

A Storage Building at the Washington-Era Ferry Farm
(George Washington's Boyhood Home National Historic Landmark):
Archaeological and Historical Documentation and Evidence
for Proposed Implementation of Phase 1-B of a Landscape
Rehabilitation

David Muraca
Director of Archaeology
The George Washington Foundation

Mark R. Wenger
Architectural Historian
Mesick, Cohen, Wilson, and Baker

March 2021

Documentation of Storage Building and Landscape Rehabilitation, in Relation to NPS Conservation Easement and Reviews

This report presents archaeological and historical documentation of a storage building, no longer extant, at Ferry Farm during the eighteenth century and the Washington family's ownership of the property. The site of this structure, along with others, is today encompassed by George Washington's Boyhood Home National Historic Landmark, Stafford County, Virginia. The George Washington Foundation (Foundation) now proposes, as part of its Phase 1-B implementation of the Preferred Alternative of a Site Treatment Plan, to erect a structure representing a storage building in the property's Core Interpretive Landscape. That landscape now includes structures representing the Washington family's dwelling and fencing contemporary to it, structures erected following presentation of archeological and historical documentation and evidence to the National Park Service (NPS) for its National Historic Preservation Act (NHPA) review and approval in 2015 of the Foundation's Phase 1-A implementation of the Preferred Alternative.

The preamble of the NPS-held Ferry Farm conservation easement of 2000 includes and acknowledges "...to restore and perpetuate the historic scene" among the goals of the Foundation. In 2014, an NPS National Environmental Policy Act review of an Environmental Assessment of the Foundation's Site Treatment Plan made a Finding of No Significant Impact (FONSI) for a Preferred Alternative of that Plan: "a rehabilitated landscape" that will include new buildings for visitor reception and education, maintenance, and utilities; access-infrastructure such as walkways and a road; and "a core interpretive landscape" containing new "features including fences, paths, crops, yards, and structures to demonstrate the 18th century plantation setting as authentically as possible." Those new interpretive-landscape structures proposed by the Foundation for the 18th century setting will include buildings that, in the wording of the FONSI, "capitalize on and communicate what is known--the location and nature of the main residence and the inclusion of outbuildings where their location and function have been determined."

This rehabilitated-landscape concept for Ferry Farm, subject of the NPS's NEPA review and FONSI of 2014 and NHPA review of the Foundation's Phase 1-A plans in 2015, is derived from the Secretary of Interior's Guidelines for rehabilitating cultural landscapes, guidelines that include the concept of replacing missing, interpretively important landscape features "if adequate historical, pictorial, and physical documentation exists so that the feature may be accurately reproduced."

Archaeological Documentation and Evidence

Feature 43¹ - excavated in 2014

¹ The excavation of this cellar included two opposing quadrants that contained a number of different soil layers resulting in a large number of context numbers. They are FF22-00371, FF22-00389, FF22-00390, FF22-00392, FF22-00401, FF22-00405, FF22-00409, FF22-00434, FF22-00439, FF22-00451, FF22-00456, FF22-00459, FF22-00465, FF22-00472, FF22-00482, FF22-00485, FF22-00489, FF22-00494, FF22-00546, FF22-00551, FF22-00552, FF22-00563, FF22-00568, FF22-00569, FF22-00575, FF22-00581, FF22-00582, FF22-00594. Muraca et al, Report

Coordinates - N635/E545

Feature 43 is a medium sized, colonial-era cellar and the only architectural remnant of a dependency structure once a prominent element of the Washington-dwelling workyard at Ferry Farm. George Washington Foundation archaeological staff uncovered it during the FF20 excavation in 2013 and located about 65 ft. east from the center back (east wall) of the Washington house. Feature 43 was nearly square in shape and measured 7.8 ft. by 8.0 ft. The cellar was intruded by two twentieth-century utility trenches: Feature 12 cut the southwest corner and Feature 23 impacted the east edge.

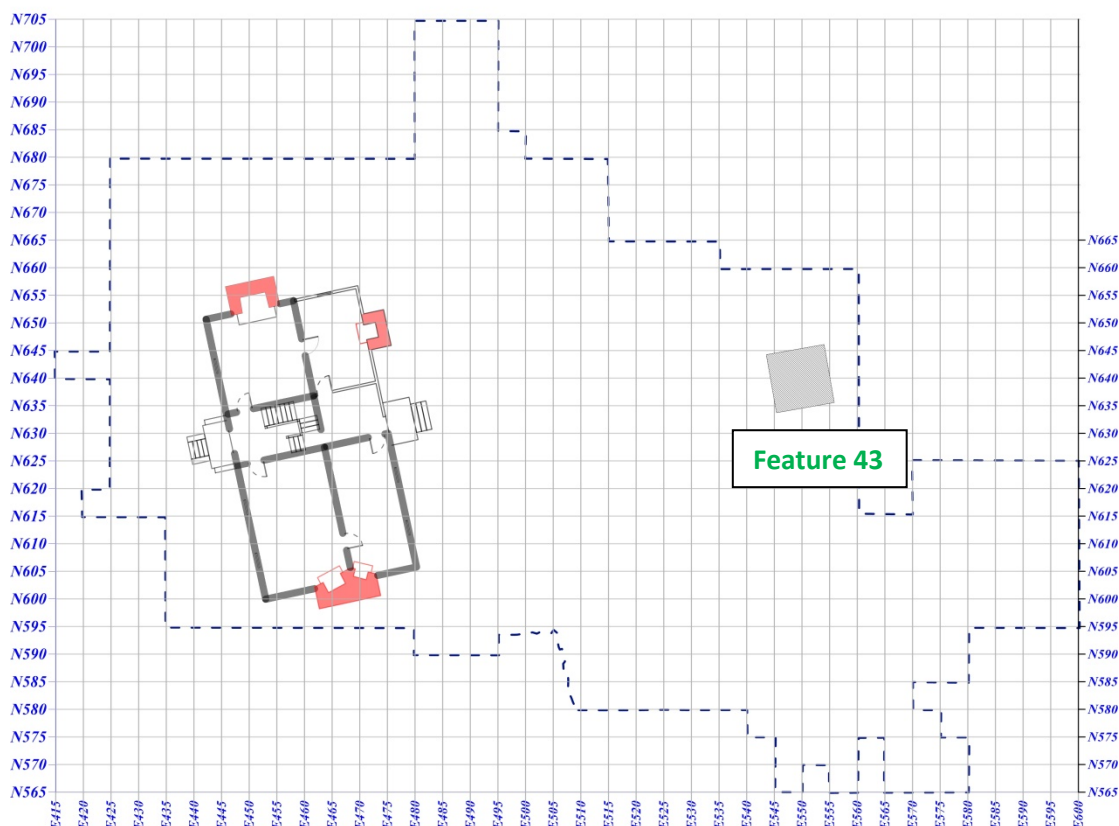


Figure 1. Location of Storage Building (right) in relationship to the Washington House (left).

Other than being vertically clipped by two twentieth-century utility features, the cellar was found horizontally intact (not truncated by plowing) and was encountered below undisturbed stratigraphy. The stratigraphic location of the frame outbuilding which this cellar served suggests that it was built by William Strother III, who sold the plantation to Augustine Washington. The artifacts found within the excavated layers, including ceramics, suggests the outbuilding was demolished in the second half of the eighteenth century.

Two quadrants of the feature were excavated – the northwest and southeast, leaving the other two quadrants in situ. The cellar intruded subsoil to a depth of 2.9 ft. The cellar walls were

unlined and the floor made of subsoil. There were impressions of sills on the north and south side of the structure indicating a wooden structure once sat directly on the ground. No evidence of a fireplace or a floor was present.

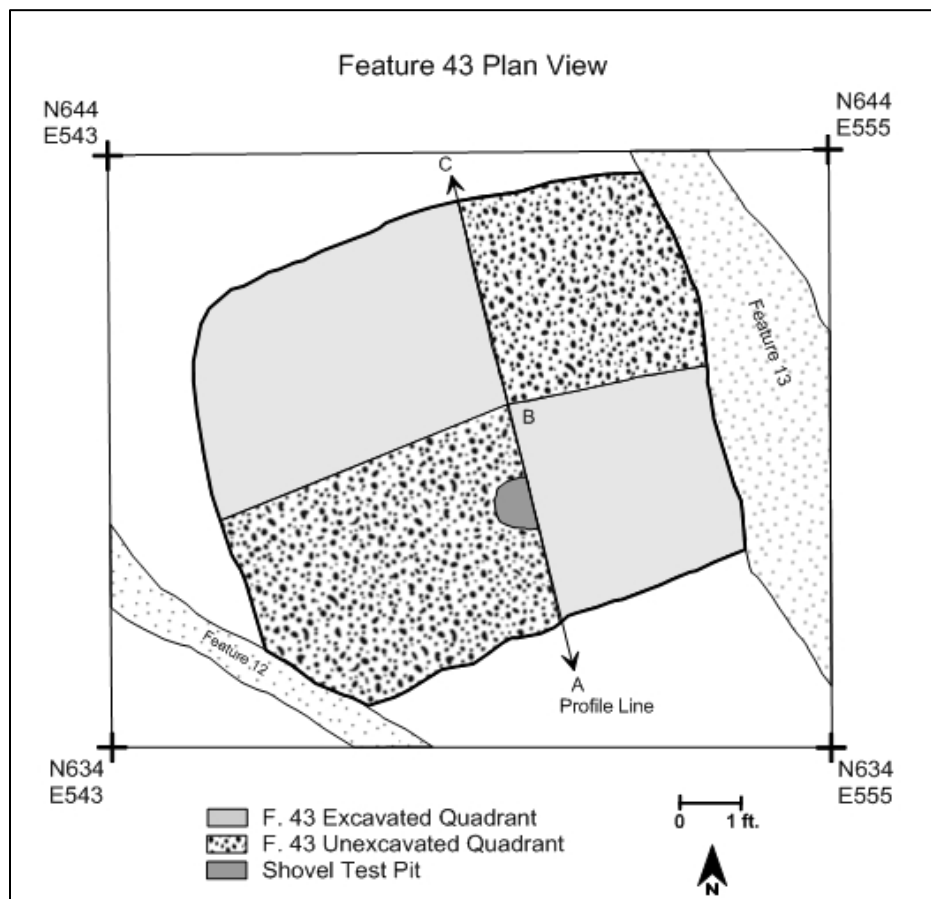


Figure 2. Feature 43 Plan View.

Stratigraphic Analysis

Five layers were identified within the feature, four of which were rapid filling events using fireplace ashes. Supporting evidence of a single episode of fill was provided by eight distinct burned bone button molds from the same garment found throughout the ash fill layers. In addition, a number of modified red clay nodules were located within the ash layers.

Layer One, the top layer, was a dark yellowish brown silty loam that measured 0.5 to 0.7 ft. in thickness. This layer was formed after the structure was demolished and represents post-demolition deposition. The architectural artifacts from Layer One included plaster, daub, window glass, brick bits and nails. Domestic artifacts from this layer included tobacco pipe fragments, a wig curler, oyster shell, and creamware, which provides the TPQ of 1762. A small piece of pearlware was considered as a contaminant.

Layer Two was very similar in soil color and consistency to Layer One, but measured only 0.2 ft. thick. Layer Two contained a small collection of artifacts that included nails, animal bones, oyster shell, plaster, window glass, mortar, and architectural stone. This layer contained one piece of creamware providing a TPQ of 1762.

Layer Three was a brown silt with charcoal, burned clay, and ash flecking. It varied in thickness from 0.2 ft. to 0.5 ft. Layer Three contained furniture tacks, tablewares, animal bone, creamware, egg shell, oyster shell, tobacco pipe fragments, brick fragments, plaster, and straight pins. The TPQ for this layer is 1762.

Layer Four was a brown/yellow brown silt with large and small clay nodules, some of which showed signs of burning. This layer was 2.0 ft. thick and excavated in 0.5 ft. arbitrary layers. Sizable red clay nodules existed within this ash layer. Layer Four contained the majority of the feature's finds. Domestic artifacts included lead shot, a furniture escutcheon, buttons, table glass, straight pins, an aiglet, tin glazed earthenware, Staffordshire slipware, Nottingham stoneware, tobacco pipe fragments, a fishing hook, white salt glazed stoneware, Chinese porcelain, redware and coarsewares. Architectural finds included daub, brick fragments, window glass, and mortar. The TPQ for this layer is 1700.

Layer Five was a yellowish red sand layer that appears to have formed while the structure was still in use. This layer measured 0.2 ft. to 0.3 ft. thick. Layer Five contained no artifacts.

The fill of this cellar appears to have originated in the fireplaces of other buildings, such as the kitchen or the Washington House. The storage building appears to have been built during the Strother period of occupation (pre-Washington: 1728 – 1738) and then used and eventually abandoned during the Washington occupation (1738 – 1772). The size and nature of the cellar suggests it was used for storage of root vegetables. Specialist studies on the artifacts recovered from this cellar include macro-botanical, faunal, and small finds.

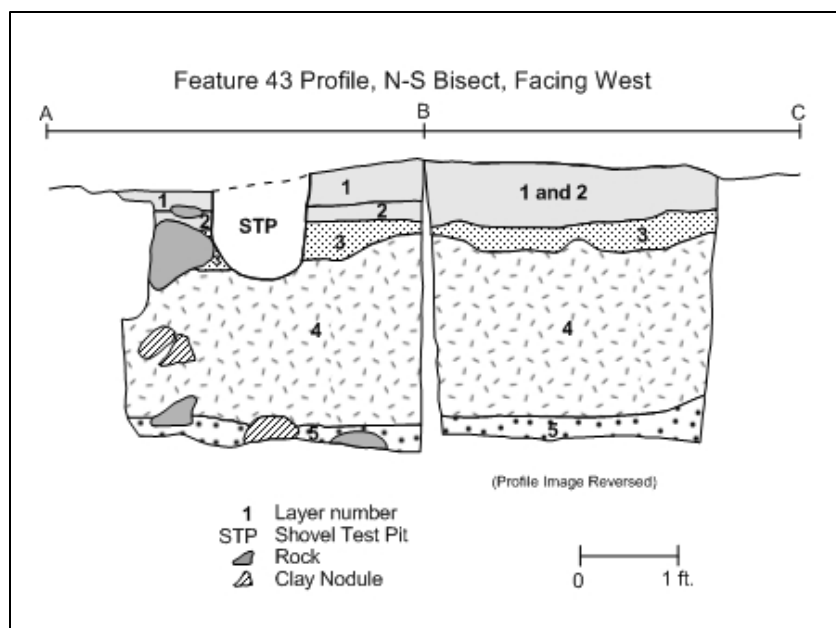


Figure 3. Feature 43 North-South Bisect Profile.



Figure 4. Feature 43 Northwest Quadrant During Excavation, Facing North.

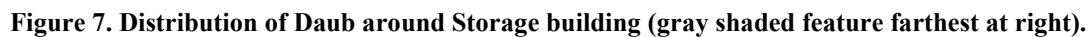


Figure 5. Feature 43 Northwest Quadrant After Excavation.



Figure 6. Feature 43 Southeast Quadrant After Excavation.

Feature 43 is the remnant of an in-ground, unlined cellar protected by a wooden structure with a sill that sat directly on the ground. The sill impressions and the cellar are surviving elements of this structure. The structure appears to have been constructed during the Strother occupancy, used to store root vegetables, and survived until after 1762. The fill sequences suggest the structure was torn down and the root cellar quickly backfilled with a mix of fireplace ash and large clumps of processed clay. Large quantities of daub (around gray shaded feature farthest to right in Figure 7, below) were recovered from around this structure suggesting that the structure was made of logs. Also found at the structure's site was a scatter, heavy in comparison to the rest of the work yard area, of Aquia sandstone (around gray shaded feature farthest to the right in Figure 8).



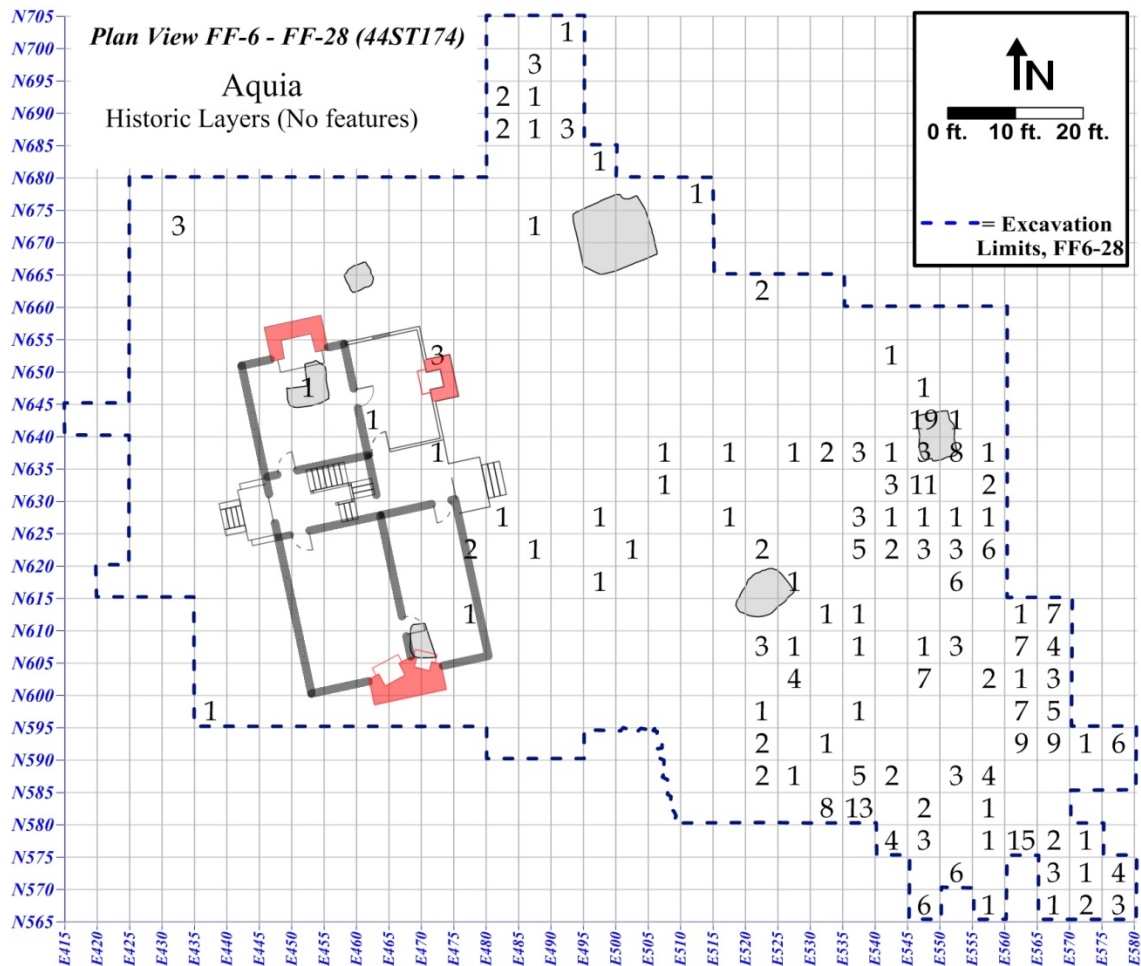


Figure 8. Distribution of Aquia Sandstone fragments (around gray shaded feature farthest at right).

Comparative Historical Evidence

Dell Upton has pointed out that many of the earliest Chesapeake cellars stood entirely apart from the main house.² The Wessels root cellar on Virginia's Eastern Shore is one of the few early survivors, owing no doubt to its substantial construction.

² Dell Upton, *Early Vernacular Architecture in Southeastern Virginia*, PhD. Diss, Brown University, 1979), I, pp. 197-198.



Figure 9. Wessels Root Cellar, Northampton County, VA, probably late 18th century.

Archaeology further demonstrates the point. On 17th-century sites, brick-lined cellars are more often associated with outbuildings, than with houses. Middle Plantation in Anne Arundel County Maryland supplies an example. By c. 1700, the site had at least two quarters built over full cellars, while two detached cellar features were also extant at the time. During this same period, the main house had only a few small storage pits.

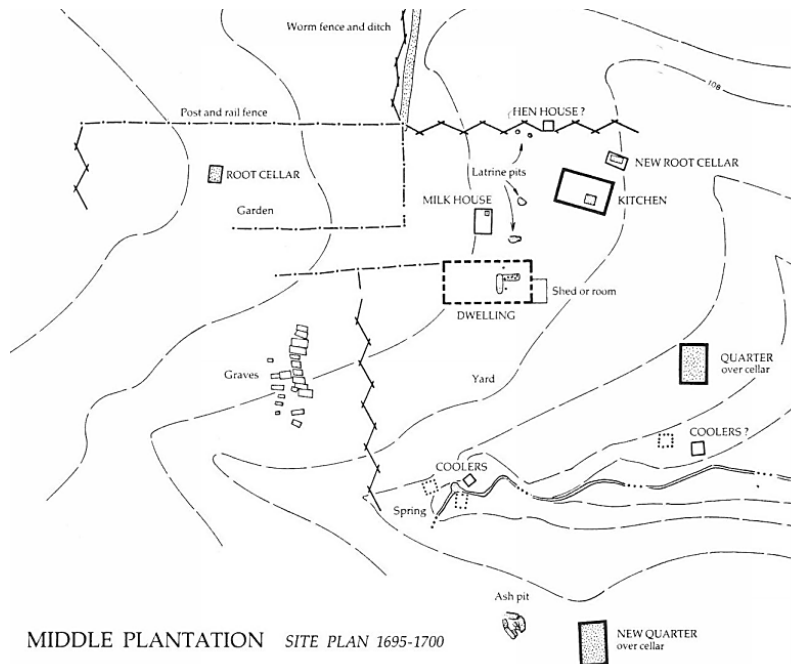
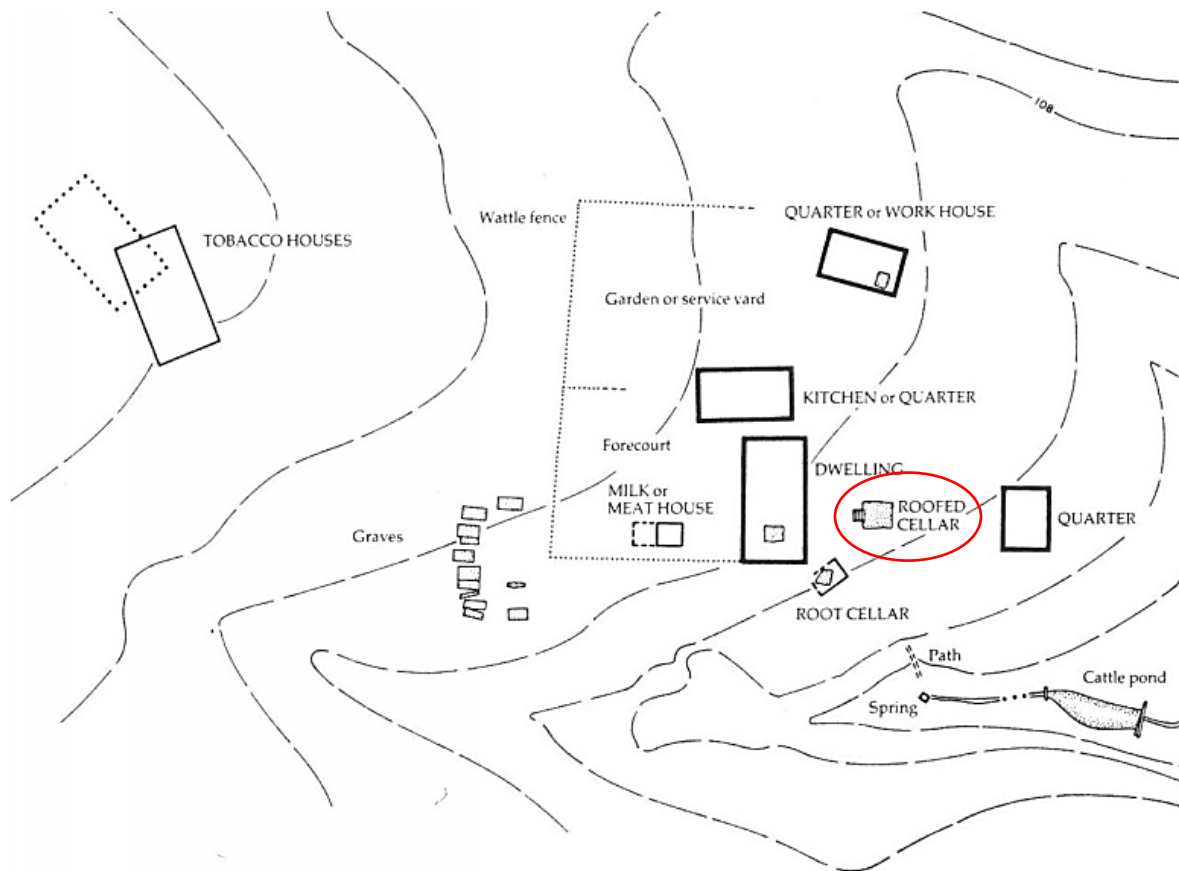


Figure 10. From: “Impermanent Architecture of the Southern Colonies,” *Winterthur Portfolio*, 1981.

By c. 1720, the earlier cellars on this Maryland site had disappeared, while a sizable “Roofed Cellar” and a smaller “root cellar,” both free-standing, had been created in the meantime. Still, there was no cellar in the main house (Figure 11).



MIDDLE PLANTATION SITE PLAN 1730-35

Figure 11. From: "Impermanent Architecture of the Southern Colonies," *Winterthur Portfolio*, 1981.

Conclusion

Garden Historian Barbara Sarudy defines root cellars as "space used for storage, usually of roots as well as vegetables & fruits & drinks made from them overwinter."³ Investigators of Virginia's colonial archaeology sites routinely find root cellars and have spent considerable time and effort learning to understand and decode these important features.⁴ The excavation of the Washington work yard at Ferry Farm has allowed for an in-depth exploration of a storage building and root cellar that housed and preserved roots, vegetables, and fruits. This building was part of a multi-faceted complex prominent in the lives of the Washington-era domestic enslaved workforce and the functioning of the plantation seat. The work yard was the hub of domestic

³ Barbara Sarudy. Colonial and Early American Garden Blog "Root Cellars" April 24, 2020

⁴ Patricia Samford. "The Archaeology of African-American Slavery and Material Culture." *The William and Mary Quarterly* 53, no. 1 (1996); Garrett Fesler. From Houses to Homes: an Archaeological Case Study of Household Formation at the Utopia Slave Quarter, ca. 1675 to 1775 PhD. Dissertation University of Virginia 2004; Barbara Heath. *Hidden Lives: The Archaeology of Slave Life at Thomas Jefferson's Poplar Forest*, 1999.

work and contained spaces for cooking, butchering, laundry, wig maintenance, china mending, and many other domestic chores. The storage building was critical to success of the work yard by preserving food stuff necessary for cooking and medicines.

Washington-House Work Yard and Foodways at Ferry Farm

The archaeological and historical evidence at Ferry Farm indicates that a “roofed cellar,” similar to that discovered at Middle Plantation, existed in the Washington work yard. Colonial plantations grew plants for both food and medicine that required specialized storage. The main purpose of the storage building was to preserve roots, vegetables, and fruits—a purpose reflected in its design- and construction choices.

Identification

The structure covered a large storage pit. This unlined feature measured approximately 8.0 ft. (N-S) by 8.0 ft. (E-W) and intruded the ground to a depth of 2.9 ft. deep. The intact vertical sides of the pit indicate those were always protected by a building. No silt was uncovered at the lowest levels of the pit confirming that a building served to protect the pit from collapse. On opposite sides of the pit are impressions left by bearing members of some kind. These impressions are parallel to the adjacent sides of the pit, one on each side, and indicate that the building was only slightly larger than the pit itself. The size and nature of the pit precludes the building from serving as housing for enslaved individuals.

Construction

George Washington Foundation archaeologists recovered large quantities of daub from around the structure, suggesting the chinking for a log building. For a structure of that type, the bearing impressions would present the bottom logs of the two long walls. Generally, these longest logs were laid first, often on the ground. The archaeologists’ discovery of daub as well as evidence of logs, moreover, suggests walls of some height. This further indicates that the building was *not* a tent/like structure, composed of rafters only. The character of the daub *may* define the precise character of the log walls.

The aforementioned scatter of Aquia Sandstone indicates a light foundation of that material.

Log Planks, V-Notched at Corners

While at least one standing late eighteenth-century kitchen employs round logs, the vast majority of log buildings used log planks. That exception is a kitchen in in Southampton County, where softwoods were more common—a type of construction that usually postdates the Washington period at Ferry Farm. This technique required less skill, and because the logs extend past the corners, the saddle notching retains water.

Using log planks results in corners cut-back flush with the sides of the structure, resulting in less water retention. The log planks would be hewn on the inner and other faces, leaving the top and bottom in the round. This produces a plank five to seven inches thick, probably closer to five inches given the small size of the building. Simple V-notching, or more complex half-dovetail notching, was most prevalent in the colonial period. Colonial period logs tend to be hardwood, perhaps for durability. For example, in Alamance County, North Carolina, 90 percent of the log buildings use V-notching. These include the John Allen House, circa 1782 and others from 1800 to 1830.⁵

Roof Covering

Little evidence survives about the choice of roof covering that existed on the storage building. It is possible that the building was covered with clapboards; however, there is no site-specific evidence for this (or any other covering).

Door

Archaeologists' recovery of clinched nails from around the site of the Ferry Farm storage building indicates the combined thickness of board and batten. That thickness, together with early tobacco-house doors⁶ indicates that wooden hinges are appropriate.

Floor

There is no evidence for a floor surface in the intact layers above and around the pit. Archaeological evidence shows that the pit sides were intact at the inner edges of the sills. Intact pit edges imply some means of protecting them from damage.

Summary

Although the storage building identified at Ferry Farm embodies a function common during the eighteenth century, only a few such structures been identified archaeologically. The characteristics of this building include a large, cellar hole about 2.9 ft. deep. The cellar represents the main function of this building—preserving roots, vegetables, and fruits. The cellar was covered by a low “cellar” building. Historical evidence from existing examples indicates it was built of 5-inch hewn log planks, with V-notched at the corners. Archaeological evidence uncovered two “sills” only on the two long walls, indicating that the sills were seated on the ground.

⁵ Carl Lounsbury, *Alamance County Architectural Heritage*, (Alamance Historic Properties Commission, 1980), pp. 18-17.; Lounsbury *et al.*, *Alamance County Architectural Inventory*, (Alamance County Historic Properties Commission, April, 2014), *passim*; see also Carl Lounsbury (2010) Log Building in the Chesapeake, *Vernacular Architecture*, 41:1, 75-80, DOI: [10.1179/174962910X12838716153961](https://doi.org/10.1179/174962910X12838716153961); Christopher C. Fennel, “Log House Architecture in Eighteenth-Century Piedmont Virginia, 2003, <http://www.histarch.illinois.edu/harper/demoryarch.html>;

⁶ See William Fitzhugh to Nicholas Hayward, Jan. 30, 1686/7 in *William Fitzhugh and His Chesapeake World, 1676-1701* ..., Richard Beale Davis, ed., (Chapel Hill: University of North Carolina Press, 1963), pp. 202-203.