

Document Type: EA-Administrative Record
Index Field: Final Environmental Document
Project Name: Eagle's Landing Golf Course Expansion
Project Number: 2008-18

FINAL ENVIRONMENTAL ASSESSMENT

EAGLE'S LANDING GOLF COURSE EXPANSION, BRIDGES, AND SANDERS ISLANDS FILL LITTLE PIGEON RIVER MILE 2.4 Sevier County, Tennessee

PREPARED BY:
TENNESSEE VALLEY AUTHORITY

APRIL 2008

Direct comments to:

Stanford E. Davis
NEPA Resources
Tennessee Valley Authority
400 West Summit Hill Drive, WT 11D
Knoxville, Tennessee 37902
Phone: 865/632-2915
Fax: 865/632-3451
E-mail: sedavis2@tva.gov

Page intentionally blank

FINAL ENVIRONMENTAL ASSESSMENT

EAGLE'S LANDING GOLF COURSE EXPANSION, BRIDGES, AND SANDERS ISLANDS FILL LITTLE PIGEON RIVER MILE 2.4

SEVIER COUNTY, TENNESSEE

TENNESSEE VALLEY AUTHORITY

APRIL 2008

The Proposed Action and Need

The City of Sevierville Public Building Authority (PBA) proposes to expand and improve the Eagle's Landing Golf Course in Sevierville, Sevier County, Tennessee (see Figure 1). The proposal involves constructing two permanent bridges and one temporary bridge over the Little Pigeon River and placing fill material on Sanders Islands for a new golf course playing surface. Sanders Islands consists of two separate islands with the larger being to the south (upstream) and the smaller to the north. One bridge would connect the south island to the western shore of the river, and the other would connect the north and south islands. The temporary bridge has already been constructed to provide access from the east bank to the south island. The temporary bridge would allow the placement of fill material on both islands to raise their elevations above the 100-year floodplain (elevation 890 feet mean sea level [msl]), the construction of a playing surface, and the protection of archaeological sites eligible for listing in the National Register of Historic Places (NRHP). This bridge would be removed once this work is completed. PBA also proposes to construct underground utilities (waterlines and an irrigation sprinkler system) to support golf course operations and maintenance. These utilities would be attached to the permanent bridges and placed within the minimum 2-foot layer of fill material on the islands. In accordance with the Tennessee Valley Authority (TVA) Act of 1933, construction of these bridges and placement of fill material within the limits of the 100-year floodplain require approval under Section 26a.

This golf course expansion represents some of the additional recreational, retail, and commercial business development in the vicinity of PBA's Event Center Complex (see "Other Environmental Reviews and Documentation" below) and the surrounding Sevierville area. Course expansion and improvements would enhance the local and regional economy through further expanded development as well as provide a larger recreation and tourism destination venue.

In March 2006, the U.S. Army Corps of Engineers (USACE) approved the bridges under Nationwide Permit No. 14, Linear Transportation Projects. In April 2006, the Tennessee Department of Environment and Conservation (TDEC) determined that the project met its criteria for approval under a general permit for construction and removal of minor bridge crossings (Application NRS05.482). TVA has prepared this environmental assessment (EA) to evaluate the effects of issuing the Section 26a permit on cultural and natural resources in the impact area. The scope of this EA includes the bridges, borrow area, and fill placement locations. This includes all of the golf course development on the islands because the presence of the golf course on the islands is dependent on the bridges.

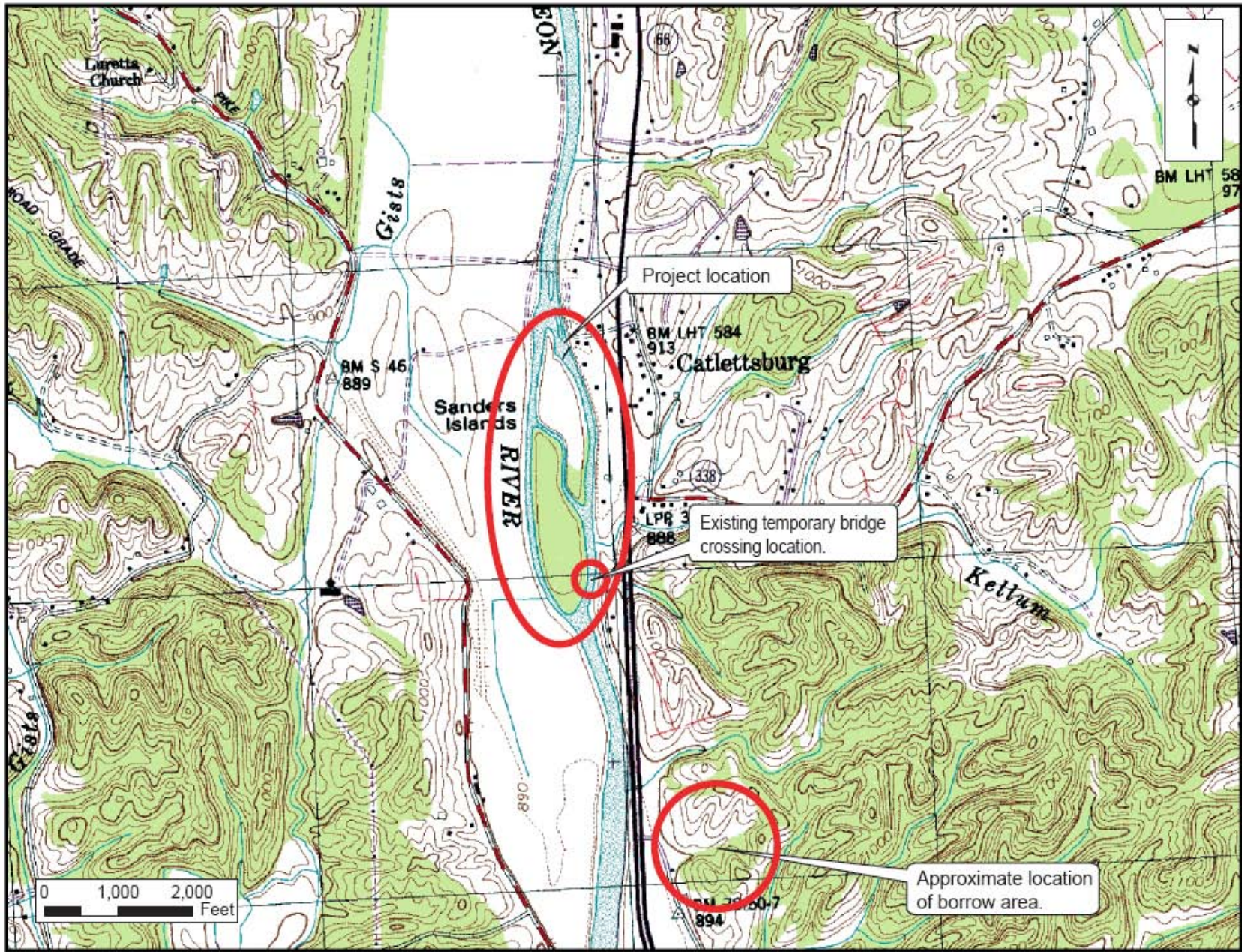


Figure 1. Eagle's Landing Golf Course Expansion Proposal, Sevierville, Tennessee – Site Vicinity Map (Douglas Dam, Tennessee, Quadrangle)

Background and Description of Work

TVA originally received the golf course expansion permit application in December 2005. Progress on evaluating the permit application was delayed due to the following reasons:

1. Development of needed site-specific, detailed plans, which discerned the relationship between this proposal and others around the course
2. Discussion and deferral of a plan to stabilize the eroding islands' shoreline (which instead would be monitored)
3. PBA approval and the completion of necessary archaeological surveys and report preparation and submittals

The delay also included time needed for an on-site meeting in December 2007 and subsequent discussions during the winter of 2007-2008 about the unauthorized temporary bridge and the potential impact of its construction on an archaeological site. During the latter part of the winter, consultation with the Tennessee Historical Commission, State Historic Preservation Officer, was completed (see "Cultural Resources" below).

Description of Work

The work now proposed would consist of constructing two permanent span bridges over the Little Pigeon River (Mile 2.4) to connect to the islands, along with one temporary concrete I-beam and wood bridge from the east bank to Sanders Islands. The temporary bridge, located along Winfield Dunn Highway (State Route [SR] 66) east of the river, exists and was constructed without TVA authorization. Of the two permanent bridges, Bridge 1 would be approximately 136 feet long and 10 feet wide. Bridge 2 would be approximately 121 feet long and would also be 10 feet wide. Both of these bridges would be designed to safely accommodate golf cart and foot traffic. Low bridge beams on both bridges would be above the 100-year flood elevation and be approximately 12 feet above the elevation of the Little Pigeon River during normal base flow conditions. Each bridge would be curbed on each side of the centerline for the cart path. Steel piles would be constructed on the stream bank as foundation to support these proposed bridges, and no support piers or pilings would be constructed or placed in the river. Under this proposal, Bridge 1 would connect the existing expanded golf course on the west bank to the larger south island. Bridge 2 would connect the south and north islands. The golf cart path across the bridges would funnel traffic in both directions to holes 3, 4, and 5 and back to the western mainland of Eagle's Landing Golf Course.

The temporary bridge is needed for low-impact heavy equipment to gain access to the islands for vegetation removal (already completed), minor grading to facilitate drainage, and placement of fill material. The temporary bridge would be removed following completion of fill placement.

Under this proposal, over 126,000 cubic yards of fill material would be placed on the islands to raise them above the 100-year floodplain elevation and provide a golf course playing surface including managed turf, tees, and greens. Soil fill material would be obtained from a ridgetop on the east side of SR 66 about 0.5 mile south of Sanders Islands. This material would be transported by truck across the temporary access bridge from the east bank over Little Pigeon River (see Figure 1). Fill material placement would be conducted by pushing the soil across the area with a low-contact pressure dozer until a minimum thickness of 24

inches is achieved. Additional fill material would then be placed using two or three D4 or D8 bulldozers to place material and shape the course on the islands. Standard compaction would then commence as this additional fill material is deposited. To support golf course operations and maintenance, PBA would also construct underground utilities including trenched waterlines and sprinkler heads completely contained within the fill material layer. Water lines would not be buried below the depths of the current ground surface elevation and would range from an 8-inch mainline at the west bank entrance bridge to the south island to a 2.5-inch-diameter line over most of the islands, including the tees and greens on both islands. From the entrance, the line would be narrowed down to a 6-inch and then a 4-inch mainline to a 2.5-inch-diameter line connecting to numerous sprinkler heads. Waterlines would be attached to the bridges and, therefore, no river trenching or independent aerial crossings would occur.

Other Environmental Reviews and Documentation

In March 2005, the USACE, in cooperation with TVA, began review of a PBA proposal to construct an Events Center Complex to promote tourism to the community. The site is generally located west of the Little Pigeon River and east of Old Knoxville Highway, within the city limits of Sevierville. As a requirement for construction of the complex, approval from TVA under Section 26a of the TVA Act was needed for placement of permanent fill in wetlands and alterations to two small streams. An EA was prepared to describe the impacts of the agencies' permit approvals (USACE 2005). PBA and a private developer constructed a convention center, hotel, planetarium, golf course, clubhouse, and associated retail development on approximately 152 acres of jointly owned property. The entire property that might accommodate future phased development was 1,100 acres. Because of financial constraints at the time, Eagle's Landing Golf Course improvements and other development phases were envisioned, but not definitely planned. Because of the economic benefits associated with increased tourism and demonstration values of the use of emerging technologies, the PBA also asked that TVA Customer Services & Marketing consider providing federal financial assistance to study the feasibility of meeting the heating and cooling needs of the convention center using geothermal technology. Impacts of the use of geothermal technology were considered in the environmental review. On August 24, 2005, TVA issued a finding of no significant impact. TVA approved the project and issued its Section 26a permit on August 30, 2005.

Alternatives

Under Alternative A, the No Action Alternative, expansion of the existing golf course would be hampered by the denial of the permit for the two permanent bridges to and placement of fill on Sanders Islands. The golf course could be redesigned to use another part of the landscape. Some work on uplands has already begun. However, some work, such as fill in the floodplain and stream obstructions that would require approval under Section 26a, would not be performed. Local and regional economic benefits of the entire expansion proposal would be foregone. The PBA purpose and need would not be fulfilled as originally proposed.

Under Alternative B, the Proposed Action with Mitigation, TVA would issue the Section 26a permit for one temporary and two permanent bridges over Little Pigeon River and placement of over 126,000 cubic yards of fill material on Sanders Islands. The PBA and Eagle's Landing Golf Course would mitigate the project-related effects on eligible

archaeological sites in accordance with stipulations and conditions agreed upon and included in a memorandum of agreement (MOA) (see “Cultural Resources” below). These stipulations and conditions would be included in the TVA Section 26a permit.

Affected Environment and Evaluation of Impacts

Site Description

The site lies in eastern Tennessee within the Blue Ridge Mountain Physiographic Province, northwest of Sevierville, Tennessee, and the Great Smoky Mountains National Park (Unaka Mountains). The Eagle’s Landing Golf Course, 1556 Old Knoxville Highway, lies along the west side of SR 66 and the Little Pigeon River and east of Old Knoxville Highway. It generally lies within the floodplain of the Little Pigeon River between Gists Creek and SR 338 to the north and U.S. Route 411/SR 35 to the south. The French Broad River and Douglas Reservoir also lie to the north and east. SR 66, between Interstate 40 and Sevierville, is becoming an increasingly crowded commercial strip. Most of the lowlands in this river valley have been affected by past land use, including farming and the pasturing of livestock. Its land cover is largely grassland and scattered wood lot. Topography in the area ranges from nearly flat to rolling and hilly to moderately steep and mountainous to the south toward Sevierville and the national park. Land on English, Cove, Bates, and Chilhowee mountains to the east, south, and west and in higher elevations above the 600-foot-msl contour is largely forested. The adjoining Sanders Islands, which total approximately 33 acres, have been cleared of most of their former young hardwood trees. Some older trees remain on the shoreline except within the planned flight path of in-play golf balls on the course. A few mature hardwood trees also remain in out-of-the-way locations on the islands. Generally, this area has a great diversity of plants and abundance of stream fishes and terrestrial wildlife. The plant communities and wildlife species in this area are common to the region. Streams appear to have fair to good water quality and would likely support designated uses.

Opened by the City of Sevierville in June 1994, this existing 18-hole championship course has quickly become recognized as one of the top public courses in the state of Tennessee and received a 4-star rating by *Golf Digest* and was nominated for the magazine’s “Best Public Course” award in 1995 (<http://www.seviervilletn.org/DepartmentPages/Golf.htm>).

Impacts Evaluated

TVA conducted a preliminary review and evaluation of the proposed project. As a result of this staff review, TVA determined that impacts to natural features such as prime or unique farmland; groundwater; parklands; state or national forests, trails, greenways, wilderness, scenic, or other ecologically critical areas; and wetlands were either nonexistent or minor and insignificant. Improvements to Old Knoxville Highway in the vicinity of the proposed golf course improvements are being considered in future years, and during the foreseeable future, the project would not result in a significant change in traffic volumes, congestion, or decrease in safety. Other than temporarily during construction, minor existing noise levels would not significantly increase, dust would be controlled through wetting, and other best management practices (BMPs) would be implemented to control erosion and prevent sedimentation from disturbed areas from entering the Little Pigeon River. Other than normally expected solid waste, no air or land emissions of pollutants, hazardous waste or waste requiring special handling and disposal, or negative social impacts are anticipated.

BMPs would be used during bridge construction and fill placement to control erosion and prevent sedimentation from disturbed areas from entering the Little Pigeon River. Therefore, impacts on water quality and aquatic life would be minimized. Socioeconomic impacts are expected to be minimally positive and beneficial to the Sevierville area and region.

Because of current land use, little recreational usage of this reach of the Little Pigeon River is known to occur. Generally, during spring and summer, people canoe and tube on the river, and some fishing occurs. Therefore, the proposed permanent bridges would be designed and constructed with a minimum of 10 feet of clearance above minimum base flow elevation so that they would not interfere with recreational paddlers or anglers. Bridge material and color selections (brown) would mimic the natural environment to decrease visual effects.

Floodplains Management

Consistent with Executive Order 11988 (Floodplain Management), bridges are considered repetitive actions in the floodplain that result in minor impacts. However, a golf course is not considered a repetitive action in the floodplain but an acceptable recreational use, provided adverse floodplain impacts are minimized. Since there is limited space for expansion of the golf course, inadequate source material on the islands, and risk of destruction of archaeological sites from excavation, PBA has no practicable alternative other than bringing in fill to the islands from off site. Therefore, plans for golf course expansion include use of over 126,000 cubic yards of off-site fill material. This material would be brought onto the islands (see "Cultural Resources") and placed in the limits of the 100-year floodplain (elevation 890 feet msl) for construction of the golf course. TVA has determined that the impacts to flooding would be minimal and that the project complies with Executive Order 11988.

The fill on the islands would also be placed within the published Little Pigeon River 100-year floodway. The PBA has hired an engineering firm to perform the necessary hydraulic analysis and is in the process of obtaining a "No Rise Certification" from the City of Sevierville indicating that the project complies with all the local floodplain regulations and requirements of the City of Sevierville (see Attachment 1). TVA concludes that impacts of fill placement on flooding and potential loss of beneficial floodplain values would be minor and insignificant.

Terrestrial Ecology

Based on review of the TVA Natural Heritage database and subsequent field inspections, habitat for the federally listed Indiana bat (*Myotis sodalis*), Carolina northern flying squirrel (*Glaucomys sabrinus coloratus*), and spruce-fir moss spider (*Microhexura montivaga*) does not exist at the project site. No caves are recorded within a 3-mile radius of the site. TVA staff also determined that two heronries and three state-listed terrestrial animals have been reported from within a 3-mile radius of the Sanders Islands site. The distance between a reported bald eagle (*Haliaeetus leucocephalus*) nest and the project site is sufficient to avoid impacts, and preferred foraging habitat would not be affected. Habitat for the state-listed southeastern shrew (*Sorex longirostris*) and eastern hellbender (*Cryptobranchus alleganiensis*) would not be adversely impacted. No federally or state-listed as threatened or endangered aquatic or terrestrial plants or animals are known from the site or immediate

vicinity, and no listed species or designated critical habitat would be directly or indirectly impacted by the proposal.

During a late winter 2006 field inspection, staff found great blue herons nesting on the north (downstream) island. Subsequent staff observations in December 2007 revealed that an unauthorized access temporary bridge from the east riverbank was already in place, and most of the vegetation from the islands had been removed. However, several large hardwood trees on the north and south islands contain great blue heron nests, probably totaling 20 to 30 individual nests. These two heronries appear to be a few years old, but it is uncertain whether they are used from year to year. Because populations of these herons have rebounded in recent years and these birds are common across the region, effects of converting these islands from forest to open land are expected to be insignificant. Even if these nests have been used in the past and young birds fledged from them, abandonment of these nests, if it occurs, would not adversely affect the regional great blue heron population.

Cultural Resources

Photographs and site inspection in May 2006 confirmed that three existing concrete structures, believed to be remnants of a mill operation at least 70 years old, are in the Little Pigeon River between the islands. PBA originally proposed to remove these structures as a part of its proposal. However, rather than investigate the potential historical value of these structures, PBA agreed that it would not remove them.

TVA, in consultation with the Tennessee State Historic Preservation Officer (TNSHPO), determined the project area of potential effects (APE) would include the bridge sites, borrow area, and entirety of the two islands. A Phase I archaeological survey of Sanders Islands, and subsequent report (Manning 2005), identified two sites (40SV175 on the north island and 40SV176 on the south island) potentially eligible for listing in the NRHP. Based on the results of subsequent Phase II testing (Polhemus 2006), TVA determined the two sites are eligible for listing in the NRHP. In November 2007, TVA further consulted with the TNSHPO on the Phase I survey results and recommendations of Phase II testing. In its November 28, 2007, response, the TNSHPO concurred with the eligibility of archaeological sites 40SV175 and 40SV176. Additionally, the TNSHPO concurred that the project as currently proposed may adversely affect eligible historic properties and that an MOA is the appropriate strategy for addressing these adverse effects (see "Mitigation and Special Permit Conditions" below). During this process, TVA also consulted with 14 federally recognized Indian tribes responding to questions and addressing their concern in the MOA. The Seminole Tribe of Florida will be a concurring party to the MOA.

A nearby upland borrow area east of and along SR 66 would be used to obtain the needed fill soil material. This area has been previously surveyed for archaeological resources as a part of a 2006 environmental investigation on the *Extension of Middle Creek Road* (Beverly and McBride 2006). Systematically screened shovel test pits were excavated within the planned borrow area, and all were negative. No cultural materials were encountered in any of these test pits or observed within the project APE.

In consultation with the TNSHPO and tribes, TVA requested an assessment of the impact of the unauthorized, temporary bridge crossing from the east bank of the Little Pigeon River to the south island. On November 28, 2007, TVA staff monitored preliminary archaeological fieldwork needed for the preparation of this EA. The study showed the

bridge was placed on modern fill that probably resulted from the placement of a utility corridor in this area. Although there is a documented archaeological site (40SV197) present (Manning 2007), TVA agrees with the conclusion that the temporary bridge has not disturbed intact archaeological deposits at this location.

Vegetation removal on the Sanders Islands has already been conducted but limited to cutting at the ground surface level. In lieu of a Phase III archaeological survey for sites 40SV175 and 40SV176, PBA (and Eagle's Landing Golf Course) would agree to mitigate the effects of placing over 126,000 cubic yards of fill material and installing underground utilities on the islands for this development and abide by the stipulations of an MOA between TVA, the TNSHPO, and the Tribal Historic Preservation Officer (THPO) or appropriate tribal representative.

By letter dated February 25, 2008, the TNSHPO concurred that portions of site 40SV197 directly affected by construction of the temporary bridge do not contain archaeological resources eligible for listing in the NRHP. Furthermore, the TNSHPO found that the proposed strategy for addressing the adverse affects to sites 40SV175 and 40SV176 to be adequate and concurred that an MOA should be drafted to formalize all proposed treatment stipulations (Attachment 2). The MOA includes the following mitigative stipulations:

1. Treatment Plan:

- a. PBA will place at least twenty-four (24) inches of un-compacted fill on the surface of sites 40SV175 and 40SV176 in the areas to be impacted by the golf course using soil from a borrow area that has been previously surveyed for archaeological resources and the borrowing of such material determined in consultation with TNSHPO to not affect historic properties (see MOA in Attachment 3). The placement of the first twenty-four (24) inches of fill will be conducted by pushing the soils across the area utilizing a low-contact pressure dozer, such as a D-4 to a D-8 ensuring that said dozer does not contact the current surface of the sites 40SV175 and 40SV176. Portions of sites 40SV175 and 40SV176 that will not be used for the golf course will not be impacted by construction activities associated with the golf course expansion. Future activities on the non-developed portion of the islands would be limited to mowing or erosion control, with no disturbance beneath the existing ground surface.
- b. PBA will place all utilities within the minimum twenty-four (24) inches of fill placed over archaeological sites 40SV175 and 40SV176. No excavation for utilities will be conducted to depths at, or below, the current ground surface.

2. Monitoring:

At PBA's expense, TVA shall ensure that an independent, professional archaeologist, whose qualifications meets the Secretary of Interior's Guidelines for Identification (see Appendix C) and has been approved by TVA, will be present to monitor the placement of twenty-four (24) inches of fill and all underground utilities on Sanders Islands. The City will grant said monitor the authority, in writing, to stop the placement of fill or any underground utility if the integrity of site 40SV175 and 40SV176 is threatened. This monitor will report directly to TVA's manager of Cultural Resources or a TVA Cultural Resources specialist he designates. At the conclusion of monitoring activities, the on-site monitoring archaeologist shall submit a report on such activities to TVA. TVA shall distribute the report to all signatories and afford them thirty (30) days for review and comment.

3. Treatment of Human Remains

TVA shall ensure that the treatment of any human remains discovered within the Project area complies with all state and federal laws concerning archaeological sites and treatment of human remains. Should human remains be encountered, all ground disturbing activities within fifty (50) feet of the discovery will be ceased immediately. TVA's manager of Cultural Resources should be contacted immediately. Tennessee's state archaeologist and the local coroner must also be contacted immediately to ensure compliance with Tennessee Code Annotated (T.C.A.) 46-4-101 to 104 ("Termination of Use of Land as a Cemetery,"); T.C.A. 11-6-116, ("Excavation of Areas Containing Native American Indian Remains,"); T.C.A. 11-6-119 ("Reburial of Human Remains or Native American Burial Objects following Discovery or Confiscation"), and Tennessee Rules and Regulations, Chapter 0400-9-1 ("Native American Indian Cemetery Removal and Reburial."). Should any human remains be determined to be Native American in origin, TVA will consult with THPOs and adhere to the consultation procedures agreed upon with the Eastern Band of Cherokee Indians and the United Keetoowah Band of Cherokee Indians in Oklahoma.

Administrative conditions included in the MOA ensure that this agreement's execution and implementation occur in a timely manner; relevant changes are acknowledged; information is shared and disagreement is resolved; procedures pursuant to 36 CFR § 800 are followed including voiding or amending the agreement; and appropriate parties are involved in further consultations and decision-making (see "Administrative Conditions" in the attached MOA).

Execution of the MOA by TVA, the TNSHPO, the Seminole Tribe of Florida, and the City of Sevierville Public Building Authority, submission of documentation, filing of this agreement with the Advisory Council on Historic Preservation (ACHP) and implementation of its terms is evidence that TVA has, in accordance with Section 106 of the National Historic Preservation Act, taken into account the effects of this undertaking on historic properties and afforded the ACHP an opportunity to comment.

Public Review

Included in the City of Sevierville's Central Business Improvement District/Tourism Development Zone Plan, the Eagle's Landing Golf Course expansion proposal has generally been public knowledge since August 2005. Various decisions among local government and city officials regarding implementation of the planned construction of an additional 18 holes have been approved during public forums, including PBA meetings held on January 8, 2007, May 24, 2007, June 11, 2007, and July 9, 2007. The City of Sevierville approved final plans for fill placement on Sanders Islands that ensure that the development meets the requirements of local ordinances, including floodplains. TVA also consulted with USACE, TDEC, the TNSHPO, and 14 federally recognized Indian tribes during the environmental review process.

Mitigation and Special Permit Conditions

PBA would also adhere to conditions of approval contained in the USACE and TDEC authorizations. TVA General and Standard Conditions to prevent sedimentation of and minimize potential adverse water quality and aquatic life impacts to Little Pigeon River would be implemented. TVA would also require the following measures:

- Permanent bridges would be designed and constructed with a minimum of 10 feet of clearance above minimum base flow elevation of the Little Pigeon River.
- Bridge material and color selections would mimic the natural environment.
- The City of Sevierville Public Building Authority and TVA, in consultation with the TNSHPO and the Seminole Tribe of Florida, would ensure that the stipulations of the MOA are carried out as it relates to placement of fill and utilities over eligible archaeological sites 40SV175 and 40SV176.

TVA Preparers

Freddie C. Bennett, Regional Environmental Scientist, Environmental Stewardship and Policy (ES&P)

Stanford E. Davis, Senior NEPA Specialist, NEPA Services, ES&P

Thomas O. Maher, Manager, Cultural Resources, ES&P

Roger A. Milstead, Program Manager, Flood Risk, River Operations

Laurie S. Pearl, Land Use Representative, Holston-Cherokee-Douglas Watershed Team, ES&P

Karen C. Stewart, Land Use Representative, Holston-Cherokee-Douglas Watershed Team, ES&P

Agencies and Others Consulted

City of Sevierville, Tennessee

Eagle's Landing Golf Course

Federally Recognized Tribal Historic Preservation Representatives

Tennessee Department of Environment and Conservation

Tennessee Historical Commission, State Historic Preservation Office

U.S. Army Corps of Engineers, Nashville District

References

Beverly, J. H., and J. D. McBride. 2006. *A Phase I Archaeological Survey of Portions of Sections One and Three of the Extension of Middle Creek Road, Sevierville, Tennessee*. Report submitted to the City of Sevierville.

Manning, K. 2005. *Archaeological Survey (Phase I) of Sanders Islands, Sevier County, Tennessee*. Report submitted to S&ME Inc., Topside Road, Louisville, Tennessee.

———. 2007. *Archaeological Assessment of Temporary Bridge Impacts, Sevier County, Tennessee*. Report submitted to S&ME Inc., Topside Road, Louisville, Tennessee.

Polhemus, R. R. 2006. *Limited Phase II Archaeological Survey of the Sanders Islands, Sevier County, Tennessee*. Report submitted to S&ME Inc., Topside Road, Louisville, Tennessee.

U.S. Army Corps of Engineers. 2005. *Final Environmental Assessment - Sevierville Public Building Authority, Proposed Wetland Fill, Adjacent to Little Pigeon River Mile 3.3, Left Bank, Sevier County, Tennessee.*

Attachments

Attachment 1 - March 19, 2008, Letter Evidencing Sevierville Public Building Authority's Intention to Obtain a No Rise Certification and Provide a Copy to TVA

Attachment 2 - Tennessee State Historic Preservation Officer Letter Dated February 25, 2008

Attachment 3 – Memorandum of Agreement Between the Tennessee Valley Authority and the Tennessee State Historic Preservation Officer Regarding the Expansion of the Eagle's Landing Golf Club Onto Sanders Island in the Little Pigeon River

Attachment 1

March 19, 2008, Letter Evidencing Sevierville Public Building Authority's Intention to Obtain a No Rise Certification and Provide a Copy to TVA



March 19, 2008

Mr. Stan Davis
Tennessee Valley Authority
400 West Summit Hill Drive
Knoxville, Tennessee 37902

Re: Status of No Rise for Sanders Islands Fill Placement

Dear Mr. Davis:

Wilbur Smith Associates (WSA) has been working with the City of Sevierville, as their consultant, on the flood way and flood plain of the Little Pigeon River within the area of the Eagle's Landing Golf Course. This stretch of the river begins a few hundred feet south of the Universe Bridge and continues through the golf course. During the construction of the Sevierville Event Center and associated grading activities, the Federal Emergency Management Agency (FEMA) was contacted to obtain a Conditional Letter of Map Revision (CLOMR) for flood way modifications. FEMA approved the CLOMR in late summer of 2006. After completion of the grading an As-built survey was performed in November 2006, by WSA, as required by FEMA in order to submit a LOMR (Letter of Map Revision).

Presently we are modeling the proposed fill placement on Sanders Islands and associated golf course grading activities downstream of our previous efforts. Preliminary modeling confirms that a No-Rise condition can be obtained in this area due to two factors:

1. The East Bank of the River is essentially a bluff and will have no adverse effect on adjacent property owners, and
2. The City owns all the property on the west bank as well as Sanders Islands. All this is part of the golf course and provides ample room to work with the contours and the golf course architect to achieve the No-Rise Certification.

Both WSA and the City of Sevierville understand that this No-Rise certification is required as part of the golf course expansion. The WSA modeling efforts to date have demonstrated that the fill placement on the islands will be offset by the proposed grading activities for the golf course holes to the west of the islands. The proposed grading for the golf holes west of Sanders Islands has not yet been finalized, and therefore the No-Rise certification request has not yet been submitted to the City. If requested, a copy of the No-rise certification can be provided to TVA once it is issued by the City.

I hope this clarifies the present status of the No Rise for Sanders Islands and the golf course, and I would be happy to answer any questions your might have.

Sincerely,
WILBUR SMITH ASSOCIATES



Randy Corlew, P.E.
Director Municipal/ Site Design

Cc: Mr. Butch Stott, Flood Plain Manager, City of Sevierville

1100 Marion Street, Suite 200, Knoxville, Tennessee 37921
865.963.4300 / 865.963.4301 www.WilburSmith.com

Attachment 2

Tennessee State Historic Preservation Officer Letter
Dated February 25, 2008



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

February 25, 2008

Dr. Thomas Maher
Tennessee Valley Authority
400 W. Summit Hill Drive
WT 11D - Cultural Resources
Knoxville, Tennessee 37902

RE: TVA, ARCHAEOLOGICAL ASSESSMENT, EAGLES LNDG GOLF COURSE/
SANDERS IS, SEVIERVILLE, SEVIER COUNTY, TN

Dear Dr. Maher:

At your request, our office in receipt of the above-referenced archaeological survey report for the unpermitted temporary bridge that affected archaeological site 40SV197. We have reviewed the report in accordance with regulations codified at 36 CFR 800 (Federal Register, December 12, 2000, 77698-77739). Based on the information provided, we concur with your agency that the portions of site 40SV197 directly affected by the bridge construction project do not contain archaeological resources eligible for listing in the National Register of Historic Places.

We have also reviewed the additional information provided by your agency regarding the applicant's proposed treatment plan for addressing the adverse affects to sites 40SV175 and 40SV176 by expansion of the Eagles Landing Golf Course on to Sanders Island. We find the strategy to be adequate and concur that a Memorandum of Agreement should be drafted to formalize all proposed treatment stipulations.

If project plans are changed please contact this office to determine what further action, may be necessary to comply with Section 106 of the National Historic Preservation Act.

Your cooperation is appreciated.

Sincerely,

A handwritten signature in black ink that reads "E. Patrick McIntyre, Jr." in a cursive style.

E. Patrick McIntyre, Jr.
Executive Director and
State Historic Preservation Officer

EPM/jmb

Attachment 3

**MEMORANDUM OF AGREEMENT
BETWEEN THE TENNESSEE VALLEY AUTHORITY
AND THE TENNESSEE STATE HISTORIC PRESERVATION OFFICER
REGARDING THE EXPANSION OF THE EAGLE'S LANDING GOLF CLUB ONTO
SANDERS ISLAND IN THE LITTLE PIGEON RIVER**

WHEREAS, the city of Sevierville (City) will expand the municipal Eagle's Landing Golf Club (Project) by placing three golf holes on Sanders Island in the Little Pigeon River at River Mile 2.4 in Sevier County, Tennessee; and,

WHEREAS, the City intends to place fill on Sanders Island to raise portions of the golfing facilities above the 100-year flood plain and provide golf cart access from the west bank of the Little Pigeon River; and,

WHEREAS, these actions require a permit from the Tennessee Valley Authority (TVA) under Section 26a of the *TVA Act* making TVA's permitting action a federal undertaking; and,

WHEREAS, TVA has consulted with the Tennessee State Historic Preservation Officer (TNSHPO) in accordance with 36 CFR §800, regulations implementing Section 106 of the *National Historic Preservation Act (NHPA)*; and,

WHEREAS, TVA has consulted with the Tribal Historic Preservation Officer (THPO) of the Eastern Band of Cherokee Indians, Cherokee Nation, United Keetoowah Band of Cherokee Indians in Oklahoma, Muscogee (Creek) Nation of Oklahoma, Kialegee Tribal Town, Thlopthlocco Tribal Town, Alabama-Quassarte Tribal Town, Alabama-Coushatta Tribe of Texas, Choctaw Nation of Oklahoma, Seminole Tribe of Florida, Absentee Shawnee Tribe of Oklahoma, Eastern Shawnee Tribe of Oklahoma, Shawnee Tribe, and The Chickasaw Nation regarding the potential for this undertaking to affect properties of religious, cultural, and traditional significance; and,

WHEREAS, the Seminole Tribe of Florida has requested to concur in this Agreement; and,

WHEREAS, TVA has determined, in consultation with TNSHPO, that the area of potential effects (APE) for the Project is the entirety of Sanders Island (see Appendix A); and,

WHEREAS, the expansion of the Project onto Sanders Island will adversely affect the National Register of Historic Places (NRHP)-eligible archaeological sites 40SV175 and 40SV176.

NOW THEREFORE, TVA and TNSHPO agree that the undertaking shall be implemented in accordance with the following stipulations to satisfy TVA's responsibilities under Section 106 of *NHPA*. The TVA Federal Preservation Officer, or the designee thereof, shall act for TVA in all matters concerning the administration of this Agreement.

STIPULATIONS

1. TREATMENT PLAN

- a. The City will place at least twenty-four (24) inches of un-compacted fill on the surface of sites 40SV175 and 40SV176 in the areas to be impacted by the golf course using soil from a borrow area that has been previously surveyed for archaeological resources and the borrowing of such material determined in consultation with TNSHPO to not affect historic properties (see Appendix B). The placement of the first twenty-four (24) inches of fill will be conducted by pushing the soils across the area utilizing a low-contact pressure dozer, such as a D-4 to a D-8 ensuring that said dozer does not contact the current surface of the sites 40SV175 and 40SV176. Portions of sites 40SV175 and 40SV176 that will not be used for the golf course will not be impacted by construction activities associated with the golf course expansion. Future activities on the non-developed portion of the islands would be limited to mowing or erosion control, with no disturbance beneath the existing ground surface.
- b. The City will place all utilities within the minimum twenty-four (24) inches of fill placed over archaeological sites 40SV175 and 40SV176. No excavation for utilities will be conducted to depths at, or below, the current ground surface.

2. MONITORING

At the City's expense, TVA shall ensure that an independent, professional archaeologist, whose qualifications meets the Secretary of Interior's Guidelines for Identification (see Appendix C) and has been approved by TVA, will be present to monitor the placement of twenty-four (24) inches of fill and all underground utilities on Sanders Island. The City will grant said monitor the authority, in writing, to stop the placement of fill or any underground utility if the integrity of site 40SV175 and 40SV176 is threatened. This monitor will report directly to TVA's manager of Cultural Resources or a designated TVA Cultural Resources specialist. At the conclusion of monitoring activities, the on-site monitoring archaeologist shall submit a report on such activities to TVA. TVA shall distribute the report to all signatories and afford them thirty (30) days for review and comment.

3. TREATMENT OF HUMAN REMAINS

TVA shall ensure that the treatment of any human remains discovered within the Project area complies with all state and federal laws concerning archaeological sites and treatment of human remains. Should human remains be encountered, all ground disturbing activities within fifty (50) feet of the discovery will be ceased immediately. TVA's manager of Cultural Resources, or designee, should be contacted immediately. Tennessee's state archaeologist and the local coroner must also be contacted immediately to ensure compliance with Tennessee Code Annotated (T.C.A.) 46-4-101 to 104 ("Termination of Use of Land as a Cemetery,"); T.C.A. 11-6-116, ("Excavation of Areas Containing Native American Indian Remains,"); T.C.A. 11-6-119 ("Reburial of Human Remains or Native American Burial Objects following Discovery or Confiscation"), and Tennessee Rules and Regulations, Chapter 0400-9-1 ("Native American Indian Cemetery Removal and Reburial."). Should any human remains be determined to be Native American in origin, TVA will consult with THPOs and adhere to the consultation procedures agreed upon with the Eastern Band of Cherokee Indians and the United Keetoowah Band of Cherokee Indians in Oklahoma.

4. ADMINISTRATIVE CONDITIONS

- a. If implementation of Stipulations 1-3 has not been initiated within one (1) year from the date of this Agreement's execution, TVA and the TNSHPO shall review the Agreement to determine whether the Agreement should be extended. If an extension is deemed necessary, TVA, the TNSHPO and other consulting parties will consult in accordance with 36 CFR §800.6 to make appropriate revisions to the Agreement.
- b. If Stipulations 1-3 have not been implemented within five (5) years from the date of this Agreement's execution, this Agreement shall be considered null and void, unless the signatories have agreed in writing to an extension for carrying out its terms. If the Agreement becomes null and void, then TVA and the TNSHPO will resume consultation pursuant to 36 CFR §800.
- c. Should any signatory, or invited signatory, object within thirty (30) days after receipt to any documents provided for review pursuant to this Agreement, TVA shall consult with the objecting party to resolve the objection.
- d. If any signatory to this Agreement determines that the terms of the Agreement cannot be carried out, the signatories shall consult to seek an amendment to the Agreement. If, after such consultation, the Agreement is not amended, then signatories may terminate the Agreement. In that case, TVA shall either execute a new Agreement with the signatories pursuant to 36 CFR §800.6(c) (1), or request the comments of the Advisory Council on Historic Preservation (ACHP) pursuant to 36 CFR §800.7(a).
- e. The signatories to this agreement may agree to amend the terms of this agreement. If the Agreement is amended, then such amendment shall take effect when signatories have signed this Agreement, and the amendment shall be appended to the Agreement as an attachment.

EXECUTION of this Memorandum of Agreement by TVA, the TNSHPO, and the City, the submission of documentation and filing of this Agreement with the ACHP, and implementation of its terms evidence that TVA has, in accordance with Section 106 of the *NHPA*, taken into account the effects of this Undertaking on Historic Properties and afforded the ACHP an opportunity to comment.

SIGNATORY PARTIES

TENNESSEE VALLEY AUTHORITY

By: Bridgette Ellis

Date: 3-17-08

Bridgette K. Ellis, Senior Vice President, Office of Environment and Research and Federal Preservation Officer

THE TENNESSEE STATE HISTORIC PRESERVATION OFFICER

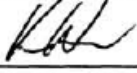
By: E. Patrick McIntyre, Jr.

Date: 3-25-08

E. Patrick McIntyre, Jr., State Historic Preservation Officer

INVITED SIGNATORIES

THE CITY OF SEVIERVILLE

By: 

Date: 4-14-08

Mr. Victor Weals, City of Sevierville Public Building Authority

CONCURRING PARTIES

SEMINOLE TRIBE OF FLORIDA

BY: _____
Willard S. Steele, Tribal Historic Preservation Officer

Date: _____

APPENDIX C

Secretary of Interior's Qualification Standards

The following requirements are those used by the National Park Service, and have been previously published in the Code of Federal Regulations, 36 CFR Part 61. The qualifications define minimum education and experience required to perform identification, evaluation, registration, and treatment activities. In some cases, additional areas or levels of expertise may be needed, depending on the complexity of the task and the nature of the historic properties involved. In the following definitions, a year of full-time professional experience need not consist of a continuous year of full-time work but may be made up of discontinuous periods of full-time or part-time work adding up to the equivalent of a year of full-time experience.

History

The minimum professional qualifications in history are a graduate degree in history or closely related field; or a bachelor's degree in history or closely related field plus one of the following:

1. At least two years of full-time experience in research, writing, teaching, interpretation, or other demonstrable professional activity with an academic institution, historic organization or agency, museum, or other professional institution; or
2. Substantial contribution through research and publication to the body of scholarly knowledge in the field of history.

Archeology

The minimum professional qualifications in archeology are a graduate degree in archeology, anthropology, or closely related field plus:

1. At least one year of full-time professional experience or equivalent specialized training in archeological research, administration or management;
2. At least four months of supervised field and analytic experience in general North American archeology, and
3. Demonstrated ability to carry research to completion.

In addition to these minimum qualifications, a professional in prehistoric archeology shall have at least one year of full-time professional experience at a supervisory level in the study of archeological resources of the prehistoric period. A professional in historic archeology shall have at least one year of full-time professional experience at a supervisory level in the study of archeological resources of the historic period.

Architectural History

The minimum professional qualifications in architectural history are a graduate degree in architectural history, art history, historic preservation, or closely related field, with coursework in American architectural history, or a bachelor's degree in architectural history, art history, historic preservation or closely related field plus one of the following:

1. At least two years of full-time experience in research, writing, or teaching in American architectural history or restoration architecture with an academic institution, historical organization or agency, museum, or other professional institution; or
2. Substantial contribution through research and publication to the body of scholarly knowledge in the field of American architectural history.

Architecture

The minimum professional qualifications in architecture are a professional degree in architecture plus at least two years of full-time experience in architecture; or a State license to practice architecture.

Historic Architecture

The minimum professional qualifications in historic architecture are a professional degree in architecture or a State license to practice architecture, plus one of the following:

1. At least one year of graduate study in architectural preservation, American architectural history, preservation planning, or closely related field; or
2. At least one year of full-time professional experience on historic preservation projects.

Such graduate study or experience shall include detailed investigations of historic structures, preparation of historic structures research reports, and preparation of plans and specifications for preservation projects.