TEST EXCAVATIONS AT
CITICO (40HA65)
HAMILTON COUNTY, TENNESSEE

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Prepared for Tennessee American Water Company
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ABSTRACT

In June and July, 1988 test excavations were conducted on a portion of the Citico Site (40HA65). A considerable amount of cultural material, structural features and human burials were documented. More importantly, it was demonstrated that significant portions of the site remain archaeologically intact. Further research would provide valuable insights concerning this major southeastern site.

INTRODUCTION

On June 3, 1988 sewer construction in the right-of-way of Amnicola Highway (SR 58) near downtown Chattanooga, Tennessee, was being conducted by Rothwell contractors for placement of a connector sewer to a newly constructed building. Cultural material was encountered adjacent to the Tennessee American Water Company distribution complex and four human burials were disturbed in front of the new building. Construction workers removed a number of artifacts and, during the next two days, the open trench containing the burials was heavily vandalized by amateur collectors who removed still more material.

Upon learning of the situation, R. Bruce Wilkey contacted Ms. Frances Alexander, Community Relations Manager of Tennessee American Water Company, concerning potential significance of the project due to its location on the well-known Citico site (40HA65). Wilkey visited the site on June 9, 1988 and noted that the area of burial disturbance had been backfilled. However, the portion of the trench adjacent to the Tennessee American Water Company had been left open due to necessity of inspection by the Public Works Department of the City of Chattanooga. An abundance of cultural material was noted in the back dirt and an intact house floor was visible in the trench profile approximately two feet below the surface. At the request of State Archaeologist Nick Fielder the site was visited by Nicholas Honerkamp and Bruce Council of the University of Tennessee at Chattanooga. They observed no evidence of burial disturbance.

Subsequently at Wilkey's urging, Ms. Alexander, and Mr. Dick Sullivan, Vice President of Tennessee American Water Company, authorized the inspection of the site by E. Raymond Evans who had done previous work in the area. Preliminary examination included screening of back dirt from the sewer trench on June 14 and 15, 1988 and examination of the exposed floor in the profile. Results indicated potential for significant data retrieval. Subsequently, an agreement was reached between Tennessee American Water Company and U/O, Inc. of Nashville to conduct archaeological testing on the property of Tennessee American Water Company. Consulting archaeologists were Gerald Smith of Memphis State University and E. Raymond Evans. The testing program was initiated on June 26, 1988 and continued through June 29, 1988. The study was under the direction of E. Raymond Evans assisted by R. Bruce Wilkey and Edwin Evans. Valuable support was provided by Ms. Alexander and other water company personnel including Mr. Lowell Bennington, Assistant Distribution Superintendent, and Mr. Bill Hobbs, Distribution Manager. Special consideration is also due off-duty Chattanooga policemen who provided security at the site at the request of Tennessee American Water Company. All aspects of the study will be described below.
GENERAL BACKGROUND OF CITICO

The Citico site (40HA65) is located on the left bank of the Tennessee River (Nickajack Lake) in the city of Chattanooga in Hamilton County, Tennessee. The central plaza with its large mound, was located on a terrace above the river north of the course of Citico Creek which empties into the river nearby. The village midden area and the former site of the mound now lies under the right-of-way of Amnicola Highway (SR58).

During the late Mississippian period, most of the southeastern United States was divided among a number of highly developed chiefdoms consisting of peripheral towns affiliated with a differentiated ceremonial center that probably served as a political center as well (cf. Olah 1975:145-169; Sears 1962). Well defined chiefdoms (Sears 1962 termed them "states") are those centered around Etowah in Georgia (1962:110-115), Moundville in Alabama (Peebles 1971:68-91) and possible Garden Creek in North Carolina (Coe 1952:301-311); Keel 1976:217-218). In the local area, the Citico site appears to have been the seat of the chiefdom exercising power over this section of the Tennessee Valley during the late Mississippian period. Hatch (1976:95-96) has noted:

All pan-area studies suggest 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 seems 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.

Citico (40HA65) remained in importance during the time of early European contact. Probably the final prehistoric occupation at Citico was Mouse Creek phase. Several items dated from the Spanish Colonial period have been recovered from the site (Moore 1915:373-374).

In 1776, the site was occupied by Cherokees who relocated to this area from the Little Tennessee River valley. The town was burned by an American army in 1779 but was rapidly rebuilt. It continued to function as a major Cherokee community until the general Indian removal in 1838 (Evans 1977:176-
During the American Civil War there was considerable military presence in the area with a signal corps tower located atop the Citico mound. Following the war, the Citico area underwent a number of changes. During the late 19th Century a large blast furnace operated in the area. This was followed by the Wells Brick Company which mined clay and fired bricks along Citico Creek. More recently the area has been modernized by the construction of Amnicola highway with most of the site area being devoted to a mix of industrial and commercial use.

FIGURE 1. Map of Citico, 40HA65, (after Hatch 1976)
SUMMARY OF PREVIOUS WORK IN THE CITICO AREA

Due to the highly visible nature of its large mound, the Citico site was well known for many years. As was mentioned, during the American Civil War, a signal corps tower was erected atop the mound and off-duty soldiers amused themselves by digging in the mound in search of relics. In 1865 M.C. Read began a tunnel into the side of the mound where he discovered structural remains and several burials. He planned to continue his excavation but the firing of heavy guns in celebration of Lee's surrender caused the tunnel to collapse and his activities ceased (Read 1868:402). Following the war various relic collectors dug extensively on the site. Prominent among these were J.B. Nicklin, J.C. Haley and George Barnes (Hatch 1976:78). By the early twentieth century the site had gained a national reputation among relic collectors and dealers as being “famed for the discovery there of aboriginal remains” (Moore 1915:361).

In 1913-14 Clarence B. Moore travelled up the Tennessee River in a steamboat, aptly named the Gopher, collecting artifacts for the Philadelphia Academy of Sciences. He dug extensively on most of the larger sites along the Chattanooga riverfront including Citico. Here he concentrated his activities on a low ridge adjacent to the mound and was disappointed by the “tangible results” of his destruction of 106 burials (Moore 1915:352-385). Shortly after Moore’s visit, the Citico mound was largely destroyed by road construction. Most of the mound was used as landfill along Citico Creek in an area then used as a local trash dump. At this time W.E. Myer, field administrator for the Smithsonian, salvaged a number of southeastern ceremonial complex artifacts from the mound. Several local collectors, the best known of which were Charles Peacock and J.P. Brown, continued to remove artifacts from the site. Construction of the present Tennessee American Water Company Distribution Complex, adjacent to the former mound site, revealed numerous burials. Salvage excavations conducted by J.B. Graham and Charles Peacock resulted in the removal of 73 burials from the eight foot thick midden deposits (Hatch 1976:82-85). Amateur collectors were also busy at this time. The most prominent being C.G. Ruffner (Lewis 1958) and Paul O'Rear (John Nail, personal communication). These individuals removed numerous artifacts including ceramic vessels, marine shell ornaments and engraved sheet copper. In 1976 J.W. Hatch published an excellent synthesis of Citico data based on literature review, examination of artifacts at the Museum of the American Indian-Heye Foundation, Smithsonian Institution and interviews with amateur collectors (Hatch 1976). In 1981 E. Raymond Evans and Nicholas Honerkamp conducted an assessment of the site in conjunction with the study of several sites being considered for development of the Chattanooga Riverport. Their recommendation (Evans and Honerkamp 1974) called for:

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.
The most recent assessment of the site was conducted in 1985 by E. Raymond Evans and Vicky Karhu. This was a part of an overall cultural overview of the Chattanooga Riverfront conducted under contract with the Chattanooga-Hamilton County Regional Planning Commission concerning proposed riverfront development. Their recommendations called for intensive testing and the establishment of a designated memorial cemetery for the proper reburial of all human remains disturbed during the implementation of planned development (Evans and Karhu 1985:119).

FIGURE 2. Sewer Trench on SR58 right-of-way adjacent to TAWC Distribution Complex. Facing north toward Amnicola Highway (SR58) and the Tennessee River
PRELIMINARY RESEARCH DESIGN AND METHODOLOGY

The objective of the study was to ascertain the extent of in situ cultural materials and features on that portion of 40HA65 that is located on Tennessee American Water Company (TAWC) property. To obtain background data, as much information as possible was sought pertaining to the disturbed burials in the area of the adjacent office building. Bruce Wilkey conducted intensive interviews with amateur archaeologists and collectors including the operator of the backhoe which first disturbed the cultural material and a local artifact dealer who subsequently purchased an item from him.

Based on the results of the initial investigation, more intensive sample screening of the sewer trench back dirt initiated the study. A total of 1,224 items were recovered from this back dirt. Also, delineation of the angle of the structural floor from the two profiles of the sewer trench enabled the placement of pins along the route of the wall extending onto the TAWC property. Approximately midway between the open trench and the building, a 1 X 1 foot hand excavated test pit (designated Test Unit "A") was dug along this line. Location of partially carbonized post remains confirmed the hypothesis. This test revealed approximately eighteen inches of disturbed soil overlying six inches of midden above the structural floor. Subsequently, heavy equipment was used to dig a 2 X 12 foot trench to a depth of approximately two feet parallel to the building (designated Test Unit "B") on the edge of the TAW property. This confirmed the wall location. The third test trench (designated Test Unit "C") also 2 X 12 feet, was dug 8 feet toward the building from the first trench, also to a depth of approximately two feet - see figure. This confirmed continuation of the wall line. A final trench (designated test Test Unit "D") was excavated outside the structure in line with test Unit B to a depth of approximately two feet. Further hand excavation at the southwest end of this trench revealed an undisturbed human burial at a depth of approximately four feet. This burial was not removed. Insofar as time permitted, back dirt from the test trenches was screened with the artifacts individually bagged.

Artifacts were cleaned and sorted in central laboratory facilities. The following section will discuss in detail the results of artifact analysis. On June 29, 1988 the sewer trench was backfilled by Rothwell personnel after integrity of the new sewer installation was confirmed through inspection by Chattanooga Public Works employees. Test units opened during the present study were protected with plywood and polyethylene strips in anticipation of the possibility of further work.

As was stated above, the primary objective of the testing program was to delineate the exposed structural floor and assess the degree of in situ material. This objective was met with the northwest wall being defined and an estimate of more than fifty percent integrity. Daub and post materials were encountered in both Test Units "B" and "C" as expected. Although beyond the scope of the present study, the occurrence of a burial in Test Unit "D" was not unexpected and merely confirms the fact that numerous human burials remain in this area.
FIGURE 3. Test Excavations at Citico (40HA65). Scale: 1 inch = 10 feet.

FIGURE 4. South profile of sewer trench. 1" = 2 ft
DESCRIPTION OF TEST UNITS

OPEN SEWER TRENCH:

The sewer trench which first gave indication of the site and was kept open throughout the testing program, was nominally two feet wide and 25 feet long (see figure 3). It extended to a depth of seven feet. There was 6 inches of topsoil, a foot of gravel base material from road construction overlying 6 inches of undisturbed midden. Beneath this band of midden a well defined floor and other structural remains created a band one and one-half to two inches thick. A second structural floor was visible in the wall at the southeastern end of the trench, two feet beneath the first (these features will be more fully described in the next section). Considerable cultural material was derived from sifting the back dirt of the sewer trench.

TEST UNIT “A”:

Test Unit “A” consisted of a hand-excavated unit one foot by one foot extending to a depth of 2 feet. The purpose of this test was to ascertain the continuity and wall location of the structure noted in the sewer trench profile. Here there was approximately six inches of topsoil overlying 12 inches of disturbed midden with approximately 6 inches of undisturbed midden above the structural floor.

TEST UNIT “B”:

Test Unit “B” was placed between the sewer trench and “A” being dug parallel to the trench. A backhoe was used to remove the disturbed material and the pit was hand excavated to floor level. The resulting pit was two feet by twelve feet. Stratigraphy proved the same as that noted in Unit “A”. A representative sample of the disturbed back dirt was screened.

TEST UNIT “C”:

Test Unit “C”, also two by twelve feet, was placed between Test Unit “A” and the building. Here again, mechanical equipment was used to remove the disturbed layers and the excavation continued by hand to the floor level. Again, the stratigraphy proved uniform as that described for Test Unit “A”. As before, a representative sample of the back dirt was screened.

TEST UNIT “D”:

Test Unit “D” was placed outside the known limits of the house floor. Here it was found that there was approximately six inches of topsoil overlying eighteen to twenty-four inches of disturbed midden beneath which intact midden continues to an unknown depth.

TEST UNIT “D1”:

The eastern end of Test Unit “D” was further excavated to a depth of an additional two feet. This revealed the presence of undisturbed midden.
TEST UNIT “D2”:

The remaining portion of Test Unit “D”, herein designated “D2” was also continued to a depth of two additional feet with a burial discovered in the southwest end of the trench. This will be described in greater detail below.

FIGURE 5. Open Sewer Trench facing east parallel to Amnicola Highway (SR58).
FIGURE 6. Structural remains in south profile of sewer trench

FIGURE 7. Excavating Test Unit "A" to confirm wall angle of the structure.
FIGURE 8. Test Unit "B" during excavation. The TAWC Distribution Complex is at the left.

FIGURE 9. Test Unit "B" showing structural remains. There is burned daub and thatch overlying a thin ash layer over the clay floor.
In the course of the present study, two features were discovered. Both of these were Missis-
sippian period structures originally noted in the open sewer trench.

FEATURE 1:

Feature 1 was a clay floor with collapsed wall material approximately one to one-and-a-half
inches thick appearing 2 feet below the surface in the south trench profile. In the opposing profile the
floor was noted terminating a few feet to the east in the north profile. This made possible an estimate
of the wall angle which would be extending in a southwesterly direction. Test Units “A”, “D” and “C”
confirmed this hypothesis. Large quantities of wall daub containing grass and leaf inclusions were
present. Wall posts were single set and approximately four to five inches in diameter. A thin layer of
ash covered the floor. Associated ceramics suggest that this structure is late Mississippian probably
Mouse Creek phase. A large portion of the floor remains archaeologically intact.

FEATURE 2:

Feature 2 consists of a clay floor with associated wall material approximately an inch thick
located four feet below the surface and two feet below feature 1 in the south profile of the sewer trench.
No further testing was conducted during the present study. However, the presence of Hiwassee Island
Complicated Stamped, Hiwassee Island Red Filmed and Hiwassee Island Red on Buff ceramics strongly
suggests this to be a Hiwassee Island phase structure.
DESCRIPTION OF BURIALS

Prior to the present investigation, it was documented that four human burials were destroyed by construction and/or vandalism in the right-of-way of SR 58 in front of the adjacent building. In order to make these burials a part of the record, they are herein referred to as burials 1 through 4. There is no available information concerning placement or sex. Presumably, all four were adults. Although provenience data pertinent to individual burial associations is lacking, it was possible to obtain some information on items removed from the graves by amateur collectors and construction personnel.

Items reportedly removed include a perforated spatular celt, copper earspools, flat engraved greenstone celt(s), shell gorgets and around 50 large conch columella beads. Of this material, the first celt has been photographed. To date it has been impossible to confirm the other items reportedly removed from this burial.

BURIAL NUMBER 5:

In the southwest end of Test Unit "D", at a depth of four feet, a human skull was encountered designated burial Number 5. Dirt was removed from around the skull to a distance deemed necessary to ascertain that no additional bones were present. Based on suture closings and skull shape, it is estimated that the individual was a male age between 25 and 30 years at death. The lower mandible and two vertebrae were present. Teeth, while showing some wear, were in reasonably good condition. The burial was backfilled with no further disturbance.

FIGURE 10. Burial Number 5 in west end of Test Unit "D2".
ARTIFACT ANALYSIS

During the course of the testing program, a total of 1,983 items (excluding non-worked bone and shell items) were recovered. This material has been broadly categorized as ceramics, lithics and worked bone, antler and shell. Each category will be described below.

CERAMICS

The highest quantity of cultural materials recovered during the testing program consisted of ceramics. 1,693 sherds, 87.6% of the total assemblage, were recovered. These are identified as follows:

Shell Tempered:

Mississippi Plain (Phillips 1970:130-135):

The majority of the ceramics recovered from the testing at Citico (87.8% or 1,487 sherds) is classified as Mississippi Plain on the basis of absence of surface decoration. As is known, this figure may be somewhat misleading in that many decorated types have design on a limited area of the surface thus leaving sherds from the remaining portions of the vessel classified as plain.

Mississippi Plain, with some regional variations, was the basic ceramic type throughout the late prehistoric lower Mississippi Valley phase. In the eastern Tennessee Valley, it is the dominant ceramic type throughout the Hiwassee Island, Dallas and Mouse Creek phases, and with minor variation continued in use among the historic Overhill Cherokees (King 1969:60).

Wall thickness varies considerably in the sample sherds, as do scrape marks from the smoothing process. Tempering is generally coarse to medium crushed shell and color varies from black to light tan. Sherds large enough to suggest vessel form indicated small to medium bowls and large globular jars. Both lugs and strap handles are present.

McKee Island Cord Marked (Heimlich 1952):

The second predominant ceramic type in the sample is McKee Island Cord Marked. A total of 71 sherds (4.2%) were recovered. McKee Island Cord Marked is found throughout the main Tennessee Valley and along major tributaries in both early and late Mississippian context. However, there appears to have been an increase in frequency during the late protohistoric phase (Faulkner 1968:25).

McKee Island Cord Marked is characterized by surface impressions of fine to coarse cord. There is frequently some surface smoothing that, in many cases, almost obliterates the cord marking. It is similar to the contiguous types Madisonville Cord Marked and Cox Farm Cord Marked (Griffin 1943:346-349). The vessel form is typically a medium to large jar with strap handles. Examples recovered during the testing are characterized by medium to coarse cord marking and all indicate subsequent smoothing. Apparently the entire body of the vessel was covered with the cord marking.
Laurel Incised (King 1969:64):

Laurel Incised is a variant of the outdated Dallas Decorated type (Lewis and Kneberg 1946:105) and is characterised by hachured triangles of parallel incised lines encompassing the portion of the vessel between the lip and the shoulder. In the case of strap handles, parallel lines commonly occur on the outer surface of the strap. The type is a local variant of Barton Incised of the Lower Mississippi Valley (Phillips, Ford and Griffin 1951:114-119). The most common vessel form is a globular jar with strap handles. 29 sherds (1.7%) were recovered during the testing. Tempering consists of medium to coarse shell. Most of the sherds clearly suggest the strap handled, globular jar commonly associated with this type.

Laurel Incised pottery occurs throughout the eastern Tennessee Valley. It appears to have begun with the Dallas phase continuing through the Mouse Creek phase into historic times in Tennessee.

Dallas Modeled (Lewis and Kneberg 1946:94-95):

This type occurs in late Mississippian context throughout the Tennessee Valley. It is characterised by zoomorphic forms usually applied to the rims of bowls. A total of 26 sherds (1.5%) is represented in the present sample. Most appear to represent fish or frog effigys. Stylized frog legs common to this type are clearly discernible on several sherds.

Dallas Filleted (Lewis and Kneberg 1946:105):

Dallas Filleted is commonly characterised by a notched applique present on the vessel just below the lip. Occasionally notching of the rim or lip without the added strip or, fillet, is found. The notching is done with a sharp tool or, in many cases, a fingernail. This style is a Tennessee Valley adaptation of late Lamar decorative techniques (Dickens 1979). The historic Cherokee rim treatment characterised by a folded or attached rim strip with notching at the base of the strip is derived from this type (King 1969:66-67). Although this technique of decoration can be found on almost any vessel form, it is most commonly associated with bowls.

Hiwassee Island Complicated Stamped (Lewis and Kneberg 1946:92-93):

Hiwassee Island Complicated Stamped is characterised by rectilinear designs impressed into the surface with a carved paddle. It appears to have been influenced by the Savannah Complicated Stamped and has been regarded as a determinant for the Hiwassee Island phase in the eastern Tennessee Valley. Vessel form typically consists of globular jars with loop or lug handles.

In the present sample 16 sherds (1.0%) were recovered. All bore indications of subsequent smoothing with some overstamping. Tempering is medium to coarse shell. All the sherds appear to be from large globular jars.
Moundville Black Filmed (Heimlich 1952:29-32):

Moundville Black Filmed is a well made pottery characterised by a glossy black slip. It is similar to the north Georgia type Etowah Polished Black (Sears 1958:191-192). The vessel form is usually a bowl. During the present investigation, 15 sherds (0.9%) of Moundville Black Filmed were recovered. They have fine shell temper and a well executed black slip.

Moundville Black Filmed seems to have been a tradeware. Though not common, it is found in the Tennessee Valley in late Mississippian context (Ball, Hood and Evans 1976:22).

DeArmond Incised (King 1969:62-63):

DeArmond Incised is a variant of the outdated Dallas Decorated type (Lewis and Kneberg 1946:105) and is characterised by well executed spirals, scrolls or concentric festoons, which encircle the rim of the vessel at intervals and are connected by multiple parallel horizontal lines. Although there are varying degrees of precision, there is generally a high degree of uniformity in the design. In some cases, the interval between the festoons is so close that the lowermost concentric circles are connected at the tangent point of the adjacent festoon. In these cases, only the festoons closest to the rim are connected by horizontal lines. This type is a Dallas variant of the Lamar Bold Incised (Jennings and Fairbanks 1939:4) type of northern Georgia. The vessel form is almost always a steep-shouldered cazuela bowl with the incising occurring between the shoulder and the lip.

A total of 7 sherds (0.4%) of DeArmond Incised is included in the present sample. All may be regarded as conforming to the above type description and all are from cazuela bowls.

DeArmond Incised pottery occurs throughout the eastern Tennessee Valley in late Mississippian context. The design persisted outside the Tennessee Valley into the historic period and occurs on vessels attributed to the Alabama-Creeks (Funderburk and Foreman 1967:Plate 127). Locally it is suggested that this represents a late Mississippian-protohistoric type (Evans, Hood and Lautzenheiser 1981:53).

Hiwassee Island Red on Buff (Lewis and Kneberg 1946:104):

This type is regarded as diagnostic for the early Mississippian Hiwassee Island phase in the eastern Tennessee Valley. It is characterised by a buff to tan colored vessel decorated with geometric designs applied in red paint. Vessel form is typically hemispheric bowls.

A total of three sherds (0.18%) were recovered during the present testing. They have fine shell tempering, are buff in color and are decorated in red stripes. All are too small to determine individual designs.
Hiwassee Island Red Filmed (Lewis and Kneberg 1946:104):

Hiwassee Island Red Filmed is a diagnostic type associated with the Hiwassee Island phase in the eastern Tennessee Valley. It is characterised by a buff colored clay with fine shell tempering having a well smoothed surface and filmed with iron oxide paint occasionally thick enough to suggest a slip. Vessel form is usually bowls but long-necked bottles also occur.

A total of 2 sherds (0.12%) occur in the present sample. They have fine shell tempering and a thick red slip.

Ten Mile Incised (King 1969:63-64):

Ten Mile Incised is a variant of the outdated Hiwassee Island Decorated type (Lewis and Kneberg 1946:105) and is characterised by a curvilinear incised gilloche-like design encircling the vessel. The elements of the "gilloche" consist of from three to six concentric "S" shaped lines. Usually the "gilloche" is broken so that the design resembles loosely curled interlocking whorls. This type appears to be a Tennessee Valley variant of the Ocmulgee Fields Incised type of Georgia (Jennings and Fairbanks 1939:5). The vessel form is usually a shallow bowl with straight to incurvate sides having the decoration incised just below the rim. Occasionally however, it occurs on bottles or globular jars encircling the thickest part of the vessel body.

One sherd (0.06%) of the present sample is Ten Mile Incised. It has medium shell tempering and appears to be from a shallow bowl.

Ten Mile Incised pottery is found throughout the eastern Tennessee Valley in late Mississippian context. It is regarded as typical of the late Mississippian-protohistoric occupation of this region (King 1969:64).

Salt Pan Fabric Marked (King 1969:113):

This type occurs throughout the eastern Tennessee Valley in late Mississippian context. Although commonly called salt pans, many were probably used for baking (Lewis and Kneberg 1949:90). The type is characterised by extremely thick walls, coarse shell tempering and fabric impression. One sherd of this type was recovered during the testing program.

Bell Plain (Phillips, Ford and Griffin 1951:122-126):

Bell Plain is the best example of prehistoric pottery in Tennessee. Vessel walls are very thin. The tempering is fine shell and the surfaces are extremely smooth, almost polished. Vessel form is usually shallow bowls or bottles. One sherd, light grey in color, was recovered during testing.
Undesignated Incised:

15 sherds (9%) of the sample were decorated by incising that conforms to no known type description. In most cases, these appear to be deep, randomly placed incised marks over the body of the vessel with much overlapping.

Undesignated Complicated Stamped:

One sherd (0.06%) of the sample was shell tempered with traces of complicated stamping too smoothed for proper identification.

Sand Tempering:

Etowah Smooth (Wauchope 1966:71-75):

Etowah smooth is a broad pottery type characterised by a plain surface and sand or sand and grit tempering. It is roughly a Georgia counterpart to Mississippi Plain and was a common pottery throughout the Mississippian period continuing into the late Lamar phase and the protohistoric Ocmulgee Fields. Vessel forms cover the entire range of shapes including globular jars, bottles, bowls and effigy forms. Two sherds of this type (0.12%) were recovered during the testing. Both contain heavy sand tempering and are similar in paste to the Lamar series.

Other Ceramic Items:

Ceramic Disks:

Six ceramic disks were recovered during the testing. Five of these were made from Mississippi Plain sherds and one from a McKee Island Cord Marked sherd. They are similar in size, and probably served the same function as the stone disks or “gamestones” which also occur on the site.

Pipe fragments:

Three fragments of shell tempered clay pipes were recovered. Two are clearly from pipe stems while the third appears to be a small portion of an effigy-shaped pipe bowl.

Clay Cylinder:

Half of a clay cylindrical tube was recovered during the testing. Size and shape suggest that this was probably a hair spool.
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**TABLE 1. Ceramics**
While not ceramics per se, large fired clay chunks associated with architecture were present in considerable quantity on the site. Two thick clay floors were defined and large pieces of wall daub containing heavy grass and leaf inclusions and, frequently, well defined imprints from wall posts were present in all test units. Representative samples were collected.

In summary, 40HA65 contains an abundance of Mississippian period ceramics. Culturally the assemblage contains diagnostic Hiwassee Island phase material, Dallas material and probably a high frequency of protohistoric Mouse Creek phase material. There is evidence of interaction with the Alabama Moundville phase and a more nebulous interaction or trade with the North Georgia Lamar phase. Excellent stratigraphy on this site presents a unique opportunity for further research aimed at better defining interaction and transitions of various Mississippian phase ceramics in the eastern Tennessee Valley.

LITHIC MATERIAL

Somewhat surprisingly, lithic material on 40HA65 occurs far less frequently than ceramics. Including flint knapping refuse, the lithic assemblage represents only 11.95% of the total assemblage. Most of the material is derived from streambeds and nearby outcrops containing Chickamauga Chert. Two flakes are identifiable as coming from the Dover quarries near the Cumberland River in Middle Tennessee. Quartzite from North Carolina was also present in the sample. Nine of the flakes exhibit thermal alteration in the form of pot liding and color alteration which has imparted a pink cast to the material (cf. Hood and McColough 1976). A portion of a stone bowl made from slightly metamorphosed sandstone typically found in the Blue Ridge foothills region was found. The base of a pipe made from soft greenstone typically found in the Hiwassee River valley was present. This diverse base of lithic raw materials is in keeping with other dimensions of cultural interpretation of the site. It also serves to support the interpretation of the cultural significance of the site and the complex sociopolitical structure at Citico (40HA65).

Sewer Trench Back Dirt:

In the back dirt removed from the initial sewer trench, 103 lithic items were recovered. These include two Madison type (Faulkner and McColough 1973:91) projectile points, one unidentified stemmed knife/projectile point made from a thin flake, approximately half of a bifacial blade, one bifacial side scraper, three greenstone celts fragments, a mortar and pestle made from river cobbles, a sandstone bowl fragment, a limestone gamestone and two quartzite gamestones (one unfinished). Flint knapping refuse included three cores, 29 thinning flakes, 20 decortation flakes and 32 flat flakes. There were five utilized flakes with wear patterns indicating minor use as scraping tools.

Test Unit “A”:

A total of 18 lithic items were recovered from Test Unit “A”. These include a limestone hoe, a biface scraper, and an unidentified basal fragment of a projectile point. In addition, there was one projectile point blank, one core, seven thinning flakes, two decortation flakes and four flat flakes.

Test Unit “B”:

There were 62 lithic items recovered from Test Unit “B”. These include one celts fragment, four unfinished gamestones, three bifacial scrapers, one Madison type projectile point, two unidentified proximal portions of projectile points. Also there was a projectile point blank, 22 thinning flakes, 16 decortation flakes, and nine utilized flakes exhibiting wear marks on at least one side.

Test Unit “C”:

Test Unit “C” contained 46 lithic items. These included the basal portion of a Dallas projectile point (Cambron and Hulse 1964), a Guntersville projectile point (Scully 1951), an unidentified basal portion of a projectile point, two unidentified proximal portions of projectile points and the basal portion of a stone pipe made from soft greenstone. Charred smoking material was still present in the pipe.
addition, there were three cores, 19 thinning flakes, eight decortation flakes, eight flat flakes and two utilized flakes with noticeable wear patterns.

**Test Unit “D”:**

Test Unit “D” contained 46 lithic items. These included a quartzite scraper/knife, two madison type projectile points and two proximal portions of Madison type projectile points. Lithic waste included one core, seven thinning flakes, 13 decortation flakes, 18 flat flakes and two utilized flakes with discernible wear patterns.

**Test Unit “D1”:**

Test Unit “D1” contained 43 lithic items. One of these was an extremely well made bifacially flaked chert drill pointed at either end. Heavy wear patterns are present at one end. In addition, the basal portion of a Dallas type projectile point and one unidentified basal portion of a projectile point. Lithic waste included 17 thinning flakes, nine decortation flakes, 11 flat flakes, and three utilized flakes.

**Test Unit “D2”:**

This unit contained a limestone hoe and half of a greenstone celt. Lithic refuse included one thinning flake, seven decortation flakes, two flat flakes and one utilized flake.

In summary, it may be said that results of analysis of lithic material collected during the testing program are consistent with what is to be expected on a late Mississippian period site. However, the size of the sample is too small to make meaningful inferences at this time. It is hoped that future work may result in a broadening of our database considering lithic industries at Citico (40HA65).

**BONE, ANTLER AND SHELL:**

**Bone Pins:**

Sections of two bone pins were recovered during the testing program. One of these was small and appears to have been made from polished bird bone. The second was oval shaped in cross section and made from split deer bone. It had been fire-hardened and polished to a glossy black. These pins were probably worn as hair ornaments.

**Bone Awls:**

Two bone awls were recovered. Both are splinter awls and were probably manufactured from split deer bone.

**Antler Projectile Points:**

Two highly polished antler projectile points were recovered during the testing. One of these
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<th>B</th>
<th>C</th>
<th>D</th>
<th>D1</th>
<th>D2</th>
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<td>46</td>
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**TABLE 2. Lithic Material**
is complete with the other being broken at the base.

Shell Beads:

Two marine shell beads were recovered. These were probably made from conch columella obtained from the Gulf of Mexico. Being of the "seed bead" variety, they are quite small and were probably sewn onto clothing as a decoration.

Other:

One large section of antler was recovered still attached to a portion of the skull. This may have once been a portion of a headdress.

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TABLE 3. Bone, Antler and Shell
FAUNAL ANALYSIS

During the course of the investigation, 902 specimens of vertebrate remains were recovered. Many of these were small fragments, several had been burned and others cracked during the eating and cooking process. Consequently, 661 (or 73.3%) remain unidentified. Of the identified material the most prevalent (118 pieces or 13.1%) is Whitetail Deer (Odocoileus virginianus). Next in quantity, represented by 44 pieces (or 4.9%) is Wild Turkey (Meleagris gallopavo). Next in quantity is the Black Bear (Ursus americanus) represented by 18 pieces (or 2%). Next in quantity, represented by 16 pieces of the shell (or 1.8%) are turtles - probably Box Turtles (Terrapin carolina). Identifiable fish bones, 13 samples (or 1.4%) were those of the Drum Fish (Aplodinotus grunniens). It was mainly the portion bearing the pharyngeal teeth that was found. Twenty-four unidentified bones from waterfowl were found. The upper mandible of a small heron was identified along with two other mandibles from undetermined species. Two dog teeth were present. One bone each was identified from Opossum (Didelphis marsupialis) and Muskrat (Ondatra zibethica). Three bones were also present from unidentified small rodents. A representative sample of shell material was collected. Apparently several univalve species were eaten, especially the Periwinkle (Pleurocara canaliculatum) and Spiny River Snail (Io fluvialis). Several other species of freshwater and land snails were present in the test units. Moderate quantities of freshwater Mussels (Unio sp.) were present throughout the site. These were gathered for tempering in pottery and in search of freshwater pearls as well as a food source.

FIGURE 12. Faunal material from Citico (40HA65) Deer Antler, Turtle carapaces, Deer metatarsal, Drum Fish bone bearing pharyngeal teeth, Opossum mandible and Deer mandible.
<table>
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<th>C</th>
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<th>D2</th>
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**TABLE 4. Faunal Material**
CONCLUSIONS and RECOMMENDATIONS

CONCLUSIONS:

The present project was designed to be an archaeological testing program on the Tennessee American Water Company (TAWC) portion of the Citico site (40HA65) for the purpose of evaluating potential cultural resources on TAWC property. A secondary objective was to evaluate structural remains exposed by the sewer project in the state right-of-way. In terms of these goals, the test excavations were highly successful. It was demonstrated that in this area there was no subsurface disturbance below a depth of approximately two feet. Vast amounts of in situ cultural material and features are present. By extrapolation, it can be expected that a similar situation will exist on adjacent properties on both sides of Amnicola Highway (SR 58). Given the known significance of 40HA65, the importance of undisturbed material is self-evident. This site, once thought to be totally destroyed (Hatch 1976), offers unique opportunities for long range research and has a high potential for a meaningful contribution to the scientific study of human life and culture. A number of problem oriented lines of research that would be highly productive in terms of data can be suggested and they will be discussed below.

The fact that 40HA65 is a long-term multicomponent site, means that it will be possible to deduce fine points of socio-political evolution, isolate ceramic variations, and greatly upgrade the definition of the various Mississippian phases, both in terms of internal context and in broad regional patterns of interaction.

This site presents an excellent potential for investigating and defining Hiwassee Island phase and Dallas phase relationships as well as Dallas and Mouse Creek phase relationships and/or interaction. In addition, intensive investigations of the site could produce a vast amount of data regarding prehistoric trade routes and interaction spheres in general.

Since it was one of the major chiefdoms in the Southeast, investigations of Citico provide an excellent opportunity to determine relationships between the central community and outlying satellite communities such as the Audubon Acres site (40HA84), Williams Island (40HA223), Moccasin Bend (40HA146) and the now inundated Dallas and Hixson sites.

40HA65 offers unique opportunity for the detailed study of terminal Mississippian culture in east Tennessee. It is possible that the site will yield meaningful insights between the late Mississippian/protohistoric and documented populations of the region.

The presence of very early European material documented by C.B. Moore demonstrates that the site was occupied during contact. It therefore has a unique potential for providing significant data concerning routes and activities of early European explorers as well as the movement of European artifacts during the Spanish Colonial period.

In summary, Citico (40HA65) is a valuable cultural resource and all efforts should be made to properly manage and preserve these irreplaceable scientific data. With this thought in mind, the following recommendations are offered:
RECOMMENDATIONS:

While the present investigation has only considered that portion of 40HA65 which is located on TAWC property, the future research potential extends far beyond the area currently tested. The following recommendations are specifically offered concerning the TAWC property but would equally apply to any other undisturbed portion of the site.

1. **Preservation**: It is important that at least a part of known intact portions of the site be preserved for the future. This will enable even more meaningful research in years to come as well as providing the potential for confirmation of existing hypotheses through the use of more advanced techniques in the future.

2. **Curation/Interpretation**: Cultural material from Citico has a high degree of significance to the local area and offers an excellent opportunity for future research. This being the case, it is recommended that some form of public interpretation and permanent artifact curation be arranged.

3. **Background Documentation**: As has been noted above, large quantities of material have been removed from Citico (40HA65) over the last 150 years. Much of this material is now known to be in such places as The Museum of the American Indian - Heye Foundation, The Smithsonian Institution, The Philadelphia Academy of Sciences, The McClung Museum and assorted private collections. It would be a valuable asset to future research to examine and document this material photographically. This is a project that would be extremely cost effective in terms of data yield and could be done very rapidly.

4. **Depth Determination**: It is recommended that a small unit be excavated to whatever depth is needed to ascertain what lies beneath Hiwassee Island phase material and to determine total depth of undisturbed cultural material on the site.

5. **Structural Investigation**: It is recommended that the disturbed material be stripped from one corner of the exposed structure in order to facilitate an excavation to better determine the architecture.

6. **Problem-oriented Research**: Systematic, problem-oriented research including excavation aimed at seeking answers to some of the questions posed above would be very worthwhile on this site. These questions are of extreme importance to properly understanding this region’s past. Multiple funding sources could be used over a long period to vastly add to our knowledge of human activity through time.

7. **Testing and Mapping**: All portions of the Citico site (40HA65) should be tested for the presence of in situ cultural materials and a detailed map prepared based on cultural testing that will delineate all areas still containing such materials. Such a document would be invaluable to conscientious planners, developers and government officials throughout coming years.
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