



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

May 20, 2015

Mr. E. Patrick McIntyre, Jr.
Executive Director
Tennessee Historical Commission
2941 Lebanon Road
Nashville, Tennessee 37243-0442

Dear Mr. McIntyre:

TENNESSEE VALLEY AUTHORITY (TVA), CLINCH RIVER SMALL MODULAR REACTORS (SMR) PROJECT, PHASE I ARCHITECTURAL ASSESSMENT, ROANE COUNTY, TENNESSEE 35° 55.01' N / 84° 23.29' W

We recently re-opened consultation with your office regarding TVA's proposal to develop a nuclear generating plant utilizing small modular reactors (SMRs) at the Clinch River Site in Roane County, Tennessee and apply for an early site permit license from the Nuclear Regulatory Commission (prior to applying for a construction and operating license). To date, our consultation has been concerned with the undertaking's possible effects on archaeological properties. In this letter, we are initiating consultation regarding the undertaking's possible effects on historic architectural properties.

In 2011, we contracted with TRC Environmental Corporation, Inc. (TRC) to conduct a Phase I architectural survey of the APE, as it was then defined by TVA. No detailed plans had been developed; the undertaking under consideration consisted of geotechnical borings that were proposed as part of a site characterization study related to the SMR project. However, before we could consult with your office regarding this study, TVA placed the project on hold due to funding issues.

At that time, we considered the APE for architectural resources to consist of the area within a one-half mile radius of the "power block" area, which had been cleared of vegetation and disturbed by earth moving activities during the 1980s as site preparation for the then-proposed Clinch River Breeder Reactor facility. The 2011 letter report prepared by TRC notes that background research identified no previously recorded architectural properties and no National Register of Historic Places (NRHP) listings in the APE. The survey did not result in the identification of any previously unrecorded architectural properties. We have enclosed one unbound copy of this letter report.

TVA recently has resumed planning for the SMR project, and has developed a preliminary layout and land clearing plan. The extent of land clearing, as currently proposed, would extend beyond the power block area that was the basis of the 2011 APE. Therefore, we propose to expand the APE for visual effects to include areas that are within a one-half mile radius of the proposed land clearing, and that would have a visual line of sight to the project. Figure 1 (below) depicts the boundaries of proposed land clearing (467 acres), a project boundary (labelled "site boundary"), and an outline of the project layout. Figure 2 shows the current APE for architectural resources compared with the APE that was the basis of the 2011 study.

The new APE encompasses almost the entire former APE, but it also includes areas that were not considered in 2011. In order to determine whether these latter areas contain any architectural

Mr. E. Patrick McIntyre, Jr.
Page Two
May 20, 2015

properties older than 50 years that could potentially be eligible for inclusion in the NRHP, TVA Cultural Compliance staff conducted a desktop review followed by a field review of two properties. The desktop review consisted of a close examination and comparison of the following: the 1941 and 1968 (photo revised 1990) editions of the USGS Elverton, TN 7.5-minute quadrangle; the 1941 and 1998 editions of the Bethel Valley, TN 7.5-minute quadrangle; the 1939 TVA Watts Bar Reservoir land acquisition maps; and current aerial photography available from public domain sources through ESRI ArcGIS. Structures shown on the 1941 quadrangles that were absent from later editions were considered to be non-extant. Structures shown in the same location on both quadrangles and also visible in current aerial photography were considered to be extant structures that are at least 70 years old.

Seven structures within the current APE appear on both the 1941 USGS quadrangles and later editions. These are labelled 1-7 on Figure 2. Structure 2 (a barn) does not appear on current aerial imagery and has apparently been demolished. Four of the structures (numbers 4-7) are within the 2011 APE and were recommended ineligible by TRC in 2011. Structures 1 and 3 are within the current APE but were not included in the 2011 survey. On the 1939 TVA land acquisition map, Structure 1 is indicated as a two-story frame house surrounded by scattered fruit trees, a smoke house, and a shed (Figure 3). The 1939 map shows Structure 3 as a one-story frame house surrounding by an orchard and several outbuildings: a barn, two chicken houses, a smoke house, and two corn cribs (Figure 4).

A TVA archaeologist visited Structures 1 and 3 on May 8, 2015 and took photographs. Structure 1 (Figures 5 and 6) appears to be extant and in good condition, and shows signs of having been modified by at least one modern addition. Structure 3 (Figures 7 and 8) is abandoned and in poor condition. The proposed undertaking, as currently proposed, would not be visible from a person standing at either property. At Structure 1, views would be blocked by a stand of mature trees on the property, as well as a wooded area along the top of the hill overlooking the Clinch River. Structure 3 is entirely surrounded by thick secondary vegetation and is not visible from Industrial Park Road, which is the nearest public road. Therefore, TVA finds that both structures are outside the APE for visual effects.

Pursuant to 36 CFR Part 800.4(d)(1), we are seeking your concurrence with TVA's finding that the Clinch River SMR project, as currently proposed, would affect no historic architectural resources listed or eligible for listing in the NRHP. If TVA's plans for the undertaking change such that the APE would need to be modified or effects reconsidered, TVA will consult further with your office.

If you have any questions or comments, please contact Richard Yarnell at 865/632-3463 or wryarnell@tva.gov.

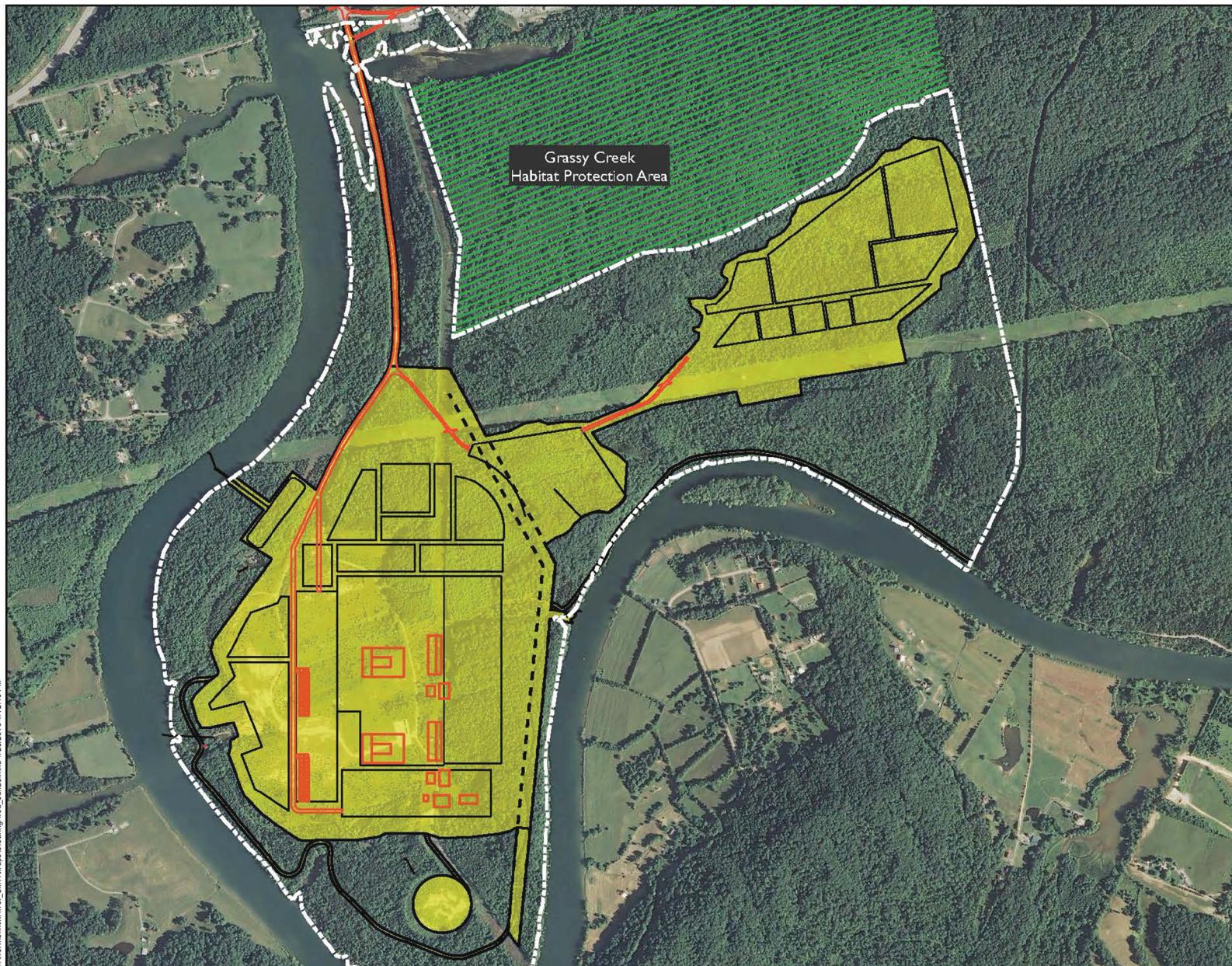
Sincerely,



Clinton E. Jones, Manager
Biological and Cultural Compliance
Safety, River Management and Environment
WT11B-K

SCC:CSD
Enclosure

AECOM



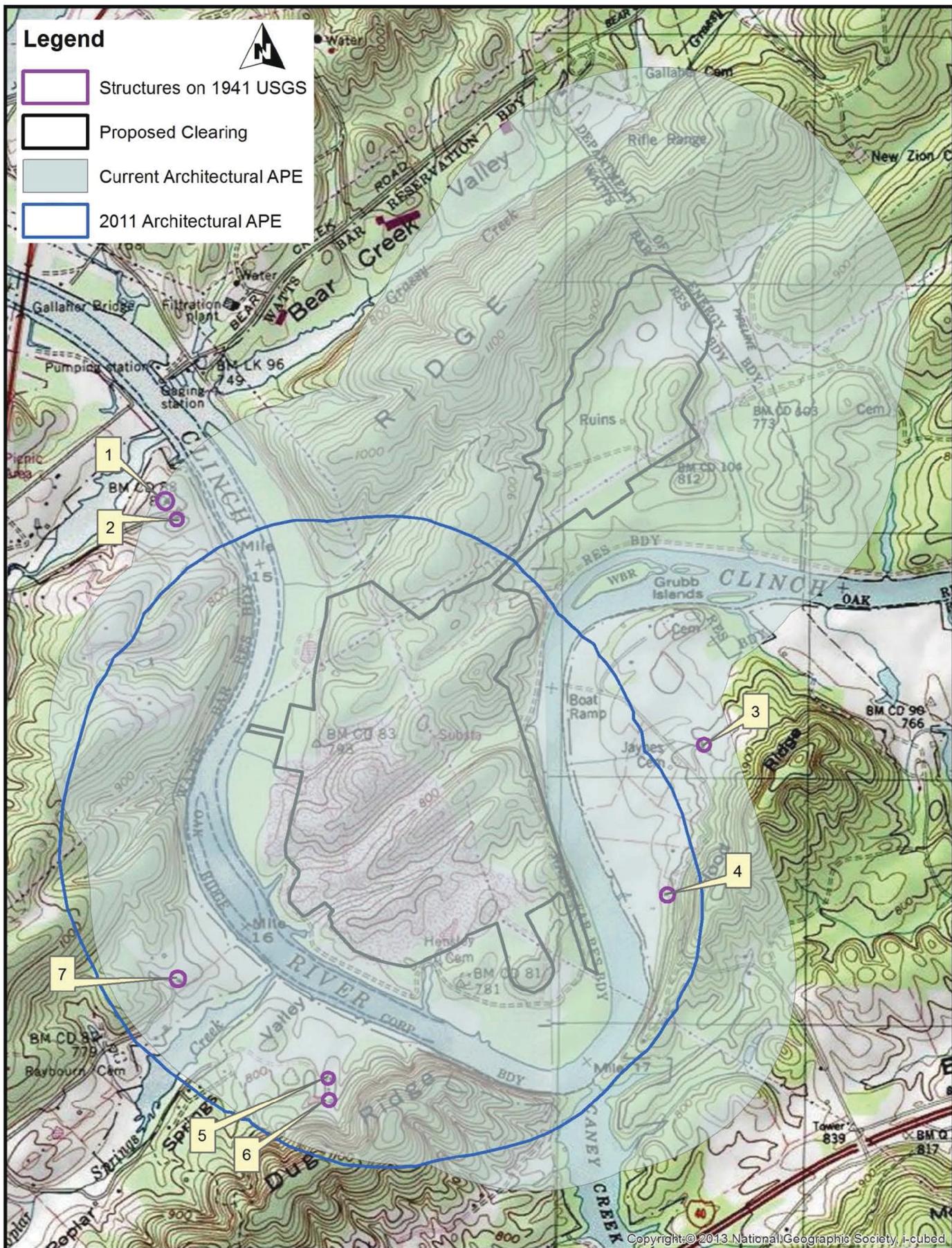


Figure 2. Current and former APEs; extent of proposed clearing; and structures indicated on 1941 U.S.G.S. Bethel Valley and Elverton 7.5-minute quadrangles. Base map: USA Topo Map.

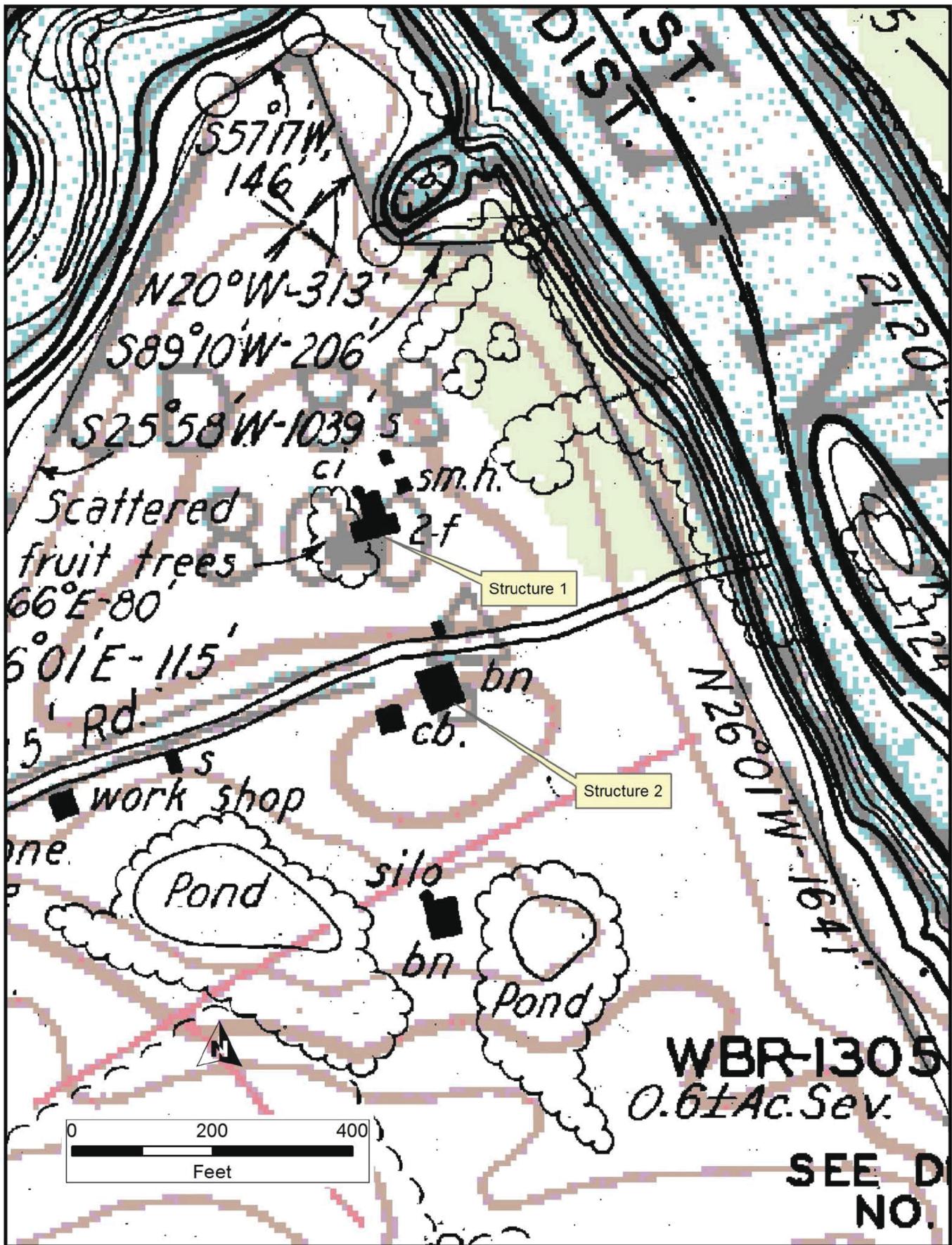


Figure 3. Structures 1 and 2 from the 1939 TVA Land Acquisition Map, overlaid on the 1968 U.S.G.S. Elverton 7.5-minute quadrangle (photo revised 1990). Note: resolution limits of the maps' projections account for the slight differences in location.

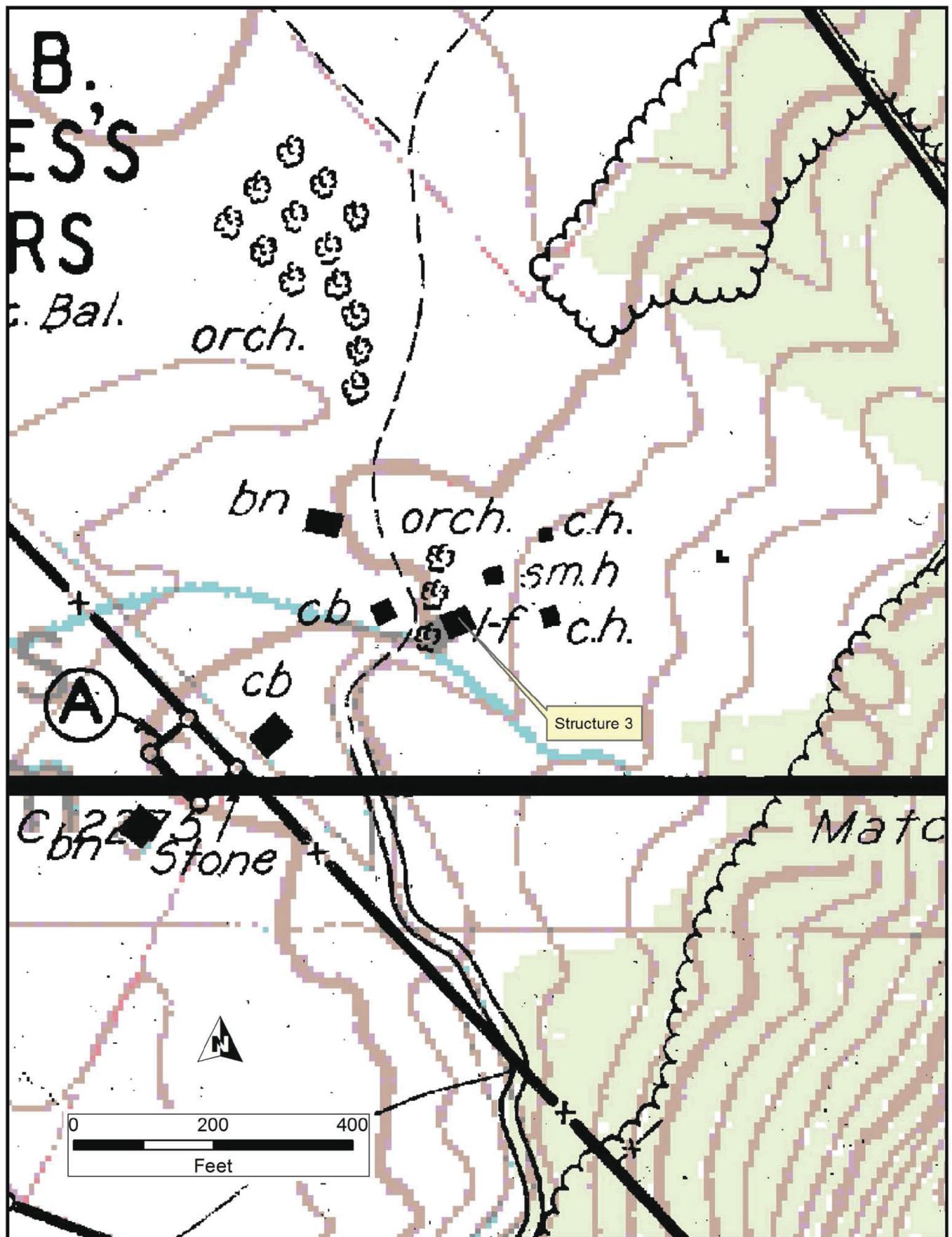


Figure 4. Structure 3 from the 1939 TVA Land Acquisition Map, overlaid on the 1998 U.S.G.S. Bethel Valley 7.5-minute quadrangle. Note: resolution limits of the maps' projections account for the slight differences in location.