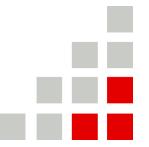
DECEMBER 13, 2019 2019 - REVISED MAY 29, 2020



PHASE I ARCHAEOLOGICAL SURVEY FOR THE KY 194 RECONSTRUCTION PROJECT, PIKE COUNTY, KENTUCKY

Item No. 12-198.00

PROJECT NUMBER PR19019

TECHNICAL REPORT 19098







SUBMITTED TO:

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PHASE I ARCHAEOLOGICAL SURVEY FOR THE KY 194 RECONSTRUCTION PROJECT, PIKE COUNTY, KENTUCKY

KYTC Item No. 12-198.00 OSA Project No. FY20-10445

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December 13, 2019 Revised May 29, 2020

ABSTRACT

On October 16, 2019, Corn Island Archaeology LLC completed a Phase I archaeological survey for the KY 194 Reconstruction Project (KYTC Item No. 12-198.00) in Pike County, Kentucky. The survey area consisted of an approximately 5,160-meter or 3.2-mile corridor for proposed improvements along KY 194 from the US 119 ramp near Smith Farms Bottom (CR 1458) to near Deskins Branch culvert. HDR, Inc. requested the archaeological survey to meet federal and state compliance requirements relative to cultural resources management prior to the planned reconstruction. The archaeological survey was completed primarily by ground surface inspection. Shovel testing on one area was terminated due to the presence of buried gravel.

The project area of potential effects encompassed 30.56 hectares (73.52 acres). It was partially located within property owned by a coal company, an energy company, and a private company. The proposed project area consisted mainly of forested ridges and hills consisting of slope greater than 15 percent and overgrown pastureland. The survey produced no evidence for intact cultural deposits that may have been associated with former residential buildings in the area. No cultural material was recovered during the survey. As such, no archaeological sites or other cultural resources were identified during the field investigation. No sites listed in, or eligible for listing in, the National Register of Historic Places will be affected by the planned undertaking. Therefore, no further archaeological investigation is recommended. Should any work be extended beyond the current area of potential effect, further investigation may be needed to assess for potential deposits or features associated with previously extant residences.

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ABBREVIATIONS AND ACRONYMS

A.D. AMSL APE B.C. B.P. bs ca. cm cm bs e.g. FR ft GIS GPS GSV ha KDOH KYTC m mi MMPA NRCS NRHP OSA ROW RPA SHPO STP(s) USDA	after the birth of Christ above mean sea level Area of Potential Effects before the birth of Christ before present below surface circa centimeter(s) centimeter(s) below surface example Federal Regulation foot (feet) Geographic Information System Global Positioning System ground surface visibility hectare Kentucky Department of Highways Kentucky Transportation Cabinet meter(s) mille(s) millimeter(s) National Historic Preservation Act of 1966 Natural Resources Conservation Service National Register of Historic Places Office of State Archaeology ROW Registered Professional Archaeologist State Historic Preservation Office shovel test probe(s) United States Department of Agriculture
-	

1

INTRODUCTION

Corn Island Archaeology LLC, in support of the Kentucky Transportation Cabinet (KYTC), completed a Phase I archaeological survey for the KY 194 Reconstruction Project (KYTC Item No. 12-198.00) in Pike County, Kentucky (**Figure 1**). The survey was conducted on October 16, 2019 and consisted of an approximate 5,160-meter (m) long (3.2-mile) corridor for proposed

improvements along a stretch of KY 194 (**Figure 2**). Several waste areas (Alma Land Waste Area 2A, Alma Land Waste Area 2B, and Waste Site 3-Mine Area) had originally been included in the proposed undertaking and were included in the archaeological survey. However, two of these waste areas (Alma Waste Area 2B and Waste Site 3-Mine Area) were later dropped from consideration after the archaeological survey had been completed. As they had already been surveyed, their coverage is included in this report, but these areas are not now considered



Figure 1. Location of Pike County, Kentucky.

as part of the current project area of potential effect (APE). Thus, the entire surveyed area (project area) encompasses 59.9 acres, while the APE encompassed 30.56 hectares (ha) or (73.52 acres). The survey was required to meet federal compliance requirements relative to cultural resources management prior to the reconstruction. The archaeological survey was completed using ground surface inspection. No shovel test probes (STP) were able to be performed because the entire project area was either sloped greater than 15 percent or the ground was disturbed from previous mining or construction activities.

PROJECT DESCRIPTION

The project will entail improvements to KY 194 from the US 119 ramp near Smith Farms Bottom (CR 1458) to near Deskins Branch culvert, a distance of 3.2 miles. Much of the corridor extends through previously disturbed areas. Corn Island conducted a Phase I archaeological survey of the project APE of the project corridor. This work is required to determine the presence of cultural resources within the project APE that could be adversely affected by implementation of the project.

The proposed project plans provided by HDR, Inc. constituted the APE and consist of the project corridor and three associated waste disposal areas. The project corridor, in part, crosses private businesses and residential properties. While it was apparent that the majority of the proposed development area was paved, disturbed or sloped, it was unclear whether undisturbed and flat areas were present prior to field inspection and testing.

COMPLIANCE REQUIREMENTS

The study was conducted to comply with Section 106 of the National Historic Preservation Act (NHPA). This transportation project is federally funded and is therefore considered an undertaking subject to Section 106 review. The purpose of this assessment was to locate,

describe, evaluate, and make appropriate recommendations for the future treatment of any historic properties or sites that may be affected by the project. For the purposes of this assessment, a site was defined as "any location where human behavior has resulted in the deposition of artifacts, or other evidence of purposive behavior at least 50 years of age" (Sanders 2017:2). Cultural deposits less than 50 years of age were not considered sites. A description of the project area, the field methods used, and the results of this investigation follow. The investigation is intended to conform to the *Specifications for Conducting Fieldwork and Preparing Cultural Resource Assessment Reports* (Sanders 2017).

PROJECT STATEMENT OF WORK

The archaeological investigation described herein entailed the following tasks:

- A routine background records search at the Office of State Archaeology (OSA) in Lexington, Kentucky, to determine the level of existing documentation relevant to recorded archaeological sites and prior archaeological investigation(s), if any, at and near the site of the proposed undertaking;
- A review of archival documentation pertaining to the presence and locations of potential historical archaeological resources within the project APE;
- Ground surface inspection;
- Preparation of a professional technical report of findings per the standards of the Secretary of the Interior and the Kentucky Heritage Council (KHC)/State Historic Preservation Office (SHPO).
- Prepare a professional technical report per the standards of the Secretary of the Interior and the SHPO to provide a description of field investigations along with fieldwork findings. The report will provide clear recommendations regarding the clearance of the area for construction or the need for additional archaeological investigation, as appropriate.

FINDINGS

No previously recorded sites are located within the project APE. The survey produced no evidence for intact cultural deposits. No archaeological sites or other cultural resources were identified during the field investigation. No sites listed in, or eligible for listing in, the National Register of Historic Places (NRHP) will be affected by the planned undertaking. Therefore, no further archaeological investigation is recommended. Should any work be extended west beyond the current APE, further investigation may be needed to assess for potential deposits or features associated with previously extant residences.

PROJECT SCHEDULING AND STAFFING

The field portion of the survey required 16 manhours to complete by a crew of two over a period of one day. The project staff meets the requirements for professional archaeologists as detailed in the Secretary of the Interior's standards. Mr. William Hill, MA, RPA, served as Principal Investigator for the project, and as Field Director. He was assisted in the field by Mr. Jonas Yates. Mr. Hill and Mr. Julian Schagene, MA prepared the technical report. Report graphics and mapping were prepared by Mr. Dave Schatz, MA and Mr. Joshua Thomson, BA.

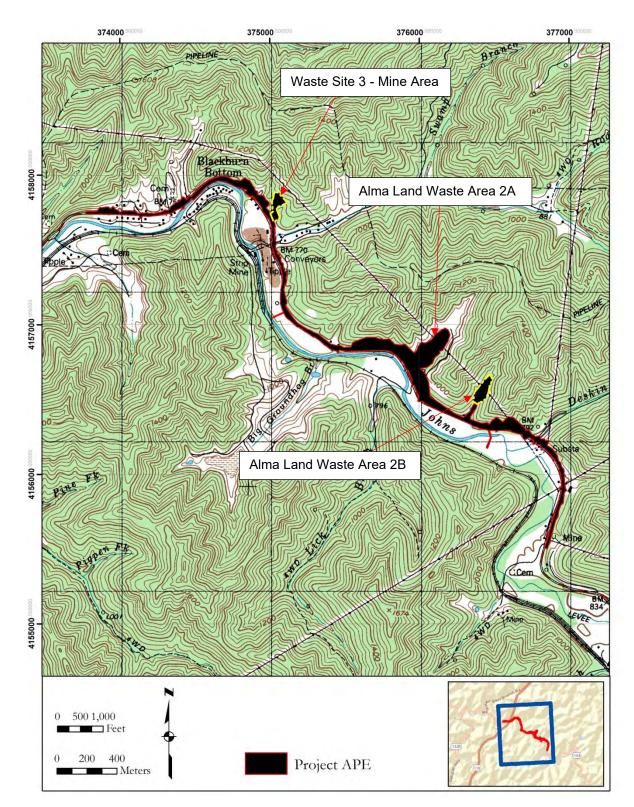


Figure 2. KY 194 Reconstruction Project (KYTC Item No. 12-198.00) APE on the 1992 Meta, KY U.S. Geological Survey (USGS) 7.5-minute topographic maps (including all waste areas).

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BACKGROUND RESEARCH

A records search request was made to the OSA in September 2019 to identify the presence of recorded previous archaeological investigations and recorded archaeological sites at the project location and within a 2-kilometer (km) or (1.2-mile) buffer of the APE. Fourteen previously conducted investigations and five archaeological sites are reported within this area.

PREVIOUS ARCHAEOLOGICAL INVESTIGATIONS

Fourteen professional archaeological surveys (**Table 1** and **Figure 3**) and five archaeological sites (**Table 2**) have been previously reported within a 2-km (1.2-mile) radius of the project APE. Three of the previous investigations cross into portions of the current project APE. These investigations included a survey for a coal mine by Hand (2004) that intersected the western portion of the project area APE; a survey for a proposed coal mine by Bradbury and Hudson that intersected the middle of the project area APE; and a survey by Kelley et al. (2009) that also intersects in the middle of the project area APE. None of the previously reported prehistoric sites are located within or nearby the APE.

A 1932 report by Webb and Funkhouser cites five prehistoric archaeological sites in Pike County. Surveys were made during the 1960s and 1970s in the Fishtrap Reservoir, which Dunnell (1966) indicated was the location of 27 prehistoric sites. In 1975, Allen carried out two surveys on behalf of urban development projects in the Pikeville area; however, these yielded no historic or prehistoric sites.

Previously Conducted Archaeological Surveys

The earliest survey conducted within the 2-km (1.2-mile) buffer was performed in 1973 by Western Kentucky University for the proposed relocation of US 119 (Shock et al. 1976). Nine prehistoric sites were found in Pike County between South Williamson and Pikeville (Schock et al. 1976). An extensive array of cultural resources was found, including a considerable number of surface artifacts dating to the Archaic period featuring bone, clay and stone implements.

Dr. Jack Schock of Arrow Enterprises carried out an archaeological survey for six proposed water tank locations for the Pikeville water district/distribution system in 1987. No prehistoric or historic sites were identified within this project and no further archaeological work was recommended (Schock 1987).

On January 19, 1995, Cultural Resource Analysts (CRA) performed a Phase I archaeological survey for a proposed coal processing plant on John's Creek in Pike County. A survey of the 36-acre project area, which included pedestrian survey, shovel testing and bucket auger testing, found no prehistoric or historic sites, and no sites listed in or eligible for inclusion in the NRHP would be affected by the coal mining operation (Hand 1995).

Cultural Horizons Inc. carried out an archaeological survey in 1996 for the proposed realignment of US 119 from Zebulon to Bent Mountain in Pike County. The only cultural resource discovered

was a twentieth-century cemetery with six marked graves ranging from 1926 to 1960. The cemetery was determined to be ineligible for inclusion in the NRHP (Thomas et al 1996).

In December 1999 and again in January and February 2000, Betty McGraw (2000) conducted an archaeological survey of approximately 493 ha (1,217 acres) in Pike County for the Bevins Branch coal mining project permit application. A historic farmstead was identified in the project area though no prehistoric sites were found (a log house in the area had burned in 2000). There was no evidence of intact subsurface cultural deposits, and square cut nails were the only diagnostic artifacts found.

CRA performed a Phase I archaeological survey in March 2000 for a proposed surface coal mine operation along Blevins Branch in Pike County (Bradbury and Hudson 2000). An intensive pedestrian survey of the 5-ha (12.5-acre) project area found identified one standing structure; however, it proved to be ineligible for inclusion in the NRHP. Cultural resource clearance was granted.

On July 13 and 14, 2000, CRA completed an archaeological survey for a proposed coal mining operation approximately 4 km (2.3 miles) from Meta in Pike County. A previously recorded site (15PI183) was identified along a long-haul road, and two standing structures were found within the project boundary. None of the resources met the criteria for NRHP eligibility (Bybee 2000).

In October 2001, AMEC Earth & Environmental, Inc. (AMEC) carried out a Phase I archaeological survey for a proposed waste area at Scott Fork in Pike County, in conjunction with the US 119 realignment. The 22-ha (54-acre) site produced no archaeological sites or cultural resources. Consequently, archaeological clearance was granted (Schatz and Evans 2001).

A Phase I archaeological survey of 11 ha (27 acres) along Little Groundhog Hollow in Pike County was conducted on October 6, 2003 for a coal mine refuse area. No cultural resources were identified. Pedestrian survey and shovel testing revealed an area disturbed by waste disposal activities with no sites listed in, or eligible for listing in, the NRHP (D'Ambruoso 2003).

CRA also completed an archaeological survey in October 2003 along Cabin Knoll Branch of Johns Creek in Pike County. After an intensive pedestrian survey, augmented by shovel testing, it was determined that no sites listed in, or eligible for inclusion in, the NRHP would be impacted by the proposed mining operations (D'Ambruoso 2005).

On April 9, 2009, an archaeological survey by CRA identified a previously unrecorded archaeological site during investigations in an approximately 92-ha (227-acre) project area in Pike County for a proposed coal mining operation near the town of Meta. Site 15PI183, which was listed as a 20th-century historic farm residence, included two standing structures and a well; however, the site failed to meet NRHP eligibility criteria. A previously unrecorded cemetery was also found, and a recommendation was made that the cemetery be avoided in all mining activities (Kelley et al 2009).

A Phase I archaeological survey was performed by Betty McGraw on October 21, 2009 for a 10acre mining project area in Pike County. During the project, a historic cemetery (site 15PI226) was identified near the edge of the 0.9-ha (2.24-acre) project area, although no other prehistoric or historic archaeological sites were discovered (McGraw 2010). In July 2013, Apogee carried out an archaeological survey for a proposed surface mine near Winn in Pike County. The 233-ha (575-acre) site resulted in the discovery of no new archaeological sites or standing historic structures (Winterhoff 2013).

In August 2017, a Phase I archaeological survey for the proposed Meta Appalachian Wireless Telecommunication Tower project determined that there were no known archaeological sites within the 0.27-ha (0.67-acre) project area. No new archaeological sites were identified as a result of this investigation (Webb 2017).

Report Title and Reference	Reference	SHPO ID
An Archaeological Survey of the Relocation of U.S. 119, Between South Williamson and Pikeville, Pike County, Kentucky	(Schock et al. 1976)	098-019
A Cultural Reconnaissance of Six Proposed Water Tank Locations for the Grapevine Area Water Distribution System Extension, Mountain Water District in Pike County, Kentucky	(Schock 1987)	098-030
A Coal Mine Survey Along John's Creek, Pike County, Kentucky	(Hand 1995)	098-132
A Phase I Archaeological Survey of the Proposed Realignment of KY 199, Zebulon to Bent Mountain, Pike County, Kentucky	(Thomas et al. 1996)	098-158
Phase I Archeological Survey of the Bevins Branch Resources, Inc. Bevins Branch Coal Permit Area, Pike County, Kentucky	(McGraw 2000)	098-212
An Archaeological Reconnaissance of a Proposed Coal Mine Operation Along Bevins Branch, Pike County, Kentucky	(Bradbury and Hudson 2000)	098-210
An Archaeological Survey of a Proposed Coal Mine Operation Along Lick Branch of Johns Creek in Pike County, Kentucky	(Bybee 2000)	098-225
Phase I Archaeological Survey for Proposed Waste Area in Scott Fork in Conjunction with the US 119 Realignment in Pike County, Kentucky	(Schatz and Evans 2001)	098-237
An Archaeological Reconnaissance of the Proposed Johns Creek Processing Refuse Area Along Little Groundhog Hollow in Pike County, Kentucky	(D'Ambruoso 2003)	098-258
An Archaeological Survey of a Proposed Coal Mining Operation Along Cabin Knoll Branch in Pike County, Kentucky	(D'Ambruoso 2005)	098-273
A Cultural Resource Survey of a Proposed Revision to the McCoy Elkhorn Coal Mine Operation on Lick Branch of Johns Creek in Pike County, Kentucky	(Kelley et al. 2009)	098-332
Phase I Archaeological Survey of the Budco Company, Inc. Lawson Branch Coal Permit Area, Pike County, Kentucky	(McGraw 2010)	098-349
A Phase I Archaeological Survey of the Proposed Landmark Mining Company, Inc. Surface Mine Located Along Winn Branch in Pike County, Kentucky		098-374
Phase I Archaeological Survey of the Proposed Meta Telecommunications Tower, Pike County, Kentucky	(Webb 2017)	098-405

Table 1. Previously conducted archaeological surveys within 2-km of the project area.

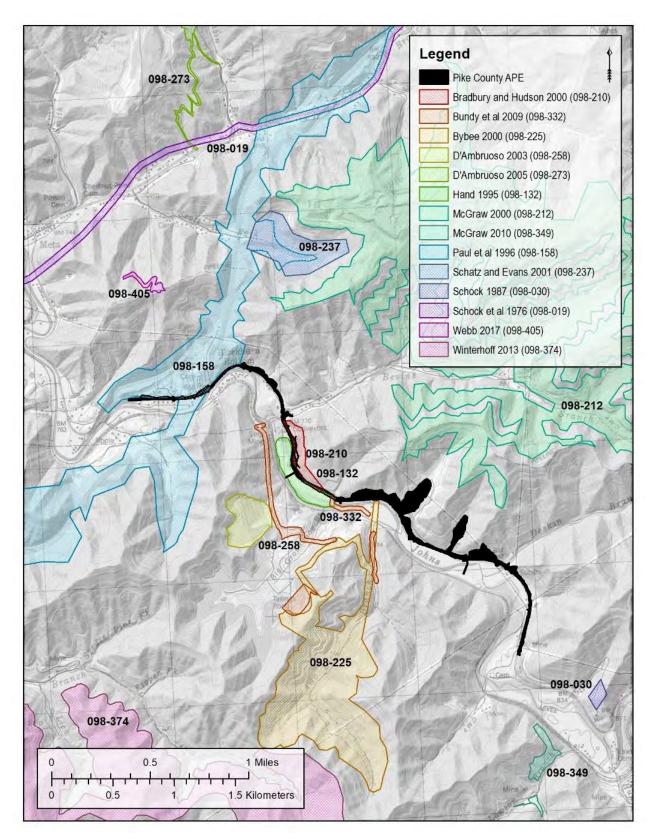


Figure 3. Locations of previous archaeological investigations.

Previously Recorded Archaeological Sites

The project APE is situated within the Upper Big Sandy Section of the Big Sandy Management Area, which has the lowest number of recorded sites (1,418 as of 2008) of any management area in the state (Stackelbeck and Mink 2008). As with most management areas, prehistoric open habitation sites without mounds are the most common site type (54 percent) reported, followed by historic farm sites (15 percent) and rockshelter sites (15 percent).

Five archaeological sites have been reported within or near the boundaries of the APE for the current study. Of the five previously reported archaeological sites within a 2-km (1.2-mile) buffer of the current project APE, two are prehistoric and three are historic. Four are classified as sites not assessed for the NRHP eligibility, while one is considered an inventory site.

Site Number	Temporal/Cultural Affiliation	Site Type	NRHP Status
15PI47	Late Woodland	Industrial	Not Assessed
15PI180	Historic Euro-American	Historic Farm/Residence	Inventory site
15PI183	Historic Euro-American	Historic Farm/Residence	Not Assessed
15PI226	Historic Euro-American	Open habitation without mounds	Not Assessed
15PI09	Early Archaic	Open habitation without mounds	Not Assessed

Table 2. Recorded archaeological sites within a 2-km (1.2-mile) buffer of the APE.

HISTORIC MAP REVIEW

A series of historical maps was examined to gain historical perspective on the area and to identify former buildings and structures that could contain associated archaeological deposits. Changes in land use, the locations of roadways, civic institutions and hubs of the communities (such as churches and schools), and names of property owners who resided in the area, often became evident during this review (**Table 3**).

The earliest map reviewed for this project was the 1887 USGS topographic map of the Warfield, Kentucky 30-minute quadrangle. There were no buildings or structures located within the project area APE on this map. The 1891 and 1905 USGS topographic maps of the Warfield, Kentucky 30-minute quadrangle also depict no buildings or structures within the project APE.

The 1915 USGS topographic map of the Williamson, Kentucky 15-minute quadrangle (USGS 1915) was also reviewed (**Figure 4** and **Figure 5**). This map depicts one building within the current project APE, at the mouth of Deskin Branch, north of KY 194 (**Figure 5**).

The 1918 and 1943 USGS topographic maps of the Williamson, Kentucky 15-minute quadrangle (United States Geological Survey 1918, 1943) depict two residential buildings within the project APE. The 1943 USGS version of the map is presented here because it is an updated reprinting of the 1918 USGS map. The first building is located west of where US 119 crosses KY 194 (**Figure 6**), while the other is located near the intersection of KY 194 and Deskins Branch Road (**Figure 7**).

The 1949 Kentucky Department of Highways (KDOH) Plan and Profile of the Proposed State Highway Project map (KDOH 1949) depicts road improvements along KY 194 from approximately the intersection of KY 194 and US 119 to east down KY 194 for 3 km (1.7 miles) (half of the project APE length). None of the buildings or structures depicted on this map are located within the project APE.

The 1954 topographic map of the Meta, Kentucky (United States Geological Survey 1954) quadrangle depicts two residential buildings and a school within the project APE. The first residential building appears west of where US 119 crosses over KY 194 (**Figure 8**). The Lawson School is located near the center of the project APE. One residential building is located at the mouth of an unnamed hollow located to the northeast of the mouth of Two Lick Branch (**Figure 9**).

Мар	Reference	
Topographic Map of the Warfield, Kentucky 30-minute Quadrangle	(United States Geological Survey 1887, 1891, 1905)	
Topographic Map of the Williamson, Kentucky 15-minute Quadrangle	(United States Geological Survey 1915)	
Topographic Map of the Williamson, Kentucky 15-minute Quadrangle	USGS 1918	
Topographic Map of the Williamson, Kentucky 15-minute Quadrangle	(United States Geological Survey 1943)	
Plan and Profile of Proposed State Highway Pike County Project S12.0(1)	(Kentucky Department of Highways 1949)	
Topographic Map of the Meta, Kentucky 7.5-minute Topographic Quadrangle	(United States Geological Survey 1954, 1978)	

Table 3. Reviewed historic maps.

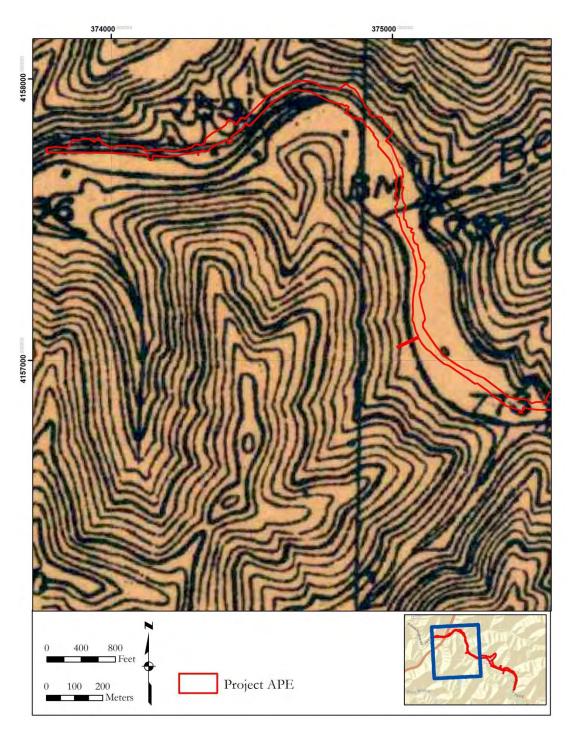


Figure 4. Western portion of the project area on 1915 Williamson topographic map (USGS 1915) showing no buildings.

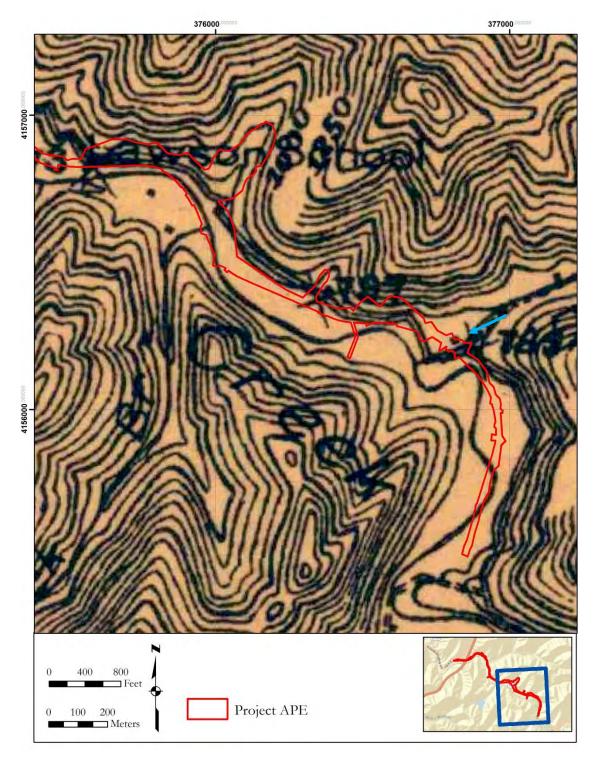


Figure 5. West portion of project area on 1915 Williamson topographic map (USGS 1915) showing building (blue arrow).

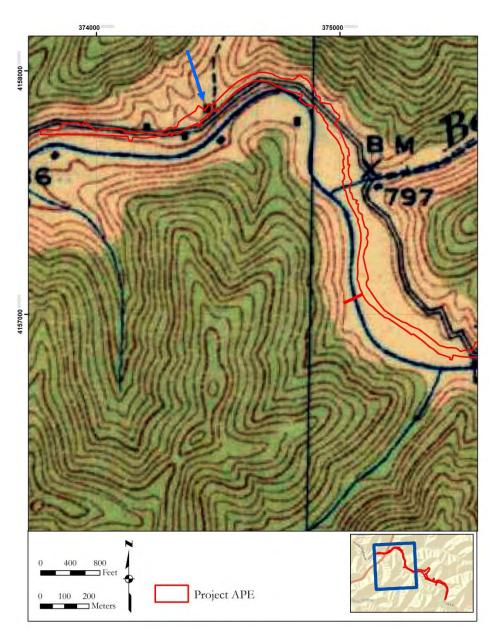


Figure 6. Western portion of the project area on 1918 Williamson topographic map (USGS 1918, 1943) showing building (blue arrow) in project APE.

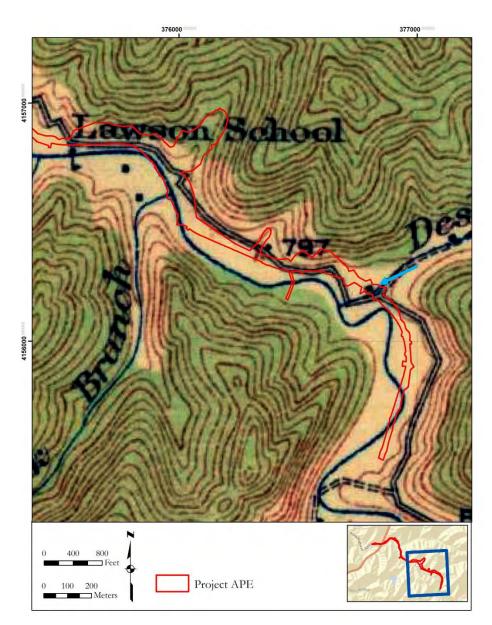


Figure 7. Eastern portion of project area on 1918 Williamson topographic map (USGS 1918, 1943) showing residence (blue arrow) in APE.

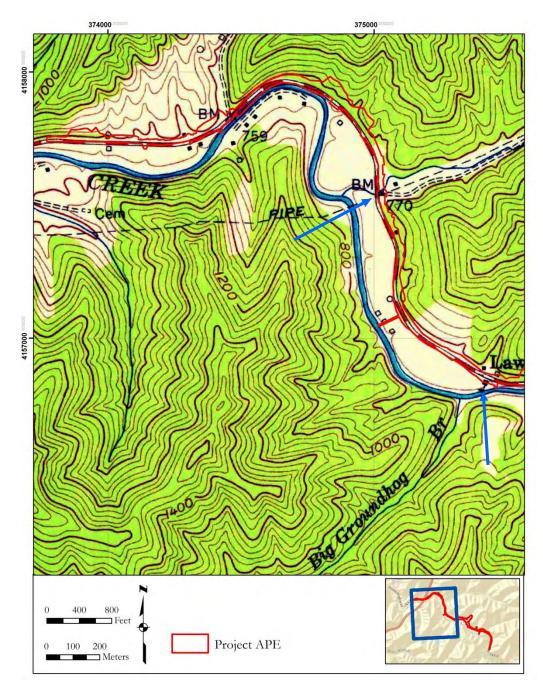


Figure 8. Western portion of the project area on 1954 Meta, Kentucky topographic map (USGS 1954) showing buildings (blue arrows) within APE.

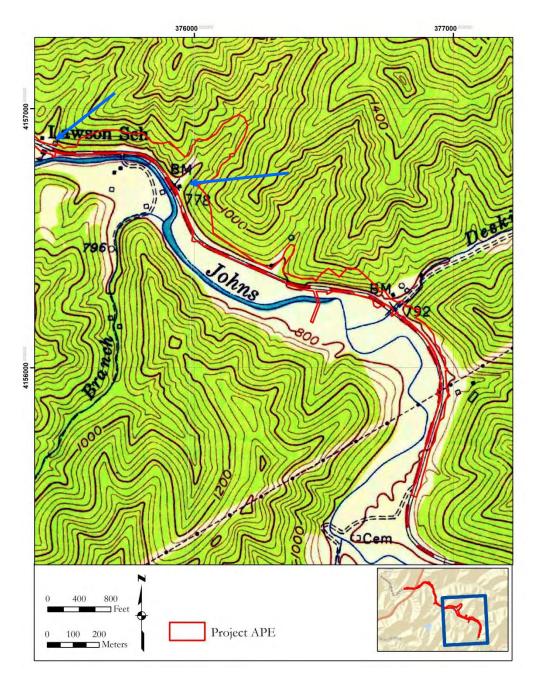


Figure 9. Eastern portion of project area on 1954 Meta, Kentucky topographic map (USGS 1954) showing buildings (blue arrows) within APE.

3

FIELD METHODS

This section describes the project area conditions and the general field methods of a survey of an approximate 5,160-m long (3.2-mile) corridor and waste disposal areas for proposed improvements along KY 194 in Pike County. The project APE encompasses 30.56 ha (73.52 acres) and was clearly delineated on topographic quadrangles, project mapping, and aerial photographs prior to initiation of fieldwork. The project APE was easily identified in the field. The project area consists of a continuous highway corridor with several divergent stream segments and waste areas. The entirety of the project area was developed, disturbed, or slope. The project area consists of KY 194 and associated land modifications, businesses and residential house lots, and privately-owned woods, clearings, and young drainages. Survey methods included the near-surface examination of the project area to determine the presence of above-ground indications of historic or prehistoric land use, as well as the attempted investigation of near-surface deposits, to determine the presence of intact subsurface remains. This was accomplished using primarily ground surface inspection (pedestrian reconnaissance). Shovel testing was attempted in one location but encountered gravel refusal and was terminated.

GROUND SURFACE INSPECTION AND PEDESTRIAN SURVEY

The entirely of the APE was subjected to a Phase I archaeological survey. Field methods included mainly pedestrian survey, which was conducted across the entire project area. Pedestrian survey was conducted along linear transects spaced no more than 20 m apart (Sanders 2017). In any area that were less than 20 m wide, the entire APE at that point was examined. Pedestrian survey focused on locating potential above-ground evidence of archaeological sites such as structural foundations, refuse dumps, wells and cisterns, gravestones, quarry pits, and earthen-and-stone mounds. Field personnel also examined the project area for caves, quarries, benches, rock faces, and rock overhangs that may have been utilized by prehistoric or historic groups. Areas in which ground disturbances were readily apparent were visually inspected to determine and document the nature and level of disturbance.

STP EXCAVATION

Shovel test probe (STP) excavation was expected to be conducted in undisturbed areas with slopes less than 15 percent at intervals spaced no more than 20 m (65.5 ft) apart along the project corridor. However, no STPs were excavated within the project area because the entire area exhibited either slope or ground disturbances. Shovel probing was attempted, however, in a flat area on the Kellogg property that appeared from a simple visual inspection to be potentially undisturbed. The shovel probing was terminated upon repeatedly encountering extensive gravel and fill under the topsoil.

MAPPING AND DOCUMENTATION

A *Delorme Earthmate PN-40* GPS (Global Positioning System) unit was used to record the locations of excavation units and archaeological sites. The project corridor, including archaeological site locations, excavation units, and relevant features and anomalies, was

photographed with a digital camera. A project field log was used to document survey conditions and strategies. Sketch maps of the project corridor, including artifact locations, topographic conditions, and excavation units, were also made.

4 RESULTS

PROJECT AREA CONDITIONS

The project area conditions are discussed herein from west to east along the right-of-way (ROW) of KY 194. The ROW constitutes the area of archaeological investigation and the APE, as shown in more detailed mapping in **Figure 10** through **Figure 14**. Several waste areas (Alma Land Waste Area 2A, Alma Land Waste Area 2B, and Waste Site 3-Mine Area) had originally been included in the proposed undertaking. However, two of these waste areas were later dropped from consideration (Alma Waste Area 2B and Waste Area 3-Mine Site) and are no longer included in the project APE. However, because the archaeological survey had already been conducted in these areas, their coverage is included in this report. The following maps (**Figure 10** through **Figure 14**) do not depict Alma Waste Area 2B or Waste Site 3-Mine Area which were also surveyed. Alma Waste

The mile points (MP) used in the following descriptions are derived from the KYTC Project Plan Archive website (2019). The project APE begins on KY 194 near the on ramp for US 119 at Mile Point (MP) 17.9 (Figure 15). At MP 18.2 the ROW reaches the intersection of Otis Hollow Road (Figure 16). Here two residential homes are located that are slated for relocation (Figure 17, and Figure 18). These structures were built on artificially cut and leveled hill slope. Continuing along KY 194 at MP 18.7 is the Waste Site 3-Mine Area (Figure 19 and Figure 20) and Parcel 19, a business that is also to be relocated (Figure 21). At MP 19 of KY 194, Bevins Branch Road will be reconfigured and moved closer to the residential building owned by David L. and Shiela C. Hunt (Figure 22 and Figure 23). Starting past the Hunt's residence along KY 194, the ROW will be expanded and the telephone and electrical lines will be moved (Figure 24).

At approximately MP 19.1 is the location for a proposed drainage pipe, which will cut through the McCoy Elkhorn Coal Corporation (**Figure 25**). At MP 19.4 is the entrance to Larry Childers Appalachian Land Company. Across KY 194 from Larry Childers Appalachian Land Company, the ROW will be widened and the telephone and electrical lines will be extended outside the ROW (**Figure 26**). At MP 19.5 is the location for a proposed drainage pipe that will cut across a portion of land owned by Quest Energy (**Figure 27** and **Figure 28**). From MP 19.5 of KY 194 to MP 20, the ROW is being extended (**Figure 29**). At MP 20 is the entrance to the Alma Land Waste Area 2A (**Figure 30** and **Figure 31**). The Alma Area 2A is benched by a road on the left side and ends at an artificial dam. Between MP 20.2 and MP 20.3 is another valley and the location of the Alma Land Waste Area 2B (**Figure 32** and **Figure 33**).

Across KY 194 from the Alma Land Waste Area 2B is the location of the Kellogg plant, where the ROW will be extended out from the roadway along with the telephone and electrical utilities lines (**Figure 34**). At MP 20.4, a drainage pipe is proposed to cut through part of the Kellogg property. This drainage location was at the time of the survey paved (**Figure 35**). A power station is located between MP 20.5 and MP 20.6. Across the street from the power station, the ROW is being extended along with the installation of a drainage pipe (**Figure 36**). At MP 20.7 of KY 194 are three residential houses (**Figure 37**). Just past the residential houses down KY 194 approximately 305 m (1,000 ft), the project area ends near MP 21.1 (**Figure 38**).

Ground surface visibility was typically poor, between 0 and 10 percent throughout the APE. The entire survey corridor was subjected to pedestrian survey, although no shovel tests were able to be completed within the project area. As mentioned, shovel probing was attempted near the Kellogg plant entrance but immediately encountered disturbed fill. The entire project APE was either sloped greater than 15 percent or the soil was disturbed due to construction, pavement, or mining activities.

RESULTS

The entirety of the project area was subject to pedestrian survey. Shovel probing was attempted in an area that appeared to be potentially intact but revealed disturbed fill deposits. The survey did not result in the discovery of any previously unrecorded archaeological sites. Although historical maps indicated that residential buildings once stood along some portions of the project corridor, between 1995 and 2004 the McCoy Elkhorn Coal Company expanded its mining operations and, in the process, apparently demolished these houses. The few areas along the project area that are located in areas with slope less than 15 percent have been heavily disturbed by highway construction, waste disposal areas, mining activities, residential or commercial construction, lot leveling, and associated landform modifications. As a result of the highly modified and steeply sloped landforms, the integrity of the entirety of the project area has been compromised. No cultural artifacts were recovered, or intact cultural deposits identified, during the current archaeological survey.

Two originally planned waste areas (Alma Waste Area 2B and Waste Site 3-Mine Area) were also subjected to pedestrian survey only; no shovel probes were excavated in these areas as they exhibited considerable prior disturbances. No archaeological materials were found in any of the originally planned waste areas.

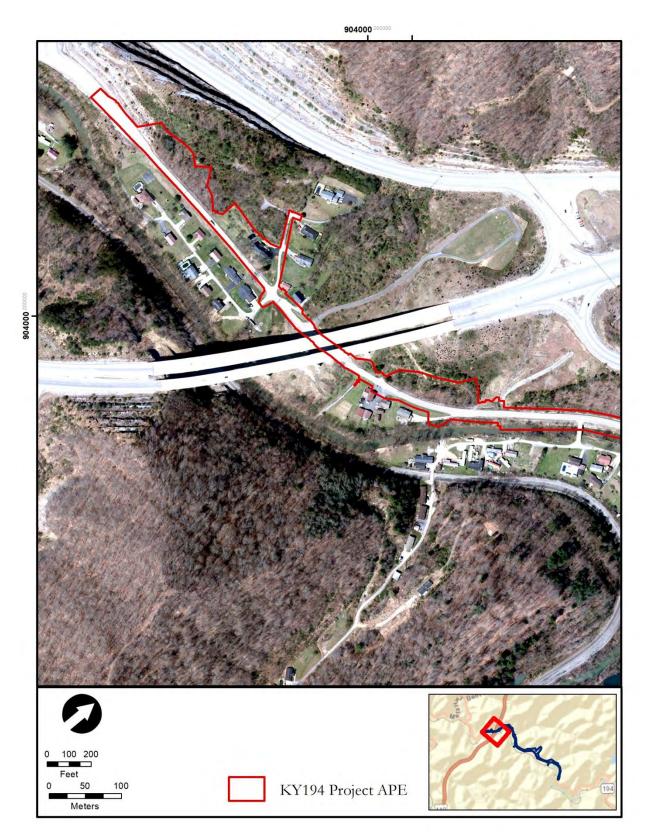


Figure 10. Project APE on 2019 NAIP orthoimagery (Section 1).



Figure 11. Project APE on 2019 NAIP orthoimagery (Section 2).

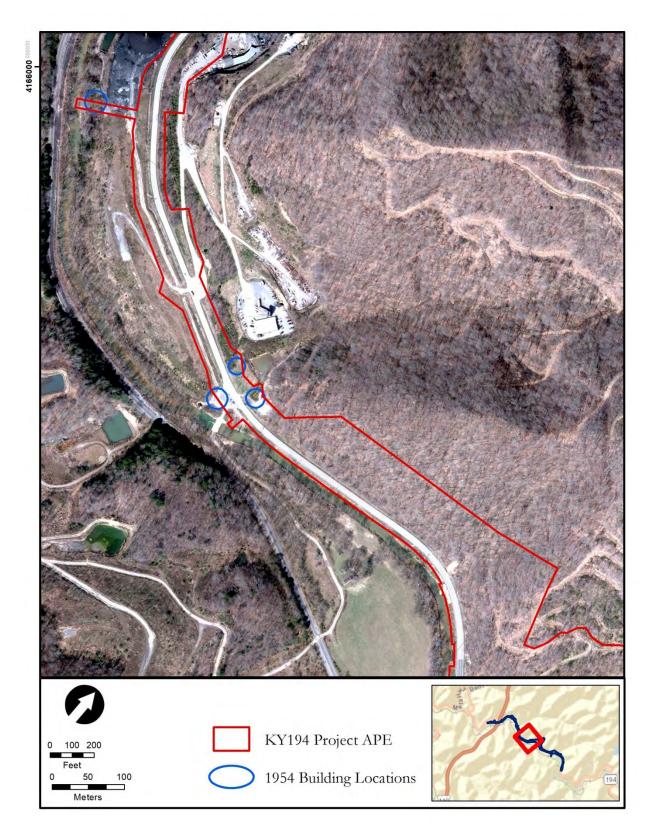


Figure 12. Project APE on 2019 NAIP orthoimagery (Section 3).

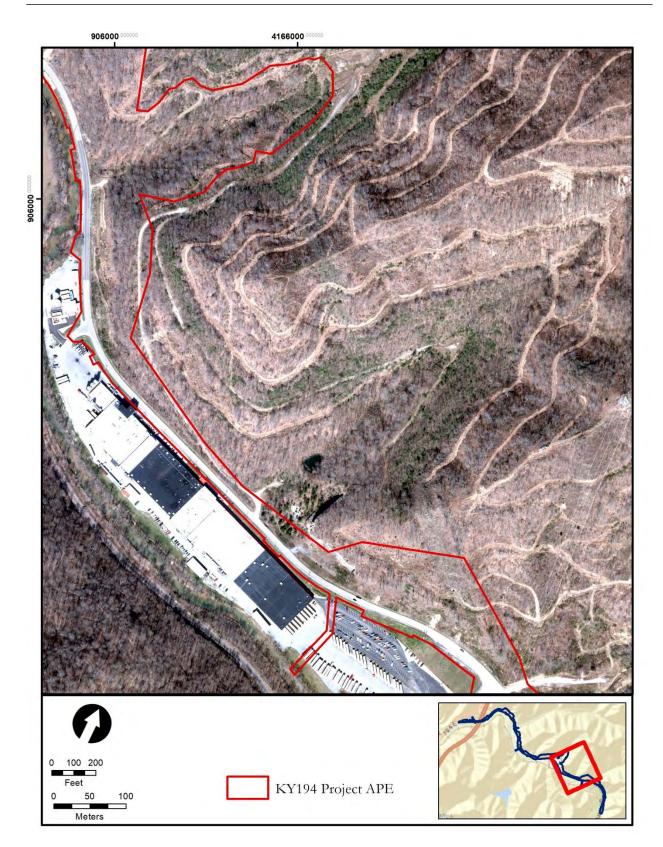


Figure 13. Project APE on 2019 NAIP orthoimagery. (Section 4).

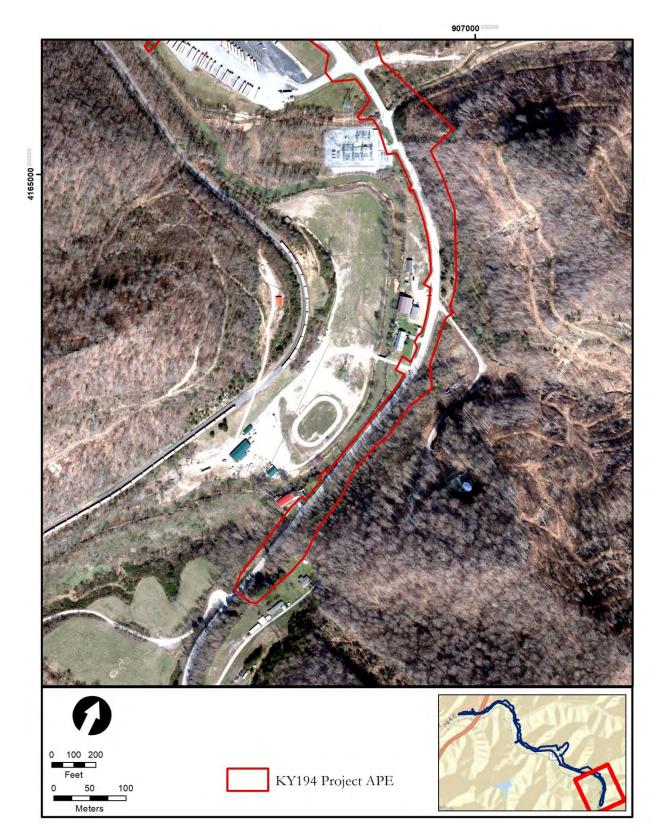


Figure 14. Project APE on 2019 NAIP orthoimagery. (Section 5).



Figure 15. Beginning of Project APE, KY 194 near the ramp for US 119, facing east.



Figure 16. Intersection of KY 194 and Otis Hollow Road, facing southeast.



Figure 17. Artificially modified landform and residential home within ROW at KY 194 and Otis Hollow Road intersection, Parcel 6, facing northwest.



Figure 18. Residential home within ROW at KY 194 and Otis Hollow Road intersection, Parcel 14, facing east.



Figure 19. KY 194 facing northwest toward Waste Site 3 – Mine Area of the project APE.



Figure 20. Waste Site 3 – Mine Area, facing northeast.



Figure 21. Parcel 19 business relocation along KY 194, facing south.



Figure 22. Intersection of KY 194 and Bevins Branch Road, facing southwest.



Figure 23. View of Bevins Branch Road, facing east.



Figure 24. Proposed ROW expansion along KY 194, facing south.



Figure 25. Location of proposed drainage pipe, facing west.



Figure 26. KY 194 near the entrance to Larry Childers Appalachian Land Company, facing west.



Figure 27. Pull-off near proposed drainage pipe on Quest Energy property, facing east.



Figure 28. Location of proposed drainage pipe, facing south.



Figure 29. Extended ROW area, facing west.



Figure 30. Entrance to Alma Land Waste Area 2A, facing northwest down KY 194.



Figure 31. Alma Land Waste Area 2A, facing south.



Figure 32. Alma Land Waste Area 2B, facing south.

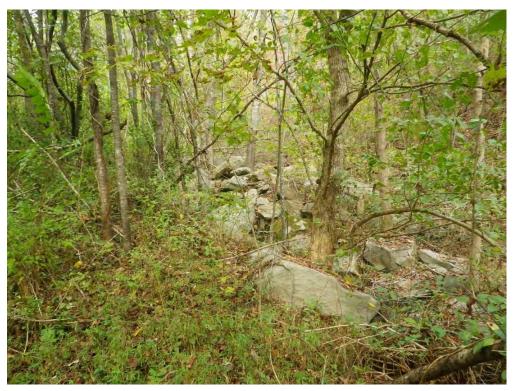


Figure 33. Alma Land Waste Area 2B, facing northeast.



Figure 34. Kellogg plant along KY 194, facing southeast.



Figure 35. Location of the drainage pipe on Kellogg's property, facing south.



Figure 36. Location of the extension of the ROW and installation of a drainage pipe, facing southwest.



Figure 37. Eastern portion of the project APE, facing northwest.



Figure 38. Eastern portion of the project APE, facing southeast.

5 CONCLUSIONS AND RECOMMENDATIONS

On October 16, 2019, Corn Island completed a Phase I archaeological survey for the KY 194 Highway Reconstruction Project in Pike County, Kentucky, a 5,160-m (3.2-mile) long corridor stretching from the US 119 ramp near Smith Farms Bottom (CR 1458) to near Deskins Branch culvert. The project area encompassed 30.56 ha or 73.52 acres. HDR, Inc. requested the archaeological survey to meet federal compliance requirements relative to cultural resources management prior to the reconstruction. The project corridor was examined by ground surface inspection. Shovel probing was attempted in one area but was terminated upon encountering gravel.

The project APE consisted mainly of steeply sloping forested hills and ridges. The entire project area corridor and waste disposal areas are located on disturbed landforms related to road, residential, and business construction and associated landform modifications. No previously recorded sites are located within the project area and no intact cultural deposits were identified during the archaeological survey. No sites listed in, or eligible for listing in, the NRHP will be affected by the planned undertaking. Therefore, no further archaeological investigation is recommended. Should any work be extended beyond the current APE, further investigation may be needed to assess for potential deposits or features associated with previously extant residences.

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