PREHISTORIC AND HISTORIC CULTURAL RESOURCES IN THE CHATTANOOGA AREA AND AN ASSESSMENT OF FOUR PROSPECTIVE SITES FOR THE PROPOSED RIVER PORT AT CHATTANOOGA, HAMILTON COUNTY, TENNESSEE

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Abstract

In July, 1981, personnel of the Jeffrey L. Brown Institute of Archaeology, University of Tennessee at Chattanooga, conducted a preliminary assessment of four prospective sites under consideration for the construction of a river port facility at the city of Chattanooga, Hamilton County, Tennessee, in accordance with an agreement between the Institute and the firm of Sverdrup and Parcel and Associates, Inc. The study was based on a review of available archival, documentary, and published data relevant to the Chattanooga area. This study revealed that all four prospective sites are known to contain cultural remains, but the overall significance of these remains could not be determined at the documentary level of research. Furthermore, it is highly probable that each of the sites contain additional cultural resources not presently recorded, including deeply buried prehistoric material. Additional archaeological research will therefore be necessary for any of the prospective sites that will be subjected to development or other land-altering activities. In order to determine the nature and extent of the cultural resources present at each of the sites slated for development, we make the following recommendations:

1. a thorough surface renaissance of the site area;
2. subsurface testing in the form of small hand-excavated units in all areas of low surface visibility and additionally as deemed necessary;
3. extensive mechanical testing for deeply buried components;
4. determination of National Register eligibility based on the results of the testing program outlined above.
Introduction

In May, 1981, the authors attended agency meetings and the initial public hearing in connection with site location for the proposed riverport at Chattanooga, Hamilton County, Tennessee. At the meetings, the relative merits of nine prospective sites for the riverport were discussed. As a part of the public record it was noted by one of the authors that most, if not all, of these sites had a high probability of containing significant cultural resources that would be negatively impacted by the proposed project.

At the close of this session, in consultation with Mr. W. R. Coles and other representatives of Sverdrup & Parcel and Associates, the authors strongly recommended that the necessary arrangements for an archaeological survey of each of the proposed sites be made. These recommendations were reiterated in a written proposal, dated May 26, 1981, and submitted to Sverdrup & Parcel. Anthropological services proposed included a background investigation consisting of a thorough review of available archival, documentary and published historical and archaeological sources relevant to the prospective sites, a surface reconnaissance with limited subsurface testing to determine nature, extent and significance of cultural remains, and the preparation of a comprehensive assessment of the cultural resources present.

Subsequently, Sverdrup & Parcel decided to limit the archaeological study to four of the prospective sites considered to be the most feasible. These sites are:

1. Prospective Site #2, termed the New Bridge site, located on the south side of the Tennessee River approximately a quarter of a mile above the mouth of South Chickamauga Creek.
2. Prospective Site #3, termed the Amnicola site, located on the south side of the Tennessee River approximately a quarter of a mile below the mouth of South Chickamauga Creek and extending to within approximately .1 of a mile of the mouth of Citico Creek.
3. Prospective Site #4, termed the Moccasin Bend site, located on the lower portion of Moccasin Bend on the east side of the Tennessee River, and expanded to include the property of the Moccasin Bend Golf Course.

4. Prospective Site #8, termed the Williams Island site, located in the Tennessee River below Chattanooga and including all of Williams Island.

It was further decided by Sverdrup and Parcel to dispense with the field reconnaissance and testing at the stage of the project and limit the study to an assessment based on the available documentary data. Verbal authorization to proceed was received from Mr. W. R. Coles on July 2, 1981 (confirmed on July 14, 1981). Personnel from the Jeffrey L. Brown Institute of Archaeology, University of Tennessee at Chattanooga, began work on the study on July 3, 1981. Although the specific focus of attention was limited to the four specific sites described above, the study area will be defined as that portion of the Tennessee Valley in the southern part of Hamilton County, Tennessee that extends from the Sequoyah Nuclear Plant on the north to the lower end of Williams Island on the south. A general assessment of cultural resources in this area is included in addition to the specific assessments of each of the four sites. The study consisted of a thorough review of published histories and reports and unpublished documentary data pertaining to the study area in general and the four prospective sites in particular. This was supplemented with data obtained earlier through interviews with area residents and relic collectors conducted by the authors in connection with other regional studies. The work was conducted by E. Raymond Evans, under the direction of Dr. Nicholas Honerkamp, Director of the Jeffrey L. Brown Institute of Archaeology, University of Tennessee at Chattanooga. All phases of the study were completed by July 25, 1981.
Assessment of Prehistoric and Historic
Cultural Resources in the Chattanooga Area

It is somewhat ironic that the Chattanooga area, while having several of the largest and most significant archaeological sites to be found in the state of Tennessee, has had less systematic archaeological investigation than any other part of the state. This neglect is due in part to the area's intermediate location between the W.P.A. funded excavations of the Chickamauga reservoir (Lewis and Kneberg n.d.) and the more recent T.V.A./D.O.T. funded excavations in the Nickajack reservoir (Faulkner and Graham 1965; 1966a and 1966b). Another factor has been the availability of archaeologists. While upper east Tennessee, middle Tennessee and the Memphis area have had well established professional communities for several decades, local archaeological services through the University of Tennessee at Chattanooga have existed for less that ten years.

Previous archaeological work in the Chattanooga area has been of an extremely cursory nature. Most of the major Mississippian period sites in the area were well known to collectors of Indian relics by the mid-nineteenth century. During the Civil War, off duty soldiers at Chattanooga amused themselves by digging into the Citico mound, and a small signal station was located on its top (Hatch 1976: 74). In 1865, M. C. Read began a tunnel into the side of the mound. He discovered several burials, and planned to continue his investigation, but the firing of the heavy guns in the area to celebrate Lee's surrender caused the tunnel to collaps and ended his activities (Read 1872: 402). In subsequent years, the area gained a national reputation among relic dealers as being "famed for the discovery there of aboriginal remains" (Moore 1915: 361). Much of the reputation stemmed from the work of George Barns, a highly active commercial relic hunter who sold to dealers and museums all over the eastern United States (Hoff 1973: 2-6). Much of this material was taken from sites on Williams Island and Moocasin Bend.
In 1915, Clarence B. Moore traveled up the Tennessee in a steamboat, aptly named "The Gopher," collecting relics for the Academy of Natural Sciences of Philadelphia. He dug extensively on most of the major sites in the area, including Williams Island, Moccasin Bend, and Citico, but regarded the Roxbury mound as already so damaged by local collectors as to not be worth his attention. He was disappointed with the results of his activities on Williams Island, was reasonably satisfied with the quantity of artifacts from Moccasin Bend, but again disappointed by the "tangible result" of his destruction of 106 burials at Citico (Moore 1915: 352-385). Shortly after Moore's visit, the city of Chattanooga destroyed the large Citico mound in road construction. W. E. Myer, a well known Nashville collector, came to Chattanooga and purchased a number of Southeastern Ceremonial Complex items from workmen who had removed them from the mound (Moorehead 1924: 159-169). These items are now in the Museum of the American Indian, Heye Foundation (Hatch 1976: 82-83). Charles Peacock, a local amateur archaeologist, also recovered considerable material from the site. In subsequent years, Peacock and other self-styled amateur archaeologists and relic collectors amassed large collections of artifacts from sites in the Chattanooga area.

These early "investigations" of the prehistory of the Chattanooga area, while sheer vandalism by modern standards, are somewhat difficult to condemn at this point since they represent most of what is now known regarding the area's prehistory. Professional archaeological work has been very limited in scope, and has included salvage excavations on Moccasin Bend (Graham 1964; Evans and Brown n.d.; Evans and Brown 1977) that were able to do little more than document the presence of prehistoric occupations, surveys on South Chickamauga Creek, Chattanooga Creek, the Tennessee River on either side of the Walnut Street Bridge and in the Tyner area (Evans and Brown 1976; Brown and Evans 1977; Evans and Brown 1977; Evans and McCollough 1980). These studies, while providing valuable bits of incidental
data, are obviously insufficient in terms of an overall syntheses of regional prehistory.

The following assessment, therefore, has been based largely on references drawn from work in adjacent areas and on data derived from interviews with collectors, rather than being drawn from a broad data base established by local controlled excavations. It is hoped that this deficiency can be corrected in the future. However, for the present, the following assessment represents the best data currently available.

Prehistoric Background of the Chattanooga Area.

Before considering the cultural sequences of prehistoric occupation, a few general remarks concerning possible settlement and subsistence patterns in the prehistory of the study area are in order. With allowances for temporal and cultural differences, it can be said that a major factor in all Native American lifestyles, prior to European contact embodied and adjustment to the environment, rather than attempts to alter the environment to a desired norm. Several hypothetical models have been proposed in recent years concerning prehistoric Southeastern settlement and subsistence systems (Dye 1977; Jenkins 1971; Larson 1971; Narrinan 1976 and Stoltman 1974). As would be expected, considering the geographic and temporal differences, each model has a tendency to emphasize certain features, and all are of little use outside the specific context in which they were developed. For instance, Dye (1977: 74-75) places emphasis on early agriculture, wild plants, and hunting, while Jenkins (1974: 187-191) stresses reliance on shellfish, nuts and deer. Larson (1971: 187-191) emphasizes the significance of agriculture, while Stoltman (1972: 37-62) regards shellfish as most important. Thus, while none of these models developed elsewhere can be applied to the study area, certain features from each are likely to hold true in this region.

Regardless of the prehistoric subsistence system in question,
the two major factors are seasonality and scheduling (Jenkins 1974: 185). Seasonality was imposed upon man by the environment (Flannery 1968), such as the seasonal availability of berries, or the migratory pattern of ducks. Scheduling was a cultural activity in which conflict between procurement systems was resolved. Thus, if the most favorable time for collecting nuts in the up-lands of the study area coincided with the availability of ducks on the river, scheduling of activities was necessary to resolve the conflict between available food resources.

The factors of scheduling and seasonality, when applied to the natural environment of the study area, made this region a highly desirable location for human occupation. In this area there was a consistent abundance of natural resources in considerable variety from at least 8,000 years ago (DeSelm and Brown 1977). These resources, however, would not have been available at the same time, or in the same place, for more than a few weeks. The pre-agricultural peoples of the early prehistoric periods, therefore, would have been governed by scheduling and seasonality to a high degree, generating a highly mobile settlement as foods in the various environmental zones were exploited at different times of the year. Sites from these periods can be expected to be small, and may appear in any part of the study area since riverine resources would have had a high priority in subsistence strategies.

The only primitive procurement system which gave man a degree of control over the factors of scheduling and seasonality was agriculture. Within limits, it was possible to determine in advance when agricultural foods would be available, with the location and (at a degree) the time being determined by the planter. As agriculture grew in importance, particularly during the Mississippian period, the rich alluvial bottom lands along the Tennessee River were selected for more or less permanent habitation areas. Since the most productive and easiest worked soil is the Huntington silt
loam, Mississippian period sites can be expected to occur in the sections of the study area having a high concentration of soil of this type. Data published in the Hamilton County Soil Survey (Roberts et al. 1947) show this soil type to be found on the west side of Williams Island, on both sides of the River at Williams Island, along the western side of Moccasin Bend, along about a mile of the north side of the river opposite McClellan's Island, on the entirety of McClellan Island, along the south side of the river from Citico Creek almost to the mouth of South Chickamauga Creek and on both sides of the river above South Chickamauga Creek.

An additional inducement for prehistoric settlement in the study area would have been the access to major trade and transportation corridors. The Tennessee River (as the presently proposed river port indicates) is an important transportation route, and served as a "natural highway" (Webb 1935: 1) in prehistoric times. In addition, the Chattanooga area was a junction point for several important overland trails in prehistoric times that extended west to the Mississippi Valley, south to the Gulf and north to the Great Lakes (Myer 1971: 16, 114-116).

Prehistoric Occupations in the Chattanooga area.

The earliest recognized prehistoric phase in the study area, termed "Paleo Indian," dates from before 10,000 years ago. The available data suggests a subsistence pattern with emphasis on hunting now-extinct megafauna. There appears to have been a high degree of cultural uniformity over much of the southeastern United States at this time. Game was obtained with characteristically fluted projectile points of the Clovis and Cumberland styles. Later, smaller projectiles points of the Quad and Dalton forms occur. Other tools present in this assemblage include end scrapers and a variety of flake tools. While the importance of large game animals has been emphasized, it is also probable that Paleo Indians were exploiting smaller game
and some wild food plants in a strategy which may have been antece-
dent to the more fully realized adaptations to woodland environments
in subsequent periods.

Human society was highly migratory during this period, and site
remains are slight. There are no well-defined Paleo sites in the
study area, but human occupation during this time is documented by a
number of surface occurrences of diagnostic Paleo projectile points
(Guthe 1964: 87-88, 1966: 43-44; Lewis 1956: 36; Whiteford 1952:
207-225).

The following period, termed the Archaic, is characterized by a
totally exploitative subsistence strategy with much greater complexity
and diversity in technology. The period is commonly divided into three
phases: Early, Middle, and Late (or Terminal) Archaic. Caldwell
(1958) termed the environmental exploitation of the Archaic period
"primary forest efficiency." Pointing out the rich biotic resources
of the Eastern woodlands, he inferred that the Archaic peoples learned
to exploit an increasingly wider spectrum of plants and animals with
growing skill until, by around 2000 B.C., there was a dense population
enjoying optimal adjustment to a fruitful environment. Such a strat-
egy implies scheduled movement from one resource to another, usually
on a seasonal basis.

While Archaic period sites occur frequently in the upland areas
in caves and rock shelters, the larger sites are usually found along
rivers and major streams. These are frequently deeply buried by cen-
turies of deposition, and can only be located by deep mechanical test-
ing. For this reason, local variations and adaptations are known for
only limited areas and frequently in sparse detail. The work of
Jefferson Chapman on deeply buried Archaic sites in the Little Tennes-
see Valley is the best documented study of isolated sealed Early
Archaic components in eastern Tennessee. Major traditions including
a succession from large to small Kirk projectile points (7500 to 6800
B. C.) followed by a shift to bifurcate styles (6800 to 6500 B. C.)
are recognizable and appear to correlate with an increase in nut ex-

In the study area, one early Archaic period site, having a bifurcate projectile point tradition, has been described on Chickamauga Lake near the Sequoyah Nuclear Plant (Lewis and Kneberg 1956: 5-11). The presence of an Early Archaic occupation in the study area is further documented by the occasional presence of Kirk-like projectile points found eroding from the banks of Chickamauga Lake. Graham (1964) reported no diagnostic Early Archaic material during his excavations on Moccasin Bend, although one of the unidentified projectile points described by him (Graham 1964: 10) could represent the small Kirk corner notched form. It is possible that, although his test excavations extended to a depth of 10 feet, they were not deep enough to locate the Early Archaic component.

The Middle Archaic period is characterized by the Stanley and Morrow Mountain projectile point traditions. Additional cultural markers include the presence in the assemblage of atlatl weights, netsinkers and grinding tools, and an increased emphasis on walnuts. Riverine sites further down the Tennessee River in Alabama and in west Tennessee are characterized by thick shell middens. Chapman (1977) identified a Morrow Mountain component on the Howard site dating to around 5000 B.C. Other middle Archaic components have been identified at the Calloway Island, Bacon Farm, Icehouse Bottom and Harrison Branch sites in the Little Tennessee Valley (Chapman 1976).

In the study area, the Middle Archaic Period occupation is best represented by projectile points eroding from the banks of Chickamauga Lake. The Morrow Mountain type is most common, and local relic collectors also occasionally report finding them in upland rock shelters.

The Late Archaic period is poorly documented in eastern Tennessee. Several sites have been excavated in the Cumberland and Tennessee drainages, but little if any meaningful synthesis of the data has emerged. In broad terms, this period may be characterized by a more diversified
artifact assemblage. During this phase several new projectile point types emerged, usually variants of the Wade and Ledbetter forms. Other traits include conoidal pestles, stemmed scrapers, a wide variety of bone and antler tools and a continued emphasis upon riverine resources (Lewis and Lewis 1961: 175).

Late Archaic material was recovered by Graham (1964: 15) on Moccasin Bend in the study area. Two small sites containing Late Archaic material were destroyed recently on the west side of Moccasin Bend near Williams Island during industrial development in that area (Evans and Brown n.d.).

The Late Archaic period extended roughly from 4000 B.C. to around 1500 B.C., and was followed by what is termed the "Woodland" period. Much attention has been given to the transition from Archaic to Woodland. It was once felt that this cultural change came about as a result of intrusive physical contact with people from outside the area. Now, however, growing evidence in several areas suggests that the Woodland lifestyle may have developed in situ, with no substantial population shifts. However, much work remains to be done on this problem.

The outstanding differences between the Early Woodland and the Late Archaic are the appearance of ceramics, increased sedentism, elaboration of ritual and ceremonial activity, and the adoption of horticulture and a greater reliance on cultigens. Nevertheless, this shift appears, a great extent, to have been rather gradual and firmly rooted in the habits and customs of the preceding Archaic periods. The nature of the shift is by no means clear, largely because the overall picture has been somewhat obscured by lack of consistent data over a contiguous area, and great difference in research strategies in various areas.

Chronologically, the Woodland period may be subdivided in a number of ways. Recent extensive research on the Duck River in the Normandy Reservoir by the University of Tennessee has produced subdivi-
sions of the traditional Early, Middle and Late Woodland into specific phases. The Wade Phase (1000 - 200 B.C.) spans the transition from the Late Archaic to Early Woodland. Permanent structures, large storage and roasting pits and intensive site occupation are viewed as reflecting the presence of a stable population with general continuation of Archaic lifeways (Faulkner and McCullough 1974: 575-576). The succeeding McFarland Phase (100 B.C. - 150 A.D.) is seen as an intensification of the developments in the Wade phase (Faulkner and McCullough 1974: 577). McFarland was followed by the Owl Hollow Phase (200-500 A.D.), which is felt to represent a major change in subsistence emphasis. Owl Hollow is characterized by a rescheduling of hunting patterns and an increasing emphasis on agriculture. Crites (1978: 78) has demonstrated that both indigenous plants (chenopodium, May grass and sunflower) and imported plants (squash and corn) were cultivated. In the final Woodland phase, designated as the Mason Phase, there appears to have been a decline in population and a re-emphasis on wild plant foods (Faulkner 1968: 245).

In other areas similar cultural sequences have been developed. While these sequences have been demonstrated to apply to the areas in which they were developed, i.e. the Normandy Reservoir, it would be a serious mistake to attempt to impose any one of these on the Chattanooga area. Thus, until such time as local excavations can provide a broad data base, it will be necessary to think of the Woodland period in the study area in terms of the Early, Middle and Late phases.

Early Woodland occupation of the study area is known to have involved two phases characterized by the quartz tempered Watts Bar Fabric Marked forms ceramics and the limestone tempered Long Branch Fabric Marked forms. From the temporal standpoint, Watts Bar appears to be the earliest (Ball, Hood and Evans 1976: 16). In the absence of reliable dates, it is estimated that the Early Woodland period in the study area represents the time from approximately 1500 B.C. to
around 1 A.D. This time can be assumed to have been one of steady population growth, with increasing interaction between peoples over a wide area that made the highly developed ceremonialism and trade networks of the subsequent Middle Woodland period possible.

The Middle Woodland period represents one of the most highly evolved lifestyles in the prehistory of the eastern United States. Impressive earthworks and a complicated mortuary tradition reflect a stable population with a high regard for ritual and ceremonialism. A trade network, termed the Hopewell Interaction Sphere, centered on the Ohio Valley area spread over most of eastern North America, bringing together such exotic items as shark teeth and marine shells from the Gulf Coast, copper from the Great Lakes, mica from the Blue Ridge mountains, obsidian from the Rockies and silver from an undetermined source. South of the study area, two distinct Middle Woodland phases are the Copena in Alabama and the Tunnicunnehee in north Georgia. In eastern Tennessee, the best defined Middle Woodland phase is Candy Creek, characterized by cord marked, limestone tempered ceramics (Whiteford 1952: 207-225).

During the Early and Middle Woodland periods there was a substantial population in the study area. The majority of the material recovered during Graham's work on Moccasin Bend can be dated to this time (Graham 1964: 44-45). Longbranch Fabric Marked, Watts Bar Fabric Marked, and Candy Creek Cord Marked ceramics were reported (Graham 1964: 24-26). Also present were Bluff Creek Simple Stamped, Wright Check Stamped and Pickwick Complicated Stamped, forms that may be regarded as contemporaneous with, if not indicative of, Copena habitation (see Walthall 1973a: 127-134; 1973b: 93-96). Two additional sites on the western side of Moccasin Bend are known to have contained Early to Middle Woodland material (Evans and Brown n.d.).

The Late Woodland period (approximately 500 - 900 A.D.) can be considered a time of redefining exploitative subsistence strategy. It appears that the population and social complexity of the Middle Woodland period reached the carrying point of the environment as limited by existing technology. There was a shift away from cen-
tralized life toward less sedentism, dispursed settlement pattern and a re-emphasis on wild plant foods and riverine resources.

In the study area, the Late Woodland occupation is well represented by the Hamilton phase. This tradition is characterized by a small, triangular projectile point that clearly demonstrates the use of bow and arrow; cord marked, limestone tempered ceramics; and small conical burial mounds. Several Hamilton burial mounds are known to have been destroyed by agricultural activities on Williams Island. Opposite Williams Island, on the east side of the river, three mounds were destroyed in the construction of the Baylor School athletic field. Graham (1964) recovered diagnostic Hamilton material during his excavations on Moccasin Bend. Surveys on South Chickamauga Creek documented two mound complexes, one of two and the other five mounds (Evans and Brown 1976; Brown and Evans 1977).

The only remaining Hamilton mound in the study area is located on the Roxbury property on the south side of the Tennessee River above the mouth of South Chickamauga Creek. Partly excavated in 1973 (Calabrese, personal communication), the site contains a small habitation area in addition to the burial mound.

The period following the Late Woodland, termed Mississippian, has frequently been viewed in terms of a physical penetration and conquest of the area by more sophisticated peoples from outside the Chattanooga area (Caldwell 1958: 64). Present evidence, however, indicates that the situation was far more complex than this conquest model would suggest. While there may have been some physical displacement in parts of the Southeast, and there appears to have been an influx of new cultural traits, there is increasing data to suggest that many of the Mississippian components were deeply rooted in Woodland traditions and can be best interpreted as indigenous adoption of cultural systems and subsystems from the Middle Mississippi Valley area. The Lea Farm Site, for example, contained a mixture of Late
Woodland limestone tempered ceramics with typical early Mississippian shell tempered pottery (Griffin 1938: 294-297). Similarly, recent excavations on the Martin Farm Site in the Little Tennessee Valley revealed mixed Woodland and Mississippian materials (Salo 1969). This multicomponent site had two early Mississippian phases, termed "emergent" (Martin Farm) and "developed" (Hiwassee Island) Mississippian. The latter was characterized by typical Mississippian traits: shell tempered pottery including jars with loop handles, Hiwassee Island Red Filmed type bowls, fabric marked salt pans, various types of small triangular projectile points, and both wall-trench and single-post dwellings. The earlier phase exhibited what appears to be a combination of Woodland and Mississippian traits: both limestone and shell tempered globular jars with flaring rims and occasional loop handles, Hamilton Triangular type projectile points and wall-trench houses with open corners (Faulkner 1975: 19-30).

Mississippian cultural sequences in the Eastern Tennessee Valley include: Martin Farm (emergent Mississippian - ca. 900 - 1100 A.D.), Hiwassee Island (developed Mississippian - ca. 1100 - 1300 A.D.) followed by a terminal Mississippian/protohistoric phase represented by Late Dallas and Mouse Creek (ca. 1500 -1700). In the study area, there is at present no defined Martin Farm phase occupation, although the available data suggests that one or more sites from this period are probably present on Moccasin Bend and Williams Island.

The Hiwassee Island phase is characterized by shell tempered pottery that may be plain, painted, complicated stamped, or less frequently, cord marked; compact villages consisting of wall-trench and individually set pole houses; and substructural mounds (Lewis and Kneberg 1946). Although few details are presently known, Hiwassee Island phase ceramics are present on Williams Island, Moccasin Bend and Citico (Evans and Brown n.d.).

The Dallas phase is characterized by shell tempered pottery that is usually plain or incised, frequently with strap or lug handles and
some effigy forms; compact villages with wall-trench houses, often fortified with walls and ditches; and an increased emphasis on ceremonialism and the paraphernalia of hereditary social ranks as indicated by elaborate expressions of what is termed the Southern Cult, or the Southeastern Ceremonial Complex (Howard 1968; Lewis and Kneberg 1946). The increased size of several of the Dallas sites, continued evidence of ranked social positions, and the engraved shell gorgets and other exotic artifacts of the Southeastern Ceremonial complex suggesting craft specialists indicate a well-developed chiefdom level of socio-political integration. (A chiefdom is based on a redistributive economy with exchanges often being made between groups in different ecological zones (Service 1962). Lewis Larson (1971) has suggested that the large Mississippian villages, typical of the Dallas phase in the study area, were established along the boundaries between major physiographic provinces so that the resources from these regions could be processed and redistributed from these economic centers. In the study area, well-defined Dallas phase components are present on Williams Island (Hoff 1973), Moccasin Bend (Moore 1915), Citico (Moore 1915; Hatch 1975: 75-103), and Hixon and Dallas Island (now inundated) (Lewis and Kneberg 1946; n.d.).

Mississippian culture began to disintegrate before European contact. The terminal Mississippian/proto-historic phases in the study area are late Dallas (similar to the Lamar phase in northern Georgia) and Mouse Creek (characterized by single post houses with subterranean floors). Although poorly defined at present, components from this period are known to exist on Williams Island, Moccasin Bend, Citico (Moore 1915) and on a site about twenty miles up South Chickamauga Creek (Brown and Evans 1977). Although attempts have been made to link these proto-historic peoples with the historic Creeks (Lewis and Kneberg 1946), Yuchi (Lewis and Kneberg 1946; Bauxar 1957; Mason 1963), or Cherokee (Keel 1976), the arguments are inconclusive, and the present data base is insufficient to make definitive statements on this
question. Ethnohistoric evidence demonstrates that the study area was uninhabited by the mid-eighteenth century. The historic occupation will be discussed in the following section.
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<th>Period</th>
<th>Component present in the study area</th>
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<td>Dalton</td>
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<td>Bifurcate (''LeCroy'')</td>
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<td>6500-4000 B.C.</td>
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<td>1500-1700 A.D.</td>
<td>Terminal Mississippian/Proto-Historic</td>
<td>Late Dallas</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Mouse Creek (?)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Lanar (?)</td>
</tr>
</tbody>
</table>

Table 1. Cultural sequences in the Chattanooga area.

Note: The above is based on early excavation reports, a few limited surveys, and examination of material in the possession of relic collectors. Until a broad data base can be developed through controlled excavations in the local area, this sequence should be regarded as highly tentative. All dates are approximate.
Historic Occupations in the Chattanooga Area.

The breakdown of prehistoric society, already in progress before European contact, may have been hastened by the introduction of new disease forms and a more destructive weapon technology. Many feel that the route of the early sixteenth century Spanish expeditions passed through the study area (Swanton 1939; Breazeale 1842). Early European artifacts, possibly dating from this time have been found on Williams Island, Moccasin Bend, and South Chickamauga Creek. These items, however, could have easily been brought into the study area along the same well-developed trade networks that had been bringing marine shells from the Gulf Coast for centuries, and at present there is insufficient data to make a meaningful comment regarding the possible Spanish presence in the study area.

Local folklore presented as history (Armstrong 1931; Brown 1938) and elaborated on by recent authors (Govan and Livingood 1963) claims that there was a French occupation of the area in the mid-eighteenth century in the form of an "Old French Store," usually said to have been located on Williams Island or Moccasin Bend. Although this claim has been sanctioned by the Tennessee Historical Commission to the point of erecting a historical marker near the alleged site, the story has no basis in fact. It was simply an invention of well-meaning but untrained amateur historians who attempted to elaborate on Adair's (1775) account of an abortive French mission to the Cherokees in 1760, in which the French boat was unable to ascend the Tennessee River because of the whirlpool below Chattanooga.

The earliest documented historic occupation of the study area came around 1770 when a Scottish trader named John McDonald established himself in a then-uninhabited area about twelve miles up South Chickamauga. His motive for locating in this unoccupied area was to avoid conflict with the white settlers in upper east Tennessee and to be present on one of the major overland trails to the port of Pensacola (Mounton 1978: 3-4). Six years later, during the winter of 1776-77, a large portion of the Overhill Cherokees moved from the Little Tennessee Valley and established eleven towns in and around the study area (Brown 1933; Cottrell 1954: 44-46; Evans 1977: 176-180). Being pro-British, these Cherokees
were motivated to move here in order to be McDonald, who had a British commission to supply them with arms and ammunition for use against the rebellious settlers during the American Revolution (Roosevelt 1900 (3): 105-123). The Cherokees later stated that, aside from McDonald, the only people in the area were a few Blacks, located downriver from the present Chattanooga, who were escaped slaves from the coastal settlements (Norton 1970: 45-46).

The Cherokee gaut'gi, translated "town," was used in reference to a socio-political unit of varying size, usually anywhere from a dozen to one hundred houses, with an extended, somewhat linear settlement pattern that included a central town house for public meetings (See Reid 1970). Four of these eleven towns were located near the Tennessee River in the study area. These include: (1) an unnamed town at the mouth of South Chickamauga Creek (Haywood 1823; Mooney 1900), Citico Town south of the river at Citico Creek, Chattanooga Town south of the river on Chattanooga Creek, and Tuskiqi Town on Williams Island and south of the river in Lookout Valley (Williams 1928: 235-238; Christian 1978: 49-53). These towns were destroyed by an American army under Colonel Evan Shelby in April 1779 (O'Donnell 1973: 84; Roosevelt 1900 (3): 111). The towns of Citico, Chattanooga and Tuskiqi were re-occupied and continued to function until near the end of the eighteenth century when the Cherokee settlement pattern changed from towns to dispersed farmsteads (Williams 1928: 235-238; Christian 1978: 49-53).

At this point it should be noted that local amateur historians (Armstrong 1931 and Brown 1938) have written that the town of Tuskiqi was located on the eastern side of the river opposite Williams Island. This is incorrect in that when Donnelson came down river in 1780, he stated that the town was on the south side of the river and described the north and east side, including Moccasin Bend, as unoccupied (Williams 1928: 236-37). Similarly, George Christian, who took part in an attack against the local Cherokee towns in 1788, described Tuskiqi as being west of Lookout Mountain (or in the present Lookout Valley) and southwest of the river (Christian 1978:49-52). It should be further noted that Brown and Armstrong's claim that John Sevier destroyed a Cherokee town on Moccasin Bend in connection with a mythical "last battle of the Revolution"
in 1782 also has no basis in fact (Evans 1980: 30-40), but probably represents a local attempt to identify prehistoric remains on the bend with a Cherokee occupation.

By the beginning of the nineteenth century the Cherokee trend toward a decentralized settlement pattern had resulted in a series of widely dispersed farmsteads located all along the river in the study area (Wilms 1974: 50-51). Typically, each farmstead consisted of a log house, cribs, barns and other outbuildings, also built of logs, surrounded by cultivated fields that were bordered with woodlands (Evans n.d.).

Cherokee title to the lands north of the river was relinquished under terms of U.S.-Cherokee treaties in 1817 and 1819 (Royce 1887: 84-110). In accordance with these treaties, any Cherokee who desired to do so was entitled to file for a 650 acre reservation to be granted in the lands ceded north of the river. Several of these reservations were located in the study area. Among these there is the David Fields Reservation opposite Williams Island, the John Brown Reservation on Moccasin Bend (see Figure 7), the William Brown Reservation, one mile below the mouth of North Chickamauga Creek on the north side of the Tennessee River, and the Timberlake Reservation located a few miles up North Chickamauga Creek.

Cherokee title to the lands south of the river was relinquished under the terms of the Treaty of New Echota in 1835. A Cherokee census taken that year indicates a substantial population in the study area south of the river. In addition to numerous farmsteads, there was a ferry and tavern above Williams Island established by John Brown, and a boat landing used by traders on the river near the mouth of South Chickamauga Creek. The area was then known as Ross's Landing (Morris 1834; Govan and Livingood 1963). Three years later, in 1838, in accordance to the terms of the treaty of New Echota, the Cherokees departed from the area (Wilkins 1970; Malone 1956; Foreman 1934; and Starkey 1946). The major local point of departure was a staging area, called Camp Cherokee, located on the south side of the river above McClellan Island (Evans and Brown 1977a).

White settlement of the study area began immediately after the Cherokee removal (Goodspeed 1886; McGuffey 1911). A small town was
established along the present Market Street, and the name was changed from Ross's Landing to Chattanooga (Govan and Livingood 1963). During the years before the Civil War, the Chattanooga area was largely agricultural. Sites from this period are best preserved on Williams Island and at the site of the Crutchfield plantation in the Amnicola area. The Bluff Furnace, located south of the river below McClellan Island, represents a significant industrial site from this period. For additional information on the general history of early Chattanooga the reader is directed to the works of Govan (1947), Lynde (1895), and Parham (1876).

During the first part of the American Civil War (1861-63), the study area was occupied by Confederate forces. A major military encampment and staging area with hospitals and a cemetery, was located in the Tyner area (Govan and Livingood 1963; Evans and McCollough 1980). Two of the major battles of the war -- the battle of Chickamauga and the battle of Chattanooga -- were fought here in 1863 (Gracie 1911; Norwood 1898; Randolph 1922; Tucker 1961). In connection with the battle of Chattanooga, there were important troop movements across Moccasin Bend by way of Brown's Ferry, a large artillery position on the south of the river near the mouth of South Chickamauga Creek (with an unconfirmed report of an artillery position in this area), and, during the battle, the Crutchfield house near Amnicola Highway was used as a hospital.

During the second part of the war (1863-65), the study area was occupied by the Union Army (Govan and Livingood 1963; 1951: 23-47). During the occupation, the area was heavily fortified with earthworks, trenches and other defensive position. Following the end of the war, several Union soldiers remained in Chattanooga, and their efforts, supported by northern investors, was largely responsible for making Chattanooga the modern industrial city it is today (Livingood 1943:35-48, 1947: 230-250; Doster 1964: 45-55).

Summary of the Cultural Resources of the Chattanooga Area.

The prehistoric cultural resources of the Chattanooga area have suffered greatly over the years. Since the mid-nineteenth century, this
area has been highly attractive to persons seeking "Indian relics." During the past hundred and thirty years, numerous self-styled "amateur archaeologists," relic collectors, and professional dealers have systematically vandalized and looted prehistoric sites in the Chattanooga area to build private collections or to obtain relics for sale to dealers and (until very recently) to museums. In the process, hundreds of significant sites have been destroyed or heavily damaged. Many more sites have been destroyed through agricultural activity, erosion, and urban or industrial development. The only scientific archaeological investigations conducted in the area to date have been limited to small-scale salvage projects and area surveys conducted in connection with a specific proposed construction project.

Data gathered from a variety of sources, as outlined above, indicates that there has been human occupations in the Chattanooga area for much of the past ten thousand years. However, it is impossible to locate specifically many early sites, and it is suspected that local sites of significance that date prior to the Woodland period will be deeply buried. Woodland period sites are known to exist on Williams Island, Moccasin Bend, and near the mouth of South Chickamauga Creek. Large Mississippian period sites are present on Williams Island, Moccasin Bend and near the mouth of Citico Creek. Important sites of unknown cultural or temporal association are known to be present on McClellan Island, and highly significant protohistoric components are present on Williams Island, Moccasin Bend, at Citico, and approximately twenty miles up South Chickamauga Creek. It is impossible to make any assessment regarding National Register eligibility without extensive field work to determine the full nature and extent of the site and to assess the degree of damage to the site and arrive at an estimate of the undisturbed cultural materials still present.

The area's historic cultural resources are better documented and include eighteenth century Cherokee material on Williams Island, at Citico, and at the mouth of South Chickamauga Creek. Nineteenth century Cherokee material is present on Williams Island, Moccasin Bend, and Lookout Valley, and may be present in other areas on the south side of the river. Civil War related sites and materials are known to be on Moccasin Bend, in the Amnicola area and near the mouth of South Chickamauga Creek. However, as was the case with the prehistoric sites noted above, extensive field work will be necessary to determine the extent and present condition
of cultural materials associated with these sites.

The fact that so much of the area's cultural resources, particularly from the prehistoric period, has been destroyed makes the remaining sites all the more significant. Everyone involved with regional development should be concerned with these fragile, non-renewable resources.
Figure 1. Disposition of Huntingdon Silt Loam in the Chattanooga Area. This soil is highly productive and easily worked, making it desirable for occupation by the later prehistoric peoples who relied extensively on agriculture oriented subsistence patterns. In addition, the presence of this water-born aluvium is suggestive of deeply buried early prehistoric sites (Roberst et al. : 1947).
Figure 2. Locations in the Chattanooga Area Known to Contain Significant Prehistoric Cultural Resources. It is to be understood that these locations simply represent areas of known significance and in no way precludes the presence of significant material in the remaining area.
Figure 3. Location of the Four Prospective Sites for the Proposed Chattanooga River Port That Were Included in This Study.
Assessment of Four Prospective Sites
For the Proposed Chattanooga River Port

Each of the four prospective sites for the proposed Chattanooga river port was examined during the present study with an equal degree of intensity in terms of available published histories, archaeological reports, and comparative regional studies; unpublished archival and documentary data, manuscripts and early maps. The data derived from these sources were supplemented, in so far as was possible, by information gained through prior work by the authors, interviews with local residents and relic collectors, and a review of contemporary state and local records.

On the basis of information gained from these combined sources, an assessment of each of the four prospective sites will be given in the following pages. Since no field work was done in connection with the present study, all conclusions must be regarded as tentative and the differences in length of the assessment of individual sites does not reflect varying significance but rather the availability of documentary data. Specific recommendations for additional archaeological work, based on the data currently available, are offered for each of the four prospective sites.

Prospective Site No. 2.

Prospective Site No. 2 is located on the south side of the Tennessee River above the mouth of South Chickamauga Creek (see Figure 4). This is an area characterized by heavy deposits of Huntingdon Silt Loam, a soil that is highly productive and easily worked, making it highly desirable for occupation by later prehistoric peoples with an intensive reliance on agricultural oriented subsistence patterns. The presence of this water born aluvium also suggests the presence of deeply buried early prehistoric sites.

There was a fairly large late Woodland (Hamilton phase) occupation of the area immediately east of the mouth of South Chickamauga Creek. This site consisted of an open habitation area of undetermined size and a number of small concical burial mounds. This site, then called the Bell
Place Mound, was described as follows by C. B. Moore (1915: 387-388):

In a cultivated field at this place is a mound within sight from the river, slightly more than 10 feet in height and 60 feet across its circular base. This mound, covered with stumps and trees, had been so greatly dug into in various parts that no investigation was attempted by us. In sight from this mound were several slight rises which we were told were what remained of mounds that had been plowed away.

Now known as the Roxbury Mound, this is the only remaining Woodland mound in the immediate Chattanooga area. Limited salvage excavations were conducted on the open habitation site adjacent to the mound in 1973 (Calabrese, personal communication). While the results of this work have not been published, the materials recovered are available for study at the University of Tennessee at Chattanooga. A cursory examination of this material indicates an artifact assemblage diagnostic of the Hamilton phase in the eastern Tennessee Valley.

The Roxbury Mound is located outside the area to be directly impacted by port construction if prospective site No. 2 is selected. However, the limits of the Woodland period habitation site, and the location of the additional mounds documented by C. B. Moore as "in sight" of the Roxbury Mound, are not presently known. Intensive work in other sections of the eastern Tennessee Valley (Lewis and Kneberg 1946) has established an extended, somewhat linear settlement pattern for the late Woodland Hamilton phase. This being the case, it is highly probable that prospective site No. 2 may contain significant cultural remains from this time period.

In addition to its prehistoric significance, prospective site No. 2 has a real potential for containing significant historical cultural materials and features. This was the site of one of the towns established by the Chickamauga faction of the Cherokees during the winter of 1776-77 and destroyed by Evan Shelby in the spring of 1779 (Evans n.d.). Remains of this town were noted in 1780 by John Donelson who camped in the area while conducting a party of emigrants down the Tennessee River to Nashville. Donelson stated (Williams 1928: 235):

Got under way very early; the day proving very windy, a S.S.W., and the river being wide, occasioned a high sea insomuch that some of the smaller crafts were in danger, therefore came to at the uppermost Chickamauga town, which was then evacuated, where we lay by that afternoon and camped that night. The wife of Ephraim
Peyton was here delivered of a child. Mr. Peyton has gone through by land with Captain Robertson.

During the early nineteenth century, this section of river, above the mouth of South Chickamauga Creek, was a favorite stopping place and camp sites for Cherokee and white traders engaged in river commerce. This is documented by numerous references in the records of the Cherokee Agency in Tennessee (Meigs et. al. n.d.). A typical example is given below:

I was going down the river Tennessee with a Boat load of property to make sale of. I employed at Highwassee Garrison Mr. Samuel Riley to assist me to make sale, as he could speak the Cherokee language... On preceeding down the River from Highwassee I had occasion to detain a day or two near the mouth of Chickamauga Creek... whilst tying there in company with another Boat belonging to George Fields, a half Breed... (Arthur S. Campbell in a letter to R.J. Meigs, dated September 23, 1808).

The only physical remains associated with this period are parts of an eighteenth century type flint-lock pistol, said to have been found near the mouth of South Chickamauga Creek by an unknown individual several years ago (Fielder, personal communication). The location of the trader's camp sites and the features associated with the Cherokee town are not presently known. However, since again an extended settlement pattern is indicated, there is a good possibility that prospective site No. 2 will contain significant cultural remains or features from this time period.

In connection with the Battle of Chattanooga, during the American Civil War in 1863, the Union forces led by General William T. Sherman crossed the Tennessee River in the general area of prospective site No. 2. There are several, as yet unconfirmed, reports of area collectors of Civil War relics finding materials here, as well as a feature believed to be an artillery position near the river.

In summary, prospective site No. 2 has a high probability of containing deeply buried cultural materials and features with a specific potential for late Woodland Hamilton phase material. In addi-
tion, the presence of Cherokee, early settlement period, and Civil War related materials and features at the site is probable. It is therefore the recommendation of the authors that, prior to any construction activities, provisions be made for the following archaeological work:

1. A thorough surface reconnaissance of the area.
2. Systematic subsurface testing in the form of small hand-excavated units in all areas of low surface visibility and additionally as deemed necessary.
3. Deep mechanical testing.
4. Determination of National Register eligibility on the basis of the above.
A. Tennessee site file # 40HA66 -- a late Woodland mound and open habitation site of undetermined extent that may extend into the study area.

B. Tennessee site file # 40HA102 -- Archaic/Woodland open habitation site of undetermined extent.

C. Unconfirmed report of Civil War related materials.
Prospective Site No. 3:

Prospective Site No. 3 is located on the south side of the Tennessee River between the mouth of Citico Creek and South Chickamauga Creek (see Figure 5). This is an area characterized by heavy deposits of Huntington Silt Loam, a soil that is highly productive and easily worked, making it very desirable for occupation by late prehistoric peoples with an intensive reliance on agricultural oriented subsistence patterns. The presence of this water-born aluvium also suggests the possibility of deeply buried early prehistoric sites.

One of the major Mississippian period sites in eastern Tennessee was located on the western edge of prospective site No 3. Termed the Citico Site, this Dallas phase occupation consisted of a large substructural mound, rectangular in shape and measuring, in 1865 (Read 1868: 401-402), 158 feet by 120 feet and 19 feet in height, surrounded by an extensive open habitation area of undertermined size. The town of Citico occupied a significant socio-political position in the eastern Tennessee Valley. James W. Hatch, whose work (1976: 74-103) represents the best available synthesis of the data concerning the prehistoric occupation of Citico, has stated (1976: 95-96):

All pan-area studies suggested that Citico ranked at or near the top in terms of mortuary complexity... If we combine this with the large size of the Citico site, the large population base, and its strategic location in the region as a whole, Citico emerges as the most impressive and perhaps the dominant site in the Dallas area. Items of trade, whether carried overland or by canoe, must have passed through Citico on their journey into and out of the area. Whatever the social forces were that regulated trade, there seem to have been large numbers of specialized and exotic artifacts at Citico and a conspicuous concentration of these artifacts in the graves of a few key individuals. Its location with respect to other Dallas sites would give Citico the opportunity to regulate the flow of trade items both within the eastern Tennessee Valley and with other regions to the south (along the valley floor) and west (down the Tennessee River). The distribution of Southern Cult objects attests to this, since, either as raw materials or finished products, most originated outside the Dallas area. These same objects may very well
have functioned as indicators of social and political status and, if so, they again attest to the dominance of Citico as an integral force in the area.

The destruction of most of this site was outlined in an earlier section of this report, and the mound and center of habitation was located west of prospective site No. 3. Nevertheless, area relic collectors and workmen engaged in the construction of Amnicola highway reported encountering burials with Dallas phase artifacts included along the route of road construction well into the area to be impacted by prospective site No. 3. Due to the large size of Citico, it is highly probable that outlying houses and individual farmsteads were located in the area to be impacted.

The name Citico is derived from one of the towns established by the Chickamauga faction of the Cherokees during the winter of 1776-77 (Brown 1938). Like the other Chickamauga towns, Citico was destroyed by the American army under Colonel Evan Shelby in the spring of 1779 (Williams 1944). However, unlike most of the others, it was immediately reoccupied by the Cherokees. The following year, in 1780, John Donelson recorded that after departing from the camp site at the mouth of South Chickamauga Creek his party "cast off at ten o'clock, and proceeded down to an Indian village, which was inhabited, on the south side of the river" (Williams 1928: 233). Citico continued as a major Cherokee town into the closing years of the eighteenth century. In 1785, a young Scottish trader named Daniel Ross was captured by Cherokees at Citico while traveling down river. He was released through the intervention of John McDonald, and remained in the area becoming wealthy through trade. He later married McDonald's quarter-blood Cherokee daughter, and their son John Ross eventually assumed total political control over the Cherokees in Oklahoma (Houlton 1978: 5).

There is no available data at present concerning the specific location of houses or other features relating to the Cherokee occupation at Citico. However, due to the extended Cherokee settlement pattern it is likely that Cherokee cultural remains are present in the area to be impacted by road construction at prospective site No. 3.
The Crutchfield House site is a significant mid-nineteenth century site located directly in the area to be impacted if prospective site No. 3 is selected for the port construction. The Crutchfield House was built during the years before the American Civil War, and served as the Crutchfield family estate. The Crutchfield brothers, William and Thomas, figured prominently in the building and development of the city of Chattanooga, both before and after the Civil War. During the war, the brothers held opposing views. Originally this seems to have been a way of insuring that the family estates would remain intact regardless of which side won the war. William Crutchfield, however, demonstrated his pro-Union sympathy by a near successful assassination attempt on Jefferson Davis when the Confederate president made a public appearance at Chattanooga in 1861 (Govan and Livingood 1963).

During the Battle of Chattanooga, in 1963, there was fighting in the vicinity of the Crutchfield house, and it was used as a field hospital during and after the battle. In 1975 it was one of the two remaining examples of suburban Chattanooga houses in use during the Civil War that still existed. It was visited that year by one of the authors and found to be still occupied, although in a gross state of disrepair. It was not revisited during the present study due to the fact that field work was beyond the scope of the present work, but it has been learned that the house was torn down two or three years ago. It should be emphasized, however, that this does not diminish the archaeological significance of the site. Since it is the only well-defined domestic site in Chattanooga dating from the Civil War period, its importance to the understanding and interpretation of regional history is self evident.

In summary, prospective site No. 3 has a high probability of containing deeply buried cultural materials and features, with the additional probability of classic Mississippian Dallas phase and eighteenth century Cherokee materials and features. One of the area's most significant domestic sites dating from the Civil War period is
located in the project area, and there is an additional possibility of the presence of military sites or materials connected with the Battle of Chattanooga. This being the case, the following additional archaeological work is recommended prior to any construction activities:

1. A thorough surface reconnaissance of the area.
2. Systematic subsurface testing in the form of small hand-excavated units in all areas of low surface visibility and additionally as deemed necessary.
3. Deep mechanical testing.
4. Determination of National Register eligibility on the basis of the above.
Figure 5: Prospective Site No. 3.

A. Tennessee site file #40HA65 — Citico. It is possible that the eastern edge of the site may extend into the study area.

B. Tennessee site file #40HA74 — Sherman Crossing. The actual point that Sherman crossed the river is not known and Civil War material from this event may be anticipated throughout the area.

C. Crutchfield House — Civil War era farmstead used as a hospital during the battle of Chattanooga.
Prospective site No. 4:

Prospective site No. 4 is located east of the Tennessee River on the west side of Moccasin Bend (see Figure 6). Originally, the site began at the Moccasin Bend Psychiatric Hospital and extended north to the golf course, covering an area of approximately 250 acres. Recently, the site has been expanded to include the golf course area as well, making it more than twice as large.

The presence of cultural materials suggesting a long and intensive prehistoric occupation of Moccasin Bend has been well known for more than a hundred years. When Clarence B. Moore visited the area in 1915, there had already been considerable vandalism of the archaeological sites there. He noted that "circumstantial accounts from various sources, of the finding of many relics on the place, superficially and by digging, are current" (Moore 1915: 361). Guided by a local informant, Moore proceeded to destroy an area of concentrated burials located "about 200 yards ESE" of the power line crossing the Tennessee River on the lower end of Moccasin Bend. This area, described by Moore as approximately 34 feet long and 19 to 25 feet wide, is located in the southeastern edge of prospective site No 4. It contained 31 burials in addition to "several" that had been disturbed by previous vandalism. Moore reported that most of the burials were in circular pits ranging in depth from 40 to 68 inches. Structural remains were encountered in the upper levels of the site. Burial goods included some early historic material, items associated with the Southeastern Ceremonial Complex, and Dallas ceramics (Moore 1915: 362-368). The near absence of shell material suggests that the mortuary area was in use around 1700, after the Anglo-Spanish hostilities in northern Florida had disrupted the shell trade. In addition to the mortuary area, Moore dug into five mounds somewhere near the southern end of the bend, the location of which cannot be determined at this time (Moore 1915: 368-369).

Early in 1964, J.B. Graham conducted a limited salvage excavation south of the present study area on the portion of the bend that
was subsequently dredged away in a river-widening operation. In the course of the excavation, four distinct concentrations of cultural materials were noted (Graham 1964: 5-16). These ranged from middle to late Archaic through early Mississippian. In his conclusions Graham stated his belief that the evidence demonstrated an intermittent occupation of the Bend over a span of several thousand years. He felt that this occupation was characterized by short-term occupancy of a number of sites by different groups of hunting and gathering peoples, with the heaviest occupation occurring during the Middle to Late Woodland period (Graham 1964: 43-45). It should be noted that while Graham extended his mechanical testing to a depth of ten feet, he still found no early Archaic material, suggesting therefore that there may be additional deeply buried material on this site.

In 1975 another small salvage excavation was conducted by Jeffrey L. Brown and E. Raymond Evans north of the present study area on the property of the Genoco Oil Company. This project was limited to an industrial drainage ditch being constructed in an area that had already been lowered approximately six feet below the present surface level in earlier construction work on the site. Two late Mississippian burials were removed from pits that extended into a late Woodland occupation strata (Evans and Brown n.d.). A cursory reconnaissance of the surrounding area by Brown and Evans revealed several prehistoric sites, ranging from late Archaic through proto-historic in the area from the south end of the Bend to a point opposite Williams Island, on the basis of surface material. The most important of these was a large late Mississippian/proto-historic site located directly in the area to be impacted by prospective site No. 4, and approximately 0.3 miles north of the site excavated earlier by C. B. Moore. There was extensive evidence of recent vandalism on the site. Several freshly dug holes, some to a depth of more than six feet, were observed. Structural remains were present, and broken ceramics and human bones littered the entire site. Subsequent interviews with some of the individuals responsible for the looting indicate that the artifactual material removed by them was culturally similar to that described by Moore, except that here a considerable quantity of shell material was
present. This suggests that the site in question was probably occupied somewhat earlier than the one dug by Moore (ca. 1600-1650 A.D.). Since the site is on public property, Evans and Brown attempted to have official action taken to halt the vandalism. Apparently this was successful for a time, but when the authors of the present study visited the site a few months ago there were ample signs of current vandalism. Again the appropriate local and state officials were contacted and the vandalism stopped, at least temporarily.

In 1977, Evans and Brown conducted an intensive archaeological reconnaissance of the Moccasin Bend Wastewater Treatment Plant, east of the present study area. During this project a small late Woodland site was located, and interviews with Mr. John T. Hotchens, a backhoe operator for the City of Chattanooga who did considerable excavation in the area of the present golf course before it was developed, revealed the probable presence of a large late Mississippian occupation on the site of the golf course. Mr. Hotchens described cutting into numerous burials that were accompanied by ceramics and shell ornaments (Evans and Brown 1977: 6).

While the probable deeply buried material remains an unknown factor at present, the authors are of the opinion that the cultural resources known to be present on the area to be impacted by prospective site No. 4 have the potential of being one of the most significant archaeological sites in the southeastern United States. This is based on the possibility of gaining valuable data and meaningful insights regarding the poorly understood contact period. In the final analysis, however, the significance of the site from this prospective will rest with extent of the site that has not been vandalized, and can only be determined by intensive subsurface testing.

As was noted earlier, the local tradition that one of the eighteenth century Chickamauga-Cherokee towns was located in this area has no basis in fact. When Donelson passed down the river in 1780, he noted: "we came in sight of another town, situated likewise on the south side of the river, nearly opposite a small island" (Williams 1928: 236). By implication, Donelson's Journal indicated that the
north (or east) side of the river was uninhabited and wooded at this time. He wrote: "And here we must regret the unfortunate death of young Mr. Payne, on board Captain Blackmore's boat, who was mortally wounded by reason of the boat running too near the northern shore, opposite the town where some of the enemy lay concealed" (Williams 1928: 236). While there was no Cherokee town here, there may have been one or two isolated farmsteads in the late eighteenth century. During the early nineteenth century, a Cherokee mixed-blood named Richard Brown lived here (Keigs et al.: n.d.). His property was a part of the 640 acre reservation claimed by his son John Brown under the terms of the U.S.-Cherokee treaty of 1817 (see figure 7). The Brown Reservation included most of the area to be impacted by prospective site No. 4.

During the American Civil War there was considerable activity on Moccasin Bend. In connection with the siege of Chattanooga, in 1863. A Union artillery battery was established south of the study area on the end of Stringer's Ridge to oppose Confederate artillery positions on Lookout Mountain (Gov, 72 and Livingood 1952: 237-238). Although somewhat damaged by vandals, this site is probably the area's most important Civil War related site located outside the National Park properties. Union forces crossed the river at Brown's ferry, passing through the area to be impacted by prospective site No. 4, and there are unconfirmed reports by area relic collectors of the occurrence of Civil War material here.

In summary, prospective site No. 4 is known to contain potentially significant cultural resources dating from the late Mississippian/proto-historic period, and a well defined early nineteenth century Cherokee occupation. In addition there is a high probability of deeply buried prehistoric cultural materials and features being present as well as Civil War related materials. It is therefore the recommendation of the authors that prior to any construction activities, provisions be made for the following additional archaeological work:

1. A thorough surface reconnaissance of the area.

2. Systematic sub-surface testing in the form of small hand-
excavated units in all areas of low surface visibility and additionally as deemed necessary.

3. Deep mechanical testing.

4. Determination of National Register eligibility on the basis of the above.
Figure 6: Prospective Site No. 4.

A. Tennessee site file #4OH63 (apparently this number is applied to the entire bend) — a protohistoric site dug by C. B. Moore in 1914/15.

B. A large late Mississippian/proto-historic site of undetermined extent having the potential of extreme significance.

C. A large Mississippian site of undetermined extent.
Figure 7: Brown Reservation on Moccasin Bend.

This reservation was established under the terms of the U.S.–Cherokee Treaty of 1817 and was surveyed and mapped on January 25, 1820 by Robert Armstrong. (The original map is in the Cherokee collections, Tennessee State Library and Archives, Nashville).
Prospective Site No. 8:

Prospective Site No. 8 includes the entirety of Williams Island, approximately 300 acres in size, and located in the Tennessee River below Moccasin Bend (see Figure 8). There is a wide band of Hunting- ton Silt Loam, a soil that is highly productive and easily worked, along the western side of the island. This soil type was highly desirable for use by prehistoric peoples with an intensive reliance on agricultural oriented subsistence patterns. The presence of the water-born aluvium is also suggestive of the presence of deeply buried early prehistoric sites.

There is a well known Mississippian site located on the eastern side of the island about a third of the way up from the southern end. When Moore (1915: 354) visited the island he noted that it "has a history, both local and otherwise, of aboriginal relics discovered there." Before Moore, the site had been heavily damaged by the activities of George Barns and other local relic collectors and dealers. Material removed from the site by Barns and now located at Wesleyan University in Middletown, Connecticut includes a large number of ceramic vessels (largely Dallas, but some that appear to date from the developed Mississippian Hiwassee Island phase), assorted shell and lithic artifacts, and a few brass items from the proto-historic period. Although the data are far from clear, the Wesleyan collection appears to suggest a continuous occupation from early Mississippian through proto-historic times (Hoff 1973).

Moore dug up eleven burials here accompanied by lithic and shell materials. While his description of the artifacts is somewhat vague, they appear to be late Dallas material (Moore 1915: 354-355). He then went on to "about one-quarter mile above" the south end of the island, where he located an open habitation area and four additional burials. His description of the ceramics as "bearing a design conferred with a stamp," suggests a middle woodland or emergent Mississippian occupation. The only additional artifact mentioned was described as "a piercing implement of bone" (Moore 1915: 356).
In 1955, James Griffin at the University of Michigan was given a small Mississippian bowl from Williams Island that still contained the dirt that had been in it when it was excavated. When the dirt was cleaned out, it was found to contain a number of charred beans (*Phaseolus vulgaris*) fragments. Radiocarbon tests on the beans arrived at the date 1620 (plus or minus 75 years), and Griffin considered the bowl as a late Dallas form (Griffin 1963: 43-46).

The large Mississippian site on Williams Island is still being subjected to periodic vandalism by local relic collectors. Interviews with some of the individuals responsible for recent vandalism suggests that a considerable quantity of late Dallas/proto-historic material, largely pottery vessels and shell ornaments, have been removed from the site in recent years. They also mentioned the presence of two Woodland period sites at an undetermined location on the island. The degree of damage and extent of remaining undisturbed cultural materials is not presently known.

The late eighteenth century Cherokee town of Tuskeegee was located west of the river in Lookout Valley, and it is probable that a few of the houses from this town were located on Williams Island. During the early nineteenth century, a Cherokee mixed blood named David Fields established a farstead and grist mill opposite the island on the east side of the river. The island was being farmed by the Brown family at this time. There are four known farmstead sites on Williams Island (early T.V.A. land records). All of these appear to date from the nineteenth century, and some may have originated during the Cherokee occupation.

The island is now designated as a National Historic Site in the National Register of Historic Places.

In summary, prospective site No. 8 is known to contain one large Mississippian/proto-historic open habitation site that could provide significant data regarding the emergence, development, and decline of Mississippian culture in the region as well as valuable insights regarding the contact period. In addition, there are at least two probable Woodland period sites of undetermined extent and nature, and four nineteenth century farmstead sites. Aside from the
known sites, there is a strong probability of deeply buried prehistoric sites, particularly along the western side of the island, and a possible presence of late eighteenth/early nineteenth century Cherokee sites. The fact that prospective site No. 8 is an island means that if it is selected as the site for the proposed Chattanooga river port, considerable development in the form of bridge construction, and road, rail and utilities access will be necessary, and this will have a direct impact on a considerable portion of the mainland as well as the island itself. This being the case, the following recommendations for additional archaeological work are made for both prospective site No. 8 and the necessary access corridor on the mainland:

1. A thorough surface reconnaissance of the prospective site area and the necessary access corridor on the mainland.
2. Systematic subsurface testing in the form of small hand-excavated units in all areas of low surface visibility and additionally as deemed necessary.
3. Deep mechanical testing of the prospective site area and the necessary access corridor on the mainland.
4. Determination of National Register eligibility of cultural resources to be affected in the access corridor on the basis of the above.
Table 2: Archaeological sites in the State Archaeological File, Tennessee Division of Archaeology, Nashville.

<table>
<thead>
<tr>
<th>Site</th>
<th>Remarks</th>
<th>Project Impact</th>
</tr>
</thead>
<tbody>
<tr>
<td>40 HA 59</td>
<td>Carter Place Mounds (no longer in existence).</td>
<td>None</td>
</tr>
<tr>
<td>40 HA 60</td>
<td>Williams Island: Single site number used for entire island, but there are actually a number of sites present.</td>
<td>Primary -- Prospective Site No. 8.</td>
</tr>
<tr>
<td>40 HA 62</td>
<td>Prehistoric Site</td>
<td>Secondary -- Prospective Site No. 8.</td>
</tr>
<tr>
<td>40 HA 63</td>
<td>Moccasin Bend: Single number used for the entire Bend, but there are actually a number of sites present.</td>
<td>Primary -- prospective Site No. 4.</td>
</tr>
<tr>
<td>40 HA 64</td>
<td>McClellan Island: several sites.</td>
<td>None</td>
</tr>
<tr>
<td>40 HA 65</td>
<td>Citico.</td>
<td>Possible secondary -- Prospective site No. 3.</td>
</tr>
<tr>
<td>40 HA 66</td>
<td>Roxbury.</td>
<td>Possible secondary -- Prospective site No. 2.</td>
</tr>
<tr>
<td>40 HA 71</td>
<td>Wenning Collection: recorded by early collector.</td>
<td>None</td>
</tr>
<tr>
<td>40 HA 73</td>
<td>Prehistoric site</td>
<td>None</td>
</tr>
<tr>
<td>40 HA 74</td>
<td>Sherman Crossing.</td>
<td>Primary -- Prospective Site No. 3.</td>
</tr>
<tr>
<td>40 HA 75</td>
<td>Wenning Collection: recorded by early collector.</td>
<td>None</td>
</tr>
<tr>
<td>40 HA 76</td>
<td>Prehistoric site</td>
<td>None</td>
</tr>
<tr>
<td>40 HA 77</td>
<td>Wenning Collection: Recorded by early collector.</td>
<td>None</td>
</tr>
<tr>
<td>40 HA 97</td>
<td>Montague Pottery.</td>
<td>None</td>
</tr>
<tr>
<td>40 HA 102</td>
<td>Archaic/Woodland site.</td>
<td>Primary -- Prospective Site No. 2.</td>
</tr>
</tbody>
</table>
Figure 8: Prospective Site No. 8.

Tennessee site file #40HA60 is apparently applied to the entire island although there are a number of distinct sites.

Mississippian/proto-historic site of undetermined extent.

Woodland/Mississippian site of undetermined extent.

19th century farmstead site.

19th century farmstead site.

19th century farmstead site.

19th century farmstead site.
Conclusions and Recommendations

Each of the prospective sites for the proposed Chattanooga river port considered in the present study has a number of things in common. Each has a high probability of containing deeply buried cultural materials from early prehistoric occupations. Each is known to contain cultural materials of undetermined significance, but quite likely of National Register level importance. Each will require additional archaeological work. Nevertheless, the authors will attempt to rank the prospective sites in order of potential significance on the basis of the present study. It must be understood, however, that this is based on indirect evidence, and until it can be confirmed by subsurface testing the assessment must be regarded as highly tentative.

Prospective Site No. 4: It is the opinion of the authors, on the basis of presently available data, that prospective site No. 4 has the greatest potential significance. In addition to deeply buried sites and a known Cherokee farmstead, this area contains two or more late Mississippian/proto-historic sites that, if not too badly disturbed by vandalism, could be of extreme significance in providing badly needed data on one of the most poorly understood periods of Southeastern prehistory.

Prospective Site No. 8: Although prospective site No. 8 is poorly documented and is known to have sustained heavy damage from vandals over an extended period of time, the authors regard it, largely on the basis of size, as having the second greatest potential significance.

Prospective Site No. 2: It is the opinion of the authors that prospective site No. 2 has the third greatest potential significance. This is based on the known presence of multicomponent prehistoric cultural materials and the high probability of deeply buried early prehistoric materials as well as the possibility of historic Cherokee and Civil War related materials.

Prospective Site No. 3: Although prospective site No. 3 is known to contain significant historic Civil War related materials, has a
high probability of deeply buried prehistoric materials and may have some outlying structures from the late Mississippian and Cherokee occupations at Citico, on the basis of data presently available regarding this site in comparison with the other three sites the authors conclude that this site has the least potential significance of the four. Nevertheless, it must again be stressed that sub-surface testing could completely reorder this assessment of potential significance.

Regardless of which of these sites if selected for the proposed Chattanooga river port, additional archaeological work will be required prior to any land altering activities. The following general recommendations are offered as being applicable to any site selected:

1. A thorough surface reconnaissance of the prospective site area.
2. Systematic sub-surface testing in the form of small hand-excavated units in all areas of low surface visibility and additionally as deemed necessary.
3. Deep mechanical testing of the prospective site area.
4. Determination of National Register eligibility on the basis of the above (in the case of Williams Island, which is already on the National Register, this will be understood to apply to the access corridor that will be directly impacted by the selection of this site.)
REFERENCES CITED

Adair, James

Armstrong, Zella

Ball, Donald B., Victor P. Hood, and E. Raymond Evans

Bauxar, J. Joseph

Breazeale, J. W. M.
1842 Life As It Is; or Matters and Things in General. James Williams, Knoxville.

Brown, Jeffrey L. and E. Raymond Evans

Brown, John P.
1838 Old Frontiers, Southern Publishers, Kingsport.

Caldwell, Joseph R.

Chapman
1973 The Icehouse Bottom Site, Report of Investigations 13, Department of Anthropology, University of Tennessee, Knoxville.
1975 The Rose Island Site and the Bifurcated Point Tradition, Reports of Investigation 14, Department of Anthropology, University of Tennessee, Knoxville.
Christian, George

Cole, Patricia E.
1975	A Synthesis and Interpretation of the Hamilton Mortuary Pattern in East Tennessee, M.A. Thesis in Anthropology, University of Tennessee, Knoxville.

Cottenill, Robert S.

Crites, Gary D.

DeSelm, H.R., and Jeffrey L. Brown

Doster, James F.

Dye, David H.
1977	"A Model for Late Archaic Subsistence Systems in the Western Middle Tennessee Valley During the Bluff Creek Phase," Tennessee Anthropologist 2(1):63-80.

Evans, E. Raymond

n.d.	Cherokee Heritage: An Assessment of Historic Native American Sites in Lower East Tennessee, Ms. on file with Tennessee Division of Archaeology, Department of Conservation, Nashville.

Evans, E. Raymond, and Jeffrey L. Brown
Evans, E. Raymond and Jeffrey L. Brown

1976 Archaeological Survey of South Chickamauga Creek, Report prepared for Hensley, Schmidt, Inc., Chattanooga.


Evans, E. Raymond and Major C. R. McCullough

Faulkner, Charles
1968 Archaeological Investigations in the Tims Ford Reservoir, Tennessee, 1966, Department of Anthropology, University of Tennessee, Knoxville.


Faulkner, Charles H. and J. B. Graham

1966a Highway Salvage in the Nickajack Reservoir, Department of Anthropology, University of Tennessee, Knoxville.

1966b Westmoreland-Barber Site Nickajack Reservoir, Department of Anthropology, University of Tennessee, Knoxville.

Faulkner, Charles and Major C. R. McCullough
1974 Excavations and Testings, Normandy Reservoir. Reports of Investigations No. 12, Department of Anthropology, University of Tennessee, Knoxville.

Flannery, Kent V.
Foreman, Grant

Govan, Gilbert E.

Govan, Gilbert E. and James W. Livingood

Gracie, Archibald

Graham, J. B.
1964 The Archaeological Investigation of Moccasin Bend (40 HA 63), Hamilton County, Tennessee, Department of Arthropology, University of Tennessee, Knoxville.

Goodspeed, Weston A. (ed.)

Griffin, James B.

1963 "A Radio Carbon Date on Prehistoric Beans from Williams Island," Hamilton County, Tennessee. T.A. 19 (2) 43-46

Guthe, Alfred K.


Hatch, James W.

Haywood, John  

Hoff, Kathryn E.  

Howard, James H.  

Jenkins, Ned J.  

Keel, Bennie C.  

Larson, Lewis H.  

Lewis, Thomas M. N.  


1946  Hiwassee Island, University of Tennessee Press, Knoxville.


Lewis, T. M. N. and Madeline Lewis  
Livingood, James W.  

Lynde, Francis  

Malone, Henry T.  

Marrinan, Rochelle  

Mason, Carol I.  

McGuffey, Charles D.  

Mooney, James  

Moore, Clarence B.  

Moorehead, Warren K.  
1924 "Mr. W.E. Myer's Archaeological Collection," Science 60 (1546): 159-160.  

Morris, Eastin  

Moulton, Gary E.  

Myer, William E.  
Norton, John

Norwood, C. W.
1898   The Chickamauga and Chattanooga Campaign and Battlefields. Gervis M. Connelly Co. Chattanooga.

O'Donnell, James H.

Parham, Louis L.
1876   Chattanooga, Tennessee; Hamilton County, and Lookout Mountain, published by Author. Chattanooga.

Randolph, Richard B.

Read, M. C.

Reid, John Philip

Roberts, Wallace, James Tyer, C. A. Mogen and K. V. Goodman

Roosevelt, Theodore

Rowe, Chandler W.

Royce, Charles C.

Salo, Lawr W.
Service, Elman R.

Starkey, Marion L.

Stoltman, James

Tucker, Glenn

Walthall, John A.

Webb, William S.

Whiteford, Andrew H.

Wilkins, Thurman

Williams, Samuel Cole
1937  Dawn of Tennessee Valley and Tennessee History, Watauga Press, Johnson City

Wilms, Douglas C.