

University of Alabama Museums
Office of Archaeological Research

April 27, 2009

THE UNIVERSITY OF
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Mr. Jerry W. Williams
Task Engineering Management, Inc.
P.O. Box 660548
Birmingham, Alabama 35266

OAR PROJECT NUMBER: 09-162

Dear Mr. Williams:

Please find enclosed for your company a copy of our recent report entitled "A Cultural Resources Reconnaissance for the Proposed 385 Acre Masseyline Surface Mine in Jefferson County, Alabama", by R. Lance Richardson of our staff. Please note that SHPO has 30 days to comment on our findings.

It has been a pleasure to be of service to Task Engineering Management, Inc. Please feel free to call for further information or services.

Sincerely,



Robert A. Clouse, Ph.D./Director
The University of Alabama
Office of Archaeological Research

RAC:tkw
FILE:2008-09SURVEY.FCL/1

Enclosures: Survey Report
Invoice for Professional Services

Copy of Survey Report to:

Alabama Historical Commission
Attn: Stacye Hathorn

University of Alabama Museums

Office of Archaeological Research

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April 27, 2009

**A Cultural Resources Reconnaissance for the Proposed 385 Acre Masseyline
Surface Mine in Jefferson County, Alabama**

OAR PROJECT NUMBER: 09-162

PERFORMED FOR: Task Engineering Management, Inc.
P.O. Box 660548
Birmingham, Alabama 35266
Attn: Mr. Jerry W. Williams

PERFORMED BY: R. Lance Richardson
The University of Alabama
Office of Archaeological Research
13075 Moundville Archaeological Park
Moundville, Alabama 35474

DATE PERFORMED: April 20-22, 2009



R. Lance Richardson
Cultural Resources Analyst
Office of Archaeological Research



Robert A. Clouse, Ph.D./Director
The University of Alabama
Office of Archaeological Research

*A Cultural Resources Reconnaissance
for the Proposed 385 Acre Masseyline Surface Mine in Jefferson County, Alabama*

R. Lance Richardson

Introduction

The University of Alabama, Office of Archaeological Research (OAR) was contracted by Task Engineering Management, Inc. to perform a cultural resources reconnaissance of a proposed 385 acre Masseyline surface mine in Jefferson County, Alabama. R. Lance Richardson (Cultural Resources Analyst) and Donald L. Brown (Cultural Resources Assistant) conducted the survey on April 20 through 22, 2009 to locate and identify any archaeological sites or historic standing structures. The Co-Principal Investigators for the survey are Robert A. Clouse, Ph.D. and Samuel D. Mizelle, II.

The location of the survey area is shown entirely on the USGS 7.5' Trafford, Alabama topographic quadrangle (Figure 1). The proposed mining project is located in portions of Sections 24, 25, and 36 of Township 14 South, Range 1 West in Jefferson County, Alabama. The total acreage of the project is 385 acres, however, roughly 185 acres have been previously surface mined.

This project area is located to the south of Gurley Creek and is divided by Bethel Road. To the north of Bethel Road, the parcel can be divided in half. The western half is primarily situated in secondary growth, bisected by unimproved access roads and a small wild game plot. The eastern half of the tract north of Bethel Road is a reclaimed surface mine. The northern boundary of the project area with Gurley Creek was examined for rock shelters but no shelters large enough for human occupation were noted. South of Bethel Road, the survey area consists of two distinct areas, to the east lies a former surface mine that has not been reclaimed and to the west, the parcel is situated in secondary growth. The area that has been formerly mined contains several access roadways that weave their way through the area. Access roads, some land grading, and several geological exploration trenches are scattered throughout the parcel south of Bethel Road that is currently situated in secondary growth. The ridgetops throughout the southern portion of the survey area are heavily eroded. Figures 2 thru 9 are general views of the survey area.

The survey area lies within the Warrior Basin district of the Cumberland Plateau physiographic section of Alabama. The Warrior Basin district is described as a homoclinal limestone valley of low relief. It is synclinal submaturely to maturely dissected sandstone and shale plateau of moderate relief (Sapp and Emplainscourt 1975). Elevation within the survey area is 560 ft AMSL to 700 ft AMSL. The National Cooperative Soil Survey (NCSS) for Jefferson County, Alabama shows four soil types present in the survey area prior to mining disturbances (Figure 10). In the Soil Survey of Jefferson County, Alabama (Spivey 1982), the soil types are summarized as follows (Table 1).

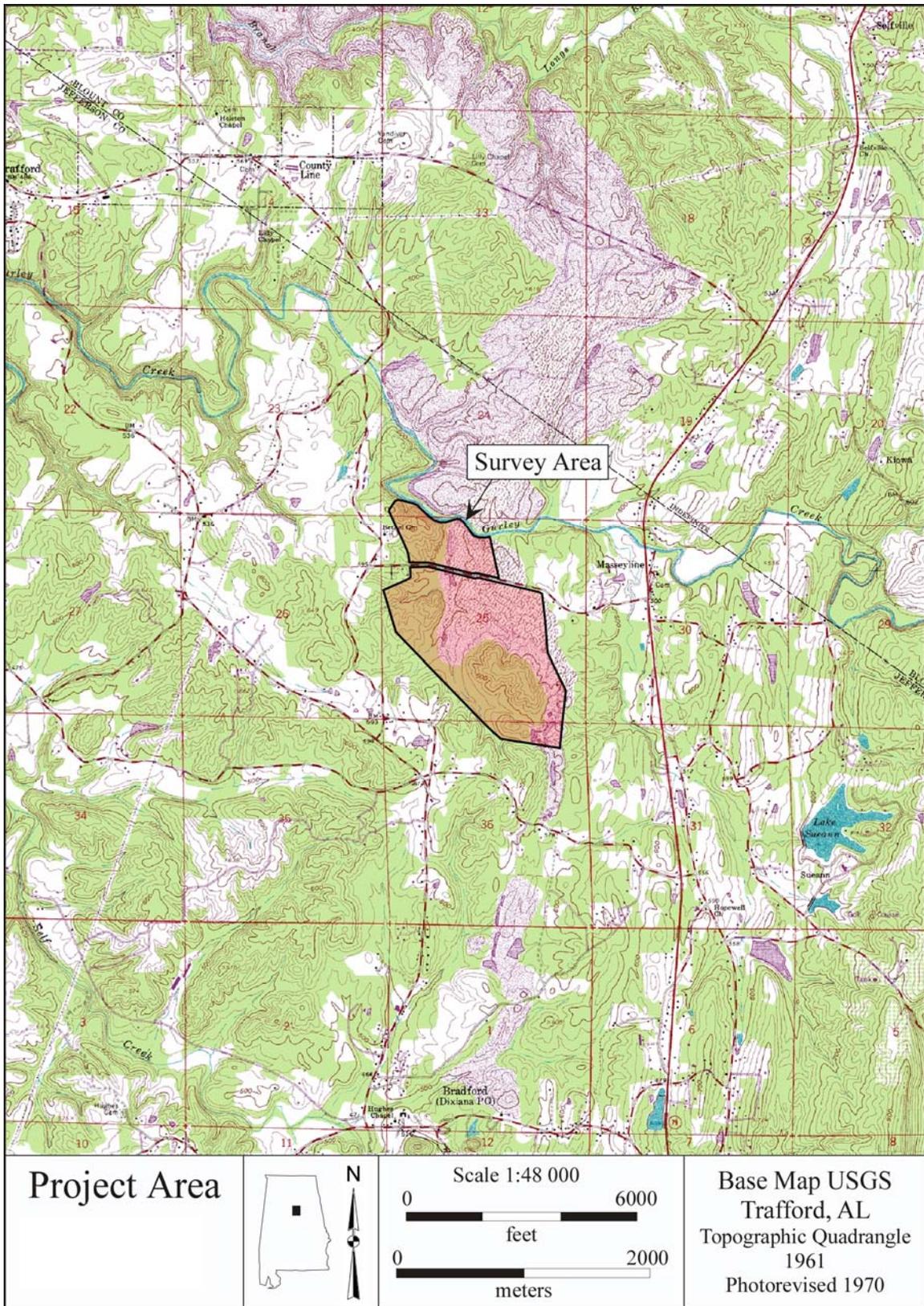


Figure 1. Location of the survey area.



Figure 2. General view of portion of the former surface mine that has not been reclaimed.



Figure 3. View showing reclaimed surface mine and the secondary growth and slopes north of Bethel Road.



Figure 4. Typical, small rock shelter located along Gurley Creek.



Figure 5. Wild game plot located north of Bethel Road.



Figure 6. General view of secondary growth located south of Bethel Road.



Figure 7. Recently constructed access road.



Figure 8. Recently dug trenches along an access roadway.



Figure 9. General view of secondary growth and slope south of Bethel Road.



Figure 10. Aerial photograph and soil map of the project area.

Table 1. Soil types located in the survey area.

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
29	Montevallo-Nauvoo association, steep	164.6	42.7
31	Nauvoo fine sandy loam, 8 to 15 percent slopes	0.9	0.1
35	Palmerdale complex, steep	203.3	56.8
40	Townley-Nauvoo complex, 8 to 15 percent slopes	16.2	0.4
Totals for Area of Interest (AOI)		385.0	100.0

Literature and Document Search

The Alabama State Site File (ASSF) lists nine archaeological sites recorded within one mile of the survey area. They are listed with a summary description of each site in Table 2. The *National Register of Historic Places* (NRHP) and related supplements list no eligible properties located in or near the project area. For prior archaeological surveys conducted in the general area, the National Archaeological Database Bibliography (NADB), housed at OAR, and the Alabama Online Cultural Resources Database (AOCRD) were reviewed. The search yielded no results for surveys recorded within one mile of the proposed surface mine.

Table 2: Sites located within a one mile radius of the survey areas.

Site Number	Cultural Affiliation	Size	NRHP Status
1Je9	Unknown Aboriginal	? m x ? m	Undetermined
1Je15	Unknown Aboriginal	? m x ? m	Undetermined
1Je16	Unknown Aboriginal	? m x ? m	Undetermined
1Je151	Unknown Aboriginal	200 m x 100 m	Undetermined
1Je237	Unknown Aboriginal	65 m x 10 m	No
1Je238	Woodland	220 m x 10 m	No
1Je239	Unknown Aboriginal, 19 th and 20 th Century Nonaboriginal	110 m x 40 m	No
1Je280	Unknown Aboriginal	170 m x 50 m	Undetermined
1Je284	Middle Archaic, Late Gulf Formational, Mid and Late Woodland	150 m x 100 m	Undetermined

The 1937 Jefferson County Highway map depicts two structures within the project area. However, no structures are shown on the 1960 Jefferson County Highway map. These structures are depicted to the south of Bethel Road in a portion of the project area that has been previously mined, presumably after 1960. No evidence of the structures was located during the field survey. The *Historical Atlas of Alabama, Vol. 2* lists one historic cemetery located just west of the survey area. The cemetery is associated with Bethel Methodist Church and is still in use. No cemeteries are recorded within the survey boundaries (Remington 1998).

Field Methods

Standard Phase I surveys include visual inspection of exposed surface areas and subsurface testing. Field investigations were conducted by a two person crew. As required in the State of Alabama, shovel tests were excavated to a minimum of 30 cm in diameter and to a minimum depth of 30 cm, under optimal conditions. If subsoil, groundwater, or bedrock was not

encountered after achieving 30 cm of depth, then excavation is continued until culturally sterile subsoil is identified (Figure 11). All excavated soil is screened utilizing 6 mm hardware cloth to recover any cultural material. A total of 81 shovel tests was excavated in the course of this survey. Figure 12 is a map of the survey areas including shovel test placement. A large amount of the survey area was located on slope, in former surface mines, or areas with subsoil visible at the surface (Figure 13), thus limiting the number of shovel tests actually dug as compared to normal circumstances.

Laboratory Methods and Collection Curation

All cultural materials recovered during the project were returned to the David L. DeJarnette Laboratory at Moundville Archaeological Park. All photographs, field notes, maps and documentation pertinent to the survey will be curated at the Erskine Ramsay Archaeological Repository located at Moundville Archaeological Park. This repository meets Department of the Interior curation standards as defined under 36 CFR Part 79.



Figure 11. Typical shovel test.

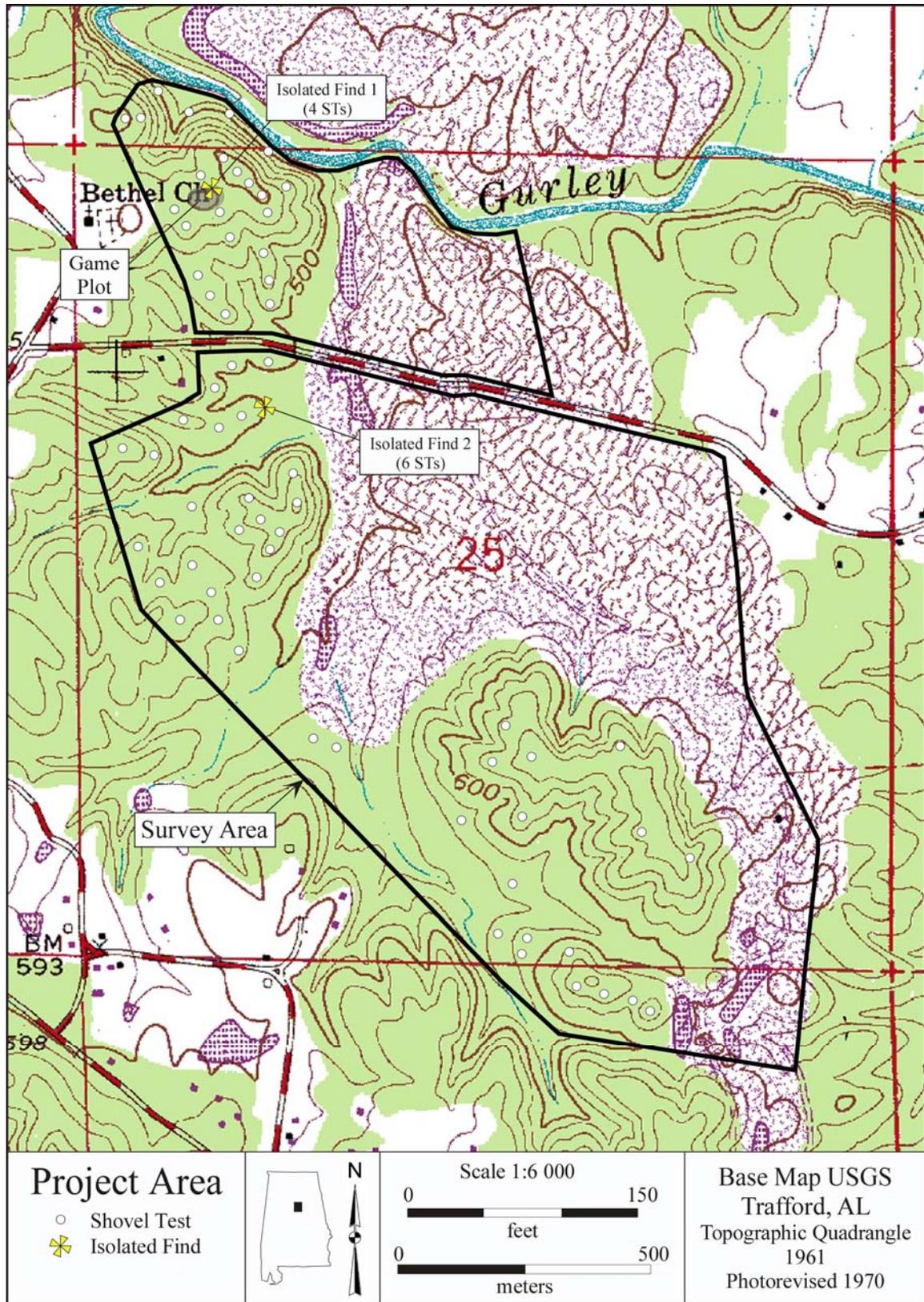


Figure 12. Project area.



Figure 13. Access roadway and visible subsoil at the surface on a ridgetop south of Bethel Road.

Results

As a result of this project, no new sites were added to the ASSF. However, two isolated finds were recorded. A brief description of the NRHP status and recommendations for treatment for the finds follow.

Isolated Find 1

Research Methods: Shovel Test

Materials Recovered:

<u>Group</u>	<u>Category</u>	<u>Subcategory</u>	<u>Remarks</u>	<u>Count</u>	<u>Wt (gr)</u>
Debitage	.25" Cortical	Knox Chert	Heated	1	5.2

Comments:

The isolated find was discovered in a shovel test adjacent to a drainage associated with Gurley Creek located in the SW $\frac{1}{4}$ of the NW $\frac{1}{4}$ of Section 25, T14S, R1W to the south of Bethel Road. The landform has been disturbed from former timbering activities and recent access road construction. Surface inspection yielded no additional artifacts and four subsequent shovel tests were negative. The isolated find does not appear to meet NRHP eligibility criteria.

*Isolated Find 2**Research Methods: Shovel Test**Materials Recovered:*

<u>Group</u>	<u>Category</u>	<u>Subcategory</u>	<u>Remarks</u>	<u>Count</u>	<u>Wt (gr)</u>
Debitage	.25" Cortical	Knox Chert	Heated	1	5.2

Comments:

The isolated find was discovered in a shovel test situated in an a wild game plot located in the NW ¼ of the NW ¼ of Section 25, T14S, R1W behind the Bethel Methodist Church and Cemetery. The artifact was recovered in a saddle located on an upland crest. Six subsequent shovel tests were negative and surface examination yielded no additional artifacts. The isolated find does not appear to meet NRHP eligibility criteria.

Recommendations

The survey area is for the proposed 385 acre Masseyline surface mine located in Jefferson County, Alabama. Much of the survey area, both north and south of Bethel Road, has been heavily disturbed by activities associated with previous surface mining in the area. To the south of the road, the portions of the survey area not disturbed by mining activities are relatively undisturbed. However, other activities including access road construction, trenching, and limited land grading have occurred throughout the parcel. The portion north of Bethel Road that has not been previously mined is situated in secondary growth, with limited modifications. A game plot and an unimproved access road are the only disturbances to this portion of the project area. Two isolated finds were discovered during survey of the project area. These isolates are not worthy of any additional work and it is the recommendation of this office that the project area is considered as one that contained no properties eligible for the *National Register of Historic Places*.

References Cited

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