

EI - 21015



Cates Landing Railroad Report, Gerald Smith
Jennifer Barnett

to:
Joshua.Wayland@stb.dot.gov, Jimmy McNeil
04/17/2015 11:29 AM

Hide Details

From: Jennifer Barnett <Jennifer.Barnett@tn.gov>

To: "Joshua.Wayland@stb.dot.gov" <Joshua.Wayland@stb.dot.gov>, Jimmy McNeil
<jimmy.d.mcneil@us.army.mil>

History: This message has been replied to and forwarded.

3 Attachments



Gerald Smith Report Review.doc Cates Landing, Gerald Smith revised 2015.pdf



TNSHPO Arch. Standards & Guidelines 2009.pdf

Good Morning,

I received a revised report for the Cates Landing railroad line directly from Gerald Smith without a cover letter or any consultation documentation from the federal agency(s). I am attaching a copy of the report. Gerald addressed some of my report revision requests, as listed in the attached notes. I acknowledge that Gerald has done his best at improving the report and I have an acceptable level of confidence that there are no unknown resources within the area of potential effect.

The report still does not address the following comments:

1. There is no mention of the federal agency responsible for the undertaking or that the survey was conducted as part of an agency(s) Section 106 compliance obligations.
3. There is no discussion of previous archaeological investigations associated with the Cates Landing project. – This is particularly important so as to put the investigation into the context of the overall Northwest Tennessee Harbor development project.
5. There was no subsurface testing and/or drawings or descriptions of the soil stratigraphy within the area of potential effect. – Although page 14 states that visual examination of the ditches showed sterile channel fill without buried soil horizons.

In addition the cover page needs to be changed to reflect the date of the current version of the report.

The attached report is compliance document on behalf of the Surface Transportation Board (STB) and is directly related to the stipulations of the former Programmatic Agreement for the harbor with the Corps of Engineers. As such, I am going to withhold our response until I formally receive the document and a cover letter from the agency(s). I will leave it to the agency(s) discretion to determine whether it meets their standards and if they concur with the findings of the investigations.

Thanks,

- Jennifer

Jennifer M. Barnett

Archaeologist Supervisor and Federal Programs Archaeologist
Tennessee Division of Archaeology
Cole Building #3, 1216 Foster Avenue
Nashville, TN 37243
Office: 615-741-1588, ext. 105
FAX: 615-741-7329
Email: Jennifer.Barnett@tn.gov



Sign-up for the [TDEC E-Newsletter](#).

The survey report that you provided is inadequate and does not meet the TN SHPO Standards and Guidelines.

A few examples:

1. There is no mention of the federal agency responsible for the undertaking or that the survey was conducted as part of an agency(s) Section 106 compliance obligations.
2. The maps are sloppy and nearly illegible.
3. There is no discussion of previous archaeological investigations associated with the Cates Landing project or other investigations in the immediate area.
4. The conclusions paragraph references a previous survey that you conducted of the Industrial Park. This survey was never submitted to our office for review as part of the overall Cates Landing Port. The entire port and development fall under the review of the Corps of Engineers Memphis district, but we have no record of them ever having reviewed the report under the Section 106 process.
5. There is no discussion or map of previously identified archaeological sites in the area.
5. There was no subsurface testing and/or drawings or descriptions of the soil stratigraphy within the area of potential effect.
6. There is no measurement of the entire survey area listed.
7. The methods section does not include how many transects were surveyed or a map showing the exact location of the transects.
8. Site 40LK121 is mentioned without any context or a map of its location.
9. There is a management summary but no introduction section.

**CULTURAL RESOURCES SURVEY OF THE RAILROAD ACCESS RIGHT OF WAY
FOR THE CATES LANDING INDUSTRIAL PARK, LAKE COUNTY, TENNESSEE**

by

Gerald P. Smith and Nancy C. Smith
Smith Archaeological Consulting
3453 Blueberry Lane
Birmingham, AL 35216

for

EnSafe, Inc.
5724 Summer Trees Drive
Memphis, TN 38134

August 2014

MANAGEMENT SUMMARY

This was a Phase I survey done as part of the overall preliminary investigations of the development area of the Port of Cates Landing, the associated industrial park, and the railroad access corridor. The port is in Lake County on the Mississippi River just north of the point where Tennessee Highway 22 turns eastward after running north from Tiptonville, TN. The entire project area is on the Tiptonville 1:24,000 topographic sheet (Index No. 419 NW)

The industrial park is on a tract of 345 acres southwest of this turn. The railroad access route runs south 14,500 feet from its southeastern corner to the Illinois Central/Canadian National line from New Orleans to Chicago, on a right of way approximately 60 to 80 feet wide over most of its length, expanding to 130 feet near the northern end and a fan shaped expansion at the southern to provide for a junction with the main line, with a total area is 380 acres/ 0.59 square mile.

Field survey was conducted by Gerald and Nancy Smith on August 2-4, 2014 under generally good to excellent field conditions. The entire area except for roads was under cultivation with clear soil visibility under standing crops. No archaeological sites were found on the right of way outside the industrial park tract.

CONTENTS

Introduction	1
Environment	4
Regional Cultural Background	6
Local Archaeology and History	10
Field Methods and Results	14
References Cited	17

Figures

1. Project Location	2
2. Project Area	3
3. View southward along right of way from southeastern corner of industrial park	15
4. View eastward across right of way along road toward Northwest Correctional Center	15
5. View northwest along right of way from main line railroad	16
6. Transect locations, in 6 sheets	19

INTRODUCTION

This was a Phase I survey done on behalf of Ensafe, Inc. of Memphis, TN, as part of the overall preliminary investigations of the development area of the Port of Cates Landing, the associated industrial park, and the railroad access corridor. Lead Federal agency is the U. S. Army Corps of Engineers. The port is on the Mississippi River just north of the point where Tennessee Highway 22 turns from northward out of Tiptonville, TN to an east-west alignment

The industrial park is on a tract of 345 acres southwest of this turn. The railroad access route runs south 14,500 feet from its southeastern corner to the Illinois Central/Canadian National line from New Orleans to Chicago, on a right of way approximately 60 to 80 feet wide over most of its length, expanding to 130 feet near the northern end and a fan shaped expansion at the southern to provide for a junction with the main line, with a total area is 380 acres/ 0.59 square mile. Field survey was conducted by Gerald and Nancy Smith on August 2-4, 2014 under generally good to excellent field conditions.

20 Statute Miles

30 Kilometers

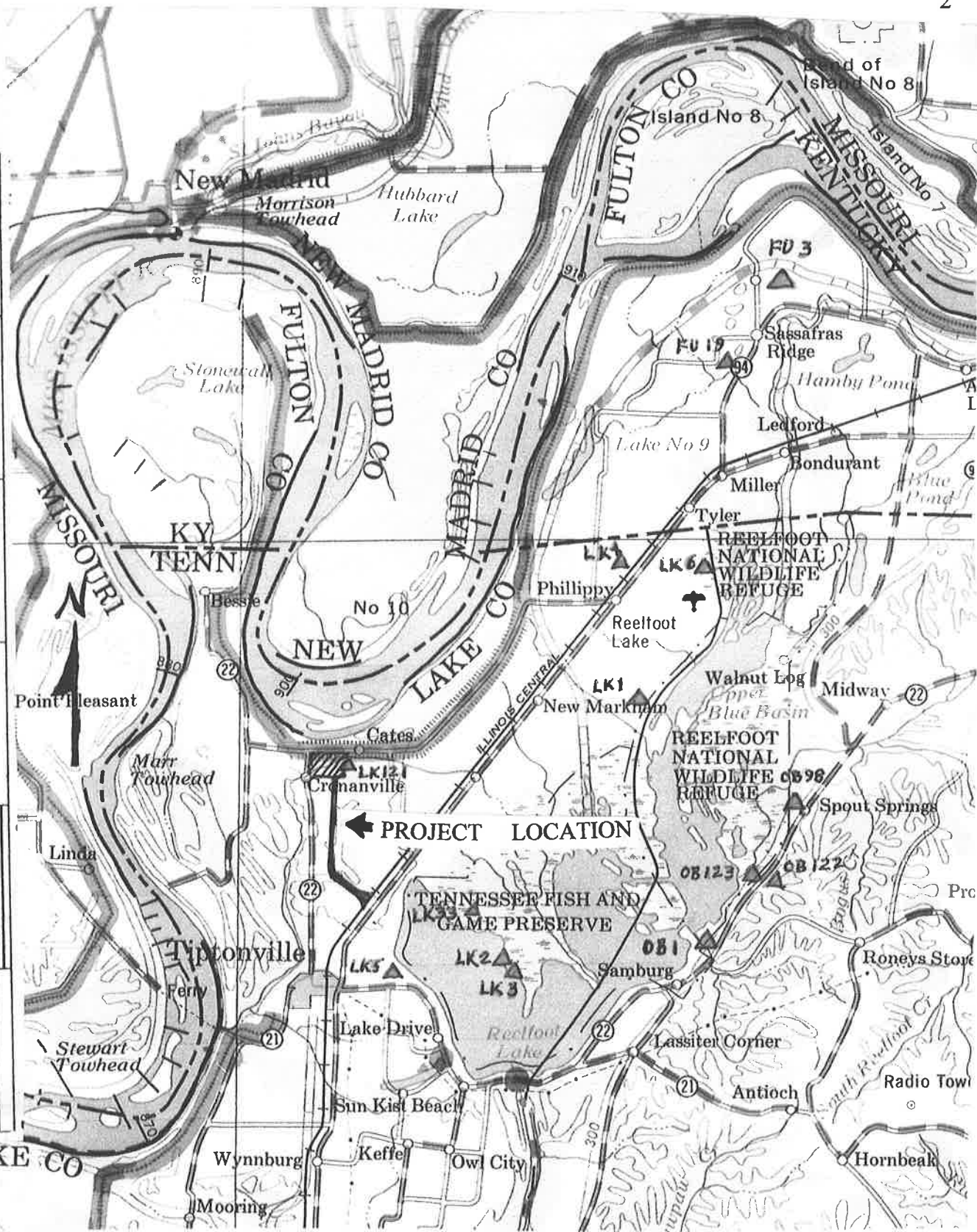


Figure 1. Project Location. Base map is Dyersburg Tenn.;KY;MO;ILL 1:250,000 sheet, 1982.

ENVIRONMENT

The project area is in the Lower Mississippi River Alluvial Valley, adjacent to the Mississippi River with the industrial park and northern railroad corridor areas on a recent natural levee of the river and the central and southern railroad corridor passing through lower lying earlier river channel scars. The climate is moderate, with a growing season averaging about 221 days (Brown 1969:2). Average temperatures range from a high of 92 in July to 49 in January and lows of 70 in July and 28 in January. Rainfall is fairly evenly distributed through the year, with more than 5 inches a month coming only in January and occasional dry periods in August - October. Winter and spring rains tend to come as long periods of drizzle and summer rains generally in thunderstorms.

Geologically the area is quite young, being comprised of late and post-Pleistocene Mississippi River surfaces and meander belt ridge and channel fill deposits. The areas east and west of the industrial park consist of a mosaic of recent channels and meander belt ridges, and the industrial park itself is on a modern natural levee formation. Reelfoot Lake and much of southern and eastern Lake county are in areas noted by Saucier (1994: 298-299 and Fig. 55) as being on the downwarped eastern side of the Reelfoot Fault, while the project area is mainly on the uplifted western side.

The Reelfoot area has long been the focus of extensive ecological study, including reconstruction of the probable preclearing forest habitats by Victor Shelford (1963). Shelford's work there (1963: 94 - 103) emphasizes development of a succession of habitats as an area is abandoned by the river and is gradually elevated by flood deposits. Initial Cottonwood-Willow forest is characteristic of sand bars and banklines in and along the active channel. The Mature Cottonwood Willow Forest is less frequently flooded and includes a wide range of vines and understory plants with swamp rabbits, opossums, and raccoons common and grey squirrels and deer also present. The Old Cottonwood - Willow Forest begins to develop as soil deposition reaches 28 to 30 feet above mean low water and the previous forest is invaded by boxelder, hackberry, elm, and sweetgum.

Shelford's Sugarberry-Elm-Sweetgum Forest (using "sugarberry" for "hackberry") includes a wide range of other tree species along with vines and shrubs. Additional animal species present include bear, cougar, bobcat, and wolf. This forest is followed by the Floodplain Oak-hickory Forest of about 50% cherrybark and pin oak, 15 to 20% shellbark and bitternut hickory, and otherwise including a wide range of species from previous stages. The Tulip Poplar-Oak Forest is considered probable for all areas 40 to 45 or more feet above low water and not disturbed by the river for several hundred years. It includes tulip poplar, basswood, chinkapin oak, shumard oak, beech, elm, and hackberry as major arboreal species. Backswamp and lake marginal areas of permanent to extensive seasonal flooding are characterized by the Cypress-Ash Forest of cypress, tupelo gum, and ash. Successive non forest aquatic zones extend into progressively deeper areas of old meander loop lakes such as Reelfoot Lake and others in the area.

Correlation of Shelford's forest type distributions (1963: Fig. 4-2 and 4-3) with soils on the Lake County soil survey (Brown *et al*: 1969) suggests Tulip Poplar - Oak Forest on Reelfoot-Tiptonville-Adler soils with Sugarberry-Elm-Sweetgum and Cypress-Ash Forest on various elements of the Iberia-Sharkey-Bowdre soil association. The industrial park would thus have been in Tulip Poplar-Oak forest and much of the railroad corridor in a mosaic of other forest habitats.

REGIONAL CULTURAL BACKGROUND

Prehistory

The Mississippi River drainage of western Tennessee and Kentucky has been occupied by humans for at least the past 10,000 to 12,000 years. It is covered in general regional treatments as provided by McNutt (1996); Morse and Morse (1983); Phillips (1970); and Phillips, Ford, and Griffin (1951). More localized information is provided in Mainfort (1996), Smith (1979, 1990, 1993, and 1996), Smith and Evans (1987), and Smith and Smith (2013). The summary provided here is intended as a general framework for the study area discussion.

The cultural remains of the earliest inhabitants consist primarily of large fluted points and an associated complex of scrapers, flake knives, multipurpose flake tools, and unfluted points otherwise similar to the fluted forms. Most of the known specimens are from east of the loess sheet, but some are also known from the vicinity of the Mississippi River bluffs where they have apparently been exposed by deep erosion cutting into the loess deposits in which they were included. Specimens from this period are rare and very few sites are known. The population was apparently small and consisted of small groups living by hunting large animals and gathering plant foods. Climatic conditions were much cooler than now and may well have been more similar to those now characteristic of the Great Lakes than to local modern conditions.

By about 8000 BC the archaeological record indicates increasing importance for plant foods by the appearance of grinding tools meant mainly for grinding seeds and nuts from species now present in the environment. The large, slow game animals of the late Pleistocene were now gone and deer was main large animal available. Hunting weapons now emphasized the use of spear thrower darts tipped with stemmed, notched, or barbed points. The population during this cultural period, the Early Archaic, appears to have increased and archaeological sites are now present on the oldest exposed surfaces of the Alluvial Valley itself.

The Middle Archaic period of about 5000 to 3500 BC is poorly known in the area. Basally notched Evans points are present in the Tennessee River valley during this period, and a variety of side notched types are present to the north in the Midwest. Some of the Midwestern types are occasionally found in western Tennessee, but many are also similar to Early Archaic types, thus rendering clear definition of Middle Archaic occupations in western Tennessee difficult. Ground stone axes and spear thrower weights appear regionally during this period and continue in use into late prehistoric times. The climate had become much warmer and drier than present, with the upland forests likely made up of xeric oak and hickory species of minimal food value and permanent surface water restricted to the largest streams. Middle Archaic occupations are known from the Mississippi alluvial valley and adjacent uplands to the south, and are quite distinct from either the Tennessee River or the Midwestern materials of the period.

By about 3500 BC climatic and environmental conditions had improved to approximate modern conditions in the area. This change and the introduction of new subsistence methods appear to have resulted in continuing population growth. The most important development combined concentration on seasonally concentrated food sources with storage methods allowing

effectiv preservation of food from times of abundance through those of severe shortage. In the western Tennessee area this Late Archaic development resulted in spring and summer occupation of the Tennessee River valley emphasizing use of fish and mussels along with generalized hunting and gathering, followed by movement to the eastern part of the loess sheet for fall and winter occupation of groves of shagbark and scalybark hickories on stream terraces for storable nuts as well as hunting territory.

Between about 1500 and 1000 BC a new way of life, and possibly new people, appeared from the south in southwestern Tennessee southwest of the Hatchie River. This new culture in the area represented the expanding frontier of the Poverty Point culture based in Louisiana and southern Mississippi. By about 500 BC these sites had appeared throughout the Mississippi River drainage of western Tennessee, to the exclusion of Tennessee River based Late Archaic activity. Projectile point styles are distinct from those of the Tennessee River valley, corresponding instead to those of the lower Mississippi River valley. The larger sites in particular are marked by the presence of a wide variety of spherical, biconical, and ellipsoidal baked clay objects used to the south for baking food in cooking pits. The form, frequencies, and decoration of these objects occur in distinctive local clusters, suggestive of local social groups. Use of these objects continued to some extent after the introduction of pottery which marks the beginning of the Early Woodland period.

The Early Woodland cultural period in the area appears to have lasted from about 400 BC to about AD 100. The initial ceramic styles were drawn from the Tchula tradition of northwestern Mississippi, with local variation suggesting continuation of the previous Poverty Point derived local groups, but by the end of the period Adena projectile points derived from the Ohio River Valley and sand tempered cordmarked and fabric impressed ceramics derived from the Hatchie-Tombigbee-Yalobusha headwaters area had become common.

During the Middle Woodland period of about AD 100 to 400 western Tennessee was included in the vast trade network shared by the Marksville culture of the lower Mississippi River valley, Hopewell in the Ohio and upper Mississippi valleys, Miller in the Hatchie-Tombigbee-Yalobusha headwaters, and others along the coast of the Gulf of Mexico. The Pinson site near Jackson on the South Fork of Forked Deer River (Mainfort 1986) is the primary center for the western Tennessee area at this time. Baldwin series sand tempered ceramics, primarily with plain and cordmarked surface finishes, are the most common marker for the period. The lack of variability in this ware has so far precluded any effort to use it for defining local groups.

Late Woodland sites of the approximate AD 400 - 1000 period are common in the Mississippi delta portions of westernmost Tennessee and Kentucky, but are rare in the uplands. The few known upland sites of the period are mostly on the main stem and North Fork of Obion River and appear to be small special purpose camps rather than permanent occupations. Ceramics are of clay grog tempered ware and have plain, cordmarked, or occasionally check stamped surfaces. Projectile points are generally small notched or triangular forms apparently meant for use on arrows rather than spear thrower darts.

The Mississippian cultural period of about AD1000 - 1550 is the era of large town and ceremonial centers in the southeastern and midwestern United States. Agriculture, fishing, and hunting provided the food supply for a large and growing population. Large towns, usually fortified, were up to 100 acres or more of dense occupation with a central plaza and pyramidal earthen platform mounds were the homes of most of the population of the Mississippi River flood plain and bluffs below the Ohio River. Hunting camps and hamlets are scattered up the lower 20 miles or so of the tributary streams, but the incipient Mississippian Obion site (Garland) on the upper North Fork of Obion River is the only known large upland center in the area. Numerous local area cultural units have been defined throughout the area, including one centered in the Reelfoot Lake area and another in far western Kentucky north of Reelfoot Lake. Mississippian ceramics include a wide variety of vessel forms, mainly jars, bottles, and bowls and a wide variety of punctated, and painted decorated, incised, engraved decoration as well as plainware and effigy vessels of all kinds. Stone items primarily include small triangular and lanceolate arrow points along with chipped and ground stone axes and chisels.

Arrival of the DeSoto expedition in 1541 at once provided a glimpse Mississippian culture at its peak of powerful chiefdoms, extensive agriculture, and elaborate arts and crafts, and brought its demise through Old World epidemic diseases which killed nearly everyone. Accounts written by survivors of this expedition provide virtually our only non-archaeological information about this culture until the eighteenth century French accounts of the Natchez and their neighbors.

History: Regional Settlement

After the DeSoto expedition there were no further recorded European activities in the lower Mississippi River valley until the Marquette and Joliet expedition of 1673, when they descended the Mississippi to the vicinity of the mouth of the Arkansas River. They found no trace of the populous provinces reported by the Spanish until they reached the Quapaw at the mouth of the Arkansas. By this time the Quapaw already had European trade goods, an expectable state of affairs given the flood of trade goods pouring into Cherokee, Creek, Choctaw, and Chickasaw territory by this time as a result of the deerskin trade with Virginia and South Carolina. French activity in the Mississippi valley grew gradually, but resulted in regular travel by the early 1700's with the establishment of New Orleans, Natchez, Arkansas Post, Kaskaskia, and points north which relied upon the river system for the transportation of supplies and exports.

British claim to the territory between the Tennessee and Mississippi Rivers was solidified with the capture of French Canada, and was passed to the United States at the end of the Revolutionary War. Actual control of the area, however rested with whichever adjacent tribal claimant could evict intruders first, with the Chickasaw and Shawnee as primary contenders, with the Cherokee and Choctaw also occasionally involved. In 1793 the Chickasaw sold Spain a tract on the Fourth Chickasaw Bluff of the Mississippi River for Fort San Fernando and its associated settlement and trading facilities. This grant was assumed by the United States in 1798, with the existing Fort San Fernando being replaced by a new fort and trading facilities to the south near the present railroad and highway bridges. North Carolina was particularly energetic in providing land grants in the area to Revolutionary War veterans. These grants often overlapped and became the subjects of rampant land speculation and decades of lawsuits rather than being settled

by their nominal owners. Non-tribal settlement of these lands was considered illegal until after the Jackson Purchase of the area from the Chickasaws in 1818. Squatter occupation of the area appears to have been rare in most of the area until then.

After the Jackson Purchase the area filled rapidly, with most of the key towns and major routes of travel established by the 1830's. Towns were generally established along the main rivers and were served by keelboats and small steamboats for primary transportation. Roads were both poor and of only seasonal utility. Settlement of the upland areas was mainly by small scale subsistence farmers, with large commercial plantations operated by slave labor found mainly in the river bottom areas. By the 1840's cotton was the cash crop for all, with grains and general food crops raised only to the extent necessary to provide for the draft animals and local human population. Effective rail transportation in most of the area was not established until just before the Civil War, during which most of it was destroyed.

Large troop operations in the area were virtually over by the middle of 1862. After that the main activities were small units of the regular armies, mainly raids and recruiting trips by Confederate cavalry and pursuit by Union occupation troops. Irregular and guerrilla group attacks against both military and civilian facilities were also frequent. While local damage was often severe, the project area was spared the wholesale destruction visited on such areas as northern Virginia or the Chattanooga-Atlanta-Charleston corridor.

After the Civil War the end of the plantation-slavery agricultural system required formation of new working relationships between the large landowners and their now free former slaves in order for all to survive. Tenant farming became the dominant system, in which the tenant provides the labor and the landowner provides the rest of the resources necessary to produce a crop whose proceeds are then shared. Formerly tightly nucleated plantation headquarters communities became dispersed as tenant farmers were scattered along roads and bayous on the 20 to 60 acre tracts each family was now responsible for farming.

Settlement of lowland areas was severely hampered by repeated flooding, which restricted most occupation either to rarely flooded natural levee ridges, terraces, or the adjacent uplands until stream channelization and effective levee construction during the first half of the twentieth century. Southern timber became a more valued commodity by the 1880's with the exhaustion of the great northern forests, and commercial clearing of previously uncultivated areas began in earnest. Logging railroads and ephemeral/portable sawmills abounded until most of the major stands of timber were cut by the end of the 1930's. The introduction of soybeans, capable of growing well on land too wet for other commercial crops of the area, spurred the clearing of most of the surviving tracts of lowland timber during the mid 1900's. The modern post-tenancy era emphasizes diversified wheat, soybean, rice, and sorghum/milo production which is conducted with heavy farm equipment requiring only a fraction of the previously necessary labor force. By the 1950's most of the rural population was moving in to the nearby towns and cities in search of new employment. Lowland areas once characterized by large plantation operations now only have a few families and most of the once ubiquitous small sawmill/cotton gin towns are now gone.

Local Archaeology and History

Human occupation of the Reelfoot area is known to have occurred since the Late Pleistocene. Paleo Indian hunter-gatherers visited the loess covered uplands overlooking the modern Mississippi River flood plain (Mainfort 1996:80), followed by evidence of Archaic Period activity (Smith 1979 and Mainfort 1996) in the uplands and Early to Middle Woodland occupations in the adjacent upland drainages and a few sites in the flood plain itself. The Woodland materials include Tchula related Early Woodland and sand tempered ceramics apparently related to Middle Woodland materials better known from the Pinson and related sites in western Tennessee and the LaPlant site in southeastern Missouri.

Several large Late Woodland sites have been recorded along and near the base of the bluffs forming the eastern margin of the Reelfoot Basin. These are part of the extensive Late Woodland tradition of the northern Mississippi delta and the Mississippi River valley northward to the vicinity of St. Louis at the mouth of the Missouri River. Ceramics of the period are primarily grog tempered Mulberry Creek Cordmarked and Baytown Plain with small amounts of Wheeler Check Stamped, Kimmswick Fabric Impressed, Larto Red, Kersey Incised, and Wickliffe Thick. Mill Creek chert hoe flakes, produced by sharpening hoes imported from southern Illinois, are frequent on these sites. Particularly large sites include 40OB98, 40OB128, 40LK6, 15FU18, and 15FU19, all on old natural levees of the Mississippi River. This complex is dated to the approximate AD 700 - 950 time span (Mainfort 1996:84).

Emergent Mississippian of approximately AD 950 - 1050 is represented by a group of sites near Samburg which are characterized by a high frequency of Mulberry Creek Cordmarked, Baytown Plain, Mississippi Plain, and Varney Red Filmed ceramics with Mississippian vessel forms, apparently related to the similar Malden Plain complex of southeastern Missouri and northeastern Arkansas. Sites 40OB1, 40OB6, 40OB122, and 40OB123 are part of this group. Site 40LK10 in the central part of Reelfoot Lake and 40LK5 at the southwestern end of the lake also appear to be related, but distinctive sites of this period. Later Mississippian sites related to the Cairo Lowland sites of southeastern Missouri and similar sites in western Kentucky are present in the area, particularly 40LK1, 40LK2, 40LK3, 40LK33, and the major mound center at 15FU3. There is also a complex of approximate early to mid seventeenth century date at 40LK4, 15FU119 in particular, characterized by snub nosed end scrapers, Nodena and large triangular projectile points, jars with closely spaced vertical applique strips on their necks. This complex is also represented at the Campbell site in Pemiscott County, Missouri and others near it. Also present are three fragments of iron and a brass tinkler from 40LK4, which has carbon dates indicating occupation about AD 1650 (Mainfort 1996:94).

Although there was early French activity on the Mississippi River near the study area there is no evidence of local French occupation. By the mid eighteenth century French travellers were using a small river east of the study area, which they called Bayou du Chein. There was some trading with local Indians along this stream but little is known about it. The Chickasaws were the main claimants of the area by this time.

In 1775 J. F. D. Smyth, an English traveller on the Mississippi, noted a river he called the

Kiskinopa, which seems to have been Bayou du Chein (Williams 1930:30-31) The first systematic exploration of the area was undertaken in June 1785. This was done by a party consisting of Henry Rutherford, James Robertson, and Edward Harris along with two assistants explored much of western Tennessee. They found a small Indian settlement near Bayou du Chein, which they called "Reelfoot" after their name for the headman of the community. In remarking on the local terrain they noted that there were no hills and little rolling land between the Mississippi River and the Reelfoot cliffs. Most was essentially first or second bottoms - ideal for agriculture but not for permanent settlement due to flooding.

The Rutherford survey attracted some interest in the study area, but the continued Chickasaw presence was enough to discourage white settlement into the nineteenth century. By this time New Madrid had been begun on the west bank of the Mississippi. This community had been begun by Colonel George Morgan, a prominent veteran of the American Revolution on land he purchased from the Spanish (Penwick 1976:16-31). New Madrid became famous as a result of the massive earthquakes of 1811-1812. These earthquakes began in December 1811 and continued into January 1812. The land along the Reelfoot Cliffs sank from one to fifty feet and up to twenty feet just east of the study area. The Mississippi River is said to have run backwards for 48 hours as it flooded the new great depression now known as Reelfoot Lake (Fuller 1912:9-11, Penwick 1976:43-81).

Andrew Jackson and Isaac Shelby negotiated the Jackson Purchase treaty of 1818 which extinguished the Chickasaw title to West Tennessee and opened the area to white settlement. The area was rapidly settled, with George W. L. Marr, a war of 1812 veteran and friend of Andrew Jackson as a prominent local settler. He claimed Island No. 10 in the Mississippi in 1823 (Henley 1962:6-7) and the Meriwether family established Silver Top plantation just above the present location of Tiptonville in 1826. In 1856 William Tipton moved from Kentucky and built a house and store on the Mississippi River about a mile and a half below Silver Top plantation on land purchased from James Reeves. Tiptonville then grew up around his store (Goodspeed 1887: 734).

Tiptonville served as the shipping point and mercantile center for the surrounding area, where cotton was the main cash crop. Grain was initially ground with horse-powered mills, but a steam powered mill was established in the area in 1845. By 1860 the study area had developed a typical slave labor based cotton economy. Although still part of Obion County the county held separate courts west of Reelfoot Lake due to the difficulties of travel to the rest of the county.

At the beginning of the Civil War the white residents of the Tiptonville area were nearly unanimous in support of the Confederacy and provided four companies of troops for the Confederate Army. Island No. 10 was regarded as crucial to the defense of the Mississippi valley and was the next point of defense between Memphis and the fortifications at Columbus, Kentucky. There were five batteries of artillery on the island, five batteries on the Tennessee bank, two earthwork forts at New Madrid, a battery of six heavy guns above the New Madrid bend, and a 16-gun floating battery moored at the island. The garrison approximated 7000 troops. (Henley *et al*: 1962:4)

Early in 1862 Grant's capture of Forts Henry and Donelson opened both the Tennessee and Cumberland Rivers to the Union navy and outflanked the fortifications at Columbus. The guns from there were sent to strengthen the defenses at Island No. 10. On March 3, 1862 the earthwork forts on the Missouri side of the river were overcome from the rear and only part of the garrisons and artillery could be evacuated to Tiptonville. (Melton 1979:8).

The next Union move, an attack by seven ironclads, was beaten off by the floating battery, so the Union forces under Pope awaited the arrival of their ten mortar rafts. Heavy rains and flooding complicated efforts by both sides and forced abandonment of the Confederate works above the island. Before daylight on April 6, 1862, two ironclads fought past the island to provide artillery cover for a Union crossing of the river from New Madrid. The Confederate Army was then forced to fall back from the island, but was trapped between Reelfoot Lake and the Mississippi River at Tiptonville, and surrendered April 7 (Melton 1979:46; Henley 1962:5-6). This essentially ended the war in the area, except as that Tiptonville, as a known center of support for the Confederacy, was shelled by Union gunboats and completely burned out.

No effort was made to rebuild Tiptonville until 1865 when J. C. Harris and W. H. Shelton were instrumental in its restoration. In 1870 the state legislature created Lake County with Tiptonville as its county seat. Cotton remained the economic base of the area and Tiptonville was its main shipping point. A major ferry crossing was established about a mile above Tiptonville by Robert Nall.

In 1880 a fire destroyed much of Tiptonville, then in 1891 the Mississippi River shifted its course about a quarter mile eastward and destroyed the rest of the original 1865 town area. By 1902 the river had moved still another half mile eastward, by 1905 began shifting back westward to its 1891 course. Another major fire in 1905 destroyed most of the town as it existed at that time. Arrival of the railroad in 1907 rail transport to Dyersburg, which was extended to Hickman, Kentucky by 1910. In 1885 the Keystone Lumber Company built a railroad from Reelfoot Lake to the river and began cutting large quantities of cypress, oak, and walnut. Their operations also included the removal of large quantities of sunken timber from Reelfoot Lake itself.

Even as late as the 1880's most settlement in Lake County was restricted to the high ground from Tiptonville northward to the Mississippi River at Cates Landing. Goodspeed (1887:854) notes that the only approximation of a village in the county was the community of Cronanville. It then consisted of a store, cotton gin, and gristmill owned by James Cronan along with a few houses. Cronan had built a blacksmith shop and saloon there after the Civil War and continued operations there. The area seems to have been a center of activities in the area well before the Civil War; Emmet Lewis (personal communication) notes that the first burial in the Cronanville cemetery took place in 1838 and a Cumberland Presbyterian church was built near the northwest corner of the cemetery in 1852 or 1853. The 1890 Mississippi River Commission map of the area shows several structures in the area, some of which seem to have survived to appear on the 1965 aerial photographs used the base for the Lake County soil map of 1969 (Brown *et al*: 1969).

Historic period sites noted in the area include late nineteenth through twentieth century

tenant occupation sites recorded in Fulton County, Kentucky, and Lake County, Tennessee by Gerald Smith (1993) and near Grays Camp in Lake County Tennessee by Guy Weaver (2008). The late nineteenth century through mid twentieth century rural center of Cronanville was recorded by Gerald Smith (1993) and revisited by Smith and Smith (2013) in connection with the survey done for the Lake County Intermodal Industrial Park. The earliest local sites include the mid nineteenth century cemetery at Cronanville (Smith 1993) and 40LK121 (Smith and Smith 2013: 11-12), mid nineteenth century residential scatter in eastern edge of the industrial park tract, probably representing the western endge of a site centered to the east in fields outside that and the present survey areas and too densely covered in standing crops for effective investigation.

Materials recovered from 40LK121 range in approximate date from about 1840 to 1875. These include:

Aqua blown-in-mold rectilinear bottle fragments with beveled corners	2
Aqua panelled apothecary bottle fragment with lettered panel	1
Very dark green bottle glass, 1 applied/turned lip and 1 embossed rectilinear mold blwn fragment	2
Very dark amber bottle glass: rectilinear base, blown in snap mold	1
Plain whiteware	4
Blue sponge decorated whiteware	1
Blue edge painted/embossed whiteware	1
Botanic embossed whiteware	1
Salt glazed exterior/reddish brown interior stoneware	1
Salt glazed exterior/black interior glazed stoneware	1
Dark reddish brown glazed stoneware	1
Cast iron fragments, approximately 1/8 inch thick, slightly curved	2

The "very dark" glass semiopaque items fall within the "black glass" category generally used for wine, liquor, and a wide variety other items considered to need protection from sunlight, commonly used from at least the 1500's into the mid 1800's, and still in use for some goods. The applied/turned lip finish is noted by Weaver (1993: 197) as having been in use from the late 1820's into the early 1870's when improved lipping tools came into general use. Blue edge painted/embossed whiteware appears by the 1780's and continues into the 1850's; the specimen from 40LK121 appears to be relatively late in the sequence. The cast iron fragments could easily have come from simple flared-wall skillet, kettle, or Dutch oven-like cooking vessels.

FIELD METHODS AND RESULTS

The railroad right of way was all under cultivation except for a paved road crossing it at a right angle, with good visibility under the standing crops. A drainage ditch forms the eastern edge of the central third of the right of way, with lateral drainage ditches entering the main ditch from the adjacent fields and the county road. The southern three quarters of the right of way is in swampy Mississippi river channel fill soils, primarily Bowdre silty clay, Iberia silt loam, Iberia silty clay loam, and Sharkey clay. The northern quarter is Adler silt loam on the backslope of a Mississippi River natural levee. There were no sites recorded in the survey area in the state site files and no structures showing on extant aerial photographs or topographic sheets.

Field survey was carried out along the main line route as longitudinal pedestrian transects covering the entire route at 30 foot intervals, proceeding outbound from the local parking spot outbound along one side of the right of way and returning along the other half. The fan shaped area at the connection with the main line was covered at approximate 50 foot intervals in parallel pedestrian transects. Lateral drain banks were examined for evidence of buried cultural horizons, with such exposures present at irregular intervals rarely exceeding 200 feet.

There were no cultural remains found during the survey. Examination of the lateral drains across the right of way into main ditches revealed only sterile channel fill without buried soil horizons. Soil visibility was excellent over most of the area and soil disturbances consisted of plowing fields for farming and excavation of drainage ways prevent ponding of water in the fields, both activities which tend to expose rather than conceal sites. The right of way over most of the area passes through channel fill deposits which formed in relict lake/swamp bottoms and thus should not have been suitable for human occupation. This would also be consistent with local flood plain settlement patterns which emphasize settlement on natural levee crests adjacent to rather than within lacustrine/swamp habitats.



Figure 3. View southward along right of way from southeastern corner of industrial park.



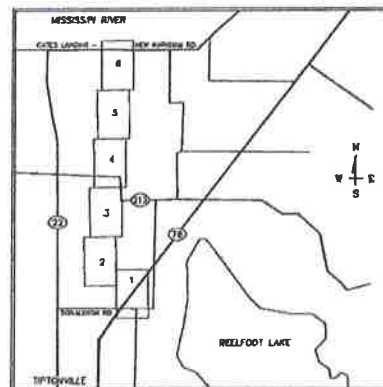
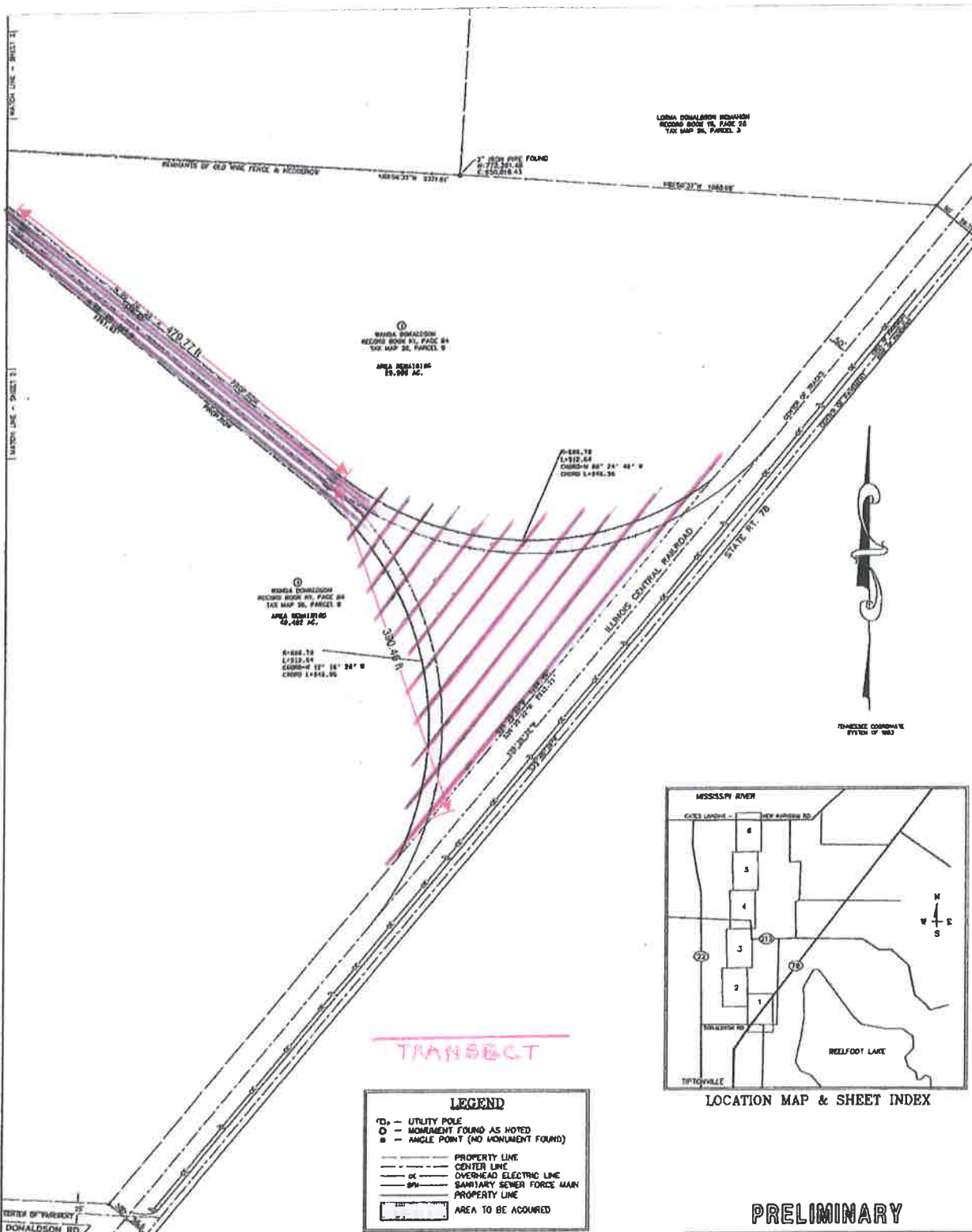
Figure 4. View eastward across right of way toward Northwest Correctional Center. Right of way is marked by tree line at eastern edge of cornfield and dry grass strip along eastern edge of soybean field.



Figure 5. View northwest along right of way from main line railroad.

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1951 *Archaeological Survey in the Lower Mississippi Valley, 1940-1947*. Papers of the



LOCATION MAP & SHEET INDEX

LEGEND	
○	UTILITY POLE
○	MONUMENT FOUND AS NOTED
●	ANGLE POINT (NO MONUMENT FOUND)
---	PROPERTY LINE
---	CENTER LINE
---	OVERHEAD ELECTRIC LINE
---	SANITARY SEWER FORCE MAIN
---	PROPERTY LINE
---	AREA TO BE ACQUIRED

NOTES:

1. SURVEY PREPARED BY PROFESSIONAL LAND SERVICES (PLS)
115 MILLER AVENUE, JACKSON, TN 38305
PHONE 731-668-7171, FAX 731-668-0778
2. PROPERTY LINES AS SHOWN HEREON ARE BASED ON RECOVERY OF AVAILABLE MONUMENTS AND OTHER FIELD EVIDENCE, TOGETHER WITH THE LATEST DEEDS OF RECORD AS REFERENCED IN THE PROPERTY ASSESSOR'S OFFICE OF LAKE COUNTY, TENNESSEE. THIS SURVEY WAS PREPARED WITHOUT THE BENEFIT OF A TITLE EXAMINATION OR ABSTRACT OF TITLE. THE SURVEYOR HAS MADE NO INDEPENDENT SEARCH FOR EASEMENTS OF RECORD, OWNERSHIP TITLE EVIDENCE, OR OTHER FACTS THAT AN ACCURATE AND CURRENT TITLE EXAMINATION MAY DISCLOSE.
3. ONLY ABOVE GROUND INDICATIONS OF UNDERGROUND UTILITIES WERE NOTED AND LOCATED AS A PART OF THIS SURVEY. THIS PLAT MAY NOT SHOW (OR NOTE) ALL UNDERGROUND UTILITIES IN EXISTENCE WITHIN THE SURVEYED AREA. ALL UTILITY INFORMATION SHOULD BE VERIFIED BY THE PROPER UTILITY AUTHORITY HAVING JURISDICTION.
4. BEARINGS AND COORDINATES SHOWN HEREON ARE RELATIVE TO THE TENNESSEE STATE PLANE COORDINATE SYSTEM OF 1983.

PRELIMINARY

ROUTE SURVEY
FOR THE PROPOSED

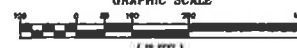
CATES PORT RAILROAD

SECOND & SEVENTH CIVIL DISTRICTS
LAKE COUNTY, TENNESSEE



NEEL-SCHAFER
210 75th Avenue North, Suite 801
Nashville, Tennessee 37206
PH 615-363-0120 FAX 615-363-0201

GRAPHIC SCALE



*Drainage ditch
15-20 feet deep*

Drainage ditch is approximately
15-20 feet wide and 12-15 feet deep

①
LEONARD HOPPER
& ELIZABETH HOPPER
DEED BOOK 13, PAGE 618 (TRACT 2)
TAX MAP 26, PARCEL 1

②
JEAN & JOHN WICKERT, L.P.
DEED BOOK 23, PAGE 215 (TRACT 2)
TAX MAP 26, PARCEL 5

Drainage ditch is approximately
15-20 feet wide and 4-6 feet deep

Drainage ditch is approximately
10-12 feet wide and 4-6 feet deep

③
EDWARD J. BURGESS
RECORD BOOK 8, PAGE 14
TAX MAP 26, PARCEL 2

④
WILL WEAVER
DEED BOOK 1, PAGE 210
TAX MAP 26, PARCEL 4
AREA REMAINING
101.423 AC.

⑤
WILL WEAVER
DEED BOOK 1, PAGE 210
TAX MAP 26, PARCEL 4
AREA REMAINING
3.518 AC.

⑥
LORNA DONALDSON MCANAMON
DEED BOOK 10, PAGE 84
TAX MAP 26, PARCEL 17.01

⑦
LORNA DONALDSON MCANAMON
RECORD BOOK 62, PAGE 687
TAX MAP 26, PARCEL 11

⑧
LORNA DONALDSON MCANAMON
RECORD BOOK 11, PAGE 84
TAX MAP 26, PARCEL 8

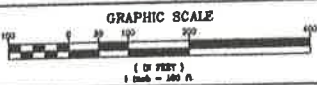


TRANSECT

PRELIMINARY

ROUTE SURVEY
FOR THE PROPOSED
CATES PORT RAILROAD
SECOND & SEVENTH CIVIL DISTRICTS
LAKE COUNTY, TENNESSEE

NEEL-SCHAFFER
214 25th Avenue North, Suite 866
Nashville, Tennessee 37263
PH. 415-263-8426 Fax 615-383-9984



WATCH LINE - SHEET 1

TOWNSHIP COORDINATE
SYSTEM OF 1983

①
LINDAMOOD FARM, INC.
DEED BOOK 104, PAGE 160
TAX MAP 21, PARCEL 29
AREA BEING 158,000 AC.

①
LINDAMOOD FARM, INC.
DEED BOOK 104, PAGE 160
TAX MAP 21, PARCEL 29
AREA BEING 41,348 AC.

DRAINAGE DITCH IS APPROXIMATELY
2-3 FEET WIDE AND 1-2 FOOT DEEP

DRAINAGE DITCH IS APPROXIMATELY
18-20 FEET WIDE AND 5-7 FOOT DEEP

①
MAURICE MCCLAIN
& WIFE, PHYLLIS A. MCCLAIN
DEED BOOK 11, PAGE 130 (TRACT 2)
TAX MAP 21, PARCEL 33

DRAINAGE DITCH IS APPROXIMATELY
20-25 FEET WIDE AND 6-8 FOOT DEEP

①
LEONARD HOPPER
& ELIZABETH HOPPER
DEED BOOK 62, PAGE 418 (TRACT 3)
TAX MAP 21, PARCEL 32

①
JEAN & JOHN VINCENT, LP.
DEED BOOK 62, PAGE 218 (TRACT 2)
TAX MAP 21, PARCEL 5

TRANSECT

PRELIMINARY

ROUTE SURVEY
FOR THE PROPOSED

CATES PORT RAILROAD

SECOND & SEVENTH CIVIL DISTRICTS
LAKE COUNTY, TENNESSEE



NEEL-SCHAFER
210 25th Avenue North, Suite 660
Kashville, Tennessee 37203
PH 615-383-8430 Fax 615-383-9084

GRAPHIC SCALE



DATE:

JUNE 20, 2007

BY: JEB HANCOCK

00079.001

SHEET 8 OF 7



①
DAVE B. ANDERSON, TRUSTEE
OF THE DAVE B. ANDERSON TRUST
RECORD BOOK 8, PAGE 642
TAX MAP 21, PARCEL 1
AREA REMAINING
219.007 AC.

①
DAVE B. ANDERSON, TRUSTEE
OF THE DAVE B. ANDERSON TRUST
RECORD BOOK 8, PAGE 642
TAX MAP 21, PARCEL 1
AREA REMAINING
138.377 AC.

DRAINAGE DITCH IS APPROXIMATELY
15-20 FEET WIDE AND 3-5 FOOT DEEP

DRAINAGE DITCH IS APPROXIMATELY
27-30 FEET WIDE AND 4-6 FOOT DEEP

N 778.649.62
E 1949.363.48

S87°14'51"E

DRAINAGE DITCH IS APPROXIMATELY
15-18 FEET WIDE AND 3-4 FOOT DEEP

②
SHELBY ARMSTRONG
DEED BOOK 41, PAGE 373
TAX MAP 21, PARCEL 2

DRAINAGE DITCH IS APPROXIMATELY
22-26 FEET WIDE AND 4-6 FOOT DEEP

SEW AND VALVE FOR
SEWER FORCE MAIN
LOCATED ALONG THE
NORTH SIDE OF
ROADWAY

N 777.394.10
E 895.261.38

CENTER OF PAVEMENT
STATE ROUTE 212

11'x27'
CONCRETE
BRIDGE ON
TIMBER
ABUTMENTS

DRAINAGE DITCH IS APPROXIMATELY
20-30 FEET WIDE AND 5-7 FOOT DEEP

③
LINDWOOD FARMS, INC.
DEED BOOK 24, PAGE 160
TAX MAP 21, PARCEL 20
AREA REMAINING
166.000 AC.

④
LINDWOOD FARMS, INC.
DEED BOOK 25, PAGE 160
TAX MAP 21, PARCEL 20
AREA REMAINING
41.346 AC.

TRANSECT

PRELIMINARY

ROUTE SURVEY
FOR THE PROPOSED

CATES PORT RAILROAD

SECOND & SEVENTH CIVIL DISTRICTS
LAKE COUNTY, TENNESSEE

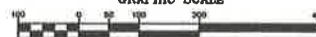


NEEL-SCHAFER

210 25th Avenue North, Suite 800
Nashville, Tennessee 37203

PH: 615-383-8420 Fax: 615-383-8944

GRAPHIC SCALE



DATE:

JUNE 29, 2007

BY:

08076.001

SHEET 4 OF 7

①
JOHN FORSTER FIELDS
DEED BOOK 17, PAGE 318
TAX MAP 16, PARCEL 13

②
WALTER SHAMATE, JR.
DEED BOOK 17, PAGE 307
TAX MAP 16, PARCEL 12



VERMONT COORDINATE
SYSTEM OF 1983

③
W. C. HAYNES
DEED BOOK 94, PAGE 232
TAX MAP 16, PARCEL 17

④
MARY MARGARET FIELDS PEARSON
(NO GOOD REFERENCE FOUND)
TAX MAP 16, PARCEL 13.02

⑤
JOHN FORSTER FIELDS
DEED BOOK 17, PAGE 318
TAX MAP 16, PARCEL 13.01

⑥
DAVE B. ANDERSON, TRUSTEE
OF THE DAVE B. ANDERSON TRUST
RECORD BOOK 8, PAGE 643
TAX MAP 21, PARCEL 1
AREA REBUILT 100
138-177 AC.

⑦
DAVE B. ANDERSON, TRUSTEE
OF THE DAVE B. ANDERSON TRUST
RECORD BOOK 8, PAGE 643
TAX MAP 21, PARCEL 1

TRANSECT

PRELIMINARY

ROUTE SURVEY
FOR THE PROPOSED
CATES PORT RAILROAD
SECOND & SEVENTH CIVIL DISTRICTS
LAKE COUNTY, TENNESSEE



NEEL-SCHAFER
210 25th Avenue North, Suite 800
Nashville, Tennessee 37203
PH: 615-383-8420 Fax: 615-383-8984

GRAPHIC SCALE



DATE: JUNE 26, 2007
BY: JSD/HANCOCK
00576.001
SHEET 5 OF 7



KENNEDY COORDINATE
SYSTEM OF 1983

NOTE: UNDERGROUND
TELEPHONE LOCATED ALONG
THE NORTH SIDE OF ROADWAY

CATES LANDING-NEW MARKHAM RD.

CENTER OF PAYMENT

FOUND 1" BEAM ON LINE
AND 5" SOUTHERN OF
CORNER

THIS SECTOR SURVEYED 2013 AS PART OF IND. PK TRACT

UNDER BARE GROUND CONDITIONS - NO FURTHER DIAGNOSTICS

JOHN FOSTER FIELDS
DEED BOOK 17, PAGE 318
TAX MAP 16, PARCEL 13

MILTON BRADY, JR.
DEED BOOK 11, PAGE 287
TAX MAP 16, PARCEL 12

TRANSECT

PRELIMINARY

ROUTE SURVEY
FOR THE PROPOSED
CATES PORT RAILROAD
SECOND & SEVENTH CIVIL DISTRICTS
LAKE COUNTY, TENNESSEE



NEEL-SCHAFFER
210 25th Avenue North, Suite 800
Nashville, Tennessee 37203
PH 615-383-4420 Fax: 615-383-9984

GRAPHIC SCALE



(1 IN FEET)

1 INCH = 100 FT.

DATE:

JUNE 29, 2007

BY: JCB HANCOCK

06078.001

SHEET 6 OF 7

MATCH LINE - SHEET 5

MATCH LINE - SHEET 5

TENNESSEE SHPO STANDARDS AND GUIDELINES FOR ARCHAEOLOGICAL RESOURCE MANAGEMENT STUDIES

(Revised) March 2009

INTRODUCTION

Since 1969, environmental assessment and impact studies have generated a large number of archaeological survey reports. It is incumbent on the archaeological profession to reduce the variation in content, description and documentation of work conducted, and a lack of appropriate recommendations in keeping with legal compliance by federal agencies. Consequently, there is a critical need for a clear and concise statement of what kinds of information should be presented in a cultural resource document so that reports can be used effectively for federal decision making and comparative research.

In each state, the State Historic Preservation Officer is charged with the responsibility for coordination of state and federal cultural resource surveys as well as review responsibilities for surveys and data recovery done in compliance with the National Historic Preservation Act of 1966 (as amended). It is in this view that the following standards and guidelines for qualifications and reporting will be required for archaeological reports resulting from projects involving federal aid, licenses, or permits.

Legal Considerations

In recent years, federal agencies have become more attentive to their legal compliance with the National Historic Preservation Act (PL 89-665), the Archaeological Resources Protection Act (PL 96-95), the Archaeological and Historic Preservation Act (PL 93-291), and the National Environmental Policy Act (PL 91-190).

Consequently, it has become even more important that cultural resource consultants fully understand the technical legalities of preservation law so that they can provide the best service to their clients and can help protect cultural resources using the letter of the law as well as the spirit.

Attached to these Standards and Guidelines is a current list of federal preservation laws, rules, and regulations. We strongly recommend that every consultant and agency become familiar with these documents and that they fully understand their responsibilities in the compliance process.

Role of the State Historic Preservation Officer

Under current preservation legislation, the State Historic Preservation Officer (SHPO) does not approve nor disapprove of any federal undertaking; the role is one of providing information and opinions on the significance of properties and on appropriate plans to avoid, minimize, or mitigate adverse impacts. In a sense, the SHPO is the state arm of the President's Advisory Council on Historic Preservation. Specific legal responsibilities of the SHPO are given at 36 CFR 61.2 and 36 CFR 800.

LEVELS OF INVESTIGATION

Tennessee has a tremendous variety of geological, topographic, and physiographic regimes, ranging from the Gulf Coastal Plain on the west to the Appalachian Highlands on the east. This variety of conditions makes it nearly impossible to specify general requirements for survey. The following should be considered general guidelines for projects, but consultants should consult with the Federal Programs Archaeologist concerning specific projects and project areas.

Phase I Survey. A reconnaissance level survey is designed to identify prehistoric and historic archaeological sites. In general, these surveys are designed only to identify sites, not to evaluate their significance or eligibility to the National Register of Historic Places. Intensity of methods will be determined by the individual project location and may range from a “walk-over” and visual inspection of a plowed field to shovel testing in open pasture to backhoe investigations in situations with the potential for deep colluvial or alluvial deposits. The position of the Tennessee SHPO is that qualified professional archaeologists are hired for these projects because of their experience and abilities in determining the level of investigation necessary. As a result, this office will not specify details of investigation such as distance between shovel tests or similar methodologies. We will provide guidance on specific projects and project areas upon request. At a minimum, a Phase I survey should provide for the identification of sites within the project’s Area of Potential Effects (APE) and their approximate boundaries.

Phase II Testing. Phase II projects involve the testing of previously identified archaeological sites for their eligibility to the National Register of Historic Places (NRHP). This level of investigation may include controlled surface collections, intensive shovel testing, test units, strip blocks, and other appropriate methods for the determination of the extent and nature of archaeological deposits at the site or sites. Again, due to the highly variable nature of each site, this office will not issue a set of general specifications for number of test units or other requirements. The end result of a Phase II project should include, at a minimum, recommendations concerning the eligibility of the site to the NRHP, and firm identification of site boundaries within the project APE. If the site is recommended eligible by the consultant, Phase II investigations should yield recommendations for potential modifications of the project that might avoid impact to the site. Phase II testing reports SHOULD NOT include proposed data recovery plans and research designs. In accordance with 36 CFR 800 (64 FR 27044, May 18, 1999), data recovery excavation is an ADVERSE EFFECT to historic properties. All avenues of avoidance must be exhausted prior to consideration of Phase III data recovery excavation.

Phase III Data Recovery. If project plans cannot avoid impact to an NRHP eligible archaeological site, it may be determined that the resulting Adverse Effect can be addressed through data recovery excavation. Data recovery is intended to remove and record the archaeological information at a site or sites. Because of the unique or nearly unique nature of each archaeological site, requirements for data recovery will be determined through a process of consultation between the appropriate federal agency and the SHPO.

CONSULTANT QUALIFICATIONS

The general rationale of specifying minimum qualifications is that the recognition and evaluation of the significance of archaeological properties requires professional training and experience. The following standards surpass the published requirements of the Department of the Interior (36 CFR 66[42FR 5371-5383, Jan. 28, 1977]), and represent the minimum qualifications acceptable for principal investigators and field directors on Section 106 compliance projects conducted in Tennessee. The qualifications also meet the requirements specified by the Tennessee Division of Archaeology (TDOA) archaeological permit application for investigations conducted on state property. TDOA maintains a List of Consulting Archaeologists who have requested to be identified as working in the State of Tennessee. This list is provided for the convenience of persons or firms seeking archaeological services and does not indicate nor imply any sanction, certification, or approval by the State of Tennessee.

PHASE I SURVEY

PRINCIPAL INVESTIGATOR (Archaeologist in General Charge)

Graduate degree in archaeology, anthropology or closely related field

24 weeks of field experience under the supervision of a qualified archaeologist, of which no more than 12 weeks was survey

20 additional weeks of field archaeological experience in a supervisory capacity (i.e. field director, crew chief, or similar position)

8 weeks of laboratory experience under the direct supervision of a qualified archaeologist

Documentation of the successful completion of archaeological research in Tennessee or the Southeastern United States

FIELD DIRECTOR (Archaeologist in Direct Charge)

52 weeks of field experience under the supervision of a qualified archaeologist.

PHASE II TESTING AND PHASE III DATA RECOVERY -- HISTORIC SITES

PRINCIPAL INVESTIGATOR (Archaeologist in General Charge)

Graduate degree in archaeology, anthropology or closely related field

24 weeks of field experience under the supervision of a qualified historical archaeologist on sites and artifacts of an historical period

20 additional weeks of field archaeological experience in a supervisory capacity on sites and artifacts of an historical period (i.e. field director, crew chief, or similar position)

8 weeks of laboratory experience under the direct supervision of a qualified historical archaeologist on sites and artifacts of an historical period

Documentation of the successful completion of archaeological research on historic period sites in the Eastern United States

FIELD DIRECTOR (Archaeologist in Direct Charge)

Graduate degree in archaeology, anthropology or closely related field

52 weeks of field experience under the supervision of a qualified historical archaeologist.

PHASE II TESTING AND PHASE III DATA RECOVERY -- PREHISTORIC SITES

PRINCIPAL INVESTIGATOR (Archaeologist in General Charge)

Graduate degree in archaeology, anthropology or closely related field

24 weeks of field experience under the supervision of a qualified prehistoric archaeologist on sites and artifacts of a prehistoric nature

20 additional weeks of field archaeological experience in a supervisory capacity on sites and artifacts of a prehistoric nature (i.e. field director, crew chief, or similar position)

8 weeks of laboratory experience under the direct supervision of a qualified prehistoric archaeologist on sites and artifacts of a prehistoric nature

Documentation of the successful completion of archaeological research in Tennessee or the Southeastern United States

FIELD DIRECTOR (Archaeologist in Direct Charge)

Graduate degree in archaeology, anthropology or closely related field

52 weeks of field experience under the supervision of a qualified prehistoric archaeologist.

REPORTING STANDARDS AND GUIDELINES

The following shall not be interpreted to restrict the inclusion of any data deemed important. These standards and guidelines are minimum requirements to insure research comparability and to comply with the Secretary of the Interior's Standards and Guidelines. The following sections have been adapted from "Standards and Guidelines for Quality Control in Archaeological Resource Management in the Southeastern United States" by J. A. Bense, H. A. Davis, L. Heartfield, and K. Deagan, *Southeastern Archaeology* 5(1):52-62. A checklist of report components is also included to assist authors.

1. **Title Page.** This page shall include:
 - a. Title of the report, including the name and location of the project (e.g. "Archaeological Survey of the Proposed Jones Wastewater Treatment Facility Tract, Nashville, Davidson County");
 - b. Names of author(s), field director(s), and principal investigator(s); institutional affiliation, address, and phone number;
 - c. Point of contact including institutional affiliation, address, and phone number of the client for whom the report was prepared;
 - d. Lead federal agency requiring compliance. If you don't know, ask your client;
 - e. State and/or federal archaeological permit numbers, where applicable; and
 - f. Month and year of report.
2. **Management Summary.** The management summary shall contain the following:
 - a. Statement of whether the project is a reconnaissance survey, testing for National Register eligibility or data recovery for mitigation;
 - b. General project location, including County Name and Name and Number of the corresponding U.S.G.S. Topographic 7.5-minute, 1:24000-scale quadrangle series map.
 - c. If this is a Phase I survey, Area (in square miles) covered by the survey;
 - d. Statement of findings (i.e., negative finding, or sites identified, examined, or excavated during the course of the project)
 - e. A paragraph summary on each site reported, giving the state site survey number and a description of findings and recommendations.
 - f. Dates that the archaeological investigations were undertaken.
3. **Table of Contents.**
4. **Introduction.**
 - a. Client and, if different, federal agency requiring compliance;
 - b. Brief description of project for which compliance is being undertaken;
 - b. Geographic limits of study area;
 - c. Scope of work;
 - d. Dates of investigation and names and positions of project personnel;
 - e. Place of temporary and final curation of artifacts and other project related materials.
 - f. USGS quad map showing the geographic limits of the survey area, and locations of sites mentioned in the text (if any). This may be attached as an appendix.
5. **Environment.** Describe the present environment of the area and how the prehistoric/historic environment may have differed.
6. **Literature Review/Culture/Historical Background.** Summarize the archaeological and historical information from literature searches, **including the most recent documented data available**, to provide a framework for prehistoric culture periods and the course of historical development in the area. Include a short discussion of known

sites and indicate the types of sites expected in the area of investigation. Repositories consulted and dates of consultation shall be listed with addresses (personal library, firm/agency library, Division of Archaeology library, etc.).

7. **Field Methods.** This section should contain:
 - a. Detailed summation and evaluation of field techniques used, including sampling and recording techniques (If the complete range of artifact types was not collected, a rationale should be given for differential recovery methods.);
 - b. Note all constraints on investigation (limitation of access, poor visibility, adverse weather conditions, etc.);
 - c. Maps showing the location of survey transects and locations of subsurface tests.
8. **Laboratory and Analytical Methods.** Include the following:
 - a. Classificatory/typological schemes used for analysis;
 - b. Means of determining chronological affiliation;
 - c. Location where artifacts and records are to be curated, include accession numbers assigned to materials obtained from each site. If materials are to be curated by the Tennessee Division of Archaeology, this section must include appropriate TDOA accession numbers.
9. **Results of Investigations.** This section should include the following:

Negative Finding Reports

 - a. Section numbers 5 and 6 above may be reduced, but shall address the known and expected types of sites given the environmental setting and culture history of the area.
 - b. Discuss possible reasons why resources were not located given the known or expected types of sites in the area (previous disturbance, poor visibility, possibility for buried sites, unlikely location for sites, etc.).

Positive Finding Reports

 - a. Describe each site in short narrative form using state site survey numbers.
 - b. Enumerate and describe artifacts in tables, including illustrations of a representative sample of diagnostic artifacts used to determine cultural affiliation and/or site type. Artifact tables should summarize data by parameters such as artifact type and provenience. Artifact inventories should **not** consist of lengthy lists for each individual test, excavation, or collection unit.
 - c. Surveys using any form of subsurface investigation (i.e. shovel test, auger test, hand or mechanically assisted excavated units or trenches) must include, at a minimum, scaled profile drawings characteristic of the site stratigraphy.
 - d. Clear photographs depicting significant project data (i.e. site conditions, features, profiles, plan views, diagnostic artifacts). Digitally scanned or xeroxed photographs must be "crisp and clear".
10. **Recommendations.** While the eligibility of specific sites in terms of the NRHP is determined through consultation between the federal agency and the SHPO, consultants are required to make recommendations based on their field investigations in reports. This section should include the following:
 - a. For no sites recorded or reported, a recommendation for no further investigation of the project area because no sites were identified and none are expected.
 - b. For each site recorded or reported,
 - (1) A recommendation for eligibility to the NRHP (i.e. ineligible; potentially eligible; eligible; or previously listed);
 - (2) Reasoning for each recommendation in 10.b.1; If a site is recommended as NRHP eligible, the consultant should identify the appropriate NRHP criteria used for the eligibility recommendation;

- (3) Known or potential effects of the proposed project in as much detail as is available;
- (4) Proposed reasonable modifications to the project design which might avoid effects to sites identified within the project impact area.

**TENNESSEE STATE HISTORIC PRESERVATION OFFICE
CHECKLIST FOR CULTURAL RESOURCE MANAGEMENT REPORTS**

ADEQUATE	INADEQUATE	REPORTING STANDARD	COMMENTS
		TITLE PAGE	
		Report title	_____
		PI and author's names	_____
		Institutional affiliation and client	_____
		Lead federal agency	_____
		Contract/Permit #s	_____
		Date	_____
		MANAGEMENT SUMMARY	
		Level of investigation	_____
		Project Location & Map information	_____
		Survey area in square miles	_____
		Statement of findings	_____
		Site summary	_____
		Recommendations	_____
		TABLE OF CONTENTS	
		INTRODUCTION	
		Client/Agency	_____
		Study area (text & map)	_____
		Scope of work	_____
		Project description/Impacts	_____
		Dates/Staff composition	_____
		Disposition (temporary & final)	_____
		ENVIRONMENT	
		Present/Historic/Prehistoric	_____
		LITERATURE REVIEW OF REGION	
		Prehist. Framework/Hist. Devel.	_____
		Known/Expected sites	_____
		Repositories/Consultation dates	_____
		FIELD METHODS	
		Sampling/Recording techniques	_____
		Collection/Recovery	_____
		Investigation limitations	_____
		Map of transects/Subsurface tests	_____
		LAB AND ANALYTICAL METHODS	
		Classifications/Typology	_____
		Chronological determinations	_____
		Final curation/Accession #s	_____
		RESULTS	
		If negative, why?	_____
		Site descriptions/TDOA site #s	_____
		Completed site forms to TDOA	_____
		Artifact tables/Illustrations	_____
		Soil profiles	_____
		Photographs	_____
		RECOMMENDATIONS	
		No sites /No Further Investigation	_____
		NR eligibility (Y/N)/Justification	_____
		Site significance/Research ?s	_____
		Potential effects/Avoidance	_____

PROCEDURAL REQUIREMENTS

Consultation of Site Survey Files. Consultation of official repositories to identify previously recorded sites. The only official repository for this information is the Tennessee Division of Archaeology, Central Office, Nashville, Tennessee. Consultants should include travel to this office in their budget proposals. Staffing and office limitations **REQUIRE** that consultants set up an appointment prior to site file consultation.

Notification of Fieldwork. The Federal Programs Archaeologist shall be informed, by phone or mail, of the date fieldwork (survey, testing, and data recovery) will begin.

Completion of Tennessee Site Survey Record. Compliance projects identifying sites **MUST** file **COMPLETE** Tennessee Site Survey Records with the Division of Archaeology. Forms can be obtained from the Site File Curator, and shall be submitted for assignment of numbers prior to submittal of draft reports. Updated Site Forms must also be submitted for all previously identified sites investigated during the current study.

Reports containing field numbers will not be accepted. State site survey numbers may be assigned before completion of analysis, but artifact summaries in site survey records should include diagnostic artifacts used as the basis for cultural affiliation designation. Final report approval will be conditional upon notification to the Site File Curator of revisions to cultural affiliation designation or site location maps following completion of analysis.

Application for State Archaeological Permit. All archaeological work on state-owned lands, or lands proposed for state acquisition shall be conducted under a State Archaeological Permit. Approval requires submittal of a State Archaeological Permit Application, and issuance of the permit by the State Archaeologist.

Draft Report Submittal. All reports (Phase I, II and III) shall be submitted in draft format for review and comment by the SHPO. Reports will not be accepted by email transmission. Whenever possible, reports should be submitted through the lead federal agency for the project. Two copies of the draft shall be submitted to Mr. E. Patrick McIntyre, Jr., SHPO, Tennessee Historical Commission, Cloverbottom Mansion, 2941 Lebanon Road, Nashville, TN 37242-0442. Upon receipt of comments by the SHPO, the submitter shall complete the requirements given below.

Final Report Submittal. The following numbers of reports shall be submitted:

1. **Phase I Survey and Phase II Testing Reports.** A minimum of 2 hardcopies and 3 PDF copies on CD of final Phase I and Phase II reports shall be submitted to the SHPO for state the files. **NOTE:** For projects on state property, this requirement is not in addition to the number of reports specified in the conditions of a State Archaeological Permit.
2. **Phase III Data Recovery Reports.** Required number of paper and electronic copies for Data Recovery reports will be determined through consultation with the applicable federal agency, the SHPO, and in some instances the Presidential Advisory Council on Historic Preservation.

TENNESSEE DIVISION OF ARCHAEOLOGY

ARCHAEOLOGICAL CURATION REQUIREMENTS

The Tennessee Division of Archaeology (TDOA) is the authorized curator of archaeological collections retrieved from state-owned land. The State Archaeologist reviews requests to curate collections from private or federal land, on a case-by-case basis with written curation permission from the land owner or agency representative. Curation requests and questions regarding packaging requirements should be directed to the TDOA Site File Curator. Collection materials include but are not limited to artifacts, field notes, maps, negatives, slides, and other project documentation.

ARTIFACTS

Secure artifacts in sealed plastic bags, at least 2 MIL thick. Label with permanent marker on the bag and on archival paper inserted in the bag, including the following information:

- a. state site number;
- b. state accession number (available from the Site File Curator);
- c. appropriate provenience information (i.e. unit, shovel test, etc.).

Package artifacts in storage boxes with removable lids approximating L15.5 in. x W12.5 in. x H10 in. Label boxes on one end with the following information:

- a. state site number(s);
- b. state accession number(s);
- c. site name and project name (optional). For example:

SR 73, Phase I 40JG25 Doe Site 95 - 2
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or

40WL127	92-225
40WL128	92-226
40WL129	92-227

NOTE: For artifacts such as fire cracked rock, unmodified chert cobbles, limestone fragments, or brick, retain a sample, then weigh, record and discard the remainder. Tabulate, describe and discard late 20th century materials, such as aluminum cans or bottle glass, that have no bearing on site interpretation. Do not include unprocessed soil samples. Questions regarding curation of processed soil samples should be directed to the Division staff on a case-by-case basis.

FIELD NOTES AND MAPS

Package field notes in a secure, consolidated format. Label each document package (i.e. notebook, folder, etc.) and map with state site and accession numbers.

NEGATIVES AND SLIDES

Submit photographic negatives and slides in archival quality negative sleeves for a three-ring or four-ring binder. Label each photo sleeve with site number and provide a photographic record sheet with basic information, by negative number, for each negative. Label each slide with the state site number and provenience description.

DIGITAL IMAGES

Submit digital images as .jpg files on CD. The file name for each image on the CD should include the site number and be cross-referenced with a photographic record sheet. The photographic record sheet should include such basic information as site number, provenience, and date. Label each CD with the site number and date of photography.

TRANSFER OF MATERIAL TO TDOA

To make arrangements for transfer of material contact Suzanne Hoyal, TDOA-Nashville, (615) 741-1588, ext. 104. A transfer memo should accompany delivered material.

SHPO CONTACTS FOR ARCHAEOLOGICAL MATTERS

In the State of Tennessee, review and compliance responsibilities concerning archaeological matters are carried out by the Tennessee State Historic Preservation Office.

General compliance issues, specific project review, technical assistance on Request for Proposals or Scope of Services, and notification when fieldwork begins should be directed to the attention of the Federal Programs Archaeologist.

Jennifer M. Barnett (615) 741-1588, ext. 105

Requests for site recording information, information on previously recorded sites within a project area, appointments for review of Site Survey files, and similar requests should be directed to the attention of the Site File Curator.

Suzanne D. Hoyal (615) 741-1588, ext. 104

Requests for State Archaeological Permits should be submitted to the attention of the State Programs Archaeologist.

Mark R. Norton (615) 741-1588, ext. 113

Tennessee Division of Archaeology
Cole Building #3
1216 Foster Avenue
Nashville, TN 37243

Telephone: (615) 741-1588

FAX: (615) 741-7329

BASIC LEGISLATION AND CODIFIED RULES AND REGULATIONS

National Historic Preservation Act as amended Public Law 89-664 (16 U.S.C. 470)

National Environmental Policy Act as amended Public Law 91-190 (42 U.S.C. et seq.)

NEPA Regulation 40 CFR 1500-1508 (43 FR 55978-56007; November 29, 1978).

Native American Graves Protection and Repatriation Act, Public Law 101-601 (104 Stat. 3048; 25 U.S.C. 3001-13; November 16, 1990).

Advisory Council Procedures for the Protection of Historic and Cultural Properties.
36 CFR 800 (65 FR 77725, Dec. 12, 2000, as amended at 69 FR 40555, July 6, 2004).

National Register of Historic Places. 36 CFR 60 (46 FR 56187, Nov. 16, 1981)

Criteria for Comprehensive Statewide Historic Surveys and Plans. 36 CFR 61 (64 FR 11742)

Determinations of Eligibility for Inclusion in the National Register of Historic Places. 36 CFR 63 (46 FR 34329, March 9, 1999).

Executive Order 11593, May 13, 1971, "Protection and Enhancement of the Cultural Environment."

Archaeological Resources Protection Act of 1979, Public Law 96-95 (16 U.S.C. 470).

Archaeological and Historic Preservation Act, Public Law 93-291 [16 U.S.C. 469(a)].

Secretary of the Interior's Professional Qualifications Standards (48 FR 44738- 44739)

Department of the Interior's Format Standards for Final Reports of Data Recovery Programs (42 FR 5377-79)