Siting Study

Kewanee – Enterprise Park 138 kV Transmission Project
Kentucky Public Service Commission
Case No. 2020-00062

Prepared for:

KENTUCKY POWER
An AEP Company
BOUNDLESS ENERGY™

Prepared by:

POWER Engineers, Inc.
11 S. 12th Street
Richmond, Virginia 23219

POWER ENGINEERS

Updated August 2020

This page left intentionally blank.

TABLE OF CONTENTS

Tables

Figures

Attachments

KEY TERMINOLOGY

Alternative Routes	Assemblage of Study Segments that form routes for analysis and comparison.
Conceptual Routes	Initial routes for the project that adhere to a series of general siting and technical guidelines.
Constraints	Specific areas that should be avoided to the extent reasonably practical during the route development and site selection process.
Certificate of Public Convenience and Necessity	An application required for transmission line projects that exceed 138 kV and one mile in length are to be submitted to the Kentucky Public Service Commission for approval.
Distribution Line	An electric line that delivers power from a substation to households and businesses.
Opportunity Feature	Areas where the transmission line may have less disruption to area land uses and the natural and cultural environment.
Project Endpoint	The project starting and ending point(s), which may include substations, switch stations, tap points, or other locations defined by the Company's planners and engineers.
Proposed Route	The alignment on which the applicant/Siting Team proposes to construct a transmission line. The Proposed Route (1) reasonably minimizes adverse impacts on area land uses and the natural and cultural environment; (2) minimizes special design requirements and is cost effective; and (3) can be constructed and operated in a timely, safe and reliable manner.
Segment Endpoint	The intersection of two or more Study Segments.
Siting Team	A multidisciplinary team of experts in transmission line routing, impact assessment for a wide variety of natural resources and the human environment, impact mitigation, engineering, and construction management.
Study Area	The territory in which line route alternatives can be sited to feasibly meet the Project's functional requirements and minimizes environmental impacts.
Study Segments	Study Segments are partial alignments that when combined form a complete route.

Substation	Substations are facilities that transform electric power from high to low, or the reverse in an enclosed assemblage of equipment, e.g., switches, circuit breakers, buses, and transformers, through which electric energy is passed for the purpose of switching or modifying its characteristics.
Substation Site	Potential substation locations.
Switching Station	A particular type of substation without transformers and operating only at a single voltage level.
Tap Point	The location where power is tapped from an existing transmission line to source a substation.
Transmission Line	An electric line that moves bulk electric power from a generating plant to a substation or between substations.

ACRONYMS

AEP	American Electric Power
Application	Application of a Certificate of Public Convenience and Necessity
CAM Mining	Cam Kentucky Real Estate, LLC
Company	Kentucky Power Company
CPCN	Certificate of Public Convenience and Necessity
EHV	Extra High Voltage
Enterprise Park	Kentucky Enterprise Industrial Park
FAA	United States Federal Aviation Administration
FEMA	United States Federal Emergency and Management Agency
GIS	Geographic Information System
GNIS	Geographic Names Information System
GPS	Global Positioning System
IPaC	Information for Planning and Consultation
LiDAR	Light Detection and Ranging Data
KDFWR	Kentucky Department of Fish and Wildlife Resources
KHC	Kentucky Historic Council
Kentucky Power	Kentucky Power Company
KOSA	Kentucky Office of State Archaeology
KSNPC	Kentucky State Nature Preserves Commission
kV	kilovolt
NCED	National Conservation Easement Database
NERC	North American Electric Reliability Corporation
NESC	National Electric Safety Code
NHD	National Hydrography Dataset
NLCD	National Land Cover Database
NRHP	National Register of Historic Places
NWI	National Wetlands Inventory
POWER	POWER Engineers, Inc.

Project	Kewanee – Enterprise Park 138 kV Transmission Project
PSC	Public Service Commission
ROW	Right-of-Way
SHPO	Kentucky State Historic Preservation Office
UMG	Utility Management Group, LLC
USFWS	United States Fish and Wildlife Service
USGS	United States Geological Survey
US Hwy	United States Highway
WPP	Western Pocahontas Properties

This page left intentionally blank.

1.0 PROJECT OVERVIEW

Kentucky Power Company (Kentucky Power or the Company) and American Electric Power (AEP) are proposing to construct a new overhead electric transmission line and a new substation to improve electric reliability to customers in eastern Kentucky by making upgrades to the power grid in Floyd and Pike counties. The proposed project will connect the existing Sprigg – Beaver Creek 138 kilovolt (kV) Transmission Line to a proposed substation to be located adjacent to the Kentucky Enterprise Industrial Park (the Enterprise Park). The 300-acre Enterprise Park is located west of United States Highway (US Hwy) 23 and in the City of Pikeville (see Figure 1, Project Location Map). The project will retire the aging 46 kV system and replace it with a robust 138 kV system.

The proposed project includes constructing approximately five miles of new double circuit 138 kV transmission line between a tap point on the existing Sprigg – Beaver Creek 138 kV Transmission Line ("Kewanee 138 kV Transmission Line Extension" or "Kewanee Extension") and the proposed 138 kV substation located immediately south and adjacent to the Enterprise Park ("Kewanee 138 kV Substation"). The proposed Kewanee 138 kV Substation will replace the existing Fords Branch Substation, which will be retired due to its aging and deteriorating condition (collectively, the "Project"). Kentucky Power has purchased approximately 16.4 acres for the proposed Kewanee 138 kV Substation, but additional acreage may be required for the necessary stormwater controls. The Project transmission line will be constructed within a new 100-foot right-of-way (ROW). The proposed transmission line structures will be constructed of largely steel lattice tower that average approximately 110 feet tall. Other structure types may be used, as necessary and for unique design situations. Tree clearing and pre-construction activities are expected to begin early 2023 and be completed by the end of 2023.

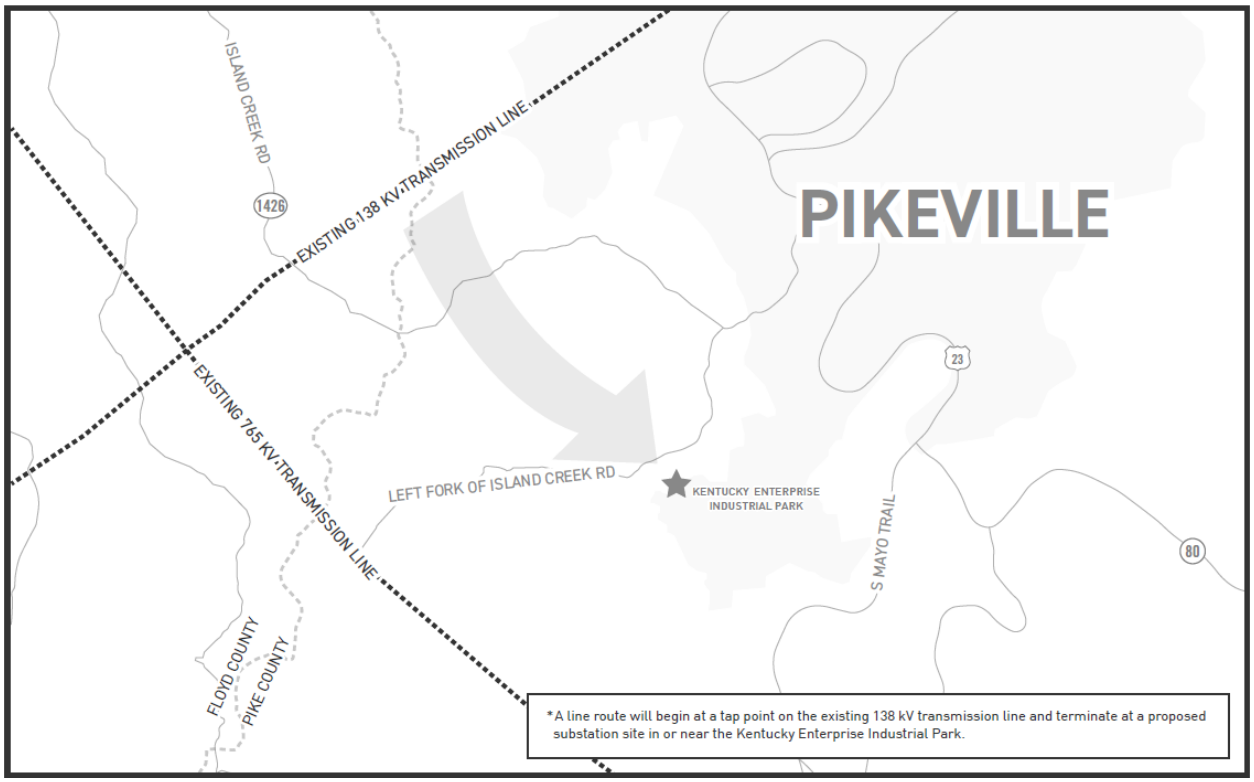


Figure 1. Project Location Map

1.1 Project Purpose and Need Summary

Kentucky Power contracted POWER Engineers, Inc. (POWER) to prepare a siting study to support Kentucky Power's application (the Application) for a Certificate of Public Necessity (CPCN) to the Kentucky Public Service Commission (PSC). The Siting Study for the Project discusses the environmental and land use constraints identified within the study area, documents siting methodologies and guidelines, documents public involvement, provides an evaluation of alternative routes, and aids in the selection of the Proposed Route. The document also provides the basis for Kentucky Power to identify a Proposed Route that most suitably addresses the Kentucky Guidelines filed under Kentucky Regulatory Statute 278.020 (2).

The Project is required to replace the aging 46 kV system with a robust 138 kV transmission system and to provide new 12 kV/34.5 kV electrical distribution service to the general area including portions of Pike County, the City of Pikeville, and the Enterprise Park. Once complete, the transmission and substation upgrades will reduce the likelihood of extended outages and allow aging infrastructure to be retired. Kentucky Power has purchased a 16.4 acre parcel located immediately south and adjacent to the Enterprise Park in Pike County, Kentucky for the

construction of the new substation. However, additional acreage may be required to construct the necessary stormwater controls.

1.2 Project Characteristics

1.2.1 Project Endpoints and Improvement Description

The Project begins in the eastern portion of Floyd County, Kentucky where the Project taps the existing Sprigg – Beaver Creek 138 kV Transmission Line and crosses into the adjoining western portion of Pike County, where most of the transmission line is located. The 138 kV transmission line terminates at a proposed substation site adjacent to the Enterprise Park.

The proposed Kewanee 138 kV Substation will replace the existing Fords Branch Substation, which is located approximately two miles east of the Enterprise Park. The existing Fords Branch Substation equipment and infrastructure are deteriorating or otherwise inadequate and must be replaced. Given the footprint of the Fords Branch Substation, there is inadequate space to upgrade the infrastructure to meet current design needs. The new substation location must serve the existing Fords Branch Substation customers and will serve any businesses within the Enterprise Park. A total of five sites (within or near the Enterprise Park) were evaluated for the proposed Kewanee 138 kV Substation and are detailed in **Attachment A – Substation Site Selection Study**.

1.2.2 Transmission Line and Substation Design and ROW Requirements

The Project consists of building approximately five miles of new double circuit 138 kV transmission line (Kewanee 138 kV Transmission Line Extension) and the proposed Kewanee 138 kV Substation. Structure type may vary along the line route depending on the needs of the Project; however, the typical structure used for the Project will consist of steel lattice towers that average approximately 110 feet tall (**Figure 2**). A short section of the Sprigg – Beaver Creek 138 kV Transmission Line between the new tap structure and the adjacent structures on the 138 kV transmission line will be removed during an outage. The Project will be built within a new 100-foot ROW and is not a rebuild of an existing transmission line.

Kentucky Power plans to file a corridor for approval from the PSC. The filing corridor allows for flexibility in the location of the final centerline for the ROW and to accommodate final engineering, ground surveys, minimization of impacts to resources, and property owner input. Once the PSC approves the Project, Kentucky Power will work with property owners to determine the final alignment of the ROW. Easements will be acquired across private lands for the new transmission line ROW. ROW agents within the Siting Team will work with the affected

landowners to provide fair compensation for the easements. Based on the above input, Kentucky Power will finalize the locations for the proposed structures and ROW within the PSC approved corridor.

Figure 2. Proposed Typical Structure (Steel Lattice Tower)

1.2.3 Kewanee 138 kV Substation

Kentucky Power proposes to construct the Kewanee 138 kV Substation on a site located immediately south and adjacent to the Enterprise Park in Pike County. The new Kewanee 138 kV Substation includes a fenced gravel pad that is expected to cover a 335-foot by 280-foot area (approximately 2.5 acres). An approximate 16.4-acre parcel has been purchased by Kentucky Power for construction of an electrical substation that will support the Project. However, additional acreage may be required to purchase from the City of Pikeville for the construction of the station and necessary stormwater controls. The proposed Kewanee 138 kV Substation will replace the existing Fords Branch Substation and provide new 12 kV/34.5 kV electrical distribution service to the general area including portions of Pike County, the City of Pikeville and the Enterprise Park.

Upon PSC approval of the Project and any appropriate studies or agency approvals, Kentucky Power will grade the site to accommodate the proposed substation's foundation, equipment, and facilities.

1.2.4 Construction and Maintenance Considerations

The Kewanee 138 kV Transmission Line Extension and new substation requires surveying, ROW clearing, foundation installation, structure assembly and erection, conductor and shield wire installation, and restoration upon completion. Construction operations will be conducted with attention to the preservation and enhancement of the natural habitat and the conservation of natural resources. The following criteria will be used to attain this goal. These criteria are subject to adjustment according to the rules and judgments of any public agencies whose lands may be crossed by the proposed line. Construction activities should be conducted in accordance with all applicable local, state, and federal permits.

1. Disturbance of construction areas and laydown yards will be minimized. These areas will be graded in a manner that will minimize erosion and conform to the natural topography.
2. Soil excavated during construction and not used for other purposes will be evenly backfilled onto a cleared area. Backfilled soil will be sloped gradually to conform to the terrain and adjacent land.
3. Erosion control devices will be constructed where necessary to reduce soil erosion in the ROW.
4. Storm water Best Management Practices and implementation of appropriate soil design features will be used as necessary to reduce the effects of erosion.
5. If any roads are found to be necessary, they will not be constructed on unstable slopes. Where feasible, service and access roads are constructed jointly but none are expected in this project.
6. Clearing and construction activities near streambeds will be performed in a manner that will minimize damage to the natural condition of the area. Stream banks will be restored as necessary to minimize erosion.
7. Concerted and diligent effort will be made to prevent accidental oil spills and other types of pollution, particularly while performing work near streams, lakes, and reservoirs.
8. Precautions will be taken to prevent the possibility of accidentally starting fires.
9. Tension stringing of conductors will be employed, which may reduce the amount of vegetation clearing necessary.
10. Precautions will be taken to protect natural features and cultural resources (identified by site-specific studies of the Project) along the ROW, if any are found.

11. If federal protected species or habitat is present, guidance from the United States Fish and Wildlife Service (USFWS) will be obtained prior to clearing or construction activities.
12. Soil disturbance during construction will be kept to a minimum, and restorative measures will be taken in a reasonable length of time.

1.3 Project Timeline and Overview of Regulatory Approvals

The Project was initiated in the fall of 2017 to support the retirement of the Fords Branch Substation. AEP's planning engineers determined the need to replace the aging 46 kV system with a new 138 kV source, which will increase electric reliability to customers by making upgrades to the power grid in Floyd and Pike counties. As such, the Kewanee 138 kV Transmission Line Extension would need to tap the existing Sprigg – Beaver Creek 138 kV Transmission Line between the community of Galveston and the City of Pikeville. A tap point any farther east or west on the Sprigg – Beaver Creek 138 kV Transmission Line would add unnecessary transmission line length and non-standard design requirements (**Attachment B – Map 1**). The Siting Team, as described in Section 2.2, completed the detailed route development and substation site selection process in 2018, with an update to materials in April 2020, as discussed through Section 2.0. During this time, the Siting Team collected environmental resource data, developed routing criteria, conducted an opportunities and constraints analysis, developed preliminary study segments, conducted field visits to verify the data and aid in the development of Alternative Routes (as discussed in Section 3.0).

Throughout the detailed route development process, the Siting Team coordinated with key stakeholders. On March 8, 2018, Kentucky Power representatives met with Pike County and the City of Pikeville officials to introduce the Project and discuss the need. Kentucky Power spoke with Judge Executive Hale from Floyd County to discuss the Project; an in person meeting was not requested nor required by the county, as he did not have any comments on the Project. Another stakeholder meeting was held on March 19, 2018 with Cam Kentucky Real Estate, LLC (CAM Mining) to discuss future mining plans within the Study Area and to minimize impacts from the Project. The Siting Team met with Utility Management Group, LLC (UMG) to discuss the water line system throughout the Enterprise Park and general information about the Study Area. Detailed summaries of each meeting conducted are included in **Attachment C – Stakeholder Meeting Notes**.

Kentucky Power published a news release on March 20, 2018 to generally announce the Project and inform landowners that study segments were under development. On April 19, 2018, AEP announced the Project to the public with a news release and public map showing study segment

network. A public open house was held May 3, 2018 at Pikeville High School in the City of Pikeville to solicit feedback from the public and landowners affected. No major route modifications were made based on the public input as outlined in Section 3.4.3. Kentucky Power continued to speak with landowners along the study segments about the Project to aid in the selection of the Proposed Route.

After evaluating the public feedback from the open house and reviewing engineering considerations, a Proposed Route was chosen in June 2018. The proposed site for the Kewanee 138 kV Substation is located immediately south and adjacent to the Enterprise Park and in the City of Pikeville limits. The section of the proposed site is discussed further in **Attachment A – Substation Site Selection Study** and was also chosen in conjunction with the Proposed Route.

A CPCN Application for the Project was initially filed on August 10, 2018 and conditionally approved in December 2018. The Project Team reviewed the need for the Project and plans to file a new CPCN Application in August 2020. Additional information is provided in Section 5.1.2. Kentucky Power's anticipated in-service date for the Project is the end of 2023.

1.4 Goal of the Siting Study

The goal of the Siting Study is to gain an understanding of the opportunities and constraints in the Study Area to facilitate the development of Alternative Routes, evaluate potential impacts associated with the Alternative Routes, and identify a Proposed Route and one or more Alternative Routes. The Proposed Route is the route that: (1) reasonably minimizes adverse impacts on residential areas and the natural and cultural environment; (2) minimizes special design requirements and unreasonable costs; and (3) permit the line to be constructed and operated in a timely, safe, and reliable manner.

2.0 ROUTE AND SITE DEVELOPMENT PROCESS

2.1 Route Development Process Summary/Methodology

The route development process is inherently iterative with frequent modifications made throughout the study as a result of the identification of new constraints, input from agencies, landowners, and other stakeholders, periodic re-assessment of routes with respect to the siting criteria, and adjustments to the overall route network. As a result of the evolving nature of the route development process, the Siting Team (see Section 2.2) uses specific vocabulary to describe the routes at different stages of development.

Initial route development efforts start with the identification of large area constraints and opportunity features within the Study Area, which encompasses the endpoints of the Project and areas in between **(Figure 3, Step 1)**. These areas are typically identified using a combination of readily available public data sources as described in Section 2.3.

The Siting Team uses this information to first develop an array of Routing Concepts for the Project adhering to a series of general siting and technical guidelines (**Figure 3, Step 2**).

Where two or more of these conceptual routes intersect, Preliminary Study Segments are formed between two common nodes or points of intersection. The Preliminary Study Segments are partial alignments originating from the Routing Concepts based on the siting process and criteria. After conducting field reviews and considering input from stakeholders, the Preliminary Study Segments are refined to a smaller network. Together, the assemblage of Study Segments and their intersecting nodes are referred to as the Study Segment Network **(Figure 3, Step 3)**.

As the route development process continues, the Siting Team evaluates new data and modifies, if necessary, the Study Segments included in the network to develop a Refined Study Segment Network **(Figure 3, Step 4)**. Eventually, formal Alternative Routes are developed by assembling the Study Segments that meet the siting guidelines into individual routes for analysis **(Figure 3, Step 5)**. Alternative Routes are assessed and compared with land uses, natural and cultural resources, and engineering and construction concerns. Ultimately, through a quantitative and qualitative analysis and comparison of the Alternative Routes, the Siting Team identifies a Proposed Route for submittal to the PSC **(Figure 3, Step 6)**.

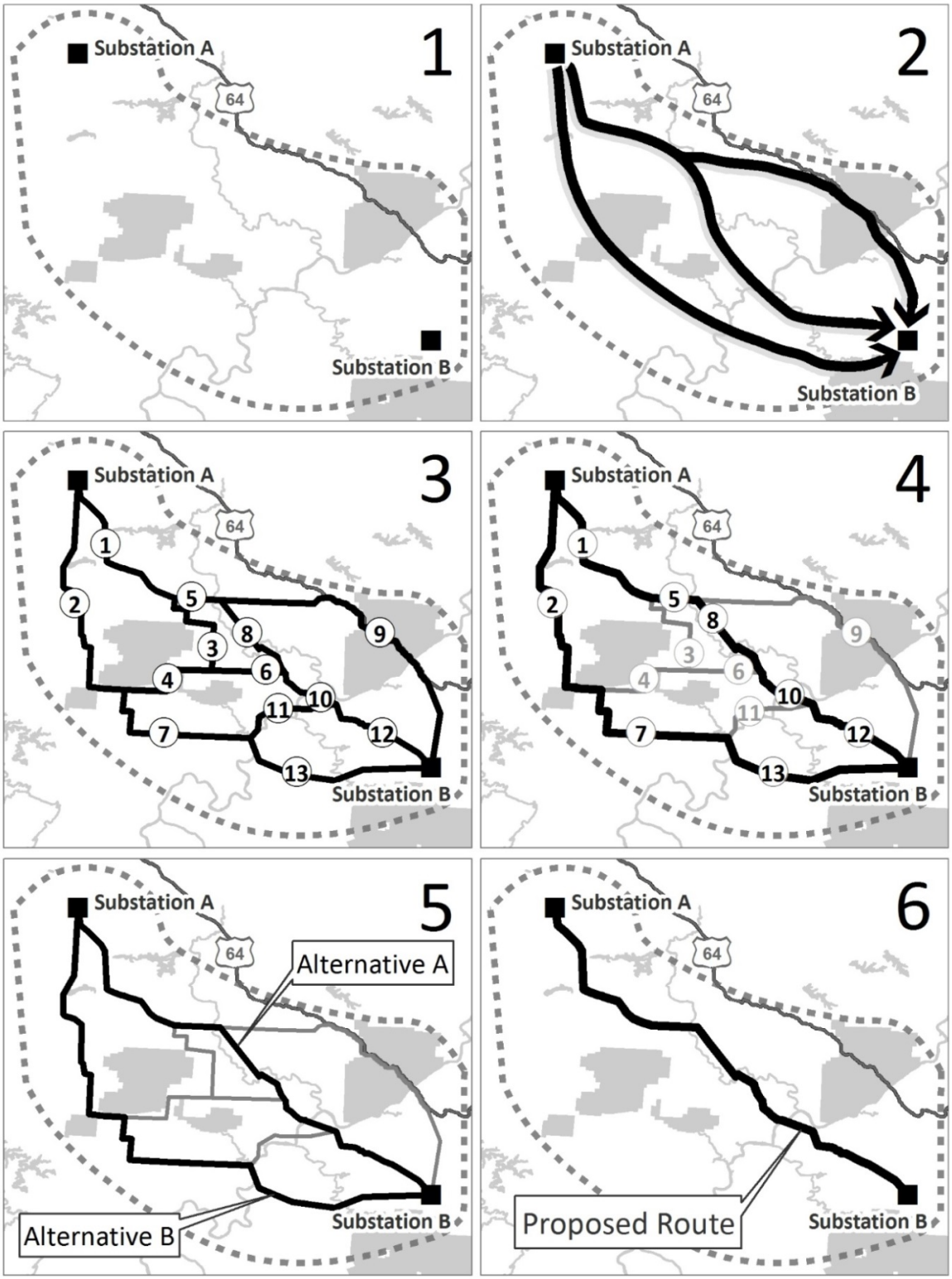


Figure 3. Route Development Process Steps

2.2 Siting Team Members

A multi-disciplinary Siting Team performed the Siting Study. Team members were selected to bring wide experience to the Siting Study to achieve a thorough review of all aspects of developing the route. Members of the Siting Team have experience in transmission line siting, impact assessment for a wide variety of natural resources and the human environment, impact mitigation, engineering, and construction management.

The team worked together during the Siting Study to define the Study Area, develop siting criteria, identify siting constraints and opportunities, collect and analyze environmental and design data, solicit public input and concerns, consult with natural resource and permitting agencies, develop and revise the siting study segments and alternatives, and analyze and report on the selection of a Proposed Route.

2.3 Data Collection

The following sources of information were used to develop data for the Siting Study. Data was reviewed and collected for existing land uses, natural resources, cultural resources, transportation facilities, and existing utility and linear features. A detailed table of data sources is provided in **Attachment D – GIS Data Sources**. The Siting Team collected and reviewed the data in the following sections to support the Siting Study.

2.3.1 Geographic Information System (GIS) Data Collection

Aerial photography is an important tool for route selection. The primary sources of aerial imagery used in the route identification, analysis, and selection effort for the Project include:

- Light Detection and Ranging Data (LiDAR) (flown for Project May 9 – 11, 2018)
- Esri
- Google

The following summary of GIS data was collected:

- Land Uses
    - Floyd and Pike counties Property Valuation Administrator to obtain parcel data and ownership including heirships.
    - Geographic Names Information System (GNIS) data to verify institutional uses such as parks and recreational facilities.
    - Federal Aviation Administration (FAA) database to verify airfields and heliports.

- Roads and railroads from various publicly available data sources.
- Mining permit areas such as those centrally located within the Study Area from the Kentucky Mine Mapping Information System.
- S&P Platts database to verify gas and oil well data.
- Transmission lines, communication towers, and natural gas pipelines from various publicly available data sources and Kentucky Power.
- National Land Cover Database (NLCD) data.
- National Conservation Easement Database data.
- GNIS data and other publicly available data for roads, railroads, and airports.

- Natural Resources
  - National Wetland Inventory (NWI) wetland locations.
  - National Hydrographic Data (NHD) stream locations.
  - United States Federal Emergency and Management Agency (FEMA) designated floodplains and floodways.
  - USFWS federally-listed threatened, endangered, rare or sensitive species information [see **Attachment F – USFWS Information for Planning and Consultation (IPaC)**].

- Cultural Resources
  - GNIS data to verify locations of institutional uses such as schools, cemeteries and places of worship.
  - Sites listed or eligible for listing on the National Register of Historic Places (NRHP).
  - Kentucky Historic Council (KHC) State Historic Preservation Office (SHPO) and the Kentucky Office of State Archaeology (KOSA) for previously surveyed archaeology sites and architectural resources.

Updated information, such as the location of new residences and other constraints, was annotated to the photography by either paper maps (at the public meetings) and transferred into the GIS, or digitized directly into the GIS as identified during field inspections.

The study made extensive use of information in existing GIS data sets, obtained from many sources, including federal, state, and local governments. Much of this information was obtained through official agency GIS data access websites, some was provided directly by government

agencies, and the Siting Team created some by digitizing information from paper-based maps, aerial photo interpretation, interviews with stakeholders and field inspections.

GIS data sources vary with respect to their accuracy and precision. For this reason, GIS-based calculations and maps presented throughout this study should be considered reasonable approximations of the resource or geographic feature they represent and not absolute measures or counts. The data and calculations presented in this study allow for relative comparisons among project alternatives, with the assumption that any inherent errors or inaccuracies would be generally equal across all alternatives. Field reconnaissance is conducted to verify certain features (e.g., locations of residential, commercial and industrial buildings). **Attachment D** presents a list of the GIS data sources and the specific datasets used for this study.

2.3.2 Field Reconnaissance

Field reconnaissance is critical to verify data and gain additional qualitative insight. Siting Team members conducted field inspections within the Study Area throughout the duration of the Siting Process. The team members examined Study Segments by automobile from public roads and other points of public access and correlated observed features to information shown on aerial photography, United States Geological Survey (USGS) 7.5 minute topographic maps, road maps, and the range of GIS sources compiled. Prior to field work, some key features such as residences, outbuildings, places of worship, cemeteries, and commercial and industrial areas were identified and mapped in GIS. These features were then field-verified, and added to the GIS database using laptops/tablets running GIS software supported by real-time Global Positioning System (GPS) during field reconnaissance efforts.

The primary goal of the detailed reconnaissance is to verify existing residential, commercial, or industrial structures located in proximity to Project study segments not visible on aerial photography or available from GIS data. Two field visits were conducted in 2017 (September 20, 2017 and December 11 and 12, 2017) to gain a high level understanding of the Project area and kick off the Project. On April 5, 2018, Siting Team members visited the Study Area to evaluate the substation sites and the preliminary study segments in order to make any necessary modifications, refinements, and/or removals of these components. Following the May 3, 2018 public open house, the Siting Team visited the Study Area to review comments received and areas of concerns for consideration in the development, modification, or removal of study segments for use in the alternative routes. The Siting Team members also reviewed all 138 kV tap locations in more detail and the 765 kV parallel options for constructability. A detailed route reconnaissance was completed May 29, 2018 to June 1, 2018 to verify structures and buildings within the study segment network (as described in Section 3.4). Lastly, on February 24 and 25,

2020, members of the Siting Team reviewed the Project area and accessible road crossings in the field to confirm there were no changes from the initial analysis.

2.3.3 Federal, State and Local Government Coordination

Agency coordination is a vital part of the routing and data collection process. The Siting Team obtained information from or contacted various federal, state, and local agencies and/or officials to inform them of the Project and request data for the route planning process. The integration of the regulatory agency coordination and local contact efforts allowed Kentucky Power to consider very specific input and comments for the Project Area, while considering cultural resources, environmental conditions, engineering, and constructability. Cultural resources information for the Project was acquired via a Full Historic Resources Site Check in March 2018 to the KHC. The request provided a GIS shapefile specifically created for the Project that shows historic resources (architectural and archaeological) located within the Study Area. The below environmental agencies were contacted to introduce the Project and request information on environmental resources that may occur in the Study Area. Response from the environmental agencies did not reveal any challenges in their jurisdictions; however, continued cooperation throughout the siting process was requested. Copies of agency correspondence are included as **Attachment E – Agency Correspondence**.

Federal Agencies

- USFWS

State Agencies

- Kentucky Department of Fish and Wildlife Resources (KDFWR)
- Kentucky State Nature Preserves Commission (KSNPC)
- KHC

Local Agencies and/or Officials

Local coordination on the Project was initiated on March 8, 2018, when AEP and Kentucky Power representatives met with local officials from the City of Pikeville and Pike County to introduce the Project. A Siting Team representative contacted Floyd County shortly after to present and discuss the Project. Other local legislators were contacted on April 30, 2018 for an in-person meeting and were invited to the May 3, 2018 public open house. The counties were notified again in March 2020 to inform them of Kentucky Power's intent to re-file the Project. Additionally, landowners located within the 1,000-foot filing corridor were mailed a letter to inform them about the

Project. The purpose of this communication was to notify, educate, and collect input from the local officials regarding the need for and benefits of the Project, as well as to elicit input on possible locations for the proposed facilities.

2.3.4 Other Stakeholders

On March 19, 2018, members of the Siting Team met with CAM Mining to discuss preliminary routes and to receive feedback regarding their mining permit areas in the northern portions of the Study Area (as shown in **Attachment B – Map 1**). On April 4, 2018, members of the Siting Team met with UMG, a utility organization that maintains water lines throughout the Enterprise Park and owns a water tower in close proximity to a possible site location for the Kewanee 138 kV Substation. The purpose of this meeting was to elicit a response for potential impacts to the water lines throughout the Enterprise Park as a result of the potential substation sites.

Kentucky Power representatives attempted to contact landowners crossed by the study segments. Feedback from the landowners was brought to the Siting Team in order to address concerns, criticism, and support of the Project. On April 19, 2018, AEP announced the Project to the public with a news release, website, and public map showing the study segment network. A public open house was held May 3, 2018 at Pikeville High School in the City of Pikeville to elicit feedback from the public and landowners affected as described in Section 2.5. No major route modifications were made based on the public input as outlined in Section 3.4.3.

Members of the Siting Team met with Western Pocahontas Properties (WPP) and Raven Coal on March 24 and May 21, 2020 to discuss mining permit areas, agreement options, and a potential shift to the Proposed Route, discussed further in Section 5.0. All stakeholder meeting summaries can be found in **Attachment C – Stakeholder Meeting Notes**.

2.4 Siting Guidelines

2.4.1 General Guidelines

The primary goal for this siting effort was to identify a route for the Project that (1) reasonably minimizes adverse impacts on residential areas and the natural and cultural environment; (2) minimizes special design requirements and unreasonable costs; and (3) permit the line to be constructed and operated in a timely, safe, and reliable manner. Although no Proposed Route can optimally minimize impacts across all area resources, the Siting Team used a series of general siting guidelines to direct the development, evaluation, and selection of routes toward this overall goal.

The following guidelines were considered for this effort:

- Consider parallel alignments along existing ROWs or other infrastructure such as the existing Big Sandy – Broadford 765 kV Transmission Line.
- Maximize the separation distance from and/or minimize impact on dwellings, schools, daycare facilities, hospitals, and other community facilities.
- Consider stakeholder input as practical.
- Avoid or minimize visibility from populated areas, scenic roadways, and designated scenic resources.
- Minimize interference with economic activities, including agricultural, mining, and natural gas activities.
- Avoid or minimize conflict with existing and proposed future development and land uses.
- Avoid crossing or minimize conflict with designated public resource lands such as national and state forests and parks, large camps and other recreation lands, designated battlefields, nature preserves or other designated historic resources and sites, and conservation areas.
- Minimize environmental impact and construction/maintenance cost by selecting shorter, direct routes; route corridors through terrain where economical construction and environmental best management practices can be employed, and where line operational/maintenance is most feasible (e.g., use existing access roads where practicable such as those located along the existing Big Sandy – Broadford 765 kV Transmission Line).
- Avoid or minimize new crossings of large lakes, rivers and large wetland complexes, critical habitat, and other unique or distinct natural resources.
- Minimize habitat fragmentation and impacts on designated areas of biodiversity concern.

2.4.2 Technical Guidelines

Technical guidelines are driven by the physical characteristics and engineering limitations of the structures and lines themselves, and the design criteria necessary to meet AEP design standards, North American Electric Reliability Corporation (NERC) reliability standards, National Electric Safety Code (NESC), and typical industry practices for construction. The technical guidelines were informed by (1) the technical expertise of engineers and other industry professionals responsible

for the reliable, safe and economical construction, operation, and maintenance of electric system facilities; (2) NERC reliability standards as implemented by PJM; and (3) typical industry practices.

The Siting Team considered the following technical guidelines during the development, evaluation, and comparison of routes.

- Minimize crossings of extra high voltage (EHV) transmission lines.
- Maintain the required centerline to centerline separations when paralleling EHV transmission lines.
- Maintain a minimum of 100-foot centerline to centerline separation when paralleling 138 kV or lower voltage transmission lines.
- Utilize existing access roads when possible.
- Avoid potential terrain slips/slides with access roads and transmission line structure locations.
- Consider long term operation and maintenance of the transmission line facilities.
- Minimize heavy angles greater than 65 degrees for rural transmission projects to reduce the need for large dead-end structure types and added costs.
- Minimize structures on steep slopes (generally, this is more than 20% slopes for angle structures and more than 30% for tangent structures), particularly if guy wires are required for construction.
- Avoid triple circuit lines.
- Minimize the number and duration of customer outage requirements during construction.
- Cross roadways, rivers, and railroads at a close to perpendicular angle and avoid placing structures within limited access ROWs.

2.5 Public Involvement Process

2.5.1 Public Open House

A public open house was held May 3, 2018 from 5:30 – 7:30 p.m. at Pikeville High School located at 120 Championship Drive in Pikeville, Kentucky. The Siting Team set up stations at the meeting and provided information related to engineering and design of the structures, Project need, real estate and ROW issues, and the siting process. Landowners within a pre-established corridor

around the study segment network were notified about the time and location of the meeting through the following means:

1. Landowners within 250 feet of the Project study segments received two automated telephone notifications from Kentucky Power on April 24 and May 2, 2018.
2. Landowners within 250 feet of the Project study segments received two automated telephone notifications from Kentucky Power on April 24 and May 2, 2018.
3. Mailings for affected landowner letters and project fact sheets were sent on April 18, 2018 to landowners within 250 feet of the Project study segments, as well as several parcels that fell just outside of the 500 foot corridor, but between study segments. A total of 189 letters and fact sheets were mailed to landowner addresses.
4. Mailings for post card invitations indicating the location for the public open house were sent April 23, 2018 to landowners within 250 feet of the Project study segments, as well as several parcels that fell just outside of the 500-foot corridor, but between study segments. A total of 189 post cards were mailed to landowner addresses.
5. Two advertisements ran in the *Appalachian News Express*. The first advertisement introduced the Project to the community on three separate occasions in March 2018. The second advertisement informed the community of the open house on two separate occasions in April 2018.
6. A total of three news releases were distributed for the Project on March 20, April 19, and June 25, 2018.
7. The public open house meeting was announced on the Project website on April 19, 2018 established by Kentucky Power (see Section 2.5.2).

Printed maps at a scale of 1-inch equals 200 feet were provided at the open house for the public to review and were used to record written comments concerning sensitive resources in their local environment. Members of the Siting Team greeted meeting attendees, answered questions about the Project, and aided attendees in locating their property or other features of concern on aerial maps showing the array of existing infrastructure, study segments, and the potential substation locations under consideration. Participants were encouraged to document the location of their houses, places of business, property of concern, or other sensitive resources on the printed maps.

Comment sheets were distributed to all meeting attendees. Attendees were asked to fill out the sheet completely, including contact information. The Siting Team read all comment sheets, and

scanned and stored them in the Project database as a record of meeting attendance and public comments. Participants were also given the opportunity to mail in their comment sheets at a later date. A total of 41 people attended the open house and 16 comment cards have been received as of June 27, 2018.

2.5.2 Project Website and Virtual Open House

A Project website was created by Kentucky Power to further encourage attendance of the local community for the public open house and provide more information regarding the Project. The Project website (www.kentuckypower.com/enterprisepark) went live on March 20, 2018. The website includes Project updates, news releases, Project map, fact sheet information, and the Project timeline. A virtual open house was also linked on the Project website on April 19, 2018 for interested parties who may have been unable to make the public open house meeting. Information presented at the public open house was made available on the virtual open house including the Project need, siting, ROW, engineering, and construction. Questions and comments were also welcomed on the Project website through the contact page. The Proposed Route was added to the Project website on June 25, 2018 and updated on March 9, 2020. There have been 1,751 views and one comment received through the Project website since the initial Project announcement in 2018.

2.5.3 Consideration of Public Input

A total of 16 comment cards were received following the public open house and were digitized and entered into a GIS database for further review by the Siting Team. Within several weeks of the public open house, the Siting Team held a conference call to discuss and review the feedback received at the open house. During this meeting, the public comment database was used to review all comments collected throughout the Study Area and to review features drawn by members of the public. With the majority of the comment cards listing contact information only and no additional comments received via the website, very little route modifications were required as a result of public concerns. The categories of concern noted on the comment cards included health and property values. After the open house, Kentucky Power continued to speak with landowners along the study segments about the Project to aid in the selection of a proposed route and continue to gather information and feedback from the public.

3.0 ALTERNATIVE ROUTE IDENTIFICATION

3.1 Study Area Description

The Study Area sets initial boundaries for the data collection described in Section 2.3 and the routing concept development described below in Section 3.3. The Study Area includes feasible geographically diverse areas for the location of the Project between the defined endpoints: the Sprigg – Beaver Creek 138 kV Transmission Line and the proposed Kewanee 138 kV Substation, to be located in or near Enterprise Park. The Project endpoints were identified by the Company's planners and engineers (e.g., based on load growth, engineering criteria or existing infrastructure) or in combination with the Siting Team.

The Study Area was defined the Sprigg – Beaver Creek 138 kV Transmission Line, the proposed Kewanee 138 kV Substation located in or near Enterprise Park, and other linear infrastructure in the area. The existing Sprigg – Beaver Creek 138 kV Transmission Line bounds the Study Area in the northwest and the Enterprise Park in the southeast. The existing Big Sandy – Broadford 765 kV Transmission Line bound the Study Area to the southwest and the City of Pikeville bounds the Study Area to the northeast. Right Fork of Island Creek Road/Route 1426 and Left Fork of Island Creek Road/Route 3416 bisect the Study Area from east to west (**Attachment B – Map 1**). The Study Area was intended to encompass all reasonable Routing Concepts between these connection points. Given these considerations, the Siting Team identified a Study Area encompassing approximately 16,176 acres (approximately 25.3 square miles).

The Study Area is characterized by mainly forested and mountainous terrain that is dissected by scattered residential and commercial development along the roadways in the valley bottoms. Extensive surface mining has occurred in the Study Area where a number of ridges have previously been mined and are terraced hillsides providing a landscape that is rugged and steep. The Enterprise Park is located at a high elevation and on a large flat-benched area at which a strip mining operation had previously occurred and has since been converted into an industrial park. See **Attachment G – Study Area Context Photographs**.

3.2 Opportunities and Constraints

The Siting Team identified and mapped siting constraints and opportunities within the Study Area after collecting data and developing routing and technical criteria. The siting constraints and opportunities analysis would then assist in developing the Project's preliminary study segments in addition to a proposed substation location.

Siting Constraints

Constraints are generally areas that should be avoided to the extent practical during the route development and selection process. The Siting Team initially identifies larger constraints during the conceptual siting process at a high level view. As the Siting Team develops specific siting alignments, smaller constraints are identified and avoided where feasible. Much of the Project Study Area is mountainous and undeveloped with the exception of areas of development along roadways and in valleys. The following is a list of general, large constraints that encompass a large geographic area:

- Urban areas, including towns, small communities, and other high concentrations of residential, commercial and industrial development areas.
- NRHP Historic Districts and adjacent areas.
- Recreational areas such as parks and large recreational reservoirs.
- Large streams, wetlands, flood zones or unique natural resource features, and critical habitat areas.
- Designated federal or state forests, parks, state game lands, and other natural and conservation areas
- Large mining permit areas such as the CAM Mining permit area in the northeast portion of the Study Area.[1]
- Heirship properties located throughout the Study Area.
- Steep and mountainous terrain, prone to slips and slides.

As the Siting Team develops specific alignments, smaller constraints are identified. These constraints encompass other feature types found within smaller geographic areas, or site-specific locations. Through the iterative process of route development described above, the routes are adjusted to avoid small constraints where feasible, including:

[1] Mining permit areas are initially gathered from the Kentucky Mine Mapping Information System database during the initial phases of the siting process. Mining permit areas are generally located throughout the entire Study Area. The larger known mining permit areas that likely could not be spanned were considered as large area constraints, but does not mean other mining operations are not present in the study area.

- Individual residences (houses, mobile homes, and multi-family buildings) such as those along Toler Creek Road, Left Fork of Island Creek Road, and Right Fork of Island Creek Road
- Commercial and industrial buildings
- Outbuildings and barns
- Cemeteries
- Places of worship
- Schools
- Hospitals
- Recorded sites of designated historic buildings and sites
- Small wetlands
- Specific recreational sites, facilities, and trails
- Radio and communications towers
- Designated scenic vista points
- Gas wells and pipelines

Siting Opportunities

The Siting Team defined siting opportunities as locations where the proposed transmission line might be located while reasonably minimizing adverse impacts. Siting opportunities typically include other linear infrastructure and utility corridors, such as the existing electric transmission network, rail lines, and roads, but may also include reclaimed mine lands, or unused portions of industrial or commercial areas. These routing opportunities were used to the maximum extent possible to facilitate identification of the most compatible locations for the proposed Kewanee 138 kV Transmission Line Extension.

The Study Area was limited in available opportunities, as there is only one north-south existing linear transmission line (i.e., the existing Big Sandy – Broadford 765 kV Transmission Line) that could potentially provide a parallel opportunity. After the necessary data collection and further analysis in the field, roads and distribution lines were not considered an opportunity feature given the amount of residential development located along roadways such as Left Fork of Island Creek Road/ Route 3416 and Right Fork of Island Creek Road/ Route 1426 within the Study Area

and their location in low lying areas or valleys. However, where parcels were larger, paralleling parcel boundaries were considered an opportunity feature within the Study Area. Siting opportunities identified within the Study Area are presented on the Study Area map (**Attachment B – Map 1**).

3.3 Routing Concepts

The Siting Team developed three routing concepts in the Study Area for the proposed Kewanee Extension while considering the opportunities and constraints, the goal of the Project, and general routing and technical guidelines (see **Attachment B – Map 2**). In general, the Siting Team attempted to develop routing concepts that avoided residential areas and that were located in terrain suitable for the new line and with feasible access.

Routing concepts to the southwest of the existing 765 kV transmission line were not considered as steep terrain would limit constructability and a crossing under the 765 kV transmission line would be required to connect into Enterprise Park. Routing concepts northeast of the Cedar Creek Substation and near the City of Pikeville were not considered as there is dense development along Cedar Creek Road and surrounding US Hwy 23. The Siting Team reviewed the existing Sprigg – Beaver Creek 138 kV Transmission Line to determine feasible tap locations to minimize the total length of the transmission line, consider constructability constraints, and take advantage of any siting opportunities. A major constraint within the Study Area is the residential development in the valley bottoms along Right Fork of Island Creek Road and Left Fork of Island Creek Road. These roads are located in valley bottoms between steep terrain on either side with dense development along the roadways, particularly on the east side of the Study Area and closer to the City of Pikeville. The Siting Team reviewed these roads and identified possible crossing locations for a new transmission line to minimize impacts on residences. As a result, northern, central, and southern routing concepts were developed (see **Attachment B – Map 2**).

Northern routing concepts begin near a tap point on the 138 kV transmission line approximately half a mile southwest of the Cedar Creek Substation and provide the most direct route to the Enterprise Park. This northernmost concept travels generally south and spans across Right Fork of Island Creek Road/Route 1426. While this northernmost routing concept was considered the most direct and shortest route to the Enterprise Park, it was dismissed as a result of its proximity to residential development along Right Fork of Island Creek Road and Left Fork of Island Creek Road; required crossings over future and permitted mining areas (which would typically require relocation agreements with the mining companies); and overall proximity to the City of Pikeville.

Central routing concepts were developed in the central portion of the Study Area and on either side of Toler Creek Road. The central routing concepts take advantage of higher terrain and travel along the ridgeline tops where residences are situated well below in the valleys and along the roadways. Development farther west along Right Fork of Island Creek Road is still present, but not as dense as the development to the east closer to the City of Pikeville. Proximity to the residences was minimized to the extent possible. The central routing concepts are slightly longer than the northern concepts, but accommodate better road crossings and minimize impacts to adjacent residential development. As such, the central routing concepts on either side of Toler Creek Road were carried forward and developed into study segments later in the siting process.

Southern routing concepts were developed to parallel the Big Sandy – Broadford 765 kV Transmission Line where it crosses the Sprigg – Beaver Creek 138 kV Transmission Line. The 765 kV transmission line was the only linear infrastructure paralleling opportunity available and considered by the Siting Team for the Project. The southern routing concept is the furthest from residential development (located even farther west of the City of Pikeville) and provides a paralleling opportunity. The paralleling portion of the southern routing concept is located on the east side of the 765 kV transmission line to avoid engineering and constructability issues. The southern routing concept provides a paralleling opportunity and is located the farthest from residential development. The southern routing concepts were carried forward and developed into in the study segments later in the siting process.

3.4 Study Segments and Substation Selection

The Siting Team developed a series of study segments based on the siting process and criteria developed in Section 2.4 and potential locations for the new substation. Study segments are partial alignments developed based on the routing concepts in Section 3.3 (see **Figure 2**). As the siting effort evolved after conducting desktop reviews, field visits, and stakeholder input, study segments and substation locations were revised, removed, or added. These eliminations or adjustments were based on the likelihood of impacts on residential, commercial and industrial areas, planned and future development and natural areas. The resulting network of the study segments evaluated the by Siting Team are shown in **Attachment B, Maps 3 and 4**.

3.4.1 Substation Study Sites

In developing the preliminary study segment network, the Siting Team added additional substation sites to avoid or minimize impacts to nearby residential development along Road Fork and to optimize line design and terrain. Five substation sites (Sites 1 – 5) were considered to

connect the preliminary study segments to a substation location within or near the Enterprise Park (**Attachment B – Map 3)**. Each substation site was reviewed by the City of Pikeville to determine feasibility for a substation based on past use of the area and future development plans for the Enterprise Park. Further analysis of the five substation locations are detailed in **Attachment A – Substation Siting Study.**

3.4.2 Preliminary Study Segment Network

Desktop review, field visits, and stakeholder input contributed to the evaluation of the preliminary study segments for review. Preliminary study segments were created for the proposed Kewanee 138 kV Transmission Line Extension from southern and central tap points on the existing Sprigg – Beaver Creek 138 kV Transmission Line to substation study sites located within or near the Enterprise Park. The substation site locations considered were largely developed based on feasible routing options to a location in or near the Enterprise Park. The Siting Team focused on creating segments that would minimize impact to the residential development scattered throughout the Study Area and provide the most direct route into the evaluated substation study site locations while also considering constructability on steep terrains.

A tap structure for the Project must be offset south from the existing Sprigg – Beaver Creek 138 kV Transmission Line because it is not possible to obtain an outage long enough on the 138 kV transmission line to replace an inline structure with the new tap structure. As such, once the three way tap structure is built in the clear, the conductors would need to reconnect with the existing 138 kV transmission line, and one structure on the existing Sprigg – Beaver Creek 138 kV Transmission Line will be removed (**Figure 4 and Attachment B – Maps 3 and 4**).

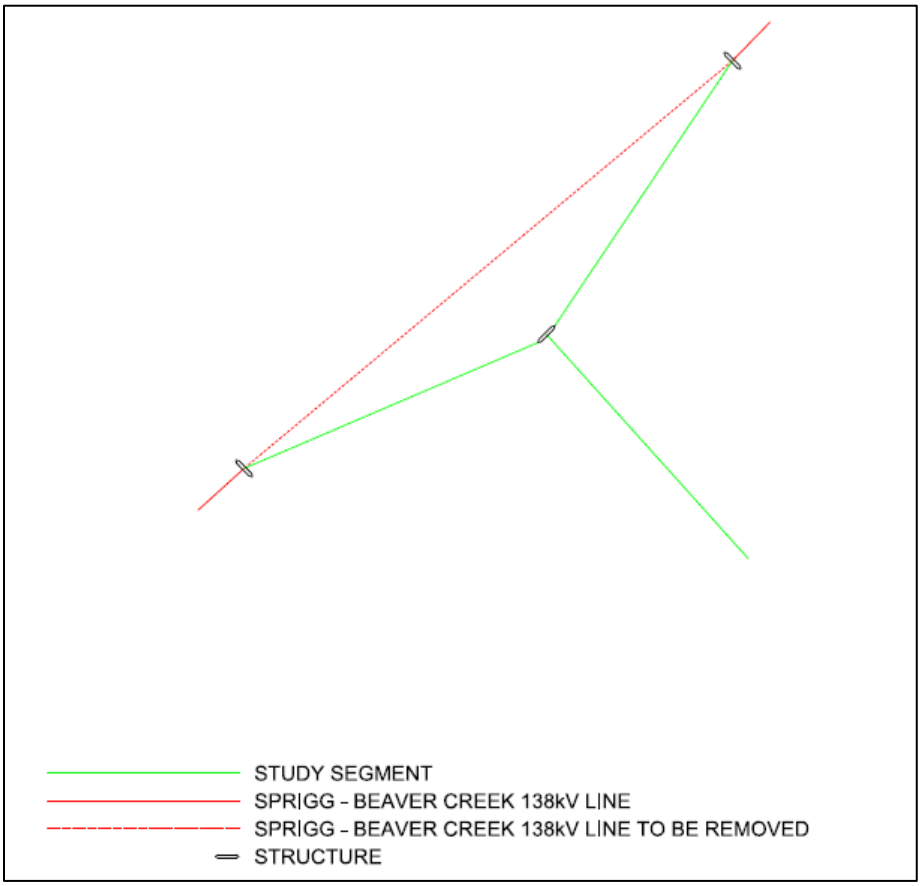


Figure 4. Tap Structure Alignment

With the elimination of the northernmost routing concept, the Siting Team focused the development of preliminary study segments in the central and southern portions of the Study Area (**Attachment B – Map 3**). Preliminary study segments are generally described based on the tap location from which they originate.

Northern Tap Preliminary Study Segments

From the northern tap on the existing Sprigg – Beaver Creek 138 kV Transmission Line, the Siting Team considered two preliminary study segments to cross Toler Creek Road and Right Fork of Island Creek Road at the breaks in development. There are few practicable crossings that are feasible and result in few impacts to the nearby residences. Two viable crossing locations were reviewed; however the easternmost crossing over Right Fork of Island Creek Road was carried forward into the study segment network as it would require fewer angles to construct to avoid residences and was a more direct option. The preliminary study segment crossing farther west

on Right Fork of Island Creek Road/Route 1426 was dismissed from further review due to the additional angles and circuitous length (**Attachment B – Map 3)**.

There is dense residential development along Left Fork of Island Creek Road, particularly north of Substation Site 1, as such the Siting Team reviewed the roadway in either direction for the most feasible crossing locations. As a result, Substation Site 2 was added to the review as there is a fairly large break in development east of Substation Site 1 that could accommodate a transmission line crossing. Preliminary study segments were developed to connect the northern tap location to Substation Site 2, which largely remained north of Left Fork of Island Creek Road but crossed the future mining area. The preliminary study segments connecting into Substation Site 2 were later eliminated due to the mining areas and the likelihood of a required relocation agreement in the future. As a result, Substation Site 2 was also eliminated.

Connectors for the northern tap were added as preliminary study segments and carried forward into the study segment network to provide options into Substation Sites 1, 3, and 5.

Middle Tap Preliminary Study Segments

The middle tap location is on an undeveloped ridgeline between Keathley Branch Road and Toler Creek Road. The location was chosen to take advantage of this undeveloped area and remain at a higher elevation. There is also a known mine portal in the vicinity of the tap location, which could provide habitat for threatened and endangered bat species. From the tap structure, a preliminary study segment was created to travel southeast along the ridgeline between Keathley Branch Road and Toler Creek Road. The preliminary study segment diverts into two options on either side of Rays Branch to connect to the southern tap preliminary study segments to the west or the northern tap preliminary study segments to the east.

The preliminary study segment connecting to southern preliminary study segments intersects Rays Branch and travels generally south east with connectors into Substation Sites 1, 3, and 5. The preliminary study segment connecting to the northern preliminary study segments on the east side of Rays Branch travels generally southeast crossing a future CAM Mining permit area north of Left Fork of Island Creek Road. A preliminary study segment was created on the side of a ridgeline between Left Fork of Island Creek Road and Billy Compton Branch to provide a direct route to Site 1; however, but the location of the side of the ridgeline between these two roads is narrow and could result in slips and slides during construction. Due to the possible constructability issues, an additional angle was added on top of the ridge before spanning to Site 1. In order to avoid the steep ridgeline, a study segment was created to continue south over Sleepy Hollow and across Billy Compton Branch, where it turns east to take advantage of north

to south ridgelines towards the Enterprise Park. Site 3 was created to facilitate this preliminary study segment and is located on the western side of the Enterprise Park. Conversations with the City of Pikeville indicated that Site 3 was viable, but not a preferred location, as it could have impacts on future development for the industrial park. As such, a preliminary study segment was added to connect Site 3 to Site 1, which added additional hard angles and length, but allowed options when connecting preliminary study segments to substation sites. Due to possible conflicts with the use of Site 3, a preliminary study segment was also added to continue generally southeast in a more direct route to the southern extents and immediately adjacent to the Enterprise Park, which became the location for Site 5. A preliminary study segment into Site 5 crosses Road Fork at a location farther from residential development and away from the future industrial areas within the Enterprise Park (**Attachment B – Map 3**).

Southern Tap Preliminary Study Segments

The southernmost tap is located where the 765 kV transmission line crosses the 138 kV transmission line and was created to facilitate a paralleling opportunity. The location for a tap structure is approximately 100 feet south of the Sprigg – Beaver Creek 138 kV Transmission Line. The Siting Team considered a preliminary study segment to parallel the 765 kV transmission line for almost four miles before turning northeast to cross Billy Compton Branch and Road Fork to arrive at Site 4 located on the western side of the Enterprise Park. A direct parallel to the 765 kV transmission line across Left Fork of Island Creek Road was reviewed by transmission line engineers on the Siting Team and determined that the topography south of the road would be unfavorable due to an old strip mine located to the north and the 765 kV transmission line located at a low point to the south. Further, the Siting Team met with City officials, who indicated that Site 4 was unfavorable due to its prime location to serving a potential client within the Enterprise Park. Due to the feedback from the City and engineering review and a longer 765 kV parallel, Site 4 was dismissed from further consideration.

The Siting Team continued to explore a preliminary study segment that paralleled the 765 kV transmission line. Several shortened parallel study segments were created that divert east to consider development at the end of Left Fork of Island Creek Road, where the study segment splits between several residences, a cemetery, and an industrial building. Further review of the westernmost crossing of Left Fork of Island Creek Road determined that a crossing here might result in land use impacts, given the limited space to cross the road and the topography south of the road; therefore, the parallel alignment was shortened slightly to avoid this development. Preliminary study segments connecting the 765 kV parallel options to Site 5 cross a reclaimed mining operation and are far away from most residential development. Preliminary study

segments connecting the 765 kV parallel option to Sites 1 and 3 were developed to provide more optionality in the study segment network; however, they add additional hard angles and more congested crossings of Road Fork.

The resulting network of the preliminary study segments and substation locations evaluated by the Siting Team as discussed above is shown in **Attachment B – Map 3.** The five proposed substation sites evaluated by the Siting Team were narrowed down to eliminate Sites 2, 3, and 4 due to the elimination of study segments and potential conflicts with future development within the Enterprise Park. Sites 1 and 5 were carried forward for further evaluation in the study segment network.

3.4.3 Study Segment Network

The Siting Team conducted several field and desktop reviews and incorporated the information to review, revise, and compare the above preliminary study segments into the final study segment network. The final study segment network consisting of 23 study segments includes the preliminary study segments that were not dismissed. The resulting study segment network were further refined to be presented at the open house for comment and to continue to gather information; inform the Siting Team of any remaining possible study segments that should be considered as part of the Project; and to modify the existing study segments, if needed (**Attachment B – Map 4**).

Substation Sites 1 and 5 were carried forward and are referred to from this point on as Substation Site A and Substation Site B, respectively. These substation sites were presented at the open house. Connectors were added to the study segment network to ensure each of the three tap locations had options to connect to Substation Site A or B.

3.4.4 Refined Study Segment Network

This section discusses the study segments further refined after the open house as a result of public input, quantitative and qualitative analysis, further constructability and engineering review, the environment, and future land uses. As described in Section 2.5, an open house was held on May 3, 2018 and 41 members of the public attended. No new study segments were added to the network; however, some were dismissed or modified due to landowner input or constructability constraints.

After the open house, the three remaining tap locations were reviewed in the field again by the Siting Team to further evaluate constructability. At the middle tap, there are previously mined areas and clear evidence of slips and slides that could result in future complications for structure

placement including frequent maintenance or possible structure replacement, and environmental degradation. There is also a known mine portal, which could also impact the stability of the slope and provide habitat for protected species. The residential development in the low valley areas near Keathley Branch Road and Toler Creek Road resulted in a unique engineering design and additional structures at the tap. Due to the unstable hillside, land use constraints, possible protected species habitat, and unique engineering design, the middle tap was eliminated from consideration. The elimination of the middle tap, resulted in the elimination of Study Segments 4 – 8.

Study Segment 13 was initially developed to facilitate the use of Site 3 and cross Road Fork between residences; however, when Site 3 was removed, a connector (Study Segment 14) was added to connect to Substation Site A (previously Site 1). While Study Segment 13 minimized land use impacts along Road Fork, feedback from the City indicated that the study segment could complicate future development on the western side of the Enterprise Park due to an existing storm water pond or the potential for a future customer building in that area. As such, Study Segment 13 was eliminated.

The Siting Team then further evaluated the two remaining substation sites (Substation Sites A and B) to choose a proposed site and narrow down the study segment network. Discussions with a stakeholder, UMG, provided valuable information regarding the reclamation of the Enterprise Park. The Siting Team was informed that the substation sites are located on various amounts of fill (ranges approximately 80 to 300 feet in depth). Substation Site A is likely to be located on a more significant amount of fill as it is believed that more fill is located further north in the Enterprise Park. Substation Site B is likely located on less fill. The use of Substation Site A requires Study Segment 12 or 10, both of which cross Road Fork in more congested areas, compared with Study Segment 23. Additionally, Study Segment 12 requires the removal of one residence (which is currently for sale) and Study Segment 10, which is located on a narrow ridge that could have constructability concerns for structures and access roads. Both Substation Sites A and B are located on properties that would require minimal to moderate grading and where the owners are willing to sell. Substation Site A is located closer to the main Enterprise Park development area and would be least cost effective as it could potentially restrict developable land for future customers. Substation Site B and Study Segment 23 are located further away from future development in the Enterprise Park and along Road Fork. As a result, **Substation Site B was chosen as the proposed substation site** (for additional information, reference **Attachment A**). In eliminating Substation Site A, Study Segments 10, 12, and 14 were eliminated.

Study Segment 20 was slightly modified to avoid a cemetery under the ROW, but was ultimately dismissed due to Substation Site A being dismissed. Additional comparison of Study Segments 17 and 18 were reviewed in the field for constructability, including structure placement and available access roads. It was determined that both Study Segment 17 and 18 are constructible; however, since Study Segment 18 provides a parallel opportunity and has existing access roads, it was preferred over Study Segment 17. Study Segment 17 would require a new ROW not adjacent to existing infrastructure and therefore, require the construction of new access roads.

The refined study segment network as discussed above is shown on **Attachment B – Map 5**.

3.5 Alternative Routes

The Siting Team met frequently throughout the route identification and review process, continually reviewing, modifying, and eliminating the Study Segments based on new field analysis and stakeholder input. At the end of the process, the Siting Team compiled the Refined Study Segments into two Alternative Routes for analysis and comparison with the proposed substation site. The Alternative Routes are described in the following sections and are shown on **Attachment B – Map 6.**

3.5.1 Alternative Route A

Alternative Route A (Northern Route) consists of the remaining Study Segments 1, 2, 3, 9, 11, 22, and 23. Alternative Route A begins at a northern tap point and travels in a generally southeast direction, turning south and crossing Right Fork of Island Creek Road and into Pike County. Alternative Route A continues south for approximately one mile, crossing permitted mining areas, before turning back in the southeast direction to cross Left Fork of Island Creek Road. Ridges in this area run perpendicular to Alternative Route A, allowing the alternative route to be located on ridgelines and span peak to peak high above roadways and valleys from Left Fork of Island Creek Road to the proposed Kewanee 138 kV Substation site, located south and adjacent to the Enterprise Park.

3.5.2 Alternative Route B

Alternative Route B (Southern Route) consists of the remaining Study Segments 15, 16, 18, 19, 21, and 23. Alternative Route B begins at the southern tap point, adjacent to the Broadford – Big Sandy 765 kV Transmission Line. Alternative Route B parallels the 765 kV transmission line from the east for approximately 1.3 miles spanning over valleys to take advantage of the mountainous terrain and existing access roads, previously built for the construction of the 765 kV transmission line. Alternative Route B turns easterly and crosses Rays Branch, Long Branch, and Compton

Branch taking advantage of the terrain and spanning high above these roadways. Alternative Route B joins the trajectory of Alternative Route A at Study Segment 23 to connect to the proposed Kewanee 138 kV Substation site located south and adjacent to the Enterprise Park.

3.5.3 Alternative Route Comparison

This section further discusses the Alternative Routes and provides a quantitative and qualitative analysis of potential impacts to local communities, the environment and cultural resources. The Alternative Routes were reviewed in detail and compared using a combination of information collected in the field, GIS data sources, public input, supporting documents, and the collective knowledge and experience of the Siting Team. In order to compare the Alternative Routes, the Siting Team developed a list of evaluation criteria tailored to the Study Area and reflecting the siting guidelines in Section 4.0 tables.

4.0 RESOURCE DESCRIPTION OF THE STUDY AREA

4.1 Natural Resources

Natural resource impacts include potential impacts to vegetation and habitat, surface waters, threatened and endangered species, and conservation and recreation lands. Potential impacts discussed in this section are based on publicly available maps and data, as well as consultation with federal and state agencies. A comparison of the natural environment considerations for the Alternative Routes is presented in **Table 1** below.

Table 1. Natural Resource Evaluation Criterion

	Unit	Alternative Route A	Alternative Route B
General			
Length	miles	4.8	5.0
Water Resources			
Total NHD streams crossed	count	5	5
FEMA-designated floodplain crossed by ROW	acres	0.1	0.2
Geological, Topographical, and Soil Resources			
Karst topography in the ROW	acres	0	0
Known caves or portals in the ROW	count	0	0
Wildlife and Habitat			
Tree clearing required in the ROW (digitized based on aerial photography)	acres	56.6	59.8
Length of clearing parallel to existing linear infrastructure	miles	0	1.3

4.1.1 Soil and Water Resources

Resource Characteristics

The Study Area is mountainous with scattered development along roadways and in valleys. Previously mined areas or forested ridges make up a majority of the resource characteristics in the Study Area. Previously mined areas require attentive detail to constructability and tap feasibility when choosing Alternative Routes. There are no major rivers within the Study Area, but there are various NHD stream features. Wherever possible and in most cases, streams and wetlands, if present, will be spanned by the transmission line and individual structures will be

located outside stream banks, riparian zones, and wetland boundaries to avoid potential impacts or permitting.

Alternative Route Comparison

Both Alternative Routes have similar impacts on soil and water resources within the Study Area, as they are both new routes requiring a new ROW and clearing for new access roads. Both Alternative Routes cross a total of five NHD stream crossings; therefore, they are equal in regard to possible water resource impacts. The stream crossings are not significant streams that would require additional permitting nor are they Section 10 Rivers. No wetlands according to NWI data are crossed by either Alternative Route. Floodplain impacts are minimal by either Alternative Route, where Alternative Route B crosses approximately 0.1 acre more, located at the floodplain of Island Creek along Left Fork of Island Creek Road. It is expected that both Alternative Routes will span over floodplains and will not have any structures located within a 100-year floodplain. No known caves or portals are crossed by either ROW; however, environmental surveys will be conducted prior to beginning construction activities, as it is likely caves or portals exist given the previously mined nature of the Study Area.

4.1.2 Wildlife Habitat and Sensitive Species

Resource Characteristics

The Study Area's habitat includes a mix of mountainous terrain, grassland, forest, and small urban environments. Aquatic and wetland habitat is provided by small streams such as Island Creek, Long Branch, and Road Branch within the Big Sandy Watershed. The Big Sandy Crayfish is listed as a threatened aquatic species within these areas.

Kentucky's special status wildlife and plant species that are designated as threatened, endangered, or candidate species are protected at the federal level by the Endangered Species Act (16 United States Code §1531 et seq. [1973]) and/ or at the state level for the protection of threatened and endangered species of fish and wildlife (301 KAR 3:061) through the KDFWR. The KSNPC identifies and monitors state natural preserves and biodiversity while the USFWS implements the Endangered Species Act. An Information for Planning and Consultation (IPaC) was generated through the USFWS website (see **Attachment F – IPaC Report**) and updated in June 2020. The KDFWR documented occurrences of state-listed sensitive species within the Study Area via a letter dated March 23, 2018. No letter was received from the KSNPC regarding the occurrence of sensitive species or significant biological resources. Federally-listed wildlife and habitat resources are identified in **Table 2**.

Table 2. Threatened and Endangered Species[2]			
Species Name	**Federal Status**	**Habitat Type**	**Note**
Gray Bat *(Myotis grisescens)*	Endangered	Roosts in caves or cave-like structures year-round and forages in riparian habitats next to lakes, streams, or rivers.	This Study Area includes potential habitat; however, no critical habitat has been designated for this species.
Indiana Bat *(Myotis sodalist)*	Endangered	Roost in trees and forage in hardwood and hardwood-pine forested and grassland areas during the summer.	This Study Area includes potential habitat; however, no critical habitat has been defined within the Study Area. Activities should consider possible effects to this species.
Northern Long-eared Bat *(Myotis septentrionalis)*	Threatened	Roost in trees and forage in hardwood forested areas during the summer.	No critical habitat has been designated for this species in the Study Area.
Big Sandy Crayfish *(Cambarus callainus)*	Threatened	Freshwater habitat; shelter in shallow excavations under loose rocks on the stream bottom.	This Study Area includes proposed critical habitats for this species; however, no critical habitat has been defined with the Study Area.

Bald and golden eagles are protected under the Bald and Golden Eagle Protection Act. Under this act, it is unlawful to take, kill, or possess any bald or golden eagle, except as regulated by authorized programs. Projects affecting these species may require development of an eagle conservation plan. An eagle conservation plan is not anticipated for the Project.

[2] Table 2 reflects the IPaC results generated in June 2020, but remains unchanged from previous results.

Migratory birds are protected under the Migratory Bird Treaty Act of 1918, which is the legal cornerstone for the conservation and protection of migratory birds in the United States. The act protects the majority of birds that nest in North America. There are currently 1,026 bird species protected under the act, including raptors, waterfowl, shorebirds, seabirds, and songbirds. The act does not protect non-migratory species including upland game birds or introduced species. The USFWS provides guidance for minimizing impacts to migratory birds and AEP has an avian protection plan in place that will be implemented for the Project.

Alternative Route Comparison

Both Alternative Routes are new and require extensive tree clearing. The ROW of Alternative Route B will likely require approximately three more acres of tree clearing than Alternative Route A due to additional line length. Extensive tree clearing can result in habitat fragmentation; however, Alternative Route B is located in a previously fragmented area by paralleling the 765 kV transmission line, which minimizes impacts habitat fragmentation. As a general guideline throughout the siting process, the Siting Team avoids impacts to biodiversity and avoids crossings of large waterbodies and wetland complexes that may have distinct critical habits and natural resources. According to the IPaC report (**Attachment F**), no conservation easements or critical habitats have been designated in the Study Area. The species included in the IPaC report will likely require surveys for the Proposed Route and either Alternative Route chosen. There are no special natural areas such as federal/state nature preserves, lands and areas within the Study Area.

4.2 Land Use

Land use impacts include direct and indirect impacts to residential, commercial and industrial development, institutional uses (e.g., schools, places of worship, cemeteries, and hospitals), cultural resources, and land use. Construction of a new transmission line can result in changes in land use and aesthetic impacts to residents, commuters and travelers, employees, and recreational users. A comparison of the land use considerations for the Alternative Routes is presented below in **Table 3.**

The Study Area covers areas in both Floyd and Pike counties and is located largely west of the City of Pikeville, Kentucky. The Study Area features scattered patterns of development mainly along the roadways and in valleys. There are previously mined areas and future mining permit areas within the Study Area. The mountainous landscape is referenced in photos taken during site visits throughout the duration of the siting process in **Attachment G – Study Area Context Photographs.**

Table 3. Land Use Evaluation Criterion			
	Unit	**Alternative Route A**	**Alternative Route B**
General			
Length	miles	4.8	5.0
Number of parcels[1] crossed by ROW	count	34	28
Unique Landowners crossed by ROW[2]	count	26	23
Municipalities, Counties, and Townships			
Pike County	miles	4.0	3.4
Floyd County	miles	0.8	1.6
Residential			
Barns, outbuildings, sheds, garages and silos in the ROW (excludes abandoned features)	count	0	0
Residences/single-family dwellings within ROW	count	0	0
Residences/single-family dwellings within 250 feet of centerline	count	4	2
Residences/single-family dwellings within 500 feet of centerline	count	11	7
Commercial/Industrial			
Businesses/commercial buildings within 500 feet of the centerline	count	0	0
Total Length of Permitted Mining Areas crossed	miles	1.8	1.9
Cultural Resources			
Listed architectural sites within one mile of the centerline	count	14	3

[1] The number of parcels crossed refers to the number of individual plots of owned land recorded by each county.

[2] The number of landowners within the ROW represents the number of individual landowners, who each may own one or more parcels.

4.2.1 Agricultural and Forestry Resources

Resource Characteristics

The Study Area is primarily a mix of previously mined areas, forestry uses, and developed land along roadways. Most of the land is mountainous and heavily forested with scattered developed land uses. The major land use activities situated on the high terrains include mining and forestry uses.

Alternative Route Comparison

Crossing previously surfaced mined areas avoids impacts to lands that have not been previously impacted and can result in reduced tree clearing for both the transmission line and access road use, as well as minimizing impact to habitat fragmentation. Alternative Route A crosses less permitted mining areas by approximately 0.2 mile than Alternative Route B; however, in discussions with CAM Mining, larger mining operations were planned east of Rays Branch and where the ROW of Alternative Route A would cross. A relocation agreement would likely be required. No known agricultural easements, tree farms/orchards, or cropland according to NLCD data are crossed by either Alternative Route.

4.2.2 Recreation and Conservation Lands

Research was conducted to identify areas that include federal/state forests, parks, designated wilderness areas, game lands/public hunting areas, trails, and local recreation. None of these protected lands are crossed by either ROW of the two Alternative Routes, nor are they located within the Study Area. As mentioned in Section 4.1.2, coordination was initiated with the KSNPC, the KDFWR, and the USFWS; however, no responses were received concerning the existence of these protected lands.

4.2.3 Developed Land Use

Resource Characteristics

Residential and commercial land uses near any of the alternative route ROWs can result in temporary disturbances and other direct effects. Construction activities can create dust, noise, and traffic by routing construction equipment along existing roads and along temporary access to transport materials between work sites. Construction of a new transmission line can also result in changes in land use and aesthetic impacts to residents, commuters and travelers, employees, and recreational users.

Alternative Route Comparison

Alternative Route A provides a more direct route to the Enterprise Park; however, there is more development concentrated in the middle and eastern portions of the Study Area and tends to be smaller parcels with more landowners. Most of the attendees at the public open house were landowners concentrated near Alternative Route A. No residences or single-family dwellings exist within the ROW of either Alternative Route or within 100 feet of either Alternative Route's centerline. However, four more residences are within 500 feet of the centerline for Alternative

Route A, compared with Alternative Route B. No commercial or industrial buildings exist near either centerline. Where Alternative Route B parallels the existing 765 kV transmission line, there are existing impacts to those landowners and their viewshed. By paralleling the ROW, Alternative Route B is able to minimize future viewshed impacts whereas Alternative Route A is situated in an area without any existing transmission line impacts. Overall, Alternative Route B is located farther from residential areas and the City of Pikeville.

4.2.4 Historic and Archaeological Resources

Resource Characteristics

Research was conducted for the Study Area to identify previously recorded cultural resources and potential cultural resources. Research was completed through review of historic documents and other archives (including the KHC database). Historic resources include architectural and archaeological resources, historic and cultural landscapes.

Alternative Route Comparison

No NRHP-listed or -eligible sites were found within one mile of the centerline for either Alternative Route. No Historic Districts exist within one mile of the centerline for either Alternative Route. No listed archaeological sites were found within either ROW or within 250 feet of the centerline for both Alternative Routes. No National Landmarks exist in the Study Area.

Fourteen historic architectural resources within one mile of the centerline for Alternative Route A and three resources were found for Alternative Route B; however, all resources are located north of the 138 kV transmission line and are not impacted by either Alternative Route.

4.2.5 Visual Resources

To gain an understanding of the potential impacts on the landscape by comparing the Alternative Routes, members of the Siting Team conducted a route reconnaissance for the study segments presented at the open house, which includes the Alternative Routes chosen. Route reconnaissance was used determine the possible viewshed from publicly accessible areas.

Alternative Route Comparison

The Study Area is generally mountainous and remote, and both Alternative Routes generally remain high above valleys and on ridgelines to avoid impacts to development along roadways. The visual impacts for both alternatives would be low. Alternative B, however, would be

expected to have less visual impacts since it is further away from residences and the City of Pikeville and parallels an existing linear ROW.

Alternative Route A crosses more roads and parcels, compared with Alternative Route B, as it is concentrated in an area with more scattered development. Alternative Route A also has more residences in close proximity to the ROW than Alternative Route B. Development is typically found around or along roads and can result in viewshed impacts and, as such, minimizing the number of road crossings is a criterion during the siting process. Minimizing the number of parcels crossed also reduces the number of landowners affected; by crossing larger parcels it is also likely that the crossing may be further from residences and outbuildings. Lastly, either alternative route would span roadways in the valleys where residential development is prevalent. Structures would be situated in such a way as to minimize visual impacts to the residences. Where the alternatives can span the valleys from peak to peak, mostly between Left Fork of Island Creek Road, Long Branch, and Compton Branch, visual impacts would be minimized to residences by the alternative routes.

By conducting route reconnaissance and reviewing the LIDAR aerials, it was found that four more residences or single-family dwellings are located within 500 feet of the centerline for Alternative Route A than Alternative Route B. No residences exist within 100 feet of either centerline. No community or recreation facilities (schools, places of worship, cemeteries, hospitals, parks, etc.) are crossed by either ROW or located near either Alternative Route.

4.3 Constructability

This section discusses the feasibility of a proposed transmission line, as it relates to engineering and construction concerns. Constructability evaluates the use of existing transmission corridors, engineering challenges, and accessibility issues of a Proposed Route. Major factors that affect constructability include, but are not limited to, steep topography, condensed ROWs, heavy angles (greater than 30 degrees), proximity to major highways, accessibility, and safety. A comparison of the engineering and construction considerations for the three Alternative Routes is presented below in **Table 4.**

Table 4. Constructability Evaluation Criterion			
	Unit	**Alternative Route A**	**Alternative Route B**
General			
Length	miles	4.8	5.0
Transportation Resources			
Local roads and streets crossed	count	8	6
Utility Resources			
Oil and gas wells within ROW	count	2	0
Number of gas lines crossed	count	0	0
Communication towers within 1,000 feet of the centerline	count	0	0
Engineering and Construction Considerations			
Steep slopes crossed by ROW (>20%), percent of total length	percent	4.5%	4.9%
Heavy angles, greater than 30%	count	6	1
Total Number of Structures	count	18	16
Rights-of-Way Rebuild/Parallel			
Existing 765 kV transmission line paralleled	miles	0	1.3
Total percentage paralleled	percent	0	26%

4.3.1 Engineering Design Considerations

Transmission Right-of-Way

The Siting Team attempted to minimize total length and ROW acquisition. Where possible and practical, Kentucky Power considers using existing transmission ROW, paralleling existing electric lines, or paralleling other infrastructure (i.e., roadways, railways or gas lines). Roadways were not considered parallel opportunities for this Siting Study as they are typically surrounded by dense residential or commercial development and are located in valleys where construction is not feasible. Transmission line ROWs are designed at a certain width to account for safety considerations. Crossing existing linear infrastructure is also a consideration when designing and siting a transmission line. A crossing of the 765 kV transmission line was not considered due to very steep topography on the western side and outages required on the EHV line. A parallel opportunity for the 765 kV transmission line was considered for engineering and construction. Other utility infrastructure does not exist within the Study Area and neither Alternative Route crosses existing EHV transmission lines or gas pipelines.

Alternative Comparison

Alternative Route B parallels the 765 kV transmission line for approximately 1.3 miles (26% of the total length) whereas Alternative Route A does not parallel any existing infrastructure. Paralleling existing infrastructure provides opportunity to use existing access roads and minimize tree clearing.

Engineering and Construction Considerations

Potential engineering and construction challenges are important to consider when siting a transmission line. Heavy angles, steep topography, nearby towers, antennas, and airfields along with narrow ROW alignments are all elements that could ultimately require extensive or non-standard engineering and lead to increases in impacts.

The proximity to existing roadways, transmission and gas pipelines, or gas well infrastructure could also pose potential engineering and construction challenges. As with paralleling existing infrastructure, crossing over transmission lines and gas pipelines may require specialized construction techniques, and transmission crossings may require outages. Kentucky Power attempted to minimize engineering challenges during the conceptual design phase. The most suitable transmission line route from an engineering and constructability perspective is typically the shortest and straightest route; however, given the complexity of the Study Area, a straight and direct route was not possible.

Alternative Comparison

Based on a preliminary desktop design, Alternative Route A requires two more structures than Alternative Route B and five additional heavy angles (greater than 30°) to avoid development along roadways. Additionally, Alternative Route A does not have any gas wells within the 100-foot ROW, while Alternative Route A has two. If Alternative Route A was chosen as the proposed route, final engineering and additional design would need to occur to avoid any gas wells from being located within the ROW; this additional design would likely result in additional angles or structures. No interstate highways, US Hwys, state highways, or scenic byways are crossed as a result of either Alternative Route. There are no railroads crossed by the Alternative Routes; no airports exist within the Study Area that would require extra permitting and design considerations.

4.3.2 Topography and Geology

The Study Area is comprised mostly of steep topography with previously mined areas that can be difficult for structure placement due to the increased potential for slips and slides. Steep slopes are an important consideration when siting a transmission line, as they directly impact the constructability of both access roads and structures. Road washouts or road failure due to steep slopes require extensive erosion and sediment controls during construction and are not cost effective during construction. Span lengths are also considered when siting a transmission line across ridgetops.

Alternative Comparison

The percentage of steep slopes for Alternative Route A and Alternative Route B are comparable and neither would be built in particularly rugged terrain where the steep slopes would be a major engineering and constructability constraint. The routes associated with the middle tap were eliminated earlier in the process due to these constraints. Both alternative routes can generally run peak to peak and span high above valleys and roadways.

4.3.3 Access Roads

Both Alternative Route A and Alternative Route B will require new access roads as they would both be constructed within a new ROW. Roads with a particularly high volume of traffic, such as Left Fork of Island Creek Road and Right Fork of Island Creek Road, are not ideal access roads due to the need for heavy machinery to enter and exit the access roads into a high traffic area. Similarly, interstate highways generally cannot be used for access roads due to traffic control and safety concerns; no interstate highways exist in the Study Area. Existing access roads used for mining activities and transmission infrastructure are present in the Project area. Using existing access roads when possible are considered an opportunity, as building new access roads can result in habitat fragmentation due to tree clearing and grading activities.

Alternative Routes Comparison

Alternative Route B has more existing road access due to the 765 kV transmission line parallel in addition to the old mining operation south of the Enterprise Park. Field visits confirmed that there are some existing roads that could likely be used to access the southern tap location; however, additional ROW acquisition from private landowners would be required. There are also a few existing access roads near the tap for Alternative A due to some ongoing gas well locations, but there are significantly fewer existing roads compared with Alternative B.

5.0 IDENTIFICATION OF THE PROPOSED ROUTE

The goal in selecting a suitable route for the Project is to minimize impacts on land use, and natural and cultural resources while avoiding circuitous routes, and non-standard design requirements. However, in practice, it is not possible to optimally minimize all potential impacts at all times. There are often inherent tradeoffs in potential impacts to every siting decision. For example, in heavily forested study areas, the route that avoids the most developed areas will likely have the greatest amount of forest clearing, while the route that has the least impact on vegetation and wildlife habitats often impacts more residences or agricultural land. Thus, an underlying goal of a siting study is to reach a reasonable balance between minimizing potential impacts on one resource versus increasing the potential impacts on another.

The following section summarizes the rationale for selection of the Proposed Route, and thus, the route that the Siting Team considers to be most suitable in minimizing the overall impacts of the Project. The rationale presented is derived from the accumulation of the siting decisions made throughout the process, the knowledge and experience of the Siting Team, comments from the public and regulatory agencies, and the comparative analysis of potential impacts presented in Section 4.

5.1 Proposed Route

Based on a qualitative and quantitative review of information obtained from GIS data, existing easements, field reconnaissance, agency consultation and public outreach as well as engineering and financial estimates for the Project, **the Siting Team recommends Alternative Route B as the Proposed Route.**

The Siting Team identified a Proposed Route from an iterative process that moved from concepts to increasingly refined segments and alternative routes. First, a Study Area was defined and constraint data collected (**Map 1**). Next, three routing concepts were developed in the Study Area originating from the existing 138 kV transmission line to the Kentucky Enterprise Industrial Park (**Map 2**). The northern concept corridor was dismissed due to proximity to residences and future land use. From the two remaining routing concepts, numerous preliminary study segments were developed to connect the five substation study sites considered (**Map 3**). Using stakeholder input and analysis, the preliminary study segments were refined and/or eliminated into 23 study segments and two substation sites (**Map 4**), which were presented at the public open house. Next, the study segments were refined again (**Map 5**) and the remaining segments were assembled into two final alternative routes and the proposed substation site was identified (**Maps 6 and 7**).

The Siting Team identified a Proposed Route from an iterative process, described above, and concluded that the construction of the Alternative B as the Proposed Route is the most suitable route to connect the Company's existing Sprigg – Beaver Creek 138 kV Transmission Line to the proposed Kewanee 138 kV Substation. The Proposed Route provides a paralleling opportunity to the existing Big Sandy – Broadford 765 kV Transmission Line. The paralleling opportunity reduces forest and habitat fragmentation, minimizes additional viewshed impacts, utilizes existing access roads, and is a very common and accepted transmission line siting criterion. The Proposed Route is also more efficient and direct, and takes advantage of the terrain to maximize span lengths and reduce the number of structures and heavy angles. Based on preliminary design, the Proposed Route would require two less transmission line structures and fewer angles exceeding 30 degrees as compared to Alternative Route A. Additionally, based on field investigations, members of the Siting Team concluded approximately 15 miles of existing or partially existing access roads can be used to construct the Proposed Route. Minimizing the construction of new roads reduces the associated environmental impacts including habitat fragmentation. Lastly, the Proposed Route is located in a largely undeveloped area farther from residential, commercial, and future mining development, resulting in lesser visual impacts.

Furthermore, given the generally undeveloped landscape associated with the Study Area, a primary major factor for identifying a Proposed Route was landowner cooperation. Kentucky Power has contacted the majority of the affected landowners on the Proposed Route. Generally landowners have expressed a willingness to work with Kentucky Power. Although some landowners expressed concerns, Kentucky Power representatives were able to make minor adjustments to the route to satisfy landowners concerns or comments.

Collectively, the Siting Team believes that the Proposed Route (Alternative Route B) meets the goal of avoiding or minimizing impacts on people, land use, and the natural and cultural resources along the route, while avoiding circuitous routes, and non-standard design requirements.

5.1.1 Proposed Route Modifications (2018)

In the time between the selection of the Proposed Route and filing the Project in August 2018 with the Kentucky PSC, the Siting Team began detailed engineering and landowner discussions. Adjustments were made to take better advantage of topography; provide a more feasible, constructible route; and consider landowner input.

The alignment between Left Fork of Island Creek Road and Billy Compton Branch was adjusted slightly south to consider landowner recommendations and comments. Due to previous mining activity, the publicly available contour data did not show accurate elevation contours. More

accurate data was available once the LiDAR data was processed and a detailed design was conducted. As a result, the section of the Proposed Route between Billy Compton Branch and the Kewanee 138 kV Substation was moved slightly north to allow structures to be placed on higher terrain and thereby avoid side slopes that are prone to slips and slides. Shifts to the Proposed Route did not result in impacts to any new landowners not previously notified as part of the public open house and did not require additional structures or non-standard design requirements to the line. Kentucky Power ROW representatives have met with or spoken to landowners along the Proposed Route and the majority have supported the Project and/or signed permission to survey forms. Modifications to the Proposed Route are also shown in **Attachment B – Map 7**.

5.1.2 Kentucky PSC Resubmittal (2020)

Kentucky Power submitted a CPCN Application for the proposed Project and received a conditional approval in December 2018. Additional feasibility studies for the Project were completed to identify potential reliability concerns in the eastern Kentucky area.

Kentucky Power plans to resubmit the CPCN Application for the construction of the Kewanee 138 kV Transmission Line Extension and Kewanee 138 kV Substation, which will allow for the retirement of the existing Ford's Branch 46 kV Substation and associated distribution work. As discussed above Section 5.1.1, a slight southern shift (less than 300 feet) to the Proposed Route was created between Left Fork of Island Creek Road and Billy Compton Branch to consider landowner recommendations, terrain, and constructability. An additional modification to the Proposed Route was created between Billy Compton Branch and Road Fork after completing geotechnical and access road studies. The Proposed Route was shifted approximately 800 feet to the north to consider better accessibility and constructability due to the steep terrain. The Proposed Route is approximately five miles long. Thirty-one parcels, owned by 22 unique landowners, are crossed by the Proposed Route ROW.

On February 24 and 25, 2020, members of the Project Team conducted a field review to confirm the Proposed Route modifications and proposed Kewanee 138 kV Substation site to initiate refiling efforts. Upon field review, no habitable structures or outbuildings were located within the proposed transmission line ROW. Kentucky Power representatives also began re-contacting all affected landowners to update them on the Project. As part of this coordination, the Company was made aware of a new mining activity operated by Raven Mining on WPP's lands, near the Proposed Route. Kentucky Power representatives met with both stakeholders on March 24 and May 21, 2020 to further discuss the Project and identify potential impacts of the Proposed Route and active mining plans. Further detail of the coal mining discussions are included in **Attachment C – Stakeholder Meeting Notes**. The Company plans to widen the filing corridor in the vicinity of

the active mining, to allow for a possible centerline shift, if it is determined feasible and needed based on future mining progression and schedule. The final Proposed Route and proposed Kewanee 138 kV Substation site to be filed with the Kentucky PSC is shown in **Attachment B – Map 8**.

Attachment A: Substation Site Selection Study

Substation Site Selection Study

Kewanee 138 kV Substation

Kewanee – Enterprise Park 138 kV Transmission Project
Kentucky Public Service Commission
Case No. 2020-00062

Prepared for:

KENTUCKY POWER
An AEP Company
BOUNDLESS ENERGY™

Prepared by:

POWER Engineers, Inc.
11 S. 12th Street
Richmond, Virginia 23219

POWER ENGINEERS

Updated July 2020

TABLE OF CONTENTS

Maps

Photos

ACRONYMS

AEP	American Electric Power
Enterprise Park	Kentucky Enterprise Industrial Park
Kentucky Power	Kentucky Power Company
kV	kilovolt
POWER	POWER Engineers, Inc.
Project	Kewanee – Enterprise Park 138 kV Transmission Project
UMG	Utility Management Group, LLC
US Hwy	United States Highway

1.0 PROJECT OVERVIEW

1.1 Project Need Summary

Kentucky Power Company (Kentucky Power) and American Electric Power (AEP) are proposing to build a new 138 kilovolt (kV) substation (the Kewanee 138 kV Substation) to support the larger Kewanee – Enterprise Park 138 kV Transmission Project (the Project). Kentucky Power and POWER Engineers, Inc. (POWER), identified and evaluated five potential substation sites for the Project. The objective in choosing the substation site was to find a suitable location within proximity to the existing Fords Branch 46 kV Substation, which will be retired due to deteriorating equipment and infrastructure. The proposed Kewanee 138 kV Substation must serve customers previously served by the Fords Branch 46 kV Substation and will provide a new 12 kV/34.5 kV electrical distribution service to the general area including portions of Pike County, the City of Pikeville, and the Kentucky Enterprise Industrial Park (the Enterprise Park). The specific location of the substation is dependent on engineering and constructability considerations, future development plans, purchase availability, as well as efforts to avoid or minimize environmental and land use impacts. The location of the substation also affects the transmission line routes and associated impacts on residences and environment.

The Project aims to improve electric reliability to customers in eastern Kentucky by making upgrades to the power grid in Floyd and Pike counties. Once complete, the transmission and substation upgrades will reduce the likelihood of extended outages and allow aging infrastructure to be retired. Tree clearing and pre-construction activities are expected to begin early 2023 and be completed by the end of 2023.

1.2 Siting Criteria

Many of the initial siting considerations for a transmission substation are dictated by the system planning requirements. System planning considerations typically dictate the general location of the station and the necessary transmission interconnections needed. Once key system requirements are identified, the Siting Team's engineers and environmental planners identify potential sites and evaluate the potential engineering obstacles, construction logistics, potential operational constraints, and potential environmental and human impacts associated with each site. The following list provides a summary of the siting criteria.

System Planning Requirements

- Electrical Load Center: Identified sites must meet the electrical need and requirements identified by the system planners and do so in an economic and reliable manner.

- Transmission and Distribution Access: The new substation will be located within proximity to the existing Fords Branch Substation to minimize distribution exposure and continue serving existing customers.

Engineering/Operations

- Space Requirements: The station pad must be at least 335-foot by 280-foot (approximately 2.15 acres). A larger area will be needed to accommodate grading and associated storm water controls.
- Access Requirements: Access during construction, operation, and maintenance of the substation must be considered. Due to the heavy equipment needed at the site, consideration of bridge/public roadway weight limits is necessary. Access to the site should be via roads with a reasonable grade, length, turning radius, and line of sight. Railroad crossings and joint access to public roads with other private owners should be avoided. Access to the site must also minimize future development plans within the Enterprise Park and the surrounding area.
- Geotechnical Considerations: Consideration will be given to soil types and soil stability, especially in areas of previous mined lands. Soils with excessive restrictions on engineering and construction factors should be avoided, including areas prone to slips, slides, and large rock outcrops.
- Cost: Relative site development and construction costs are considered in the evaluation.

Natural and Human Environment Impacts

- Terrain/Slope Considerations: Excessively steep terrain should be avoided where feasible. Low-lying sites prone to flooding should be avoided or the site should be elevated above the 100-year floodplain elevation. Allowance should be provided for excavation cuts and fills, drainage and detention ponds, construction disturbed areas, and lay-down areas.
- Historic and Archaeological Concerns: Sites should be reviewed for any impact to historic or archaeological features and these impacts should be minimized.
- Public Use Facilities: Where possible, sites in close proximity to schools, churches, community buildings, and parks should be avoided.
- Recreational Areas: Recreational areas will be avoided to the maximum extent practical during site selection. Aesthetic impacts should be reviewed and considered to minimize conflicts with these uses.

- Aesthetics: Consideration will be given to the aesthetics of the area. Where appropriate and practical, vegetation screening should be considered to minimize views.
- Residential Land Use: Vacant or undeveloped lands are the preferred location for the potential Kewanee 138 kV Substation; high-density residential areas should be avoided during preliminary site selection, if possible and practical. Whenever possible, the number of individual property owners involved will be minimized. Future development for residential areas should also be avoided.
- Utility Lines: Consideration will be given to the presence of underground gas or water pipelines, drainage easements, other utilities, and proposed adjacent development plans.
- Water Resources/Wetlands: Sites with substantial amounts of wetlands should be avoided if possible. If present, the design for the proposed substation should maximize avoidance and any impacts should be properly mitigated.
- Hazardous Wastes: Alternative Sites should be reviewed for the current or historic presence or use of hazardous materials and avoided where possible.

1.3 Study Area

The Study Area for the proposed Kewanee 138 kV Substation is in proximity of the Enterprise Park as this was an ideal location with compatible industrial land uses and preferred by the City of Pikeville. In addition, the Enterprise Park is located within two miles of the existing Fords Branch Substation and thus reduces distribution line exposure in order to serve customers previously served by the station to be retired. The Enterprise Park is located west of United States Highway (US Hwy) 23/South Mayo Trail and the Town of Fords Branch. The proposed Kewanee 138 kV Substation will replace the existing Fords Branch Substation once it is retired, which is located approximately 0.2 mile east of the intersection of US Hwy 23/South Mayo Trail and Fords Branch Road. The Study Area is at a higher elevation and located on a reclaimed strip mining operation that is being converted into an industrial park. There is residential development surrounding the Enterprise Park to the north (Left Fork of Island Creek Road), to the east (US Hwy 23), and to the west (Road Fork).

1.4 Alternative Sites

Using established siting guidelines, the Siting Team identified suitable sites within the Study Area that would minimize impacts to the natural and human environment, while remaining on the western side of the Enterprise Park to be in closer proximity of the existing Sprigg – Beaver

Creek 138 kV Transmission Line. The Siting Team identified five Alternative Sites for the proposed Kewanee 138 kV Substation, as shown on **Map 1**. All five sites are located adjacent or in the Enterprise Park and located on reclaimed strip mining land. Considerations for choosing a site included constructability for the proposed substation and proposed transmission line, feasible access, and purchase availability of the parcel. Other criteria considered when identifying alternative substation sites included utility placement, future development of the Enterprise Park, topography suitable for a foundation, geotechnical considerations, engineering and operational costs, sufficient acreage, ground contamination issues, and potential visual and environmental impacts.

Once the list of Alternative Sites was developed in conjunction with the route development process, key members of the Siting Team conducted field inspections of each of the sites. These inspections involved the visual examination of the Alternative Sites and the surrounding area from road crossings and other points of public access. Of the five sites evaluated, three sites were dismissed from consideration; two remaining sites were carried forward and presented at the public open house in addition to the routes as part of the Project. The three sites were dismissed for various reasons including potential for development or feasibility with the proposed Kewanee 138 kV Transmission Line Extension.

Alternative Site Descriptions

Site 1/Site A: Retained

Site 1 is located on the northwest side of the Enterprise Park, with Left Fork of Island Creek Road to the north and Road Fork to the west. Site 1 would require approximately five miles of new double circuit 138 kV transmission line. Site 1 was the original substation site discussed with Kentucky Power and the City of Pikeville representatives. Site 1 is relatively flat, of adequate size, and owned by the City of Pikeville. The site is narrow (approximately 300 to 500 feet wide) with a steep drop off on either side, limiting the possibility of widening the site. Though narrow, the site is large enough to accommodate the proposed Kewanee 138 kV Substation. Site 1 is in a good location for distribution and for serving both Enterprise Park and the Fords Branch Substation customers, and the construction footprint could be resized or reconfigured. The City of Pikeville is willing to sell the property to Kentucky Power for use of a substation. Site 1 is a viable location for several route options originating from the three tap points on the existing 138 kV transmission line; however, it would require crossing Left Fork of Island Creek Road and Road Fork in areas of moderate residential development. Site 1 was carried forward to the open house as Site A for routing feasibility to the existing 138 kV transmission line and access to the site.

Photo 1. Site A Facing East

Photo 2. Site A Facing Northeast

Site 2: Eliminated

Site 2 is located the farthest north within the Enterprise Park and would require approximately four miles of new double circuit transmission line. Substation Site 2 was considered in order to accommodate a less congested crossing of Left Fork of Island Creek Road. The site is cleared; therefore, minimal grading would be required for the proposed Kewanee 138 kV Substation. The study segments making up a potential alignment for the Kewanee 138 kV Transmission Line Extension that were considered for Site 2 cross a larger future mining area that may require a relocation agreement between AEP and the mining company. When these study segments were eliminated from consideration, Site 2 was no longer a viable location and was therefore eliminated. Site 2 was eliminated early in the siting process and no photos were taken of the site.

Site 3: Eliminated

Site 3 is located on the eastern side of the Enterprise Park with a break in residential development on Road Fork to the west. Site 3 would require approximately five miles of new 138 kV transmission line. Similar to Site 2, the site is also primarily cleared, but would still require some grading to accommodate a substation pad. During a meeting with City officials, it was expressed that Site 3 was unfavorable as a substation site because it could hinder future economic growth from prospective clients to the Enterprise Park. Preliminary site plans for the Enterprise Park show a possible storm water pond located near Site 3. Feedback from City officials and the possible impacts to future development resulted in the elimination of Site 3.

Photo 3. Site 3 Facing West

Photo 4. Site 3 Facing East

Site 4: Eliminated

Site 4 is located just south of Site 3 and east of Road Fork. The site is relatively flat and would require minimal grading to accommodate a substation pad. During a meeting with City officials, Site 4 was also unfavorable due to its prime location to serving potential customers to the Enterprise Park. Due to the feedback from the City Commission meeting, Site 4 was dismissed from further consideration. Additionally, possible transmission line routes into Site 4 were dismissed for the larger Project and therefore, Site 4 was no longer a feasible option. Site 4 was eliminated early in the siting process and no photos were taken of the site.

Site 5/Site B: Retained

Site 5 is located at the southernmost end of the Enterprise Park and is owned by a private landowner, not the City of Pikeville. The site is away from future development of the park and would minimize viewshed impacts from other areas of the industrial park. There is also a water tank on the southern end of the Enterprise Park, which could result in waterlines running through the site. The Siting Team determined that Utility Management Group, LLC (UMG) owns the water tank and maintains water lines to the tank. The Siting Team met with UMG to discuss the Project and confirmed that no water lines from the tank are located on Site 5. UMG has been involved in the development of the Enterprise Park and provided valuable information. UMG also informed the Siting Team that there was a significant amount of fill from previous mining operations throughout the entire Enterprise Park, varying from 80 to 300 feet deep, with deeper amounts to the north and less to the south. Most of the site is flat with minimal to moderate grading required. This is the only site considered that is not owned by the City. Kentucky Power contacted the private landowner and they are willing to sell the parcel. Additionally, the site has good access from the Enterprise Park's primary entrance road. The proposed Kewanee 138 kV Extension would be approximately five miles long and largely located away from residential area. Overall, Site 5 is away from existing and future development in the Enterprise Park and was carried forward to the open house as Site B for further consideration.

Photo 5. Site B Facing Southeast

Photo 6. Site B Facing South (Towards the Water Tank)

Photo 7. Site B Facing Northeast

Photo 8. Site B Facing Southeast

2.0 ALTERNATIVE SITE COMPARISON

The Siting Team moved forward with Alternative Sites 1 and 5 (renamed to Sites A and B for public outreach) to be evaluated for the proposed Kewanee 138 kV Substation. Site A is located on the western side of the Enterprise Park and Site B is located the farthest south. Both sites are located within or adjacent to the Enterprise Park where several industrial companies intend to build, with residential development along the roadways at a lower elevation from the future industrial park. The site locations were largely driven by topography, available access into the site, transmission line route feasibility, and land use constraints.

Based on field reviews, no streams or wetlands are present on either site. Nonetheless, a wetland delineation will be completed for the selected site. Due to the Enterprise Park sitting atop a previously mined and disturbed area, it is unlikely that any archaeological or historic resources are present on either study site carried forward for further evaluation

Neither Site A nor B has any known utility infrastructure constraints or conflicts. Site B presented constraints early in the siting process due to potential water lines underground and a water tank located on the property. However, a meeting with UMG confirmed that the water lines would not be impacted and a substation site could be accommodated far enough from the water tower.

Threatened and endangered species impacts are not likely for either site. Both were evaluated through an Information for Planning and Consultation on the United States Fish and Wildlife Service's website and no critical habitats were found in the entire Project Area, including the Enterprise Park. Nevertheless, field surveys for critical species and habitats will be conducted as required.

From a planning and constructability standpoint, both Sites A and B have good access from the Enterprise Park's primary entrance road and are good locations to feed an electric source to the Park and to the existing customers served by the Fords Branch Substation, once retired. Substation Site A is likely to be located on a more significant amount of fill as it is believed that more fill is located further north in the Enterprise Park. Substation Site A could lead to additional costs to install foundations and potentially cause undercutting of the substation foundation as a result of more fill. From stakeholder interviews, Site B is likely located in an area with less fill and would likely provide a more constructible location for a substation foundation

The use of Substation Site A requires siting study segments that would cross Road Fork in more congested areas of residential development. Additionally, one study segment would require the

removal of a residence and the other study segment is located on a narrow ridge that could potentially have future constructability concerns for structures and access roads. Both Substation Sites A and B are located on parcels that would require minimal to moderate grading, and where the owners are willing to sell. Site B is located at a lower elevation and is situated in a more secluded area that would likely result in less visual impacts.

3.0 SUMMARY AND RECOMMENDATIONS

The Siting Team considered and reviewed five possible substation sites for the proposed Kewanee 138 kV Substation. Three substation sites considered (Sites 2, 3, and 4) were eliminated due to possible conflicts with future development of the Enterprise Park or the locations were not advantageous for the proposed 138 kV transmission line due to land use, terrain, or future mining permits. Ultimately, the substation location was narrowed down to two alternative sites that most feasibly avoided existing and future development (Sites A and B).

Substation Site B is recommended as the "Proposed Kewanee 138 kV Substation" site. Both Sites A and B are feasible for construction of a substation. Additionally, both sites have willing sellers and avoid or minimize impacts on natural resources and land uses. Both alternative sites avoid the need for non-standard engineering design requirements and are cost effective.

However, the Siting Team believes that Site B is the most feasible site as it is a larger site with construction feasibility that minimizes foundation risks as a result of less fill and provides good access for the associated transmission line entrance. Site B is at a lower elevation and farther from the main development portions of the Enterprise Park; land use and visual impacts are minimized; and there are likely to be fewer impacts on residences. The transmission line route into Site A crosses an occupied residential valley (Road Fork) and would likely require the removal of at least one residence. Additionally, the United States Army Corps of Engineers reviewed and confirmed no jurisdictional wetlands to be present on Site B. Therefore, based on a detailed desktop analysis and field reviews, the Siting Team recommended proceeding with the acquisition of Site B.

The following studies and/or surveys were conducted after this site selection process and prior to Kentucky Power purchasing Substation Site B:

- Phase I Environmental Site Assessment
- Geotechnical borings and groundwater elevation
- Wetland delineation

- Phase I Cultural Resource Survey
- Threatened and endangered species surveys
- Access road design and line of sight survey

However, Kentucky Power will verify that all previously completed surveys are to date and concurrence is still valid prior to construction of the new substation. After additional geotechnical and civil studies were completed, the Project Team determined an additional 1.4 acres to the east of the current property will need to be purchased from the City of Pikeville to minimize nonstandard design requirements. The City of Pikeville is willing to sell the additional acreage needed for the proposed substation.

Proposed Substation Site 2 (Dismissed)

Proposed Substation Site A (Dismissed)

Proposed Substation Site 3 (Dismissed)

Proposed Substation Site 4 (Dismissed)

Previously Proposed Substation Site B (Dismissed)

Final Proposed Substation Site

Water Tower

Kentucky Enterprise Industrial Park

Cedar Creek - Elwood 46 kV

Lovada Compton Branch
Left Fork of Island Creek Rd
Douglas St
Johnson Cemetery Rd
S Mayo Trl
Mills Branch Rd
Compton Branch
Paul David Dr
Justice Ct
Johnson St
Yorktown Dr
Kelson St
Marion Branch Rd
Levisa Fork
Kewanee Rd
Peach Orchard Branch
School House Dr
Left Fork of Island Creek Rd
Long Branch Rd
Island Creek
Rd Fork
Long Branch
Marion Branch
Stanley Fork
Billy Compton Branch
Cane Branch
Road Branch
Sword Fork
US Hwy 119
Fords Branch
Sookeys Creek
W Sookeys Creek
Rd Fork
Rd Branch

Path: E:\GIS\RAM120_Projects\148926_EnterprisePark_P18025005\SitingReport_SS_151565_EnterprisePark_P18025005_11x17P.mxd

Final Proposed Substation Site
Proposed Substation Site (Dismissed)
Existing AEP Transmission Line (69 kV or Lower)
Road
Railroad
Stream (NHD)
Parcel Purchased for Substation
Land to be Purchased from the City of Pikeville
Future Industrial Development Area
Approximate Extents of the Kentucky Enterprise Industrial Park
FEMA Floodplain
City of Pikeville

1 " = 1,000 '
0 500 1,000
Feet

Morgan
Johnson
Martin
WV
Magoffin
Floyd
Breathitt
Pike
Knott
Project Location
Perry
Letcher
VA

Proposed Kewanee 138 kV Substation Site Locations

Pike County
Kentucky

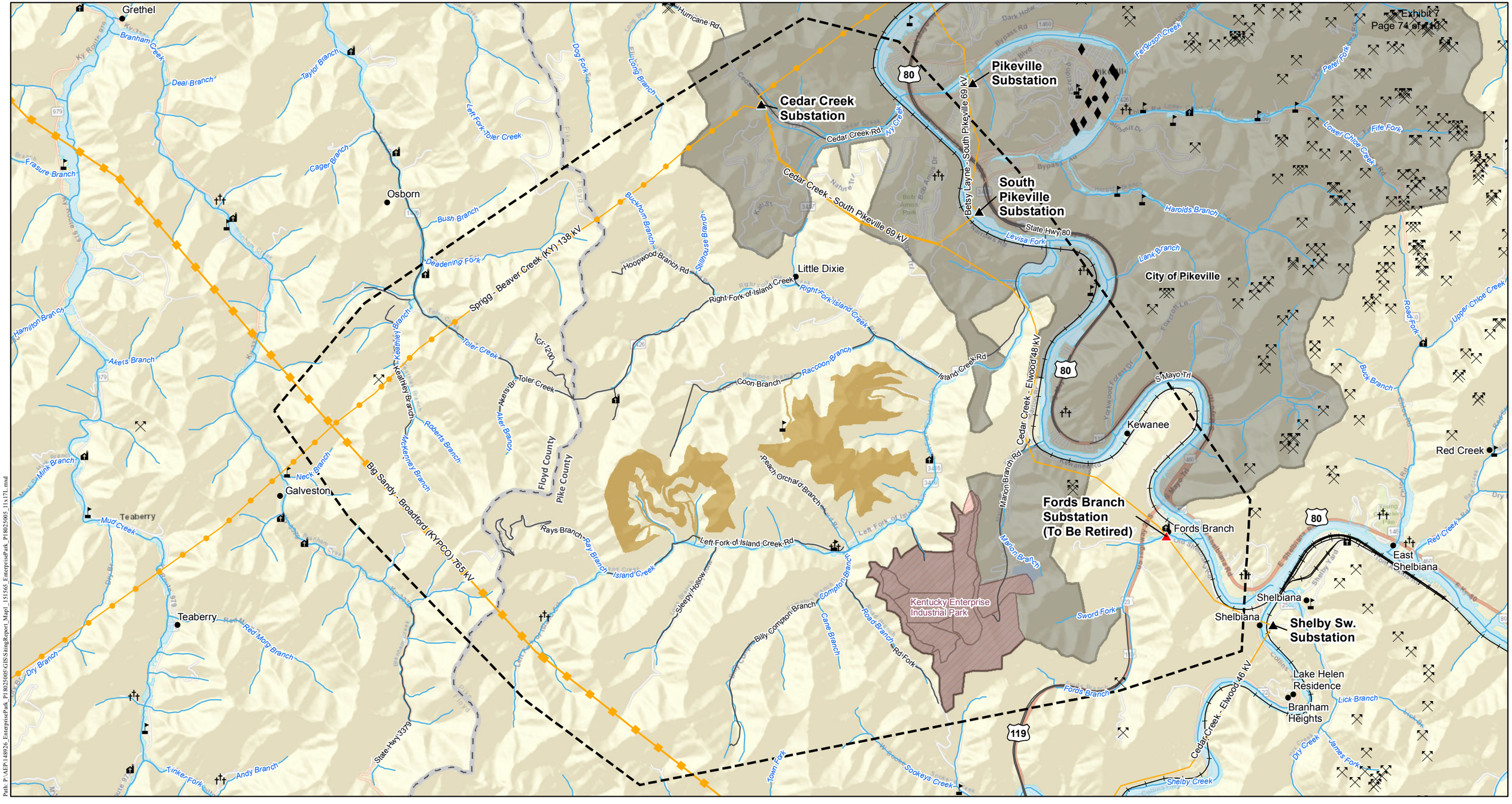
NAD 1983 StatePlane Kentucky South FIPS 1602 Feet
Foot US
Lambert Conformal Conic
North American 1983

Date: 7/2/2020
Author: AMW
POWER: 151565

Kewanee-Enterprise Park 138 kV Transmission Project

KENTUCKY POWER
An AEP Company
BOUNDLESS ENERGY

Attachment B: Maps



- ● Populated Place
- ▲ Existing AEP Substation
- ▲ Existing AEP Substation to be Retired
- ─ Existing AEP Transmission Line (69 kV or Lower)
- ● Existing AEP Transmission Line (115-230 kV)
- ■ Existing AEP Transmission Line (345 kV +)
- ◆ NRHP Site
- ✝ Cemetery
- Church
- School
- ⚒ Known Mine Portal Location
- ─ Road
- ┼ Railroad
- ─ Stream (NHD)
- ▨ Future CAM Mining Permit Area
- ▨ FEMA Floodplain
- ▨ Future Industrial Development Area
- ▨ Approximate Extents of the Kentucky Enterprise Industrial Park
- ▨ City of Pikeville
- ▭ County Boundary
- ⬭ Project Study Area

N

NAD 1983 StatePlane Kentucky South FIPS 1602 Feet
Foot US
Lambert Conformal Conic
North American 1983

Floyd and Pike Counties
Kentucky

0 3,500 7,000
Feet

1 " = 3,500 '

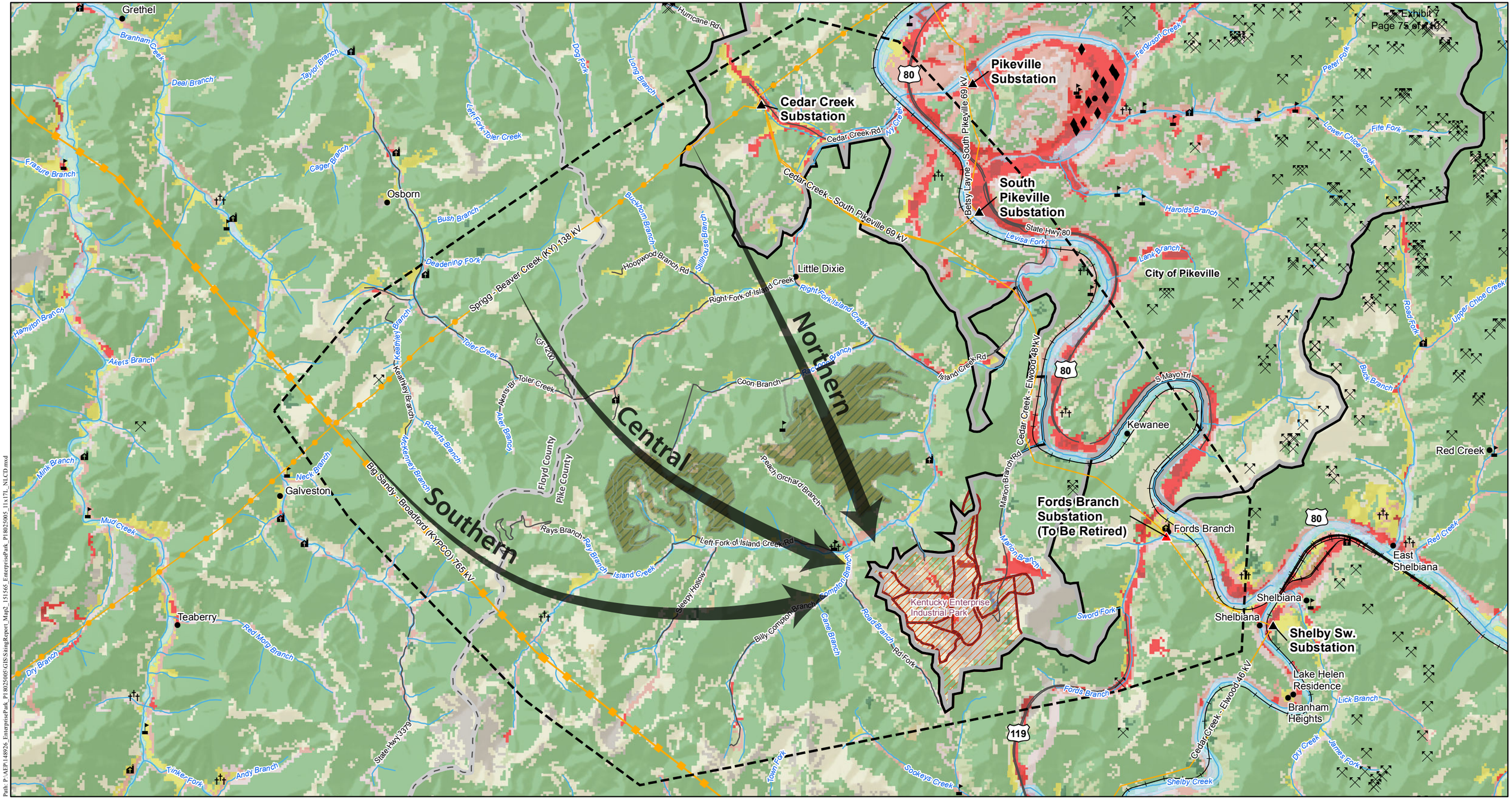
Page 1 of 1

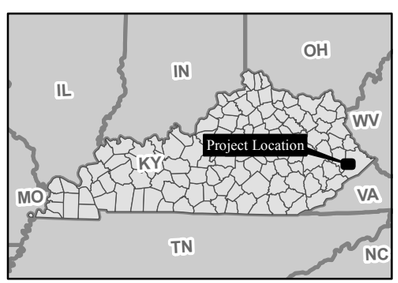
Map 1: Study Area

Kewanee-Enterprise Park 138 kV Transmission Project
P18025005

Date: 7/6/2020
Author: AMW
Project: 151565

KENTUCKY POWER
An AEP Company
BOUNDLESS ENERGY





- Populated Place
- Existing AEP Substation
- Existing AEP Substation to be Retired
- Existing AEP Transmission Line (69 kV or Lower)
- Existing AEP Transmission Line (115-230 kV)
- Existing AEP Transmission Line (345 kV +)
- NRHP Site
- Cemetery
- Church
- School
- Known Mine Portal Location
- Road
- Railroad
- Stream (NHD)
- Future CAM Mining Permit Area
- FEMA Floodplain
- Future Industrial Development Area
- Approximate Extents of the Kentucky Enterprise Industrial Park
- City of Pikeville
- County Boundary
- Project Study Area

NLCD Land Cover Classification

- Open Water
- Developed, Open Space
- Developed, Low Intensity
- Developed, Medium Intensity
- Developed, High Intensity
- Barren Land
- Deciduous Forest
- Evergreen Forest
- Mixed Forest
- Shrub/Scrub
- Herbaceuous
- Hay/Pasture
- Cultivated Crops
- Routing Concepts

NAD 1983 StatePlane Kentucky South FIPS 1602 Feet
Foot US
Lambert Conformal Conic
North American 1983

Floyd and Pike Counties
Kentucky

0 3,500 7,000
Feet

1 " = 3,500 '

Page 1 of 1

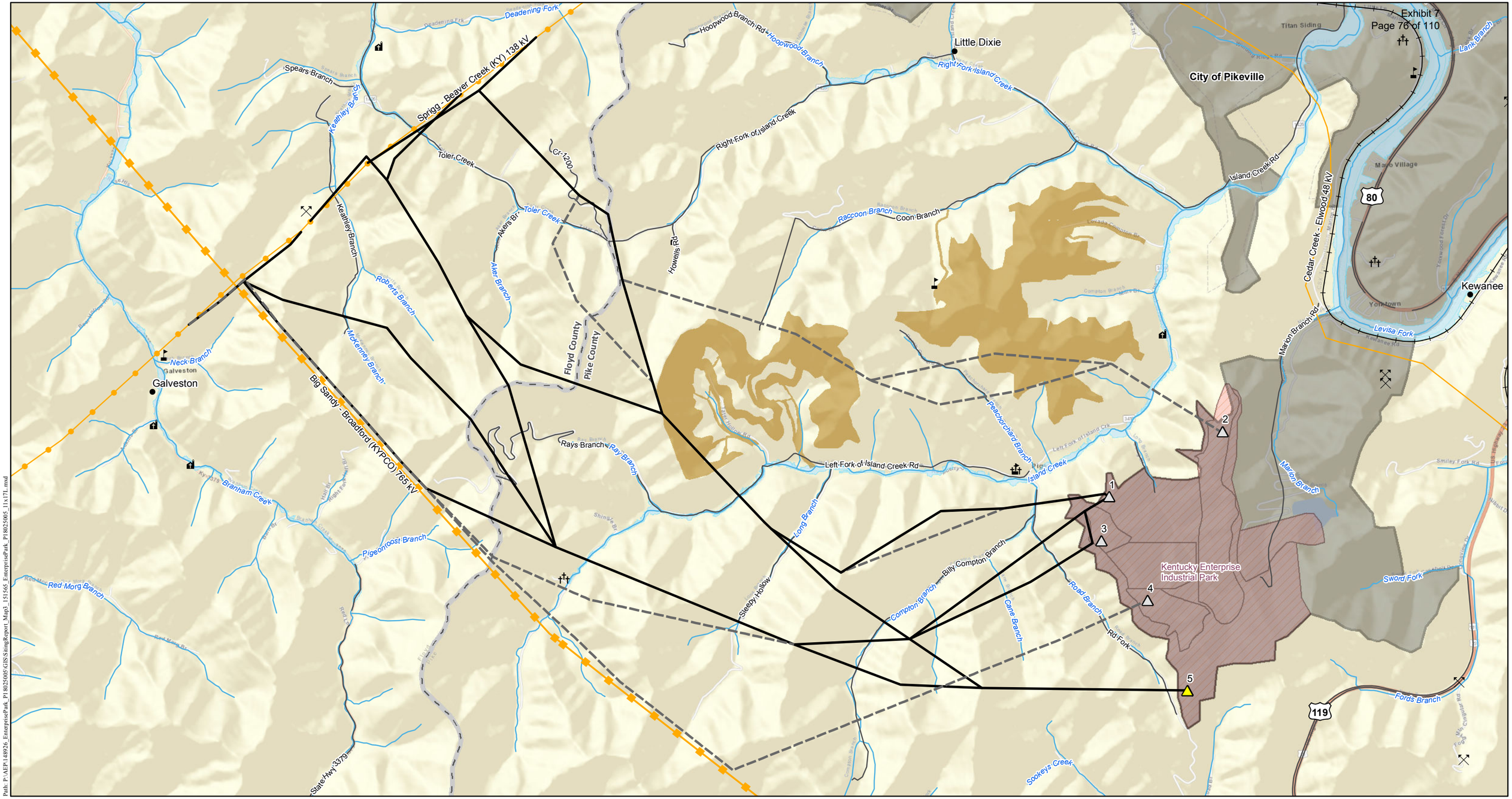
Map 2: Routing Concepts

Kewanee-Enterprise Park 138
kV Transmission Project
P18025005

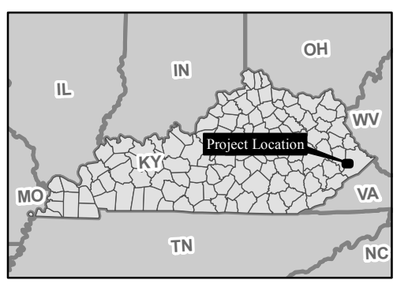
Date: 7/6/2020
Author: AMW
Project: 151565

KENTUCKY POWER
An AEP Company
BOUNDLESS ENERGY

Path: P:\AEP\14092e_EnterprisePark_P18025005\GIS\SitingReport_Map2_151565_EnterprisePark_P18025005_11x17TL_NLCD.mxd



Path: P:\AEP\148926_EnterprisePark_P18025005\GIS\SitingReport_Map3_151565_EnterprisePark_P18025005_11x17L.mxd



- Populated Place
- Proposed Substation Site
- Proposed Substation Site (Dismissed)
- Existing AEP Transmission Line (69 kV or Lower)
- Existing AEP Transmission Line (115-230 kV)
- Existing AEP Transmission Line (345 kV +)
- Cemetery
- Church
- School
- Known Mine Portal Location
- Road
- Railroad
- Stream (NHD)
- Future CAM Mining Permit Area
- FEMA Floodplain
- Future Industrial Development Area
- Approximate Extents of the Kentucky Enterprise Industrial Park
- City of Pikeville
- Dismissed Preliminary Study Segments
- Preliminary Study Segments Carried Forward
- County Boundary

NAD 1983 StatePlane Kentucky South FIPS 1602 Feet
Foot US
Lambert Conformal Conic
North American 1983

Floyd and Pike Counties
Kentucky

0 2,250 4,500
Feet

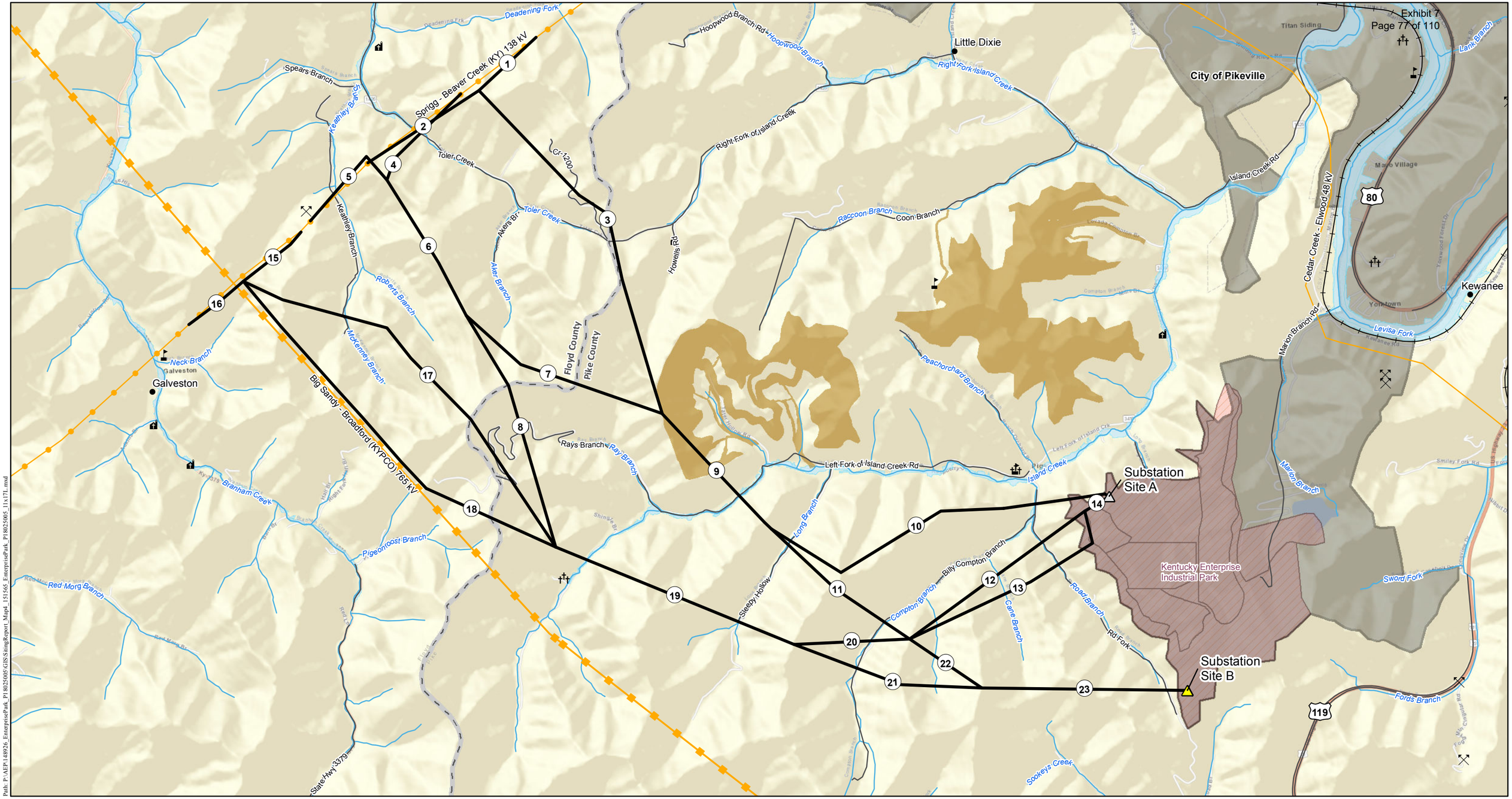
1 " = 2,250 '

Map 3: Preliminary Study Segment Network and Substation Study Sites

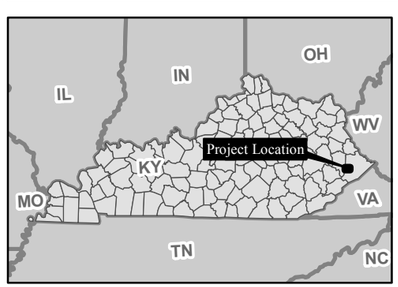
Kewanee-Enterprise Park 138
kV Transmission Project
P18025005

Date: 7/6/2020
Author: AMW
Project: 151565

KENTUCKY POWER
An AEP Company
BOUNDLESS ENERGY



Path: P:\AEP\148926_EnterprisePark_P18025005\GISSitingReport_Map4_151565_EnterprisePark_P18025005_11x17L.mxd



- Populated Place
- Proposed Substation Site
- Dismissed Substation Site
- Preliminary Study Segments Carried Forward
- Existing AEP Transmission Line (69 kV or Lower)
- Existing AEP Transmission Line (115-230 kV)
- Existing AEP Transmission Line (345 kV +)
- Cemetery
- Church
- School
- Known Mine Portal Location
- Road
- Railroad
- Stream (NHD)
- Future CAM Mining Permit Area
- FEMA Floodplain
- Future Industrial Development Area
- Approximate Extents of the Kentucky Enterprise Industrial Park
- City of Pikeville
- County Boundary

NAD 1983 StatePlane Kentucky South FIPS 1602 Feet
Foot US
Lambert Conformal Conic
North American 1983

Floyd and Pike Counties
Kentucky

0 2,250 4,500
Feet

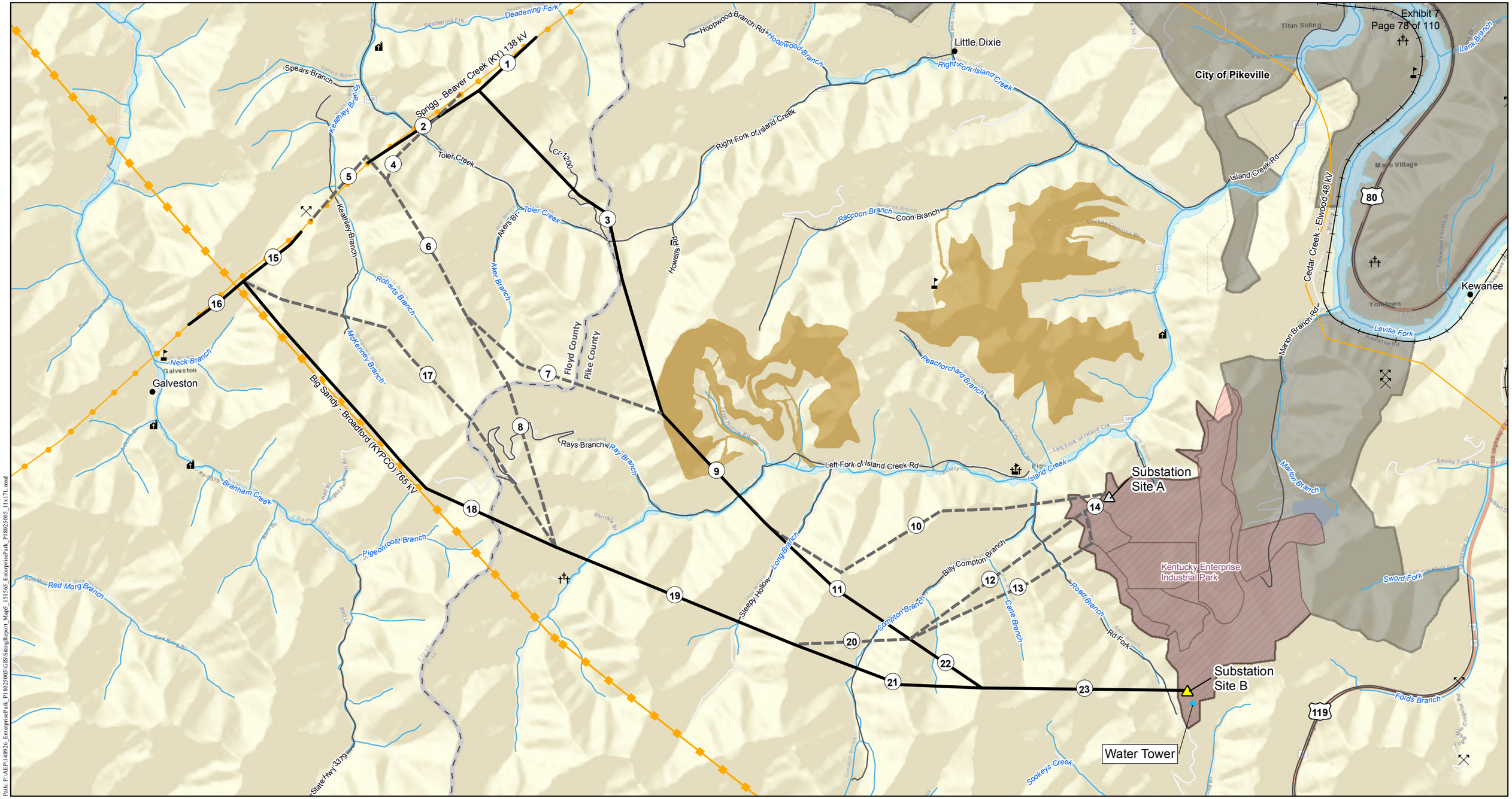
1 " = 2,250 '

Map 4: Study Segment Network and Substation Study Sites

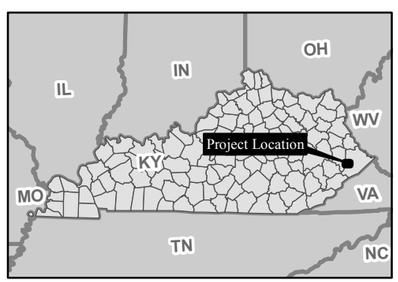
Kewanee-Enterprise Park 138 kV Transmission Project
P18025005

Date: 7/6/2020
Author: AMW
Project: 151565

KENTUCKY POWER
An AEP Company
BOUNDLESS ENERGY



Path: P:\AEP\148926_EnterprisePark_P18025005\GIS\SitingReport_Map5_151565_EnterprisePark_P18025005_11x17L.mxd



- Populated Place
- Proposed Substation Site
- Dismissed Substation Site
- Study Segments Carried Forward
- Study Segments Dismissed
- Existing AEP Transmission Line (69 kV or Lower)
- Existing AEP Transmission Line (115-230 kV)
- Existing AEP Transmission Line (345 kV +)
- Cemetery
- Church
- School
- Known Mine Portal Location
- Water Tower
- Road
- Railroad
- Stream (NHD)
- Future CAM Mining Permit Area
- FEMA Floodplain
- Future Industrial Development Area
- Approximate Extents of the Kentucky Enterprise Industrial Park
- City of Pikeville
- County Boundary

NAD 1983 StatePlane Kentucky South FIPS 1602 Feet
Foot US
Lambert Conformal Conic
North American 1983

Floyd and Pike Counties
Kentucky

0 2,250 4,500
Feet

1 " = 2,250 '

Page 1 of 1

Map 5: Refined Study Segment Network and Substation Study Sites

Kewanee-Enterprise Park 138 kV Transmission Project
P18025005

Date: 7/6/2020
Author: AMW
Project: 151565

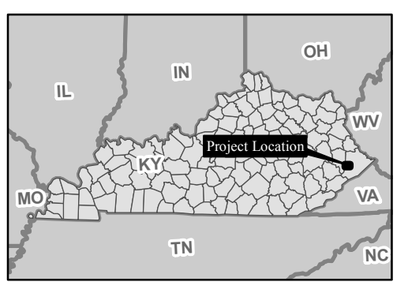
KENTUCKY POWER
An AEP Company
BOUNDLESS ENERGY

Deadening Fork
Hoopwood Branch Rd
Hoopwood Branch
Little Dixie
Right Fork Island Creek
City of Pikeville
Lank Branch
Spears Branch
Toler Creek
Sprigg - Beaver Creek (KY) 138 kV
Right Fork of Island Creek
Island Creek Rd
Cedar Creek - Elwood 138 kV
80
Cr-1200
Toler Creek
Keathley Branch
Alters Br
Raccoon Branch
Coon Branch
Howells Rd
Alter Branch
Roberts Branch
Alternative Route A
Floyd County
Pike County
Kewanee
Levisa Fork
Marion Branch Rd
Neck Branch
Galveston
Alternative Route B
Big Sandy - Broadford (KYPCO) 765 kV
Rays Branch
Peachorchard Branch
Left Fork of Island Creek Rd
Island Creek
Marion Branch
Branham Creek
Long Branch
Pigeonroost Branch
Red Morg Branch
Sleepy Hollow
Compton Branch
Billy Compton Branch
Cane Branch
Red Fork
Kentucky Enterprise Industrial Park
Sword Fork
Proposed Site for Kewanee Substation
Water Tower
119
Fords Branch
State Hwy 3379
Floyd County
Pike County
Sookeys Creek

1) Habitable structures shown are those that were field verified and located within the open house notification area.

Alternative Route A: Study Segments 1, 2, 3, 9, 11, 22 and 23

Alternative Route B: Study Segments 15, 16, 18, 19, 21 and 23



- Populated Place
- Proposed Substation Site
- Alternative Routes
- Existing AEP Transmission Line (69 kV or Lower)
- Existing AEP Transmission Line (115-230 kV)
- Existing AEP Transmission Line (345 kV +)
- Habitable Structure[1]
- Cemetery
- Church
- School
- Known Mine Portal Location
- Water Tower
- Road
- Railroad
- Stream (NHD)
- Parcel to be Purchased for Substation
- Future CAM Mining Permit Area
- Future Industrial Development Area
- Approximate Extents of the Kentucky Enterprise Industrial Park
- City of Pikeville
- County Boundary

NAD 1983 StatePlane Kentucky South FIPS 1602 Feet
Foot US
Lambert Conformal Conic
North American 1983

Floyd and Pike Counties
Kentucky

0 2,250 4,500
Feet

1 " = 2,250 '

Page 1 of 1

Map 6: Alternative Routes

Kewanee-Enterprise Park 138 kV Transmission Project
P18025005

Date: 7/6/2020
Author: AMW
Project: 151565

KENTUCKY POWER
An AEP Company
BOUNDLESS ENERGY

Path: P:\AEP\149926_EnterprisePark_P18025005\GIS\SitingReport_Maps_151565_EnterprisePark_P18025005_11x17L.mxd

Proposed Tap Structure - Sprigg - Beaver Creek Asset (K116-97A)

Sprigg - Beaver Creek (KY) 138 kV

Big Sandy - Broadford (KYPCO) 765 kV

1) Habitable structures shown are those that were field verified and located within the open house notification area.

*Shown is a preliminary design. This design is not the final route centerline or structure locations. Final line route and structure locations will be determined during final engineering, which includes ground survey and geotechnical and environmental studies. Nonetheless, the Company believes the centerline illustrated is the most suitable alignment based upon preliminary analysis.

Proposed Site for Kewanee Substation

Water Tower

Kentucky Enterprise Industrial Park

City of Pikeville

Kewanee

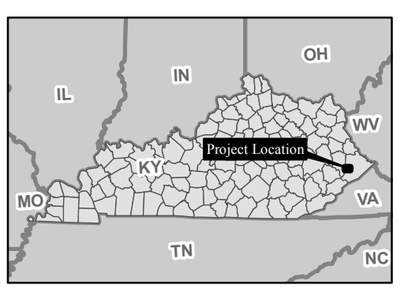
Little Dixie

Galveston

Floyd County

Pike County

Path: C:\Workspace\Projects\RAM120_Projects\AEP\148926_EnterprisePark_P18025005\GIS\SitingReport_Map7_151565_EnterprisePark_P18025005.mxd



- Populated Place
- Proposed Substation Site
- Preliminary Structure Location
- Proposed Route Before Modification
- Proposed Route with Modification
- Existing AEP Transmission Line (69 kV or Lower)
- Existing AEP Transmission Line (115-230 kV)
- Existing AEP Transmission Line (345 kV +)
- Habitable Structure[1]
- Cemetery
- Church
- School
- Known Mine Portal Location
- Water Tower
- Road
- Railroad
- Stream (NHD)
- Parcel to be Purchased for Substation
- Future CAM Mining Permit Area
- FEMA Floodplain
- Future Industrial Development Area
- Approximate Extents of the Kentucky Enterprise Industrial Park
- City of Pikeville
- County Boundary

NAD 1983 StatePlane Kentucky South FIPS 1602 Feet
Foot US
Lambert Conformal Conic
North American 1983

Floyd and Pike Counties
Kentucky

0 2,250 4,500
Feet

1 " = 2,250 '

Map 7: Proposed Route with Modification

Kewanee-Enterprise Park 138 kV Transmission Project
P18025005

Date: 7/6/2020
Author: AMW
Project: 151565

KENTUCKY POWER
An AEP Company
BOUNDLESS ENERGY

Proposed Tap Structure - Sprigg - Beaver Creek Asset (K116-97A)

Sprigg - Beaver Creek (KY) 138 kV

Big Sandy - Broadford (KYPCO) 765 kV

Proposed Kewanee Substation

Water Tower

City of Pikeville

Kentucky Enterprise Industrial Park

Little Dixie

Galveston

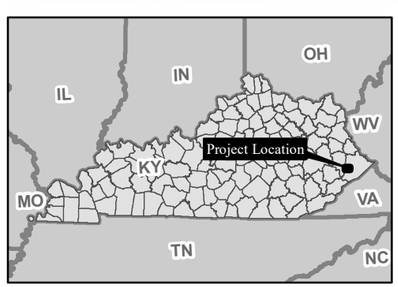
Kewanee

Floyd County

Pike County

1) Habitable structures shown are those that were field verified and located within the open house notification area.

*Shown is a preliminary design. This design is not the final route centerline or structure locations. Final line route and structure locations will be determined during final engineering, which includes ground survey and geotechnical and environmental studies. Nonetheless, the Company believes the centerline illustrated is the most suitable alignment based upon preliminary analysis.



- Proposed Substation Site
- Proposed Structure Location
- Proposed Route
- Existing AEP Transmission Line (69 kV or Lower)
- Existing AEP Transmission Line (115-230 kV)
- Existing AEP Transmission Line (345 kV +)
- Populated Place
- Habitable Structure[1]
- Cemetery
- Church
- School
- Known Mine Portal Location
- Water Tower
- Road
- Railroad
- Stream (NHD)
- Parcel Purchased for Substation
- WPP Proposed Mining Limits
- Future CAM Mining Permit Area
- Land to be Purchased from the City of Pikeville
- Future Industrial Development Area
- Approximate Extents of the Kentucky Enterprise Industrial Park
- FEMA Floodplain
- City of Pikeville
- County Boundary

NAD 1983 StatePlane Kentucky South FIPS 1602 Feet
Foot US
Lambert Conformal Conic
North American 1983

Floyd and Pike Counties
Kentucky

0 2,250 4,500
Feet

1 " = 2,250 '

Map 8: Proposed Route to be Submitted to Kentucky PSC

Kewanee-Enterprise Park
138 kV Transmission Project
P18025005

Date: 7/2/2020
Author: AMW
Project: 151565

KENTUCKY POWER
An AEP Company
BOUNDLESS ENERGY

Attachment C: Stakeholder Meeting Notes

DATE: July 1, 2020

TO: Scott Kennedy

C: Shaun Lopez

FROM: Emily Larson
Environmental Project Manager

SUBJECT: 151565 Kewanee - Enterprise Park 138 kV Transmission Project

MESSAGE

STAKEHOLDER MEETING SUMMARIES

Key stakeholders were identified early in the siting process. During initial siting activities, the Siting Team contacted and met with key stakeholders in the field on March 8 and 19, 2018 and April 4, 2018. These stakeholders included local representatives from Floyd and Pike counties and the City of Pikeville for which the Project is located; Cam Kentucky Real Estate, LLC (CAM Mining), a company with large mining tracts of land in the northern portion of the Study Area; and Utility Management Group, LLC (UMG), an organization that owns a water tower adjacent to a proposed substation site and manages the underground water lines situated throughout the Kentucky Enterprise Industrial Park.

Additional stakeholders were contacted as part of the reengagement of the Project in March 2020. These stakeholders include local officials; Western Pocahontas Properties (WPP) and Raven Coal, both involved with mining operations in the eastern extents of the Project Area. The goal of the stakeholder meetings was to solicit information and gain feedback on the proposed Project and determine any potential conflicting land uses

STAKEHOLDER MEETINGS

Floyd and Pike Counties and City of Pikeville
March 8th, 2018

Meeting Attendees
Herbert Deskins, Deputy Judge Exec.
Elizabeth Thompson, Economic Development Administration
Sean Cochran, Executive Director of Economic Development
Brad Slone, Deputy City Manager of Operations
Phillip Elswick, P.E., City Manager of Pikeville
Judge Executive Ben Hale, Floyd County

Discussion
Members of the Project Team reached out to a Floyd County official informing them of the Project. Floyd County's Judge Executive Hale did not note any potential impacts and did not request for an in-person meeting. Members of the Project Team conducted an in-person meeting at the Pikeville City Hall with Pike County and City officials. The preliminary routes were presented to the officials for their comment and review. The siting and construction processes associated with transmission lines and the Kentucky Public Service Commission (PSC) filing for this Project was also presented. The City and County representatives did not foresee any major issues based on the need and schedule of the Project; however, it was mentioned that landowners will likely be unwilling to relocate. No potentially affected landowner was named to have a strong opposition to the Project. The Cedar Hills neighborhood, located approximately 1.8 miles north of the northern alternatives presented, had voiced concerns regarding visual impacts of the existing industrial park at the time of its construction. It was noted that residents of this neighborhood may have similar concerns for this transmission line project. In discussing potential concerns from the neighborhood, they will most likely not be affected due to their location north and away from the right-of-way. It was suggested by the City and County representatives that candidates running for the local government be invited to the open house, and that also the open house avoid being held the third week of April due to a local festival. The alternative substation site was also presented to the local officials with no objections; however, this site has concerns related to distribution. Additionally, the Project Team notified Floyd and Pike county and City of Pikeville officials in March 2020 to inform them of the Project's reengagement and no concerns were noted.

Cam Kentucky Real Estate, LLC (CAM Mining)
March 19th, 2018

Meeting Attendees
Dennis Halbert, CAM Mining

Discussion
A meeting was held among members of the Siting Team and CAM Mining. Preliminary routes were presented to CAM Mining to receive feedback regarding their mining permit areas in the northern portions of the Study Area. Larger mining plans are anticipated near the northernmost routes and would likely interfere with preliminary routes in the area. The Siting Team took this into consideration as interference with the future mining plans would likely need a relocation agreement. It was also noted that a mining operation consisting of a minor contour job was currently located on the middle route options. CAM Mining provided suggestions for structure placements in order to avoid the mining operation. Two knobs on the middle route options were noted on maps that would keep transmission structures outside of their mining plan limits (see image below). Their preferred location would be the northernmost structure; however, either noted location would be acceptable to them.

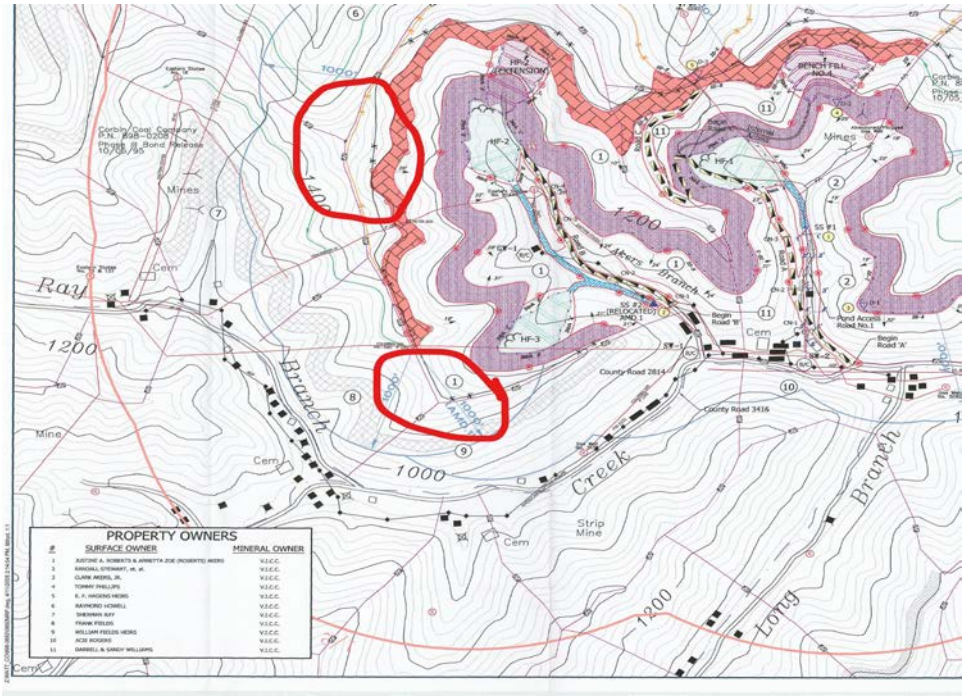


FIGURE 1. CAM MINING PLANNED AREAS

Utility Management Group, LLC (UMG)
April 4th, 2018

Meeting Contacts
Grondall Potter, Special Projects Manager

Discussion
An in-person meeting was held on April 4, 2018 at the UMG office in Pikeville, Kentucky. UMG maintains water lines throughout the Kentucky Enterprise Industrial Park (KEIP) and owns a water tower near the southernmost proposed site for the Kewanee 138 kV Substation. The study segments and five potential substation sites were discussed in conjunction with future plans of the KEIP. The water tower, known as the Island Creek Tank, is currently owned by UMG; there would likely be no impacts if the proposed Kewanee 138 kV Substation were to be constructed on potential Substation Site 5. Water lines going to the Island Creek Tank are located south of the water tank and away from Substation Site 5. Mr. Potter showed the Team maps of the KEIP indicating the landowner of Substation Site 5 as Kent and Vivian Snodgrass; there will be follow-up through ORC for the permission to survey on the parcel and determine if they are interested in selling. There was discussion on mining areas throughout the Study Area, specifically north and south of the routes. Old mining areas to the south of the study segments could be a site for a residential development in the future. As a result of mining on the KEIP site, there is backfill located on all potential substation sites, varying from 80 to 300 feet deep. Mr. Potter said he will provide boring information to AEP that has been completed where Substation Site 5 is currently situated. There was discussion regarding proposals for an additional entrance road into the KEIP, one of which is near Substation Site 5; however, the most probable entrance that will be chosen will be via Sword Fork and away from all potential substation sites. Overall, there is positive response from the community regarding EnerBlu and other industries expanding into the KEIP.

Mr. Potter provided contact information for the City's Engineer, Brad Slone, who could provide environmental surveys that were completed. He also provided contact information for John Michael Johnson, Kentucky Highway Department, who has extensive knowledge of the Study Area, particularly the Cline Heirs who own property throughout the Study Area. These contacts were forwarded to ORC for further coordination.

Western Pocahontas Properties (WPP) and Raven Coal
March 24 and May 21, 2020

Meeting Contacts
Jeff Conley, WPP
Paul Sebastian, WPP
Allan Robinson, WPP
Dave Ison, Raven Coal

During the reengagement of the Project in 2020, right-of-way representatives met with WPP and Raven Coal onsite to discuss an active mining operation west of the Proposed Route on March 24, 2020. Raven Coal was identified as the coal mining operator on WPP's properties, who are the mineral owner. The stakeholders noted the Proposed Route crosses their future mining plans, which are largely driven by market trends and are often dynamic. During the initial siting process, the mining plans were not known, despite contacts with WPP through the filing effort in 2018. A follow up meeting was conducted on May 21, 2020 to discuss agreement options and determine ways to mitigate potential impacts from the Proposed Route. The proposed structures could require future relocation based on current plants. WPP provided a potential shift to the Proposed Route near Structure Number 1261-7 that would minimize impacts to the planned coal operation. The shift is shown below. Engineering team members reviewed the alignment shift at Proposed Structure 1261-7 and determined it is feasible, but would require a more detailed review given the rugged terrain. As a result, the Project Team defined a filing corridor that encompasses the shift and would provide flexibility on WPP's properties during final engineering and at the time of construction.

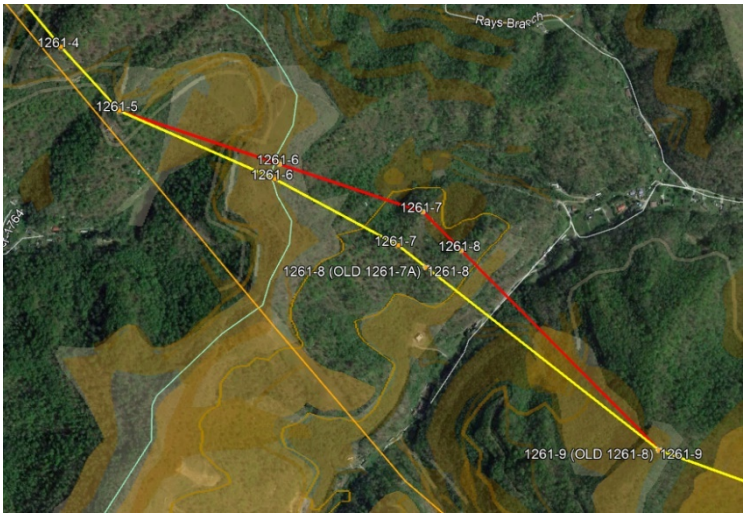


FIGURE 2. POTENTIAL PROPOSED ROUTE ALIGNMENT SHIFT ON WPP PROPERTIES

Attachment D: GIS Data Sources

Attachment D. GIS Data Sources		
Siting Evaluation Factor	**Source**	**Description**
	Land Use	
Number of parcels crossed by the ROW	Floyd and Pike counties, Kentucky (2017 and 2020 datasets) Property Valuation Administrator Offices	Count of the number of parcels crossed by the ROW.
Number of residences within 500 feet of the route centerline	Digitized from LiDAR ortho imagery (flown in 2018), Environmental Systems Research Institute (Esri) Imagery (2016 dataset), and Google Earth imagery. Data also field verified from points of public access in 2018 and 2020.	Count of the number of residences within the ROW and within 500 feet of potential routes.
Number of commercial buildings within 500 feet of the route centerline	Digitized from LiDAR ortho imagery (flown in dataset), Environmental Systems Research Institute (Esri) Imagery (2016 dataset), and Google Earth imagery. Data also field verified from points of public access in 2018 and 2020.	Count of the number of commercial buildings within the ROW and within 500 feet of potential routes.
Land use within the Study Area	NLCD was downloaded from the National Resources Conservation Service Geospatial Data Gateway (date of dataset unavailable)	The NLCD data compiled by the Multi-Resolution Land Characteristics Consortium includes 15 classes of land cover from Landsat satellite imagery.
Acres of conservation easements crossed	National Conservation Easement Database (NCED) (2017 dataset)	Private conservation easements crossed by the routes from the NCED which is comprised of voluntarily reported conservation easement information from land trusts and public agencies.
Number of archeological resources within the ROW and within 250 feet of the route centerline	Kentucky Office of State Archaeology (2018 dataset)	Previously identified archeological resources listed or eligible on the National Register of Historic Places (NRHP) acquired through Kentucky Office of State Archaeology (2018).

Attachment D. GIS Data Sources		
Siting Evaluation Factor	**Source**	**Description**
Number of historic architectural resources within the ROW and within one mile of the centerline	Kentucky Heritage Council (KHC) (2018 dataset)	Previously identified historic architectural resource sites and districts listed or eligible on the NRHP acquired through KHC.
Institutional uses (schools, places of worship and cemeteries) within 1,000 feet of the route centerline	U.S. Geological Survey's GNIS (2018 dataset)	This dataset includes the locations of cemeteries, places of worship, hospitals, parks, and schools. Features within 1,000 feet of potential routes were field verified.
Airfield and heliports within one mile of the route centerline	GNIS (2018 dataset) and the Federal Aviation Administration database (2018 dataset)	Distance from airfields and heliports.
Mining areas within study area and crossed by centerline	Kentucky Mine Mapping Information System (2018 dataset)	Dataset includes mining information regarding Mining Areas, Mined Out Areas, Mine Portal Locations, and MMIs Coal Mine Data. Data also available for oil and gas wells.
Natural Environment		
Forest clearing within the ROW	Digitized based on LiDAR ortho imagery sources	Acres of forest within the ROW.
Number of National hydrography dataset (NHD) stream and waterbody crossings within the ROW	USGS (NHD) (2016 dataset)	The NHD is a comprehensive set of digital spatial data prepared by the USGS that contains information about surface water features such as lakes, ponds, streams, rivers, springs and wells.
Acres of National Wetland Inventory (NWI) wetland crossings within the ROW	U.S. Fish and Wildlife Service (USFWS) (2017 dataset)	The NWI produces information on the characteristics, extent, and status of the Nation's wetlands and deepwater habitats.
Acres of 100-year floodplain crossing within the ROW	U.S. Federal Emergency and Management Agency (FEMA) (2017 dataset)	Acres of 100-year floodplain within the ROW.
Miles of public lands crossed by the route	The Protected Areas Database of the United States (PAD-US) (2018 dataset)	Miles of federal, state and local lands crossed by the ROW.

Attachment D. GIS Data Sources		
Siting Evaluation Factor	**Source**	**Description**
Threatened, endangered, rare or sensitive species occurrence within the Project vicinity	USFWS (IPaC reports generated in 2018 and 2020)	Locations of potential habitat based on land use.
Technical		
Route length	Measured in GIS	Length of route in miles.
Number and severity of angled structures	Developed in CAD	Anticipated number of angled structures < 3 degrees, 3 to 45 degrees and over 45 degrees based on preliminary design.
Number of road crossings	TIGER roads file (2016 dataset)	Count of federal, state and local roadway crossings.
Number of pipeline crossings	S&P Platts database (2018 dataset)	Number of known pipelines crossed by the transmission ROW.
Number of transmission line crossings	AEP TGIS	Number of high voltage (100 kV or greater) transmission lines crossed by the ROW.
Distance of steep slopes crossed	Derived from seamless Digital Elevation Models obtained from the U.S. Geologic Survey (Date of dataset unavailable)	Miles of slope greater than 20 percent crossed by the routes.
Length of transmission line parallel	AEP TGIS	Miles of the route parallel to existing high voltage transmission lines.
Length of pipeline parallel	S&P Platts database (2018 dataset)	Miles of the route parallel to existing pipelines.
Length of road parallel	TIGER roads file (2016 dataset)	Miles of the route parallel to existing roadways.

Attachment E: Agency Correspondence

POWER ENGINEERS, INC.
1041 RED VENTURES DR.
SUITE 105
FORT MILL, SC 29707 USA

PHONE 803-835-5900
FAX 803-835-5999

March 12, 2018

Mr. Tom Timmerman
Kentucky Department of Fish and Wildlife Resources
Northeastern District
120 Fish Hatchery Road
Morehead, Kentucky 40351

Subject: Kentucky Power Enterprise Park Economic Expansion Project (Floyd and Pike Counties, Kentucky) – Siting Study and Kentucky Public Service Commission Application

Dear Mr. Timmerman:

POWER Engineers, Inc. (POWER) is preparing a siting study and Kentucky Public Service Commission Application on behalf of Kentucky Power for an upcoming transmission line project. Kentucky Power is planning to improve electric reliability to customers and increase economic development opportunities in eastern Kentucky by making upgrades to the power grid in Floyd and Pike counties. Kentucky Power plans to construct approximately five miles of double circuit 138 kilovolt (kV) transmission line and a new substation to ensure continued reliable electric service to existing customers and to provide a new source of power to the 300-acre Kentucky Enterprise Industrial Park located in Pikeville. The transmission upgrades will reduce the likelihood of extended outages while providing the 300-acre industrial park with a reliable and robust power source capable of handling continued customer growth. The transmission line will be constructed within a new 100-foot right-of-way. Construction is expected to start the beginning of 2019 and be complete by the end of the year.

POWER is requesting information concerning the potential for the occurrence of rare, threatened, or endangered species, habitats of concern, and significant biological resources under the jurisdiction of the Kentucky Department of Fish and Wildlife Resources within the Study Area as shown on the attached Figure 1.

Should you have any questions or concerns, please feel free to contact me at 609-570-7227 or Emily.Larson@powereng.com.

Sincerely,

Emily Larson

Emily Larson
Environmental Project Manager
POWER Engineers, Inc.

Attachment: Figure 1: Project Study Area

c: Scott Kennedy, American Electric Power
Jared Webb, American Electric Power
Tyler Emery, American Electric Power
DMS: 148926/PER-03

23 March 2018

Power Engineers, Inc.
Attn: Emily Larson
1041 Red Ventures Drive
Suite 105
Fort Mill, South Carolina 29707

RE: Kentucky Power Enterprise Park Economic Expansion Project (Floyd and Pike Counties)
Siting Study and Kentucky Public Service Commission Application

Dear Ms. Larson:

The Kentucky Department of Fish and Wildlife Resources (KDFWR) has received your request for information pertaining to the subject project. The Kentucky Fish and Wildlife Information System indicates that the federally-listed Northern Long-eared bat *(Myotis septentrionalis)*, Indiana bat *(Myotis sodalis)*, Grey bat *(Myotis grisescens)*, and Big Sandy Crayfish *(Cambarus callainus)* are known to occur within 10 miles of the project site. The state-listed Eastern Small-footed Myotis *(Myotis leibii)*, American Black Bear *(Ursus americanus)*, and Northern Harrier *(Circus cyaneus)* are known to occur within one mile of the project site. Please be aware that our database system is a dynamic one that only represents our current knowledge of various species distributions.

If tree clearing is required for the project, please coordinate with the U.S. Fish and Wildlife Service Kentucky Field Office (502-695-0468) to ensure compliance under the Federal Endangered Species Act. Questions pertaining to plant communities should be directed to the Kentucky State Nature Preserves Commission at 502-573-2886.

KDFWR recommends that you contact the appropriate US Army Corps of Engineers office and the Kentucky Division of Water prior to any work within the waterways or wetland habitats of Kentucky. Additionally, KDFWR recommends the following for the portions of the project that impact streams:

- Channel changes located within the project area should incorporate natural stream channel design.
- If culverts are used, the culvert should be designed to allow the passage of aquatic organisms.
- Culverts should be designed so that degradation upstream and downstream of the culvert does not occur.
- Development/excavation during low flow period to minimize disturbances.
- Proper placement of erosion control structures below highly disturbed areas to minimize entry of silt into area streams.

- Replanting of disturbed areas after construction, including stream banks, with native vegetation for soil stabilization and enhancement of fish and wildlife populations. We recommend a 100 foot forested buffer along each stream bank.
- Return all disturbed instream habitat to a stable condition upon completion of construction in the area.
- Preservation of any tree canopy overhanging any streams within the project area.

To minimize indirect impacts to the aquatic environment, the KDFWR recommends that erosion control measures be developed and implemented prior to construction to reduce siltation into waterways located within the project area. Such erosion control measures may include, but are not limited to silt fences, staked straw bales, brush barriers, sediment basins, and diversion ditches. Erosion control measures will need to be installed prior to construction and should be inspected and repaired regularly as needed.

I hope this information is helpful to you, and if you have questions or require additional information, please call me at (502) 564-7109 extension 4453.

Sincerely,

Dan Stoelb
Environmental Scientist

Cc: Environmental Section File

POWER ENGINEERS, INC.
1041 RED VENTURES DR.
SUITE 105
FORT MILL, SC 29707 USA

PHONE 803-835-5900
FAX 803-835-5999

March 12, 2018

Mr. Lee Andrews
Field Supervisor
U.S. Fish and Wildlife Service, Kentucky Ecological Services
330 West Broadway, Room 265
Frankfort, Kentucky 40601

Subject: Kentucky Power Enterprise Park Economic Expansion Project (Floyd and Pike Counties, Kentucky) – Siting Study and Kentucky Public Service Commission Application

Dear Mr. Lee:

POWER Engineers, Inc. (POWER) is preparing a siting study and Kentucky Public Service Commission Application on behalf of Kentucky Power for an upcoming transmission line project. Kentucky Power is planning to improve electric reliability to customers and increase economic development opportunities in eastern Kentucky by making upgrades to the power grid in Floyd and Pike counties. Kentucky Power plans to construct approximately five miles of double circuit 138 kilovolt (kV) transmission line and a new substation to ensure continued reliable electric service to existing customers and to provide a new source of power to the 300-acre Kentucky Enterprise Industrial Park located in Pikeville. The transmission upgrades will reduce the likelihood of extended outages while providing the 300-acre industrial park with a reliable and robust power source capable of handling continued customer growth. The transmission line will be constructed within a new 100-foot right-of-way. Construction is expected to start the beginning of 2019 and be complete by the end of the year.

POWER is requesting information concerning the potential for the occurrence of rare, threatened, or endangered species, habitats of concern, and significant biological resources under the jurisdiction of the U.S. Fish and Wildlife Service within the Study Area as shown on the attached Figure 1.

Should you have any questions or concerns, please feel free to contact me at 609-570-7227 or Emily.Larson@powereng.com.

Sincerely,

Emily Larson

Emily Larson
Environmental Project Manager
POWER Engineers, Inc.

Attachment: Figure 1: Project Study Area

c: Scott Kennedy, American Electric Power
Jared Webb, American Electric Power
Tyler Emery, American Electric Power

DMS: 148926/PER-03

United States Department of the Interior

FISH AND WILDLIFE SERVICE
Kentucky Ecological Services Field Office
330 West Broadway, Suite 265
Frankfort, Kentucky 40601
(502) 695-0468

Dear Project Proponent:

We have received your request for a species list for your project. The Kentucky Field Office (KFO) is directing project proponents to obtain species lists from the U.S. Fish and Wildlife Service (USFWS) Information for Planning and Conservation (IPaC) system located at: https://ecos.fws.gov/ipac/. IPaC will immediately provide you with a current species list appropriate for your proposed project and an official letter on USFWS letterhead. This list will include species currently listed as threatened or endangered, species proposed for listing, critical habitat for listed species, and bird species of conservation concern.

When you open the IPaC site, you will be asked to input a location for your proposed project. The location can be input in different ways. Often, the easiest way is to zoom into the vicinity of the project area on the map and use the sketch tool to approximate the boundaries of the proposed project site, plus an appropriate buffer. This location that you input should represent the entire "action area" of your proposed project by considering all the potential "effects of the action," including potential direct, indirect, and cumulative effects to federally-listed species or their critical habitat as defined in 50 CFR 402.02. This includes effects of any "interrelated actions" that are part of a larger action and depend on the larger action for their justification and "interdependent actions" that have no independent utility apart from the action under consideration (e.g.; utilities, access roads, etc.) and future actions that are reasonably certain to occur as a result of the proposed project (e.g.; development in response to a new road).

IPaC will generate a species list specific to the action area of the proposed project, as you defined it. You can then request an official species list under the "Regulatory Documents" tab. This species list fulfills the requirements of the USFWS under section 7(c) of the Endangered Species Act (ESA) of 1973, as amended (16 U.S.C. 1531 et seq.) to provide information as to whether any proposed or listed species may be present in the area of a proposed action. The letter generated by IPaC will explain how to request an updated list or a revised list based on project modifications.

The official species list is not a concurrence letter; additional coordination with the KFO may be necessary to ensure ESA compliance. Please read the letter that accompanies the species list for further direction as to how to request technical assistance or section 7 consultation from the KFO. Please include the consultation tracking number on the IPaC-generated letter (e.g., 04EK1000-####-SLI-####) at the top of your future correspondences with the KFO. The KFO

will be able to retrieve the information that you input into IPaC; there is no need to include a printed copy of your IPaC-generated letter or species list with your correspondence.

Thank you for your request. Your concern for the protection of endangered and threatened species is greatly appreciated. If you have any questions or problems obtaining a species list from IPaC, please contact Jessica Blackwood Miller at (502) 695-0468 extension 104 or jessica_miller@fws.gov.

Sincerely,

Virgil Lee Andrews, Jr.
Field Supervisor

POWER ENGINEERS, INC.
1041 RED VENTURES DR.
SUITE 105
FORT MILL, SC 29707 USA

PHONE 803-835-5900
FAX 803-835-5999

March 12, 2018

Mr. Ian Horn
Data Manager
Kentucky State Nature Preserves Commission
801 Teton Trail
Frankfort, Kentucky 40601

Subject: Kentucky Power Enterprise Park Economic Expansion Project (Floyd and Pike Counties, Kentucky) – Siting Study and Kentucky Public Service Commission Application

Dear Mr. Horn:

POWER Engineers, Inc. (POWER) is preparing a siting study and Kentucky Public Service Commission Application on behalf of Kentucky Power for an upcoming transmission line project. Kentucky Power is planning to improve electric reliability to customers and increase economic development opportunities in eastern Kentucky by making upgrades to the power grid in Floyd and Pike counties. Kentucky Power plans to construct approximately five miles of double circuit 138 kilovolt (kV) transmission line and a new substation to ensure continued reliable electric service to existing customers and to provide a new source of power to the 300-acre Kentucky Enterprise Industrial Park located in Pikeville. The transmission upgrades will reduce the likelihood of extended outages while providing the 300-acre industrial park with a reliable and robust power source capable of handling continued customer growth. The transmission line will be constructed within a new 100-foot right-of-way. Construction is expected to start the beginning of 2019 and be complete by the end of the year.

POWER is requesting information concerning the potential for the occurrence of rare, threatened, or endangered species, habitats of concern, and significant biological resources under the jurisdiction of the Kentucky State Nature Preserves Commission within the Study Area, as shown on the attached Figure 1.

Should you have any questions or concerns, please feel free to contact me at 609-570-7227 or Emily.Larson@powereng.com.

Sincerely,

Emily Larson

Emily Larson
Environmental Project Manager
POWER Engineers, Inc.

Attachment: Figure 1: Project Study Area

c: Scott Kennedy, American Electric Power
Jared Webb, American Electric Power
Tyler Emery, American Electric Power
DMS: 148926/PER-03

Attachment F: United States Fish and Wildlife Service IPaC Report (Updated July 2020)

IPaC **U.S. Fish & Wildlife Service**

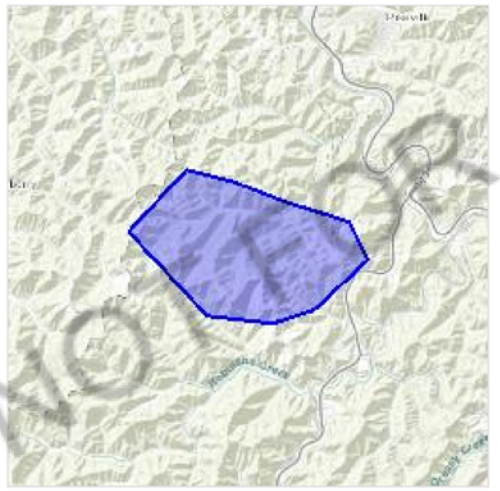
IPaC resource list

This report is an automatically generated list of species and other resources such as critical habitat (collectively referred to as *trust resources*) under the U.S. Fish and Wildlife Service's (USFWS) jurisdiction that are known or expected to be on or near the project area referenced below. The list may also include trust resources that occur outside of the project area, but that could potentially be directly or indirectly affected by activities in the project area. However, determining the likelihood and extent of effects a project may have on trust resources typically requires gathering additional site-specific (e.g., vegetation/species surveys) and project-specific (e.g., magnitude and timing of proposed activities) information.

Below is a summary of the project information you provided and contact information for the USFWS office(s) with jurisdiction in the defined project area. Please read the introduction to each section that follows (Endangered Species, Migratory Birds, USFWS Facilities, and NWI Wetlands) for additional information applicable to the trust resources addressed in that section.

Location

Floyd and Pike counties, Kentucky



Local office

Kentucky Ecological Services Field Office

(502) 695-0468
(502) 695-1024

J C Watts Federal Building, Room 265
330 West Broadway
Frankfort, KY 40601-8670

http://www.fws.gov/frankfort/

Endangered species

This resource list is for informational purposes only and does not constitute an analysis of project level impacts.

The primary information used to generate this list is the known or expected range of each species. Additional areas of influence (AOI) for species are also considered. An AOI includes areas outside of the species range if the species could be indirectly affected by activities in that area (e.g., placing a dam upstream of a fish population, even if that fish does not occur at the dam site, may indirectly impact the species by reducing or eliminating water flow downstream). Because species can move, and site conditions can change, the species on this list are not guaranteed to be found on or near the project area. To fully determine any potential effects to species, additional site-specific and project-specific information is often required.

Section 7 of the Endangered Species Act **requires** Federal agencies to "request of the Secretary information whether any species which is listed or proposed to be listed may be present in the area of such proposed action" for any project that is conducted, permitted, funded, or licensed by any Federal agency. A letter from the local office and a species list which fulfills this requirement can **only** be obtained by requesting an official species list from either the Regulatory Review section in IPaC (see directions below) or from the local field office directly.

For project evaluations that require USFWS concurrence/review, please return to the IPaC website and request an official species list by doing the following:

1. Draw the project location and click CONTINUE.
2. Click DEFINE PROJECT.
3. Log in (if directed to do so).
4. Provide a name and description for your project.
5. Click REQUEST SPECIES LIST.

Listed species[1] and their critical habitats are managed by the Ecological Services Program of the U.S. Fish and Wildlife Service (USFWS) and the fisheries division of the National Oceanic and Atmospheric Administration (NOAA Fisheries[2]).

Species and critical habitats under the sole responsibility of NOAA Fisheries are **not** shown on this list. Please contact NOAA Fisheries for species under their jurisdiction.

1. Species listed under the Endangered Species Act are threatened or endangered; IPaC also shows species that are candidates, or proposed, for listing. See the listing status page for more information.
2. NOAA Fisheries, also known as the National Marine Fisheries Service (NMFS), is an office of the National Oceanic and Atmospheric Administration within the Department of Commerce.

The following species are potentially affected by activities in this location:

Mammals

NAME	STATUS

Gray Bat Myotis grisescens — Endangered

This species only needs to be considered if the following condition applies:

- The project area includes potential gray bat habitat.

No critical habitat has been designated for this species.
https://ecos.fws.gov/ecp/species/6329

Indiana Bat Myotis sodalis — Endangered

This species only needs to be considered if the following condition applies:

- The project area includes 'potential' habitat. All activities in this location should consider possible effects to this species.

There is **final** critical habitat for this species. Your location is outside the critical habitat.
https://ecos.fws.gov/ecp/species/5949

Northern Long-eared Bat Myotis septentrionalis — Threatened

This species only needs to be considered if the following condition applies:

- The specified area includes areas in which incidental take would not be prohibited under the 4(d) rule. For reporting purposes, please use the "streamlined consultation form," linked to in the "general project design guidelines" for the species.

No critical habitat has been designated for this species.
https://ecos.fws.gov/ecp/species/9045

Crustaceans

NAME	STATUS
Big Sandy Crayfish Cambarus callainus There is **proposed** critical habitat for this species. Your location is outside the critical habitat. https://ecos.fws.gov/ecp/species/8285	Threatened

Critical habitats

Potential effects to critical habitat(s) in this location must be analyzed along with the endangered species themselves.

THERE ARE NO CRITICAL HABITATS AT THIS LOCATION.

Migratory birds

Certain birds are protected under the Migratory Bird Treaty Act[1] and the Bald and Golden Eagle Protection Act[2].

Any person or organization who plans or conducts activities that may result in impacts to migratory birds, eagles, and their habitats should follow appropriate regulations and consider implementing appropriate conservation measures, as described below.

1. The Migratory Birds Treaty Act of 1918.
2. The Bald and Golden Eagle Protection Act of 1940.

Additional information can be found using the following links:

- Birds of Conservation Concern http://www.fws.gov/birds/management/managed-species/birds-of-conservation-concern.php
- Measures for avoiding and minimizing impacts to birds http://www.fws.gov/birds/management/project-assessment-tools-and-guidance/conservation-measures.php
- Nationwide conservation measures for birds http://www.fws.gov/migratorybirds/pdf/management/nationwidestandardconservationmeasures.pdf

MIGRATORY BIRD INFORMATION IS NOT AVAILABLE AT THIS TIME

Tell me more about conservation measures I can implement to avoid or minimize impacts to migratory birds.

Nationwide Conservation Measures describes measures that can help avoid and minimize impacts to all birds at any location year round. Implementation of these measures is particularly important when birds are most likely to occur in the project area. When birds may be breeding in the area, identifying the locations of any active nests and avoiding their destruction is a very helpful impact minimization measure. To see when birds are most likely to occur and be breeding in your project area, view the Probability of Presence Summary. Additional measures and/or permits may be advisable depending on the type of activity you are conducting and the type of infrastructure or bird species present on your project site.

What does IPaC use to generate the migratory birds potentially occurring in my specified location?

The Migratory Bird Resource List is comprised of USFWS Birds of Conservation Concern (BCC) and other species that may warrant special attention in your project location.

The migratory bird list generated for your project is derived from data provided by the Avian Knowledge Network (AKN). The AKN data is based on a growing collection of survey, banding, and citizen science datasets and is queried and filtered to return a list of those birds reported as occurring in the 10km grid cell(s) which your project intersects, and that have been identified as warranting special attention because they are a BCC species in that area, an eagle (Eagle Act requirements may apply), or a species that has a particular vulnerability to offshore activities or development.

Again, the Migratory Bird Resource list includes only a subset of birds that may occur in your project area. It is not representative of all birds that may occur in your project area. To get a list of all birds potentially present in your project area, please visit the AKN Phenology Tool.

What does IPaC use to generate the probability of presence graphs for the migratory birds potentially occurring in my specified location?

The probability of presence graphs associated with your migratory bird list are based on data provided by the Avian Knowledge Network (AKN). This data is derived from a growing collection of survey, banding, and citizen science datasets .

Probability of presence data is continuously being updated as new and better information becomes available. To learn more about how the probability of presence graphs are produced and how to interpret them, go the Probability of Presence Summary and then click on the "Tell me about these graphs" link.

How do I know if a bird is breeding, wintering, migrating or present year-round in my project area?

To see what part of a particular bird's range your project area falls within (i.e. breeding, wintering, migrating or year-round), you may refer to the following resources: The Cornell Lab of Ornithology All About Birds Bird Guide, or (if you are unsuccessful in locating the bird of interest there), the Cornell Lab of Ornithology Neotropical Birds guide. If a bird on your migratory bird species list has a breeding season associated with it, if that bird does occur in your project area, there may be nests present at some point within the timeframe specified. If "Breeds elsewhere" is indicated, then the bird likely does not breed in your project area.

What are the levels of concern for migratory birds?

Migratory birds delivered through IPaC fall into the following distinct categories of concern:

1. "BCC Rangewide" birds are Birds of Conservation Concern (BCC) that are of concern throughout their range anywhere within the USA (including Hawaii, the Pacific Islands, Puerto Rico, and the Virgin Islands);
2. "BCC - BCR" birds are BCCs that are of concern only in particular Bird Conservation Regions (BCRs) in the continental USA; and
3. "Non-BCC - Vulnerable" birds are not BCC species in your project area, but appear on your list either because of the Eagle Act requirements (for eagles) or (for non-eagles) potential susceptibilities in offshore areas from certain types of development or activities (e.g. offshore energy development or longline fishing).

Although it is important to try to avoid and minimize impacts to all birds, efforts should be made, in particular, to avoid and minimize impacts to the birds on this list, especially eagles and BCC species of rangewide concern. For more information on conservation measures you can implement to help avoid and minimize migratory bird impacts and requirements for eagles, please see the FAQs for these topics.

Details about birds that are potentially affected by offshore projects

For additional details about the relative occurrence and abundance of both individual bird species and groups of bird species within your project area off the Atlantic Coast, please visit the Northeast Ocean Data Portal. The Portal also offers data and information about other taxa besides birds that may be helpful to you in your project review. Alternately, you may download the bird model results files underlying the portal maps through the NOAA NCCOS Integrative Statistical Modeling and Predictive Mapping of Marine Bird Distributions and Abundance on the Atlantic Outer Continental Shelf project webpage.

Bird tracking data can also provide additional details about occurrence and habitat use throughout the year, including migration. Models relying on survey data may not include this information. For additional information on marine bird tracking data, see the Diving Bird Study and the nanotag studies or contact Caleb Spiegel or Pam Loring.

What if I have eagles on my list?

If your project has the potential to disturb or kill eagles, you may need to obtain a permit to avoid violating the Eagle Act should such impacts occur.

Proper Interpretation and Use of Your Migratory Bird Report

The migratory bird list generated is not a list of all birds in your project area, only a subset of birds of priority concern. To learn more about how your list is generated, and see options for identifying what other birds may be in your project area, please see the FAQ "What does IPaC use to generate the migratory birds potentially occurring in my specified location". Please be aware this report provides the "probability of presence" of birds within the 10 km grid cell(s) that overlap your project; not your exact project footprint. On the graphs provided, please also look carefully at the survey effort (indicated by the black vertical bar) and for the existence of the "no data" indicator (a red horizontal bar). A high survey effort is the key component. If the survey effort is high, then the probability of presence score can be viewed as more dependable. In contrast, a low survey effort bar or no data bar means a lack of data and, therefore, a lack of certainty about presence of the species. This list is not perfect; it is simply a starting point for identifying what birds of concern have the potential to be in your project area, when they might be there, and if they might be breeding (which means nests might be present). The list helps you know what to look for to confirm presence, and helps guide you in knowing when to implement conservation measures to avoid or minimize potential impacts from your project activities, should presence be confirmed. To learn more about conservation measures, visit the FAQ "Tell me about conservation measures I can implement to avoid or minimize impacts to migratory birds" at the bottom of your migratory bird trust resources page.

Facilities

National Wildlife Refuge lands

Any activity proposed on lands managed by the National Wildlife Refuge system must undergo a 'Compatibility Determination' conducted by the Refuge. Please contact the individual Refuges to discuss any questions or concerns.

THERE ARE NO REFUGE LANDS AT THIS LOCATION.

Fish hatcheries

THERE ARE NO FISH HATCHERIES AT THIS LOCATION.

Wetlands in the National Wetlands Inventory

Impacts to NWI wetlands and other aquatic habitats may be subject to regulation under Section 404 of the Clean Water Act, or other State/Federal statutes.

For more information please contact the Regulatory Program of the local U.S. Army Corps of Engineers District.

Please note that the NWI data being shown may be out of date. We are currently working to update our NWI data set. We recommend you verify these results with a site visit to determine the actual extent of wetlands on site.

This location overlaps the following wetlands:

FRESHWATER POND

PUBHh

RIVERINE

R4SBC
R3UBH
R5UBH

A full description for each wetland code can be found at the National Wetlands Inventory website

Data limitations

The Service's objective of mapping wetlands and deepwater habitats is to produce reconnaissance level information on the location, type and size of these resources. The maps are prepared from the analysis of high altitude imagery. Wetlands are identified based on vegetation, visible hydrology and geography. A margin of error is inherent in the use of imagery; thus, detailed on-the-ground inspection of any particular site may result in revision of the wetland boundaries or classification established through image analysis.

The accuracy of image interpretation depends on the quality of the imagery, the experience of the image analysts, the amount and quality of the collateral data and the amount of ground truth verification work conducted. Metadata should be consulted to determine the date of the source imagery used and any mapping problems.

Wetlands or other mapped features may have changed since the date of the imagery or field work. There may be occasional differences in polygon boundaries or classifications between the information depicted on the map and the actual conditions on site.

Data exclusions

Certain wetland habitats are excluded from the National mapping program because of the limitations of aerial imagery as the primary data source used to detect wetlands. These habitats include seagrasses or submerged aquatic vegetation that are found in the intertidal and subtidal zones of estuaries and nearshore coastal waters. Some deepwater reef communities (coral or tuberficid worm reefs) have also been excluded from the inventory. These habitats, because of their depth, go undetected by aerial imagery.

Data precautions

Federal, state, and local regulatory agencies with jurisdiction over wetlands may define and describe wetlands in a different manner than that used in this inventory. There is no attempt, in either the design or products of this inventory, to define the limits of proprietary jurisdiction of any Federal, state, or local government or to establish the geographical scope of the regulatory programs of government agencies. Persons intending to engage in activities involving modifications within or adjacent to wetland areas should seek the advice of appropriate federal, state, or local agencies concerning specified agency regulatory programs and proprietary jurisdictions that may affect such activities.

Attachment G: Study Area Context Photographs

Photo 1. View of the Enterprise Park

Photo 2. Facing Southeast from the Big Sandy – Broadford 765 kV Transmission Line

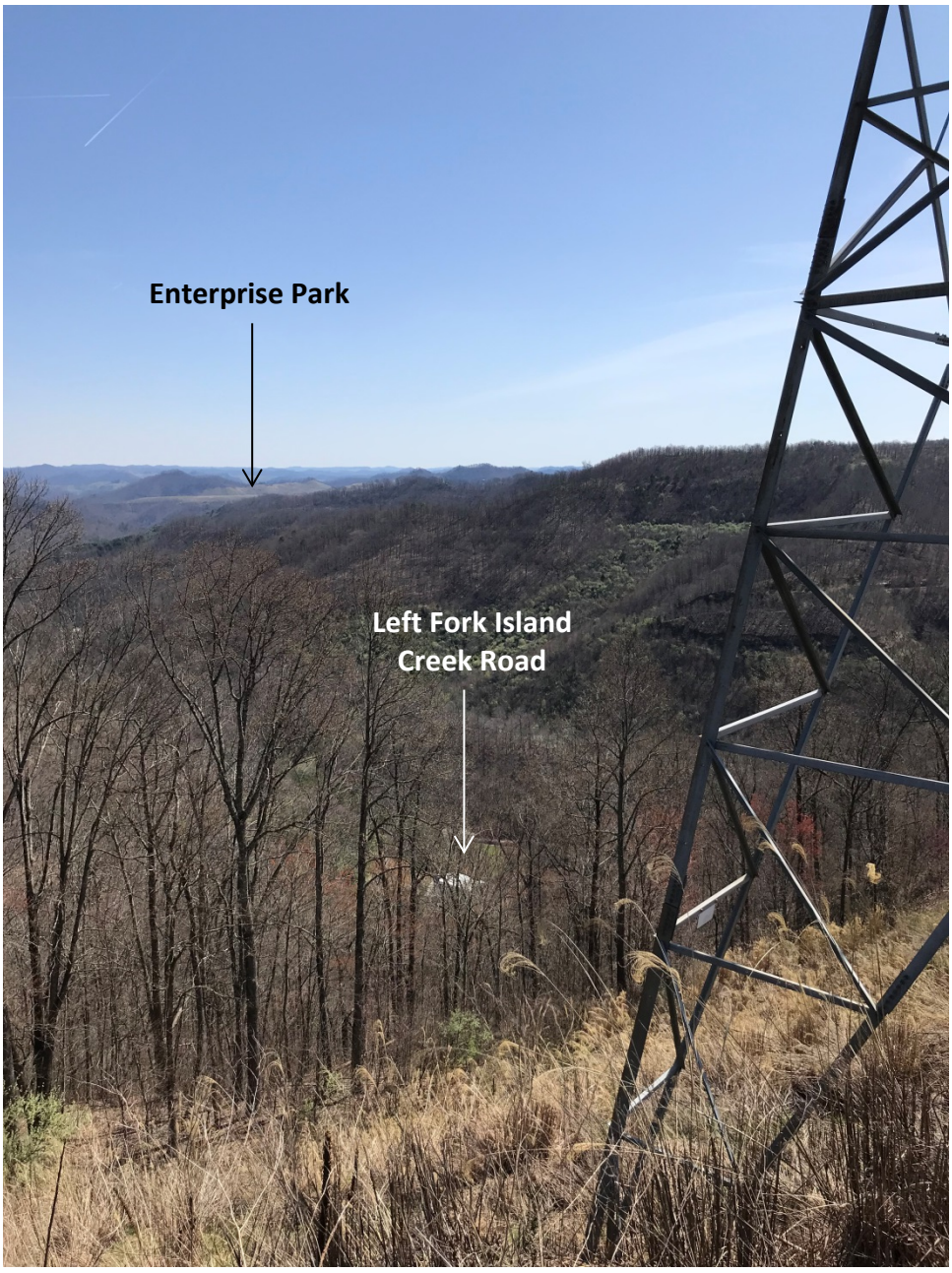
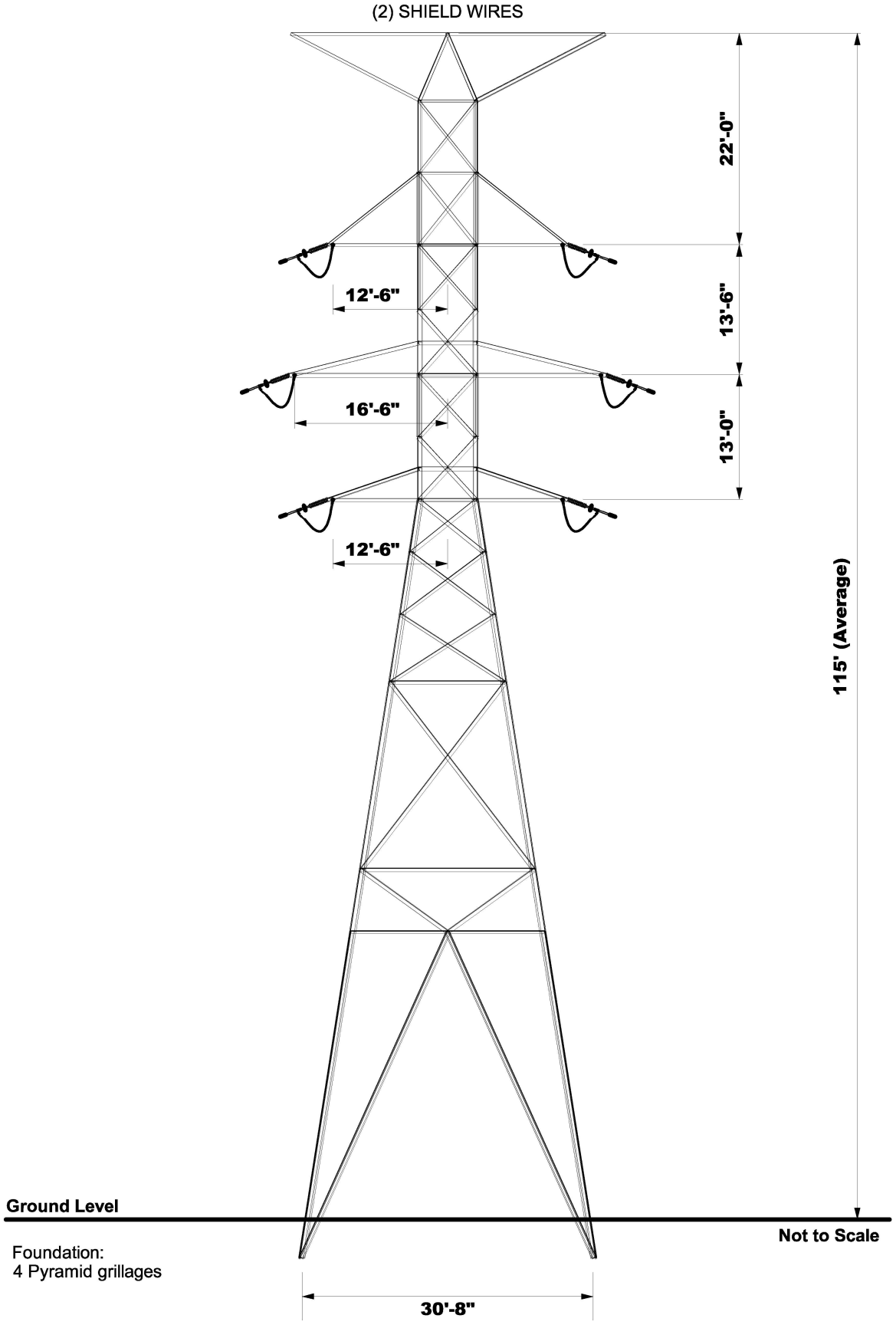
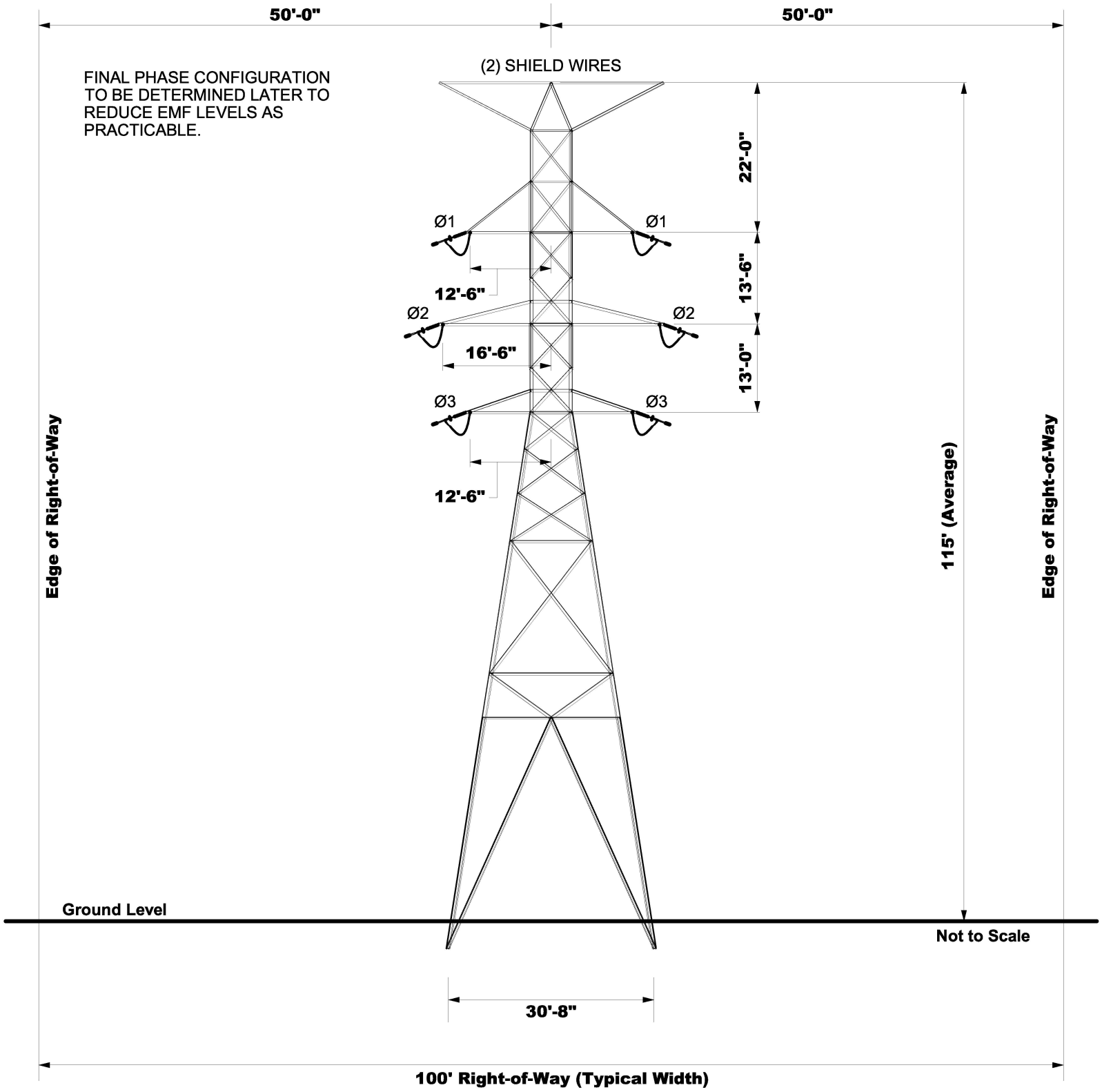


Photo 3. Facing southeast towards the Enterprise Park from the Big Sandy – Broadford 765 kV Transmission Line

Photo 4. Facing northeast from the northern extents of the Enterprise Park



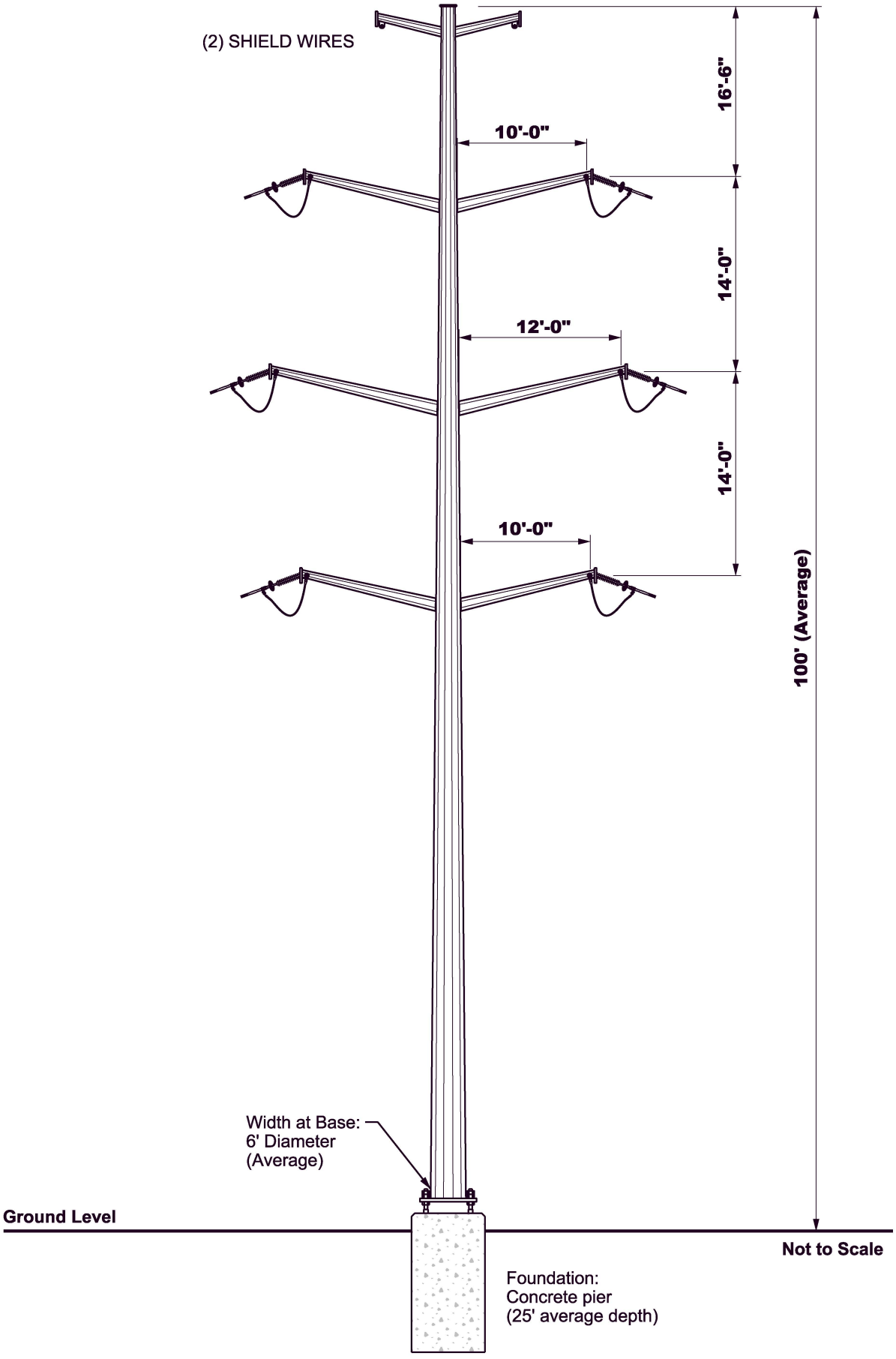
TYPICAL SCHEMATIC



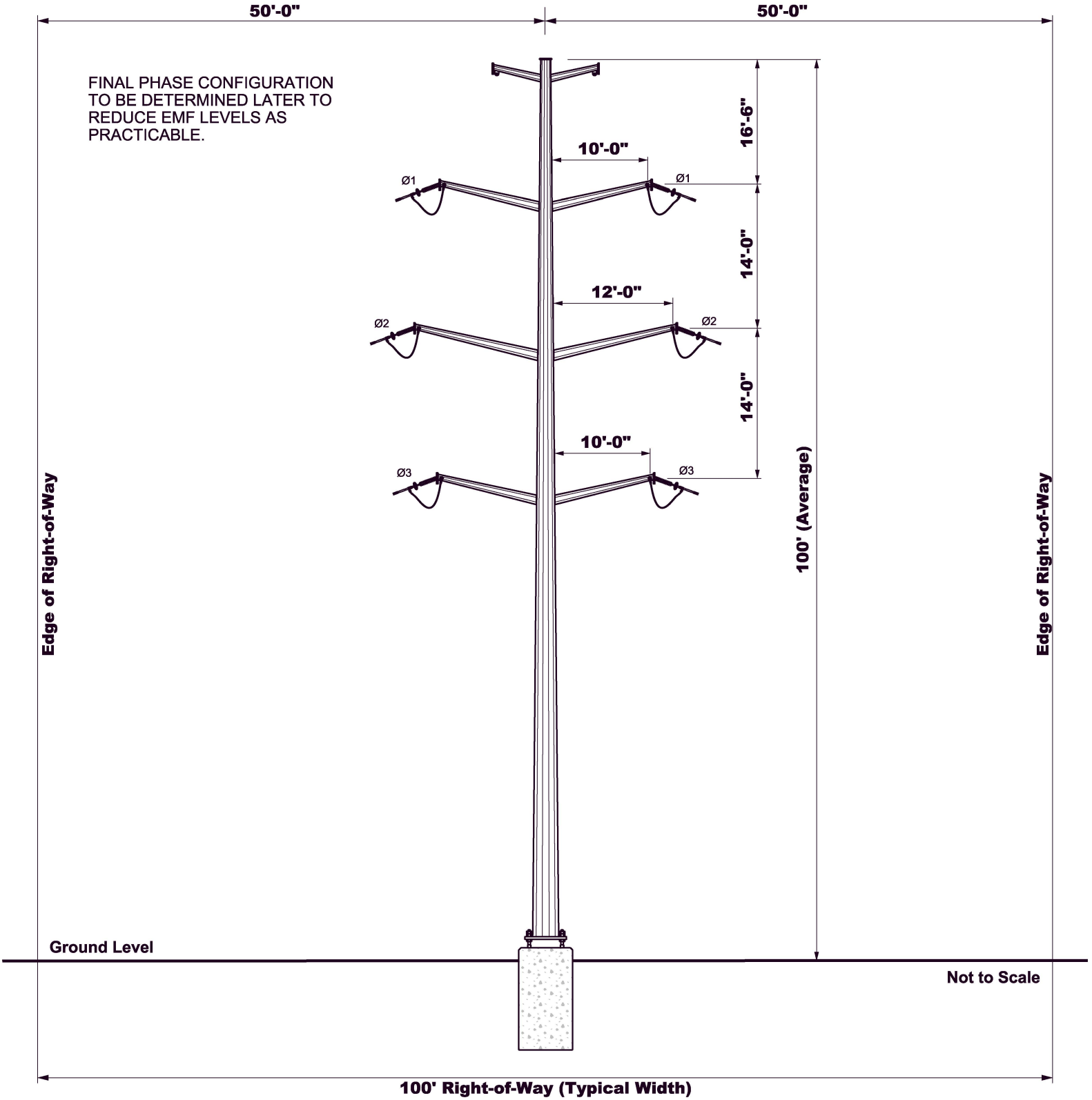
TYPICAL RIGHT-OF-WAY CROSS SECTION

COMPARABLE STRUCTURE PHOTOGRAPH

TYPICAL LATTICE TOWER PYRAMID GRILLAGE FOUNDATION
4 REQUIRED PER TOWER

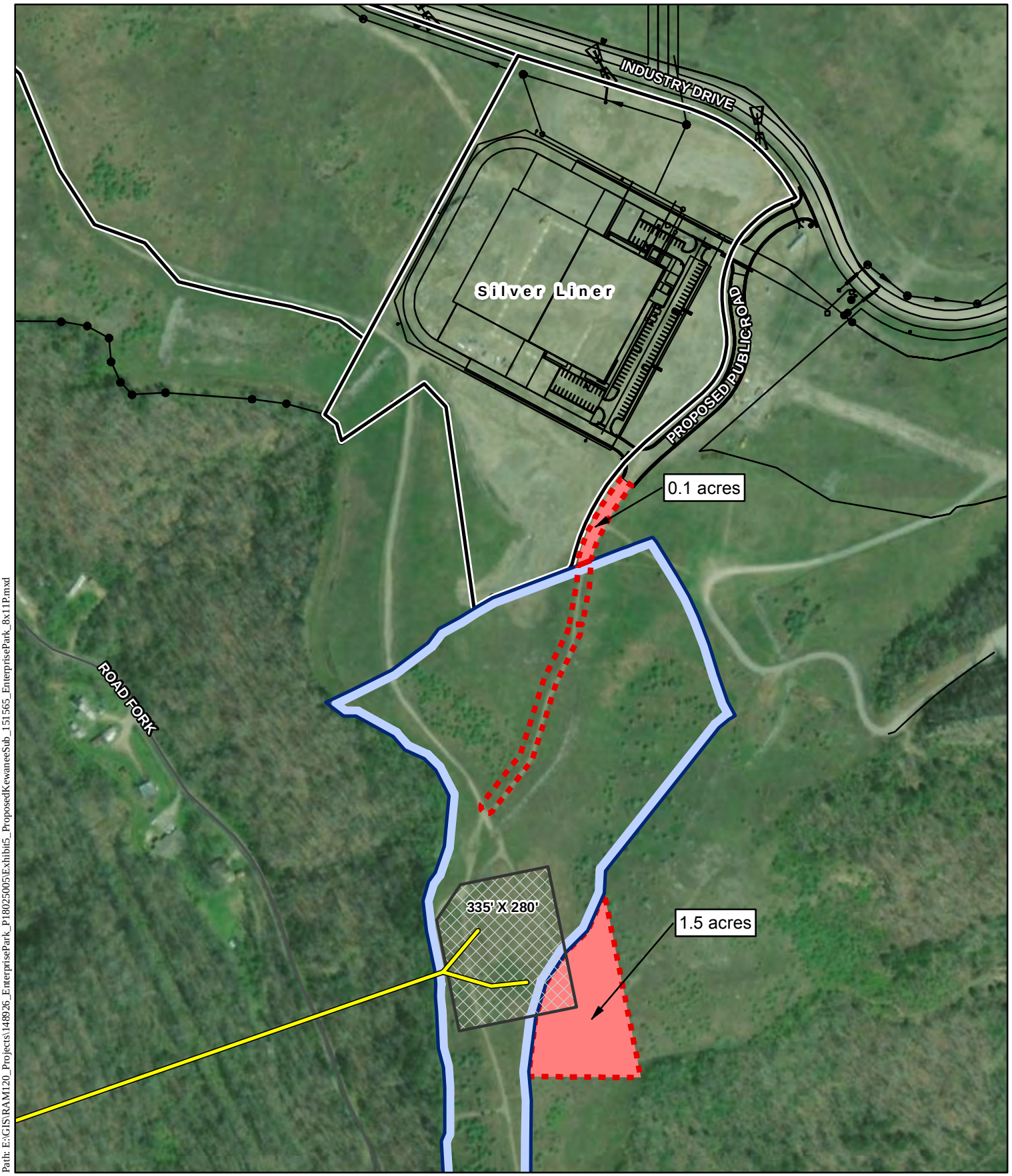


TYPICAL SCHEMATIC

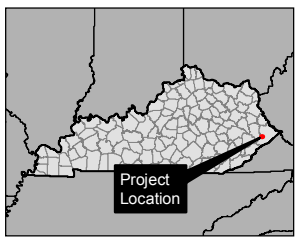


TYPICAL RIGHT-OF-WAY CROSS SECTION

COMPARABLE STRUCTURE PHOTOGRAPH



Path: E:\GIS\RAM120_Projects\148926_EnterprisePark_P18025005\Exhibit5_ProposedKewaneeSub_151565_EnterprisePark_8x11P.mxd



- Kewanee 138 kV Extension Proposed Route
- Parcel Boundary
- Proposed Access Road (30' corridor)
- Land to be Purchased from the City of Pikeville (Approximate Limits)
- Parcel Purchased for Substation
- Proposed Kewanee Substation

N
W E
S

SCALE: 1 " = 300 '

0 150 300
Feet

Pike County, Kentucky

NAD 1983 State Plane Kentucky South FIPS 1602 Feet
Foot US
Lambert Conformal Conic
North American 1983

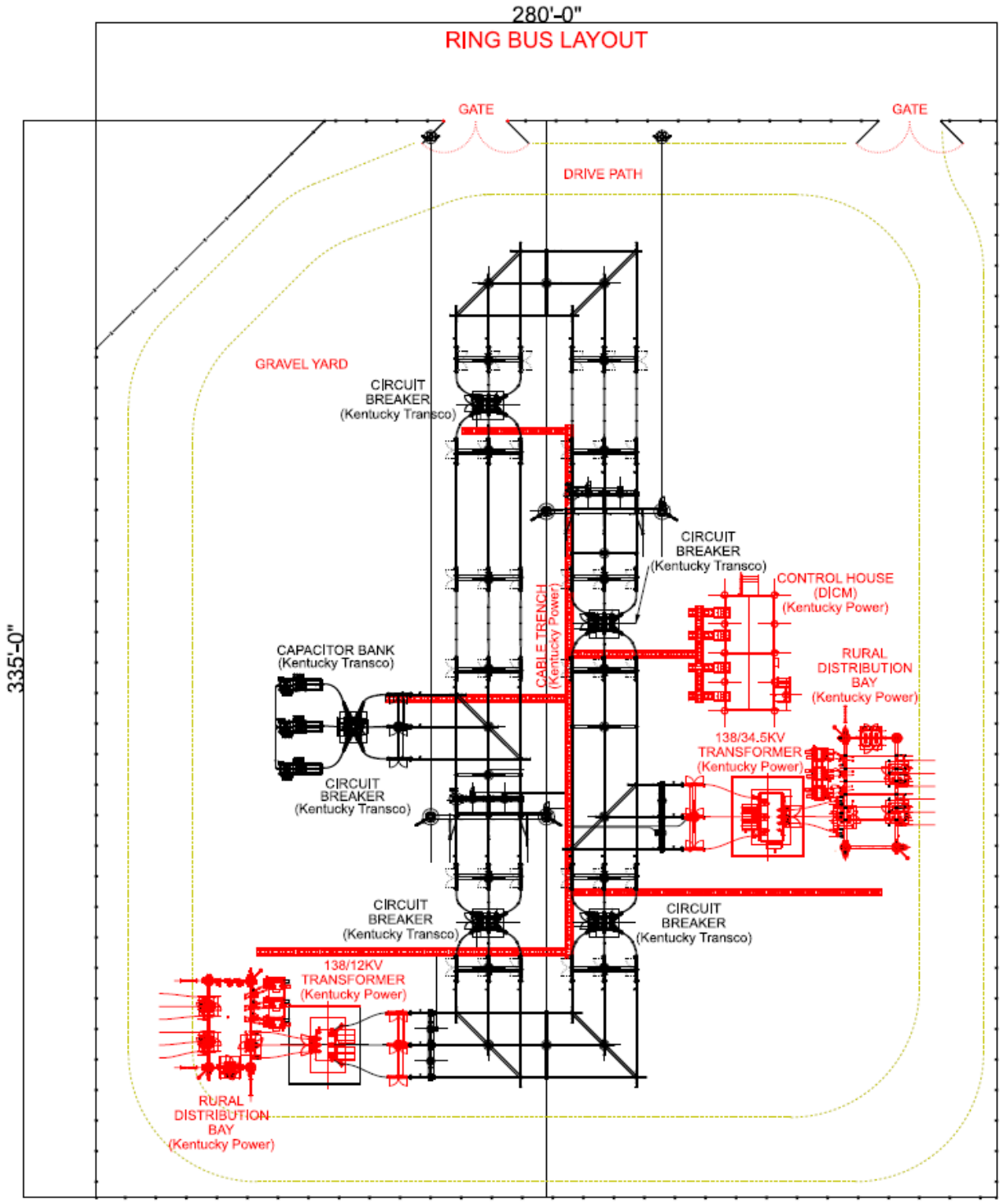
Date: 7/6/2020
By: AMW
POWER: 151565

Exhibit 5: Proposed Kewanee Substation

Kewanee-Enterprise Park
138 kV Transmission Project

KENTUCKY POWER
An AEP Company

POWER ENGINEERS


280'-0"
RING BUS LAYOUT
335'-0"
GATE
GATE
DRIVE PATH
GRAVEL YARD
CIRCUIT BREAKER (Kentucky Transco)
CIRCUIT BREAKER (Kentucky Transco)
CONTROL HOUSE (DICM) (Kentucky Power)
CABLE TRENCH (Kentucky Power)
CAPACITOR BANK (Kentucky Transco)
RURAL DISTRIBUTION BAY (Kentucky Power)
138/34.5KV TRANSFORMER (Kentucky Power)
CIRCUIT BREAKER (Kentucky Transco)
CIRCUIT BREAKER (Kentucky Transco)
CIRCUIT BREAKER (Kentucky Transco)
138/12KV TRANSFORMER (Kentucky Power)
RURAL DISTRIBUTION BAY (Kentucky Power)

MAP ID	PARCEL ID	COUNTY	NAME 1	NAME 2	MAILING ADDRESS	CITY STATE ZIP	FULL ADDRESS	WITHIN PROPOSED RIGHT-OF-WAY (INCLUSIVE OF BLOW-OUT)	WITHIN FILING CORRIDOR	NOTES
1	109-00-00-044.00	FLOYD	SHANA RENEE, SHAWNA RAE & BRITTANY LYNN KEATHLEY		1195 BURNING FORK ROAD	PIKEVILLE KY, 41501	1195 BURNING FORK ROAD	X	X	
2	109-00-00-022.00	FLOYD	LYDIA M. ROBERTS		727 KEATHLEY BRANCH	HAROLD, KY 41635	727 KEATHLEY BRANCH	X	X	
3	109-00-00-012.00	FLOYD	ISAAC KEATHLEY	C/O KELLY KEATHLEY	987 KEATHLEY BRANCH	HAROLD, KY 41635	987 KEATHLEY BRANCH		X	UPDATED FROM PVA DATA BASED ON LANDOWNER CONTACT OR ADDITIONAL RESEARCH
4	109-00-00-015.00	FLOYD	ZELLIA ROGERS	C/O RONALD ROGERS	9716 HARRISON ROAD	WAKEMAN, OH 44889	9716 HARRISON ROAD		X	
5	109-00-00-016.01	FLOYD	UDELL ROGERS		1277 KEATHLEY BRANCH	HAROLD, KY 41635	1277 KEATHLEY BRANCH	X	X	
6	109-00-00-016.00	FLOYD	C. C. JOHNSON HEIRS	EVA B. FOSTER	46 BOOMDECKER COURT	ELKTON, MD 21921	46 BOOMDECKER COURT	X	X	UPDATED FROM PVA DATA BASED ON LANDOWNER CONTACT OR ADDITIONAL RESEARCH
7	109-00-00-018.00	FLOYD	ZELLIA ROGERS		9716 HARRISON ROAD	WAKEMAN, OH 44889	9716 HARRISON ROAD		X	
8	109-00-00-019.00	FLOYD	ISAAC KEATHLEY	C/O KELLY KEATHLEY	987 KEATHLEY BRANCH	HAROLD, KY 41635	987 KEATHLEY BRANCH	X	X	UPDATED FROM PVA DATA BASED ON LANDOWNER CONTACT OR ADDITIONAL RESEARCH
9	109-00-00-020.00	FLOYD	OPAL YOUNG		PO BOX 71	GRETHEL, KY 41631	PO BOX 71	X	X	UNABLE TO CONTACT LANDOWNER TO DATE
10	109-00-00-021.00	FLOYD	C. C. JOHNSON HEIRS	EVA B. FOSTER	46 BOOMDECKER COURT	ELKTON, MD 21921	46 BOOMDECKER COURT		X	UPDATED FROM PVA DATA BASED ON LANDOWNER CONTACT OR ADDITIONAL RESEARCH
11	110-00-00-019.07	FLOYD	WANDA & FREDDIE CONN JR. BURKE		PO BOX 43	PRINTER, KY 41655	3921 KY ROUTE 40 WEST, STAFFORDSVILLE, KY 41256	X	X	UPDATED FROM PVA DATA BASED ON LANDOWNER CONTACT OR ADDITIONAL RESEARCH
12	110-00-00-023.06	FLOYD	TIMMY DOUGLAS & RHONDA HALL	C/O MICHAEL HALL	60 RED MORGAN BRANCH	CRAYNOR, KY 41614	60 RED MORGAN BRANCH	X	X	UPDATED FROM PVA DATA BASED ON LANDOWNER CONTACT OR ADDITIONAL RESEARCH
13	110-00-00-025.00	FLOYD	GENE & GARNETT HALL	C/O WINNE VANDERPOOL, ET AL.	PO BOX 1032	GRETHEL, KY 41629	PO BOX 1032	X	X	UPDATED FROM PVA DATA BASED ON LANDOWNER CONTACT OR ADDITIONAL RESEARCH
14	110-00-00-026.00	FLOYD	EARL HALL & MICHAEL SLONE	C/O MICHAEL HALL	271 PIGEON ROOST	HAROLD, KY 41635	271 PIGEON ROOST	X	X	
15	110-00-00-027.00	FLOYD	LOUISE SPEARS		22 G B SPEARS DRIVE	GALVESTON, KY 41635	22 G B SPEARS DRIVE	X	X	
16	034-00-00-041.00	PIKE	ACIN, LLC.	C/O WESTERN POCAHONTAS PROPERTIES	5260 IRWIN ROAD	HUNTINGTON, WV 25705	5260 IRWIN ROAD, HUNTINGTON, WV 25705	X	X	
17	035-00-00-003.00	PIKE	THOMAS B. RATLIFF TRUST	C/O CHRIS RATLIFF	PO BOX 460	SHELBIANA, KY 41562	PO BOX 460	X	X	UPDATED FROM PVA DATA BASED ON LANDOWNER CONTACT OR ADDITIONAL RESEARCH
18	WITHIN 035-00-00-003.00	PIKE	THOMAS B. RATLIFF TRUST	C/O CHRIS RATLIFF	PO BOX 460	SHELBIANA, KY 41563	PO BOX 461		X	
19	034-00-00-045.00	PIKE	BRUCE FIELDS		4074 LEFT FORK OF ISLAND CREEK ROAD	PIKEVILLE, KY 41501	4074 LEFT FORK OF ISLAND CREEK ROAD	X	X	
20	WITHIN 035-00-00-003.00	PIKE	THOMAS B. RATLIFF TRUST	CEMETERY	N/A	N/A	N/A		X	
21	WITHIN 035-00-00-003.00	PIKE	THOMAS B. RATLIFF TRUST	C/O CHRIS RATLIFF	PO BOX 460	SHELBIANA, KY 41563	PO BOX 461		X	
22	034-00-00-041.01	PIKE	LEONARD IRICKS		3882 LEFT FORK OF ISLAND CREEK ROAD	PIKEVILLE, KY 41501	3882 LEFT FORK OF ISLAND CREEK ROAD		X	NOT PREVIOUSLY LOCATED WITHIN FILING CORRIDOR AS SUBMITTED IN 2018
23	034-00-00-045.01	PIKE	BRUCE MICHAEL FIELDS & JOSEPH M. FIELDS		3909 LEFT FORK ISLAND CREEK ROAD	PIKEVILLE,KY 41501	3909 LEFT FORK ISLAND CREEK ROAD		X	NOT PREVIOUSLY LOCATED WITHIN FILING CORRIDOR AS SUBMITTED IN 2018
24	035-00-00-001.01	PIKE	THOMAS B. RATLIFF TRUST	C/O CHRIS RATLIFF	PO BOX 460	SHELBIANA, KY 41562	PO BOX 460	X	X	UPDATED FROM PVA DATA BASED ON LANDOWNER CONTACT OR ADDITIONAL RESEARCH
25	034-00-00-042.00	PIKE	THOMAS B. RATLIFF TRUST	C/O CHRIS RATLIFF	PO BOX 460	SHELBIANA, KY 41563	PO BOX 461	X	X	UPDATED FROM PVA DATA BASED ON LANDOWNER CONTACT OR ADDITIONAL RESEARCH
26	034-00-00-050.00	PIKE	MARY SENDELBACH AND IRVIN V. SENDELBACH, TRUSTEES	BISHOP	8205 SR 61 SOUTH	PLYMOUTH, OH 44865	8205 SR 61 SOUTH		X	PARCEL BOUNDARY MODIFIED ON EXHIBIT 3 TO REFLECT LAND SURVEY DATA RESULTS COMPLETED IN MARCH 2020
27	035-00-00-019.00	PIKE	ROBERT DOTSON PINSON (DECEASED)	C/O ANNA PINSON	PO BOX 948	PIKEVILLE, KY 41502	PO BOX 948	X	X	UPDATED FROM PVA DATA BASED ON LANDOWNER CONTACT OR ADDITIONAL RESEARCH
28	035-00-00-014.08	PIKE	LAUREN SLONE & KENNETH HALL SLONE		17040 ASHBURTON DRIVE	LOUISVILLE, KY 40245	17040 ASHBURTON DRIVE	X	X	
29	035-00-00-019.00	PIKE	ROBERT DOTSON PINSON (DECEASED)	C/O ANNA PINSON	PO BOX 948	PIKEVILLE, KY 41502	PO BOX 948	X	X	UPDATED FROM PVA DATA BASED ON LANDOWNER CONTACT OR ADDITIONAL RESEARCH
30	035-00-00-014.05	PIKE	THOMAS B. RATLIFF TRUST	C/O CHRIS RATLIFF	PO BOX 460	SHELBIANA, KY 41562	PO BOX 460	X	X	UPDATED FROM PVA DATA BASED ON LANDOWNER CONTACT OR ADDITIONAL RESEARCH
31	052-00-00-035.00	PIKE	RILEY HALL COAL		PO BOX 2497	PIKEVILLE, KY 41502	PO BOX 2497		X	
32	052-00-00-036.01	PIKE	RICHARD E. & ANNETTE RAY		PO BOX 2593	PIKEVILLE, KY 41502	PO BOX 2593	X	X	
33	052-00-00-036.00	PIKE	JOHN S. CLINE SR. ESTATE	C/O JOHN M. JOHNSON	PO BOX 489	PIKEVILLE, KY 41502	PO BOX 489	X	X	
34	052-00-00-036.01	PIKE	RICHARD E. & ANNETTE RAY		PO BOX 2593	PIKEVILLE, KY 41502	PO BOX 2593	X	X	
35	052-00-00-032.00	PIKE	RICHARD RAY		PO BOX 2593	PIKEVILLE, KY 41502	PO BOX 2593	X	X	
36	052-00-00-056.01	PIKE	APPALACHIAN LAND COMPANY	C/O JOHN HARRIS	164 MAIN STREET, SUITE 200	PIKEVILLE, KY 41501	164 MAIN STREET	X	X	UPDATED FROM PVA DATA BASED ON LANDOWNER CONTACT OR ADDITIONAL RESEARCH
37	052-00-00-023.00	PIKE	DANIEL H. & SARAH F. FORSYTH	C/O DAN H. FORSYTH	4320 DEEP SPRINGS COURT	KENNESAW, GA 30144	4320 DEEP SPRINGS COURT	X	X	UPDATED FROM PVA DATA BASED ON LANDOWNER CONTACT OR ADDITIONAL RESEARCH
38	052-00-00-055.01	PIKE	JOSH & PHILLIP POTTER		91 ELDER LANE	PIKEVILLE, KY 41501	91 ELDER LANE	X	X	

MAP ID	PARCEL ID	COUNTY	NAME 1	NAME 2	MAILING ADDRESS	CITY STATE ZIP	FULL ADDRESS	WITHIN PROPOSED RIGHT-OF-WAY (INCLUSIVE OF BLOW-OUT)	WITHIN FILING CORRIDOR	NOTES
39	052-00-00-026.02	PIKE	DANIEL H. & SARAH F. FORSYTH	C/O DAN H. FORSYTH	4320 DEEP SPRINGS COURT	KENNESAW, GA 30144	4320 DEEP SPRINGS COURT	X	X	UPDATED FROM PVA DATA BASED ON LANDOWNER CONTACT OR ADDITIONAL RESEARCH
40	052-00-00-054.00	PIKE	APPALACHIAN LAND COMPANY	C/O JOHN HARRIS	164 MAIN STREET, SUITE 200	PIKEVILLE, KY 41501	164 MAIN STREET	X	X	UPDATED FROM PVA DATA BASED ON LANDOWNER CONTACT OR ADDITIONAL RESEARCH
41	067-00-00-078.13	PIKE	ELLIS & SELENA COLEMAN		836 COLLINS HIGHWAY	PIKEVILLE KY 41501	836 COLLINS HIGHWAY		X	
42	052-00-00-026.03	PIKE	LLOYD HAROLD & WANDA S. DAMRON		1203 ROAD FORK ROAD	PIKEVILLE KY 41501	1203 ROAD FORK ROAD		X	NOT PREVIOUSLY LOCATED WITHIN FILING CORRIDOR AS SUBMITTED IN 2018
43	067-00-00-116.00	PIKE	CITY OF PIKEVILLE		118 COLLEGE STREET	PIKEVILLE, KY 41501	118 COLLEGE STREET	X	X	
44	WITHIN 067-00-00-116.00	PIKE	CITY OF PIKEVILLE		119 COLLEGE STREET	PIKEVILLE, KY 41502	119 COLLEGE STREET		X	
45	052-00-00-021.00	PIKE	CITY OF PIKEVILLE		118 COLLEGE STREET	PIKEVILLE, KY 41501	118 COLLEGE STREET		X	
46	NO MAP #	PIKE	KENTUCKY POWER COMPANY	AMERICAN ELECTRIC POWER	1 RIVERSIDE PLAZA	COLUMBUS, OH 43215	1 RIVERSIDE PLAZA, COLUMBUS, OH 43215	X	X	UPDATED FROM PVA DATA. PARCEL PURCHASED BY AMERICAN ELECTRIC POWER FOR FUTURE SUBSTATION SITE

Verification of Mailing In Conformity With 807 KAR 5:120, Section (2)(3)

I, Ryan M. Howell, being first duly sworn, state that on August 31st, 2020 I caused to be mailed the information required by 807 KAR 5: 120, Section 2(3) to each property owner, as indicated by the records of the Floyd County Property Valuation Administrator and the Pike County Property Valuation Administrator, except as corrected or updated upon landowner contact or other research, located within the Filing Corridor, including each property owner over whose property the proposed transmission line will cross ("Notice").

A sample copy of the Notice, including all enclosures, the list of the persons to whom they were mailed, and their addresses as indicated by the records of the Floyd County Property Valuation Administrator and the Pike County Property Valuation Administrator, or as corrected or updated upon landowner contact or other research, are attached to this verification.

Ryan M. Howell

COMMONWEALTH OF KENTUCKY

COUNTY OF PIKE

The foregoing instrument was subscribed and sworn to before me this 31st day of August, 2020 by Ryan M. Howell.

My commission expires: 5-21-2022

Glenda M. Foley
NOTARY PUBLIC

[SEAL]

Notice Of Proposed Construction Of Electric Transmission Line

This is to notify you that Kentucky Power Company intends to file with the Public Service Commission of Kentucky an application seeking a certificate of public convenience and necessity in connection with its plans to build the Kewanee-Enterprise Park 138 kV Transmission Project in Floyd and Pike counties, Kentucky. The proposed transmission line and substation will remedy PJM Baseline thermal and voltage criteria violations on the Company's existing 46 kV Pikeville area subtransmission network, address aging infrastructure needs at the Fords Branch 46 kV Substation, and provide additional capacity for the area's 34.5 kV and 12 kV distribution system. The Kewanee-Enterprise Park 138 kV Transmission Project will include the construction of an approximately five-mile new 138 kV double circuit transmission line in Floyd and Pike counties, Kentucky ("the Kewanee 138 kV Transmission Line Extension.")

This notice is being provided to you because the records of the Floyd County Property Valuation Administrator or the Pike County Property Valuation Administrator indicate the Kewanee 138 kV Transmission Line Extension, filing corridor or right-of-way may cross property owned by you.

1. The Kewanee-Enterprise Park 138 kV Transmission Project is expected to involve the following work:

(a) The construction of the Kewanee 138 kV Transmission Line Extension. The Kewanee 138 kV Transmission Line Extension will connect to the existing Beaver Creek–Cedar Creek 138 kV circuit of the Sprigg–Beaver Creek 138 kV Transmission Line at a tap point located between Route 3379 and Route 1426 in Floyd County, Kentucky and run in a southeasterly direction to a point south of and adjacent to the Kentucky Enterprise Industrial Park in Pike County, Kentucky where the Company proposes to build the new Kewanee 138 kV Substation;

(b) The construction of the proposed Kewanee 138 kV Substation to be located off Industry Drive south of and adjacent to the Kentucky Enterprise Industrial Park in Pike County;

(c) The retirement of Kentucky Power's existing Fords Branch 138 kV Substation located near 46 Old Shelbiana Road in Pike County, Kentucky;

(d) The proposed line will require a 100-foot wide right-of-way (50 feet on each side of the centerline). In certain areas a wider right-of-way may be required;

(e) To enable the safe operation of the line, the required right-of-way width, as well as the location of the centerline, will be determined during detailed engineering design and construction phases, and will be included in discussions with landowners. Both the centerline and the right-of-way will lie within the filing corridor described immediately below;

(f) Kentucky Power anticipates building the transmission line on the centerline shown on the enclosed map. Kentucky Power is seeking authority to re-locate the line within a filing corridor. The Filing Corridor for the 1.3 miles of the Kewanee 138 kV Transmission Line Extension that begins at the tap point and parallels the existing Big Sandy–Broadford 765 kV Transmission Line is 500 feet to the northeast of the centerline. For the remainder of the centerline (approximately 3.7 miles), the Filing Corridor is generally 1,000 feet wide (500 feet on each side of the proposed centerline). To mitigate known mining risks and allow for added design flexibility in rugged topography, the Filing Corridor was expanded an additional 500 feet between proposed structures 6 and 8. For this 2,000 foot section of centerline, the Filing Corridor is 1,500 feet wide (about 500 feet to the south of the centerline and 1,000 feet to the north of the centerline).

(g) The proposed transmission line will be supported by approximately sixteen galvanized lattice steel 138 kV double-circuit structures and three steel 138 kV monopole steel structures. Current plans indicate the height of the structures will average approximately 110 feet above ground level. The Company also will construct an additional structure at the tap point on the Sprigg–Beaver Creek 138kV Transmission Line as part of the Project.

2. Enclosed is a map showing the route of the proposed transmission line.

3. The Public Service Commission of Kentucky will process Kentucky Power's application in Case No. 2020-00062. The address and telephone number of the Executive Director of the Public Service Commission of Kentucky are:

Executive Director
Public Service Commission of Kentucky
211 Sower Boulevard
P. O. Box 615
Frankfort, Kentucky 40602-0615

(502) 564-3940

Kentucky Power anticipates filing its application with the Public Service Commission of Kentucky on or before September 8, 2020. The application when filed may be viewed under Case No. 2020-00062 on the Commission's website at https://psc.ky.gov/PSC_WebNet/ViewCaseFilings.aspx?case=2020-00062.

4. You have the right to submit a timely written request for intervention in Case No. 2020-00062. The motion must be submitted to the Public Service Commission, 211 Sower Boulevard, P. O. Box 615, Frankfort, Kentucky 40602-0615, and must establish the grounds for your request to intervene, including your status and the nature of your interest in the proceeding. Please see 807 KAR 5:001, Section 4(11) for further information regarding the requirements and procedure for requesting intervention. 807 KAR 5:001, Section 4(11) may be accessed here: https://apps.legislature.ky.gov/law/kar/807/005/001.pdf. If no request for intervention is received within 30 days of the filing of the application, the Commission may take final action on the application. The request for intervention should reference Case No. 2020-00062.

5. You also have the right to request a local public hearing regarding the application and the proposed 138 kV transmission line and related work. The requirements for requesting a local public hearing are set forth in 807 KAR 5:120, Section 3. 807 KAR 5:120, Section 3 may be accessed here: https://apps.legislature.ky.gov/law/kar/807/005/120.pdf.

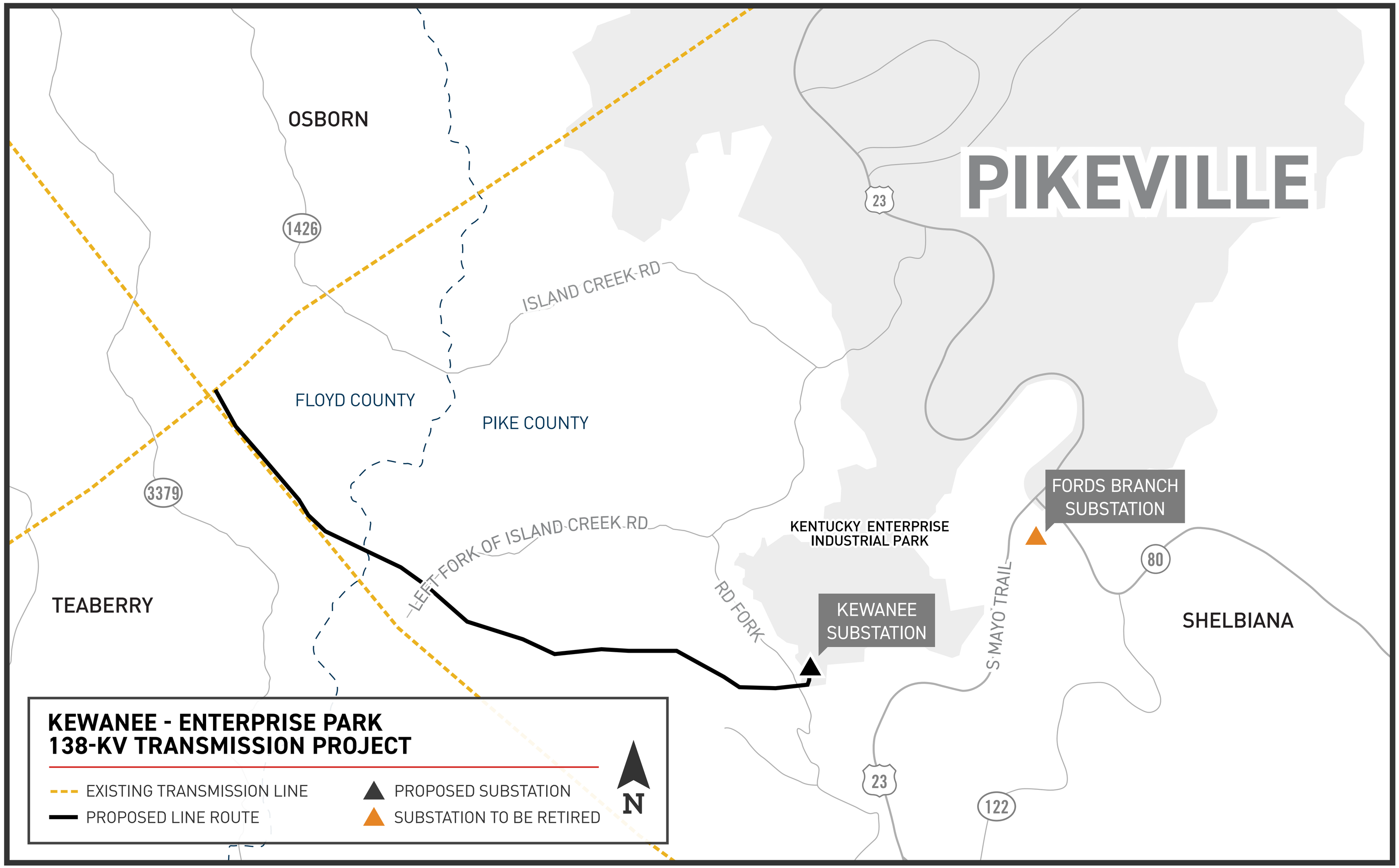
6. Written comments may also be filed at the above address, or by sending an e-mail to the Commission's public information officer at psc.info@ky.gov. The comments should reference Case No. 2020-00062.

7. Project updates and further information may also be found on the Company's website: http://kentuckypower.com/EnterprisePark/.

KEWANEE – ENTERPRISE PARK

138-KV TRANSMISSION PROJECT

KENTUCKY POWER
An AEP Company
BOUNDLESS ENERGY



NAME 1	MAILING ADDRESS	CITY2	STATE	ZIPCODE
SHANA RENEE, SHAWNA RAE & BRITTANY LYNN KEATHLEY	1195 BURNING FORK ROAD	PIKEVILLE	KY	41501
LYDIA M. ROBERTS	727 KEATHLEY BRANCH	HAROLD	KY	41635
ISAAC KEATHLEY & KELLY KEATHLEY	987 KEATHLEY BRANCH	HAROLD	KY	41635
ZELLIA ROGERS & RONALD ROGERS	9716 HARRISON ROAD	WAKEMAN	OH	44889
UDELL ROGERS	1277 KEATHLEY BRANCH	HAROLD	KY	41635
C. C. JOHNSON HEIRS, EVA B. FOSTER	46 BOOMDECKER COURT	ELKTON	MD	21921
ZELLIA ROGERS	9716 HARRISON ROAD	WAKEMAN	OH	44889
OPAL YOUNG	PO BOX 71	GRETHEL	KY	41631
WANDA & FREDDIE CONN JR. BURKE	PO BOX 43	PRINTER	KY	41655
TIMMY DOUGLAS & RHONDA HALL & MICHAEL HALL	60 RED MORGAN BRANCH	CRAYNOR	KY	41614
GENE & GARNETT HALL, WINNIE VANDERPOOL	PO BOX 1032	GRETHEL	KY	41629
EARL HALL & MICHAEL SLONE & MICHAEL HALL	271 PIGEON ROOST	HAROLD	KY	41635
LOUISE SPEARS	22 G B SPEARS DRIVE	GALVESTON	KY	41635
ACIN, LLC., WESTERN POCAHONTAS PROPERTIES	5260 IRWIN ROAD	HUNTINGTON	WV	25705
THOMAS B. RATLIFF TRUST, CHRIS RATLIFF	PO BOX 460	SHELBIANA	KY	41562
BRUCE FIELDS	4074 LEFT FORK OF ISLAND CREEK ROAD	PIKEVILLE	KY	41501
LEONARD IRICKS	3882 LEFT FORK OF ISLAND CREEK ROAD	PIKEVILLE	KY	41501
BRUCE MICHAEL FIELDS & JOSEPH M. FIELDS	3909 LEFT FORK ISLAND CREEK ROAD	PIKEVILLE	KY	41501
MARY SENDELBACH AND IRVIN V. SENDELBACH, TRUSTEES	8205 SR 61 SOUTH	PLYMOUTH	OH	44865
ROBERT DOTSON PINSON & ANNA PINSON	PO BOX 948	PIKEVILLE	KY	41502
LAUREN SLONE & KENNETH HALL SLONE	17040 ASHBURTON DRIVE	LOUISVILLE	KY	40245
RILEY HALL COAL	PO BOX 2497	PIKEVILLE	KY	41502
RICHARD E. & ANNETTE RAY	PO BOX 2593	PIKEVILLE	KY	41502
JOHN S. CLINE SR. ESTATE & JOHN JOHNSON	PO BOX 489	PIKEVILLE	KY	41502
RICHARD E. & ANNETTE RAY	PO BOX 2593	PIKEVILLE	KY	41502
RICHARD RAY	PO BOX 2593	PIKEVILLE	KY	41502
APPALACHIAN LAND COMPANY, JOHN HARRIS	164 MAIN STREET, SUITE 200	PIKEVILLE	KY	41501
DANIEL H. & SARAH F. FORSYTH	4320 DEEP SPRINGS COURT	KENNESAW	GA	30144
JOSH & PHILLIP POTTER	91 ELDER LANE	PIKEVILLE	KY	41501
ELLIS & SELENA COLEMAN	836 COLLINS HIGHWAY	PIKEVILLE	KY	41501
LLOYD HAROLD & WANDA S. DAMRON	1203 ROAD FORK ROAD	PIKEVILLE	KY	41501
CITY OF PIKEVILLE	119 COLLEGE STREET	PIKEVILLE	KY	41502
CITY OF PIKEVILLE	118 COLLEGE STREET	PIKEVILLE	KY	41501

NOTARIZED PROOF OF PUBLICATION

COMMONWEALTH OF KENTUCKY

COUNTY OF Franklin

Before me, a Notary Public, in and for said county and state, this 6th day of August, 2020, came Rachel McCarty, personally known to me, who, being duly sworn, states as follows: that she is the Advertising Assistant of the Kentucky Press Service, Inc.; that she has personal knowledge of the contents of this Affidavit; that the newspapers shown on Attachment No. 1 to this Affidavit published the Public Notice, on the dates shown thereon at the request of Kentucky Press Service, Inc. for Kentucky Power Company; that the form and content of the Notice submitted for publication to each paper is shown in Attachment No. 2 to this Affidavit; and that the Kentucky Press Service, Inc. has presented to Kentucky Power Company proof of these publications in the form of "tear sheets" for retention in its files.

Rachel McCarty
Signature

Bonnie J. Howard
Notary Public
My Commission Expires: 9-18-2020
(SEAL) ID. #563384

KENTUCKY PRESS SERVICE

101 Consumer Lane **Frankfort, KY 40601**
(502) 223-8821 **FAX (502) 875-2624**
Rachel McCarty Advertising Dept.

List of newspapers running the Notice to Kentucky Power Company Customers. Attached tearsheets provide proof of publication:

Pikeville Appalachian News -- 8-4
Prestonsburg Floyd Co. Chronicle & Times -- 8-5

CLASSIFIEDS

Contact: Deborah Chambers | (606) 437-4054 | www.news-expressky.com

PRE-PAY AND SAVE! ALL MAJOR CREDIT CARDS ACCEPTED

E-mail: classads@news-expressky.com
Mail: PO Box 802 • Pikeville KY • 41502
Fax: (606) 437-4246

Deadlines:
Wednesday Edition - Monday @ 3 p.m.
Friday Edition - Wednesday @ 5 p.m.
Weekend Edition - Thursday @ 5 p.m.
Deadlines are same for placing, changing, or stopping ad.
No changes or cancellations can be made after deadlines.

To Our Readers

PUBLISHER'S NOTICE

All real estate advertising in this newspaper is subject to the Fair Housing Act which makes it illegal to advertise "any preference, limitation or discrimination based on race, color, religion, sex, handicap, familial status or national origin, or an intention to make any such preference, limitation or discrimination." Familial includes children under the age of 18 living with parents or legal custodians, pregnant women and people securing custody of children under 18.

This newspaper will not knowingly accept any advertising for real estate which is in violation of the law. Our readers are hereby informed that all dwellings advertised in this newspaper are available on an equal opportunity basis. To complain of discrimination, call HUD toll-free at 1-800-669-9777. The toll-free number for the hearing impaired is 1-800-927-9275.

EQUAL HOUSING OPPORTUNITY

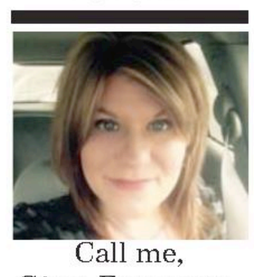
POLICIES

The Appalachian News-Express reserves the right to edit, properly classify, cancel or decline any ad. We will not knowingly accept advertising that discriminates on the basis of sex, age, religion, race, national origin or physical disability.

PLEASE CHECK YOUR AD

Please read your ad the first day it appears in the *Appalachian News-Express*. Report any errors immediately and we will gladly correct any errors published. Credit will be issued for one (1) day only. After the first day the ad can be corrected for the remaining number of runs, but credit will not be issued for days ad ran incorrectly.

For Sale



Call me, Gina Ferguson, for all your advertising needs in the *News- Express* and the *Mountain Bargain Hunter*. Enhance your selling power today! (606)437-4054

Lost & Found

AS A SERVICE to our community, **LOST & FOUND** ads are always listed for free! Call today. (606)437-4054

Other Announcements

KEEP UP WITH the latest news, weather and sports. Call for Home Delivery (606)437-4054

Apartments-Unfurnished

APARTMENTS FOR RENT in the City of Pikeville. Reasonable rates. Close to college and hospital. Housing accepted. (606)794-2911.

PIKEVILLA APARTMENTS ACCEPTING APPLICATION for 1BR, 2BR and 3BR Apartments. Please call for more info 606-432-3286. Monday-Thursday 8am-4pm. Friday 8am-12.

EQUAL HOUSING OPPORTUNITY

Houses for Rent

SMALL 2BR HOUSE for rent. located on Hurricane Creek. About mile from Pikeville. 606-434-2997

1062 CHLOE ROAD, Pikeville. 2BR 1BA. $400mo. $50dep. Call Pat Beavins 606-213-6725

VERY NICE BRICK. Electric cook top, oven and refrigerator. Security deposit and references. Call 433-4831

Mobile Homes for Rent

16X80 2BR TRAILER for rent 1-3/4 miles up Coon Creek, $550mo. plus dep. Ref. req. No inside pets. Call 437-0296 or 794-2669

I NEVER NEED to run my ad for more than a few days because the *News-Express* works so well at renting my mobile home.- Ruth, Pikeville.

Property for Sale

LAND FOR SALE AT KEWANEE Dead book 730 page 463 Pike Co. Courthouse. Asking $20,000 Daphne 859-272-8182.

APPROX. 1/4 ACRE lot located on Powderhouse Hollow, city limits. City water/ sewer. 606-454-2400, 606-424-2549.

Collectibles

ANY FOR SALE item of $100 or less is run absolutely free! Call Today! **(606)437-4054**

Employment Opportunity

LOOKING FOR SOMEONE to sit with elderly lady and slight housework. Millard area. Must have references and experience. 20 hour week. Call 606-213-2400.

Automobiles

I SOLD MY car in no time at all by advertising in the *News-Express Classifieds.*- Anthony, Pikeville

Legals

NOTICE OF CREDITORS AND OTHERS

The estate of Vernon Wayne Hopson deceased late of 142 Brickyard Hill Road, Jenkins KY, 41537, who died on May 4, 2019, take notice that all persons having claims upon the estate of the above named person has to filed such claims with the undersigned estate trustee, by August 22, 2020, full statement of the acclaims and the security held by them.

Ruby Dutton
1661
Dorton Creek
Road Jenkins KY
41537.
240-988-0892

NOTICE OF INTENTION TO MINE
Pursuant to Application Number 898-4656 Transfer No. 3

In accordance with the provisions of 405 KAR 8:010, notice is hereby given that Shelby Resources LLC, 15888 Ferrells Creek Road, P.O. Box 2100, Pikeville, KY 41502 intends to transfer permit number 898-4483 to Clintwood JOD, Inc., P.O. Box 100, Belcher, KY 41513, the new permit number will be 898-4656. The operation disturbs 11.48 surface acres and underlies 1,138.20 acres for a total acreage of 1,149.68. No new acres are affected by the transfer.

The operation is approximately 0.9 miles north from Upper Chloe Creek Road's junction with Right Fork of Upper Chloe Creek Road and is located 0.25 miles north of Ivy Fork of Chloe Creek. The operation is located 3.0 miles north of Shelbiana in Pike County. The operation is located on the Millard U.S.G.S. 7 1/2 minute quadrangle map.

The application has been filed for public inspection at the Department for Surface Mining Reclamation and Enforcement's Pikeville Regional Office, 121 Mays Branch Road; Pikeville, Kentucky 41501. Written comments or objections must be filed with the Director, Division of Permits, 300 Sower Blvd. 2nd Floor, Frankfort, Kentucky 40601. All comments or objections must be received within fifteen (15) days of today's date

NOTICE OF INTENTION TO MINE
Pursuant to Application Number 898-4656 Transfer No. 3

In accordance with the provisions of 405 KAR 8:010, notice is hereby given that Shelby Resources LLC, 15888 Ferrells Creek Road, P.O. Box 2100, Pikeville, KY 41502 intends to transfer permit number 898-4483 to Clintwood JOD, Inc., P.O. Box 100, Belcher, KY 41513, the new permit number will be 898-4656. The operation disturbs 11.48 surface acres and underlies 1,138.20 acres for a total of 1,149.68. No new acres are affected by the transfer.

The operation is located 3.0 miles north of Shelbiana in Pike County. The operation is located on the Millard U.S.G.S. 7 1/2 minute quadrangle map.

The application has been filed for public inspection at the Department for Surface Mining Reclamation and Enforcement's Pikeville Regional Office, 121 Mays Branch Road; Pikeville, Kentucky 41501. Written comments or objections must be filed with the Director, Division of Permits, 300 Sower Blvd. 2nd Floor, Frankfort, Kentucky 40601. All comments or objections must be received within fifteen (15) days of today's date

NOTICE OF INTENTION TO MINE
Pursuant to Application Number 898-1071 Transfer No. 3

In accordance with the provisions of 405 KAR 8:010, notice is hereby given that Cambrian Coal LLC, 15888 Ferrells Creek Road, P.O. Box 2100, Pikeville, KY 41502 intends to transfer permit number 898-0615 to Clintwood JOD, Inc., P.O. Box 100, Belcher, KY 41513, the new permit number will be 898-1071. The operation disturbs 680.25 surface acres and underlies 208.75 acres for a total of 707.00 acres. No new acres are affected by the transfer.

The operation is located 3.0 miles north of Ashcamp in Pike County. The operation is located 1.5 miles northwest from Adams Branch Road's junction with KY 197 and located 0.25 miles west of Adams Branch. The operation is located on the Hellier U.S.G.S. 7-1/2 minute quadrangle map.

The application has been filed for public inspection at the Department for Surface Mining Reclamation and Enforcement's Pikeville Regional Office, 121 Mays Branch Road; Pikeville, Kentucky 41501. Written comments or objections must be filed with the Director, Division of Permits, 300 Sower Blvd. 2nd Floor, Frankfort, Kentucky 40601. All comments or objections must be received within fifteen (15) days of today's date

NOTICE OF SALE PIKE CIRCUIT COURT DIVISION NO. I CIVIL ACTION NO. 18-CI-01321

JAMES CHANEY, DARLENE CHANEY, JONATHAN CHANEY, LINDA CHANEY, DONNA WILES, CHRISTOPHER WILES, GENEVA BLAIR, HAROLD BLAIR, ROBIN BURKE, RHONDA MATNEY MURPHY, LONNIE MURPHY, DOUGLAS KEITH SAWYERS, VICTORIA SAWYERS, BERTHA SUE ADKINS, and J.D. ADKINS
PLAINTIFFS
VS.
AARON JUSTICE, JR.
DEFENDANT

By virtue of Findings of Fact, Conclusions of Law and Partial Judgment of the Pike Circuit Court entered November 12, 2019, I shall proceed to offer for sale, at the Pike County Courthouse in the Fiscal Court Room located on the 2nd Floor, together with such COVID-19 safety measures, including, but not limited to, social distancing and the use of facial coverings over the nose and mouth, to the highest bidder at public auction on Wednesday, August 12, 2020, at the hour of 9:00 a.m., or thereabout, on the following terms: at the time of sale, the successful bidder(s) shall pay cash or make a deposit of 10%, with the balance payable within 30 days, the purchaser who does not pay cash in full, shall be required to execute a bond, with surety thereon acceptable to the Master Commissioner and pre-approved by the Master Commissioner, to secure the unpaid balance of the purchase price, in accordance with KRS 426.705 the bond shall bear interest at the judgment rate from the date of the sale until paid, and shall have the same force and effect as a Judgment and shall remain and be a lien on the property until paid; the successful bidder(s) shall have the privilege of paying all of the balance of the purchase price prior to the expiration of the thirty (30) day period, the following described property which is being sold for indivisibility, Parcel One and Parcel Two, shall be sold separately, and not together, said property being located, in Pike County, Kentucky, and more particularly described as follows: Parcel One: Map Number 116-20-01019.00 containing two houses and approximately 1.97 acres at 10473 and 10463 Regina Belcher Highway, Elkhorn City, Kentucky, more particularly described in Deed Book 487, page 61, and Deed Book 619, page 305, and Deed Book 766, page 118, and further conveyed by the Will of Aaron Justice recorded in Will Book AA, page, 234 and the Will of Elsie Lee Justice recorded in Will Book 7, page 129, all of which are recorded in the Pike County Clerk's Office.

Subject to all restrictions, easements, or out-conveyances which may appear of record.

Parcel Two:

That certain tract or parcel of land, located in Pike County, Kentucky, and is on Harless Creek, a tributary of Russell's Fork of the Big Sandy River, and is bounded and described as follows:

Beginning on a marked sycamore at the upper end of the Adam Venters farm which is a corner of the Lizzie Blair farm; thence a straight line across the bottom with Lizzie Blairs's line; thence up the hill and the center of the point to the top of the ridge to H.E. Coleman and Lizzie Blair's line; thence down the top of the ridge to a planted stone; thence down the side of the hill with the center of point to a twin marked red oak and ash standing on the right hand edge of the rock cliff looking up the hill; thence a straight line down the hill across the bottom to a marked sycamore standing on the bank of Harless Creek approximately one hundred feet above the Rilda Smallwood and Isaac Sanders corner; thence a straight line to the center of Harless Creek; thence with its meanders up the creek opposite the beginning; thence

Notice Of Proposed Electric Transmission Line Construction Project

Kentucky Power Company proposes to build an approximately five-mile double-circuit 138 kV transmission line in Floyd and Pike counties, Kentucky ("Kewanee 138 kV Transmission Line Extension"). The Kewanee 138 kV Transmission Line Extension will connect to the Beaver Creek–Cedar Creek 138 kV circuit of the Sprigg–Beaver Creek 138 kV Transmission Line in Floyd County, Kentucky at a tap point located between Route 3379 and Route 1426 in Floyd County, Kentucky and proceed in a southeasterly direction for approximately five miles to a proposed 138 kV substation in Pike County, Kentucky (the "Kewanee 138 kV Substation"). The Kewanee 138 kV Substation is to be located off Industry Drive south of and adjacent to the Kentucky Enterprise Industrial Park. The project also will include the retirement of the Company's existing Fords Branch 46 kV Substation located near 46 Old Shelbiana Road, Pike County, Kentucky.

The Kewanee 138 kV Transmission Line Extension, proposed Kewanee 138 kV Substation, and the retirement of the Fords Branch 46 kV Substation collectively constitute the Kewanee-Enterprise Park 138 kV Transmission Project. The Kewanee-Enterprise Park 138 kV Transmission Project will address PJM Baseline thermal and voltage criteria violations on the Company's existing 46 kV Pikeville area subtransmission network, address aging infrastructure needs at the Fords Branch 46 kV Substation, and provide additional capacity for the area's 34.5 kV and 12 kV distribution system.

The proposed transmission line generally will require a 100-foot wide right-of-way (50 feet on each side of the centerline). In certain areas a wider right-of-way may be required. Kentucky Power may also adjust the proposed centerline of the Kewanee 138 kV Transmission Line Extension and adjacent rights-of-way to address conditions discovered during survey and construction that affect constructability and access.

Kentucky Power plans to file an application with the Public Service Commission of Kentucky on or before September 8, 2020 seeking a certificate of public convenience and necessity authorizing the Kewanee-Enterprise Park 138 kV Transmission Project. The application and the Commission proceeding have been assigned Case No. 2020-00062.

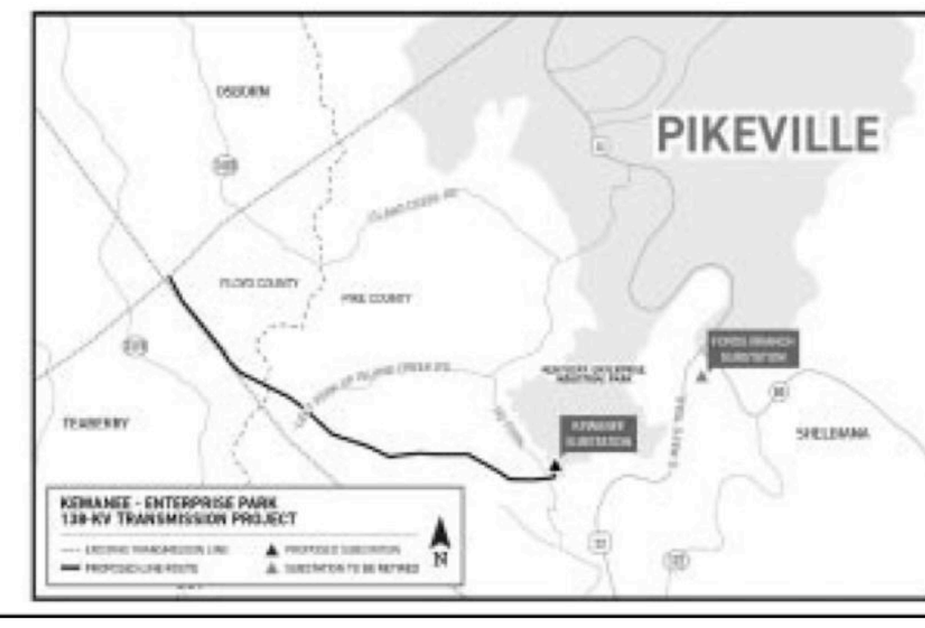
Any interested person under KRS 278.020(9), including any person over whose property the proposed transmission line will cross, may request a local public hearing in the county in which the transmission line is proposed to be constructed. The request must be in writing and should be delivered to the Executive Director, Public Service Commission, 211 Sower Boulevard, P.O. Box 615, Frankfort, Kentucky 40602-0615. The request for local public hearing must be delivered to the Executive Director no later than thirty days after the date the application is filed. The request for local public hearing must comply with the requirements of 807 KAR 5:120, Section 3.

A person may seek to intervene as a party in the Commission proceeding to review Kentucky Power's application by filing a timely written request for intervention in accordance with the requirements of 807 KAR 5:001, Section 4(11) and 807 KAR 5:120, Section 3(3).

The application and other filings in connection with Kentucky Power's application may be accessed at http://psc.ky.gov under Case No. 2020-00062 when filed. Project updates and further information may also be found on the Company's website: http://aeptransmission.com/kentucky/EnterprisePark/.

A map of the proposed route for the line is shown below.

KEWANEE – ENTERPRISE PARK
138-KV TRANSMISSION PROJECT



FLOYD COUNTY CHRONICLE AND TIMES

CLASSIFIEDS

PHONE: (800) 539-4054

EMAIL: eburchett@floydct.com

MAIL: P.O. Box 802 • Pikeville, KY 41502

FAX: (606) 437-4246

Deadlines are:
Wednesday - Monday @ Noon
Friday- Monday @ Noon

Pre-Pay and Save!
All major credit cards accepted

To Our Readers

PUBLISHER'S NOTICE

All real estate advertising in this newspaper is subject to the Fair Housing Act which makes it illegal to advertise "any preference, limitation or discrimination based on race, color, religion, sex, handicap, familial status or national origin, or an intention to make any such preference, limitation or discrimination." Familial includes children under the age of 18 living with parents or legal custodians, pregnant women and people securing custody of children under 18.

This newspaper will not knowingly accept any advertising for real estate which is in violation of the law. Our readers are hereby informed that all dwellings advertised in this newspaper are available on an equal opportunity basis. To complain of discrimination, call HUD toll-free at 1-800-669-9777. The toll-free number for the hearing impaired is 1-800-927-9275.

EQUAL HOUSING OPPORTUNITY

POLICIES

The *Floyd County Chronicle and Times* reserves the right to edit, properly classify, cancel or decline any ad. We will not knowingly accept advertising that discriminates on the basis of sex, age, religion, race, national origin or physical disability.

PLEASE CHECK YOUR AD

Please read your ad the first day it appears in the *Floyd County Chronicle and Times*. Report any errors immediately and we will gladly correct any errors published. Credit will be issued for one (1) day only. After the first day the ad can be corrected for the remaining number of runs, but credit will not be issued for days ad ran incorrectly.

PERSONAL AD POLICY

Ads will be printed at publisher's discretion. Publisher not responsible for results, parties responding to or placing ads.

To Our Readers

For Sale

NEED EXTRA CASH? Run a Classified Ad. They Work! Call (800)539-4054 Today!

Apartments-Unfurnished

2BR DUPLEX, CENTRAL heat/air, total electric. Close to Prestonsburg. Call 606-886-9007 or 606-889-9747.

Houses for Rent

3BR, 1BA HOUSE for rent. Carport, large yard. Located between Prestonsburg and Paintsville. Call 606-886-9007 or 606-889-9747.

Carpentry / Home Repair

WANTED: PERSON OR persons with roofing skills to make repairs to a one story house. Will pay cash. Call 606-226-2077.

Employment Opportunity

LOOKING TO HIRE someone to cut grass and weed eat around house. I will provide equipment. McDowell KY. Area. Call 606-949-1152.

Employment Opportunity

WANTED EXPERIENCED Concrete Finishers. $17.00 per hour. Call (606)477-9307 or (606)886-8373. EOE

Legals

BID NOTICE

Southern Water and Sewer District is seeking bids to perform waterline repair/replacement and road repairs related to FEMA 4428 DR-Ky. Bid packages of locations and repair description's can be obtained at: Southern Water's office located at 245 Ky RT 680 McDowell, Ky 41647. To obtain site visits contact Southern Water & Sewer District. Sealed bids are to be submitted by 4:00 pm 8/19/2020 to the office.

PUBLIC NOTICE

Evans Wrecker Service, located at 8520 KY RT 979, Grethel, KY 41631, has in their possession a towed 1994 Ford F150, Orange in color, Vin # 1FTEF15NXRNB 28728, owned by Glen Hamilton, last know address 1346 Mink Branch, Craynor, Kentucky 41635. Owner may contact Evans Wrecker Service at 606-587-1675 to obtain balance of storage and towing expenses owed.

Said vehicle will be sold due to nonpayment of bill on August 14, 2020.

Legals

NOTICE OF INTENTION TO MINE
Pursuant to Application Number 836-5662 Renewal 4

In accordance with KRS 350.055, notice is hereby given that Spurlock Mining, LLC, 3228 Summit Square Place, Suite 180, Lexington, Kentucky 40509 has applied for renewal of a permit for an underground coal mining and reclamation operation located 1.5 miles southeast of Printer in Floyd County. The operation disturbs 8.07 surface acres and underlies 183.32 acres, and the total area within the permit boundary is 191.39 acres.

The facility is approximately 0.2 mile southeast from KY 2030's junction with Big Branch-Honaker Road and located adjacent to Spurlock Creek.

The facility is located on the Harold USGS 7.5 minute quadrangle map. The surface area is owned by Blackhawk Mining, LLC. The permit underlies land owned by Blackhawk Mining, LLC, Johnnie Conn, Denver and Mickie Meade, Marlene Dingus, Jeanie and John Melvin Mullins, Russell W Jarrell and Bonita B Jarrell, Ruby Halbert, Tandy Spurlock, Velma Miller, Howard Meade Heirs (James W Meade, Alesia Meade, Tammy Meade Ensslin, Kimberly D Meade, Robert Slone, Stacey Slone Williams, Charles B Slone, Barbara Meade Parsons, Roger W Meade, John M Meade, Mary T. McCallister, Dorothy A Sword) and James and Kimberly Meade.

The operation will affects an area within 100 feet of public road KY 2030. The operation will not involve relocation or closure of the public road.

The application has been filed for public inspection at the Division of Mine Reclamation and Enforcement's Hazard Regional Office, 556 Village Lane, P.O. Box 851, Hazard, Kentucky 41702. Written comments, objections or requests for a permit conference must be filed with the Director, Division of Mine Permits, 300 Sower Boulevard, Frankfort, KY 40601.

This is the final advertisement of the application; all comments, objections or requests for a permit conference must be received within thirty (30) days of this date.

Notice Of Proposed Electric Transmission Line Construction Project

Kentucky Power Company proposes to build an approximately five-mile double-circuit 138 kV transmission line in Floyd and Pike counties, Kentucky ("Kewanee 138 kV Transmission Line Extension"). The Kewanee 138 kV Transmission Line Extension will connect to the Beaver Creek–Cedar Creek 138 kV circuit of the Sprigg–Beaver Creek 138 kV Transmission Line in Floyd County, Kentucky at a tap point located between Route 3379 and Route 1426 in Floyd County, Kentucky and proceed in a southeasterly direction for approximately five miles to a proposed 138 kV substation in Pike County, Kentucky (the "Kewanee 138 kV Substation"). The Kewanee 138 kV Substation is to be located off Industry Drive south of and adjacent to the Kentucky Enterprise Industrial Park. The project also will include the retirement of the Company's existing Fords Branch 46 kV Substation located near 46 Old Shelbiana Road, Pike County, Kentucky.

The Kewanee 138 kV Transmission Line Extension, proposed Kewanee 138 kV Substation, and the retirement of the Fords Branch 46 kV Substation collectively constitute the Kewanee-Enterprise Park 138 kV Transmission Project. The Kewanee-Enterprise Park 138 kV Transmission Project will address PJM Baseline thermal and voltage criteria violations on the Company's existing 46 kV Pikeville area subtransmission network, address aging infrastructure needs at the Fords Branch 46 kV Substation, and provide additional capacity for the area's 34.5 kV and 12 kV distribution system.

The proposed transmission line generally will require a 100-foot wide right-of-way (50 feet on each side of the centerline). In certain areas a wider right-of-way may be required. Kentucky Power may also adjust the proposed centerline of the Kewanee 138 kV Transmission Line Extension and adjacent rights-of-way to address conditions discovered during survey and construction that affect constructability and access.

Kentucky Power plans to file an application with the Public Service Commission of Kentucky on or before September 8, 2020 seeking a certificate of public convenience and necessity authorizing the Kewanee-Enterprise Park 138 kV Transmission Project. The application and the Commission proceeding have been assigned Case No. 2020-00062.

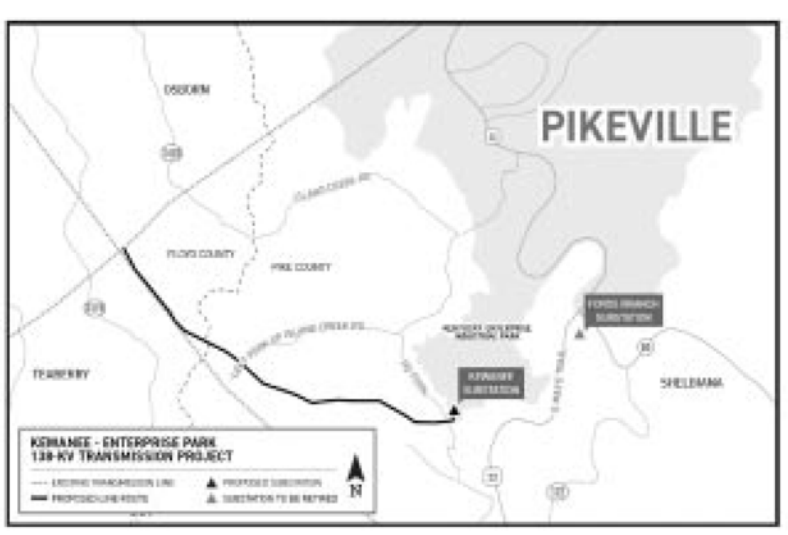
Any interested person under KRS 278.020(9), including any person over whose property the proposed transmission line will cross, may request a local public hearing in the county in which the transmission line is proposed to be constructed. The request must be in writing and should be delivered to the Executive Director, Public Service Commission, 211 Sower Boulevard, P.O. Box 615, Frankfort, Kentucky 40602-0615. The request for local public hearing must be delivered to the Executive Director no later than thirty days after the date the application is filed. The request for local public hearing must comply with the requirements of 807 KAR 5:120, Section 3.

A person may seek to intervene as a party in the Commission proceeding to review Kentucky Power's application by filing a timely written request for intervention in accordance with the requirements of 807 KAR 5:001, Section 4(11) and 807 KAR 5:120, Section 3(3).

The application and other filings in connection with Kentucky Power's application may be accessed at http://psc.ky.gov under Case No. 2020-00062 when filed. Project updates and further information may also be found on the Company's website: http://aeptransmission.com/kentucky/EnterprisePark/.

A map of the proposed route for the line is shown below.

KEWANEE – ENTERPRISE PARK
138-KV TRANSMISSION PROJECT



WANTED

EXPERIENCED CONCRETE FINISHERS

$17.00 per hour.
EOE.
Call 606-477-9307 or 606-886-8373.

Veterans Crisis Line

1-800-273-8255
PRESS 1

APPLICATIONS BEING ACCEPTED for 1-Bedroom Apartments for Persons 62 and older

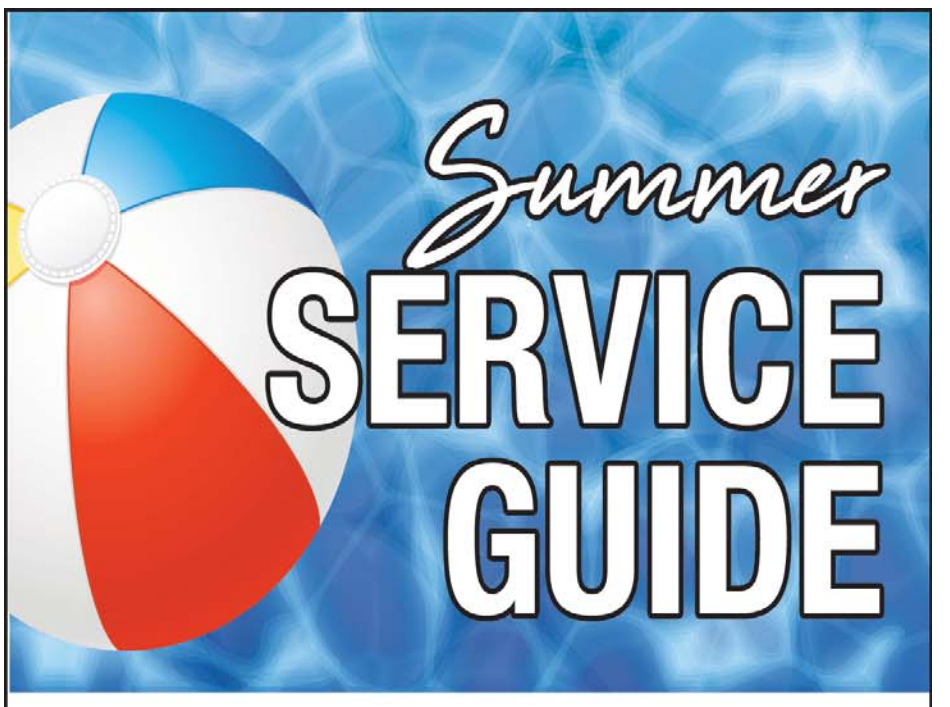
Located on Mays Branch in Prestonsburg. All utilities included, rent is based on gross monthly income. Several activities such as line dancing, crafts, church services, hair salon. Furnished with stove, refrigerator, emergency alarm system and air conditioner. For more information, please call Highland Terrace at 606-886-1925, TDD: 1-800-648-6056 or 711 or come by the office for an application.

Highland Terrace does not discriminate in admission or employment in subsidized housing on account of race, color, religion, gender, national origin, disability or familial status. EQUAL HOUSING OPPORTUNITY

APPLICATIONS BEING ACCEPTED for 1,2,3 & 4 Bedroom Apartments

Located in Prestonsburg is Highland Heights Apartments in Goble Roberts addition and Cliffside Apartments on Cliff Road. Rent is based on gross monthly income. All utilities included at Highland Heights and a utility Allowance at Cliffside. Learning centers at both sites with computers available. For more information, call Highland Heights at 606-886-0608 and Cliffside at 606-886-1819, TDD: 1-800-648-6056 or 711 or come by the offices for an application.

Highland Heights and Cliffside Apartments do not discriminate in admission or employment in subsidized housing on account of race, color, religion, gender, national origin, disability or familial status. EQUAL HOUSING OPPORTUNITY



MR. PRESSURE
COMMERCIAL & RESIDENTIAL! GREAT QUALITY WORK!
• PRESSURE WASHING • SOFT WASH
• SEALING & STRIPING
• ROOF & EXTERIOR CLEANING
• COMMERCIAL SNOW PLOWING & SALTING
CORY HALL
2855 COLLINS HWY. • PIKEVILLE, KY
606-794-1985
LIKE US ON facebook
facebook.com/themrpressure

3 Month Special!

12 WEEKS IN 6 PAPERS –
Appalachian News-Express, Mingo Messenger, Floyd County Chronicle & Times, The Hazard Herald, The Paintsville Herald, & Mountain Bargain Hunter – A TOTAL OF 120 ADS!

Customer: _____
Attach Ad Copy/Business Card
Phone #: _____
Address: _____
Payment Method: ( ) Check ( ) Credit Card
Credit Card #: _____
Exp. Date: _____ Security Code (on back): _____
Signature: _____

Fill out form and mail to: Service Guide, PO Box 802, Pikeville, KY 41502 or...

for only **$150/mo**

CALL TODAY! 800.539.4054

Over 40,000 Households & 80,000 Readers for Only $3.50 Per ad!

Kewanee-Enterprise Park
138 kV Transmission Line Project

Exhibit 4: Alternative Routes

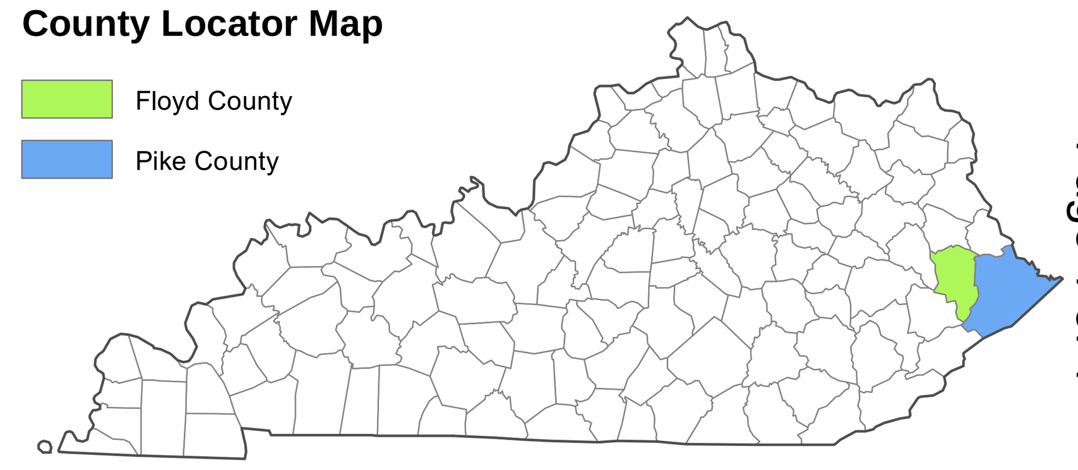
Date: 8/3/2018
Sheet 1 of 1

- Proposed Substation Site
- Alternative Routes
- Existing AEP Transmission Line (69kV or lower)
- Existing AEP Transmission Line (115-230kV)
- Existing AEP Transmission Line (345kV or higher)
- Parcel to be Purchased for Substation
- City of Pikeville

Base Map Source: Esri, DigitalGlobe, GeoEye, Earthstar

0 1,000 2,000 3,000
Feet
1 " □ 1,000 feet

N



KENTUCKY POWER
An AEP Company
BOUNDLESS ENERGY

Path: P:\AEP\148926_EnterprisePark_P18025005\GIS\CPCN_Exhibit_XX_AltRoutes_151565_EnterprisePark_24x36_Aerial.mxd

MEDIA CONTACT:
Cindy Wiseman
External Affairs and Customer Service
Cell: 606-585-6847
cgwiseman aep.com; kentuckypower.com

FOR IMMEDIATE RELEASE

KENTUCKY POWER RESUMES PLANS FOR POWER GRID UPGRADES IN PIKE AND FLOYD COUNTIES

ASHLAND, Ky., Sept 3, 2020 – Kentucky Power representatives are resuming plans for power upgrades in Pike and Floyd counties. The Kewanee – Enterprise Park 138-kV Transmission Project involves building approximately 5 miles of transmission line and a new substation to address electrical needs in the area.

Company representatives announced the project in spring 2018 as the Enterprise Park Economic Area Improvements Project. The project team hosted an open house to gather input from the public and later selected a proposed route for the power line. Kentucky Power representatives placed the project on hold in 2019 due to changing electrical needs in the area.

"The project no longer requires serving a customer in the Kentucky Enterprise Industrial Park," said Brett Mattison, president and chief operating officer. "However, our need to provide continued reliable electric service to our customers has not changed."

The project is intended to address findings verified by PJM Interconnection. PJM Interconnection serves as the regional transmission organization that coordinates the movement of wholesale electricity in 13 states, including Kentucky, and the District of Columbia. The upgrades are expected to increase the electrical grid's performance and reliability during periods of high electric demand. Company officials are resubmitting for a Certificate of Public Convenience and Necessity with the Kentucky Public Service Commission. Company representatives are submitting a line route similar to previously announced plans.

Crews plan to build the new substation adjacent to the Kentucky Enterprise Industrial Park in Pike County. The proposed transmission line begins at the new substation and travels northwest through Pike County. The line crosses into Floyd County where it parallels the Company's existing 765-kilovolt transmission line. The proposed line ends at an existing power line west of Keathley Branch Road. After the project concludes, Kentucky Power officials plan to retire the Fords Branch Substation located on Old Shelbiana Road.

OR Colan Utility Infrastructure Land Services, LLC (ORC) serves as the right-of-way contractor representing Kentucky Power on this project. Directly-involved landowners can expect to hear from ORC in the coming months to discuss next steps.

If the project is approved, construction is expected to start in the fall of 2021 and conclude by the end of 2023.

Additional information about this project, including an interactive map of the proposed line route, is available at KentuckyPower.com/EnterprisePark.

Kentucky Power, with headquarters in Ashland, provides service to about 165,000 customers in 20 eastern Kentucky counties, including Boyd, Breathitt, Carter, Clay, Elliott, Floyd, Greenup, Johnson, Knott, Lawrence, Leslie, Letcher, Lewis, Magoffin, Martin, Morgan, Owsley, Perry, Pike and Rowan. Kentucky Power is an operating company in the American Electric Power (AEP) system. AEP, based in Columbus, Ohio, is focused on building a smarter energy infrastructure and delivering new technologies and custom energy solutions to customers. AEP's more than 17,000 employees operate and maintain the nation's largest electricity transmission system and more than 224,000 miles of distribution lines to efficiently deliver safe, reliable power to nearly 5.4 million regulated customers in 11 states, including Kentucky. AEP also is one of the nation's largest electricity producers with approximately 33,000 megawatts of diverse generating capacity, including 4,200 megawatts of renewable energy. AEP's companies includes utilities AEP Ohio, AEP Texas, Appalachian Power, Indiana Michigan Power, Kentucky Power, Public Service Company of Oklahoma, and Southwestern Electric Power Company. AEP also owns AEP Energy.

Filing Requirements

Citation	Requirement	Location
807 KAR 5:001, Section 14(1)	Applicant And Project Information	Application ¶¶ 1-2; *passim*.
807 KAR 5:001, Section 14(2)	Corporate Information	Application ¶ 1; Application Exhibit 1.
807 KAR 5:001, Section 14(3)	Limited Liability Company Information	Not Applicable.
807 KAR 5:001, Section 14(4)	Limited Partnership Information	Not Applicable.
807 KAR 5:001, Section 15(1)	Information Required For Certificates Of Public Convenience And Necessity To Bid On Franchises	Not Applicable.
807 KAR 5:001, Section 15(2)	Requirements of 807 KAR 5:001, Section 14	See Above.
807 KAR 5:001, Section 15(2)(a)	Facts Demonstrating The Proposed Construction Is Required By The Public Convenience And Necessity	Testimony of Nicolas C. Koehler; and Application ¶¶ 46-50.
807 KAR 5:001, Section 15(2)(b)	Franchises And Permits.	Testimony of Emily S. Larson; and Application ¶¶ 43-45.
807 KAR 5:001, Section 15(2)(c)	Proposed Route	Application Exhibit 3 (maps); Testimony of Brian K. West; Testimony of Emily S. Larson; Application ¶¶ 15-17; and Application Exhibit 16 (Siting Study).
807 KAR 5:001, Section 15(2)(c)	Description Of Manner of Construction	Testimony of Nicolas C. Koehler; Application ¶¶ 15-28; and Application Exhibits 5-9.
807 KAR 5:001, Section 15(2)(c)	Competitors	Application ¶ 50.
807 KAR 5:001, Section 15(2)(d)(1)	Map To Suitable Scale Showing Route And Neighboring Facilities	Application Exhibit 3.[1]
807 KAR 5:001, Section 15(2)(d)(2)	Plans And Specifications	Application Exhibits 5-9.[2]

[1] The maps show a preferred centerline and are not an actual design. Kentucky Power will supplement its filing with maps certified in accordance with KRS 322.340 once the project is in service.

[2] The structure exhibit drawings are conceptual representative sketches and not actual designs. Kentucky Power will supplement its filing with plans certified in accordance with KRS 322.340 once the project is in service.

Citation	Requirement	Location
807 KAR 5:001, Section 15(2)(e)	Manner Of Financing	Testimony of Brian K. West.
807 KAR 5:001, Section 15(2)(f)	Annual Operating Expenses	Application ¶ 30; and Testimony of Brian K. West.
807 KAR 5:001, Section 15(3)	Extensions In Ordinary Course	*See* Application ¶ 21; Not Applicable To Transmission Line and Substation Work.
807 KAR 5:001, Section 15(4)	Renewal Applications	Not Applicable.
807 KAR 5:120, Section 1	Notice Of Intent Conforming To The Requirements Of 807 KAR 5:120, Section 1(2)	Filed On March 9, 2020.
807 KAR 5:120, Section 2(1)(a)	All Information Required By 807 KAR 5:001, Section 14	See 807 KAR 5:001, Section 14 Above. The Required Number Of Copies Will Be Filed.
807 KAR 5:120, Section 2(1)(b)	All Information Required By 807 KAR 5:001, Section 15(2)(a)-(c) And 807 KAR 5:001, Section 15(2)(e)-(f) .	See 807 KAR 5:001, Section 15(2)(a)-(c) And 807 KAR 5:001, Section 15(2)(e)-(f) Above.
807 KAR 5:120, Section 2(2)(a)	Map Showing Centerline, Right-Of-Way, And Boundaries Of Properties Crossed By Right-Of-Way.	Application Exhibit 3.
807 KAR 5:120, Section 2(2)(b)	Sketches Of Typical Support Structures	Application Exhibits 8-9.
807 KAR 5:120, Section 2(2)(c)	Separate Map Showing Alternate Routes Considered	Application Exhibit 4. *See also* Testimony of Emily S. Larson; and Exhibit 16 (Siting Study).
807 KAR 5:120, Section (2)(3)	Verified Statement Concerning Mailed Notice To Property Owners	Application Exhibit 12. *See Also* Application ¶¶ 38-41; and Testimony of Brian K. West.
807 KAR 5:120, Section (2)(4)	Sample Copy Of Notices Conforming To 807 KAR 5:001, Section 120, Section (2)(3).	Application Exhibit 12.
807 KAR 5:120, Section	Statement Of Publication Of	Application Exhibit 13;

Citation	Requirement	Location
(2)(5)	Notice Of Proposed Electric Transmission Line Project	Application ¶ 42; and Testimony of Brian K. West.
807 KAR 5:120, Section (2)(6)	Copy Of Published Notice Of Proposed Electric Transmission Line Project	Application Exhibit 13.
807 KAR 5:120, Section (2)(7)	Capital Outlay	Application ¶ 29; Testimony of Brian K. West.