Environmental Assessment

Boone – Williamstown 69 kV Transmission Line Rebuild Project Boone, Gallatin, and Grant Counties, Kentucky

U.S. Department of Agriculture
Rural Utilities Service (RUS)

Prepared by:

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LIST OF EXHIBITS

ACRONYMS

APE	Area of Potential Effect
BMPs	Best Management Practices
CFR	Code of Federal Regulations
CRA	Cultural Resource Analysts, Inc.
CWA	Clean Water Act
EKPC	East Kentucky Power Cooperative, Inc.
EMF	Electric and Magnetic Fields
ESA	Endangered Species Act of 1973, as amended
EA	Environmental Assessment
E.O.	Executive Order
et seq.	*et sequential* (and following)
FAA	Federal Aviation Administration
FEMA	Federal Emergency Management Agency
FIRM	Flood Insurance Rate Map
FPPA	Farmland Protection Policy Act, as amended
HUC	Hydrologic Unit Code
HUD	Housing and Urban Development
IPaC	Information for Planning and Consultation
KAR	Kentucky Administrative Regulations
KDAQ	Kentucky Division for Air Quality
KDOW	Kentucky Division of Water
KGS	Kentucky Geological Survey
KHC	Kentucky Heritage Council
kV	Kilovolt
KYTC	Kentucky Transportation Cabinet
LIDAR	Light Detection and Ranging
NEPA	National Environmental Policy Act of 1969, as amended
NFIP	National Flood Insurance Program
NHPA	National Historic Preservation Act of 1966, as amended
NRHP	National Register of Historic Places
NRCS	Natural Resource Conservation Service
NWI	National Wetland Inventory
NWP	Nationwide Permit
OHWM	Ordinary High Water Mark
OKNP	Office of Kentucky Nature Preserves
OSA	Office of State Archaeology
OSHA	Occupational Safety and Health Administration
OSRW	Outstanding State Resource Water
PPE	Personal Protection Equipment
PCN	Pre-Construction Notification
RD	Rural Development
ROW	Right-Of-Way
RUS	Rural Utilities Service
SHPO	State Historic Preservation Office

SWPPP	Stormwater Pollution Prevention Plan
TCWP	Transmission Construction Work Plan
USACE	U.S. Army Corps of Engineers
USEPA	U.S. Environmental Protection Agency
U.S.C.	United States Code
USDA	U.S. Department of Agriculture
USFWS	U.S. Fish and Wildlife Service
USGS	U.S. Geological Survey
WSS	Web Soil Survey
WHO	World Health Organization

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1.0 INTRODUCTION

East Kentucky Power Cooperative, Inc. (EKPC) of Winchester, Kentucky is a non-profit electric generation and transmission cooperative that provides electric power to 16 Owner-Member Electric Distribution Cooperatives. The distribution cooperatives serve approximately 530,000 homes, farms, and commercial and industrial customers in 87 Kentucky counties located across the central and eastern portions of the Commonwealth. The Boone – Williamstown 69 kilovolt (kV) Transmission Line is approximately 28.4 miles in length and was constructed circa 1957 and 1958. Due to reliability concerns associated with the deteriorating physical condition of the existing facility, EKPC has identified the need to rebuild this line section as the most cost-effective long-term solution.

EKPC is requesting financing and seeking environmental approval from the U.S. Department of Agriculture (USDA) Rural Utilities Service (RUS) to rebuild, operate, and maintain the 69 kV electric transmission line within the existing 100-foot-wide right-of-way (ROW) in portions of Boone, Gallatin, and Grant Counties, Kentucky (proposed action). Because EKPC plans to apply for project financing assistance from RUS, the proposal constitutes a Federal action subject to review in accordance with Rural Development's (RD) *Environmental Policy and Procedures* for implementing the National Environmental Policy Act (7 CFR Part 1970). Per Section 1970.101 of these regulations, the proposed action requires the preparation of an Environmental Assessment (EA).

On behalf of RUS, EKPC Natural Resources and Environmental Communications has conducted an environmental investigation and analysis and prepared this report that can be adopted by RUS as an EA to meet their environmental regulations for complying with NEPA. The EA will serve as a detailed written record of the environmental analysis completed for the proposed action and will be used to determine whether preparation of an Environmental Impact Statement is necessary.

The EA incorporates a detailed description of the proposed action, including topographic maps and aerial photographs depicting the location of the project, and a discussion of the need and alternatives considered for the proposed action. A discussion of the affected environment within the proposed action area, the environmental impacts of the proposed action, and mitigation of environmental impacts are included to support this EA.

1.1 Other Federal Statutes and Executive Orders

The following is a list of federal statutes and E.O.s that may be applicable to the proposed action:

- Archeological Resources Protection Act, 16 U.S.C. 470aa *et seq*.
- Clean Air Act, 42 U.S.C. 7401 *et seq*.

- Clean Water Act, 33 U.S.C. 1251 *et seq.*
- Comprehensive Environmental Response, Compensation, & Liability Act, 42 U.S.C. 9601 *et seq.*
- Endangered Species Act, 16 U.S.C. 1531 *et seq.*
- Farmland Protection Policy Act, 7 U.S.C. 4201 *et seq.*
- National Environmental Policy Act, 42 U.S.C. 4321 *et seq.*
- National Historic Preservation Act, 16 U.S.C. 470 *et seq.*
- Native American Graves Protection and Repatriation Act of November 16, 1990 (P.L. 101-601, 104 Statute 3048; 25 USC 3001-3013)
- Resource Conservation & Recovery Act, 42 U.S.C. 6901 *et seq.*
- Solid Waste Disposal Act, 42 U.S.C. 3251
- Safe Drinking Water Act, 42 U.S.C. 300 *et seq.*
- E.O. 11514, Protection and Enhancement of Environmental Quality
- E.O. 11593, Protection and Enhancement of the Cultural Environment
- E.O. 11988, Floodplain Management
- E.O. 11990, Protection of Wetlands
- E.O. 12898, Environmental Justice
- E.O. 13084, Consultation and Coordination with American Indian Tribes
- E.O. 13112, Invasive Species
- E.O. 13212, Actions to Expedite Energy Related Projects
- Title 36 Code of Federal Regulations, Part 251, Subpart B

1.2 Agencies Consulted

The following is a listing of federal and state agencies consulted for the proposed action:

- Kentucky Division of Water, Frankfort, Kentucky
- Kentucky Heritage Council, State Historic Preservation Office, Frankfort, Kentucky
- Office of Kentucky Nature Preserves, Frankfort, Kentucky
- Natural Resources Conservation Service, Owensboro, Kentucky
- U.S. Army Corps of Engineers, Louisville, Kentucky
- U.S. Fish and Wildlife Service, Kentucky Ecological Services Field Office, Frankfort, Kentucky

1.3 Required Permits

The following is a list of known permits that will be required for implementation of the proposed action:

- U.S. Army Corps of Engineers
  - Nationwide Permit 57
- Kentucky Division of Water
  - General Water Quality Certification – Nationwide Permit 57
  - KY Pollutant Discharge Elimination System General Permit (KYR10) Stormwater
  - Development in a Floodplain General Permit (KY FPGP)

1.4 Federal Decision to be Made

The Federal action related to the proposed project will be RUS's granting of financial assistance for the construction of the Boone – Williamstown Transmission Line Rebuild project. RUS's decision of whether or not to grant the requested financing assistance will be made based on the environmental analysis outlined in the EA and subsequent engineering and financial reviews. Issuance of this EA is not a decision on a loan application and, therefore, not an approval of the expenditure of federal funds. Issuance of the EA and any subsequent environmental findings is required in accordance with NEPA and RD's *Environmental Policies and Procedures* (7 CFR Part 1970). Legal challenges to the EA and any subsequent environmental findings may be filed in federal district court under the Administrative Procedures Act.

2.0 PROPOSED ACTION

EKPC is proposing to rebuild, operate, and maintain the existing Boone – Williamstown 69 kV Transmission Line section within the existing 100-foot-wide ROW easement in portions of Boone, Gallatin, and Grant Counties, Kentucky (see enclosed *Overview Map*). This transmission line section is approximately 28.4 miles in length and generally oriented north to south between the Boone 69 kV substation and Munk Junction, and west to east between Munk Junction and the Williamstown 69 kV substation. The Boone substation is located at the southeastern corner of the junction of Longbranch Road and Camp Ernst Road, approximately 3.5 miles south of Burlington in Boone County. Munk Junction is located on the west side of Kentucky Highway (KY) 36, approximately 0.1 mile southeast of Smokey Road in Grant County. The Williamstown substation is located on the south side of Barnes Road, 0.25 mile west of Interstate 75, approximately 1.75 miles west of Williamstown in Grant County. The transmission line section is located on the Union, Verona, Elliston, and Williamstown U.S. Geological Survey (USGS) 7.5-minute topographic quadrangles (see enclosed *Topo Maps 1 – 4*). RUS determined that this project required an Environmental Assessment because it does not qualify for any of the Categorical Exclusions listed in 7 CFR 1970 Sections 1970.53 and 1970.54.

2.1 Project Components

The proposed action is approximately 28.4 miles in length and will occur within the existing 100-foot-wide ROW easement, which encompasses approximately 344.2 acres. The transmission line crosses private land, and no State/Federal lands are present in the ROW. The proposed action will consist of removing the existing transmission line and associated wood pole structures and constructing the new line in its place. The new line will be constructed using stronger steel-pole structures, which are approximately 12 feet higher than existing poles. This construction method will require significantly fewer structures than currently present. The existing transmission line is currently comprised of 263 wood-pole structures that have an approximate above ground height of 60 feet and a typical span length of 575 feet. Based on the engineering design, the existing structures will be replaced with 212 steel-pole structures with an approximate above ground height of 72 feet and a typical span length of 715 feet, resulting in 51 fewer structures. Three electrical conductors supported by the steel-pole structures will transmit electric power along the rebuilt transmission line. The majority of new support structures will be steel single-pole and two-pole H-frame type structures, with a few three-pole structures required based on engineering design

constraints. Two static wires will extend along the top of the support structures to protect the electric conductors from lightning strikes.

2.2 Project Schedule

The start of construction for the proposed action depends on the time required to obtain multiple permits and approvals for the various project components. Construction of the proposed action is tentatively scheduled to begin in February 2022 with construction completed by May 2024. Based on the preliminary schedule, it is expected that construction will primarily occur during the spring, summer, and fall to avoid unfavorable weather conditions during the winter. This schedule will also allow the transmission line to be in service for the duration of peak loading conditions during extreme winter weather events.

2.3 Construction Procedures

The first phase of construction for the proposed action will involve the access roads used for ingress to the existing ROW easement. As a result of there being an existing transmission line facility and associated maintenance access points, EKPC anticipates using existing roads and the ROW easement to access the existing and new structure locations without having to create new roads. However, due to the moderate topography in portions of the project area, some of the existing access points may require improvements to allow for larger construction vehicles to reach the ROW. The amount of work required to improve the access roads will depend on the local topography and the current condition of the existing roads. Improvements could range from reopening existing roadways (i.e., brush clearing, etc.) to limited grading in order to widen/reestablish a safe drive path. Access roads may be improved using heavy equipment, such as a bulldozer or skidder. Water bars and dips may be installed in the roads along with silt fences and staked straw bales to aid in preventing erosion. In some instances, gravel or crushed stone may be applied to road surfaces to prevent rutting. After construction, the access roads will either be closed or left open according to the discretion of landowners and EKPC maintenance needs. Closed roads will be seeded and covered to promote revegetation.

The second phase of project activities associated with the proposed action involves removing the existing wood-pole structures and installing the new steel-pole structures. For structure locations within flat or gently sloping topography, no ground disturbing activities are typically required for site preparation; however, some minimal disturbance may occur if the site becomes wet during and after precipitation events. For structures located on steep or uneven terrain, grading may be used to create a level pad adjacent to the structure to allow vehicles and other equipment to operate safely. Existing wood-pole structures will be removed by accessing the locations with a utility boom truck and pulling the poles directly out of the ground, then backfilling the hole. During new steel-pole structure installation, a hole will be mechanically excavated using a truck mounted auger. The new structure will be placed into the hole, and excavated soil will be backfilled in and around the structure. Excess soil may also be disseminated in an adjacent vegetated area. Based on previous project experience, EKPC estimates that structure installation activities in steeper terrain could create up to 0.08 acre (roughly 50’ X 70’) of soil disturbance. The majority of structure installations will require significantly less disturbance, and EKPC estimates an average of 0.04 acre of disturbance at each of the 212 proposed structure locations, resulting in just under

eight and a half acres of disturbance within the 28.4-mile-long action area. To the maximum extent practicable, EKPC plans to first set the new structures and then use the existing conductor to pull the new conductor into place, which will generally avoid the need to operate equipment between structure locations.

Within the existing ROW, the vegetation is maintained by EKPC, agricultural, and residential property owners as a low growing herbaceous plant community (see enclosed *Aerial Maps 1 – 9*). No tree clearing is anticipated within the ROW; however, EKPC project engineers utilized Light Detection and Ranging (LIDAR) data to identify trees located along the edges of the existing ROW that could pose a potential threat to the future operation of the transmission line. These hazard trees are typically large, live trees that could fall and contact the conductor due to their height and/or position relative to the line. As part of the action, EKPC proposes to clear up to 44.76 acres of hazard trees. The final determination on which trees will require clearing will be made following construction of the new line by observing tree heights relative to that of the new line. During tree clearing, merchantable trees may be cut into commercial lengths and staged along the ROW for landowners to utilize or sell. Trees may also be disposed of, left where they fall, windrowed, chipped, or scattered based on landowner requests.

Appropriate soil erosion and sedimentation control procedures will be implemented during and after construction of the proposed transmission line in areas denuded of vegetation in accordance with the requirements of the *Kentucky Pollutant Discharge Elimination System General Permit for Stormwater Discharges Associated with Construction Activities (KYR10)* as a minimum to achieve soil and water quality objectives. EKPC will utilize accepted erosion control measures and maintain a Stormwater Pollutant Prevention Plan (SWPPP) for construction activities as required by the Kentucky Division of Water (KDOW). The SWPPP will include the use of accepted Best Management Practices (BMPs) to minimize water quality degradation of streams within the action area and downstream from construction related activities. To reduce the amount of time bare soils are exposed to wind and water erosion, required land clearing activities will not be initiated until absolutely necessary, and all disturbed areas will be stabilized and revegetated, as soon as practicable once construction is complete. EKPC will also implement enhanced BMPs in the critical areas of streams as defined by the KDOW. Because the project area crosses multiple receiving waters, some activities may occur within the critical areas of these waters. Any required disturbances in critical areas will be controlled using adequately protective alternative devices including, but not limited to, covering with turf mats/erosion control blankets, mulch, or straw, stabilization with tackifiers or by track treading within 24 hours or "as soon as practicable" after completion of disturbance activities. Methods of cover, stabilization, and sediment control in critical areas will be determined on a case-by-case basis by the construction contractor, EKPC project inspector, or another qualified person. Unless infeasible, natural buffers will be provided and maintained around these receiving waters, stormwater will be directed to vegetated areas, and infiltration of stormwater will be maximized to reduce pollutant discharges.

2.4 Representative Photographs

Photo 1. View south from existing EKPC Boone Substation, within northern portion of project area

Photo 2. Representative view within northern portion of the project area (north of Hathaway Road, KY 536)

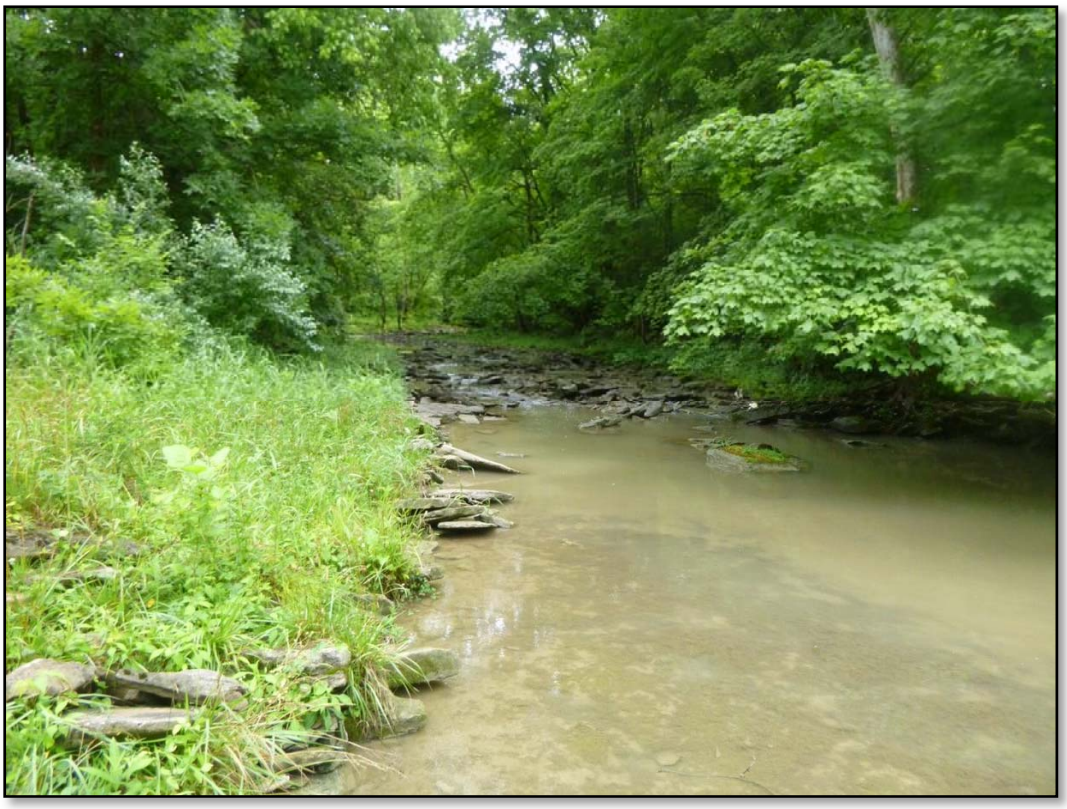

Photo 3. Representative view of Big Bone Creek, within northern portion of the project area

Photo 4. Representative view within northern portion of the project area (north of Beaver Road)

Photo 5. Representative view of Mud Lick Creek in north-central portion of project area

Photo 6. Representative view in the central portion of project area (just north of Munk Substation)

Photo 7. Representative view in the central portion of project area (just north of Clarks Creek Road)

Photo 8. Representative view of Clarks Creek in south-central portion of project area

Photo 9. Representative view in southern portion of project area (just east of KY Hwy 36)

Photo 10. Representative view in southern portion of project area (west of the end of Barnes Road)

3.0 PURPOSE AND NEED

The purpose and need for the proposed action are discussed in the following sections.

3.1 Agency Purpose and Need

RUS is authorized to make loans and loan guarantees to finance the construction of electric distribution, transmission, and generation facilities, including system improvements and replacements required to furnish and improve electric service to rural areas, as well as demand side management, energy conservation programs, and on-grid and off-grid renewable energy systems. RUS does not regulate the siting of transmission and generation infrastructure. RUS' proposed federal action is to decide whether to provide financing assistance for the proposed action. Completing the NEPA process is one requirement, along with other technical and financial considerations, in processing a financial assistance application.

The Rural Electrification Act of 1936, as amended (7 USC §901 *et seq*.), generally authorizes the Secretary of Agriculture to make rural electrification and telecommunication loans, including specifying eligible borrowers, references, purposes, terms and conditions, and security requirements. RUS' agency reviews include the following:

- Provide engineering reviews of the purpose and need, engineering feasibility, and cost of the proposed action
- Ensure that the proposed action meets the borrower's requirements and prudent utility practices
- Evaluate the financial ability of the borrower to repay its potential financial obligations to RUS
- Review and study the alternatives to mitigate and improve electric reliability issues
- Ensure that adequate transmission service and capacity are available to meet the proposed action's needs
- Ensure that NEPA and other environmental requirements and RUS environmental policies and procedures are satisfied prior to making a financing decision

3.2 Applicant Purpose and Need

EKPC is proposing the transmission line rebuild project to improve system reliability by improving the physical condition of the existing transmission line, including the conductors, static wires, poles, and structures. The EKPC Reliability team assessed the Boone – Williamstown line section through a two-phase evaluation process to determine if the line section needed replacement due to poor physical condition. First, the mechanical integrity of the in-service phase and static wires were assessed using an automated robot. The robot was placed directly on the line, traveling the length of the conductor for the entire section. While traveling along the line, the robot uses electric and magnetic fields to determine the remaining strength of the wire. The electric field is used to measure the remaining cross-sectional area of the steel core, while the magnetic field detects rust, pitting, and broken strands. The second phase of the assessment process was an evaluation of the

data and scoring based on specific parameters, which resulted in the EKPC Reliability Team determination that the existing transmission line section warranted replacement. The outage probability of this section is expected to be considerably higher than for other transmission lines on the EKPC system.

EKPC first evaluated reconductoring the line section; however, it was concluded that the existing support structures, many of which are the original wood pole structures installed circa 1957 and 1958, are in such poor physical condition they would not be able to support the increased weight of the larger conductor. Therefore, EKPC is proposing a complete rebuild of the transmission line section using the larger conductor and steel-pole structures. Rebuilding this 2/0 and 4/0 ASCR conductor line section using 556.5 ACSR/TW conductor will improve the physical condition of the line, while also providing increased conductor thermal rating, increased voltage support for normal and contingency conditions, address reliability concerns, and reduce conductor losses. These additional benefits will ultimately result in future cost savings for EKPC's members.

Not rebuilding this aging line section could have an adverse effect on the health and safety of the public living in the area that the transmission line facility serves. Interruptions in electric service caused by not rebuilding the line section could impact the operation of emergency lighting, medical life support equipment, and healthcare operations, possibly resulting in injury or death. Service interruptions caused by outages on this line section could also cause ill effects, such as pneumonia, to individuals living in the project area, or potentially death in the event of an extended power outage during periods of freezing weather. The public could also be affected in times of severe heat during episodes of electric power brownouts and outages. Very small children, the elderly, and individuals sensitive to heat could suffer the most should outages occur during periods of extreme heat. Furthermore, a failure of the energized line could result in fires or electrocutions.

4.0 ALTERNATIVES

The following sections discuss the alternatives considered for the proposed action.

4.1 Alternatives Analysis

Based on the identified need to address reliability concerns associated with the poor physical condition of the existing line section, EKPC planning and engineering staff performed an analysis to identify the most cost effective, long-term solution to address the identified transmission system issues. The potential for continued reliability issues was considered high due to the poor physical condition of the existing transmission line. As previously discussed, EKPC first evaluated reconductoring the line section; however, it was concluded that the existing support structures will not be able to support the larger conductor currently utilized by EKPC. Therefore, a complete rebuild of this line section using the larger conductor and steel-pole structures was determined to be the most cost-effective long-term solution. The total estimated installed project cost is just over $22 million, with an anticipated in-service date of May 2024.

The justification detailing the electrical alternatives was prepared for EKPC's Board, who reviewed the proposed alternative as part of the January 2021 – December 2023 Transmission

Construction Work Plan (TCWP). The TCWP was approved by the Board in the December 2020 board meeting, and EKPC submitted the TCWP to RUS for review on January 26, 2021. A copy of the project justification is included in Exhibit F – *Project Justification*.

4.2 Alternatives Evaluated in the EA

Throughout the remainder of this document, the two alternatives analyzed in detail will be referred to as the No Action Alternative and the Proposed Action Alternative – Rebuild, Operate, and Maintain Electrical Transmission Line.

4.2.1 No Action Alternative

The No Action Alternative would result in RUS not providing financing assistance for the proposed action. Consequently, EKPC would not rebuild the Boone – Williamstown transmission line, and the small size and overall poor physical condition of the existing conductor and wood-pole structures would continue to produce maintenance and reliability issues, low voltages, and ultimately result in EKPC's inability to meet future load growth. EKPC would also be unable to meet its obligation to its members to furnish adequate and reliable power to meet their present and future needs.

4.2.2 Proposed Action Alternative – Rebuild, Operate, and Maintain Electrical Transmission Line

The Proposed Action Alternative would result in RUS providing financial assistance to EKPC for construction of the Boone – Williamstown transmission line rebuild project as described in Section 2.0 Proposed Action.

4.3. Alternatives Considered but Dismissed

Because the proposed transmission line rebuild will be located within an existing facility, any alternatives to the current route could potentially affect a larger area, cost more to construct, affect more property owners, and have greater environmental impacts. Therefore, the proposed route was the only alternative considered in detail for the proposed action.

5.0 CUMULATIVE EFFECTS

The Council on Environmental Quality (CEQ) defines cumulative impact as *the impact on the environment which results from the incremental impact of the action when added to other past, present, and reasonably foreseeable future actions regardless of what agency (Federal or non-Federal) or person undertakes such other actions. Cumulative impacts can result from individually minor but collectively significant actions taking place over a period of time* (40 CFR Part 1508.7).

Within the region of northern Kentucky where the proposed action is located, activities and projects considered past, present, or reasonably foreseeable within the project area that could cause implementation of the proposed action to have a cumulative effect are:

- Private residential/agricultural activities
- Utility and ROW maintenance
- Road maintenance and improvement projects

EKPC attempted to identify activities that have occurred, are occurring, or are reasonably foreseeable within the project area that are relevant in the analysis of cumulative effects for the proposed action. No current or future private residential or major agricultural activities were identified in the project vicinity, and the area does not contain any large commercial or industrial facilities. The Boone County Zoning Map shows that the majority of land within and adjacent to the existing ROW in Boone County, which is the most developed portion of the project corridor, is zoned as agricultural estate (BCPC 2021). Small areas zoned as rural suburban estate and recreation are also present. No areas along the existing ROW are zoned for commercial or industrial uses.

No major current or future utility projects were identified in the project vicinity based on a review of local utility plans. EKPC is unaware of any major projects planned by Duke Energy, and no projects by Sanitation District #1 of Northern Kentucky (SD1) are shown on the utility's online project map (SD1 2021). Minor utility ROW maintenance may occur in the project vicinity; however, these activities, when combined with the proposed project, are not expected to result in cumulative effects.

The Kentucky Transportation Cabinet's (KYTC) *Six-Year Highway Plan for Fiscal Year 2020 thru Fiscal Year 2026* lists two highway projects within the project vicinity. KYTC Items 6-20001.00 and 6-20022.00 both address pavement conditions along Interstate 71 north and south-bound from Milepoint 59.673 to Milepoint 77.724. The plan also includes several other highway projects for Boone, Gallatin, and Grant Counties; however, these projects are located outside the area of influence. A review of current and future roadway projects in Boone County shows one project located northwest of the Boone 69 kV substation, which involves the installation of a new roundabout at the intersection of Camp Ernst Road and Longbranch Road. This minor project is located outside the proposed project corridor and is not anticipated to cause the proposed project to result in cumulative effects.

EKPC researched future projects and developments planned for the transmission route vicinity and no projects were identified. Based on the lack of recent, current, and future activities identified in the project vicinity, EKPC is currently unaware of any other significant activities that are reasonably foreseeable within the project area that may be relevant in the assessment of cumulative effects. It is anticipated that any potential cumulative effects that could result from implementation of the proposed action will likely be insignificant, as the alternatives will result in the open lands associated with the existing transmission line ROW continuing to be operated and maintained as an electrical transmission facility.

6.0 AFFECTED ENVIRONMENT AND ENVIRONMENTAL CONSEQUENCES

Potential project impacts were evaluated through an assessment of the extent and quality of on-site resources and the potential environmental consequences that could occur to these resources as a result of the proposed action. The evaluation includes environmental issues identified under NEPA and those environmental factors singled out for special attention under other applicable Federal laws, statutes, and E.O.s. Each resource is discussed further in the sections below.

6.1 Land Use & Recreation

6.1.1 Introduction

This section describes the affected environment and environmental consequences as they apply to land use and recreation. The area of influence for land use and recreation is considered to be an approximately 1,500-foot-wide corridor (750 feet on either side of the existing transmission line). This buffer is considered a reasonable area that will encompass all identified land uses and public lands in the vicinity. However, no impacts to land use and recreation are anticipated beyond the transmission line ROW.

6.1.2 Affected Environment

All land to be impacted by the proposed action is located within the existing 100-foot-wide transmission line ROW easement that has been in place since 1957/1958. The Boone and Williamstown 69 kV distribution substations located at each end of the transmission line section have also been in place since 1956 and 1954, respectively.

The 1,500-foot-wide corridor is rural in nature, and the predominant land uses are agriculture, forest, and open/undeveloped land. Private residences and farm buildings are interspersed throughout the corridor along larger roadways and become more concentrated towards the northern extent of the corridor. No large commercial or industrial facilities are present. Public institutions and recreational facilities within the area of influence include Randall K. Cooper High School, Boone County Central Park and Arboretum, and Mountain Ballpark. These facilities contain sports fields and courts, walking/biking trails, and other recreational activities. Major public highways in the area of influence include Interstates 71 and 75, U.S. Highway (US) 127/42, KY 536, KY 338, KY 16, and KY 22.

6.1.3 Environmental Consequences

The direct and indirect effects of the proposed action on land use and recreation are discussed below.

No Action Alternative

The No Action Alternative will not have any direct or indirect effects to existing land use or recreation within the area of influence because the proposed action will not occur.

Proposed Action Alternative – Rebuild, Operate, and Maintain Electrical Transmission Line

The proposed action is contained within an existing transmission line ROW easement that has been in place since 1957/1958. The line rebuild and vegetation clearing activities will be limited to the existing ROW, with the exception of some nearby hazard trees, as previously discussed. As a

result, the proposed action will not have any additional impacts on existing land uses, and the surrounding land will continue to be used for its current purposes. Significant portions of the existing transmission line route traverse agricultural lands, and EKPC will continue to allow agricultural practices within the ROW easement as long as they do not interfere with or jeopardize the operation of the transmission line. The proposed action will maintain the ROW in a similar manner to its current composition, with vegetation in the ROW ultimately consisting of shrubs, grasses, and forbs. The clearing of hazard trees and trees that have encroached upon the ROW will not result in the additional fragmentation or isolation of forested sections along the ROW. The only public recreational facility traversed by the existing transmission line is Boone County Central Park. Direct impacts to the park may include the removal of hazard trees or trees that have encroached into the ROW; however, this limited clearing is not anticipated to significantly affect the park and will not alter the land use. Additionally, because the proposed action will not significantly impact traffic, noise, aesthetics, or air quality, as discussed in the respective sections below, there are no significant indirect effects anticipated to public lands or recreational resources as a result of the action.

6.2 Geology and Soils

6.2.1 Introduction

This section describes the affected environment and environmental consequences as they apply to geologic and soil resources. Potential impacts associated with geology and soils are anticipated to be localized within the area where ground disturbing activities may occur. Significant ground disturbing activities are only anticipated within the existing 100-foot-wide ROW and potentially associated with reestablishing some access roads; therefore, the area of influence for geology and soils is considered to be a 150-foot-wide corridor (75 feet on either side of the existing transmission line). Any potential impacts associated with geology and soils are anticipated to be localized within the identified area of influence.

6.2.2 Affected Environment

Based on previous project experience, EKPC estimates an average of 0.04 acre of disturbance at each of the 212 proposed structure locations, which will result in just under eight and a half acres of disturbance within the 28.4-mile-long action area. Potential ground disturbing activities required to level/widen construction access roads are anticipated to be minimal. Due to the majority of ground disturbing activities occurring within the existing ROW and minimal ground disturbance anticipated within the area of influence, no detailed field explorations were performed. A general description of geology, hydrogeology, karst, and soil in the area of influence is presented below.

6.2.2.1 Geology

The area of influence is underlain by several interbedded limestone and shale formations, including the Bull Fork, Fairview, Grant Lake Limestone, and Kope formations. The Kope formation has poor drainage and soft shale that often results in hillside slippage during extreme weather events, and the area is well known for landslides because of this formation. The Kope formation is typically located at the surface along stream beds and the lower portions of stream valley walls in the southern portions of Boone County. Fluvial and glacial

deposits occur over the limestone and shale in some areas, and alluvium is typically present in and along stream beds (KGS 2021).

6.2.2.2 Hydrogeology

Alluvium deposits along the Ohio River are considered the best source of groundwater in Boone and Gallatin Counties. Properly constructed drilled wells in these areas can produce several hundred gallons per minute and provide enough water for a domestic supply at depths less than 100 feet. Wells drilled in larger stream valleys can also produce enough water for a domestic supply at depths less than 100 feet. Wells in smaller creek valleys can typically produce enough water for a domestic supply, except during dry weather. In upland areas of Boone and Gallatin County, the majority of drilled wells will not produce enough water for a dependable domestic supply unless located along drainage lines, and these wells may not produce enough during dry weather. Groundwater in these areas is hard or very hard and may contain salt or hydrogen sulfide, especially at depths greater than 100 feet (Smath et al. 2005a, Smath et al. 2005b).

Groundwater resources in Grant County are more limited. Wells located in larger valley bottoms will produce enough water for a domestic supply, except during dry weather. Drilled wells in upland areas will not produce enough water for a dependable domestic supply unless located along drainage lines, and these wells may still not produce enough water during dry weather. Groundwater in Grant County is also hard or very hard and may contain salt or hydrogen sulfide, especially at depths greater than 100 feet (Smath et al. 2006).

The Kentucky Geologic Map Service, Water Wells and Springs Map was reviewed for active, inactive, and decommissioned wells and springs in the area of influence. No wells or springs were identified within the 150-foot-wide corridor. Three wells, including two domestic wells and one livestock well, are present within 500 feet of the area of influence but will not be impacted by the action (KGS 2021).

6.2.2.3 Karst

The term "karst" refers to a landscape characterized by the presence of caves, springs, sinkholes, and losing streams, created as groundwater dissolves soluble rock such as limestone or dolomite. These areas are of special interest in evaluation of potential for geologic impacts because the underground features can easily be impacted by surface disturbance. No detailed field explorations have been performed for the proposed action. Published mapping provided by the Kentucky Geological Survey classifies the majority of the area of influence as "non-karst"; however, a few areas classified as "prone" to karst are present within the 150-foot-wide corridor. No sinkholes are mapped within the area of influence (KGS 2021). In addition, no sinkholes or karst features were observed during field investigations for the action.

6.2.2.4 Soils

According to the USDA's Web Soil Survey (WSS), the predominant soil in the area of influence is Eden silty clay loam. Additional soils include Faywood silty clay, Jessup silt loam, Nicholson silt loam, Rossmoyne silt loam, Otwood silt loam, and Lowell-Faywood silt loams (USDA 2021).

The Federal Farmland Protection Policy Act (FPPA), enacted by Congress in 1984, established criteria for identifying and considering the effects of federal actions on the conversion of farmland to nonagricultural uses. The purpose of the FPPA is to minimize the extent of farmland conversion and impacts and to "assure that federal programs are administered in a manner that, to the extent practicable, would be compatible with state, unit of local government, and private programs and policies to protect farmland." The FPPA program is administered by the Natural Resource Conservation Service (NRCS)

The NRCS Soil Scientist for the region of Kentucky where the project is located, was contacted via email on October 29, 2020 to determine if any of the soils within the area of influence are classified as prime farmland or hydric. In a letter dated November 2, 2020, the NRCS Soil Scientist stated that although Prime and Statewide Important Farmland can be found within the area of influence, the proposed action will not permanently convert such agricultural lands. The NRCS Soil Scientist further noted that electrical overhead transmission lines do not have a significant impact on the conversion of agricultural lands, provided no deed restriction is placed on the planting of an agricultural commodity crop (e.g., corn, soybeans, wheat) within the ROW. The NRCS Soil Scientist also concluded that the small footprint resulting from such above-ground activities negates the need for conducting a Farmland Policy Protection Act assessment.

Impacts to Prime and Statewide Important Farmland are also not anticipated from the proposed action due to EKPC's policy of permitting agricultural activities within the ROW easement. Current agricultural practices within the ROW easement will be allowed to continue after completion of the proposed action. Additionally, the project will result in a net loss of 51 structures from the existing ROW, which could result in increased use of the ROW for agricultural purposes.

The correspondence from the NRCS Soil Scientist also stated that the project corridor contains the hydric soils Nolin (No) silt loam in Boone and Grant Counties and Markland (MbD) silt loam in Gallatin County. These hydric soil types are typically associated with floodplain and stream terrace landforms. The NRCS correspondence and WSS Hydric Soils data is included in Exhibit D – *Agency Correspondence*.

6.2.3 Environmental Consequences

The direct and indirect effects of the proposed action on geology and soils are discussed below.

No Action Alternative

The No Action Alternative will not have any direct or indirect effects to geology or soils within the area of influence because the proposed action will not occur.

Proposed Action Alternative – Rebuild, Operate, and Maintain Electrical Transmission Line

As described above, the main ground-disturbing components of the construction phase of the proposed action are removal of the existing wood-pole structures, installation of the new steel-pole structures, and improvement of access roads. Minor localized impacts to soils are anticipated to

occur near the surface where construction and clearing activities occur. No components of the action will impact deeply buried subsurface features.

6.2.3.1 Geology

Whether preserved or not, areas with unique geologic features are considered areas of geologic importance. Though some minimal rock excavation may be required during structure installation, no areas of geological importance are present within the area of influence. Therefore, no geologically-important areas will be impacted by the proposed project.

6.2.3.2 Hydrogeology

No wells or springs are present in the area of influence; therefore, no impacts to these resources are anticipated from the proposed action.

6.2.3.3 Karst

The majority of the area of influence is classified as non-karst, and no sinkholes or other karst features are mapped within this area. A few portions of the area of influence are classified as "karst prone"; however, no significant karst features are mapped or have been observed in these areas. Therefore, impacts to karst features are not anticipated from the proposed action.

6.2.3.4 Soils

Based on correspondence from the NRCS, no impacts to Prime or Statewide Important Farmland located within the area of influence will occur from the proposed action. In addition, the reduction in the number of transmission line structures within the ROW may have a beneficial effect on farmland. No impacts to hydric soils are anticipated as a result of the project.

As discussed in Section 2.3 Construction Procedures, appropriate soil erosion and sedimentation control procedures will be implemented during and after the construction of the proposed transmission line in areas denuded of vegetation. Required land clearing activities also will not be initiated until absolutely necessary, and all disturbed areas will be stabilized and revegetated, as soon as practicable, once construction is complete to reduce the amount of time bare soils are exposed to wind and water erosion. Based on these practices, no significant direct or indirect effects to soils are anticipated from the construction of the proposed action.

6.3 Floodplains

6.3.1 Introduction

The Federal Emergency Management Agency (FEMA), through the National Flood Insurance Program (NFIP), has primary responsibility for developing and implementing regulations and procedures to control development in areas subject to flooding. The U.S. Congress established the NFIP with the passage of the National Flood Insurance Act of 1968. The KDOW is the state's coordinating agency for the NFIP. To implement the NFIP, FEMA prepares Flood Insurance Rate Maps (FIRMs) that show special flood hazard areas where flood insurance is mandatory. The 100-

year flood, or base flood, is the flood having a one percent chance of being equaled or exceeded in any given year. The base flood is the national standard used by the NFIP and all federal agencies for the purposes of requiring the purchase of flood insurance and regulating new development.

The area of influence considered for floodplains was defined as the immediate area where disturbances associated with the reconstruction, operation, and maintenance of the proposed action are most likely to occur. As a result, the area of influence includes a 150-foot-wide corridor (75 feet on either side of the existing transmission line). Any potential impacts associated with floodplains are anticipated to be localized within this area.

6.3.2 Affected Environment

EKPC personnel acquired the FIRM data for Boone, Gallatin, and Grant Counties from the FEMA Flood Map Service Center (FEMA 2021).The FIRM data shows that the proposed action traverses the Zone A floodplain associated with seven streams, including, from north to south, Big Bone Creek, Mud Lick Creek, Ten Mile Creek, Little Ten Mile Creek, Arnolds Creek, Clarks Creek, and Williams Branch. According to EKPC's engineering plans, none of the new steel-pole structures will be installed within these designated floodplains (see enclosed *Floodplain Maps 1 – 2*). Additionally, two existing structures will be removed from the designated floodplains of Mud Lick Creek and Williams Branch. The activities to remove these structures within the floodplain will be authorized under the Kentucky Division of Water's (KDOW) Development in a Floodplain General Permit (Permit Number: KY FPGP, AI No.: 35050), in accordance with the requirements of 401 KAR 4:060. The Floodplain General Permit authorizes development and placement of utility poles as an eligible activity that shall be granted automatic coverage because this type of activity does not have the potential to change the Base Flood Elevation and has minimal flood risk potential. The NRCS correspondence is included in Exhibit D – *Agency Correspondence*.

6.3.3 Environmental Consequences

The direct and indirect effects of the proposed action on floodplains are discussed below.

No Action Alternative

The No Action Alternative will not have any direct or indirect effects to floodplains within the area of influence because the proposed action will not occur.

Proposed Action Alternative – Rebuild, Operate, and Maintain Electrical Transmission Line

No new structures will be placed within the 100-year floodplain, and two structures currently within the 100-year floodplain will be removed. Construction work in the 100-year floodplain is authorized under the Floodplain General Permit (Permit Number: KY FPGP, AI No.: 35050) and will not result in adverse effects to floodplains.

6.4 Jurisdictional Waters of the U.S.

6.4.1 Introduction

The jurisdictional authority for protection of waters of the U.S. is derived from several sources, including the Clean Water Act of 1972 (CWA). Section 404 of the CWA authorizes the U.S. Army Corps of Engineers (USACE) to issue permits for discharges of dredged or fill material into waters of the U.S., and it gives the USACE enforcement authority against violations. Section 10 of the

Rivers and Harbors Act regulates activities affecting navigation that occur below the Ordinary High Water Mark (OHWM) elevation of navigable waters of the U.S. The determination of jurisdiction applies over the entire surface of a waterbody to the OHWM. E.O. 11990 directs federal agencies to take action to minimize the destruction, loss, or degradation to both non-jurisdictional and jurisdictional wetlands.

The area of influence considered for jurisdictional waters of the U.S. was defined as the immediate area where disturbances associated with the reconstruction, operation, and maintenance of the proposed action are most likely to occur. As a result, the area of influence includes a 150-foot-wide corridor (75 feet on either side of the existing transmission line). Any potential impacts associated with jurisdictional waters of the U.S. are anticipated to be localized within this area.

6.4.2 Affected Environment

Waters of the U.S., including wetlands, were delineated within the existing ROW by RES Kentucky, LLC on June 22 through 25, 2020. Prior to the delineation, several sources of data were reviewed to identify potential jurisdictional waters of the U.S., including, USGS topographic maps, the USGS National Hydrography Dataset, the U.S. Fish and Wildlife Service (USFWS) National Wetland Inventory (NWI) dataset, NRCS SSURGO dataset, and aerial photographs. During the delineation, multiple waters of the U.S. were identified within the ROW, including streams, wetlands, and open water features. The results of the delineation are discussed further below.

6.4.2.1 Streams

Jurisdictional streams documented within the existing ROW during the delineation include 16 perennial streams, 37 intermittent streams, and 122 ephemeral streams (see enclosed *Water/Wetland Location Maps 1 – 37*). A perennial stream is defined as a stream or river that has continuous flow in parts, or all, of its streambed year round during years of normal rainfall. An intermittent stream is defined as a stream which carries water a considerable portion of the time, but which ceases to flow occasionally or seasonally because bed seepage and evapotranspiration exceed the available water supply. An ephemeral stream is defined by flow that occurs only in response to direct precipitation or snowmelt and ceases within a 48-hour period following the contributing event. Non-jurisdictional waters are also present within the ROW, including small, isolated wetlands and ditches constructed along roadways for the purpose of stormwater management.

One perennial stream within the ROW, Little South Fork, is designated as an Outstanding State Resource Water (OSRW) and Exceptional Water by the KDOW. An OSRW is a special-use designation category for certain unique waters of the commonwealth that have additional water quality standards for their protection. Exceptional Waters is a special-use antidegradation category applying to certain waterbodies worthy of additional protection, which exhibit water quality exceeding that necessary to support the propagation of fish, wildlife, and recreation. The Little South Fork is designated as an OSRW due to supporting a diverse or unique aquatic flora or fauna within the physiographic region, and an Exceptional Water due to supporting an excellent macroinvertebrate community. Additionally, six perennial streams traversed by the ROW are included on the KDOW's 305(b) list. Big Bone Creek, Mud Lick Creek, Little South Fork, and Clarks Creek are listed as fully supporting for aquatic life, Arnolds Creek is listed as partially supporting for aquatic

life and not supporting for Primary Contact Recreation (PCR), and Ten Mile Creek is listed as partially supporting for PCR (KDOW 2021). The stream designations are summarized in Table 4 below. None of the streams traversed by the existing ROW are recognized as navigable.

Table 1. Streams with Special Water Resource Designations

Stream	Outstanding State Resource Water	Exceptional Water	Impaired
Little South Fork	X	X	
Arnolds Creek			Primary Contact Recreation - Not Supporting
Ten Mile Creek			Primary Contact Recreation - Partially Supporting

6.4.2.2 Wetlands

"Wetlands" refers to areas which meet the criteria for the definition of a wetland, as adopted by the U.S. Environmental Protection Agency (USEPA) and USACE for administering Section 404 of the CWA. According to this definition, wetlands are:

> *"Those areas that are inundated or saturated by surface or groundwater at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions. Wetlands generally include swamps, marshes, bogs, and similar areas."*

The delineation of the existing ROW resulted in the identification of 11 wetlands (see enclosed *Water/Wetland Location Maps 1 – 37*). These wetlands are primarily small freshwater emergent features associated with the fringe of open water ponds or along streams within floodplain areas. A few isolated wetlands are also present in upland areas.

The NWI website was also reviewed to identify wetlands located within the existing ROW. Mapped wetlands located within the existing ROW include five freshwater ponds (PUBHh), one freshwater emergent wetland (PEM1Fx), and one riverine feature (R2USC) (USFWS 2021).

Hydric soils can also be an indicator of wetland features. In general, hydric soils are those soils that support the hydrology and vegetation associated with wetlands. As discussed in Section 5.2.2.4 Soils, hydric soils in the existing ROW include the following:

- No – Nolin silt loam, 0 to 2 percent slopes, occasionally flooded
- MbD – Markland soils, 12 to 35 percent slopes

These hydric soils are predominantly associated with the floodplains of larger streams in the existing ROW.

6.4.3 Environmental Consequences

The direct and indirect effects of the proposed action on jurisdictional waters of the U.S. are discussed below.

No Action Alternative

The No Action Alternative will not have any direct or indirect effects to jurisdictional waters of the U.S. within the area of influence because the proposed action will not occur.

Proposed Action Alternative – Rebuild, Operate, and Maintain Electrical Transmission Line

The proposed rebuild was designed to avoid placement of structures in waters of the U.S., and EKPC is committed to avoiding impacts within the identified OSRW/Exceptional Water and the larger perennial streams crossed by the transmission line (i.e., crossings or operating equipment in streams). Therefore, EKPC does not anticipate that the proposed action will result in the permanent loss of waters or significant impacts to perennial streams. Reconstruction of the transmission line will likely require temporary construction access road crossings of intermittent and ephemeral streams in the area of influence.

Due to the proposed rebuild project occurring within an existing transmission line facility, no land clearing activities will be required; thus, no impacts to wetlands are anticipated from land clearing. None of the existing or proposed structures are located within wetlands, and the aerial nature of the transmission line will further preclude construction activities from occurring within the identified wetlands. However, the project will require access-related and/or construction activities adjacent to wetlands. EKPC is committed to only conducting construction activities within the proximity of these wetlands during periods of dry weather, or if this is not feasible, utilizing protective measures (e.g., construction matting or an alternate Best Management Practice) to minimize temporary wetland impacts during construction. For these reasons, no loss of wetlands is anticipated as a result of the proposed action.

Stream and wetland impacts associated with the proposed action are authorized under USACE Nationwide Permit (NWP) 57 and the KDOW General 401 Water Quality Certification (WQC). The NWP 57 general conditions allow for stream crossings, provided the total loss of waters of the U.S. does not exceed 0.5 acre for a single and complete project. Appropriate measures will be taken to maintain normal downstream flows at each stream crossing, and materials will be placed in a manner so as not to be eroded by expected high flows. All temporary stream crossings will be removed in their entirety, and the stream will be returned to pre-construction elevations and revegetated along the banks following construction. Access roads required for maintenance activities and constructed above pre-construction contours and elevations in waters of the U.S. would be properly culverted to maintain surface flows. EKPC reviewed the pre-construction notification (PCN) requirements of NWP 57, and none of the criteria or thresholds requiring a PCN will be met or exceeded. Therefore, no PCN to the USACE is required for the proposed action.

Likewise, the KDOW requires notification if the project cannot meet the conditions of the general WQC. EKPC evaluated the anticipated project impacts against the requirements of the WQC and has determined it can meet the conditions for coverage under the general certification. Per these requirements, erosion and sedimentation pollution control plans and BMPs will be designed, installed, and maintained in effective operating conditions at all times during construction activities so that violations of state water quality standards do not occur (401 KAR 10:031 Section 2 and KRS 224.70-100).

The NWP and general WQC are available to provide a streamlined means for the KDOW and USACE to approve activities that have minimal impacts on the environment. The temporary stream crossing activities under consideration for the proposed action fall below the notification requirements of the NWPs and general WQC. Therefore, no significant impacts to waters of the U.S. are anticipated as a result of the proposed project.

6.5 Cultural Resources and Historic Properties

6.5.1 Introduction

Sections 106 and 110 of the National Historic Preservation Act (NHPA) provide the framework for federal review and protection of historic properties, ensuring that they are considered during federal project planning and execution. The implementing regulations for the Section 106 process have been developed by the Advisory Council on Historic Preservation. The Secretary of the Interior maintains the National Register of Historic Places (NRHP) and sets forth significance criteria for inclusion in the register. Cultural resources may be considered "historic properties" for the purpose of consideration by a federal undertaking if they meet NRHP inclusion criteria. Historic properties may be those that are formally placed in the NRHP by the Secretary of the Interior or those identified that meet the criteria and are determined eligible for inclusion.

EKPC initially contacted Kentucky Heritage Council (KHC), State Historic Preservation Office (SHPO) on October 19, 2020 to coordinate development of an area of potential effect (APE) where assessment of project-related impacts to cultural resources should occur. At this time, the project was proposed as a hybrid reconductor/rebuild project. The APE for the project included a 4.1-mile-long, 100-foot-wide transmission line ROW to be assessed for effects to archaeological properties and a 1,500-foot-wide corridor (750 feet on either side of the existing transmission line) along the 4.1-mile-long rebuild section to be assessed for cultural historic resources. The SHPO concurred with the proposed APE on December 30, 2020 and October 21, 2020, respectively.

On May 26, 2021, EKPC informed the SHPO that the scope of the project had changed to include a rebuild of the entire transmission line section. EKPC proposed revisions to the project APE to include the 24.3 miles of existing ROW excluded from the original APE, resulting in a total length of 28.4 miles (see enclosed *Cultural Resource APEs Topo Maps 1 – 4*). Archaeological effects would be assessed within a 100-foot-wide corridor and cultural historical resource effects assessed within a 1,500 foot-wide corridor running the length of the ROW. The SHPO concurred with the revised APE by email on May 7, 2021. Correspondence with the SHPO is included in Exhibit D – *Agency Correspondence*.

6.5.2 Affected Environment

This section summarizes the cultural resources within the APE, which are defined as sites, features, structures, or objects that may have significant archaeological or historic value. Additionally, they can be properties that play a significant, traditional role in a community's historically based beliefs, customs, and/or practices. Cultural resources can encompass a wide range of settings, from prehistoric campsites to farmsteads constructed in the recent past. EKPC contracted Cultural Resource Analysts, Inc. (CRA) to perform a Phase 1 archaeological survey and cultural historic overview survey with the identified APEs.

The following summarizes the efforts used to identify archaeological historic properties that may be affected by the proposed action alternative. Prior to initiating field investigations for the archaeological survey, CRA personnel completed an archaeological records review at the Office of State Archaeology (OSA). The review identified previous professional archaeological surveys or site investigations that have been conducted within a two-kilometer radius of the APE. The results of the original and addendum archaeology surveys were submitted to the KHC on March 17, 2021 in a report entitled *An Archaeological Survey for the Proposed Williamstown 69 Kilovolt Transmission Line Reconductor/Rebuild Project in Boone, Gallatin, and Grant Counties, Kentucky* and on September 9, 2021 in the addendum report entitled *An Addendum to an Archaeological Survey for the Proposed Williamstown 69 Kilovolt Transmission Line Reconductor/Rebuild Project in Boone, Gallatin, and Grant Counties, Kentucky*.

During the archaeology surveys, no new archaeological sites were recorded or relocated within the APE. One previously identified archaeological site is partially located within the project APE. The NRHP eligibility of this resource has not been determined, and the site was previously recommended for avoidance or additional assessment of NRHP eligibility. In their current reports CRA reiterated these management recommendations, and SHPO continues to recommend that the NRHP eligibility of this site is undetermined. EKPC revised the plans for the proposed action alternative to avoid this archaeological site. The site would not be impacted by either of the proposed project alternatives under consideration. RUS has therefore determined that no archaeological historic properties listed in or eligible for listing in the NRHP will be affected by the proposed action alternatives.

The following summarizes the efforts used to identify cultural historical historic properties that may be affected by the proposed action alternative. Prior to initiating the cultural historic fieldwork, CRA personnel conducted a review of records maintained by the KHC to determine if previously recorded cultural historic resources or NHRP-listed sites are located in the project APE. KHC data indicated that 19 previously identified resources are present within the APE. Of these, one cultural historic resource is listed in the NRHP. The remaining 18 resources have an undetermined NRHP status. The results of the original and addendum cultural historic overviews were submitted to the KHC on March 17, 2021 in a report entitled *Cultural Historic Overview Survey for the Proposed Williamstown 69 kV Transmission Reconductor/Rebuild Project in Boone, Gallatin, and Grant Counties, Kentucky* and on September 9, 2021 in the addendum report entitled an *Addendum to Cultural Historic Overview Survey for the Proposed Williamstown 69 kV Transmission Rebuild Project in Boone, Gallatin, and Grant Counties, Kentucky*.

Based on the results of these identification efforts, including background research and the results of the field surveys, CRA personnel identified a total of 115 cultural historic resources within the project APE, 19 of which were previously identified. CRA recommended that 97 of these cultural historical resources are not eligible for listing in the NRHP, that 16 have an undetermined NRHP eligibility status as they were either not accessible or not visible during field survey and could not be sufficiently evaluated, and that two are eligible for the NRHP. NRHP eligible resources include the one previously identified resources that is listed in the NRHP and one newly identified cultural historical resource.

In its October 4, 2021 letter, SHPO disagreed with some of CRA eligibility recommendations. Based on their review of the survey results, the SHPO recommended that 16 cultural historical resources recommended by CRA as not eligible for the NRHP were not sufficiently investigated to support the proposed eligibility and should be considered to have an undetermined NRHP eligibility. Therefore, SHPO agreed that 81 resources within the proposed project's APE are not eligible for the NRHP, recommended that 32 cultural historical resources have undetermined NRHP eligibilities, and agreed with CRA's assessments for the two NRHP eligible cultural historical resources.

As indicated above, EKPC submitted archaeological and cultural resources surveys to SHPO for review twice during the development of the proposed project. After its review of the initial survey reports, SHPO issued a letter dated April 12, 2021 in which it agreed with EKPC's recommendation that the proposed project would result in no adverse effect to historic properties. After the proposed project's scope was revised, EKPC submitted addendum cultural resources surveys to SHPO. The SHPO, in its October 4, 2021 response, did not agree with some of the eligibility recommendations for resources identified in the addendum cultural historical survey. However, the SHPO ultimately did continue to concur with EKPC's official recommendation of no adverse effect to archaeological and cultural historic properties for the proposed project.

Through an October 30, 2020 mailing, EKPC, on behalf of RUS, sent a notification of intent to initiate Section 106 review with federally recognized Tribes regarding historic properties that may be affected by the proposed action. No responses from the Tribes were received by EKPC or RUS from these letters. On October 5, 2021, EKPC accessed the online Tribal Directory Assessment Tool (TDAT) to update federally recognized tribes regarding the proposed project. Through emails dated October 7, 2021, EKPC sent project notifications to the Eastern Band of Cherokee Indians, Cherokee Nation, Miami Tribe of Oklahoma, Osage Nation, Seneca-Cayuga Nation, and the Delaware Nation-Oklahoma regarding historic properties that may be affected by the proposed project. On October 14, 2021, the Miami Tribe of Oklahoma responded stating they offer no objection to the project at this time and are not currently aware of existing documentation directly linking a specific Miami cultural or historic sites to the project area. On December 21, 2021, the Osage Nation Historic Preservation Office responded, stating they were not aware of any resources, and as none were found during the archaeology survey, no further coordination with the Osage Nation was requested. There were no other responses received by EKPC or RUS to these mailings.

If the proposed action inadvertently uncovers an archaeological site or object(s) during construction, EKPC will cease construction activities in the vicinity of the findings immediately and contact RUS, the SHPO, Tribes, and appropriate federal and state authorities. Copies of the tribal correspondence are included in Exhibit D – *Agency Correspondence*.

In accordance with Section 106 of the NHPA and its implementing regulations, "Protection of Historic Properties" (36 CFR Part 800), EKPC conducted a public notice regarding the proposed action. The public notice entailed notification to the local government official that has primary land use jurisdiction over the project area and written notice to the public of the proposed action through the local newspaper of general circulation in the project area. Through three October 30, 2020 mailings, EKPC notified Boone County Judge Executive, Gallatin County Judge Executive,

and Grant County Judge Executive, of the proposed action and requested that each contact EKPC should they want to be formally involved in the regulatory process as a consulting party. EKPC also ran a public notice in newspapers local to the project area requesting that anyone interested in the action contact EKPC. The public notice was published in The Boone County Recorder, The Gallatin County News, and The Grant County News, on November 19, November 11, and November 12, 2020, respectively. No responses were received from the County Judge Executives or the public. Copies of the local official correspondence and newspaper notices are included in Exhibit C – *Public Notice*.

6.5.3 Environmental Consequences

The direct and indirect effects of the proposed action on cultural resources and historic properties are discussed below.

No Action Alternative

The No Action Alternative will not have any direct or indirect effects to cultural resources or historic properties within the archaeology and cultural historic APEs because the proposed action will not occur.

Proposed Action Alternative – Rebuild, Operate, and Maintain Electrical Transmission Line

The following summary describes the anticipated effects of the proposed action on resources eligible for or listed on the NRHP.

Archaeological Resources: Through the Section 106 process and tribal consultation RUS has determined that there will be "No Adverse Effect" on historic properties or cultural resources listed in or eligible for listing in the NHRP.

Cultural Historic Resources: Based on the survey results and receipt of SHPO concurrence, the proposed action will have "No Adverse Effect" on historic properties listed in or eligible for listing in the NRHP.

6.6 Threatened and Endangered Species

6.6.1 Introduction

Potential impacts to federally protected threatened and endangered species are anticipated to be localized within the existing ROW and areas adjacent to the ROW where hazard trees may be cleared. Therefore, the area of influence for threatened and endangered species includes a 150-foot-wide corridor (75 feet on either side of the existing transmission line). Any potential impacts associated with threatened and endangered species are anticipated to be localized within this area.

6.6.2 Affected Environment

Based upon the construction activities outlined in Section 2.0 Proposed Action and the resulting disturbance to the existing environment, EKPC evaluated the potential for the proposed action to affect federally listed threatened and endangered species and critical habitats that are known to occur or could potentially occur within the area of influence. To determine the species that could be affected by the proposed action, EKPC reviewed available information acquired from the USFWS and the Office of Kentucky Nature Preserves (OKNP).

Information contained within these resources identified 15 federally listed species known to occur or having the potential to occur within the area of influence, including the Indiana bat (*Myotis sodalis*), gray bat (*M. grisescens*), northern long-eared bat (*M. septentrionalis*), clubshell (*Pleurobema clava*), fanshell (*Cyprogenia stegaria*), northern riffleshell (*Epioblasma torulosa rangiana*), orangefoot pimpleback (*Plethobasus cooperianus*), pink mucket (*Lampsilis abrupta*), purple cat's paw (*Epioblasma obliquata obliquata*), rabbitsfoot (*Quadrula cylindrica cylindrica*), ring pink (*Obovaria retusa*), rough pigtoe (*Pleurobema plenum*), sheepnose (*Plethobasus cyphyus*), spectaclecase (*Cumberlandia monodonta*), and running buffalo clover (*Trifolium stoloniferum*). Running buffalo clover was delisted effective September 7, 2021 and is no longer protected under the ESA. As a result, potential impacts to this species no longer need to be considered for federally funded projects, and this species is not addressed further in this report. In addition to these federally listed species, potential impacts to federally protected bird species resulting from construction of the proposed action were evaluated. Copies of the USFWS and OKNP correspondence are included in Exhibit D – *Agency Correspondence*.

To determine the likelihood of the identified species being impacted by the proposed action, permitted EKPC and RES biologists performed a habitat assessment of the area of influence to identify suitable habitat for these species. The assessment included both in-house and field components. The in-house review included an analysis of existing occurrence data, topographic maps, aerial photographs, and other available resources to identify potential habitat within the area of influence. EKPC and RES biologists conducted field surveys on April 9, 15, 16, and 23, 2020 and June 22-25, 2020, which consisted of traversing the existing ROW and adjacent areas and visually observing existing habitat. During the surveys, 44.76 acres of forested habitat along the edges of the existing ROW was identified as suitable summer roosting, foraging, and commuting habitat for the Indiana bat and northern long-eared bat and commuting habitat for the gray bat (see enclosed *Suitable Bat Habitat Aerial Maps 1 – 7*). Additionally, the perennial streams in the area of influence provide suitable foraging habitat for the gray bat. Suitable habitat for the listed mussels species was identified in 10 of the perennial streams within the area of influence, including Big Bone Creek, Beaver Branch, Mud Lick Creek, McPherson Branch, Big South Fork, Ten Mile Creek, Little Ten Mile Creek, Arnolds Creek, Clarks Creek, and Williams Branch.

EKPC submitted the results of the habitat assessment to the USFWS Kentucky Field Office (KFO) in a letter dated March 3, 2021. In the letter, EKPC proposed an effects determination of "May Affect – Not Likely to Adversely Affect" for the gray bat and listed mussel species. Due to the removal of suitable Indiana bat summer habitat along the edges of the ROW, EKPC proposed mitigation for adverse effects to the species by contributing to the Imperiled Bat Conservation Fund (IBCF), using the process detailed in the USFWS KFO's *2016 Revised Conservation Strategy for Forest-Dwelling Bats*. Based on the anticipated removal of up to 44.76 acres of suitable habitat during the unoccupied period (October 15 to March 31), EKPC contributed $87,729.60 to the IBCF, receipt of which was confirmed via an email dated March 29, 2021 from the Kentucky Natural Lands Trust. As a result of the IBCF contribution, adverse effects to the Indiana bat from removal of suitable roost trees have been mitigated through implementation of the USFWS process.

EKPC submitted an effects determination for the proposed action using the northern long-eared bat key within the USFWS's Information for Planning and Consultation (IPaC) system on February 24, 2021 (Consultation Code: 04EK1000-2021-TA-0131). The IPaC review showed that the proposed action is consistent with activities analyzed in the USFWS's January 5, 2016 Programmatic Biological Opinion (PBO) for this species, which addresses activities excepted from "take" prohibitions applicable to the northern long-eared bat under the ESA. The proposed action has the potential to affect the northern long-eared bat; however, any take that may occur as a result of the action is not prohibited under the ESA Section 4(d) rule adopted for this species at 50 CFR §17.40(o). Therefore, EKPC, on behalf of RUS has fulfilled its responsibilities under ESA section 7(a)(2) relative to the NLEB for this project by requesting reliance on the USFWS's PBO. A copy of the USFWS northern long-eared bat key is included in Exhibit D – *Agency Correspondence*.

Table 2. Determination of Effect Findings for the Boone - Williamstown Line Rebuild Project

Group	Species	Common name	Legal Status*	Occurrence**	Comments
Mammals	*M. sodalis*	Indiana bat	E	Known habitat in project Counties	Habitat impacts mitigated through the IBCF contribution
	M. septentrionalis	Northern long-eared bat	T	Project within known habitat	Would not cause prohibited incidental take as defined in the Final 4(d) Rule
	M. grisescens	Gray bat	E	P	Not likely to adversely affect
Mussels	*P. clava*	Clubshell	E	P	Not likely to adversely affect
	C. stegaria	Fanshell	E	P	Not likely to adversely affect
	E. t. rangiana	Northern riffleshell	E	P	Not likely to adversely affect
	P. cooperianus	Orangefoot pimpleback	E	P	Not likely to adversely affect
	L. abrupta	Pink mucket	E	P	Not likely to adversely affect
	E. o. obliquata	Purple cat's paw	E	P	Not likely to adversely affect
	Q. c. cylindrica	Rabbitsfoot	T	P	Not likely to adversely affect
	O. retusa	Ring pink	E	P	Not likely to adversely affect
	P. plenum	Rough pigtoe	E	P	Not likely to adversely affect
	P. cyphyus	Sheepnose	E	P	Not likely to adversely affect
	C. monodonta	Spectaclecase	E	P	Not likely to adversely affect

Group	Species	Common name	Legal Status*	Occurrence**	Comments
Plants	*T. stoloniferum*	Running buffalo clover	E	Known from Boone, Grant Counties	Not likely to adversely affect

NOTES: Key to Notations

* E = Endangered, T = Threatened, P = Proposed for Listing, CH = Critical Habitat
** K = Known occurrence record within the project area, P = Potential for the species to occur within the project area based upon historic range, proximity to known occurrence records, biological, and physiographic characteristics.

After reviewing the information provided in the March 3, 2021 letter, the USFWS concurred with EKPC's findings and effects determinations in a letter dated March 19, 2021. As a result, the proposed action is not likely to adversely affect/jeopardize the evaluated species. In view of these findings, EKPC, on behalf of RUS, has fulfilled the requirements of Section 7 of the Endangered Species Act, the Migratory Bird Treaty Act, and the Bald and Golden Eagle Protection Act for this project. A copy of the USFWS concurrence letter is included in Exhibit D – *Agency Correspondence*.

6.6.3 Environmental Consequences

The direct and indirect effects of the proposed action on threatened and endangered species are discussed below.

No Action Alternative

The No Action Alternative will not have any direct or indirect effects to threatened and endangered species within the area of influence because the proposed action will not occur.

Proposed Action Alternative – Rebuild, Operate, and Maintain Electrical Transmission Line

Based on USFWS KFO concurrence with the "May Affect – Not Likely to Adversely Affect" determinations for the gray bat and mussel species, mitigation of adverse effects to Indiana bat summer habitat, and reliance on the USFWS's PBO for the NLEB, EKPC, on behalf of RUS, has fulfilled the requirements of Section 7 of the Endangered Species Act for this project.

6.7 Fish and Wildlife Resources

6.7.1 Introduction

This section describes the affected environment and environmental consequences as they apply to fish and wildlife resources, including species that are not federally threatened or endangered. Potential impacts to non-listed species are anticipated to be localized within the same area of influence as listed species; therefore, the area of influence for fish and wildlife resources includes a 150-foot-wide corridor (75 feet on either side of the existing transmission line). Any potential impacts associated with fish and wildlife resources are anticipated to be localized within this area.

6.7.2 Affected Environment

The project area provides habitat to a variety of mammal, bird, reptile, amphibian, and invertebrate species that are not listed as federally threatened or endangered species. Multiple streams and open water features are present in the area of influence that could provide habitat for fish species and other aquatic organisms that require a permanent water source, and the intermittent and

ephemeral streams could provide habitat for aquatic and semi-aquatic organisms that can tolerate occasional drying of the stream bed.

Common terrestrial wildlife species in the area of influence include white-tailed deer (*Odocoileus virginianus*), wild turkey (*Meleagris gallopavo*), gray squirrel (*Sciurus carolinensis*), northern cardinal (*Cardinalis cardinalis*), Carolina wren (*Thryothorus judicious*), American robin (*Turdus migratorius*), eastern box turtle (*Terrapene carolina carolina*), black rat snake (*Pantherophis obsoletus*), eastern milk snake (*Lampropeltis triangulum*), American toad (*Anaxyrus americanus*), and dusky salamander (*Desmognathus fuscus*). These species, as well as other similar species, are considered common throughout the state and are not currently monitored by any state or federal agency. Different wildlife species require different habitats composed of unique arrangements of food, water, and cover to survive. As changes in habitats occur, the variety and abundance of wildlife species change as well.

6.7.3 Environmental Consequences

The direct and indirect effects of the proposed action on fish and wildlife resources are discussed below.

No Action Alternative

The No Action Alternative will not have any direct or indirect effects to fish and wildlife resources within the area of influence because the proposed action will not occur.

Proposed Action Alternative – Rebuild, Operate, and Maintain Electrical Transmission Line

All areas impacted by the proposed action, to some degree, provide wildlife habitat that will be disrupted by the action, at least temporarily. Direct effects to wildlife resources may occur during construction activities within the area of influence, including vehicle movement, ground disturbance during structure removal and installation, and tree clearing within and along the existing ROW. Vehicles and other equipment moving within the area of influence could injure or kill individuals struck by the equipment, such as small mammalian, amphibian, and reptile species, as well as nesting birds. Ground disturbance at the structure removal/installation locations could also impact these species, as well as subterranean species. Tree clearing may affect bird, bat, and invertebrate species that inhabit trees, and felled trees could injure or kill individuals when they hit the ground.

Noise produced by cutting machinery and other equipment may have short-term impacts to wildlife species in the area of influence by forcing these species away from the immediate area. The majority of common wildlife species are mobile and can leave the affected area or seek refuge within the area to avoid impacts from noise. These species are expected to return to the area and resume normal activities after noise-producing activities have ceased. As a result, impacts to these species are not anticipated to be permanent.

Indirect effects to wildlife resources may occur due to displacement of wildlife and habitat loss. Impacts to habitat within the area of influence are anticipated to be minimal due to current maintenance of the majority of this area as transmission line ROW. Species that currently use the existing ROW are expected to continue to use the ROW after construction. The proposed action will result in some permanent habitat alteration and loss (primarily from hazard tree removal);

however, the amount of habitat affected is minimal compared to the total forested land available within the area of influence.

The proposed action could indirectly affect aquatic species living in streams within and downstream of the area of influence due to increased sedimentation or contaminants introduced to the surface water system as a result of the project. As outlined in Section 2.3 Construction Procedures, EKPC will employ BMPs and other techniques to reduce the potential for erosion and protect water resources adjacent to and downstream of construction activities.

Adverse effects to federally protected bird species are not anticipated due to use of design guidelines for the proposed transmission line listed in the Avian Power Line Interaction Committee's *Suggested Practices for Avian Protection on Power Lines: The State of the Art in 2006*. Birds are highly mobile and will take flight when disturbed; therefore, direct effects from construction are not anticipated. Indirect effects may occur from the loss of habitat associated with tree removal. EKPC has committed to limit tree clearing to between October 15 and March 31 as part of the Indiana bat mitigation for the action, which will also act as a conservation measure to minimize impacts to bird nests with eggs or non-volant juveniles. Additionally, the area of influence is not located within a major flyway or principal route for migratory birds, and no areas of significant concern were identified during the field survey. Likewise, based on information provided in the IPaC Report, there are no known eagle occurrences within the vicinity of the proposal, and no eagles or eagle nests were observed within the area of influence during the field investigations.

For the reasons listed above, common fish and wildlife resources may be affected directly or indirectly by the proposed action. However, the potential impact to individuals is not likely to cause a trend toward federal listing or loss of viability to these species.

6.8 Vegetation

6.8.1 Introduction

This section discusses the vegetation that may be affected by the proposed action. Potential impacts to vegetation are anticipated to be localized within the existing ROW and areas adjacent to the ROW where hazard trees may be cleared. Therefore, the area of influence for vegetation includes a 150-foot-wide corridor (75 feet on either side of the existing transmission line). Any potential impacts associated with vegetation are anticipated to be localized within this area.

6.8.2 Affected Environment

The proposed action is located in the Oak-Hickory Forest Region of Kentucky, which covers the western and central portions of the state. This forest type is characterized by a mixture of tree species dominated by oaks (*Quercus* sp.) and hickories (*Carya* sp.), as well as American elm *(Ulmus americana*), American basswood (*Tilia americana*), black cherry (*Prunus serotina*), black walnut (*Juglans nigra*), and white ash (*Fraxinus americana*). Many of the tree species in this forest type are limestone-associated species, including bur oak (*Quercus macrocarpa*), chinquapin oak (*Quercus muhlenbergii*), Kentucky coffeetree (*Gymnocladus dioicus*), and rock elm (*Ulmus thomasii*).

The vegetation within the existing ROW easement is maintained by agricultural/residential practices and EKPC as a low growing herbaceous plant community (see enclosed *Aerial Maps 1 – 9*). Areas adjacent to the ROW also contain forested habitat. No federally threatened or endangered plant species were identified during the biological field survey of the area of influence.

6.8.3 Environmental Consequences
The direct and indirect effects of the proposed action on vegetation are discussed below.

No Action Alternative
The No Action Alternative will not have any direct or indirect effects to vegetation within the area of influence because the proposed action will not occur.

Proposed Action Alternative – Rebuild, Operate, and Maintain Electrical Transmission Line
Construction of the proposed project will result in direct and indirect effects to vegetation in the project footprint; however, these impacts cannot be avoided. Clearing will be accomplished by hand cutting, supplemented cutting, and mowing with a mechanical bushhog and side-trimmer where necessary. Clearing will occur per RUS Form 203 – *Right-of-Way Clearing Guide*, as detailed in Exhibit A – *ROW Clearing Guide.* The use of existing roads to access the existing ROW and structure replacement locations will help minimize impacts to the vegetative communities in the ROW. Open areas and early successional habitat disturbed within the ROW will be revegetated upon completion of project activities, and these areas are expected to remain similar after construction. The minimal amount of tree clearing within and adjacent to the existing ROW is also not anticipated to significantly alter the vegetative composition of the area. Additionally, the areas surrounding the proposed project are a mixture of pasture, cropland, and woodlands and will remain so after construction of the project. No areas of high-quality native vegetation or unique communities were identified within the project footprint.

Vegetation within the existing ROW will be maintained with USEPA-approved herbicides applied at USEPA-approved rates and application methods by licensed applicators. Use of herbicides for maintenance of the ROW is expected to be similar to current herbicide applications within the ROW and is not anticipated to significantly alter the current vegetative community.

6.9 Air Quality

6.9.1 Introduction
Kentucky follows protocols established through the USEPA in monitoring air quality. Pursuant to 401 KAR 63:010, fugitive dust emissions are subject to specific requirements, and "no person shall cause or permit the discharge of visible fugitive dust emissions beyond the lot line of the property on which the emissions originate." The proposed project consists of a corridor many miles long that overlaps many properties. Therefore, the area of influence considered for air quality was defined as the immediate area where disturbances associated with the reconstruction, operation, and maintenance of the proposed action are most likely to occur. As a result, the area of influence includes a 150-foot-wide corridor (75 feet on either side of the existing transmission line). Any potential impacts associated with air quality are anticipated to be localized within this area.

6.9.2 Affected Environment

According to the USEPA, Boone County is in a non-attainment area for ozone (1-hour), and the northern half of the county is in a non-attainment area for ozone (8-hour) (EPA 2021). Boone County is not listed in a non-attainment area for any other ambient air quality standards, and Gallatin and Grant Counties are not located in any non-attainment areas. The Kentucky Division for Air Quality (KDAQ) has one monitoring station (East Bend) in Boone County, located near Union, Kentucky (KDAQ 2020). No monitoring stations are operated by the KDAQ in Gallatin or Grant Counties.

6.9.3 Environmental Consequences

The direct and indirect effects of the proposed action on air quality are discussed below.

No Action Alternative

The No Action Alternative will not have any direct or indirect effects to air quality within the area of influence because the proposed action will not occur.

Proposed Action Alternative – Rebuild, Operate, and Maintain Electrical Transmission Line

Dust associated with the proposed action could have a small potential for affecting the air quality of the area of influence; however, this source of air quality degradation is not anticipated to have a major effect on the area. Any dust associated with construction activities will be short-term, lasting only through the construction phase of the project, and areas denuded of vegetation will be fairly small. As a result, the amount of air quality degradation associated with fugitive dust will be negligible. Once construction is complete, air quality is expected to return to ambient conditions in the immediate vicinity of the project. No dust will be associated with the maintenance of the proposed action once construction activities are completed. The ROW will be maintained by the selective manual foliar method of herbicide application, which will not produce any dust. Therefore, EKPC does not anticipate significant direct or indirect effects associated with fugitive dust from the proposed action.

Vehicles and other equipment used during construction of the proposed action will emit ozone through exhaust and gasoline vapors. The amount of ozone generated from these sources will be minimal and is not expected to significantly increase ozone levels in the immediate area. In addition, ozone emissions associated with the proposed action will be temporary and are not anticipated to increase ozone levels in the area of influence over the long term.

6.10 Water Quality

6.10.1 Introduction

The proposed action is located within the Middle Ohio-Little Miami River and Kentucky River Basins, which flow into the Ohio River north of the proposed action location. Major perennial streams in the proposed action area include Big Bone Creek, Beaver Branch, Mud Lick Creek, McPherson Branch, Big South Fork, Ten Mile Creek, Little Ten Mile Creek, Arnolds Creek, Clarks Creek, and Williams Branch (see enclosed *Water/Wetland Location Maps 1-37*).

The area of influence for water quality was considered to be an approximately 1,500-foot corridor (750 feet on either side of the existing transmission line). In addition, the area of influence was

further assessed using the USGS Hydrologic Unit system. The Hydrologic Unit system is a standardized watershed classification system developed by the USGS in the mid-1970s. The U.S. is divided and sub-divided into successively smaller hydrologic units, which are classified into levels. The hydrologic units are arranged within each other, from the largest geographic (regions) to the smallest units (subwatersheds). Each hydrologic unit is identified by a unique hydrologic unit code (HUC) representing its level of classification in the hydrologic unit system.

The proposed action is located within portions of numerous 14-digit HUCs, including from north to south:

- 05090203-190-050 – Long Branch
- 05090203-200-010 – Big Bone Creek
- 05090203-200-030 – Big Bone Creek
- 05090203-200-040 – Braver Branch
- 05090203-200-050 – Big Bone Creek
- 05090203-200-160 – Mud Lick Creek
- 05090203-200-230 – Little South Fork
- 05090203-200-210 – McPherson Branch
- 05090203-200-200 – Big South Fork
- 05100205-390-090 – Ten Mile Creek
- 05100205-390-100 – Little Ten Mile Creek
- 05100205-390-120 – Arnolds Creek
- 05100205-380-110 – Clarks Creek
- 05100205-380-090 – Clarks Creek
- 05100205-370-340 – Rattlesnake Creek
- 05100205-380-070 – Clarks Creek
- 05100205-380-060 – Williams Branch
- 05100205-380-020 – Steammill Branch

The proposed action will have the potential to impact the water quality within these watersheds. The assessed area of influence includes all areas that could be affected directly or indirectly by the proposed action with respect to water quality.

6.10.2 Affected Environment

The action area consists of moderately to deeply dissected uplands with little flat land due to the presence of limestone and shale that are easily eroded. The majority of flat land is present on ridge tops between stream valleys. As a result, water resources in the area of influence are concentrated in the valley bottoms, occurring mainly in the alluvial zone bordering streams. Surface water is concentrated in perennial, intermittent, and ephemeral stream channels, many of which flow only during the wetter portions of the year.

6.10.2.1 Surface Water

The Commonwealth of Kentucky Energy and Environment Cabinet designates surface waters as having one or more specific uses for which water quality must be protected. One stream, Little South Fork, is designated as an Outstanding State Resource Water (OSRW) and Exceptional Water, as described in Section 5.4 Jurisdictional Waters of the U.S. Ten Mile Creek is listed as partially supporting for secondary contact recreation.

Waters of the Commonwealth within the area of influence that will be spanned by the transmission line consist of numerous intermittent streams and larger perennial streams including, but not limited to, Big Bone Creek, Beaver Branch, Mud Lick Creek, McPherson Branch, Big South Fork, Ten Mile Creek, Little Ten Mile Creek, Arnolds Creek, Clarks Creek, and Williams Branch. As a result, there is a potential for degradation of these or other downstream waterbodies due to stormwater discharges from construction-related activities within the project area.

To protect the water quality of the area, EKPC will apply for and follow the requirements of the Kentucky Pollutant Discharge Elimination System General Permit for Stormwater Discharges Associated with Construction Activities (KYR10) from the KDOW. As required by the permit, EKPC will submit an electronic Notice of Intent to the KDOW and prepare and implement a SWPPP prior to the start of construction. The goal of this plan is to implement BMPs, which would include appropriate and adequate erosion prevention measures, sediment control measures, and other site management practices necessary to manage stormwater runoff during the construction period. These practices are aimed primarily at controlling erosion and sediment transport but also include controls such as good housekeeping practices aimed at other pollutants such as construction chemicals and solid waste. Furthermore, EKPC is committed to minimizing water quality degradation of any sensitive streams or downstream waterbodies due to stormwater discharges from construction-related activities by implementing enhanced BMPs within the critical areas of these sensitive stream crossings. The plan describes the site management practices that will be utilized in order to effectively minimize such discharges for storm events up to and including a 2-year, 24-hour event.

The BMPs outlined in the SWPPP will be employed and maintained on site as recommended by the KDOW and will be inspected as required by the permit to ensure the BMPs are functioning effectively and preventing impacts to the surrounding environment. After construction activities have ended, all disturbed areas will be seeded and covered and all BMPs will be removed once the areas are stabilized and revegetated. EKPC will then send a Notice of Termination to the KDOW to end coverage of the general permit. By initiating these measures, the proposed action is not anticipated to have any adverse impacts on the water quality or aquatic resources of Waters of the Commonwealth.

6.10.2.2 Groundwater

As discussed in Section 5.2.2.2 *Hydrogeology*, most wells drilled in stream valleys in Boone, Gallatin, and Grant Counties can produce enough water for a domestic supply. These wells can typically produce several hundred gallons per minute at depths less than 100 feet. No wells or springs are present in the area of influence; therefore, no impacts to these resources are anticipated from project construction.

6.10.3 Environmental Consequences

The direct and indirect effects of the proposed action on water quality are discussed below.

No Action Alternative

The No Action Alternative will not have any direct or indirect effects to water quality within the area of influence because the proposed action will not occur.

Proposed Action Alternative – Rebuild, Operate, and Maintain Electrical Transmission Line

The proposed action will not have any permanent direct effects on streams in the area of influence. All streams will be spanned by the proposed transmission line, and no support poles will be placed within stream channels. In addition, no construction access roads will cross any perennial streams.

6.10.3.1 Surface Water

The disturbances associated with the proposed action could potentially increase nutrients, storm flows, and sediment loading of streams and could impact groundwater within the project area. Generally, the amount of increase depends on the degree of disturbance, the topography of the area, type of soil involved, and measures implemented to limit discharges (i.e. BMPs, etc.). EKPC estimates an average of 0.04 acre of disturbance at each of the 212 proposed structure locations, which would result in just under eight and a half acres of disturbance within the 28.4-mile-long action area. These disturbances are expected to have minimal impacts on surface waters in the action area and will be spread across a 28.4-mile area over an extended period of time.

Surface water run-off and erosion of soil from construction operations will be controlled by utilizing temporary sediment controls, such as silt fences, rock check dams, seed, mulch, erosion blankets, and revegetation. This combination of BMPs has been shown to be an effective method for similar linear construction activities to reduce or eliminate sediment and other potential contaminants from reaching receiving streams. Although Little South Fork is designated as an OSRW and Exceptional Water, impacts to water quality in the stream are not anticipated due to avoidance (spanning) of the stream and the enhanced stormwater BMPs that will be utilized within critical areas during construction. Critical areas have been identified by the KDOW as those areas within 50 feet of waters designated as OSRWs and on a positive slope toward the OSRW. Because the action area crosses an OSRW, some activities may be required within the critical area. Any required disturbances in critical areas will be controlled using adequately protective alternative devices including, but not limited to, covering with turf mats/erosion control blankets, mulch, or straw, stabilization with tackifiers or by track treading within 24 hours or "as soon as practicable" after completion of disturbance activities. Methods of cover, stabilization, and sediment control in critical areas will be determined on a case by case basis by the construction contractor, EKPC project inspector, or another qualified person. Unless infeasible, natural buffers will be provided and maintained around these receiving waters, stormwater will be directed to vegetated areas, and infiltration of stormwater will be maximized to reduce pollutant discharges. Minimizing siltation and maintaining the appropriate buffer strips will preserve these stream segments, and no significant impacts are anticipated.

No municipal water intakes are located within the area of influence. As a result, the proposed action will not have the potential to affect water quality within any municipal water intake drainages and is not expected to have any influence drinking water or affect ground water.

6.10.3.2 Groundwater

Groundwater could be affected by herbicide application as part of the Proposed Action through the vertical seepage of herbicides into aquifers. EKPC will prohibit herbicide application within 100 horizontal feet of any public or domestic water source. Through the implementation of these mitigation measures, the risk to groundwater will be minimal because the buffers will reduce herbicide concentrations through mixing and dilution (USDA 1989).

6.11 Aesthetics

6.11.1 Introduction

This section describes the affected environment and environmental consequences as they apply to aesthetics. The area of influence for aesthetics is considered to be an approximately 1,500-foot-wide corridor (750 feet on either side of the existing transmission line). This buffer is considered a reasonable area that will address potential effects to viewsheds in the project area.

6.11.2 Affected Environment

Public lands, recreational facilities, and visual resources within the area of influence can be adversely impacted by traffic, noise, visual intrusions, and changes in air quality. The only public lands or recreational facilities in the area of influence is Boone County Central Park.

6.11.3 Environmental Consequences

The direct and indirect effects of the proposed action on aesthetics are discussed below.

No Action Alternative

The No Action Alternative will not have any direct or indirect effects to aesthetics within the area of influence because the proposed action will not occur.

Proposed Action Alternative – Rebuild, Operate, and Maintain Electrical Transmission Line

The proposed action involves rebuilding an existing facility within an established ROW corridor and is not expected to have any adverse impacts on aesthetics in the area of influence. The proposed transmission line will either span or be visible from multiple roadways and cross or parallel several rural residential properties in the project area. However, the existing transmission line currently crosses or is visible from these areas, and construction of the new transmission line within the existing ROW should have little additional aesthetic impact. Although the new steel-pole structures will be approximately 12 feet taller, there will be 51 fewer structures required to support the new transmission line, which could potentially decrease the impact of the facility on the aesthetics of the area. Therefore, it is believed there will not be significant impacts on aesthetics because of the proposed project. Additionally, the cultural historic survey concluded that the proposed project would not adversely affect any properties that are listed, or eligible for listing, in the NRHP within the project area. Therefore, there will be no significant impacts on cultural historic resources as a result of the proposed action.

6.12 Transportation

6.12.1 Introduction

This section describes the affected environment and environmental consequences as they apply to transportation. The area of influence for transportation was considered to be an approximately 1,500-foot corridor (750 feet on either side of the existing transmission line); however, potential effects to transportation will predominantly occur within the existing ROW.

6.12.2 Affected Environment

As discussed in Section 2.3 Construction Procedures, access for construction of the proposed transmission line will maximize the use of existing public and private roads and existing EKPC

maintenance access roads. Major roads within the area of influence include KY 536 near the northern terminus of the project, KY 338 and US 127/42 in the northern portion of the project, Interstate 71 and KY 16 in the central portion of the project, KY 22 in the southern portion of the project, and Interstate 75, which is located just east of the Williamstown Substation.

As discussed in Section 5.0, no projects proposed by the KYTC are located within the area of influence. Additionally, the proposed action will not require notification to the Federal Aviation Administration (FAA) because none of the structures associated with the facility will exceed the 200-foot above-ground height notification requirements of the FAA. The nearest airport to the project area is the Greater Cincinnati International Airport, which is located approximately five miles northeast of the area of influence at its closest point. As a result, the prosed action is not expected to result in adverse impacts to aviation or navigable airspace.

6.12.3 Environmental Consequences

The direct and indirect effects of the proposed action on transportation are discussed below.

No Action Alternative

The No Action Alternative will not have any direct or indirect effects to transportation within the area of influence because the proposed action will not occur.

Proposed Action Alternative – Rebuild, Operate, and Maintain Electrical Transmission Line

The construction of the proposed electric transmission line could temporarily increase traffic within the area of influence through the movement of construction vehicles along the transmission line route. However, this increase in traffic will be temporary and will return to pre-construction levels after project completion. Maintenance of the proposed transmission line every three to five years is not expected to have any impact on traffic flows or patterns within the area of influence.

Construction of the proposed project may have a temporary effect on transportation in the area of influence due to temporary road closures. During installation of the transmission line, the electrical conductor will be strung on support structures using a pulley system and/or helicopter or with a tensioner mounted on the back of a digger/derrick truck. Some roads crossed by the transmission line may have to be temporarily closed for safety purposes during stringing of the conductor. These road closures could range from several minutes to up to four hours based on the width of the road and the complexity of the crossing. These road closings are not expected to have major impacts on transportation due to their temporary nature and restoration of traffic flows and patterns once complete. Additionally, with the exception of the proposed crossings of Interstate 71 and US 127/42, the roads crossed by the transmission line will be light-duty roads that are not subject to high concentrations of vehicular traffic. EKPC will coordinate construction of the proposed project with the KYTC and secure all required permits for the road crossings.

As discussed in Section 5.4 Jurisdictional Waters of the U.S, none of the streams in the area of influence are classified as navigable waters or are used for commerce. Therefore, the crossing of these streams by the proposed transmission line will not have any effect on transportation.

6.13 Noise

6.13.1 Introduction

Noise-sensitive receptors are those that may be subject to stress or significant interference from noise. They often include residential dwellings, hotels, motels, hospitals, nursing homes, educational facilities, and libraries. Industrial, commercial, agricultural, and undeveloped land uses generally are not considered sensitive to ambient noise. Noise is often considered unwanted sound; however, response to noise is highly individualized and is influenced by both acoustic and non-acoustic factors. Acoustic factors include the sound's amplitude, duration, frequency content, and fluctuations. Non-acoustic factors include the listener's ability to become accustomed to the sound, the listener's attitude towards the noise and the noise source, the listener's view of the necessity of the noise, and the predictability of the noise. No state or county noise regulations have been identified that would be applicable to the proposed transmission line reconstruction project. Thus, the proposed project would conform to the requirements of the U.S. Department of Housing and Urban Development (HUD) as noted in this section.

The area of influence for noise was considered to be an approximately 1,500-foot corridor (750 feet on either side of the existing transmission line). This buffer was considered a reasonable area that would encompass all potential noise-sensitive receptors in the vicinity.

6.13.2 Affected Environment

HUD has adopted environmental noise standards, criteria, and guidelines for determining acceptability of federally assisted projects and proposed mitigation measures that achieve the goal of a suitable living environment. The majority of the existing transmission line is in a relatively quiet, rural area, with a few areas of concentrated residential development near the northern extent of the proposed project. Private residences and farm buildings are interspersed throughout the area, and no large commercial or industrial facilities are present. Public facilities within the area of influence include Randall K. Cooper High School, Boone County Central Park, and Mountain Ballpark.

6.13.3 Environmental Consequences

The direct and indirect effects of the proposed action on noise are discussed below.

No Action Alternative

The No Action Alternative will not have any direct or indirect effects to noise within the area of influence because the proposed action will not occur.

Proposed Action Alternative – Rebuild, Operate, and Maintain Electrical Transmission Line

Construction of the proposed action will have a minor impact on noise levels in the area of influence. Noise will emanate from chainsaws and machinery used during tree clearing activities and from vehicles, machinery, and equipment used during the structure replacement and installation of the transmission line. The increase in noise levels will be short-term, and noise levels are anticipated to return to ambient conditions upon completion of construction activities. Additionally, all operational equipment will be specified and designed so as not to exceed the noise limits as required by HUD for off-site receptors. Maintenance of the transmission line will have a

minor impact, if any, on the noise levels of the area. Therefore, the proposed action is not expected to produce any significant direct or indirect effects on noise levels within the area of influence.

6.14 Radio, Television & Cellular Phone Interference

6.14.1 Introduction

This section describes the affected environment and environmental consequences as they apply to radio, television, and cellular phone interference. The area of influence for radio, television, and cellular phone interference was considered to be an approximately 1,500-foot corridor (750 feet on either side of the existing transmission line). This buffer was considered a reasonable area that would encompass all identified radio, television, and cellular phone issues in the vicinity.

6.14.2 Affected Environment

No radio, television, or cellular phone infrastructure is mapped within the area of influence. However, signals for radio, television, and cellular phones are emitted into the area of influence from infrastructure in the area surrounding the proposed project.

6.14.3 Environmental Consequences

The direct and indirect effects of the proposed action on radio, television, and cellular phone interference are discussed below.

No Action Alternative

The No Action Alternative will not have any direct or indirect effects to radio, television, and cellular phone interference within the area of influence because the proposed action will not occur.

Proposed Action Alternative – Rebuild, Operate, and Maintain Electrical Transmission Line

The proposed action is not anticipated to have any effect on radio or television reception because electric transmission line equipment by design does not cause radio or television reception interference. Additionally, the existing transmission line has been active since 1957/1958, and the proposed action will result in only minor changes to the electric line and its operation.

The new transmission line is designed using RUS guidelines to minimize any impacts on communications in the area. The standard structures are designed to eliminate radio and television interference, which can be caused by improperly installed, loose, or damaged hardware. In addition, the proposed action is not expected to cause radio or television reception interference due to the rural nature of the action and the distance of houses from the existing transmission line route. Should EKPC receive a reception inference complaint, the policy is to investigate the source of the interference and take steps to remedy the situation (e.g., replacing insulators, tightening hardware, etc.) should the source of the problem be determined to be electric equipment associated with one of its electric facilities.

Mobile and automobile radios can lose signal strength directly underneath electric transmission lines, such as a loss of signal strength when traveling underneath a transmission line at a road or highway crossing. Cellular telephones can also lose signal strength directly underneath electric transmission lines when located in fringe areas of the cellular service companies. However, these

are temporary, momentary losses of signal strength that have minimal effects on the use of mobile or automobile radio or cellular telephone equipment.

6.15 Human Health & Safety

6.15.1 Introduction

There is a commitment to safety by management of EKPC, and safe job performance is a Cooperative expectation for all employees and contractors. The area of influence for human health and safety is considered to be the immediate area where disturbances associated with the reconstruction, operation, and maintenance of the proposed action are most likely to occur. As a result, the area of influence includes a 150-foot-wide corridor (75 feet on either side of the existing transmission line). Any potential impacts to human health and safety are anticipated to be localized within this area.

6.15.2 Affected Environment

EKPC provides the approved Personal Protection Equipment (PPE) for the protection of all employees. It is the employee's responsibility to use this equipment and the supervisor's responsibility to see that this equipment is used in accordance with the manufacturer's recommendations and all Occupational Safety and Health Administration (OSHA) Regulations. Training guidelines set forth by EKPC are applicable to all EKPC employees and are intended to emphasize that all employees are trained in safety-related work practices, safe procedures, and other safety requirements, including those mandated by federal or state laws and by EKPC. Training is designed to provide information, to ensure understanding, and to apply/practice what is understood so that employees will be motivated to follow principles that protect their safety and health.

6.15.3 Environmental Consequences

The direct and indirect effects of the proposed action on human health and safety are discussed below.

No Action Alternative

The No Action Alternative will not have any direct or indirect effects to human health and safety within the area of influence because the proposed action will not occur.

Proposed Action Alternative – Rebuild, Operate, and Maintain Electrical Transmission Line

The clearing of vegetation associated with reestablishment of the existing ROW as described in the proposed action could have an effect on human health and safety. One common tool used for manually cutting and clearing vegetation in the electric utility industry is the chainsaw. The chainsaw can be one of the most dangerous hand cutting tools used, and cuts caused by these tools can be encountered by crewmembers. Other hazards associated with chainsaw use include flying wood chips, sawdust, and bar oil, causing eye problems for workers. Another hazard associated with chainsaw use is hearing loss if proper ear protection is not used. However, if the chainsaws are operated in a safe manner adhering to all state, local, and federal PPE safety rules (i.e., protective clothing, eyewear, and ear protection), injuries from chainsaws should not present a problem, and no direct or indirect effects are anticipated.

Mechanical types of equipment used during construction activities, such as utility trucks, bulldozers, and off road vehicles, could also pose a hazard to construction workers. This type of equipment could roll over when operated improperly on steep grades, injuring the operator and any nearby crewmembers who happen to be in the way. Fire can also potentially be a hazard to operators attempting to refuel hot engines or when leaked oil or flammable debris is exposed to hot engines. However, operators would be trained in the safe operation of this kind of equipment. Hazards from the operation of such equipment should not pose a problem, and no direct or indirect effects are anticipated.

Emissions from the exhaust of chainsaws and mechanical equipment could expose operators to a number of carcinogens known to be present in the exhaust of internal combustion engines, such as benzene, 1,3-butadiene, and numerous polynuclear aromatic hydrocarbons (USDA 1997). Exhaust from the engines also exposes equipment operators to carbon monoxide and neurotoxic hydrocarbons, as well as irritants, such as, formaldehyde, acrolein, and nitrogen oxides (USDA 1997). However, the effects to operators will be minimal because the components of exhaust are volatile and will move out of the immediate project area within a short period of time (USDA 1997).

Hazards to the general public could occur during vegetation clearing activities if individuals were to enter work areas while machinery is operating and vegetation is being cut. Individuals of the public present on or near the work sites when the cutting operations are occurring could be struck by falling vegetation, flying wood chips, sawdust, etc. Stubble left on the ROW after cutting operations can also present a hazard to the public by individuals tripping over or falling onto cut stumps and stubble, causing injury. Recreational facilities within the project area are limited, and the risk to the general public from ROW clearing operations is considered negligible. This risk will not be present during the maintenance of the proposed ROW because the ROW will be maintained through the use of herbicides.

Extremely low-frequency electric and magnetic fields (EMFs) surround high-voltage electric transmission lines and transformers but are invisible to the human eye (WHO 2009). A good deal of attention has been focused on the possible health effects of EMFs since the 1970's. However, evidence of health effects from EMFs is inconclusive, and the available information is not sufficient to establish a cause-effect relationship (National Safety Council 2002). Overall, the evidence that power line EMFs cause or contribute to cancer in humans is considered weak or nonexistent by most scientists (Moulder 2005). The U.S. National Institutes of Health concluded in 2002 that the overall scientific evidence for human health risk from EMFs is weak, and that no consistent pattern of biological effects from exposure to EMFs has emerged from laboratory studies (Moulder 2005). Over the past 30 years, approximately 25,000 articles have been published on the health effects associated with EMFs, and based on a recent in-depth review of the scientific literature, the World Health Organization (WHO) concluded that current evidence does not confirm the existence of any health consequences from exposure to low level EMFs (WHO 2009). Additionally, the strength of EMFs quickly decreases as you move away from the source. Overhead transmission lines produce a magnetic field that peaks underneath the electric conductors and falls off rapidly with distance on either side. The proposed reconstruction project is located on a dedicated ROW where the line has been active since construction in 1957/1958. In addition, the proposed project is located in a rural area and is not located immediately adjacent to

any residences or other occupied buildings. Consequently, no such structures are located close enough to the proposed transmission line to experience increased EMF levels.

6.16 Socioeconomics & Environmental Justice

6.16.1 Introduction

This section describes the affected environment and environmental consequences as they apply to socioeconomics and environmental justice. The area of influence for these issues was considered to be an approximately 1,500-foot corridor (750 feet on either side of the existing transmission line) This buffer was considered a reasonable area that would encompass all identified socioeconomic and environmental justice issues in the vicinity.

6.16.2 Affected Environment

The county seat of Boone County is Burlington, but the largest city in the county is Florence. According to the 2020 U.S. Census performed by the U.S. Census Bureau, Boone County has an estimated total population of 135,968. Since 2010, the population has increased by 14.4%, which is significantly higher than the growth rate experienced across the Commonwealth of Kentucky (3.8%) during this time. The population in Boone County is predominantly White (91.2%), with smaller minority populations of Hispanics (4.4%), African Americans (3.8%), Asians (2.4%), and other ethnicities (U.S. Census Bureau 2021).

The county seat of Gallatin County is Warsaw, which is also the largest city in the county. 2020 U.S. Census data shows that the estimated total population in 2020 was 8,690. Since 2010, the population has increased by 1.2%, which is considerably lower than the 3.8% growth rate experienced across the Commonwealth of Kentucky. The population in Gallatin County is predominantly White (95.4%), with smaller minority populations of Hispanics (5.2%), African Americans (1.7%), and other ethnicities (U.S. Census Bureau 2021).

The county seat of Grant County is Williamstown, which is also the largest city in the county. 2020 U.S. Census data shows that the estimated total population in 2020 was 24,941. Since 2010, the population has increased by 1.1%, which is considerably lower than the 3.8% growth rate experienced across the Commonwealth of Kentucky. The population in Grant County is predominantly White (96.8%), with smaller minority populations of Hispanics (2.9%), African Americans (1.0%), and other ethnicities (U.S. Census Bureau 2021).

Minorities comprise a very small percentage of the population in the area of influence that is much smaller than the statewide minority population of 12.5%. As of August 2021, the unemployment rates in Boone, Gallatin, and Grant Counties were 3.1%, 3.3%, and 3.5%, respectively. These rates are lower than the state (4.3%) and national (5.2%) unemployment rates for the same time period. The percentage of persons living below the poverty line in Boone, Gallatin, and Grant Counties in 2019 was 7.1%, 13.3%, and 13.3%, respectively, which are all lower than the state (16.3%) poverty rate. The poverty rate for Boone County is lower than the 2019 national rate of 10.5%; however, the rates for Gallatin and Grant Counties are above the national rate (U.S. Census Bureau 2021).

6.16.3 Environmental Consequences
The direct and indirect effects of the proposed action on socioeconomics and environmental justice are discussed below.

No Action Alternative
The No Action Alternative will not have any direct or indirect effects to socioeconomics and environmental justice within the area of influence because the proposed action will not occur.

Proposed Action Alternative – Rebuild, Operate, and Maintain Electrical Transmission Line
The proposed action is not anticipated to change the population or economy of the surrounding area. Based upon the small size of the project and location within a rural area, it is unlikely that new jobs will be created or that unemployment rates for the area will be impacted by the action. The proposed action will ultimately have a beneficial effect on the community as a whole by increasing electric service reliability to property owners in the project area. Additionally, the proposed electric facilities will not be located within any high-density residential areas or minority or low-income areas. As a result, the action will not have any disproportionate effects on populations located in such areas. The action will also not have any impact on, or be influenced by, the civil rights, ethnic origin, sex, or social status of people living within the project area.

7.0 AVOIDANCE, MINIMIZATION, AND MITIGATION MEASURES

The following section discusses avoidance and minimization measures for the proposed action, which would be implemented to avoid or minimize impacts to resources or which are required pursuant to Federal, State, or local permits or approvals. This section also addresses mitigation required as a result of unavoidable impacts to resources.

7.1 Floodplains

The activities to remove two existing structures within the floodplains of Mud Lick Creek and Williams Branch will be authorized under the KDOW's Development in a Floodplain General Permit (Permit Number: KY FPGP, AI No.: 35050), in accordance with the requirements of 401 KAR 4:060. The Floodplain General Permit authorizes development and placement of utility poles as an eligible activity that shall be granted automatic coverage because this type of activity does not have the potential to change the Base Flood Elevation and has minimal flood risk potential.

7.2 Jurisdictional Waters of the U.S.

The proposed rebuild was designed to avoid placement of structures in waters of the U.S., and EKPC is committed to avoiding impacts within the larger perennial streams and wetlands crossed by the transmission line (i.e., crossings or operating equipment in streams). Therefore, EKPC does not anticipate that the proposed action will result in the permanent loss of waters or significant impacts to perennial streams. The project will require access-related and/or construction activities adjacent to wetlands; however, EKPC is committed to only conducting construction activities within the proximity of these wetlands during periods of dry weather and/or utilizing protective

measures (e.g., construction matting or an alternate Best Management Practice) to minimize temporary wetland impacts during construction.

Reconstruction of the transmission line will likely require temporary construction access road crossings of intermittent and ephemeral streams in the area of influence. The NWP 57 general conditions allow for stream crossings, provided the total loss of waters of the U.S. does not exceed 0.5 acre for a single and complete project. Appropriate measures will be taken to maintain normal downstream flows at each stream crossing, and materials will be placed in a manner so as not to be eroded by expected high flows. All temporary stream crossings will be removed in their entirety, and the stream will be returned to pre-construction elevations and revegetated along the banks following construction. Access roads required for maintenance activities and constructed above pre-construction contours and elevations in waters of the U.S. would be properly culverted to maintain surface flows.

7.4 Indiana and Northern Long-Eared Bats

EKPC will minimize effects to the Indiana and northern long-eared bats by limiting tree clearing associated with the proposed action to the unoccupied period (October 15 to March 31) for these species. EKPC has also mitigated for unavoidable adverse effects to the Indiana bat from the removal of suitable habitat by contributing to the IBCF, as discussed in Section 6.6.2.

7.5 Water Quality

EKPC will minimize impacts to water quality by applying for and following the requirements of the Kentucky Pollutant Discharge Elimination System General Permit for Stormwater Discharges Associated with Construction Activities (KYR10) from the KDOW. As required by the permit, EKPC will submit an electronic Notice of Intent to the KDOW and prepare and implement a SWPPP prior to the start of construction, as discussed in Section 6.10.2.1. EKPC is will also implement enhanced BMPs within the critical areas of sensitive stream crossings. After construction activities have ended, all disturbed areas will be seeded and covered and all BMPs will be removed once the areas are stabilized and revegetated. EKPC will then send a Notice of Termination to the KDOW to end coverage of the general permit.

8.0 CONCLUSION

EKPC has applied to RUS to rebuild, operate, and maintain the Boone – Williamstown 69 kV Transmission Line in Boone, Gallatin, and Grant Counties, Kentucky. RUS will use this EA to determine whether or not to grant financing assistance for the proposed action. This section of line is roughly 28.4 miles in length and has been in service since its construction in 1957 and 1958. Due to reliability concerns associated with the deteriorating physical condition of the existing facility, EKPC has identified the need to rebuild this line section as the most cost effective long-term solution. The proposed project will consist of removing the existing transmission line and associated wood pole structures and constructing a new line in its place within the existing 100-foot-wide ROW easement. Based on the engineering design, 212 steel-pole structures with an approximate above ground height of 72 feet and a typical span length of 715 feet will replace the existing 263 wood-pole structures that have an approximate above ground height of 60 feet and a typical span length of 575 feet.

EKPC analyzed two alternatives for the proposed rebuild project, including a "No Action Alternative" and a "Proposed Action Alternative – Rebuild, Operate, and Maintain Electrical Transmission Line". Potential impacts for each alternative were evaluated through an assessment of the extent and quality of on-site resources and the potential environmental consequences that could occur to these resources as a result of each action. The evaluation included environmental issues identified under NEPA and those environmental factors singled out for special attention under other applicable Federal laws, statutes, and E.O.s. Based on the analysis results, EKPC identified the "Proposed Action – Rebuild, Operate, and Maintain Electrical Transmission Line" as the least environmentally damaging practicable alternative.

LITERATURE CITED

Boone County Planning Commission. 2021. Current Zoning Map. Available at https://secure.boonecountygis.com/JavaScript/BooneCounty/?config=config-zoning.json [Accessed October 2021].

Cotton, Claudia, David Taylor, and Kevin Beck. 2020. United States Department of Agriculture, Forest Service, Daniel Boone National Forest. Soil and Water Protection Measures for Timber Sales. September 2020. 5 pp.

Federal Emergency Management Agency. 2021. FEMA Flood Map Service Center https://msc.fema.gov/portal/home.

Kentucky Division of Air Quality. 2020. 2020 Kentucky Ambient Air Monitoring Network Plan. Commonwealth of Kentucky Energy and Environment Cabinet, Department for Environmental Protection, Division of Air Quality. Frankfort, Kentucky.

Kentucky Division of Water. 2021. Kentucky Watershed Viewer. Commonwealth of Kentucky Energy and Environment Cabinet, Department for Environmental Protection, Division of Water. Frankfort, Kentucky.

Kentucky Geological Survey, University of Kentucky. 2020. Kentucky Geologic Map Information Service. Available at https://kgs.uky.edu/kgsmap/kgsgeoserver/viewer.asp. [Accessed September 2021].

Kentucky Transportation Cabinet. Active Highway Plan Map. Interactive map of the approved Six-Year Highway Plan. Available at https://maps.kytc.ky.gov/activehighwayplan/ [Accessed September 2021].

Moulder, John E., Ph.D., Professor of Radiation Oncology. 2005. *"Electromagnetic Fields and Human Health."* Medical College of Wisconsin.

National Safety Council. 2002. *"Understanding Radiation, Sources of Nonionizing Radiation."*

Sanitation District No. 1 of Northern Kentucky. 2021. Online Map https://sd1.maps.arcgis.com/apps/webappviewer/index.html?id=7c6c5e311f294cd09ff61c52c3762d2d [Accessed October 2021].

Smath, Richard A., Bart Davidson, Daniel I. Carey, John D. Kiefer, and Ken Daniels. 2005a. Generalized Geologic Map for Land-Use Planning: Boone County, Kentucky. Kentucky Geological Survey and University of Kentucky. Map and Chart 119, Series XII.

Smath, Richard A., Bart Davidson, Daniel I. Carey, John D. Kiefer, and Ken Daniels. 2005b. Generalized Geologic Map for Land-Use Planning: Gallatin County, Kentucky. Kentucky Geological Survey and University of Kentucky. Map and Chart 114, Series XII.

Smath, Richard A., Daniel I. Carey, and Preston Lacy. 2006. Generalized Geologic Map for Land-Use Planning: Grant County, Kentucky. Kentucky Geological Survey and University of Kentucky. Map and Chart 123, Series XII.

United States Census Bureau. 2021. Quick Facts: Kentucky. https://www.census.gov/quickfacts/fact/table/KY/PST045219. [Accessed September 2021.]

United States Department of Agriculture, Forest Service. 1989. Final Environmental Impact Statement for the Vegetation Management in the Appalachian Mountains.

United States Department of Agriculture, Forest Service. 1997. Final Environmental Impact Statement, Vegetation Management on Electric Utility Rights-of-Way, Allegheny National Forest.

United States Department of Agricultural, Natural Resources Conservation Service. 2021. Web Soil Survey at https://websoilsurvey.nrcs.usda.gov/app/ [Accessed September 2021.]

United States Department of the Interior, Fish and Wildlife Service. 2021. National Wetland Inventory Mapper at https://www.fws.gov/wetlands/data/mapper.html. [Accessed September 2021.]

United States Environmental Protection Agency. 2021. Air Data Air Quality Monitors Interactive Map at https://epa.maps.arcgis.com/apps/webappviewer/index.html?id=5f239fd3e72f424f98ef3d5def547eb5&extent=-146.2334%2c13.1913%2c-46.3896%2c56.5319. [Accessed September 2021.]

World Health Organization. 2009. *"What are Electromagnetic Fields."*

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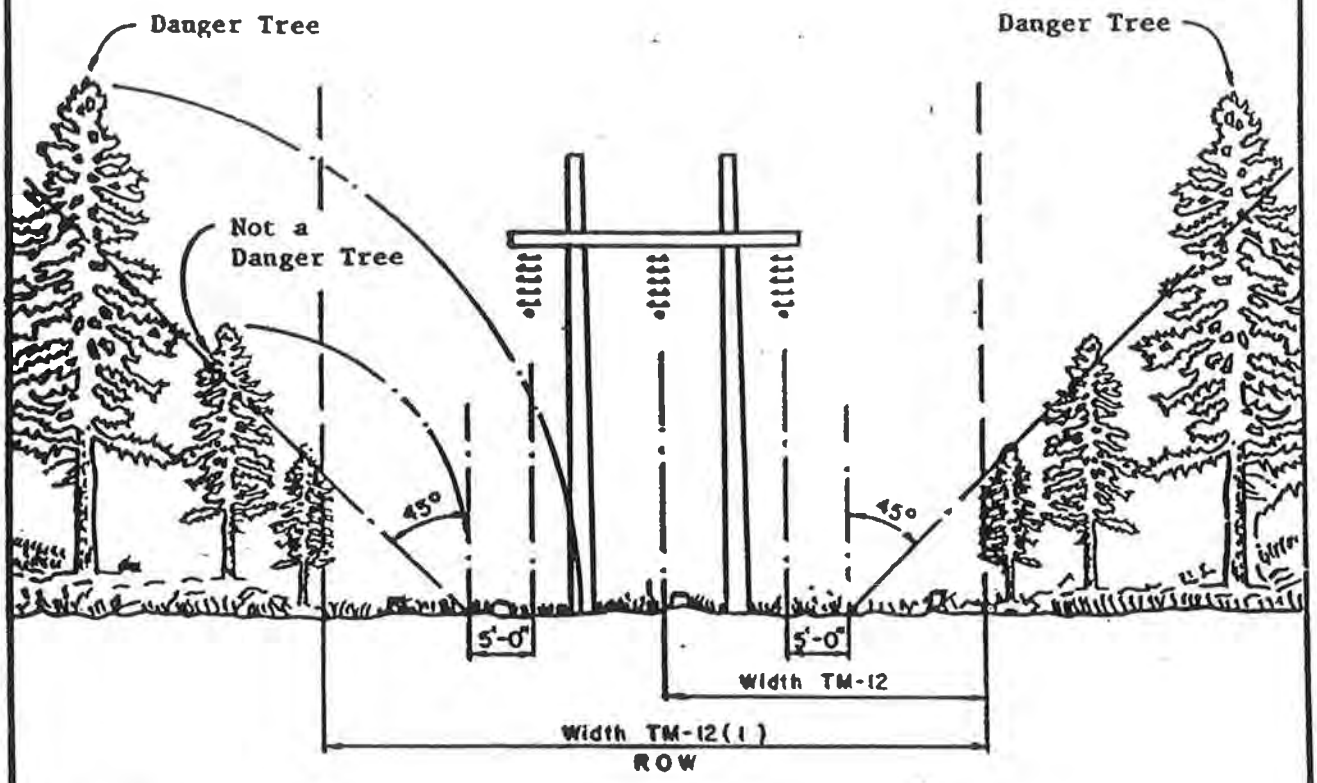
Exhibit A. ROW Clearing Guide



NOTES:

1. Engineer will designate all danger trees which shall be removed or topped at option of contractor. In approximately level terrain, trees which would reach within 5 feet of a point underneath the outside conductor in falling are examples of danger trees.

2. As directed by the engineer, portions of the right-of-way (ROW) must be cut so that stumps will not prevent the passage of tractor and trucks along the ROW.

3. The unit for clearing one-half of the ROW is "WIDTH TM-12."

4. The unit for clearing the full ROW is "WIDTH TM-12(1)."

5. The unit for clearing danger trees is "TM-13."

			TRANSMISSION ROW CLEARING		
			RIGHT-OF-WAY CLEARING GUIDE		
NO.	REVISION	DATE	Aug., 1986		TM-12, -12(1), -13

Exhibit B. Project Maps

1. Overview Map
2. Topographic Maps 1 – 4
3. Aerial Maps 1 – 9
4. Cultural Resource APE Topo Maps 1 – 4
5. Floodplain Maps 1 – 2
6. Water/Wetland Location Maps 1 – 37
7. Suitable Bat Habitat Aerial Maps 1 – 7

W. R. Smoot #1
W. R. Smoot #2
Boone Distribution
Boone Transmission
Webster Road
Turkey Foot
Richardson #2
Richardson #1
Bristow #2
Bristow #1
Turkey Foot Jct.
MBUSA
Duro #2
Duro #1
Bank Lick
Richwood
Stanley Parker
Big Bone
Bavarian Landfill Generator
Bavarian Plant
Sterling
Munk
Oakley Noel
Munk Junction
Williamstown

Doe Run Lake
Golf Courses of Kenton County
Union
Independence
Triple Crown Country Club
Gunpowder Creek
Big Bone Creek
Mud Lick Creek
Big Bone Lick State Park
EAST BOTTOM
KENTUCKY
DIANA
MEXICO BOTTOM
Patriot
Ohio River
STEELE BOTTOM
KENTUCKY
DIANA
Verona
BOONE
GALLATIN
GRANT
Big South Fork
Ten Mile Creek
Eagle Creek Country Club
Eagle Creek
Glencoe
McCoys Fork
North Fork Grassy Creek
North Fork Middle Fork Grassy Creek
Middle Fork Grassy Creek
Crittenden
PENDLETON
GRANT
Cruises Creek
Jacks Lick
Dry Ridge
929 ft
Jonesville
Williamstown
500 ft
36
75
71
42
127
25
27
9
50

Boone - Williamstown 69 kV Transmission Line Rebuild Project

Overview Map

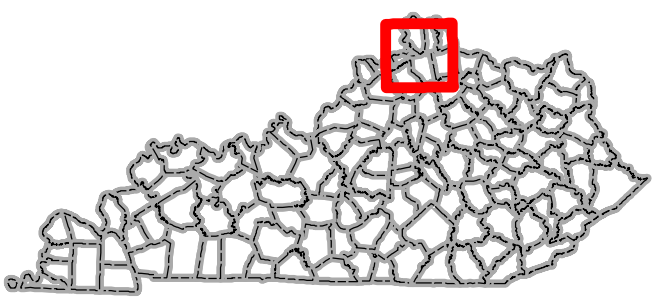
N

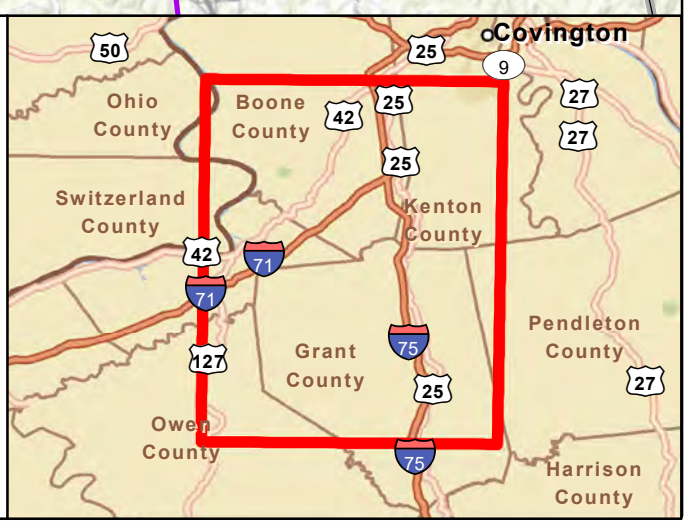
Proposed Line Rebuild

Existing Transmission Lines

EKPC Substations

0 1.5 3 6 Miles





Boone - Williamstown 69 kV Transmission Line Rebuild Project

Topo Map 1 of 4

N

Proposed Line Rebuild

Existing Transmission Lines

Existing EKPC Substations

0 0.3 0.6 1.2 Miles

Boone Distribution Substation

Cem

Substation

LONG BRANCH

Long

ROAD

GUNPOWDER

ERNST CAMP ROAD

Branch

Camp Michael

Fork

BDY

INDEF

Hueys Corners

Union

BM 831

Cem

Union Ch

Run

Riddles

UNION ROAD

BONE

Creek

BIG BONE CHURCH ROAD

RICE PIKE

BM 820 Big Bone Ch

Big Bone

Dark Hollow

New Haven Sch

Howlett Cem

Gum Branch

BIG BONE

Beaver Creek

Roadside Park

Substa

Boone - Williamstown 69 kV Transmission Line Rebuild Project

Topo Map 2 of 4

N

Proposed Line Rebuild

Existing Transmission Lines

Existing EKPC Substations

0 0.3 0.6 1.2 Miles

Big Bone Substa

Baker Cem

BIG BONE LICK STATE PARK Campground

WT

BM 491

BM 517

BM 549

BM 758

Big Bone

Branch

Beaverlick Ch

CREEK

ROAD

Buzzard Branch

Mud Lick

Hume

Creek

Cem

Cem

INTERCHANGE 72

RYAN ROAD

POOLE ROAD

BM 821

SOUTH FORK CH RD

Little South Fork

BOONE CO GALLATIN CO

BAKER

BROWN

PORTER ROAD

NASHVILLE

McPherson Branch

ALLPHIN

Ryle

BM 598

St Patrick Cem

Boone - Williamstown 69 kV Transmission Line Rebuild Project

Topo Map 3 of 4

N

Proposed Line Rebuild

Existing Transmission Lines

Existing EKPC Substations

0 0.3 0.6 1.2 Miles

Munk

Oakley Noel

Boone - Williamstown 69 kV Transmission Line Rebuild Project

Topo Map 4 of 4

N

Proposed Line Rebuild

Existing Transmission Lines

Existing EKPC Substations

0 0.35 0.7 1.4 Miles

Munk Junction

Williamstown

Boone - Williamstown 69 kV Transmission Line Rebuild Project

Aerial Map 1 of 9

N

- Proposed Line Rebuild
- Proposed Structure Locations
- Existing Structure Locations
- Existing Transmission Lines
- Existing EKPC Substations

0 0.15 0.3 0.6 Miles

Boone Distribution

Boone Transmission

Boone County Arboretum Children's Garden

Camp Ernst Rd

Longbranch Rd

Gordon Blvd

Long Branch

Hathaway Rd

Riddles Run

Big Bone Creek

Deerview Dr

Shamrock Ave

Ballyshannon Dr

Loch Dr

Parnell St

Spruce Ln

Turner Ln

Canoe Dr

Big Bone Rd

Taymann Dr

Timbercreek Dr

Obynne Ln

Glenreagh Ln

Bonaghan Ave

Eden Ct

Barrons Ct

Connelly Dr

bing

Boone - Williamstown 69 kV Transmission Line Rebuild Project

Aerial Map 2 of 9

N

- Proposed Line Rebuild
- Proposed Structure Locations
- Existing Structure Locations
- Existing Transmission Lines
- Existing EKPC Substations

0 0.15 0.3 0.6 Miles

Boone - Williamstown 69 kV Transmission Line Rebuild Project

Aerial Map 3 of 9

N

- Proposed Line Rebuild
- Proposed Structure Locations
- Existing Structure Locations
- Existing Transmission Lines
- Existing EKPC Substations

0 0.15 0.3 0.6 Miles

Boone - Williamstown 69 kV Transmission Line Rebuild Project

Aerial Map 4 of 9

N

- Proposed Line Rebuild
- Proposed Structure Locations
- Existing Structure Locations
- Existing Transmission Lines
- Existing EKPC Substations

0 0.15 0.3 0.6 Miles

Boone - Williamstown 69 kV Transmission Line Rebuild Project

Aerial Map 5 of 9

N

- Proposed Line Rebuild
- Proposed Structure Locations
- Existing Structure Locations
- Existing Transmission Lines
- Existing EKPC Substations

0 0.15 0.3 0.6 Miles

Big South Fork
McPherson Branch
Walnut Lick Rd
Rudd Ln
Baker Rd
Ryle Rd
Munk
KY Highway 16
Little Church Hill Rd
Concord Rd
Chapman Cemetery
Munk Spur Rd
Napoleon Zion Station Rd
Ten Mile Creek

Boone - Williamstown 69 kV Transmission Line Rebuild Project

Aerial Map 6 of 9

N

- Proposed Line Rebuild
- Proposed Structure Locations
- Existing Structure Locations
- Existing Transmission Lines
- Existing EKPC Substations

0 0.15 0.3 0.6 Miles

Ten Mile Creek
Perkins Rd
Napoleon Zion Station Rd
Harrison Ridge Rd
Sugar Creek Rd
Frederica Rd
Little Tenmile Creek
Little Ten Mile Creek
Elliston Mount Zion Rd
Kendall Rd
Jackson Delph Rd
Freedom Rd
Oakley Noel

bing

Boone - Williamstown 69 kV Transmission Line Rebuild Project

Aerial Map 7 of 9

N

- Proposed Line Rebuild
- Proposed Structure Locations
- Existing Structure Locations
- Existing Transmission Lines
- Existing EKPC Substations

0 0.15 0.3 0.6 Miles

Boone - Williamstown 69 kV Transmission Line Rebuild Project

Aerial Map 8 of 9

N

- Proposed Line Rebuild
- Proposed Structure Locations
- Existing Structure Locations
- Existing Transmission Lines
- Existing EKPC Substations

0 0.15 0.3 0.6 Miles

Munk Junction

Boone - Williamstown 69 kV Transmission Line Rebuild Project

Aerial Map 9 of 9

N

- Proposed Line Rebuild
- Proposed Structure Locations
- Existing Structure Locations
- Existing Transmission Lines
- Existing EKPC Substations

0 0.15 0.3 0.6 Miles

Williamstown

Clay Lick

Baton Rouge Rd

Williams Branch

Clarks Creek

Barnes Rd

Barnes Cemetery

Clay Cemetery

Steammill Branch

Panther Run

Stewartsville Rd

KY Highway 36 W

bing

Boone - Williamstown 69 kV Transmission Line Rebuild Project

Cultural Resource APEs Topo Map 1 of 4

N

- Archaeology APE_NEW
- Cultural Historic APE_NEW
- Previously Surveyed
- Existing Transmission Lines
- Existing EKPC Substations

0 0.3 0.6 1.2 Miles

Boone Distribution Substation

Cem

Camp Michael

Hueys Corners

Union

Union Ch

Riddles Run

Big Bone Creek

Dark Hollow

New Haven Sch

Howlett Cem

Roadside Park

Big Bone Ch

GUNPOWDER

LONG BRANCH

ERNST CAMP

Branch

INDEF BDY

Fork

BIG BONE CHURCH ROAD

UNION ROAD

RICE PIKE

PIPELINES

Boone - Williamstown 69 kV Transmission Line Rebuild Project

Cultural Resource APEs Topo Map 2 of 4

N

- Archaeology APE_NEW
- Cultural Historic APE_NEW
- Previously Surveyed
- Existing Transmission Lines
- Existing EKPC Substations

0 0.3 0.6 1.2 Miles

Big Bone Substa
Baker Cem
BIG BONE LICK STATE PARK
Campground
WT
Big Bone
BM 491
BM 517
BM 549
BM 768
Beaverlick Ch
Buzzard Branch Mud Lick
Hume
Creek
Carr Cem
Cem
INTERCHANGE 72
South Fork Little Gallatin Co
Boone Co
Baker
Brown
Allphin
Porter
Poole
Ryan
Road
McPherson

Boone - Williamstown 69 kV Transmission Line Rebuild Project

Cultural Resource APEs Topo Map 3 of 4

N

- Archaeology APE_NEW
- Cultural Historic APE_NEW
- Previously Surveyed
- Existing Transmission Lines
- Existing EKPC Substations

0 0.3 0.6 1.2 Miles

Munk

Oakley Noel

Boone - Williamstown 69 kV Transmission Line Rebuild Project

Cultural Resource APEs Topo Map 4 of 4

N

- Archaeology APE_NEW
- Cultural Historic APE_NEW
- Previously Surveyed
- Existing Transmission Lines
- Existing EKPC Substations

0 0.35 0.7 1.4 Miles

Munk Junction

Williamstown

Boone - Williamstown
69 kV Transmission Line Rebuild
Floodplain Map 1 of 2

Zone A Floodplain (100-Year)

Proposed Line Rebuild

Proposed Structure Locations

Existing Structure Locations

Existing Transmission Lines

N

0 0.5 1 2 Miles

Boone Distribution

Boone Transmission

Big Bone

Richwood

Sterling

Union

Verona

Big Bone Creek

Mud Lick Creek

Boone - Williamstown
69 kV Transmission Line Rebuild
Floodplain Map 2 of 2

Zone A Floodplain (100-Year)

Proposed Line Rebuild

Proposed Structure Locations

Existing Structure Locations

Existing Transmission Lines

N

0 0.5 1 2 Miles

Tenmile Creek

Little Tenmile Creek

Arnolds Creek

Clarks Creek

Williams Branch

Clarks Creek

Munk

Oakley Noel

Munk Junction

Williamstown

Big South Fork

Concord Rd

Lebanon Rd

Crittenden

Crittenden-Mt Zion Rd

Napoleon-Zion Station Rd

Harrison Ridge Rd

Little Ten Mile Creek

Elliston Mt Zion Rd

Kendall Rd

Delphs Mill Rd

Mulligan Rd

Valandingham Rd

Sugar Creek Rd

Jonesville Rd

Taft Hwy

Smokey Rd

Chipman Ridge Rd

Baton Rouge Rd

Barnister Pike

Dixie Hwy

Norfolk Southern

Gardnersville Rd

Duncan Rd

Kittle Run

Eagle Creek Country Club

Claiborne Dr

Eagle Ridge Dr

Rusk Rd

Indian Hill Dr

Eagle Creek Dr

Flynn Rd

Hill Crest

Walnut Lick Rd

McPherson Branch

Porter Rd

North Fork Ten Mile Creek

Teal Dr

Warsaw Rd

Stafford Run

Fords Mill Rd

Jump Rd

Flat Creek Rd

Williams Branch

Steammill Branch

Bottlesnake Creek

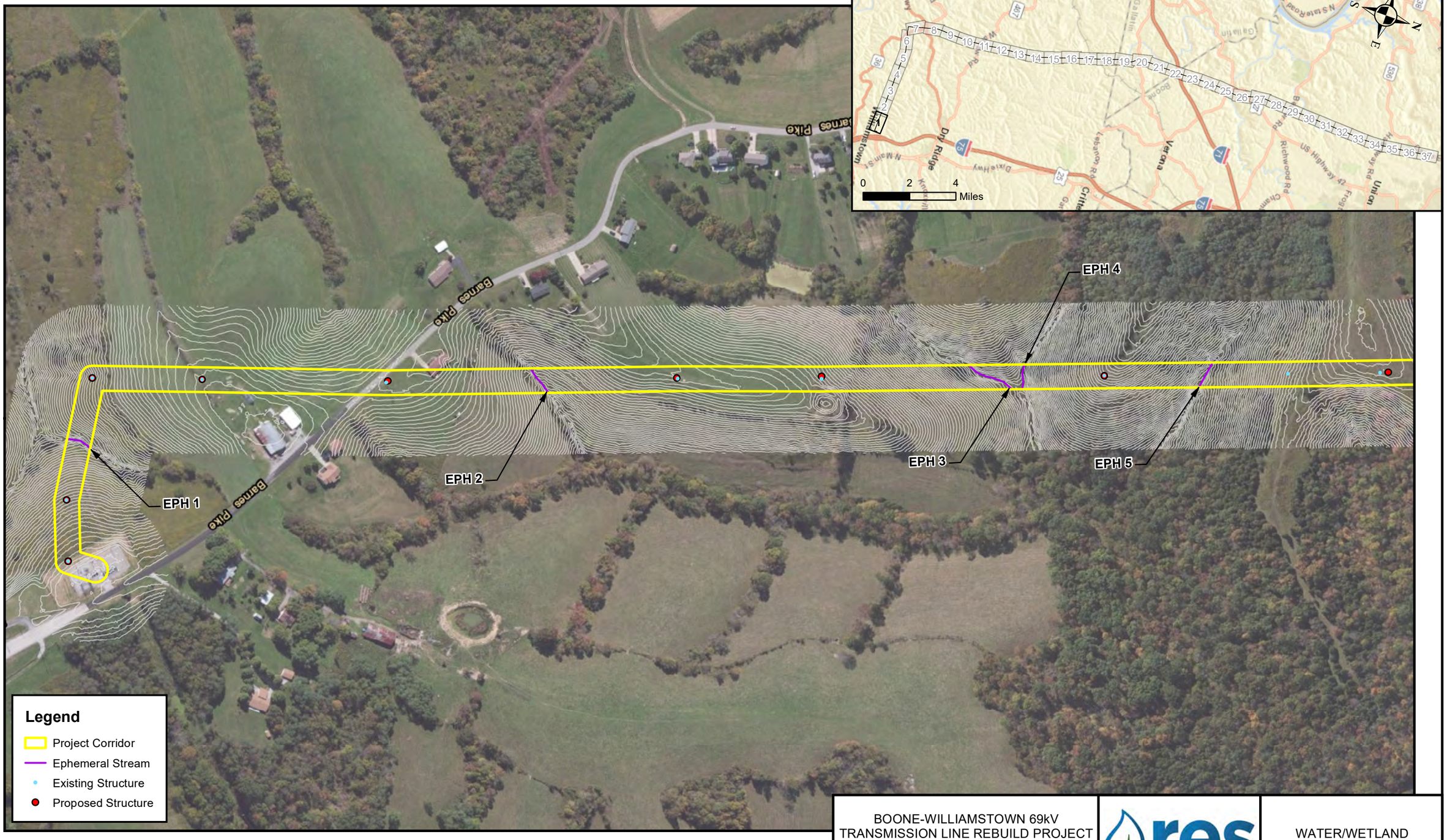
Mills Rd

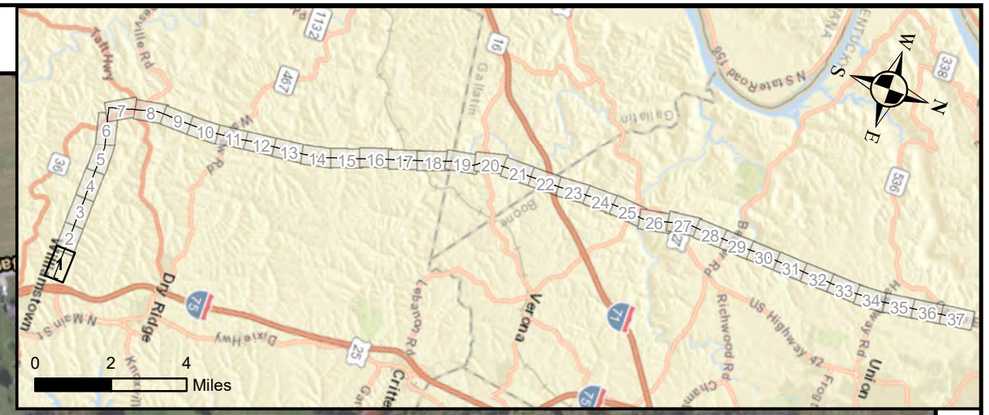
Goths Valley Rd

Owens Creek Rd

Rabbit Fork Rd

Source: Aerial - Esri and the GIS User Community (2019); Existing two foot contour topography generated from DEM.





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BOONE-WILLIAMSTOWN 69kV TRANSMISSION LINE REBUILD PROJECT
BOONE, GALLATIN, AND GRANT COUNTIES, KENTUCKY

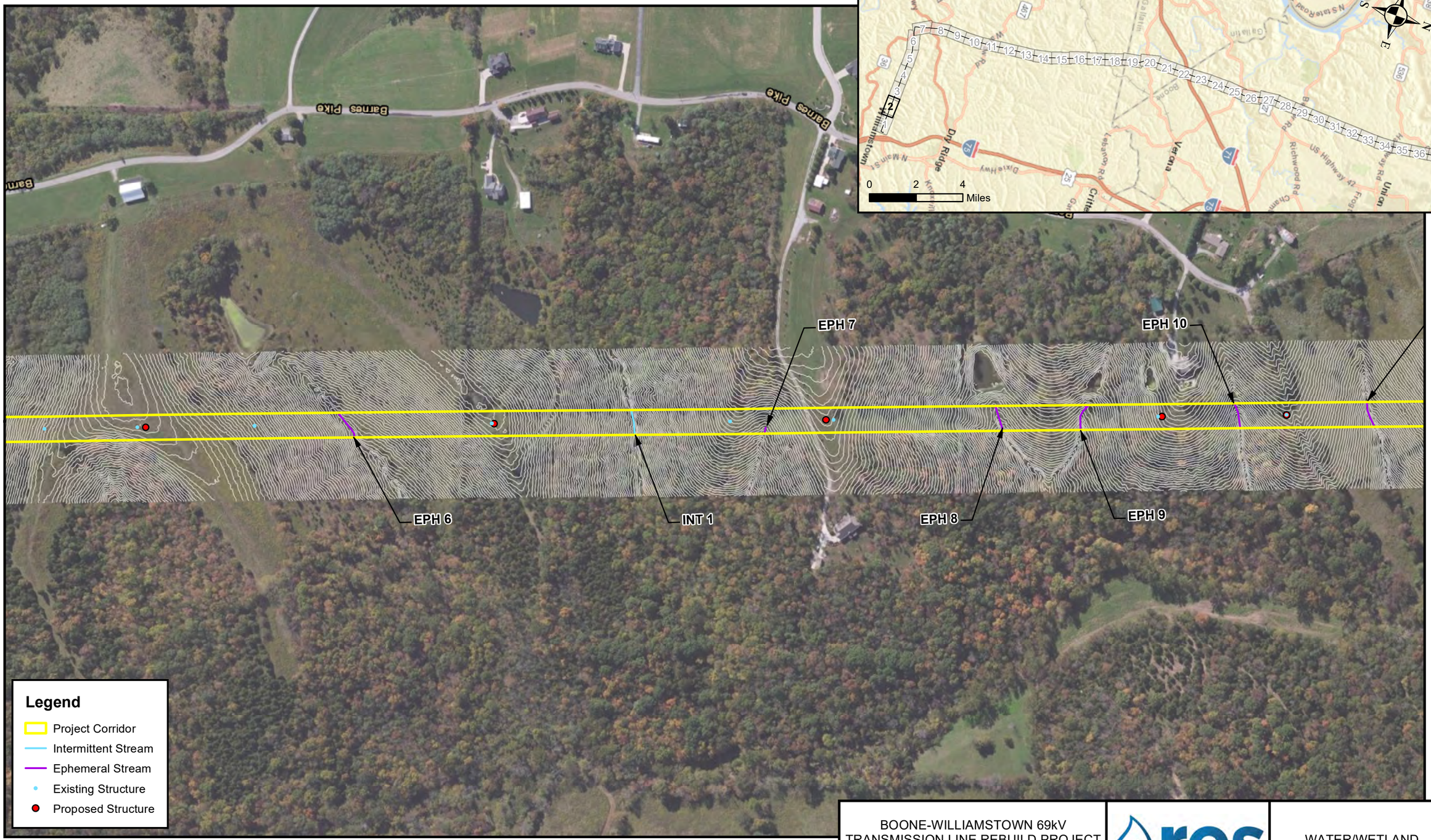
REVISED DATE:09-30-21 | DRAWN BY: EDB/ZTT/BJD

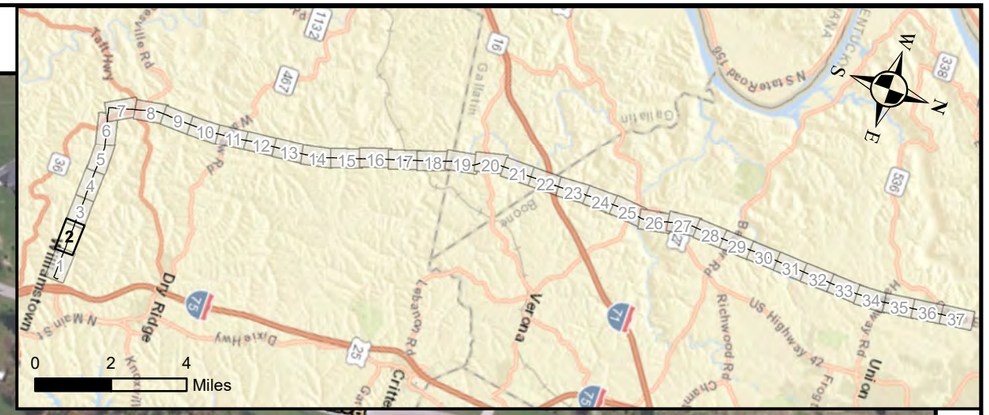
WATER/WETLAND LOCATION MAP

SHEET 1 of 37

R:\Resgis\entgis\Projects\104366_Boone_County_Williamstown_EA\MXD\Water Wetland Recon Map.mxd, 09-30-2021, ebowman

Source: Aerial - Esri and the GIS User Community (2019); Existing two foot contour topography generated from DEM.





Legend

- Project Corridor
- Intermittent Stream
- Ephemeral Stream
- Existing Structure
- Proposed Structure

0 150 300 600 900 1,200 Feet

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BOONE-WILLIAMSTOWN 69kV TRANSMISSION LINE REBUILD PROJECT
BOONE, GALLATIN, AND GRANT COUNTIES, KENTUCKY

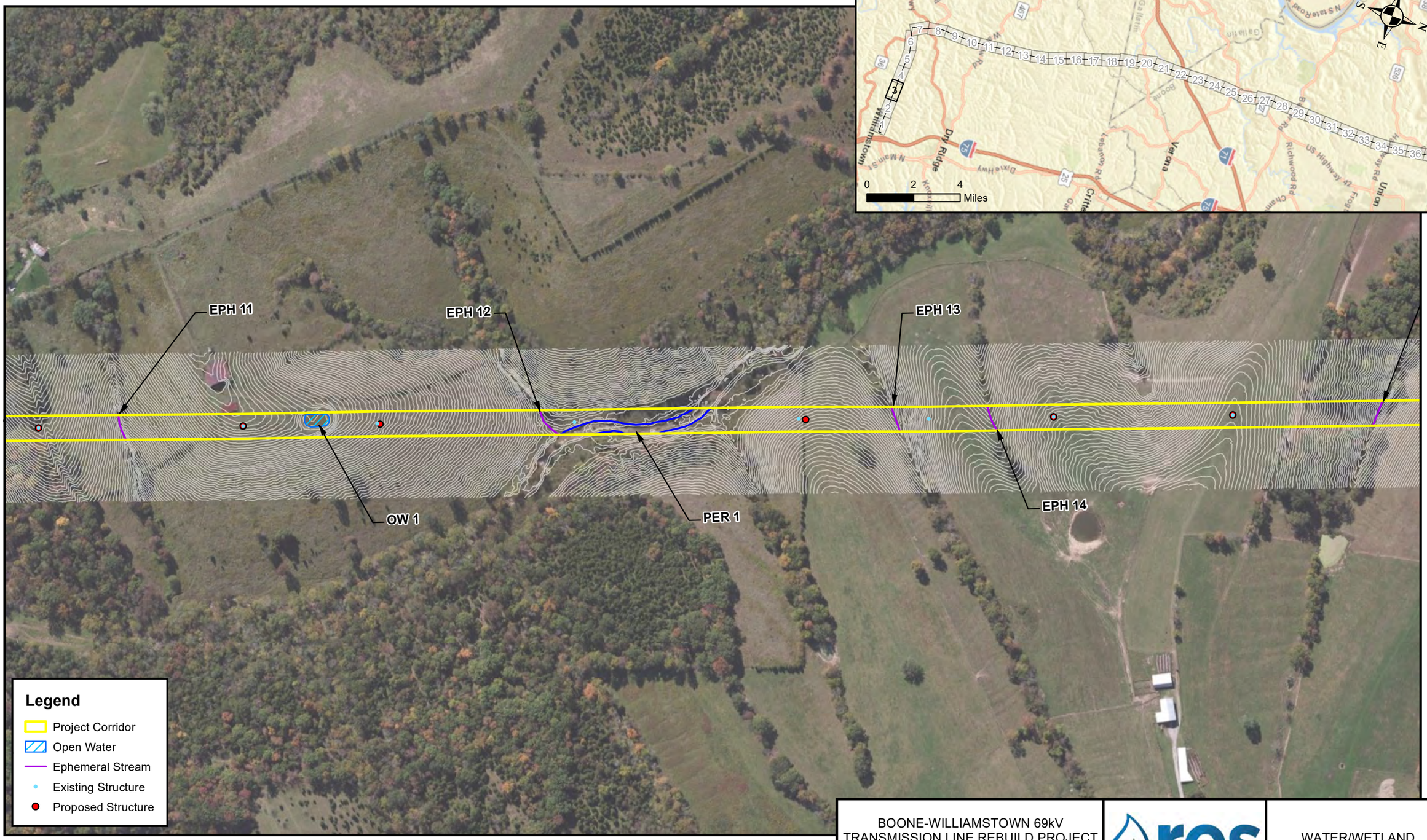
REVISED DATE:09-30-21 | DRAWN BY: EDB/ZTT/BJD

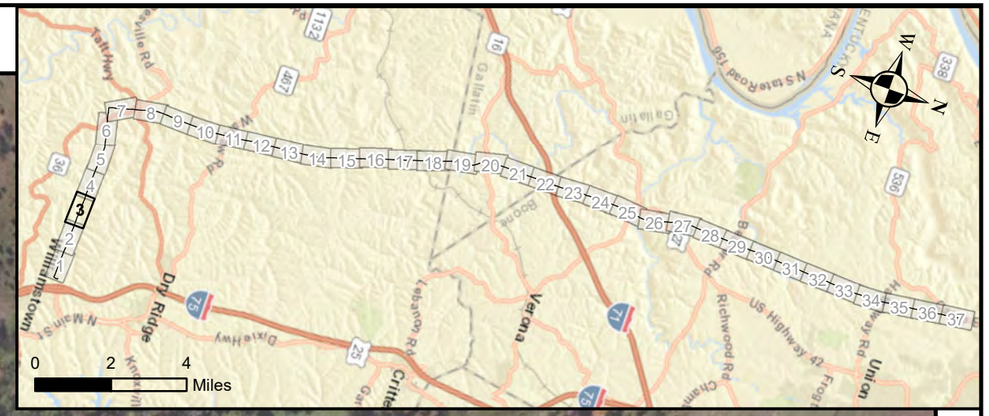
WATER/WETLAND LOCATION MAP

SHEET 2 of 37

R:\Resgis\entgis\Projects\104366_Boone_County_Williamstown_EA\MXD\Water Wetland Recon Map.mxd, 09-30-2021, ebowman

Source: Aerial - Esri and the GIS User Community (2019); Existing two foot contour topography generated from DEM.





Legend

- Project Corridor
- Open Water
- Ephemeral Stream
- Existing Structure
- Proposed Structure

0 150 300 600 900 1,200 Feet

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BOONE-WILLIAMSTOWN 69kV TRANSMISSION LINE REBUILD PROJECT
BOONE, GALLATIN, AND GRANT COUNTIES, KENTUCKY

REVISED DATE:09-30-21 | DRAWN BY: EDB/ZTT/BJD

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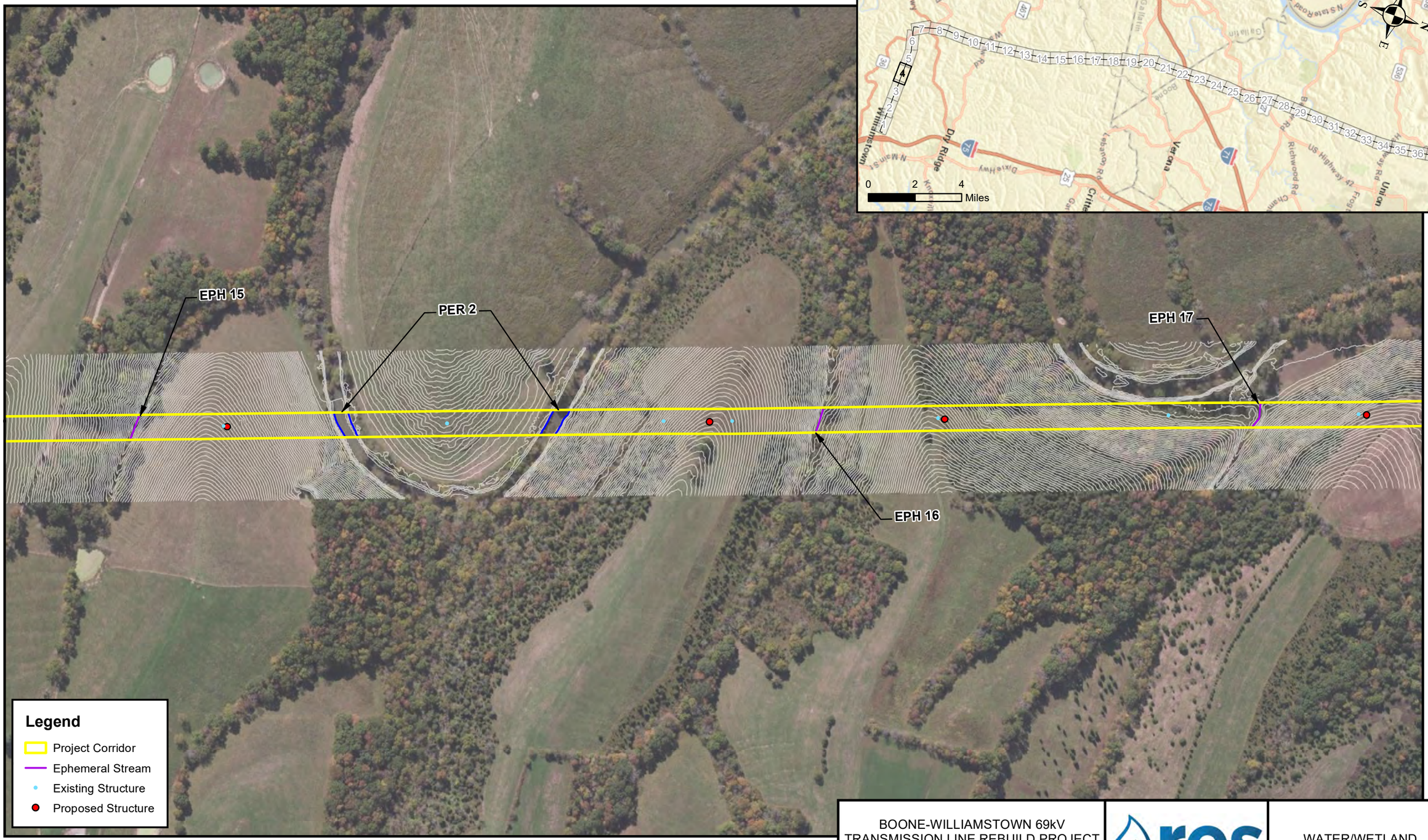
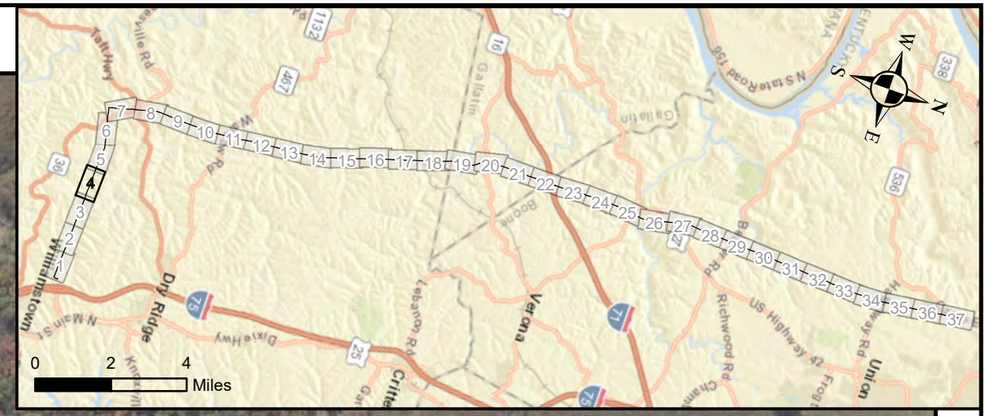
WATER/WETLAND LOCATION MAP

SHEET 3 of 37

R:\Resgis\entgis\Projects\104366_Boone_County_Williamstown_EA\MXD\Water Wetland Recon Map.mxd, 09-30-2021, ebowman

Source: Aerial - Esri and the GIS User Community (2019); Existing two foot contour topography generated from DEM.





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BOONE-WILLIAMSTOWN 69kV TRANSMISSION LINE REBUILD PROJECT
BOONE, GALLATIN, AND GRANT COUNTIES, KENTUCKY

REVISED DATE:09-30-21 | DRAWN BY: EDB/ZTT/BJD

WATER/WETLAND LOCATION MAP

SHEET 4 of 37

R:\Resgis\entgis\Projects\104366_Boone_County_Williamstown_EA\MXD\Water Wetland Recon Map.mxd, 09-30-2021, ebowman

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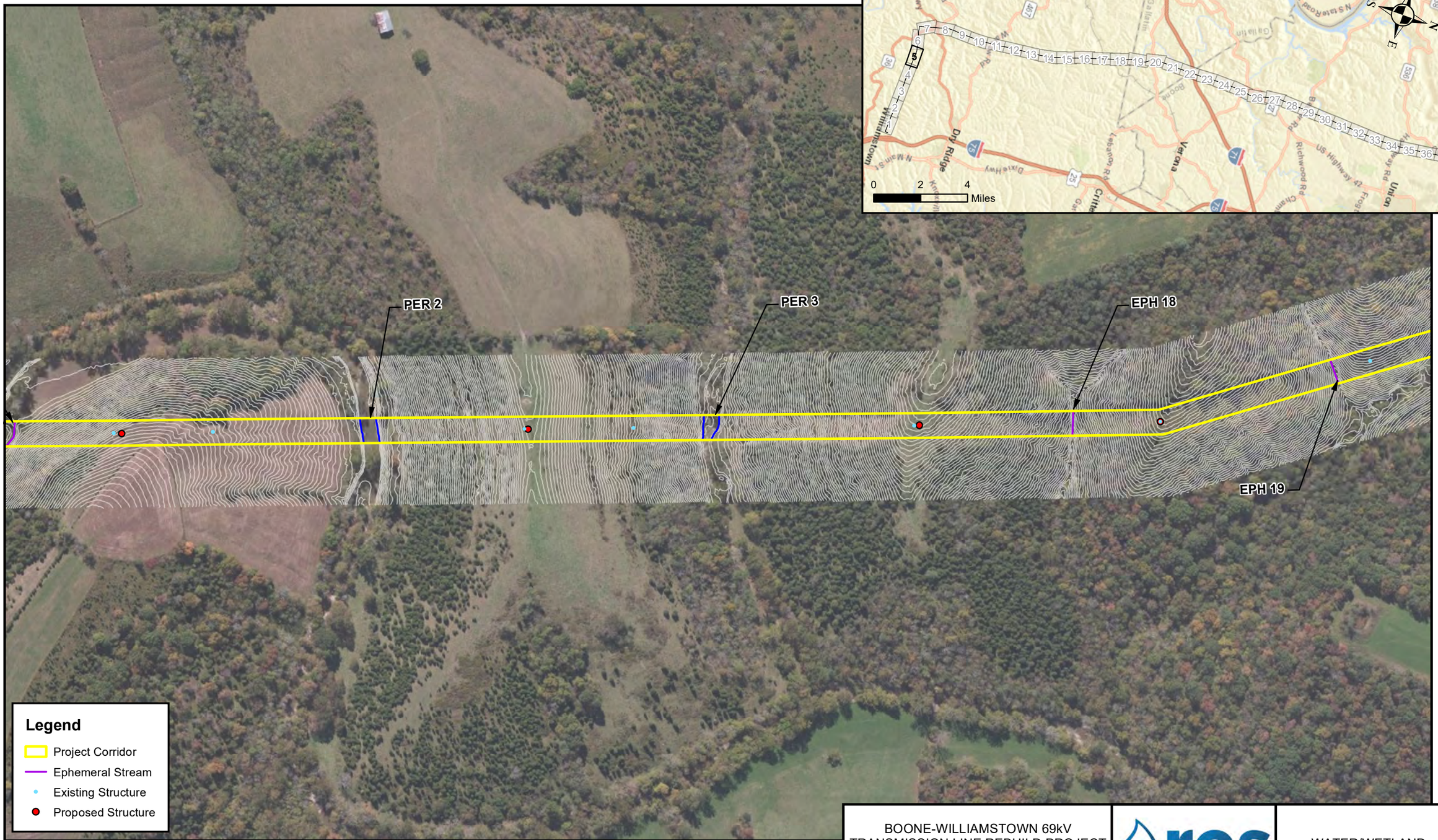

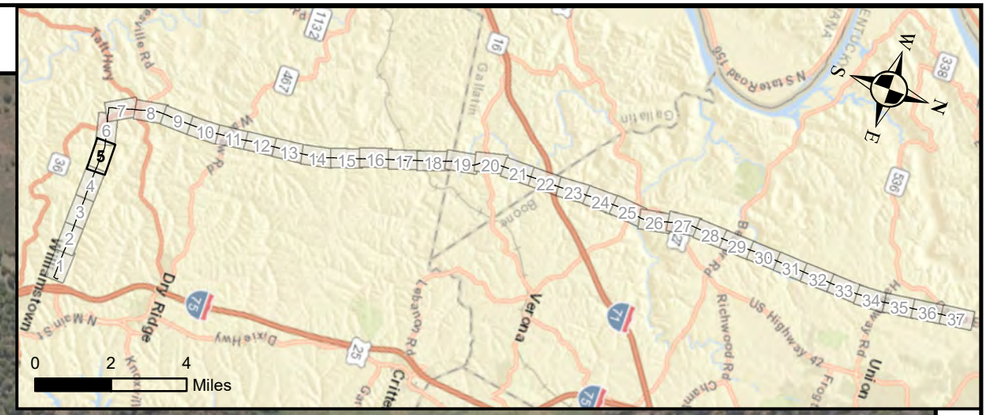

Legend

- Project Corridor
- Ephemeral Stream
- Existing Structure
- Proposed Structure

0 150 300 600 900 1,200 Feet

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BOONE-WILLIAMSTOWN 69kV TRANSMISSION LINE REBUILD PROJECT
BOONE, GALLATIN, AND GRANT COUNTIES, KENTUCKY

REVISED DATE:09-30-21 | DRAWN BY: EDB/ZTT/BJD

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WATER/WETLAND LOCATION MAP

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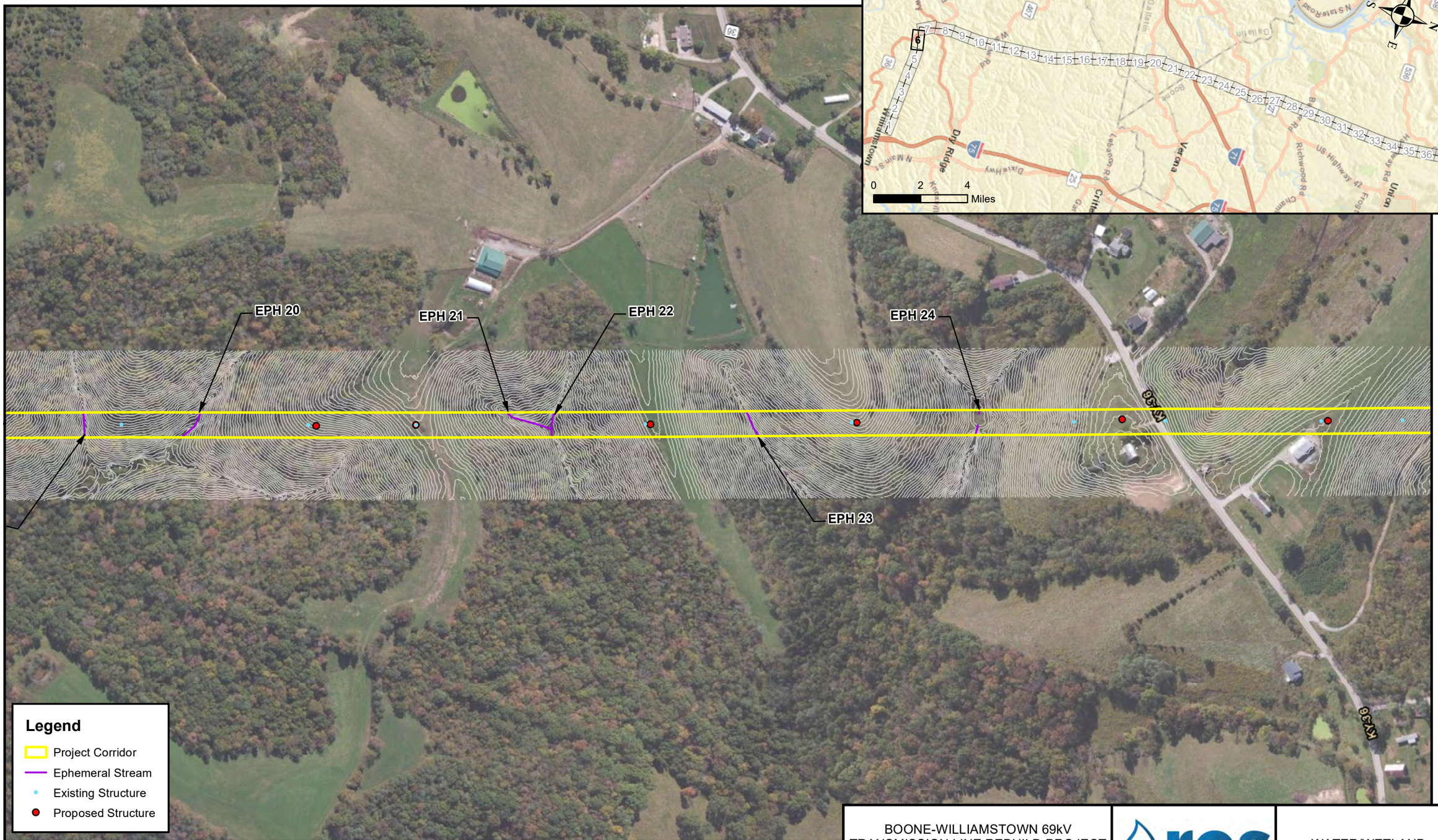

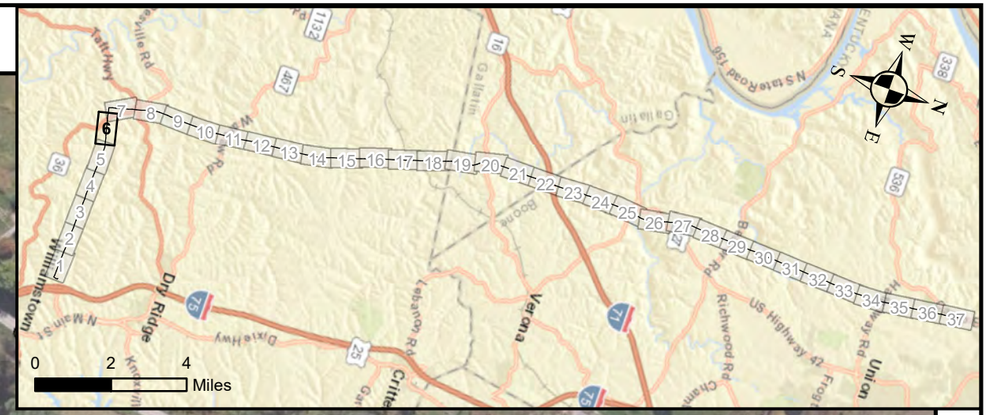

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BOONE-WILLIAMSTOWN 69kV TRANSMISSION LINE REBUILD PROJECT
BOONE, GALLATIN, AND GRANT COUNTIES, KENTUCKY

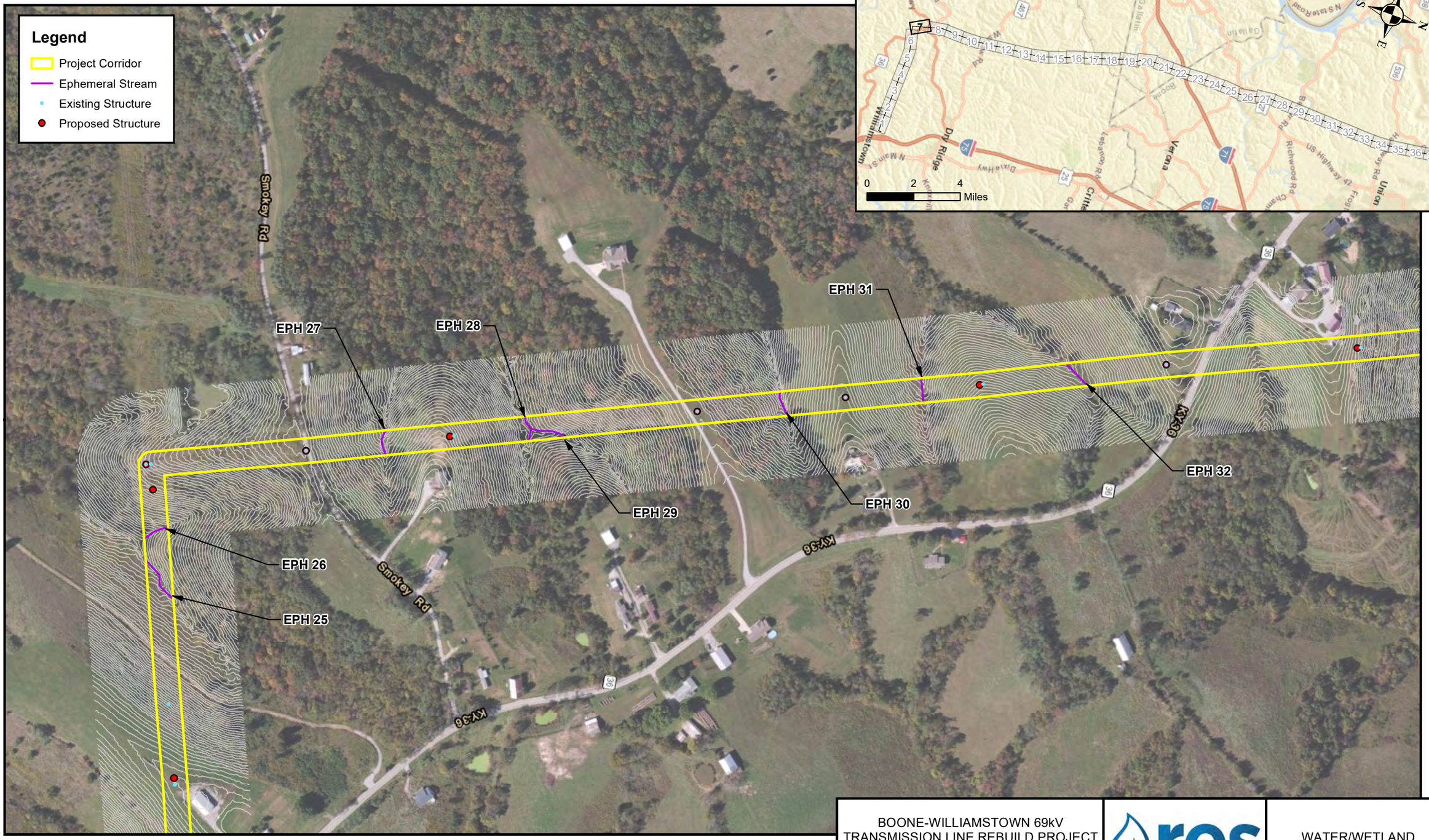
REVISED DATE:09-30-21 | DRAWN BY: EDB/ZTT/BJD

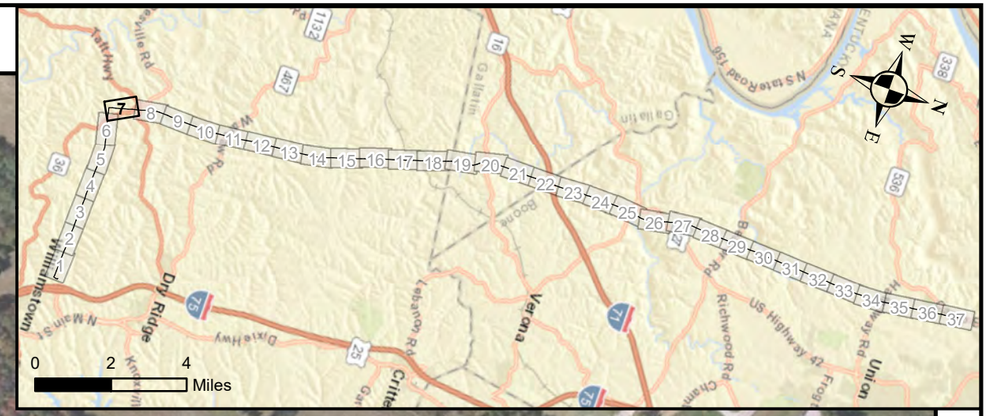
WATER/WETLAND LOCATION MAP

SHEET 6 of 37

R:\Resgis\entgis\Projects\104366_Boone_County_Williamstown_EA\MXD\Water Wetland Recon Map.mxd, 09-30-2021, ebowman

Source: Aerial - Esri and the GIS User Community (2019); Existing two foot contour topography generated from DEM.





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BOONE-WILLIAMSTOWN 69kV TRANSMISSION LINE REBUILD PROJECT
BOONE, GALLATIN, AND GRANT COUNTIES, KENTUCKY

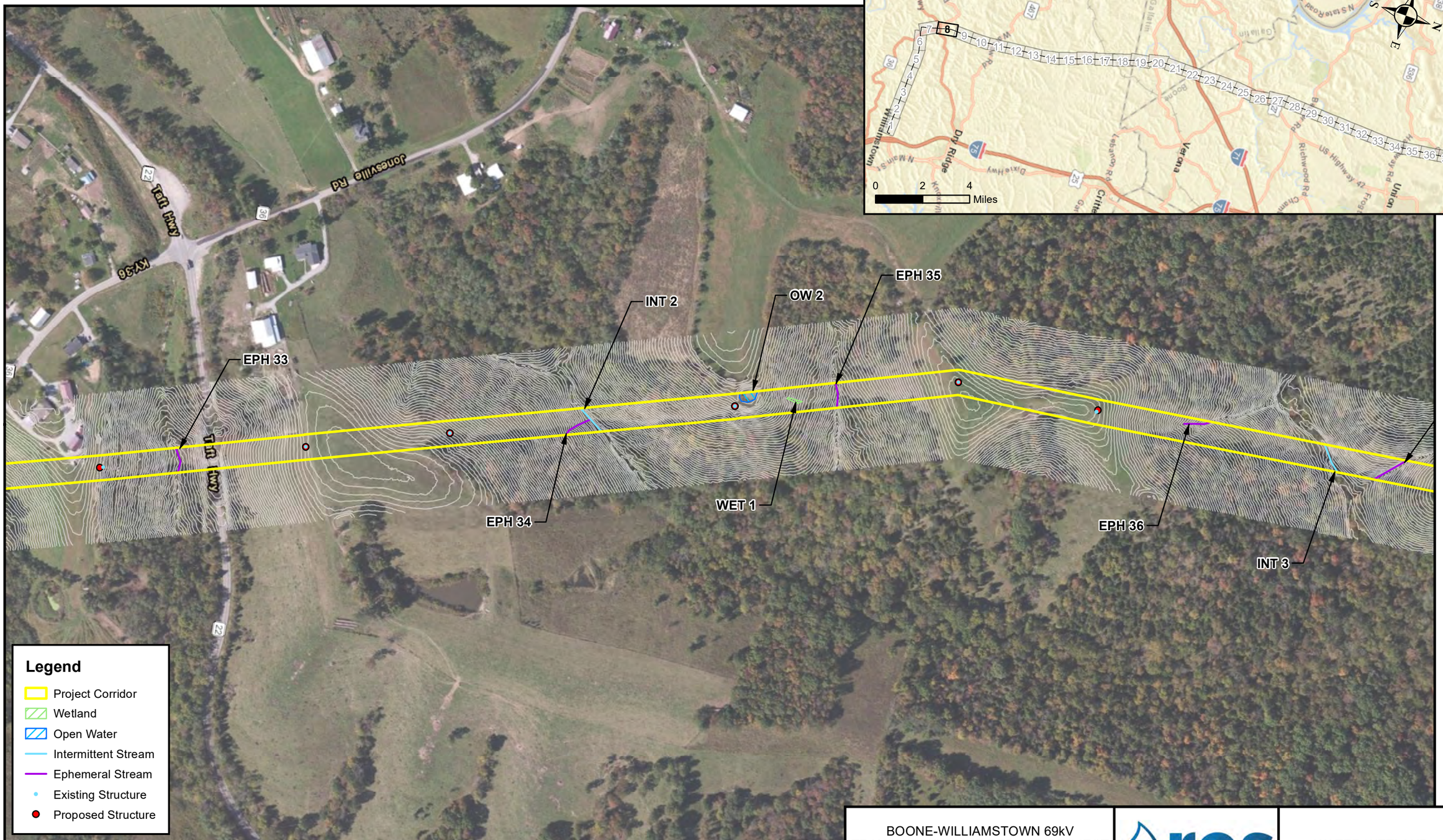
REVISED DATE:09-30-21 | DRAWN BY: EDB/ZTT/BJD

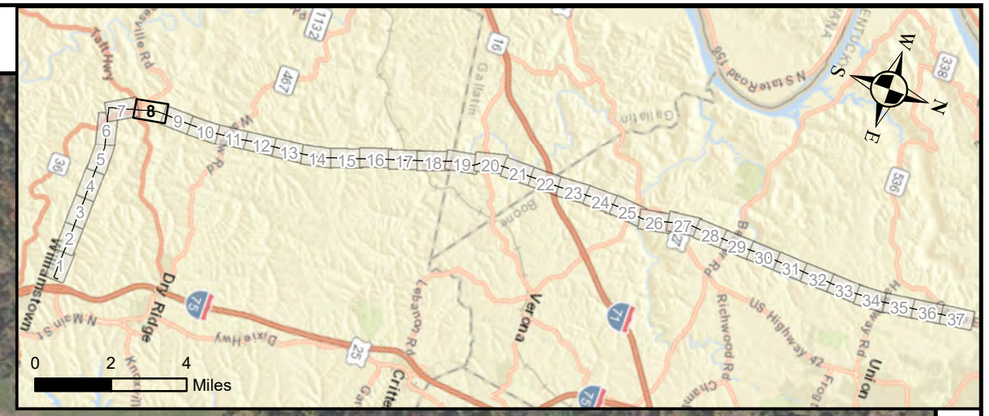
WATER/WETLAND LOCATION MAP

SHEET 7 of 37

R:\Resgis\entgis\Projects\104366_Boone_County_Williamstown_EA\MXD\Water Wetland Recon Map.mxd, 09-30-2021, ebowman

Source: Aerial - Esri and the GIS User Community (2019); Existing two foot contour topography generated from DEM.





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BOONE-WILLIAMSTOWN 69kV TRANSMISSION LINE REBUILD PROJECT
BOONE, GALLATIN, AND GRANT COUNTIES, KENTUCKY

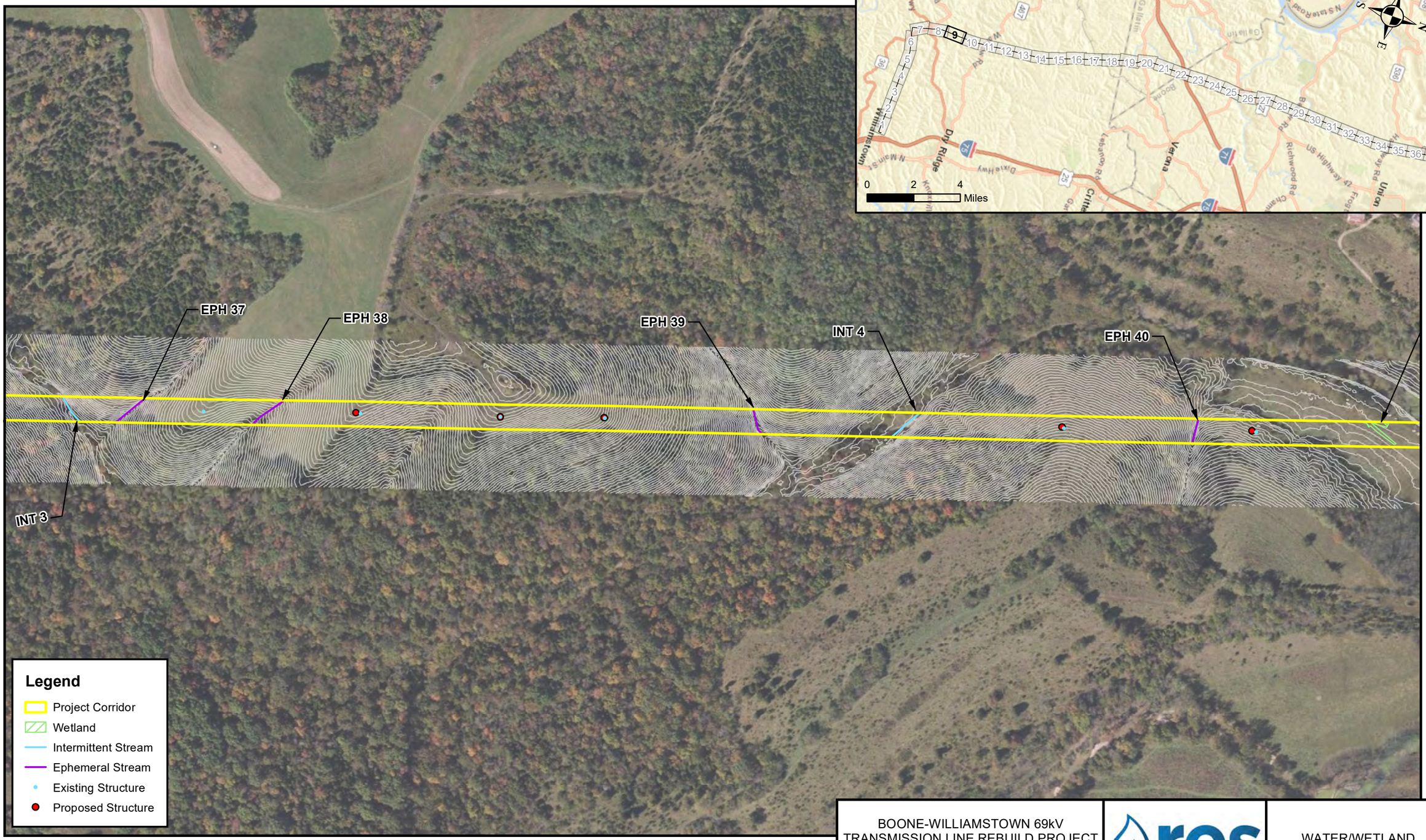
REVISED DATE:09-30-21 | DRAWN BY: EDB/ZTT/BJD

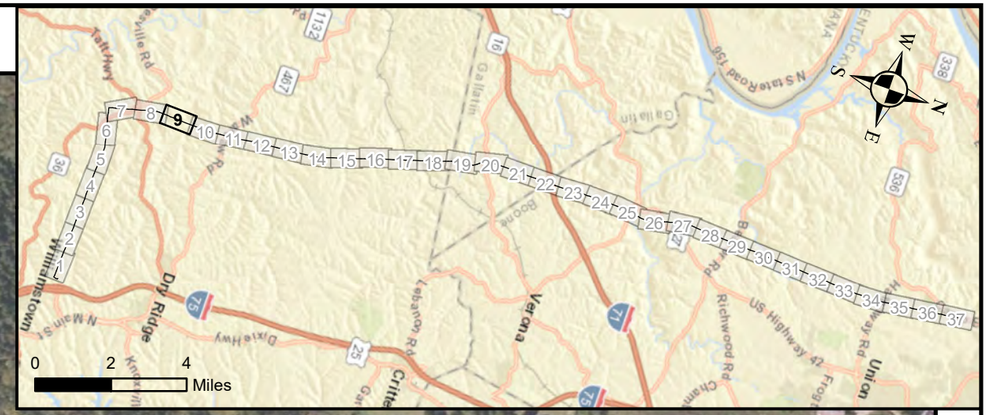
WATER/WETLAND LOCATION MAP

SHEET 8 of 37

R:\Resgis\entgis\Projects\104366_Boone_County_Williamstown_EA\MXD\Water Wetland Recon Map.mxd, 09-30-2021, ebowman

Source: Aerial - Esri and the GIS User Community (2019); Existing two foot contour topography generated from DEM.





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BOONE-WILLIAMSTOWN 69kV TRANSMISSION LINE REBUILD PROJECT
BOONE, GALLATIN, AND GRANT COUNTIES, KENTUCKY

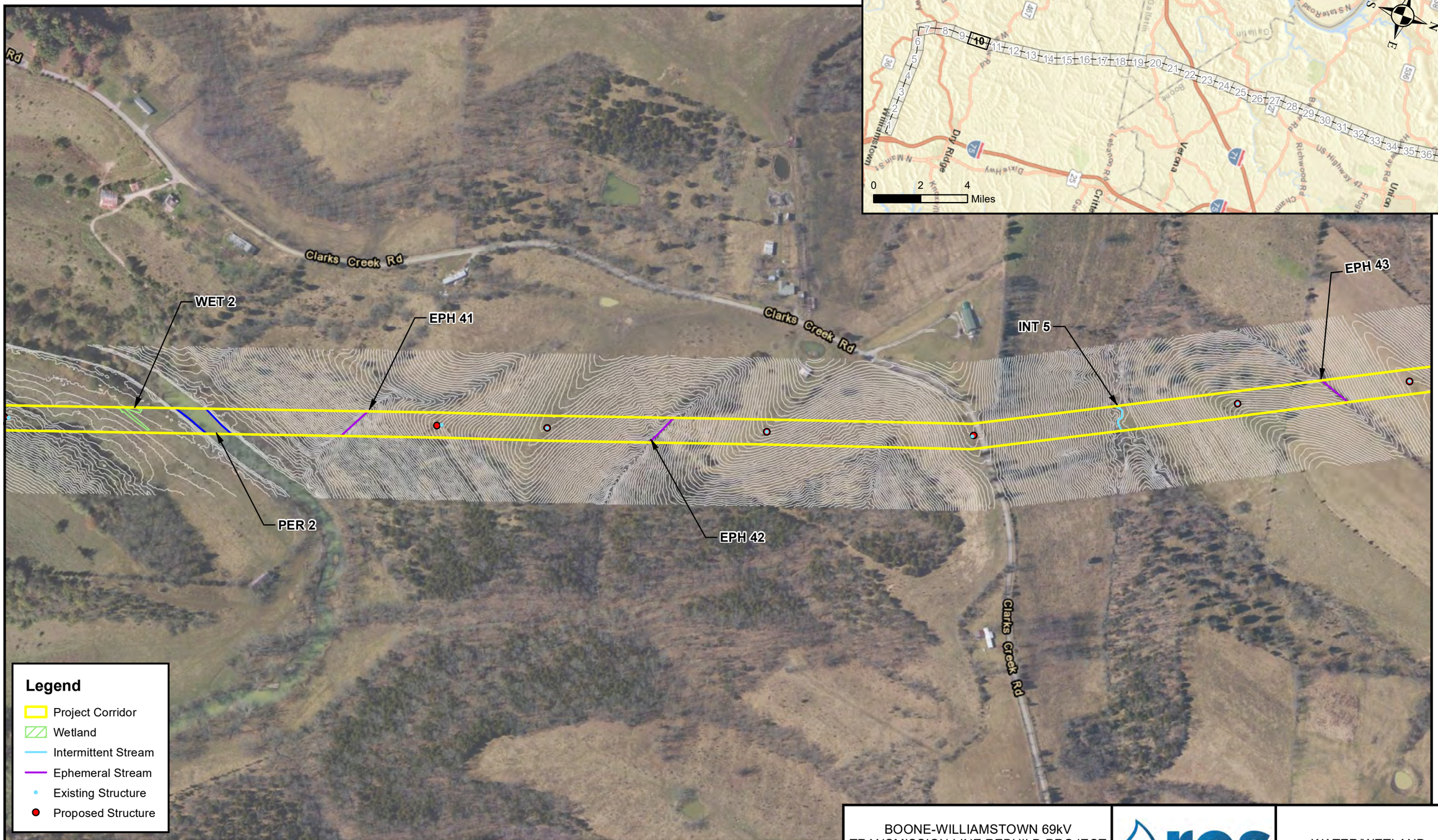
REVISED DATE:09-30-21 | DRAWN BY: EDB/ZTT/BJD

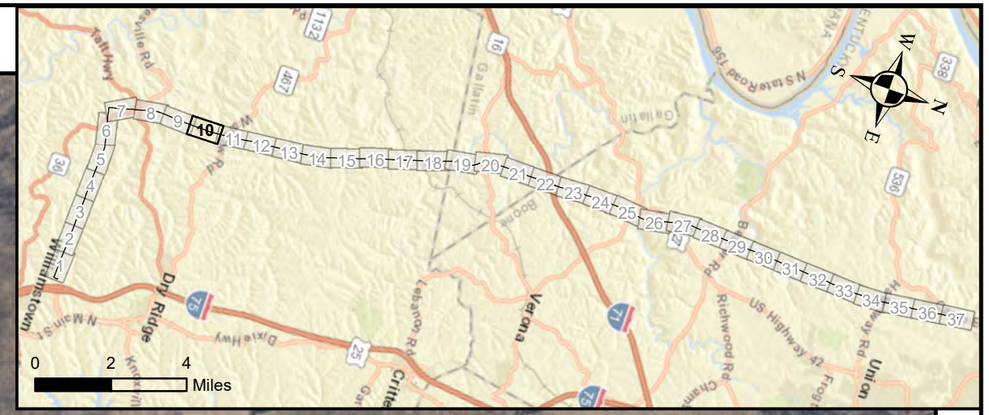
WATER/WETLAND LOCATION MAP

SHEET 9 of 37

R:\Resgis\entgis\Projects\104366_Boone_County_Williamstown_EA\MXD\Water Wetland Recon Map.mxd, 09-30-2021, ebowman

Source: Aerial - Esri and the GIS User Community (2019); Existing two foot contour topography generated from DEM.





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BOONE-WILLIAMSTOWN 69kV TRANSMISSION LINE REBUILD PROJECT
BOONE, GALLATIN, AND GRANT COUNTIES, KENTUCKY

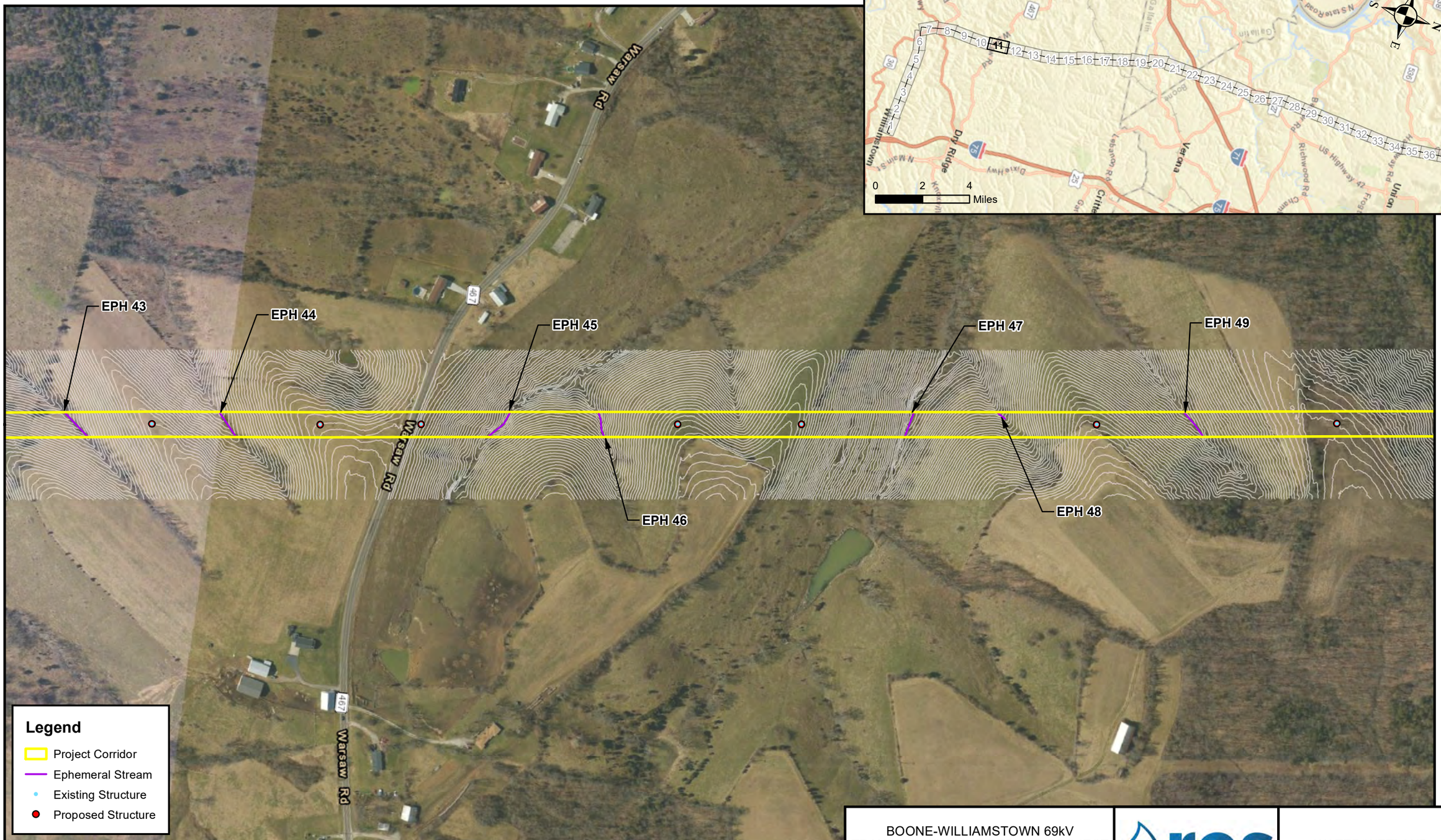
REVISED DATE:09-30-21 | DRAWN BY: EDB/ZTT/BJD

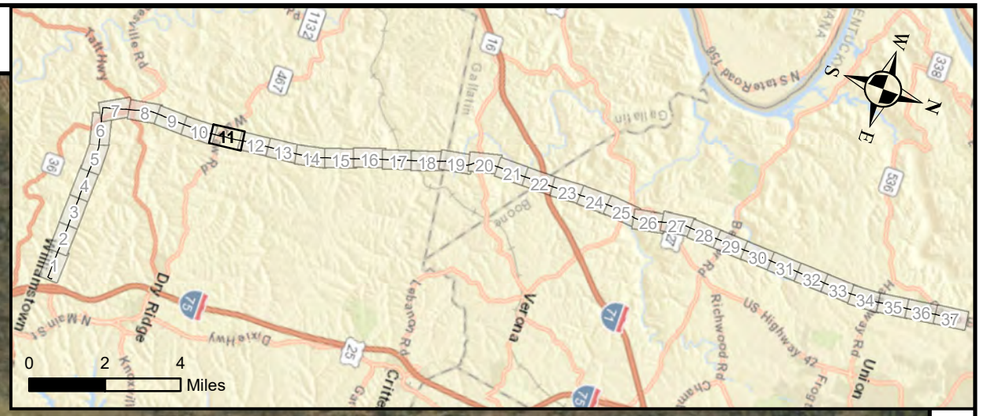
WATER/WETLAND LOCATION MAP

SHEET 10 of 37

R:\Resgis\entgis\Projects\104366_Boone_County_Williamstown_EA\MXD\Water Wetland Recon Map.mxd, 09-30-2021, ebowman

Source: Aerial - Esri and the GIS User Community (2019); Existing two foot contour topography generated from DEM.





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BOONE-WILLIAMSTOWN 69kV TRANSMISSION LINE REBUILD PROJECT
BOONE, GALLATIN, AND GRANT COUNTIES, KENTUCKY

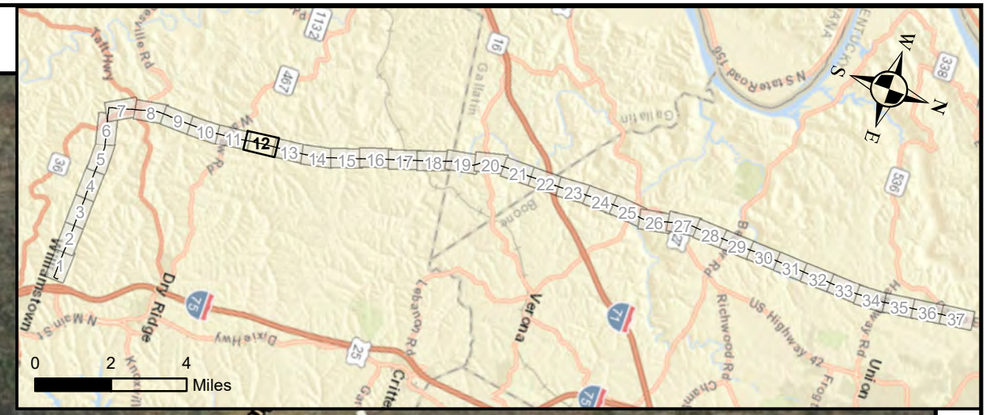
REVISED DATE:09-30-21 | DRAWN BY: EDB/ZTT/BJD

WATER/WETLAND LOCATION MAP

SHEET 11 of 37

R:\Resgis\entgis\Projects\104366_Boone_County_Williamstown_EA\MXD\Water Wetland Recon Map.mxd, 09-30-2021, ebowman

Source: Aerial - Esri and the GIS User Community (2019); Existing two foot contour topography generated from DEM.



EPH 50

PER 4

EPH 51

Arnolds Creek Rd

Dolphs Mill Rd

Legend

- Project Corridor
- Ephemeral Stream
- Existing Structure
- Proposed Structure

0 150 300 600 900 1,200 Feet

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BOONE-WILLIAMSTOWN 69kV TRANSMISSION LINE REBUILD PROJECT
BOONE, GALLATIN, AND GRANT COUNTIES, KENTUCKY

REVISED DATE:09-30-21 | DRAWN BY: EDB/ZTT/BJD

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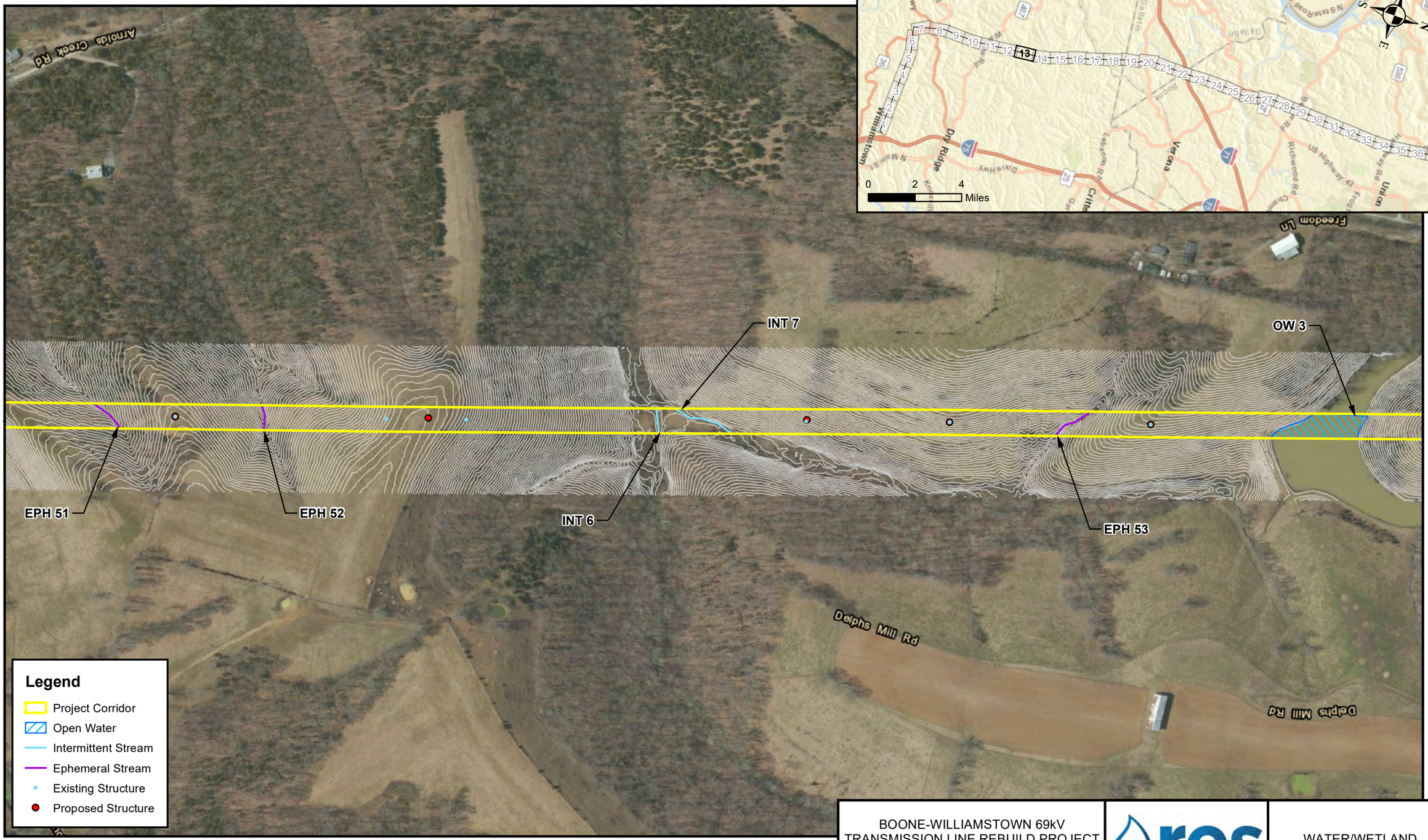
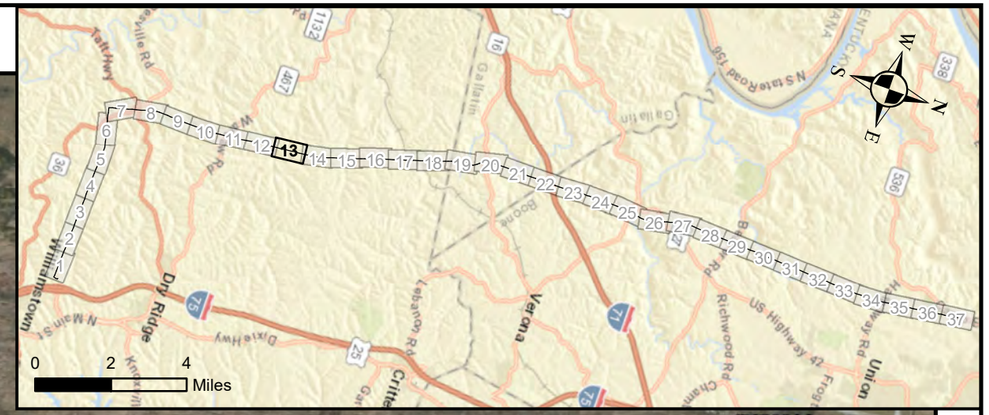
WATER/WETLAND LOCATION MAP

SHEET 12 of 37

R:\Resgis\entgis\Projects\104366_Boone_County_Williamstown_EA\MXD\Water Wetland Recon Map.mxd, 09-30-2021, ebowman

Source: Aerial - Esri and the GIS User Community (2019); Existing two foot contour topography generated from DEM.





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BOONE, GALLATIN, AND GRANT COUNTIES, KENTUCKY

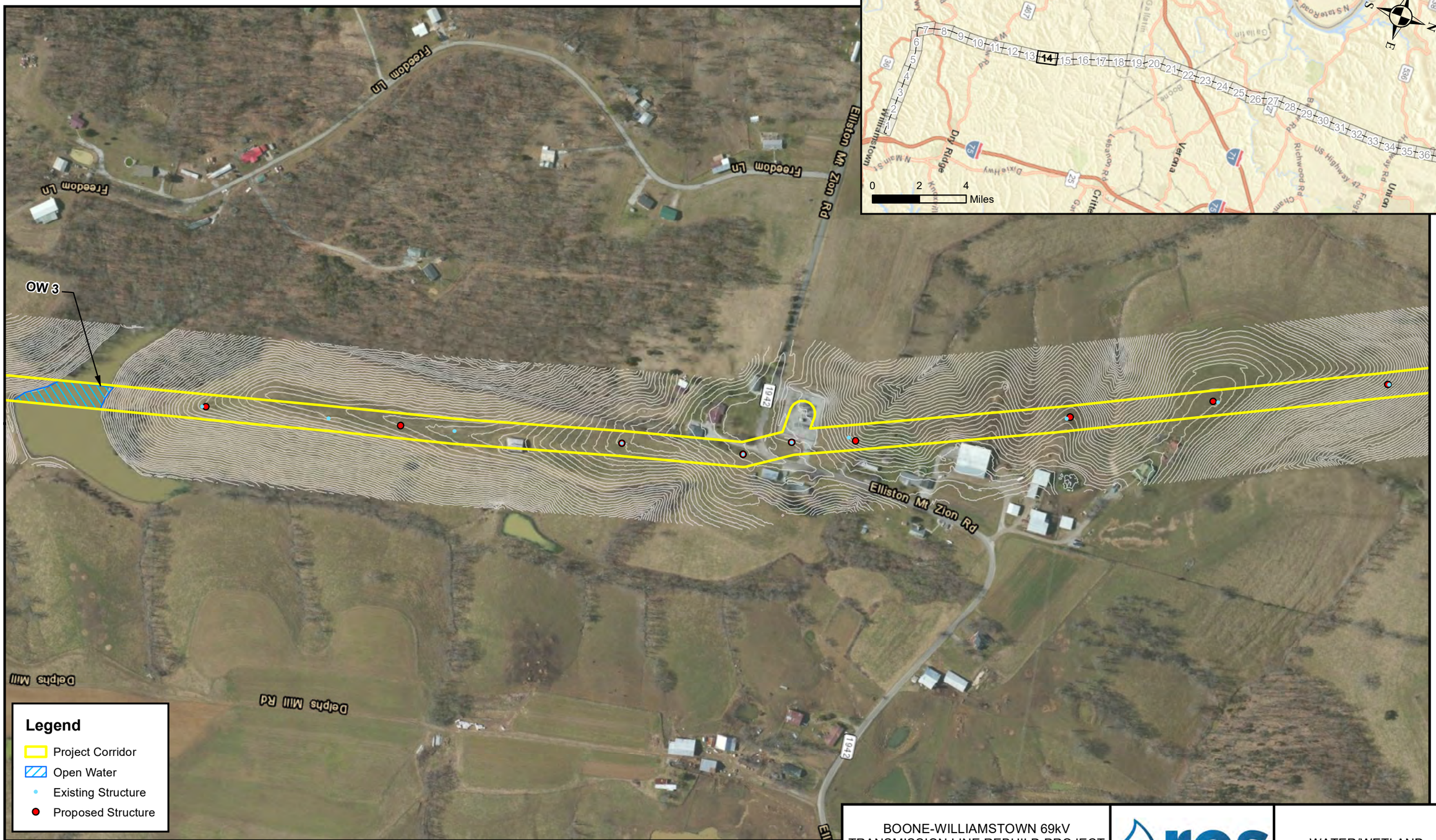
REVISED DATE:09-30-21 | DRAWN BY: EDB/ZTT/BJD

WATER/WETLAND LOCATION MAP

SHEET 13 of 37

R:\Resgis\entgis\Projects\104366_Boone_County_Williamstown_EAMXD\Water Wetland Recon Map.mxd, 09-30-2021, ebowman

Source: Aerial - Esri and the GIS User Community (2019); Existing two foot contour topography generated from DEM.



NOTE: JURISDICTIONAL WATER/WETLAND BOUNDARIES WERE APPROXIMATED BY REDWING WETLAND SCIENTISTS ON JUNE 22 - 25, 2020. THESE BOUNDARIES HAVE NOT BEEN VERIFIED BY THE U.S. ARMY CORPS OF ENGINEERS. USE OF THIS MAP IS FOR PRELIMINARY PLANNING PURPOSES ONLY.

BOONE-WILLIAMSTOWN 69kV TRANSMISSION LINE REBUILD PROJECT
BOONE, GALLATIN, AND GRANT COUNTIES, KENTUCKY

REVISED DATE:09-30-21 | DRAWN BY: EDB/ZTT/BJD

WATER/WETLAND LOCATION MAP

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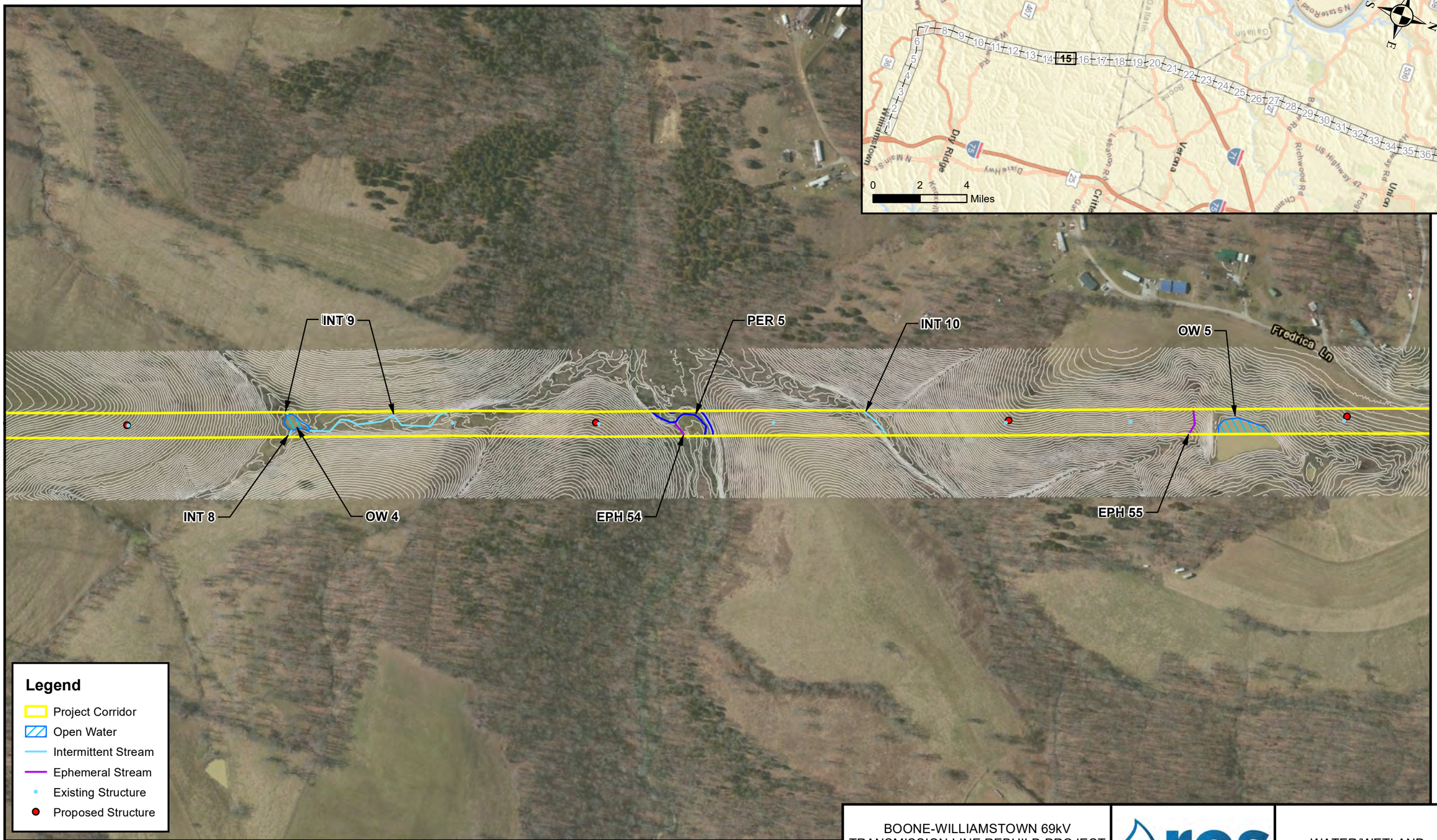
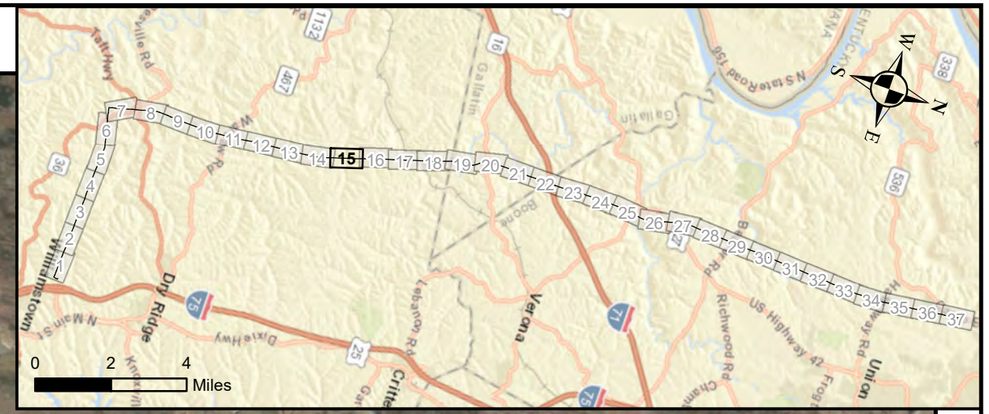
R:\Resgis\entgis\Projects\104366_Boone_County_Williamstown_EA\MXD\Water Wetland Recon Map.mxd, 09-30-2021, ebowman

Source: Aerial - Esri and the GIS User Community (2019); Existing two foot contour topography generated from DEM.





Legend

- Project Corridor
- Open Water
- Intermittent Stream
- Ephemeral Stream
- Existing Structure
- Proposed Structure

0 150 300 600 900 1,200 Feet

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BOONE-WILLIAMSTOWN 69kV TRANSMISSION LINE REBUILD PROJECT
BOONE, GALLATIN, AND GRANT COUNTIES, KENTUCKY

REVISED DATE:09-30-21 | DRAWN BY: EDB/ZTT/BJD

WATER/WETLAND LOCATION MAP

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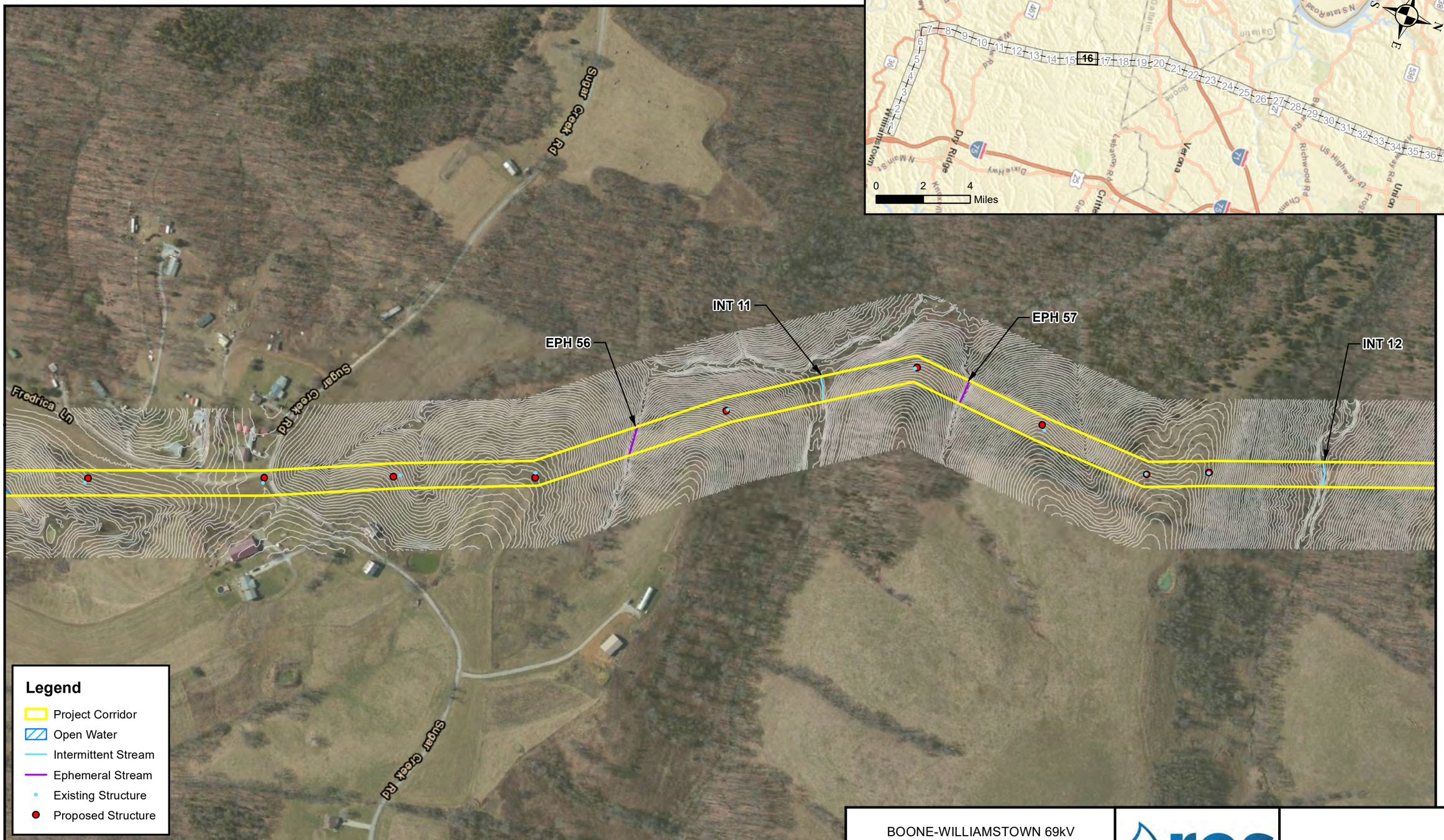
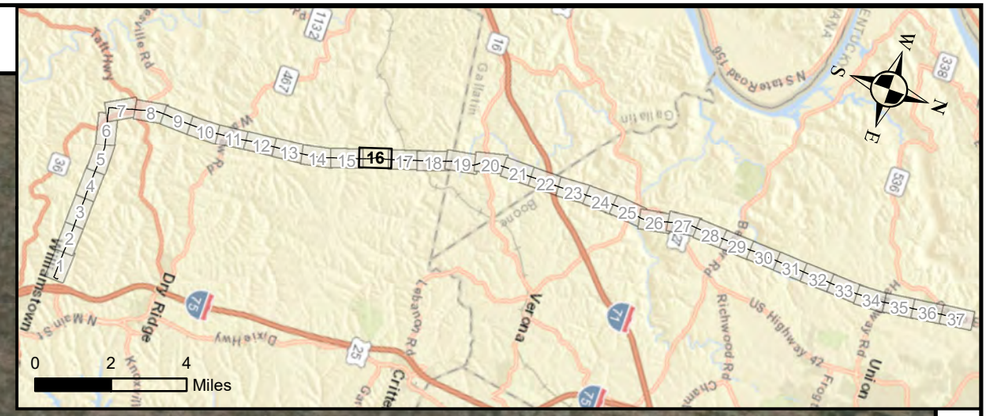
R:\Resgis\entgis\Projects\104366_Boone_County_Williamstown_EA\MXD\Water Wetland Recon Map.mxd, 09-30-2021, ebowman

Source: Aerial - Esri and the GIS User Community (2019); Existing two foot contour topography generated from DEM.





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BOONE-WILLIAMSTOWN 69kV TRANSMISSION LINE REBUILD PROJECT
BOONE, GALLATIN, AND GRANT COUNTIES, KENTUCKY

REVISED DATE:09-30-21 | DRAWN BY: EDB/ZTT/BJD

WATER/WETLAND LOCATION MAP

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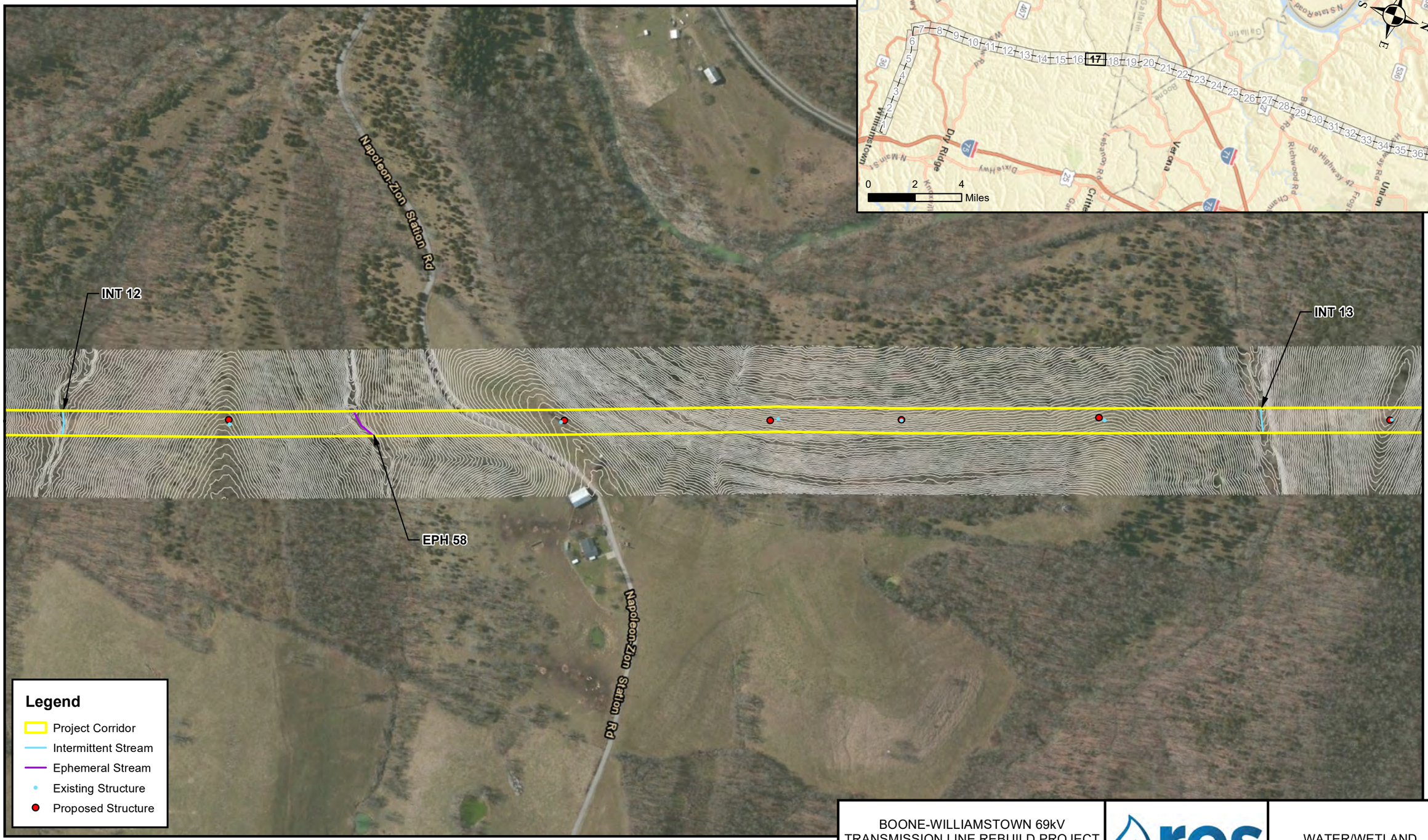
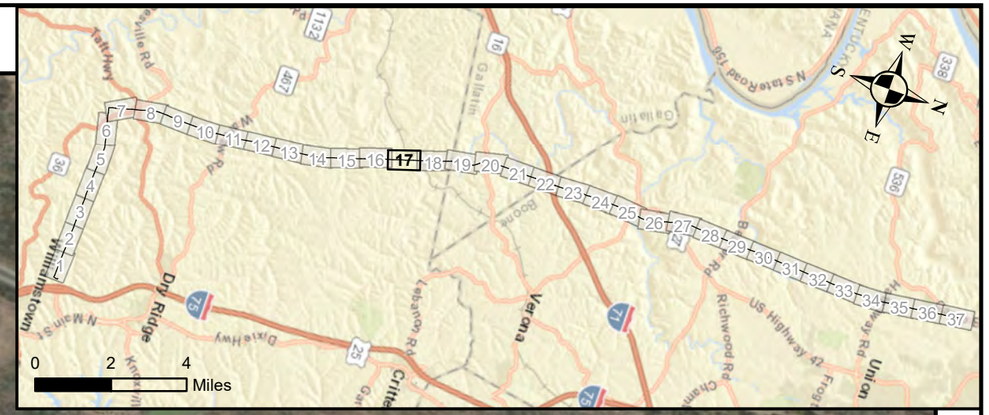
R:\Resgis\entgis\Projects\104366_Boone_County_Williamstown_EA\MXD\Water Wetland Recon Map.mxd, 09-30-2021, ebowman

Source: Aerial - Esri and the GIS User Community (2019); Existing two foot contour topography generated from DEM.





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BOONE-WILLIAMSTOWN 69kV TRANSMISSION LINE REBUILD PROJECT
BOONE, GALLATIN, AND GRANT COUNTIES, KENTUCKY

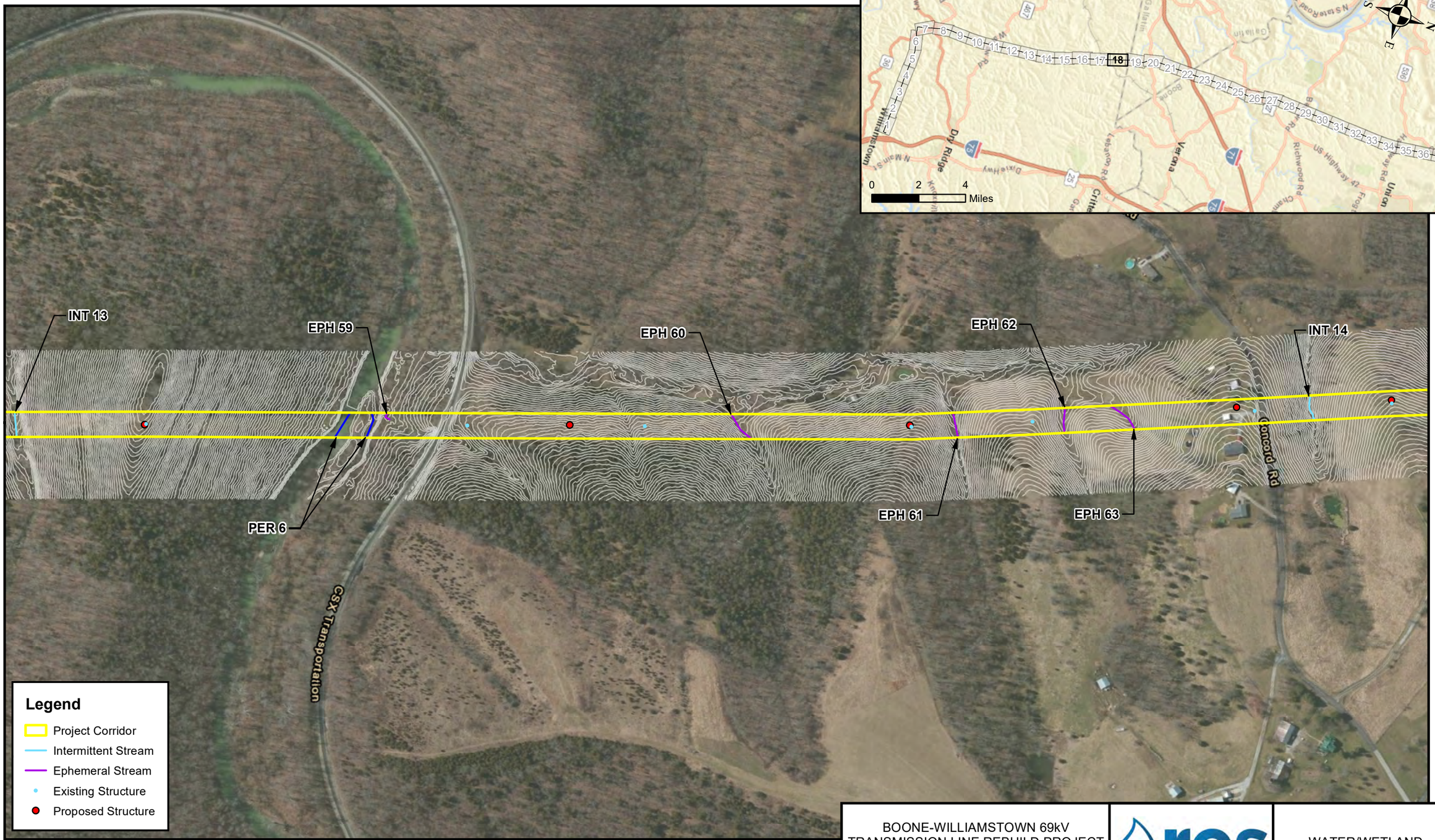
REVISED DATE:09-30-21 | DRAWN BY: EDB/ZTT/BJD

WATER/WETLAND LOCATION MAP

SHEET 17 of 37

R:\Resgis\entgis\Projects\104366_Boone_County_Williamstown_EA\MXD\Water Wetland Recon Map.mxd, 09-30-2021, ebowman

Source: Aerial - Esri and the GIS User Community (2019); Existing two foot contour topography generated from DEM.



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BOONE-WILLIAMSTOWN 69kV TRANSMISSION LINE REBUILD PROJECT
BOONE, GALLATIN, AND GRANT COUNTIES, KENTUCKY

REVISED DATE:09-30-21 | DRAWN BY: EDB/ZTT/BJD

WATER/WETLAND LOCATION MAP

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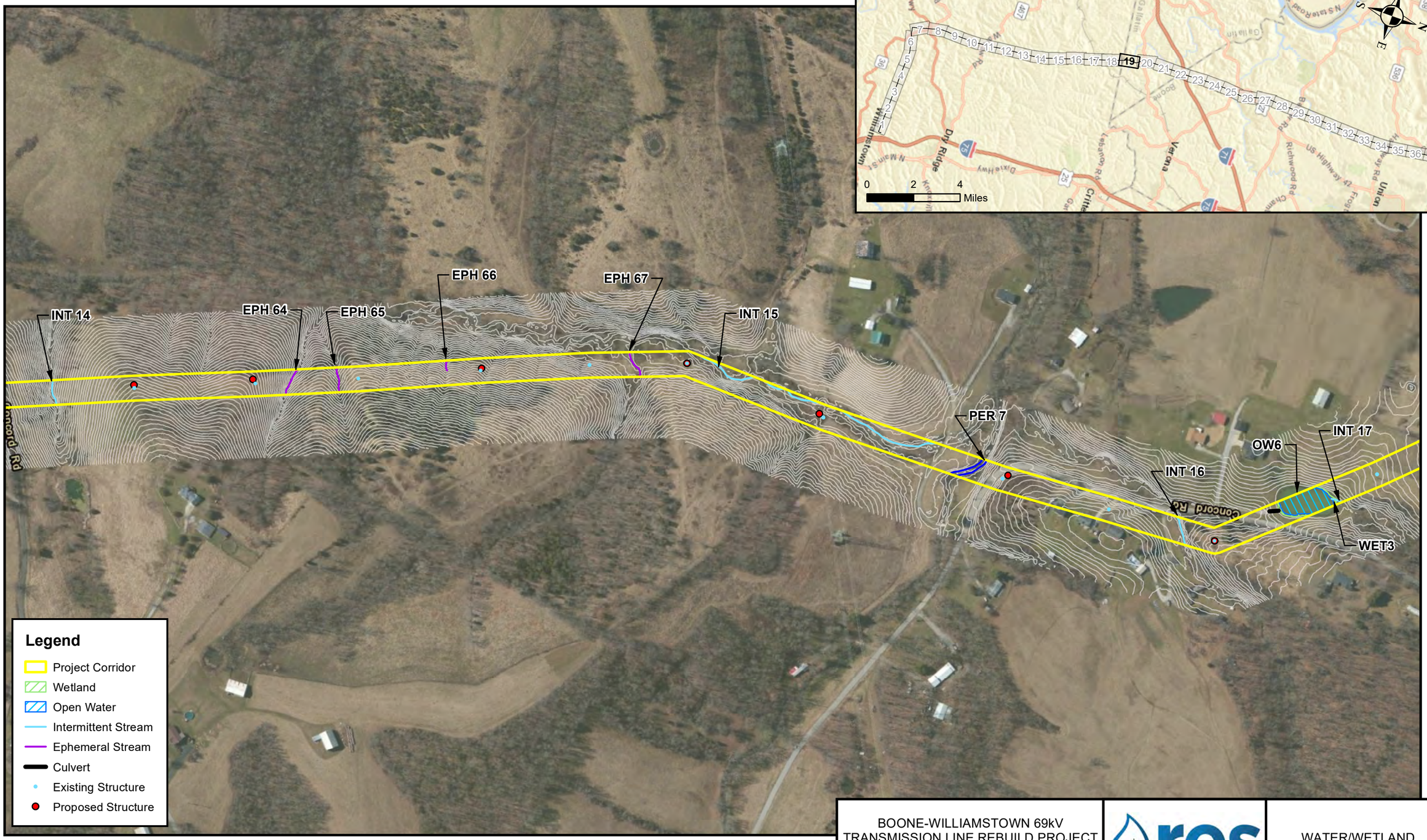
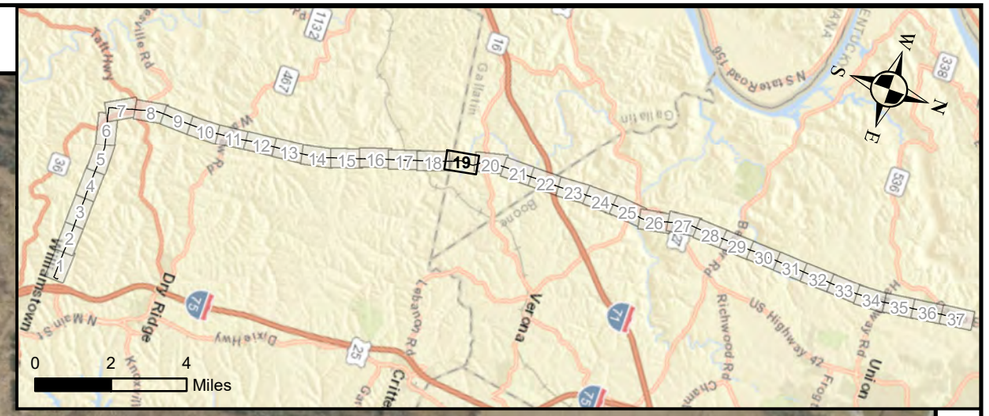
R:\Resgis\entgis\Projects\104366_Boone_County_Williamstown_EA\MXD\Water Wetland Recon Map.mxd, 09-30-2021, ebowman

Source: Aerial - Esri and the GIS User Community (2019); Existing two foot contour topography generated from DEM.





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BOONE-WILLIAMSTOWN 69kV
TRANSMISSION LINE REBUILD PROJECT
BOONE, GALLATIN, AND GRANT
COUNTIES, KENTUCKY

REVISED DATE:09-30-21 | DRAWN BY: EDB/ZTT/BJD

WATER/WETLAND
LOCATION MAP

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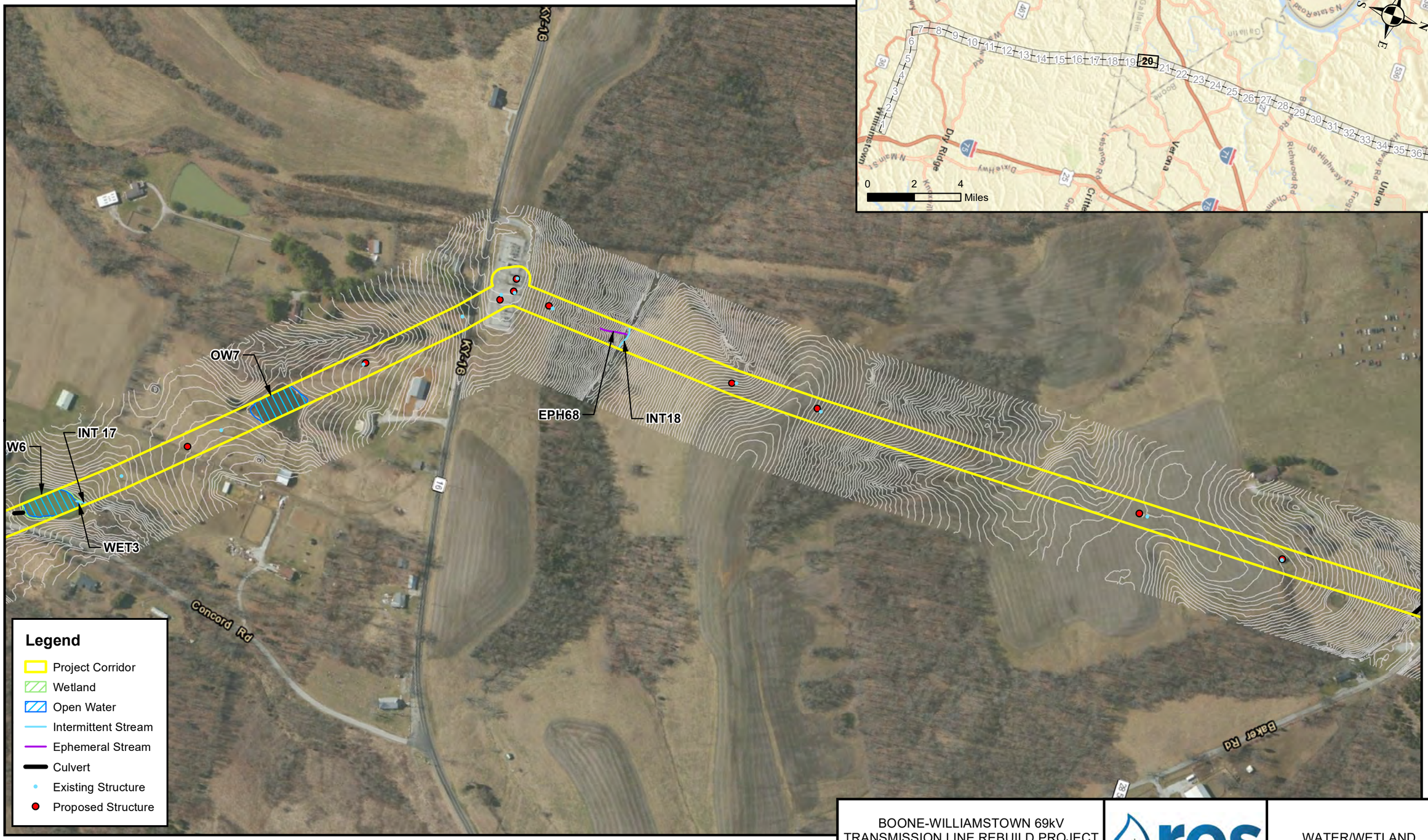
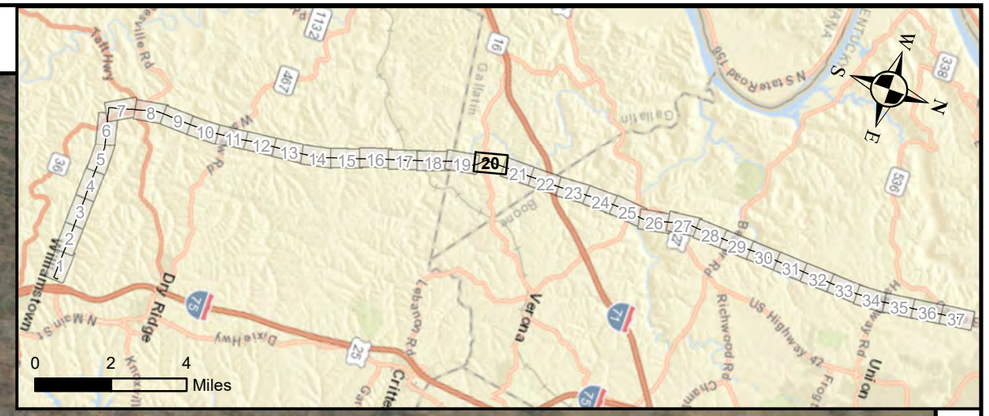
R:\Resgis\entgis\Projects\104366_Boone_County_Williamstown_EA\MXD\Water Wetland Recon Map.mxd, 09-30-2021, ebowman

Source: Aerial - Esri and the GIS User Community (2019); Existing two foot contour topography generated from DEM.





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BOONE-WILLIAMSTOWN 69kV
TRANSMISSION LINE REBUILD PROJECT
BOONE, GALLATIN, AND GRANT
COUNTIES, KENTUCKY

REVISED DATE:09-30-21 | DRAWN BY: EDB/ZTT/BJD

WATER/WETLAND
LOCATION MAP

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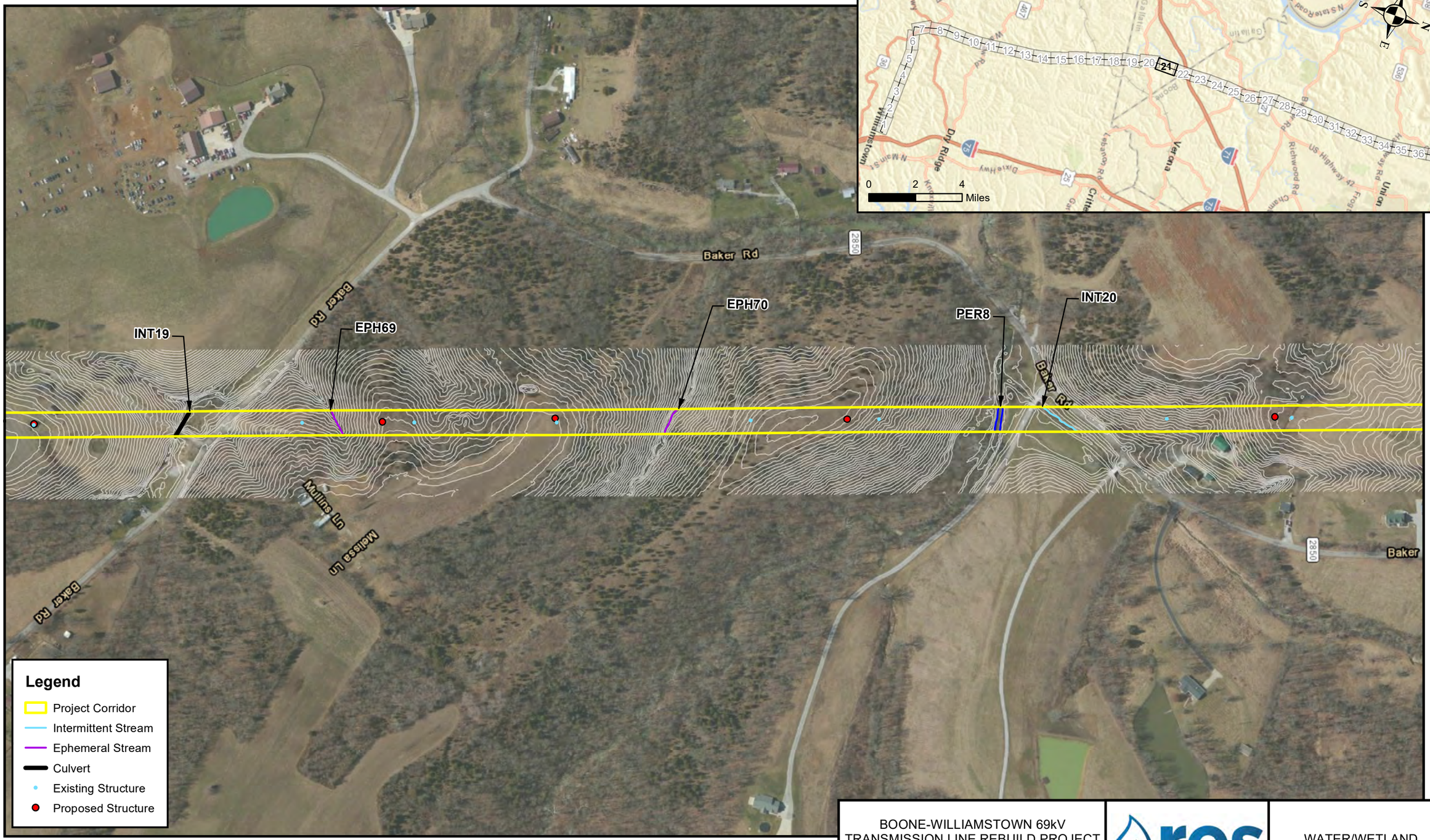
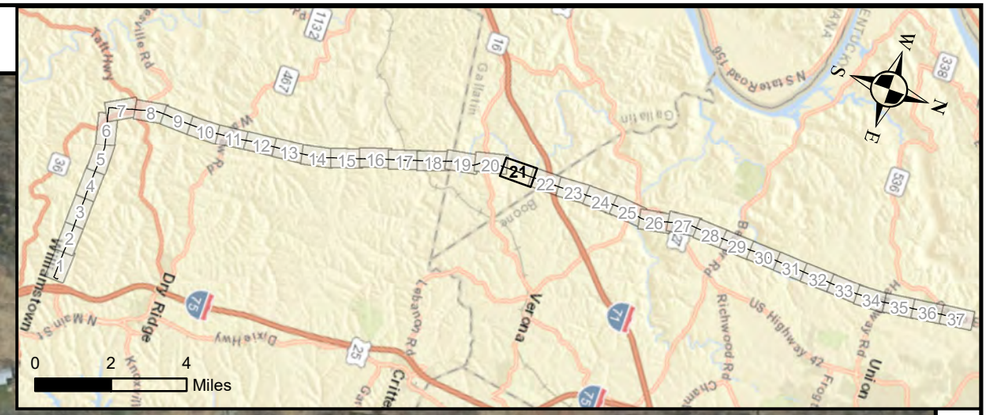
R:\Resgis\entgis\Projects\104366_Boone_County_Williamstown_EA\MXD\Water Wetland Recon Map.mxd, 09-30-2021, ebowman

Source: Aerial - Esri and the GIS User Community (2019); Existing two foot contour topography generated from DEM.





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BOONE-WILLIAMSTOWN 69kV TRANSMISSION LINE REBUILD PROJECT
BOONE, GALLATIN, AND GRANT COUNTIES, KENTUCKY

REVISED DATE:09-30-21 | DRAWN BY: EDB/ZTT/BJD

WATER/WETLAND LOCATION MAP

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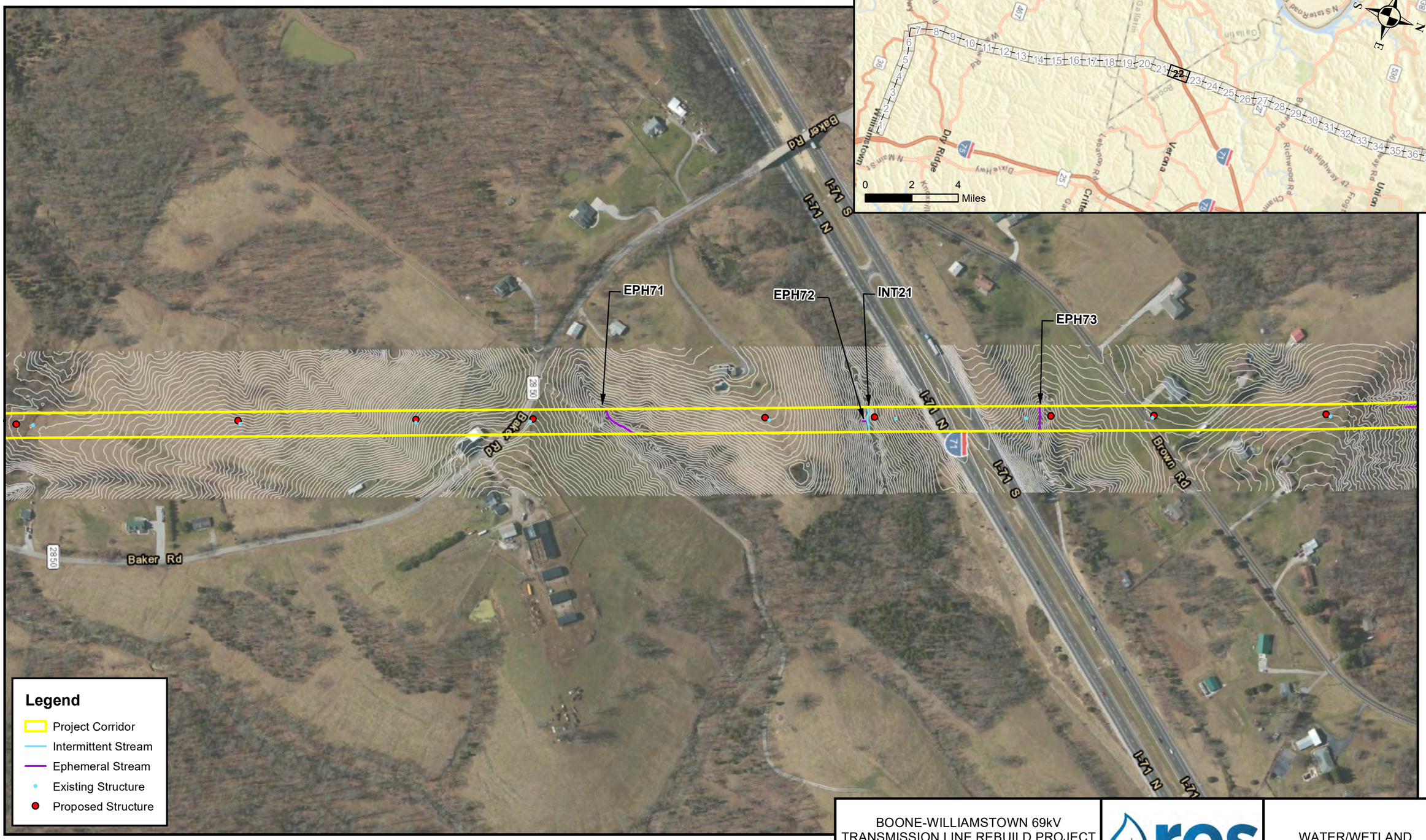
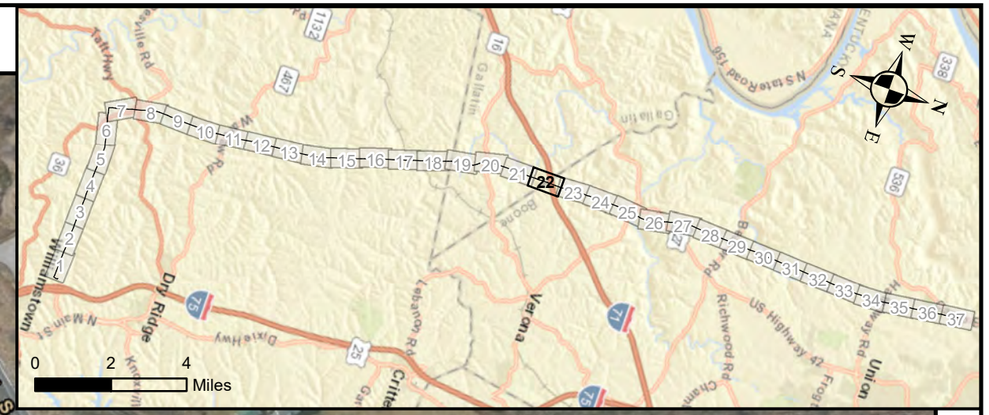
R:\Resgis\entgis\Projects\104366_Boone_County_Williamstown_EA\MXD\Water Wetland Recon Map.mxd, 09-30-2021, ebowman

Source: Aerial - Esri and the GIS User Community (2019); Existing two foot contour topography generated from DEM.





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BOONE-WILLIAMSTOWN 69kV TRANSMISSION LINE REBUILD PROJECT
BOONE, GALLATIN, AND GRANT COUNTIES, KENTUCKY

REVISED DATE:09-30-21 | DRAWN BY: EDB/ZTT/BJD

WATER/WETLAND LOCATION MAP

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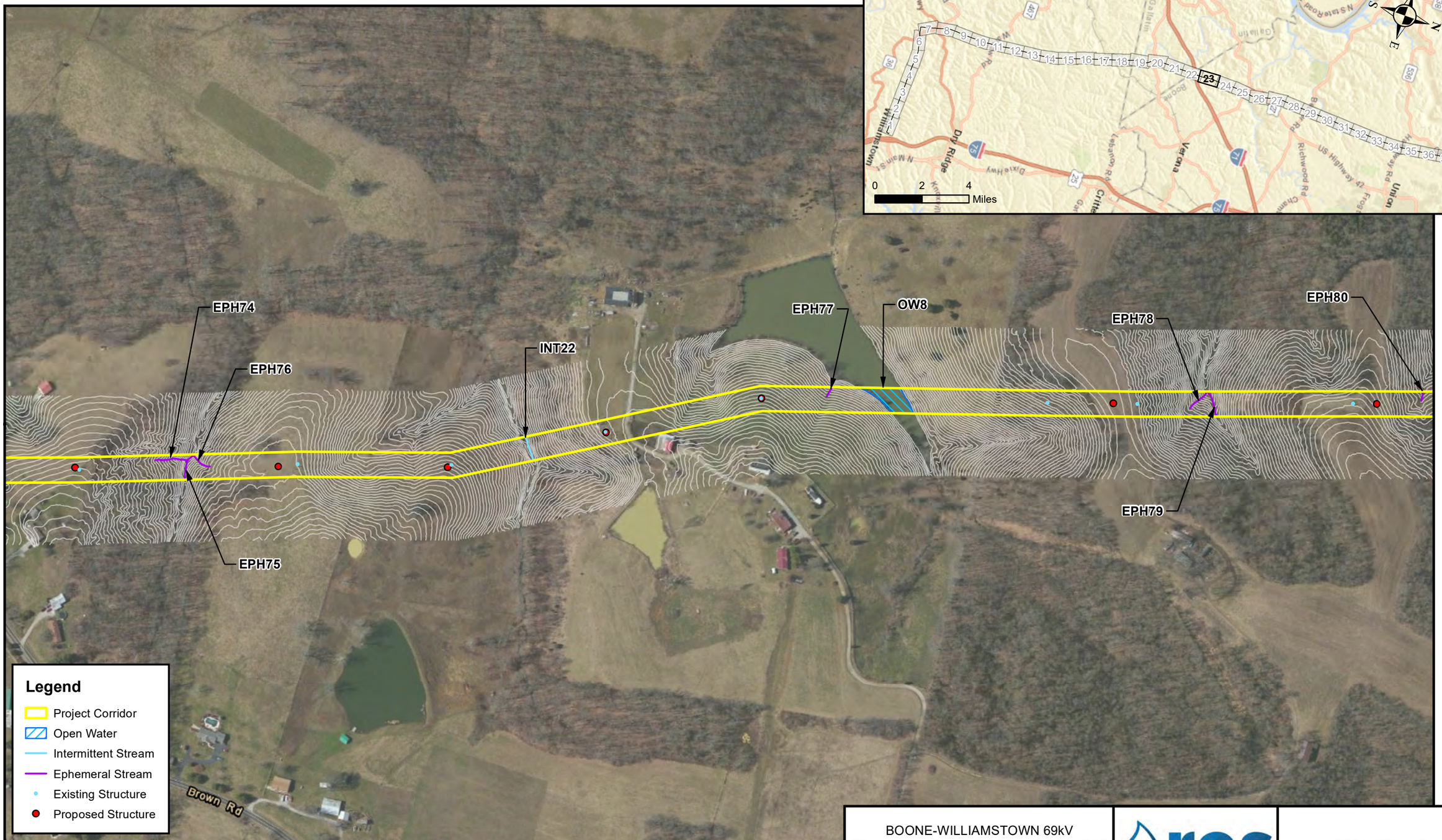
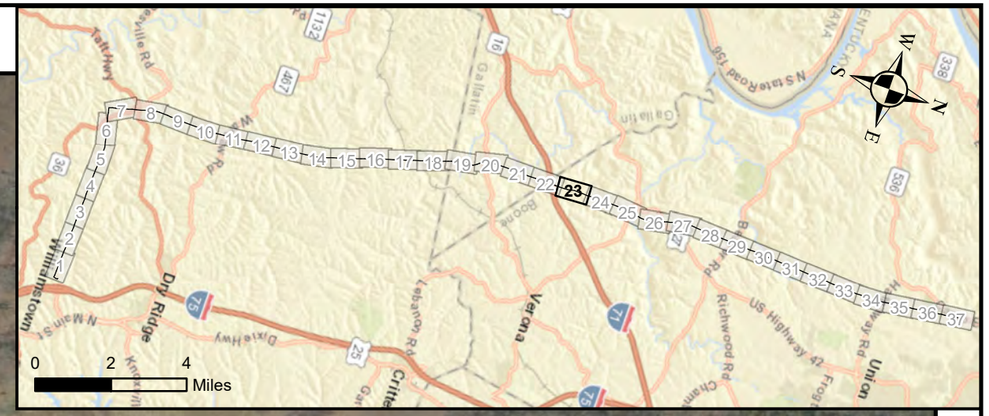
R:\Resgis\entgis\Projects\104366_Boone_County_Williamstown_EA\MXD\Water Wetland Recon Map.mxd, 09-30-2021, ebowman

Source: Aerial - Esri and the GIS User Community (2019); Existing two foot contour topography generated from DEM.





Legend

- Project Corridor
- Open Water
- Intermittent Stream
- Ephemeral Stream
- Existing Structure
- Proposed Structure

0 150 300 600 900 1,200 Feet

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BOONE-WILLIAMSTOWN 69kV TRANSMISSION LINE REBUILD PROJECT
BOONE, GALLATIN, AND GRANT COUNTIES, KENTUCKY

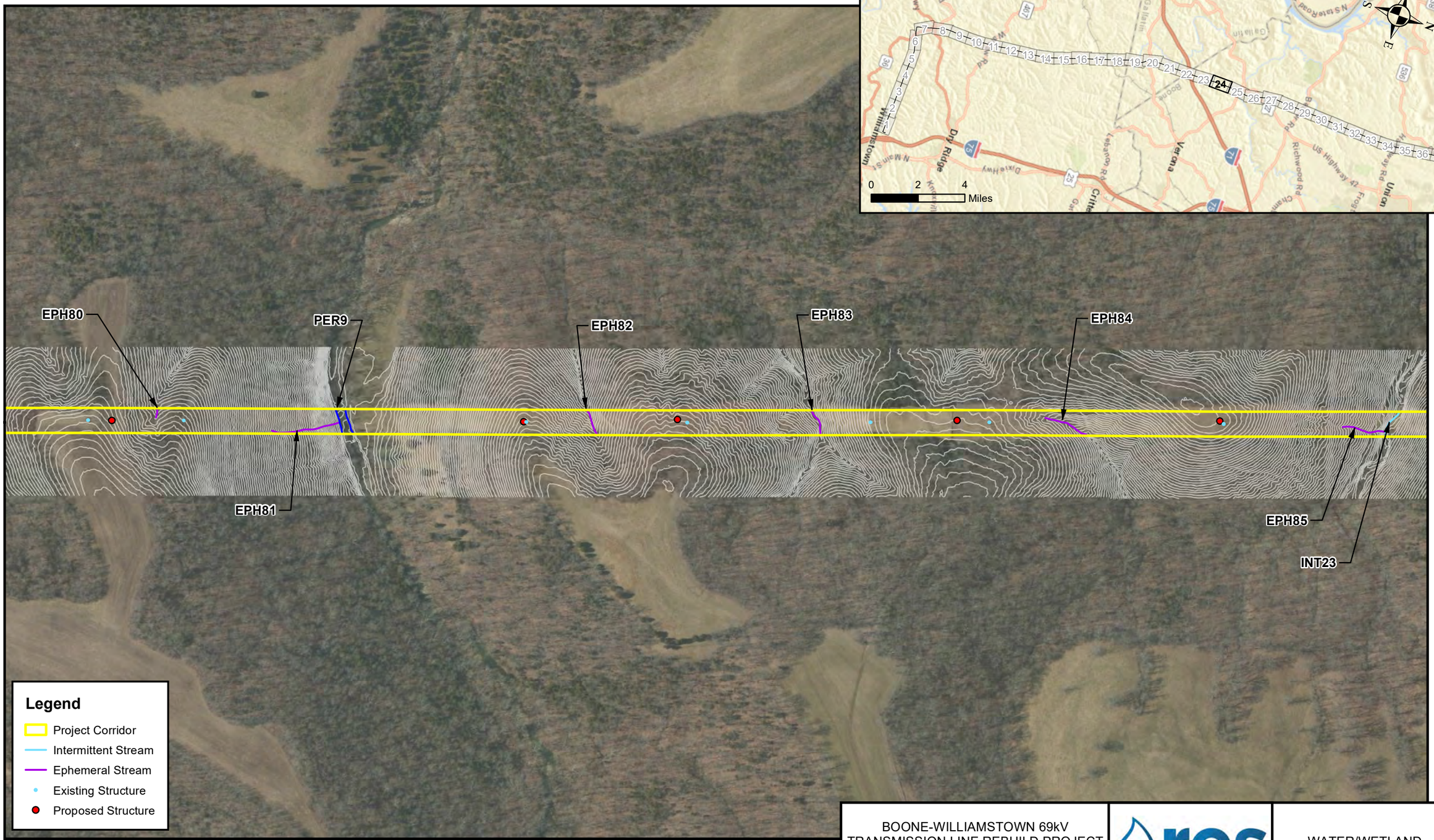
REVISED DATE:09-30-21 | DRAWN BY: EDB/ZTT/BJD

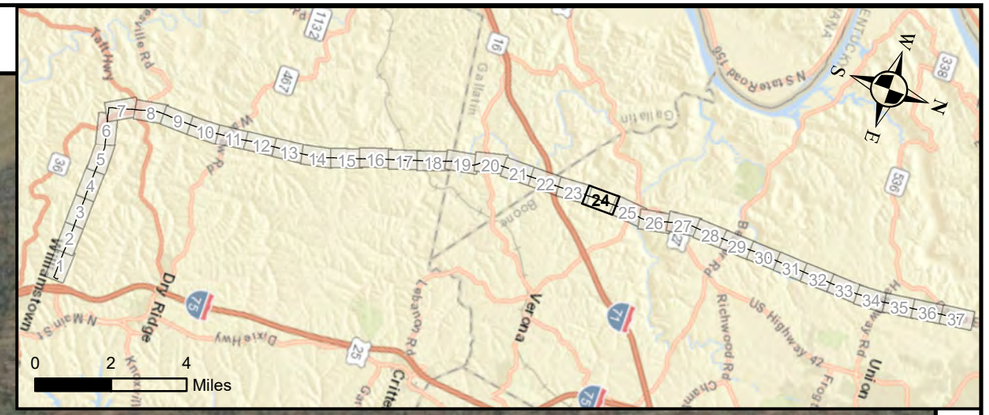
WATER/WETLAND LOCATION MAP

SHEET 23 of 37

R:\Resgis\entgis\Projects\104366_Boone_County_Williamstown_EA\MXD\Water Wetland Recon Map.mxd, 09-30-2021, ebowman

Source: Aerial - Esri and the GIS User Community (2019); Existing two foot contour topography generated from DEM.





Legend

- Project Corridor
- Intermittent Stream
- Ephemeral Stream
- Existing Structure
- Proposed Structure

0 150 300 600 900 1,200 Feet

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BOONE-WILLIAMSTOWN 69kV TRANSMISSION LINE REBUILD PROJECT
BOONE, GALLATIN, AND GRANT COUNTIES, KENTUCKY

REVISED DATE:09-30-21 | DRAWN BY: EDB/ZTT/BJD

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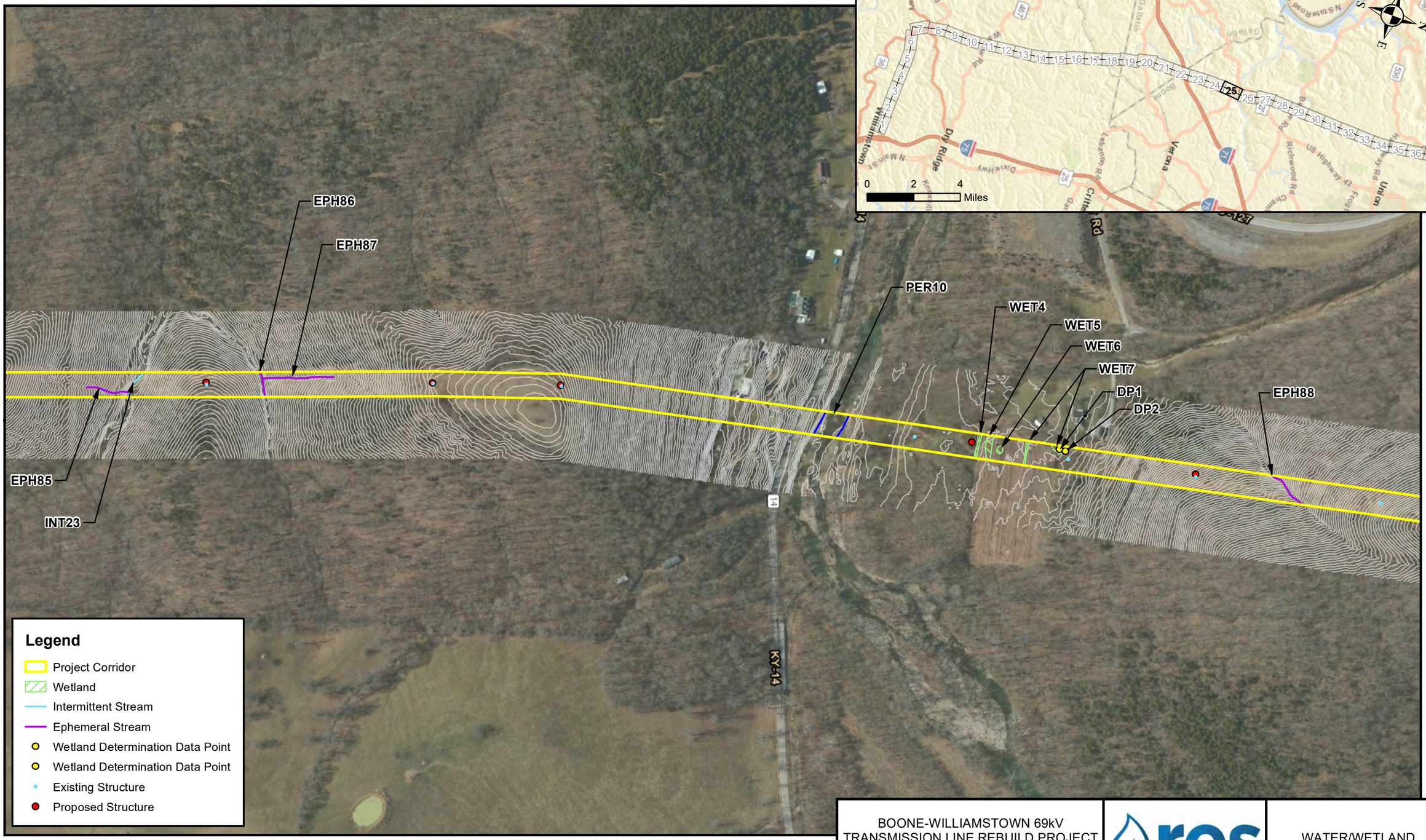
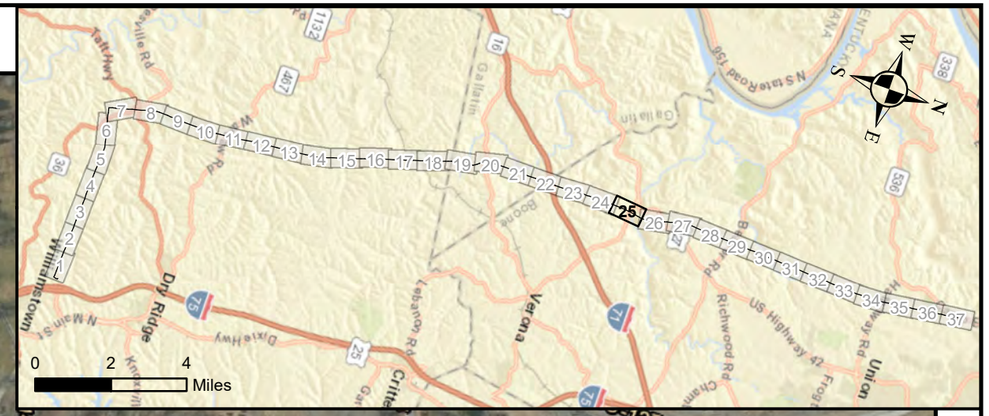
WATER/WETLAND LOCATION MAP

SHEET 24 of 37

R:\Resgis\entgis\Projects\104366_Boone_County_Williamstown_EA\MXD\Water Wetland Recon Map.mxd, 09-30-2021, ebowman

Source: Aerial - Esri and the GIS User Community (2019); Existing two foot contour topography generated from DEM.





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BOONE-WILLIAMSTOWN 69kV
TRANSMISSION LINE REBUILD PROJECT
BOONE, GALLATIN, AND GRANT
COUNTIES, KENTUCKY

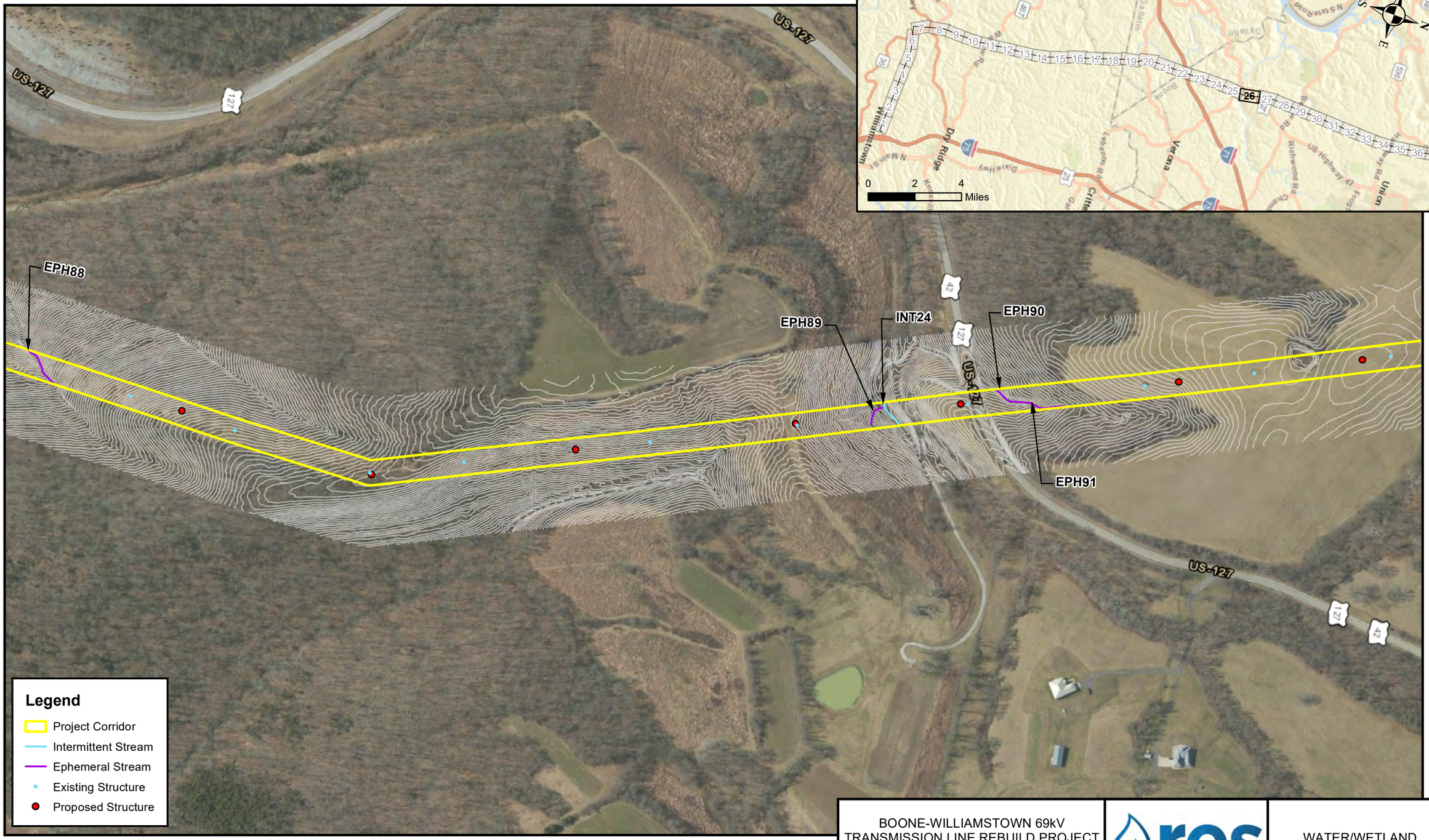
REVISED DATE:09-30-21 | DRAWN BY: EDB/ZTT/BJD

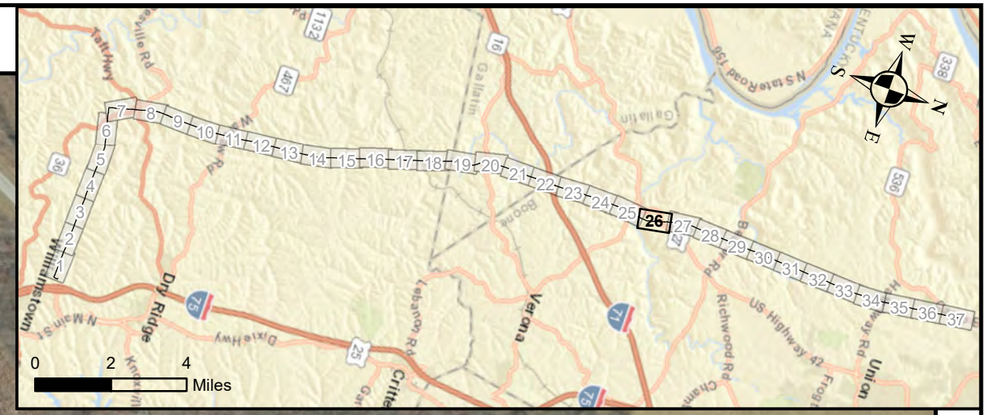
WATER/WETLAND
LOCATION MAP

SHEET 25 of 37

R:\Resgis\entgis\Projects\104366_Boone_County_Williamstown_EA\MXD\Water Wetland Recon Map.mxd, 09-30-2021, ebowman

Source: Aerial - Esri and the GIS User Community (2019); Existing two foot contour topography generated from DEM.





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BOONE-WILLIAMSTOWN 69kV TRANSMISSION LINE REBUILD PROJECT
BOONE, GALLATIN, AND GRANT COUNTIES, KENTUCKY

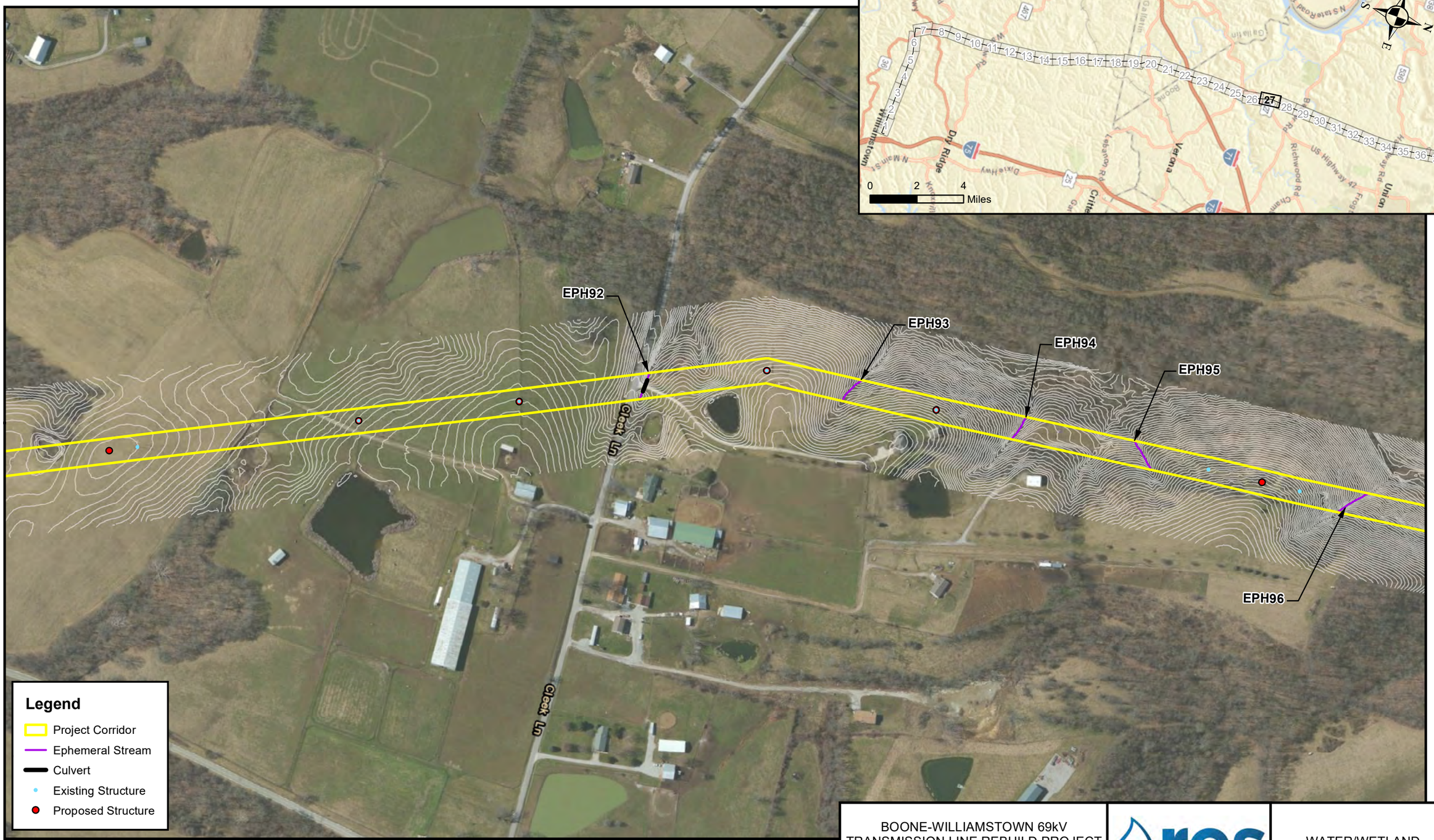
REVISED DATE:09-30-21 | DRAWN BY: EDB/ZTT/BJD

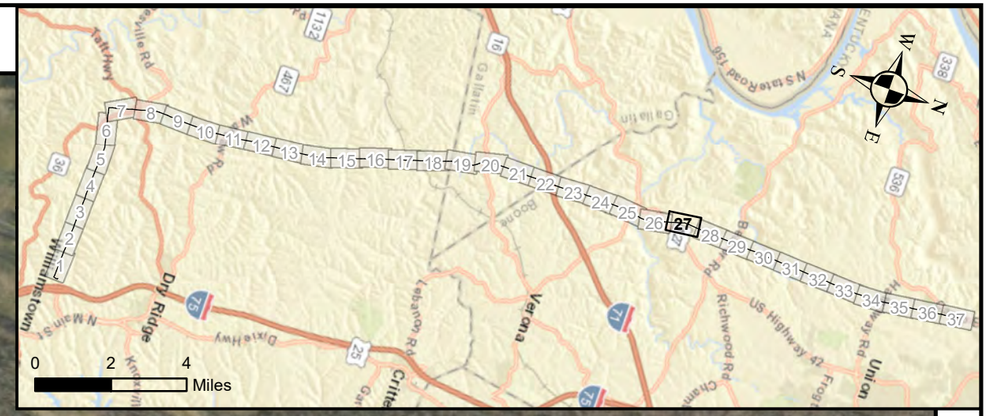
WATER/WETLAND LOCATION MAP

SHEET 26 of 37

R:\Resgis\entgis\Projects\104366_Boone_County_Williamstown_EA\MXD\Water Wetland Recon Map.mxd, 09-30-2021, ebowman

Source: Aerial - Esri and the GIS User Community (2019); Existing two foot contour topography generated from DEM.





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BOONE-WILLIAMSTOWN 69kV TRANSMISSION LINE REBUILD PROJECT
BOONE, GALLATIN, AND GRANT COUNTIES, KENTUCKY

REVISED DATE:09-30-21 | DRAWN BY: EDB/ZTT/BJD

WATER/WETLAND LOCATION MAP

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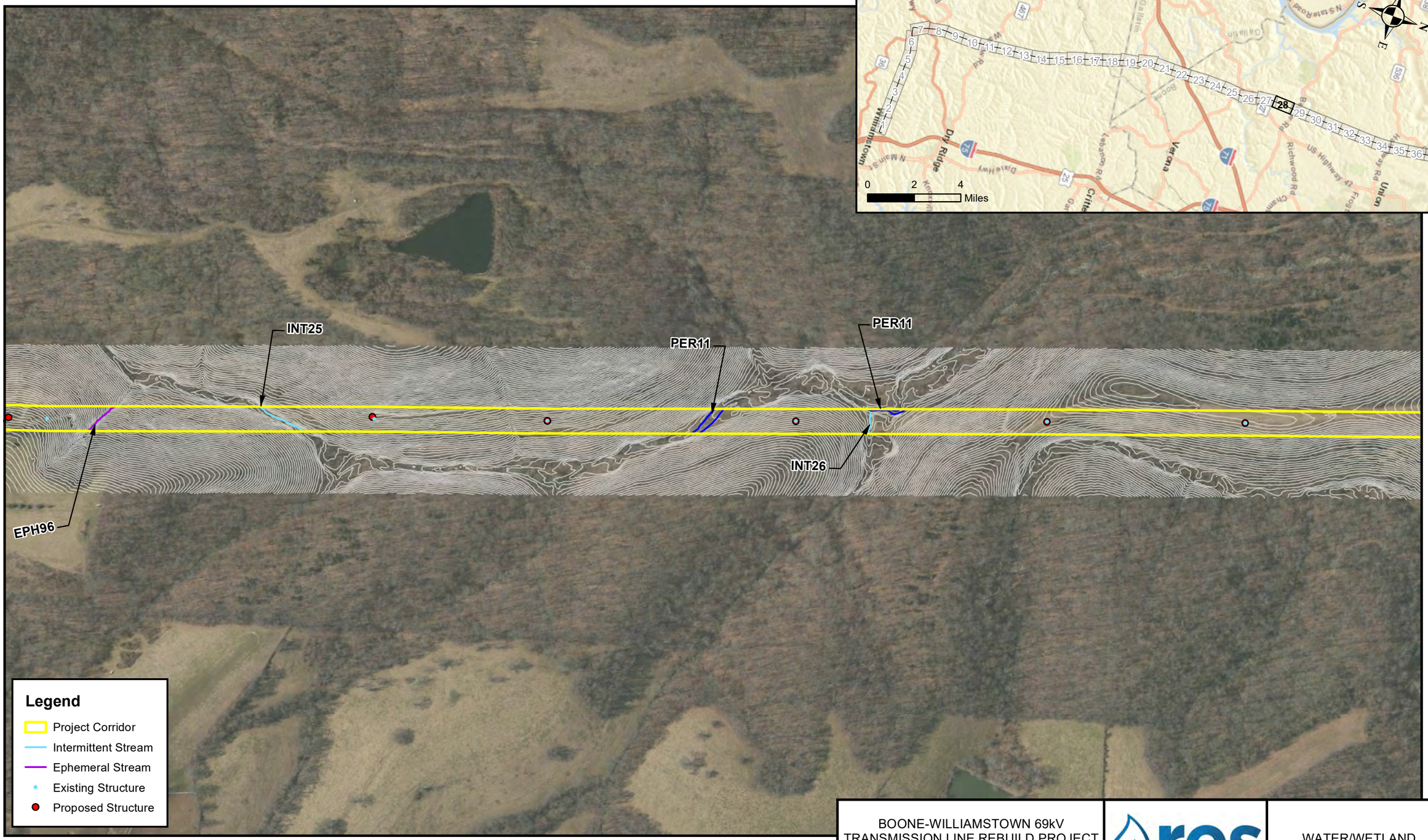
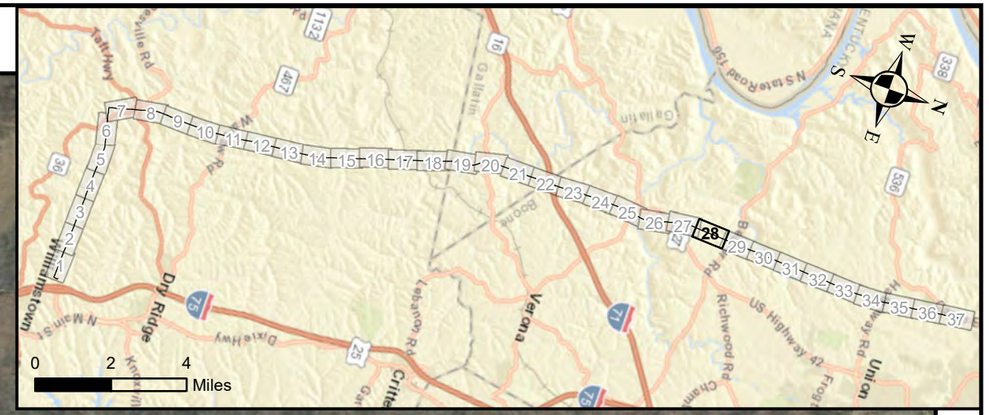
R:\Resgis\entgis\Projects\104366_Boone_County_Williamstown_EA\MXD\Water Wetland Recon Map.mxd, 09-30-2021, ebowman

Source: Aerial - Esri and the GIS User Community (2019); Existing two foot contour topography generated from DEM.





Legend

- Project Corridor
- Intermittent Stream
- Ephemeral Stream
- Existing Structure
- Proposed Structure

0 150 300 600 900 1,200 Feet

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BOONE-WILLIAMSTOWN 69kV TRANSMISSION LINE REBUILD PROJECT
BOONE, GALLATIN, AND GRANT COUNTIES, KENTUCKY

REVISED DATE:09-30-21 | DRAWN BY: EDB/ZTT/BJD

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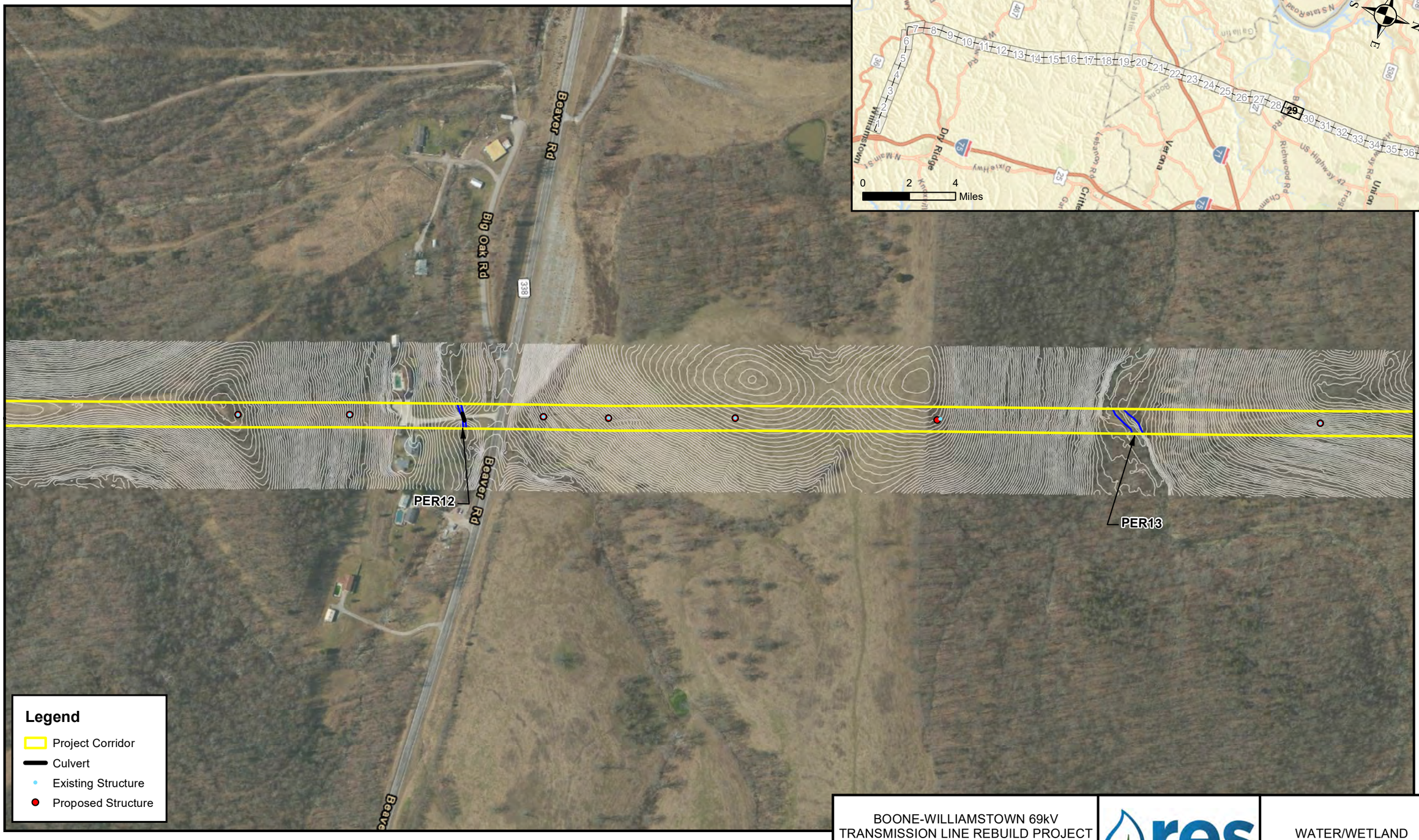
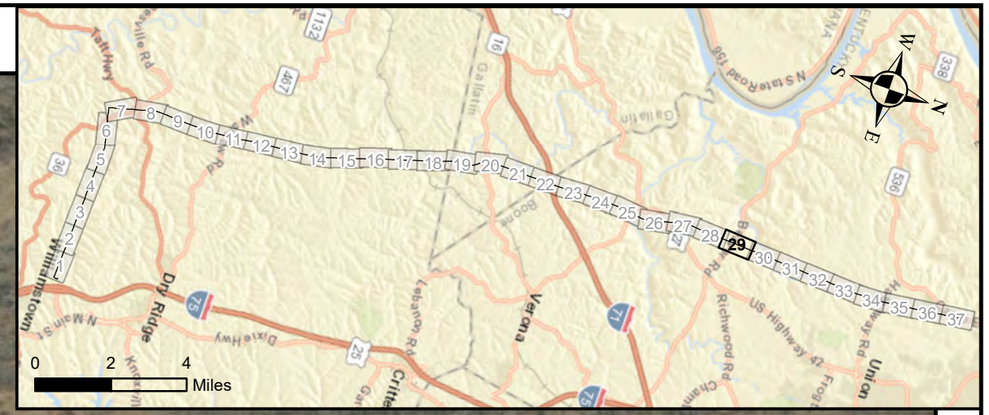
WATER/WETLAND LOCATION MAP

SHEET 28 of 37

R:\Resgis\entgis\Projects\104366_Boone_County_Williamstown_EA\MXD\Water Wetland Recon Map.mxd, 09-30-2021, ebowman

Source: Aerial - Esri and the GIS User Community (2019); Existing two foot contour topography generated from DEM.





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BOONE-WILLIAMSTOWN 69kV TRANSMISSION LINE REBUILD PROJECT
BOONE, GALLATIN, AND GRANT COUNTIES, KENTUCKY

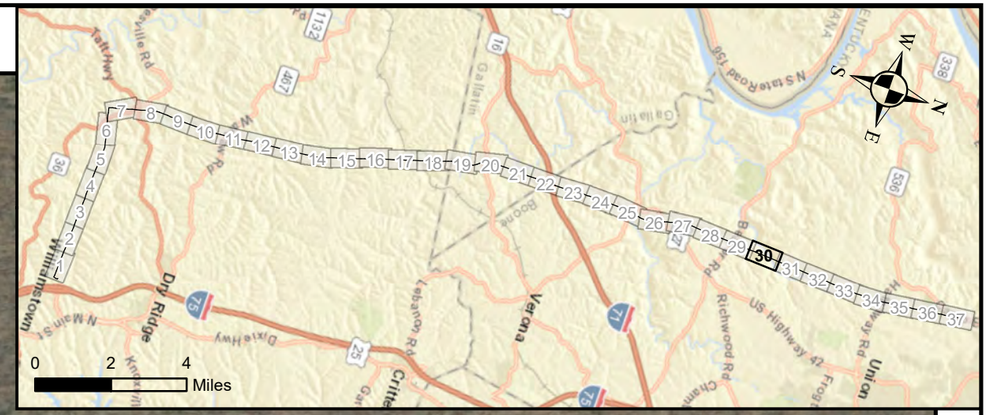
REVISED DATE:09-30-21 | DRAWN BY: EDB/ZTT/BJD

WATER/WETLAND LOCATION MAP

SHEET 29 of 37

R:\Resgis\entgis\Projects\104366_Boone_County_Williamstown_EA\MXD\Water Wetland Recon Map.mxd, 09-30-2021, ebowman

Source: Aerial - Esri and the GIS User Community (2019); Existing two foot contour topography generated from DEM.



EPH97

EPH98

INT27

PER14

EPH100

EPH99

Legend

- Project Corridor
- Intermittent Stream
- Ephemeral Stream
- Existing Structure
- Proposed Structure

0 150 300 600 900 1,200 Feet

NOTE: JURISDICTIONAL WATER/WETLAND BOUNDARIES WERE APPROXIMATED BY REDWING WETLAND SCIENTISTS ON JUNE 22 - 25, 2020. THESE BOUNDARIES HAVE NOT BEEN VERIFIED BY THE U.S. ARMY CORPS OF ENGINEERS. USE OF THIS MAP IS FOR PRELIMINARY PLANNING PURPOSES ONLY.

BOONE-WILLIAMSTOWN 69kV TRANSMISSION LINE REBUILD PROJECT
BOONE, GALLATIN, AND GRANT COUNTIES, KENTUCKY

REVISED DATE:09-30-21 | DRAWN BY: EDB/ZTT/BJD

WATER/WETLAND LOCATION MAP

SHEET 30 of 37

R:\Resgis\entgis\Projects\104366_Boone_County_Williamstown_EA\MXD\Water Wetland Recon Map.mxd, 09-30-2021, ebowman

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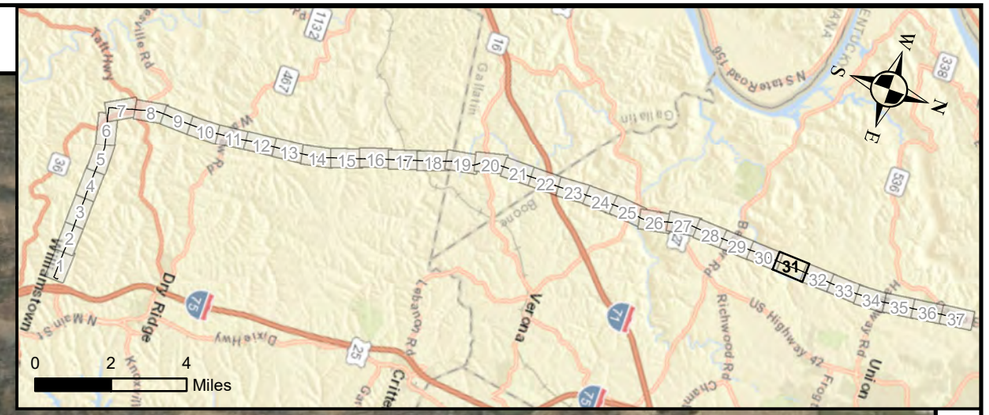

EPH100
EPH101
EPH102
INT28
EPH103
EPH104
EPH105
EPH106
EPH107
EPH108

Legend

- Project Corridor
- Intermittent Stream
- Ephemeral Stream
- Existing Structure
- Proposed Structure

0 150 300 600 900 1,200 Feet

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BOONE-WILLIAMSTOWN 69kV TRANSMISSION LINE REBUILD PROJECT
BOONE, GALLATIN, AND GRANT COUNTIES, KENTUCKY

REVISED DATE:09-30-21 | DRAWN BY: EDB/ZTT/BJD

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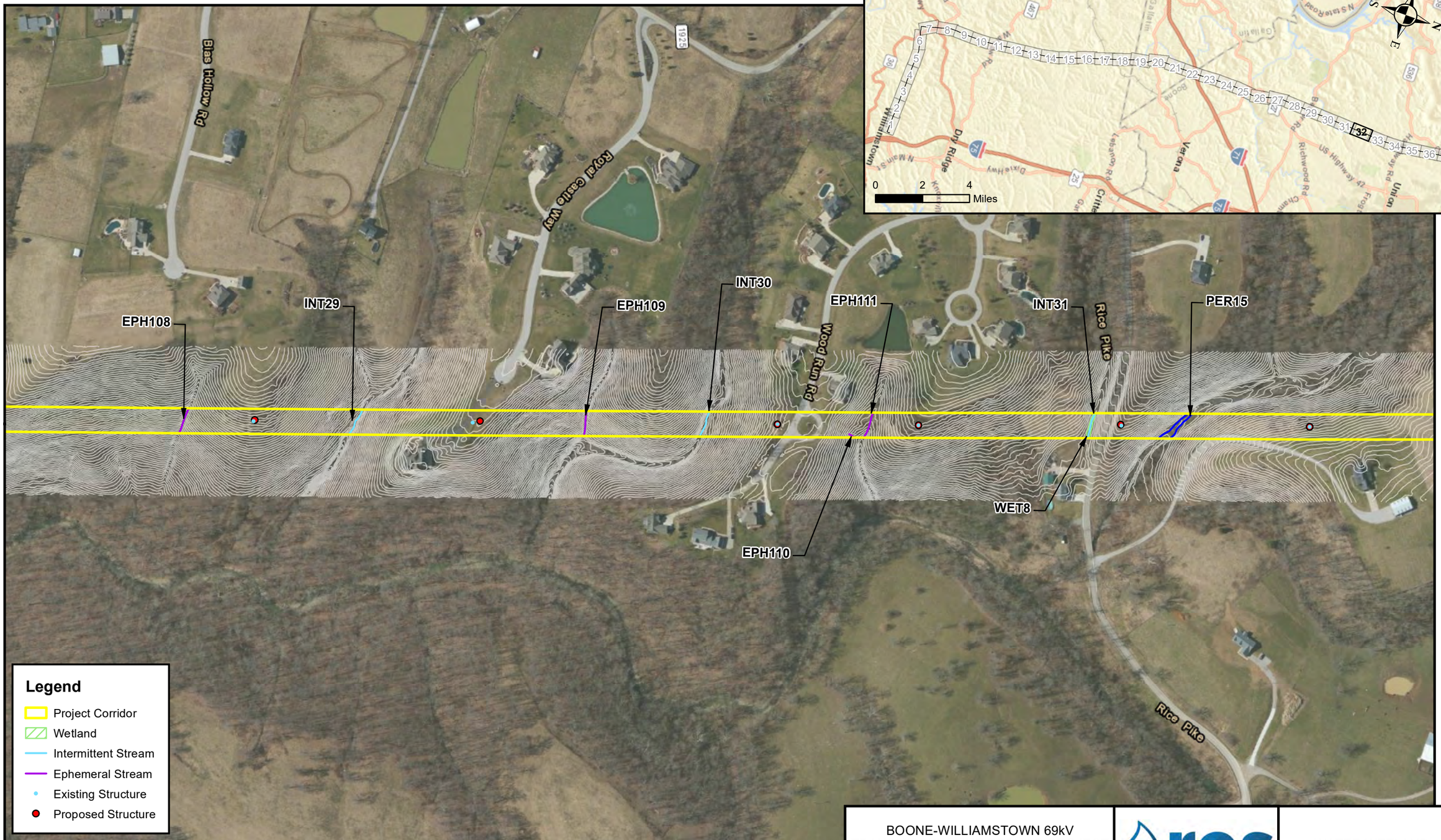
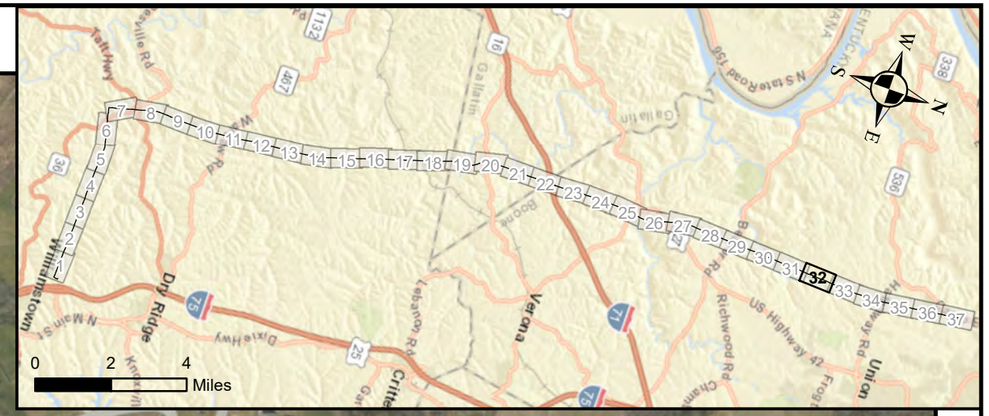
WATER/WETLAND LOCATION MAP

SHEET 31 of 37

R:\Resgis\entgis\Projects\104366_Boone_County_Williamstown_EA\MXD\Water Wetland Recon Map.mxd, 09-30-2021, ebowman

Source: Aerial - Esri and the GIS User Community (2019); Existing two foot contour topography generated from DEM.





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BOONE-WILLIAMSTOWN 69kV TRANSMISSION LINE REBUILD PROJECT
BOONE, GALLATIN, AND GRANT COUNTIES, KENTUCKY

REVISED DATE:09-30-21 | DRAWN BY: EDB/ZTT/BJD

WATER/WETLAND LOCATION MAP

SHEET 32 of 37

R:\Resgis\entgis\Projects\104366_Boone_County_Williamstown_EA\MXD\Water Wetland Recon Map.mxd, 09-30-2021, ebowman

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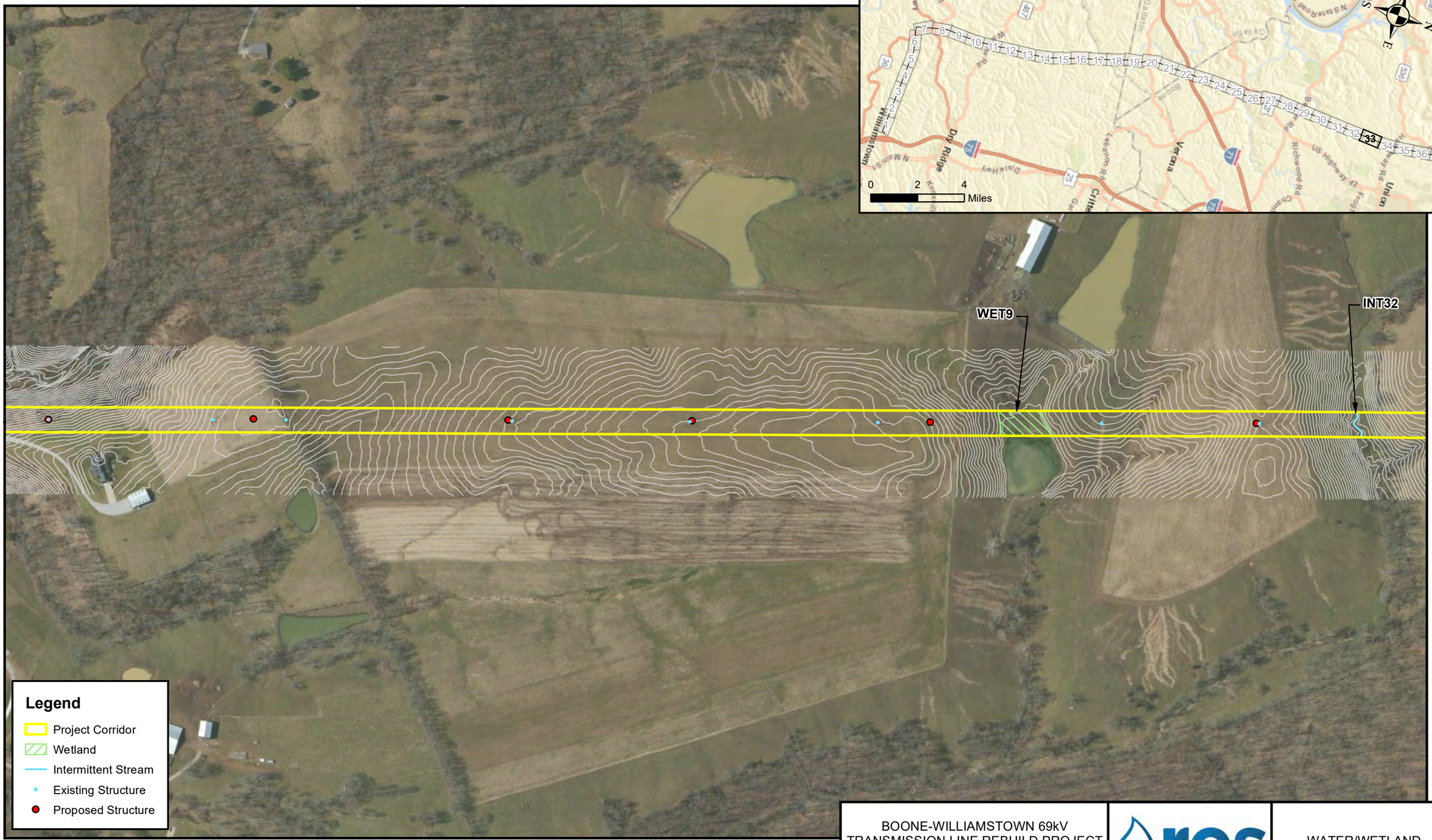

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BOONE-WILLIAMSTOWN 69kV TRANSMISSION LINE REBUILD PROJECT
BOONE, GALLATIN, AND GRANT COUNTIES, KENTUCKY

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WATER/WETLAND LOCATION MAP

SHEET 33 of 37

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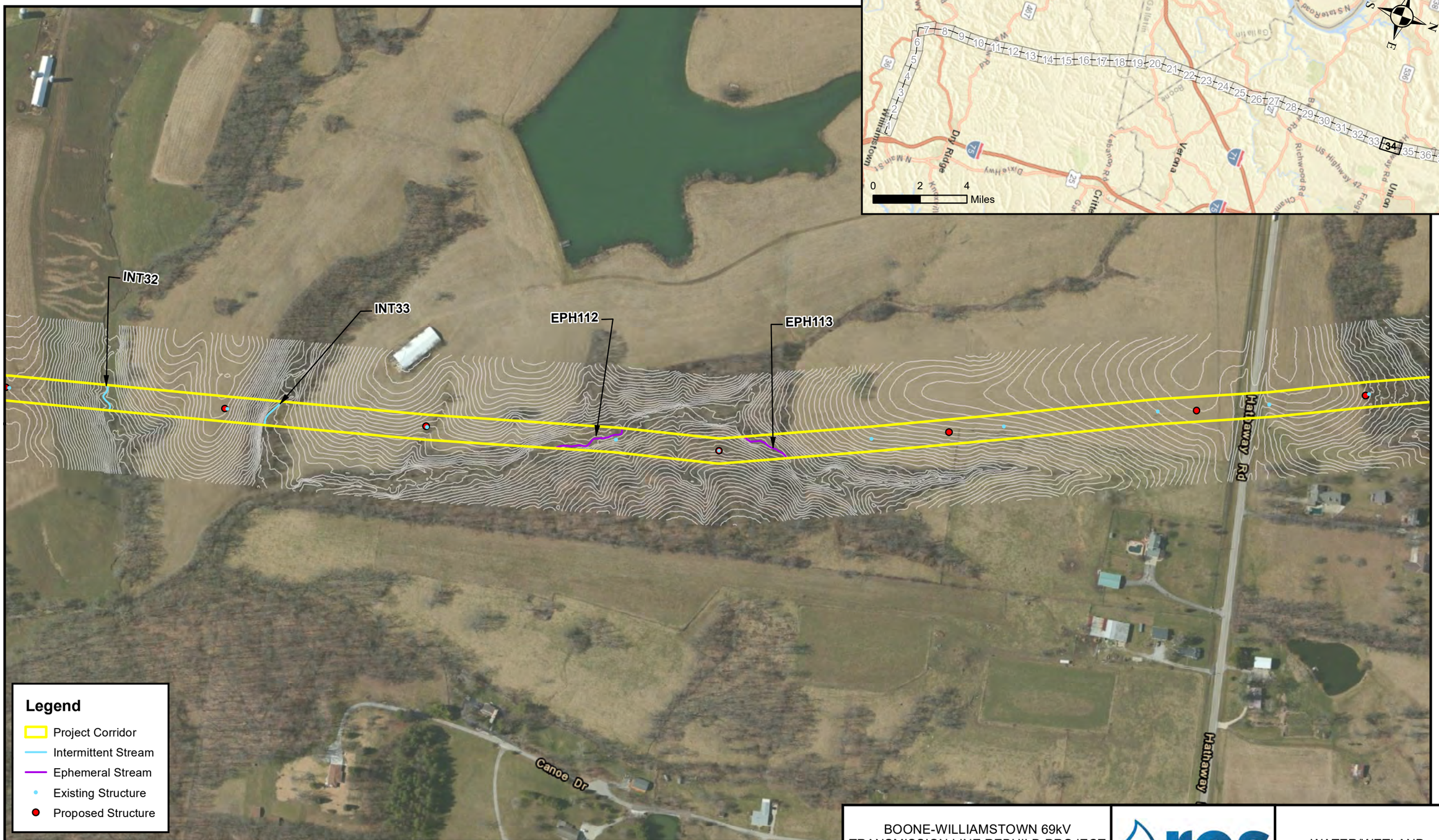

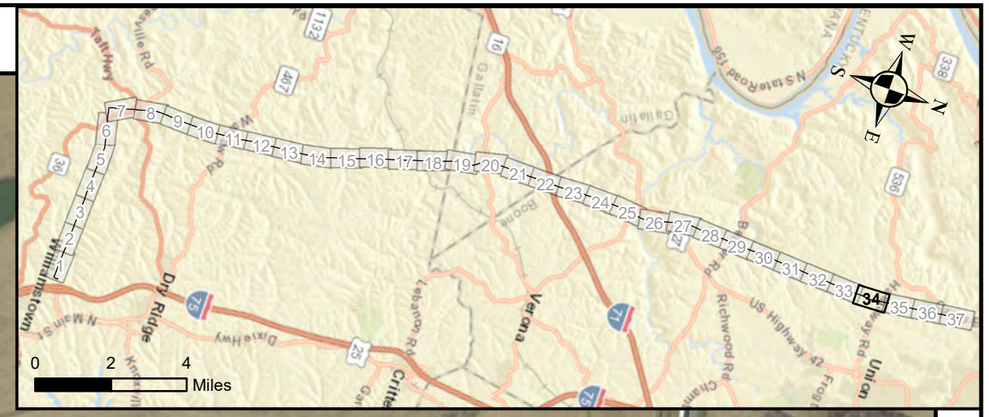

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BOONE-WILLIAMSTOWN 69kV TRANSMISSION LINE REBUILD PROJECT
BOONE, GALLATIN, AND GRANT COUNTIES, KENTUCKY

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WATER/WETLAND LOCATION MAP

SHEET 34 of 37

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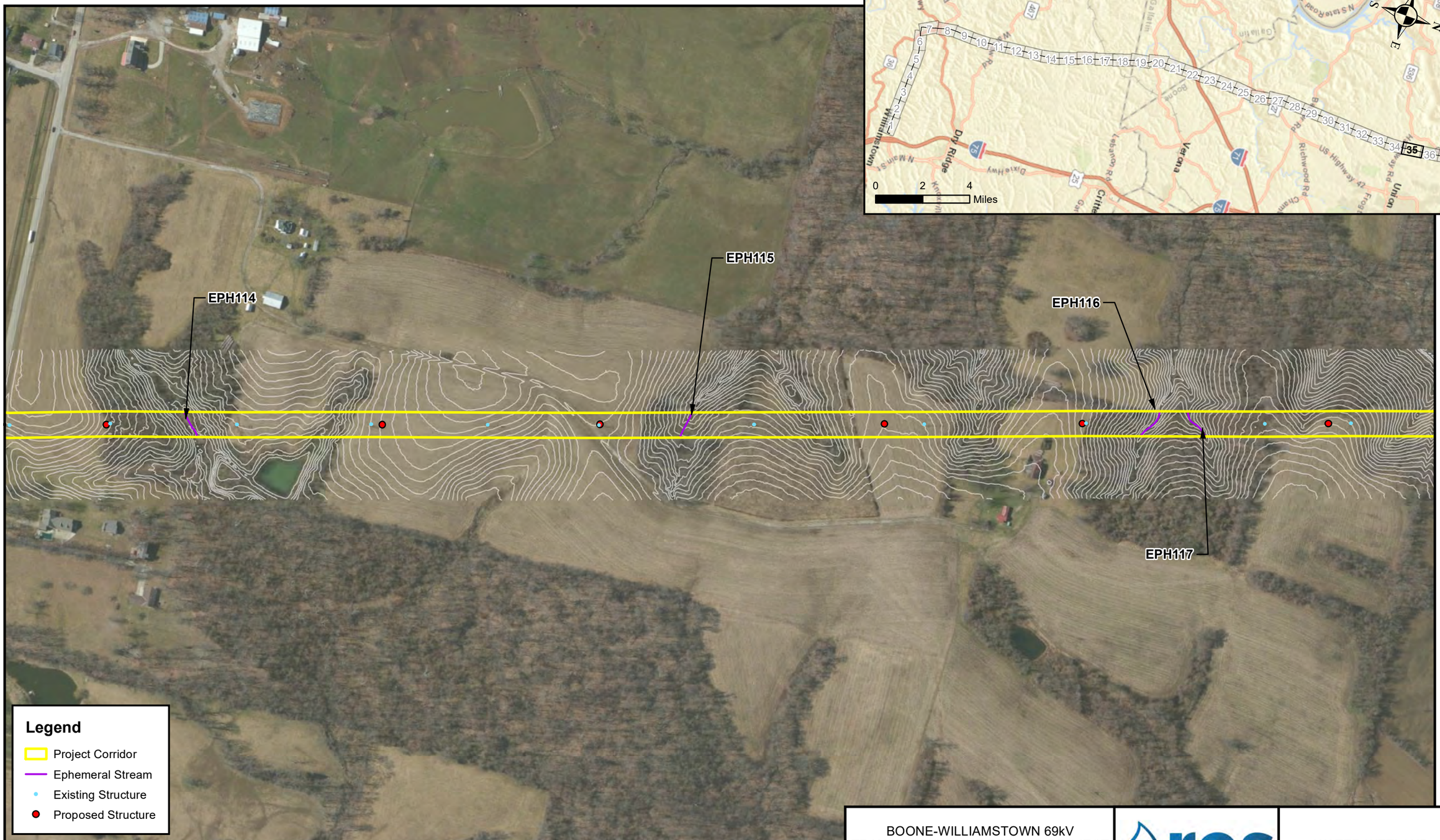

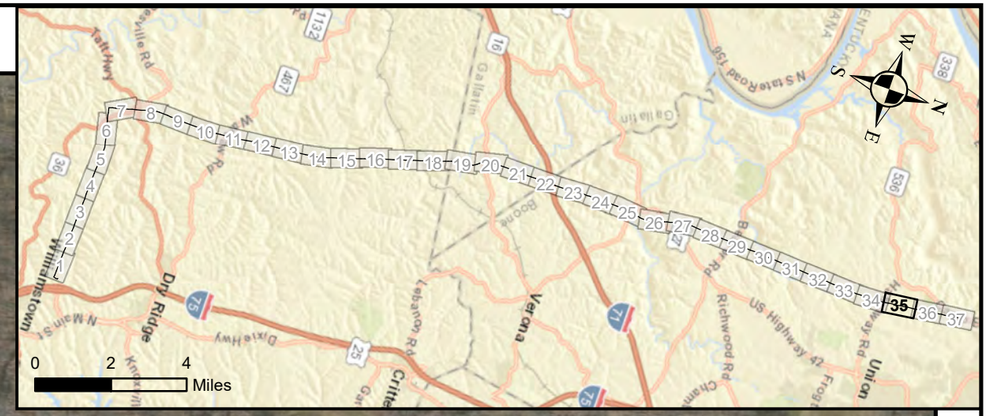

Legend

- Project Corridor
- Ephemeral Stream
- Existing Structure
- Proposed Structure

0 150 300 600 900 1,200 Feet

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BOONE-WILLIAMSTOWN 69kV TRANSMISSION LINE REBUILD PROJECT
BOONE, GALLATIN, AND GRANT COUNTIES, KENTUCKY

REVISED DATE:09-30-21 | DRAWN BY: EDB/ZTT/BJD

WATER/WETLAND LOCATION MAP

SHEET 35 of 37

R:\Resgis\entgis\Projects\104366_Boone_County_Williamstown_EA\MXD\Water Wetland Recon Map.mxd, 09-30-2021, ebowman

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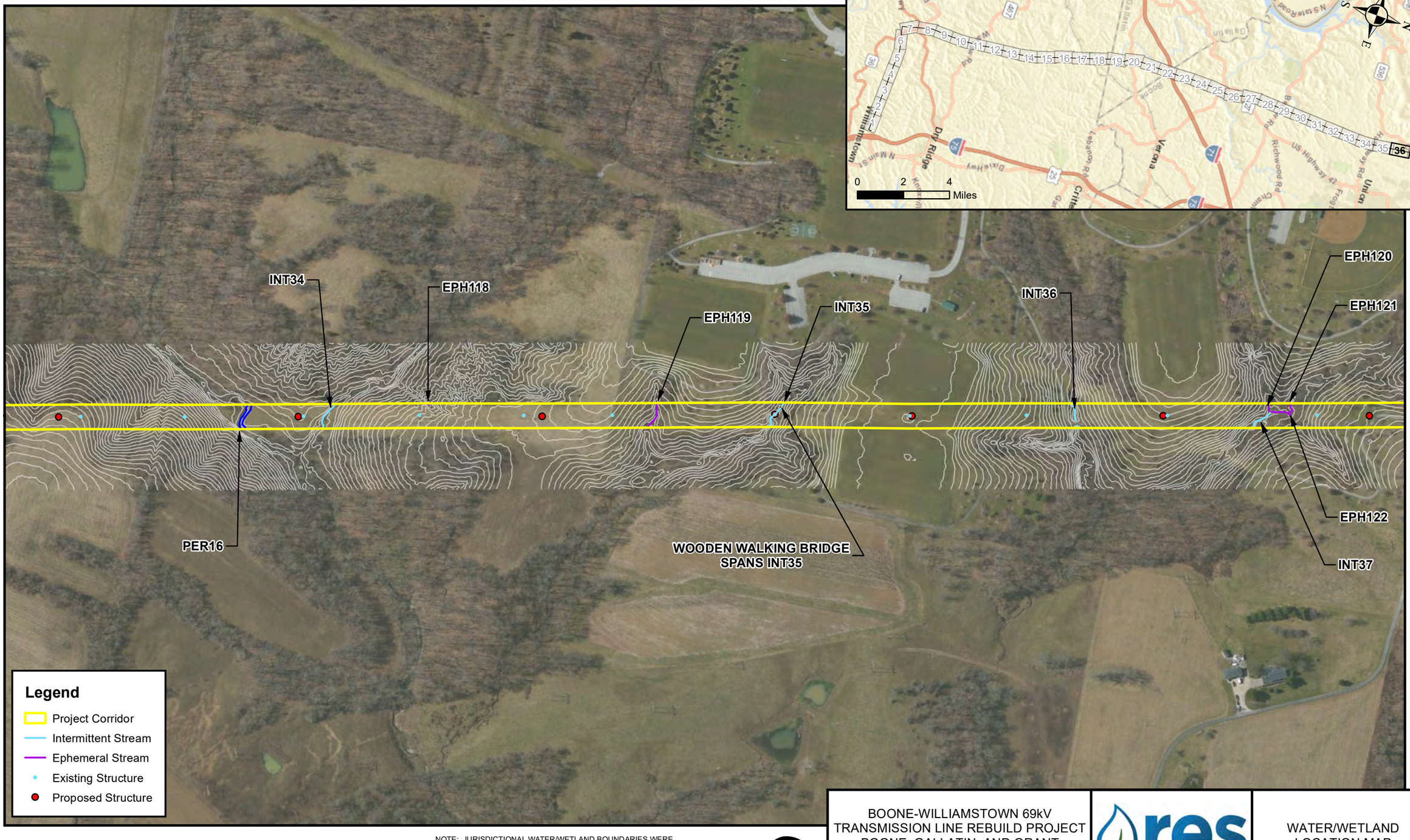

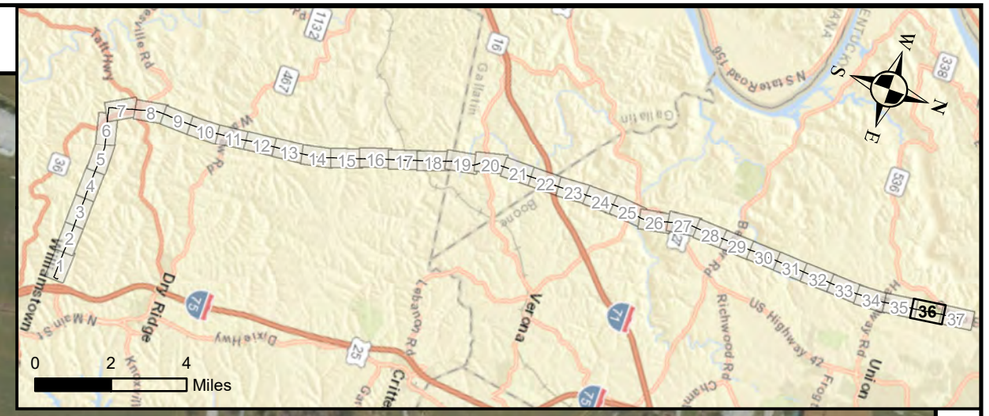

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BOONE-WILLIAMSTOWN 69kV TRANSMISSION LINE REBUILD PROJECT
BOONE, GALLATIN, AND GRANT COUNTIES, KENTUCKY

REVISED DATE:09-30-21 | DRAWN BY: EDB/ZTT/BJD

WATER/WETLAND LOCATION MAP

SHEET 36 of 37

R:\Resgis\entgis\Projects\104366_Boone_County_Williamstown_EAMXD\Water Wetland Recon Map.mxd, 09-30-2021, ebowman

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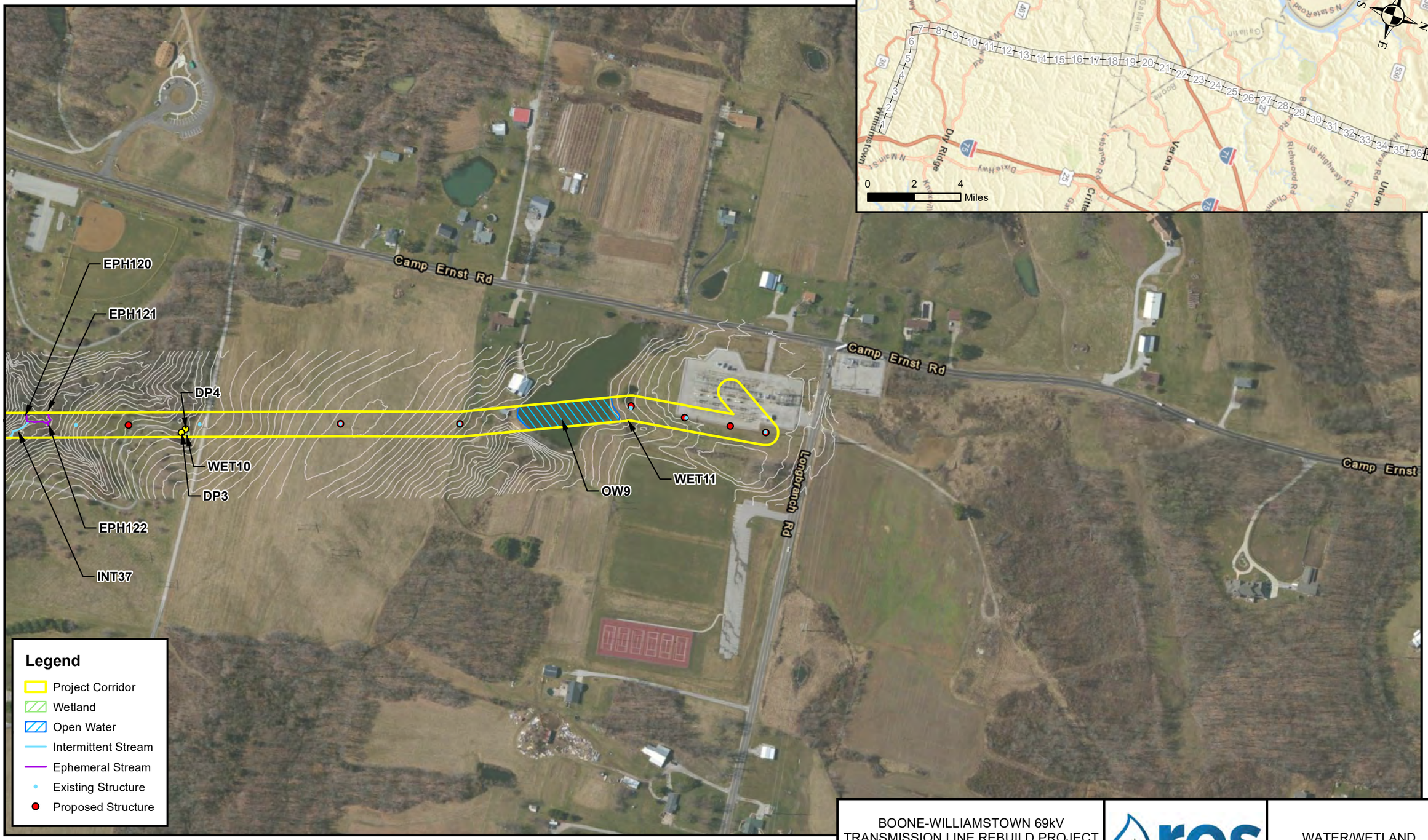

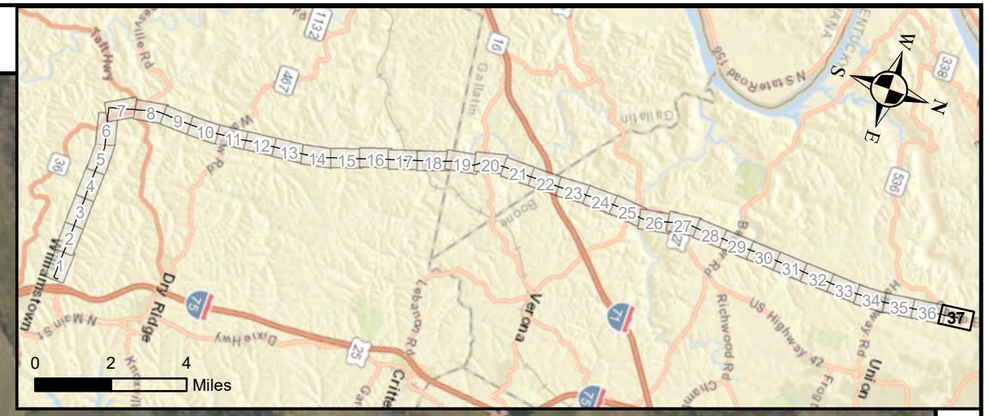

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BOONE, GALLATIN, AND GRANT COUNTIES, KENTUCKY

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WATER/WETLAND LOCATION MAP

SHEET 37 of 37

R:\Resgis\entgis\Projects\104366_Boone_County_Williamstown_EA\MXD\Water Wetland Recon Map.mxd, 09-30-2021, ebowman

Boone - Williamstown 69 kV Transmission Line Rebuild/Reconductor

Suitable Bat Habitat Aerial Map 1 of 7

Boone Distribution

Boone Transmission

Suitable Bat Habitat

Proposed Line Reconductor

Proposed Structure Replacements

Proposed Structure Modifications

Proposed Line Rebuild

Existing Transmission Lines

Existing EKPC Substations

N

0 1,000 2,000 4,000 Feet

0.011 0.016 0.096 0.017 0.064 0.039 0.245 0.098 0.13 0.103 0.03 0.102 0.113 0.385 0.064 0.187 0.074 0.08 0.039 0.047 0.021 0.157 0.058 0.456 0.074 0.27 0.047 0.155 0.011 0.17 0.12

Boone County Arboretum Children's Garden

Hueys Corners

Longbranch Rd

Hathaway Rd

Camp Ernst Rd

Riddles Run

Big Bone Rd

Big Bone Creek

Gunpowder Creek

Long Branch

Ballyshannon Dr

Rice Pike

Boone - Williamstown 69 kV Transmission Line Rebuild/Reconductor

Suitable Bat Habitat Aerial Map 2 of 7

- Suitable Bat Habitat
- Proposed Line Reconductor
- Proposed Structure Replacements
- Proposed Structure Modifications
- Proposed Line Rebuild
- Existing Transmission Lines
- Existing EKPC Substations

N

0 1,000 2,000 4,000 Feet

Boone - Williamstown 69 kV Transmission Line Rebuild/Reconductor

Suitable Bat Habitat Aerial Map 3 of 7

- Suitable Bat Habitat
- Proposed Line Reconductor
- Proposed Structure Replacements
- Proposed Structure Modifications
- Proposed Line Rebuild
- Existing Transmission Lines
- Existing EKPC Substations

N

0 1,000 2,000 4,000 Feet

Boone - Williamstown 69 kV Transmission Line Rebuild/Reconductor

Suitable Bat Habitat Aerial Map 4 of 7

- Suitable Bat Habitat
- Proposed Line Reconductor
- Proposed Structure Replacements
- Proposed Structure Modifications
- Proposed Line Rebuild
- Existing Transmission Lines
- Existing EKPC Substations

N

0 1,000 2,000 4,000 Feet

Boone - Williamstown 69 kV Transmission Line Rebuild/Reconductor

Suitable Bat Habitat Aerial Map 5 of 7

- Suitable Bat Habitat
- Proposed Line Reconductor
- Proposed Structure Replacements
- Proposed Structure Modifications
- Proposed Line Rebuild
- Existing Transmission Lines
- Existing EKPC Substations

N

0 1,000 2,000 4,000 Feet

Boone - Williamstown 69 kV Transmission Line Rebuild/Reconductor

Suitable Bat Habitat Aerial Map 6 of 7

- Suitable Bat Habitat
- Proposed Line Reconductor
- Proposed Structure Replacements
- Proposed Structure Modifications
- Proposed Line Rebuild
- Existing Transmission Lines
- Existing EKPC Substations

N

0 1,000 2,000 4,000 Feet

Munk Junction

Boone - Williamstown 69 kV Transmission Line Rebuild/Reconductor

Suitable Bat Habitat Aerial Map 7 of 7

- Suitable Bat Habitat
- Proposed Line Reconductor
- Proposed Structure Replacements
- Proposed Structure Modifications
- Proposed Line Rebuild
- Existing Transmission Lines
- Existing EKPC Substations

N

0 1,000 2,000 4,000 Feet

Williamstown

Baton Rouge Rd

Clay Lick

Clarks Creek

Williams Branch

Conrad Cemetery

Barnes Cemetery

Clay Cemetery

Barnes Rd

Garter Gl

Martin Rd

Steammill Branch

Stewartsville Rd

KY Highway 36 W

156

75

36

0.004 0.045 0.048 0.04 0.01 0.051 0.002 0.01 0.042 0.117 0.007 0.02 0.051 0.073 0.025 0.024 0.042 0.051 0.006 0.033 0.029 0.073 0.054 0.007 0.022 0.019 0.003 0.009 0.023 0.005 0.006 0.017 0.018 0.028 0.008

Exhibit C. Public Notice

EAST KENTUCKY POWER COOPERATIVE

October 30, 2020

The Honorable Gary W. Moore
Boone County Judge/Executive
P.O. Box 900
Burlington, KY 41005

RE: Invitation to Participate as a Consulting Party for the Section 106 Review Process for the Proposed Boone County – Williamstown 69 kV Transmission Line Reconductor/Rebuild Project

Dear Judge Moore,

Thank you for taking the time to review this letter regarding the potential involvement by your office in the above referenced project. The U.S. Department of Agriculture, Rural Utilities Service (RUS), is considering an application from East Kentucky Power Cooperative (EKPC) for financial assistance for the construction, operation, and maintenance of the Boone County – Williamstown 69 kV Transmission Line Reconductor/Rebuild Project in portions of Boone, Gallatin, and Grant Counties, Kentucky. RUS is considering funding this application, thereby making the referenced project an undertaking subject to review under Section 106 of the National Historic Preservation Act, 16 U.S.C. § 470f, and its implementing regulations, "Protection of Historic Properties" (36 CFR Part 800).

The existing transmission line section that would be reconductored/rebuilt is approximately 28.5 miles in length and is generally oriented north to south between the existing EKPC Boone County 69 kV substation and Munk Junction; and generally west to east between Munk Junction and the Williamstown 69 kV substation. The Boone County substation is located at southeastern corner of the junction of Longbranch Road and Camp Ernst Road, approximately 3.5 miles south of Burlington in Boone County. The Munk Junction is located on the west side of KY Hwy 36, approximately 0.1 mile southeast of Smokey Road at 38.643634oN, -84.675623oW in Grant County. The Williamstown substation is located on the south side of Barnes Road, 0.25-mile west Interstate 75, approximately 1.75 miles west of Williamstown in Grant County. The proposed 28.5 mile hybrid project would include portions of rebuild, reconductor, and structure modifications within the existing 100-foot-wide right-of-way (ROW) easement Please see enclosed maps depicting the project location and project plan.

As head of the local government in the area that will be affected by the project, and in accordance with 36 CFR Part 800 and the National Historic Preservation Act of 1966, as amended, you and/or your representative(s) are entitled to participate in the Section 106 review process as a consulting party. If you desire to become formally involved in the regulatory process as a consulting party, please send an email or letter to *josh.young@ekpc.coop*, or at East Kentucky Power Cooperative, 4775 Lexington Road, Winchester, KY 40391. For additional information not specific to the Section 106 review process, please respond to the above email address with project questions and the appropriate EKPC representative will contact you. We look forward to hearing from you.

Sincerely,

Josh Young
Supervisor, Natural Resources
& Environmental Communications

Enclosures
cc: Jerry Purvis, Steve Anderson, Darrin Adams (EKPC), and Lauren McGee Rayburn (RUS)

4775 Lexington Road 40391
P.O. Box 707, Winchester
Kentucky 40392-0707

Tel. (859) 744-4812
Fax: (859) 744-6008
http://www.ekpc.coop

EAST KENTUCKY POWER COOPERATIVE

October 30, 2020

The Honorable Jon Ryan Morris
Gallatin County Judge/Executive
P.O. Box 144
Warsaw, KY 41095

RE: Invitation to Participate as a Consulting Party for the Section 106 Review Process for the Proposed Boone County – Williamstown 69 kV Transmission Line Reconductor/Rebuild Project

Dear Judge Morris,

Thank you for taking the time to review this letter regarding the potential involvement by your office in the above referenced project. The U.S. Department of Agriculture, Rural Utilities Service (RUS), is considering an application from East Kentucky Power Cooperative (EKPC) for financial assistance for the construction, operation, and maintenance of the Boone County – Williamstown 69 kV Transmission Line Reconductor/Rebuild Project in portions of Boone, Gallatin, and Grant Counties, Kentucky. RUS is considering funding this application, thereby making the referenced project an undertaking subject to review under Section 106 of the National Historic Preservation Act, 16 U.S.C. § 470f, and its implementing regulations, "Protection of Historic Properties" (36 CFR Part 800).

The existing transmission line section that would be reconductored/rebuilt is approximately 28.5 miles in length and is generally oriented north to south between the existing EKPC Boone County 69 kV substation and Munk Junction; and generally west to east between Munk Junction and the Williamstown 69 kV substation. The Boone County substation is located at southeastern corner of the junction of Longbranch Road and Camp Ernst Road, approximately 3.5 miles south of Burlington in Boone County. The Munk Junction is located on the west side of KY Hwy 36, approximately 0.1 mile southeast of Smokey Road at 38.643634ºN, -84.675623ºW in Grant County. The Williamstown substation is located on the south side of Barnes Road, 0.25-mile west Interstate 75, approximately 1.75 miles west of Williamstown in Grant County. The proposed 28.5 mile hybrid project would include portions of rebuild, reconductor, and structure modifications within the existing 100-foot-wide right-of-way (ROW) easement Please see enclosed maps depicting the project location and project plan.

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Supervisor, Natural Resources
& Environmental Communications

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Kentucky 40392-0707

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Fax: (859) 744-6008
http://www.ekpc.coop

EAST KENTUCKY POWER COOPERATIVE

October 30, 2020

The Honorable Chuck Dills
Grant County Judge/Executive
101 North Main Street
Williamstown, KY 41097

RE: Invitation to Participate as a Consulting Party for the Section 106 Review Process for the Proposed Boone County – Williamstown 69 kV Transmission Line Reconductor/Rebuild Project

Dear Judge Dills,

Thank you for taking the time to review this letter regarding the potential involvement by your office in the above referenced project. The U.S. Department of Agriculture, Rural Utilities Service (RUS), is considering an application from East Kentucky Power Cooperative (EKPC) for financial assistance for the construction, operation, and maintenance of the Boone County – Williamstown 69 kV Transmission Line Reconductor/Rebuild Project in portions of Boone, Gallatin, and Grant Counties, Kentucky. RUS is considering funding this application, thereby making the referenced project an undertaking subject to review under Section 106 of the National Historic Preservation Act, 16 U.S.C. § 470f, and its implementing regulations, "Protection of Historic Properties" (36 CFR Part 800).

The existing transmission line section that would be reconductored/rebuilt is approximately 28.5 miles in length and is generally oriented north to south between the existing EKPC Boone County 69 kV substation and Munk Junction; and generally west to east between Munk Junction and the Williamstown 69 kV substation. The Boone County substation is located at southeastern corner of the junction of Longbranch Road and Camp Ernst Road, approximately 3.5 miles south of Burlington in Boone County. The Munk Junction is located on the west side of KY Hwy 36, approximately 0.1 mile southeast of Smokey Road at 38.643634°N, -84.675623°W in Grant County. The Williamstown substation is located on the south side of Barnes Road, 0.25-mile west Interstate 75, approximately 1.75 miles west of Williamstown in Grant County. The proposed 28.5 mile hybrid project would include portions of rebuild, reconductor, and structure modifications within the existing 100-foot-wide right-of-way (ROW) easement Please see enclosed maps depicting the project location and project plan.

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Josh Young
Supervisor, Natural Resources
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Enclosures
cc: Jerry Purvis, Steve Anderson, Darrin Adams (EKPC), and Lauren McGee Rayburn (RUS)

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EAST KENTUCKY POWER COOPERATIVE

October 30, 2020

The Boone County Recorder
6948 Oakwood Drive
Florence, KY 41042

Re: Public Notice Regarding the Planned Boone County – Williamstown 69 kV Transmission Line Reconductor/Rebuild Project in Boone, Gallatin and Grant Counties, Kentucky

To Whom It May Concern:

I would like to place a public notice to run one day in mid-November 2020. Please follow this request by emailing a proof and the cost for placing the notice. The public notice I wish to place reads as follows:

Notice: East Kentucky Power Cooperative, Inc. (EKPC) is proposing a transmission line rebuild project in portions of Boone, Gallatin, and Grant Counties. The existing Boone County – Williamstown 69 kV transmission line section that would be reconductored/rebuilt is approximately 28.5 miles in length and is generally oriented north to south between the existing EKPC Boone County 69 kV substation and Munk Junction; and generally west to east between Munk Junction and the Williamstown 69 kV substation. The Boone County substation is located at southeastern corner of the junction of Longbranch Road and Camp Ernst Road, approximately 3.5 miles south of Burlington in Boone County. The Munk Junction is located on the west side of KY Hwy 36, approximately 0.1 mile southeast of Smokey Road at 38.643634°N, -84.675623°W in Grant County. The Williamstown substation is located on the south side of Barnes Road, 0.25-mile west Interstate 75, approximately 1.75 miles west of Williamstown in Grant County. The proposed 28.5 mile hybrid project would include portions of rebuild, reconductor, and structure modifications within the existing 100-foot-wide right-of-way (ROW) easement.

The U.S. Department of Agriculture, Rural Utilities Service (RUS) is considering an application from EKPC for financial assistance to construct the proposed project. Actions taken by the agency for the referenced project may be undertakings subject to review under Section 106 of the National Historic Preservation Act, 16 U.S.C. § 470f, and its implementing regulations, "Protection of Historic Properties" (36 CFR Part 800). This act requires federal agencies to consider the effects of its undertakings on important historic properties listed or eligible for listing in the National Register of Historic Places (NRHP).

On behalf of RUS, EKPC is seeking to identify persons who are interested in participating in the process for evaluating the potential effects of this proposed project on historic properties located in the project area that are listed or eligible for listing in the NRHP. If you have a legal or economic relation to properties that will be affected by the proposed project, or if you have a demonstrable interest in the historic built and/or archaeological environment in the project area, you are invited to participate as a consulting party in the

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Fax: (859) 744-6008
http://www.ekpc.coop

Section 106 review process. If you believe you meet these criteria and you wish to participate as a consulting party, please send a letter with your contact information and statement of interest, to Josh Young at josh.young@ekpc.coop, or at East Kentucky Power Cooperative, 4775 Lexington Road, Winchester, KY 40391.

Please send an affidavit or a tear sheet once the public notice has been circulated. If you need any further information or wish to discuss this project, please feel free to contact Josh Young at (859) 745-9799 or by email at josh.young@ekpc.coop.

Thank you very much for your assistance in this matter.

Sincerely,

Josh Young
Supervisor, Natural Resources
& Environmental Communications

Enclosures

cc: Jerry Purvis (EKPC)
Steve Anderson (EKPC)
Darrin Adams (EKPC)
Lauren McGee Rayburn (RUS)

The Community Press
Because community matters.

The Community Recorder
Because community matters.

Advertiser:

EAST KENTUCKY POWER COOPERATIV
4775 LEXINGTON RD

WINCHESTER KY 40391

LEGAL NOTICE ATTACHED

This is not an invoice
Account #: CIN-140391
Total Cost of the Ad: $68.86
Last Run Date: 11/19/2020

# of Affidavits: 1

AFFIDAVIT OF PUBLICATION

Newspaper: CIN-CR KY Boone Enq Bundle

State of Wisconsin

RE: Order # 0004453493

I, _____

of the The Enquirer, a newspaper printed in Cincinnati, Ohio and published in Cincinnati, in said County and State, and of general circulation in said county, and as to the Kentucky Enquirer published in Ft. Mitchell, Kenton County, Kentucky, who being duly sworn, deposeth and saith that the advertisement of which the annexed is a true copy, has been published in the said newspaper times, once in each issue as follows:

11/19/2020

.....

_____

Subscribed and sworn to before me this
15th day of March, 2021

_____
Notary Public

10/23/2023
Commission expires

PANG PAPPATHOPOULOS
Notary Public
State of Wisconsin

Notice: East Kentucky Power Cooperative, Inc. (EKPC) is proposing a transmission line rebuild project in portions of Boone, Gallatin, and Grant Counties. The existing Boone County – Williamstown 69 kV transmission line section that would be reconductored/rebuilt is approximately 28.5 miles in length and is generally oriented north to south between the existing EKPC Boone County 69 kV substation and Munk Junction; and generally west to east between Munk Junction and the Williamstown 69 kV substation. The Boone County substation is located at southeastern corner of the junction of Longbranch Road and Camp Ernst Road, approximately 3.5 miles south of Burlington in Boone County. The Munk Junction is located on the west side of KY Hwy 36, approximately 0.1 mile southeast of Smokey Road at 38.643634oN, -84.675623oW in Grant County. The Williamstown substation is located on the south side of Barnes Road, 0.25-mile west Interstate 75, approximately 1.75 miles west of Williamstown in Grant County. The proposed 28.5 mile hybrid project would include portions of rebuild, reconductor, and structure modifications within the existing 100-foot-wide right-of-way (ROW) easement.

The U.S. Department of Agriculture, Rural Utilities Service (RUS) is considering an application from EKPC for financial assistance to construct the proposed project. Actions taken by the agency for the referenced project may be undertakings subject to review under Section 106 of the National Historic Preservation Act, 16 U.S.C. § 470f, and its implementing regulations, "Protection of Historic Properties" (36 CFR Part 800). This act requires federal agencies to consider the effects of its undertakings on important historic properties listed or eligible for listing in the National Register of Historic Places (NRHP).

On behalf of RUS, EKPC is seeking to identify persons who are interested in participating in the process for evaluating the potential effects of this proposed project on historic properties located in the project area that are listed or eligible for listing in the NRHP. If you have a legal or economic relation to properties that will be affected by the proposed project, or if you have a demonstrable interest in the historic built and/or archaeological environment in the project area, you are invited to participate as a consulting party in the Section 106 review process. If you believe you meet these criteria and you wish to participate as a consulting party, please send a letter with your contact information and

statement of interest, to Josh Young at josh.young@ekpc.coop, or at East Kentucky Power Cooperative, 4775 Lexington Road, Winchester, KY 40391.
BCR,Nov19,'20#4453493

EAST KENTUCKY POWER COOPERATIVE

October 30, 2020

The Gallatin County News
211 3rd Avenue
Warsaw, KY 41095

Re: Public Notice Regarding the Planned Boone County – Williamstown 69 kV Transmission Line Reconductor/Rebuild Project in Boone, Gallatin and Grant Counties, Kentucky

To Whom It May Concern:

I would like to place a public notice to run one day in mid-November 2020. Please follow this request by emailing a proof and the cost for placing the notice. The public notice I wish to place reads as follows:

Notice: East Kentucky Power Cooperative, Inc. (EKPC) is proposing a transmission line rebuild project in portions of Boone, Gallatin, and Grant Counties. The existing Boone County – Williamstown 69 kV transmission line section that would be reconductored/rebuilt is approximately 28.5 miles in length and is generally oriented north to south between the existing EKPC Boone County 69 kV substation and Munk Junction; and generally west to east between Munk Junction and the Williamstown 69 kV substation. The Boone County substation is located at southeastern corner of the junction of Longbranch Road and Camp Ernst Road, approximately 3.5 miles south of Burlington in Boone County. The Munk Junction is located on the west side of KY Hwy 36, approximately 0.1 mile southeast of Smokey Road at 38.643634°N, -84.675623°W in Grant County. The Williamstown substation is located on the south side of Barnes Road, 0.25-mile west Interstate 75, approximately 1.75 miles west of Williamstown in Grant County. The proposed 28.5 mile hybrid project would include portions of rebuild, reconductor, and structure modifications within the existing 100-foot-wide right-of-way (ROW) easement.

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4775 Lexington Road 40391
P.O. Box 707, Winchester
Kentucky 40392-0707
Tel. (859) 744-4812
Fax: (859) 744-6008
http://www.ekpc.coop

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Thank you very much for your assistance in this matter.

Sincerely,

Josh Young
Supervisor, Natural Resources
& Environmental Communications

Enclosures

cc: Jerry Purvis (EKPC)
Steve Anderson (EKPC)
Darrin Adams (EKPC)
Lauren McGee Rayburn (RUS)

Gallatin County News
P.O. Box 435
Warsaw, Kentucky

AFFIDAVIT

The affiant, Denny Kelley Warnick, publisher or proprietor of the Gallatin County News, Warsaw, Kentucky, after being duly sworn and cautioned does depose and states the following:

That the Gallatin County News is a newspaper printed and published in the State of Kentucky and of general circulation in the County of Gallatin.

That the attached Legal Notice was duly published in the Gallatin County News on Nov 11, 2020.

Done at Warsaw, Kentucky, this 15th day of March, 2021.

STATE OF KENTUCKY
COUNTY OF GALLATIN
Subscribed and sworn to before me by Denny Warnick, **this 15th day of March, 2021, at Warsaw, Gallatin County, Kentucky.**

Kelley Warnick
Notary Public

My commission expires
September 9th, 2022

Classified Advertising

FOR SALE

FOR SALE: Washers, dryers, stoves, and refrigerators in excellent condition, deluxe models, all with warranty. Will deliver. $125 and up. Call 859-727-3030, **Best Appliance since 1993, at 4115 Dixie Highway, Elsmere, KY 41018.** 1-51p

FOR SALE: Square bale hay, first cutting, Timothy and Orchard Grass mix. Call Gary Richardson 859-643-5776.

25-tfc

SERVICES

SERVICES: Hauling, driveway gravel, topsoil, backhoe, loader work. Licensed electrical service. Call Ron Maxwell, at 859-743-6968.

40-13p

YARD SALES

BARN SALE: Saturday, November 14, 8 a.m.-6 p.m., rain or shine, 5605 Hwy. 16, Warsaw. Extension ladders, tools, welder, heaters, log chains, meat smoker, deer hunting equipment, bee boxes, and other items.

45-1p

PUBLIC NOTICES

PUBLIC NOTICE:
Notice is hereby given that Michael and Marisa Risch, 798 Little Sugar Creek Road, Warsaw, Kentucky 41095, has filed an application with the Energy & Environment Cabinet to install a low water crossing over Little Sugar Creek as a form of egress to their property. The property is located on Little Sugar Creek Road, six miles North of Warsaw, off of route 42. Any comments or objections concerning this application shall be directed in writing to: Kentucky Division of Water, Floodplain Management Section, 300 Sower Blvd. 3rd Floor, Frankfort, Kentucky 40601.

45-2c

PUBLIC NOTICE:
Gallatin County Water District has rescheduled its regular monthly Board Meeting from November 12, 2020 to November 19, 2020.

45-1c

PUBLIC NOTICE:
COMMISSIONER'S SALE
GALLATIN CIRCUIT COURT,
CASE NO. 20-CI-00069
LAKEVIEW LOAN SERVICING, LLC
PLAINTIFF
VERSUS}
SARAH CLAYTON AKA SARAH N. CLAYTON,
STANLEY CLAYTON AKA STANLEY W. CLAYTON, ET AL.
DEFENDANTS
NOTICE OF SALE

By virtue of a judgment and order of sale of the Gallatin Circuit Court entered October 23, 2020, in the above case, I shall proceed to offer for sale on the SECOND FLOOR LOBBY OF THE GALLATIN COUNTY COURTHOUSE (or on the courthouse lawn, weather permitting) in Warsaw, Kentucky, to the highest bidder, at public auction on THURSDAY, November 19, 2020, at the hour of 1:30 p.m. or thereabouts, the following described property, to-wit:
ADDRESS: 115 Sarah Court, Verona, KY 41092
PIDN: 36-MP-084
PRIOR INSTRUMENT: Deed Book 103, Page 575
The following described real estate, located in the County of Gallatin, and Commonwealth of Kentucky, to-wit:
Being all of lot number eighty four (84) of Mars Place Subdivision, section 3, as shown on Plat A-70 of the Gallatin County Clerk's records at Warsaw, Kentucky.
Subject to easements, conditions, restrictions, and covenants of record and/or in existence, including but not limited to those recorded in Deed BK 71, Page 558.
Save and Except:
Being all of Lot 84A, part of Mars Place Subdivision, Section Number 3, Plat A-70 and being 0.276 acres.
Subject to any and all easements, restrictions, conditions, and legal highways of record and/or in existence.
Being the same property conveyed from AGC of NKY, Inc. a Kentucky Corporation to Stanley Clayton and Sarah Clayton, husband and wife, jointly with right of survivorship by virtue of a deed dated January 13, 2007
and recorded December 28, 2007 at Deed Book 103, Page 575 of the Gallatin County, Kentucky real estate records.
Said property shall be sold for the purpose of collecting the following judgment debt: A judgment in favor of the plaintiff(s) in the amount of $84,242.72 together with interest, assessments, taxes and costs herein expended.
TERMS OF SALE: The property shall be sold as a whole. The purchaser may pay all or part of the purchase price in cash, and may pay the balance of the purchase price on a credit of 30 days after date of sale; said credit shall be granted only upon the execution by the purchaser of bond, with surety thereon, and said surety shall be a lending institution, fidelity or surety company authorized and doing business in Kentucky or other surety approved by the Master Commissioner; an authorized officer of the surety must be present at the sale or must have given the Master Commissioner adequate assurance of its intent to be surety prior to or at the sale; said Bond shall be, and shall remain, a lien on the property sold as additional security for the payment of the full purchase price, and shall have the full force and effect of a Judgment; and said Bond shall bear interest at the rate of Twelve (12%) Percent per annum until paid. The purchaser shall be required to pay the sum of 10% of the bid amount in cash or certified check on the purchase at the time of sale. Risk of loss shall pass to the successful bidder at the close of the sale. The successful bidder at the sale shall, at bidder's own expense, carry fire and extended insurance coverage on any improvements from the date of sale until the purchase price is fully paid, with a loss payable clause to the Master Commissioner of the Gallatin Circuit Court. Failure of the purchaser to effect such insurance shall not affect the validity of the sale or the purchaser's liability thereunder, but shall entitle, but not require, a lien holder herein, after giving notice to the Master Commissioner, to effect said insurance and furnish the policy or evidence thereof to the Master Commissioner, and the premium thereon or the proper portion thereof shall be charged to the purchaser as purchaser's cost. The property shall be sold subject to ad valorem taxes for the year 2021 and all subsequent years thereafter; easements, restrictions and stipulations of record; assessments for public improvements levied against the property, if any; existing zoning ordinances, statutes, laws, or regulations; and any facts which an inspection and accurate survey of the property may disclose.
All sales conducted in-person must meet the health and safety measures required by Kentucky Supreme Court Administrative Order 2020-43, "Kentucky Court of Justice Response to COVID-19 Emergency – Health and Safety Requirements for the Expansion of Court Operations," including but not limited to, the requirements for facial coverings, limited occupancy capacity, social distancing, and cleaning/disinfecting.
BIDDERS SHALL BE PREPARED TO COMPLY WITH THESE TERMS.
STEPHEN P. HUDDLESTON,
MASTER COMMISSIONER,
GALLATIN CIRCUIT COURT
P.O. Box 988, WARSAW, KY 41095,
859-567-2818.

44-3c

PUBLIC NOTICE:
Notice: East Kentucky Power Cooperative, Inc. (EKPC) is proposing a transmission line rebuild project in portions of Boone, Gallatin, and Grant Counties. The existing Boone County – Williamstown 69 kV transmission line section that would be reconductored/rebuilt is approximately 28.5 miles in length and is generally oriented north to south between the existing EKPC Boone County 69 kV substation and Munk Junction; and generally west to east between Munk Junction and the Williamstown 69 kV substation. The Boone County substation is located at southeastern corner of the junction of Longbranch Road and Camp Ernst Road, approximately 3.5 miles south of Burlington in Boone County. The Munk Junction is located on the west side of KY Hwy 36, approximately 0.1 mile southeast of Smokey Road at 38.643634oN, -84.675623oW in Grant County. The Williamstown substation is located on the south side of Barnes Road, 0.25-mile west Interstate 75, approximately 1.75 miles west of Williamstown in Grant County. The proposed 28.5 mile hybrid project would include portions of rebuild, reconductor, and structure modifications within the existing 100-foot-wide right-of-way (ROW) easement.
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45-1c

EAST KENTUCKY POWER COOPERATIVE

October 30, 2020

The Grant County News
1404 North Main Street
Williamstown, KY 41097

Re: Public Notice Regarding the Planned Boone County – Williamstown 69 kV Transmission Line Reconductor/Rebuild Project in Boone, Gallatin and Grant Counties, Kentucky

To Whom It May Concern:

I would like to place a public notice to run one day in mid-November 2020. Please follow this request by emailing a proof and the cost for placing the notice. The public notice I wish to place reads as follows:

Notice: East Kentucky Power Cooperative, Inc. (EKPC) is proposing a transmission line rebuild project in portions of Boone, Gallatin, and Grant Counties. The existing Boone County – Williamstown 69 kV transmission line section that would be reconductored/rebuilt is approximately 28.5 miles in length and is generally oriented north to south between the existing EKPC Boone County 69 kV substation and Munk Junction; and generally west to east between Munk Junction and the Williamstown 69 kV substation. The Boone County substation is located at southeastern corner of the junction of Longbranch Road and Camp Ernst Road, approximately 3.5 miles south of Burlington in Boone County. The Munk Junction is located on the west side of KY Hwy 36, approximately 0.1 mile southeast of Smokey Road at 38.643634°N, -84.675623°W in Grant County. The Williamstown substation is located on the south side of Barnes Road, 0.25-mile west Interstate 75, approximately 1.75 miles west of Williamstown in Grant County. The proposed 28.5 mile hybrid project would include portions of rebuild, reconductor, and structure modifications within the existing 100-foot-wide right-of-way (ROW) easement.

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4775 Lexington Road 40391
P.O. Box 707, Winchester
Kentucky 40392-0707
Tel. (859) 744-4812
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Thank you very much for your assistance in this matter.

Sincerely,

Josh Young
Supervisor, Natural Resources
& Environmental Communications

Enclosures

cc: Jerry Purvis (EKPC)
Steve Anderson (EKPC)
Darrin Adams (EKPC)
Lauren McGee Rayburn (RUS)

Grant County News
1406 N. Main, Williamstown, Ky. 41097
P.O. Box 247, Williamstown, Kentucky 41097

The affiant, Bryan Marshall, Editor of the Grant County News, Williamstown, Kentucky, after being duly sworn and cautioned does depose and states the following:

That the Grant County News is a newspaper printed and published in the State of Kentucky, and of general circulation in the County or Counties of Grant.

That the attached Legal Notice was duly published in the Grant County News on November 12, 2020.

Done at Williamstown, Kentucky, this 12 day of November, 2020.

Bryan Marshall

STATE OF KENTUCKY
COUNTY OF GRANT

Subscribed and sworn to before me by Bryan Marshall, this 12 day of November 2020, at Williamstown, Grant County, Kentucky.

Notary Public

Notary ID 581506
My commission expires 13 August 2021

POSTED!

Call 1-888-824-1237 to place your posted ad.
$52 - 1 year or $25 - 10 weeks
Cash, Check, Visa, Mastercard or Discover

Persons are notified that the land and property belonging to the below listed persons are posted against hunting, fishing, trapping, 4-wheeling or dirt bike riding, walking, horseback riding, woodcutting, dumping or any other kind of trespassing. Owners are not responsible for any accidents. Violators will be prosecuted to the fullest extent of the law.

Becker property at 1105 Peaceful Hollow, Dry Ridge.

Beuna Marksberry, 920 Mason Cordova Rd., Corinth.

BREWER Properties located at: 5075 Dixie Hwy., Corner of Dry Ridge Rd. & Assembly Church Rd., and 1725 Knoxville Rd.

Byrley property located at 255 Turner Dr., Crittenden.

Collins property located at 215, 225 and 235 Frederica Rd., Dry Ridge. KY

CONRAD, Janet & Donnie. 1700 Crittenden Mount Zion Rd., Dry Ridge KY 41035

DEGLOW, RICHARD & LINDA. Farm at 1495 Heekin Road, Williamstown, KY.

Dimitt Property 7120 Warsaw Rd., Dry Ridge (Old Kelly Martin Farm)

Dishon Farms, Verona-Mt. Zion Rd., Vanlandingham Rd. and Arnold's Creek Rd.

Henry Family Farm at 1115 Smokey Rd., Williamstown. 4-23-20

Coldiron property located at 265 Russell Flynn Rd., and 2180 Heathen Ridge Road, Crittenden.

Janice & Jack Bowling property located on White Chapel Road. 12-16-19

Kathy and James Havens, 5843 Baton Rouge Rd. 6-29-20

Littrell property at 800 Ashbrook Rd., Williamstown.

Lonald, Linda and Wesley Cook, 1600 Corinth Road (40 acres).

LOWERY, PAULA all properties located in Harvesters Subdivision - 255 Barley Circle in Crittenden KY - NO TRESSPASSING ALL VIOLATORS WILL BE PROSECUTED.

March property located at 540 Hopewell Road, Crittenden. 11-12-20

McClanahan Farm, 289 Adams Road, Williamstown and 5765 Warsaw Road, Dry Ridge.

McKEE PROPERTY, 210 Mason Cordova Road, Corinth.

PROPERTY LOCATED AT - 5340 Stewartsville Rd., Williamstown.

Property of **Doering Family Ltd.** Partnership on Dry Ridge Mt. Zion Rd., Dry Ridge.

Race Family Property, 23.6 acres, 685 Smokey Rd., Williamstown.

SAALFELD, KURT - 423 Peaceful Hollow Road, Dry Ridge, KY & Surrounding 42 acres.

SAMS PROPERTY, 265 Turner Road and Lincoln Ridge Road properties.

SATTERWHITE, MIKE Farm, 250 School Road, Jonesville, KY 41052.

Schehr, Joshua - 4060 Gardensville Road, Crittenden, KY 41030

Schneider, Kenneth & Deborah - All properties located at 375 & 365 Cash Drive, Williamstown, KY

TAYLOR FARM located at 5098 Warsaw Rd., Dry Ridge.

The Darlington Property located at Lawrenceville Rd. (East of Eagle Creek) Williamstown Ky.

Vinson, Jeffrey & Nancy - 2915 Corinth Rd., Corinth, KY

Wayne Sponcil, 485 Sherman Newtown Rd.; Sponcil Properties, 2895 Dixie Hwy. 12-03-20

Wyan property located at Smokey Road, Williamstown.

Call 1-888-824-1237 to place your posted ad.

Wray J. Jump
Circuit Court Clerk

Grant Circuit Clerk
Grant District Clerk

Commonwealth of Kentucky
OFFICE OF CIRCUIT COURT CLERK
Grant County Judicial Center, 224 South Main Street, Williamstown, Kentucky 41097
Phone 859-824-4467 Fax 859-824-0183

Estate of:	Fiduciary:	Date of appointment:	Date for filing of claim:
Kethman, Juanita (dec) Dry Ridge, KY	Trautman, Eric (admin) Westchester, OH	10/14/2020	4/14/2021
Wright, Edith (dec) Corinth, KY	Dyer, Bonnie (ex) Corinth, KY	9/30/2020	3/30/2021
Applegate, Victoria (child) Crittenden, KY	Curd, Barbara (guard) Crittenden, KY	9/22/2020	3/22/2021
Blackmore, Ava (child) Dry Ridge, KY	Blackmore, James (guard) Dry Ridge, KY	10/20/2020	4/20/2021
Blackmore, Sky (child) Dry Ridge, KY	Blackmore, James (guard) Dry Ridge, KY	10/20/2020	4/20/2021
Hopper, Tony (dec) Dry Ridge, KY	Hopper, Brandon (admin) Dry Ridge, KY	10/1/2020	4/1/2021
	Hopper, Cameron (admin) Dry Ridge, KY	10/1/2020	4/1/2021
Dehner, Lyman (dec) Dry Ridge, KY	Dehner, Lyman D. (ex) Prospect, KY	10/14/2020	4/14/2021
Adams, John (dec) Dry Ridge, KY	Adams, Steven (ex) Dry Ridge, KY	10/6/2020	4/6/2021
Watkins, Vicki (dec) Dry Ridge, KY	Marksberry, Carrie (admin) Falmouth, KY	10/20/2020	4/20/2021
Landrum, Ervin (dec) Crittenden, KY	Landrum, Gary (ex) Bedford, KY	FINAL	
Kendall, Brenda (dec) Dry Ridge, KY	Kannady, Diana (ex) Dry Ridge, KY	FINAL	

Written exceptions to the above named settlements must be filed in the Grant Co. District Court on or before November 24, 2020 at 1:00 p.m. If no exceptions are filed, said settlements will be confirmed recorded.

Wray J. Jump, Grant Circuit Clerk
By: Karen Colson

N11121C

LEGAL NOTICES

Grant County Board of Adjustment
NOTICE OF PUBLIC HEARINGS

Notice is hereby given that the Grant County Board of Adjustments will hold the following public hearings:

1. **Mary Ann Simpson** has filed an application with the Board of Adjustments requesting a Dimensional Variance Permit to reduce the side yard setback to 10'for the property located at 345 Highview, Grant County, KY.

A full copy of all requests may be reviewed at the Planning Commission Office during normal business hours.

All public hearings will be held before said body on Tuesday, November 24th, 2020 at 6:00 p.m., at the Grant County Courthouse, 101 North Main Street, Williamstown at which time those wishing to comment on these items shall appear and be heard.

--- Grant County Board of Adjustment

N11121C

Notice: East Kentucky Power Cooperative, Inc. (EKPC) is proposing a transmission line rebuild project in portions of Boone, Gallatin, and Grant Counties. The existing Boone County – Williamstown 69 kV transmission line section that would be reconductored/rebuilt is approximately 28.5 miles in length and is generally oriented north to south between the existing EKPC Boone County 69 kV substation and Munk Junction; and generally west to east between Munk Junction and the Williamstown 69 kV substation. The Boone County substation is located at southeastern corner of the junction of Longbranch Road and Camp Ernst Road, approximately 3.5 miles south of Burlington in Boone County. The Munk Junction is located on the west side of KY Hwy 36, approximately 0.1 mile southeast of Smokey Road at 38.643634oN, -84.675623oW in Grant County. The Williamstown substation is located on the south side of Barnes Road, 0.25-mile west Interstate 75, approximately 1.75 miles west of Williamstown in Grant County. The proposed 28.5 mile hybrid project would include portions of rebuild, reconductor, and structure modifications within the existing 100-foot-wide right-of-way (ROW) easement.

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COMMONWEALTH OF KENTUCKY
GRANT CIRCUIT COURT
CASE NO. 20-CI-00101

KY Lien Holdings, LLC — PLAINTIFF

VS. **NOTICE OF COMMISSIONER'S SALE**

Octavio G. Correa, et al — DEFENDANTS

** ** ** ** **

By virtue of a Judgment and Order of Sale entered in the Grant Circuit Court on October 22, 2020, I will sell at public auction **on the steps of the Judicial Center**, 224 South Main Street, Williamstown, Kentucky, the property described herein located in Grant County, Kentucky, on **Monday, November 16, 2020**, at the hour of **10:00 a.m.**, prevailing time, and more particularly described as follows:

Being the same property conveyed to Octavio G. Correa on September 2, 2009, of record in Deed Book 340, Page 660, in the office of the Grant County Clerk.

Property Address: Independence Road, 26.0610 acres

There is not a mobile home, doublewide and/or manufactured home included in the sale.

Announcements made on the day of sale take precedence over printed material.

The amount of money to be raised by this sale is the principal sum of **Three Thousand Five Hundred Sixteen Dollars and Thirty Five Cents ($3,516.35)**, is subject to supplemental judgment at distribution, due to ongoing legal fees associated with this action.

The real estate shall be sold on the terms of 10% cash at the time of the sale, except that said deposit shall be waived if the Plaintiff is the successful bidder at the sale, and the balance on a credit of thirty (30) days bearing interest at the rate of 6% per annum for the date of sale. When the purchase price is paid in full, the deed will be delivered to the purchaser. It is further provided that the property sold includes insurable improvements and the successful bidder at said sale shall, at bidder's own expense, carry fire and extended insurance coverage on said improvements from the date of sale until the purchase price is fully paid in the amount of the Court appraised value of said improvements or the amount of the unpaid balance of the purchase price, whichever is less, at minimum, with a loss payable clause to the Commissioner of the Grant Circuit Court and the Plaintiff herein. Failure of the purchasers to obtain such insurance shall not affect the validity of the sale or the purchaser's liability thereunder, but shall entitle, but not require, the Plaintiff to obtain said insurance and furnish the policy or premium thereon or the proper portion thereof shall be charged to the purchaser as purchaser's costs.

Pursuant to the Orders of the Kentucky Supreme Court, all participants in this sale, bidders and parties, shall practice social distancing by remaining at least six (6) feet from all other persons throughout the sale process, as well as any other recommendations by the Master Commissioner at the time of the sale.

The aforesaid property shall be sold free and clear of all liens and encumbrances, except the following:

a. All unpaid state, county and city real estate taxes for the year 2020;
b. Easements, restrictions, and stipulations of record;
c. Assessments for public improvements levied against the property;
d. Any facts which an inspection and/or accurate survey of the property may disclose.

For further information, see the Final Judgment and Order of Sale and pleadings of record in the Office of the Circuit Court of Grant County.

/s/ EDWARD M. BOURNE
MASTER COMMISSIONER
GRANT CIRCUIT COURT

Copies to all parties N10293C E11/12/20

Crittenden is reaching out to the community in regards to the senior citizens that have been in the past active in the lower level of the post office.

We are trying to see if we have individuals still meeting or wanting to meet.

Please contact the city at 859-428-2597 at your convenience.

Mayor Patton
117 S. Main St.
Crittenden, Ky. 41030 N11121C

NOTICE

Please take notice that Duke Energy Kentucky, Inc. has applied to the Kentucky Public Service Commission for approval to revise its Demand Side Management (DSM) rate for gas service and electric service for residential and commercial customers. Duke Energy Kentucky's current monthly DSM rate for residential gas customers is $0.030735 per hundred cubic feet and for non-residential gas customers is $0.000000 per hundred cubic feet. Duke Energy Kentucky's current monthly DSM rate for residential electric customers is ($0.003143) per kilowatt-hour and for non-residential customers is $0.001768 per kilowatt-hour for distribution service and $0.000537 per kilowatt-hour for transmission service.

Duke Energy Kentucky seeks approval to revise these rates as follows: Duke Energy Kentucky's monthly DSM rate for residential gas customers would increase to $0.045817 per hundred cubic feet and for non-residential gas customers would remain at $0.000000 per hundred cubic feet. Duke Energy Kentucky's monthly DSM rate for residential electric customers would increase to $0.002175 per kilowatt-hour and for non-residential customers would decrease to ($0.000868) per kilowatt-hour for distribution service and would decrease to $0.000218 per kilowatt-hour for transmission service.

The rate contained in this notice is the rate proposed by Duke Energy Kentucky. However, the Public Service Commission may order a rate to be charged that differs from this proposed rate. Such action may result in a rate for consumers other than the rate in this notice. The foregoing rates reflect a proposed increase in electric revenues of approximately $1.93 million or 0.57% over current total electric revenues and an increase in gas revenues of approximately $0.94 million or 0.98% over current total gas revenues.

A typical residential gas customer using 70 ccf in a month will see an increase of $1.05 or 1.5%. A typical residential electric customer using 1000 kWh in a month will see an increase of $5.65 or 6.1%. A typical non-residential electric customer using 40 kilowatts and 14,000 kWh will see a decrease of $40.35 or (3.2%). A non-residential customer served at transmission voltage using 10,000 kilowatts and 4,000,000 kWh will see a decrease of $887 or (0.4%). Non-residential gas customers will see no change in their bills from this application.

Any corporation, association, body politic or person may by motion within thirty (30) days after publication or mailing of notice of the proposed rate changes, submit a written request to intervene to the Public Service Commission, 211 Sower Boulevard, P.O. Box 615, Frankfort, Kentucky 40602, and shall set forth the grounds for the request including the status and interest of the party. The intervention may be granted beyond the thirty (30) day period for good cause shown. Written comments regarding the proposed rate may be submitted to the Public Service Commission by mail or through the Public Service Commission's website. A copy of this application filed with the Public Service Commission is available for public inspection at Duke Energy Kentucky's office at 1262 Cox Road, Erlanger, Kentucky 41018 and on its website at http://www.duke-energy.com. This filing and any other related documents can be found on the Public Service Commission's website at http://psc.ky.gov.

EMPOYMENT OPPORTUNITIES

Cleaning Service Bid Requested

Williamstown Baptist Church is accepting bids for weekly cleaning.

·Approx. 16 hours/week
·Must have proof of insurance

Call 859-824-4102 or email roxanne@williamstownbaptist.com for bid proposal details

Deadline – Friday, Nov. 27

N1112 E11/19/20

We are hiring substitute bus drivers, substitute bus monitors, substitute food service and substitute custodians for the Grant County School District. To apply, go to our website at grant.kyschools.us. Your application will be reviewed and you may be called for an interview with us. The positions are for a substitute bus driver or a substitute bus monitor but could lead to a full-time position, which would provide you with full benefits. You must have a GED or high school diploma – we will pay you while you train if you do not have your CDL. N1029 E11/19/20

Exhibit D. Agency Correspondence

Chris Carpenter

From: Chris Carpenter
Sent: Thursday, October 29, 2020 2:16 PM
To: 'Pedley, Perri - NRCS, Owensboro, KY'
Cc: Josh Young; Wesley Byrd
Subject: Data Request for the Boone-Williamstown 69 kV Transmission Line Rebuild-Reconductor Project-Boone and
Attachments: Boone-Williamstown 69 kV Transmission Line Rebuild-Reconductor Project_Map Package 3-26-2020(r).pdf; Boone-Williamstown Shapefiles.zip

Good afternoon Ms. Pedley,

EKPC is proposing to rebuild/reconductor, operate, and maintain the existing Boone – Williamstown 69 kV Transmission Line section located in portions of Boone, Gallatin, and Grant Counties, Kentucky The existing transmission line section that would be rebuilt and/or reconductored is approximately 28.5 miles in length and is generally oriented north to south between the existing EKPC Boone 69 kV substation and Munk Junction; and generally west to east between Munk Junction and the Williamstown 69 kV substation. The Boone substation is located at southeastern corner of the junction of Longbranch Road and Camp Ernst Road, approximately 3.5 miles south of Burlington in Boone County. The Munk Junction is located on the west side of KY Hwy 36, approximately 0.1 mile southeast of Smokey Road at 38.643634ºN, -84.675623ºW in Grant County. The Williamstown substation is located on the south side of Barnes Road, 0.25-mile west Interstate 75, approximately 1.75 miles west of Williamstown in Grant County.

The proposed 28.5 mile hybrid project would include portions of rebuild, reconductor, and structure modifications as depicted on the attached maps. The rebuild portions of the project consist of five line sections comprising 4.6 miles and the reconductor portions consist of four line sections comprising 23.9 miles. There are 263 existing structures located within these transmission line sections. Based on preliminary engineering design, 60 single wood-pole structures would be replaced with steel-pole structures within the rebuild sections. While the final line design is ongoing it is anticipated that the new steel-pole structures would be approximately 12 feet taller than the existing wood-pole structures with roughly 30-40% fewer steel-pole structures required. For the reconductor sections, 33 wood-pole H-frame structures would be replaced with in-kind steel-pole H-frame structures at the existing locations and an additional 170 structures would be modified with X-braces and arm braces to address conditions related to strength, lean, etc.

Based on past correspondence regarding similar projects, it is our understanding that a Farmland Policy Protection Act (FPPA) assessment would not be needed since this is an existing overhead transmission line and it would not alter the land enough to convert it from agricultural purposes. As a result, I have not included an AD-1006 form. Please let us know if you if you are in agreement with our assessment of the project or if you need additional information. EKPC would also like to know if the project would impact any hydric soils or areas designated as floodplain. Attached are project maps showing the location of the project and a shape file of the proposed transmission line area of potential effect.

Thank you very much for your help. If you need any additional information or wish to discuss this project please do not hesitate to contact myself, or Josh Young at (859) 745-9799 and josh.young@ekpc.coop.

Have a great day,

Chris Carpenter

East Kentucky Power Cooperative, Inc.
Natural Resources and Environmental Communications
4775 Lexington Road
Winchester, KY 40391
Office: (859) 745-9805
Cell: (859) 771-0764
chris.carpenter@ekpc.coop

Chris Carpenter

From: Pedley, Perri - NRCS, Owensboro, KY <perri.pedley@usda.gov>
Sent: Monday, November 2, 2020 3:39 PM
To: Chris Carpenter
Subject: RE: Data Request for the Boone-Williamstown 69 kV Transmission Line Rebuild-Reconductor Project-Boone and
Attachments: Boone-Williamstown 69 kV Transmission Line Rebuild-Reconductor.pdf; Boone, Campbell, Kenton_Hydric Soils.pdf; Carroll, Gallatin, Owen Hydric Soils.pdf; Grant and Pendleton Hydric Soils.pdf

Mr. Carpenter,

The attached document is in response to your request for the above mentioned project in Boone, Gallatin, and Grant Counties, Kentucky.

If I may be of additional assistance or if you have any further questions, please don't hesitate to contact me.

Thank you,

Perri Pedley
Soil Scientist
USDA-NRCS
Owensboro, KY
(270) 684-9286

From: Chris Carpenter <Chris.Carpenter@ekpc.coop>
Sent: Thursday, October 29, 2020 1:16 PM
To: Pedley, Perri - NRCS, Owensboro, KY <perri.pedley@usda.gov>
Cc: Josh Young <josh.young@ekpc.coop>; Wesley Byrd <Wesley.Byrd@ekpc.coop>
Subject: Data Request for the Boone-Williamstown 69 kV Transmission Line Rebuild-Reconductor Project-Boone and

Good afternoon Ms. Pedley,

EKPC is proposing to rebuild/reconductor, operate, and maintain the existing Boone – Williamstown 69 kV Transmission Line section located in portions of Boone, Gallatin, and Grant Counties, Kentucky The existing transmission line section that would be rebuilt and/or reconductored is approximately 28.5 miles in length and is generally oriented north to south between the existing EKPC Boone 69 kV substation and Munk Junction; and generally west to east between Munk Junction and the Williamstown 69 kV substation. The Boone substation is located at southeastern corner of the junction of Longbranch Road and Camp Ernst Road, approximately 3.5 miles south of Burlington in Boone County. The Munk Junction is located on the west side of KY Hwy 36, approximately 0.1 mile southeast of Smokey Road at 38.643634ºN, -84.675623ºW in Grant County. The Williamstown substation is located on the south side of Barnes Road, 0.25-mile west Interstate 75, approximately 1.75 miles west of Williamstown in Grant County.

United States Department of Agriculture

Natural Resources Conservation Service
USDA Service Center
3100 Alvey Park Drive W
Owensboro, KY 42303

November 2, 2020

Chris Carpenter
East Kentucky Power Cooperative, Inc.
4775 Lexington Road
Winchester, KY 40391

RE: BOONE-WILLIAMSTOWN 69 KV TRANSMISSION REBUILD-RECONDUCTOR

Dear Mr. Carpenter:

Enclosed is the Farmland Protection Policy Act (FPPA) site assessment for the proposed project in Boone, Gallatin, and Grant Counties, Kentucky. The Natural Resources Conservation Service (NRCS) is mandated to provide information on the soils and/or impact to farmland according to the Farmland Protection Policy Act (P.L. 97-98) for projects that will be utilizing federal monies.

As a rule of thumb, construction of electrical overhead transmission lines do not have a significant impact on the conversion of agricultural lands (*Prime or Statewide Important Farmland*), provided no deed restriction is placed on the planting of an agricultural commodity crop *(e.g., corn, soybeans, wheat)* within the proposed Right-of-Way. The small footprint resulting from such above-ground activity(s) negates the need for conducting a Farmland Policy Protection Act assessment. Although *Prime* and *Statewide Important Farmland* can be found within your project area, the project will not be permanently converting such agricultural lands.

The proposed project also contains the HYDRIC soil *No-Nolin silt loam* in Boone and Grant County, and the Gallatin County portion of the project contains the HYDRIC soil *MbD-Markland silt loam.* Further information on this can be found within the enclosed Hydric Soils Lists from the respective Soil Surveys. Information can also be accessed online at Web Soil Survey.

Please do not hesitate to contact me if I may be of additional assistance.

Sincerely,

Perri Pedley
Soil Scientist
Perri.Pedley@usda.gov

Enclosures

Hydric Soils

Boone, Campbell, and Kenton Counties, Kentucky

[This report lists only those map unit components that are rated as hydric. Dashes (---) in any column indicate that the data were not included in the database. Definitions of hydric criteria codes are included at the end of the report]

Map symbol and map unit name	Component	Percent of map unit	Landform	Hydric rating	Hydric criteria
Av:					
Avonburg silt loam (0 to 4 percent slopes)	Poorly drained soils	2	Depressions	Yes	2
Hu:					
Huntington silt loam, 0 to 2 percent slopes, occasionally flooded	Huntington, frequently flooded	2	Flood plains	Yes	4
Lc:					
Lawrence silt loam (0 to 4 percent slopes)	Robertsville	3	Stream terraces	Yes	2
Nk:					
Newark silt loam (0 to 2 percent slopes, occasionally flooded)	Poorly drained soils	2	Flood plains	Yes	2
No:					
Nolin silt loam, 0 to 2 percent slopes, occasionally flooded	Dunning, occasionally flooded	1	Flood plains	Yes	2
Ro:					
Robertsville silt loam, 0 to 2 percent slopes	Robertsville	85	Depressions	Yes	2

Hydric Soils

Carroll, Gallatin, and Owen Counties, Kentucky

[This report lists only those map unit components that are rated as hydric. Dashes (---) in any column indicate that the data were not included in the database. Definitions of hydric criteria codes are included at the end of the report]

Map symbol and map unit name	Component	Percent of map unit	Landform	Hydric rating	Hydric criteria
Hu:					
Huntington silt loam, 0 to 2 percent slopes, occasionally flooded	Huntington, frequently flooded	2	Flood plains	Yes	4
Lc:					
Lawrence silt loam, 0 to 4 percent slopes, rarely flooded	Robertsville, rarely flooded	4	Stream terraces	Yes	2
MaB:					
Markland silt loam, 2 to 6 percent slopes	Zipp, frequently flooded	1	Stream terraces	Yes	2, 4
MbD:					
Markland soils, 12 to 35 percent slopes	Zipp, frequently flooded	1	Stream terraces	Yes	2, 4
Mc:					
McGary silt loam	Other hydric soils	2	Flood plains	Yes	2
	Robertsville, rarely flooded	2	Stream terraces	Yes	2
	Zipp, frequently flooded	2	Stream terraces	Yes	2, 4
Ne:					
Newark silt loam, 0 to 2 percent slopes, frequently flooded	Dunning, frequently flooded	1	Flood plains	Yes	2
Ro:					
Robertsville silt loam	Robertsville, rarely flooded	85	Stream terraces	Yes	2
	Zipp, frequently flooded	4	Stream terraces	Yes	2, 4
	Other hydric soils	2	Flood plains	Yes	2
Zp:					
Zipp silty clay loam	Zipp, frequently flooded	90	Stream terraces	Yes	2, 4
	Robertsville, rarely flooded	3	Stream terraces	Yes	2

Hydric Soils

Grant and Pendleton Counties, Kentucky

[This report lists only those map unit components that are rated as hydric. Dashes (---) in any column indicate that the data were not included in the database. Definitions of hydric criteria codes are included at the end of the report]

Map symbol and map unit name	Component	Percent of map unit	Landform	Hydric rating	Hydric criteria
En:					
Elk-Newark complex	Poorly drained soils	1	Flood plains	Yes	2
Mc:					
McGary silt loam, 0 to 2 percent slopes	Zipp	5	Lakebeds	Yes	2
Ne:					
Newark silt loam, 0 to 2 percent slopes, frequently flooded	Dunning, frequently flooded	1	Flood plains	Yes	2
No:					
Nolin silt loam, 0 to 2 percent slopes, occasionally flooded	Dunning, occasionally flooded	1	Flood plains	Yes	2
Nw:					
Nolin silt loam, 0 to 2 percent slopes, frequently flooded	Dunning, frequently flooded	1	Flood plains	Yes	2
Ro:					
Robertsville silt loam	Robertsville, occasionally flooded	85	Stream terraces	Yes	2
	Zipp, frequently flooded	5	Stream terraces	Yes	2
Zp:					
Zipp silty clay loam	Zipp, frequently flooded	80	Stream terraces	Yes	2
	Other soils	5	Depressions	Yes	2

Hydric Soils

This table lists the map unit components that are rated as hydric soils in the survey area. This list can help in planning land uses; however, onsite investigation is recommended to determine the hydric soils on a specific site (National Research Council, 1995; Hurt and others, 2002).

The three essential characteristics of wetlands are hydrophytic vegetation, hydric soils, and wetland hydrology (Cowardin and others, 1979; U.S. Army Corps of Engineers, 1987; National Research Council, 1995; Tiner, 1985). Criteria for all of the characteristics must be met for areas to be identified as wetlands. Undrained hydric soils that have natural vegetation should support a dominant population of ecological wetland plant species. Hydric soils that have been converted to other uses should be capable of being restored to wetlands.

Hydric soils are defined by the National Technical Committee for Hydric Soils (NTCHS) as soils that formed under conditions of saturation, flooding, or ponding long enough during the growing season to develop anaerobic conditions in the upper part (Federal Register, 1994). These soils, under natural conditions, are either saturated or inundated long enough during the growing season to support the growth and reproduction of hydrophytic vegetation.

The NTCHS definition identifies general soil properties that are associated with wetness. In order to determine whether a specific soil is a hydric soil or nonhydric soil, however, more specific information, such as information about the depth and duration of the water table, is needed. Thus, criteria that identify those estimated soil properties unique to hydric soils have been established (Federal Register, 2002). These criteria are used to identify map unit components that normally are associated with wetlands. The criteria used are selected estimated soil properties that are described in "Soil Taxonomy" (Soil Survey Staff, 1999) and "Keys to Soil Taxonomy" (Soil Survey Staff, 2003) and in the "Soil Survey Manual" (Soil Survey Division Staff, 1993).

If soils are wet enough for a long enough period of time to be considered hydric, they should exhibit certain properties that can be easily observed in the field. These visible properties are indicators of hydric soils. The indicators used to make onsite determinations of hydric soils are specified in "Field Indicators of Hydric Soils in the United States" (Hurt and others, 2002).

Hydric soils are identified by examining and describing the soil to a depth of about 20 inches. This depth may be greater if determination of an appropriate indicator so requires. It is always recommended that soils be excavated and described to the depth necessary for an understanding of the redoximorphic processes. Then, using the completed soil descriptions, soil scientists can compare the soil features required by each indicator and specify which indicators have been matched with the conditions observed in the soil. The soil can be identified as a hydric soil if at least one of the approved indicators is present.

Map units that are dominantly made up of hydric soils may have small areas, or inclusions, of nonhydric soils in the higher positions on the landform, and map units dominantly made up of nonhydric soils may have inclusions of hydric soils in the lower positions on the landform.

The criteria for hydric soils are represented by codes in the table (for example, 2B3). Definitions for the codes are as follows:

1. All Histels except for Folistels, and Histosols except for Folists.
2. Soils in Aquic suborders, great groups, or subgroups, Albolls suborder, Historthels great group, Histoturbels great group, Pachic subgroups, or Cumulic subgroups that:
   A. are somewhat poorly drained and have a water table at the surface (0.0 feet) during the growing season, or
   B. are poorly drained or very poorly drained and have either:
      1) a water table at the surface (0.0 feet) during the growing season if textures are coarse sand, sand, or fine sand in all layers within a depth of 20 inches, or
      2) a water table at a depth of 0.5 foot or less during the growing season if permeability is equal to or greater than 6.0 in/hr in all layers within a depth of 20 inches, or
      3) a water table at a depth of 1.0 foot or less during the growing season if permeability is less than 6.0 in/hr in any layer within a depth of 20 inches.
3. Soils that are frequently ponded for long or very long duration during the growing season.
4. Soils that are frequently flooded for long or very long duration during the growing season.

References:

Cowardin, L.M., V. Carter, F.C. Golet, and E.T. LaRoe. 1979. Classification of wetlands and deep-water habitats of the United States. U.S. Fish and Wildlife Service FWS/OBS-79/31.
Federal Register. September 18, 2002. Hydric soils of the United States.
Federal Register. July 13, 1994. Changes in hydric soils of the United States.
Hurt, G.W., P.M. Whited, and R.F. Pringle, editors. Version 5.0, 2002. Field indicators of hydric soils in the United States.
National Research Council. 1995. Wetlands: Characteristics and boundaries.
Soil Survey Division Staff. 1993. Soil survey manual. Soil Conservation Service. U.S. Department of Agriculture Handbook 18.
Soil Survey Staff. 2003. Keys to soil taxonomy. 9th edition. U.S. Department of Agriculture, Natural Resources Conservation Service.
Soil Survey Staff. 1999. Soil taxonomy: A basic system of soil classification for making and interpreting soil surveys. 2nd edition. Natural Resources Conservation Service. U.S. Department of Agriculture Handbook 436.
Tiner, R.W., Jr. 1985. Wetlands of Delaware. U.S. Fish and Wildlife Service and Delaware Department of Natural Resources and Environmental Control, Wetlands Section.
United States Army Corps of Engineers, Environmental Laboratory. 1987. Corps of Engineers wetlands delineation manual. Waterways Experiment Station Technical Report Y-87-1.

Chris Carpenter

From: Josh Young
Sent: Monday, October 19, 2020 3:22 PM
To: Gunn, Chris (Heritage Council); Ryall, Jennifer (Heritage Council)
Cc: Chris Carpenter
Subject: Boone County - Williamstown 69 kV Transmission Line Reconductor/Rebuild Project, Boone, Gallatin, and Grant Counties, Kentucky
Attachments: Boone-Williamstown_Cultural Resource APE Maps 10-16-2020.pdf

Good afternoon Jenn and Chris, hope you are doing well!

We are starting our environmental review of East Kentucky Power Cooperative's (EKPC) proposed Boone County – Williamstown 69 kilovolt (kV) Transmission Line Reconductor/Rebuild project located in portions of Boone, Gallatin, and Grant Counties, Kentucky. As a part of that process, we would like to coordinate development of cultural historic and archaeological areas of potential effect (APEs). Attached are topographic maps and aerial photographs depicting the location of the proposed project and APEs.

Project Scope Summary

- 23.9 miles: Reconductor with 556.5 ACSR/TW and change out approx. 25% of double, wood-pole H-Frame structures. Add X-braces and arm braces to all remaining double, wood-pole H-Frame structures.
- 4.6 miles: Rebuild single, wood-pole sections with steel structures and 556.5 ACSR/TW conductor.
- Install OPGW in place of existing static wires
- Replace guy wires and anchors as needed
- Clear Danger Trees

Project Description

EKPC is proposing to reconductor/rebuild, operate, and maintain the existing Boone County – Williamstown 69 kV Transmission Line section located in portions of Boone, Gallatin, and Grant Counties, Kentucky. EKPC is proposing this transmission line reconductor/rebuild project to address the poor physical condition of the existing transmission line, including the conductors, static wires, poles, and/or structures. The project would require replacement of the existing conductor (2/0 and 4/0 ASCR) with the larger size conductor (556.5 ACSR/TW) currently utilized by EKPC. EKPC first evaluated only reconductoring the entire line section; however, it was determined that several section of existing line are constructed with single, wood-pole support structures. Many of these single pole-wood structures are the originals installed circa 1957 and 1958 and are in such poor physical condition they would not be able to support the increased weight of the larger conductor. Therefore, EKPC is proposing a hybrid rebuild/reconductor of this line section using the larger conductor, steel-pole structures, and necessary structure modifications.

The existing transmission line section that would be reconductored/rebuilt is approximately 28.5 miles in length and is generally oriented north to south between the existing EKPC Boone County 69 kV substation and Munk Junction; and generally west to east between Munk Junction and the Williamstown 69 kV substation. The Boone County substation is located at southeastern corner of the junction of Longbranch Road and Camp Ernst Road, approximately 3.5 miles south of Burlington in Boone County. The Munk Junction is located on the west side of KY Hwy 36, approximately 0.1 mile southeast of Smokey Road at 38.643634oN, -84.675623oW in Grant County. The Williamstown substation is located on the south side of Barnes Road, 0.25-mile west Interstate 75, approximately 1.75 miles west of Williamstown in Grant County.

The proposed 28.5 mile hybrid project would include portions of rebuild, reconductor, and structure modifications as depicted on the attached maps. The rebuild portions of the project consist of five line sections comprising 4.6 miles and the reconductor portions consist of four line sections comprising 23.9 miles. There are 263 existing structures located within these transmission line sections. Based on preliminary engineering design, 60 single wood-pole structures would be replaced with steel-pole structures within the rebuild sections. While the final line design is ongoing it is anticipated that the new steel-pole structures would be approximately 12 feet taller than the existing wood-pole structures with roughly 30-40% fewer steel-pole structures required. For the reconductor sections, 33 wood-pole H-frame structures would be replaced with in-kind steel-pole H-frame structures at the existing locations and an additional 170 structures would be modified with X-braces and arm braces to address conditions related to strength, lean, etc. Furthermore, the existing static wires would be replaced with Optical Ground Wire (OPGW), and the existing guy wires and anchors would be replaced as warranted.

Within the existing ROW, the vegetation is maintained by EKPC and property owners as a low growing herbaceous plant community and no tree clearing will be required. However, prior to and during construction activities, EKPC would identify and clear any "danger trees" located along the edges of the transmission line ROW easement that have the potential to threaten the future operation of the facility. Because there is an existing transmission line facility and associated maintenance access points, EKPC anticipates using existing roads and drive paths to and/or within the ROW easement to access the structure replacement and modification locations by driving over the existing terrain, without having to create new roads.

EKPC makes the following recommendations regarding cultural resource APEs for the project:

Archaeological APE

For archaeological resources, EKPC is proposing to conduct a Phase I archaeological investigation within the existing 4.6-mile-long, 100-foot-wide transmission line ROW proposed for rebuild. This APE represents a total of approximately 55.8 acres and is depicted on the attached maps. EKPC believes this APE is appropriate to evaluate the new potential effects on archaeological resources from the proposed rebuild portion of the project. For the reconductor portion of the project it is anticipated that all project activities would occur at the previously disturbed existing structure location and along existing access points. Deep testing will be conducted within any alluvial soils encountered within the rebuild portion of the project area per KHC Specifications for Fieldwork.

Cultural Historic APE

The proposed transmission line rebuild portion of the project would require removal of the existing facility and construction of a new facility within the existing ROW easement. Although the new steel pole structures are anticipated to be approximately 12 feet taller than the existing wood pole structures, the average span between structures would be increased and significantly fewer structures would be required. Therefore. EKPC is recommending an Overview Study of the cultural historic resources within 750 feet (1500 feet corridor) of the transmission centerline for the rebuild portion of the project. EKPC's contractor, would document and assess the effects of the proposed project on historic properties within the APE. Properties that are listed, formerly determined eligible for listing, or appear potentially eligible for listing in the National Register will be documented to KHC survey standards, including a full description and National Register evaluation of each property and completion of a KHC survey form. Properties containing resources 50 years of age or older that appear ineligible for listing in the National Register will be mapped, photographed, and summarized in a table including a brief description of the property and its current condition as they relate to the potential eligibility of the resource; resources recommended ineligible will not be formally surveyed. EKPC believes an Overview Study of the proposed APE, as described above, is appropriate to evaluate the potential effect on cultural historic resources from the rebuild portion of the proposed project. Due to the reconductor portion of the project being an in-kind (i.e. same height, number, and location of structures) replacement of the existing facility, EKPC believes that a cultural historic assessment of this portion of the project would not be warranted.

We would like your feedback on these APE recommendations as soon as possible and will coordinate field work with our consultant accordingly. As always, please contact me should you have any questions or need additional information.

Thank you,

Josh Young
East Kentucky Power Cooperative, Inc.
Natural Resources and Environmental Communications
4775 Lexington Road
Winchester, KY 40391
Office: (859) 745-9799
Cell: (859) 749-0553
josh.young@ekpc.coop

Josh Young

From: Gunn, Chris (Heritage Council) <Chris.Gunn@ky.gov>
Sent: Wednesday, December 30, 2020 2:00 PM
To: Josh Young; Ryall, Jennifer (Heritage Council)
Cc: Chris Carpenter
Subject: Re: Boone County - Williamstown 69 kV Transmission Line Reconductor/Rebuild Project, Boone, Gallatin, and Grant Counties, Kentucky

Hello Josh,

Thank you for the additional information for this project. As I already commented, the proposal for the 4.6 miles of rebuild is fine. I would also like the locations of the pole replacements in the remaining 23.9 miles of reconductor corridor to be surveyed as well. The survey areas around the replacement locations should extend 50 ft/15 m in each direction from the pole within the right-of-way. The pole replacement locations should be investigated through standard pedestrian reconnaissance techniques (visual and/or shovel testing) as appropriate.

Thank you,
Chris Gunn

Christopher M. Gunn, Ph.D.
Archaeology Review Coordinator
Kentucky Heritage Council
410 High Street
Frankfort, KY 40601

502-892-3615

To our constituents, please be advised the KHC Historic Resource Library is now open for consultants wishing to conduct background research and site checks. Consultants can make appointments to visit our office in two time slots a day on Mondays, Wednesdays, and Fridays: 9 a.m. to 12 p.m. and 1 :30 p.m. to 4:30 p.m. We ask that you please refer to this memo for information and follow all protocols outlined there and posted at our facility. Consultants who require this service may also continue to utilize the electronic records review portal at https://secure.kentucky.gov/formservices/Heritage/SiteID.The rest of the office remains open on a limited basis. Staff continue to telecommute or alternate days in the office and are not available for face-to-face meetings or site visits. We continue to recommend that when possible, *environmental review reports, tax credit applications and supporting materials, National Register correspondence, or other documents that require hard-copy submissions* ***be mailed or sent by delivery service*** to the Kentucky Heritage Council, 410 High Street, Frankfort, KY 40601, so that staff may follow up with you by phone.

Note for Applicants Submitting Projects for Section 106 Review: Our office commits to flexibility for Applicants unable to submit in hard copy due to telework requirements and, per the ACHP's most recent guidance, we appreciate Applicants being flexible with our office's response time frames during a declared national emergency.

If you have an emergency action that requires Section 106 consultation, please include our Site Protection Manager Nick Laracuente nicolas.laracuente@ky.govon your emails to the review staff.

From: Josh Young <josh.young@ekpc.coop>
Sent: Monday, December 7, 2020 4:09 PM
To: Gunn, Chris (Heritage Council) <Chris.Gunn@ky.gov>; Ryall, Jennifer (Heritage Council) <Jennifer.Ryall@ky.gov>

Chris Carpenter

From: Ryall, Jennifer (Heritage Council) <Jennifer.Ryall@ky.gov>
Sent: Wednesday, October 21, 2020 7:31 PM
To: Josh Young; Gunn, Chris (Heritage Council)
Cc: Chris Carpenter
Subject: RE: Boone County - Williamstown 69 kV Transmission Line Reconductor/Rebuild Project, Boone, Gallatin, and Grant Counties, Kentucky

Hi Josh, the Cultural Historic APE and justification described below (Cultural Historic APE excluding the reconductor portion of the project as replacements here are in-kind) appear to be appropriate based on the scope of work described. Please note that, should the details of the project change such that replacements in the reconductor portion are NOT in kind replacements, you would need to re-consult on the Cultural Historic APE as it may no longer be appropriate in that case.

Thanks,
~Jenn

Jennifer Ryall
Environmental Review Coordinator
Kentucky Heritage Council
410 High Street
Frankfort, Kentucky 40601
Phone: (502) 892-3619
Pronouns: she, her, hers

TEAM KENTUCKY

To our constituents, please be advised the KHC Historic Resource Library is now open for consultants wishing to conduct background research and site checks. Consultants can make appointments to visit our office in two time slots a day on Mondays, Wednesdays, and Fridays: 9 a.m. to 12 p.m. and 1 :30 p.m. to 4:30 p.m. We ask that you please refer to this memo for information and follow all protocols outlined there and posted at our facility. Consultants who require this service may also continue to utilize the electronic records review portal at https://secure.kentucky.gov/formservices/Heritage/SiteID. The rest of the office remains open on a limited basis. Staff continue to telecommute or alternate days in the office and are not available for face-to-face meetings or site visits. We continue to recommend that when possible, *environmental review reports, tax credit applications and supporting materials, National Register correspondence, or other documents that require hard-copy submissions* ***be mailed or sent by delivery service*** to the Kentucky Heritage Council, 410 High Street, Frankfort, KY 40601, so that staff may follow up with you by phone.

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If you have an emergency action that requires Section 106 consultation, please include our Site Protection Manager Nick Laracuente nicolas.laracuente@ky.gov on your emails to the review staff.

From: Josh Young <josh.young@ekpc.coop>
Sent: Monday, October 19, 2020 3:22 PM
To: Gunn, Chris (Heritage Council) <Chris.Gunn@ky.gov>; Ryall, Jennifer (Heritage Council) <Jennifer.Ryall@ky.gov>
Cc: Chris Carpenter <Chris.Carpenter@ekpc.coop>

Josh Young

From: Josh Young
Sent: Wednesday, March 17, 2021 12:35 PM
To: Craig Potts (craig.potts@ky.gov); Gunn, Chris (Heritage Council); Ryall, Jennifer (Heritage Council)
Cc: Chris Carpenter
Subject: Boone County - Williamstown 69 kV Transmission Line Reconductor/Rebuild Project, Boone, Gallatin, and Grant Counties, Kentucky

March 17, 2021

Mr. Craig Potts
Kentucky Heritage Council
State Historic Preservation Officer
410 High Street
Frankfort, KY 40601

RE: Archaeological and Cultural Historic Survey Reports and Recommended Findings of Effect for East Kentucky Power Cooperative's Proposed Boone - Williamstown 69 kV Transmission Line Reconductor/Rebuild Project, Boone, Gallatin, and Grant Counties, Kentucky

Dear Mr. Potts,

East Kentucky Power Cooperative, Inc. (EKPC) plans to request financing from the USDA Rural Utilities Service (RUS) to construct the proposed Boone - Williamstown 69 kV Transmission Line Reconductor/Rebuild Project in Boone, Gallatin, and Grant Counties, Kentucky. RUS considers this potential action an undertaking subject to Section 106 of the National Historic Preservation Act, 16 U.S.C. § 470f, and its implementing regulations, "Protection of Historic Properties" (36 CFR Part 800).

In accordance with a delegation memo dated August 14, 2012, EKPC initiated Section 106 consultation with the Kentucky State Historic Preservation Office (SHPO) to identify the areas of potential effect (APEs) where assessment of potential effects to archeological and cultural historic resources should occur for the proposed project. This email and recommended findings focuses on the results of the cultural resource surveys that were conducted within the established APE's. At the request of EKPC, Cultural Resource Analysts, Inc. (CRA), personnel completed a Phase I Archaeological Investigation and a Cultural Historic Overview Survey during December 2020 – February 2021. The survey reports and site form are available for download from EKPCs ShareFile site at https://ekpcoop.sharefile.com/d-sf6753764ad854b39ae84951e66d6afce (please let us know if there are any issues accessing).

The archaeology report documents the results of the survey within the five linear transmission line areas and 33 structure replacement locations, which resulted in no sites recorded or relocated during the current field investigation. Site 15Be705 is partially located within the current project area, and additional archaeological work was previously recommended if avoidance was not possible. Due to the possibility for intact subsurface archaeological deposits, avoidance of Site 15Be705 is again recommended. EKPC has revised the proposed plans and is committed to avoidance of project activities within the boundary of Site 15Be705; therefore, the site will not be impacted by the proposed project. As such, the proposed project will have no effect on archaeological sites listed in, or eligible for listing in, the National Register of Historic Places (NRHP);

therefore, archaeological clearance is recommended for this project. If the proposed project plans change to impact Site 15Be705, further archaeological work will be necessary to determine its eligibility for inclusion in the NRHP.

The cultural historic overview report documents the results of the survey and CRA's recommended finding that Site 5 (BE 396) retains sufficient integrity to maintain its NRHP listing under Criterion C as representative of its architectural type, a transitional side-passage massed plan type house. In addition, CRA recommends Site 5 (BE 396) is eligible for listing in the NRHP under Criterion A as a representative example of a mid-nineteenth- to mid-twentieth-century farmstead in Boone County that participated in tenancy farming with black, and later, white farmers. The existing transmission line and corridor traverse the property associated with Site 5 (BE 396). Taller transmission towers with longer spans within the existing corridor would be a minimal visual change and as such would not adversely affect the property's setting. In addition, the proposed project would not alter any of the character-defining features of the property, which include the building forms, primary residence's stylistic detailing, and spatial organization of structures. Thus, CRA recommends a finding of No Adverse Effect for the proposed project.

Based on these findings, EKPC recommends that the undertaking would result in No Adverse Effect to Historic Properties for cultural resources listed or eligible for listing in the NRHP for the project. Please review these recommended findings of effect for the subject undertaking and notify EKPC or RUS within thirty (30) days of receipt of this letter of your concurrence or objection. If the SHPO fails to respond within this timeframe, RUS will conclude Section 106 review of this project in accordance with 36 CFR § 800.3(c)(4) based on EKPC's recommended finding of No Adverse Effect to Historic Properties for cultural resources listed or eligible for listing in the NRHP for the project.

We appreciate your attention to this matter. Should you have any questions or require additional information, please contact me at (859) 745-9799 or josh.young@ekpc.coop, or Suzanne Kopich, RUS Environmental Protection Specialist at (202) 692-4907 or Suzanne.Kopich@usda.gov.

Sincerely,

Josh Young
East Kentucky Power Cooperative, Inc.
Natural Resources and Environmental Communications
4775 Lexington Road
Winchester, KY 40391
Office: (859) 745-9799
Cell: (859) 749-0553
josh.young@ekpc.coop

ANDY BESHEAR
GOVERNOR

JACQUELINE COLEMAN
LT. GOVERNOR

TOURISM, ARTS AND HERITAGE CABINET
KENTUCKY HERITAGE COUNCIL
THE STATE HISTORIC PRESERVATION OFFICE
410 HIGH STREET
FRANKFORT, KENTUCKY 40601
(502) 564-7005
www.heritage.ky.gov

MICHAEL E. BERRY
SECRETARY

CRAIG A. POTTS
EXECUTIVE DIRECTOR &
STATE HISTORIC
PRESERVATION OFFICER

April 12, 2021

Mr. Josh Young
East Kentucky Power Cooperative
4775 Lexington Road
Winchester, KY 40391

Re: **An Archaeological Survey for the Proposed Williamstown 69 Kilovolt Transmission Line Reconductor/Rebuild Project in Boone, Gallatin, and Grant Counties, Kentucky** prepared by Robert McCain of Cultural Resource Analysts, Inc. Report dated February 24, 2021.
and
Cultural Historic Overview Survey for the Proposed Williamstown 69 kV Transmission Reconductor/Rebuild Project in Boone, Gallatin, and Grant Counties, Kentucky, prepared by Sarah J. Reynolds and Sarah Hanna of Cultural Resource Analysts, Inc. Report dated March 17, 2021.

Dear Mr. Young:

Thank you for your email and attached documentation concerning the above-mentioned project, received March 17, 2021. We understand that the East Kentucky Power Cooperative proposes to replace some structures and reconductor the 69 kV Williamstown transmission line in Boone, Gallatin, and Grant Counties, Kentucky. We additionally understand that the proposed project will be supported through the USDA-RUS.

The enclosed archaeological report describes the intensive pedestrian reconnaissance, supplemented by screened shovel tests, of the proposed project area. During the survey, the investigator encountered no new archaeological sites or artifacts. However, one previously identified archaeological site – 15Be705 – falls within the project area. This site was previously recommended for avoidance or additional testing to establish its NRHP eligibility. Although the survey aera did not include access routes to the wooden poles that are to be replaced throughout the transmission line corridor, we understand from prior consultation that existing access routes will be utilized for these locations. After review of the report, we accept its findings and recommendations. We accept this report as final. ***We reviewed a digital draft of this report. Please ensure that we receive two printed and bound archival copies of the report.***

Based on our review of the cultural historic overview survey report cited above, we understand that the authors of the report identified a total of 44 cultural historic sites on parcels within or extending into the area of potential effects, six of which had been previously documented (Sites 1/BE-394, 5/BE-396, 8/BE-286, 10/BE-443, 11/BE-449, and 23/GA-76), one of those six (Site 5/BE-396) which is Listed on the National Register of Historic Places (NRHP). We understand that the primary resources (houses) associated with Sites 8 (BE-286) and 11 (BE-449) are no longer extant. In addition, we understand that the resource associated with BE-397 is no longer extant. We understand that thirty-eight previously unrecorded resources also were identified within the area of potential effects (Sites 2–4, 6, 7, 9, 12–22, and 24–43).

We understand that the authors of the report recommend that Sites 1 (BE 394), 2–4, 6, 10 (BE 443), 11 (BE 449), 12–19, 21, 22, 23 (GA 76), and 24–44 are Not Eligible for listing in the National Register of Historic Places under Criterion A, B, or C. We understand that four sites (7, 8 [BE 286], 9, and 20) were not fully accessible during the field survey and thus, are recommended undetermined.
(Continued on next page.)

In addition, we understand that the authors of the report recommend that Site 5 (BE-396) retains sufficient historic integrity to retain its National Register listing under Criterion C as a transitional side passage, massed plan house and that, in addition, the authors recommend that BE-396 also appears to be Eligible for listing in the National Register of Historic Places under Criterion A as a representative example of a mid-nineteenth- to mid-twentieth-century farmstead in Boone County that participated in tenancy farming with black, and later, white farmers.

Based on our review, we concur with the author of the report, and with EKPC's official determination that Sites 1/BE-394, 2-4, 6, 10/BE-443, 11/BE-449, 12-17, 19, 21, 22, 24-33, 35, and 37-44 do not appear to retain sufficient historic integrity and significance and, as such, appear to be Not Eligible for listing on the National Register of Historic Places (NRHP). We also concur that Site 5/BE-396 appears to retain sufficient historic integrity and significance to retain its status as Listed on the National Register under Criterion C; additionally, we concur that BE-396 appears to be Eligible for listing on the NRHP under Criterion A as a representative example of the evolution of farming in Boone County and, perhaps more specifically, as it relates to the history of tenant farming. We concur that Sites 7, 8/BE-286, 9, and 20 should be assigned an "Undetermined" status as they were not accessible in the field and we do not have sufficient information to comment, but they are neither being directly or indirectly impacted by the proposed project so we are withholding comment on their National Register eligibility and are not requesting additional information at this time. Finally, we do not feel we have sufficient information to comment on the National Register eligibility of Sites 18/Hagish Family Cemetery, Site 23/Concord Baptist Church/cemetery, Site 34, or Site 36. For the Hagish Family Cemetery and Concord Baptist Church/cemetery, we feel we would need to better understand the families buried in both cemeteries and we feel we would need to better understand the evolution of the church to understand whether it has indeed lost its integrity as well as to better understand the history/significance of the church and its congregation. For Sites 34 and 36 the photos and descriptions were not of sufficient detail for us to understand either the historic integrity or significance of those properties. Although this is the case, since it does not appear that Sites 18, 23, 34, or 36 would be either directly or indirectly impacted by the proposed project either due to distance or due to existing modern commercial intrusions and transmission infrastructure within the viewshed, we are withholding comment at this time, recommending these resources are assigned an "Undetermined" status, and not requesting additional information. Thanks to the authors of the report for ensuring that all historic resources extending into the APE were as well documented as possible. ***We reviewed a digital draft of this report. Please ensure that we receive (1) printed and bound archival copy of the report and the hard copy of the KHC survey form for BE-396.***

We understand that EKPC will avoid site 15Be705 during the project activities. As such, we concur with EKPC's official determination of No Adverse Effect for this project.

In the event of the unanticipated discovery of an archaeological site or object of antiquity, the discovery should be reported to the Kentucky Heritage Council and to the Kentucky Office of State Archaeology in the Anthropology Department at the University of Kentucky in accordance with KRS 164.730. In the event that human remains are encountered during project activities, all work should be immediately stopped in the area and the area cordoned off, and in accordance with KRS 72.020 the county coroner and local law enforcement must be contacted immediately. Upon confirmation that the human remains are not of forensic interest, the unanticipated discovery must be reported to the Kentucky Heritage Council.

Should you have any questions concerning archaeological resources, feel free to contact Chris Gunn of my staff at chris.gunn@ky.gov. Questions concerning above-ground resources can be directed to Jennifer Ryall at jennifer.ryall@ky.gov.

Sincerely,

Craig A. Potts,
Executive Director and State Historic Preservation Officer

CP:cmg, jnr KHC# 61238, 61567
cc: George Crothers (OSA)

Chris Carpenter

From: Josh Young
Sent: Thursday, May 6, 2021 2:26 PM
To: 'Gunn, Chris (Heritage Council)'; Ryall, Jennifer (Heritage Council)
Cc: Chris Carpenter
Subject: RE: Boone County - Williamstown 69 kV Transmission Line Reconductor/Rebuild Project, Boone, Gallatin, and Grant Counties, Kentucky
Attachments: Boone-Williamstown_Cultural Resource APE Maps_Updated 5-5-2021.pdf

Jenn and Chris,

We have just been informed of a change in scope to the Boone County - Williamstown 69 kV Transmission Line ~~Reconductor/~~Rebuild Project, Boone, Gallatin, and Grant Counties, Kentucky, which will require additional cultural resource review. As originally proposed this project was a hybrid reconductor/rebuild project, with archaeology and cultural historic surveys conducted for the rebuild sections and archaeology at the 33 structure replacement locations, with your project review letter dated 4/12/2021. Since this time, EKPC Engineering has now determined that the majority of the existing structures within the previously identified reconductor line sections will also need to be replaced, and EKPC is now considering this a complete line rebuild project. Therefore, based on this change in scope we would like to coordinate development of cultural historic and archaeological areas of potential effect (APEs). Attached are topographic maps and aerial photographs depicting the location of the proposed project and APEs.

Project Scope Summary

- 28.4 miles: Rebuild transmission line with 556.5 ACSR/TW conductor and replace wood-pole structures with steel-pole structures.
- Install OPGW in place of existing static wires
- Replace guy wires and anchors as needed
- Clear Hazard Trees

Project Description

EKPC is proposing to rebuild, operate, and maintain the existing Boone County – Williamstown 69 kV Transmission Line section located in portions of Boone, Gallatin, and Grant Counties, Kentucky. EKPC is proposing this transmission line rebuild project to address the poor physical condition of the existing transmission line, including the conductors, static wires, poles, and/or structures. The project would require replacement of the existing conductor (2/0 and 4/0 ASCR) with the larger size conductor (556.5 ACSR/TW) currently utilized by EKPC. EKPC first evaluated reconductoring the line sections; however, it was concluded that the existing support structures, many of which are the original wood pole structures installed circa 1957 and 1958 and are in such poor physical condition they would not be able to support the increased weight of the larger conductor. Therefore, EKPC is proposing a complete rebuild of this line section using the larger conductor and steel-pole structures.

The existing Boone County – Williamstown transmission line section that would be rebuilt is approximately 28.4 miles in length and is generally oriented north to south between the existing EKPC Boone County 69 kV substation and Munk Junction; and generally west to east between Munk Junction and the Williamstown 69 kV substation. The Boone County substation is located at southeastern corner of the junction of Longbranch Road and Camp Ernst Road, approximately 3.5 miles south of Burlington in Boone County. The Munk Junction is located on the west side of KY Hwy 36, approximately 0.1 mile southeast of Smokey Road at 38.643634°N, -

84.675623°W in Grant County. The Williamstown substation is located on the south side of Barnes Road, 0.25-mile west Interstate 75, approximately 1.75 miles west of Williamstown in Grant County.

The proposed project would consist of removing the existing transmission line and associated wood-pole structures and construction of the new line in its place using steel pole structures, within the existing 100-foot-wide right-of-way (ROW) easement. While the exact new structure locations have not been identified at this time, the new line will be constructed using the stronger, approximately 12-foot taller steel pole structures, which will allow for a significantly fewer number of structures than the 236 currently present. Furthermore, the existing static wires would be replaced with Optical Ground Wire (OPGW), and the existing guy wires and anchors would be replaced as warranted.

Within the existing ROW, the vegetation is maintained by EKPC and property owners as a low growing herbaceous plant community and no tree clearing will be required. However, prior to and during construction activities, EKPC would identify and clear any hazard trees located along the edges of the transmission line ROW easement that have the potential to threaten the future operation of the facility. Because there is an existing transmission line facility and associated maintenance access points, EKPC anticipates using existing roads and drive paths to and/or within the ROW easement to access the structure replacement locations by driving over the existing terrain, without having to create new roads.

EKPC makes the following recommendations regarding cultural resource APEs for the project:

Archaeological APE

For archaeological resources, EKPC is proposing to conduct a Phase I archaeological investigation within the existing 24.2-mile-long, 100-foot-wide transmission line ROW proposed for rebuild, that was not previously surveyed. This APE represents a total of approximately 271.5 acres and is depicted on the attached maps. EKPC believes this APE is appropriate to evaluate the potential effects on archaeological resources from the proposed project. Deep testing will be conducted within any alluvial soils encountered within the rebuild portion of the project area per KHC Specifications for Fieldwork.

Cultural Historic APE

The proposed transmission line rebuild project would require removal of the existing facility and construction of a new facility within the existing ROW easement. Although the new steel pole structures are anticipated to be approximately 12 feet taller than the existing wood pole structures, the average span between structures would be increased and significantly fewer structures would be required. Therefore, EKPC is recommending an Overview Study of the cultural historic resources within 750 feet (1500 feet corridor) of the transmission centerline for the portion of the project not previously surveyed. EKPC's contractor, would document and assess the effects of the proposed project on historic properties within the APE. Properties that are listed, formerly determined eligible for listing, or appear potentially eligible for listing in the National Register will be documented to KHC survey standards, including a full description and National Register evaluation of each property and completion of a KHC survey form. Properties containing resources 50 years of age or older that appear ineligible for listing in the National Register will be mapped, photographed, and summarized in a table including a brief description of the property and its current condition as they relate to the potential eligibility of the resource; resources recommended ineligible will not be formally surveyed. EKPC believes an Overview Study of the proposed APE, as described above, is appropriate to evaluate the potential effect on cultural historic resources from the proposed project. The APE was developed to take into consideration the scale and nature of the proposed project. It encompasses the area in which the proposed project may directly or indirectly affect historic properties, if such properties exist.

We would like your feedback on these APE recommendations as soon as possible and will coordinate field work with our consultant accordingly. As always, please contact me should you have any questions or need additional information.

W. R. Smoot #1
W. R. Smoot #2
Boone Transmission
Boone Distribution
Webster Road
Turkey Foot
Richardson #2
Richardson #1
Bristow #1
Bristow #2
Turkey Foot Jct.
MBUSA
Duro #2
Duro #1
Bank Lick
Richwood
Stanley Parker
Big Bone
Bavarian Plant
Bavarian Landfill Generator
Sterling
Munk
Oakley Noel
Munk Junction
Williamstown

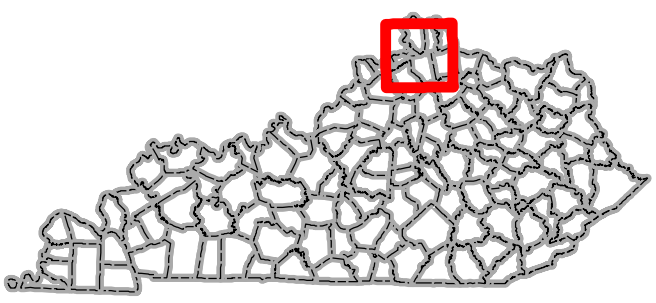
Doe Run Lake
Golf Courses of Kenton County
Union
Independence
Triple Crown Country Club
Gunpowder Creek
Big Bone Creek
Big Bone Lick State Park
Mud Lick Creek
Walton
Cruises Creek
McCoys Fork
Patriot
Ohio River
Verona
Big South Fork
Crittenden
Eagle Creek Country Club
Ten Mile Creek
North Fork Grassy Creek
North Fork Middle Fork Grassy Creek
Middle Fork Grassy Creek
Glencoe
Eagle Creek
Jacks Lick
Dry Ridge
Jonesville
929 ft
EAST BOTTOM
MEXICO BOTTOM
STEELE BOTTOM
KENTUCKY
INDIANA
BOONE
GALLATIN
GRANT
PENDLETON
500 ft
36
75
7A

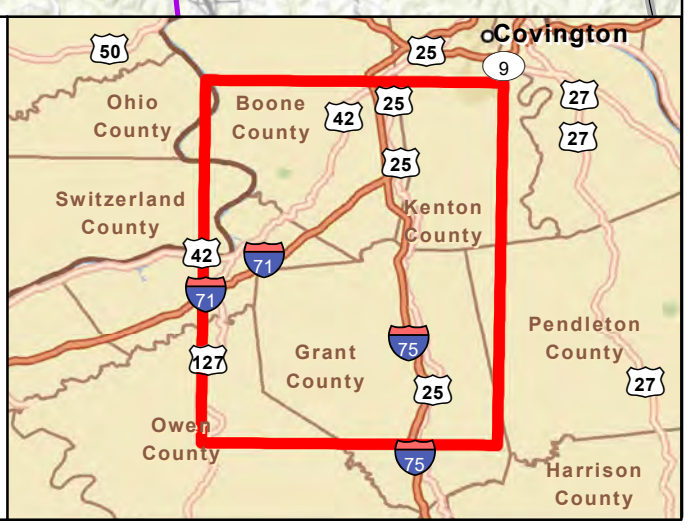
Boone - Williamstown 69 kV Transmission Line Rebuild Project
Overview Map

N

Proposed Line Rebuild
Existing Transmission Lines
EKPC Substations

0 1.5 3 6 Miles





Boone - Williamstown 69 kV Transmission Line Rebuild Project

Cultural Resource APEs Topo Map 1 of 4

N

- Archaeology APE_NEW
- Cultural Historic APE_NEW
- Previously Surveyed
- Existing Transmission Lines
- Existing EKPC Substations

0 0.3 0.6 1.2 Miles

Boone Distribution Substation

Cem

Camp Michael

Hueys Corners

Union

Union Ch

Riddles Run

Big Bone Creek

Dark Hollow

New Haven Sch

Howlett Cem

Roadside Park

Big Bone Ch

GUNPOWDER

LONG BRANCH

ERNST CAMP

Branch

INDEF BDY

Fork

BIG BONE CHURCH ROAD

UNION ROAD

RICE PIKE

PIPELINES

Boone - Williamstown 69 kV Transmission Line Rebuild Project

Cultural Resource APEs Topo Map 2 of 4

N

- Archaeology APE_NEW
- Cultural Historic APE_NEW
- Previously Surveyed
- Existing Transmission Lines
- Existing EKPC Substations

0 0.3 0.6 1.2 Miles

Big Bone Substa
Baker Cem
BIG BONE LICK STATE PARK
Campground
WT
Big Bone
BM 491
BM 517
BM 549
BM 768
Beaverlick Ch
Buzzard Branch Mud Lick
Hume
Creek
Carr Cem
Cem
INTERCHANGE 72
South Fork Little Gallatin Co
Boone Co
Baker
Brown
Allphin
Porter
Poole
Ryan
Road
McPherson

Boone - Williamstown 69 kV Transmission Line Rebuild Project

Cultural Resource APEs Topo Map 3 of 4

N

- Archaeology APE_NEW
- Cultural Historic APE_NEW
- Previously Surveyed
- Existing Transmission Lines
- Existing EKPC Substations

0 0.3 0.6 1.2 Miles

Munk

Oakley Noel

Boone - Williamstown 69 kV Transmission Line Rebuild Project

Cultural Resource APEs Topo Map 4 of 4

N

- Archaeology APE_NEW
- Cultural Historic APE_NEW
- Previously Surveyed
- Existing Transmission Lines
- Existing EKPC Substations

0 0.35 0.7 1.4 Miles

Munk Junction

Williamstown

Boone Distribution

Boone Transmission

Longbranch Rd

KDK Ln

Keli Ct

Grozat St

Armstrong St

Lapalco Ct

Iberville Ct

Eden Ct

Eden St

Long Branch

Barronne St

Longbranch Rd

Oconnell Pl

Loch Dr

Parnell St

Ballyshannon Dr

Shamrock Ave

Obyrne Ln

Donegal Ave

Glencree Ln

Gunpowder Creek

Boone County Arboretum Children's Garden

Camp Ernst Rd

Deerview Dr

Hathaway Rd

536

Tayman Dr

Timbercreek Dr

Hueys Corners

Riddles Run

Big Bone Rd

Canoe Dr

Spruce Ln

Turner Ln

Big Bone Creek

Rice Pike

Boone - Williamstown 69 kV Transmission Line Rebuild Project

Cultural Resource APEs Aerial Map 1 of 7

N

Archaeology APE_NEW

Cultural Historic APE_NEW

Previously Surveyed

Existing Transmission Lines

Existing EKPC Substations

0 1,000 2,000 4,000 Feet

Boone - Williamstown 69 kV Transmission Line Rebuild Project

Cultural Resource APEs Aerial Map 2 of 7

N

- Archaeology APE_NEW
- Cultural Historic APE_NEW
- Previously Surveyed
- Existing Transmission Lines
- Existing EKPC Substations

0 1,000 2,000 4,000 Feet

Boone - Williamstown 69 kV Transmission Line Rebuild Project

Cultural Resource APEs Aerial Map 3 of 7

N

- Archaeology APE_NEW
- Cultural Historic APE_NEW
- Previously Surveyed
- Existing Transmission Lines
- Existing EKPC Substations

0 1,000 2,000 4,000 Feet

Boone - Williamstown 69 kV Transmission Line Rebuild Project

Cultural Resource APEs Aerial Map 4 of 7

- Archaeology APE_NEW
- Cultural Historic APE_NEW
- Previously Surveyed
- Existing Transmission Lines
- Existing EKPC Substations

N

0 1,000 2,000 4,000 Feet

Boone - Williamstown 69 kV Transmission Line Rebuild Project

Cultural Resource APEs Aerial Map 5 of 7

- Archaeology APE_NEW
- Cultural Historic APE_NEW
- Previously Surveyed
- Existing Transmission Lines
- Existing EKPC Substations

N

0 1,000 2,000 4,000 Feet

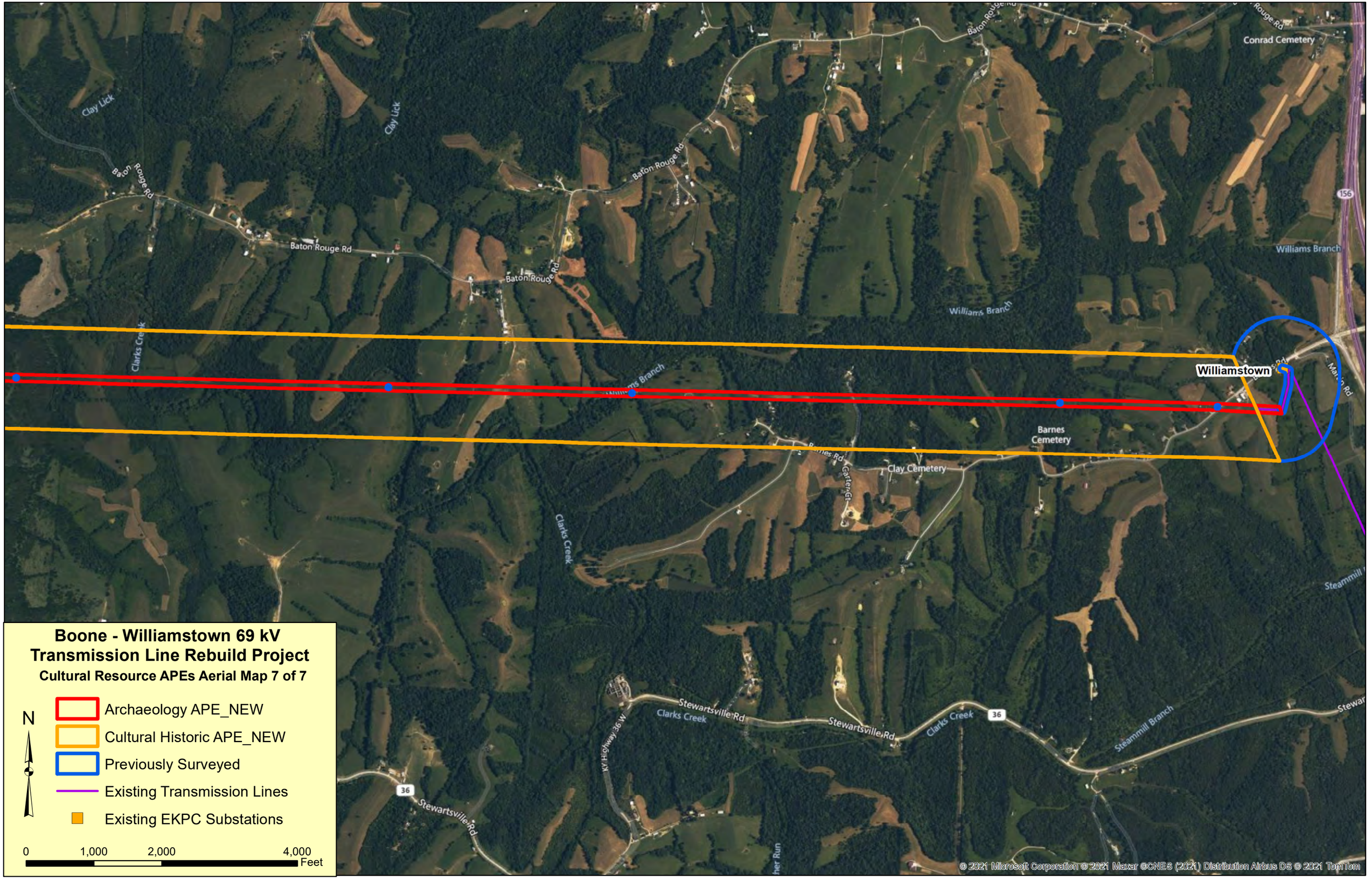
Boone - Williamstown 69 kV Transmission Line Rebuild Project

Cultural Resource APEs Aerial Map 6 of 7

N

- Archaeology APE_NEW
- Cultural Historic APE_NEW
- Previously Surveyed
- Existing Transmission Lines
- Existing EKPC Substations

0 1,000 2,000 4,000 Feet


Clay Lick
Clay Lick
Baton Rouge Rd
Baton Rouge Rd
Baton Rouge Rd
Baton Rouge Rd
Baton Rouge Rd
Conrad Cemetery
156
Williams Branch
Williams Branch
Clarks Creek
Williamstown
Barnes Cemetery
Barnes Rd
Carter Ct
Clay Cemetery
Clarks Creek
Steammill Branch
KY Highway 36 W
Stewartsville Rd
Clarks Creek
Stewartsville Rd
Clarks Creek
36
36
Stewartsville Rd
Boone - Williamstown 69 kV
Transmission Line Rebuild Project
Cultural Resource APEs Aerial Map 7 of 7
N
Archaeology APE_NEW
Cultural Historic APE_NEW
Previously Surveyed
Existing Transmission Lines
Existing EKPC Substations
0
1,000
2,000
4,000
Feet
© 2021 Microsoft Corporation © 2021 Maxar ©CNES (2021) Distribution Airbus DS © 2021 TomTom

Chris Carpenter

From: Gunn, Chris (Heritage Council) <Chris.Gunn@ky.gov>
Sent: Friday, May 7, 2021 12:56 PM
To: Josh Young; Ryall, Jennifer (Heritage Council)
Cc: Chris Carpenter
Subject: Re: Boone County - Williamstown 69 kV Transmission Line Reconductor/Rebuild Project, Boone, Gallatin, and Grant Counties, Kentucky

Hello Josh,

Yes, this looks like an appropriate APE based on the change in the scope fo the project. Access roads would also be included within the APE and should be presented when you develop your effect recommendation for the project, and surveyed as needed. If you are able to use existing access routes without modification, then these would not require survey generally. If any previous access routes cross previously defined sites, we can discuss them, or you elect to use an avoidance measure, like wetland matting or similar, to reduce impacts to the site. New access routes should be surveyed for cultural resources.

Thank you,
Chris Gunn

Christopher M. Gunn, Ph.D.
Archaeology Review Coordinator
Kentucky Heritage Council
410 High Street
Frankfort, KY 40601

502-892-3615

Note for Applicants Submitting Projects for Section 106 Review: Following the Governor's Red Zone Recommendations, the KHC Site Protection section staff are teleworking. To ensure the timely reception and review of Section 106 submissions, all project documents should be submitted via email. KHC staff will respond with an email acknowledging receipt of these documents.

For archival purposes, applicants will still need to mail bound hard copies of reports to 410 High Street Frankfort, KY 40601 – (1) bound hard copy (with unbound hard copy KHC survey forms) for cultural historic reports and (3) bound hard copies for archaeology reports.

Site Protection staff commit to flexibility at this difficult time and, per the ACHP's most recent guidance, we appreciate Applicants being flexible with our response time frames during a declared national emergency. If you have an emergency action that requires Section 106 consultation, please include our Site Protection Manager Nick Laracuente nicolas.laracuente@ky.gov on emails to review staff.

To our constituents, please be advised the KHC Historic Resource Library is currently open for consultants wishing to conduct background research and site checks. Consultants can make appointments to visit our office in two time slots a day on Mondays, Wednesdays, and Fridays: 9 a.m. to 12 p.m. and 1 :30 p.m. to 4:30 p.m. We ask that you please refer to this memo for information and follow all protocols outlined there and posted at our facility. Consultants who require this service may also continue to utilize the electronic records review portal at https://secure.kentucky.gov/formservices/Heritage/SiteID. Staff are not available for face-to-face meetings or site visits.

From: Josh Young <josh.young@ekpc.coop>
Sent: Thursday, May 6, 2021 2:26 PM

Chris Carpenter

From: Ryall, Jennifer (Heritage Council) <Jennifer.Ryall@ky.gov>
Sent: Friday, May 7, 2021 9:06 AM
To: Josh Young; Gunn, Chris (Heritage Council)
Cc: Chris Carpenter
Subject: RE: Boone County - Williamstown 69 kV Transmission Line Reconductor/Rebuild Project, Boone, Gallatin, and Grant Counties, Kentucky

Thanks for the update on the revised scope of this project, Josh. Based on the revised scope, I'm able to concur that the Cultural Historic APE and Overview Study format presented for the Boone County-Williamstown 69 kV Transmission Line **Rebuild** Project is appropriate to address the National Register eligibility and effects of this project.

Have a great weekend,
~Jenn

Jennifer Ryall
Environmental Review Coordinator
Kentucky Heritage Council
410 High Street
Frankfort, Kentucky 40601
Phone: (502) 892-3619
Pronouns: she, her, hers

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Sent: Thursday, May 6, 2021 2:26 PM
To: Gunn, Chris (Heritage Council) <Chris.Gunn@ky.gov>; Ryall, Jennifer (Heritage Council) <Jennifer.Ryall@ky.gov>
Cc: Chris Carpenter <Chris.Carpenter@ekpc.coop>

Josh Young

From: Josh Young
Sent: Thursday, September 9, 2021 4:42 PM
To: Craig Potts (craig.potts@ky.gov); Gunn, Chris (Heritage Council); Ryall, Jennifer (Heritage Council)
Cc: Chris Carpenter; Kopich, Suzanne - RD, Washington, DC
Subject: Boone – Williamstown 69 kV Transmission Line Rebuild Project - Boone, Gallatin, and Grant Counties, Kentucky

September 9, 2021

Mr. Craig Potts
Kentucky Heritage Council
State Historic Preservation Officer
410 High Street
Frankfort, KY 40601

RE: Archaeological and Cultural Historic Overview Survey Addendum Reports and Recommended Findings of Effect for East Kentucky Power Cooperative's Proposed Boone – Williamstown 69 kV Transmission Line Rebuild Project in Boone, Gallatin, and Grant Counties, Kentucky

Dear Mr. Potts,

East Kentucky Power Cooperative, Inc. (EKPC) plans to request financing from the USDA Rural Utilities Service (RUS) to construct the proposed Boone – Williamstown 69 kV Transmission Line Rebuild Project in Boone, Gallatin, and Grant Counties, Kentucky. RUS considers this potential action an undertaking subject to Section 106 of the National Historic Preservation Act, 16 U.S.C. § 470f, and its implementing regulations, "Protection of Historic Properties" (36 CFR Part 800).

The Boone - Williamstown transmission line project was originally proposed as a hybrid reconductor/rebuild project, with archaeology and cultural historic surveys conducted for the rebuild sections and archaeology at the 33 structure replacement locations, with a project No Adverse Effect concurrence letter received from your office on 4/12/2021. Since that time, EKPC Engineering has determined that the majority of the existing structures within the previously identified reconductor line sections will also need to be replaced, and EKPC is now considering this a complete line rebuild project. Therefore, based on this change in scope, additional cultural historic and archaeological surveys were conducted per the following.

In accordance with a delegation memo dated August 14, 2012, EKPC initiated Section 106 consultation with the Kentucky State Historic Preservation Office (SHPO) to identify the areas of potential effect (APEs) where assessment of potential effects to archeological and cultural historic resources should occur for the additional project areas. This email and recommended findings focuses on the results of the cultural resource surveys that were conducted within the established APE's. At the request of EKPC, Cultural Resource Analysts, Inc. (CRA), personnel completed a Phase I Archaeological Investigation and a Cultural Historic Overview Survey during July - August 2021. The addendum survey reports and site forms are available for download from EKPC's ShareFile site at https://ekpcoop.sharefile.com/d-sb304c951e56b45f6830ebcb00ca3e0e6 (please let us know if there are any issues accessing).

The addendum archaeology survey resulted in no archaeological sites or isolated finds identified within the current project area, and archaeological clearance for the proposed project is recommended by CRA. No sites listed in, or eligible for listing in, the National Register of Historic Places (NRHP) will be affected by the project as planned, and archaeological clearance is recommended for the proposed project..

The Cultural Historic Overview Addendum Report documents the results of the survey and CRA's determination that eight of the 71 sites assessed (Sites 49, 57, 59, 60, 63, 64, 67, and 100 [BE 293, BE 1907, BE 730, BE 1019, BE 1493, BE 705, GA 77, and GR 55]) warranted a detailed discussion in order to provide recommendations on each site's eligibility for listing in the NRHP. Based on their detailed review, CRA recommends that one previously undocumented resource (Site 57 [BE 1907]) is eligible for inclusion in the NRHP under Criterion C as an excellent, intact example of a concrete slab bridge with a fence-type railing. The proposed project is located outside the recommended NRHP boundary for Site's 57 Resource I and also the property boundary for Site 57 (BE 1907). Therefore, the proposed project will not result in any direct effects to the recommended eligible resource. Given the bridge's location in relation to the proposed project, the trees immediately surrounding the resource, and the rolling terrain, the proposed project will most likely not be visible from the recommended eligible resource both during and after construction. Therefore, it will not result in adverse visual effects to the bridge (Site 57 [Resource I]). Therefore, CRA recommends a finding of No Historic Properties Affected for the proposed project

Based on these and the previous findings, EKPC recommends that the undertaking, would result in No Adverse Effect to Historic Properties for cultural resources listed, or eligible for listing in the NRHP for the project. Please review this recommended findings of effect for the subject undertaking and notify EKPC or RUS within thirty (30) days of receipt of this letter of your concurrence or objection. If the SHPO fails to respond within this timeframe, RUS will conclude Section 106 review of this project in accordance with 36 CFR § 800.3(c)(4) based on EKPC's recommended finding of No Adverse Effect to Historic Properties for cultural resources listed or eligible for listing in the NRHP for the project.

We appreciate your attention to this matter. Should you have any questions or require additional information, please contact me at (859) 745-9799 or josh.young@ekpc.coop; or Suzanne Kopich, RUS Environmental Protection Specialist at (202) 692-4907 or Suzanne.Kopich@usda.gov.

Sincerely,

Josh Young
East Kentucky Power Cooperative, Inc.
Natural Resources and Environmental Communications
4775 Lexington Road
Winchester, KY 40391
Office: (859) 745-9799
Cell: (859) 749-0553
josh.young@ekpc.coop

ANDY BESHEAR
GOVERNOR

JACQUELINE COLEMAN
LT. GOVERNOR

TOURISM, ARTS AND HERITAGE CABINET
KENTUCKY HERITAGE COUNCIL
THE STATE HISTORIC PRESERVATION OFFICE
410 HIGH STREET
FRANKFORT, KENTUCKY 40601
(502) 564-7005
www.heritage.ky.gov

MICHAEL E. BERRY
SECRETARY

CRAIG A. POTTS
EXECUTIVE DIRECTOR &
STATE HISTORIC
PRESERVATION OFFICER

October 4, 2021

Mr. Josh Young
East Kentucky Power Cooperative
4775 Lexington Road
Winchester, KY 40391

Re: **An Addendum to An Archaeological Survey for the Proposed Williamstown 69 Kilovolt Transmission Line Reconductor/Rebuild Project in Boone, Gallatin, and Grant Counties, Kentucky** prepared by Robert McCain of Cultural Resource Analysts, Inc. Report dated September 1, 2021.

An Addendum to the Cultural Historic Overview Survey for the Proposed Williamstown 69 kV Transmission Line Rebuild Project in Boone, Gallatin, and Grant Counties, Kentucky, prepared by Lauren Poole, John Dickerson, and Sarah Reynolds of Cultural Resource Analysts, Inc. Report dated September 9, 2021.

Dear Mr. Young:

Thank you for your email and attached documentation concerning the above-mentioned project, received September 9, 2021. We understand that the East Kentucky Power Cooperative has revised the scope of its Boone-Williamstown 69 kV transmission line reconductor project in Boone, Gallatin, and Grant Counties, Kentucky. We understand that, after additional assessment of the integrity of the supporting transmission line structures, that most of the transmission line structures require replacement, and that the project is now conceived as a complete line rebuild. Accordingly, cultural resources identification reports for the transmission line corridor have been updated to reflect the enlarged scope of the project. We understand that the proposed project will be supported through the USDA-RUS.

The enclosed addendum archaeological report describes the intensive pedestrian reconnaissance, supplemented by screened shovel tests, of the portions of the project area that were not assessed previously in the 2021 cultural resources assessment. The addendum survey did not identify additional archaeological resources. After review of the addendum report, we accept its findings and recommendations. We accept this report as final. ***We reviewed a digital draft of this report. Please ensure that we receive two printed and bound archival copies of the report.***

Based on our review of the above-cited cultural historic survey (addendum) report, we understand that the addendum report includes the identification of aboveground historic resources within the portions of the expanded APE not assessed in the initial report for this project. We provided comment on the initial report for this project in our response letter dated April 12, 2021 and we reinforce our concurrence and recommendations that letter while evaluating the additional resources in this response. We understand that, as part of the survey for the addendum report, the authors of the above-cited report identified a total of 71 cultural historic sites (Sites 45–115) in the portion of the APE not previously evaluated, 13 of which (Sites 49, 51–53, 55, 59, 60, 62–64, 67, 71, and 74 [BE-293, BE-1467, BE-413, BE-251, BE-662, BE-730, BE-1019, BE-1492, BE-1493, BE-705, GA-77, GA-81, and GR-31]) have been previously documented.

(Continued on Next Page)

Based on our review, we understand that the authors of the report recommend that the bridge (Resource I) associated with Site 57 (BE-1907) is Eligible for listing in the NRHP under Criterion C as a good example of a concrete slab bridge with a fence-type railing. We understand that the authors of the report recommend that Sites 45–56, 59, 60, 62–64, 66–69, 71, 72, 74–79, 81, 82, 84, 85, 89–92, 94–102, and 104–115 are Not Eligible for listing in the National Register of Historic Places (NRHP) under Criterion A, B, or C. We understand that the authors of the report recommend an Undetermined status for Sites 58, 61, 65, 70, 73, 80, 83, 86–88, 93, and 103 as they were either not accessible or not visible in the field and could not be properly evaluated for NRHP eligibility.

Based on our review, we concur with the authors of the report and with EKPC's official determination that Site 57/BE-1907, Resource I (concrete slab bridge with fence-type railing, inclusive of its stone abutments) appears to retain sufficient historic integrity and significance to be Eligible for listing in the NRHP. We concur that the remainder of Site 57 (not including Resource I), Site 60/BE-1019, and Site 67/GA-77 do not appear to retain sufficient historic integrity and significance and, as a result, appear to be Not Eligible for listing in the NRHP. Additionally, we concur that Sites 45–48, 50-56, 60, 67–69, 71, 72, 75–79, 81, 82, 85, 89–92, 94–99, 102, and 104–106, 109-115 do not appear to preserve sufficient historic integrity and significance and, as a result, appear to be Not Eligible for listing in the NRHP. We concur with leaving an Undetermined status for Sites 58, 61, 65, 70, 73, 80, 83, 86–88, 93, and 103 as they could not be fully documented but will not be impacted by the proposed project.

We withhold comment on Sites 49/BE-293, 59/BE-730, 62/BE-1492 (barn), 63/BE-1493, 64/BE-705 (see comment on Site 64, Resource F, Carr Cemetery comment below), 66 (barn), 74/GR-31 (see comment on Site 74 below), Site 84, 100/GR-55, Site 101, Site 107 (see comment on Site 107 below), and Site 108 (barn) as we feel additional information would be needed to understand the historic integrity and significance of these sites; however, since all but Site 84 are outside the APE, due to their location as it relates to the APE they will neither be directly or indirectly impacted by the proposed project (including Site 84). For Site 59, we feel this barn would benefit from drawings of its plan in the future to better understand its evolution from a log crib. Although we concur that this appears to be a later log crib due to the type and size of logs used, the primary way such crib barns have been preserved is within modern barns. Because relatively few log crib barns are preserved, they become more important for the study of the development of log construction within Kentucky's counties. Although we feel that additional identification work is warranted to document the other side of the stone culvert at Site 74/GR-31 and to better understand its historic integrity, we disagree with the authors of the report and with EKPC's official determination of Not Eligible for Site 74 without having that full documentation as this is a c.1869 stone culvert which appears to be a well-preserved early example, we recommend that it appears to preserve sufficient historic *significance* for National Register consideration under Criterion C. For Site 107, although documented as a "T-plan," this house appears to preserve a highly unique form with its primary entrance being a front *corner* entrance at the junction of the "T." We feel that this house type in Boone County would benefit from additional research to help contextualize this house.

We disagree with the authors of the report and with EKPC's official determination of Not Eligible for Site 64, Resource F/Carr Cemetery. We instead recommend that Site 64/BE-705, Resource F/Carr Cemetery (inclusive of its stone gateposts) appears to preserve sufficient historic integrity and significance under Criteria Consideration D/Criterion A/Ethnic Heritage/Irish as an important remnant of the early development of the Irish community which made a significant impact on Boone County. As it is outside the APE for this project, Site 64/Carr Cemetery should not be either directly or indirectly impacted by the proposed project. ***We reviewed a digital draft of the addendum cultural historic overview report. Please ensure that we receive (1) printed and bound archival copy of the report as well as the associated KHC survey forms for this project.***

One previously identified archaeological site – 15Be705 – falls within the project area. However, we understand that EKPC will avoid the site during project activities. As such, based on our review, we concur with EKPC's official determination of No Adverse Effect as it relates to the updated scope of this project.

(Continued on Next Page)

In the event of the unanticipated discovery of an archaeological site or object of antiquity, the discovery should be reported to the Kentucky Heritage Council and to the Kentucky Office of State Archaeology in the Anthropology Department at the University of Kentucky in accordance with KRS 164.730. In the event that human remains are encountered during project activities, all work should be immediately stopped in the area and the area cordoned off, and in accordance with KRS 72.020 the county coroner and local law enforcement must be contacted immediately. Upon confirmation that the human remains are not of forensic interest, the unanticipated discovery must be reported to the Kentucky Heritage Council.

Should you have any questions concerning archaeological resources, feel free to contact Chris Gunn of my staff at chris.gunn@ky.gov. Questions concerning above-ground resources can be directed to Jennifer Ryall at jennifer.ryall@ky.gov.

Sincerely,

Craig A. Potts,
Executive Director and
State Historic Preservation Officer

CP:cmg, jnr KHC# 61238, 61567, 62843, 63105
cc: George Crothers (OSA)

EAST KENTUCKY POWER COOPERATIVE

October 30, 2020

Ms. Holly Austin
Tribal Historic Preservation Officer
Eastern Band of Cherokee Indians
PO Box 455
Cherokee, NC 28719

SUBJECT: Notification of Intent to Initiate Section 106 Review
Boone County – Williamstown 69 kilovolt Transmission Line Reconductor/Rebuild Project
Boone, Gallatin, and Grant Counties, Kentucky

Dear Ms. Austin,

The Rural Utilities Service (RUS), one of three agencies comprising USDA Rural Development, is authorized under the Rural Electrification Act of 1936, as amended, to provide federal financial assistance for the construction, improvement and expansions of electrical infrastructure in eligible rural communities in the United States. East Kentucky Power Cooperative, Inc. (EKPC) plans to seek financial assistance from RUS for construction of the proposed Boone County – Williamstown 69 kilovolt (kV) Transmission Line Reconductor/Rebuild Project in portions of Boone, Gallatin, and Grant Counties, Kentucky as shown on the enclosed maps.

EKPC is proposing to reconductor/rebuild, operate, and maintain the existing Boone County – Williamstown transmission line section between the cities of Burlington and Williamstown, KY. The existing Boone County – Williamstown transmission line section that would be reconductored/rebuilt is approximately 28.5 miles in length and is generally oriented north to south between the existing EKPC Boone County 69 kV substation and Munk Junction; and generally west to east between Munk Junction and the Williamstown 69 kV substation. The Boone County substation is located at southeastern corner of the junction of Longbranch Road and Camp Ernst Road, approximately 3.5 miles south of Burlington in Boone County. The Munk Junction is located on the west side of KY Hwy 36, approximately 0.1 mile southeast of Smokey Road at 38.643634oN, -84.675623oW in Grant County. The Williamstown substation is located on the south side of Barnes Road, 0.25-mile west Interstate 75, approximately 1.75 miles west of Williamstown in Grant County.

The proposed 28.5 mile hybrid project would include portions of rebuild, reconductor, and structure modifications within the existing 100-foot transmission line right-of way (ROW). The rebuild portions of the project consist of five line sections comprising 4.6 miles and the reconductor portions consist of four line sections comprising 23.9 miles. There are 263 existing structures located within these transmission line sections. Based on preliminary engineering design, 60 single wood-pole structures would be replaced with steel-pole structures within the rebuild sections. While the final line design is ongoing it is anticipated that the new steel-pole structures would be approximately 12 feet taller than the existing wood-pole structures with roughly 30-40% fewer steel-pole structures required. For the reconductor sections, 33 wood-pole H-frame structures would be replaced with in-kind steel-pole H-frame structures at the existing locations and an additional 170 structures would be modified with X-braces and arm braces to address conditions related to strength, lean, etc. Furthermore, the existing static wires would be replaced with Optical Ground Wire (OPGW), and the existing guy wires and anchors would be replaced as warranted. EKPC is proposing the Boone County – Williamstown transmission line reconductor/rebuild project to address the poor physical condition of the existing transmission line, including the conductors, static wires, poles, and/or structures. Additionally, EKPC has determined that the existing wooden transmission line support structures, many of which are the original structures and would not be able to support the weight of the larger conductor; therefore, EKPC is proposing a hybrid reconductor/rebuild of this line section using the larger conductor, steel-pole structures, and necessary structure modifications.

4775 Lexington Road 40391
P.O. Box 707, Winchester
Kentucky 40392-0707
Tel. (859) 744-4812
Fax: (859) 744-6008
http://www.ekpc.coop

If RUS elects to fund this application, it will become an undertaking subject to review under Section 106 of the National Historic Preservation Act, 54 U.S.C. 306108, and its implementing regulations, 36 CFR Part 800. Pursuant to 7 CFR § 1970.5 (b) (2) of the regulations, "Environmental Policies and Procedures" (7 CFR Part 1970), RUS has issued a blanket delegation to its borrowers to initiate and proceed through Section 106 review. In accordance with this blanket delegation, EKPC is initiating section 106 review on behalf of RUS. In delegating this authority, RUS is advocating for the direct interaction between its borrowers and the Indian tribes. RUS believes that this interaction, prior to direct agency involvement, will support and encourage the consideration of impacts to historic properties of importance to Indian tribes earlier in the project planning.

EKPC proposes that the area of potential effects (APE) for the referenced project consists of the 4.6-mile long, 100 foot-wide existing transmission line ROW easement proposed for rebuild. For the reconductor portion of the project it is anticipated that all project activities would occur at the previously disturbed existing structure location and along existing access points. The geographic scope of the APE will not be final until a determination is made by RUS pursuant to 36 CFR § 800.4 (a)(1). The APE does not include any Tribal lands as defined pursuant to 36 CFR § 800.16(x).

EKPC has contracted with a professional archaeologist to conduct a Phase I archaeological investigation within the proposed project APE in accordance with current Kentucky State Historic Preservation Office guidelines. A survey report will be developed and submitted to the Kentucky Heritage Council for their review.

EKPC is notifying you about the referenced project because of the possible interest of the Eastern Band of Cherokee Indians in portions of Boone, Gallatin, and Grant Counties. Should the Eastern Band of Cherokee Indians elect to participate in Section 106 review of the referenced project please notify me as soon as possible, but no later than December 7, 2020. EKPC has been advised by RUS to proceed to the next step in Section 106 review if you fail to provide a timely response. Please submit your response in writing via letter or email at the following address – Josh Young, East Kentucky Power Cooperative, Inc., 4775 Lexington Road, Winchester, KY, 40391 or josh.young@ekpc.coop.

Please include with your affirmative response, a description of any specific historic properties or important tribal resources in the APE and your recommendations about the level of effort needed to identify additional historic properties which might be affected by the referenced project. EKPC will respect the confidentiality of the information which you provide to the fullest extent possible.

If at any time you wish to share your interests, recommendations and concerns directly with RUS, as the agency responsible for conducting Section 106 review, or to request that RUS participate directly in Section 106 review, please notify me at once, preferably via email. However, you may contact RUS directly. If you wish to do so, please submit your request to Lauren Rayburn, Physical Scientist (Environmental), (202) 695-2540 or lauren.rayburn@wdc.usda.gov.

Thank you for your review of this project information, should you have any questions or require additional information, I can also be reached via phone at (859) 745-9799.

Sincerely,

Josh Young
Supervisor, Natural Resources
& Environmental Communications

Enclosures
cc: Jerry Purvis, Steve Anderson, Darrin Adams (EKPC), Lauren McGee Rayburn

EAST KENTUCKY POWER COOPERATIVE

October 30, 2020

Mr. Russell Townsend
Tribal Historic Preservation Officer
Eastern Band of Cherokee Indians
PO Box 455
Cherokee, NC 28719

SUBJECT: Notification of Intent to Initiate Section 106 Review
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Boone, Gallatin, and Grant Counties, Kentucky

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EKPC proposes that the area of potential effects (APE) for the referenced project consists of the 4.6-mile long, 100 foot-wide existing transmission line ROW easement proposed for rebuild. For the reconductor portion of the project it is anticipated that all project activities would occur at the previously disturbed existing structure location and along existing access points. The geographic scope of the APE will not be final until a determination is made by RUS pursuant to 36 CFR § 800.4 (a)(1). The APE does not include any Tribal lands as defined pursuant to 36 CFR § 800.16(x).

EKPC has contracted with a professional archaeologist to conduct a Phase I archaeological investigation within the proposed project APE in accordance with current Kentucky State Historic Preservation Office guidelines. A survey report will be developed and submitted to the Kentucky Heritage Council for their review.

EKPC is notifying you about the referenced project because of the possible interest of Eastern Band of Cherokee Indians in portions of Boone, Gallatin, and Grant Counties. Should the Eastern Band of Cherokee Indians elect to participate in Section 106 review of the referenced project please notify me as soon as possible, but no later than December 7, 2020. EKPC has been advised by RUS to proceed to the next step in Section 106 review if you fail to provide a timely response. Please submit your response in writing via letter or email at the following address – Josh Young, East Kentucky Power Cooperative, Inc., 4775 Lexington Road, Winchester, KY, 40391 or *josh.young@ekpc.coop*.

Please include with your affirmative response, a description of any specific historic properties or important tribal resources in the APE and your recommendations about the level of effort needed to identify additional historic properties which might be affected by the referenced project. EKPC will respect the confidentiality of the information which you provide to the fullest extent possible.

If at any time you wish to share your interests, recommendations and concerns directly with RUS, as the agency responsible for conducting Section 106 review, or to request that RUS participate directly in Section 106 review, please notify me at once, preferably via email. However, you may contact RUS directly. If you wish to do so, please submit your request to Lauren Rayburn, Physical Scientist (Environmental), (202) 695-2540 or *lauren.rayburn@wdc.usda.gov*.

Thank you for your review of this project information, should you have any questions or require additional information, I can also be reached via phone at (859) 745-9799.

Sincerely,

Josh Young
Supervisor, Natural Resources
& Environmental Communications

Enclosures
cc: Jerry Purvis, Steve Anderson, Darrin Adams (EKPC), Lauren McGee Rayburn (RUS)

EAST KENTUCKY POWER COOPERATIVE

October 30, 2020

Ms. Diane Hunter
Tribal Historic Preservation Officer
Miami Nation
PO Box 1326
Miami, OK 74354

SUBJECT: Notification of Intent to Initiate Section 106 Review
Boone County – Williamstown 69 kilovolt Transmission Line Reconductor/Rebuild Project
Boone, Gallatin, and Grant Counties, Kentucky

Dear Ms. Hunter,

The Rural Utilities Service (RUS), one of three agencies comprising USDA Rural Development, is authorized under the Rural Electrification Act of 1936, as amended, to provide federal financial assistance for the construction, improvement and expansions of electrical infrastructure in eligible rural communities in the United States. East Kentucky Power Cooperative, Inc. (EKPC) plans to seek financial assistance from RUS for construction of the proposed Boone County – Williamstown 69 kilovolt (kV) Transmission Line Reconductor/Rebuild Project in portions of Boone, Gallatin, and Grant Counties, Kentucky as shown on the enclosed maps.

EKPC is proposing to reconductor/rebuild, operate, and maintain the existing Boone County – Williamstown transmission line section between the cities of Burlington and Williamstown, KY. The existing Boone County – Williamstown transmission line section that would be reconductored/rebuilt is approximately 28.5 miles in length and is generally oriented north to south between the existing EKPC Boone County 69 kV substation and Munk Junction; and generally west to east between Munk Junction and the Williamstown 69 kV substation. The Boone County substation is located at southeastern corner of the junction of Longbranch Road and Camp Ernst Road, approximately 3.5 miles south of Burlington in Boone County. The Munk Junction is located on the west side of KY Hwy 36, approximately 0.1 mile southeast of Smokey Road at 38.643634oN, -84.675623oW in Grant County. The Williamstown substation is located on the south side of Barnes Road, 0.25-mile west Interstate 75, approximately 1.75 miles west of Williamstown in Grant County.

The proposed 28.5 mile hybrid project would include portions of rebuild, reconductor, and structure modifications within the existing 100-foot transmission line right-of way (ROW). The rebuild portions of the project consist of five line sections comprising 4.6 miles and the reconductor portions consist of four line sections comprising 23.9 miles. There are 263 existing structures located within these transmission line sections. Based on preliminary engineering design, 60 single wood-pole structures would be replaced with steel-pole structures within the rebuild sections. While the final line design is ongoing it is anticipated that the new steel-pole structures would be approximately 12 feet taller than the existing wood-pole structures with roughly 30-40% fewer steel-pole structures required. For the reconductor sections, 33 wood-pole H-frame structures would be replaced with in-kind steel-pole H-frame structures at the existing locations and an additional 170 structures would be modified with X-braces and arm braces to address conditions related to strength, lean, etc. Furthermore, the existing static wires would be replaced with Optical Ground Wire (OPGW), and the existing guy wires and anchors would be replaced as warranted. EKPC is proposing the Boone County – Williamstown transmission line reconductor/rebuild project to address the poor physical condition of the existing transmission line, including the conductors, static wires, poles, and/or structures. Additionally, EKPC has determined that the existing wooden transmission line support structures, many of which are the original structures and would not be able to support the weight of the larger conductor; therefore, EKPC is proposing a hybrid reconductor/rebuild of this line section using the larger conductor, steel-pole structures, and necessary structure modifications.

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If RUS elects to fund this application, it will become an undertaking subject to review under Section 106 of the National Historic Preservation Act, 54 U.S.C. 306108, and its implementing regulations, 36 CFR Part 800. Pursuant to 7 CFR § 1970.5 (b) (2) of the regulations, "Environmental Policies and Procedures" (7 CFR Part 1970), RUS has issued a blanket delegation to its borrowers to initiate and proceed through Section 106 review. In accordance with this blanket delegation, EKPC is initiating section 106 review on behalf of RUS. In delegating this authority, RUS is advocating for the direct interaction between its borrowers and the Indian tribes. RUS believes that this interaction, prior to direct agency involvement, will support and encourage the consideration of impacts to historic properties of importance to Indian tribes earlier in the project planning.

EKPC proposes that the area of potential effects (APE) for the referenced project consists of the 4.6-mile long, 100 foot-wide existing transmission line ROW easement proposed for rebuild. For the reconductor portion of the project it is anticipated that all project activities would occur at the previously disturbed existing structure location and along existing access points. The geographic scope of the APE will not be final until a determination is made by RUS pursuant to 36 CFR § 800.4 (a)(1). The APE does not include any Tribal lands as defined pursuant to 36 CFR § 800.16(x).

EKPC has contracted with a professional archaeologist to conduct a Phase I archaeological investigation within the proposed project APE in accordance with current Kentucky State Historic Preservation Office guidelines. A survey report will be developed and submitted to the Kentucky Heritage Council for their review.

EKPC is notifying you about the referenced project because of the possible interest of the Miami Nation in portions of Boone, Gallatin, and Grant Counties. Should the Miami Nation elect to participate in Section 106 review of the referenced project please notify me as soon as possible, but no later than December 7, 2020. EKPC has been advised by RUS to proceed to the next step in Section 106 review if you fail to provide a timely response. Please submit your response in writing via letter or email at the following address – Josh Young, East Kentucky Power Cooperative, Inc., 4775 Lexington Road, Winchester, KY, 40391 or *josh.young@ekpc.coop*.

Please include with your affirmative response, a description of any specific historic properties or important tribal resources in the APE and your recommendations about the level of effort needed to identify additional historic properties which might be affected by the referenced project. EKPC will respect the confidentiality of the information which you provide to the fullest extent possible.

If at any time you wish to share your interests, recommendations and concerns directly with RUS, as the agency responsible for conducting Section 106 review, or to request that RUS participate directly in Section 106 review, please notify me at once, preferably via email. However, you may contact RUS directly. If you wish to do so, please submit your request to Lauren Rayburn, Environmental Scientist, (202) 695-2540 or *lauren.rayburn@wdc.usda.gov*.

Thank you for your review of this project information, should you have any questions or require additional information, I can also be reached via phone at (859) 745-9799.

Sincerely,

Josh Young
Supervisor, Natural Resources
& Environmental Communications

Enclosures
cc: Jerry Purvis, Steve Anderson, Darrin Adams (EKPC), Lauren McGee Rayburn (RUS)

EAST KENTUCKY POWER COOPERATIVE

October 30, 2020

Ms. Dana Kelly
Historic Preservation/106 Asst.
Delaware Nation
PO Box 825
Anadarko, OK 73005

SUBJECT: Notification of Intent to Initiate Section 106 Review
Boone County – Williamstown 69 kilovolt Transmission Line Reconductor/Rebuild Project
Boone, Gallatin, and Grant Counties, Kentucky

Dear Ms. Kelly,

The Rural Utilities Service (RUS), one of three agencies comprising USDA Rural Development, is authorized under the Rural Electrification Act of 1936, as amended, to provide federal financial assistance for the construction, improvement and expansions of electrical infrastructure in eligible rural communities in the United States. East Kentucky Power Cooperative, Inc. (EKPC) plans to seek financial assistance from RUS for construction of the proposed Boone County – Williamstown 69 kilovolt (kV) Transmission Line Reconductor/Rebuild Project in portions of Boone, Gallatin, and Grant Counties, Kentucky as shown on the enclosed maps.

EKPC is proposing to reconductor/rebuild, operate, and maintain the existing Boone County – Williamstown transmission line section between the cities of Burlington and Williamstown, KY. The existing Boone County – Williamstown transmission line section that would be reconductored/rebuilt is approximately 28.5 miles in length and is generally oriented north to south between the existing EKPC Boone County 69 kV substation and Munk Junction; and generally west to east between Munk Junction and the Williamstown 69 kV substation. The Boone County substation is located at southeastern corner of the junction of Longbranch Road and Camp Ernst Road, approximately 3.5 miles south of Burlington in Boone County. The Munk Junction is located on the west side of KY Hwy 36, approximately 0.1 mile southeast of Smokey Road at 38.643634oN, -84.675623oW in Grant County. The Williamstown substation is located on the south side of Barnes Road, 0.25-mile west Interstate 75, approximately 1.75 miles west of Williamstown in Grant County.

The proposed 28.5 mile hybrid project would include portions of rebuild, reconductor, and structure modifications within the existing 100-foot transmission line right-of way (ROW). The rebuild portions of the project consist of five line sections comprising 4.6 miles and the reconductor portions consist of four line sections comprising 23.9 miles. There are 263 existing structures located within these transmission line sections. Based on preliminary engineering design, 60 single wood-pole structures would be replaced with steel-pole structures within the rebuild sections. While the final line design is ongoing it is anticipated that the new steel-pole structures would be approximately 12 feet taller than the existing wood-pole structures with roughly 30-40% fewer steel-pole structures required. For the reconductor sections, 33 wood-pole H-frame structures would be replaced with in-kind steel-pole H-frame structures at the existing locations and an additional 170 structures would be modified with X-braces and arm braces to address conditions related to strength, lean, etc. Furthermore, the existing static wires would be replaced with Optical Ground Wire (OPGW), and the existing guy wires and anchors would be replaced as warranted. EKPC is proposing the Boone County – Williamstown transmission line reconductor/rebuild project to address the poor physical condition of the existing transmission line, including the conductors, static wires, poles, and/or structures. Additionally, EKPC has determined that the existing wooden transmission line support structures, many of which are the original structures and would not be able to support the weight of the larger conductor; therefore, EKPC is proposing a hybrid

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reconductor/rebuild of this line section using the larger conductor, steel-pole structures, and necessary structure modifications.

If RUS elects to fund this application, it will become an undertaking subject to review under Section 106 of the National Historic Preservation Act, 54 U.S.C. 306108, and its implementing regulations, 36 CFR Part 800. Pursuant to 7 CFR § 1970.5 (b) (2) of the regulations, "Environmental Policies and Procedures" (7 CFR Part 1970), RUS has issued a blanket delegation to its borrowers to initiate and proceed through Section 106 review. In accordance with this blanket delegation, EKPC is initiating section 106 review on behalf of RUS. In delegating this authority, RUS is advocating for the direct interaction between its borrowers and the Indian tribes. RUS believes that this interaction, prior to direct agency involvement, will support and encourage the consideration of impacts to historic properties of importance to Indian tribes earlier in the project planning.

EKPC proposes that the area of potential effects (APE) for the referenced project consists of the 4.6-mile long, 100 foot-wide existing transmission line ROW easement proposed for rebuild. For the reconductor portion of the project it is anticipated that all project activities would occur at the previously disturbed existing structure location and along existing access points. The geographic scope of the APE will not be final until a determination is made by RUS pursuant to 36 CFR § 800.4 (a)(1). The APE does not include any Tribal lands as defined pursuant to 36 CFR § 800.16(x).

EKPC has contracted with a professional archaeologist to conduct a Phase I archaeological investigation within the proposed project APE in accordance with current Kentucky State Historic Preservation Office guidelines. A survey report will be developed and submitted to the Kentucky Heritage Council for their review.

EKPC is notifying you about the referenced project because of the possible interest of the Delaware Nation in portions of Boone, Gallatin, and Grant Counties. Should the Delaware Nation elect to participate in Section 106 review of the referenced project please notify me as soon as possible, but no later than December 7, 2020. EKPC has been advised by RUS to proceed to the next step in Section 106 review if you fail to provide a timely response. Please submit your response in writing via letter or email at the following address – Josh Young, East Kentucky Power Cooperative, Inc., 4775 Lexington Road, Winchester, KY, 40391 or *josh.young@ekpc.coop*.

Please include with your affirmative response, a description of any specific historic properties or important tribal resources in the APE and your recommendations about the level of effort needed to identify additional historic properties which might be affected by the referenced project. EKPC will respect the confidentiality of the information which you provide to the fullest extent possible.

If at any time you wish to share your interests, recommendations and concerns directly with RUS, as the agency responsible for conducting Section 106 review, or to request that RUS participate directly in Section 106 review, please notify me at once, preferably via email. However, you may contact RUS directly. If you wish to do so, please submit your request to Lauren Rayburn, Physical Scientist (Environmental), (202) 695-2540 or *lauren.rayburn@wdc.usda.gov*.

Thank you for your review of this project information, should you have any questions or require additional information, I can also be reached via phone at (859) 745-9799.

Sincerely,

Josh Young
Supervisor, Natural Resources
& Environmental Communications

Enclosures
cc: Jerry Purvis, Steve Anderson, Darrin Adams (EKPC), Lauren McGee Rayburn (RUS)

EAST KENTUCKY POWER COOPERATIVE

October 7, 2021

Mr. Russell Townsend
Tribal Historic Preservation Specialist
Eastern Band of Cherokee Indians
P.O. Box 455
Cherokee, NC 28719

SUBJECT: Notification of Intent to Initiate Section 106 Review
Boone – Williamstown 69 kilovolt (kV) Transmission Line Rebuild Project
Boone, Gallatin, and Grant Counties, Kentucky

Dear Mr. Townsend,

The Rural Utilities Service (RUS), one of three agencies comprising USDA Rural Development, is authorized under the Rural Electrification Act of 1936, as amended, to provide federal financial assistance for the construction, improvement and expansions of electrical infrastructure in eligible rural communities in the United States. East Kentucky Power Cooperative, Inc. (EKPC) plans to seek financial assistance from RUS for construction of the proposed Boone – Williamstown 69 kV Transmission Line Rebuild Project in portions of Boone, Gallatin, and Grant Counties, Kentucky as shown on the enclosed maps.

EKPC is proposing to rebuild, operate, and maintain the existing Boone – Williamstown 69 kV Transmission Line section within the existing 100-foot-wide ROW easement, which encompasses approximately 344.2 acres. This transmission line section is approximately 28.4 miles in length and generally oriented north to south between the Boone 69 kV substation and Munk Junction, and west to east between Munk Junction and the Williamstown 69 kV substation. The Boone substation is located at the southeastern corner of the junction of Longbranch Road and Camp Ernst Road, approximately 3.5 miles south of Burlington in Boone County. Munk Junction is located on the west side of Kentucky Highway (KY) 36, approximately 0.1 mile southeast of Smokey Road in Grant County. The Williamstown substation is located on the south side of Barnes Road, 0.25 mile west of Interstate 75, approximately 1.75 miles west of Williamstown in Grant County. The transmission line crosses private and county owned land, but no State/Federal lands are present in the ROW.

The proposed action will consist of removing the existing transmission line and associated wood pole structures and constructing the new line in its place. The new line will be constructed using stronger, approximately 12-foot-taller steel-pole structures, which will require significantly fewer structures than currently present. The existing transmission line is currently comprised of 263 wood-pole structures that have an approximate above ground height of 60 feet and a typical span length of 575 feet. Based on the engineering design, the existing structures will be replaced with 212 steel-pole structures with an approximate above ground height of 72 feet and a typical span length of 715 feet, resulting in 51 fewer structures. The majority of new support structures will be steel single-pole and two-pole H-frame type structures, with a few three-pole structures required based on engineering design constraints. Three electrical conductors supported by the steel-pole structures will transmit electric power along the rebuilt transmission line.

If RUS elects to fund this application, it will become an undertaking subject to review under Section 106 of the National Historic Preservation Act, 54 U.S.C. 306108, and its implementing regulations, 36 CFR Part 800. Pursuant to 7 CFR § 1970.5 (b) (2) of the regulations, "Environmental Policies and Procedures"

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(7 CFR Part 1970), RUS has issued a blanket delegation to its borrowers to initiate and proceed through Section 106 review. In accordance with this blanket delegation, EKPC is initiating section 106 review on behalf of RUS. In delegating this authority, RUS is advocating for the direct interaction between its borrowers and the Indian tribes. RUS believes that this interaction, prior to direct agency involvement, will support and encourage the consideration of impacts to historic properties of importance to Indian tribes earlier in the project planning.

EKPC proposes that the area of potential effects (APE) for the referenced project consists of the 28.4-mile long, 100 foot-wide existing transmission line ROW easement, encompassing approximately 344.2 acres. The geographic scope of the APE will not be final until a determination is made by RUS pursuant to 36 CFR § 800.4 (a)(1). The APE does not include any Tribal lands as defined pursuant to 36 CFR § 800.16(x).

EKPC contracted a professional archaeologist to conduct a Phase I archaeological investigation within the proposed project APE in accordance with current Kentucky State Historic Preservation Office (SHPO) guidelines. The archaeological survey resulted in the identification of one historic site and no prehistoric sites within the APE. The archaeology survey report was submitted to the Kentucky Heritage Council for review, with a No Adverse Effect concurrence letter received from the SHPO, dated October 4, 2021.

EKPC is notifying you about the referenced project because of the possible interest of the Eastern Band of Cherokee Indians in portions of Boone, Gallatin, and/or Grant Counties, Kentucky. Should the Eastern Band of Cherokee Indians elect to participate in Section 106 review of the referenced project please notify me as soon as possible, but no later than November 8, 2021. EKPC has been advised by RUS to proceed to the next step in Section 106 review if you fail to provide a timely response. Please submit your response in writing via letter or email at the following address – Josh Young, East Kentucky Power Cooperative, Inc., 4775 Lexington Road, Winchester, KY, 40391 or *josh.young@ekpc.coop*.

Please include with your affirmative response, a description of any specific historic properties or important tribal resources in the APE and your recommendations about the level of effort needed to identify additional historic properties which might be affected by the referenced project. EKPC will respect the confidentiality of the information which you provide to the fullest extent possible.

If at any time you wish to share your interests, recommendations and concerns directly with RUS, as the agency responsible for conducting Section 106 review, or to request that RUS participate directly in Section 106 review, please notify me at once, preferably via email. However, you may contact RUS directly. If you wish to do so, please submit your request to Suzanne Kopich, Environmental Protection Specialist, (202) 692-4907 or Suzanne.Kopich@usda.gov.

Thank you for your review of this project information, should you have any questions or require additional information, I can also be reached via phone at (859) 745-9799.

Sincerely,

Josh Young
Supervisor, Natural Resources
& Environmental Communications

Enclosures

cc: Jerry Purvis, Steve Anderson, Darrin Adams (EKPC), Suzanne Kopich (RUS)

EAST KENTUCKY POWER COOPERATIVE

October 7, 2021

Mrs. Diane Hunter
Tribal Historic Preservation Specialist
Miami Tribe of Oklahoma
P.O. Box 1326
Miami, OK 74355

SUBJECT: Notification of Intent to Initiate Section 106 Review
Boone – Williamstown 69 kilovolt (kV) Transmission Line Rebuild Project
Boone, Gallatin, and Grant Counties, Kentucky

Dear Mrs. Hunter,

The Rural Utilities Service (RUS), one of three agencies comprising USDA Rural Development, is authorized under the Rural Electrification Act of 1936, as amended, to provide federal financial assistance for the construction, improvement and expansions of electrical infrastructure in eligible rural communities in the United States. East Kentucky Power Cooperative, Inc. (EKPC) plans to seek financial assistance from RUS for construction of the proposed Boone – Williamstown 69 kV Transmission Line Rebuild Project in portions of Boone, Gallatin, and Grant Counties, Kentucky as shown on the enclosed maps.

EKPC is proposing to rebuild, operate, and maintain the existing Boone – Williamstown 69 kV Transmission Line section within the existing 100-foot-wide ROW easement, which encompasses approximately 344.2 acres. This transmission line section is approximately 28.4 miles in length and generally oriented north to south between the Boone 69 kV substation and Munk Junction, and west to east between Munk Junction and the Williamstown 69 kV substation. The Boone substation is located at the southeastern corner of the junction of Longbranch Road and Camp Ernst Road, approximately 3.5 miles south of Burlington in Boone County. Munk Junction is located on the west side of Kentucky Highway (KY) 36, approximately 0.1 mile southeast of Smokey Road in Grant County. The Williamstown substation is located on the south side of Barnes Road, 0.25 mile west of Interstate 75, approximately 1.75 miles west of Williamstown in Grant County. The transmission line crosses private and county owned land, but no State/Federal lands are present in the ROW.

The proposed action will consist of removing the existing transmission line and associated wood pole structures and constructing the new line in its place. The new line will be constructed using stronger, approximately 12-foot-taller steel-pole structures, which will require significantly fewer structures than currently present. The existing transmission line is currently comprised of 263 wood-pole structures that have an approximate above ground height of 60 feet and a typical span length of 575 feet. Based on the engineering design, the existing structures will be replaced with 212 steel-pole structures with an approximate above ground height of 72 feet and a typical span length of 715 feet, resulting in 51 fewer structures. The majority of new support structures will be steel single-pole and two-pole H-frame type structures, with a few three-pole structures required based on engineering design constraints. Three electrical conductors supported by the steel-pole structures will transmit electric power along the rebuilt transmission line.

If RUS elects to fund this application, it will become an undertaking subject to review under Section 106 of the National Historic Preservation Act, 54 U.S.C. 306108, and its implementing regulations, 36 CFR Part 800. Pursuant to 7 CFR § 1970.5 (b) (2) of the regulations, "Environmental Policies and Procedures"

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(7 CFR Part 1970), RUS has issued a blanket delegation to its borrowers to initiate and proceed through Section 106 review. In accordance with this blanket delegation, EKPC is initiating section 106 review on behalf of RUS. In delegating this authority, RUS is advocating for the direct interaction between its borrowers and the Indian tribes. RUS believes that this interaction, prior to direct agency involvement, will support and encourage the consideration of impacts to historic properties of importance to Indian tribes earlier in the project planning.

EKPC proposes that the area of potential effects (APE) for the referenced project consists of the 28.4-mile long, 100 foot-wide existing transmission line ROW easement, encompassing approximately 344.2 acres. The geographic scope of the APE will not be final until a determination is made by RUS pursuant to 36 CFR § 800.4 (a)(1). The APE does not include any Tribal lands as defined pursuant to 36 CFR § 800.16(x).

EKPC contracted a professional archaeologist to conduct a Phase I archaeological investigation within the proposed project APE in accordance with current Kentucky State Historic Preservation Office (SHPO) guidelines. The archaeological survey resulted in the identification of one historic site and no prehistoric sites within the APE. The archaeology survey report was submitted to the Kentucky Heritage Council for review, with a No Adverse Effect concurrence letter received from the SHPO, dated October 4, 2021.

EKPC is notifying you about the referenced project because of the possible interest of the Miami Tribe of Oklahoma in portions of Boone, Gallatin, and/or Grant Counties, Kentucky. Should the Miami Tribe of Oklahoma elect to participate in Section 106 review of the referenced project please notify me as soon as possible, but no later than November 8, 2021. EKPC has been advised by RUS to proceed to the next step in Section 106 review if you fail to provide a timely response. Please submit your response in writing via letter or email at the following address – Josh Young, East Kentucky Power Cooperative, Inc., 4775 Lexington Road, Winchester, KY, 40391 or *josh.young@ekpc.coop*.

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Thank you for your review of this project information, should you have any questions or require additional information, I can also be reached via phone at (859) 745-9799.

Sincerely,

Josh Young
Supervisor, Natural Resources
& Environmental Communications

Enclosures

cc: Jerry Purvis, Steve Anderson, Darrin Adams (EKPC), Suzanne Kopich (RUS)

EAST KENTUCKY POWER COOPERATIVE

October 7, 2021

Mrs. Andrea A. Hunter
Tribal Historic Preservation Specialist
Osage Nation
627 Grandview Avenue
Pawhuska, OK 74056

SUBJECT: Notification of Intent to Initiate Section 106 Review
Boone – Williamstown 69 kilovolt (kV) Transmission Line Rebuild Project
Boone, Gallatin, and Grant Counties, Kentucky

Dear Mrs. Hunter,

The Rural Utilities Service (RUS), one of three agencies comprising USDA Rural Development, is authorized under the Rural Electrification Act of 1936, as amended, to provide federal financial assistance for the construction, improvement and expansions of electrical infrastructure in eligible rural communities in the United States. East Kentucky Power Cooperative, Inc. (EKPC) plans to seek financial assistance from RUS for construction of the proposed Boone – Williamstown 69 kV Transmission Line Rebuild Project in portions of Boone, Gallatin, and Grant Counties, Kentucky as shown on the enclosed maps.

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EKPC proposes that the area of potential effects (APE) for the referenced project consists of the 28.4-mile long, 100 foot-wide existing transmission line ROW easement, encompassing approximately 344.2 acres. The geographic scope of the APE will not be final until a determination is made by RUS pursuant to 36 CFR § 800.4 (a)(1). The APE does not include any Tribal lands as defined pursuant to 36 CFR § 800.16(x).

EKPC contracted a professional archaeologist to conduct a Phase I archaeological investigation within the proposed project APE in accordance with current Kentucky State Historic Preservation Office (SHPO) guidelines. The archaeological survey resulted in the identification of one historic site and no prehistoric sites within the APE. The archaeology survey report was submitted to the Kentucky Heritage Council for review, with a No Adverse Effect concurrence letter received from the SHPO, dated October 4, 2021.

EKPC is notifying you about the referenced project because of the possible interest of the Osage Nation in portions of Boone, Gallatin, and/or Grant Counties, Kentucky. Should the Osage Nation elect to participate in Section 106 review of the referenced project please notify me as soon as possible, but no later than November 8, 2021. EKPC has been advised by RUS to proceed to the next step in Section 106 review if you fail to provide a timely response. Please submit your response in writing via letter or email at the following address – Josh Young, East Kentucky Power Cooperative, Inc., 4775 Lexington Road, Winchester, KY, 40391 or *josh.young@ekpc.coop*.

Please include with your affirmative response, a description of any specific historic properties or important tribal resources in the APE and your recommendations about the level of effort needed to identify additional historic properties which might be affected by the referenced project. EKPC will respect the confidentiality of the information which you provide to the fullest extent possible.

If at any time you wish to share your interests, recommendations and concerns directly with RUS, as the agency responsible for conducting Section 106 review, or to request that RUS participate directly in Section 106 review, please notify me at once, preferably via email. However, you may contact RUS directly. If you wish to do so, please submit your request to Suzanne Kopich, Environmental Protection Specialist, (202) 692-4907 or Suzanne.Kopich@usda.gov.

Thank you for your review of this project information, should you have any questions or require additional information, I can also be reached via phone at (859) 745-9799.

Sincerely,

Josh Young
Supervisor, Natural Resources
& Environmental Communications

Enclosures

cc: Jerry Purvis, Steve Anderson, Darrin Adams (EKPC), Suzanne Kopich (RUS)

EAST KENTUCKY POWER COOPERATIVE

October 7, 2021

Mr. William Tarrant
Tribal Historic Preservation Officer
Seneca-Cayuga Nation
P.O. Box 453220
Grove, OK 74345

SUBJECT: Notification of Intent to Initiate Section 106 Review
Boone – Williamstown 69 kilovolt (kV) Transmission Line Rebuild Project
Boone, Gallatin, and Grant Counties, Kentucky

Dear Mr. Tarrant,

The Rural Utilities Service (RUS), one of three agencies comprising USDA Rural Development, is authorized under the Rural Electrification Act of 1936, as amended, to provide federal financial assistance for the construction, improvement and expansions of electrical infrastructure in eligible rural communities in the United States. East Kentucky Power Cooperative, Inc. (EKPC) plans to seek financial assistance from RUS for construction of the proposed Boone – Williamstown 69 kV Transmission Line Rebuild Project in portions of Boone, Gallatin, and Grant Counties, Kentucky as shown on the enclosed maps.

EKPC is proposing to rebuild, operate, and maintain the existing Boone – Williamstown 69 kV Transmission Line section within the existing 100-foot-wide ROW easement, which encompasses approximately 344.2 acres. This transmission line section is approximately 28.4 miles in length and generally oriented north to south between the Boone 69 kV substation and Munk Junction, and west to east between Munk Junction and the Williamstown 69 kV substation. The Boone substation is located at the southeastern corner of the junction of Longbranch Road and Camp Ernst Road, approximately 3.5 miles south of Burlington in Boone County. Munk Junction is located on the west side of Kentucky Highway (KY) 36, approximately 0.1 mile southeast of Smokey Road in Grant County. The Williamstown substation is located on the south side of Barnes Road, 0.25 mile west of Interstate 75, approximately 1.75 miles west of Williamstown in Grant County. The transmission line crosses private and county owned land, but no State/Federal lands are present in the ROW.

The proposed action will consist of removing the existing transmission line and associated wood pole structures and constructing the new line in its place. The new line will be constructed using stronger, approximately 12-foot-taller steel-pole structures, which will require significantly fewer structures than currently present. The existing transmission line is currently comprised of 263 wood-pole structures that have an approximate above ground height of 60 feet and a typical span length of 575 feet. Based on the engineering design, the existing structures will be replaced with 212 steel-pole structures with an approximate above ground height of 72 feet and a typical span length of 715 feet, resulting in 51 fewer structures. The majority of new support structures will be steel single-pole and two-pole H-frame type structures, with a few three-pole structures required based on engineering design constraints. Three electrical conductors supported by the steel-pole structures will transmit electric power along the rebuilt transmission line.

If RUS elects to fund this application, it will become an undertaking subject to review under Section 106 of the National Historic Preservation Act, 54 U.S.C. 306108, and its implementing regulations, 36 CFR Part 800. Pursuant to 7 CFR § 1970.5 (b) (2) of the regulations, “Environmental Policies and Procedures”

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Kentucky 40392-0707
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Fax: (859) 744-6008
http://www.ekpc.coop

(7 CFR Part 1970), RUS has issued a blanket delegation to its borrowers to initiate and proceed through Section 106 review. In accordance with this blanket delegation, EKPC is initiating section 106 review on behalf of RUS. In delegating this authority, RUS is advocating for the direct interaction between its borrowers and the Indian tribes. RUS believes that this interaction, prior to direct agency involvement, will support and encourage the consideration of impacts to historic properties of importance to Indian tribes earlier in the project planning.

EKPC proposes that the area of potential effects (APE) for the referenced project consists of the 28.4-mile long, 100 foot-wide existing transmission line ROW easement, encompassing approximately 344.2 acres. The geographic scope of the APE will not be final until a determination is made by RUS pursuant to 36 CFR § 800.4 (a)(1). The APE does not include any Tribal lands as defined pursuant to 36 CFR § 800.16(x).

EKPC contracted a professional archaeologist to conduct a Phase I archaeological investigation within the proposed project APE in accordance with current Kentucky State Historic Preservation Office (SHPO) guidelines. The archaeological survey resulted in the identification of one historic site and no prehistoric sites within the APE. The archaeology survey report was submitted to the Kentucky Heritage Council for review, with a No Adverse Effect concurrence letter received from the SHPO, dated October 4, 2021.

EKPC is notifying you about the referenced project because of the possible interest of the Seneca-Cayuga Nation in portions of Boone, Gallatin, and/or Grant Counties, Kentucky. Should the Seneca-Cayuga Nation elect to participate in Section 106 review of the referenced project please notify me as soon as possible, but no later than November 8, 2021. EKPC has been advised by RUS to proceed to the next step in Section 106 review if you fail to provide a timely response. Please submit your response in writing via letter or email at the following address – Josh Young, East Kentucky Power Cooperative, Inc., 4775 Lexington Road, Winchester, KY, 40391 or *Josh.Young@ekpc.coop*.

Please include with your affirmative response, a description of any specific historic properties or important tribal resources in the APE and your recommendations about the level of effort needed to identify additional historic properties which might be affected by the referenced project. EKPC will respect the confidentiality of the information which you provide to the fullest extent possible.

If at any time you wish to share your interests, recommendations and concerns directly with RUS, as the agency responsible for conducting Section 106 review, or to request that RUS participate directly in Section 106 review, please notify me at once, preferably via email. However, you may contact RUS directly. If you wish to do so, please submit your request to Suzanne Kopich, Environmental Protection Specialist, (202) 692-4907 or *Suzanne.Kopich@usda.gov*.

Thank you for your review of this project information, should you have any questions or require additional information, I can also be reached via phone at (859) 745-9799.

Sincerely,

Josh Young
Supervisor, Natural Resources
& Environmental Communications

Enclosures
cc: Jerry Purvis, Steve Anderson, Darrin Adams (EKPC), Suzanne Kopich (RUS)

EAST KENTUCKY POWER COOPERATIVE

October 7, 2021

Mrs. Elizabeth Toombs
Tribal Historic Preservation Officer
Cherokee Nation
P.O. Box 948
Tahlequah, OK 74465

SUBJECT: Notification of Intent to Initiate Section 106 Review
Boone – Williamstown 69 kilovolt (kV) Transmission Line Rebuild Project
Boone, Gallatin, and Grant Counties, Kentucky

Dear Mrs. Toombs,

The Rural Utilities Service (RUS), one of three agencies comprising USDA Rural Development, is authorized under the Rural Electrification Act of 1936, as amended, to provide federal financial assistance for the construction, improvement and expansions of electrical infrastructure in eligible rural communities in the United States. East Kentucky Power Cooperative, Inc. (EKPC) plans to seek financial assistance from RUS for construction of the proposed Boone – Williamstown 69 kV Transmission Line Rebuild Project in portions of Boone, Gallatin, and Grant Counties, Kentucky as shown on the enclosed maps.

EKPC is proposing to rebuild, operate, and maintain the existing Boone – Williamstown 69 kV Transmission Line section within the existing 100-foot-wide ROW easement, which encompasses approximately 344.2 acres. This transmission line section is approximately 28.4 miles in length and generally oriented north to south between the Boone 69 kV substation and Munk Junction, and west to east between Munk Junction and the Williamstown 69 kV substation. The Boone substation is located at the southeastern corner of the junction of Longbranch Road and Camp Ernst Road, approximately 3.5 miles south of Burlington in Boone County. Munk Junction is located on the west side of Kentucky Highway (KY) 36, approximately 0.1 mile southeast of Smokey Road in Grant County. The Williamstown substation is located on the south side of Barnes Road, 0.25 mile west of Interstate 75, approximately 1.75 miles west of Williamstown in Grant County. The transmission line crosses private and county owned land, but no State/Federal lands are present in the ROW.

The proposed action will consist of removing the existing transmission line and associated wood pole structures and constructing the new line in its place. The new line will be constructed using stronger, approximately 12-foot-taller steel-pole structures, which will require significantly fewer structures than currently present. The existing transmission line is currently comprised of 263 wood-pole structures that have an approximate above ground height of 60 feet and a typical span length of 575 feet. Based on the engineering design, the existing structures will be replaced with 212 steel-pole structures with an approximate above ground height of 72 feet and a typical span length of 715 feet, resulting in 51 fewer structures. The majority of new support structures will be steel single-pole and two-pole H-frame type structures, with a few three-pole structures required based on engineering design constraints. Three electrical conductors supported by the steel-pole structures will transmit electric power along the rebuilt transmission line.

If RUS elects to fund this application, it will become an undertaking subject to review under Section 106 of the National Historic Preservation Act, 54 U.S.C. 306108, and its implementing regulations, 36 CFR Part 800. Pursuant to 7 CFR § 1970.5 (b) (2) of the regulations, “Environmental Policies and Procedures”

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(7 CFR Part 1970), RUS has issued a blanket delegation to its borrowers to initiate and proceed through Section 106 review. In accordance with this blanket delegation, EKPC is initiating section 106 review on behalf of RUS. In delegating this authority, RUS is advocating for the direct interaction between its borrowers and the Indian tribes. RUS believes that this interaction, prior to direct agency involvement, will support and encourage the consideration of impacts to historic properties of importance to Indian tribes earlier in the project planning.

EKPC proposes that the area of potential effects (APE) for the referenced project consists of the 28.4-mile long, 100 foot-wide existing transmission line ROW easement, encompassing approximately 344.2 acres. The geographic scope of the APE will not be final until a determination is made by RUS pursuant to 36 CFR § 800.4 (a)(1). The APE does not include any Tribal lands as defined pursuant to 36 CFR § 800.16(x).

EKPC contracted a professional archaeologist to conduct a Phase I archaeological investigation within the proposed project APE in accordance with current Kentucky State Historic Preservation Office (SHPO) guidelines. The archaeological survey resulted in the identification of one historic site and no prehistoric sites within the APE. The archaeology survey report was submitted to the Kentucky Heritage Council for review, with a No Adverse Effect concurrence letter received from the SHPO, dated October 4, 2021.

EKPC is notifying you about the referenced project because of the possible interest of the Cherokee Nation in portions of Boone, Gallatin, and/or Grant Counties, Kentucky. Should the Cherokee Nation elect to participate in Section 106 review of the referenced project please notify me as soon as possible, but no later than November 8, 2021. EKPC has been advised by RUS to proceed to the next step in Section 106 review if you fail to provide a timely response. Please submit your response in writing via letter or email at the following address – Josh Young, East Kentucky Power Cooperative, Inc., 4775 Lexington Road, Winchester, KY, 40391 or *Josh.Young@ekpc.coop*.

Please include with your affirmative response, a description of any specific historic properties or important tribal resources in the APE and your recommendations about the level of effort needed to identify additional historic properties which might be affected by the referenced project. EKPC will respect the confidentiality of the information which you provide to the fullest extent possible.

If at any time you wish to share your interests, recommendations and concerns directly with RUS, as the agency responsible for conducting Section 106 review, or to request that RUS participate directly in Section 106 review, please notify me at once, preferably via email. However, you may contact RUS directly. If you wish to do so, please submit your request to Suzanne Kopich, Environmental Protection Specialist, (202) 692-4907 or *Suzanne.Kopich@usda.gov*.

Thank you for your review of this project information, should you have any questions or require additional information, I can also be reached via phone at (859) 745-9799.

Sincerely,

Josh Young
Supervisor, Natural Resources
& Environmental Communications

Enclosures
cc: Jerry Purvis, Steve Anderson, Darrin Adams (EKPC), Suzanne Kopich (RUS)

EAST KENTUCKY POWER COOPERATIVE

October 7, 2021

Ms. Nekole Alligood
Director of Historical Preservation
Delaware Nation, Oklahoma
P.O. Box 825
Anadarko, OK 73005

SUBJECT: Notification of Intent to Initiate Section 106 Review
Boone – Williamstown 69 kilovolt (kV) Transmission Line Rebuild Project
Boone, Gallatin, and Grant Counties, Kentucky

Dear Ms. Alligood,

The Rural Utilities Service (RUS), one of three agencies comprising USDA Rural Development, is authorized under the Rural Electrification Act of 1936, as amended, to provide federal financial assistance for the construction, improvement and expansions of electrical infrastructure in eligible rural communities in the United States. East Kentucky Power Cooperative, Inc. (EKPC) plans to seek financial assistance from RUS for construction of the proposed Boone – Williamstown 69 kV Transmission Line Rebuild Project in portions of Boone, Gallatin, and Grant Counties, Kentucky as shown on the enclosed maps.

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(7 CFR Part 1970), RUS has issued a blanket delegation to its borrowers to initiate and proceed through Section 106 review. In accordance with this blanket delegation, EKPC is initiating section 106 review on behalf of RUS. In delegating this authority, RUS is advocating for the direct interaction between its borrowers and the Indian tribes. RUS believes that this interaction, prior to direct agency involvement, will support and encourage the consideration of impacts to historic properties of importance to Indian tribes earlier in the project planning.

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EKPC is notifying you about the referenced project because of the possible interest of the Delaware Nation, Oklahoma in portions of Boone, Gallatin, and/or Grant Counties, Kentucky. Should the Delaware Nation, Oklahoma elect to participate in Section 106 review of the referenced project please notify me as soon as possible, but no later than November 8, 2021. EKPC has been advised by RUS to proceed to the next step in Section 106 review if you fail to provide a timely response. Please submit your response in writing via letter or email at the following address – Josh Young, East Kentucky Power Cooperative, Inc., 4775 Lexington Road, Winchester, KY, 40391 or *Josh.Young@ekpc.coop*.

Please include with your affirmative response, a description of any specific historic properties or important tribal resources in the APE and your recommendations about the level of effort needed to identify additional historic properties which might be affected by the referenced project. EKPC will respect the confidentiality of the information which you provide to the fullest extent possible.

If at any time you wish to share your interests, recommendations and concerns directly with RUS, as the agency responsible for conducting Section 106 review, or to request that RUS participate directly in Section 106 review, please notify me at once, preferably via email. However, you may contact RUS directly. If you wish to do so, please submit your request to Suzanne Kopich, Environmental Protection Specialist, (202) 692-4907 or *Suzanne.Kopich@usda.gov*.

Thank you for your review of this project information, should you have any questions or require additional information, I can also be reached via phone at (859) 745-9799.

Sincerely,

Josh Young
Supervisor, Natural Resources
& Environmental Communications

Enclosures
cc: Jerry Purvis, Steve Anderson, Darrin Adams (EKPC), Suzanne Kopich (RUS)

Miami Tribe of Oklahoma
3410 P St. NW, Miami, OK 74354 ● P.O. Box 1326, Miami, OK 74355
Ph: (918) 541-1300 ● Fax: (918) 542-7260
www.miamination.com

Via email: josh.young@ekpc.coop

October 14, 2021

Josh Young, Supervisor, Natural Resources & Environmental Communications
East Kentucky Power Cooperative
P.O. Box 707
Winchester, KY 40392-0707

Re Boone County-Williamstown 69 kV Transmission Line Rebuild, Boone, Gallatin, Grant Counties, Kentucky – Comments of the Miami Tribe of Oklahoma

Dear. Mr. Young:

Aya, kikwehsitoole – I show you respect. The Miami Tribe of Oklahoma, a federally recognized Indian tribe with a Constitution ratified in 1939 under the Oklahoma Indian Welfare Act of 1936, respectfully submits the following comments regarding Boone County-Williamstown 69 kV Transmission Line Rebuild in Boone, Gallatin & Grant Counties, Kentucky.

The Miami Tribe offers no objection to the above-referenced project at this time, as we are not currently aware of existing documentation directly linking a specific Miami cultural or historic site to the project site. However, given the Miami Tribe's deep and enduring relationship to its historic lands and cultural property within present-day Kentucky, if any human remains or Native American cultural items falling under the Native American Graves Protection and Repatriation Act (NAGPRA) or archaeological evidence is discovered during any phase of this project, the Miami Tribe requests immediate consultation with the entity of jurisdiction for the location of discovery. In such a case, please contact me at 918-541-8966 or by email at dhunter@miamination.com to initiate consultation.

The Miami Tribe accepts the invitation to serve as a consulting party to the proposed project. In my capacity as Tribal Historic Preservation Officer I am the point of contact for consultation.

Respectfully,

Diane Hunter

Diane Hunter
Tribal Historic Preservation Officer

Osage Nation Historic Preservation Office

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Date: December 21, 2021 **File:** 2122-4214KY-10

RE: **USDA, RUS, East Kentucky Power Cooperative, Inc., Boone - Williamstown 69 kilovolt Transmission Line Rebuild Project, Boone, Gallatin, and Grant Counties, Kentucky**

East Kentucky Power Cooperative, Inc.
Josh Young
4775 Lexington Road 40391, P.O. Box 707
Winchester, KY 40392-0707

Dear Mr. Young,

The Osage Nation Historic Preservation Office (ONHPO) has evaluated your submission for the proposed USDA, RUS, East Kentucky Power Cooperative, Inc., Boone - Williamstown 69 kilovolt Transmission Line Rebuild Project, Boone, Gallatin, and Grant Counties, Kentucky. The ONHPO is not aware of, but has a general concern for, any burials (graves, mounds, cairns), prehistoric districts, sites, or objects included in or eligible for inclusion in the National Register of Historic Places (36 CFR § 800.16(l)) or that have not been evaluated pursuant to 36 CFR § 800.4(c) in consultation with the Osage Nation that may be located within the area of potential effects (APE). **If any are identified within the APE during any identification efforts conducted for the proposed project, including background research and cultural resource surveys, the Osage Nation requests to be notified and provided with all relevant CRS reports and correspondence of the State Historic Preservation Office (SHPO), or affiliated reviewing state agency, for review and comment prior to the federal agency's approval of the proposed undertaking.** The Osage Nation, however, has no concern for **historic** graves unaffiliated with the Osage Nation or any identified **historic** archaeology sites that have no known connection to the Osage Nation. **There is no need to further notify or further consult with the Osage Nation regarding any such graves or non-Osage historic sites located in the project APE.**

In accordance with the National Historic Preservation Act, (NHPA) [54 U.S.C. § 300101 et seq.] 1966, undertakings subject to the review process are referred to in 54 U.S.C. § 302706 (a), which clarifies that historic properties may have religious and cultural significance to Indian tribes. Additionally, Section 106 of NHPA requires Federal agencies to consider the effects of their actions on historic properties (36 CFR Part 800) as does the National Environmental Policy Act (43 U.S.C. 4321 and 4331-35 and 40 CFR 1501.7(a) of 1969). **If no graves, historic properties, or cultural resources, as specified above, are identified within the APE during any identification efforts conducted for the proposed project, the Osage Nation concurs that the East Kentucky Power Cooperative, Inc. has fulfilled NHPA compliance by consulting with the Osage Nation Historic Preservation Office in regard to the proposed USDA, RUS, East Kentucky Power Cooperative, Inc., Boone - Williamstown 69 kilovolt Transmission Line Rebuild Project, Boone, Gallatin, and Grant Counties, Kentucky.**

If artifacts or human remains are discovered during project-related activities we ask that activities cease immediately and the Osage Nation Historic Preservation Office be contacted at 918-287-5328 within 48 hours of the discovery and prior to the resuming of project activities. Should you have any questions or need any additional information please feel free to contact me at the number listed below. Thank you for consulting with the Osage Nation on this matter.

Johnnie Jacobs
Archaeologist

627 Grandview Ave. * Pawhuska, OK 74056 Telephone 918-287-5328 * Fax 918-287-5376
HistoricPreservation@osagenation-nsn.gov

ANDY BESHEAR
GOVERNOR

REBECCA W. GOODMAN
SECRETARY

ZEB WEESE
EXECUTIVE DIRECTOR

ENERGY AND ENVIRONMENT CABINET
OFFICE OF KENTUCKY NATURE PRESERVES

300 SOWER BOULEVARD
FRANKFORT, KENTUCKY 40601
TELEPHONE: 502-573-2886
TELEFAX: 502-564-7484

February 11, 2021

Chris Carpenter
East Kentucky Power Cooperative
4775 Lexington Road
Winchester, KY 40391

Project:	Boone County-Williamstown 69 kV Transmission Line Rebuild Project
Project ID:	21-0102
Project Type:	Standard (*customers will be invoiced), 2.5 mile buffer ($250 fee)
Site Acreage:	343.78
Site Lat/Lon:	38.709194 / -84.686946
County:	Boone; Gallatin; Grant
USGS Quad:	ELLISTON; UNION; VERONA; WILLIAMSTOWN
Watershed HUC12:	Big Bone Creek; Big South Fork; Clarks Creek; Grassy Run-Eagle Creek; Lower Gunpowder Creek +

Dear Chris Carpenter,

This letter is in response to your data request for the project referenced above. We have reviewed our Natural Heritage Program Database to determine if any of the endangered, threatened, or special concern plants and animals or exemplary natural communities monitored by the Office of Kentucky Nature Preserves occur within your general project area. Your project does pose a concern at this time, therefore please see the attached reports and report key for more detailed information.

I would like to take this opportunity to remind you of the terms of the data request license, which you agreed upon in order to submit your request. The license agreement states "Data and data products received from the Office of Kentucky Nature Preserves, including any portion thereof, may not be reproduced in any form or by any means without the express written authorization of the Office of Kentucky Nature Preserves." The exact location of plants, animals, and natural communities, if released by the Office of Kentucky Nature Preserves, may not be released in any document or correspondence. These products are provided on a temporary basis for the express project (described above) of the requester, and may not be redistributed, resold or copied without the written permission of the Biological Assessment Branch (300 Sower Blvd - 4th Floor, Frankfort, KY, 40601. Phone: 502-782-7828).

Please note that the quantity and quality of data collected by the Kentucky Natural Heritage Program are dependent on the research and observations of many individuals and organizations. In most cases, this information is not the result of comprehensive or site-specific field surveys; many natural areas in Kentucky have never been thoroughly surveyed and new plants and animals are still being discovered. For these reasons, the Kentucky Natural Heritage Program cannot provide a definitive statement on the presence, absence, or condition of biological elements in any part of Kentucky. Heritage reports summarize the existing information known to the Kentucky Natural Heritage Program at the time of the request regarding the biological elements or locations in question. They should never be regarded as final statements on the elements or areas being considered, nor should they be substituted for on-site surveys required for environmental assessments. We would greatly appreciate receiving any pertinent information obtained as a result of on-site surveys.

If you have any questions, or if I can be of further assistance, please do not hesitate to contact me.

Sincerely,

Elizabeth Mason
Geoprocessing Specialist

United States Department of the Interior

FISH AND WILDLIFE SERVICE
Kentucky Ecological Services Field Office
J C Watts Federal Building, Room 265
330 West Broadway
Frankfort, KY 40601-8670
Phone: (502) 695-0468 Fax: (502) 695-1024
http://www.fws.gov/frankfort/

In Reply Refer To: February 24, 2021
Consultation Code: 04EK1000-2021-SLI-0131
Event Code: 04EK1000-2021-E-01770
Project Name: Boone County-Williamstown 69 kV Transmission LIne Reconductor/Rebuild Project

Subject: Updated list of threatened and endangered species that may occur in your proposed project location or may be affected by your proposed project

To Whom It May Concern:

Your concern for the protection of endangered and threatened species is greatly appreciated. The purpose of the Endangered Species Act (ESA) of 1973, as amended (16 U.S.C. 1531 et seq.) (ESA) is to provide a means whereby threatened and endangered species and the ecosystems upon which they depend may be conserved. The species list attached to this letter fulfills the requirements of the U.S. Fish and Wildlife Service (Service) under section 7(c) of the ESA to provide information as to whether any proposed or listed species may be present in the area of a proposed action. This is not a concurrence letter; additional consultation with the Service may be required.

The Information in Your Species List:

The enclosed species list identifies federal trust species and critical habitat that may occur within the boundary that you entered into IPaC. For your species list to most accurately represent the species that may potentially be affected by the proposed project, the boundary that you input into IPaC should represent the entire “action area” of the 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). If your project is likely to have significant indirect effects that extend well beyond the project footprint (e.g., long-term impacts to water quality), we highly recommend that you

coordinate with the Service early to appropriately define your action area and ensure that you are evaluating all the species that could potentially be affected.

We must advise you that our database is a compilation of collection records made available by various individuals and resource agencies available to the Service and may not be all-inclusive. This information is seldom based on comprehensive surveys of all potential habitats and, thus, does not necessarily provide conclusive evidence that species are present or absent at a specific locality. New information based on updated surveys, changes in the abundance and distribution of species, changed habitat conditions, or other factors could change this list.

Please note that “critical habitat” refers to specific areas identified as essential for the conservation of a species that have been designated by regulation. Critical habitat usually does not include all the habitat that the species is known to occupy or all the habitat that may be important to the species. Thus, even if your project area does not include critical habitat, the species on the list may still be present.

Please note that under 50 CFR 402.12(e) of the regulations implementing section 7 of the ESA, the accuracy of this species list should be verified after 90 days. The Service recommends that verification be completed by visiting the ECOS-IPaC website at regular intervals during project planning and implementation for updates to species lists and associated information. To re-access your project in IPaC, go to the IPaC web site (https://ecos.fws.gov/ipac/), select “Need an updated species list?”, and enter the consultation code on this letter.

ESA Obligations for Federal Projects:

Under sections 7(a)(1) and 7(a)(2) of the ESA and its implementing regulations (50 CFR 402 et seq.), Federal agencies are required to utilize their authorities to carry out programs for the conservation of threatened and endangered species and to determine whether projects may affect threatened and endangered species and/or designated critical habitat.

If a Federal project (a project authorized, funded, or carried out by a federal agency) may affect federally-listed species or critical habitat, the Federal agency is required to consult with the Service under section 7 of the ESA, pursuant to 50 CFR 402. In addition, the Service recommends that candidate species, proposed species and proposed critical habitat be addressed within the consultation. More information on the regulations and procedures for section 7 consultation, including the role of permit or license applicants, can be found in the "Endangered Species Consultation Handbook" at: http://www.fws.gov/endangered/esa-library/pdf/TOC-GLOS.PDF

A Biological Assessment is required for construction projects (or other undertakings having similar physical impacts) that are major Federal actions significantly affecting the quality of the human environment as defined in the National Environmental Policy Act (42 U.S.C. 4332(2)(c)). Recommended contents of a Biological Assessment are described at 50 CFR 402.12. For projects other than major construction activities, the Service suggests that a biological evaluation similar to a Biological Assessment be prepared to determine whether the project may affect listed or proposed species and/or designated or proposed critical habitat.

ESA Obligations for Non-federal Projects:

Proposed projects that do not have a federal nexus (non-federal projects) are not subject to the obligation to consult under section 7 of the ESA. However, section 9 of the ESA prohibits certain activities that directly or indirectly affect federally-listed species. These prohibitions apply to all individuals subject to the jurisdiction of the United States. Non-federal project proponents can request technical assistance from the Service regarding recommendations on how to avoid and/or minimize impacts to listed species. The project proponent can choose to implement avoidance, minimization, and mitigation measures in a proposed project design to avoid ESA violations.

Additional Species-specific Information:

In addition to the species list, IPaC also provides general species-specific technical assistance that may be helpful when designing a project and evaluating potential impacts to species. To access this information from the IPaC site (https://ecos.fws.gov/ipac/), click on the text "My Projects" on the left of the black bar at the top of the screen (you will need to be logged into your account to do this). Click on the project name in the list of projects; then, click on the "Project Home" button that appears. Next, click on the "See Resources" button under the "Resources" heading. A list of species will appear on the screen. Directly above this list, on the right side, is a link that will take you to pdfs of the "Species Guidelines" available for species in your list. Alternatively, these documents and a link to the "ECOS species profile" can be accessed by clicking on an individual species in the online resource list.

Next Steps:

Requests for additional technical assistance or consultation from the Kentucky Field Office should be submitted following guidance on the following page http://www.fws.gov/frankfort/PreDevelopment.html and the document retrieved by clicking the "outline" link at that page. When submitting correspondence about your project to our office, please include the Consultation Tracking Number in the header of this letter. (There is no need to provide us with a copy of the IPaC-generated letter and species list.)

Attachment(s):

- Official Species List

Official Species List

This list is provided pursuant to Section 7 of the Endangered Species Act, and fulfills the requirement for Federal agencies to "request of the Secretary of the Interior information whether any species which is listed or proposed to be listed may be present in the area of a proposed action".

This species list is provided by:

Kentucky Ecological Services Field Office
J C Watts Federal Building, Room 265
330 West Broadway
Frankfort, KY 40601-8670
(502) 695-0468

Project Summary

Consultation Code: 04EK1000-2021-SLI-0131
Event Code: 04EK1000-2021-E-01770
Project Name: Boone County-Williamstown 69 kV Transmission LIne Reconductor/ Rebuild Project
Project Type: TRANSMISSION LINE
Project Description: EKPC is proposing to reconductor/rebuild, operate, and maintain the existing Boone County – Williamstown 69 kV Transmission Line section located in portions of Boone, Gallatin, and Grant Counties, Kentucky. EKPC is proposing this transmission line reconductor/rebuild project to address the poor physical condition of the existing transmission line, including the conductors, static wires, poles, and/or structures. The project would require replacement of the existing conductor (2/0 and 4/0 ASCR) with the larger size conductor (556.5 ACSR/TW) currently utilized by EKPC. EKPC first evaluated only reconductoring the entire line section; however, it was determined that several section of existing line are constructed with single, wood-pole support structures. Many of these single pole-wood structures are the originals installed circa 1957 and 1958 and are in such poor physical condition they would not be able to support the increased weight of the larger conductor. Therefore, EKPC is proposing a hybrid rebuild/reconductor of this line section using the larger conductor, steel-pole structures, and necessary structure modifications.

The existing transmission line section that would be reconductored/rebuilt is approximately 28.5 miles in length and is generally oriented north to south between the existing EKPC Boone County 69 kV substation and Munk Junction; and generally west to east between Munk Junction and the Williamstown 69 kV substation. The Boone County substation is located at southeastern corner of the junction of Longbranch Road and Camp Ernst Road, approximately 3.5 miles south of Burlington in Boone County. The Munk Junction is located on the west side of KY Hwy 36, approximately 0.1 mile southeast of Smokey Road at 38.643634oN, -84.675623oW in Grant County. The Williamstown substation is located on the south side of Barnes Road, 0.25-mile west Interstate 75, approximately 1.75 miles west of Williamstown in Grant County.

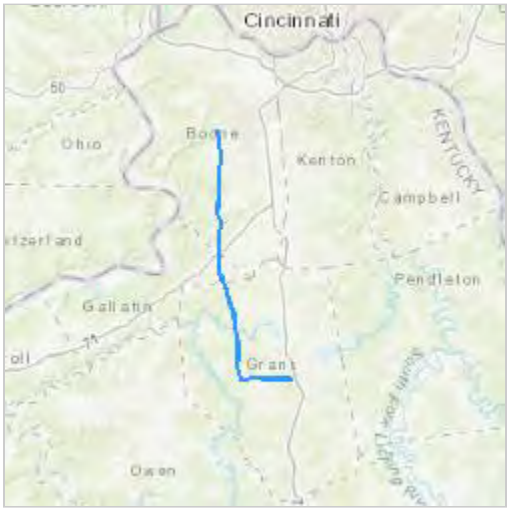
The proposed 28.5 mile hybrid project would include portions of rebuild, reconductor, and structure modifications as depicted on the attached maps. The rebuild portions of the project consist of five line sections comprising 4.6 miles and the reconductor portions consist of four line sections comprising 23.9 miles. There are 263 existing structures located within these transmission line sections. Based on preliminary engineering design, 60 single wood-pole structures would be replaced with steel-pole structures within the rebuild sections. While the final line design is

ongoing it is anticipated that the new steel-pole structures would be approximately 12 feet taller than the existing wood-pole structures with roughly 30-40% fewer steel-pole structures required. For the reconductor sections, 33 wood-pole H-frame structures would be replaced with in-kind steel-pole H-frame structures at the existing locations and an additional 170 structures would be modified with X-braces and arm braces to address conditions related to strength, lean, etc. Furthermore, the existing static wires would be replaced with Optical Ground Wire (OPGW), and the existing guy wires and anchors would be replaced as warranted.

Within the existing ROW, the vegetation is maintained by EKPC and property owners as a low growing herbaceous plant community and no tree clearing will be required. However, prior to and during construction activities, EKPC would identify and clear any “danger trees” located along the edges of the transmission line ROW easement that have the potential to threaten the future operation of the facility. Because there is an existing transmission line facility and associated maintenance access points, EKPC anticipates using existing roads and drive paths to and/or within the ROW easement to access the structure replacement and modification locations by driving over the existing terrain, without having to create new roads.

Project Location:

Approximate location of the project can be viewed in Google Maps: https://www.google.com/maps/@38.80844613387634,-84.71449544251851,14z



Counties: Boone, Gallatin, and Grant counties, Kentucky

Endangered Species Act Species

There is a total of 15 threatened, endangered, or candidate species on this species list.

Species on this list should be considered in an effects analysis for your project and could include species that exist in another geographic area. For example, certain fish may appear on the species list because a project could affect downstream species. Note that 14 of these species should be considered only under certain conditions.

IPaC does not display listed species or critical habitats under the sole jurisdiction of NOAA Fisheries[1], as USFWS does not have the authority to speak on behalf of NOAA and the Department of Commerce.

See the "Critical habitats" section below for those critical habitats that lie wholly or partially within your project area under this office's jurisdiction. Please contact the designated FWS office if you have questions.

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1. 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.

Mammals

NAME STATUS

Gray Bat *Myotis grisescens* Endangered

No critical habitat has been designated for this species.

This species only needs to be considered under the following conditions:

- The project area includes potential gray bat habitat.

Species profile: https://ecos.fws.gov/ecp/species/6329

General project design guidelines:
https://ecos.fws.gov/docs/tess/ipac_project_design_guidelines/doc6422.pdf

Indiana Bat *Myotis sodalis* Endangered

There is **final** critical habitat for this species. The location of the critical habitat is not available.

This species only needs to be considered under the following conditions:

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

Species profile: https://ecos.fws.gov/ecp/species/5949

General project design guidelines:
https://ecos.fws.gov/docs/tess/ipac_project_design_guidelines/doc6422.pdf

Northern Long-eared Bat *Myotis septentrionalis* Threatened

No critical habitat has been designated for this species.

This species only needs to be considered under the following conditions:

- 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.

Species profile: https://ecos.fws.gov/ecp/species/9045

General project design guidelines:
https://ecos.fws.gov/docs/tess/ipac_project_design_guidelines/doc6422.pdf

Clams

NAME STATUS

Clubshell *Pleurobema clava* Endangered

Population: Wherever found; Except where listed as Experimental Populations
No critical habitat has been designated for this species.
This species only needs to be considered under the following conditions:

- The species may be affected by projects that significantly impact the Ohio River.
- The species may be affected by projects that significantly impact the Kentucky River mainstem and/or any of its following tributaries: Dix River, Eagle Creek, Elkhorn Creek, North Fork Elkhorn Creek, and South Fork Kentucky River.

Species profile: https://ecos.fws.gov/ecp/species/3789
General project design guidelines:
https://ecos.fws.gov/docs/tess/ipac_project_design_guidelines/doc5639.pdf

Fanshell *Cyprogenia stegaria* Endangered

No critical habitat has been designated for this species.
This species only needs to be considered under the following conditions:

- The species may be affected by projects that significantly impact the Ohio River.
- The species may be affected by projects that significantly impact the Kentucky River mainstem and/or any of its following tributaries: Dix River, Eagle Creek, Elkhorn Creek, North Fork Elkhorn Creek, and South Fork Kentucky River.

Species profile: https://ecos.fws.gov/ecp/species/4822
General project design guidelines:
https://ecos.fws.gov/docs/tess/ipac_project_design_guidelines/doc5639.pdf

Northern Riffleshell *Epioblasma torulosa rangiana* Endangered

No critical habitat has been designated for this species.
This species only needs to be considered under the following conditions:

- The species may be affected by projects that significantly impact, directly or indirectly, the following rivers: Green, Licking, or Ohio.

Species profile: https://ecos.fws.gov/ecp/species/527
General project design guidelines:
https://ecos.fws.gov/docs/tess/ipac_project_design_guidelines/doc5639.pdf

Orangefoot Pimpleback (pearlymussel) *Plethobasus cooperianus* Endangered

No critical habitat has been designated for this species.
This species only needs to be considered under the following conditions:

- The species may be affected by projects that significantly impact the Ohio River.

Species profile: https://ecos.fws.gov/ecp/species/1132
General project design guidelines:
https://ecos.fws.gov/docs/tess/ipac_project_design_guidelines/doc5639.pdf

Pink Mucket (pearlymussel) *Lampsilis abrupta* Endangered

No critical habitat has been designated for this species.
This species only needs to be considered under the following conditions:

- The species may be affected by projects that significantly impact the Ohio River.

Species profile: https://ecos.fws.gov/ecp/species/7829
General project design guidelines:
https://ecos.fws.gov/docs/tess/ipac_project_design_guidelines/doc5639.pdf

Purple Cat's Paw (=purple Cat's Paw Pearlymussel) *Epioblasma obliquata obliquata* Endangered

NAME STATUS

Population: Wherever found; Except where listed as Experimental Populations
No critical habitat has been designated for this species.
This species only needs to be considered under the following conditions:
- The species may be affected by projects that significantly impact the Kentucky River mainstem and/or any of its following tributaries: Dix River, Eagle Creek, Elkhorn Creek, North Fork Elkhorn Creek, and South Fork Kentucky River.

Species profile: https://ecos.fws.gov/ecp/species/5602
General project design guidelines:
https://ecos.fws.gov/docs/tess/ipac_project_design_guidelines/doc5639.pdf

Rabbitsfoot *Quadrula cylindrica cylindrica* Threatened

There is **final** critical habitat for this species. The location of the critical habitat is not available.
This species only needs to be considered under the following conditions:
- The species may be affected by projects that significantly impact the Ohio River.
- The species may be affected by projects that significantly impact the Kentucky River mainstem and/or any of its following tributaries: Dix River, Eagle Creek, Elkhorn Creek, North Fork Elkhorn Creek, and South Fork Kentucky River.

Species profile: https://ecos.fws.gov/ecp/species/5165
General project design guidelines:
https://ecos.fws.gov/docs/tess/ipac_project_design_guidelines/doc5639.pdf

Ring Pink (mussel) *Obovaria retusa* Endangered

No critical habitat has been designated for this species.
This species only needs to be considered under the following conditions:
- The species may be affected by projects that significantly impact the Ohio River.

Species profile: https://ecos.fws.gov/ecp/species/4128
General project design guidelines:
https://ecos.fws.gov/docs/tess/ipac_project_design_guidelines/doc5639.pdf

Rough Pigtoe *Pleurobema plenum* Endangered

No critical habitat has been designated for this species.
This species only needs to be considered under the following conditions:
- The species may be affected by projects that significantly impact the Ohio River.

Species profile: https://ecos.fws.gov/ecp/species/6894
General project design guidelines:
https://ecos.fws.gov/docs/tess/ipac_project_design_guidelines/doc5639.pdf

Sheepnose Mussel *Plethobasus cyphyus* Endangered

No critical habitat has been designated for this species.
This species only needs to be considered under the following conditions:
- The species may be affected by projects that significantly impact the Ohio River.
- The species may be affected by projects that significantly impact the Kentucky River mainstem and/or any of its following tributaries: Dix River, Eagle Creek, Elkhorn Creek, North Fork Elkhorn Creek, and South Fork Kentucky River.

Species profile: https://ecos.fws.gov/ecp/species/6903
General project design guidelines:
https://ecos.fws.gov/docs/tess/ipac_project_design_guidelines/doc5639.pdf

Spectaclecase (mussel) *Cumberlandia monodonta* Endangered

No critical habitat has been designated for this species.
This species only needs to be considered under the following conditions:

NAME STATUS

- The species may be affected by projects that significantly impact the Ohio River.

Species profile: https://ecos.fws.gov/ecp/species/7867
General project design guidelines:
https://ecos.fws.gov/docs/tess/ipac_project_design_guidelines/doc5639.pdf

Flowering Plants

NAME STATUS

Running Buffalo Clover *Trifolium stoloniferum* Endangered

Population:
No critical habitat has been designated for this species.
Species profile: https://ecos.fws.gov/ecp/species/2529

Critical habitats

THERE ARE NO CRITICAL HABITATS WITHIN YOUR PROJECT AREA UNDER THIS OFFICE'S JURISDICTION.

United States Department of the Interior

FISH AND WILDLIFE SERVICE
Kentucky Ecological Services Field Office
J C Watts Federal Building, Room 265
330 West Broadway
Frankfort, KY 40601-8670
Phone: (502) 695-0468 Fax: (502) 695-1024
http://www.fws.gov/frankfort/

In Reply Refer To: February 24, 2021
Consultation code: 04EK1000-2021-TA-0131
Event Code: 04EK1000-2021-E-01771
Project Name: Boone County-Williamstown 69 kV Transmission LIne Reconductor/Rebuild Project

Subject: Verification letter for the 'Boone County-Williamstown 69 kV Transmission LIne Reconductor/Rebuild Project' project under the January 5, 2016, Programmatic Biological Opinion on Final 4(d) Rule for the Northern Long-eared Bat and Activities Excepted from Take Prohibitions.

Dear Chris Carpenter:

The U.S. Fish and Wildlife Service (Service) received on February 24, 2021 your effects determination for the 'Boone County-Williamstown 69 kV Transmission LIne Reconductor/ Rebuild Project' (the Action) using the northern long-eared bat (*Myotis septentrionalis*) key within the Information for Planning and Consultation (IPaC) system. This IPaC key assists users in determining whether a Federal action is consistent with the activities analyzed in the Service's January 5, 2016, Programmatic Biological Opinion (PBO). The PBO addresses activities excepted from "take"[1] prohibitions applicable to the northern long-eared bat under the Endangered Species Act of 1973 (ESA) (87 Stat.884, as amended; 16 U.S.C. 1531 et seq.).

Based upon your IPaC submission, the Action is consistent with activities analyzed in the PBO. The Action may affect the northern long-eared bat; however, any take that may occur as a result of the Action is not prohibited under the ESA Section 4(d) rule adopted for this species at 50 CFR §17.40(o). Unless the Service advises you within 30 days of the date of this letter that your IPaC-assisted determination was incorrect, this letter verifies that the PBO satisfies and concludes your responsibilities for this Action under ESA Section 7(a)(2) with respect to the northern long-eared bat.

Please report to our office any changes to the information about the Action that you submitted in IPaC, the results of any bat surveys conducted in the Action area, and any dead, injured, or sick northern long-eared bats that are found during Action implementation. If the Action is not

completed within one year of the date of this letter, you must update and resubmit the information required in the IPaC key.

This IPaC-assisted determination allows you to rely on the PBO for compliance with ESA Section 7(a)(2) only for the northern long-eared bat. It **does not** apply to the following ESA-protected species that also may occur in the Action area:

- Clubshell Pleurobema clava Endangered
- Fanshell Cyprogenia stegaria Endangered
- Gray Bat Myotis grisescens Endangered
- Indiana Bat Myotis sodalis Endangered
- Northern Riffleshell Epioblasma torulosa rangiana Endangered
- Orangefoot Pimpleback (pearlymussel) Plethobasus cooperianus Endangered
- Pink Mucket (pearlymussel) Lampsilis abrupta Endangered
- Purple Cat's Paw (=purple Cat's Paw Pearlymussel) Epioblasma obliquata obliquata Endangered
- Rabbitsfoot Quadrula cylindrica cylindrica Threatened
- Ring Pink (mussel) Obovaria retusa Endangered
- Rough Pigtoe Pleurobema plenum Endangered
- Running Buffalo Clover Trifolium stoloniferum Endangered
- Sheepnose Mussel Plethobasus cyphyus Endangered
- Spectaclecase (mussel) Cumberlandia monodonta Endangered

If the Action may affect other federally listed species besides the northern long-eared bat, a proposed species, and/or designated critical habitat, additional consultation between you and this Service office is required. If the Action may disturb bald or golden eagles, additional coordination with the Service under the Bald and Golden Eagle Protection Act is recommended.

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[1]Take means to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt to engage in any such conduct [ESA Section 3(19)].

Action Description
You provided to IPaC the following name and description for the subject Action.

1. Name

Boone County-Williamstown 69 kV Transmission LIne Reconductor/Rebuild Project

2. Description

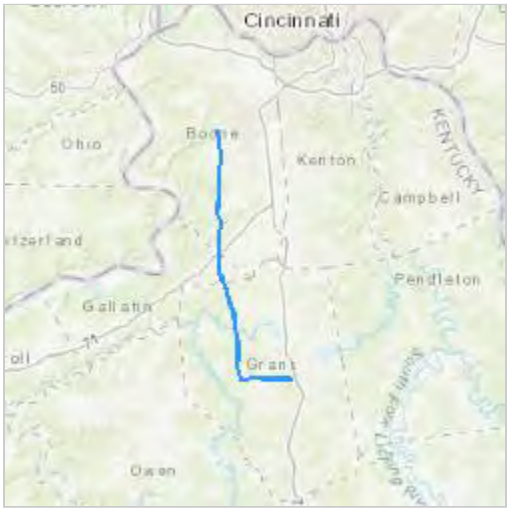
The following description was provided for the project 'Boone County-Williamstown 69 kV Transmission LIne Reconductor/Rebuild Project':

> EKPC is proposing to reconductor/rebuild, operate, and maintain the existing Boone County – Williamstown 69 kV Transmission Line section located in portions of Boone, Gallatin, and Grant Counties, Kentucky. EKPC is proposing this transmission line reconductor/rebuild project to address the poor physical condition of the existing transmission line, including the conductors, static wires, poles, and/or structures. The project would require replacement of the existing conductor (2/0 and 4/0 ASCR) with the larger size conductor (556.5 ACSR/TW) currently utilized by EKPC. EKPC first evaluated only reconductoring the entire line section; however, it was determined that several section of existing line are constructed with single, wood-pole support structures. Many of these single pole-wood structures are the originals installed circa 1957 and 1958 and are in such poor physical condition they would not be able to support the increased weight of the larger conductor. Therefore, EKPC is proposing a hybrid rebuild/reconductor of this line section using the larger conductor, steel-pole structures, and necessary structure modifications.
>
> The existing transmission line section that would be reconductored/rebuilt is approximately 28.5 miles in length and is generally oriented north to south between the existing EKPC Boone County 69 kV substation and Munk Junction; and generally west to east between Munk Junction and the Williamstown 69 kV substation. The Boone County substation is located at southeastern corner of the junction of Longbranch Road and Camp Ernst Road, approximately 3.5 miles south of Burlington in Boone County. The Munk Junction is located on the west side of KY Hwy 36, approximately 0.1 mile southeast of Smokey Road at 38.643634oN, -84.675623oW in Grant County. The Williamstown substation is located on the south side of Barnes Road, 0.25-mile west Interstate 75, approximately 1.75 miles west of Williamstown in Grant County.
>
> The proposed 28.5 mile hybrid project would include portions of rebuild, reconductor, and structure modifications as depicted on the attached maps. The rebuild portions of the project consist of five line sections comprising 4.6 miles and the reconductor portions consist of four line sections comprising 23.9 miles. There are 263 existing structures located within these transmission line sections. Based on preliminary engineering design, 60 single wood-pole structures would be replaced with steel-pole structures within the rebuild sections. While the final

line design is ongoing it is anticipated that the new steel-pole structures would be approximately 12 feet taller than the existing wood-pole structures with roughly 30-40% fewer steel-pole structures required. For the reconductor sections, 33 wood-pole H-frame structures would be replaced with in-kind steel-pole H-frame structures at the existing locations and an additional 170 structures would be modified with X-braces and arm braces to address conditions related to strength, lean, etc. Furthermore, the existing static wires would be replaced with Optical Ground Wire (OPGW), and the existing guy wires and anchors would be replaced as warranted.

Within the existing ROW, the vegetation is maintained by EKPC and property owners as a low growing herbaceous plant community and no tree clearing will be required. However, prior to and during construction activities, EKPC would identify and clear any “danger trees” located along the edges of the transmission line ROW easement that have the potential to threaten the future operation of the facility. Because there is an existing transmission line facility and associated maintenance access points, EKPC anticipates using existing roads and drive paths to and/or within the ROW easement to access the structure replacement and modification locations by driving over the existing terrain, without having to create new roads.

Approximate location of the project can be viewed in Google Maps: https://www.google.com/maps/@38.80844613387634,-84.71449544251851,14z



Determination Key Result

This Federal Action may affect the northern long-eared bat in a manner consistent with the description of activities addressed by the Service’s PBO dated January 5, 2016. Any taking that may occur incidental to this Action is not prohibited under the final 4(d) rule at 50 CFR §17.40(o). Therefore, the PBO satisfies your responsibilities for this Action under ESA Section 7(a)(2) relative to the northern long-eared bat.

Determination Key Description: Northern Long-eared Bat 4(d) Rule

This key was last updated in IPaC on May 15, 2017. Keys are subject to periodic revision.

This key is intended for actions that may affect the threatened northern long-eared bat.

The purpose of the key for Federal actions is to assist determinations as to whether proposed actions are consistent with those analyzed in the Service’s PBO dated January 5, 2016.

Federal actions that may cause prohibited take of northern long-eared bats, affect ESA-listed species other than the northern long-eared bat, or affect any designated critical habitat, require ESA Section 7(a)(2) consultation in addition to the use of this key. Federal actions that may affect species proposed for listing or critical habitat proposed for designation may require a conference under ESA Section 7(a)(4).

Determination Key Result

This project may affect the threatened Northern long-eared bat; therefore, consultation with the Service pursuant to Section 7(a)(2) of the Endangered Species Act of 1973 (87 Stat.884, as amended; 16 U.S.C. 1531 et seq.) is required. However, based on the information you provided, this project may rely on the Service's January 5, 2016, *Programmatic Biological Opinion on Final 4(d) Rule for the Northern Long-Eared Bat and Activities Excepted from Take Prohibitions* to fulfill its Section 7(a)(2) consultation obligation.

Qualification Interview

1. Is the action authorized, funded, or being carried out by a Federal agency?

   Yes

2. Have you determined that the proposed action will have "no effect" on the northern long-eared bat? (If you are unsure select "No")

   No

3. Will your activity purposefully **Take** northern long-eared bats?

   No

4. [Semantic] Is the project action area located wholly outside the White-nose Syndrome Zone?

   Automatically answered
   No

5. [Semantic] Is the project action area located within 0.25 miles of a known northern long-eared bat hibernaculum?

   Note: The map queried for this question contains proprietary information and cannot be displayed. If you need additional information, please contact your State wildlife agency

   Automatically answered
   No

6. [Semantic] Is the project action area located within 150 feet of a known occupied northern long-eared bat maternity roost tree?

   Note: The map queried for this question contains proprietary information and cannot be displayed. If you need additional information, please contact your State wildlife agency

   Automatically answered
   No

Project Questionnaire

If the project includes forest conversion, report the appropriate acreages below. Otherwise, type '0' in questions 1-3.

1. Estimated total acres of forest conversion:

45

2. If known, estimated acres of forest conversion from April 1 to October 31

0

3. If known, estimated acres of forest conversion from June 1 to July 31

0

If the project includes timber harvest, report the appropriate acreages below. Otherwise, type '0' in questions 4-6.

4. Estimated total acres of timber harvest

0

5. If known, estimated acres of timber harvest from April 1 to October 31

0

6. If known, estimated acres of timber harvest from June 1 to July 31

0

If the project includes prescribed fire, report the appropriate acreages below. Otherwise, type '0' in questions 7-9.

7. Estimated total acres of prescribed fire

0

8. If known, estimated acres of prescribed fire from April 1 to October 31

0

9. If known, estimated acres of prescribed fire from June 1 to July 31

0

If the project includes new wind turbines, report the megawatts of wind capacity below. Otherwise, type '0' in question 10.

10. What is the estimated wind capacity (in megawatts) of the new turbine(s)?

0

EAST KENTUCKY POWER COOPERATIVE

March 3, 2021

Mr. Lee Andrews
U.S. Fish and Wildlife Service
J. C. Watts Federal Building, Room 265
330 West Broadway
Frankfort, KY 40601

Dear Mr. Andrews,

East Kentucky Power Cooperative, Inc. (EKPC) is in the process of preparing an environmental report for the U.S. Department of Agriculture, Rural Utilities Service (RUS) in order that it may assess the environmental impacts of the following proposed project:

Boone – Williamstown 69 kV Transmission Line Reconductor/Rebuild Project

IPaC Consultation Code: 04EK1000-2021-SLI-0131

EKPC is proposing to reconductor/rebuild, operate, and maintain the existing Boone – Williamstown 69 kV Transmission Line section located in portions of Boone, Gallatin, and Grant Counties, Kentucky. The existing transmission line section that would be reconductored and/or rebuilt is approximately 28.5 miles in length and is generally oriented north to south between the existing EKPC Boone 69 kV substation and Munk Junction; and generally west to east between Munk Junction and the Williamstown 69 kV substation. The Boone substation is located at southeastern corner of the junction of Longbranch Road and Camp Ernst Road, approximately 3.5 miles south of Burlington in Boone County. The Munk Junction is located on the west side of KY Hwy 36, approximately 0.1 mile southeast of Smokey Road at 38.643634°N, -84.675623°W in Grant County. The Williamstown substation is located on the south side of Barnes Road, 0.25-mile west Interstate 75, approximately 1.75 miles west of Williamstown in Grant County. Topographic maps and aerial photographs depicting the location of the proposed project are enclosed with this letter.

PROJECT DESCRIPTION

The EKPC Reliability Team identified the need to reconductor/rebuild the Boone – Williamstown 69 kV transmission line section to address the poor physical condition of the existing transmission line, including the existing conductors (2/0 and 4/0 ASCR), static wires, poles, and/or structures. The project would require replacement of the existing conductor (2/0 and 4/0 ASCR) with the larger size conductor (556.5 ACSR/TW) currently utilized by EKPC. EKPC first evaluated only reconductoring the entire line section; however, it was determined that several section of existing line are constructed with single, wood-pole support structures. Many of these single pole-wood structures are the originals installed circa 1957 and 1958 and are in such poor physical condition they would not be able to support the increased weight of the larger conductor. Therefore, EKPC is proposing a hybrid reconductor/rebuild of this line section using the larger conductor, steel-pole structures, and necessary structure modifications.

The proposed 28.5-mile hybrid project would include portions of reconductor, rebuild, and structure modifications as depicted on the enclosed maps. The rebuild portions of the project consist of five line

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sections comprising 4.6 miles and the reconductor portions consist of four line sections comprising 23.9 miles. There are 263 existing structures located within these transmission line sections. Based on preliminary engineering design, 60 single wood-pole structures would be replaced with steel-pole structures within the rebuild sections. While the final line design is ongoing, it is anticipated that the new steel-pole structures would be approximately 12 feet taller than the existing wood-pole structures with roughly 30-40% fewer steel-pole structures required. For the reconductor sections, 33 wood-pole H-frame structures would be replaced with in-kind steel-pole H-frame structures at the existing locations and an additional 170 structures would be modified with X-braces and arm braces to address conditions related to strength, lean, etc. Furthermore, the existing static wires would be replaced with Optical Ground Wire (OPGW), and the existing guy wires and anchors would be replaced as warranted.

Within the existing ROW, the vegetation is maintained by EKPC, residential property owners, and agricultural practices as a low growing herbaceous plant community and no tree clearing within the ROW will be required. However, as a part of the construction activities, EKPC project engineers' utilized Light Detection and Ranging (LIDAR) data to analyze the project area, which identified trees located along the edges of the proposed ROW easement that could pose a potential threat to the future operation of the transmission line. As part of this project, EKPC will field verify and clear these hazard trees, most of which would also be classified as suitable Indiana bat habitat. Because there is an existing transmission line facility and associated maintenance access points within a moderately rolling topography, EKPC anticipates using existing access roads and the ROW easement to access the new structure locations by driving over the existing terrain, without having to create new roads.

SITE DESCRIPTION

The proposed project is located in portions of Boone, Gallatin, and Grant Counties, which are located in the Outer Bluegrass physiographic region of Kentucky. This physiographic region consists of deep valleys with little flat land due to the easily eroded Ordovician limestones and shales that underlie the region[1]. Soils in the region are typically thick over limestone formations and thin over shale formations. Upland areas were once covered by open savanna-woodlands of blue ash (*Fraxinus quadrangulata*), bur oak (*Quercus macrocarpa*), and other trees, with an understory of cane, wild grasses, and legumes. These savanna-woodlands have been reduced to a few remnants of the original oak-hickory forests. Caves and sinking springs are also found throughout the region. Boone, Gallatin, and Grant Counties are moderately to deeply dissected uplands consistent with the Outer Bluegrass physiographic region. Flat-topped ridges are present between stream valleys throughout the three counties. Elevations in the project corridor range from approximately 700 feet to 900 feet above mean sea level (AMSL)[2]. The project corridor is representative of the Outer Bluegrass physiographic region and is dominated by valleys and ridges. The primary land use throughout the project corridor is agricultural land, with rural residential properties scattered throughout the corridor. Representative photographs of the project area are presented beginning on page 3.

EKPC and Redwing biologists conducted a field survey within the project area to assess what habitat types are currently present. The project area is located in both the Oak Hickory Forest Region, which extends across much of the western two-thirds of Kentucky. In the Oak Hickory Forest Region of the state, a mixture of deciduous tree species, especially oaks and hickories, as well as American elm,

[1] Kentucky Geological Survey. The Bluegrass Region. http://www.uky.edu/KGS/geoky/regionbluegrass.htm. Accessed February 2021.
[2] McGrain, P. and J. C. Currens. 1978. Topography of Kentucky. Kentucky Geological Survey, Ser. X, Special Pub., 25University of Kentucky, Lexington, KY.

American basswood, black cherry, black walnut, and white ash, generally characterizes the forests[3]. However, the proposed transmission line project would involve reconductoring/rebuilding of an existing facility, which is maintained by EKPC and property owners as agricultural/rural residential lands, low growing herbaceous plant communities, and small woody stemmed vegetation. There would be no tree clearing required within the existing ROW; however, field verified hazard trees located along the edges of the ROW could be cleared as part of the reconstruction project. Hazard trees are defined by EKPC as those which, based primarily on size and proximity, could pose a potential threat to the future operation of the transmission line. Ultimately, the final determination of which tree(s) may require clearing will be made following construction of the new line by observing tree height(s) relative to that of the new line.

The forested areas adjacent to the existing transmission line ROW are typical of the region, with dominant tree species observed during the field surveys including shagbark hickory (*Carya ovata*), sycamore (*Platanus occidentalis*), sugar maple (*Acer saccharum*), red maple (*Acer rubrum*), black cherry (*Prunus serotina*), white oak (*Quercus alba*), red oak (*Quercus rubra*), pin oak (*Quercus palustris*), hackberry (*Celtis occidentalis*), and eastern red cedar (*Juniperus virginiana*). Common plant species documented within the existing ROW were tall fescue (*Schedonorus arundinaceus*), common teasel (*Dipsacus fullonum*), field thistle (*Cirsium discolor*), tall ironweed (*Vernonia angustifolia*), Japanese honeysuckle (*Lonicera japonica*), and poison ivy (*Toxicodendron radicans*).

Photo 1. View south from existing EKPC Boone Substation, within northern portion of project area

[3] Jones, R. L. 2005. Plant Life of Kentucky. University Press of Kentucky. Lexington, Kentucky.

Photo 2. Representative view within northern portion of the project area (north of Hathaway Road, KY 536)

Photo 3. Representative view of Big Bone Creek, within northern portion of the project area

Photo 4. Representative view within northern portion of the project area (north of Beaver Road)

Photo 5. Representative view of Mud Lick Creek in north-central portion of project area

Photo 6. Representative view in the central portion of project area (just north of Munk Substation)

Photo 7. Representative view in the central portion of project area (just north of Clarks Creek Road)

Photo 8. Representative view of Clarks Creek in south-central portion of project area

Photo 9. Representative view in southern portion of project area (just east of KY Hwy 36)

Photo 10. Representative view in southern portion of project area (west of the end of Barnes Road)

Photo 11. Transmission line crossing Barnes Road (0.2 miles southwest of Williamstown Substation)

SPECIES CONSIDERED AND EVALUATED

Based upon the construction activities outlined above and the resulting disturbance to the existing environment, EKPC evaluated the potential of the project to affect federally-listed threatened or endangered species or critical habitats that are known to occur, or could potentially occur, within the project area. To assess these potential effects, EKPC reviewed available information for the proposed project area, acquired from the following sources:

- U.S. Fish and Wildlife Service (USFWS) – *Information for Planning and Conservation – IPaC website* (*https://ecos.fws.gov/ipac/*), IPaC Consultation Code: 04EK1000-2021-SLI-0131, accessed November 9, 2020, updated February 24, 2021
- USFWS – *Known Indiana bat habitat in Kentucky and within 20 Miles* map, August 2019 (*https://www.fws.gov/frankfort/pdf/MYSO_Habitat_map.pdf*)
- USFWS – *Known northern long-eared bat habitat in Kentucky and within 20 Miles* map, August 2019 (*https://www.fws.gov/frankfort/pdf/MYSE_Habitat_Map.pdf*)
- USFWS – *Map of Quadrangles Containing Known Northern Long-Eared Bat Hibernacula &/or Maternity Roost Trees,* December 2017 *(https://www.fws.gov/frankfort/pdf/KY_NLEB_Quad_List.pdf)*
- Office of Kentucky Nature Preserves (OKNP) – *Kentucky Biological Assessment Tool* for OKNP-monitored species within 2.5-miles of proposed project area, February 11, 2021

Information contained within these resources identified 13 federally-endangered species and two federally-threatened species known to occur or having the potential to occur within the project area. These species include the Indiana bat (*Myotis sodalis*), gray bat (*M. grisescens*), northern long-eared bat (*M. septentrionalis*), clubshell (*Pleurobema clava*), fanshell (*Cyprogenia stegaria*), northern riffleshell (*Epioblasma torulosa rangiana*), orangefoot pimpleback (*Plethobasus cooperianus*), pink mucket (*Lampsilis abrupta*), purple cat's paw (*Epioblasma obliquata obliquata*), rabbitsfoot (*Quadrula cylindrica cylindrica*), ring pink (*Obovaria retusa*), rough pigtoe (*Pleurobema plenum*), sheepnose (*Plethobasus cyphyus*), spectaclecase (*Cumberlandia monodonta*), and running buffalo clover (*Trifolium stoloniferum*).

Table 1. *Federally-Listed Species Identified in Vicinity of the Boone - Williamstown Project Area*

Group	Species	Common name	Legal Status*	Occurrence**	Comments
Mammals	*M. sodalis*	Indiana bat	E	K	Known habitat in Boone, Gallatin, and Grant Counties
	M. septentrionalis	Northern long-eared bat	T	K	Central portion of project within known Summer 1 habitat
	M. grisescens	Gray bat	E	P	Potential to occur in the project vicinity
Mussels	*P. clava*	Clubshell	E	P	Potential to occur in the project vicinity
	C. stegaria	Fanshell	E	P	Potential to occur in the project vicinity
	E. t. rangiana	Northern riffleshell	E	P	Potential to occur in the project vicinity

Group	Species	Common name	Legal Status*	Occurrence**	Comments
	P. cooperianus	Orangefoot pimpleback	E	P	Potential to occur in the project vicinity
	L. abrupta	Pink mucket	E	P	Potential to occur in the project vicinity
	E. o. obliquata	Purple cat's paw	E	P	Potential to occur in the project vicinity
	Q. c. cylindrica	Rabbitsfoot	T	P	Potential to occur in the project vicinity
	O. retusa	Ring pink	E	P	Potential to occur in the project vicinity
	P. plenum	Rough pigtoe	E	P	Potential to occur in the project vicinity
	P. cyphyus	Sheepnose	E	P	Potential to occur in the project vicinity
	C. monodonta	Spectaclecase	E	P	Potential to occur in the project vicinity
Plants	*T. stoloniferum*	Running buffalo clover	E	K	Known from Boone and Grant Counties

NOTES: Key to Notations

* E = Endangered, T = Threatened, P = Proposed for Listing, CH = Critical Habitat
** K = Known occurrence record within the project area, P = Potential for the species to occur within the project area based upon historic range, proximity to known occurrence records, biological, and physiographic characteristics.

DATA REVIEW & SURVEY METHODS

To determine the likelihood of these species being impacted by the proposed project permitted EKPC biologists reviewed existing occurrence data, topographic maps, aerial photographs, and conducted field surveys to determine the presence or probable absence of these species in the proposed project area. The Union, Verona, Elliston, and Williamstown Kentucky USGS 7.5-minute topographic quadrangle map and aerial photographs taken in 2018 were reviewed and utilized to create the enclosed project mapping. EKPC and Redwing biologists conducted field surveys on April 9, 15-16 and 23, and June 22-25, 2020, which consisted of traversing the project area while making visual observations of existing habitat and site-specific observations from areas within the proposed ROW as well as existing project access roads.

EVALUATED SPECIES INFORMATION

Indiana bat

A review of existing data provided by the USFWS known Indiana bat habitat map revealed that the proposed project area is located in potential habitat for the Indiana bat, with the closest known Summer 1 habitat located 440 feet west of the proposed project area in northwestern Boone County and roughly 1.0 mile east of the project area in northern Grant County. Based on the proximity to this known habitat, historic range, and biological and physiographic characteristics, the USFWS assumes these species have the potential to occur throughout the entire region of Kentucky in which the project area

is located. Therefore, forested areas present in the project area may provide suitable summer roosting, foraging, and/or travel habitat for the Indiana bat. Additionally, any caves, rock shelters, or underground mines located in the proposed project area may provide potential Indiana bat winter habitat. Any project-related impacts to this summer and/or winter habitat could adversely affect this species; therefore, EKPC survey efforts focused on the identification of suitable Indiana bat habitat.

Suitable summer roosting habitat for the Indiana bat has been defined by the USFWS as live and dead trees with a diameter at breast height (DBH) of five (5) inches or greater that exhibit exfoliating bark, crevices, and/or cracks where Indiana bats could potentially roost. Indiana bats have also been observed roosting in human-made structures, such as bridges and bat houses (artificial roost structures). Based on the results of the field reconnaissance and subsequent desktop map review, 44.76 acres of forested habitat meeting the definition of suitable Indiana bat summer habitat would be cleared for construction of the proposed project. This identified forested habitat contains potential roost sites within live shaggy-barked trees and/or dead/damaged trees, and is located along the edges of the existing ROW easement (see enclosed *Suitable Bat Habitat Maps*). As a result of the project area containing tree species that could provide suitable summer roosting habitat for the Indiana bat, EKPC is proposing to mitigate the removal of these trees by contributing to the Imperiled Bat Conservation Fund (IBCF) using the process detailed in the *Kentucky Field Office's 2016 Revised Conservation Strategy for Forest-Dwelling Bats* (Conservation Strategy). EKPC believes the proposed action is consistent with the actions evaluated in the *2015 Biological Opinion: Kentucky Field Office's Participation in Conservation Memoranda of Agreement for the Indiana Bat and/or Northern Long-eared Bat* (BO) that supports the Conservation Strategy. Details of this agreement are provided in the mitigation discussion beginning on page 14.

During the current field survey and data review, no caves, rock shelters, or abandoned underground mines that could provide potential winter habitat for the Indiana bat were discovered within the project area. In addition, the review of topographic maps and GIS mine survey data did not show any records for mining or quarrying within the proposed project area. A review of the USFWS Known Indiana Bat Habitat in Kentucky and within 20 miles map revealed that the closest known Indiana bat hibernaculum is located in Menifee County, approximately 70 miles southeast of the project area. Based on the negative results of the habitat assessments and distance of the known hibernaculum within Menifee County, no significant adverse effects to the Indiana bat with regard to winter habitat are anticipated.

Northern long-eared bat

A review of existing data provided by the USFWS known northern long-eared bat (NLEB) habitat map revealed that the majority of the proposed project area is located within potential NLEB habitat. However the central portion (extreme eastern Gallatin County and northwestern Grant County) of the proposed project are within known Summer 1 habitat. Therefore, EKPC submitted an effects determination for the proposed project using the NLEB key within the Information for Planning and Consultation (IPaC) system on February 24, 2021 (Consultation Code: 04EK1000-2021-TA-0131). Based upon the IPaC submission, the proposed action is consistent with activities analyzed in the USFWS January 5, 2016, Programmatic Biological Opinion (PBO). The PBO addresses activities excepted from "take" prohibitions applicable to the NLEB under the Endangered Species Act of 1973 (ESA) (87 Stat.884, as amended; 16 U.S.C. 1531 et seq.). Thus, the proposal may affect the northern long-eared bat; however, any take that may occur as a result of the proposed action is not prohibited under the ESA Section 4(d) rule adopted for this species at 50 CFR § 17.40(o).

Gray Bat

Although location-specific data was not available through either OKNP or USWFS, it is assumed that gray bats have the potential to occur within the project area. Gray bats roost, breed, rear young, and hibernate in caves, rock shelters, and underground mines year round. Therefore, any of these features that are located in the proposed project area could provide potential winter/summer roosting habitat for these species, and impacts to this habitat could adversely affect these species. As previously discussed, no caves, rock shelters, or abandoned underground mines that could provide suitable winter/summer roosting habitat for gray bats were identified within the project area. Based on no known occurrences and the absence of suitable winter/summer roosting habitat in the project area, no adverse effects to gray bats are anticipated with respect to roosting habitat.

Gray bats typically forage for flying aquatic and terrestrial insects over streams, rivers, and lakes. As a result, any of these features that occur within, or in the vicinity of, the project area could provide potential gray bat foraging habitat. During the topographic map review and subsequent field survey, the project area was examined for streams, rivers, or lakes that could provide potential gray bat foraging habitat. Big Bone Creek, Beaver Branch, Mud Lick Creek, McPherson Branch, Big South Fork, 10 Mile Creek, Little 10 Mile Creek, Arnolds Creek, Clarks Creek, and Williams Branch, which are each spanned by the existing transmission line, appear to offer adequate foraging habitat for the gray bat. However, there are no new disturbances anticipated at these water crossings for the proposed line reconductor/rebuild project. Therefore, direct impacts to gray bat foraging habitat are not anticipated.

Although no direct effects to gray bat foraging habitat are anticipated, streams identified as suitable foraging habitat are located within the project area. To avoid and minimize potential indirect impacts to gray bat foraging habitat associated with water quality degradation from the project, EKPC will prepare, implement, and maintain a Storm Water Pollution Prevention Plan (SWPPP) that outlines how and where Best Management Practices (BMPs) will be used to prevent or reduce the discharge of pollutants into Waters of the Commonwealth. The goal of this plan is to implement appropriate and adequate erosion prevention measures, sediment control measures, and other site management practices necessary to manage stormwater runoff during the construction period. These practices are aimed primarily at controlling erosion and sediment transport, but also include controls such as good housekeeping practices aimed at other pollutants such as construction chemicals and solid waste. The plan describes the site management practices that will be utilized in order to effectively minimize such discharges for storm events up to and including a two-year, 24-hour event.

Freshwater Mussels

Occurrence data obtained from the USFWS IPaC report indicates that 11 federally-listed mussels (see Table 1) have the potential to occur within the project area. However, location-specific data was not available through either the OKNP or USFWS. Mapping contained in the *Kentucky State Nature Preserves Commission 2016 Distributional Atlas of the Freshwater Mussels of Kentucky* indicates that these species are known from the Licking, Ohio and Kentucky River watersheds within the region of the project area. Following the desktop review and field survey, all of the streams spanned by the proposed project empty into the Ohio and/or Kentucky River Watersheds. Therefore, EKPC biologists focused on the species known from the Ohio and Kentucky River watersheds, which included all species except for the purple cat's paw. However, the known occurrences from these watersheds are only from relic shells and archaeological records, with no recent occurrences. As previously discussed, an evaluation of project mapping resulted in the identification of 16 perennial streams, 10 of which could provide suitable habitat for mussels including Big Bone Creek, Beaver Branch, Mud Lick Creek, McPherson Branch, Big South Fork, 10 Mile Creek, Little 10 Mile Creek, Arnolds Creek, Clarks Creek and Williams Branch. The transmission line currently spans these streams and will continue to span

them after project completion. No construction activities will occur in these streams; therefore, no direct effects to the listed freshwater mussels are expected for the proposal.

Although no freshwater mussels will be directly affected by the proposed project, suitable mussel habitat is ultimately located downstream of the project area in Eagle Creek as well as the Ohio and Kentucky Rivers. As previously discussed, to avoid and minimize indirect effects associated with potential water quality degradation from the project, EKPC would prepare and implement a SWPPP that outlines how and where BMPs will be used to prevent or reduce the discharge of pollutants into waters of the Commonwealth during the construction period. Therefore, adverse impacts to water quality are not anticipated from the proposed project and the proposal would have no significant indirect effects on the identified freshwater mussel species.

Plants

Existing data from the USFWS and OKNP indicates that running buffalo clover is known from Boone and Grant Counties, and has the potential to occur in the proposed project area. Although the known occurrences were not identified within the project area, OKNP data indicates the species is known from Big Bone Creek and Beaver Branch in the vicinity of the proposal. Therefore, EKPC assumed there was potential for running buffalo clover to be present if suitable habitat was identified in the project area. Redwing biologists focused on assessing the habitat within the proposed project area as well as searching for plant specimens through field surveys conducted at the optimal time of year during the typical flowering season.

The surveys consisted of walking the project area and making visual observations for areas that typically provide suitable habitat for running buffalo clover (e.g., stream banks, bars and terraces, footpaths, dirt roads, and grazed bottomlands). During the surveys, several areas of suitable habitat were identified including the previously mentioned perennial streams as well as multiple intermittent/ephemeral streams within the existing transmission line ROW, and a number of these areas were currently being grazed by livestock. These areas were thoroughly searched for running buffalo clover; however, none was observed within any of the identified suitable habitat. Given that no running buffalo clover was documented within the project area, no significant adverse effects to this species are anticipated from the proposed project.

Federally-Protected Bird Species

In addition to federally-listed species or critical habitats that could be affected by the proposed project, EKPC evaluated the potential for the proposed project to impact federally-protected bird species with respect to the *Migratory Bird Treaty Act* and the *Bald and Golden Eagle Protection Act*. As a conservation measure, EKPC will incorporate the guidelines listed in the Avian Power Line Interaction Committee's *Suggested Practices for Avian Protection on Power Lines: The State of the Art in 2006* into the proposed project design to avoid or minimize the potential electrocution risks posed to federally-protected bird species from the project. The project will also be designed in accordance with recommended guidelines issued by RUS to ensure compliance with state and federal codes. Additionally, the proposed project area is not located within a major flyway or principal route for migratory birds, and no areas of significant concern were identified during the field survey. Likewise, based on information provided in the IPaC Report, there are no known eagle occurrences within the vicinity of the proposal, and there were no eagles or eagle nests observed within the project area during the field investigation. Therefore, construction of the proposed project is not expected to cause significant adverse impacts to federally-protected migratory birds or eagles.

FOREST-DWELLING BAT CMOA COMPENSATORY MITIGATION CALCULATIONS

As a result of the project area containing tree species and individual trees that could provide suitable roosting habitat for the Indiana bat, EKPC is proposing to mitigate the removal of these trees by contributing to the IBCF using the process detailed in the Kentucky Field Office's Conservation Strategy. The 44.76 acres of forested habitat identified as suitable Indiana bat habitat that would potentially be impacted by the project is located along the edges of the existing transmission line ROW (see enclosed *Suitable Bat Habitat Maps*). Based on the project schedule, EKPC anticipates tree clearing within the project area between October 15 and March 31 timeframe, when the habitats would be unoccupied. Therefore, the compensatory mitigation is calculated as follows:

Table 2. *Boone - Williamstown Indiana Bat Compensatory Mitigation Calculation*

Forest-Dwelling Bat Habitat Type	Impact (acres)	Mitigation Ratio	Current Rate/Acre	IBCF Contribution Amount
Potential Unoccupied-(Oct.15-Mar.31)	44.76	0.5	$3,920	$87,729.60
TOTAL				$87,729.60

EKPC believes the proposed action is consistent with the actions evaluated in the 2015 Biological Opinion: Kentucky Field Office's Participation in Conservation Memoranda of Agreement for the Indiana Bat and/or Northern Long-eared Bat (BO) that supports the Conservation Strategy. EKPC asks that your office confirm that the contribution amount is correct and provide instructions for completing this proposed conservation measure.

As a result of 44.76 acres of suitable Indiana bat habitat being impacted by the proposed transmission line reconductor/rebuild project, the proposal "may affect – likely to adversely affect" this federally-listed species. However, this loss of suitable habitat would be mitigated through the proposed IBCF contribution; thus, the project is not likely to jeopardize the continued existence of the Indiana bat or result in destruction or adverse modification of designated critical habitat for this species.

RECOMMENDATION FOR DETERMINATION OF EFFECT FINDINGS

Based on the existing occurrence data, negative survey results, lack of suitable habitat, mitigation of adverse effects to Indiana bat summer habitat, and compliance with the conservation measures in the Final 4(d) rule for the NLEB, it is not anticipated the proposed project would adversely affect/jeopardize the federally-listed species that occur, or have the potential to occur, within the project area, as outlined below.

Table 3. *Recommendation for Determination of Effect Findings*

Common Name	Effects Determination
Indiana bat	May affect - likely to adversely affect*
Northern long-eared bat	May affect - likely to adversely affect**
Gray bat	Not likely to adversely affect
Clubshell	Not likely to adversely affect
Fanshell	Not likely to adversely affect
Northern riffleshell	Not likely to adversely affect
Orangefoot pimpleback	Not likely to adversely affect

Common Name	Effects Determination
Pink mucket	Not likely to adversely affect
Purple cat's paw	Not likely to adversely affect
Rabbitsfoot	Not likely to adversely affect
Ring pink	Not likely to adversely affect
Rough pigtoe	Not likely to adversely affect
Sheepnose	Not likely to adversely affect
Spectaclecase	Not likely to adversely affect
Running buffalo clover	Not likely to adversely affect
Federally protected bird species	Not likely to adversely affect

*Loss of suitable habitat would be mitigated through the proposed IBCF contribution
**Would not cause prohibited incidental take of NLEBs as defined in the Final 4(d) Rule

EKPC asks that your office review these recommendations for determination of effect and provide your comments on this project as soon as possible. Please inform EKPC if any other threatened or endangered species or critical habitats should be addressed in regards to the proposed project. If you need any further information or wish to discuss this project, please feel free to contact me at (859) 745-9799 or by email at josh.young@ekpc.coop.

Thank you very much for your assistance in this matter.

Sincerely,

Josh Young
Supervisor, Natural Resources
& Environmental Communications

Enclosures

cc: Jerry Purvis (EKPC), Darrin Adams (EKPC), Steve Anderson (EKPC)

ENCLOSURES

W. R. Smoot #1
W. R. Smoot #2
Boone Transmission
Boone Distribution
Webster Road
Turkey Foot
Richardson #2
Richardson #1
Bristow #1
Bristow #2
Turkey Foot Jct.
MBUSA
Duro #2
Duro #1
Bank Lick
Richwood
Stanley Parker
Big Bone
Bavarian Plant
Bavarian Landfill Generator
Sterling
Munk
Oakley Noel
Munk Junction
Williamstown

Doe Run Lake
Kenton County Golf Course
Union
Independence
Triple Crown Country Club
Big Bone Lick State Park
Walton
Patriot
Ohio River
Verona
Crittenden
Glencoe
Jonesville
Dry Ridge
Williamstown
EAST BOTTOM
KENTUCKY
INDIANA
MEXICO BOTTOM
STEELE BOTTOM
KENTUCKY
INDIANA
GALLATIN GRANT
PENDLETON GRANT
BOONE
Big South Fork
Ten Mile Creek
North Fork Middle Fork Grassy Creek
Middle Fork Grassy Creek
Jacks Lick
500 ft
929 ft
75
71
74

Boone - Williamstown 69 kV Transmission Line Rebuild/Reconductor

Overview Map

N

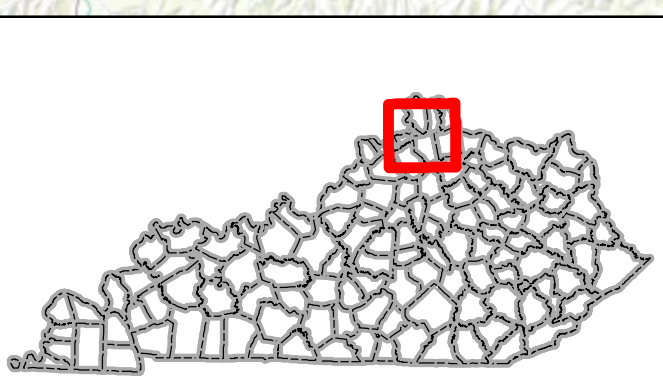
Proposed Line Rebuild

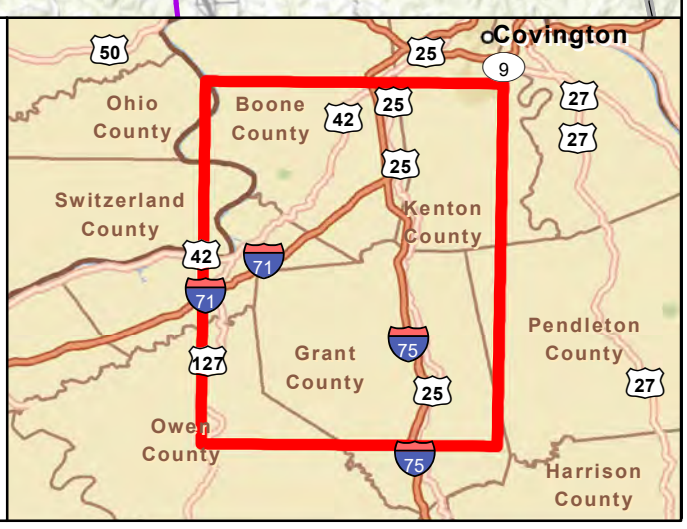
Proposed Line Reconductor

Existing Transmission Lines

EKPC Substations

0 1.5 3 6 Miles





Boone - Williamstown 69 kV Transmission Line Rebuild/Reconductor

Topo Map 1 of 4

- Proposed Line Reconductor
- Proposed Structure Replacements
- Proposed Structure Modifications
- Proposed Line Rebuild
- Existing Transmission Lines
- Existing EKPC Substations

N

0 0.3 0.6 1.2 Miles

Boone Distribution Substation

Cem

Substation

Long Branch

Gunpowder

Ernst Camp Road

Camp Michael

Hueys Corners

Union Ch

Cem

Riddles Run

Union Bone Church Road

Big Bone Creek

Rice Pike

Big Bone Ch

Pipelines

New Haven Sch

Howlett Cem

Dark Hollow

Roadside Park

Boone - Williamstown 69 kV Transmission Line Rebuild/Reconductor

Topo Map 2 of 4

N

- Proposed Line Reconductor
- Proposed Structure Replacements
- Proposed Structure Modifications
- Proposed Line Rebuild
- Existing Transmission Lines
- Existing EKPC Substations

0 0.3 0.6 1.2 Miles

Big Bone Substa
Baker Cem
BIG BONE LICK STATE PARK
Campground
WT
Big Bone
Beaverlick Ch
Buzzard Branch Mud
Lick
Creek
Hume
South Fork Little
BOONE CO
GALLATIN CO
Big South Fork
McPherson
Mud Lick
INTERCHANGE 72
Cem
Carr Cem
ROAD
BROWN
BAKER
ALLPHIN
PORTER
RYAN
PODLE
NASHVILLE

Boone - Williamstown 69 kV Transmission Line Rebuild/Reconductor

Topo Map 3 of 4

- Proposed Line Reconductor
- Proposed Structure Replacements
- Proposed Structure Modifications
- Proposed Line Rebuild
- Existing Transmission Lines
- Existing EKPC Substations

N

0 0.3 0.6 1.2 Miles

Munk

Oakley Noel

Boone - Williamstown 69 kV Transmission Line Rebuild/Reconductor

Topo Map 4 of 4

- Proposed Line Reconductor
- Proposed Structure Replacements
- Proposed Structure Modifications
- Proposed Line Rebuild
- Existing Transmission Lines
- Existing EKPC Substations

N

0 0.325 0.65 1.3 Miles

Munk Junction

Williamstown

Delia

Four Corners

Dry Ridge

Lake Politwog

Conrad Cem.

McGuinn's Cem.

Martin Cem.

Barnes Cem.

Clay Cem.

Clarks Creek Ch.

Redman Cem

Trailer Pk

County High Sch.

Jacks Lick

Clay Lick

Clarks Creek

Williams Branch

Arnolds Creek

Lake

Boone - Williamstown 69 kV Transmission Line Rebuild/Reconductor

Suitable Bat Habitat Aerial Map 1 of 7

Boone Distribution

Boone Transmission

Suitable Bat Habitat

Proposed Line Reconductor

Proposed Structure Replacements

Proposed Structure Modifications

Proposed Line Rebuild

Existing Transmission Lines

Existing EKPC Substations

N

0 1,000 2,000 4,000 Feet

0.011 0.016 0.096 0.017 0.064 0.039 0.245 0.098 0.13 0.103 0.03 0.102 0.113 0.385 0.064 0.187 0.074 0.08 0.039 0.047 0.021 0.157 0.058 0.456 0.074 0.27 0.047 0.155 0.011 0.17 0.12

Boone County Arboretum Children's Garden

Hueys Corners

Longbranch Rd

Hathaway Rd

Camp Ernst Rd

Riddles Run

Big Bone Rd

Big Bone Creek

Gunpowder Creek

Long Branch

Ballyshannon Dr

Rice Pike

Boone - Williamstown 69 kV Transmission Line Rebuild/Reconductor

Suitable Bat Habitat Aerial Map 2 of 7

- Suitable Bat Habitat
- Proposed Line Reconductor
- Proposed Structure Replacements
- Proposed Structure Modifications
- Proposed Line Rebuild
- Existing Transmission Lines
- Existing EKPC Substations

N

0 1,000 2,000 4,000 Feet

Boone - Williamstown 69 kV Transmission Line Rebuild/Reconductor

Suitable Bat Habitat Aerial Map 3 of 7

- Suitable Bat Habitat
- Proposed Line Reconductor
- Proposed Structure Replacements
- Proposed Structure Modifications
- Proposed Line Rebuild
- Existing Transmission Lines
- Existing EKPC Substations

N

0 1,000 2,000 4,000 Feet

Boone - Williamstown 69 kV Transmission Line Rebuild/Reconductor

Suitable Bat Habitat Aerial Map 4 of 7

- Suitable Bat Habitat
- Proposed Line Reconductor
- Proposed Structure Replacements
- Proposed Structure Modifications
- Proposed Line Rebuild
- Existing Transmission Lines
- Existing EKPC Substations

N

0 1,000 2,000 4,000 Feet

Boone - Williamstown 69 kV Transmission Line Rebuild/Reconductor

Suitable Bat Habitat Aerial Map 5 of 7

- Suitable Bat Habitat
- Proposed Line Reconductor
- Proposed Structure Replacements
- Proposed Structure Modifications
- Proposed Line Rebuild
- Existing Transmission Lines
- Existing EKPC Substations

N

0 1,000 2,000 4,000 Feet

Boone - Williamstown 69 kV Transmission Line Rebuild/Reconductor

Suitable Bat Habitat Aerial Map 6 of 7

- Suitable Bat Habitat
- Proposed Line Reconductor
- Proposed Structure Replacements
- Proposed Structure Modifications
- Proposed Line Rebuild
- Existing Transmission Lines
- Existing EKPC Substations

N

0 1,000 2,000 4,000 Feet

Munk Junction

Boone - Williamstown 69 kV Transmission Line Rebuild/Reconductor

Suitable Bat Habitat Aerial Map 7 of 7

- Suitable Bat Habitat
- Proposed Line Reconductor
- Proposed Structure Replacements
- Proposed Structure Modifications
- Proposed Line Rebuild
- Existing Transmission Lines
- Existing EKPC Substations

N

0 1,000 2,000 4,000 Feet

Williamstown

Baton Rouge Rd

Clay Lick

Clarks Creek

Williams Branch

Conrad Cemetery

Barnes Cemetery

Clay Cemetery

Barnes Rd

Garter Gl

Martin Rd

Steammill Branch

Stewartsville Rd

KY Highway 36 W

156

75

36

0.004 0.045 0.048 0.04 0.01 0.051 0.002 0.01 0.042 0.117 0.007 0.02 0.051 0.073 0.025 0.024 0.042 0.051 0.006 0.033 0.029 0.073 0.054 0.007 0.022 0.019 0.003 0.009 0.023 0.005 0.006 0.017 0.018 0.028 0.008

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

March 19, 2021

Josh Young
East Kentucky Power Cooperative, Inc.
4775 Lexington Road
Winchester, KY 40391

Subject: FWS 2021-B-0221; East Kentucky Power Cooperative Boone-Williamstown 69 kV Transmission Line Re-conductor/Rebuild Project in Boone, Gallatin, and Grant Counties, Kentucky

Dear Mr. Young,

The U.S. Fish and Wildlife Service's (Service) Kentucky Field Office (KFO) has reviewed the above-referenced project information and species determinations received by our office on March 3, 2021. EKPC proposes to rebuild, operate, and maintain the existing transmission line section located in portions of Boone, Gallatin, and Grant Counties, Kentucky. The KFO offers the following comments in accordance with the Endangered Species Act of 1973 (87 Stat. 884, as amended; 16 U.S.C. 1531 et seq.).

Project Description
The project is approximately 28.5 miles in length. The project would require replacement of the existing conductor with a larger size conductor. In addition, many of the single pole-wood structures would need replaced with steel-pole structures, and necessary modifications. The proposed project would require the removal of forested areas.

Federally Listed Species
EKPC has determined that the proposed action has the potential to affect the gray bat (*Myotis grisescens*), Indiana bat (*Myotis sodalis*), northern long-eared bat (*Myotis septentrionalis*), clubshell (*Pleurobema clava*), fanshell (*Cyprogenia stegaria*), northern riffleshell (*Epioblasma toulosa rangiana*), orangefoot pimpleback (*Plethobasus cooperianus*), pink mucket (*Lampsilis abrupta*), purple cat's paw (*Epioblasma obliquata obliquata*), rabbitsfoot (*Quadrula cylindrica cylindrica*), ring pink (*Obovaria retusa*), rough pigtoe (*Pleurobema plenum*), Sheepnose *(Plethobasus cyphyus*), spectaclecase (*Cumberlandia monodonta*), and running buffalo clover (*Trifolium stoloniferum*).

<u>Indiana Bat</u>
There are no caves or cave-like features within the project area that could be used as winter roosts by the Indiana bat. The proposed project occurs in "potential" Indiana bat habitat and requires the removal of 44.76 acres of forested habitat. EKPC proposes to remove this habitat

during the unoccupied timeframe for the species within the forested landscape (October 15 – March 31). EKPC has chosen to make a voluntary payment to the Imperiled Bat Conservation Fund (IBCF) as part of the proposed action to address Indiana bat habitat loss. A voluntary payment to the IBCF is a conservation measure that is identified in the KFO's 2016 *Revised Conservation Strategy for Forest-Dwelling Bats* (Conservation Strategy). Based on the Conservation Strategy, the voluntary payment to the IBCF should be $87,729.60[1]

We have determined that the proposed action is consistent with the actions evaluated in the 2015 Biological Opinion: *Kentucky Field Office's Participation in Conservation Memoranda of Agreement for the Indiana Bat and/or Northern Long-eared Bat* (BO) that supports the Conservation Strategy. Any incidental take of Indiana bats resulting from forested habitat removal are not prohibited. The BO concludes that this incidental take is not likely to jeopardize the continued existence of the Indiana bat. To complete this proposed conservation measure, the applicant should mail the voluntary payment to the Imperiled Bat Conservation Fund administered by Kentucky Natural Lands Trust. **The check or money order should be made payable to <u>Kentucky Natural Lands Trust</u> with "Imperiled Bat Conservation Fund" in the memo line. At this time, payments can only be received via U.S. Postal Service delivery due to office closures in response to COVID-19.**

Mail to:
Imperiled Bat Conservation Fund
c/o Kentucky Natural Lands Trust
433 Chestnut Street
Berea, KY 40403

The voluntary payment should include a cover letter with the following information: the applicant's name, the FWS project number referenced in the subject line of this letter, and a contact name and address to receive the receipt of payment.

<u>Gray bat</u>
No caves or cave-like features that could provide suitable roosting habitat for the gray bat were identified within the project area. To avoid and minimize impacts to gray bat foraging habitat, EKPC will prepare, implement, and maintain a Storm Water Pollution Prevention Plan that outlines how and where Best Management Practices will be used. This approach will prevent or reduce the discharge of pollutants and minimize erosion and sedimentation during the construction period. Consequently, the KFO agrees that the proposed project "may affect, but is not likely to adversely affect" the gray bat.

<u>Northern Long-eared Bat</u>: EKPC addressed potential effects to the northern long-eared bat by requesting reliance on the Service's programmatic biological opinion for the 4(d) rule through the Service's Information for Planning and Consultation (IPaC) system (Consultation Code: 4EK1000-2021-TA-0131). We have no additional comments or concerns regarding this species.

[1] The calculated amount is based on the current average value of farm real estate in Kentucky as reported by the U.S. Department of Agriculture in the Land Values and Cash Rents document ($3,920). This figure is updated annually around the first week in August. If payment is not made prior to August 2021, please contact the KFO to confirm the current cost value.

Federally listed mussels

A total of 16 perennial streams, 10 of which could provide suitable habitat for mussels occur within the project vicinity. The transmission line currently spans these streams and will continue to span them after project completion. No construction activities will occur in the streams. To avoid and minimize indirect impacts to the streams from the project, EKPC will prepare, implement, and maintain a Storm Water Pollution Prevention Plan that outlines how and where Best Management Practices will be used. This approach will prevent or reduce the discharge of pollutants and minimize erosion and sedimentation during the construction period. For these reasons, the KFO agrees that the proposed project "may affect, but is not likely to adversely affect" the previously identified federally listed mussel species.

Running buffalo clover

Qualified biologists assessed suitable habitat for the species throughout the project area, and field surveys were conducted during the optimal time of year (flowering season). No running buffalo clover was documented within the project area; therefore, we agree that the proposed action is not likely to adversely affect this species.

Summary

The KFO agrees that the proposed project "may affect, but is not likely to adversely affect" the gray bat, federally listed mussel species, and running buffalo clover. We also agree that the project is consistent with the IBCF process. Please be aware that our agreement with the federally listed species determinations does not authorize implementation of any part of the proposed action or remove the applicant from the permitting requirements that may be required by other State and federal agencies. If the proposed action is subsequently modified or new information indicates that the proposed action may affect listed species or their habitat in a manner not previously considered, additional coordination with our office may be necessary.

We appreciate the opportunity to review the proposed project. If you have any questions, please contact Phil DeGarmo of my staff at 502-695-0468, extension 46110.

Sincerely,

for Virgil Lee Andrews, Jr.
Field Supervisor

EAST KENTUCKY POWER COOPERATIVE

March 26, 2021

Imperiled Bat Conservation Fund
c/o Kentucky Natural Lands Trust
433 Chestnut Street
Berea, KY 40403

RE: East Kentucky Power Cooperative; FWS 2021-B-0221 IBCF Contribution
Boone-Williamstown 69 kV Transmission Line Reconductor/Rebuild Project
Boone, Gallatin, and Grant Counties, Kentucky

To Whom It May Concern,

East Kentucky Power Cooperative, Inc. (EKPC) is using the U.S. Fish and Wildlife Service – Kentucky Field Office's *2016 Revised Conservation Strategy for Forest-Dwelling Bats in the Commonwealth of Kentucky* (Conservation Strategy) process to offset forest losses that would potentially impact the federally listed Indiana bat (*Myotis sodalis*) from implementation of the above-referenced project in Boone, Gallatin, and Grant Counties, Kentucky. As a part of the Conservation Strategy process, EKPC has proposed to contribute to the Imperiled Bat Conservation Fund (IBCF), and this contribution will fund imperiled bat habitat protection, conservation, restoration, and/or priority monitoring and research projects involving this federally listed species.

Enclosed please find the contribution to the IBCF in the amount of $87,729.60 for impacts to potential Indiana bat habitat from October 15 – March 31. We look forward to receiving proof of payment to the IBCF from your office. Thank you for your efforts in this matter and please let me know if there are any questions at josh.young@ekpc.coop or (859) 745-9799.

Sincerely,

Josh Young
Supervisor, Natural Resources &
Environmental Communications

Enclosures

cc: Jerry Purvis, EKPC
Ronnie Terrill, EKPC
Doug Meadows, EKPC

4775 Lexington Road 40391
P.O. Box 707, Winchester
Kentucky 40392-0707

Tel. (859) 744-4812
Fax: (859) 744-6008
http://www.ekpc.coop

Josh Young

From: Angie Allman <angie@knlt.org>
Sent: Monday, March 29, 2021 11:32 AM
To: Josh Young; Donna Alexander
Cc: DeGarmo, Phil; Lee Andrews; Garland, Jennifer
Subject: IBCF Check Received - 2021-B-0221

Dear Mr. Young:

KNLT received a check for the Imperiled Bat Conservation Fund. Please be aware that this receipt does not authorize implementation of any part of the proposed action or remove any permitting requirements that may be required by other state and federal agencies. If you have project specific questions you will need to contact the USFWS staff cc'd on this email.

East KY Power Coop. Amount Received: $87,729.60 FWS#2021-B-0221

If you are interested in learning more about the Imperiled Bat Conservation Fund, please visit the webpage at http://knlt.org/ibcf/.

Sincerely,
Angie

Angie Allman, Development Coordinator
Kentucky Natural Lands Trust
Protecting, Connecting & Restoring Wildlands
Mailing Address: 433 Chestnut Street, Berea, KY 40403
859-986-0744 | KNLT.org
Facebook | Instagram | Twitter | Vimeo | #kywildlands

Exhibit E. Cultural Resource Survey Reports

ON FILE – REPORTS ARE CONFIDENTIAL

Exhibit F. Project Justification

Project Form (Form) / Boone County-Williamstown Reconductor (Item) / Today (Data as of: Sep 30, 2021)

Form Report, printed by: Young, Josh, **Sep 30, 2021**

RUS CWP

Work Plan Description	
Project:	Boone County-Williamstown Reconductor
Scope:	Rebuild 28.5 miles with 556.5 ACSR/TW conductor, re-build single pole sections with steel poles (4.75 miles), change out approximately 25% of H-structures (vs. 20% for 266.8) – this would leave approximately 140 wood “H” frame structures total. Add X-braces and arm braces to all remaining H-frame structures. Replace all guy wires and most anchors. Maintenance will continue to replace wood structures as needed & clear danger trees.
Project Type:	Capital
Category:	Transmission Lines (New, Additions, Modifications)
Justification:	LineVue robot from Kinectrics Corporation revealed: “DX” conductor is below average. “CY” conductor is average condition. “BH” conductor is in poor condition. Reliability has ranked these line sections 6th, 15th, and 5th respectively in terms of line sections needing to be considered for a rebuild based upon a weighted spreadsheet. Open work orders (16). Bad pole top (3). Damaged pole (3). Missing ground (1). Woodpecker holes top (6). Check cross arm for rot (1). Leaning pole (2). Line is approximately 60 years old. The fiber is owned by KDL/Windstream. Telecom owns only 4/24 fiber strands and requires more for our system. Owen Electric also has traffic on the fibers. There is an issue with post-contingency voltage (<0.9 pu) in the area that requires a switching procedure to mitigate. The area also experiences voltage drop (>10%) for the loss of the same contingency. Loss of Owen Co. – Bromley 69kV. 2017 Planning Criteria Study identified 14 scenarios where 556.5/TW conductor was required.
Outage:	
Payback Opportunity:	
Environmental:	Environmental Review is Required - JP
Start Date:	Jun 03, 2019
Start Date (Legacy Data):	May 24, 2018
End Date (Legacy Data):	Dec 31, 2023
End Date :	May 10, 2024
740C Code:	1005.00

3 Year Capital Budget

	Total Project Cost	22,069,105	
Year	2022	2023	2024
Annual Project Cost	9,570,000	8,420,000	3,240,000
Site Acquisition	150,000.00	0.00	
Contract Labor	4,750,000.00	4,500,000.00	2,000,000.00
Contract Material	4,250,000.00	3,500,000.00	1,000,000.00
O/S Consulting	200,000.00	200,000.00	100,000.00
Owner's Cost			
Labor ST	100,000.00	100,000.00	60,000.00
Labor OT	20,000.00	20,000.00	10,000.00
Taxes & Benefits	50,000.00	50,000.00	30,000.00
Travel	30,000.00	30,000.00	20,000.00
Miscellaneous	20,000.00	20,000.00	20,000.00

Approved Change Authorizations			

Comments:		
Contact Person:	Brad Young, Director, Construction & Capital Management - 859/745-9287	—