PHASE I

ARCHAEOLOGICAL SURVEY FOR A BRIDGE REPLACEMENT AND APPROACHES ON PR 1015 OVER ROCKCASTLE CREEK, MARTIN COUNTY, KENTUCKY (KYTC ITEM # 12-1092.00)

By:

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Prepared for:

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Kentucky Office of State Archaeology Project Number:

FY15-8169

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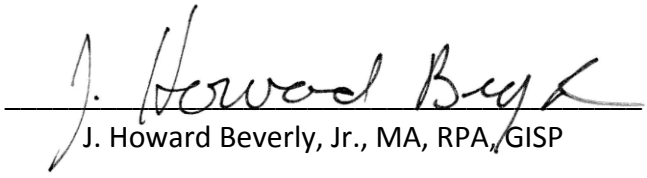

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Kentucky Office of State Archaeology
Archaeological Project Number: FY15-8169

Archaeology Report

August 2014
PRINTED ON ACID-FREE PAPER

Abstract

In accordance with the Kentucky Heritage Council's *Specifications for Conducting Fieldwork and Preparing Cultural Resource Assessment* (Sanders 2006), this is an abbreviated technical report describing a no-find resulting from a Phase I archaeological survey conducted on July 7, 2014, and the results of that survey.

CDM Smith was asked by the Kentucky Transportation Cabinet (KYTC) to conduct a Phase I archaeological survey for a proposed bridge replacement and approaches on PR-1015 over Rockcastle Creek, 275 feet west of the junction of KY 3 just south of Crooked Run Road in Martin County, Kentucky (Item Number 12-1092). Field work was conducted on July 7th, 2014. The area of potential effect (APE) is defined as the limits of the proposed right-of-way. The total area measures 2.175 acres (0.88 ha).

The archaeological survey involved a visual inspection of the entire APE and shovel probing in areas of less than 15 percent slope. The northern half of the APE was disturbed by residential construction which was photo-documented. The southern half of the APE, on the floodplain of Rockcastle Creek, was subjected to shovel probing at 10 and 20 m intervals. Seven of these probes were augured to depths below one meter to test for the presence of buried surfaces or cultural layers. There were no subsurface features revealed in the shovel probes or auger profiles. Historic metal fragments (n=3), an unidentifiable nail fragment (n=1), and 25 pieces of coal and cinder were recovered from STPs 1 and 2 between the surface and 150 cm below the surface. The area immediately northeast of STP 1 one was a septic leech area for the house on the terrace above, and the area northeast of STP 2 was the septic leech field for the most modern house within the APE. Only negative shovel probes lay to the west and the creek formed the southern boundary of the testable area. The findings were submitted to the Office of State Archaeology (OSA) for review as a possible archaeological site. OSA determined that the find did not merit a site number "due to the paucity of artifacts, the thoroughly mixed/disturbed deposits, and the use of the site area for a septic system" (Christina Pappas, personal communication 2014). The historic house within the APE had been moved from the floodplain area up to the terrace after fill was dumped there from the modern construction of KY 645. No other historic surface features were encountered.

No further archaeological work is recommended.

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Acknowledgements

The Principal Investigator for the archaeological survey was Mr. J. Howard Beverly, Jr., RPA. Field crew consisted of Ann Wilkinson. Howard Beverly generated maps and formatted the report. Robert Ball provided support in Lexington.

Section 1 -

Introduction

In accordance with the Kentucky Heritage Council's *Specifications for Conducting Fieldwork and Preparing Cultural Resource Assessment* (Sanders 2006), this is an abbreviated technical report describing a no-find Phase I archaeological survey.

CDM Smith was asked by the Kentucky Transportation Cabinet (KYTC) to conduct a Phase I archaeological survey for a proposed bridge replacement and approaches on PR-1015 over Rockcastle Creek, 275 feet west of the junction of KY 3 just south of Crooked Run Road in Martin County, Kentucky (Item Number 12-1092). Field work was conducted on July 7th, 2014.

1.1 Project Sponsor and Regulatory Authority

The state agency sponsoring this survey is the KYTC; the lead federal agency is the Federal Highway Administration. The survey was conducted in compliance with the guidelines established by the Kentucky Heritage Council Guidelines (Sanders 2001) and the National Historic Preservation Act of 1966 (P.L. 89-655; 80 Stat. 915, 16 U.S.C. 470 et seq), the National Environmental Policy Act of 1969 (P.L. 910190; 83 Stat. 852, 42 U.S.C. 4321 et seq), Procedures of the Advisory Council on Historic Preservation (36CFR800), Executive Order 11593, Protection and Enhancement of the Cultural Environment (16 U.S.C. 470; supp. 1, 1971).

1.2 Purpose and Scope of Work

A Phase I archaeological survey was conducted for a proposed bridge replacement and approaches on PR-1015 over Rockcastle Creek, 275 feet west of the junction of KY 3 just south of Crooked Run Road in Martin County, Kentucky (Item Number 12-1092).

The archaeological surveyors were prepared to shovel probe areas of less than 15% slope, auger deeper soil deposits, and to visually inspect the entire area. The purpose of this work was to identify any archaeological resources which might have existed and to record their extent, significance, and the potential impact of the proposed project on these cultural resources.

1.3 Project Area Description

The project is located on PR-1015 over Rockcastle Creek, 275 feet west of the junction of KY 3 just south of Crooked Run Road in Martin County, in the Kentucky Department of Highways District 12 (**Error! Reference source not found.**, Figure 1-2, and Figure 1-3).

1.4 Area of Potential Effect (APE)

The area of potential effect (APE) is defined as the limits of the proposed right-of-way. The total area is 2.175 acres (0.88 ha).

1.5 OSA Records Research

On July 25, 2014, the site files and survey records at the Office of State Archaeology (OSA) were accessed.

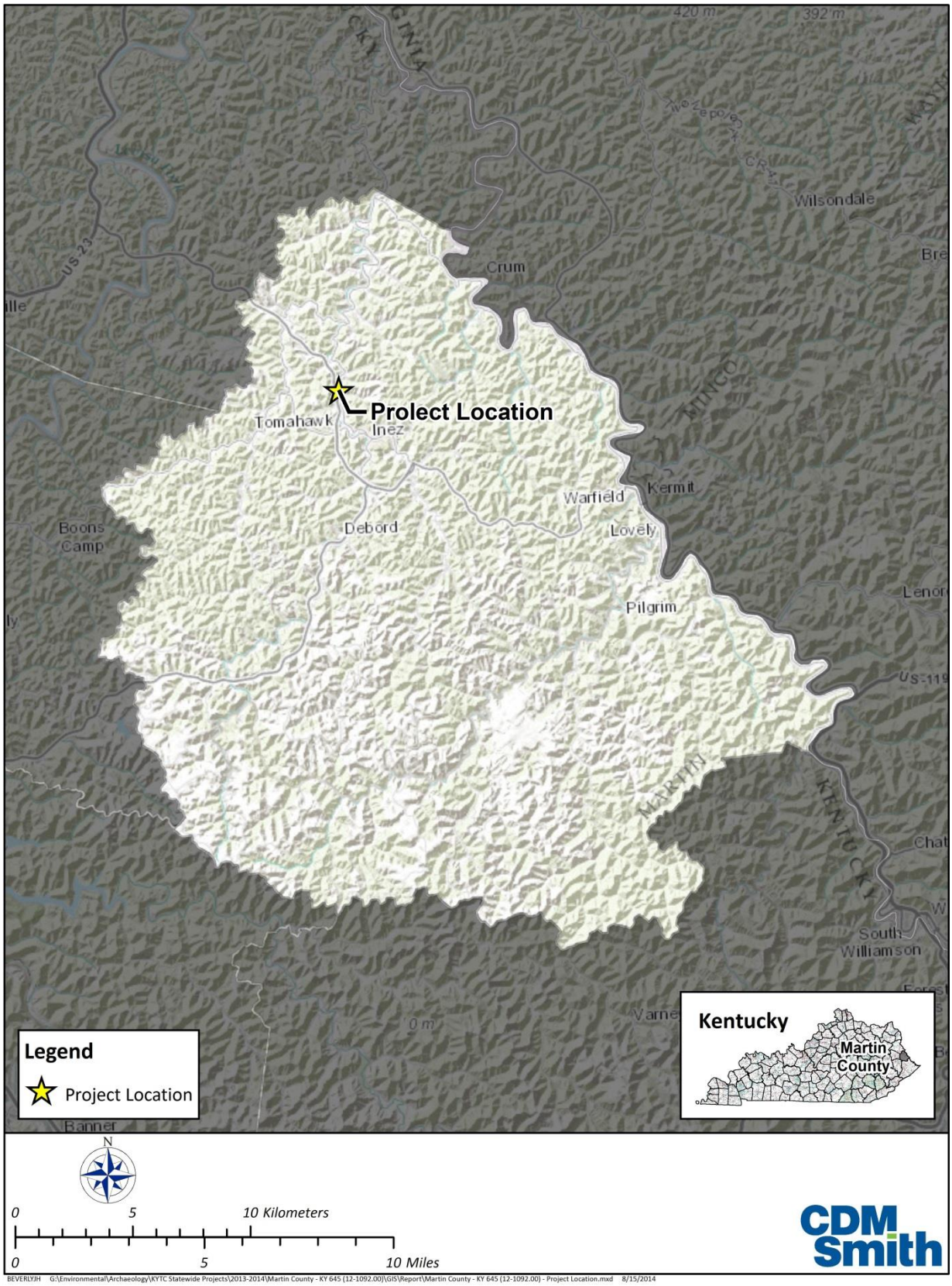

Figure 1-1. Project Location within Martin County.

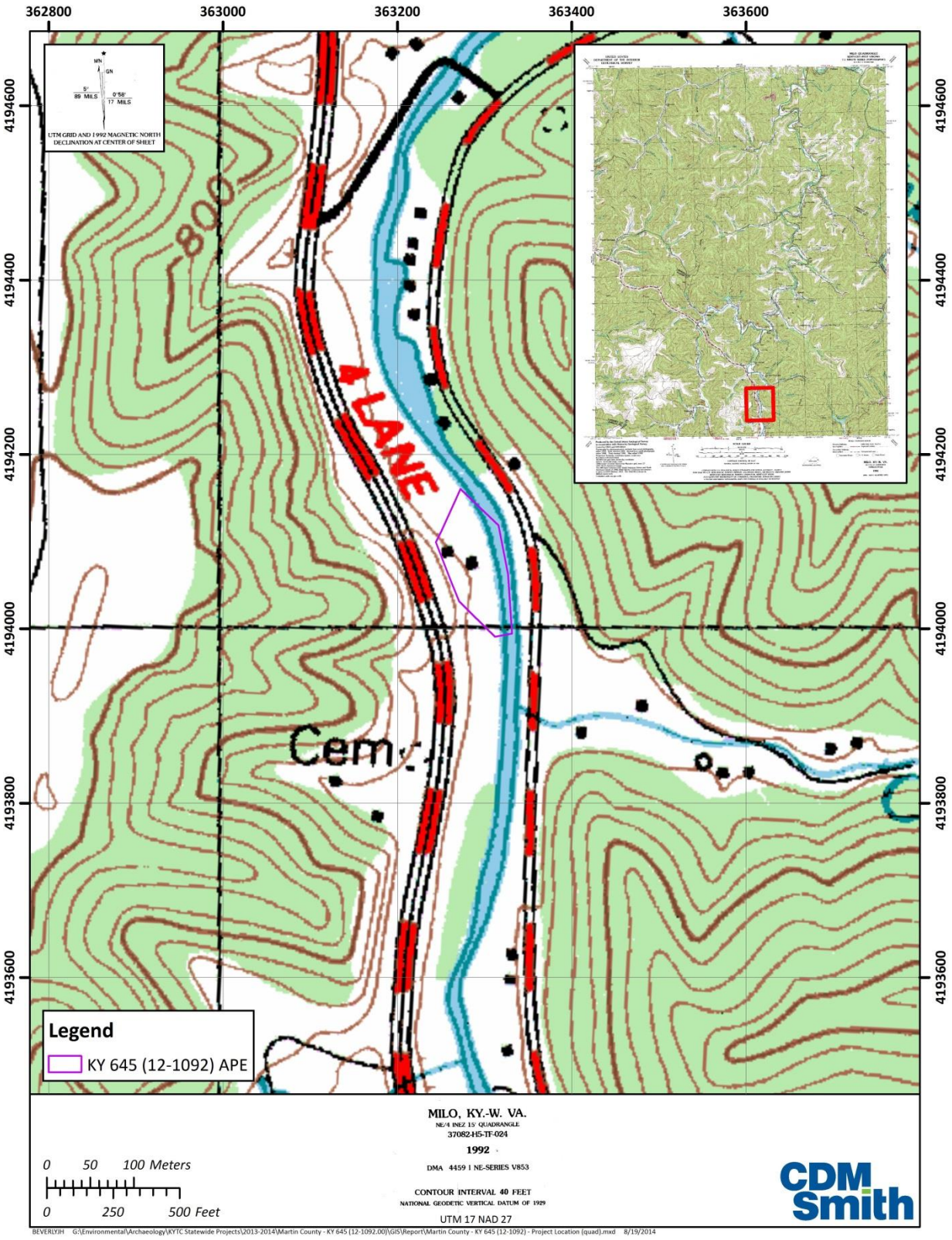

Figure 1-2. USGS Topographical Map showing Project Location.

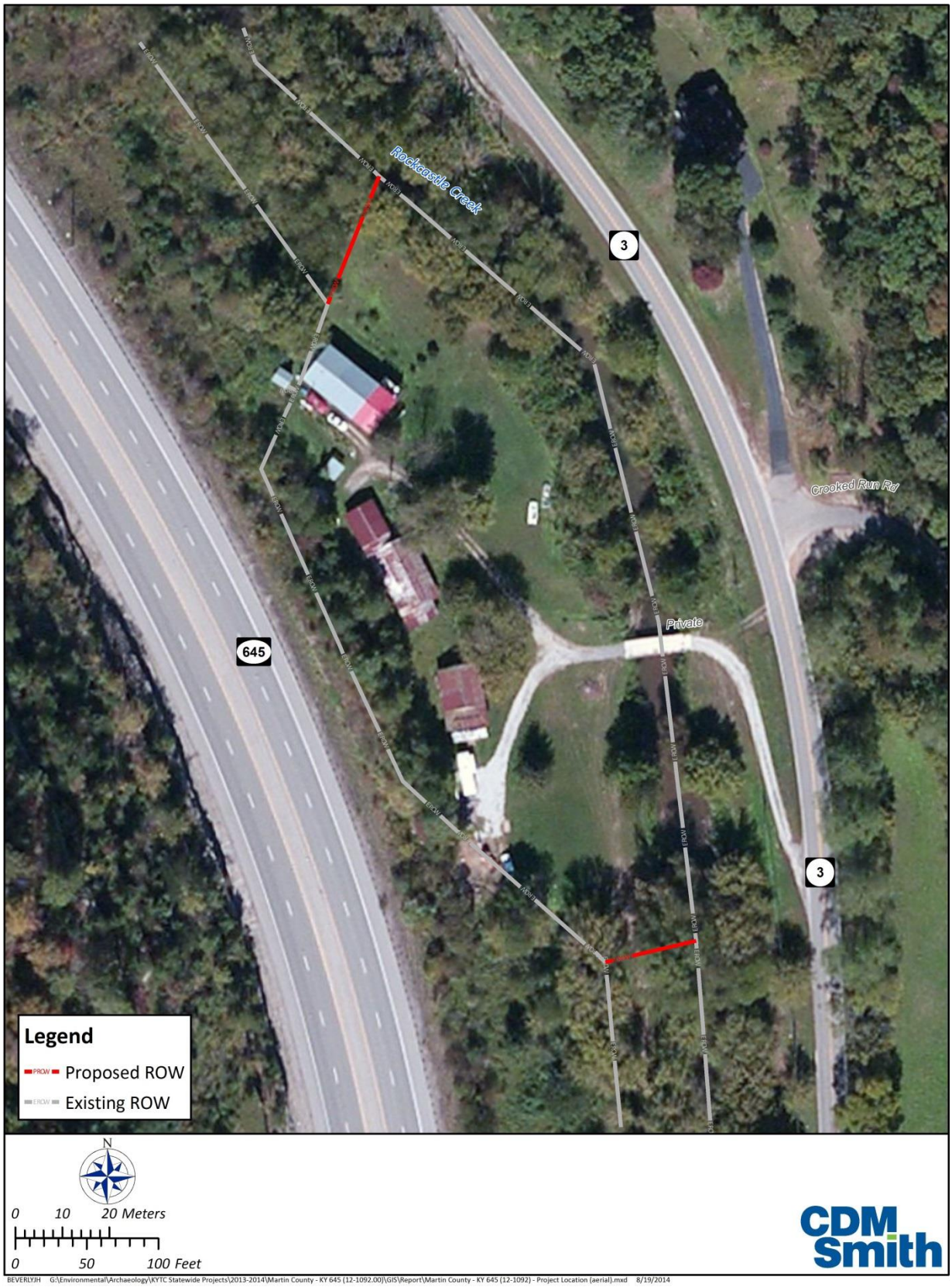

Figure 1-3. Aerial Map showing Project Location.

1.6 Field and Laboratory Crew

The field crew consisted of Ann Wilkinson. Mr. Beverly served as the field director and planned, coordinated, and supervised all field activities. J. Howard Beverly, Jr., J. David McBride, and Ann Wilkinson prepared the final report, and J. Howard Beverly, Jr., prepared the maps and formatted the report. Laboratory analysis was coordinated by Dona Daugherty. Prehistoric and historic artifact analysis was conducted by J. David McBride.

1.6.1 Field Effort

The total number of hours expended during fieldwork was 8 hours or approximately 1 person days. Field work for the project was conducted on July 7th, 2014.

1.6.2 Laboratory Effort

The total number of hours expended to wash, catalog, analyze, and write up artifacts was 35 hours. Identification of artifacts was conducted using available library references and by comparison with artifact collections at CDM Smith.

1.7 Curation

A copy of this report will be curated at the William S. Webb Museum of Anthropology, University of Kentucky, in Lexington.

1.8 Summary of Investigations

A Phase I archaeological survey was conducted for a proposed bridge replacement and approaches on PR-1015 over Rockcastle Creek, 275 feet west of the junction of KY 3 just south of Crooked Run Road in Martin County, Kentucky (Item Number 12-1092). The APE encompassed 2.175 acres (0.88 ha).

Archaeological resources were absent from the APE. No further archaeological work is necessary within the APE.

Section 2 -

Previous Investigations and Summary of Known Sites

In this chapter a summary is provided of all previous archaeological investigations in the area and all previously recorded archaeological sites are described. The research methodology involved archival research at the Office of State Archaeology and research of previous studies of archaeological sites.

2.1 Historical Documentation

USGS maps available were the 1954; 1954, Photo-revised 1978; 1954, Photo-revised 1984; and the 1992 7.5 minute topographic maps of the Milo, Kentucky, USGS quadrangle. Also available were a 1937 *Highway and Transportation Map of Martin County, Kentucky* (Kentucky Department of Highways 1937) and a 1951 *Rural Highway Series Martin County, Kentucky* (Kentucky State Highway Department 1951).

The 1937 Highway and Transportation Map indicate one house in the vicinity of the project APE. The 1952 Rural Highway Series map indicates one house in the APE vicinity and a sawmill just to the north. The 1954; 1954 Photo-revised 1978; and the 1954, Photo-revised 1989 USGS maps all indicate one house and one barn in the vicinity of the project APE. The 1992 USGS map indicates two houses and no barn in the vicinity of the project APE.

2.2 Previous Archaeological Investigations

The survey report files at the Office of State Archaeology (OSA) were consulted on July 25, 2014, at which time there were nine prior archaeological surveys recorded within a two-kilometer radius of the archaeological APE (Stallings 1995) (Figure 2-1).

Between November of 1979 and January of 1980, Kurt Fiegel conducted an archaeological reconnaissance combined with site testing in the 15.87 km (9.86 miles) length of the Ulysses-Inez Road Corridor. Four archaeological sites were identified during the November portion of the survey, including two rock shelters (15Mt5 & 15Mt6) and two lithic scatters (15La199 and 15La200). None of these sites were deemed eligible for the National Register of Historic Places (Fiegel 1980).

In October of 1984, at the request of Heer, Inc., Janzen, Inc. conducted an archaeological survey of the treatment plant site for the Inez Sewer Project in Martin County, Kentucky. The survey utilized visual reconnaissance and shovel probing. The majority of the project area was previously disturbed due to borrow activities and sloped. The remaining area was shovel probed. No archaeological material was recovered, and no further work was recommended (Janzen 1984).

In 1987, Cultural Resource Analysts, Inc. conducted an archaeological assessment of the proposed Quail Hollow II Apartments, LTD. in the community of Inez in Martin County, Kentucky. The survey utilized pedestrian reconnaissance supplemented with shovel probing. No archaeological material was recovered, and no further work was recommended (Hand 1987).

Figure 2-1. Previous Archaeological Surveys within 2km of Project Area.

In October of 1992, at the request of Alchemy Engineering Associates and on behalf of Marimplex, Inc., Cultural Resource Analysts, Inc. conducted a Phase I archaeological assessment of a proposed coal mining operation in northern Martin County, Kentucky. The survey overlooked Crooked Run and was about 2 miles north of the community of Inez. The survey consisted of about 139.9 acres and utilized pedestrian reconnaissance supplemented with shovel probing. No archaeological material was recovered, and no further work was recommended (Hand 1992).

In April of 1994, at the request of Alchemy Engineering Associates and on behalf of Marimplex, Inc., Cultural Resource Analysts, Inc. conducted a phase I archaeological assessment of a proposed coal mining operation in northern Martin County, Kentucky. The survey is about 2 miles north of the community of Inez along Twin Branch. The survey consisted of about 82.55 acres and utilized intensive pedestrian reconnaissance supplemented with shovel probing. No archaeological material was recovered, and no further work was recommended (Creasman 1994).

In January of 1995, at the request of Alchemy Engineering Associates and on behalf of Marimplex, Inc., Cultural Resource Analysts, Inc. conducted a phase I archaeological assessment of a proposed coal mining operation in northern Martin County, Kentucky. The survey is about 2 miles north of the community of Inez along Crooked Run and Twin Branch. The survey consisted of about 40 acres and utilized intensive pedestrian reconnaissance supplemented with shovel probing. No archaeological material was recovered, and no further work was recommended (Bradbury 1995).

In August of 1995, at the request of Alchemy Engineering Associates and on behalf of Transmar Land Corporation, Cultural Resource Analysts, Inc. conducted a phase I archaeological assessment of a proposed coal mining operation in northern Martin County, Kentucky. The survey is located southeast of Crooked Branch and north of Rockcastle Creek near the town of Inez. The survey consisted of about 404.47 acres, but only 173.44 acres were surveyed. The remaining acreage was an overlap with the Amendment No. 1 Revision. The survey utilized intensive pedestrian reconnaissance supplemented with shovel probing. No archaeological material was recovered, and no further work was recommended (Richmond 1995).

In September and October of 1995, at the request of Bocook Engineering, Inc., a Phase I archaeological survey was conducted for the Rockcastle Mining, Inc. Rockcastle Creek project area located in Martin County, Kentucky. The project area consisted of about 355.47 acres, and the survey utilized intensive pedestrian reconnaissance supplemented with shovel probing. No archaeological material was recovered during the survey, and no further work was recommended (McGraw 1995).

In November of 2012, on behalf of NiSource Gas Transmission and Storage (NGT&S), GAI Consultants, Inc. (GAI) conducted a Phase I archaeological survey in portions of Johnson and Martin Counties, Kentucky for the Line PM-117 Replacement Project. The survey consisted of a 200 ft. wide study corridor along the 7.53 mile length of the pipeline replacement, ten access roads proposed for construction, and extra workspaces, which totaled about 254.48 acres (102.98 ha). A small family cemetery was identified during the survey and after being notified, NGT&S rerouted the project area so the cemetery would be avoided. In addition, GAI recommended that during the proposed pipeline replacement a 50 ft. buffer be established around the identified boundaries of the cemetery in the form of protective construction fencing. Otherwise, no further work was recommended (Hood 2013).

2.3 Known Archaeological Sites

The site files at the OSA were consulted on July 25, 2014. At that time, there were three previously recorded archaeological sites within a two-kilometer buffer of the current project area: 15Mt5, 15Mt6, and 15Mt20.

Site 15Mt5, also known as the Hainey-Mills Site, is a south-facing rockshelter with a prehistoric component affiliated with the Late Archaic, Late Woodland, and Fort Ancient periods. At the time of the survey, the shelter had been recently used by someone as evidenced by the amount of carbon on the roof and ashes on the floor. A local informant said the shelter was once used as a pig pen. Also, a local informant said that the site had been previously looted sometime between December 19, 1979, and January 18, 1980. One flake was observed on the surface of the shelter, which lead to the excavation of one shovel probe. The shovel probe was positive and revealed an ash area. Then two test units were excavated, and one of the units incorporated the disturbed portion of the site. The survey produced cultural material and faunal material, and some of the cultural material was diagnostic. According to the site form, the artifact assemblage suggested that the site was in use sporadically through time. The site was not considered significant due to the disturbance to the site, and was listed as an inventory site. No further work was recommended for the site (Site Form for 15Mt5).

Site 15Mt6, the Maynard Rockshelter, is a rockshelter with a prehistoric component. The rockshelter opens to the south and the flooring is bedrock covered with talus. Sixteen shell tempered pot sherds were recovered from the surface of the shelter. A two meter square unit was excavated within the rockshelter during the survey, but the unit was split into two units while excavating. Thirty-four more pot sherds were recovered, including two rim sherds. The artifacts were located from within the first five centimeters. The site was thought to be associated with another rockshelter located to the west, but that shelter was out of the project area and could not be investigated. The site was reported as possibly being a temporary camp, possibly for hunting parties. The site was deemed not significant because it was virtually completely excavated and little data remains at the site. No further work was recommended (Fiegel 1980; Site Form for 15Mt6).

Site 15Mt20, the Alphar Brown House Site, is a historic farm residence site dating to around the start of the nineteenth century to the mid-twentieth century. The site was recorded by Betty J. McGraw with McGraw, Inc. in October of 1995. The house site is the only remaining structure and it measures about 30 meters by 30 meters. Two chimneys, numerous foundation stone, and tin roofing were also documented at the site. The house is shown on the 1916 Inez 15' topographic quadrangle map (McGraw 1995; Site 15Mt20).

Section 3 -

Field Methods

In this section, the field methods employed during the course of this study is described. These methods include the fieldwork activities, their application in different portions of the project area reflecting conditions encountered, and an evaluation of their effectiveness.

3.1 Implemented Field Methods

The field methods implemented for the Phase I investigations conform to the Kentucky Heritage Council's specifications for conducting a Phase I survey (Sanders 2006). Systematic shovel test probes (STPs) were to be excavated where possible and areas of 15 percent or greater slope were visually inspected for surface remains and potential rock shelters. Areas of disturbance were photo-documented, and deeper alluvial soils were augured to test for buried surfaces and cultural features.

The APE consists of the 2.175 acre (0.88 ha) APE for the proposed bridge replacement and approaches on PR-1015 over Rockcastle Creek, 275 feet west of the junction of KY 3 just south of Crooked Run Road in Martin County, Kentucky (Item Number 12-1092). The location includes the creek, its floodplain, and an artificially created or augmented terrace, ranging from 600 to 640 ft AMSL (Figure 3-1 and Figure 3-2). The physical setting of the APE is shown in Figure 3-3 through Figure 3-11.

3.1.1 Visual Inspection

Visual Inspection concluded that no rock overhangs or rockshelters existed within the APE. Residential disturbances were photo-documented on the terrace in the northern half of the APE. These included driveway construction, graveling of parking areas, cutting into the banks, a water meter indicating the location of a water line, and landscaped areas. Subsoil was visible at the surface in all level areas surrounding the three residences, with the exception of one grassy garden area at the northern end. The terrace edge was very steeply sloped down to the floodplain, and the portion of APE between the houses and KY 645 was also very steeply sloped.

3.1.2 Shovel Testing

The Rockcastle Creek floodplain north and south of PR 1015 was shovel probed on a 10 and 20m interval grid (Figure 3-2). Fourteen shovel probes were excavated in this portion of the project area. Seven of these were augured to depths below one meter in order to test for buried cultural deposits in the deeper alluvial sands; none were present. Shovel Probes 1 and 2 produced cultural material from the topsoil down to 150 cm below surface. These materials included small, unidentifiable metal fragments (n=3), an unidentifiable nail fragment (n=1), and coal/cinders (n=25). Eight of the coal/cinder fragments were collected from the disturbed top 60 cm of STP 1, excavated just beyond a septic leech area serving the older house above. The property owner, Gertie Cox, provided some valuable information in a personal communication on August 19, 2014. Mrs. Cox stated that the older house had originally been located down on the floodplain portion of the APE prior to construction of KY 645. During the road construction the terrace area was created from fill and the house was moved up to its current location. Additionally, Mrs. Cox informed us of the presence of the two leech fields and her in-ground septic system at the northern end of the project APE. A single shovel probe was placed up on the terrace in a garden area that was covered in mown grass. This probe verified the area as filled in with rock and subsoil.

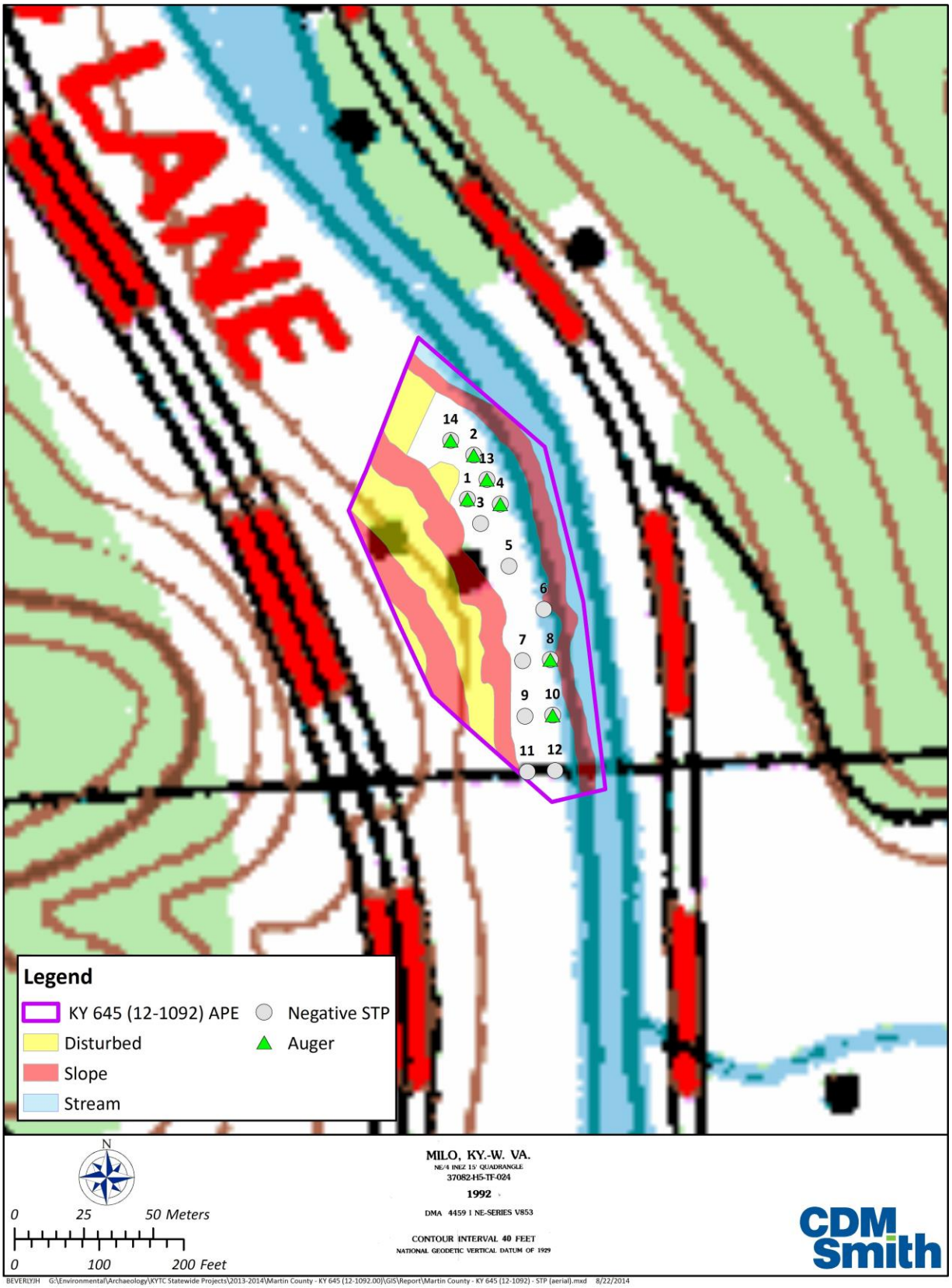

Figure 3-1. Location of STPs on USGS Topographical Map.

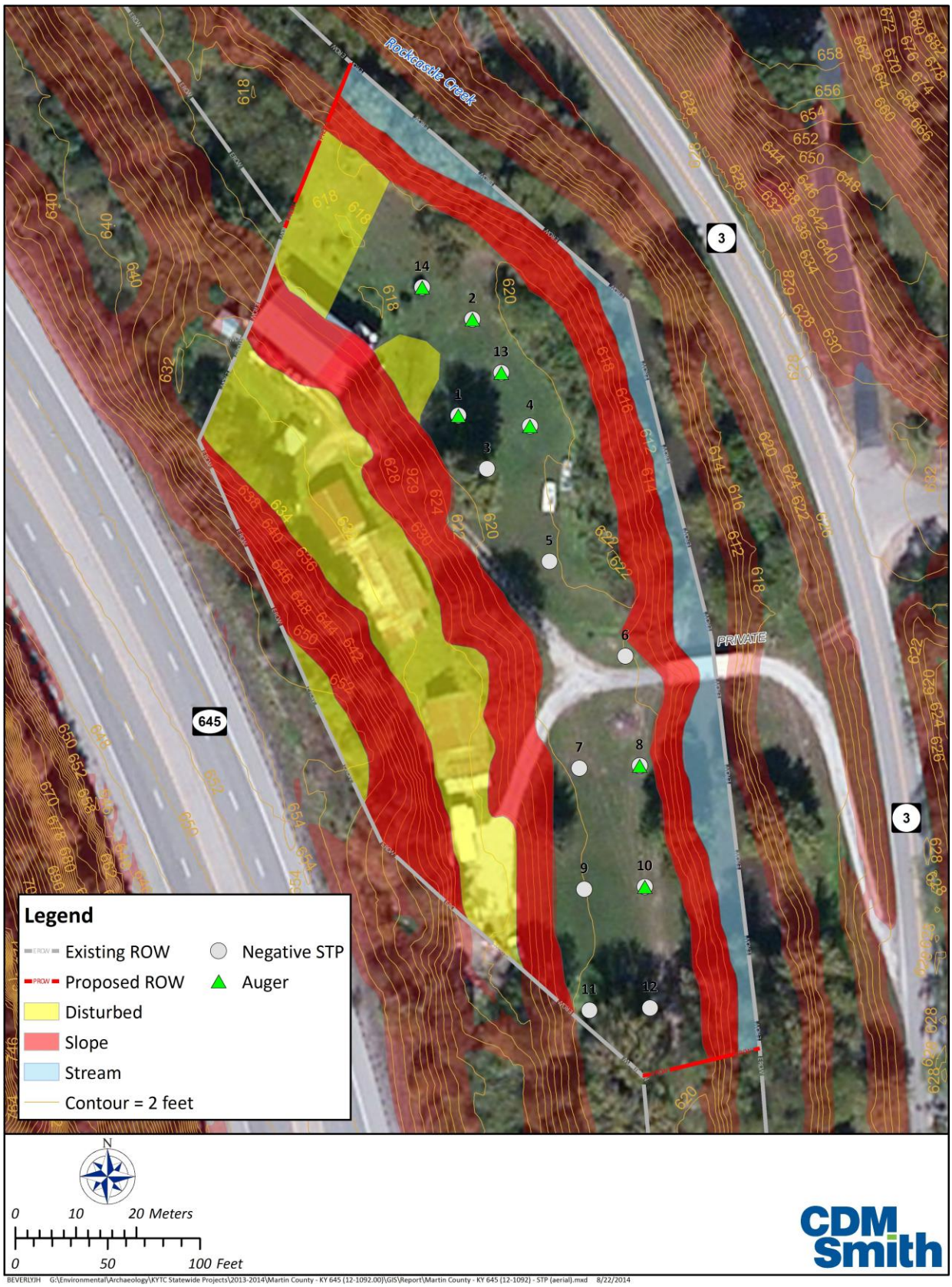

Figure 3-2. Location of STPs on Aerial Photograph.

Figure 3-3. View of Rockcastle Creek, Looking South.

Figure 3-4. View of APE Floodplain North of PR 1015, Looking North.

Figure 3-5. View of Floodplain Within APE, South of PR 1015, Looking South.

Figure 3-6. View of Terrace Within APE, Looking Southwest.

Figure 3-7. Residential Development Within APE, Looking South.

Figure 3-8. View of Residential Disturbances on Terrace, Looking West.

Figure 3-9. Residential Disturbances Within APE, Looking North Northwest.

Figure 3-10. Residential Disturbances Within the APE. Looking Northwest Towards Most Modern House and Septic Leech Area Just Right of the Two Trees in the Center.

Figure 3-11. View of Modern Septic Leech Area and Tank Area, Looking North.

3.2 Evaluation of Field Methods

Visual inspection successfully ruled out the possibility of rockshelters within the APE, and identified some major disturbances within the APE. A house within the APE had been moved from the floodplain up onto the artificial terrace (Gertie Cox, personal communication August 2014); no other potential surface features were encountered.

The findings were submitted to the Office of State Archaeology (OSA) for review as a possible archaeological site. Kentucky's OSA concluded that these materials did not constitute an archaeological site "due to the paucity of artifacts, the thoroughly mixed/disturbed deposits, and the use of the site area for a septic system" (Christina Pappas, personal communication 2014). Based on this determination, all probes were all negative, the only cultural material being produced from disturbed soils around two leech fields and a modern house.

Auguring of seven of the disturbed and culturally sterile shovel probes did not provide any indication that buried cultural horizons existed in the top 160 centimeters of alluvial sands of the floodplain. As a result of this survey, it was determined that the APE does not have any intact archaeological, and no further work is recommended.

Section 4 -

Summary and Recommendations

4.1 Summary

CDM Smith was asked by the Kentucky Transportation Cabinet (KYTC) to conduct a Phase I archaeological survey for a proposed bridge replacement and approaches on PR-1015 over Rockcastle Creek, 275 feet west of the junction of KY 3 just south of Crooked Run Road in Martin County, Kentucky (Item Number 12-1092). Field work was conducted on July 7th, 2014.

Archaeological resources were absent from the APE.

4.2 Recommendation

No further archaeological work is necessary within the APE.

Section 5 -

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1992 Milo, Kentucky, 7.5 minute series topographic quadrangle map.