

ADOPTION AND FINDING OF NO SIGNIFICANT IMPACT TENNESSEE VALLEY AUTHORITY

ECONOMIC DEVELOPMENT – HUNT PROPERTY JEFFERSON COUNTY, TENNESSEE

The Industrial Development Board (IDB) of Jefferson City, Tennessee purchased approximately 69 acres of available property, known as the Hunt Property, for potential industrial development with funding assistance from the United States Department of Agriculture (USDA) Rural Economic Development Loan and Grant (REDLG) Program. The USDA REDLG program provides funding for rural projects through local utility organizations. USDA provides zero-interest loans to local utilities which they, in turn, pass through to local businesses for projects that will create and retain employment in rural areas. The Hunt Property lies between Chucky Pike and Odyssey Road in Jefferson County, Tennessee (see **Figure 1** below) and has access to rail transportation. The site has been identified by many studies as a suitable site for industrial development. The Jefferson City IDB purchased the property, so that they may add it to their inventory of available industrial property.

An integral part of Tennessee Valley Authority's (TVA) mission is to promote economic development within the TVA service area. TVA provides financial assistance to help bring to market new/improved sites and facilities within the TVA service area and position communities to compete successfully for new jobs and capital investment. TVA proposes to provide an economic development grant through TVA InvestPrep funds to the IDB of Jefferson City to improve marketability of the Hunt Property. TVA funds would be used for removing select trees (approximately 1.1 acres), the rough grading of 25 acres and construction of an access road and sediment basin.

The USDA reviewed the potential impacts of providing a REDLG grant to the IDB of Jefferson City for the purchase and industrial development of the Hunt Property in an Environmental Assessment prepared in April 2019. Although TVA's action differs from the USDA's action, the environmental impacts associated with TVA's proposed action is contained within the same property boundary that was analyzed in the USDA EA, with the exception of minor tree clearing areas closest to the railroad, Slate Road and Odyssey Road (see Area of Potential Effect in **Figure 1** below). TVA has critically reviewed the USDA EA and determined that in reviewing the impacts of the proposed USDA grant, the scope, alternatives considered, and content of the EA are adequate in identifying the environmental issues related to TVA's action for most resource areas. The USDA EA is herein incorporated by reference. Air quality, land use, prime farmland, recreation, managed areas, noise, socioeconomics and environmental justice, aquatics, wetlands, transportation and visual resources were adequately addressed in the USDA EA and do not require additional analysis. However, TVA has determined that the EA does not completely address the impacts associated with terrestrial zoology, threatened and endangered species, surface water, solid and hazardous waste, floodplains and cultural resource impacts. Therefore, we have decided to address these issues more fully with supplemental analysis to the EA provided herein.



Figure 1: Hunt Property, Jefferson City, Tennessee

Alternatives Considered

TVA considered two alternatives: the No Action Alternative and the Action Alternative. In the No Action Alternative, TVA would not provide TVA InvestPrep funds to the IDB of Jefferson City and therefore there would be no direct, indirect, or cumulative impacts due to a TVA action.

Under the Action Alternative, TVA proposes to provide an economic development grant

through the TVA InvestPrep program to the IDB of Jefferson City to improve marketability of the Hunt Property. TVA funds would be used for removing select trees (approximately 1.1 acres), the rough grading of 25 acres and construction of an access road and sediment basin. Consequences of the Action Alternative would be the same as described under the USDA's assessment of the Proposed Action Alternative, which included the eventual industrial development of the Hunt Property.

Impacts Assessment

The USDA EA analyzed environmental impacts related to the construction and operation of industrial development on the entire Hunt Property, totaling 69 acres. Approximately 38 acres of the total 69 acres would be affected by TVA's proposed action. Adverse impacts to air quality, land use, prime farmland, recreation, managed areas, noise, socioeconomics and environmental justice, aquatics, wetlands, transportation and visual resources, as well as cumulative impacts to these resources, would be minimal and/or temporary, were adequately addressed in the USDA EA and do not require additional analysis. Additionally, upon further review of the proposed action, TVA has determined there would be no impacts from the creation of solid or hazardous wastes.

The Hunt Property consists of approximately 67% agricultural land, 19% hardwood forest, and 14% old fields and scattered hardwoods. As a result of TVA's proposed action, an estimated 1.1 acres of vegetation would be permanently removed. The removal of this habitat may result in displacement of wildlife and loss or conversion of suitable habitat for various wildlife species. However, wildlife species common to the area would be expected to return to the peripheral areas and to portions of the project site where vegetation has not been cleared.

As part of the USDA EA, McGill Associates performed a site evaluation on December 21, 2018, and found no wetlands or jurisdictional waters of the U.S. on the property. There are no identified floodplains within the parcel boundary; however, topographic maps indicate the presence of a stream. A hydrologic investigation was conducted in April 2019 that concluded that the feature is a wet-weather conveyance and not a perennial stream. Additionally, TVA's actions would not encroach on the wet-weather conveyance. Thus, the project would be consistent with E.O. 11988, Floodplain Management and E.O. 11990, Protection of Wetlands. Minor indirect impacts in the form of erosion and sedimentation could temporarily result from construction activities as part of TVA's proposed action. However, any construction project that disturbs one or more acres of land requires a state-issued General Permit for Construction Stormwater from the state of Tennessee as well as a Stormwater Pollution Prevention Plan. Compliance with permit conditions as well as implementation of Best Management Practices (BMP) would minimize potential impacts on surface waters.

Review of the U.S. Fish and Wildlife Service's Information for Planning and Consultation Website identified 11 migratory birds of conservation concern that have the potential to occur in the action area (bald eagle, bobolink, Canada warbler, cerulean warbler, eastern, whip-poor-will, Kentucky warbler, prairie warbler, red-headed woodpecker, rusty blackbird, wood thrush, and yellow-bellied sapsucker). No migratory birds of conservation concern were documented within the project footprint during field reviews. Marginal habitat for bobolink, Canada warbler, eastern whip-poor-will, Kentucky warbler, prairie warbler, red-headed woodpecker, and yellow-bellied sapsucker exists in the action area. Direct impacts could occur to individuals of these species if they were using the action area during the time of construction or tree removal, especially if individuals were immobile at the time of vegetation removal (i.e. eggs, nestlings). However, due to the relatively small scope of the actions, and presence of additionally suitable habitat in

adjacent landscapes, proposed actions are not expected to impact populations of migratory birds.

A review of terrestrial animal records in the TVA Natural Heritage database on October 14th, 2019, resulted in no records of state-listed species, federally listed species, or federally protected species within 3.0 miles of the project footprint. Two federally listed species (gray bat and northern long-eared bat) and one federally protected species (bald eagle) are known from Jefferson County, Tennessee. Though there is no known record of Indiana bat from Jefferson County, Tennessee, the project footprint falls within the known range of the species; thus impacts to this species also were evaluated.

On December 5th, 2019, TVA conducted a field review of the project site, including the four minor additional areas with proposed tree clearing (as shown on Figure 1). No bald eagles or bald eagle nests were observed or have been documented within 660 feet of the project footprint and project actions are in compliance with the National Bald Eagle Management Guidelines. Therefore, significant impacts to bald eagle are not anticipated.

No winter or summer roosting habitat was identified during field reviews for gray bat, Indiana bat, or northern long-eared bat. No caves were documented within 200 feet of the project footprint. Trees proposed for removal do provide a small amount of habitat for foraging federally listed bats. No wetlands have been documented within the project footprint. Previous survey efforts by GEOServices documented one ephemeral stream (wet weather conveyance) and a culvert in the project area, but neither falls within TVA's action area. The stream could be used seasonally by foraging bats, but would not be impacted by TVA's actions. The culvert is not likely to be used by roosting bats as it is extremely short, with no dark zone.

A number of activities associated with the proposed project were addressed in TVA's programmatic consultation with the U.S. Fish and Wildlife Service on routine actions and federally listed bats in accordance with ESA Section 7(a)(2) and completed in April 2018. For those activities with potential to affect bats, TVA committed to implementing specific conservation measures. These activities and associated conservation measures are identified on page 5 of the TVA Bat Strategy Project Screening Form (Attachment 1) and need to be reviewed/implemented as part of the proposed project. With the use of identified conservation measures, significant impacts to gray bat, Indiana bat, and northern long-eared bat are not anticipated as a result of the proposed project. No significant effects would occur to endangered or threatened species.

Pursuant to compliance with Section 106 of the National Historic Preservation Act and implementing regulations 36 CFR 800, TVA conducted a Phase I survey to identify cultural resources within the area of potential effect (APE) (shown on Figure 1) that are listed or could be eligible or potentially eligible for listing on the National Register of Historic Places (NRHP). In preparation for conducting the survey, TVA conducted a search of the site survey files and other resources available at the Tennessee Division of Archaeology and at the Tennessee Historical Commission. Additionally, TVA conducted a review of the local and regional historical and archaeological literature and interviewed local informants to identify important historical contexts for the study area. As a result of the background research and Phase I survey, and in consultation with the State Historic Preservation Officer (SHPO) and federally-recognized Indian tribes ("in consultation"), TVA determined that APE contains one resource eligible for listing in the National Register of Historic Places. The resource is designated as archaeological site 40JE222 and is a portion of the U.S. Civil War Battlefield of Mossy Creek (fought Dec. 29, 1863)

as defined by Update to the Civil War Sites Advisory Commission Report on the Nation's Civil War Battlefields (2009), published by the National Park Service. The National Park Service has previously stated their determination that the battlefield and site 40JE222 are eligible for listing on the NRHP, and TVA agrees with that determination. TVA found, in consultation, that the proposed undertaking would result in an adverse effect to the battlefield due to the cumulative effects of industrial development in diminishing the battlefield's integrity of setting, association, and feeling. TVA has proposed to resolve this adverse effect through mitigation measures that would include the placement of a historic marker detailing the Battle of Mossy Creek within the project area. TVA has executed a Memorandum of Agreement (MOA) that stipulates these mitigation measures for resolution of the undertaking's adverse effect on 40JE222. The State Historic Preservation Officer letter of concurrence and the MOA is included in Attachment 2.

Mitigation

The environmental effects of TVA's proposed action were determined to be minor and insignificant. TVA would implement the routine BMPs and the conservation measures identified on the TVA Bat Strategy Project Screening Form. TVA has entered into a MOA with the Tennessee SHPO and will implement the mitigation measures agreed upon during consultation to mitigate the adverse effect on the NRHP eligible site 40JE222.

Conclusion and Findings

TVA has independently reviewed the USDA EA and the underlying reports and has found the USDA document to be adequate of the environmental effects and potential consequences of TVA's proposed actions on air quality, land use, prime farmland, recreation, managed areas, noise, socioeconomics and environmental justice, aquatics, wetlands, transportation and visual resources. TVA is therefore adopting the USDA EA and expanded its analysis to include the environmental effects on terrestrial zoology, threatened and endangered species, surface water, solid and hazardous waste, floodplains and cultural resources. Based on the USDA EA, this subsequent analysis, and the implementation of the mitigation measures described above, TVA concludes that providing InvestPrep funds to the IDB of Jefferson City would not be a major federal action significantly affecting the environment. Accordingly, preparation of an environmental impact statement is not required.



S. Dawn Booker
Manager, NEPA Program
Environmental Compliance and Operations
Tennessee Valley Authority

05/12/2020

Date Signed

ATTACHMENT 1

BAT CONSERVATION MEASURES

Project Review Form - TVA Bat Strategy (06/2019)

This form should **only** be completed if project includes activities in Tables 2 or 3 (STEP 2 below). This form is not required if project activities are limited to Table 1 (STEP 2) or otherwise determined to have no effect on federally listed bats. If so, include the following statement in your environmental compliance document (e.g., add as a comment in the project CEC): "Project activities limited to Bat Strategy Table 1 or otherwise determined to have no effect on federally listed bats. Bat Strategy Project Review Form NOT required." This form is to assist in determining required conservation measures per TVA's ESA Section 7 programmatic consultation for routine actions and federally listed bats.¹

Project Name: Economic Development InvestPrep Grant for Jefferson County, TN **Date:** 12/10/2019
Contact(s): Ashley Pilakowski **CEC#:** **Project ID:** 409298
Project Location (City, County, State): Jefferson City, Jefferson County, Tennessee

Project Description:

TVA proposes to provide an economic development grant through TVA InvestPrepTM funds to the IDB of Jefferson City to improve marketability of the Hunt Property. TVA funds would be used for removing select trees (approximately 1.1 acres), the rough grading of 25 acres and construction of an access road and sediment basin.

SECTION 1: PROJECT INFORMATION - ACTION AND ACTIVITIES

STEP 1) Select TVA Action. If none are applicable, contact environmental support staff, Environmental Project Lead, or Terrestrial Zoologist to discuss whether form (i.e., application of Bat Programmatic Consultation) is appropriate for project:

- | | |
|---|--|
| <input type="checkbox"/> 1 Manage Biological Resources for Biodiversity and Public Use on TVA Reservoir Lands | <input type="checkbox"/> 6 Maintain Existing Electric Transmission Assets |
| <input type="checkbox"/> 2 Protect Cultural Resources on TVA-Retained Land | <input type="checkbox"/> 7 Convey Property associated with Electric Transmission |
| <input type="checkbox"/> 3 Manage Land Use and Disposal of TVA-Retained Land | <input type="checkbox"/> 8 Expand or Construct New Electric Transmission Assets |
| <input type="checkbox"/> 4 Manage Permitting under Section 26a of the TVA Act | <input checked="" type="checkbox"/> 9 Promote Economic Development |
| <input type="checkbox"/> 5 Operate, Maintain, Retire, Expand, Construct Power Plants | <input type="checkbox"/> 10 Promote Mid-Scale Solar Generation |

STEP 2) Select all activities from Tables 1, 2, and 3 below that are included in the proposed project.

TABLE 1. Activities with no effect to bats. Conservation measures & completion of bat strategy project review form NOT required.		
<input checked="" type="checkbox"/> 1. Loans and/or grant awards	<input type="checkbox"/> 8. Sale of TVA property	<input type="checkbox"/> 19. Site-specific enhancements in streams and reservoirs for aquatic animals
<input type="checkbox"/> 2. Purchase of property	<input type="checkbox"/> 9. Lease of TVA property	<input type="checkbox"/> 20. Nesting platforms
<input type="checkbox"/> 3. Purchase of equipment for industrial facilities	<input type="checkbox"/> 10. Deed modification associated with TVA rights or TVA property	<input type="checkbox"/> 41. Minor water-based structures (this does not include boat docks, boat slips or piers)
<input type="checkbox"/> 4. Environmental education	<input type="checkbox"/> 11. Abandonment of TVA retained rights	<input type="checkbox"/> 42. Internal renovation or internal expansion of an existing facility
<input type="checkbox"/> 5. Transfer of ROW easement and/or ROW equipment	<input type="checkbox"/> 12. Sufferance agreement	<input type="checkbox"/> 43. Replacement or removal of TL poles
<input type="checkbox"/> 6. Property and/or equipment transfer	<input type="checkbox"/> 13. Engineering or environmental planning or studies	<input type="checkbox"/> 44. Conductor and overhead ground wire installation and replacement
<input type="checkbox"/> 7. Easement on TVA property	<input type="checkbox"/> 14. Harbor limits delineation	<input type="checkbox"/> 49. Non-navigable houseboats

TABLE 2. Activities not likely to adversely affect bats with implementation of conservation measures. Conservation measures and completion of bat strategy project review form REQUIRED; review of bat records in proximity to project NOT required.

<input type="checkbox"/> 18. Erosion control, minor	<input type="checkbox"/> 57. Water intake - non-industrial	<input type="checkbox"/> 79. Swimming pools/associated equipment
<input type="checkbox"/> 24. Tree planting	<input type="checkbox"/> 58. Wastewater outfalls	<input type="checkbox"/> 81. Water intakes – industrial
<input type="checkbox"/> 30. Dredging and excavation; recessed harbor areas	<input type="checkbox"/> 59. Marine fueling facilities	<input type="checkbox"/> 84. On-site/off-site public utility relocation or construction or extension
<input type="checkbox"/> 39. Berm development	<input type="checkbox"/> 60. Commercial water-use facilities (e.g., marinas)	<input type="checkbox"/> 85. Playground equipment - land-based
<input type="checkbox"/> 40. Closed loop heat exchangers (heat pumps)	<input type="checkbox"/> 61. Septic fields	<input type="checkbox"/> 87. Aboveground storage tanks
<input type="checkbox"/> 45. Stream monitoring equipment - placement and use	<input type="checkbox"/> 66. Private, residential docks, piers, boathouses	<input type="checkbox"/> 88. Underground storage tanks
<input type="checkbox"/> 46. Floating boat slips within approved harbor limits	<input type="checkbox"/> 67. Siting of temporary office trailers	<input type="checkbox"/> 90. Pond closure
<input type="checkbox"/> 48. Laydown areas	<input type="checkbox"/> 68. Financing for speculative building construction	<input type="checkbox"/> 93. Standard License
<input type="checkbox"/> 50. Minor land based structures	<input type="checkbox"/> 72. Ferry landings/service operations	<input type="checkbox"/> 94. Special Use License
<input type="checkbox"/> 51. Signage installation	<input type="checkbox"/> 74. Recreational vehicle campsites	<input type="checkbox"/> 95. Recreation License
<input type="checkbox"/> 53. Mooring buoys or posts	<input type="checkbox"/> 75. Utility lines/light poles	<input type="checkbox"/> 96. Land Use Permit
<input type="checkbox"/> 56. Culverts	<input type="checkbox"/> 76. Concrete sidewalks	

Table 3: Activities that may adversely affect federally listed bats. Conservation measures AND completion of bat strategy project review form REQUIRED; review of bat records in proximity of project REQUIRED by OSAR/Heritage eMap reviewer or Terrestrial Zoologist.

<input type="checkbox"/> 15. Windshield and ground surveys for archaeological resources	<input checked="" type="checkbox"/> 34. Mechanical vegetation removal, includes trees or tree branches > 3 inches in diameter	<input type="checkbox"/> 69. Renovation of existing structures
<input type="checkbox"/> 16. Drilling	<input type="checkbox"/> 35. Stabilization (major erosion control)	<input type="checkbox"/> 70. Lock maintenance/ construction
<input type="checkbox"/> 17. Mechanical vegetation removal, does not include trees or branches > 3" in diameter (in Table 3 due to potential for woody burn piles)	<input checked="" type="checkbox"/> 36. Grading	<input type="checkbox"/> 71. Concrete dam modification
<input type="checkbox"/> 21. Herbicide use	<input type="checkbox"/> 37. Installation of soil improvements	<input type="checkbox"/> 73. Boat launching ramps
<input checked="" type="checkbox"/> 22. Grubbing	<input type="checkbox"/> 38. Drain installations for ponds	<input type="checkbox"/> 77. Construction or expansion of land-based buildings
<input type="checkbox"/> 23. Prescribed burns	<input type="checkbox"/> 47. Conduit installation	<input type="checkbox"/> 78. Wastewater treatment plants
<input type="checkbox"/> 25. Maintenance, improvement or construction of pedestrian or vehicular access corridors	<input type="checkbox"/> 52. Floating buildings	<input type="checkbox"/> 80. Barge fleeting areas
<input type="checkbox"/> 26. Maintenance/construction of access control measures	<input type="checkbox"/> 54. Maintenance of water control structures (dewatering units, spillways, levees)	<input type="checkbox"/> 82. Construction of dam/weirs/ levees
<input type="checkbox"/> 27. Restoration of sites following human use and abuse	<input type="checkbox"/> 55. Solar panels	<input type="checkbox"/> 83. Submarine pipeline, directional boring operations
<input type="checkbox"/> 28. Removal of debris (e.g., dump sites, hazardous material, unauthorized structures)	<input type="checkbox"/> 62. Blasting	<input type="checkbox"/> 86. Landfill construction
<input type="checkbox"/> 29. Acquisition and use of fill/borrow material	<input type="checkbox"/> 63. Foundation installation for transmission support	<input type="checkbox"/> 89. Structure demolition
<input type="checkbox"/> 31. Stream/wetland crossings	<input type="checkbox"/> 64. Installation of steel structure, overhead bus, equipment, etc.	<input type="checkbox"/> 91. Bridge replacement
<input type="checkbox"/> 32. Clean-up following storm damage	<input type="checkbox"/> 65. Pole and/or tower installation and/or extension	<input type="checkbox"/> 92. Return of archaeological remains to former burial sites
<input type="checkbox"/> 33. Removal of hazardous trees/tree branches		

STEP 3) Project includes one or more activities in Table 3?☒ **YES (Go to Step 4)**☐ **NO (Go to Step 13)**

STEP 4) Answer questions a through e below (applies to projects with activities from Table 3 ONLY)

- a) Will project involve continuous noise (i.e., ≥ 24 hrs) that is greater than 75 decibels measured on the A scale (e.g., loud machinery)? ☒ **NO** (NV2 does not apply) ☐ **YES** (NV2 applies, subject to records review)
- b) Will project involve entry into/survey of cave? ☒ **NO** (HP1/HP2 do not apply) ☐ **YES** (HP1/HP2 applies, subject to review of bat records)
- c) If conducting **prescribed burning (activity 23)**, estimated acreage: and timeframe(s) below: ☒ **N/A**

STATE	SWARMING	WINTER	NON-WINTER	PUP
GA, KY, TN	<input type="checkbox"/> Oct 15 - Nov 14	<input type="checkbox"/> Nov 15 - Mar 31	<input type="checkbox"/> Apr 1 - May 31, Aug 1 - Oct 14	<input type="checkbox"/> Jun 1 - Jul 31
VA	<input type="checkbox"/> Sep 16 - Nov 15	<input type="checkbox"/> Nov 16 - Apr 14	<input type="checkbox"/> Apr 15 - May 31, Aug 1 - Sept 15	<input type="checkbox"/> Jun 1 - Jul 31
AL	<input type="checkbox"/> Oct 15 - Nov 14	<input type="checkbox"/> Nov 15 - Mar 15	<input type="checkbox"/> Mar 16 - May 31, Aug 1 - Oct 14	<input type="checkbox"/> Jun 1 - Jul 31
NC	<input type="checkbox"/> Oct 15 - Nov 14	<input type="checkbox"/> Nov 15 - Apr 15	<input type="checkbox"/> Apr 16 - May 31, Aug 1 - Oct 14	<input type="checkbox"/> Jun 1 - Jul 31
MS	<input type="checkbox"/> Oct 1 - Nov 14	<input type="checkbox"/> Nov 15 - Apr 14	<input type="checkbox"/> Apr 15 - May 31, Aug 1 - Sept 30	<input type="checkbox"/> Jun 1 - Jul 31

- d) Will the project involve vegetation piling/burning? ☐ **NO** (SSPC4/SHF7/SHF8 do not apply) ☒ **YES** (SSPC4/SHF7/SHF8 applies, subject to review of bat records)

- e) If **tree removal (activity 33 or 34)**, estimated amount: ☒ **ac** ☐ **trees** ☐ **N/A**

STATE	SWARMING	WINTER	NON-WINTER	PUP
GA, KY, TN	<input checked="" type="checkbox"/> Oct 15 - Nov 14	<input checked="" type="checkbox"/> Nov 15 - Mar 31	<input checked="" type="checkbox"/> Apr 1 - May 31, Aug 1 - Oct 14	<input type="checkbox"/> Jun 1 - Jul 31
VA	<input type="checkbox"/> Sep 16 - Nov 15	<input type="checkbox"/> Nov 16 - Apr 14	<input type="checkbox"/> Apr 15 - May 31, Aug 1 - Sept 15	<input type="checkbox"/> Jun 1 - Jul 31
AL	<input type="checkbox"/> Oct 15 - Nov 14	<input type="checkbox"/> Nov 15 - Mar 15	<input type="checkbox"/> Mar 16 - May 31, Aug 1 - Oct 14	<input type="checkbox"/> Jun 1 - Jul 31
NC	<input type="checkbox"/> Oct 15 - Nov 14	<input type="checkbox"/> Nov 15 - Apr 15	<input type="checkbox"/> Apr 16 - May 31, Aug 1 - Oct 14	<input type="checkbox"/> Jun 1 - Jul 31
MS	<input type="checkbox"/> Oct 1 - Nov 14	<input type="checkbox"/> Nov 15 - Apr 14	<input type="checkbox"/> Apr 15 - May 31, Aug 1 - Sept 30	<input type="checkbox"/> Jun 1 - Jul 31

If warranted, does project have flexibility for bat surveys (May 15-Aug 15): ☒ **MAYBE** ☐ **YES** ☐ **NO**

*** For **PROJECT LEADS** whose projects will be reviewed by a Heritage Reviewer (Natural Resources Organization only), **STOP HERE**. Click File/Save As, name form as "ProjectLead_BatForm_CEC-or-ProjectIDNo_Date", and submit with project information. Otherwise continue to Step 5. ***

SECTION 2: REVIEW OF BAT RECORDS (applies to projects with activities from Table 3 ONLY)**STEP 5) Review of bat/cave records conducted by Heritage/OSAR reviewer?**

- ☒ **YES** ☐ **NO** (Go to Step 13)

Info below completed by: ☐ **Heritage Reviewer** (name) Date
☐ **OSAR Reviewer** (name) Date
☒ **Terrestrial Zoologist** (name) Elizabeth Hamrick Date Dec 23, 2019

Gray bat records: ☐ None ☐ Within 3 miles* ☒ Within a cave* ☒ Within the County

Indiana bat records: ☐ None ☒ Within 10 miles* ☒ Within a cave* ☐ Capture/roost tree* ☐ Within the County

Northern long-eared bat records: ☐ None ☐ Within 5 miles* ☐ Within a cave* ☐ Capture/roost tree* ☒ Within the County

Virginia big-eared bat records: ☒ None ☐ Within 6 miles* ☐ Within the County

Caves: ☐ None within 3 mi ☒ Within 3 miles but > 0.5 mi ☐ Within 0.5 mi but > 0.25 mi* ☐ Within 0.25 mi but > 200 feet*
☐ Within 200 feet*

Bat Habitat Inspection Sheet completed? ☒ **NO** ☐ **YES**

Amount of **SUITABLE** habitat to be removed/burned (may differ from STEP 4e): (☐ **ac** ☐ **trees**)* ☐ **N/A**

STEP 6) Provide any additional notes resulting from Heritage Reviewer records review in Notes box below then
 **Go to Step 13**

Notes from Bat Records Review (e.g., historic record; bats not on landscape during action; DOT bridge survey with negative results):

STEPS 7-12 To be Completed by Terrestrial Zoologist (if warranted):

STEP 7) Project will involve:

- ☐ Removal of suitable trees within 0.5 mile of P1-P2 Indiana bat hibernacula or 0.25 mile of P3-P4 Indiana bat hibernacula or any NLEB hibernacula.
- ☐ Removal of suitable trees within 10 miles of documented Indiana bat (or within 5 miles of NLEB) hibernacula.
- ☐ Removal of suitable trees > 10 miles from documented Indiana bat (> 5 miles from NLEB) hibernacula.
- ☐ Removal of trees within 150 feet of a documented Indiana bat or northern long-eared bat maternity roost tree.
- ☐ Removal of suitable trees within 2.5 miles of Indiana bat roost trees or within 5 miles of Indiana bat capture sites.
- ☐ Removal of suitable trees > 2.5 miles from Indiana bat roost trees or > 5 miles from Indiana bat capture sites.
- ☐ Removal of documented Indiana bat or NLEB roost tree, if still suitable.
- ☒ N/A

STEP 8) Presence/absence surveys were/will be conducted: ☐ YES ☒ NO ☐ TBD

STEP 9) Presence/absence survey results, on ☐ NEGATIVE ☐ POSITIVE ☒ N/A

STEP 10) Project ☐ WILL ☒ WILL NOT require use of Incidental Take in the amount of ☐ acres or ☐ trees
 proposed to be used during the ☐ WINTER ☐ VOLANT SEASON ☐ NON-VOLANT SEASON ☒ N/A

STEP 11) Available Incidental Take (prior to accounting for this project) as of

TVA Action	Total 20-year	Winter	Volant Season	Non-Volant Season
9 Promote Economic Development				

STEP 12) Amount contributed to TVA's Bat Conservation Fund upon activity completion: \$ **OR** ☐ N/A

TERRESTRIAL ZOOLOGISTS, after completing SECTION 2, review Table 4, modify as needed, and then complete section for Terrestrial Zoologists at end of form.

SECTION 3: REQUIRED CONSERVATION MEASURES

STEP 13) Review Conservation Measures in Table 4 and ensure those selected are relevant to the project. If not, manually override and uncheck irrelevant measures, and explain why in ADDITIONAL NOTES below Table 4.

Did review of Table 4 result in ANY remaining Conservation Measures in **RED**?

- ☐ **NO** (Go to Step 14)
- ☒ **YES** (STOP HERE; Submit for Terrestrial Zoology Review. Click File/Save As, name form as "ProjectLead_BatForm_CEC-or-ProjectIDNo_Date", and submit with project information).

Table 4. TVA's ESA Section 7 Programmatic Bat Consultation Required Conservation Measures

The Conservation Measures in Table 4 are automatically selected based on your choices in Tables 2 and 3 but can be manually overridden, if necessary. To Manually override, press the button and enter your name.

Manual Override

Name: Elizabeth Hamrick

Check if Applies to Project	Activities Subject To Conservation Measure	Conservation Measure Description
		NV1 - Noise will be short-term, transient, and not significantly different from urban interface or natural events (i.e., thunderstorms) that bats are frequently exposed to when present on the landscape.
		SSPC2 - Operations involving chemical/fuel storage or resupply and vehicle servicing will be handled outside of riparian zones (streamside management zones) in a manner to prevent these items from reaching a watercourse. Earthen berms or other effective means are installed to protect stream channel from direct surface runoff. Servicing will be done with care to avoid leakage, spillage, and subsequent stream, wetland, or ground water contamination. Oil waste, filters, other litter will be collected and disposed of properly. Equipment servicing and chemical/fuel storage will be limited to locations greater than 300-ft from sinkholes, fissures, or areas draining into known sinkholes, fissures, or other karst features.
		SSPC5 (26a, Solar, Economic Development only) - Section 26a permits and contracts associated with solar projects, economic development projects or land use projects include standards and conditions that include standard BMPs for sediment and contaminants as well as measures to avoid or minimize impacts to sensitive species or other resources consistent with applicable laws and Executive Orders.

¹Bats addressed in consultation (02/2018), which includes gray bat (listed in 1976), Indiana bat (listed in 1967), northern long-eared bat (listed in 2015), and Virginia big-eared bat (listed in 1979).

Hide All Unchecked Conservation Measures

- ☒ HIDE
☐ UNHIDE

Hide Table 4 Columns 1 and 2 to Facilitate Clean Copy and Paste

- ☒ HIDE
☐ UNHIDE

NOTES (additional info from field review, explanation of no impact or removal of conservation measures).

STEP 14) Save completed form (Click File/Save As, name form as "ProjectLead_BatForm_CEC-or-ProjectIDNo_Date") in project environmental documentation (e.g. CEC, Appendix to EA) AND send a copy of form to batstrategy@tva.gov
Submission of this form indicates that Project Lead/Applicant:

(name) is (or will be made) aware of the requirements below.

- Implementation of conservation measures identified in Table 4 is required to comply with TVA's Endangered Species Act programmatic bat consultation.
- TVA may conduct post-project monitoring to determine if conservation measures were effective in minimizing or avoiding impacts to federally listed bats.

For Use by Terrestrial Zoologist Only

☒ Terrestrial Zoologist acknowledges that Project Lead/Contact (name) has been informed of any relevant conservation measures and/or provided a copy of this form.

☐ For projects that require use of Take and/or contribution to TVA's Bat Conservation Fund, Terrestrial Zoologist acknowledges that Project Lead/Contact has been informed that project will result in use of Incidental Take ☐ ac ☐ trees and that use of Take will require \$ contribution to TVA's Conservation Fund upon completion of activity (amount entered should be \$0 if cleared in winter).

For Terrestrial Zoology Use Only. Finalize and Print to Noneditable PDF.

ATTACHMENT 2
AGENCY CORRESPONDENCE



Tennessee Valley Authority, 400 West Summit Hill Drive, Knoxville, Tennessee 37902

February 10, 2020

Mr. E. Patrick McIntyre, Jr.
Executive Director
and State Historic Preservation Officer
Tennessee Historical Commission
2941 Lebanon Pike
Nashville, Tennessee 37243-0442

Dear Mr. McIntyre:

TENNESSEE VALLEY AUTHORITY (TVA) INVESTPREP 37.7 ACRE CULTURAL RESOURCE SURVEY FOR A PROPOSED INDUSTRIAL DEVELOPMENT AT THE HUNT PROPERTY, JEFFERSON COUNTY, TENNESSEE (36.1322, -83.4695)

TVA proposes to provide matching funds (via TVA's InvestPrep program) to assist with site preparation related to a future industrial development at the Hunt Property, just northeast of Jefferson City, Tennessee (Figures 1-2). In 2019, the Industrial Development Board of Jefferson City purchased the site with funding assistance from US Department of Agriculture (USDA) via a Rural Economic Development Loan & Grant (REDLG) Program. The USDA completed an environmental assessment (EA) at the time of purchase, but did not undertake any associated cultural resource surveys. TVA's undertaking (providing funding) would not involve the USDA; TVA is the sole federal agency involved in this undertaking. TVA's funds would be used for .75 acres of tree clearing, the rough grading of 25 acres, and construction of an access road and storm water facilities. TVA determined the area of potential effects (APE) to be the area of proposed ground disturbance (37.7 acres) where physical effects could occur as well as areas within a half-mile radius of the project within which the industrial development would be visible where visual effects on aboveground [or, historic architectural] resources could occur (Figure 3).

To fulfill TVA's project obligations under Section 106 of the National Historic Preservation Act, TVA contracted with Cultural Resource Analysts, Inc. (CRA) to carry out a Phase I Archaeological survey, and an architectural resources survey of the 37.7-acre project footprint and the visual APE between December 2 and 12, 2019. The archaeological survey area consisted of the footprint of the Hunt Property, totaling approximately 15.3 ha (37.7 acres; 152,563.6 sq m) in size. The architectural survey addressed the project area and areas within a 0.5-mi radius of the project area located within the project's viewshed.

Please find two copies of the draft report entitled *Phase I Cultural Resource Survey for The Proposed Development at the Hunt Property, Jefferson County, Tennessee*

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enclosed. The survey and writing of both reports were consistent with the *Secretary of Interior's Standards and Guidelines for Identification* (National Park Service [NPS](1983).

TVA has read the enclosed reports and agrees with the authors' findings and recommendations. The preliminary project background research found that the project footprint is completely within the core area and National Register boundaries of the U.S. Civil War Battle of Mossy Creek (fought Dec. 29, 1863) as defined by *Update to the Civil War Sites Advisory Commission Report on the Nation's Civil War Battlefields* (2009), published by the National Park Service (Figures 4-5). Smith (1999) defines a slightly smaller core battlefield boundary than the National Park Service (Figure 5). Although the battlefield was determined to be eligible for the National Register of Historic Places in 2009, under Criterion A with military significance, none of the battlefield had been identified previously as an archaeological site. The archaeological field survey identified the Civil War Battlefield of Mossy Creek as an archaeological site, for which the Tennessee Division of Archaeology assigned site number 40JE222. However, the trinomial designation is based completely on local artifact collections previously removed from the project footprint by local collectors that CRA interviewed. The archaeological survey which included metal-detection, recorded no artifacts associated with the battle and no other sites.

The architectural survey found only one historic property within the viewshed of the proposed undertaking and that would be the Mossy Creek Civil War Battlefield. Given that the landscape surrounding the project footprint has not changed significantly since the initial 2005-6 American Battlefield Protection Program survey that recorded it (based on aerial imagery), and given that the project footprint remains open land suggestive of the historic agricultural use of the property, CRA, Inc. recommends and TVA concurs, that the portion of battlefield within the project footprint remains eligible for the National Register of Historic Places under Criterion A. The change in land use and cumulative effects of industrial development would severely diminish the integrity of setting, association, and feeling of this portion of the battlefield, likely resulting in overall reduction of the National Register-eligible portion of the battlefield. Based on these investigations, TVA therefore finds that the proposed undertaking would result in adverse effects to the Mossy Creek Civil War Battlefield.

Pursuant to 36 CFR Part 800.3(f)(2), TVA is consulting with federally recognized Indian tribes regarding properties within the proposed project's APE that may be of religious and cultural significance to them and eligible for the NRHP.

Pursuant to §800.6(a)(1) TVA will notify the Advisory Council on Historic Preservation of the adverse effect finding, provide the enclosed documentation, and invite their participation.

Pursuant to 36 CFR Part 800.5(a) we are notifying you of TVA's finding of adverse effects to historic properties, providing the documentation specified in § 800.11(e); and inviting you to review the finding. TVA proposes to develop a Memorandum of

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Agreement (MOA) for the resolution of the adverse effects. We are seeking your agreement with TVA's eligibility determinations, finding that the undertaking as currently planned will have adverse effects to site 40JE222, and proposal to develop an MOA.

Please contact Kerry Nichols by telephone, (865) 632-2458 or by email, kdnichols0@tva.gov with your comments.

Sincerely,



Clinton E. Jones
Manager
Cultural Compliance

KDN:ABM

Enclosures

cc (Enclosures):

Ms. Jennifer Barnett
Tennessee Division of Archaeology
1216 Foster Avenue, Cole Bldg. #3
Nashville, Tennessee 37210

References Cited

2009 *Update to the Civil War Sites Advisory Commission Report on the Nation's Civil War Battlefields*. United States Department of the Interior, National Park Service.

Smith, David

1999 *Campaign to Nowhere: The Results of General Longstreet's Move into Upper East Tennessee*. East Tennessee Printing Company, Rogersville, TN.

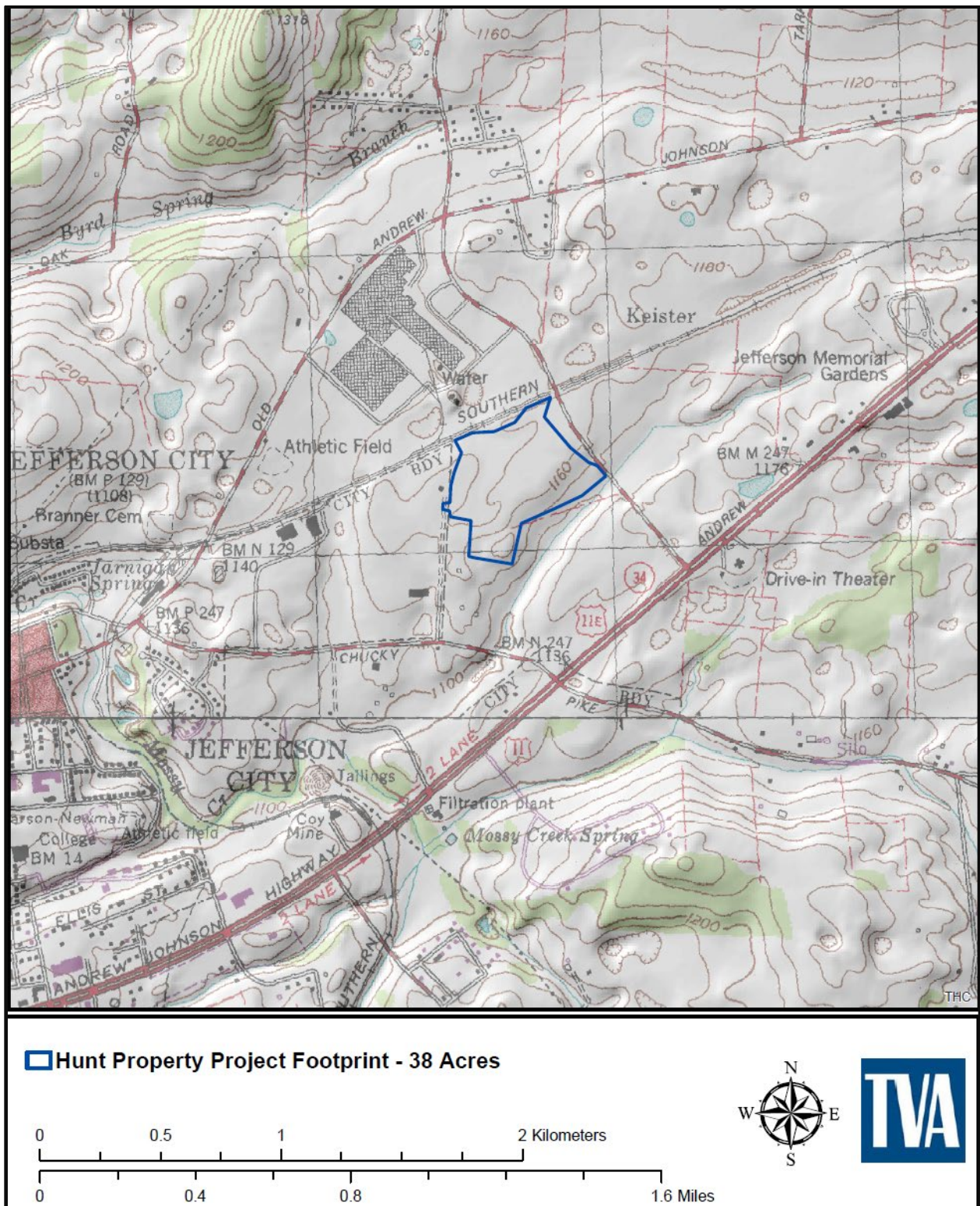


Figure 1. Basemap: ESRI.

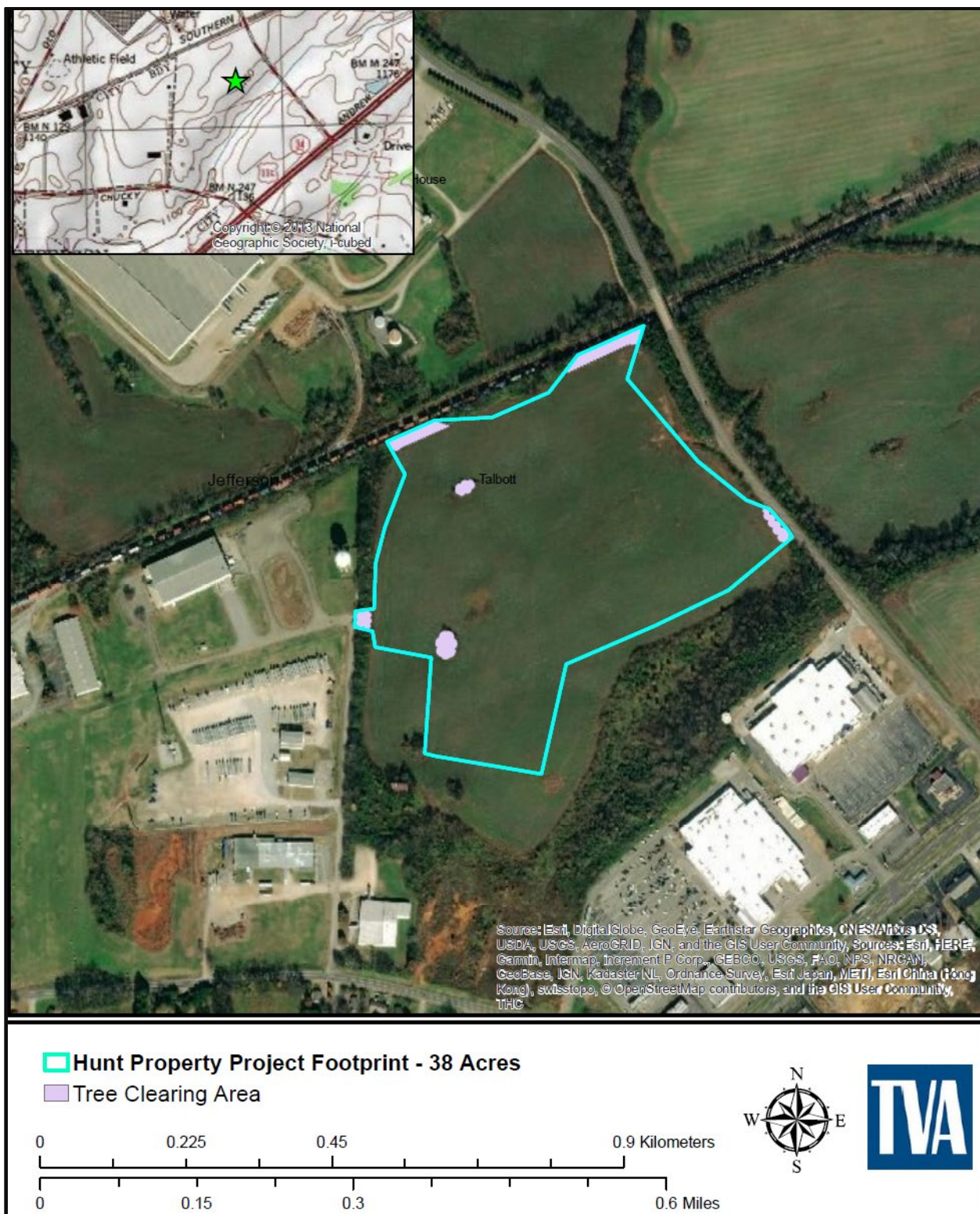


Figure 2. Basemap: ESRI.

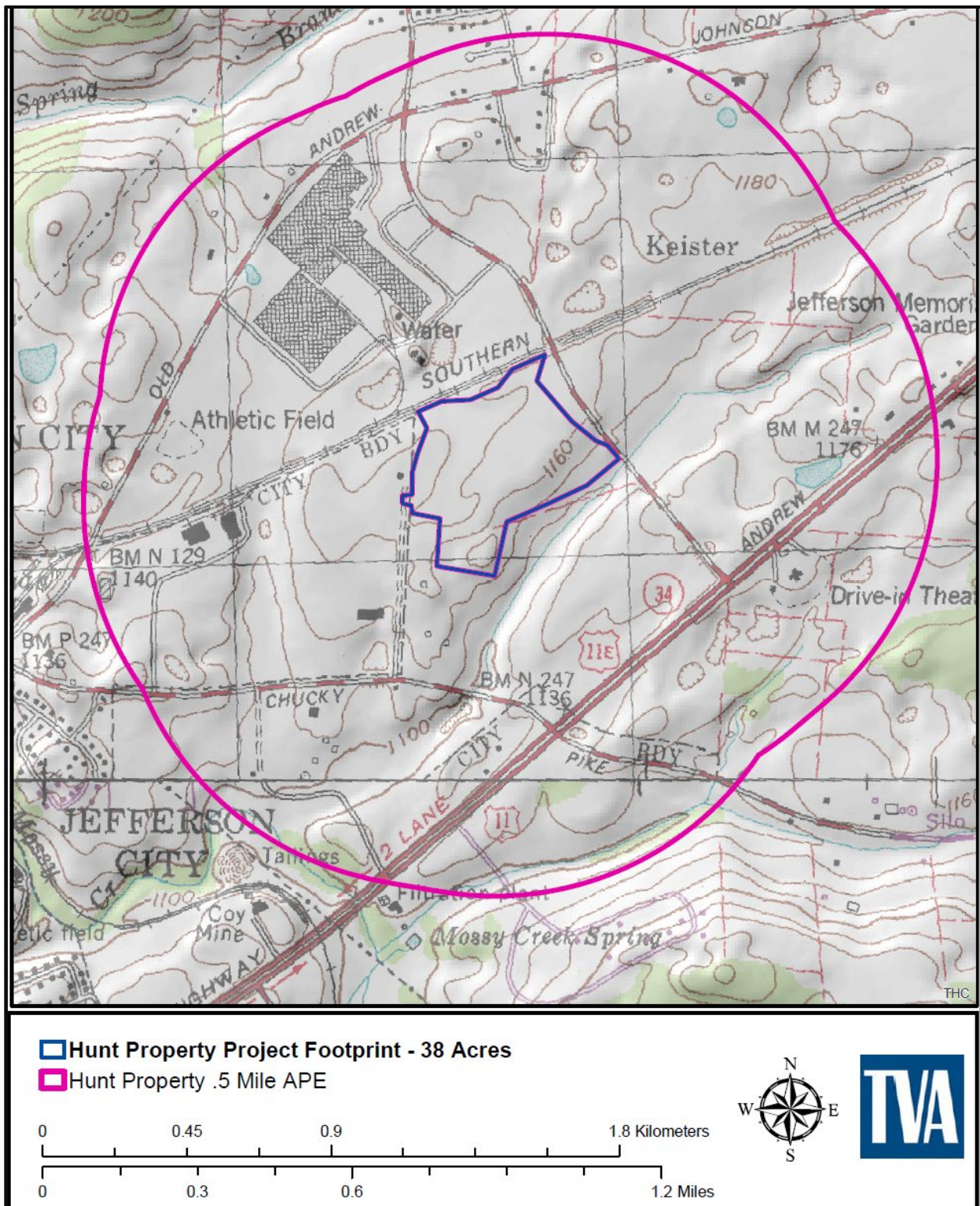


Figure 3. Basemap: ESRI.

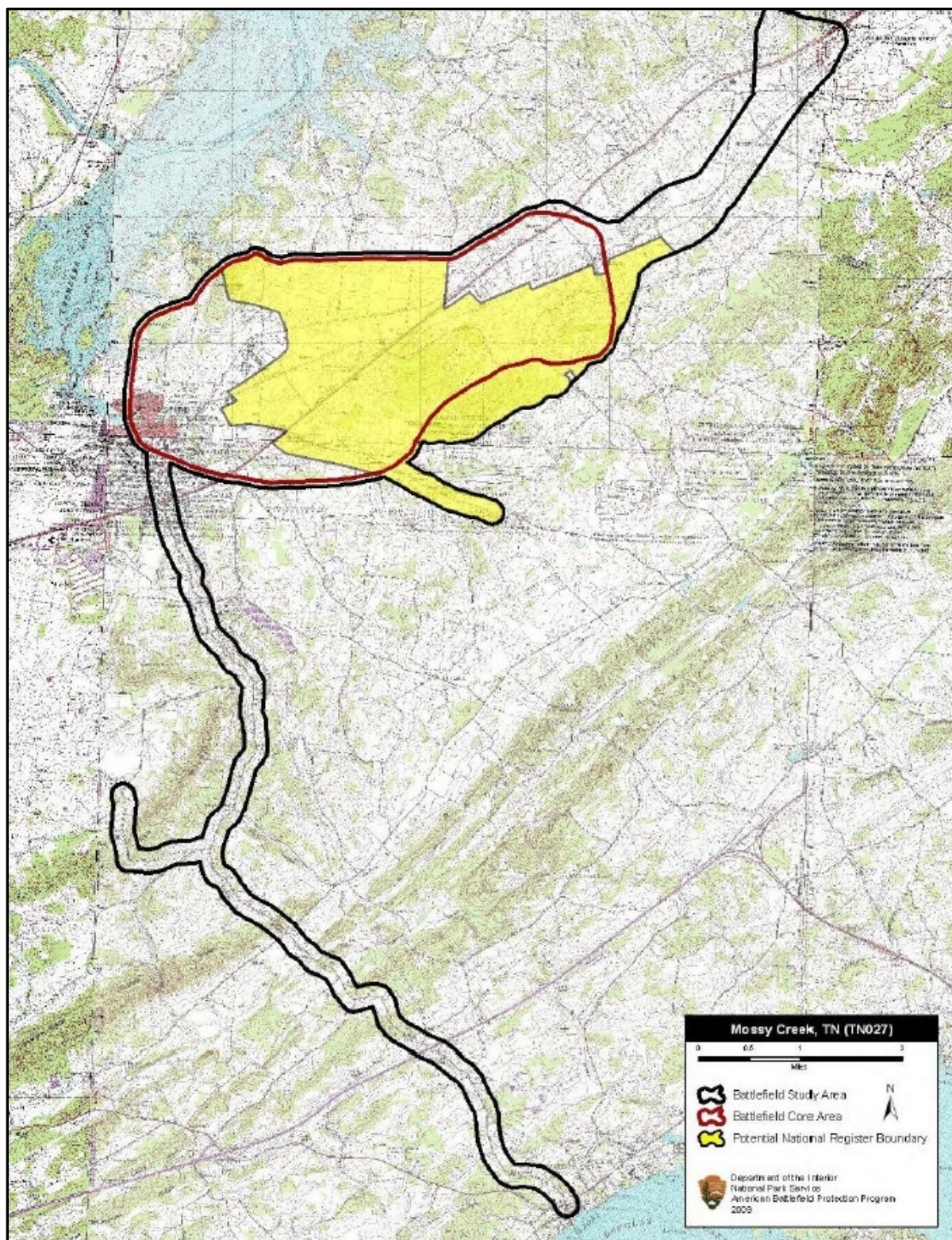


Figure 4. Mossy Creek Battlefield Areas as defined by National Park Service (2009).

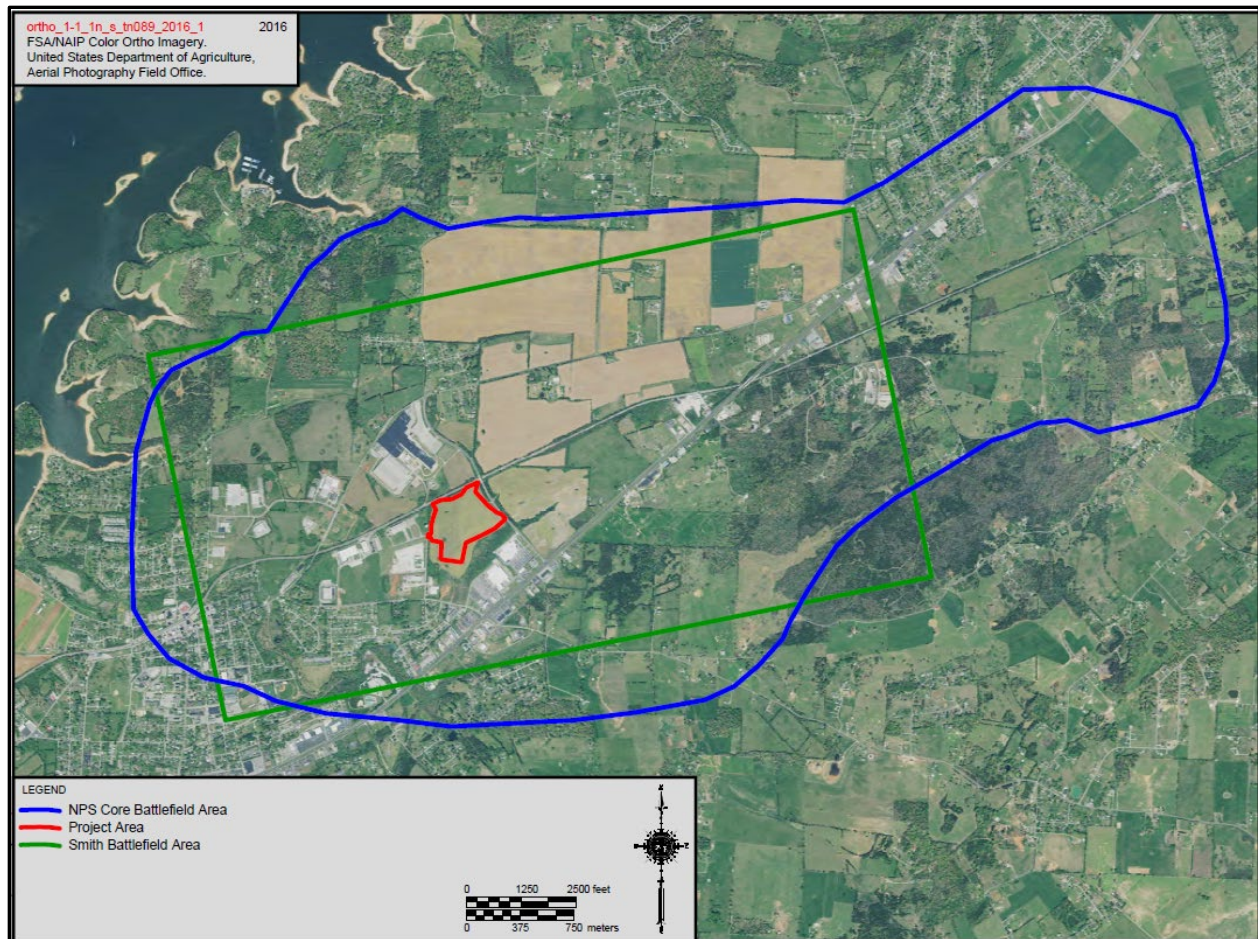


Figure 5. NPS and Smith (1999) Battlefield Areas: CRA Inc.



TENNESSEE HISTORICAL COMMISSION
STATE HISTORIC PRESERVATION OFFICE
2941 LEBANON PIKE
NASHVILLE, TENNESSEE 37243-0442
OFFICE: (615) 532-1550
www.tnhistoricalcommission.org

February 20, 2020

Mr. Clinton E. Jones
Tennessee Valley Authority
Biological and Cultural Compliance
400 West Summit Hill Drive
Knoxville, TN 37902

RE: TVA / Tennessee Valley Authority, Industrial Development at the Hunt Property
(36.1322, -83.4695), Jefferson City, Jefferson County, TN

Dear Mr. Jones:

In response to your request, we have reviewed the documents submitted regarding your proposed undertaking. Our review of and comment on your proposed undertaking are among the requirements of Section 106 of the National Historic Preservation Act. This Act requires federal agencies or applicants for federal assistance to consult with the appropriate State Historic Preservation Office before they carry out their proposed undertakings. The Advisory Council on Historic Preservation has codified procedures for carrying out Section 106 review in 36 CFR 800 (Federal Register, December 12, 2000, 77698-77739).

Considering available information, we concur that the project as currently proposed will adversely affect the National Register of Historic Places eligible Mossy Creek Civil War Battlefield (40JE222). You should continue to consult with our office to resolve the adverse effect. Please direct questions and comments to Claire Meyer (615 770-1099). We appreciate your cooperation.

Sincerely,

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

EPM/jmb



Tennessee Valley Authority, 400 West Summit Hill Drive, Knoxville, Tennessee 37902

May 11, 2020

Mr. E. Patrick McIntyre, Jr.
Executive Director
and State Historic Preservation Officer
Tennessee Historical Commission
2941 Lebanon Pike
Nashville, Tennessee 37243-0442

Dear Mr. McIntyre:

TENNESSEE VALLEY AUTHORITY (TVA) INVESTPREP EXECUTED MEMORANDUM OF AGREEMENT (MOA) BETWEEN THE TENNESSEE VALLEY AUTHORITY AND THE TENNESSEE STATE HISTORIC PRESERVATION OFFICER REGARDING TREE CLEARING, ROUGH GRADING AND CONSTRUCTION OF AN ACCESS ROAD AND STORM WATER FACILITIES AT THE HUNT PROPERTY, JEFFERSON COUNTY, TENNESSEE THE HUNT PROPERTY, JEFFERSON COUNTY, TENNESSEE (36.1322, -83.4695)

We received your signature of agreement on the above mentioned MOA on April 2, 2020. Please see an attached copy of the final executed MOA with all signature pages, for your files.

Please contact Kerry Nichols by telephone, (865) 632-2458 or by email, kdnichols0@tva.gov with any comments or questions.

Sincerely,

A handwritten signature in black ink, appearing to read "Clinton E. Jones".

Clinton E. Jones,
Manager
Cultural Compliance

KDN:ABM

Enclosures

cc (Enclosures):

Ms. Jennifer Barnett
Tennessee Division of Archaeology
1216 Foster Avenue, Cole Bldg. #3
Nashville, Tennessee 37210

**MEMORANDUM OF AGREEMENT BETWEEN
THE TENNESSEE VALLEY AUTHORITY
AND
THE TENNESSEE STATE HISTORIC PRESERVATION OFFICER
REGARDING TREE CLEARING, ROUGH GRADING AND CONSTRUCTION OF AN ACCESS
ROAD AND STORM WATER FACILITIES AT THE HUNT PROPERTY, JEFFERSON
COUNTY, TENNESSEE**

WHEREAS, the Tennessee Valley Authority (TVA) proposes to use TVA funds to assist the Industrial Development Board of Jefferson City, Tennessee with tree clearing of 1.1 acres, the rough grading of 25 acres and construction of an access road and storm water facilities at the Hunt Property, just northeast of Jefferson City, TN in preparation for a future industrial site (Undertaking); and

WHEREAS, the project footprint is completely within the core area and National Register boundaries of the U.S. Civil War Battle of Mossy Creek (fought Dec. 29, 1863) as defined by *Update to the Civil War Sites Advisory Commission Report on the Nation's Civil War Battlefields* (2009), published by the National Park Service; and

WHEREAS, the Mossy Creek Civil War battlefield was determined to be eligible for the National Register of Historic Places by the National Park Service in 2009, under Criterion A with military significance; and

WHEREAS, TVA has defined the Undertaking's area of potential effects (APE) to be the area of proposed ground disturbance (37.7 acres), where physical effects could occur, as well as areas within a half-mile radius of the project within which the industrial development would be visible, where visual effects on historic architectural resources could occur; and

WHEREAS, TVA has conducted identification efforts in the APE in consultation with the Tennessee State Historic Preservation Officer (TN SHPO), and TVA and TN SHPO agree that the APE contains one archaeological site that is eligible for inclusion in the National Register of Historic Places under criterion A, site 40JE222, the Mossy Creek Civil War Battlefield; and

WHEREAS, TVA has determined that the Undertaking will have an adverse effect on the National Register eligible portion of the Mossy Creek Battlefield, has consulted with the TN SHPO pursuant to 36 CFR Part 800, the regulations implementing Section 106 of the National Historic Preservation Act (NHPA) (54 U.S.C. § 306108), and TN SHPO has agreed with this effect finding; and

WHEREAS, in accordance with 36 CFR § 800.6(a)(1), TVA has notified the Advisory Council on Historic Preservation (ACHP) of its adverse effect determination by providing documentation specified in 36 CFR § 800.11 (e), and the ACHP has chosen not to participate in the consultation pursuant to 36 CFR § 800.6(a)(1)(iii); and

WHEREAS, TVA has identified and consulted with three non-signatory consulting parties each with a unique historical interest in the Hunt Property due to its status as an integral part of the American Civil War battlefield of Mossy Creek. These parties are listed as Tennessee Civil War Preservation Association, Lakeway Civil War Preservation Association, and East Tennessee Historical Society.

NOW, THEREFORE, TVA and the TN SHPO agree that the Undertaking shall be implemented in accordance with the following stipulations in order to take into account the effect of the Undertaking on historic properties.

STIPULATIONS

TVA shall ensure that the following measures are carried out:

I. INTERPRETIVE SIGNAGE

- A. TVA shall develop a National Park Service (NPS)-style interpretive panel set upon a cantilevered base to be sited at a location accessible by the public.
- B. The interpretive panel will include:
 - a. Relevant historic photographs and historic maps of the battlefield.
 - b. Discussion of the battle's history and significance.
 - c. An explanation of what events occurred within the project footprint during the battle.
- C. TVA shall provide the TN SHPO a digital copy of the final interpretive panel design for review to ensure Stipulations I B. 1-3 are met prior to production.

II. MONITORING AND REPORTING

Each year, following the execution of this MOA until it expires or is terminated, TVA shall provide SHPO and the ACHP a summary report detailing work undertaken pursuant to its terms. Such report shall include any scheduling changes proposed, any problems encountered, and any disputes and objections received in TVA's efforts to carry out the terms of this MOA.

III. DURATION

This MOA will expire if its terms are not carried out within three (3) years from the date of its execution. Prior to such time, TVA may consult with the other signatories to reconsider the terms of the MOA and amend it in accordance with Stipulation V below.

IV. DISPUTE RESOLUTION

Should TN SHPO object at any time in regard to any actions proposed under this MOA or to the manner in which the terms of the MOA are implemented, TVA shall consult with such party to resolve the objection. If TVA determines that such objection cannot be resolved, TVA will:

- A. Forward all documentation relevant to the dispute, including TVA's proposed resolution, to the ACHP. The ACHP shall provide TVA with its advice on the resolution of the objection within 30 days of receiving adequate documentation. Prior to reaching a final decision on the dispute, TVA shall prepare a written response that takes into account any timely advice or comments regarding the dispute from the ACHP and the TN SHPO, and provide them a copy of this written response. TVA will then proceed according to its final decision.
- B. If the ACHP does not provide its advice regarding the dispute within the thirty (30) day time period, TVA may make a final decision on the dispute and proceed accordingly. Prior to reaching such a final decision, TVA shall prepare a written response that takes into account any timely comments regarding the dispute from the TN SHPO, and provide the TN SHPO and the ACHP with a copy of such written response.

- C. TVA's responsibility to carry out all other actions subject to the terms of this MOA that are not the subject of the dispute remain unchanged.

V. AMENDMENTS

This MOA may be amended when such an amendment is agreed to in writing by both signatories. The amendment will be effective on the date a copy signed by both signatories is filed with the ACHP.

VI. TERMINATION


If either signatory to this MOA determines that its terms will not or cannot be carried out, that party shall immediately consult with the other signatory to attempt to develop an amendment per Stipulation V, above. If within thirty (30) days (or another time period agreed to by both signatories) an amendment cannot be reached, either signatory may terminate the MOA upon written notification to other signatory.

Once the MOA is terminated, and prior to work continuing on the undertaking, TVA must either (a) execute an MOA pursuant to 36 CFR § 800.6 or (b) request, take into account, and respond to the comments of the ACHP under 36 CFR § 800.7. TVA shall notify the TN SHPO as to the course of action it will pursue.

EXECUTION of this Agreement by TVA and the TN SHPO and implementation of its terms evidence that TVA has taken into account the effects of this undertaking on historic properties and afforded the ACHP an opportunity to comment. TVA will submit a copy of the executed MOA, along with the documentation that is specified in 36 CFR § 800.11 (f), to the ACHP. This MOA shall govern the Undertaking and all of its parts.

SIGNATORIES:

Tennessee Valley Authority

A handwritten signature in black ink, appearing to read "Clinton E. Jones", written over a horizontal line.

Date 05/08/2020

Mr. Clinton E. Jones
Deputy Federal Preservation Officer

Tennessee Historical Commission

E. Patrick McIntyre, Jr.

Date 04/02/2020

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