

PUCO Case No. 22-0154-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.

March 7, 2022

Letter of Notification

AEP Ohio Transmission Company, Inc. (AEP Ohio Transco) Lima-Fort Wayne 138kV Transmission Line Rebuild Project

4906-6-05

AEP Ohio Transmission Company, Inc. (the "Company") provides the following information in accordance with the requirements of Ohio Administrative Code Section 4906-6-05.

4906-6-5(B) General Information

B(1) Project Description

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.

The Company proposes the Lima-Fort Wayne 138 kV Transmission Line Rebuild Project ("Project"), which consists of rebuilding approximately 15.9 miles of the double-circuit Lima-Fort Wayne 138 kV transmission line asset, between North Delphos and Rockhill stations, located in Allen and Putnam Counties, Ohio. This segment of the line carries portions of three circuits: North Delphos - Sterling 138 kV circuit, the East Lima - Haviland 138 kV circuit, and the Rockhill - West Lima 138 kV circuit (see map in Section B2 below).

The Project consists of rebuilding the existing 138kV double-circuit transmission line by replacing the existing lattice towers with new steel monopole structures predominantly within an existing right-of-way ("ROW"). Due to existing residential and commercial buildings within the existing ROW, the Project also consists of approximately 1.2-miles of line adjustments that will occur outside of the existing ROW.

Figure 1 and Figure 2, included in Appendix A, show the location of the Project in relation to the surrounding vicinity.

The Project meets the requirements for a Letter of Notification ("LON") because it is within the types of projects defined by item 1(b) and 2(b) of Ohio Administrative Code Section 4906-1-01 Appendix A of the Application Requirement Matrix For Electric Power Transmission Lines:

- (1) New construction, extension, or relocation of single or multiple circuit electric power transmission line(s), or upgrading existing transmission or distribution lines(s) for operation at a higher transmission voltage, as follows:
 - b. Line(s) greater than 0.2 mile in length but not greater than two miles in length
- (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:

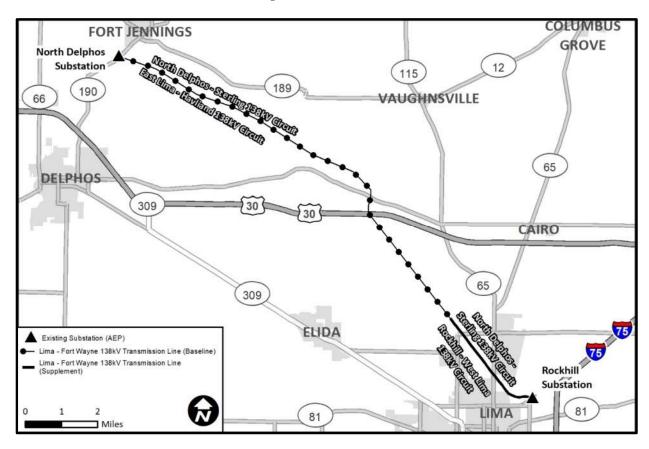
b. More than 2 miles

The Project has been assigned PUCO Case No. 22-0154-EL-BLN

B(2) Statement of Need

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

The Lima – Fort Wayne 138 kV Transmission Line Rebuild Project consists of rebuilding approximately 15.9 miles of the double-circuit Lima-Fort Wayne 138 kV transmission line asset, between North Delphos and Rockhill stations, in Putnam and Allen counties, in Ohio. This segment of the line carries portions of three circuits: North Delphos - Sterling 138 kV circuit, the East Lima - Haviland 138 kV circuit, and the Rockhill - West Lima 138 kV circuit (see map below).



This project addresses both reliability (baseline) and asset renewal (supplemental) needs. The first 12.5 miles of the line south of North Delphos will be rebuilt as a baseline project to address the planning criteria violations identified. The remaining 3.4 miles of the line into Rockhill Station will be rebuilt as a supplemental project to address the asset renewal issues identified on the line.

Regarding the baseline needs, the East Lima – Haviland 138 kV circuit was identified as overloading in PJM's 2019 Winter RTEP analysis for multiple different scenarios including various different breaker

failure scenarios at the Company's East Lima, Marysville, and Maddox Creek stations. There were also several different circuit outage scenarios that resulted in an overload of the East Lima – Haviland 138 kV circuit in PJM's 2019 Winter RTEP studies. These scenarios involved outages of the following circuits: East Lima – Maddox Creek 345 kV, Maddox Creek – RP Mone 345 kV, RP Mone – Allen 345 kV, Marysville – Sorenson 765 kV, and Hanging Rock – Jefferson 765 kV.

The supplemental needs of the Project relate to the Lima – Fort Wayne 138 kV line that utilizes lattice structures and 397.5 ACSR conductor that were originally installed in 1925. Currently there are 99 open conditions identified on the line section proposed for rebuild on this project. In addition to the open condition issues noted, pre-1930's vintage lattice transmission towers are not designed for modern wind and ice loading requirements and lack adequate lightning protection. The nearly 100-year-old towers have well exceeded the 70-year typical lifespan for this type of structure. In addition, these lines pose significant risk of failure due to the loss of strength identified with similar constructed lines. These issues include loss of strength of up to 50% of the tower legs, insulation and hardware attachment deterioration, tower support with no redundancy for strength, and loss of conductor strength. Additional details regarding the need to replace pre-1930 transmission lattice towers can be found at https://www.pjm.com/~/media/committees-groups/committees/srrtep-w/20191218/20191218-aep-system-pre-1930s-tower-lines.ashx.

Failure to implement the proposed Project in the specified period of time will likely result in PJM implementing operational controls which may include preemptive shedding of a significant amount of load served from the area transmission and distribution network in order to alleviate the thermal issues associated with the scenario identified above. Although load shedding is an approved PJM operational procedure to control thermal overloads, load shedding is not acceptable from the Company's perspective and directly impacts both large commercial and residential customers in the area. The proposed solution for this baseline identified need is necessary for the Company to continue to provide safe, reliable service to their customers.

This Project was originally presented to PJM on 02/14/2018 as a supplemental project and was assigned a PJM number of s1563.2. Subsequently on 01/15/2021, part of the supplemental project was converted to baseline with a PJM number of b3131. This Project was included in the Company's most recent Long-Term Forecast Report on page 8 (**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 location of the Project in relation to existing and proposed transmission lines and substations is shown on **Figure** 1.

The Project directly impacts the following existing facilities

- Rockhill Substation
- North Delphos Substation
- Lima Fort Wayne 138kV Transmission Line

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.

Reconstructing and modernizing the existing double-circuit 138 kV transmission line, primarily utilizing the existing corridor, will have significantly less impacts than constructing a replacement transmission line on a greenfield corridor. Most of the existing corridor will be utilized, but some alignment deviations are needed to avoid existing residential and commercial buildings within the existing right-of-way. By designing a majority of the transmission line within the existing, maintained corridor, the proposed Project will not incur significant socioeconomic, ecological, or construction impacts.

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 informs affected property owners and tenants about its projects 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 under Ohio Revised Code ("OAC") Section 4906-6-08(A) (1-6). Further, the Company will mail letters, via first class mail, to affected landowners, tenants, contiguous owners, and any other landowner the Company approached for an easement necessary for the construction, operation, or maintenance of the facility. The letter complies with all the requirements of O.A.C. Section 4906-6-08(B). The Company also 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 affected by this proposed 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 Project is anticipated to begin in July 2022, and the anticipated in-service date is December 2024.

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.

Figure 1 in **Appendix A** provides the proposed and existing Lima-Fort Wayne 138kV Transmission Line on a map of 1:24,000-scale (1-inch equals 2,000 feet), showing the Project on a topographic map of the

Cairo, Elida, Kalida, and Ottoville 7.5-minute quadrangles provided by the National Geographic Society. **Figure 2** shows the Project area on aerial imagery (March 2017, ESRI World Imagery), at a scale of 1:4,800 (1-inch equals 400 feet).

To visit the Project site from Columbus, Ohio take I-70 West for approximately 0.8 miles. Then take exit 17B to merge U.S. 33 W. Stay on U.S. 33 for approximately 62.4 miles. Next, take the OH-117 exit from U.S. 33 W and continue for approximately 27.1 miles till reaching the exit for I-75 N. Continue on I-75 N for approximately 1.3 miles, then take exit 127 to OH-81. Next, turn left onto Stewart Road. After approximately 2.3 miles, turn left onto E Bluelick Road, followed by a right onto S.R. 65. After approximately 0.6 miles, continue straight onto OH-115 N. Continue on OH-115 for approximately 2.7 miles before turning left to merge onto U.S. 30 W. After approximately 7.9 miles turn right on to Defiance Trail/Twp Road 23. Continue for approximately 3.3 miles until reaching OH-190 S. Turn left onto OH-190 S. The destination will be on your right after approximately 0.19 miles. The approximate address for the North Delphos Station is 19390 OH-190, Delphos, Ohio 45833, at latitude 40.896208, longitude -84.309391.

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.

Please refer to the table provided in **Appendix C** for the property parcel numbers and an indication as to whether the easement/option necessary to construct and operate the facility has been obtained.

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 transmission line construction for the North Delphos-Rockhill Transmission Line Rebuild Project is anticipated to include the following:

Voltage: 138kV

Conductors: 1033.5 kcmil 54/7 ACSR "Curlew"

Static Wire: 7#8 Alumoweld

Insulators: Polymer

ROW Width: Varies between 80, 90, 100, and 130 Feet. The typical ROW Width is 130 Feet.

Structure Types: Sixty (60) Double circuit steel pole tangent suspension structure.

Sixteen (16) Double circuit steel pole angle suspension structure.

Eleven (11) Double circuit steel pole deadend structure. One (1) Single circuit steel pole deadend structure.

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.

B(9)(b)(i) Calculated Electric and Magnetic Field Strength Levels

i) Calculated Electric and Magnetic Field Levels

EMF level was evaluated at two locations. (1) North Delphos – Sterling line with East Lima - Haviland line (2) North Delphos – Sterling line with Rockhill - West Lima (via Eastown Road). For both cases EMF levels were computed at the ROW width at 130 feet and 80 feet.

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 circuit of this line would operate at its WN rating in the foreseeable future.

1) EMF levels were computed one meter above ground under the line and at the ROW edges (65/65 feet, left/right, of centerline). Our results calculated using EPRI's EMF Workstation 2015 software are summarized below.

North Delphos – Sterling 138kV and East Lima -Haviland 138kV Circuits EMF Calculations – 130ft ROW							
	Condition	Circuit Load (A)	Ground Clearance (feet)	Electric Field (kV/m)*	Magnetic Field (mG)*		
(1)	Normal Maximum Loading^	139.92/118.25	34.3	0.11/0.72/0.11	2.4/10.94/1.63		
(2)	Emergency Line Loading^^	145.25/298.27	32.7	0.11/0.80/0.11	2.07/24.7/6.93		
(3)	Winter Normal Conductor Rating^^^	1566.56/1566.56	34.3	0.11/0.72/0.11	23.7/131.32/24.44		

- * Phasing Arrangements are A-B-C/C-B-A for the calculated EMF presented in this table.
- * 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 65 feet (left) and 65 feet (right) of centerline, respectively.
- ^ Peak line flow expected with all system facilities in service
- ^^ Maximum flow during a critical system contingency
- ^^^ Maximum continuous flow that the line, including its terminal equipment, can withstand during winter Conditions.

2) EMF levels were computed one meter above ground under the line and at the ROW edges (40/40 feet, left/right, of centerline). Our results, calculated using EPRI's EMF Workstation 2015 software are summarized below.

North Delphos – Sterling 138kV and Rockhill - West Lima 138kV Circuits EMF Calculations – 80 ft ROW								
Condition	Circuit Load (A)	Ground Clearance (feet)	Electric Field (kV/m)*	Magnetic Field (mG)*				
(1) Normal Maximum Loading^	139.92/118.25	34.3	0.325/0.72/0.325	5.21/10.94/4.03				
(2) Emergency Line Loading^^	145.25/298.27	32.7	0.337/0.80/0.337	5.7/24.7/13.96				
(3) Winter Normal Conductor Rating^^^	1566.56/1566.56	34.3	0.325/0.72/0.325	54.93/131.32/56.03				

- * Phasing Arrangements are A-B-C/C-B-A for the calculated EMF presented in this table.
- * 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 40 feet (left) and 40 feet (right) of centerline, respectively.
- ^ Peak line flow expected with all system facilities in service
- ^^ Maximum flow during a critical system contingency

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

		Controlled Environment
Electric Field Limit (kV/m)	5.0	20.0
Magnetic Field Limit (mG)	9040	27,100

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)(b)(ii) Design Alternatives

A discussion of the applicant's consideration of design alternatives with respect to electric and magnetic fields and their strength levels, including alternate conductor configuration and phasing, tower height, corridor location, and right-of-way width.

Design alternatives were not considered due to EMF strength levels. Transmission lines, when energized, generate EMF. Laboratory studies have failed to establish a strong correlation between exposure to EMF

^{^^^} Maximum continuous flow that the line, including its terminal equipment, can withstand during winter Conditions.

and effects on human health. However, some people are concerned that EMF have impacts on human health. Due to these concerns, EMF associated with the new circuits was calculated and set forth in the table above. The EMF was computed assuming the highest possible EMF values that could exist along the proposed transmission line rebuild. Normal daily EMF levels will operate below these maximum load conditions. Based on studies from the National Institutes of Health, the magnetic field (measured in milliGauss, or mG) associated with emergency loading at the highest EMF value for this transmission line is lower than those associated with normal household appliances like microwaves, electric shavers and hair dryers. For additional information regarding EMF, the National Institutes of Health has posted information on their website: http://www.niehs.nih.gov/health/topics/agents/emf/. Additionally, information on magnetic fields available **AEP** Ohio's electric and https://www.aepohio.com/info/projects/emf/OurPosition.aspx. The information found on AEP Ohio's website describes the basics of electromagnetic field theory, scientific research activities, and EMF exposures encountered in everyday life. Similar material will be made available for those affected by the construction activities for this Project.

B(9)(c) Project Cost

The estimated capital cost of the project.

The capital cost estimate for the proposed Project, which is comprised of applicable tangible and capital costs, is approximately \$56,000,000 from a Class 4 estimate.

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.

An aerial photograph of the Project vicinity is provided as **Figure 2**, in **Appendix A**. The Project location and vicinity have historically been primarily agricultural land, forested land, and mixed residential and commercial use. The Project is located within American, Bath, and Sugar Creek Townships in Allen County as well as Jennings and Sugar Creek Townships in Putnam County, Ohio. The Project vicinity is rural in nature and is comprised primarily of maintained agricultural land used for row crops, and less amounts of old fields, forested land, landscaped areas, scattered residences, and commercial areas. Minor tree clearing may be required, and in-water work is not planned for the Project.

One cemetery, four churches, one local municipality park, and Allen County's Sanitary Plant are located within 1,000 feet of the Lima-Fort Wayne 138kV Transmission Line. Of these areas within 1,000 feet, the cemetery, one of the four churches, and Allen County's Sanitary Plant are located along portions of the route proposed to be rebuilt. The remaining three churches and one local municipality park are located within 700 feet of the Project. Due to the nature of the Project, the Company does not anticipate a significant effect to these existing areas.

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 Allen and Putnam County Auditors provided a list of parcels registered as Agricultural District Land in January 2022. The proposed North Delphos-Rockhill Transmission Line intersects ten (10) parcels in Allen County and 2 parcels in Putnam County that were identified as Agricultural District Land Parcels for a total of 12 parcels crossed. Approximately, 2.8-miles of the Project crosses Agricultural District Land. As the Project is a rebuild within existing ROW, impacts to agricultural land uses, including Agricultural District Land, are expected to be minimal and limited to the small footprint of the poles within the agricultural land.

Of the proposed line adjustment, 442 feet of Agricultural District Land are proposed to be crossed within new easements. Construction of the transmission line will likely cause a minor temporary disturbance to the agricultural land uses, including agricultural district lands, and following construction the land use would return to agricultural use within the ROW besides the small footprint of the poles.

B(10)(c) Archaeological and Cultural Resources

Provide a description of the applicant's investigation concerning the presence or absence of significant archaeological 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.

Phase I Archaeological Investigations and separate History/Architecture Investigations for the Project occurred in July 2017. One (1) Ohio Archaeological Inventory ("OAI") site was identified by the Company's consultant and it was recommended that the site is not eligible for listing in the National Register of Historic Places ("NRHP"). Additionally, one hundred and forty-six (146) properties were investigated during the historic architecture investigation and eight (8) structures were deemed necessary for advanced detail study. The Company's consultant recommended due to the location of the structures and nature of the Project, and type of historic structures identified, the Project would not likely affect historic properties. Consultation from the Ohio State Historic Preservation Office ("SHPO") was received in August 2017. The SHPO concurred with the results of the Company's Consultant and stated that the Project will have no effect on historic properties, and that no further investigations or consultation with SHPO is necessary.

Due to line adjustments from the original coordination, an additional Phase I Archaeological Investigations and separate History/Architecture Investigations for the Project occurred in December 2021. No new archaeological or historic properties were identified as eligible for listing in the NHRP. Consultation from SHPO was received in January 2022 and SHPO stated that the Project will have no effect on historic properties or archeological resources. Copies of the concurrence letters from the August 2017 and January 2022 SHPO response have been included within **Appendix D**.

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.

A Notice of Intent will be filed with the Ohio Environmental Protection Agency for authorization of construction storm water discharges under General Permit OHCD00005. AEP Ohio Transco will also coordinate storm water permitting needs with local government agencies, as necessary. AEP Ohio Transco will implement and maintain best management practices as outlined in the Project-specific Storm Water Pollution Prevention Plan to minimize erosion control sediment to protect surface water quality during storm events. Additionally, the Company intends to file a Pre-Construction Notification (PCN) under Nationwide Permit 57 with the United States Army Core of Engineers. Furthermore, the Company is also coordinating with Allen County Floodplain Development office for exemption for permitting activities within regulated floodways. Per coordination with Putnam County Floodplain Development office, no permit is required for the Project.

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

On July 26, 2021, coordination letters were sent to United States Fish and Wildlife Service (USFWS) and the Ohio Department of Natural Resources (ODNR) Ohio Natural Heritage Program (OHNP) and Division of Wildlife (DOW), seeking an environmental review for the Project for potential impacts to threatened and endangered species.

Responses were received from the USFWS on August 3, 2021 and from the ODNR on September 1, 2021. According to a response letter received by the USFWS on August 3, 2021, the Project area is within the range of the state and federally listed Indiana bat (*Myotis sodalis*) and Northern long-eared bat (*Myotis septentrionalis*). With regard to state threatened and endangered species that may occur within the Project vicinity, nine species were listed by the ODNR DOW. These species include: Indiana bat, little brown bat (*Myotis lucifugus*), tricolored bat (*Perimyotis subflavus*), clubshell (*Pleurobema clava*), northern riffleshell (*Epioblasma torulosa rangiana*), pondhorn (*Uniomerus tetralasmus*), pirate perch (*Aphredoderus sayanus*), greater redhorse (*Moxostoma valenciennesi*), and upland sandpiper (*Bartramia longicauda*).

Based on general observations during the ecological survey, portions of the Project survey corridor contained potential summer habitat for the listed bat species. The Company intends to adhere to the ODNR and USFWS recommendation of seasonal tree cutting (between October 1st and March 31st), to avoid impacts to these bat species' summer habitat. A desktop assessment for features potentially suitable as bat hibernacula was conducted and Portal searches within the Project's Area of Investigation occurred and no features potentially suitable for hibernating bats have been documented. Furthermore, the potential presence of the mussel species (clubshell, northern riffleshell, and pondhorn) as well as the listed fish species (pirate perch and greater redhorse) are unlikely to be significantly affected by the Project due to avoidance of in-stream work proposed for the Project. Lastly, the Company's consultant completed a habitat assessment for the upland sandpiper and submitted the results of the survey to the ODNR indicating the absence of habitat for the listed species on January 14, 2022. The ODNR responded on January 14, 2022 and concurred with the assessment completed. Copies of the coordination for the Project is included within **Appendix D**.

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.

The Company's consultant prepared a Wetland Delineation and Stream Assessment Report, which is provided in **Appendix E**. The survey of the Project area identified a total of 62 wetlands totaling 10.71-acres, 27 stream segments, and 2 ponds within the area of investigation (AOI). Of these wetlands identified, 43 were classified as palustrine emergent (PEM), 8 were classified as palustrine shrub-scrub (PSS), and 12 were classified as palustrine forested (PFO). Of the streams identified, 6 were ephemeral, 5 were intermittent, and 16 were perennial. No impacts to streams are anticipated, however temporary disturbances are anticipated to occur for equipment access across the delineated wetlands.

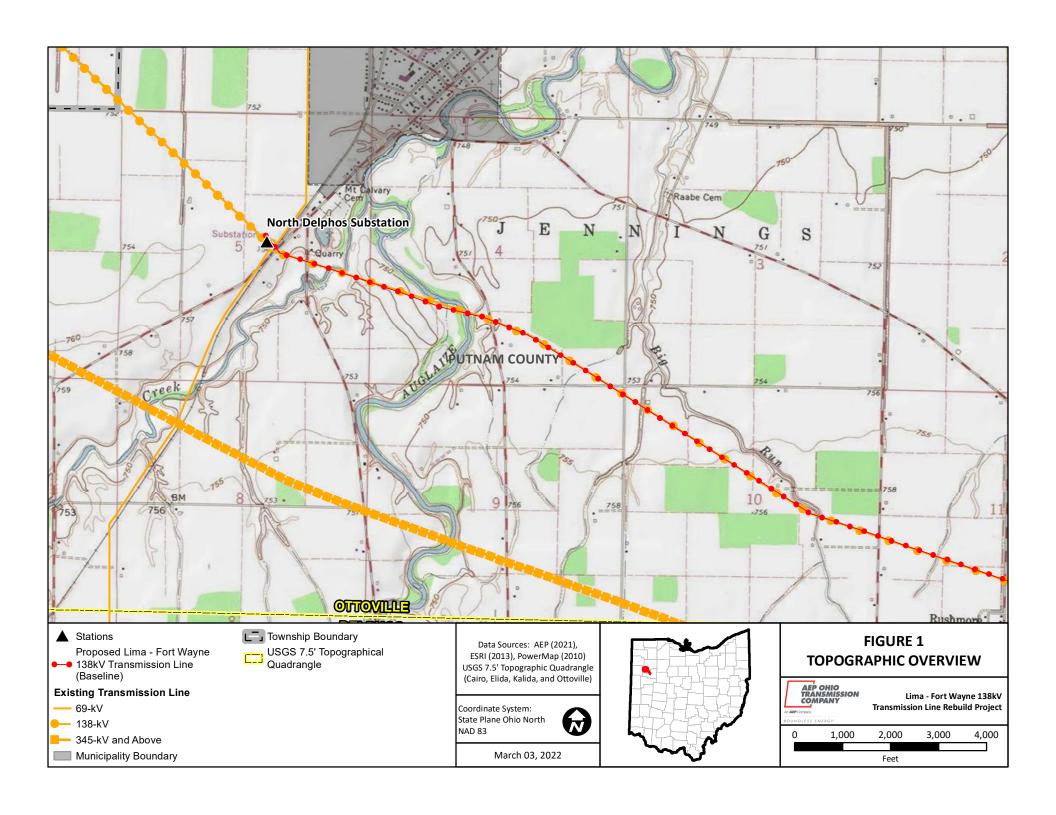
Based on the results of the wetland delineation and stream assessment, the Project activities are likely applicable to the non-reporting conditions of the Nationwide Permit 57. If disturbances to wetlands and/or streams require authorization from the USACE via PCN authorization, the Company intends to obtain the certification prior to commencement of construction activities.

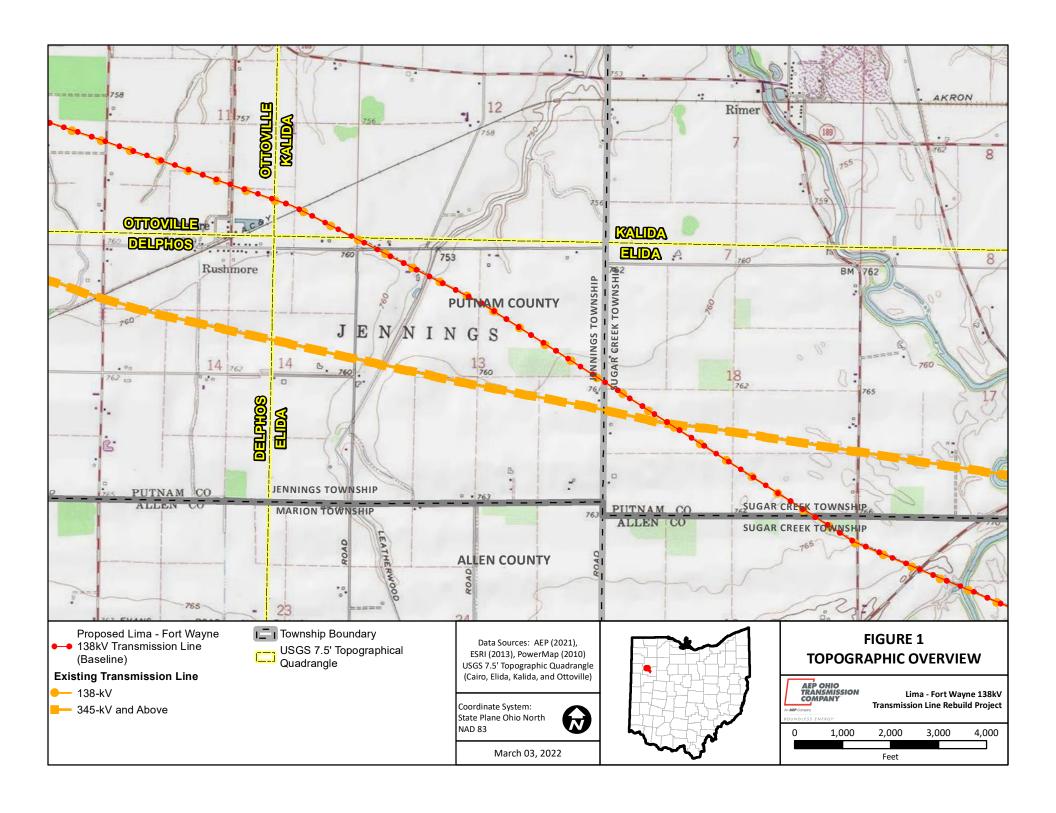
B(10)(g) Unusual Conditions

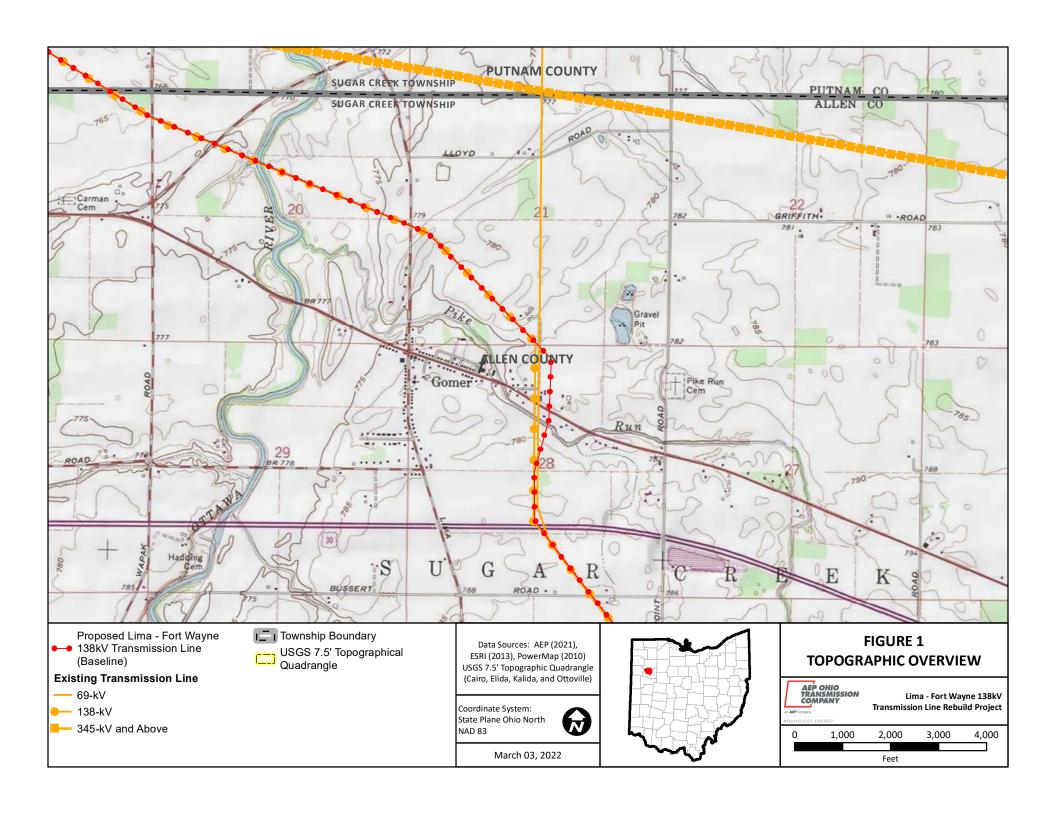
Provide any known additional information that will describe any unusual conditions resulting in significant environmental, social, health, or safety impacts.

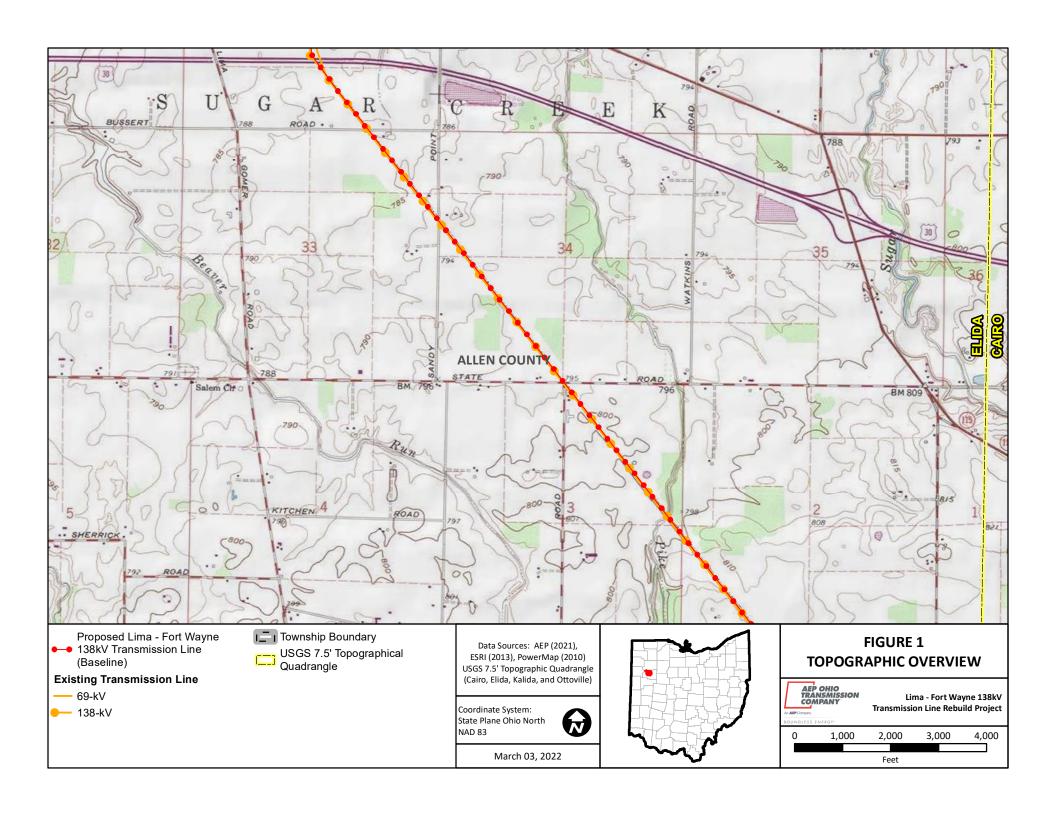
To the best of the Company's knowledge, no unusual conditions exist that would result in significant environmental, social, health, or safety impacts.

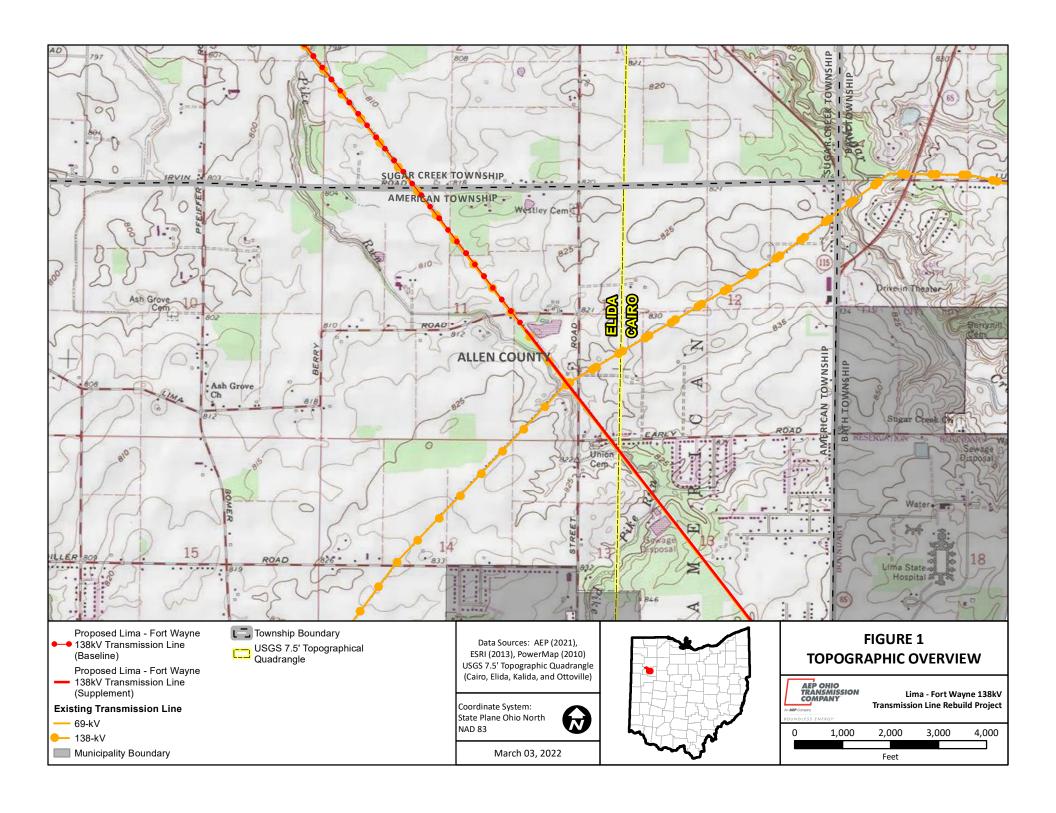
Appendix A Project Figures

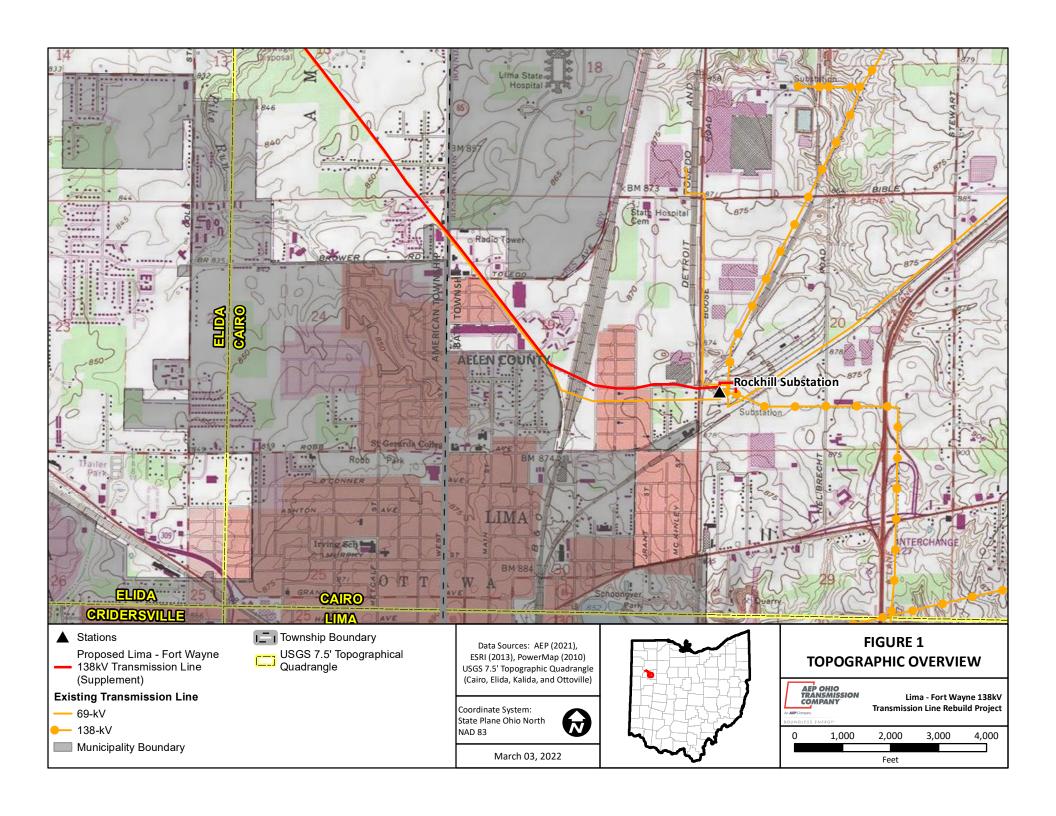


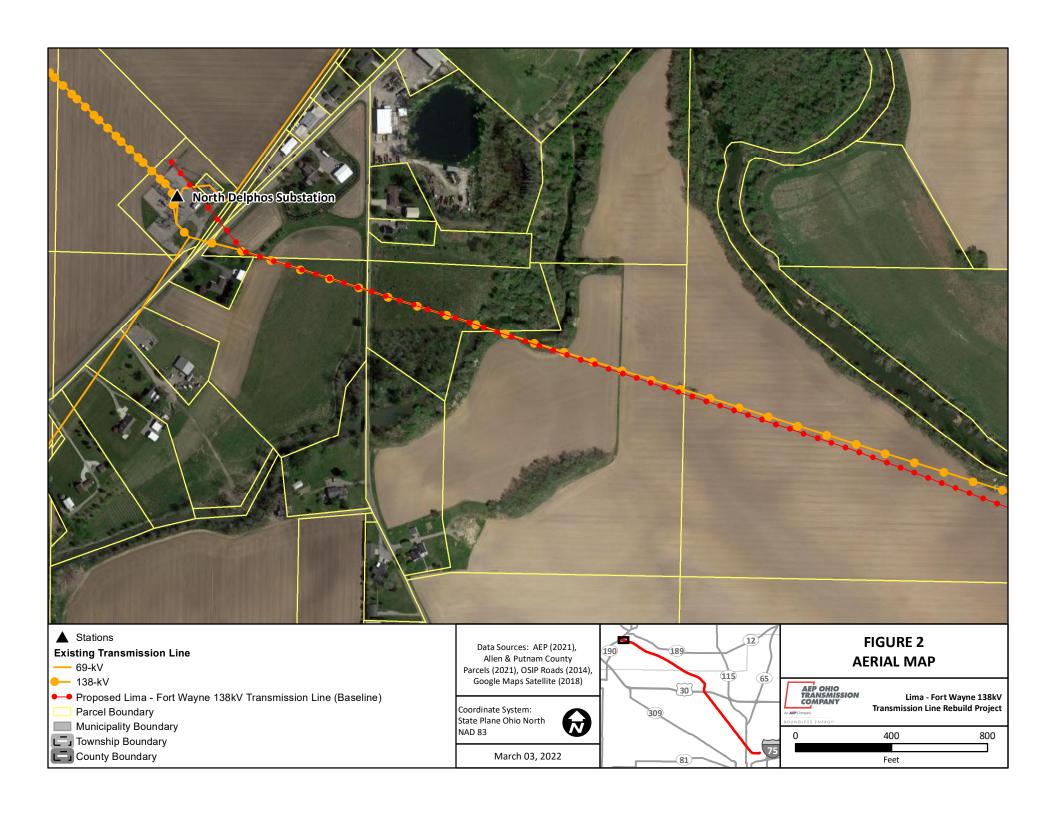


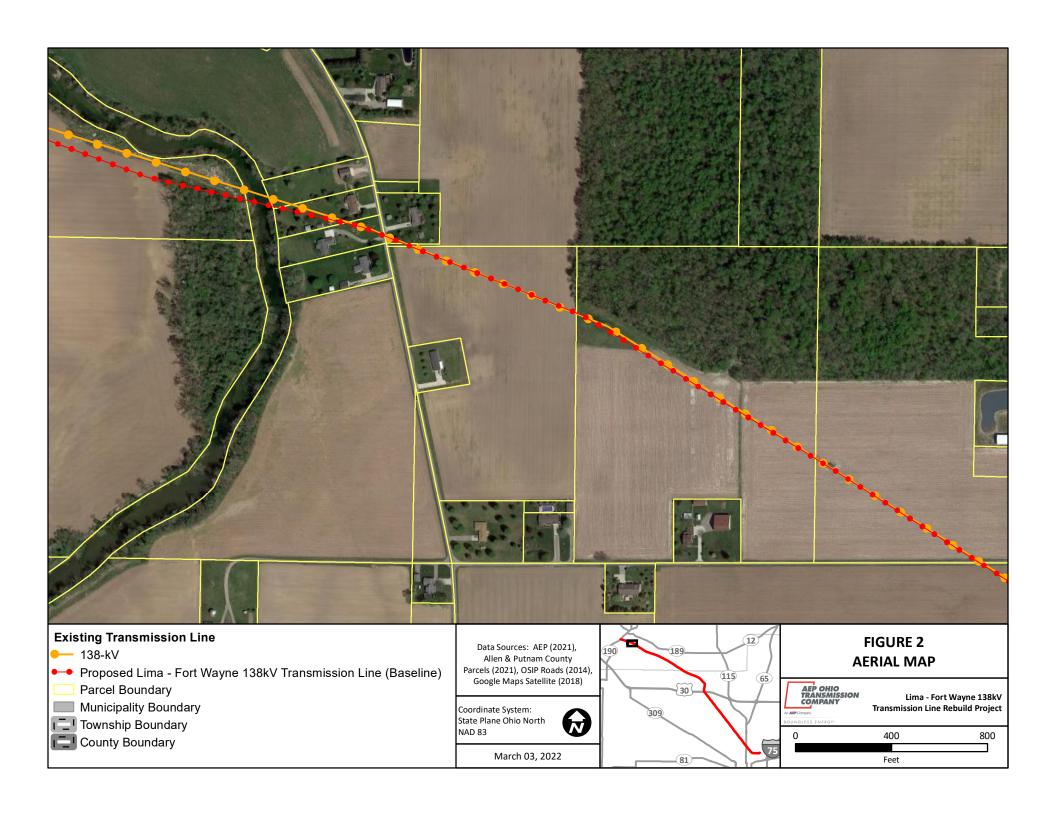


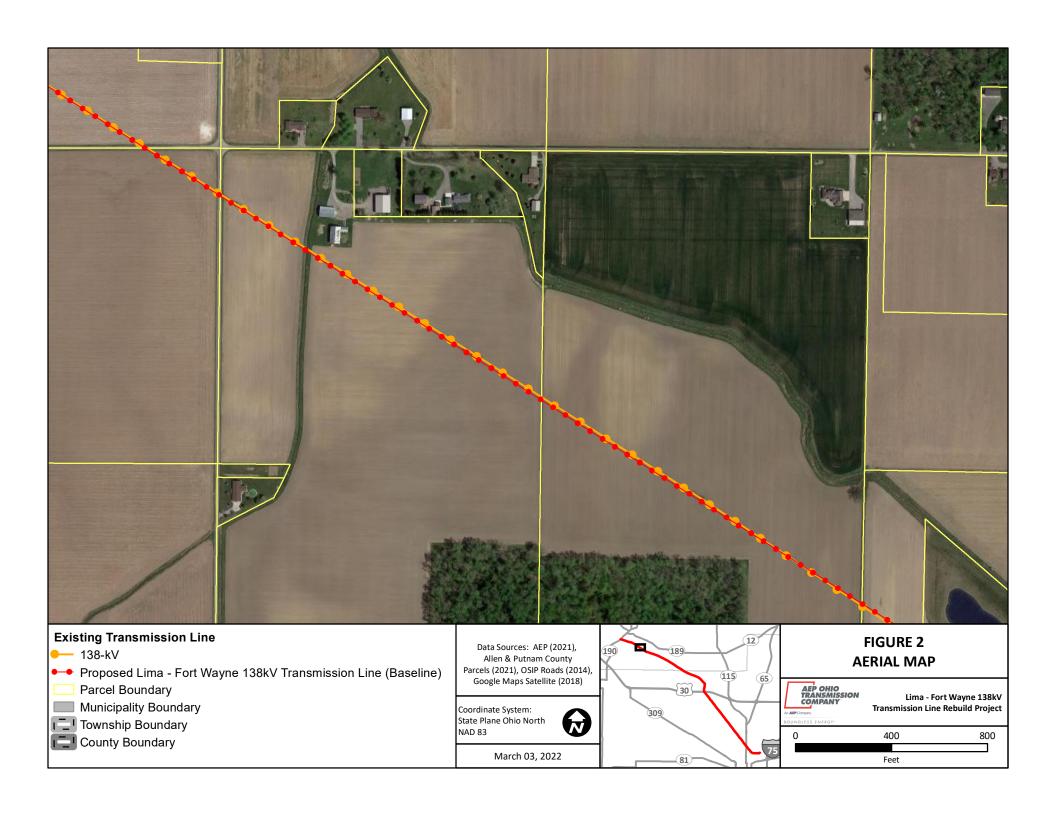


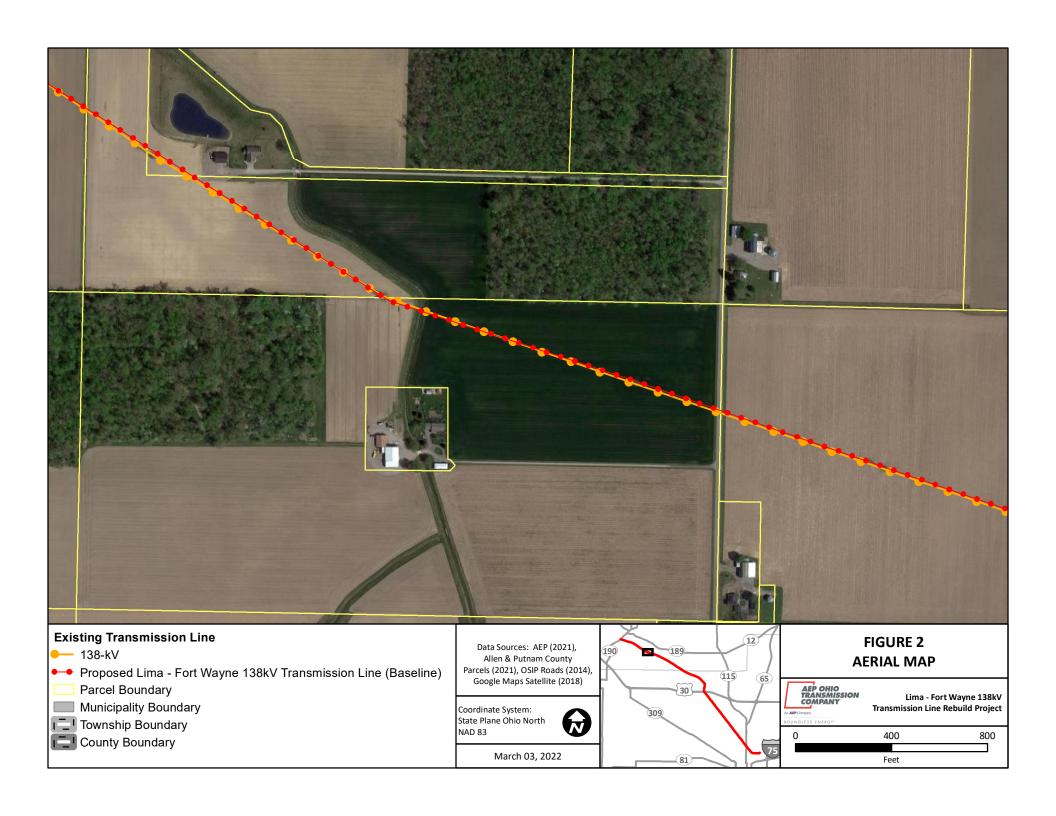


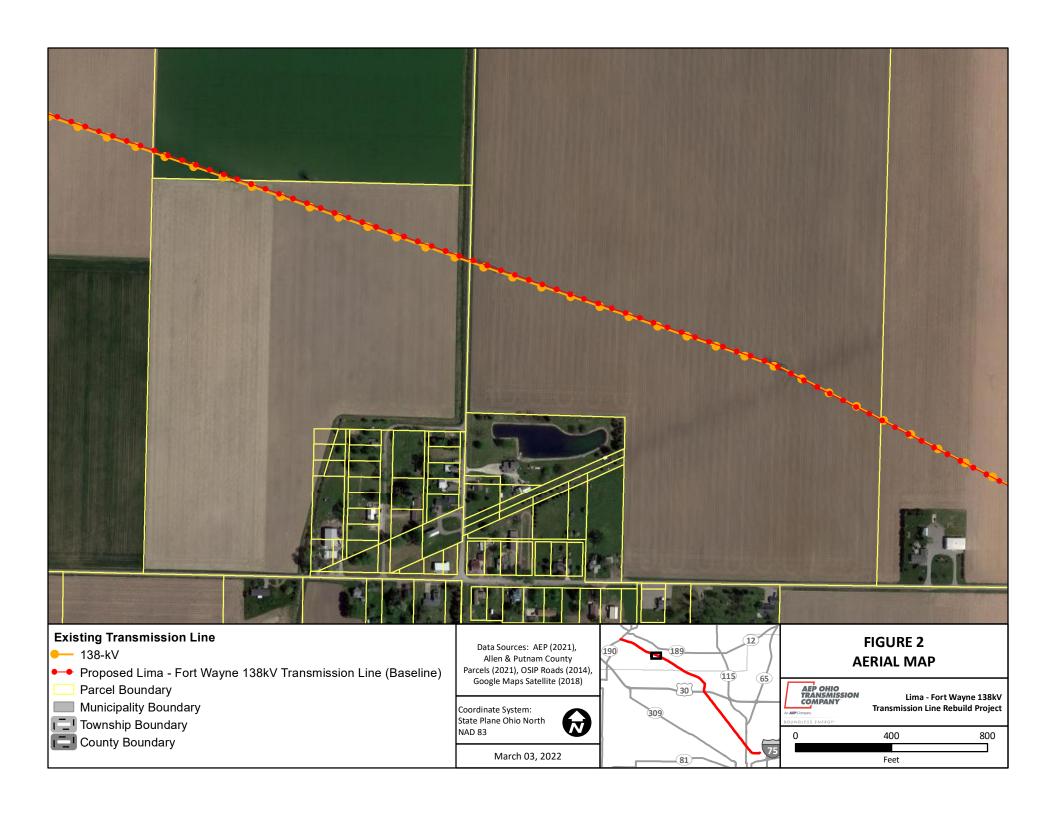


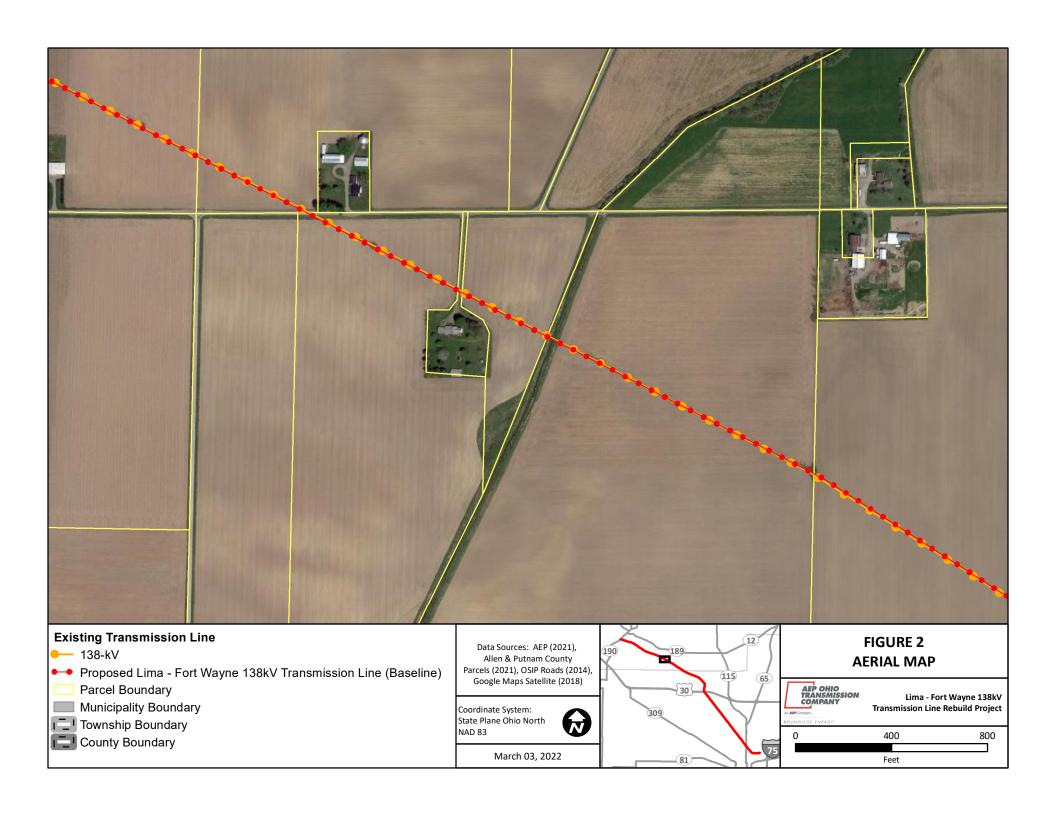


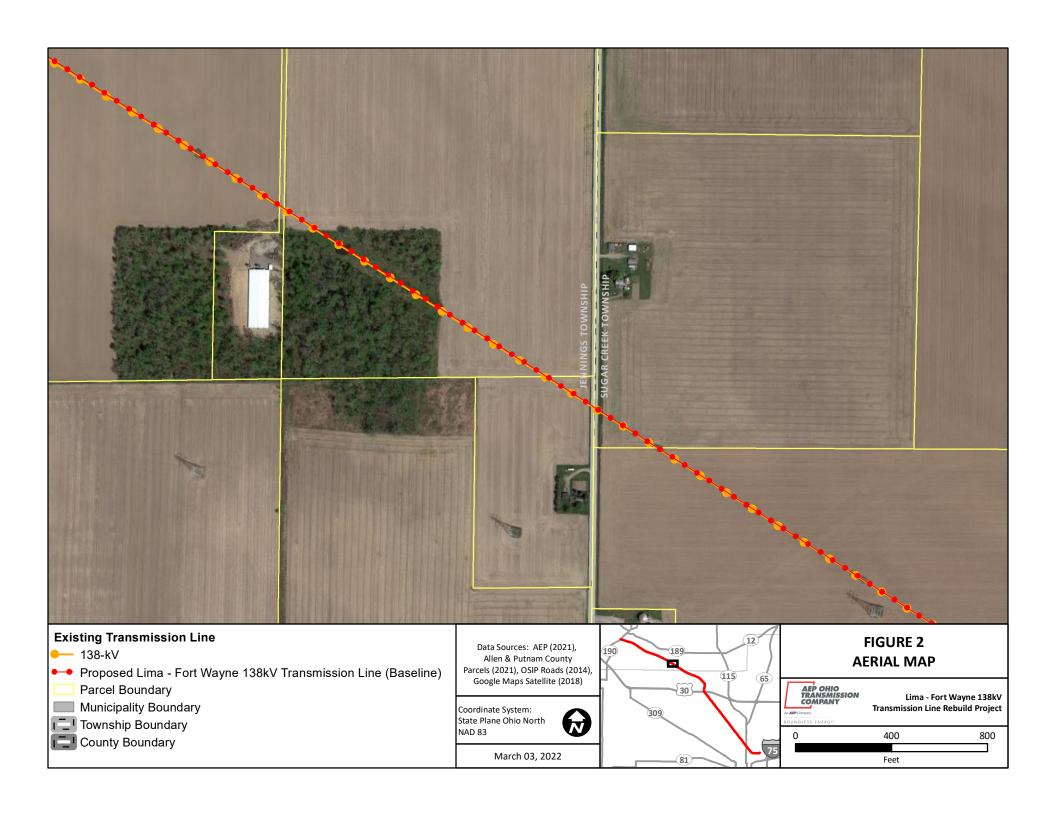


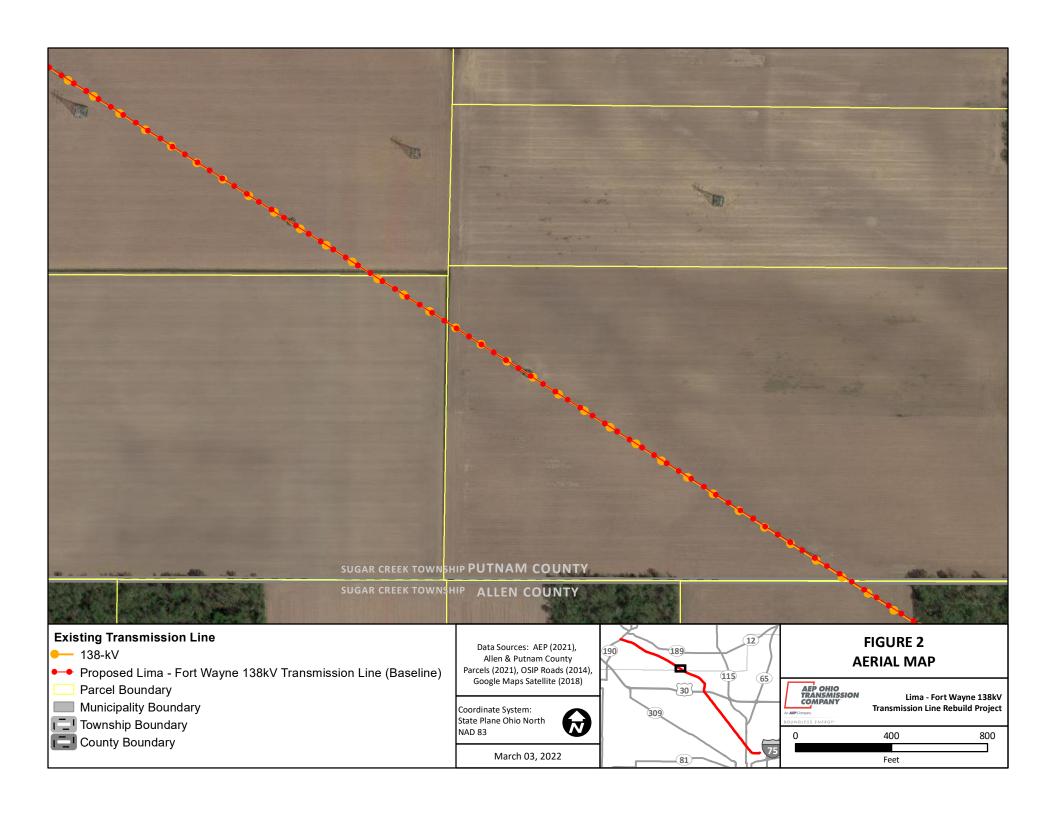


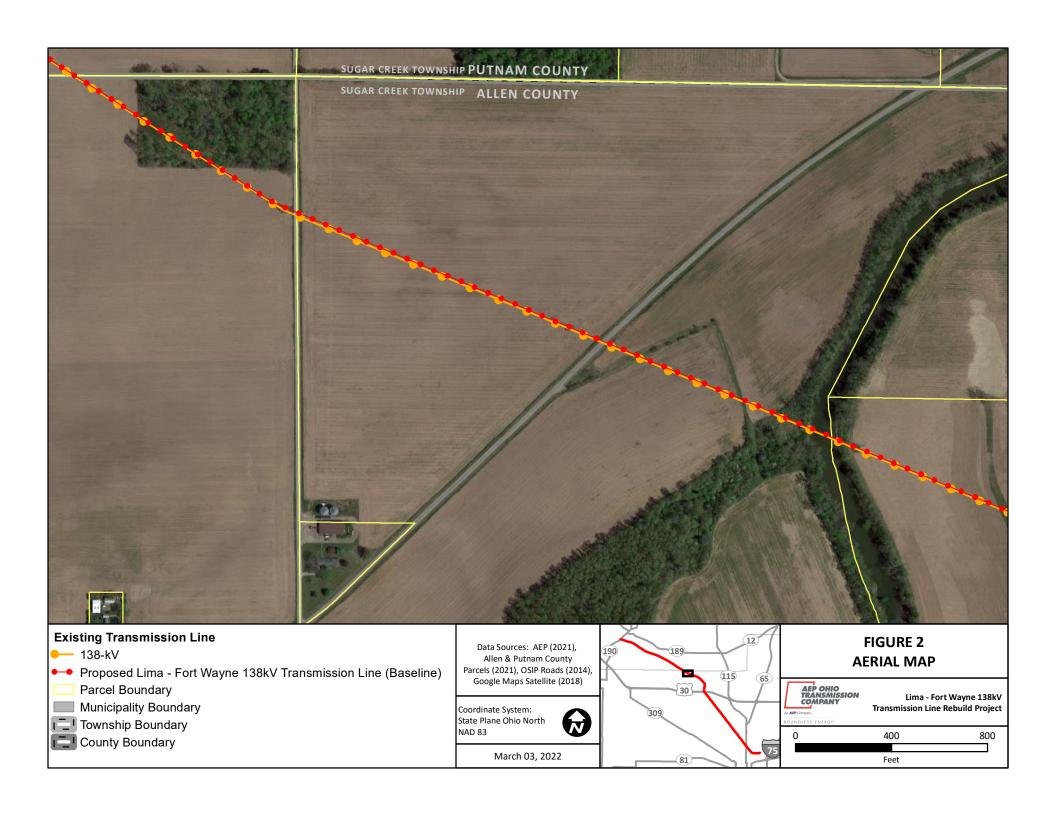


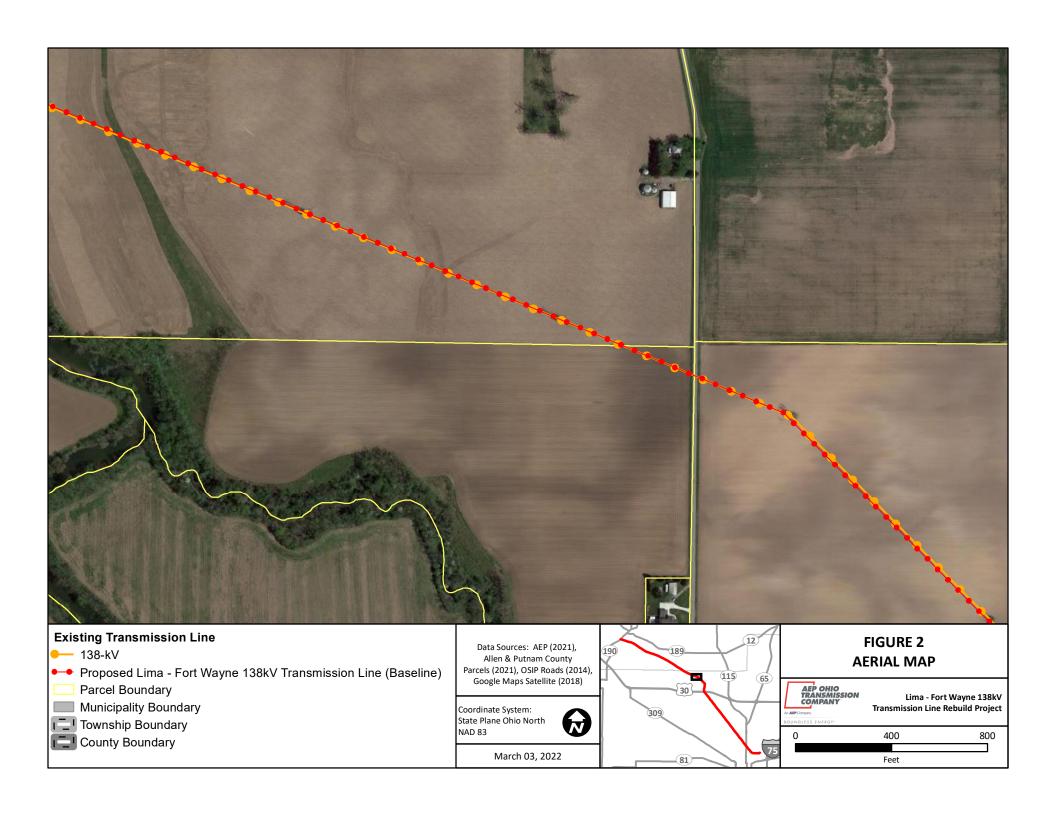


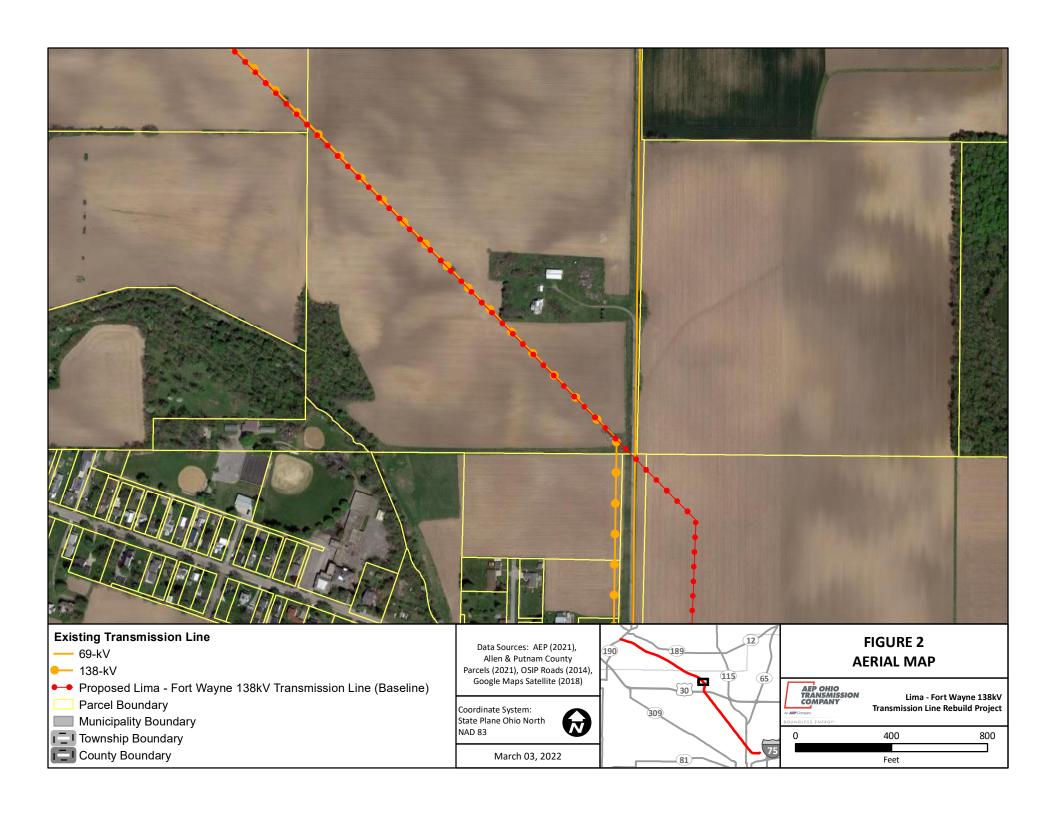


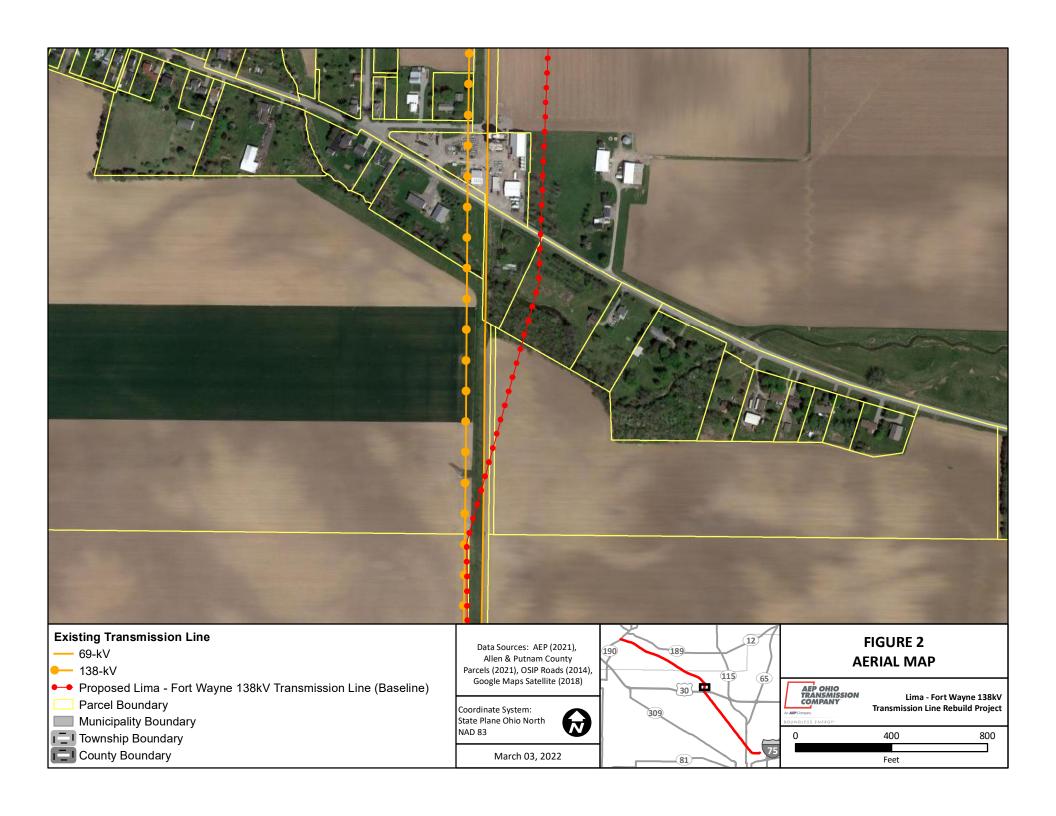


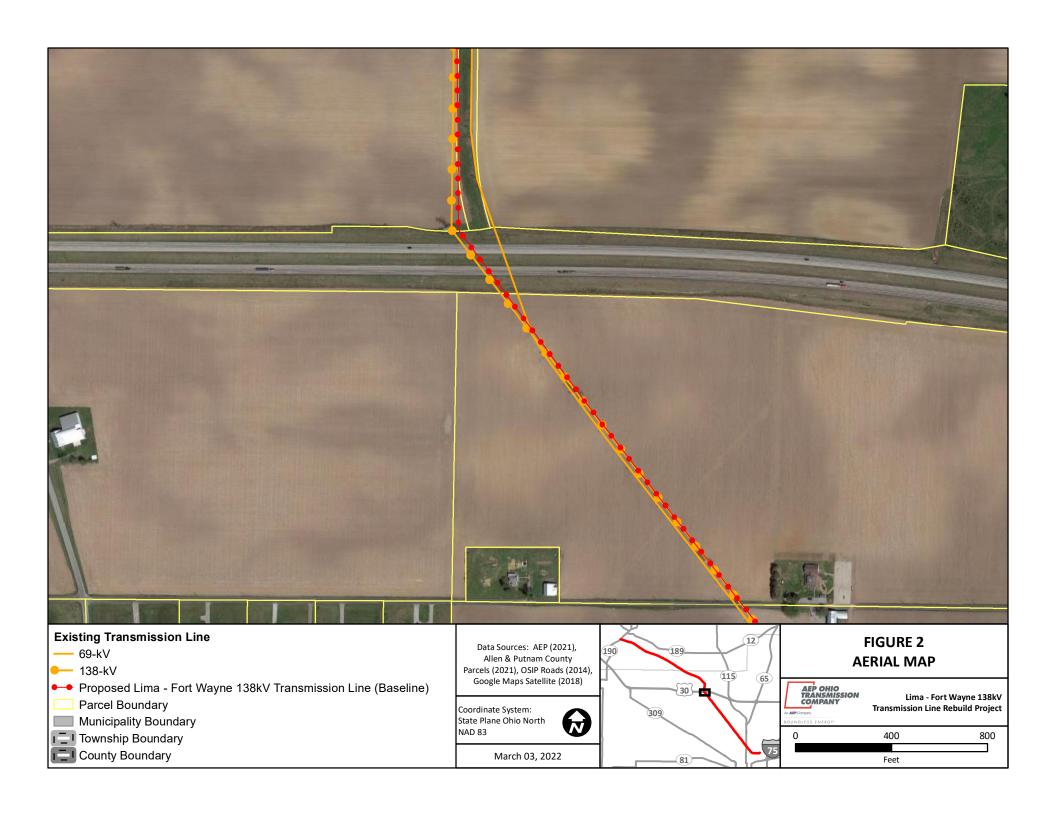


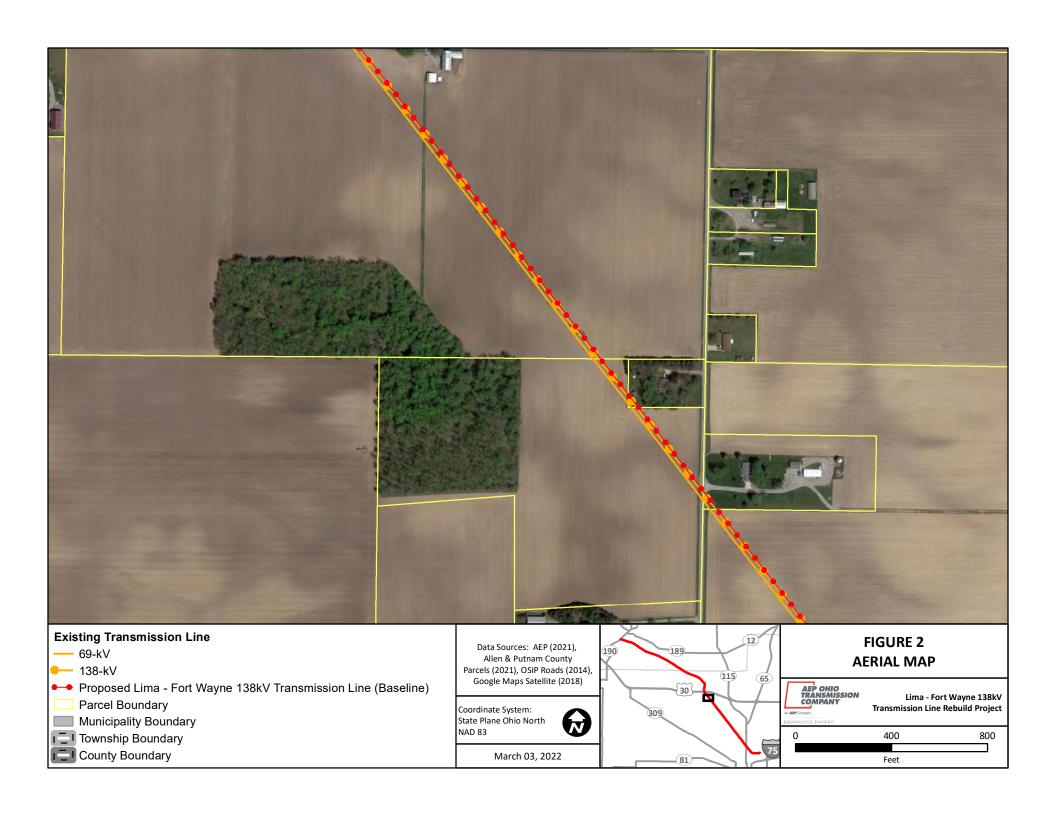


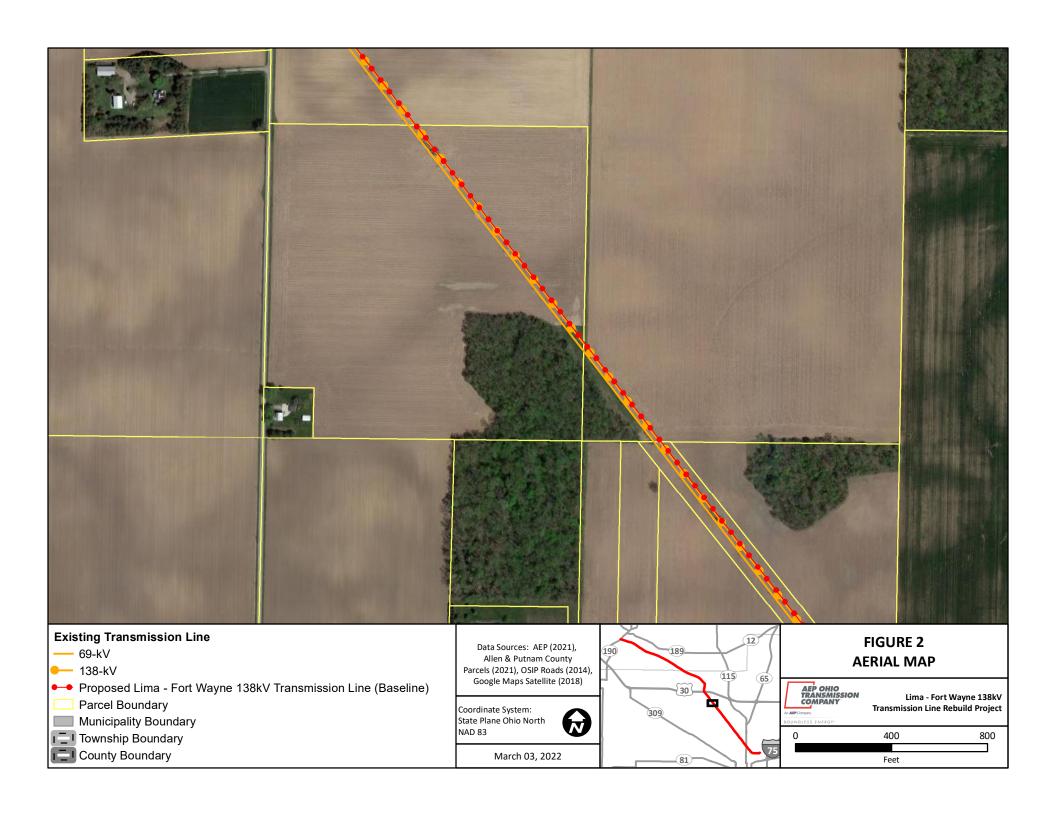


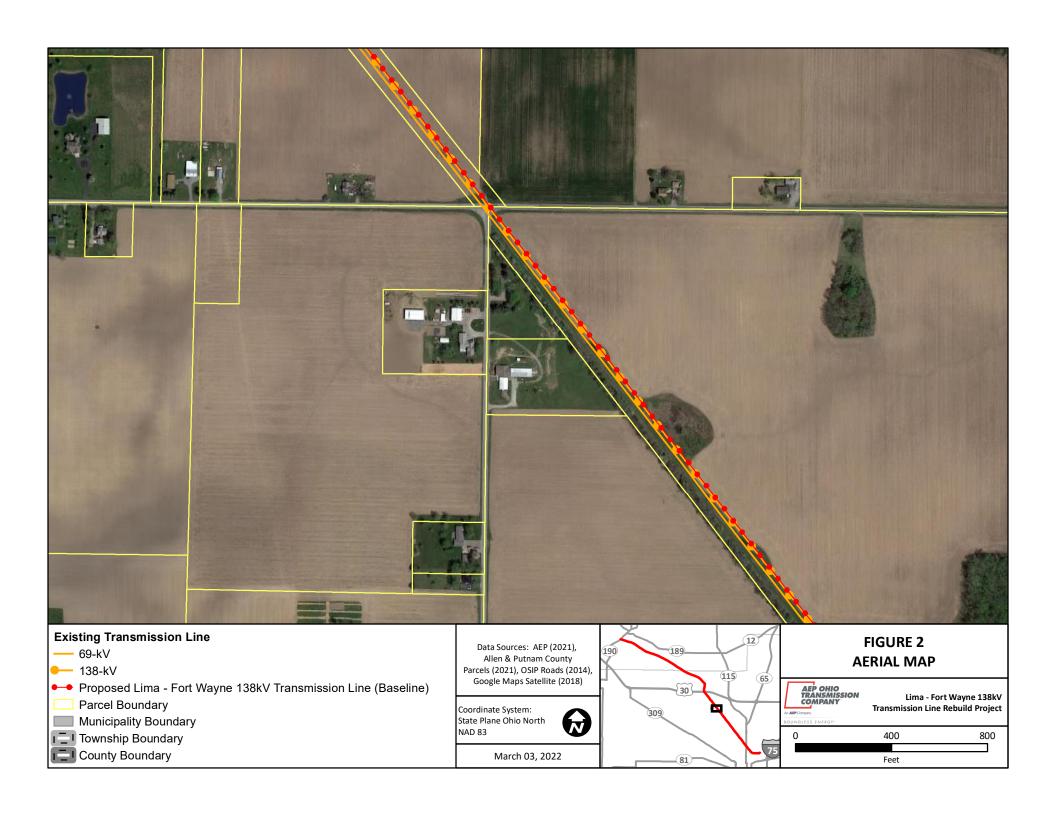


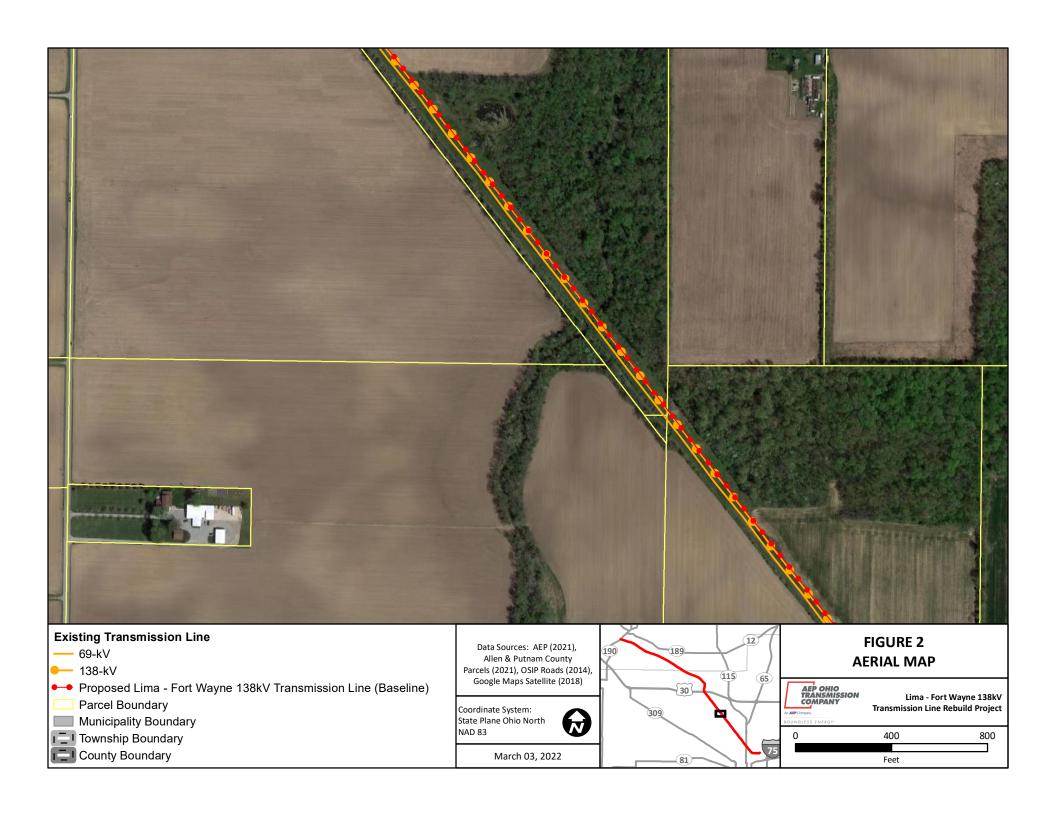


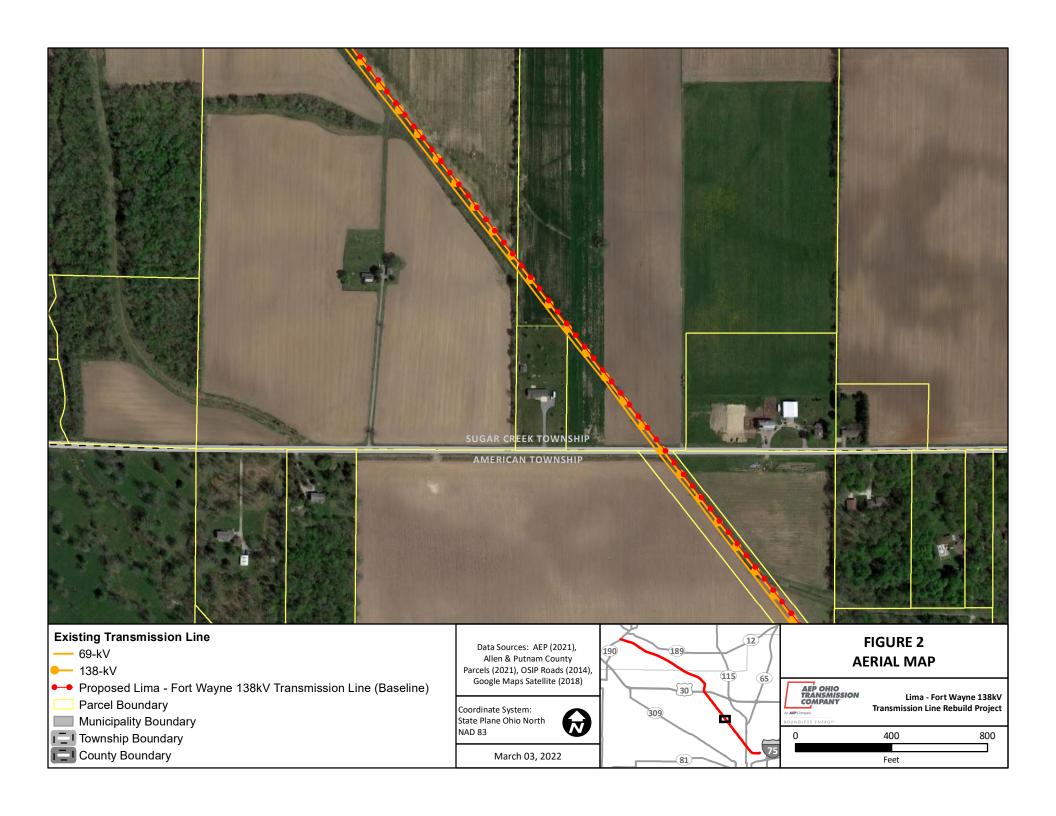


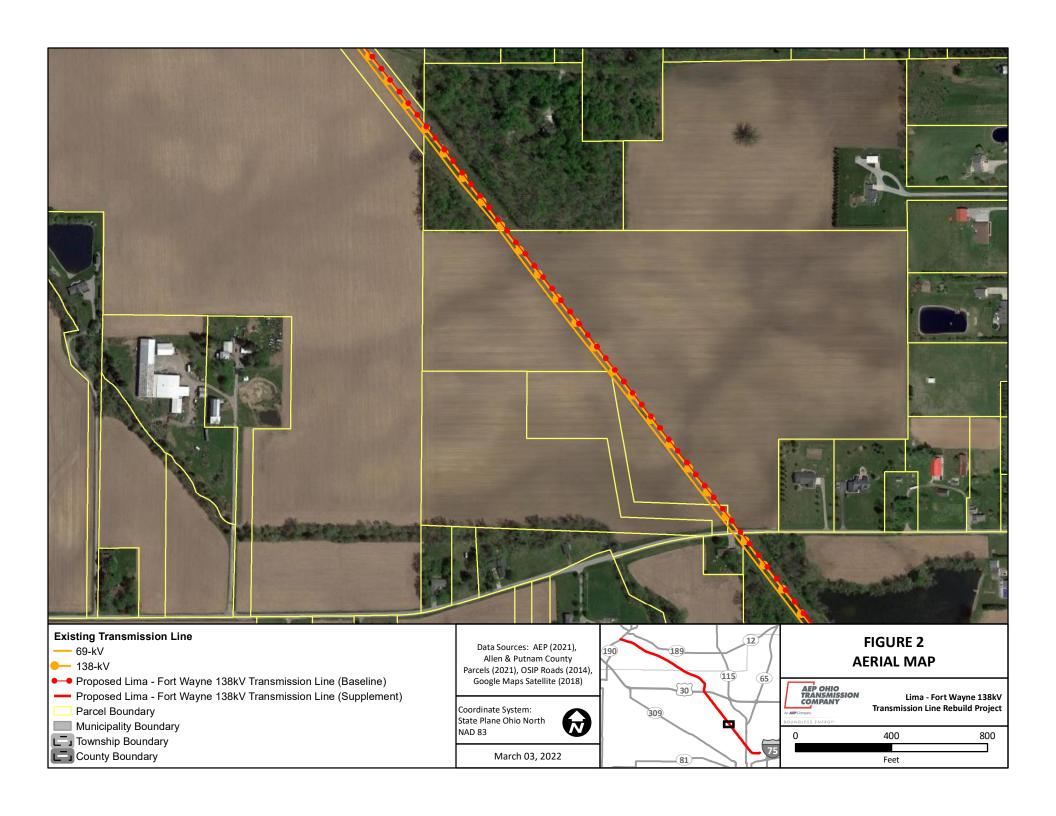


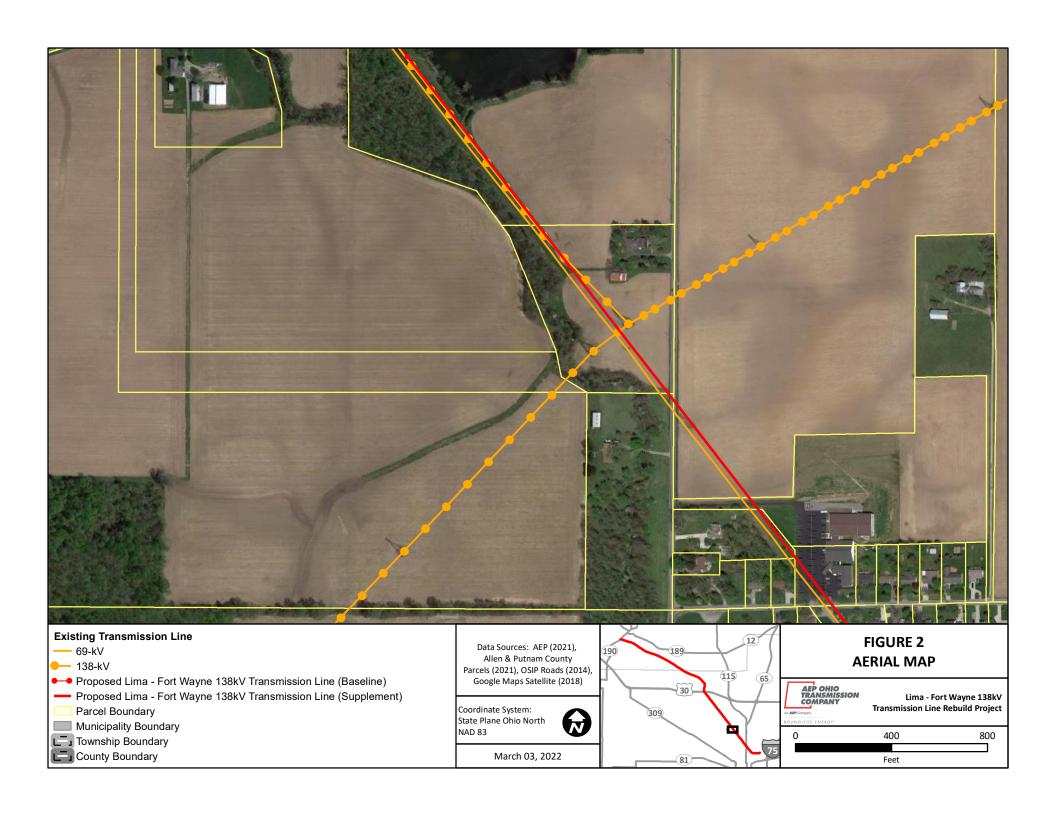


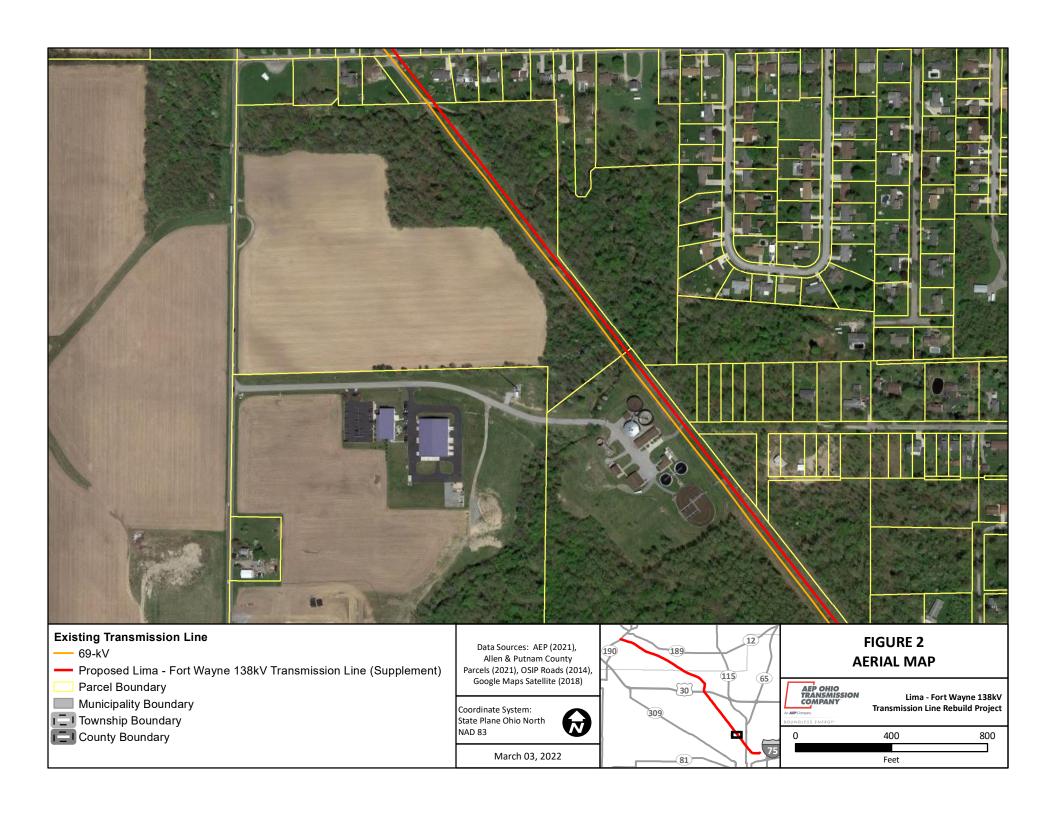


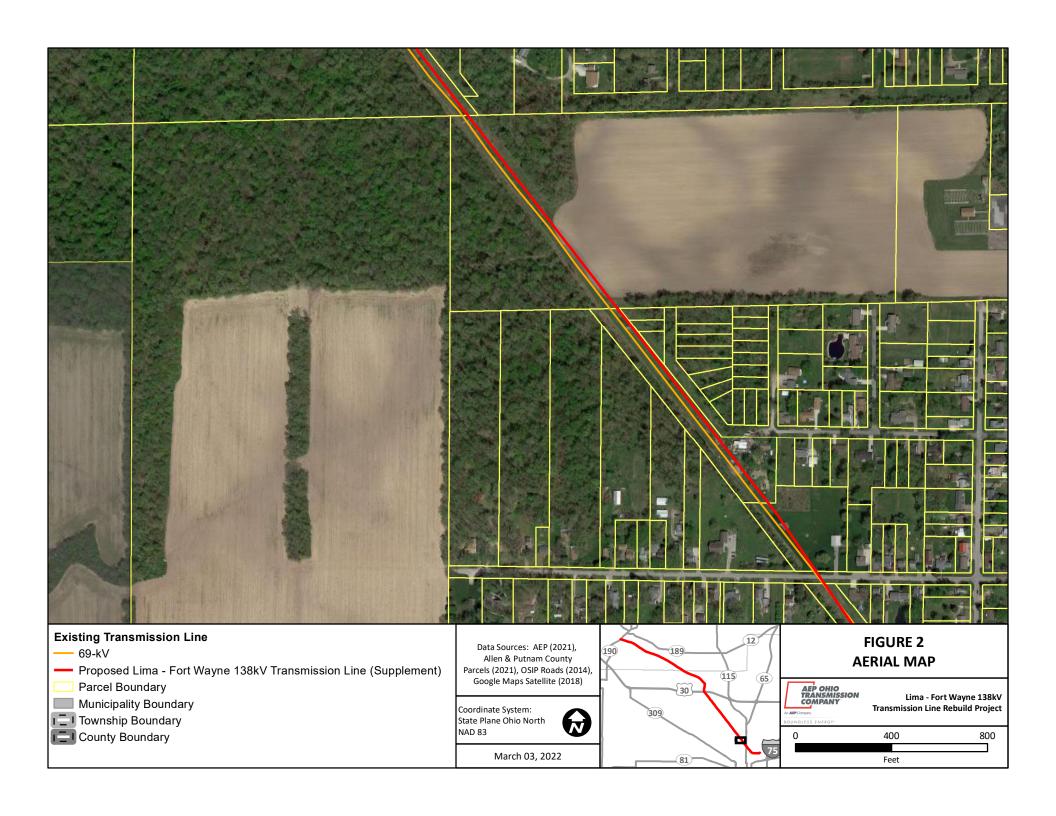


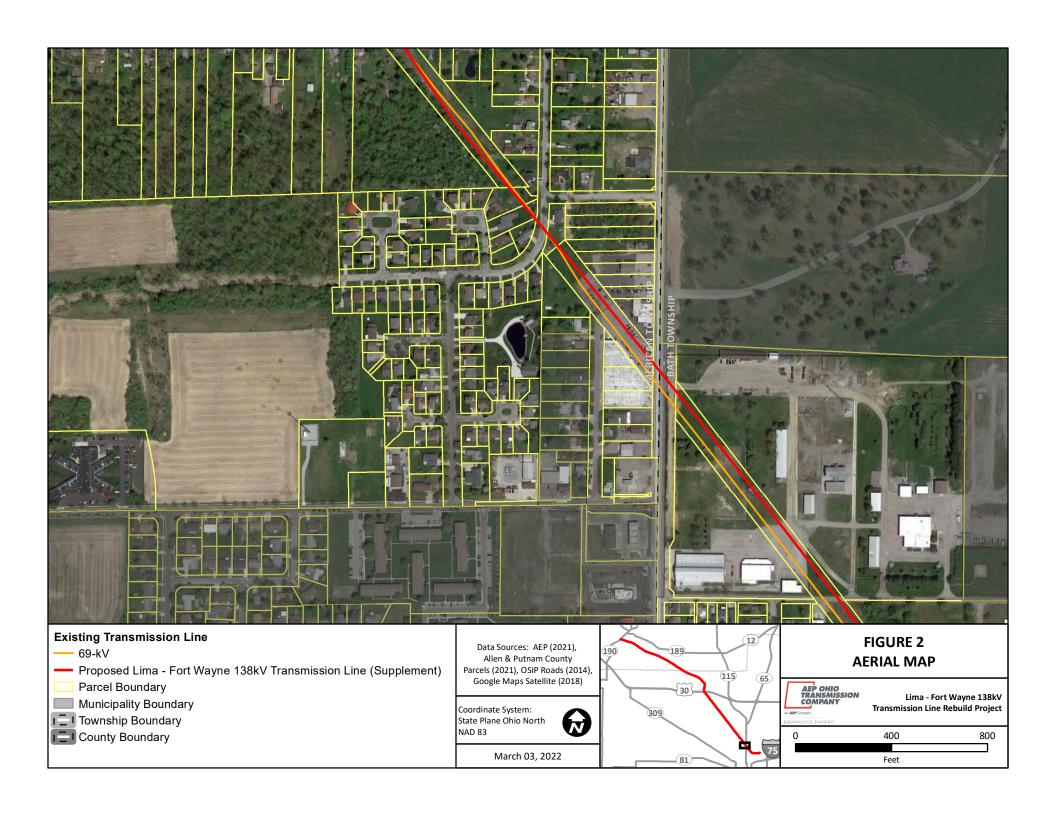


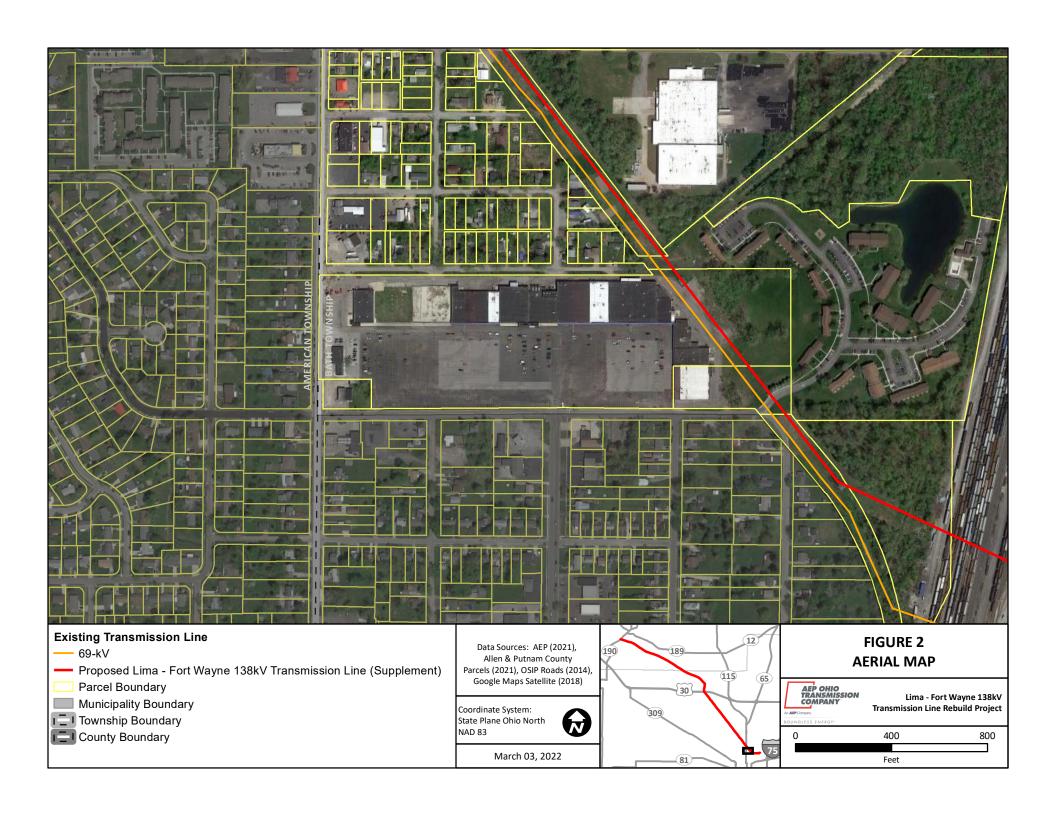


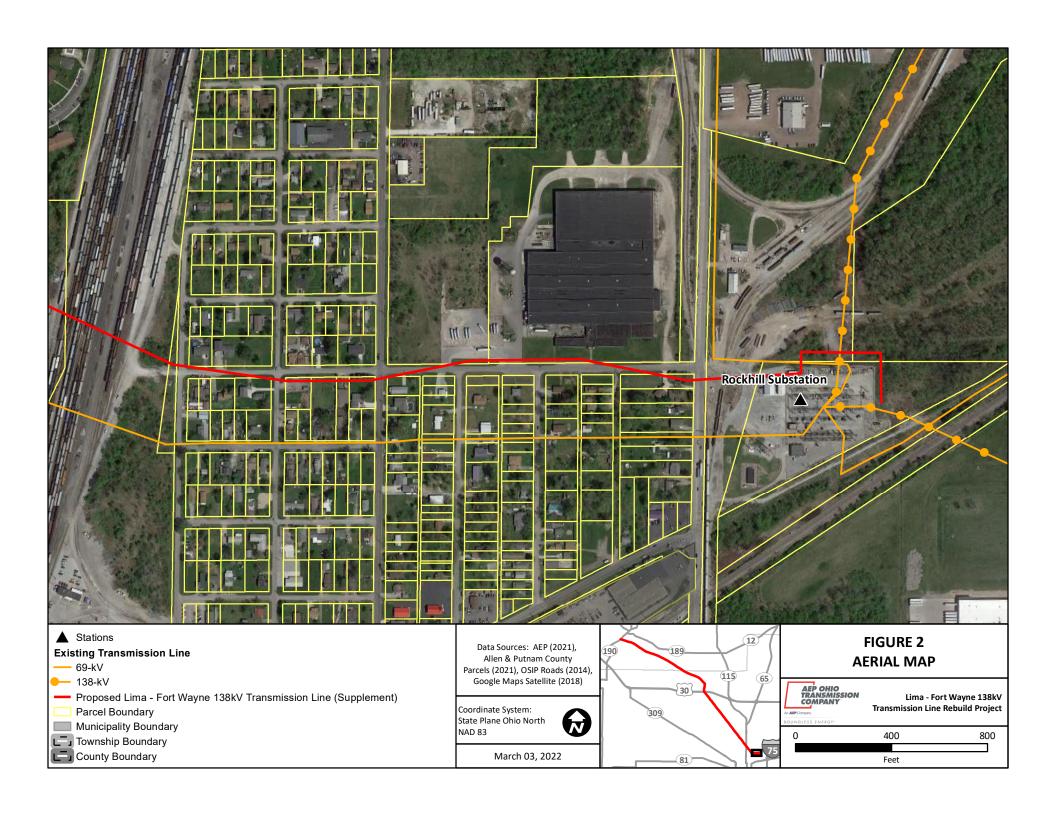












Appendix B PJM

PUCO FORM FE-T9 AEP OHIO TRANSMISSION COMPANY SPECIFICATIONS OF PLANNED TRANSMISSION LINES

1.	LINE NAME AND NUMBER:	North Delphos - Rockhill (s1563)
2.	POINTS OF ORIGIN AND TERMINATION	North Delphos, Rockhill
3.	RIGHTS-OF-WAY: LENGTH / WIDTH / CIRCUITS	15.4 miles (rebuild) / double circuit
4.	VOLTAGE: DESIGN / OPERATE	138kV / 138 kV
5.	APPLICATION FOR CERTIFICATE:	8/10/2021
6.	CONSTRUCTION:	2021-2024
7.	CAPITAL INVESTMENT:	\$24.5M
8.	PLANNED SUBSTATION:	N/A
9.	SUPPORTING STRUCTURES:	Steel
10.	PARTICIPATION WITH OTHER UTILITIES	N/A
11.	PURPOSE OF THE PLANNED TRANSMISSION LINE	Rebuild of existing line to address asset renewal concerns.
12.	CONSEQUENCES OF LINE CONSTRUCTION DEFERMENT OR TERMINATION	Unable to address concerns on line. Line continues to deteriorate and result is continued poor performance
13.	MISCELLANEOUS:	N/A
	1	- II



AEP Transmission Zone: Supplemental East Lima – Haviland 138kV

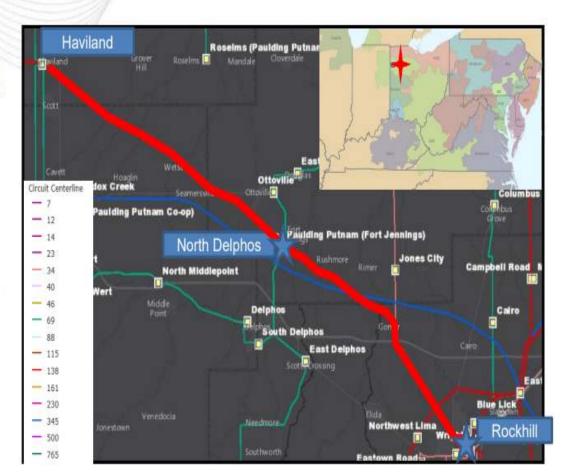
Previously presented on 2/14/2018 SRRTEP

Problem Statement:

Equipment Material/Condition/Performance/Risk:

The East Lima - Haviland 138kV line was originally constructed in 1925 with lattice towers and 397 ACSR conductor (167 MVA rating). The double circuit sectios of the line being rebuilt is approximately 30 miles long on the path from Haviland - North Delphos - Rockhill. There are 99 total open conditions along the line. There are numerous issues with the conductor and conductor hardware on this line. Armor grip suspension assemblies were installed during routine maintenance periods in an attempt to restore the strength of the conductor. However, crews have found many cases of broken conductor strands under these armor grip assemblies. In addition, the conductors' steel core has been found to be deteriorated in sections due to corrosion, which is a cause for concern as the mechanical strength of the wire can be compromised. Many insulators have lost their outer glaze, allowing contaminant buildup, compromised electrical integrity and growing risk of electrical failure. As this line was originally built in 1925, its design standards do not meet modern standards for strength, resilience, galloping and horizontal and vertical clearances for safety. Also, the easement conditions present sections with undefined width and have several encroachments.

Continued on next slide ...





AEP Transmission Zone: Supplemental East Lima – Haviland 138kV

Continued from previous slide...

Selected Solution:

Haviland – North Delphos 138kV: Rebuild 15.6 miles of double circuit 138kV line utilizing 1033 ACSR conductor (296 MVA rating) (S1563.1)

Estimated Cost: \$24.3M

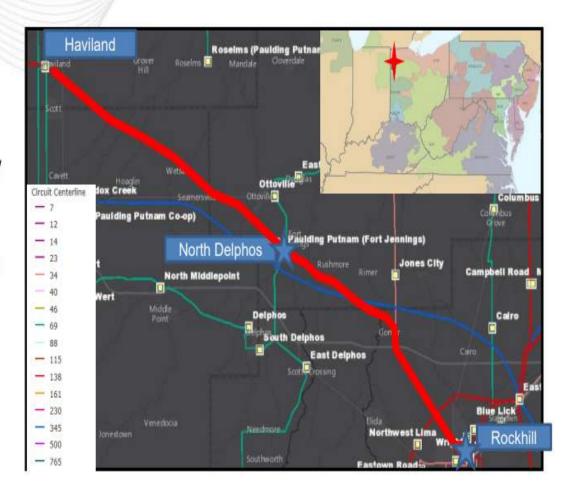
North Delphos – Rockhill 138kV: Rebuild 15.4 miles of double circuit 138kV line utilizing 1033 ACSR 1033 ACSR conductor (296 MVA rating) (S1563.2)

Estimated Cost: \$24.5M

Total Estimated Cost: \$48.8M

Projected In-service: 12/18/2020

Project Status: Engineering





AEP Transmission Zone: Baseline Project

Previously Presented: 8/31/2018 SRRTEP

Generator Deliverability and Common Mode Outage (Winter)

Below 200 kV

Problem Statement:

 The Logtown – North Delphos 138 kV line is overloaded for multiple contingencies in the winter case. (FG# GD-W290, GD-W291, GD-W39 and GD-W40)

Recommended Solution:

Convert S1563.2 into baseline (B3036)

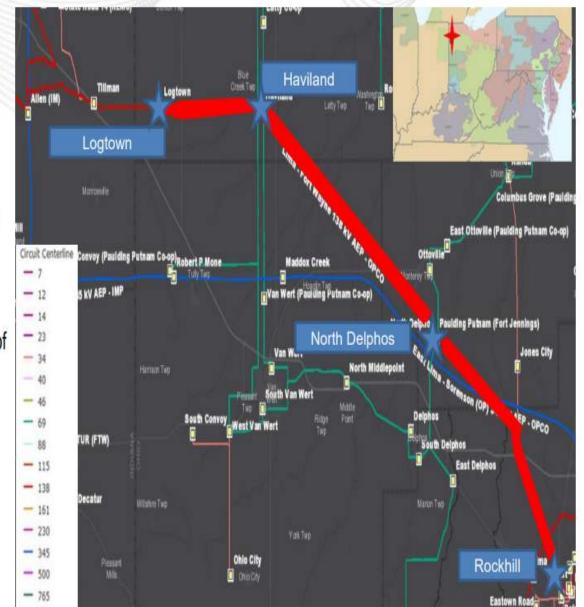
 S1563.2: North Delphos – Rockhill 138 kV: Rebuild 15.4 miles of double circuit 138 kV line utilizing 1033 ACSR 1033 ACSR conductor (296 MVA rating)

Estimated Project Cost: \$24.5 M

Required IS Date: 12/1/2023

Projected IS date: 12/18/2020

Status: Engineering



Appendix C Property Agreements

Parcel ID	Agreement Type	Easement Obtained
26-1900-01-001.000	Supplement Existing Easement	Yes
26-2000-01-002.000	Supplement Existing Easement	Yes
26-2000-02-001.000	Supplement Existing Easement	Yes
26-2000-04-001.000	Supplement Existing Easement	Yes
26-2100-03-001.000	Supplement Existing Easement	Yes
26-2100-03-003.001	Supplement Existing Easement	Yes
26-2800-01-002.000	New Easement	Yes
26-2800-01-004.000	New Easement	Yes
26-2800-01-005.000	New Easement	Yes
26-2800-01-011.002	New Easement	Yes
26-2800-01-011.003	New Easement	Yes
26-2800-02-002.000	Supplement Existing Easement	Yes
26-2800-03-001.000	Supplement Existing Easement	Yes
26-2800-04-002.000	Supplement Existing Easement	Yes
26-2806-01-001.000	Supplement Existing Easement	Yes
26-3300-01-001.000	Supplement Existing Easement	Yes
26-3300-01-002.000	Supplement Existing Easement	Yes
26-3300-01-004.000	Supplement Existing Easement	Yes
26-3400-02-003.000	Supplement Existing Easement	Yes
26-3400-02-003.002	Supplement Existing Easement	Yes
26-3400-03-001.000	Supplement Existing Easement	Yes
26-3400-03-005.000	Supplement Existing Easement	Yes
36-0200-03-001.000	Supplement Existing Easement	Yes
36-0200-03-002.000	Supplement Existing Easement	Yes
36-0300-01-001.000	Supplement Existing Easement	Yes
36-1100-01-007.001	Supplement Existing Easement	Yes
36-1100-01-007.003	Supplement Existing Easement	Yes
36-1100-01-007.007	Supplement Existing Easement	Yes
36-1100-02-002.000	New Easement	Yes
36-1100-04-001.001	Supplement Existing Easement	Yes
36-1100-04-002.000	Supplement Existing Easement	Yes
36-1100-04-005.000	Supplement Existing Easement	Yes
36-1100-04-006.000	Supplement Existing Easement	Yes
36-1200-03-002.000	Supplement Existing Easement	Yes
36-1200-03-003.000	Supplement Existing Easement	Yes
36-1200-03-008.000	Supplement Existing Easement	Yes
36-1200-03-008.001	Supplement Existing Easement	Yes
36-1302-03-005.000	Supplement Existing Easement	Yes

Parcel ID	Agreement Type	Easement Obtained
36-1302-03-010.000	Company Owned	N/A
36-1302-05-001.000	Supplement Existing Easement	Yes
36-1304-01-002.000	Supplement Existing Easement	Yes
36-1304-07-016.000	Supplement Existing Easement	Yes
36-1304-07-017.000	Supplement Existing Easement	Yes
36-1304-08-013.000	Supplement Existing Easement	Yes
36-2405-01-002.000	Supplement Existing Easement	Yes
36-2405-01-003.000	Supplement Existing Easement	Yes
36-2405-02-001.000	Supplement Existing Easement	Yes
36-2405-02-004.000	Supplement Existing Easement	Yes
36-2405-02-007.000	Supplement Existing Easement	Yes
37-1900-02-004.000	Company Owned	N/A
37-1900-03-001.000	Rebuild on Existing Rights	Yes
37-1900-03-001.001	Supplement Existing Easement	Yes
37-1900-03-004.000	Supplement Existing Easement	Yes
37-1900-04-001.000	Supplement Existing Easement	Yes
37-1900-04-003.000	Supplement Existing Easement	Yes
37-1912-05-002.000	New Easement	Yes
37-1912-09-001.000	Supplement Existing Easement	Yes
37-1912-09-002.000	Supplement Existing Easement	Yes
37-1912-09-005.000	Company Owned	N/A
37-1912-09-008.000	Supplement Existing Easement	Yes
37-1912-10-001.000	Supplement Existing Easement	Yes
37-1912-14-001.000	Company Owned	N/A
37-2000-03-003.000	Company Owned	Yes
140050500200	Supplement Existing Easement	Yes
140050700000	Supplement Existing Easement	Yes
140050710000	Supplement Existing Easement	Yes
140050920000	Supplement Existing Easement	Yes
140050930000	Supplement Existing Easement	Yes
140050940000	Supplement Existing Easement	Yes
140051700000	Supplement Existing Easement	Yes
140051900000	Supplement Existing Easement	Yes
140052000000	Supplement Existing Easement	Yes
140060410000	New Easement	Yes
140061040000	New Easement	Yes
140061500000	Company Owned	N/A
140061600000	Supplement Existing Easement	Yes

LETTER OF NOTIFICATION FOR LIMA-FORT WAYNE 138KV TRANSMISSION LINE REBUILD PROJECT

Parcel ID	Agreement Type	Easement Obtained
140070800000	Supplement Existing Easement	Yes
140070901500	Supplement Existing Easement	Yes
140071200000	Supplement Existing Easement	Yes
140110400000	Rebuild on Existing Rights	Yes
140121200000	Supplement Existing Easement	Yes
140121200100	Supplement Existing Easement	No
140121500000	Supplement Existing Easement	Yes
140121600000	Supplement Existing Easement	Yes
140121700000	Supplement Existing Easement	Yes
140131700000	Supplement Existing Easement	Yes
140131800000	Supplement Existing Easement	Yes
160360600400	Supplement Existing Easement	Yes
160360600500	Supplement Existing Easement	Yes
160361300000	Supplement Existing Easement	Yes
160370900000	Supplement Existing Easement	Yes
160371100000	Supplement Existing Easement	Yes
160371200000	Supplement Existing Easement	Yes
160371200200	Supplement Existing Easement	Yes
160371300100	Supplement Existing Easement	Yes
160371300200	Supplement Existing Easement	Yes
160371300300	Supplement Existing Easement	Yes
160371310000	Supplement Existing Easement	Yes
160371500000	Supplement Existing Easement	Yes
500221500000	Supplement Existing Easement	Yes
500222000000	Rebuild on Existing Rights	Yes
500230100000	Rebuild on Existing Rights	Yes
500230200100	Supplement Existing Easement	Yes

Appendix D Agency Coordination



In reply refer to 2017-PUT-39505

August 23, 2017

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

RE: North Delphos-Rockhill 139kV Rebuild Project in Jennings and Sugar Creek Townships, Putnam County, and Sugar Creek, American, and Bath Townships, Allen County, Ohio

Dear Mr. Weller:

This letter is in response to the correspondence received on July 26, 2017 regarding the proposed North Delphos-Rockhill 138kV Line Rebuild Project in Putnam and Allen Counties, Ohio. We appreciate the opportunity to comment on this project. The comments of the Ohio State Historic Preservation Office (SHPO) are submitted in accordance with the provisions of Section 106 of the National Historic Preservation Act of 1966, as amended (16 U.S.C.470 [36 CFR 800]).

The following comments pertain to the Phase I Archaeological Investigations for the Approximately 32.1 km (20 mi) North Delphos-Rockhill 138 kV Line Rebuild Project in Putnam and Allen Counties, Ohio by Weller & Associates, Inc. (2017).

A literature review, visual inspection, surface collection, shovel probe excavation, and shovel test unit excavation was completed as part of the investigations. One (1) Ohio Archaeological Inventory (OAI) site was identified during this investigation. OAI#33AL0232 is a prehistoric isolated find consisting of utilized flake of Upper Mercer chert found during shovel test unit excavation. Based on the information provided, we agree the archaeological site is not eligible for listing in the National Register of Historic Places (NRHP) and no further archaeological work is necessary.

The following comments pertain to the History/Architecture Survey for the 32.1 km (20 mi) North Delphos-Rockhill 138 kV Rebuild Project in Jennings and Sugar Creek Townships, Putnam County, and Sugar Creek, American, and Bath Townships in Allen County, Ohio by Weller & Associates, Inc. (2017).

The investigations included a background literature review and systematic survey of all properties 50 years of age or older that are situated within 1,000' of the centerline of the proposed project. In total, one hundred and forty-six (146) individual properties of fifty years of age or older were identified within the survey APE that may have a direct line-of-sight to the project. Out of the one hundred and five properties that were identified, eight were advanced to detailed study. Two DOE properties, ALL0045602 and ALL0049002, two previously recorded resources, ALL0045102 and ALL0054002, and six properties identified in the field, ALL0069702, ALL0069802, ALL0069902, ALL0070510, ALL0070602, and ALL0070702.

Weller recommends ALL0045102 and ALL0069702 as eligible for inclusion in the National Register of Historic Places (NRHP) under Criterion C, and ALL0069802 as eligible for inclusion in the NRHP under Criterion A. Our office agrees that these properties are NRHP-eligible.

Weller has provided documentation to support their contention that the proposed transmission line upgrade will not diminish the historic characteristics that may contribute to the above-referenced

RPR Serial No: 1069755, 1069756

Mr. Ryan Weller Page 2 August 23, 2017

properties' NRHP eligibility. Therefore, we agree that the project as proposed will have no indirect adverse effect on historic properties.

Based on the information provided, we agree the project will not affect historic properties. No further coordination with this office is necessary, unless the project changes or unless new or additional historic properties are discovered during implementation of this project. In such a situation, this office should be contacted.

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

Sincerely,

Krista Horrocks, Project Reviews Manager Resource Protection and Review

cc: Ron Howard, AEP (rmhoward@aep.com)



In reply, refer to 2021-ALL-53500

January 3, 2022

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

RE: Lima-Fort Wayne 138kV Transmission Line Baseline Project and Supplemental Project in Jennings/Sugar Creek Townships, Putnam County and Sugar Creek/American/Bath Townships, Allen County, Ohio

Dear Mr. Weller:

This letter is in response to the correspondence received on December 29, 2021 regarding the proposed Lima-Fort Wayne 138kV Transmission Line Baseline Project and Supplemental Project in Jennings/Sugar Creek Townships, Putnam County and Sugar Creek/American/Bath Townships, Allen County, Ohio. We appreciate the opportunity to comment on this project. The comments of the Ohio State Historic Preservation Office (SHPO) are made pursuant to Section 149.53 of the Ohio Revised Code 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]).

A majority of the project's alignment is located within the previously surveyed North Delphos-Rockhill 138kV Line Rebuild Project (Weller & Associates, Inc. 2017). The following comments pertain to the *Phase I Archaeological Investigations for the Lima-Fort Wayne 138kV Transmission Line Baseline Project and Supplemental Project in Jennings/Sugar Creek Townships, Putnam County and Sugar Creek/American/Bath Townships, Allen County, Ohio by Ryan J. Weller (Weller & Associates, Inc. 2021).*

A literature review, visual inspection, surface collection, shovel probe, and shovel test unit excavation was completed as part of the investigations. No previously identified archaeological sites are located within the revised project area and no new archaeological sites were identified during survey. Our office agrees no additional archeological investigation is needed. No additional history/architecture resources were identified that were not already addressed from previous surveys along this alignment. Ohio Historic Inventory (OHI)# ALL0070702 is located within the project area but was previously determined to be not eligible for listing in the National Register of Historic Places (NRHP).

Based on the information provided, we agree that the project as proposed will have no effect on historic properties. No further coordination with this office is necessary, unless the project changes or unless new or additional historic properties are discovered during implementation of this project. In such a situation, this office should be contacted. If you have any questions, please contact me at (614) 298-2022, or by e-mail at khorrocks@ohiohistory.org. Thank you for your cooperation.

Sincerely,

Krista Horrocks, Project Reviews Manager

Resource Protection and Review

RPR Serial No: 1091442

This foregoing document was electronically filed with the Public Utilities Commission of Ohio Docketing Information System on

3/7/2022 6:13:28 PM

in

Case No(s). 22-0154-EL-BLN

Summary: Notice Letter of Notification Part 1 electronically filed by Hector Garcia-Santana on behalf of Ohio Power Company