Contract Publication Series 17-238

AN ARCHAEOLOGICAL SURVEY OF THE PROPOSED RECONSTRUCTION OF KY 329 IN OLDHAM COUNTY, KENTUCKY (ITEM NO. 5-542.00)

by
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Alexandra D. Bybee, RPA 11813

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OSA Project Registration No.: FY17_9249

ABSTRACT

On February 5, 2018, Cultural Resource Analysts, Inc., personnel completed an archaeological survey of the proposed reconstruction of KY 329, north of Crestwood, in Oldham County, Kentucky (Item No. 5-542.00). The survey was conducted at the request of Tom Springer of Qk4, Inc., on behalf of the Kentucky Transportation Cabinet. The proposed reconstruction consists of rebuilding the existing Veterans Memorial Parkway and KY 329 intersection by adding turn lanes. The project area covers .06 ha (.14 acres).

Prior to the survey, a records review was conducted at the Office of State Archaeology. The review indicated that four previous professional archaeological surveys have been conducted, and seven archaeological sites have been recorded, within a 2.0 km (1.2 mi) radius of the project area. None of these survey areas or sites are within the current project area.

The entire project area was subjected to intensive pedestrian survey supplemented with screened shovel testing. No archaeological sites were identified during the survey. No sites listed on, or eligible for inclusion onto, the National Register of Historic Places will be affected by the proposed reconstruction; therefore, archaeological clearance is recommended.

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I. INTRODUCTION

On February 5, 2018, Cultural Resource Analysts, Inc. (CRA), personnel completed an archaeological survey of the proposed reconstruction of KY 329, north of Crestwood, in Oldham County, Kentucky (Item No. 5-542.00) (Figure 1). The survey was conducted at the request of Tom Springer of Qk4, Inc., on behalf of the Kentucky Transport6ation cabinet (KYTC). The fieldwork was completed by Thomas H. McAlpine, Jr., in five work hours. Office of State Archaeology (OSA) Geographic Information Systems (GIS) data was requested by CRA on June 5, 2017, and was returned on June 7, 2017. The results were researched by Heather D. Barras of CRA at the OSA on June 12, 2017. The OSA project registration number is FY17_9249.

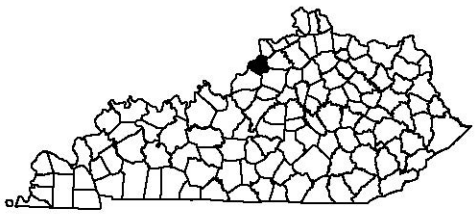

Figure 1. Map of Kentucky showing the location of Oldham County.

Project Description

KYTC is proposing to rebuild the existing Veterans Memorial Parkway and KY 329 intersection by adding turn lanes (Figures 2 and 3). The project area includes only .06 ha (.14 acres) outside of the existing right-of-way.

Purpose of Study

The study was conducted to comply with Section 106 of the National Historic Preservation Act. 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 2006:2).

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 2006).

Summary of Findings

Prior to the survey, a records review was conducted at the OSA. The review indicated that four previous professional archaeological surveys have been conducted, and seven archaeological sites have been recorded, within a 2.0 km (1.2 mi) radius of the project area. None of these survey areas or sites are within the current project area.

The entire project area was subjected to intensive pedestrian survey supplemented with screened shovel testing. No archaeological sites were identified during the survey. No sites listed on, or eligible for inclusion onto, the National Register of Historic Places (NRHP) will be affected by the proposed reconstruction; therefore, archaeological clearance is recommended.

II. DESCRIPTION OF THE PROJECT AREA

The project area is located approximately 408 m (1,338 ft) south of the KY 329 and I-71 intersection in Oldham County, Kentucky (see Figures 2 and 3). It is .06 ha (.14 acres) in size. Elevations in the project area range from approximately 207 m (680 ft) above mean sea level (AMSL) at the north end, to approximately 226 m (740 ft) AMSL at the south end. The Salt River and its tributaries drain the project area.

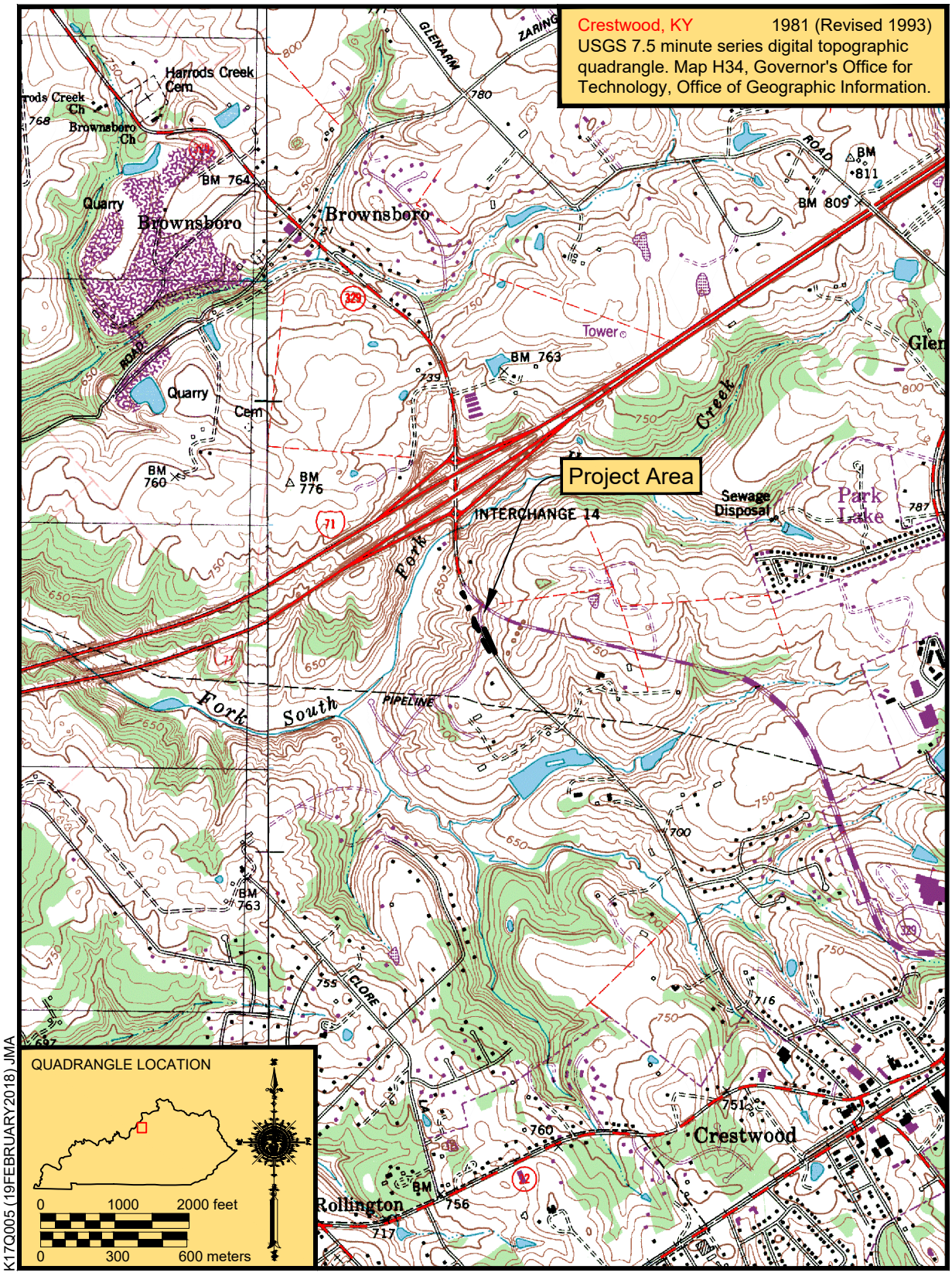

Figure 2. Location of project area on topographic quadrangle.

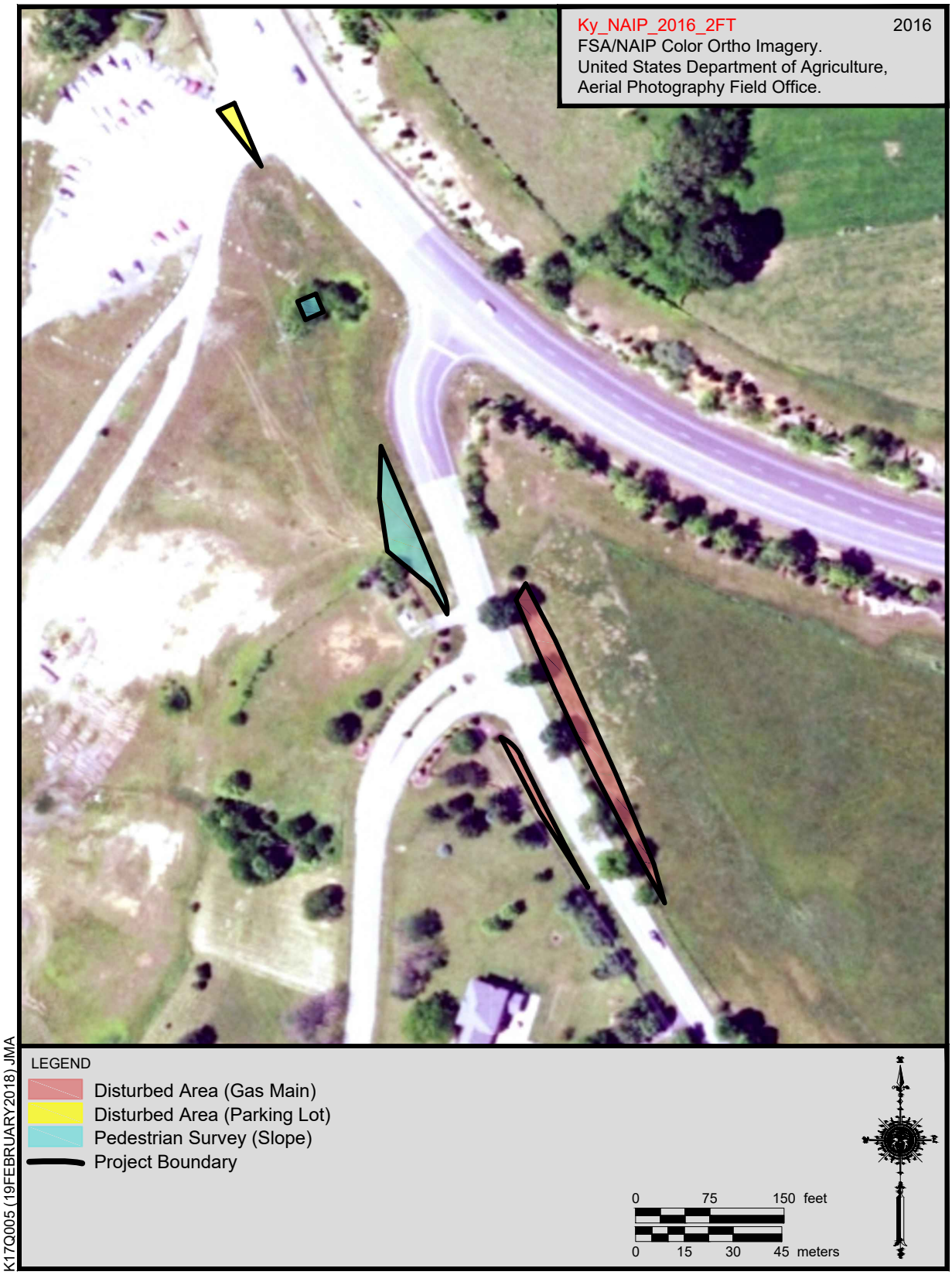

Figure 3. Project area plan map.

The project area was mostly characterized by lawn/pasture alongside KY 329 (Figure 4). The short grass completely covered the ground surface, providing no visibility. Other sections were characterized by a gravel parking lot and a tree-lined drainage ditch. A gas line (Figure 5) extended though or near several sections of the project area. Other buried utilities were also present in the project area. The placement of the buried utilities and the construction of the parking lot, road, and drainage ditch have greatly disturbed the project area.

Two soil series (Beasley and Crider) have been defined in the project area. The soil series are classified by the amount of time it has taken them to form and the landscape position they are found on (Birkeland 1984; Soil Survey Staff 1999). This information can provide a relative age of the soils and can express the potential for buried archaeological deposits within them (Stafford 2004). The soil order and group classifications for each soil series are used to assist with determining this potential.

The Beasley series consists of deep, well drained soils that formed in residuum from soft calcareous shale, siltstone, and limestone. They are found on ridgetops and hillsides. A typical Beasley profile shows an Ap horizon of dark grayish brown (10YR 4/2) silt loam extending to 18 cm (7 in) below ground surface (bgs). Below that is a Bt horizon of yellowish brown (10YR 5/6) silty clay extending to 58 cm (23 in) bgs (Soil Survey Staff 2018). The Beasley series is classified as an Alfisol, which only has archaeological deposits on or near the ground surface (Soil Survey Staff 1999).

The Crider series consists of very deep, well drained soils that formed in a loess mantle and the underlying residuum from limestone. They are found on nearly level to moderately steep uplands. A typical Crider profile shows an Ap horizon of brown (10YR 4/3) silt loam extending to 20 cm (8 in) bgs. Below that are Bt1/2 horizons of brown (7.5YR 4/4) silt loam extending to 61 cm (24 in) bgs. Below that is a Bt3 horizon of reddish brown (5YR 4/4) silt loam extending to 97 cm (38 in) bgs (Soil Survey Staff 2018). The Crider series is classified as an Alfisol, which only have archaeological deposits on or near the ground surface (Soil Survey Staff 1999).

Figure 4. Lawn alongside KY 329, facing northwest.

Figure 5. Gas line extending through project area, facing northwest.

Due to the extent of the disturbances in the project area, and the close proximity of the gas lines, only one shovel test was excavated to confirm disturbance. The profile of the shovel test showed a dark yellowish brown (10YR 4/4) silty clay loam with yellowish red (5YR 5/8) mottles extending to 10 cm (4 in) bgs, on top of a yellowish red (5YR 5/8) silty clay. While the profile is similar to the Ap and Bt3 horizons of the Crider series, the heavier clay content and the absence of the Bt1/2 horizons confirm that the area has been heavily disturbed.

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

Previous Research in Oldham County

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_9249) 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 two archaeological or cultural historic sites listed on the NRHP are situated within a 2.0 km (1.2 mi) radius of the project area. These sites consist of the Albert E. Clore House (No. 83002842), a residential structure from the late nineteenth century; and The Locust (No. 75000817), a residential structure from the early nineteenth century. The NRHP lists these sites as significant due to their architectural/engineering qualities. Neither of these sites are within or near the current project area. Prior to the current survey, CRA personnel conducted a cultural historic survey for a nearby project; that cultural historic boundary is within the current project area. The cultural historic survey resulted in the identification of a historic residence/farmstead (Site 1) that was recommended for NRHP inclusion (Heavrin

2017). While this historic residence/farmstead is within 2 km of the current project area, it is not within or near the current project boundaries.

The OSA file search was conducted between June 5 and 12, 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 Investigations

Heather D. Barras

OSA records revealed that four previous professional archaeological surveys have been conducted within a 2.0 km (1.2 mi) radius of the project area. Seven archaeological sites also have been recorded in this area. An additional survey completed within the 2 km area has not yet been entered in the OSA GIS (DiBlasi and Braunbeck 1977).

The records search revealed that four of the seven sites in the file search area (15Ol110, 15Ol128, 15Ol144, and 15Ol145) are historic farms/residences. Two of the sites are prehistoric open habitations without mounds (15Ol2 and 15Ol9). The remaining site (15Ol143) is multicomponent with historic and prehistoric occupations. The 2 km radius included areas within the Crestwood quadrangle (United States Geological Survey [USGS] 1981 [revised 1993]).

From October 27 to December 31, 1976, a literature search of all of Oldham County and portions of Bullitt, Henry, and Shelby Counties, Kentucky, was performed for the Louisville 208 Planning District (DiBlasi and Braunbeck 1977). The literature search was requested by Schimpeler-Corradina Associates, Consulting Engineers. All site information was placed on one map as a comprehensive reference for future research. Sites 15Bu230–15Bu237, 15Bu242, 15Bu244, 15Bu253, 15Bu254, 15Bu294, 15Ol1–15Ol15, 15Ol17–15Ol22, 15Sh202, and 15Sh203 were included within this collection of information.

Of these sites, 15Ol2 and 15Ol9 were the only ones located within 2 km of the current project area.

Site 15Ol2 was recorded as a prehistoric open habitation without mounds of an indeterminate temporal affiliation. The site was recorded based on the volunteered report of an avocational archaeologist. Site 15Ol9 was recorded as a Late Archaic open habitation without mounds. NRHP eligibility was not determined for either site beyond the authors statement that all the sites in the report needed further testing to determine their eligibility potential (DiBlasi and Braunbeck 1977).

On September 17–19 and October 14, 1996, Cultural Horizons, Inc., conducted an archaeological survey of approximately 6.8 km (4.2 mi) for the proposed widening and realignment of KY 22 in Oldham County, Kentucky (Ross-Stallings and Stallings 1996). The survey was conducted at the request of Presnell Group, Inc., on behalf of the KYTC (Item No. 5-304.00). The field methods consisted of pedestrian survey supplemented with screened shovel testing. No archaeological sites were found, and no further work was recommended.

On December 9, 1996, CRA personnel completed an archaeological survey of seven proposed sewer pump station locations in Oldham County, Kentucky (Wingfield 1996). The survey was conducted at the request of PDR Engineers, Inc., on behalf of the City of Crestwood. The project originally called for eight proposed pump locations totaling .5 ha (1.24 acres), but one location totaling .04 ha (.10 acre) was denied landowner access. The remaining .46 ha (1.14 acres) were surveyed by an intensive pedestrian survey supplemented with shovel testing. No archaeological sites were encountered during the survey and no further archaeological work was recommended on the pump locations that were surveyed.

Between March 23 and 25, 2009, CRA personnel conducted a cultural resource survey of the Brentwood Subdivision development area in Oldham County, Kentucky (Donahue 2009). The survey was conducted at the request of Matt Blake of Redwing Ecological Services, Inc., on behalf of Oldham Farms Development, LLC. The project area was located in the town of Crestwood and covered approximately 100 ha (248 acres) that were surveyed using intensive pedestrian survey supplemented with screened shovel tests. A records review at the OSA revealed one prehistoric archaeological site (15Ol2) was recorded within the project boundaries, but the site could not be relocated. In addition, CRA personnel located three new archaeological sites (15Ol143–15Ol145). All of these sites were located within the 2 km radius of the current project area.

The negative finding at Site 15Ol2 suggests that the site had either been destroyed or that the location of the site was incorrectly reported. Site 15Ol143 was a multicomponent historic farm/residence dating from the early-nineteenth to twentieth centuries with standing structures and a prehistoric open habitation of indeterminate temporal affiliation. Site 15Ol144 was a historic farm/residence dating from the mid-nineteenth to twentieth centuries with cultural material recovered from the surface of a plowed field. Site 15Ol145 was a historic farmstead site from the late-nineteenth to mid-twentieth centuries consisting of a collapsed structure with a low to moderate density scatter of associated historic artifacts. All three sites lacked subsurface integrity and were not deemed eligible for the NRHP. No further work was recommended (Donahue 2009).

On January 28, 2016, CRA personnel completed an archaeological survey of the proposed I-71 widening project in Jefferson and Oldham Counties, Kentucky (Herndon 2016). The survey was conducted at the request of Tom Springer of Qk4 on behalf of the KYTC (Item No. 5-483.00). Approximately .4 ha (1.0 acre) was investigated by pedestrian survey and screened shovel testing. No archaeological sites were encountered and project clearance was recommended.

Sites 15Ol110 and 15Ol128 did not have associated reports on file in the OSA records, but information regarding these sites was obtained from the site forms found in the OSA records. Site 15Ol110 was recorded as a historic farm/residence dating from 1851 to 1950 by Donald E. Janzen and Richard Stallings of Janzen, Inc., on March 1, 1986. The NRHP status of the site was not assessed at that time. Site 15Ol128, the "Henry Clore Farm Complex," was recorded as a historic farm/residence dating to the twentieth century by Lorene Miner and Perry Harrell of AMEC Earth & Environmental on September 19, 2003 (Miner 2003). The site was considered to be an inventory site, and was not eligible for NRHP inclusion at that time.

Archaeological Site Data

OSA records show that prior to this survey, 92 archaeological sites had been recorded in Oldham County (Table 1). Most of these (n = 54; 58.7 percent) are prehistoric open habitations without mounds. Other types of sites that are common in Oldham County are historic farms/residences (n = 22; 23.91 percent), undetermined (n = 8; 8.7 percent), cemeteries (n = 5; 5.43 percent), earth mounds (n = 2; 2.17 percent), and other (n = 1; 1.09 percent).

These sites are found most often in areas of dissected uplands (n = 59; 64.13 percent). Sites are also found on floodplains (n = 15; 16.3 percent), undissected uplands (n = 10; 10.87 percent), terraces (n = 4; 4.35 percent), hillsides (n = 3; 3.26 percent), and unspecified landforms (n = 1; 1.09 percent). These sites cover a variety of time periods, including Archaic (n = 17; 16.67 percent), Woodland (n = 7; 6.86 percent), Late Prehistoric (n = 3; 2.94 percent), Indeterminate Prehistoric (n = 44; 43.14 percent), Historic (n = 30; 29.41 percent), and unspecified (n = 1; .98 percent).

Table 1. Summary of Selected Information for Previously Recorded Sites in Oldham County. Data Obtained from OSA and May Contain Coding Errors.

Site Type:	N	%
Cemetery	5	5.43
Earth Mound	2	2.17
Historic Farm/Residence	22	23.91
Open Habitation without Mounds	54	58.7
Other	1	1.09
Undetermined	8	8.7
Total	92	100
Time Periods Represented	N	%
Archaic	17	16.67
Woodland	7	6.86
Late Prehistoric	3	2.94
Indeterminate Prehistoric	44	43.14
Historic	30	29.41
Unspecified	1	0.98
Total	102*	100
Landform	N	%
Dissected Uplands	59	64.13
Floodplain	15	16.3
Hillside	3	3.26
Terrace	4	4.35
Undissected Uplands	10	10.87
Unspecified	1	1.09
Total	92	100

Map Data

In addition to the file search, a review of available maps was initiated to help identify any historic structures that may have been located within the project area. The following maps were reviewed:

1879 Brownsboro Precinct, Atlas of Jefferson and Oldham Counties, Kentucky (Beers and Lanagan 1879);

1925 Oldham County Geology Map (Kentucky Geological Survey [KGS] 1925);

1929 Oldham County Geology Map (KGS 1929);

1932 LaGrange, Kentucky, 15-minute series topographic quadrangle (USGS 1932);

1942 General Highway Map of Oldham County, Kentucky (Kentucky Department of Highways [KDOH] 1942);

1951 Crestwood, Kentucky, 7.5-minute series topographic quadrangle (USGS 1951); and

1955 General Highway Map of Oldham County, Kentucky (KDOH 1955).

The maps show no structures in or near the project area.

Survey Predictions

Considering the known distribution of sites in the county, the available information on site types recorded, 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 were the primary site type expected, as it is the most common site type found in Oldham County.

IV. FIELD METHODS

The project area consisted of approximately .06 ha (.14 acres) of grass lawn/pasture, a parking lot, and a tree-lined drainage ditch located along KY 329 (see Figures 2 and 3). The project boundaries were determined using maps provided by the client and an iPad Mini tablet coupled with Garmin GLO Bluetooth global positioning system (GPS) receiver capable of real-time 2−3 m (7−10 ft) horizontal accuracy.

The entire project area was subjected to intensive pedestrian survey supplemented with screened shovel testing. The section of the project area located in the gravel parking lot was not shovel tested due to disturbance. The section of the project area located in the tree-lined drainage ditch was not shovel tested due to slope. The rest of the project area consisted of lawns/pasture with no ground surface visibility. While the northern end of these sections was sloped, the rest of the areas were flat. However, due to the proximity of the underground gas lines (Figure 6) these areas could not be systematically shovel tested. The individual responsible for locating the gas line indicated that no shovel testing could be conducted within 18 m (60 ft) of the gas line. One shovel test was carefully excavated, as far from the gas lines as the project boundaries allowed, to confirm disturbance. The shovel test measured no less than 35 cm (14 in) in diameter and was excavated well into subsoil. The contents of the shovel test were screened through .64 cm (.25 in) mesh hardware cloth, and the sides and bottoms of the shovel test were examined for cultural material and features. All sections of the project area were visually inspected for cultural material or structural remains, though none were present.

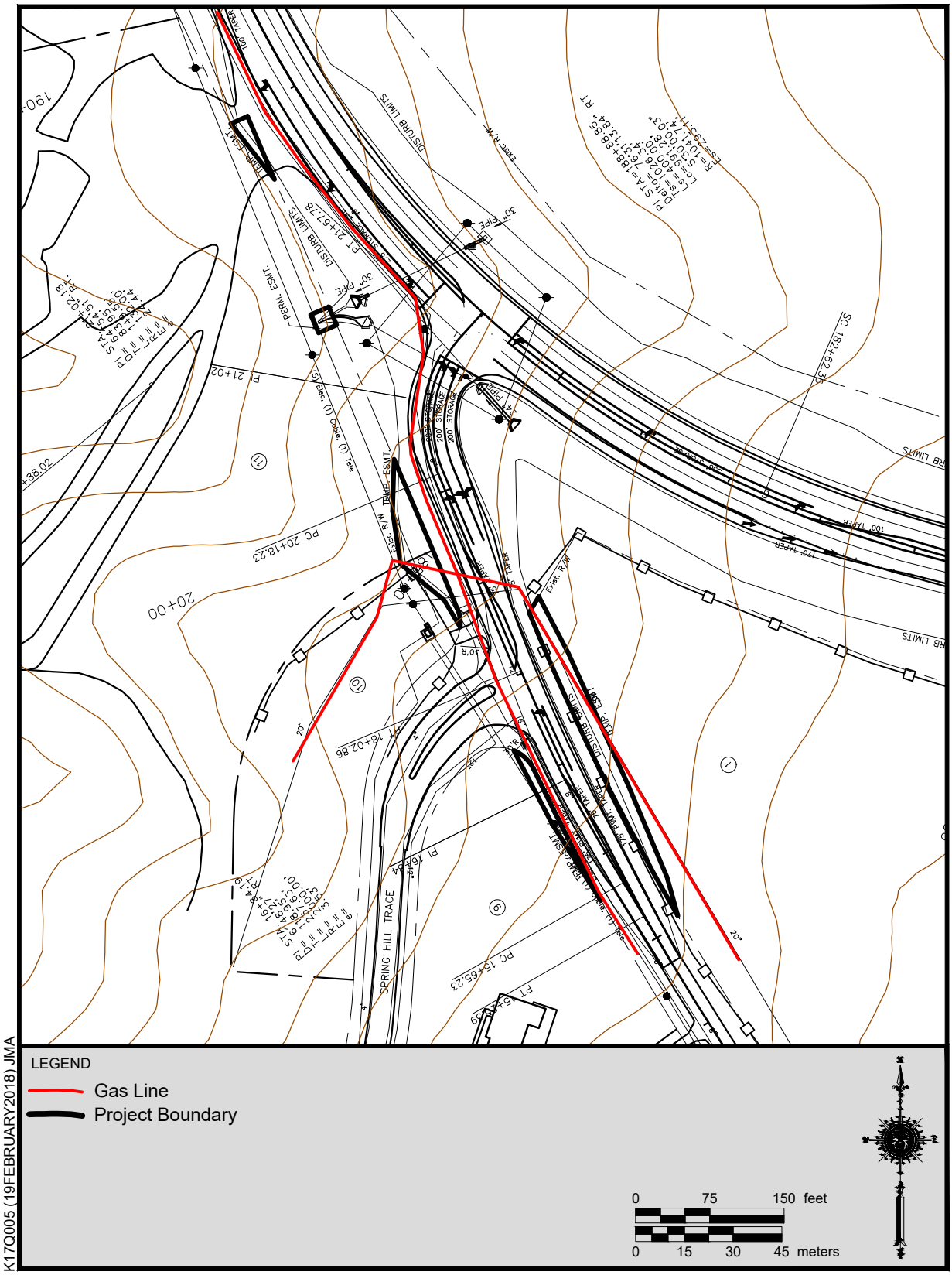

Figure 6. Strip map showing gas lines.

V. RESULTS AND CONCLUSIONS

Note that a principal investigator or field investigator 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 (the Kentucky Heritage Council [KHC]).

The records search revealed no previously recorded archaeological sites or historic properties within the project area, and no archaeological sites or historic properties were identified as a result of this investigation. Because no sites listed in, or eligible for, the NRHP will be affected by the proposed construction, archaeological clearance is recommended.

If any previously unrecorded archaeological materials are encountered during construction activities, the KHC should be notified immediately at (502) 564-6662. Furthermore, 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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