

APPENDIX H

Agencies' Clearance emails

Robinson, Amy M LRN

From: Robbie_Sykes@fws.gov
Sent: Thursday, November 17, 2005 4:18 PM
To: Robinson, Amy M LRN
Cc: Randy Lowe - TVA; Robbie Baker - TDEC; Robert Todd - TWRA; Stan Davis - TVA
Subject: Re: Bill Hawkins Revised Mitigation

Amy, I have reviewed the revised stream mitigation plan for Mr. Hawkin's proposed impoundment. The proposed mitigation appears to be adequate to compensate for the anticipated resource impacts, assuming a 50' woody buffer is established along both sides of the streams (the additional 20' feet of grass buffer would be great, but that is the applicant's decision). Therefore, the Service no longer opposes the issuance of a permit for the proposed impoundment.

If you need a letter from us, let me know. I will be out of the office until November 28.

Thanks,
Robbie

"Robinson, Amy M
LRN"
<Amy.M.Robinson@l
rn02.usace.army.m
il>

11/09/2005 01:41
PM

To
"Robert Todd - TWRA"
<rob.todd@state.tn.us>, "Robbie
Baker - TDEC"
<Robert.D.Baker@state.tn.us>,
"Robbie Sykes - USFWS"
<robbie_sykes@fws.gov>, "Randy Lowe
- TVA" <relowe2@tva.gov>, "Stan
Davis - TVA" <sedavis2@tva.gov>

cc

Subject
Bill Hawkins Revised Mitigation

I received a revised plan and CD for Bill Hawkins proposed impoundment structure. I believe the consultant provided most everyone a copy of this. However, please let me know if you did not receive this and need a copy for your review.

Please review the revised mitigation plan and provide me your comments by Nov 23rd.

Thanks,
Amy Robinson
Corps of Engineers

Robinson, Amy M LRN

From: Rob Todd [Rob.Todd@state.tn.us]
Sent: Friday, November 18, 2005 9:52 AM
To: robbie_sykes@fws.gov; Robinson, Amy M LRN; Robert.D Baker; relowe2@tva.gov; sedavis2@tva.gov
Subject: Re: Bill Hawkins Revised Mitigation

I received the information on the revised mitigation plan and have reviewed it. As long as the 50 foot vegetative buffer is planted in trees, I have no problem with the project. I would like to see the mitigation areas that are to be protected permanently marked by some type of signs or markers. We appreciate the applicant's and contractor's diligence and cooperation to assure that the potential environmental impacts associated with this project will be adequately mitigated by the proposed plan. I would like to have copies of the annual mitigation reports for my files as well as a copy of the perpetual protection instrument. Thank you for all your hard work on this project.

Robert M. Todd
Tennessee Wildlife Resources Agency
Environmental Services Division
Ellington Agricultural Center
P.O. Box 40747
Nashville, TN 37204
Phone: 615-781-6572
Fax: 615-781-6667
E-mail address: Rob.Todd@state.tn.us

>>> "Robinson, Amy M LRN" <Amy.M.Robinson@lrn02.usace.army.mil>
11/09/05 1:41 PM >>>

I received a revised plan and CD for Bill Hawkins proposed impoundment structure. I believe the consultant provided most everyone a copy of this.

However, please let me know if you did not receive this and need a copy for your review.

Please review the revised mitigation plan and provide me your comments by Nov 23rd.

Thanks,

Amy Robinson

Corps of Engineers

APPENDIX I

Archaeological and Cultural Resource Survey
And AHC Clearance Letter



TENNESSEE HISTORICAL COMMISSION
DEPARTMENT OF ENVIRONMENT AND CONSERVATION
2941 LEBANON ROAD
NASHVILLE, TN 37243-0442
(615) 532-1550

March 9, 2005

Mr. Kyle Wright
U.S. Army Corps of Engineers, Nashville District
Regulatory Branch
3701 Bell Road
Nashville, Tennessee 37214

RE: COE-N, ARCHAEOLOGICAL ASSESSMENT, PN# 04-70/IMPOUNDMENT/TRM 0.6,
UNINCORPORATED, MCNAIRY COUNTY, TN

Dear Mr. Wright:

At your request, our office has reviewed the above-referenced archaeological survey report in accordance with regulations codified at 36 CFR 800 (Federal Register, December 12, 2000, 77698-77739). Based on the information provided, we concur that the project area contains no archaeological resources eligible for listing in the National Register of Historic Places.

If project plans are changed or archaeological remains are discovered during construction, please contact this office to determine what further action, if any, will be necessary to comply with Section 106 of the National Historic Preservation Act.

Your cooperation is appreciated.

Sincerely,

Herbert L. Harper
Executive Director and
Deputy State Historic
Preservation Officer

HLH/jmb

MAR 2005



TENNESSEE HISTORICAL COMMISSION
DEPARTMENT OF ENVIRONMENT AND CONSERVATION
2941 LEBANON ROAD
NASHVILLE, TN 37243-0442
(615) 532-1550

January 5, 2006

Mr. J. Bennett Graham
Tennessee Valley Authority
400 W. Summit Hill Drive
WT 11D - Cultural Resources
Knoxville, Tennessee 37902

RE: TVA, ARCHAEOLOGICAL ASSESSMENT, IMPOUNDMENT ON BILL HAWKINS PROP.,
UNINCORPORATED, MCNAIRY COUNTY, TN

Dear Mr. Graham:

At your request, our office has reviewed the above-referenced archaeological survey report in accordance with regulations codified at 36 CFR 800 (Federal Register, December 12, 2000, 77698-77739). Based on the information provided, we find that the project area contains no archaeological resources eligible for listing in the National Register of Historic Places.

If project plans are changed or archaeological remains are discovered during construction, please contact this office to determine what further action, if any, will be necessary to comply with Section 106 of the National Historic Preservation Act.

Your cooperation is appreciated.

Sincerely,

Herbert L. Harper
Executive Director and
Deputy State Historic
Preservation Officer

HLH/jmb

1/19/06



DEPARTMENT OF THE ARMY
NASHVILLE DISTRICT, CORPS OF ENGINEERS
3701 Bell Road
NASHVILLE, TENNESSEE 37214

REPLY TO
ATTENTION OF:

18 February 2005

Regulatory Branch

SUBJECT: Proposed Discharge of Fill Material Associated with Impoundment Structure on Unnamed Tributary Mile 0.6, a tributary of the Tennessee River at Mile 197.4L, McNairy County, Tennessee

Mr. Herbert Harper, Director
Tennessee Historical Commission
Deputy State Historic Preservation Officer
2941 Lebanon Road
Nashville, TN 37243-0442

Dear Mr. Harper:

The U.S. Army Corps of Engineers, Nashville District (Corps), is in receipt of a cultural resource survey report submitted by Panamerican Consultants, Inc. detailing phase I cultural resource survey results for a proposed impoundment structure situated 0.6 mile up an unnamed tributary of the Tennessee River at mile 197.4 Left Bank, McNairy Co. Tennessee. A public notice for the proposed project was provided to your office for review (Public Notice 04-70, dated December 22nd, 2004).

In compliance with requirements of Section 106 of the National Historic Preservation Act, the project area was subject to a cultural resource survey by Panamerican Consultants, Inc. on January 6th, 2005. The project area consists of a 47 acre tract of land. Prior to the field investigation, a records search and review was conducted by staff of Panamerican Consultants at The Tennessee Division of Archaeology (TDOA) on January 5th, 2005. No previously recorded sites are located within the project area. The records search revealed four sites, 40MY79, 40MY122, 40MY124 and 40MY136, within three kilometers of the project area. The closest site, 40MY122, is 100 meters south of the project area. During the course of the survey one site, 40MY147 was recorded. This site consisted of a low-density lithic scatter. No diagnostic artifacts were recovered from this site. Based on the findings from this site, the author of this report has deemed this site is not eligible for the National Register of Historic Places based on a lack of research potential. Copies of the report, submitted by Panamerican consultants, Inc., are included with this letter for your review.

After review of the submitted archaeological survey, it is the determination of the Corps, based on the survey results and the low research potential of the single recorded site within the project area, that no historic properties listed on or eligible for listing on the National Register of Historic Places will be affected by this project.

The Corps requests your concurrence with our finding that no historic properties will be affected by this undertaking. If you have any questions or need additional information, please contact Amy Robinson, Project Manager (615/369-7509) or Kyle Wright, Archaeologist (615/736-2553).

Sincerely,

A handwritten signature in cursive script, appearing to read "Kyle D. Wright".

Kyle D. Wright
Archaeologist, Regulatory Branch

**CULTURAL RESOURCES SURVEY OF THE
McNAIRY COUNTY PHASE I PROJECT,
McNAIRY COUNTY, TENNESSEE**

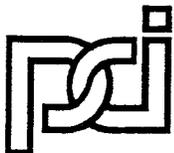


Prepared for:



AMERICAN ELECTRICAL CONTRACTORS, INC.
3405 Pearson
Memphis, Tennessee 38118

Prepared by:



PANAMERICAN CONSULTANTS, INC.
15 South Idlewild Street
Memphis, Tennessee 38104

DRAFT REPORT ♦ JANUARY 2005

DRAFT REPORT

**CULTURAL RESOURCES SURVEY OF THE
MCNAIRY COUNTY PHASE I PROJECT, MCNAIRY COUNTY,
TENNESSEE**

Authored by:

Eric M. Cruciotti and C. Andrew Buchner

Prepared for:

American Electrical Contractors, Inc.
3405 Pearson
Memphis, TN 38118

Prepared by:

Panamerican Consultants, Inc.
15 South Idlewild Street
Memphis, Tennessee 38104
PCI Project No. 25001

C. Andrew Buchner

Principal Investigator, C. Andrew Buchner

January 2005

ABSTRACT

At the request of American Electrical Contractors, Inc., Panamerican Consultants, Inc. of Memphis, Tennessee performed a cultural resources survey of the proposed modifications on privately owned property located in McNairy County, Tennessee. The proposed modifications include the creation of an impoundment. The purpose of this study was to identify all known and unrecorded cultural resources present in the project area and to provide appropriate management recommendations for any identified natural resources. A literature and records search was conducted at Nashville. The search revealed there are no previously recorded sites or historic properties located in the project area. A review of past archaeological work done in the area revealed that the area had not been previously surveyed. A two-person team conducted the field investigations during January of 2005. One site was found and was assigned the state of Tennessee site number 40MY147.

ACKNOWLEDGEMENTS

Panamerican Consultants, Inc. appreciates the opportunity to have provided American Electrical Contractors, Inc. with these archaeological services. Bill Hawkins functioned as the contracting agent's representative for the project.

Agency personnel who assisted the authors during the project include Suzanne Hoyle, Site Files Curator of the Tennessee Division of Archaeology.

PCI personnel that contributed to the project included the following individuals. Kate Gilow provided administrative support during all phases of the project. Field work was directed by Eric Cruciotti. The field crew consisted of Nick Seaburgh.

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1. INTRODUCTION

At the request of American Electrical Contractors, Inc., Panamerican Consultants, Inc. (PCI) of Memphis, Tennessee performed a cultural resources survey of the proposed modifications on property located in McNairy County, Tennessee. The proposed modification includes the creation of an impoundment.

The purpose of this study was to identify all known and unrecorded cultural resources present in the project area and to provide appropriate management recommendations for any identified cultural resources.

Significant cultural resources are any material remains of human activity that are eligible for inclusion in the National Register of Historic Places (NRHP). The Federal statutes and responsibilities include section 106 of the National Historic Preservation Act of 1966, as amended: Executive order 11593, the Advisory Council's *Protection of Historic Sites* (36 CFR Part 800) effective June 17, 1999; and section 5 of the Abandoned Shipwreck Act of 1987. All field and office work was conducted in accordance with the standards and guidelines established in 36 CFR Part 66, Recovery of Scientific, Prehistoric, Historic, and Archaeological Data: Methods, Standards, and Reporting Requirements (Federal Register, Volume 42, Number 19-Friday, January 18, 1977).

PROJECT LOCATION

The McNairy Phase I project area is located in a rural area of southeastern McNairy County, Tennessee, approximately 1.5 km north of the community of Pebble Hill (Figure 1). Michie, Tulu, Needmore, and Chambers are the only small communities mapped in the area in addition to Pebble Hill. The project area is located 13 km southeast of Selmer, the McNairy County seat.

The survey corridor can be identified on the Michie, TN 7.5-min. quadrangle sheets (1991 photo revised edition). The Project survey area is a 47-acre parcel of land. The project area has a highly irregular form as it is located within the area where dam and reservoir will lie. Within this project area, areas of high probability will be tested for cultural resources. High-probability areas include the confluence of streams, the locations shown to have structures on the 1991 photorevised 7.5 minute Michie, TN quadrangle map, and a single area close to an existing civil war site. In addition to this, the project area will be surveyed for any additional high probability locations, which will be tested. The terrain across the study area is an unnamed drainage basin. Elevations within the study corridor range from 480-ft. above mean sea level (amsl) at the bottom of the basin to 500-ft. amsl at the top of the water line. The most significant drainage in the area is Owl creek, which is located north of the project area.

REPORT OUTLINE

The technical report that follows is organized in the following manner (see also Table of Contents). The most salient aspects of the local environmental setting are outlined in Chapter 2. Prior archaeological investigations in western Tennessee and a discussion of the cultural sequence are discussed in Chapter 3. The results of the literature and records search are

presented in Chapter 4. The field results and artifact analysis are presented in Chapter 5. Chapter 6 provides a summary and recommendations. In Chapter 7, the references cited are listed.

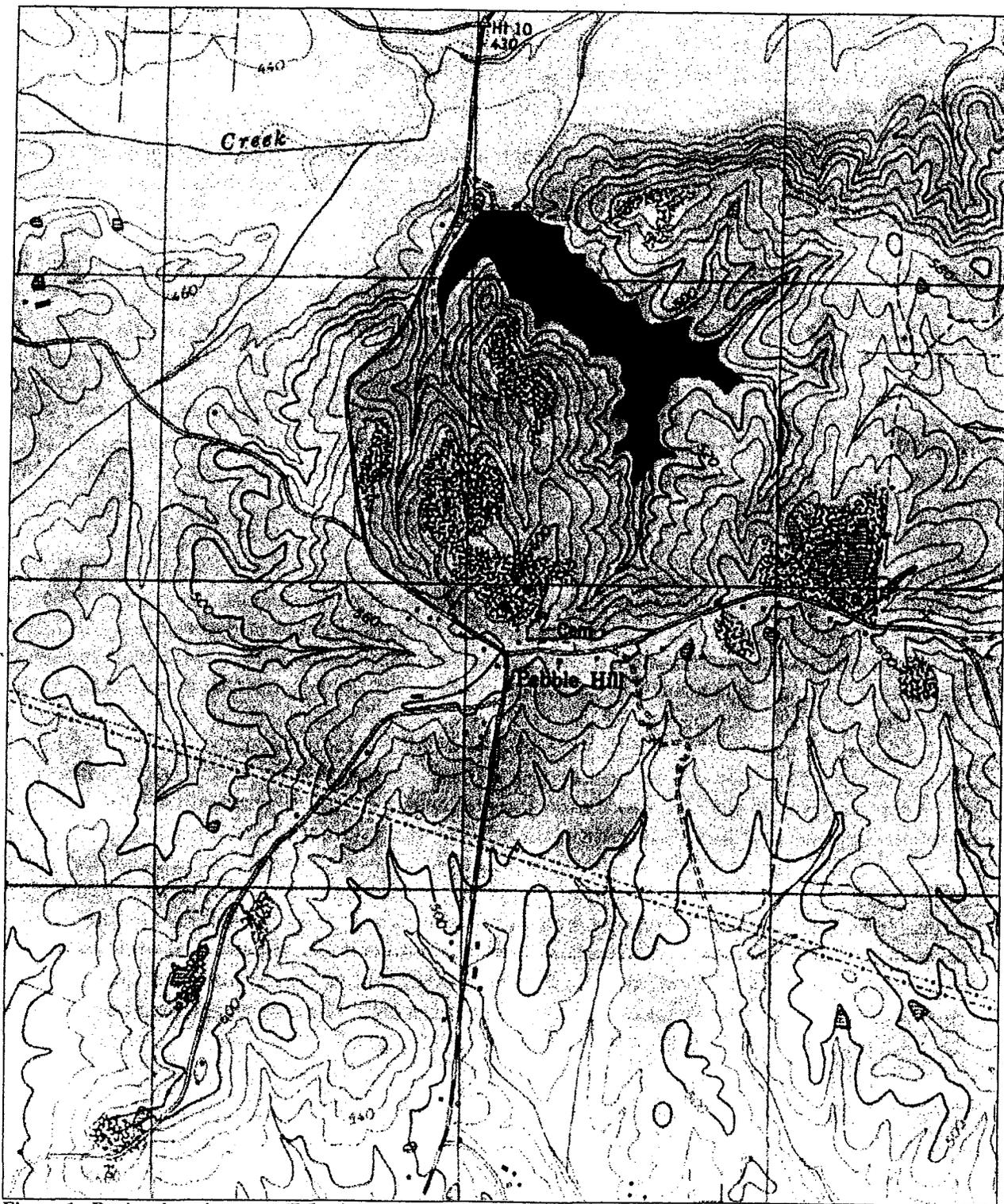


Figure 1. Project location map (7.5-minute quadrangle base map: Michie, TN 1991 photorevised edition).

2. ENVIRONMENTAL SETTING

PHYSIOGRAPHY

The study area is located in the Gulf Coastal Plain physiographic province (Fenneman 1938) and along the eastern edge of the West Tennessee Upland subregion (Stearns 1975). The West Tennessee Uplands are an area of moderately dissected terrain comprised primarily of Upper Cretaceous sands. A narrow band of marl intrudes into these Cretaceous sands just east of Selmer and extending north through nearly half of the state. A narrow band of Paleocene clay and sand follows the division between the Uplands and West Tennessee Plains to the west. The project area lies on the marl mentioned above.

Three major river systems drain McNairy County. These rivers include the Hatchie River, the Tuscumbia River, and the Tennessee River. The Hatchie River flows along a small part of the southwestern edge of the county. The Tuscumbia River flows in a northwest direction, from the Alabama state line across the southwestern portion of the county, where it intersects with the Hatchie River. The Tennessee River is located in Hardin County, but its tributaries provide drainage to the eastern portion of McNairy County. As a result, the topography in the eastern part of McNairy consists of undulating stream terraces of the Tennessee River.

GEOMORPHOLOGY

The eastern part of McNairy County is underlain by nine different Geological formations. Three of these formations are Cretaceous in origin, four formations are Tertiary in origin, one formation is both Tertiary and Quaternary in origin, and one formation is Quaternary in origin.

The formations of Cretaceous origin are the Demopolis Formation, the Sardis Formation, and Coffee Sand. The Demopolis Formation consists of silts and clays. The Sardis Formation consists of clayey sand and sandy clay. Lastly, the Coffee Sand Formation consists of quartz sand that has small bodies of clay embedded in the deposits. All of these formations were deposited by marine seas, which advanced into and retreated from the Mississippi embayment section of the Gulf Coastal Plain. The formations of Tertiary origin are the Clayton Formation, the Owl Creek Formation, The McNairy Sand Formation, and the Coon Creek Formation. The Clayton formation consists of very fine to medium grained quartz sand with stringers of clay. The McNairy Sand Formation consists of very fine to course grained quartz sand as well as some kaolinitic clay, which were deposited in shallow offshore waters along barrier bars and islands. The Coon Creek Formation consists of silty clays, clayey sands, and sands deposited in a near shore mixing zone environment. The Owl Creek Formation consists of highly fossiliferous marine sands and sandy clays deposited as the land emerged from the sea. The formation of Tertiary and Quaternary origin is Fluvial Deposits. These deposits consist of rounded gravel, sand, and silt. These were created by alternating periods of valley cutting and alluviations by the ancestral streams and major tributaries of the Tennessee River. The formation of quaternary origin is alluvial deposits. These are the youngest materials in the county and are found in the flood plains and terraces of present day streams and tributaries. These deposits consist of sand, silt, clay, and gravel, depending on the origin of the stream (Brown et al. 1997).

SOIL

McNairy County has five soil associations. The project area encounters two of these soil associations. These include the Oktibbeha-Silerton-Dulac-Laverne and Paden-Saffell-Pickwick associations. The Oktibbeha-Silerton-Dulac-Laverne soil association occupies gently sloping to steep, well drained and moderately well drained soils. These soils formed in clayey marine sediments on the uplands. The Paden-Saffell-Pickwick soil association occupies gently sloping to steep, moderately well drained to well drained soils. These soils formed in loamy and gravelly alluvial deposits of the Tennessee River, especially on old, high terraces of the Tennessee River (Brown et al. 1997).

FLORA AND FAUNA

The western uplands of Tennessee fall into the western mesophytic forest region (Braun 1950). The forests of the western uplands of Tennessee are placed by Kuchler (1964) within the Oak-Hickory Forest Region. These forests typically consist of medium tall to tall broadleaf deciduous trees. Dominant species within this ecosystem consist of Bitternut Hickory (*Carya cordiformis*), Shagbark Hickory (*Carya ovata*), White Oak (*Quercus alba*), Red Oak (*Quercus rubra*), and Black Oak (*Quercus velutina*). Minor components of these forests include Pignut (*Carya glabra*), American Ash (*Fraxinus americana*), Black Walnut (*Juglans nigra*), Wild Black Cherry (*Prunus serotina*), Chinquapin Oak (*Quercus muhlenbergii*), American Basswood (*Tilia americana*), American Elm (*Ulmus americana*), Black Hickory (*Carya texana*), Mockernut Hickory (*Carya tomentosa*), Southern Red Oak (*Quercus falcata*), Overcup Oak (*Quercus lyrata*), Blackjack Oak (*Quercus marilandica*), and the Shumard Oak (*Quercus shumardii*).

The important terrestrial and aquatic resources of the region to the prehistoric and early historic inhabitants of the region are described in Kellogg (1939). White-tailed deer (*Odocoileus virginianus*), black bear (*Ursus americanus*), rabbit (*Sylvilagus floridanus*), squirrel (*Sciurus* sp.), and raccoon (*Procyon lotor*) are the primary land mammals. Turkey (*Meleagris gallapavo*) and ruffed grouse (*Bonasa umbellus*) are also encountered in the upland environments (Schultz et al. 1954). The Tennessee River is a minor fly-way for migrating fowl. Fishes of the Tennessee River which are economically important include large-mouth bass (*Huro salmoides*), white bass (*Lepibema chrysops*), small-mouth bass (*Micropterus dolomieu*), sunfish (*Lepominae* sp.), black crappie (*Pomoxis sparoides*), and channel catfish (*Ictalurus lacustris*) (Kuhne 1939).

PRESENT CLIMATE

The climate of McNairy County tends to be humid with mild winters and hot summers. June, July, and August are the hottest months while December, January, and February are the coldest. July is the extreme of the hot months with an average daily maximum temperature of 90.2 degrees Fahrenheit and January is the extreme of the cold months with an average daily maximum temperature of 47.1 degrees Fahrenheit. The most extreme temperatures on record in McNairy County are a high of 105 degrees Fahrenheit and a low of -21 degrees Fahrenheit. June, August, and October are the driest months while March, November, and December are the wettest months. August is the extreme of the dry months with an average of 2.66 inches of rainfall and March is the extreme of the wet months with an average precipitation of 5.90 inches. The total annual precipitation is 56.5 inches, 47 percent of which falls in April through September (Brown et al. 1997).

3. CULTURAL HISTORY

This chapter provides background information relevant to the study area. A briefing on previous archaeological and historic studies conducted within western Tennessee is presented first followed by a synopsis of fieldwork conducted in proximity to the study area. An overview of the archaeological and historical sequence of western Tennessee as it is currently understood is provided next. These later discussions follow the standard period-by-period format.

PREVIOUS INVESTIGATIONS IN WESTERN TENNESSEE

Archaeological investigations in the Central Mississippi Valley (Western Tennessee included) were initially conducted by self-trained, interested individuals and focused on monumental earthworks. The earliest published scholars, such as Caleb Atwater (1820) and Squire and Davis (1848), attributed earthworks to a non-aboriginal group, the mythic "Mound Builders." However, H.R. Schoolcraft (1854) and other scholars advocated that mounds were actually Native American constructions (Williams 2002).

In 1879 Congress created the Bureau of Ethnology within the Smithsonian Institution, and a branch known as the Division of Mound Exploration was established in 1881 specifically to determine "the origins of the mounds" (Thomas 1985 [1894]:21). In Cyrus Thomas's (1985 [1894]) classic *Mound Explorations*, mound groups and pottery specimens from western Tennessee are described. Sites are described by Thomas (1985[1894]) in Obion and Lauderdale Counties.

With the origin of the mounds now both demonstrated and generally recognized to be Native Americans, the predominant archaeological research issue of the late-nineteenth and early-twentieth century shifted to determining the antiquity of the human occupation of America (O'Brien 1996).

In the early-twentieth century the pace of archaeological work in the Central Mississippi Valley accelerated. Clarence B. Moore (1908, 1910, 1911, 1916) spent several field seasons in Tennessee, excavating large sites in the region along the Tennessee River. Moore (1910:256) visited sites in western Tennessee including locations in Stewart County, Henry County, Benton County, Decatur County, and Hardin County (Figure 2). While in Hardin County alone, Moore visited over 15 mound groups and sites.

During the period between 1910 and 1930 modern excavation techniques, such as use of a grid and establishment of stratigraphic control, were popularized. On a national level the marriage of archaeology and anthropology was accomplished during the early-twentieth century; by 1935 seven universities offered Ph.D. anthropology programs. Professional archaeological organizations began to form during this period and state societies, which had begun as early as the 1880s in some areas, multiplied.

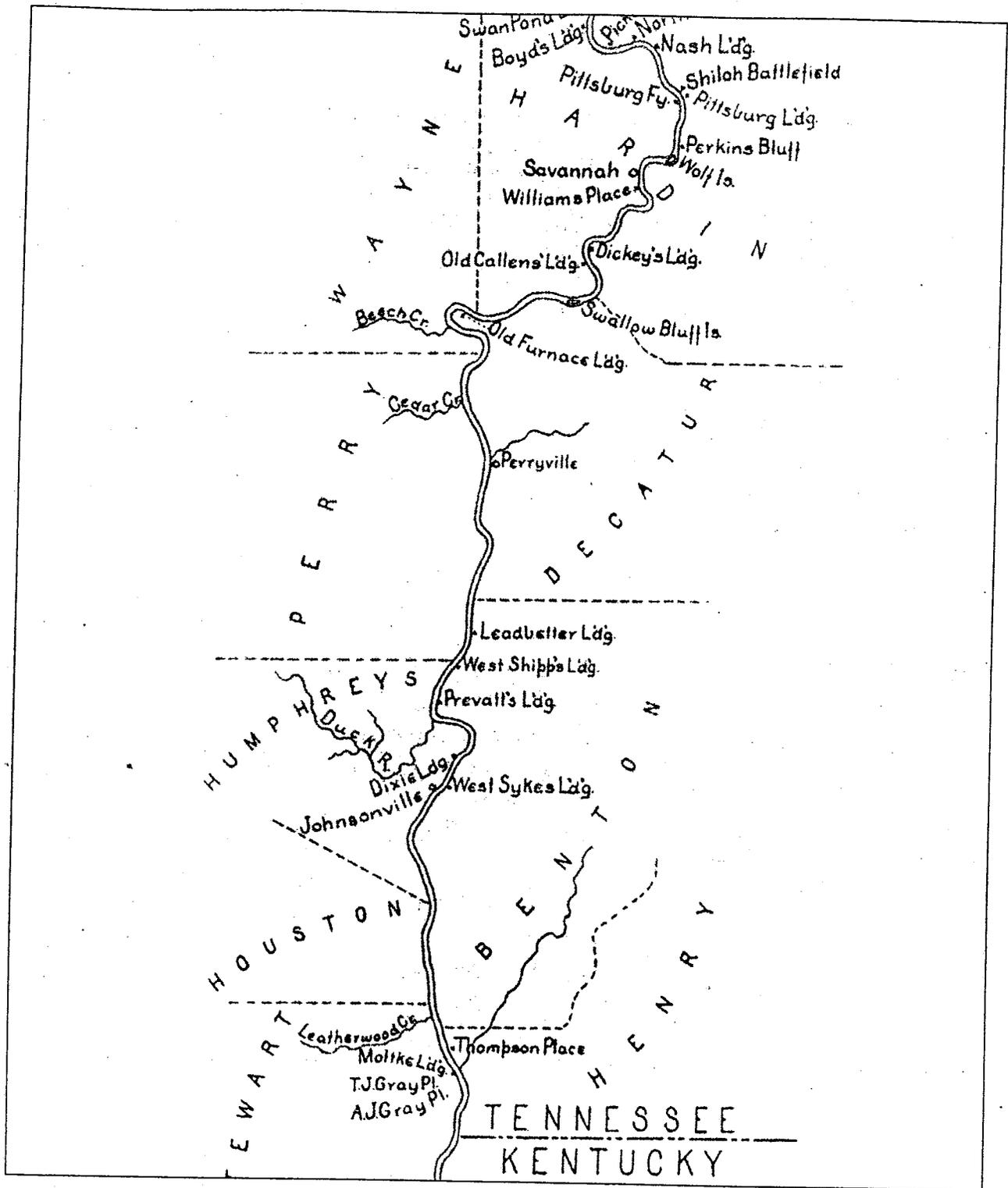


Figure 2. Portion of C.B. Moore's (1916) map showing the locations of sites investigated on the Tennessee River.

Beginning in 1939, the Peabody Museum's (Harvard) Lower Mississippi Survey (LMS) compiled survey data and conducted test excavations at many of the large sites in the region (Phillips et al. 1951). The LMS investigations are a watershed event in the archaeology of the region. The extensive LMS site files are on file at the University of Memphis and are now available on-line to authorized users.

On a national level, several significant advances were made as well during this period. Willey and Phillips (1958) published *Method and Theory in American Archaeology*, which proposed a basic archaeological unit taxonomy that replaced the Midwestern Taxonomic System. However, historic archaeology is largely neglected in this work. After 1950, radiocarbon dating became established and available to researchers, and the true antiquity of the Archaic and Paleoindian stages became analytically established. The latter portion of this period falls in Willey and Sabloff's (1974) "Explanatory Period" which is characterized by processual analysis, systems theory, use of statistics, and is derived from the neo-evolutionary theory of Leslie White.

The scope and intensity of archaeological investigations in northeast Arkansas and indeed across the Southeast increased dramatically with the passage of the Moss-Bennett Bill, or Archaeological Conservation Act by the U.S. Congress in 1974. Most Federally mandated cultural resource management (CRM) studies are a direct result of this legislation. A number of major CRM studies, as well as numerous smaller studies have taken place in western Tennessee.

PREHISTORIC SEQUENCE

The following is a summary of the prehistoric cultural sequence of western Tennessee. Characteristic artifact assemblages, patterns of subsistence and patterns of settlement define each of the following periods, which are traditionally divided into four major periods in the southeastern United States: Paleoindian, Archaic, Woodland, and Mississippian.

PALEOINDIAN

Paleoindian occupations represent the first well-accepted occurrence of humans in the Western Hemisphere. These populations are generally thought of as highly adaptive and mobile hunter-gatherers whose recent ancestors were Upper Paleolithic Siberians who migrated across the present Bering Strait during the Late Pleistocene, when sea levels were ca. 60 m lower. During the late glacial Era, when initial human colonization of the southeast is postulated (ca. 12,000 to 10,000 B.P.), climatic changes followed the receding of the continental ice sheets, and there was a widespread extinction of megafauna. The environment at this time is usually interpreted to have been spruce and/or pine dominated boreal forest (Saucier 1978). By 1,000 years prior to the fluted point occupations, the environment had changed to deciduous forest (Delcourt et al. 1999).

Recent research on Paleoindian diagnostics (Anderson et al. 1990) indicates that the period may be subdivided into early (ca. 9500-9000 B.C.), middle (ca. 9000-8500 B.C.), and late (ca. 8500-8000 B.C.) stages. This subdivision is based solely on changes in hafted biface morphology. No radiocarbon dates are available to confirm independently the accuracy of these subdivisions.

Paleoindian aboriginal groups were likely small, mobile bands dependent on hunting and gathering. Although they may have hunted some of the megafauna that became extinct at the

end of the Pleistocene, such as the mastodon (*Mammot americanum*), bison (*Bison bison antiquuus*), and ground sloth (*Megalonyx* sp.), it is likely that the subsistence base was varied, including a number of plant and animal foods. The high-technology forager model views early populations as "technology oriented" rather than "place oriented", moving from place to place in a true foraging pattern and leaving behind a minimal and redundant archaeological assemblage (Kelly and Todd 1988). This perspective is not widely accepted due to the more recent discoveries of major sites such as Carson-Conn-Short (40BN190) (Broster and Norton 1993, 1996; Broster et al. 1994) in Tennessee and Adams in Kentucky (Anderson 1996). At the Carson-Conn-Short site Eastern Clovis and Cumberland fluted points as well as related unifacial tools had been found and collected by avocational archaeologists. Intensive excavation of nine 1-x-1-m test units produced 425 tools, cores, and hammerstones Broster and Norton 1996).

For many years, Tennessee has been known to produce large numbers of Paleoindian projectile points and tools, much of which has been published in regional literature (Broster 1982, 1987; Guthe 1966, 1983; Lewis and Kneberg 1958; Nuckolls 1958). Throughout the state of Tennessee 47 Paleoindian sites and 77 localities are recognized (Broster and Norton 1992). Eighteen Paleoindian sites and 10 localities have been recorded in the Kentucky Lake Region (Tennessee River). The difference between sites and localities is rather arbitrary with sites being an area producing five or more Paleoindian artifacts and localities producing less than five Paleoindian artifacts. According to Broster and Norton (1996), the numerous Paleoindian sites in Tennessee are a possible indicator that the area may represent a major staging area in the peopling of the New World.

DALTON

The Dalton period is considered transitional between the Paleoindian and Archaic traditions. The key distinguishing feature of the material culture is the unfluted, serrated Dalton point, but the Dalton tool kit includes a number of other diagnostic special-function tools including a woodworking adz (Morse and Morse 1983, 1996). Goodyear (1982) suggests that Dalton represent a distinct temporal horizon dating to ca. 8500-7900 B.C. While technologically similar to Paleoindian assemblages, Dalton assemblages suggest an adaptive pattern more akin to Archaic cultures. The Dalton period also began a subsistence trend of reliance on white-tailed deer that continued until the contact era (Morse and Morse 1983:71).

In the western Tennessee, Dalton components are represented primarily by surface finds of projectile points. In the Forked Deer Drainage, Dalton points are frequently long, thin forms with a minimal amount of hafting-area constriction (Smith 1996:101).

Because of this lack of data, inferences must be drawn from surrounding areas. Excavations at 40FY13, which sits on a low terrace in Fayette County revealed that there was 15 cm of loess and 30 centimeters of midden overlying the Dalton component of the site (Smith 1996:101). In southeast Missouri, Wilkie recorded a Dalton site (23ST206) on the bluffs overlooking Cape La Croix Creek. The site is on a south facing slope just back from the bluff's edge (Wilkie 1985:15). A second small Dalton site has been recorded within the same environmental conditions in St. Genevieve County, Missouri (Wilkie 1984). In the 1960s the Ford-Redfield survey project identified a concentration of Dalton components in northeast Arkansas (Redfield 1971; Redfield and Moselage 1970). Important sites such as Brand (Goodyear 1974), Sloan

(Morse 1975, 1997), and Lace (Morse and Morse 1983) in northeastern Arkansas produced evidence for some of the oldest cemeteries in the New World and revealed other features interpreted as living floors and shelter remains. The distribution of sites and site types along the major drainages has also led to the formulation of competing settlement pattern models for band-level societies (Morse 1975, 1977; Price and Krakker 1975; Schiffer 1975), which have been commented upon by McNutt (1996:191–192).

ARCHAIC

The Archaic period is usually thought of in terms of three subperiods: Early (ca. 8000 to 5000 B.C.), Middle (5000 to 3000 B.C.), and Late (3000 to 1500 B.C.). Temporal divisions of the Archaic are primarily based on the occurrence of distinctive projectile points. Throughout Archaic times a hunter-gatherer lifeway appears to have continued, and it was focused on essentially the same flora and fauna as represented in the natural environment today. The Archaic is perceived as a time of regional "settling in," when an efficient utilization of the environment was keyed to highly cyclical, repetitive seasonal activities continued by indigenous groups over thousands of years. (cf. Caldwell 1958): Some seasonal movement to exploit econiches was probably required, but Archaic populations, relative to Paleoindian, are generally portrayed as being attached to localities, river valleys, or regions.

Concerning the Early Archaic period, McNutt (1996:194) notes that "we can see several projectile points coming into the Valley from the west and north, probably in conjunction with the prairie expansion and dry econiches during the Hypsithermal." Smith (1996) notes that Early Archaic components in western Tennessee are primarily represented by surface finds of Big Sandy, Kirk, Palmer, and Hardin points. Some researchers may also include transitional Paleo/Archaic points such as Greenbriar, Dalton, and Quad types (Smith and Weinstein 1987:12). End scrapers and some unifacial tool types, once used during the Paleo-Indian period, continued in use through part of the Early Archaic.

The Middle Archaic period was marked by a shift in subsistence modes. This was possibly due to environmental changes caused by a climatic episode called the Altithermal Optimum, or Hypsithermal, which is dated 7000–3000 B.C. (McNutt 1996) or 8000–4000 B.C. (Morse and Morse 1983). This change resulted in restricted deciduous forest occurrence, limiting the availability of certain floral and faunal resources. The cultural impact of this warming trend appears to have been most strongly felt from 5500–3500 B.C. Several settlement models regarding human adaptation during the climatic optimum have been posited. In the lower Tennessee/Cumberland region, populations appear to have congregated at a limited number of floodplain locations, producing deep middens (Nance 1987). Higgins (1990) proposed that the drying of the uplands forced people into the floodplain.

The Middle Archaic period is distinguished by the emergence of stemmed projectile points which were formed using minimal flaking and were often rather large (Smith and Weinstein 1987). The early part of the period is represented mostly by Morrow Mountain variants and Nonconnah points, as well as some irregular lanceolate forms. The latter part of the Middle Archaic is characterized chiefly by Benton PP/Ks.

The Late Archaic began at the end of the Altithermal climatic episode (ca. 3000 B.C.) and the establishment of the modern climatic regime. The Mississippi River was by then a well-entrenched meander belt-type fluvial system, and adapting to this type of environment was critical for human occupation. There is evidence for more sedentary lifeways, and possibly limited horticulture was being employed, as sunflower, squash, and other cultivated native starchy seed annuals appear in the archaeobotanical record at this time in the other areas of the southeast. Late Archaic settlement models typically have a seasonal round aspect, and there is evidence that the substantial "winter" villages, typically located on major streams, were actually occupied year round. Both earthen and shell mounds appear in the archaeological record in the southeast at this time.

The Late Archaic is characterized throughout the southeast by a substantial increase in the number of sites, cultural elaboration, and widespread trade. Projectile points produced during this period include wide variation in both notched and stemmed forms. Benton points mark the beginning of this time period, and camps littered with fragments of sandstone grinding tools tend to occur on low stream terraces in western Tennessee. Several local varieties of Benton points have been described by Smith (1979, 1982), although the distribution suggests temporal change in contrast to geographically separated groups. Other point types attributed to this period are Cotaco Creek, Lick Creek, and Kays, among others (Peterson 1979).

POVERTY POINT

Poverty Point, or Terminal Late Archaic, components are traditionally distinguished by the appearance of large mounds, and other earthworks, clay balls or "Poverty Point Objects," microliths, lapidary work, raw material trade, and specialized manufacturing sites. The Poverty Point period (1700-500 B.C.) is considered one of three cultural "zeniths" in prehistoric southeastern studies. Midden mounds and gathering camps appear in the archaeological record at this time, reflecting semi-sedentary populations (McNutt 1996; Morse and Morse 1983). In other portions of the southeast, these components are referred to as Gulf Formational (Walthall 1990 [1980]) and include fiber-tempered ceramics as a diagnostic (see also Morse and Morse 1983:124).

WOODLAND

During the Woodland period intensification in horticultural methods, construction of earthworks, elaboration of artistic expression, and burial rituals are all thought to be related to the reorganization of social structure. For at least part of the year a sedentary group was needed to plant, tend, and harvest crops. Sedentism and communal labor efforts promoted territorial circumscription. Increased variety and use of ceramics also characterized this period. Ceramic types and varieties thus are primary consideration in interpreting settlement patterns and chronological progression of the Woodland period. Throughout the region, a considerable amount of attention has been focused on these ceramic cultures by archaeologists.

In West Tennessee there seems to be a continuity of distinctive occupations in the areas occupied by the earlier Poverty Point complexes. Two different types of ceramics appear, distinctive because of the tempering agents used. Pottery tempered with large chunks of clay (*Tchefuncte var. Tchula*) is considered early in this time period and sandy clay-tempered pottery (Thomas

ware) being later in the time period. Other ceramic varieties consist of Cormorant Cord Impressed, Twin Lakes Punctated, and Tammany Punctated. According to McNutt (1996:207), this ceramic complex is an extension of the material reported for the Turkey Ridge phase of North Mississippi.

Smith (1996:105-106) believes that projectile points included in the west Tennessee complex of the Early Woodland period are probably variants of Adena, Mabin, and Claiborne points. There is no data available to distinguish early and late variants of these points. There is simply not enough information to expand further on point types of the Early Woodland period.

The Middle Woodland period featured elaborate burial ceremonialism and artistic expression, and represents the second major cultural zenith in the prehistoric southeast. In the Ohio Valley, the Middle Woodland period is referred to in terms of Hopewell, while in the Lower Mississippi Valley this period is characterized as Marksville.

Most information on the Middle Woodland component of the interior of west Tennessee comes from Pinson Mounds located south of Jackson on the south fork of the Forked Deer River. Pinson has several mounds (flat top and subconoidal) scattered over a large area and several areas of discreet occupation (Smith 1996). Mainfort (1980, 1986) has demonstrated that the material associated with Pinson fall into the Miller Hopewell tradition. The ceramics present at Pinson consist of Baldwin Plain and Furrs Cord Marked types. Large trade networks can be inferred from the ceramics present at Pinson, as Marksville, Porter Hopewellian, and Swift Creek sherds are present (Smith 1996). In addition to ceramic evidence, other non-local items include copper, mica, quartz, flint ridge chert, and schist (Mainfort 1980, 1988).

The Late Woodland represents a period of change characterized by a population increase accompanied by decentralization and the continuing adaptation of agriculture to riverine environments (B. Smith 1986). Both characteristics of this temporal period may have represented a response to over-exploitation of local resources (McNutt 1996:217). In general, the Late Woodland period is poorly understood throughout the southeast. The elaborate ceremonialism, trade networks, and earthworks construction activities associated with Middle Woodland times become attenuated.

According to Smith (1996) the Late Woodland of western Tennessee is characterized by a predominance of cord marked ceramics, including Philip's (1970) Coahoma, Deasonville, and Hoecake phases. Later in the Late Woodland Philip's Baytown phase emerges. Enough archaeology has been done in the Forked Deer River Drainage to suggest that no extensive Late Woodland occupation is likely.

MISSISSIPPIAN

The definition of the term Mississippian has changed over the years (see Griffin 1967, 1985; Knight 1986, 1990; Peebles and Kus 1977; Smith 1985). The term originally referred to a geographic region that included areas within which Middle Mississippi pottery was present (Holmes 1886, 1903). The term eventually began to refer to groups that shared similar material culture (Deuel 1937). The most recent definitions go beyond material traits and include aspects of economy, political organization, and ideology (Scarry 1996:13).

Hallmarks of the Mississippian period include population increase, intensive floodplain settlement, greater emphasis on agricultural activity, earthwork construction on celestial alignments, interregional exchange of exotic items, shell-tempered ceramics, and possibly bow warfare. These factors and the development of a distinctive elite iconography are associated with the rise of conscripted, complex sociopolitical systems, which we now refer to as chiefdoms. A complex mosaic of competing chiefdoms dominated the late prehistoric Southeast political landscape. The Spanish explorers at the close of the Mississippian period documented these chiefdoms, which is the final zenith of Native American cultural development.

Archaeological studies of sites and site locations indicate that settlement patterns were often indicative of a hierarchical arrangement. These settlement patterns seem to have been determined by sociopolitical, religious, and economic integration of Mississippian populations (Peebles 1978). In Tennessee, Jolley (1980) has offered a tentative site hierarchy for Mississippian sites. This hierarchy includes civic-ceremonial centers, villages, hamlets, farmsteads, and seasonal procurement activity sites.

Jolley (1980) theorized this settlement hierarchy in reference to the Lower Duck and Middle Cumberland river valleys. Civic-ceremonial sites tend to be on uplands adjacent to major drainages, while smaller farmsteads and hamlets are dispersed on the lower terraces and floodplains. Jolley theorizes that this is reflective of an emphasis on rich bottomland soils for agriculture. Conversely ceremonial centers are located on top of bluffs as a function of permanency, as flooding is common in the bottomlands.

Early Mississippian (A.D. 800-1100) cultures initiated a shift toward production of sparse shell-tempered ceramic vessels, construction of rectilinear domestic structures, and a heavy dependence upon maize-based agriculture for subsistence. The Middle Mississippian period (A.D. 1100-1400) is characterized by the appearance of palisade-fortified villages, geographically expressed across the landscape in relation to an increasing adaptation to maize agriculture. Population density, house and storage pit size, vessel forms, and tool types visible in the archaeological assemblage further reflect an adaptation to and concentration upon agrarian subsistence (McNutt 1996:230). The Late Mississippian period (A.D. 1400-1541) represents the final prehistoric cultural climax in the southeastern United States and is predominantly characterized by a wide variety of elaborately decorated ceramic vessel types. In western Tennessee, the data most applicable to this project comes from the Northern Delta tradition and inland regions.

Early Mississippian occupation in western Tennessee is generally associated with bluffs overlooking floodplains. Within the Northern Delta tradition of the Early Woodland the ceramic assemblage is dominated by Baytown Plain, but also includes low frequencies of Larto Red, Mazique Incised, Evansville Punctated, and Coles Creek Incised. The Northern Delta Tradition is best represented by the Ensley Phase, which includes Woodlyn (22DS517), Chucalissa (40SY1), Cheatham, and two west central Shelby County bluff top sites (Smith 1996).

The majority of information on Middle Mississippian sites comes from major, complex sites, particularly in the Cairo Lowlands (Morse and Morse 1983:237). In western Tennessee Middle

Mississippian sites have not been well represented. Powers phase sites of Southeast Missouri, such as Powers Fort, are the closest, well researched sites. During this time, much of the Middle Mississippian population had nucleated and by A.D. 1150 several civic ceremonial centers were occupied. Site hierarchies with multimound towns were present by A.D. 1250 (Morse and Morse 1983:237-266).

The Southeastern Ceremonial Complex (SECC) appeared in various forms throughout the Southeast during the Middle Mississippian period, although earlier manifestations are known from Cahokia. This complex was defined as a concise collection of interconnected traits signifying an underlying complex structure (Brown 1976), although Waring and Holder originally introduced and defined the concept of the SECC. Brown (1985) and Knight (1986) have introduced more recent interpretations. Knight's current interpretation is that the SECC portrays a domain of otherworldly mythic heroes and preternatural spirit beings (Knight et al. 2001). The main sites used to identify this complex are Etowah (Georgia), Spiro (Oklahoma), and Moundville (Alabama)(Waring and Holder 1945). The lack of a large amount of SECC artifacts recovered in Tennessee could indicate a difference of religious preference, or it could reflect a lack of excavated Middle Mississippian sites.

A reversal occurred in settlement patterns in several areas of the Southeast late in the Middle Mississippian period. In some areas, there was a shift from elite power, based almost entirely on sacred authority, to societies in which secular authority was increasingly dominant (Anderson 1990:187-213). Many large sites were deliberately abandoned with the population moving into the countryside or forming into new groups.

Late Mississippian components are better understood in western Tennessee. Four phases, the Boxtown phase, Walls phase, Tipton phase, and Jones Bayou phase define late Mississippian components in western Tennessee. The Tennessee components of the Boxtown and Walls phase are located in Shelby County, while the Tipton phase is located in the Hatchie Valley and the Jones Bayou phase is located in the Jones Bayou district (Smith 1996).

The Boxtown phase, defined through data obtained from stratum III at Chucalissa. The ceramic complex consists primarily of Mississippi Plain and Bell Plain, with small amounts of Parkin Punctated, Owens Punctated, Barton Incised, and Old Town Red. Boxtown phase camps and homesteads have been found along the Loosahatchie River and Nonconnah Creek, although no definitive mound associations have been obtained.

The Walls phase includes some of the most extensive data in the area. Many small village occupation with a single flattop mound are spread along the tops of the bluffs in Shelby County. Hunting camps occur on smaller creeks and rivers as far as 20 miles into the loess hills. The ceramic complex of the Walls phase includes mainly Bell Plain and Mississippi Plain, with small amounts of Parkin Punctated, Barton Incised, Old Town Red Filmed, Kent Incised, Rhodes Incised, Ranch Incised, Walls Engraved, and Hull Engraved (Smith 1996).

The Tipton phase extends 6 miles up the Hatchie Valley. The Tipton phase has a ceramic complex with very little decorated wares. The ceramic complex consists of primarily Bell Plain

and Mississippi Plain, with small amounts of Parkin Punctated, Old Town Red, and Kent Incised (Smith 1996).

Most of the sites of the Jones Bayou phase are located on the natural levees of channels 14 and 15 of the Mississippi River, while others are on the bluffs at points where creeks enter the delta. Ceramic complexes from the Jones Bayou phase consist primarily of Bell Plain and Mississippi Plain, with small amounts of Parkin Punctated, Old Town Red, Ranch Incised, Vernon Paul Applique, Nodena Red and White, Avenue Polychrome, Hollywood White, and Jones Bayou Brushed (Smith 1996).

PROTOHISTORIC

This period is generally considered to have begun with the first appearance of European peoples in the Southeast. The Spanish made the first attempts to colonize and conquer North America in 1521, although they were not successful until 1539 when Hernando De Soto landed in what is now Tampa Bay, Florida (Hoffman 1993:7).

The portion of the De Soto expedition that approaches western Tennessee is the path from Chickasaw to Quizquiz (both thought to be in Mississippi), where the expedition crossed the Mississippi River. Given that the main expedition probably never entered west Tennessee (although the route is much debated), it is still of importance as small scouting parties probably did enter western Tennessee, not to mention the repercussions of the expedition on the Native American populations throughout the Southeast.

HISTORIC PERIOD

HISTORIC ABORIGINAL

Termining seventeenth-century aboriginal occupations as "historic" versus "protohistoric" is a rather arbitrary division, because by this point Native American cultures had irretrievably changed from pre-European contact lifeways. During the time of the early exploration of Tennessee, it is believed that four aboriginal groups laid claim to different regions of the state. The Cherokee inhabited the area east of the Tennessee River. The Choctaw claimed rights to middle Tennessee and the upper Cumberland River area. The Shawnee claimed the lower Cumberland area, while the Chickasaw claimed the territory between the Tennessee and Mississippi rivers.

COLONIAL PERIOD

It is probable the first Europeans in Tennessee were members of the Hernando De Soto expedition, who camped at the Native American town of Chiaha at ca. 1540. Chiaha was an island a few miles below the site of Chattanooga. In 1566 and 1567 another Spanish expedition, led by Juan Pardo, came to the Tennessee region seeking alliances with the Native Americans as well as gold. His men became involved in hostilities with the Native Americans and built the first European forts on Tennessee Soil. These forts were quickly abandoned and no settlements were ever established in Tennessee (Folmsbee et al. 1969).

In 1673, English explorers, James Needham and Gabriel Arthur, were sent out from Fort Henry, by a trader named Abraham Wood. The party encountered the Tomahittan, who let them stay in their towns, somewhere in East Tennessee. The explorers learned that these Native Americans had been trading with the Spanish in Florida, but some had been captured and enslaved. English traders took this opportunity to develop trade relations with the Tennessee Native Americans (Folmsbee et al.1969).

In 1673, the French also began to explore the western country from their colony in the St. Lawrence Valley. Father Jacques Marquette and Louis Jolliet floated down the Mississippi to the mouth of the Arkansas River. On this trip they probably stopped on what is presently known as Tennessee. In 1682 Cavalier de la Salle led an expedition to the mouth of the Mississippi. On this expedition a fort was built near the mouth of the Hatchie River. This fort was on the first or second Chickasaw Bluff and was called "Prud'homme."

These early explorers spurred an influx of fur traders and hunters who were not only looking for game but also for good land (Dykeman and Stokely 1998). It was shortly after this time that French trader M. Charleville built a store at Salt Lick on the Cumberland River (Nashville now occupies this location). A trail was created from this store to an existing port on the Chickasaw Bluffs called Port Prudhomme. The trail passed through Hardin, Henderson, and Humphreys Counties (Stewart 1979).

The first charter of Virginia inferred a claim by the English to the territory now known as Tennessee. The second charter of Virginia, granted by King James I, also included Tennessee as part of the colony of Virginia. In 1629 this charter was disregarded when King James I granted the province of Carolina to his attorney general, Sir Robert Heath. Carolina lie between the 31st and 36th parallel and stretched to the west coast. Heath failed to plant settlements within the territory, as a result, in 1633, "Carolina" was granted to eight proprietors (Williams 1930). It must be noted that even though England was laying claim to Carolina, both Spain and France were also laying claim to the territory. In 1696, Dr. Daniel Coxe, physician of King Charles II and Queen Anne, purchased the Heath grant to Carolina and actively pressed for the recognition of it validity. In 1699 the validity of Coxe's title was certified. There were several attempts at colonization after this time, many of which failed. The first to fail was an attempt by French Protestants to start a colony near the Mississippi within Carolina. The second failure was by a group of Palatine Germans under the protection of the Swiss state of Bern. They thought their neutral status may help them gain favor.

After the treaty of Peace in 1783, which ended the Revolutionary war, thirteen states were recognized as independent. The western boundary of the new nation was the Mississippi River. North Carolina's western claim was Tennessee. Tennessee became a territory until June 1, 1796 when President Washington signed a bill admitting it to the Union.

HISTORIC McNAIRY COUNTY

McNairy County was created on October 8, 1823 from a part of Hardin County and was named in honor of John McNairy. President George Washington appointed John McNairy as one of three judges of the Southwest Territory. In 1861, during the secession crisis, McNairy County divided upon political lines. One thousand people voted for secession and 800 voted against it.

With the outbreak of the Civil War the rail junction at Corinth, Mississippi became of major strategic importance not only because it's line from the south was a major source of supplies for the confederate army, but also because of a major buildup of Confederate troops in the area. General Hallek sent Grant's army up the Tennessee River with the general objective of destroying the railroad in the vicinity of Corinth. Buell's army from Nashville was sent to reinforce these troops. General Beauregard was in command of the Confederate forces with reinforcements from Mobile, Pensacola, and New Orleans (Smith and Nance 2003).

By the time the Confederate forces were in place, the Union army had moved up the Tennessee River to Pittsburgh Landing, approximately 32 km (20 miles) north of Corinth (Bradford 1956; Horn 1965; Sword 1963; Foote 1986; Smith and Nance 2003). It was at this point that the Union forces established camps just north of the state line and southwest of Michie, which was then known as Monterey (Figure 3). These camps were fortified and are listed as archaeological sites in the Tennessee Division of Archaeology Records (Smith 2002).

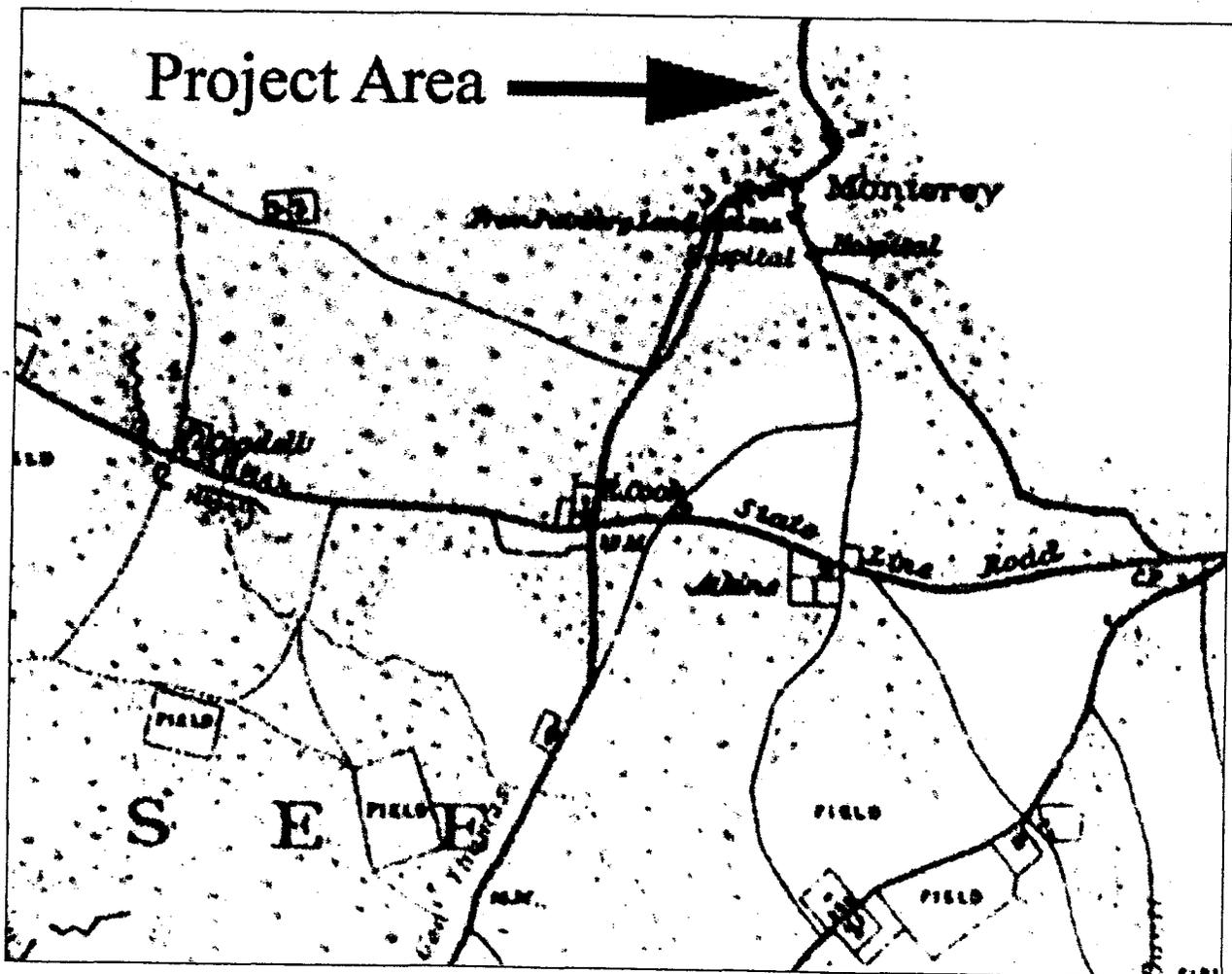
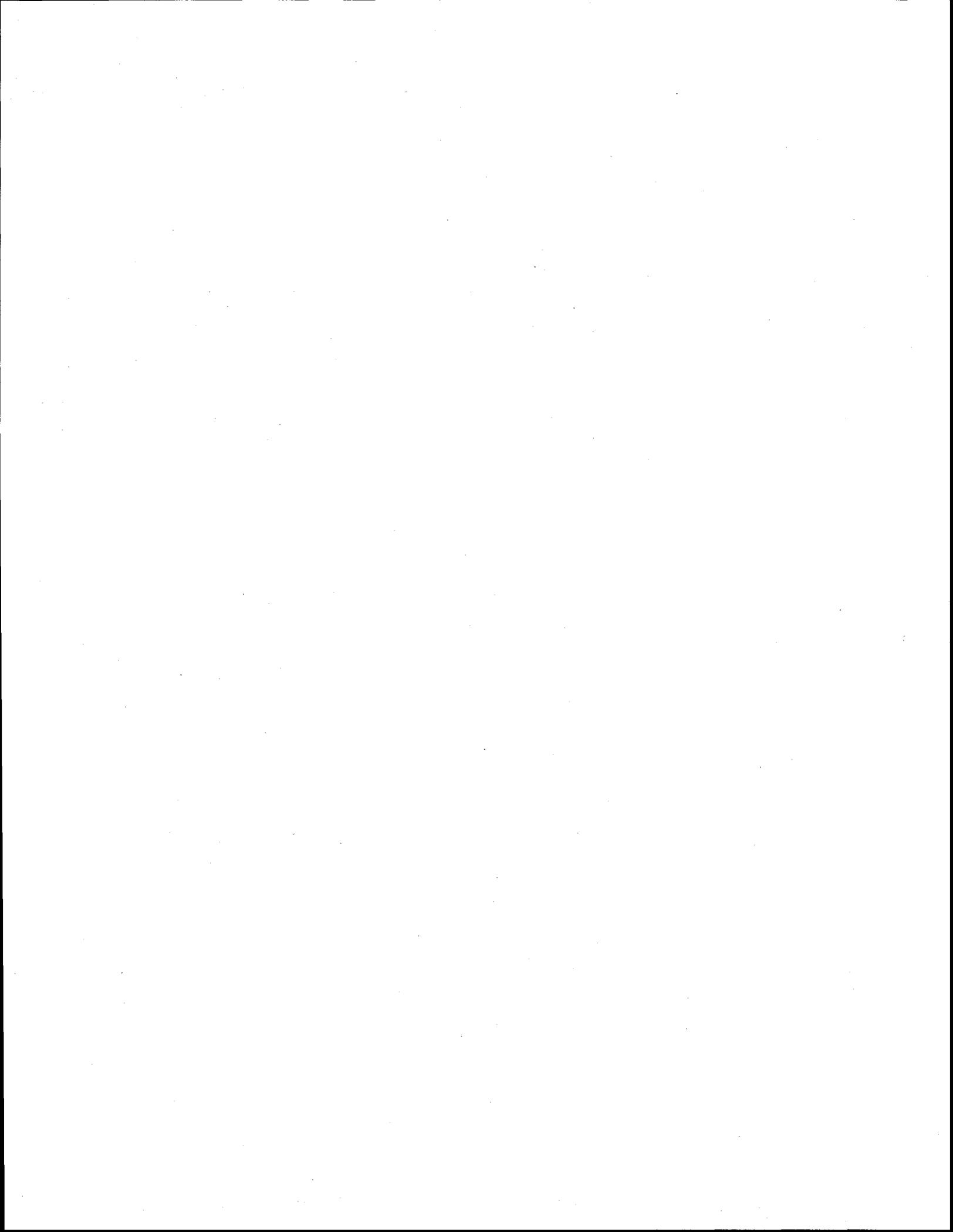


Figure 3. Map showing location of field hospital in relation to Monterey (Michie) (Cowles 1983:Plate 13).

The confederates began to advance towards Pittsburgh Landing, they formed for battle in the small town of Mickey's (Sword 1963; Foote 1986; Smith and Nance 2003). The Battle began on the morning of April 6 in the vicinity of Shiloh Chapel for which the battle is named. The Battle of Shiloh ended with a Union Victory, although the number of casualties (23,741) on both sides were high (Bradford 1956; Sword 1983; Foote 1986). The confederacy made an unsuccessful final attempt to retake the area in October of 1862, but was unable to gain any advantage over the Union Army's fortified positions.

After the battle of Shiloh and throughout the rest of the war, McNairy County became the scene of intense looting and burning. After the war McNairy Counties people returned to agricultural practices, producing mainly cotton, corn, and hogs (Van West 1998:593).



40MY122

Site 40MY122 is located approximately 100 m (.06 miles) south of the study area. It is one of several sites recorded by Fred Prouty and Gary Barker (1993) in a historical assessment of Civil War sites in Tennessee for the Tennessee Historic Commission (THC). Prouty and Barker's description of 40MY79 is brief and reads in its entirety as follows:

This earthwork is located on the west side of state route 224, overlooking Owl Creek. The site is situated at the peak of a small hill and is covered with thick secondary growth and unimproved forest. There appears to have been extensive damage in the near vicinity of the site due to the quarrying of gravel, and one portion of the works may have been impacted. The site consists of a circular shaped parapet with an adjoining inner ditch. An extension of this continues to the northwest and as stated may be due to gravel extraction. There is also an outer parapet line with an adjoining ditch on the uphill side. The parapets average 10 feet in width and appear to follow the contour of the hill. This site was located based on information obtained from Mr. Bill Waggoner of Stantonville, TN. Judging from the topography of the site, there may be intact archaeological deposits associated with these works, however below ground testing would be required to verify this hypothesis.

Other information is found on the Tennessee site survey record for 40MY122. The site size is listed as 76-x-76 m or 5,776 square meters. The earthwork is a Union fortification and its level of disturbance is unknown at this time.

40MY124

Site 40MY124 is located approximately 1.5 km (.93 miles) east of the study area. It is one of several sites recorded by Fred Prouty and Gary Barker (1993) in a historical assessment of Civil War sites in Tennessee for the Tennessee Historic Commission. Prouty and Barker's description of 40MY124 is brief and reads in its entirety as follows:

This site was defined base on information received from Stacy Allen of the National Park Service. Two relic collectors, John Marks and Doug Cupples have also informed us that they have metal detected both Confederate and Federal artifacts at the site, however specifics of the items were not revealed. The battlefield topography consists of a mixture of pasture, secondary growth, and unimproved forest. This area was the site of two Confederate short term camps, a Confederate field hospital, a skirmish between the command of General Nathan B. Forrest and General William T. Sherman on April 8, 1862, and a presumed cemetery for those who were killed during the battle. Because this site includes well over 100 acres it is likely the Civil War period archaeological deposits remain. It is presently unknown whether or not the dead were later removed to another location.

Other information is found on the Tennessee site survey record for 40MY124. The site size is listed as 792-x-671 m or 531,432 square meters. The site's level of disturbance is unknown.

40MY136

Site 40MY136 is located approximately 2 km (1.24 miles) south of the study area. It is one of several sites recorded by Fred Prouty and Gary Barker (1994) in a historical assessment of Civil War sites in Tennessee for the Tennessee Historic Commission. Prouty and Barker's description of 40MY136 is brief and reads in its entirety as follows:

This circular earthwork is located on a hill just west of state route 224, between Michie and Pebble Hill. The site consists of a low profile circular entrenchment that has a maximum width of 460 feet. The parapet averages nine feet in width and one to three feet in height.

There is a large pit near the center of the entrenchment that has been excavated for gravel extraction. There are several other gravel pits in the vicinity of the site. These are defined on the 7.5 series topographic quadrangle. The gravel pit on the site also has a small embankment around it that is a result of excavation. There is also a small dirt road that crosses the entrenchments. This was apparently used to gain access to the extraction area. According to John Marks, a relic collector from Memphis that informed us about the site, there have been Civil War period artifacts metal detected there.

Other information is found on the Tennessee site survey record for 40MY136. The site size is listed as 152-x-691 m or 13,832 square meters. The site is a Union site and the site's level of disturbance is unknown.

PREVIOUS INVESTIGATIONS IN THE STUDY VICINITY

Research at the Tennessee Department of Environment and Conservation, Division of Archaeology offices indicated that only two previous projects had been completed in the vicinity of the project area (Table 3).

Table 3. Projects in vicinity of the study area

Project	Date	Author	Conducted By
<i>An Archaeological and Historical Assessment of the FAS-293 Bridge (L.M. 4.63) Over Little Owl Creek McNairy County, Tennessee</i>	1983	Glyn D. DuVall	Tennessee Department of Transportation
<i>An Archaeological and Historical Survey of the State Route 224 Bridge Over Little Owl Creek (L.M. 4.59) McNairy County, Tennessee</i>	2001	Glyn D. DuVall	DuVall and Associates, Inc.

Both of these surveys were located within 3 km (1.86 miles) of the project area, but neither survey corridor actually fell within the project area of this report.

NATIONAL REGISTER OF HISTORIC PLACES

The Michie 7.5-minute quadrangle sheet falls within McNairy County alone. A search was conducted of National Register of Historic Places listings for McNairy County, Tennessee. The search resulted in the location of three properties listed on the National Register of Historic Places. Of these listings, no NRHP properties are within 3 km of the project area.

5. FIELD METHODS

INTRODUCTION

Field Investigations were conducted January 6, 2005 by the author and one field technician. During the survey one previously undocumented archaeological site was identified and recorded (40MY147). One previously recorded site just outside the project area was revisited because of its extremely close proximity to the project area.

The field results are presented in two sections below. First, the general findings are described in a reach by reach format. This allows for a complete description of the study corridor, including remarks on survey conditions and relevant site detection methods. The chapter concludes with descriptions of the recorded sites and isolated finds.

GENERAL FINDINGS

The project area was first inspected by pedestrian survey. The majority of the project area had 40 percent to 50 percent surface visibility. During this pedestrian survey the project area was also inspected for high-probability areas that needed to be more intensively tested. The areas along the edge of the project area, within the hill terraces were originally thought to be a high-probability area. Upon inspection the water level, which was marked by flags, did not rise onto any flat parts of the terraces. All of the outer edges were on graduated slopes exceeding 15 percent. After this initial inspection it was determined that there were five high-probability areas within the project area. These included three areas where streams converged, one area where a historic site is just outside the project area, and one standing structure within the project area (Figure 4). These areas were each visually inspected or tested thoroughly.

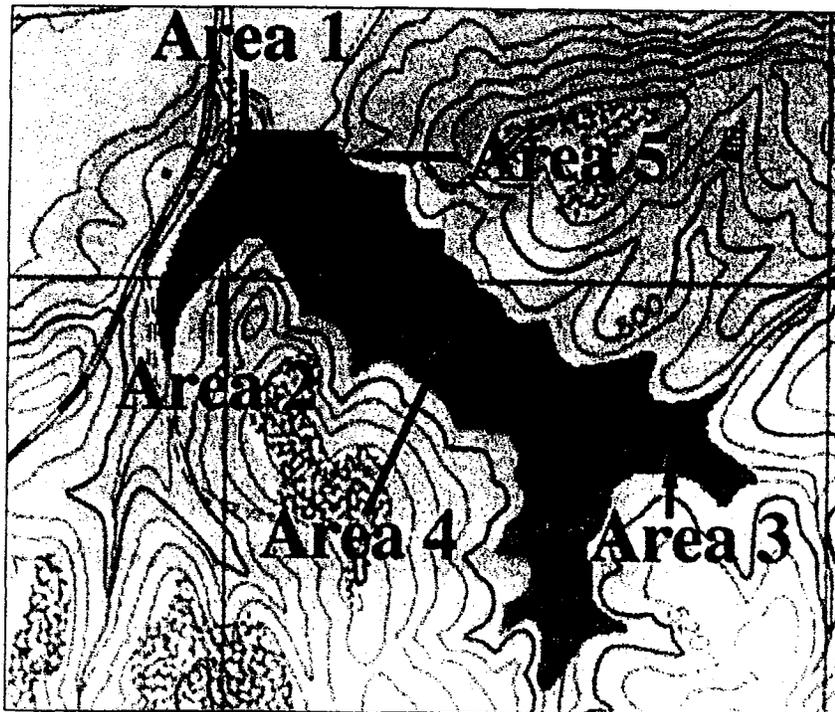


Figure 4. High-probability areas within the project area.

AREA 1 (STANDING STRUCTURE)

The standing structure within the project area was located because of its depiction on the 1991 photorevised Michie Tennessee 7.5-minute topographic quadrangle. The structure is located in a valley bottom with a large hill to the northwest. Upon this large hill is the home with which the structure is affiliated. The immediate surroundings of the structure are a hardwood scrub forest. The exact location of the structure is UTM coordinates Zone 16, 0370033 Easting, 38861162 Northing.

Upon close inspection the structure appears to be a barn (Figure 5). The structure is approximately 14-x-20 m. The structure does not appear to be older than 50 years, as there was evidence that the structure was built with wire nails and the wood of the structure is in very good condition. It also has a concrete foundation. A local informant indicated this structure was about 40 years old.

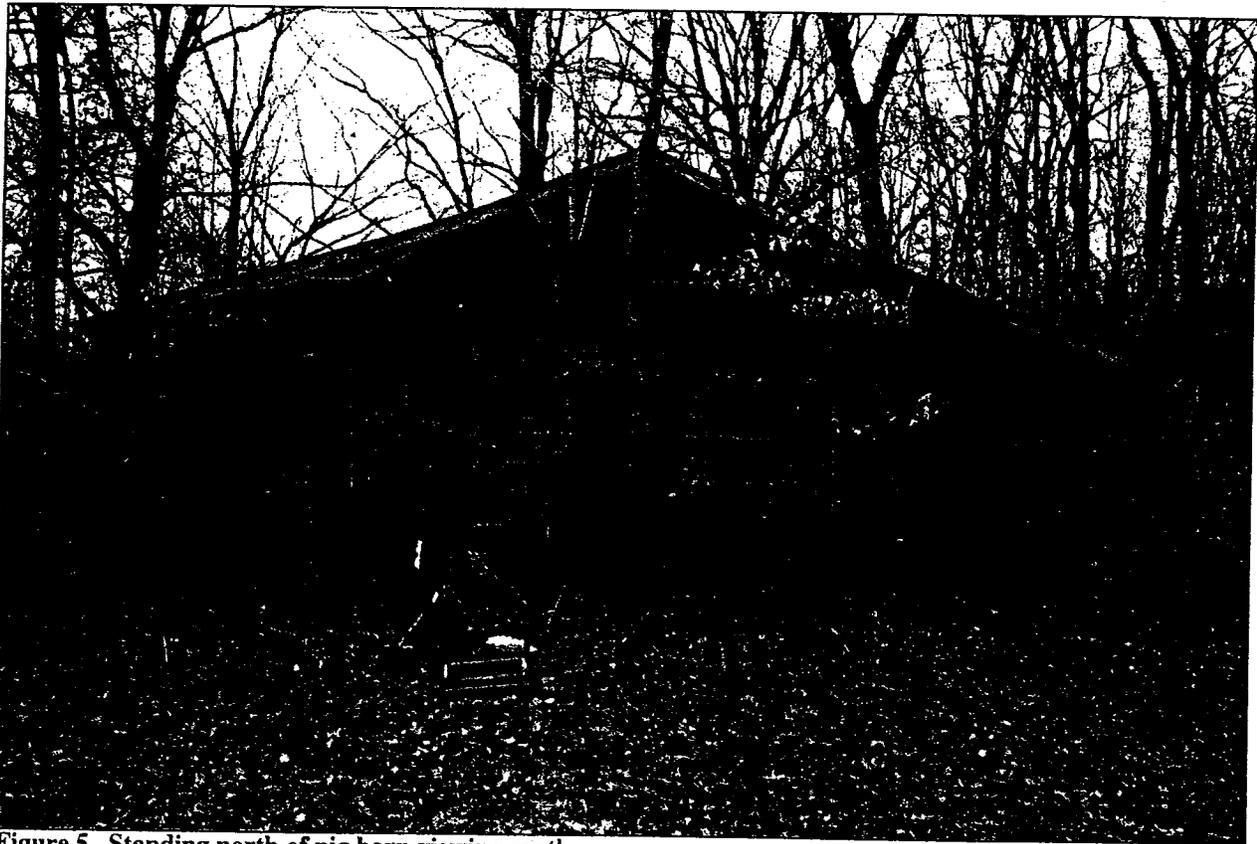


Figure 5. Standing north of pig barn viewing south.

AREA 2 (AREA NEAR PREVIOUSLY RECORDED SITE)

Site 40MY122 lies about 100 m south of the project area. The site UTM coordinates are Zone 16, 0370044 Easting, 3885926 Northing, and 590-ft. amsl. 40MY122 is a Civil War lookout post overlooking Owl Creek. The site is located at the peak of a small hill and is covered in secondary growth (Figure 6). It appears the site has sustained some damage through the quarrying of gravel on the hilltops. The earthwork consists mainly of a circular-shaped parapet with an adjoining inner ditch.

The purpose of locating the site was to insure that it is completely clear of the area of impact. To this end, surveyors had flagged the waterline of the proposed reservoir. The site appears to be completely clear of the area of direct impact. It is approximately 100 m south, and the GPS unit indicated it is 70-ft. above the proposed waterline.



Figure 6. Standing east of Civil War earthworks viewing west.

As a further precaution it was decided to shovel test the outer boundaries of the area of impact to insure that no material remains would be disturbed. This testing was conducted by following the contour of the water level around the base of the hill on which the earthworks sits. Shovel tests were excavated at 30-m intervals where permitted. Anything over 15 degree slope was not shovel tested. A total of seven shovel tests excavated within Area 2. No evidence of cultural material was found during this testing. Typically, the soils of the area consisted of two horizons. Horizon A (0 cm – 25 cm) was a 10YR 4/4 silty clay while horizon B (25 cm – 40 cm) was a 10YR 5/8 silty clay.

AREA 3 (CONVERGENCE 1)

Area 3 is a convergence of two creeks on the easternmost section of the project area. The creek here runs in a general western path with a second creek converging with it from the southeast. This general configuration separates three tracts of land, all of are high-probability areas. However, the tract north of the creek is a large slope. All land above this slope is out of the project area. This left two tracts of land to shovel test. Two shovel tests were placed at 30-m intervals on each tract of land. In addition to this, all areas with good surface visibility were pedestrian surveyed (Figure 7). The datum for the area was placed on the southwestern portion

of land. The UTM coordinates of the datum were Zone 16, 0370724 Easting, and 3885773 Northing. All areas on top of hills are out of the project area. All areas within the project area are in pasture

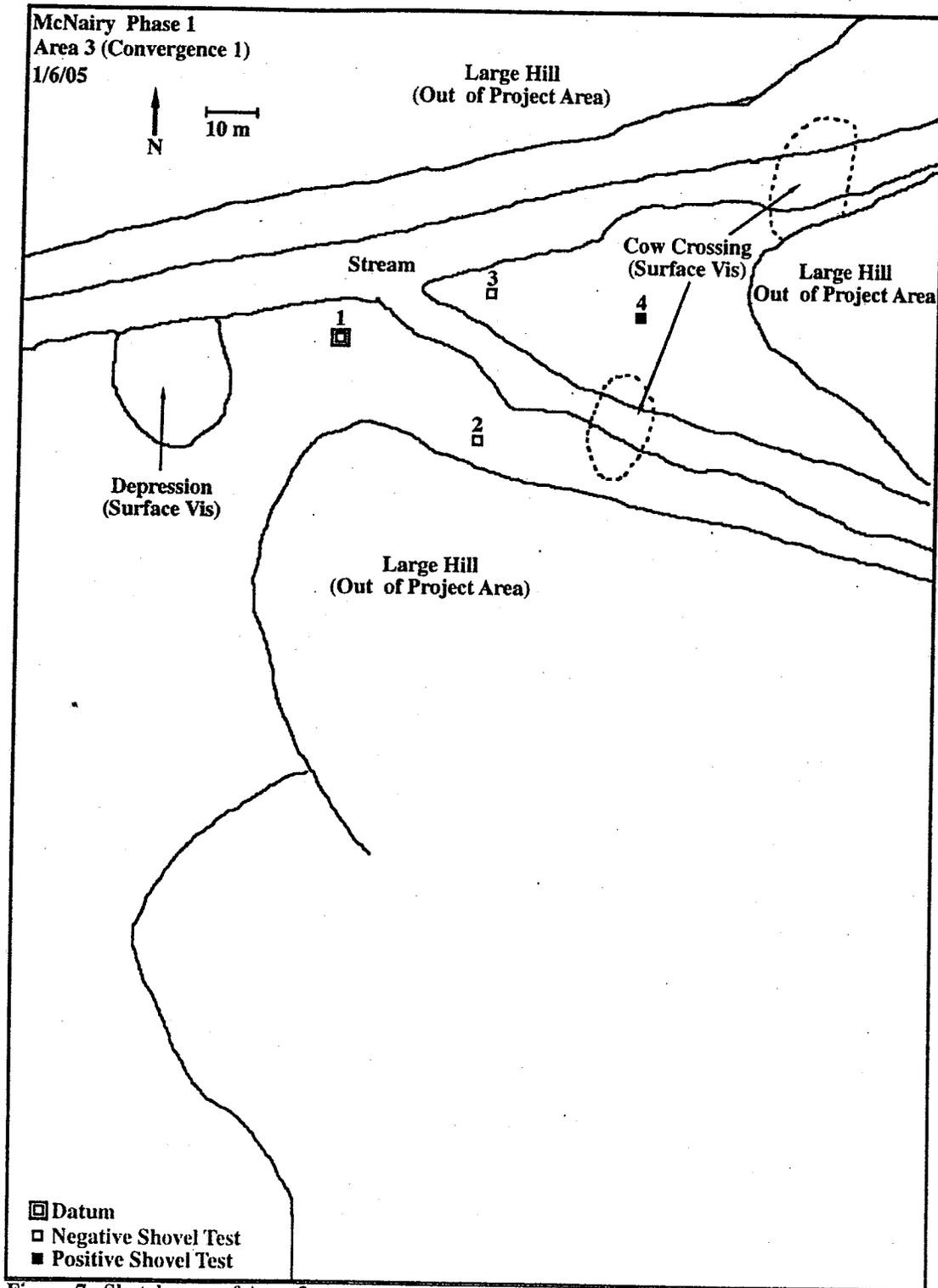


Figure 7. Sketch map of Area 3.

No evidence of cultural material was found through pedestrian survey. However, shovel test 4 did test positive for cultural material. This was labeled FS 1 and is discussed in further detail in the next part of the chapter. The typical soil profile for Area 3 consisted of two horizons. Horizon A (0 cm – 33 cm) was a 10YR 4/4 silty clay loam while horizon B was a 10YR 4/6 silty clay.

AREA 4 (CONVERGENCE 2)

Area 4 is a convergence of two creeks in the central section of the project area. The creek here runs in a general eastern path with a second creek converging with it from the southeast. This general configuration separates three tracts of land, all of which are high-probability areas. However, the center tract is a very thin tract with some surface visibility. This area was pedestrian surveyed. This left two tracts of land to shovel test. Three shovel tests were placed at 30-m intervals on each tract of land (Figure 8). The datum for the area was placed on the southwestern portion of land. The UTM coordinates of the datum were Zone 16, 0370405 Easting, and 3885922 Northing. All areas on top of hills are out of the project area. All areas within the project area were in pasture.

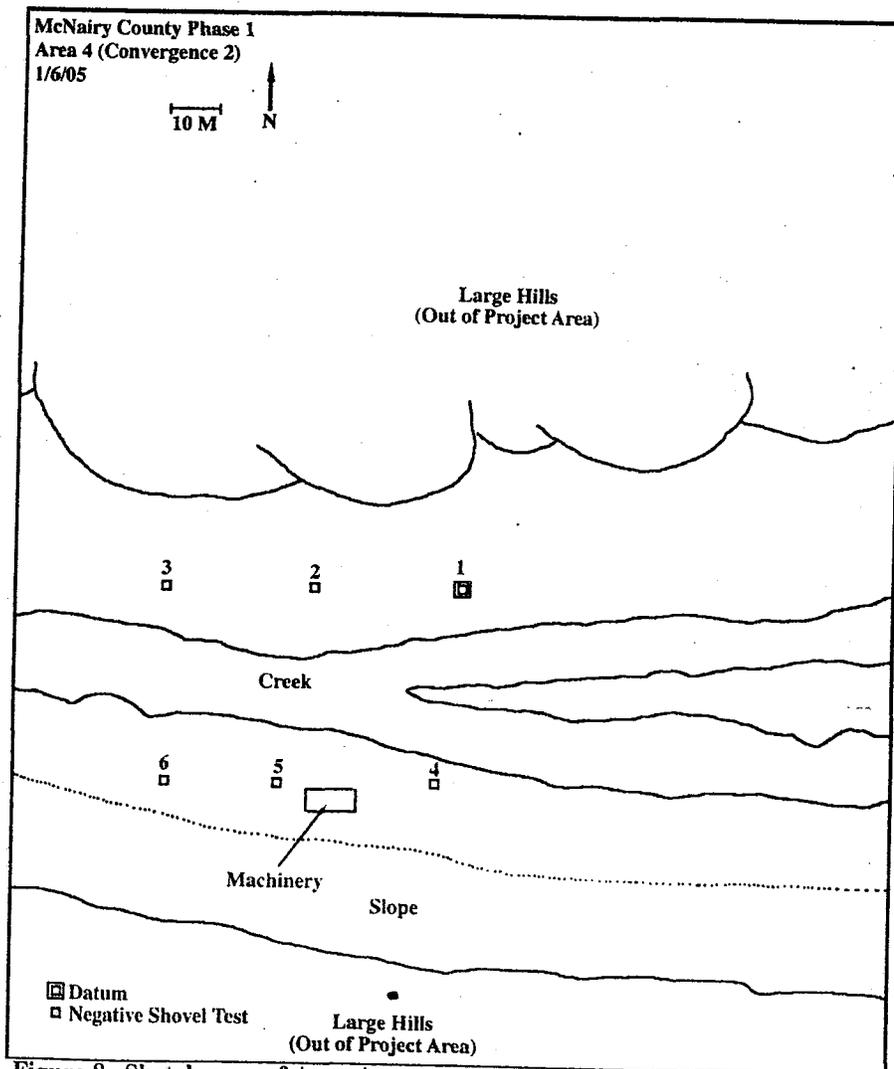


Figure 8. Sketch map of Area 4.

Neither pedestrian survey or shovel testing were positive for any cultural material. The soils in the area typically consisted of three horizons. Horizon A (0 cm - 23 cm) was a 10YR 4/6 silty clay, Horizon B (23 cm - 68 cm) was a 10YR 4/2 silty clay loam, and Horizon C (68 cm - 73 cm) was a 10YR 3/1 mottle with a 10YR 4/2 sandy clay. All horizons contained charcoal.

AREA 5 (CONVERGENCE 3)

Area 5 is a convergence of two creeks in the northern section of the project area. The creek here meanders to the northwest with a second creek converging with it from the south. This general configuration separates three tracts of land, all of which are high-probability areas. The western tract, however, is a dirt road with surface visibility, just before the outside limit of the project area. This area was pedestrian surveyed. This left two tracts of land to shovel test. Three shovel tests were excavated at 30-m intervals on the southeastern tract of land while one shovel test was entered on the northeastern tract of land (Figure 9). All areas on the hills are out of the project area. All areas within the project area are in pasture.

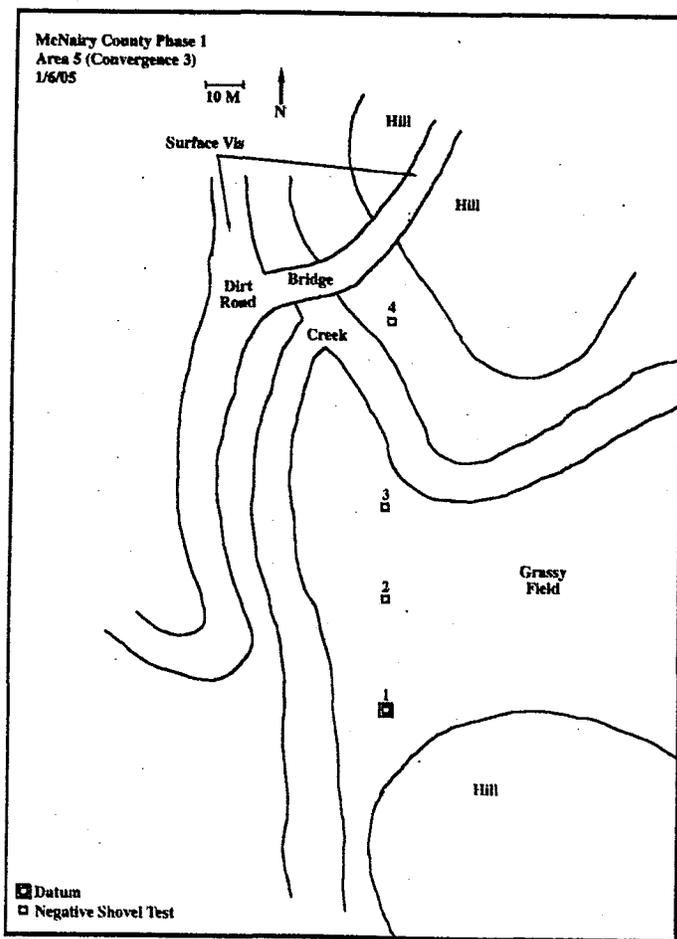


Figure 9. Sketch map of Area 5.

Neither pedestrian survey nor shovel testing was positive for any cultural material. The soils in the area typically consisted of three horizons. Horizon A (0 cm - 22 cm) was a 10YR 4/4 silty clay, Horizon B (22 cm - 39 cm) was a 10YR 3/3 silty clay loam with charcoal, and Horizon C (39 cm - 45 cm) was a 10YR 4/4 silty clay with gravel.

SITE DESCRIPTIONS

40MY147

- Gross Cultural Affiliation.....Prehistoric
- Specific Components.....Unidentified Prehistoric
- Site Type.....Lithic Scatter
- Recommended NRHP Status.....Not Eligible
- Site Size.....1 sq. m
- Artifact Recovery Total.....3
- UTM Coordinates Zone 16, 0370734 Easting, 3885773 Northing

Location and Setting

40MY147 is located at the confluence of two streams. The first stream is heading in a westerly direction while the second stream enters it from the southeast (Figure 10). The streams effectively cut the land into three sections. The first section, to the north, is occupied by a very large hill. The second section, to the southwest, is a 40-m tract that climbs into a large hill. The third section, to the southeast, is a triangular tract measuring approximately 70-x-50 m, which leads into another large hill. There are sporadic areas of surface visibility close to the site, namely where cattle cross the creeks. There is also a large depression on the southwestern portion of land with good surface visibility.

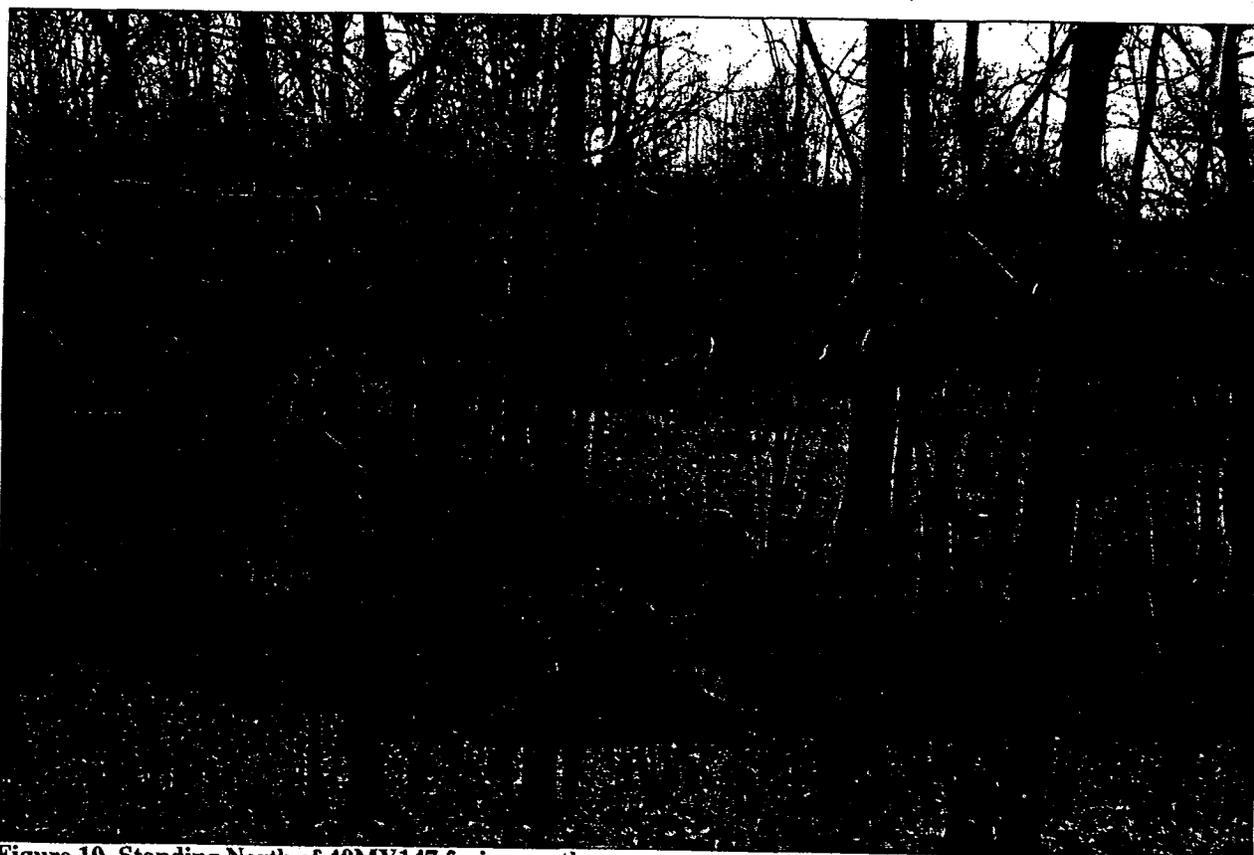


Figure 10. Standing North of 40MY147 facing south.

Two shovel tests were excavated in both the southeast and the southwest sections of the site (Figure 11). One of the shovel tests on the southeast portion of land tested positive for cultural material (Table 4). The shovel test was delineated in a cruciform fashion, until two negative shovel tests were obtained in each of the cardinal directions (Figure 8). Anything outside of the area of impact was not tested. No further shovel tests were found to be positive.

Table 4. Artifact inventory from 40MY147.

Bag #	ST	Depth	Artifact Category	Comments	Count
1	4	0 cm - 10 cm	Flakes	Heat treated	3
Total					3

Site 40MY147 is recommended not eligible for listing in the NRHP. This small, unidentified prehistoric site was probably associated with larger site on the bluff tops. The bluff to the east of the site has a flat top and would be ideal for a village site, although it is out of the project area and was not tested. It is a low-density deposit and is judged incapable of yielding any significant archaeological data, and holds no future research potential.

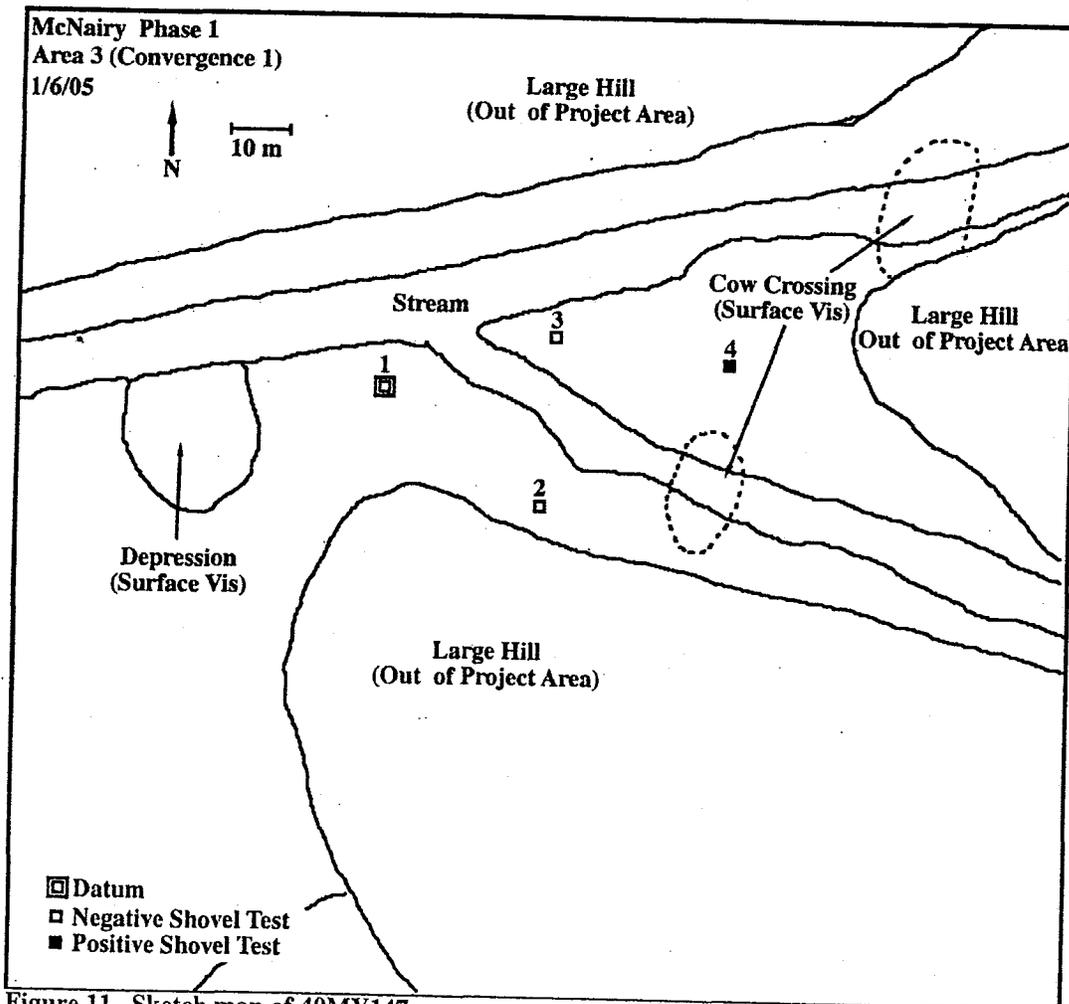


Figure 11. Sketch map of 40MY147.

6. SUMMARY AND RECOMMENDATIONS

SUMMARY

At the request of American Electrical Contractors Inc., PCI performed a cultural resources survey of the McNairy County Phase I project area in McNairy County, Tennessee. The proposed modification includes the creation of an impoundment. The purpose of this study was to identify all known and unrecorded cultural resources present in the project area and to provide appropriate management recommendations for any identified cultural resources.

A literature and records search was conducted at Nashville, Tennessee. The search revealed that there were no previously recorded archaeological sites and historic properties located within the project area, although it also revealed that there was a historic site within 100 m of the project area (40MY122). A review of past archaeological work conducted in the area revealed the project area had not been previously surveyed.

A two-person team conducted the field investigations on January 6, 2005. The project right of way primarily consisted of pasture with some limited surface visibility. As a result, the crew conducted pedestrian survey where appropriate and shovel tested high-probability areas. One newly recorded site was identified, 40MY147. The site was delineated and because of its low artifact density and lack of research potential, it is recommended as not eligible for the NRHP.

RECOMMENDATIONS

Site 40MY147 is a low-density lithic scatter. There was no diagnostic artifacts recovered to narrow the temporal dimension or identify the prehistoric context of the site. It is our opinion that this site does not show strong research potential. On this basis, site 40MY147 is recommended as not eligible for listing on the NRHP. Beyond the location data that is already in hand, this site is incapable of yielding any further significant archaeological data. Given that there are no significant or potentially significant cultural resources located within the McNairy County Phase I project area, no further archaeological work is necessary prior to planned construction of the impoundment. However, because of 40MY122's close proximity to the project area, extra precautions should be taken by the contractor to ensure that this unassessed site is in no way impacted by the construction of the impoundment.

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APPENDIX J

Section 404(b)(1) Analysis

404(B) (1) GUIDELINES COMPLIANCE EVALUATION
(40 CFR 230.10)

Project Number 200401779
Discharge of Fill Material for
Proposed Impoundment Structure on Unnamed Tributary
To Owl Creek, Tennessee River Mile 197.4L,
McNairy County, Tennessee

RESTRICTIONS ON DISCHARGE(*): A check in a block denoted by an asterisk indicates that the proposal does not comply with the guidelines.

I. Alternatives test.

- A. Are there available, practicable alternatives having less adverse impact on the aquatic ecosystem and without other significant adverse environmental consequences that do not involve discharges into "waters of the United States" or at other locations within these waters? [Yes(*) ___ No x]
- B. If the project is in a special aquatic site and is not water-dependent, has applicant clearly demonstrated that there are no practicable alternative sites available? [Yes x No(*) ___]

II. Special restrictions. Will the discharge:

- A. violate state water quality standards? [Yes(*) ___ No x]
- B. violate toxic effluent standards (under Section 307 of the Act)? [Yes(*) ___ No x]
- C. jeopardize endangered or threatened species or their critical habitat? [Yes(*) ___ No x]
- D. violate standards set by the Department of Commerce to protect marine sanctuaries? [Yes(*) ___ No x]
- E. Evaluation of the physical/chemical and biological characteristics and anticipated changes indicates that the proposed discharge material meets testing exclusion criteria for the following reason(s).
[Yes x No ___]

- (x) based on available information, the material is not a carrier of contaminants
- () the levels of contaminants are substantially similar at the extraction and disposal sites and the discharge is not likely to result in degradation of the disposal site and pollutants will not be transported to less contaminated areas
- () acceptable constraints are available and will be implemented to reduce contamination to acceptable levels within the disposal site and prevent contaminants from being transported beyond the boundaries of the disposal site

III. **Other restrictions.** Will the discharge contribute to significant degradation of "waters of the U. S." through adverse impacts to:

- A. human health or welfare, through pollution of municipal water supplies, fish, shellfish, wildlife, and special aquatic sites? [Yes(*) ___ No x]
- B. life stages of aquatic life and wildlife? [Yes(*) ___ No x]
- C. diversity, productivity, and stability of the aquatic ecosystem, such as loss of fish or wildlife habitat, or loss of the capacity of wetland to assimilate nutrients, purify water, or reduce wave energy? [Yes(*) ___ No x]
- D. recreational, aesthetic and economic values? [Yes(*) ___ No x]

IV. **Actions to minimize potential adverse impacts (mitigation).** Will all appropriate and practicable steps (40 CFR 230.70-77) be taken to minimize the potential adverse impacts of the discharge on the aquatic ecosystem? [Yes x No(*) ___]

The mitigation measures included in the proposed action together with the standard erosion and sedimentation controls included in the DA permit conditions would adequately minimize pollution or adverse effects to the affected ecosystem.