

Archaeological testing for chimneys on an historic outbuilding at Wilton, Middlesex County, Virginia



Figure 1: Frame outbuilding east of the Wilton house, looking north.. Test Units 13 and 14 were excavated on this gable.

a 5' square and a 3' by 2.5' unit were excavated adjacent to the south gable (T.U. 13 and 14) (Figure 1).

During September 2013, DATA Investigations, LLC, as part of its ongoing archaeological testing and monitoring associated with the restoration of the Wilton house and grounds, excavated test units adjacent to the north and south ends of a frame outbuilding to the east of the main house. The goal of this work was to determine whether chimneys had formerly been located in these areas and to help guide their rebuilding, if convincing evidence could be found. In addition, this work was expected to yield more information about the date of the building's construction and use, as well as how it was used. Two 5' square test units were excavated adjacent to the north gable of the building (T.U. 11 and 12), while

Test Units 11 and 12 were dug in several layers. Layer A, a very dark grayish brown (10YR3/2) sandy loam topsoil, covered the entire unit and was filled with a large quantity of rubbish, including numerous nails, a large number of window glass, ceramic, and bottle glass fragments, an iron tool and other hardware fragments. This layer represents the most recent activities in this part of the site, specifically trash from the building's use as a shed. Layer B was the robbed chimney foundation hole, containing very dark brown (10YR/2/2) sandy loam and mortar chunks. Smaller quantities of artifacts similar to those found in Layer A were recovered from Layer B. This robbed U-shaped chimney footer, filled with mortar but very little brick (Figures 2 and 3). The foundation of the hearth wall for the chimney was also still partially intact just south of the units' southern edge. This foundation was laid one course of



Figure 2: View of T.U. 11 and 12 following excavation of the robbed chimney trench.



Figure 3: Detail of T.U. 11 East profile, showing the robbed chimney trench filled with mortar, with a narrow original builder's trench visible on the left side.

brick shallower than the chimney/pier foundation on either side of it. The apparent dimension of this chimney as built were approximately 6.1' wide (E-W) by 2.7' deep (N-S) measured from the outer wall of the frame structure.

Layer C, excavated only in T.U. 11, included the relatively clean fill layer on the interior (south) of the chimney, containing dark brown (10YR3/3) sandy loam mottled with subsoil and small amounts of brick, shell, nails and ceramics. This was likely dug out in order to build the chimney, and then quickly filled, like the narrow builder's trench on the exterior (north) of the chimney. Also excavated in T.U. 11 was Layer D, a transitional layer located on the exterior (north) side of the former chimney. This layer was also characterized by few artifacts and came down to natural subsoil. Layers B and C appear to date to the early 20th century, suggesting also that the chimney was removed at that time. The majority of the ceramics appear to be a mix of 19th and 20th century wares, including pearlware, whiteware, and ironstone, and further analysis may help establish a tighter range for the building's construction, use, and later re-use. Few artifacts dating prior to the early 19th century were found.

Test Units 13 and 14 tested for the presence of a chimney on the building's south gable end. They encountered a similar mix of layers as those in T.U.s 11 and 12. A notable difference between the two areas was the absence of a chimney builder's trench. Instead, the chimney appears to have been built directly on the 19th-century ground surface, or a much wider area was dug down to the necessary depth. The other significant difference was that Layer B, the chimney demolition layer, was filled with even larger quantities of mortar chunks, as well as many whole bricks and brick bats. More substantial portions of the east and west sides of the chimney were preserved in these units (Figures 4 and 5) compared to those in T.U.s 11 and 12, but the interior (north) hearth foundation was missing. A thin bed of mortar indicated the location of this missing element. The majority of the artifacts found within Layer A (topsoil) and Layer B (chimney demolition layer) appear to date to the early-to-mid-20th century. Further analysis of the artifacts may better refine these conclusions.

The archaeological evidence, coupled with architectural clues seen in the fabric of the extant building, namely original cut outs in the sills and framing matching the shape of the archaeological footprint, clearly demonstrates that chimneys formerly stood at either gable end of this frame outbuilding. Their construction date is not yet clear, but a date in the mid-19th



Figure 4: View of T.U. 13 (left) and 14 showing the remains of the chimney foundation.

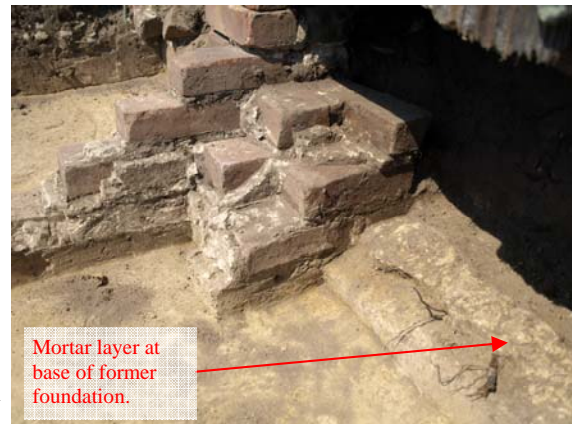


Figure 5: Detail of the western chimney remnant in T.U. 13. The majority of this element was robbed, including the interior portion of the hearth where a mortar base layer is still visible.

century is plausible and fits the archaeological evidence. The archaeological evidence suggests that the chimneys were likely removed in the early 20th century, the area and building used as a storage shed for farm equipment and other goods, the surrounding area accumulating trash related to these activities. The chimneys are roughly similar, but do not appear to have matching dimensions. The brick used throughout the chimneys and building piers is a consistent, refined, hand-made brick of modest dimensions, measuring approximately 0.68' long x 0.3' wide x 0.18' high. This is suggestive of one period of construction, the slight differences perhaps reflecting separate functions for the two parts of the building. Alternatively, these differences reflect variations in construction practices.

It is our opinion that the archaeological remains of these two chimneys have been sufficiently documented to justify the rebuilding of similarly-sized chimneys in the same locations. The small portions of intact chimney foundation brick will need to be removed in order to properly build the new chimneys, as they are not substantial enough to support, or be included within, the new construction. Outside of the test units excavated there are intact layers and features that preserve an important record of the life of this building and the surrounding activity areas, and all attempts should be made to avoid any impacts to these resources.

A full description of these four test units, along with a complete catalog of the artifacts recovered, is underway as part of DATA Investigations' larger project of archaeological testing, monitoring and mitigation associated with the restoration of the Wilton property. Once completed, a report draft will be submitted to the DHR for review.

Thane Harpole
DATA Investigations LLC
September 2013