AN ARCHAEOLOGICAL SURVEY FOR THE PROPOSED RECONSTRUCTION AND IMPROVEMENT OF THE I-69 - U.S. 45/U.S. 51 INTERCHANGE AT THE KENTUCKY/TENNESSEE STATE LINE IN FULTON, FULTON COUNTY, KENTUCKY (ITEM NO. 1-25.00)
AN ARCHAEOLOGICAL SURVEY FOR THE PROPOSED RECONSTRUCTION AND IMPROVEMENT OF THE I-69 – U.S. 45/U.S. 51 INTERCHANGE AT THE KENTUCKY/TENNESSEE STATE LINE IN FULTON, FULTON COUNTY, KENTUCKY (ITEM NO. 1-25.00)

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OSA Project Registration No.: FY17_9224
ABSTRACT

Between June 5 and 7, 2017, Cultural Resource Analysts, Inc., personnel was contracted by Qk4, Inc., to conduct an archaeological survey for the proposed reconstruction/improvement of the I-69 at the U.S. 45/U.S. 51 Interchange at the Kentucky/Tennessee state line in Fulton County, Kentucky and Obion County, Tennessee. Both the Tennessee Department of Transportation and the Kentucky Transportation Cabinet are planning this reconstruction project. This report will discuss the Kentucky portion of the survey. The Kentucky portion of the project totaled approximately 5.7 ha (14.2 ac) in size and was examined by an intensive pedestrian survey supplemented with systematic shovel testing in low visibility areas. The project area was surveyed in its entirety. The Tennessee portion of the overall project is presented in DelCastello (2017).

A records review, conducted at the Office of State Archaeology in April 2017, indicated that six previous professional archaeological surveys had been conducted within a 2 km radius of the project area. All of the previous surveys were situated outside of the current project area. A single archaeological site (15Fu5) was also recorded within this radius, but outside of the current project area boundary.

No archaeological sites were recorded as a result of this survey. Therefore, no archaeological sites listed in, or eligible for listing in, the National Register of Historic Places will be affected by the proposed construction activities, and archaeological clearance is recommended for the portions of the project area that were surveyed by the current investigations.
TABLE OF CONTENTS

ABSTRACT .............................................................................................................................................................. i
LIST OF FIGURES .................................................................................................................................................. iii
LIST OF TABLES .................................................................................................................................................... iii
I. INTRODUCTION ................................................................................................................................................ 1
II. DESCRIPTION OF THE PROJECT AREA ........................................................................................................ 2
III. RESULTS OF THE FILE AND RECORDS SEARCH AND SURVEY PREDICTIONS ..................................... 8
IV. FIELD METHODS ............................................................................................................................................... 12
V. CONCLUSIONS AND RECOMMENDATIONS .............................................................................................. 12
REFERENCES ..................................................................................................................................................... 13

LIST OF FIGURES

Figure 1. Map of Kentucky showing the location of Fulton County. ................................................................. 1
Figure 2. Location of project area on topographic quadrangle ........................................................................... 3
Figure 3. Project area plan map .......................................................................................................................... 4
Figure 4. Overview of wheat field in the southeastern portion of the project area. Photo facing north-northwest... 5
Figure 5. Overview of the western wooded portion of the project area east of the Purchase Parkway. Photo facing south-southwest. ........................................................................................................ 5
Figure 6. Overview of front elevation residence showing impervious surface of the driveway. Photo facing east-northeast. ........................................................................................................................................ 6
Figure 7. Overview of the backyard of the residence showing outbuildings and other surface disturbances. Photo facing north-northeast. ........................................................................................................ 6
Figure 8. The 1956 General Highway Map of Fulton County, Kentucky showing the location of MS1. ............ 11

LIST OF TABLES

Table 1. Soil Families, Series, and Phases Identified in the Currently Defined Project Area .............................. 7
Table 2. Summary of Selected Information for Previously Recorded Archaeological Sites in Fulton County, Kentucky. Data Obtained from OSA and May Contain Coding Errors. ................................................................. 10
I. INTRODUCTION

Between June 5 and 7, 2017, Cultural Resource Analysts, Inc., personnel was contracted by Qk4, Inc., to conduct an archaeological survey for the proposed reconstruction/improvement of the I-69 – U.S. 45/U.S. 51 Interchange at the Kentucky/Tennessee State Line in Fulton County, Kentucky and Obion County, Tennessee (Figure 1). The project area is situated just west of the modern community of Fulton, Kentucky, measuring approximately 5.7 ha (14.2 acres) in total area. The survey was conducted at the request of Tom H. Springer of Qk4, Inc.

Figure 1. Map of Kentucky showing the location of Fulton County.

This report will discuss the Kentucky portion of the survey. The cultural historic survey for this project is presented in a separate report (Spurlock 2017). The Tennessee portion of the archaeological survey is presented in a separate report (DelCastello 2017).

The field investigations were conducted by Brian G. DelCastello, Tommy McAlpine, and Karen Taylor, and required approximately 20 person hours to complete. The project area was subjected to an intensive pedestrian survey supplemented by systematic shovel testing in low visibility areas and was surveyed in its entirety.

Office of State Archaeology (OSA) Geographic Information Systems (GIS) data was requested by CRA on May 9, 2017, and was returned on May 19, 2017. The results were researched by Heather Barras of CRA at the OSA on May 23, 2017. The OSA project registration number is FY17_9224. Based on the records review, none of the project area had been previously surveyed and no known archaeological sites are found in this area.

Prior to the field investigations an 811 locate was submitted for the project area. Several underground utilities were marked within the project area, and were found to be concentrated predominately along the northern edge of State Line Road. Shovel testing was not conducted in proximity of the marked utilities. Parcels were only surveyed after landowner permission was granted.

Project Description

The project consists of a survey for the proposed reconstruction/improvement of I-69 at the Kentucky/Tennessee state line to the U.S. 45/U.S. 51 Interchange in Fulton County, Kentucky and Obion County, Tennessee (Figures 2 and 3). One of the goals of the overall project is the use of existing parkways in the creation of the I-69 corridor through Kentucky. The I-69 corridor is proposed to travel from Tennessee through Kentucky and into Indiana. Within Kentucky, the corridor passes through Fulton, Hickman, Graves, Marshall, Livingston, and Lyon Counties.

The project entails the reconstruction of the Julian M. Carrol Purchase Parkway (U.S. 51) to better merge traffic from U.S. 51 onto U.S. 45W within the proposed I-69 corridor. The Kentucky segment begins at the Tennessee state line (mile marker 0.0) and extends north to mile marker 1.2.

Purpose of Study

This study was conducted to comply with Section 106 of the National Historic Preservation Act (NHPA). This transportation project is federally funded, and therefore considered an undertaking subject to 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 2006:2).

The following report is a description of the project area, previous research and cultural history of the area, field and laboratory methods used, and results of this investigation. It conforms to the Specifications for Conducting Fieldwork and Preparing Cultural Resource Assessment Reports (Sanders 2006).

**Summary of Findings**

Prior to initiating the field investigations, a records review was conducted at the OSA. The OSA records revealed that six previous professional archaeological surveys have been conducted within a 2 km radius of the project area and a single archaeological site (15Fu5) has been identified in the same area. The surveys and the site were all situated outside of the current project area.

No archaeological sites were identified as a result of the current field investigations. No archaeological sites listed in, or eligible for listing in, the National Register of Historic Places (NRHP) will be affected by the proposed construction activities of the current project. Therefore, archaeological clearance is recommended.

**II. DESCRIPTION OF THE PROJECT AREA**

The Kentucky portion of the project area is situated in southeastern Fulton County, Kentucky. It begins at the Tennessee state line and extends north, ending just east of the Purchase Parkway (U.S. 51) weigh station.

The project area is reflective of the undulating topography of this portion of the Mississippian Embayment (Figures 4 and 5). Elevations vary from approximately 125 m (410 ft) above mean sea level (AMSL) in the northern and east-central portions of the project area to approximately 111 m (365 ft) AMSL in the southwestern corner. A substantial rill/gully system is located in this latter portion of the project area where an unnamed intermittent stream is situated. The Obion River and its tributaries drain the project area towards the southwest.

Located within the dissected loess uplands of Fulton County, the project area supports an overstory of mixed trees, most of which consist of various deciduous species (see Figure 5). The suite of trees is dominated by a series of mixed hardwood, including maple and oak. Underbrush consisted of a variety of mixed herbaceous plants and other weedy undergrowth, including in some areas, a luscious carpet of poison ivy. Overall, the project area had poor ground surface visibility due to the presence of vegetation.

Several disturbed areas were noted during the course of the current survey. A modern house and associated outbuildings are situated in the south-central portion of the project area (Figures 6 and 7). Portions of the property show various levels of disturbance, including the placement of multiple outbuildings, construction of the driveway, as well as utility installation. Shovel testing within this property, including the front and back yard areas, did not recover cultural materials.

Soils within the project area belong to a single soil association: the Grenada-Calloway-Loring-Memphis Association (Newton and Sims 1964). This association generally occurs on gently sloping upland landforms. These soils are formed on loess deposits that range from poorly drained to well-drained. These areas are commonly dissected by a series of small drainages. This association comprises a substantial portion of the region, particularly throughout the central and eastern portions of the county. Table 1 provides the details of the various soil series identified within the project area.

The project area contains a variety of soils. A total of four soil series comprising seven soil phases were identified. All are classified as Alfisols (Soil Survey Staff 1999). Approximately three-quarters of the project area are composed of three soil series (Table 1).
Figure 2. Location of project area on topographic quadrangle.

Crutchfield, KY 1969

Harris, TN 1956 (Photo-revised 1983)
Figure 3. Project area plan map.
Figure 4. Overview of wheat field in the southeastern portion of the project area. Photo facing north-northwest.

Figure 5. Overview of the western wooded portion of the project area east of the Purchase Parkway. Photo facing south-southwest.
Figure 6. Overview of front elevation residence showing impervious surface of the driveway. Photo facing east-northeast.

Figure 7. Overview of the backyard of the residence showing outbuildings and other surface disturbances. Photo facing north-northeast.
Table 1. Soil Families, Series, and Phases Identified in the Currently Defined Project Area.

<table>
<thead>
<tr>
<th>Soil Family</th>
<th>Soil Series</th>
<th>Soil Phase</th>
<th>Soil Order</th>
<th>Approx. Area Within Project Area (sq m)</th>
<th>Percent Area</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fine-Silty, Mixed, Active, Thermic</td>
<td>Feliciana</td>
<td>Feliciana silt loam, 2 to 6 percent slopes</td>
<td>Alfisol</td>
<td>14,036</td>
<td>24.42</td>
</tr>
<tr>
<td>Fine-Silty, Mixed, Active, Thermic</td>
<td>Grenada</td>
<td>Grenada silt loam, 2 to 6 percent slopes</td>
<td>Alfisol</td>
<td>13,425</td>
<td>23.36</td>
</tr>
<tr>
<td>Fine-Silty, Mixed, Active, Thermic</td>
<td>Loring</td>
<td>Loring silt loam, 12 to 20 percent slopes, severely eroded</td>
<td>Alfisol</td>
<td>12,975</td>
<td>22.58</td>
</tr>
<tr>
<td>Fine-Silty, Mixed, Active, Thermic</td>
<td>Grenada</td>
<td>Grenada silt loam, 2 to 6 percent slopes, eroded</td>
<td>Alfisol</td>
<td>7,630</td>
<td>13.28</td>
</tr>
<tr>
<td>Fine-Silty, Mixed, Active, Thermic</td>
<td>Calloway</td>
<td>Calloway silt loam, 2 to 4 percent slopes, eroded</td>
<td>Alfisol</td>
<td>5,542</td>
<td>9.64</td>
</tr>
<tr>
<td>Fine-Silty, Mixed, Active, Thermic</td>
<td>Grenada</td>
<td>Grenada silt loam, 6 to 12 percent slopes, severely eroded</td>
<td>Alfisol</td>
<td>3,735</td>
<td>6.50</td>
</tr>
<tr>
<td>Fine-Silty, Mixed, Active, Thermic</td>
<td>-NA-</td>
<td>Udorthents-Urban land complex, 5 to 25 percent slopes</td>
<td>Alfisol</td>
<td>129</td>
<td>0.22</td>
</tr>
<tr>
<td>TOTALS</td>
<td>-NA-</td>
<td>-NA-</td>
<td>-NA-</td>
<td>57,472</td>
<td>100.00</td>
</tr>
</tbody>
</table>

These soils are generally situated in the central and western portions of the project area. One of the most common soil series (i.e., Grenada) is further divided into three soil phases based primarily on slope and erosion.

The most commonly identified soil within the project area belongs to the Feliciana silt loam (2 to 6 percent slopes) and accounts for approximately 25 percent of the project area. The Feliciana series has been classified as a fine-silty, mixed, active, thermic Ultic Hapludalf (Soil Survey Staff 2017). This series consists of very deep, well drained soils found on landforms dominated by loess deposits. This soil is generally situated on nearly level to very steep uplands and terraces. This soil phase is located in the south-central portion of the project area.

The second most common soil phase is the Grenada silt loam (2 to 6 percent slopes). This soil accounts for less than 25 percent of the project area. This phase has been classified as a fine-silty, mixed, active, thermic Oxyaquic Fraglossudalf (Soil Survey Staff 2017). This soil is generally found on landforms dominated by loess deposits. This soil phase is located along the western edge of the project area within the wooded area.

The third most common soil identified in the project area is the Loring silt loam (12 to 20 percent slopes, severely eroded). Similar to the previously discussed soil phases, this soil accounts for less than 25 percent of the project area. This soil has been classified as a fine-silty, mixed, active, thermic Oxyaquic Fragiudalf (Soil Survey Staff 2017). This soil is formed in loess deposits and is generally identified in the uplands and stream terraces and is moderately well-drained and possesses a fragipan. This soil is located along the western edge of the project area within the wooded area.

The remaining soils composed increasingly smaller parts of the project area (see Table 1). When combined, these soils total approximately 1.7 ha (4.2 acres) and comprise approximately one-third of the project area. Given the local topography and the soils examined, there is no potential for buried archaeological deposits within the project area.

The soils identified during the current investigations varied throughout the project area. The soils identified and described during the current investigations generally matched the profiles and descriptions provided for the various soils identified in the project area (Newton and Sims 1964; Soil Survey Staff 1999, 2017). The minor differences observed in the profiles (i.e., color, texture, depth) were due, in part, to the difference caused by the geographical location of the type pedon and local pedological conditions within the drainage. Moisture content of the soil would also account for significant differences in the color of a soil (Birkeland 1999; Buol et al.)
Soil tends to darken when moist, while drier soil tends to be lighter in color. In addition, inter-observer biases, such as how people variously describe soil, particularly color, likely played an important role in some of the discrepancies (e.g., Harden 1982). In order to standardize soil color during the current investigations, Munsell notations were recorded only after the application of water to the soil sample.

Within the wooded area near the west edge of the project area, shovel tests were relatively consistent. A typical shovel test revealed the presence of a two horizon soil profile. The uppermost horizon was typically a very dark grayish brown (10YR 3/2) silt loam (possessing weak, fine granular structure). The lower boundary was classified as clear and smooth, and was identified at 15 cm (6 in) below ground surface (bgs). The subsoil consisted of a dark yellowish brown (10YR 4/6) silt loam (weak to moderate, fine angular blocky structure) that contained a higher amount of clay than the overlying topsoil.

Shovel tests within the wheat field generally contained soils that had a shallower profile than those found in the woods. A typical shovel test revealed a dark brown (10YR 3/3) silt loam possessing weak, fine granular structure. The lower boundary was classified as abrupt and smooth and was identified at a depth of approximately 9 cm (4 in) bgs. The subsoil was generally a dark yellowish brown (10YR 5/6) that contained higher clay content. The subsoil generally possessed varying degrees of redoximorphic features (i.e., redox) in the form of few to common, fine Iron/Manganese (Fe/Mn) nodules.

III. RESULTS OF THE FILE AND RECORDS SEARCH AND SURVEY PREDICTIONS

Prior to initiating fieldwork, a search of records maintained by the NRHP (available online at: http://nrhp.focus.nps.gov/natreghome.do?searchtype=natreghome) and the OSA (FY17_9224) was conducted to: 1) determine if the project area had been previously surveyed for archaeological resources; 2) identify any previously recorded archaeological sites that were situated within the project area; 3) provide information concerning what archaeological resources could be expected within the project area; and 4) provide a context for any archaeological resources recovered within the project area.

A search of the NRHP records indicated that no archaeological sites listed in the NRHP were situated within the current project. The OSA file search identified the presence of six previous archaeological surveys and a single previously identified site (15Fu5) within a 2-km radius of the project area. No previous archaeological surveys or archaeological sites were identified in Tennessee in the 2 km radius. The OSA file search was conducted on May 23, 2017.

The work at OSA consisted of a review of professional survey reports and records of archaeological sites for an area encompassing a 2 km radius of the project footprint. To further characterize the archaeological resources in the general area, the OSA archaeological site database for the county was reviewed and synthesized. The review of professional survey reports and archaeological site data in the county provided basic information on the types of archaeological resources that were likely to occur within the project area and the landforms that were most likely to contain these resources. The results are discussed below.

Previous Archaeological Surveys

Heather D. Barras

OSA records revealed that six previous professional archaeological surveys have been conducted within a 2 km radius of the project area. One archaeological site has been recorded in this area also. The records search revealed that the site in the file search area (15Fu5) is a prehistoric open habitation without mounds. An additional survey completed within the 2 km
area has not yet been entered in the OSA GIS (Webb and Funkhouser 1932). The 2 km radius included areas within the Crutchfield and Harris quadrangles.

In 1931, archaeologists from the University of Kentucky compiled a list of known archaeological sites in 68 Kentucky counties (Webb and Funkhouser 1932). During this documentation, Site 15Fu5 was documented as a prehistoric open habitation without mounds. It was reported by G.L. Alley as having a large amount of surface material. NRHP status was not assessed for this site.

During March and April of 1980, Fischer-Stein Associates and American Resources Group, Ltd., conducted an archaeological, architectural, and historic survey for the proposed channel widening of Harris Fork Creek in Fulton County, Kentucky and Obion County, Tennessee (McNerney and White 1981). At the request of the United States Army Corps of Engineers, Memphis District, approximately 223 ha (550 acres) were investigated with an intensive pedestrian survey, shovel testing, and soil coring. One potentially eligible prehistoric site in Tennessee was documented. No archaeological sites were identified in the Kentucky portion of the survey.

On May 17, 1983, Murray State University personnel conducted an archaeological survey of a proposed apartment development in Fulton County, Kentucky (Moffat 1983). At the request of Albert Lieberman of Lieberman Investments, 1.2 ha (3.0 acres) were investigated via pedestrian survey supplemented with shovel testing. No archaeological sites were encountered and no further work was recommended.

On September 13, 1988, Murray State University's Archaeology Service Center personnel completed an archaeological survey for a proposed housing development near Fulton in Fulton County, Kentucky (Schenian 1988). The survey was conducted at the request of Harper & Associates on behalf of Fulton Associates I. Approximately 1.6 ha (4.0 acres) were investigated by pedestrian survey and shovel testing. No archaeological sites were encountered and project clearance was recommended.

On June 12, 1990, University of Kentucky's Program for Cultural Resource Assessment conducted an archaeological survey of the proposed location of a housing project for the elderly in Fulton County, Kentucky (Henderson and Sussenbach 1990). At the request of English and Associates, 4.9 ha (12.0 acres) were investigated with a pedestrian survey. No archaeological sites were documented and no further work was recommended.

On February 15, 2001, Archaeological Services conducted an archaeological survey of a proposed housing and radio tower site in Fulton County, Kentucky (Carstens 2001). Approximately .8 ha (2.0 acres) were investigated at the request of John Birk of the Fulton County Transit Authority. Field methods consisted of shovel testing. No archaeological sites were encountered and project clearance was recommended.

On November 12, 2014, HRA Gray & Pape, LLC, personnel conducted an archaeological survey for a proposed self-supporting lattice radio tower in Fulton County, Kentucky (Wulffen 2014). The survey was conducted at the request of Golder Associates, Inc., on behalf of the Canadian National Railway Company. The project area consisted of .18 ha (.43 acres) and was investigated by pedestrian survey supplemented with systematic screened shovel testing. No archaeological sites were identified and no further work was recommended.

Archaeological Site Data

Based on OSA data provided in Table 2, a total of 152 archaeological sites have been recorded in Fulton County (Table 2). The data indicates that most of the known sites in the county are prehistoric and were classified as open habitations without mounds (n = 64; 42.11 percent). Historic Farm/Residence and Other site types were the second most commonly identified site type in the county with 23 sites of each having been identified.
Table 2. Summary of Selected Information for Previously Recorded Archaeological Sites in Fulton County, Kentucky. Data Obtained from OSA and May Contain Coding Errors.

<table>
<thead>
<tr>
<th>Site Type</th>
<th>N</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Open Habitation Without Mounds</td>
<td>64</td>
<td>42.11</td>
</tr>
<tr>
<td>Historic Farm/Residence</td>
<td>23</td>
<td>15.13</td>
</tr>
<tr>
<td>Other</td>
<td>23</td>
<td>15.13</td>
</tr>
<tr>
<td>Undetermined</td>
<td>19</td>
<td>12.5</td>
</tr>
<tr>
<td>Earth Mound</td>
<td>9</td>
<td>5.92</td>
</tr>
<tr>
<td>Mound Complex</td>
<td>4</td>
<td>2.63</td>
</tr>
<tr>
<td>Open Habitation With Mounds</td>
<td>4</td>
<td>2.63</td>
</tr>
<tr>
<td>Non-mound Earthwork</td>
<td>3</td>
<td>1.97</td>
</tr>
<tr>
<td>Isolated Find</td>
<td>2</td>
<td>1.32</td>
</tr>
<tr>
<td>Workshop</td>
<td>1</td>
<td>0.66</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>152</td>
<td>100</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Time Periods Represented:</th>
<th>N</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Woodland</td>
<td>64</td>
<td>30.05</td>
</tr>
<tr>
<td>Late Prehistoric</td>
<td>59</td>
<td>27.7</td>
</tr>
<tr>
<td>Historic</td>
<td>58</td>
<td>27.23</td>
</tr>
<tr>
<td>Indeterminate Prehistoric</td>
<td>26</td>
<td>12.21</td>
</tr>
<tr>
<td>Archaic</td>
<td>3</td>
<td>1.41</td>
</tr>
<tr>
<td>Paleoindian</td>
<td>2</td>
<td>0.94</td>
</tr>
<tr>
<td>Unspecified</td>
<td>1</td>
<td>0.47</td>
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<tr>
<td><strong>Total</strong></td>
<td>213</td>
<td>100</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Landform</th>
<th>N</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Floodplain</td>
<td>70</td>
<td>46.05</td>
</tr>
<tr>
<td>Terrace</td>
<td>46</td>
<td>30.26</td>
</tr>
<tr>
<td>Dissected Uplands</td>
<td>30</td>
<td>19.74</td>
</tr>
<tr>
<td>Hillside</td>
<td>2</td>
<td>1.32</td>
</tr>
<tr>
<td>Undissected Uplands</td>
<td>2</td>
<td>1.32</td>
</tr>
<tr>
<td>Unspecified</td>
<td>1</td>
<td>0.66</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>152</td>
<td>100</td>
</tr>
</tbody>
</table>

* One site may represent more than one time period.

Undetermined sites comprise approximately 12 percent (n = 19) of the known sites. The remaining 23 sites account for approximately 15 percent of the total number of sites identified in the county.

According to the OSA records, approximately three-quarters of the known archaeological sites have been identified on alluvial settings, including floodplain and terrace landforms. Upland settings, including dissected uplands, hillsides, and undissected uplands make up the bulk of the remaining sites. Only one site was identified in an unspecified landform.

In terms of temporal/cultural affiliation, most of the sites in the county are assigned to the latter half of human occupation of North America. These sites include components assigned to the Woodland (n = 64), the Late Prehistoric (n = 59), and Historic periods (n = 58). Indeterminate sites, those occupations lacking the presence of temporally sensitive artifacts, account for just over a quarter of the known sites. The remaining time spans comprise increasingly smaller numbers of known sites (see Table 2).

Map Data

In addition to the OSA file search, a review of the available maps were initiated to assist with identifying potential historic properties (i.e., structures) or historic archaeological site locations within the proposed project area. The following maps were reviewed during the current investigations:

- 1931 Map of Obion County, Tennessee (Post Office Department [POD]);
- 1947 General Highway Map of Fulton County, Kentucky (Kentucky Department of Highways [KDOH]);
- 1950 Aerial photograph (United States Department of the Interior [USDOI]);
- 1952a Crutchfield, Kentucky, 7.5-minute series topographic quadrangle (United States Geological Survey [USGS]);
- 1952b Water Valley, Kentucky, 15-minute series topographic quadrangle (USGS);
- 1956 General Highway Map of Fulton County, Kentucky (KDOH).

The reviewed historic maps provided useful information concerning the general locations of current and former structures located within, and adjacent to, the project area. All areas near possible map structures (i.e., MS) were investigated for archaeological deposits according to accepted survey methods, as described in the Field Methods section of this report.

Based on a review of the historic maps, only one map structure was identified in proximity to the current project area (Figure 8). This structure was noted on the 1956 General Highway map of Fulton County (KDOH 1956), located along the eastern edge of the project area on the north side of State Line Road. This map structure corresponds to an extant house that is being recommended not eligible for listing in the NRHP (Spurlock 2017).
Figure 8. The 1956 General Highway Map of Fulton County, Kentucky showing the location of MS1.
Survey Predictions

Considering the known distribution of archaeological sites in Fulton County, the available information on site types recorded, the reviewed map data, and the nature of the present project area, certain predictions were possible regarding the kinds of sites that might be encountered within the project area. Prehistoric open habitations without mounds are expected given their commonplace throughout the county. Given the proximity of other turn-of-the-century structures (i.e., Spurlock 2017), the presence of historic residence/farms is also expected.

IV. FIELD METHODS

Prior to the survey, CRA was provided with mapping of the project area. This mapping depicted the project boundary, contours, and other natural and cultural features. An iPad mini running HD Kit GPS software was used to record pertinent project-related data. The location of the project area was also determined by its relative position along State Line Road, U.S. 51, and other man-made features. The project area was also examined based on aerial photographs, satellite imagery, and historic maps.

The entire project area was subjected to an intensive pedestrian supplemented by systematic screened shovel testing (see Figure 3). All undisturbed, relatively flat terrain possessing poor surface visibility was subjected to screened shovel testing. These included the pasture along the southeastern portion of the project area along Butcher Branch. An area measuring approximately 5.2 ha (13.1 acres) was shovel tested during the current investigations.

Shovel tests were excavated at 20 m intervals with spacing of transects set at 20 m. In all cases, shovel tests measured not less than 35 cm in diameter and extended well into the subsoil. Shovel tests were excavated in levels. The topsoil was removed as one level. After the topsoil was removed, 10 cm (4 in) arbitrary levels within natural horizons were excavated. All fill removed from the tests was screened through .64 cm (.25 inch) mesh hardware cloth, and the sidewalls and bottoms were examined for cultural material and features.

All slopes greater than 15 percent also were subjected to an intensive pedestrian survey. The pedestrian survey was conducted by walking parallel transects spaced at 20 m (66 ft) intervals. These latter areas included portions of the gullied wooded area as well as the current residential house and its associated impervious surfaces (see Figure 3). Approximately 1.5 ha (1.1 acres) was subjected to pedestrian survey and included both sloped areas with and adjacent to the gully as well as disturbed portions of the project area (including extant infrastructure and other disturbed areas).

No cultural materials, artifacts, or features were identified as a result of the current archaeological investigations.

V. CONCLUSIONS AND RECOMMENDATIONS

Note that a principal investigator or field archaeologist cannot grant clearance to a project. Although the decision to grant or withhold clearance is based, at least in part, on the recommendations made by the field investigator, clearance may be obtained only through an administrative decision made by the lead federal agency in consultation with the State Historic Preservation Office (Kentucky Heritage Council).

CRA personnel completed an archaeological survey for the proposed reconstruction/improvement of the I-69 – U.S. 45/U.S. 51 Interchange at the Kentucky/Tennessee State Line in Fulton County, Kentucky and Obion County, Tennessee. This report discussed the Kentucky portion of this joint Kentucky transportation Cabinet/Tennessee Department of Transportation project. The Kentucky portion of the project area measured approximately 5.7 ha (14.2 acres) in total area. The project was surveyed in its entirety incorporating an...
intensive pedestrian survey supplemented by systematic shovel testing in low visibility areas. The records search revealed no previously recorded archaeological sites or historic properties were located within the project area. No archaeological sites or historic properties were identified as a result of the current investigation. Because no sites listed in, or eligible for, the NRHP will be affected by the proposed construction, cultural resource clearance is recommended.

If any previously unrecorded archaeological materials are encountered during construction activities, the KHC should be notified immediately at (502) 564-6662. If human skeletal material is discovered, construction activities should cease, and the KHC, the local coroner, and the local law enforcement agency must be notified, as described in KRS 72.020.

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