A Proposal for

Phase III Archaeological Data Recovery of a Proposed 2.5 Acre Development Parcel at Tennessee River Mile 464.5R in Chattanooga, Hamilton County, Tennessee.

Presented To

MAP Engineers
7380 Applegate Lane
Chattanooga, Tennessee 37421
423.855.5554; Fax 423.485.8110

And

Tennessee Valley Authority
Office of Natural Resources
400 W. Summit Hill Drive
WT 11D-Cultural Resources
Knoxville, Tennessee 37902
865.632.2453 Fax 865.632.3853

Presented By

Dr. Nicholas Honerkamp, Director
Jeffery L. Brown Institute of Archaeology
University of Tennessee at Chattanooga
615 McCallie Avenue
Chattanooga, TN 37403

MAY 9, 2008

Introduction

In the summer of 2005, DeFoor Brothers Development requested a 26a permit from the Tennessee Valley Authority (TVA) for the construction of a residential development on the north shore of Nickajack Reservoir, Hamilton County, Tennessee. Based on Phase I and Phase II testing of 40HA524 by Alexander Archaeological Consultants, TVA determined that the site met the criteria of eligibility for the NRHP and would be adversely affected by the proposed project; the Tennessee SHPO concurred with this finding. Hence a Phase III excavation is necessary to investigate significant archaeological remains at the site. MAP Engineers of Chattanooga (hired by the DeFoor Brothers) contacted the Jeffery L. Brown Institute of Archaeology to carry out the final phase of archaeological fieldwork.

The project involves 2.5 acres on a parcel of land previously occupied by Fehn's Restaurant at Tennessee River Mile 464.5R in downtown Chattanooga. Following a short synopsis of previous research completed by Alexander Archaeological Consultants, a Phase III research plan is outlined that takes into consideration a number of components, including the TVA scope of work for the Phase III investigation, the site's floodplain environment, the location of modern disturbances such as sewer pipes, and the depth of areas to be excavated.

Previous Research

In 2006, Alexander Archaeological Consultants, Inc., (AAC) conducted a Phase I survey of site 40HA524 that included the mechanical excavation of six backhoe slot trenches and the hand excavation of seven test units (50 cm by 50 cm) within the project area (Alexander 2006). Phase I testing determined that the site could be considered eligible for listing in the NRHP and could not be avoided by the proposed development. Using ACC, the project sponsor opted to move forward with Phase II testing to determine the site's eligibility.

AAC began Phase II testing in the summer of 2006 (Wolke and Alexander 2006). The testing consisted of four hand excavated and water screened test units. These units measured 1m x 2m and extended to a depth of 2 m. The units were adjacent to 2 track hoe excavated trenches which were 15 meters long and 1.6 meters wide; deep core samples were also taken. Results of this testing indicate the site may have been occupied into the Early Archaic period (8000 B.C.). Occupation of the site continued through the Woodland period (1000 B.C. to A.D. 1000) and into the Mississippian period (A.D. 1000-1400). Excavations conducted during the Phase II testing were limited to the top two meters of deposits, focusing primarily on the Late Archaic and Woodland period occupation of the site. The depth of testing was limited because OSHA requirements would have resulted in a much larger excavation to reach lower deposits. Testing of the lower deposits would result in an excavation on the scale of Phase III data recovery.

AAC collected geo-core samples throughout the project area to investigate the early deposits without adversely effect the upper archeological occupations through large-scale excavations. This method collects soil core samples to depths greater than six meters. During the testing of 40HA524, the consultants were unable to access deposits

beyond six meters due to the nature of the alluvial soils at this depth. The geomorphological testing of 40HA524 allowed archaeologists to examine the formation of the floodplain in this location and identify human occupation through the analysis of micro-artifacts and core sample botanical remains.

AAC encountered eight prehistoric cultural components that included the Archaic, Woodland and Mississippian periods. Further investigations were recommended due to the likelihood that additional significant features would be discovered at the site: given the results from the Phase I and II projects, the archaeological record would likely yield further information on the prehistory of the Tennessee River Valley. Therefore TVA proposed mitigation of 40HA524 was needed, with special attention for the Early Archaic component that was not fully investigated in the initial projects.

Research Design

During Phase II testing, Archaic fills and artifacts were located, but the depth of deposits and constraints from OSHA regulations restricted the scope of the testing. Phase III excavations will specifically target Archaic period fills located at a depth of 4 to 5 meters below surface.

The Archaic components at the site are believed to be located on a T1 terrace that was formed by the accumulation of sediments during the transition of the Pleistocene to the Holocene periods. This also marks a shift between Late PaleoIndian and Early Archaic adaptations. The Tellico Dam Little Tennessee River Valley Projects provide prime examples of Archaic occupations in east Tennessee (Chapman 1977). Because Archaic fills are believed to be located within the T1 terrace at the site, further research may provide additional evidence of Early Archaic occupations within the Tennessee River Valley.

David Anderson and Glen Hanson have provided a model for Archaic settlement organization in the Southeast. This model proposes the occurrence of band level and macro-band level settlements (Anderson 1996:29). These consist of seasonal base camps during the winter (macro-band level) and a series of short term field camps during the spring, summer and fall (band level). One question the Institute hopes to address is whether 40HA524 is a base camp, activity site or a field station. This can be accomplished by comparing our data set with that from other data sets from sites such as Icehouse Bottom, Rose Island, Calloway and Bacon Farm in the Little Tennessee River valley (Chapman 1977, 1987). These sites were all deemed to be base camp sites with Early Archaic artifact densities ranging in the hundreds per square meter (Kimball 1996:149, in Anderson 1996).

A major discussion in Tennessee archaeology today is the need to address the nature of Early Archaic social systems compared to other regional variations and to other periods, namely Late PaleoIndian and Middle Archaic (McMillan et al. 2007). Data recovery at 40HA524 may allow us to make such comparisons. Because of this, discovering the site's function is the primary research goal of this project. Specifically, the Institute will use lithic data as well as data from faunal, botanical, and geomorphology analyses to interpret the site's function as either a seasonal base camp or a field camp. Our analyses should produce information related to Early Archaic site-specific activities. Lithic analysis will not only produce temporal information (for

instance, corroborating or refining the early side notch to Kirk sequences) but also provide insight about whether this site focused on lithic production or was used primarily for hunting. Faunal and ethnobotanical analyses are critical for generating data on diet, subsistence strategies, and seasonality (for instance, the use of hickory versus acorn; McMillan et al. 2008:32). Geomorphology will not only aid in interpreting the depositional sequencing of this site, but will also provide a geographic explanation of the site's morphology during the Early Archaic period. In discerning the site's function, future researchers will be able to use this data to clarify the understanding of Early Archaic environments and adaptive strategies in the Tennessee River Valley and in the Midsouth (McMillan et al. 2007:50).

Methodology

The methodology presented below is based on specifications in the Scope of Work presented by TVA and the Tennessee Historical Commission. Any deviation from the Scope of Work will be submitted to TVA for approval. The approach taken by the Institute will be to closely monitor the mechanical stripping of an approximately 100 meter-long trench to a depth of approximately four meters in order to intersect the T1 surface at the site. This unit will be parallel to the Tennessee River. Additional trenching and excavation within the initial first trench is expected to generate data associated with Archaic cultural horizons at 40HA524.

The complexity of excavating and analyzing deep Archaic deposits at this site demands confident players. Specialized analyses of faunal/botanical remains and geomorphological samples will be undertaken at the Archaeological Research Laboratory (ARL), University of Tennessee-Knoxville, under the supervision of Dr. Kandace D. Hollenbach, and Dr. Sarah C. Sherwood, respectively. The ARL has direct, first-hand experience with the site from previous involvement through work on the Phase II project.

A crucial component for the fieldwork phase is to identify a competent earth-moving firm that is capable of responding to both the large scale of the project as well as the sometimes delicate nuisances of archaeology. The Stein Construction Company has worked with the PI on several archaeological projects in the past and has demonstrated sensitivity to the exigencies of archaeological research. This licensed and insured subcontractor possesses the experience, heavy equipment, and (most importantly) skilled operators who are familiar with coordinating mechanical stripping procedures with the special demands of archaeological monitoring. In addition, this firm has already worked out the safety and environmental logistics of the site in order to meet OSHA standards. This includes erosion screens, safety fencing, backfilling and the important terracing back of the of the trench walls for safety.

Monitoring

Tentatively, data recovery is set to begin the second week of June 2008 and will last approximately 14 weeks. The first stage will be to closely monitor mechanical stripping of deposits that lie over the targeted T1 terrace.

Using a trackhoe provided and operated by Stein Construction Company, the area will be stripped to the extent necessary to met OSHA standards to create a roughly 6

meter to 100 meter working surface about 4 meters deep. Historic fills located above undisturbed strata may be removed in bulk to expedite the excavation process. Special attention will be paid to undisturbed horizons that have not been impacted by modern earth-moving activities associated with the former restaurant. Any unique features (or those resembling burials) will be examined and investigated further. Unique features include, but are not limited to, postholes present in a pattern that might indicate a structure of some type, evidence of buried surfaces that might indicate such features as house floors, etc., oblong or other similar size features that might be indicative of a human burial, or any other unique features that could provide significant information on the Woodland or Mississippian occupations in this region.

Initially two archaeologists will monitor the historic fill removal in the initial trench. Once historic fills are removed, up to three archaeologists may be involved in the monitoring. The archaeologists will examine, photograph, map, bisect, profile and sample any features identified while the third continues monitoring when we reach prehistoric levels. A minimum 4-liter sample (or available volume, if less) will be taken from the fill of each feature for flotation/fine screening with the remaining feature fill being screened through ¼ inch mesh screen. This five-liter minimum is recommended by ARL for effective identification of archaeological materials derived from float/fine screen samples in this region. Artifacts recovered in this process will be bagged and labeled by approximate provenience. Should any burials be indentified in these deposits all work shall cease immediately and the Tennessee State Archaeologist and TVA's Cultural Resources staff will be notified. Work within 25 feet of a burial shall not proceed until appropriate consultation has taken place by TVA. Monitoring is expected take up much of the first month of fieldwork.

Field Excavation

Intensive Phase III data recovery begins once monitoring is completed and after all features are examined on the trench working floor. Three 30 meter by 2 meter secondary trenches will be placed within this base of surface excavation to a depth of 2-3 meters below the primary trench surface (or to a depth possible given the existing water table and OSHA safety standards).

The Institute shall excavate twelve (12) to eighteen (18) 1 m by 2 m test units adjacent to these trenches. Locations of each trench and test unit will be mapped using a total station that is tied to GPS coordinates. Excavations will be conducted in 10 cm arbitrary levels within the natural stratigraphy. All deposits will be screened with ¼ inch mesh screen. All artifacts recovered will be bagged and labeled by provenience. In addition, four liter soil samples for both faunal and floral analysis will be obtained from a control block established in selected excavation units. These samples will be taken from each ten centimeter level. The Institute will excavate all cultural features encountered using standard control techniques. Each feature will be mapped, photographed, bisected, profiled, and sampled. A minimum five-liter sample (or available volume, if less) will be taken from the fill of each feature for flotation/fine screening with the remaining feature fill being screened through ¼ inch mesh screen. If merited by a significant number of features, lack of notable ethnobotanical material or other extenuating circumstances, a sampling scheme for analysis will be determined by the archaeologists that would be

subject to approval by both TVA and the SHPO. Should any burials be indentified in these deposits all work shall cease immediately and the Tennessee State Archaeologist and TVA's Cultural Resources staff will be notified. Work within 25 feet of a burial shall not proceed until appropriate consultation has taken place by TVA.

The Institute proposes to excavate one trench at time in order to limit the amount of possible standing water in the working area. In order to finish field work by the end of September, a minimum of an 8 person crew is needed with the option of adding 2 archaeological field technicians. This number includes two project supervisors and one crew chief who is also a prehistoric specialist. The PI will also participate in the field work as needed. Starting in July, each trench with associated 1m by 2m test units (a minimum of four each) shall be completed in intervals. When fieldwork is concluded, tentatively at the end of September, Stein Construction Company will backfill the site.

An ARL Geoarchaeologist will periodically work alongside the UTC archaeologists in the field. As defined in the proposal set fourth by the ARL, the Geoarchaeologist will perform three main services. First, the Geoarchaeologist will document the site by pedestrian survey which includes field observation and digital photographs. Second, description and documentation of the trench profiles will be taken to correlate soil horizons with the archaeological strata. The third service will be to consult with the field director during fieldwork on observations, descriptions, and recommendations. ARL will submit a management summary to the Institute within one week of completion of the fieldwork. Within a maximum of four weeks from the submission of the summary, a full draft report will be submitted to the Institute. The technical report of the geoarchaeological evaluations will incorporate the initial goals of the project, methods, profile descriptions and discussion of the results. ARL will provide other relevant maps, figures and photographs in the report.

A management summary will be submitted to TVA within a month after completion of fieldwork, tentatively the end of October 2008. A full draft report shall be completed after four months of analysis. A completed report will be submitted by the month of May 2009, depending on TVA's comments. The Institute will generate a detailed topographic map of the site following completion of the excavations, including the natural features of the surrounding landscape, the placement of the excavations (mechanical and hand), and the location of all features (cultural and natural) encountered during the excavations within the site.

- Fieldwork - *June ~ September*
- Management Summary – *Completed End of October*
- Lab/Report – *Draft Report Completed End of February*
- Final Report – *Completed May 2009*

Laboratory Analysis

Laboratory analysis will follow the Phase III fieldwork with appropriate procedures implemented. All data including artifacts, soil samples (i.e. soil, radiocarbon, etc.) and documentation (i.e. field records, maps, photographs, etc.) recovered will be

processed. Lab analysis at the Institute will follow standard procedures of washing, sorting artifact by class and quantifying all material by either count and/or weight. Special analysis, such as radiocarbon dating, fauna/flora analysis and geomorphological analysis will be conducted as warranted by the nature of the recovered material.

Laboratory analysis following field excavations will require full-time lab technicians and a lab supervisor. Lab analysis should take four to five months to complete, with two weeks for the curation of materials. Any archaeological materials recovered, except human remains and associated funerary objects, are the property of the private developer. This material will be returned and placed in the sponsor's care upon completion of the laboratory analysis and final report or may be placed within the curation facilities at the University of Tennessee of Chattanooga under a separate curation contract. Curation will be provided by the Institute. Since the volume of curated materials is impossible to predict, a total of 8 cubic feet of curated material is being budgeted. Anything over that amount will be charged at the rate specified in the proposed budget ARL will conduct the paleoethnobotanical analysis of at least 30 column samples collected during fieldwork. Analysis includes involvement of at least two professional paleoethnobotanists and a lab technician. ARL will conduct floatation analysis of the sampled material. ARL will also provide the analysis and report on faunal remains found during the fieldwork. The Institute will consult closely with the ARL personnel concerning the submission of selected samples for up to eight radiocarbon dates by Beta Analytical, Inc.

Report Writing

A report generated from the investigation will provide details on field and laboratory methodology as well as an overview of previous research at the site. The report will incorporate the research design, a discussion of field methodology and any modifications (prior to TVA approval) to the research design resulting from experience in the field, descriptions and location of all area investigated, and provide appropriate reporting of all cultural materials and specialized studies generated by the project.The final report will conform to professional standards and the Tennessee Division of Archaeology guidelines.

The JLB Archaeology Institute shall submit 20 copies of a draft report with a digital copy (PDF format) on CD to TVA Cultural resources for review of findings and recommendations. TVA will review the report and submit its findings and recommendations to the SHPO and culturally affiliated Native American Tribes. After receiving the review comments, the Institute will produce a final report that incorporates the changes requested by TVA Cultural Resources. Digital copies of the final report, in PDF format, will be submitted to TVA and the sponsor.

Personal Qualifications

Dr. Nick Honerkamp serves as the Principal Investigator and Director of the Jeffery L. Brown Institute of Archaeology at the University of Tennessee at Chattanooga. Dr. Honerkamp assumed his post in December 1980 following the award of his Doctorate in Anthropology from the University of Florida. Honerkamp's areas of expertise include historical and prehistoric archaeology. He has directed over 40 research projects in Tennessee, including several projects in the Tennessee River Valley.

Krista Jordan-Greene serves as a project supervisor for the JLB Institute of Archaeology. She has over 9 years of archaeological fieldwork experience in prehistoric and historic sites in Indiana, Florida, Utah and Belize. She received her M.A. from the University of West Florida in anthropology in 2007.

Jim Greene serves as a project / lab supervisor for the JLB Institute of Archeology. He graduated from the University of Tennessee at Chattanooga in Anthropology and is receiving his masters from the University of West Florida in Historical Archaeology. He has served as a project supervisor and crew chief on a several historic and prehistoric sites in Tennessee and Florida.

Chris Mickwee will serve as the crew chief on this project. He has participated in excavations and research in Belize for the Maya Research Program and has excavated throughout the southeastern United States, working with various universities and CRM entities. Chris has worked extensively with the UWF Archaeology Institute in all phases of archaeological research for over 6 years. His research interests include the dynamics of Late Woodland culture change, the archaeological signatures of mobility and economic practices, and the patterns of cultural influence between major river valleys and peripheral regions. He is receiving his M.A in Anthropology from the University of West Florida in 2008 with an emphasis in prehistoric archaeology.

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Defoors Downtown Condos [800.11(e) Documentation]
As of December 15, 2006
Nickajack Reservoir ~ Hamilton County

Description of the Undertaking
TVA received a 26a permit request from Defoor Brothers Development for a the placement of fill on a 2.5 acre tract along the Tennessee River (RM 464.5R) on Nickajack Reservoir in Hamilton County, Tennessee for the purpose of constructing a residential facility. Plans for the residential structure include the placement of approximately 3800 cubic yards of fill, excavation of an underground parking facility, and construction of a six-story condo building. Additional surface parking is to be located on the north side of the building. It is our understanding that the construction would require placement of deep pilings as foundation footers. During review of the proposed plans, it was determined that this undertaking had the potential to affect historic properties that may be present. The area of potential effects was determined to be all areas to be included in the proposed fill/construction (approximately 2.5 acres). Additional information regarding the site, site photographs, maps, and drawings are available in the Phase II Testing report (Wolke and Alexander 2006).

Description of the Steps Taken to Identify Historic Properties
Results of a desktop review indicated that the project area had not been previously surveyed. Archaeological sites have been previously recorded all along the river adjacent to this tract and it was known that the project area had a high potential for archaeological sites to be present given its location on an alluvial terrace adjacent to the Tennessee River. Previous archaeological investigations have shown us these types of locations are prime settings for aboriginal occupations. Project management notified CR staff that the area had been previously disturbed from the presence of a restaurant and other facilities. These facilities had all been demolished and the property consisted of a grassy lawn with adjacent parking. A field review was conducted by TVA Cultural Resources staff to determine the extent of disturbance in this area. Based on this review, it was clear that while the site had been impacted, the potential for deeply buried deposits was likely in this location. CR Staff requested the applicant provide TVA with the results of soil borings taken by the developer. These soil borings confirmed the presence of intact alluvial deposits to depths as great as 40 feet. Disturbance was limited to one to eight feet in depth. CR requested a phase I survey from the applicant. This survey was completed in December 2005. Results indicated the potential for intact archaeological deposits to be present beneath the disturbed areas. The applicant's archaeological consultant recommended Phase II testing if the site could not be avoided.

The developer determined that the site could not be avoided. TVA requested Phase II testing of the site and received a report in October 2006. Results of the archaeological testing indicate the site may have been occupied as early as the Early Archaic period (approximately 8000 B.C.). Occupation of the site continued through the Woodland period (1000 B.C. to A.D. 1000) and into the Mississippian period(A.D. 1000-1400). Excavations conducted during the Phase II testing were limited to the top 2 meters of deposits, focusing primarily on the Late Archaic and Woodland period occupation of the site. The depth of testing was limited because OSHA requirements would have resulted in a much larger excavation to reach the lower deposits. Testing of the lower deposits would result in an excavation on the scale of Phase III data recovery.

To investigate the early deposits without conducting major excavations that could adversely effect the upper archaeological occupations, the consultant subcontracted with the University of Tennessee to conduct geomorphological testing through the excavation of geo-core samples across the property. This method collects soil core samples to depths greater than 6 meters. During the testing of 40HA524, the consultants were unable to access deposits beyond 6 meters due to the nature of the alluvial soils at this depth. The geomorphological testing of 40HA524 allowed archaeologists to examine the formation of the floodplain in this location and identify human occupation through the analysis of microartifacts. Artifacts and botanical remains are collected from the core samples and processed and examined through a microscope. Archaeologists are able to estimate the density of archaeological deposits that may be present at these levels.

Timeline

- A phase I archaeological survey was conducted on the property in December 2005. (The purpose of phase I survey is to identify properties [archaeological sites, buildings, etc] that may be eligible for listing in the NRHP.)
- Phase I survey identified site 40HA524 within the project area. At this time, the site investigations were limited to the top 2 meters of deposits. The site was determined to be potentially eligible for listing in the National Register of Historic Places (NRHP)
- The developer chose to proceed with Phase II testing of the site - stating that it could not be avoided by construction activity. Phase II testing was conducted in June 2006. (The purpose of Phase II testing is to evaluate a property for eligibility for listing in the NRHP.)
- Phase II report was submitted to TVA in October 2006. Results indicate the archaeological site is a deeply stratified, multi-component site dating from Early Archaic period through the Mississippian period. Archaeological deposits reach a depth of 4-6 meters and likely extend deeper (deeper deposits could not be reached by coring). The site contains relatively well-preserved botanical remains (plant/charcoal remains) that date to the Early Archaic period. Very little is known about the Early Archaic in this region.
- TVA has reviewed the Phase II report and finds that the site meets the criteria of eligibility for listing in the NRHP.
- TVA submitted these findings to the State Historic Preservation Officer (SHPO) in a letter dated November 14, 2006. Our determination is that the project, as currently proposed, would adversely affect site 40HA524.
- The SHPO has concurred with this finding in a letter dated November 20, 2006.

Eligibility of 40HA524

Carbon samples collected from the geo-cores at 40HA524 were used to radiocarbon date the occupation of the site to at least 4350 B.C. Preserved botanical remains were identified at this depth indicating the potential for archaeological features that could provide archaeologists with information about subsistence practices and the seasonality of use of the site by these early inhabitants. Because very few Archaic sites have been investigated in this region, there are significant gaps in the archaeological data regarding this early occupation. Excavation of this site would contribute to our understanding of

Archaic peoples and could provide information to help archaeologists define this cultural period.

Phase II archaeological testing of 40HA524 focused on the Late Archaic and Woodland period occupations. Archaeological features that were identified include hearths and pit features. Specific activities that are believed to have occurred at the site include nut and other foodstuff processing, cooking, food storage, and tool manufacturing, all suggesting that the site was used for long-term habitation. Based on the types of plant materials present at the site, it is believed that the site was primarily occupied in the late spring through early fall. The Woodland period represents a period in time when prehistoric Native Americans began domesticating indigenous wild plants and 40HA524 shows evidence of the use of such plants. The Woodland period is also significant for its involvement in regional trade of exotic materials and use of burial mounds to inter the dead. Evidence of this activity does not appear to be present and the relationship of this type of site to the more elaborate Woodland period sites on nearby Moccasin Bend could be examined with further excavation.

Research questions that can be addressed from 40HA524 are detailed in a "Statement of Significance" provided by Alexander Archaeological Consultants, Inc. (Appendix A). This document was provided to TVA on request as this information was vital to making a determination of eligibility for the site. Based on the information provided thus far by Phase II testing and the potential for the site's potential to provide additional information, TVA has determined the site meets the criteria of eligibility for listing in the National Register of Historic Places (NRHP) under Criterion D. The requirements for Criterion D include:

- The property must have, or have had, information to contribute to our understanding of human history or prehistory, and
- The information must be considered important.

This argument has been made because the site has the ability to provide answers to the research questions outlined in Appendix A. In addition, the site contains intact Archaic deposits that will provide information about a period where gaps exist in the current body of knowledge.

Determination of Adverse Effect

Adverse effect determinations are summarized in 36CFR part 800.5(a)(1-2):

> *An adverse effect is found when an undertaking may alter, directly or indirectly, any of the characteristics of a historic property that qualify the property for inclusion in the National Register in a manner that would diminish the integrity of the property's location, design, setting, materials, workmanship, feeling or association. Consideration shall be given to all qualifying characteristics of a historic property, including those that may have been identified subsequent to the original evaluation for the National Register. Adverse effects may include reasonably foreseeable effects cause by the undertaking that may occur later in time, be farther removed in distance or be cumulative.*
>
> *(2) Examples of adverse effects.*
> *Adverse effects on historic properties include, but are not limited to:*
> *(i) Physical destruction of or damage to all or part of the property;*

(ii) Alteration of the property, including restoration, rehabilitation, repair, maintenance, stabilization, hazardous material remediation, and provision of handicapped access, that is not consistent with the Secretary's Standards for the treatment of historic properties (36CFR part 68) and applicable guidelines;
(iii) Removal of the property from its historic location;
(iv)Change in character of the property's use or of physical features within the property's setting that contribute to its historic significance;
(v) Introduction of visual, atmospheric or audible elements that diminish the integrity of the property's significant historic features
(vi) Neglect of a property which causes its deterioration, except where such neglect and deterioration are recognized qualities of a property of religious and cultural significance to an Indian tribe or Native Hawaiian organization; and
(vii) Transfer, lease, or sale of property out of Federal ownership or control without restrictions or conditions to ensure long-term preservation of the property's historic significance.

An adverse effect occurs when a characteristic of a historic property that qualifies it for eligibility is diminished.

40HA524 is eligible for the NRHP under Criterion D (i.e. it is likely to yield important information that will contribute to our understanding of human prehistoric) (National Register Bulletin #15). Once a building or so much fill is placed on top of the site that it is impracticable to access the site, it can no longer yield important information; therefore it has affected the characteristic that qualified it for eligibility.

In addition, placement of such a large facility on top of alluvial sediments would result in some level of soil compaction. This compaction could adversely affect intact archaeological deposits resulting in physical destruction of the site.

Documentation of Consulting Party Viewpoints
TVA has submitted findings to the Federally recognized Indian tribes. These letters were sent on December 7, 2006. No comments have been received to date.