

AN ARCHAEOLOGICAL BASELINE SURVEY FOR THE PROPOSED COMMERCE PARKWAY EXTENSION IN OLDHAM COUNTY, KENTUCKY (ITEM NO. 5-754.00)



by
*H. William Goodman
and Robbie Grenda*

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ABSTRACT

On April 6, 2015, Cultural Resource Analysts, Inc., personnel completed an archaeological baseline survey for the proposed KIDPA-funded extensions of Commerce Parkway from KY 393 to Mattingly Road in the community of Buckner, Oldham County, Kentucky. The survey was conducted at the request of Tom Springer of Qk4, Inc., on behalf of David Waldner of the Kentucky Transportation Cabinet (Item Number 5-754.00). The project area is approximately .8 km (.5 mi) long with a right-of-way width of mostly 31 m (100 ft), widening to a little over 61 m (200 ft) in the eastern portion. The area of potential effect for the archaeological survey is defined as the area of direct impact of the proposed road extension. The project area consisted of approximately 4.12 ha (10.18 acres). The purpose of the project is to extend Commerce Parkway from KY 393 to Mattingly Road. Field methods consisted of pedestrian survey and screened shovel testing. The entire project area was surveyed, and land within the project area primarily consisted of agricultural fields as well as some commercial/industrial properties on both termini of the project area. Prior to conducting the field research, a records review was conducted at the Office of State Archaeology and the Kentucky Heritage Council. This review revealed that no archaeological sites had been documented within, or adjacent to, the current project area. However, one previous archaeological investigation (Fiegel 1997) intersects the current project area. No archaeological sites were recorded as a result of this survey. 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.

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I. INTRODUCTION

On April 6, 2015, Cultural Resource Analysts, Inc. (CRA), personnel completed an archaeological baseline survey for the proposed KIDPA-funded extensions of Commerce Parkway from KY 393 to Mattingly Road in the community of Buckner, Oldham County, Kentucky [Item Number 5-754.00 (Figures 1 and 2)]. The survey was conducted at the request of Tom Springer of Qk4 Inc., on behalf of David Waldner of the Kentucky Transportation Cabinet (KYTC). The area of potential effect (APE) for the archaeological survey is defined as the area of direct impact of the proposed alternatives. The fieldwork was completed by Will Goodman and Robbie Grenada in 18 work hours, and the field methods consisted of pedestrian survey supplemented with systematic screened shovel testing. Office of State Archaeology (OSA) Geographic Information Systems (GIS) data requested by CRA on July 29, 2014, was returned on August 6, 2014. The results were researched by Heather Barras of CRA at the OSA on March 4, 2015. The OSA project registration number is FY15_8179.

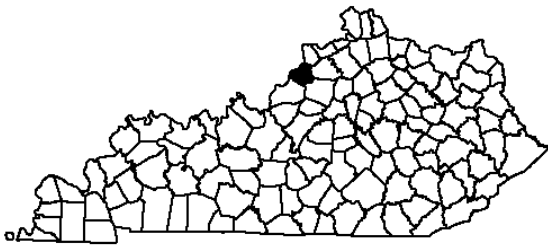


Figure 1. Map of Kentucky showing the location of Oldham County.

Project Description

The project consists of the extension of Commerce Parkway from KY 393 to Mattingly Road in the community of Buckner, Oldham County, Kentucky. Commerce Parkway currently is a two-lane road with a 10-ft wide shared use path along the north side, separated from the road with a grass verge. The road currently extends from KY 393 east approximately 3 mi to LaGrange,

Kentucky. The proposed project would extend Commerce Parkway and the shared use path west .8 km (.5 mi) from KY 393 on new alignment to connect with Mattingly Road. The proposed extension would begin approximately 366 m (1,200 ft) north of I-71 and KY 393 interchange. Mattingly Road provides access to several industrial sites. The proposed project would provide a convenient access to I-71 from Mattingly Road that would allow traffic to avoid at-grade railroad crossings. At present, traffic from Mattingly Road (which includes a notable amount of heavy trucks) must cross two at-grade CSX railroad crossings to access I-71. The project area totaled approximately 4.12 ha (10.18 acres) in size. Land within the project area consisted primarily of an agricultural corn field on a level topography. Commercial properties were situated at each terminus of the project area. The west portion of the project area had a small wooded area between the corn field and the commercial property that had some slope to a tributary to the South Fork of Darby Creek.

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 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). Cultural deposits less than 50 years of age were not considered sites in accordance with *Archeology and Historic Preservation: Secretary of the Interior’s Standards and Guidelines* (National Park Service 1983).

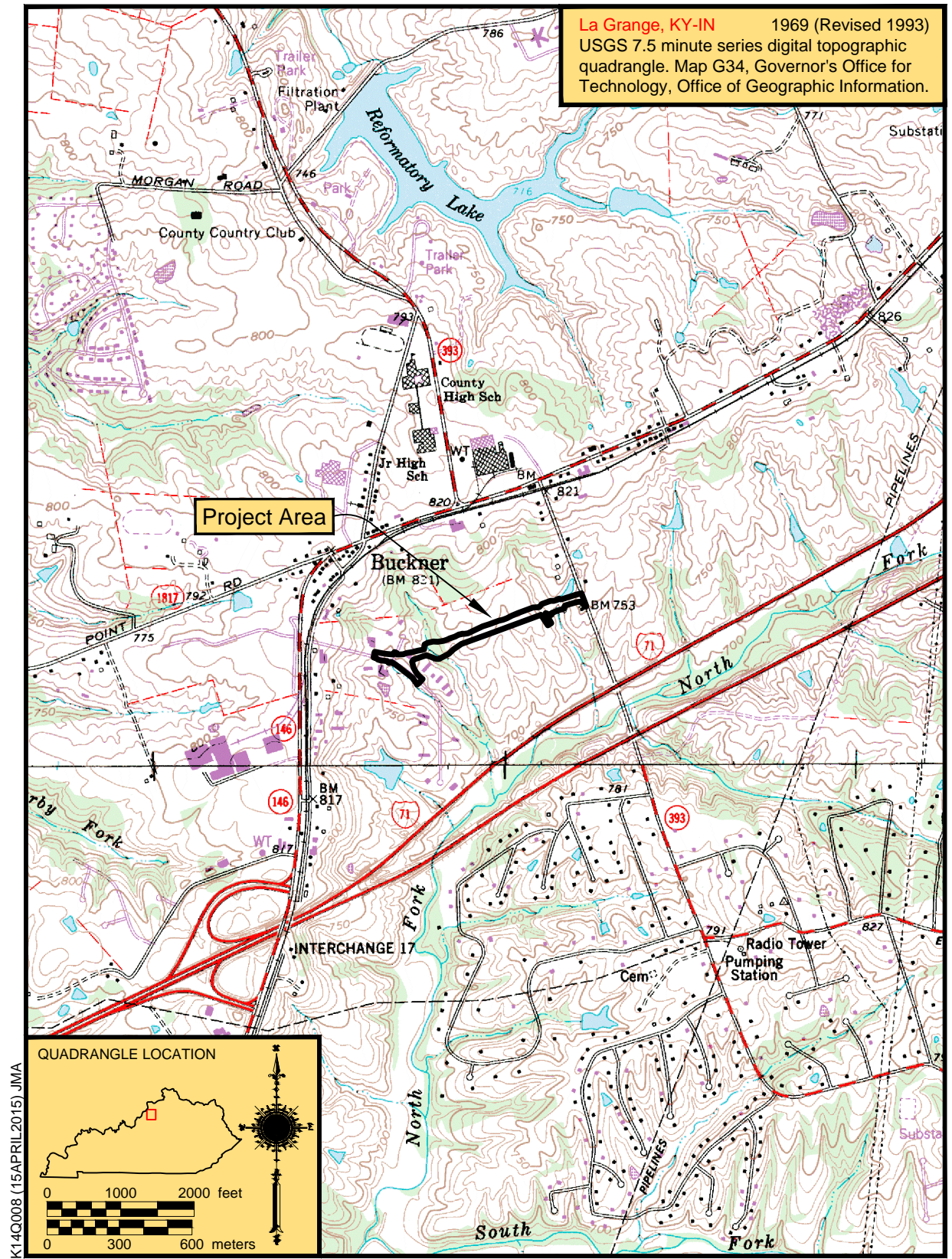


Figure 2. Location of project area on topographic quadrangle.

A description of the project area, field methods used, and 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 conducting the field research, a records review was conducted at the OSA. The review indicated that no archaeological sites had been documented within the project area; however, one archaeological investigation running northwest-southeast intersects the current project area. This archaeological investigation was conducted between April 1 and May 12, 1997, by Kurt Fiegel of the KYTC between the communities of Buckner and Centerfield in Oldham County, Kentucky (Figure 3). As a result of the survey, no archaeological sites were discovered, and no further work was recommended (Fiegel 1997).

No archaeological sites were recorded during this survey. No archaeological sites listed in or eligible for listing in the National Register of Historic Places (NRHP) will be affected by the proposed construction, and archaeological clearance is recommended.

II. DESCRIPTION OF THE PROJECT AREA

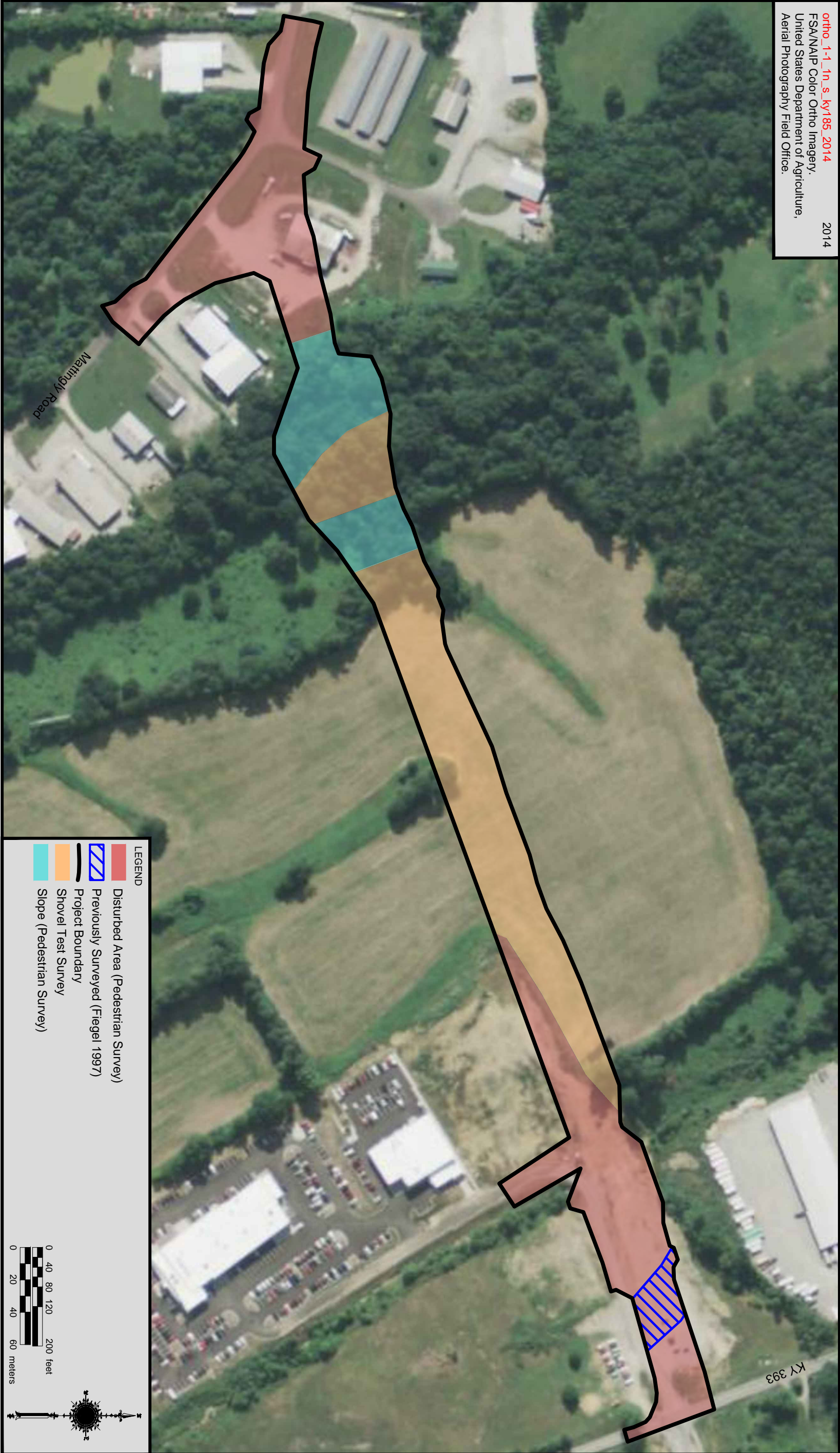
The project area is situated in the Outer Bluegrass physiographic region and runs parallel to Interstate 71, which is located south approximately 366 m (1,200 ft). The archaeological corridor of the direct APE was approximately .8 km long with a right-of-way (ROW) width of mostly 31 m, however widens to a little over 61 m in the eastern portion.

The project area is 4.12 ha in size traversing through an agricultural field (Figure 4), a small wooded area (Figure 5), and having commercial properties at each terminus. The east portion of the project begins at the intersection of KY 393 and Commerce

Parkway (Figure 6). Located there is an access road to the Tri-County Ford dealership (Figure 7) situated just south of the project area. The west portion of the project area is situated at the intersection of Mattingly Road and Mattingly Court in a commercial area. The proposed road extension cuts through the gravel parking area of a business lot, Sonne Steel (Figure 8). The road is slated to occupy the majority of this property and portions of the neighboring properties adjacent to Mattingly Road. The property to the west is a storage facility and the property to the east manufactures dishwasher parts. From this parking lot location, heading east on a bearing of 70 degrees, the landscape sloped down to a wooded portion with gentle slopes, 160 m (525 ft) in length, followed by an agricultural field (see Figures 4 and 5) to Commerce Drive. The corn field was on level topography and was 350 m (1,448 ft) in length.

As noted, terrain within the project area included gentle slopes and floodplains at elevations that range from 213 m (700 ft) above mean sea level (AMSL) along an unnamed tributary to the South Fork of Darby Creek up to 238 m (780 ft) AMSL in the middle portion of the project area. The Salt River Basin and its tributaries drain the majority of the project area including the tributary to Darby Creek.

Disturbance within the project area was mostly associated with the development of commercial properties at each terminus and included gravel or paved parking areas and access roads. The west portion of the project area ended at the intersection of Mattingly Road and Mattingly Court and is situated in a disturbed area of commercial properties (Figure 9). Just south of the east portion is the Tri-County Ford dealership. Commerce Drive serves as an access road to the Ford dealership, and the area surrounding this entrance is heavily disturbed by mechanical scraping, heavy soil redistribution, underground utility installation, and evidence of dumping material as fill (Figures 10 and 11).



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Figure 3. Project area plan map.



Figure 4. Overview of agricultural corn field within the project area, facing east.



Figure 5. Overview of the wooded area within the project area, facing west.



Figure 6. Intersection of KY 393 and Commerce Drive, facing east.



Figure 7. Ford dealership just south of the project area in the east portion, facing south.



Figure 8. Sonne Steel business located within the west portion of the project area, facing northeast.



Figure 9. Mattingly Road intersection with Mattingly Court, facing northwest.



Figure 10. Disturbance in east portion of project area, facing east.



Figure 11. Disturbance in east portion of project area, facing west.

Other ground surface disturbance in the project area consisted of agricultural plowing (see Figure 4). The wooded west portion between the corn field and the commercial area had some slope to a tributary to South Fork Darby Creek.

Ground surface visibility within the wooded portion of the project area was obscured by leaf litter and ground surface visibility was less than 10 percent. Vegetation within the small wooded area consisted of briars, grass, hardwood and softwood trees, and weeds. The corn field and the extremely disturbed areas near the commercial properties displayed good visibility 50 to 100 percent. The small undisturbed portions exhibited grass and weeds and agricultural fields.

Two soil series have been defined in the project area. They consist of Beasley and Nicholson Series. 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.

Soils within the project area varied depending on context and location. Soil profiles within the wooded area were shallower due to slope and water runoff. A typical soil profile here was represented by a dark yellowish brown (10YR 3/4) silty clay loam to a depth of 10 cm (4 in) below ground surface (bgs), followed by a yellowish brown (10YR 5/6) silty clay loam to a depth of 22 cm (9 in) bgs. The underlying subsoil was characterized by a brownish yellow (10YR 6/8) clay subsoil. These profiles are consistent with the Beasley silt loam soils that are mapped in the wooded area.

Soil profiles within the plowed agricultural corn field typically included a plow zone of dark yellowish brown (10YR 4/6) silty clay loam mixed with a yellowish brown (10YR 5/6) silty clay loam that extended from 0 to 25 cm (0 to 10 in) bgs. The

underlying subsoil was a brownish yellow (10YR 6/8) clay loam subsoil. These profiles are consistent with the Nicholson silt loam soils that are mapped in the agricultural field.

The typical profile for disturbed soils associated with the commercial properties was represented by a mixture of dark yellowish brown (10YR 4/6) silty clay loam and a yellowish brown (10YR 5/6) silty clay loam, that extended from 0 to 15 cm (0 to 6 in) bgs. The underlying subsoil was characterized by a brownish yellow (10YR 6/8) clay.

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 (FY15_8179) 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 area or within a 2 km radius of the project area.

The OSA file search was conducted on March 4, 2015. 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.

OSA records revealed that 10 previous professional archaeological surveys have been conducted within a 2 km radius of the project area, and as noted, one of these intersects the current project area. Two archaeological sites have been recorded in this area also. The records search revealed that both sites in the file search area (15OI120 and 15OI121) are historic farm/residences. The 2 km radius included areas within the La Grange quadrangle. None of these sites, however, will be affected by the proposed extension of Commerce Parkway.

Previous Archaeological Investigations

On May 25 and June 10, 1983, University of Kentucky's Cultural Resource Assessment Program conducted an archaeological survey of proposed water distribution facilities in Oldham County, Kentucky (Rossen 1983). The project area consisted of 4.8 km (3.0 mi) of water lines and two tank sites of unspecified size. At the request of Oldham County, the project area was investigated with a pedestrian survey supplemented with shovel testing. Four archaeological sites (15OI105—15OI108) were documented. None of these sites were located within the 2 km radius of the current project area.

Between April 1 and May 12, 1997, Kurt Fiegel of the KYTC conducted an archaeological survey of approximately 26 ha (64 acres) for the proposed reconstruction of KY 393 between the communities of Buckner and Centerfield in Oldham County, Kentucky (Fiegel 1997). This project area intersects the current project area within the cornfield and northwest of the Tri-County Ford Dealership

(see Figure 3). The field methods consisted of pedestrian survey supplemented with shovel testing. No archaeological sites were discovered, and no further work was recommended.

On December 18, 1998, CRA personnel completed an archaeological survey of a proposed wastewater treatment plant at the community of Buckner in Oldham County, Kentucky (Hackett 1998). The survey was conducted at the request of PDR Engineers, Inc., and consisted of approximately 1.1 ha (2.8 acres). The field methods consisted of pedestrian survey supplemented with shovel testing. No archaeological sites were discovered, and no further work was recommended.

Between January 3 and January 10, 2000, Cultural Horizons, Inc., personnel conducted an archaeological survey of proposed commercial vehicle monitoring stations along Interstate 71 in Henry and Oldham Counties, Kentucky (Stallings and Ross-Stallings 2000). The survey was conducted at the request of Presnell Associates, Inc. The project area consisted of approximately 8.00 ha (19.77 acres). One proposed monitoring station area of unspecified size was denied access by the landowner. The remaining four proposed monitoring stations were investigated with a pedestrian survey supplemented with shovel testing. No archaeological sites were identified, and no further work was recommended.

On March 17, 2000, CRA personnel completed an archaeological survey of a proposed industrial park access road between KY 393 and KY 53 in Oldham County, Kentucky (Reynolds 2000). The survey was conducted at the request of HMB, Inc., on behalf of the Oldham County Office of Economic Development. The project area consisted of approximately 25 ha (62 acres) of proposed surface disturbance, all of which was surveyed. The field methods consisted of pedestrian survey supplemented by shovel testing. No archaeological sites were discovered as a result of the field

investigation, and no further work was recommended.

On September 11, 2000, CRA personnel completed a 21.3-ha (53.3-acre) archaeological assessment of the proposed Bluegrass Generating Facility near the community of La Grange in Oldham County, Kentucky (Wingfield 2000). The survey was conducted at the request of Harry S. Chen of Bluegrass Generation Company, LLC. Field methods consisted of an intensive pedestrian survey supplemented with the use of shovel testing. Two archaeological sites (15O1120 and 15O1121) were documented within 2 km, but outside of the current project area. These were both historic farmstead/residences and were considered ineligible for NRHP inclusion. Project clearance was recommended.

On October 30, 2003, AMEC Earth & Environmental personnel conducted an archaeological survey of a proposed cellular communications tower in Oldham County, Kentucky (Schatz 2003). At the request of Verizon Wireless, Inc., .2 ha (.4 acres) were investigated by pedestrian survey, supplemented with screened shovel testing. No archaeological sites were documented, and project clearance was recommended.

On December 16, 2009, CRA personnel conducted an archaeological survey at the request of Community and Economic Development Associates, Inc., on behalf of the Oldham County Sewer District (Arnold 2009). The survey consisted of approximately 12.6 ha (31.3 acres), including a proposed force main pipeline that was approximately 7,010 m (23,000 ft) in length and a proposed lift station area that was approximately .2 ha (.5 acres) in size. Field methods consisted of pedestrian survey and screened shovel testing. No archaeological sites were recorded as a result of this survey, and no further work was recommended.

On October 18, 2007, Environment & Archaeology, LLC, personnel conducted an archaeological survey of a proposed cell tower in Oldham County, Kentucky at the request of Terracon (Crider 2007). The project area

consisted of .15 ha (.37 acres) and was investigated by pedestrian survey supplemented with screened shovel testing. No archaeological sites were encountered, and no further work was recommended.

From July 19 through July 20, 2011, CRA personnel conducted an archaeological survey for the proposed Phase 2A Waterline Improvements in Oldham County, Kentucky (Kelley 2011). The survey was conducted at the request of Johnathan Thomas of GRW Engineers, Inc., on behalf of the Oldham County Water District (Permit Number 2011-22). The project area consisted of approximately 16.5 ha (40.7 acres). A portion of the project area had been previously surveyed in 2006 and covered approximately 5.0 ha (12.4 acres). The remaining 11.5 ha (28.4 acres) were investigated via pedestrian survey supplemented with screened shovel testing. No archaeological sites were encountered, and project clearance was recommended.

Archaeological Site Data

OSA records show that prior to this survey, 92 archaeological sites had been recorded in Oldham County (Table 1). Over half of these (n = 54, 58.7 percent) are open habitations without mounds. Other types of sites that are common in Oldham include historic farm/residence sites (n = 22, 23.9 percent), and cemeteries (n = 5, 5.4 percent). No other type of site accounts for more than three percent. Nine sites (9.8 percent) are indeterminate, unspecified, or “other” type.

Most of the recorded sites in Oldham County have been located on dissected uplands (n = 59, 64.13 percent), floodplains (n = 15, 16.3 percent), or undissected uplands (n = 10, 10.87 percent). The current project area is almost entirely on dissected uplands.

Table 1. Summary of Selected Information for Previously Recorded Archaeological Sites in Oldham County, Kentucky. 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

*One site may represent more than one time period.

Map Data

In addition to the file search, a review of available maps at the University of Kentucky Geology Library, Kentucky Historical Society, and the private collection at CRA was initiated to help identify any historic structures that may have been located within the project area. The following maps were reviewed:

1925 Map of Oldham County, Kentucky (Miller);

1929 Map of the Areal and Structural Geology of Oldham County, Kentucky (Miller and Briggs);

1932 LaGrange, Kentucky-Indiana, 15-minute series topographic quadrangle (United States Geological Survey [USGS]);

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

1954 La Grange, Kentucky-Indiana, 7.5-minute series topographic quadrangle (USGS);

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

The maps can provide useful information about the general location of former structures and alert the crew to the possibility of existing historic deposits within a general area; however, no structures were indicated within the project area on any of the historic maps.

Survey Predictions

Considering the known distribution of sites in the county, the available information on site types recorded, and the nature of the current project area, certain predictions were possible regarding the kinds of sites that might be encountered within the project area. Prehistoric open habitation sites were the primary site types expected, but historic farm/residences were also considered a possibility.

IV. METHODS

This section describes the methods used during the survey. The project area was identified through mapping provided by the client, which was uploaded onto a MobileMapper 6 GPS unit, along with the most recent maps, the previously surveyed areas, and aerial photographs of the area. The GPS unit was used during the field investigations to identify the project boundaries. The entire project area was subjected to intensive pedestrian survey, which was conducted by walking the entirety of the project area. All exposed areas were visually examined for indications of cultural material, but poor ground surface visibility in undisturbed areas necessitated shovel testing within the area of the proposed road extension. The commercial properties at each terminus were pedestrian surveyed, and random shovel testing was conducted to confirm disturbance. One previous survey (Fiegel 1997) overlaps a portion of the current project area near the extensively disturbed portions of the current project area northwest of Tri-County Ford (see Figure 3). The cutbanks of the tributary to the South Fork of Darby Creek were also examined for any evidence of deeply buried cultural deposits.

In undisturbed areas, shovel test probes (STPs) were conducted on two parallel 20-m interval transects along the proposed road extension. Despite the ground surface visibility and the opportunity for surface collection within the agricultural corn field, no cultural materials were observed, and shovel testing was conducted throughout the undisturbed portions of the agricultural field to further investigate this area. The entire agricultural field was shovel tested with the exception of the heavy disturbed portion in the east of the project area.

In all cases, STPs measured not less than 35 cm in diameter and extended well into subsoil. The plow zone was removed as one level. All fill removed from the STPs was screened through .64 cm (.25 in) mesh hardware cloth, and the sidewalls and bottoms were examined for cultural materials and features. In addition, STPs were conducted to depths of 35–50 cm. Approximately 40 STPs were excavated within the project area. No artifacts were recovered, and no features or soil anomalies were evident within the project area.

V. RESULTS AND CONCLUSIONS

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 (the 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 listing in 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. 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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