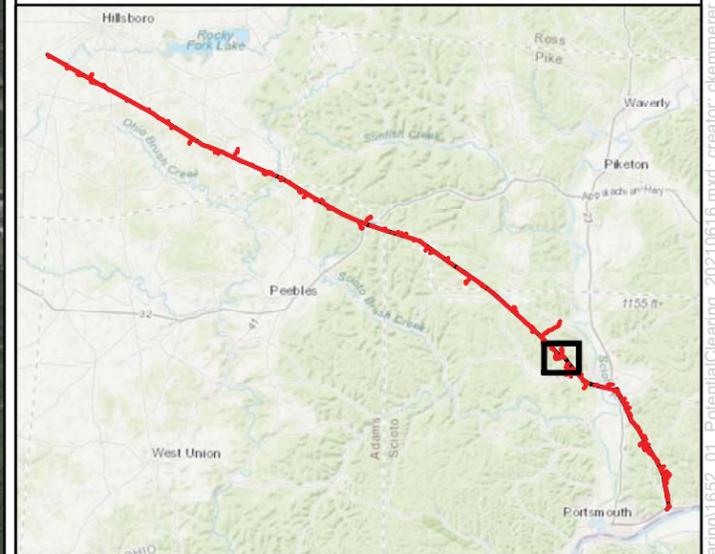
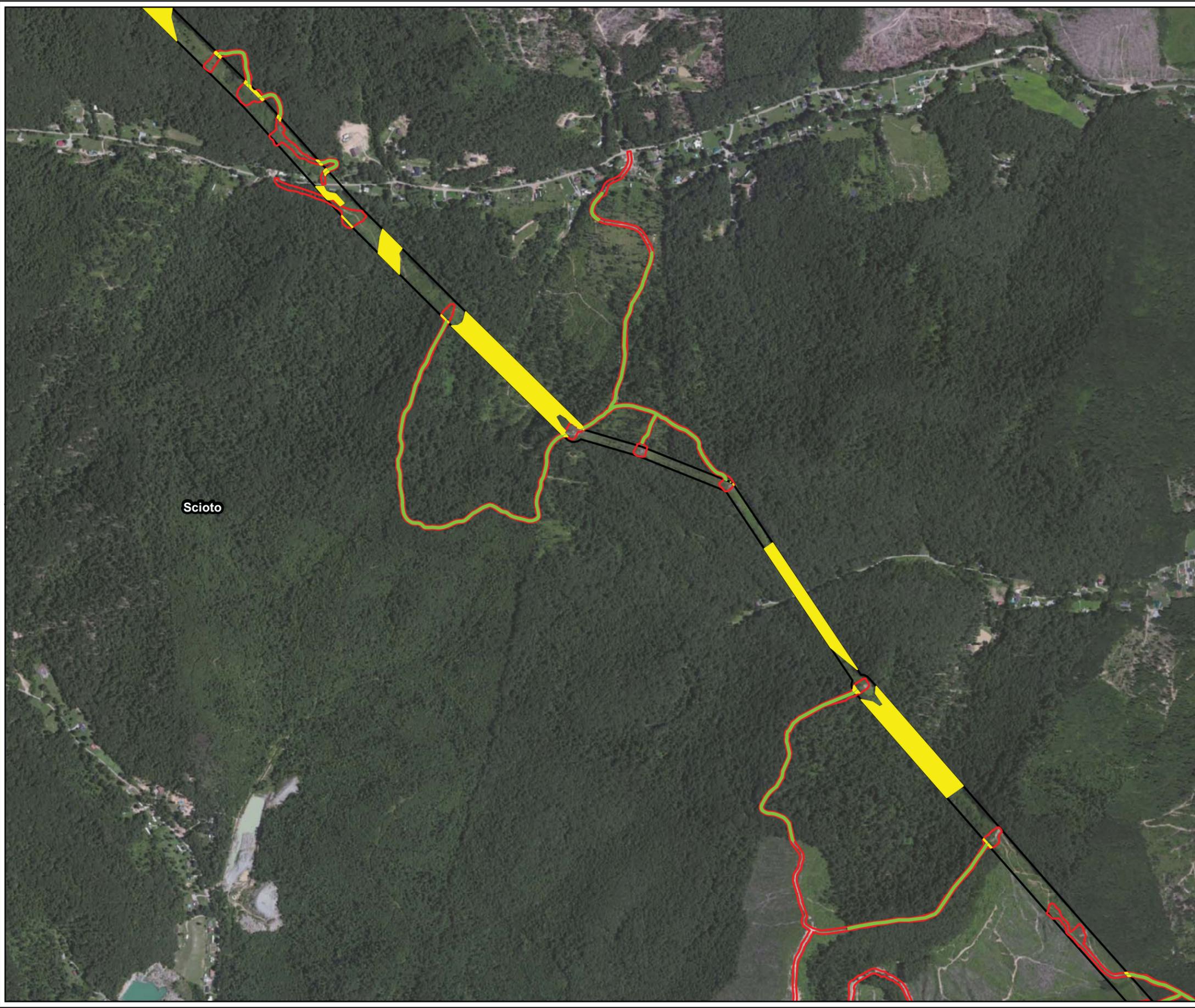
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Potential tree clearing/trimming in Scioto and Highland counties on the AEP Hillsboro - Millbrook Park Rebuild Project

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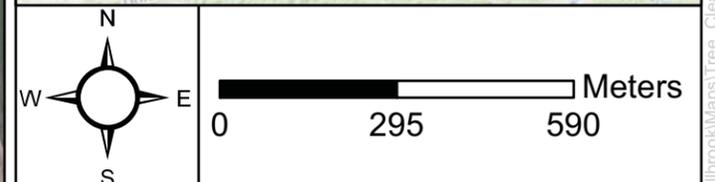
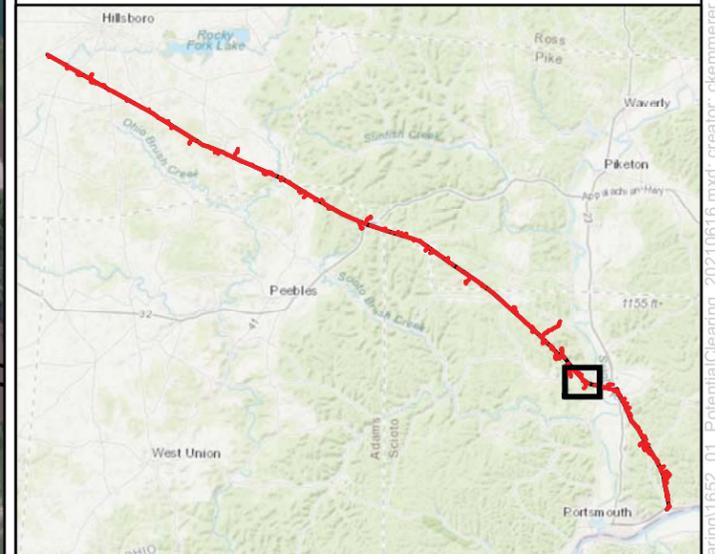
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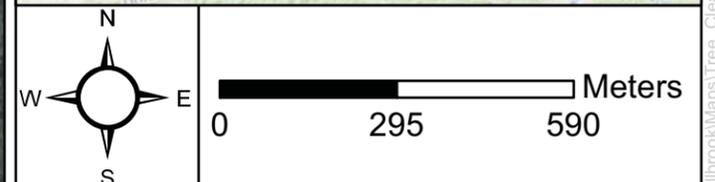
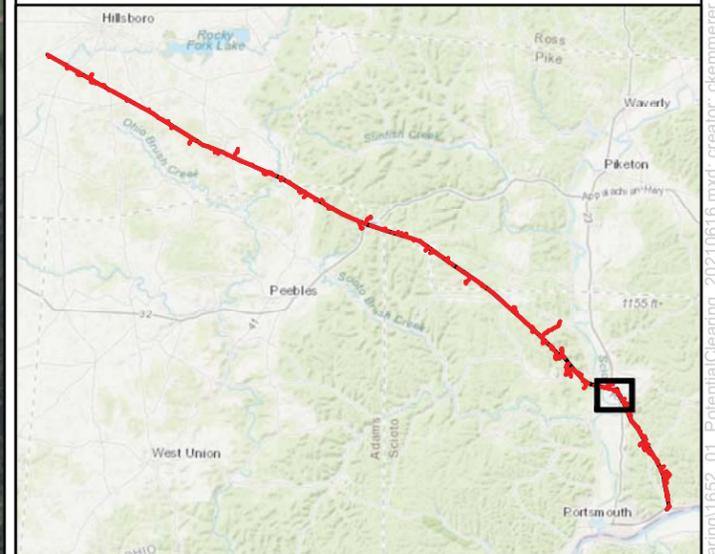
Service Layer Credits: Esri, HERE, Garmin, (c) OpenStreetMap contributors  
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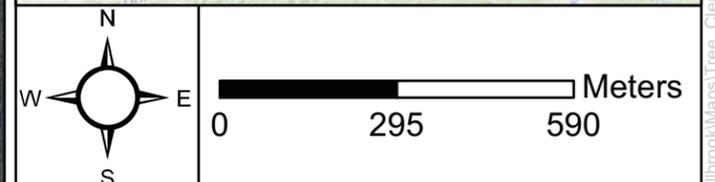
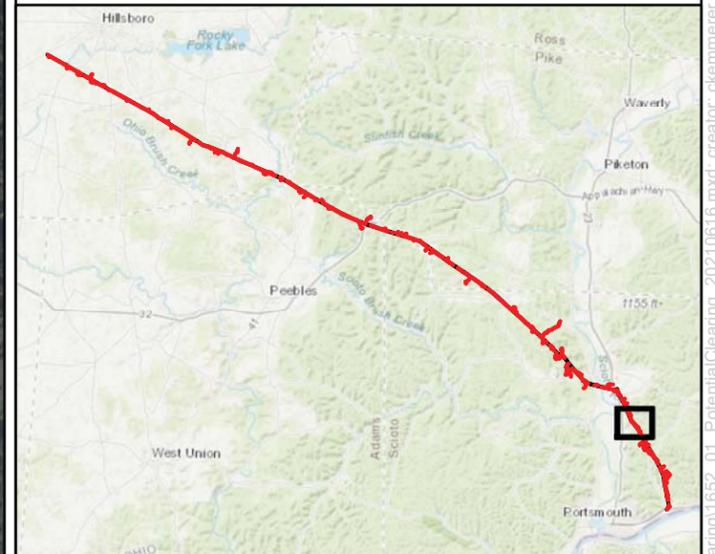
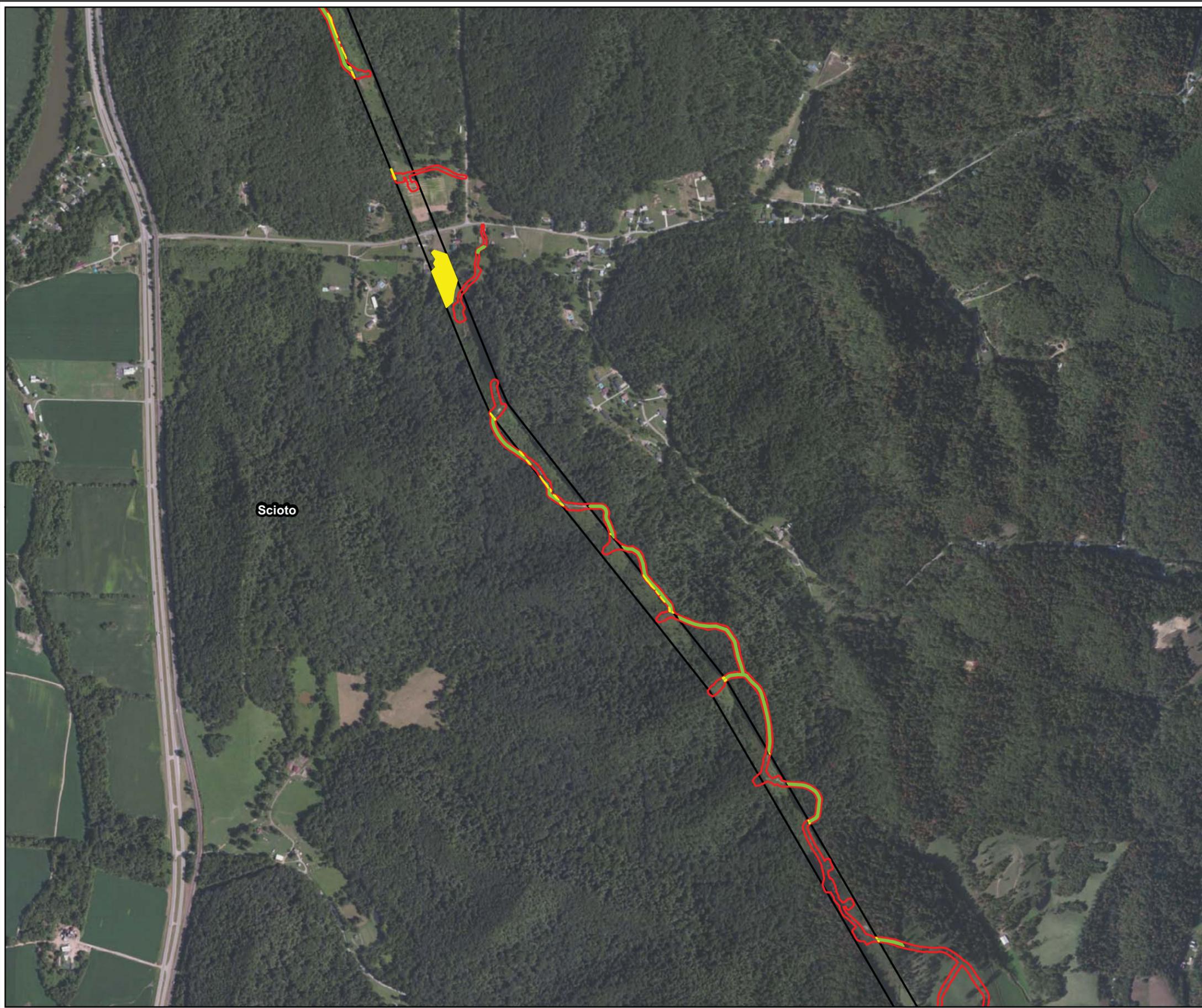


Service Layer Credits: Esri, HERE, Garmin, (c) OpenStreetMap contributors  
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Potential tree clearing/trimming in Scioto and Highland counties on the AEP Hillsboro - Millbrook Park Rebuild Project

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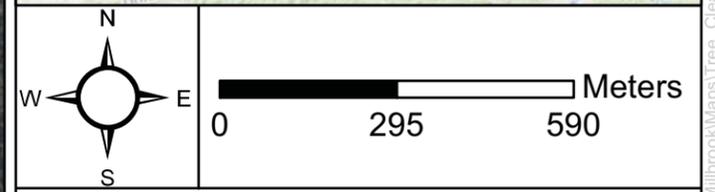
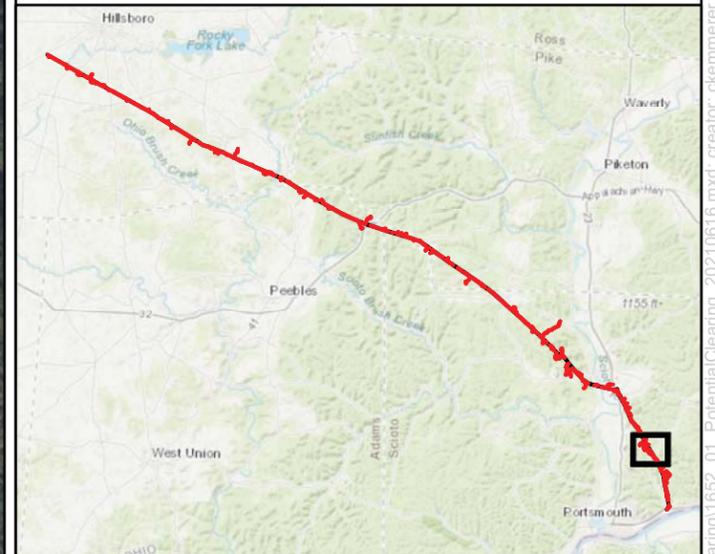
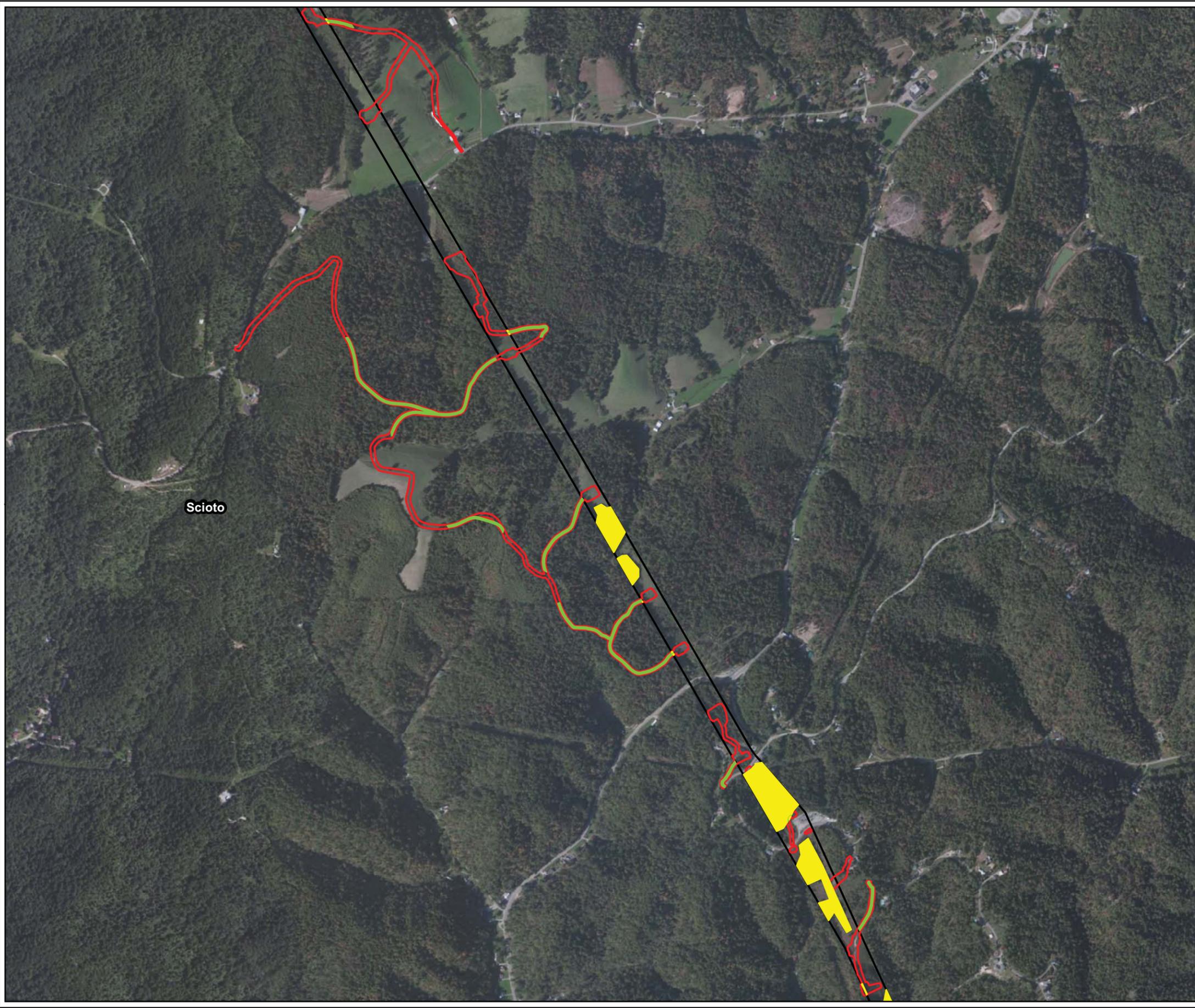
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Potential tree clearing/trimming in Scioto and Highland counties on the AEP Hillsboro - Millbrook Park Rebuild Project

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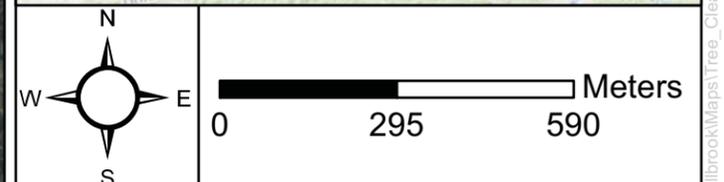
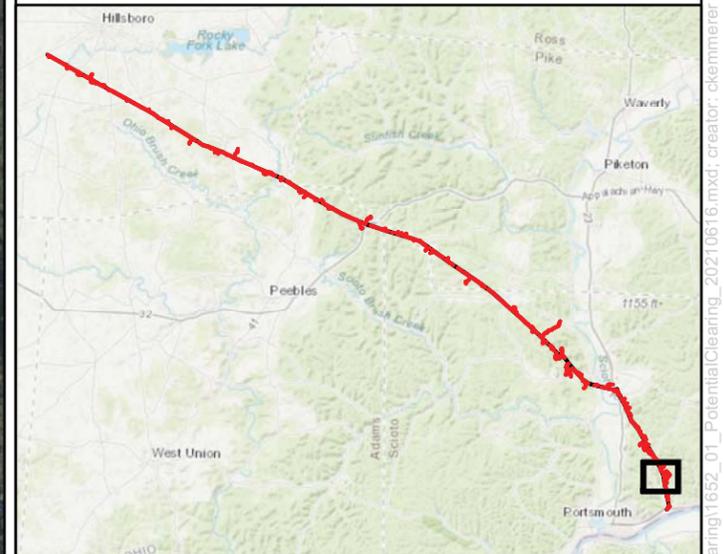
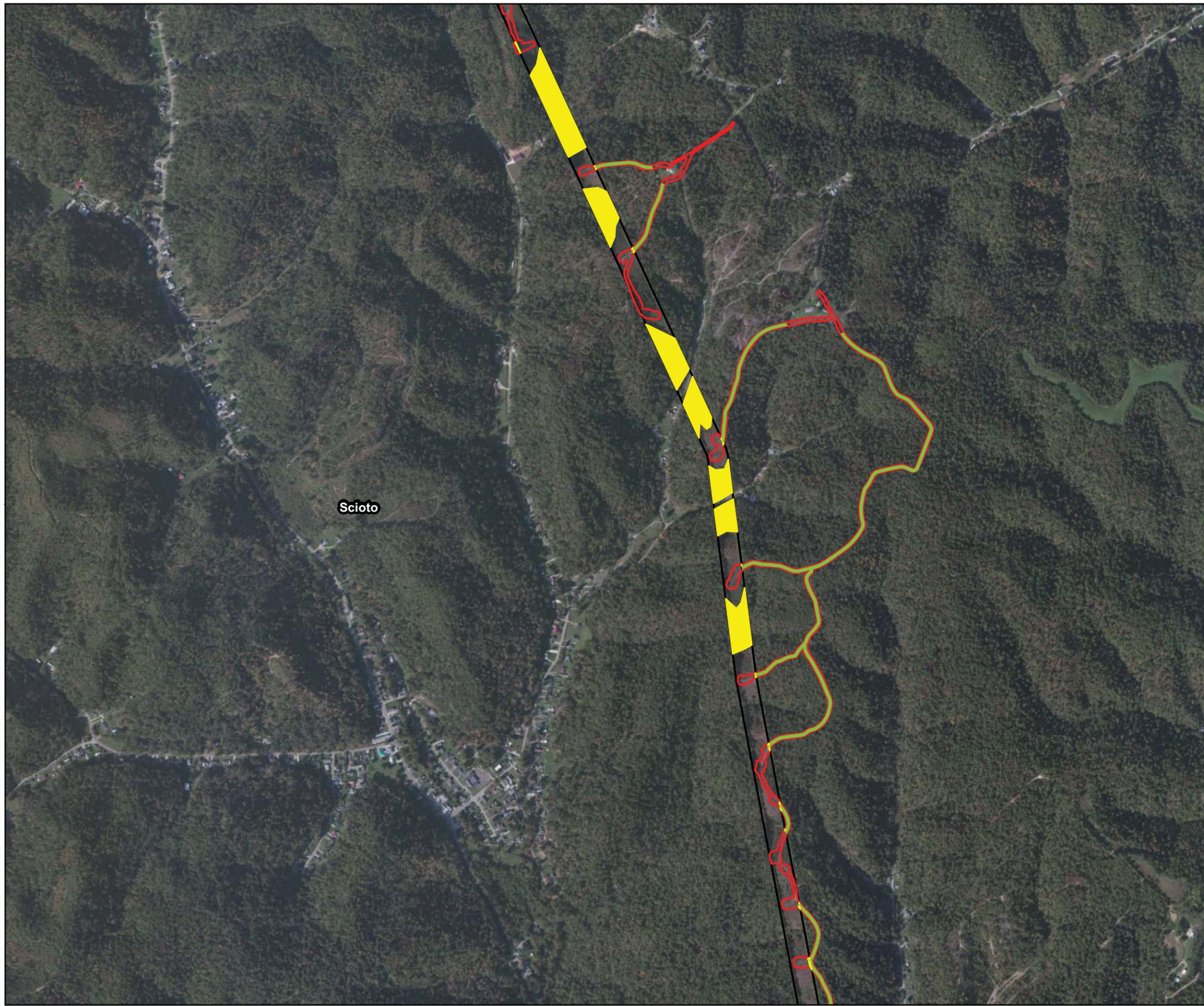
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Potential tree clearing/trimming in Scioto and Highland counties on the AEP Hillsboro - Millbrook Park Rebuild Project

Map 19 of 20

-  Potential Clearing/Trimming - ROW
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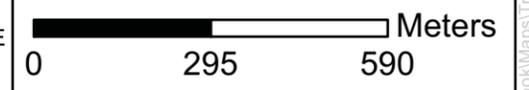
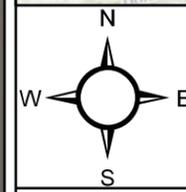
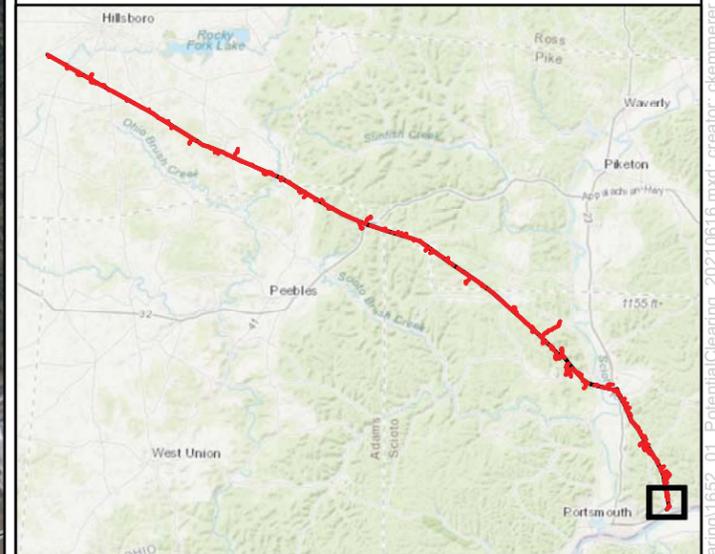
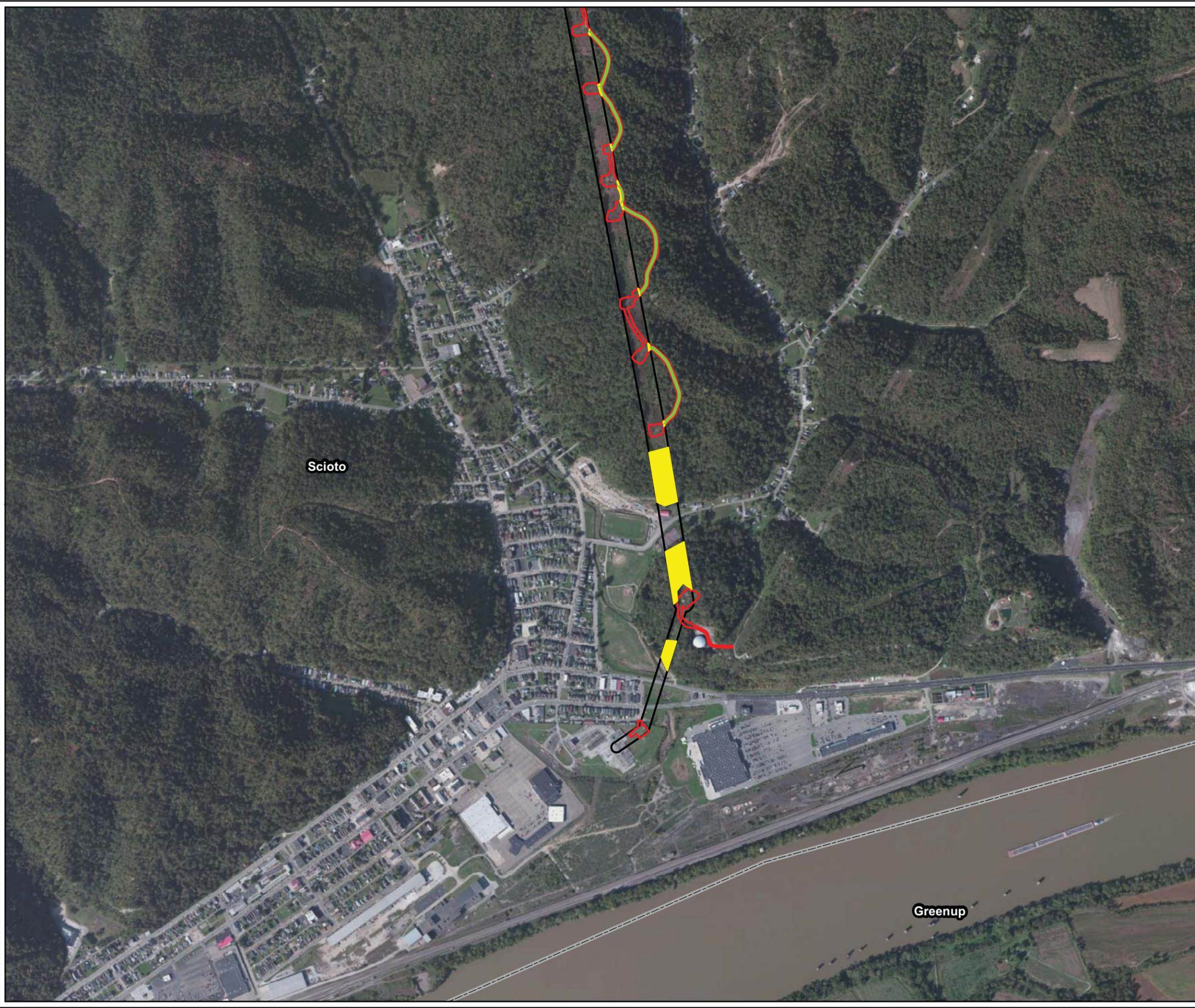


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Project No. 1652.01

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**From:** [Ohio, FW3](#)  
**To:** [mwellman@envsi.com](mailto:mwellman@envsi.com)  
**Cc:** [nathan.reardon@dnr.state.oh.us](mailto:nathan.reardon@dnr.state.oh.us); [Parsons, Kate](#); [Allison R Wheaton](#); [Valerie Clarkston](#)  
**Subject:** [EXTERNAL] AEP Hillsboro to Millbrook Park Transmission Line Rebuild Project, Scioto and Highland Counties in Ohio  
**Date:** Friday, July 2, 2021 10:12:04 AM  
**Attachments:** [Outlook-pxfclhmu.png](#)  
[Outlook-0smqvk1x.png](#)

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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# 03E15000-2019-TA-2039

Dear Mr. Wellman,

The U.S. Fish and Wildlife Service (Service) has received your June 18, 2021 correspondence requesting information about the subject proposal. We offer the following comments and recommendations to assist you in minimizing and avoiding adverse impacts to threatened and endangered species pursuant to the Endangered Species Act of 1973 (16 U.S.C. 1531 et seq), as amended (ESA).

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

**Seasonal Tree Clearing for Federally Listed Bat Species:** The proposed project is in the vicinity of one or more confirmed records of Indiana bats. Should the proposed project site contain trees  $\geq 3$  inches dbh, we recommend avoiding tree removal wherever possible. If any caves or abandoned mines may be disturbed, further coordination with this office is requested

to determine if fall or spring portal surveys are warranted.

The portion of the project that occurs in central and southern Scioto County and corresponds to maps 15-20 of your submission is within an Indiana bat hibernaculum buffer. For this portion of the project, if no caves or abandoned mines are present and trees  $\geq 3$  inches dbh cannot be avoided, we recommend removal of any trees  $\geq 3$  inches dbh only occur between November 15 and March 15.

The portion of the project in central Highland County corresponding to maps 1-4, and part of Scioto County corresponding to map 14 is in the vicinity of one or more confirmed summer records of Indiana bats. Remaining portions of the project occur in or adjacent to suitable habitat for the Indiana bat but outside of survey records. In these areas, if no caves or abandoned mines are present and trees  $\geq 3$  inches dbh cannot be avoided, we recommend removal of any trees  $\geq 3$  inches dbh only occur between October 1 and March 31.

Seasonal clearing is recommended to avoid adverse effects to Indiana bats and northern long-eared bats. While incidental take of northern long-eared bats from most tree clearing is exempted by a 4(d) rule (see <http://www.fws.gov/midwest/endangered/mammals/nleb/index.html>), incidental take of Indiana bats is still prohibited without a project-specific exemption. Thus, seasonal clearing is recommended where Indiana bats are known or assumed present. Please note that, because Indiana bat presence has already been confirmed in the project vicinity, any additional summer surveys would not constitute presence/absence surveys for this species.

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.

Should the project design change, or additional information on listed or proposed species or their critical habitat become available, or if new information reveals effects of the action that were not previously considered, coordination with the Service should be initiated to assess any potential impacts. Thank you for your efforts to conserve listed species and sensitive habitats in Ohio.

We recommend coordinating with the Ohio Department of Natural Resources due to the potential for the proposed project to affect state listed species and/or state lands. Contact Mike Pettegrew, Acting Environmental Services Administrator, at (614) 265-6387 or at [mike.pettegrew@dnr.state.oh.us](mailto: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](mailto:ohio@fws.gov).

Sincerely,

A handwritten signature in blue ink, appearing to read "Patrice M. Ashfield". The signature is fluid and cursive, with a large initial "P" and "A".

Patrice M. Ashfield  
Field Office Supervisor

cc: Nathan Reardon, ODNR-DOW  
Kate Parsons, ODNR-DOW

**LETTER OF NOTIFICATION FOR THE HILLSBORO-MILLBROOK PARK 138 KV CIRCUIT REBUILD  
ADJUSTMENT PROJECT**

**Appendix D Ecological Resources Inventory Report**