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## **Cover Page Footnote**

I would like to express great thanks to the many persons who shared their information and expertise with me. This includes Donald Linebaugh, Nicholas Lucchetti, Daniel Mouer, Mary Beaudry, Jane Sundberg, Frasier Neiman, John Metz, Leverette Gregory, Willie Graham, John Coombs, Philip Levy, Marc Wenger, Edward Chappell, Andrew Edwards, Theodore Reinhart, Frank Farmer, John Mouring, Stephen Mrozowski, Lee Priddy, and Dennis Pogue. In particular I'd like to thank David Muraca for his sobering insight and good humor. Additional thanks are in order for John Roberts for his assistance with AutoCAD and to Thane Harpole for his review of this paper and many suggestions. I'm also grateful to my partners, Cory Judson and Erika Haubert, on the precursor to this project, an annotated bibliography of the 17th-century domestic brick architecture in Virginia and Maryland. I'm most indebted to Dwayne Pickett, who recently completed a Masters thesis focusing on the John Page house and including many of the buildings discussed in this article. Lastly, I would like to thank Professor James Kornwolf for his insight, guidance, and desire to have me think more like an art histoian than an anthropologist interested in architecture.

# Domestic Masonry Architecture in 17th-Century Virginia

David A. Brown

*The focus of this study is to provide an easily accessible source of information on domestic masonry architecture in 17th-century Virginia. This includes buildings constructed entirely of brick or stone as well as framed structures, brick enders, and homes with brick-nogged walls. The few surviving examples of these buildings do not adequately represent the period and, until recently, literature pertaining to this subject has either been inaccurate or has concentrated far too heavily on a limited number of structures. Through research in the fields of history, historical archaeology, and architectural history, at least 24 structures have been found dating to the 17th century. This investigation has revealed that wealthy colonists throughout Virginia employed a diverse array of design and construction techniques. This study excludes Jamestown Island as its architecture has been addressed in more focused works, both in the contexts of town planning and urban design (Cotter 1958; Horning 1995). An equally important study of domestic masonry architecture in 17th-century Maryland is now underway and will include a comparison with similar structures in Virginia.*

*Cette étude vise à assurer une source pratique de renseignements portant sur l'architecture domestique maçonnée en Virginie au XVII<sup>e</sup> siècle. Il s'agit de bâtiments construits entièrement en brique ou en pierre ainsi que des bâtiments à charpente de bois dotés de murs hourdés de briques. Les quelques exemples survivants de ces bâtiments ne sont guère représentatifs de cette l'époque et, jusqu'à récemment, la bibliographie sur la question était inexacte ou se concentrait beaucoup trop sur un nombre limité de bâtiments. Grâce à des recherches menées dans le domaine de l'histoire, de l'archéologie historique et de l'histoire architecturale, on a pu retrouver au moins 24 constructions datant du XVII<sup>e</sup> siècle. Cette investigation a révélé que les colons riches de la Virginie utilisèrent une gamme variée de plans et de techniques de construction. Cette étude ne comprend pas Jamestown Island étant donné que son architecture a fait l'objet d'ouvrages plus particuliers, tant dans le domaine de la planification urbaine que dans celui de l'aménagement urbain (Cotter 1994, Horning 1995). De plus, une étude importante portant sur l'architecture domestique maçonnée au Maryland au XVII<sup>e</sup> siècle, étude qui comportera une comparaison avec des constructions semblables de la Virginie, est actuellement en cours.*

## Introduction

In the summer of 1995, two other students and I compiled as many examples of 17th-century brick and stone homes in Maryland and Virginia as we could find (Brown, Judson, and Haubert 1995). The resulting list was admittedly incomplete. We realized that to create the most complete list possible would require a review of almost every historical, archaeological, and architectural source available on the 17th-century Chesapeake. We discovered there were many more 17th-century domestic structures, of both brick and stone construction, however, than previously thought.

Over the following three years, I began to search for more examples of masonry home construction from the 17th century. Using the earlier bibliography as a starting point, I intended to both refine the list and expand it. Information about numerous structures was hidden in obscure, unpublished research reports and manuscripts. Also, many of the previously included examples were found to date to the 18th century, such as the Thomas Pate house in Yorktown (Pickett 1997). Here I have illustrated each foundation at the same scale and the dimensions for the length and width of each building are provided in English and metric measurements. The width of the foundations were drawn at the same scale.

Unfortunately, the locations of the entrances to many of the buildings are unknown. In order to publish this material quickly, I decided to divide this research into two reports. The second report will concentrate on Maryland. These studies are intended to provide accurate and easily accessible sources of information from which further research can be pursued on the subject of domestic masonry architecture in the 17th-century Chesapeake.

### 1607–1624

Over the last 20 years, research has established that the typical English colonist arriving in Virginia did not simply choose a piece of land, build a brick house, and start growing tobacco (Carson et al. 1981; Kelso 1984; Neiman 1993). When English settlers arrived at Jamestown during the first quarter of the 17th century, they were greeted by an environment radically different from Britain's (Horn 1991: 89). The harsh weather, unrelenting insects, and disease-infested marshes and lowlands were unaccommodating, and the result was an extremely high mortality rate during the first years of colonization (Rutman and Rutman 1976). Regardless of these dangers, the lure of inexpensive, almost limitless land and quick fortunes kept thousands of colonists sailing to Virginia throughout the century.

During this early period of settlement, no examples of masonry architecture have been found outside of Jamestown. Historical documentation, however, suggests that the ability to construct masonry structures existed. Brick makers and masons were among the first settlers not only at Jamestown but also at the earlier failed settlement of Roanoke Island (Harrington 1950, 1967). Virginia's clay resources were well suited for brick and tile manufacturing, resulting in their being exported as early as 1621 (Bruce 1896: 137). While archaeologists have yet to uncover a foundation from this period, documentary evidence suggests that in 1611 there were multiple structures at the town of Henricopolis. Located near present-day Richmond on the James River, documents indicate that it consisted of "three streets with several houses, the first stories of

which were of brick made on the spot by brickmakers brought by Sir Thomas Gates from England" (Harrington 1950: 17).

### 1624–1660

The early Virginia Company settlement became a royal colony in 1624, and a new but familiar bureaucracy was installed during the late 1620s (Morgan 1975: 101). Governors and politicians were now sent from England to lead the colony. Members of the newly appointed ruling class dreamed of profiting from tobacco as did every other settler. Unlike average small landowners Virginia's elite possessed the power and influence to obtain massive profits through the control of tenant farmers, indentured servants, and slaves. These profits were increased through the use of taxes and revenues collected by individuals with political appointments such as the County Sheriff and the Comptroller of Tobacco, an appointed official who inspected the quality of the tobacco exported from the colony.

News and propaganda quickly circulated back to Europe of the economic success individuals could experience from growing tobacco in Virginia. As emigration increased, the population of the colony continued to expand. Settlements quickly radiated out from Jamestown, spreading along the many navigable waterways flowing into the Chesapeake Bay. Plantations and smaller farmsteads initially appeared along the James River. They soon expanded, though, to the Eastern Shore and to the two upper peninsulas bounded by the present-day York, Rappahannock, and Potomac rivers. By 1634, eight counties existed within the colony, ranging from Charles River County in the north to Warrisquyoake (Isle of Wight) County in the south and Henrico County in the west (FIG. 1).

During this period, Virginia's European population consisted predominantly of incoming English settlers and recently freed indentured servants from within the colony. They all possessed an eagerness to own their own land, a rarity in England among the lower class, and to make money from it. Some became rich and prospered, some became poor or died, and others simply gave up and

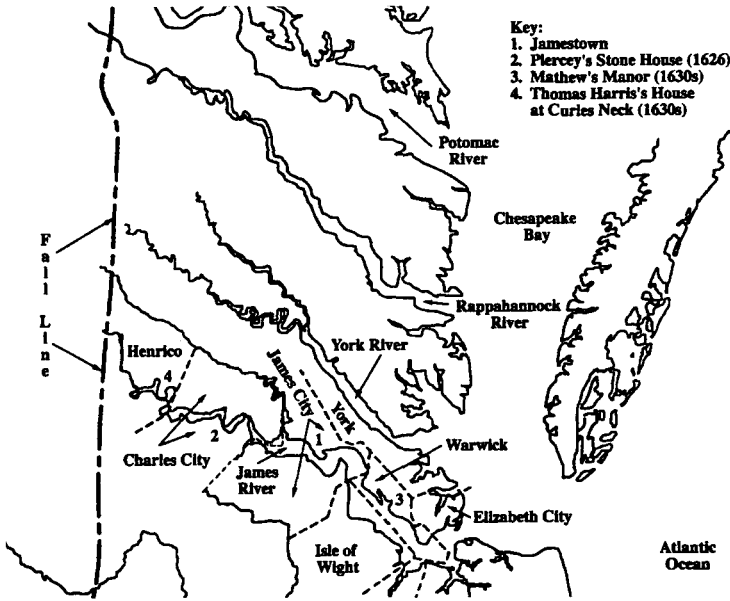


Figure 1. Counties in Virginia after 1634 with the locations of contemporary masonry domestic structures.

returned to England. Still many maintained a decent living, raised a family, and may have dreamed of creating a foundation for their future in Virginia.

For settlers intent on staying in Virginia, their futures began with the initial settlement but would need a succeeding generation to successfully extend their family's fortunes. Most individuals could not guarantee even the slightest inheritance of either money or land for their descendants (Carson et al. 1981: 170). The majority of farmsteads consisted of a house, two or three smaller support buildings, a small garden area, and the surrounding cultivated fields (Linebaugh 1994: 16–17). Buildings were of post-in-ground construction, the dominant building type within the colony, and lasted only a short time. While these initial "earthfast" houses may have been envisioned as "temporary, improvised expedients," with more permanent structures intended for the future, most buildings were simply repaired, repeatedly prolonging the impermanence of the structure (Carson et al. 1981: 139).

Occasionally, a landowner would replace his initial home with a building of brick or stone construction. The feasibility of this

endeavor was often restricted by the availability of both a mason and the money to pay him. Under these conditions it is understandable that masonry architecture first appears outside of Jamestown on the plantations of the colony's elite. The earliest of these masonry structures are along the James River, including Abraham Peirse's house (1626), Matthews Manor (1630s), and Thomas Harris's house (1630s).

Captain Samuel Mathews arrived in Virginia sometime before 1622 and quickly became "one of the most prominent men in the colony" (Noël Hume 1966: 833)(FIG. 2). He

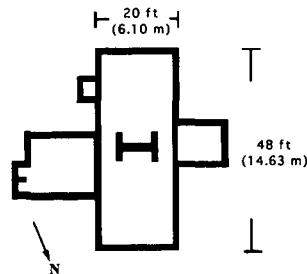


Figure 2. The foundation plan of Samuel Mathew's home, Warwick County.

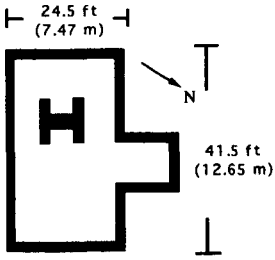


Figure 3. The foundation plan of Abraham Peirse's Stone House at Flowerdew Hundred in Prince George County.

was a member of both the General Assembly and Governor's Council and owned a large plantation east of Jamestown along the James River. During the 1630s, he built his home, Mathews Manor, here. The building was initially a two-room hall-and-parlor structure with a central H-shaped chimney. A probable porch tower and rear addition was added later giving the building a cross-patterned plan. The rear addition measured  $18 \times 16$  ft ( $5.49 \times 4.88$  m) with a chimney along the east wall, and the  $12$  ft<sup>2</sup> ( $3.66$  m) porch tower contained a cellar with a brick and tile sump (Noël Hume 1969: 228–229; Carson 1969: 142, 215). Excavations conducted by Ivor Noël Hume and the Colonial Williamsburg Foundation between 1963 and 1965 indicate that the structure was a two-story, "English, Elizabethan nogged farmhouse" resting on a 2-brick-wide foundation (Noël Hume 1966: 834). The structure had a ceramic-tiled roof, glass windows, and a plastered interior. Mathews Manor was vacated and later damaged by fire between 1637 and 1639. It was reoccupied in the 1640s, but destroyed by fire during the early 1650s.

Abraham Peirse, a powerful merchant and member of the Governor's Council, made his home west of Jamestown at Flowerdew Hundred in Prince George County. Built in 1626, his one-and-a-half or two-story house had brick-nogged walls resting on and between a 2 ft wide ( $0.61$  m) siltstone foundation, using stone that may have been imported from Bristol, England (FIG. 3) (Barka 1976: 8, 13; Deetz 1993: 35). During the early 1970s, Norman Barka and Southside Historical Sites, Inc., excavated the two-room hall-and-parlor

structure, with offset central chimney and  $8 \times 10$ – $12$  ft ( $2.44 \times 3.05$ – $3.66$  m) porch tower. They recovered evidence of a building with a ceramic flat-tiled roof and "interior walls of finished plaster and exterior walls of planking or clapboard" (Barka 1976: 49). During excavations conducted by James Deetz in 1989, three decorative bricks, carved in an "ornamental style that would be more at home at Hampton Court than on the raw Virginia frontier," were recovered (Deetz 1993: 38). The structure was abandoned and was probably destroyed by fire before 1650.

In the 1630s, Thomas Harris, a member of the General Assembly and leader of a militia near the fall line, built his brick home further west along the James River. Its early appearance along the frontier of Virginia is peculiar yet demonstrates the colony's rapid expansion. Excavations conducted by L. Daniel Mouer and Virginia Commonwealth University from 1990 to 1998 have uncovered Harris's home (FIG. 4) (Mouer 1998a: 6). It was initially built with a large brick-paved cellar measuring  $18 \times 24$  ft ( $5.49 \times 7.32$  m) with a full room and garret above. It also had brick-nogged walls, a construction technique seen earlier at both Mathews Manor and Peirse's stone house (Mouer 1998a: 40). The lack of evidence for corner posts for the structure tentatively suggests that the gable ends were entirely built of brick. The main rooms had both plastered walls and ceilings and the roof was constructed of wood shingles.

In 1640, Harris built a story-and-a-half addition with a cellar on the west end of his house. Excavations uncovered brick-paved cellar floors, an H-shaped chimney, and a

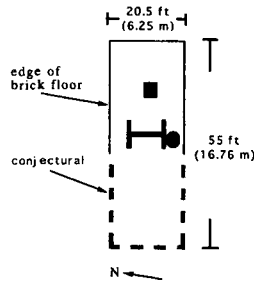


Figure 4. The foundation plan of Thomas Harris's House at Curles Neck in Henrico County.

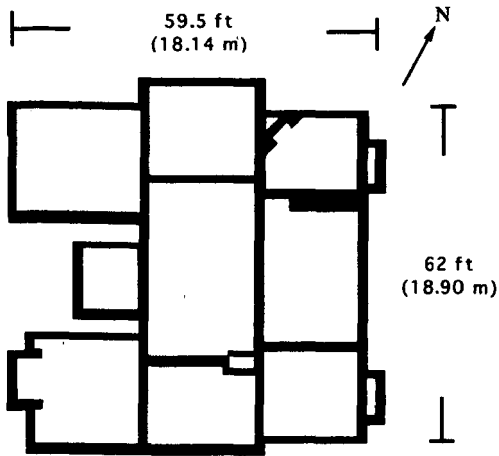


Figure 5. The foundation plan of Governor William Berkeley's first house at Green Spring in James City County.

large bake oven, constructed of brick, granite, and cobbles, adjacent to the central chimney (Mouer 1998a: 6). Analysis of the hall portion of this structure is limited because of the presence of an early 18th-century foundation directly above the cellar. Also, Nathaniel Bacon Junior's renovations and fortifications during the 1670s seriously impacted this side of the structure. The parlor room was destroyed by fire about mid-century, shortly after Harris's death (Mouer n.d.: 40).

The connection between masonry architecture and political office holders during this period is unmistakable. Two of these individuals, Governor William Berkeley and Secretary of the Colony Richard Kemp, had access to both masons and brick makers and the money to hire them. William Berkeley had arrived in the colony and purchased a 984-acre plantation called Green Spring by 1643. He constructed his first manor house there in 1646, and the lavish entertainment offered to other prominent gentlemen of the colony are recorded by 1649 (Caywood 1955: 3).

Berkeley's first house is the lesser known of his two houses at Green Spring. Its presence was unknown until archaeological excavations were undertaken, first by Jesse Dimmick in 1928-9 and again in 1955 by Louis Caywood, a National Park Service archaeolo-

gist. Waterman and Barrows state that the structure "bear[s] no resemblance to any seventeenth century plan [in Virginia]" (1932: 11). The house consisted of a wood-framed two-story structure on a predominantly one- to one-and-a-half-brick-wide foundation with a pan-tile roof (Fig. 5). The foundation of the southwest corner room consisted of a slightly wider iron sandstone base with multiple courses of brickwork mortared directly on top. This sandstone, often referred to as bog iron or bog ore, is one of the few commonly found construction stones in southeastern Virginia. Mulholland explains that "local deposits of bog iron, which were plentiful on the eastern seaboard, were sufficient to ensure a steady supply of ore" (1981: 70). In addition, "Extensive surface ore deposits were found in the unbroken forests that began only a few miles inland from the coasts" (Mulholland 1981: 71). Mulholland's references apply broadly to the mid-Atlantic region, yet the use of bog iron throughout the 17th and 18th centuries in Virginia testifies to its usefulness as a construction material. Occasional surface deposits of fieldstone were found in the lower Chesapeake region (see Edmund Swaney house), but iron sandstone was evidently more accessible. Its infrequent use in the construction of foundations in the 17th century, compared to use of brick, suggests that, colonists, preferred building with the latter material.

Excavations revealed a number of peculiar aspects concerning the house's construction and function. Two very thick sections of brickwork were found along the east walls of both the northeast and southeast corner rooms, presumably to compensate for the natural terrain and drainage of the soil (Caywood 1955: 8). The majority of the foundation is neither as deep nor as wide as these sections, further suggesting the use of wood framing for the upper two floors of this structure. Berkeley also seems to have placed a corner fireplace in the northeast corner room, an innovation that Caywood claims was more common in Virginia after the late 17th century. It is also questionable whether the area directly east of the hall was an enclosed room or simply a terraced area flanked by towers to the north and south. The house would then have an H-shaped plan, a form popular in

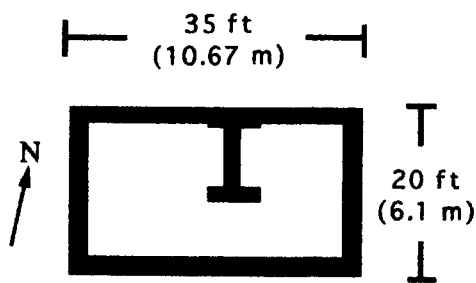


Figure 6. The foundation plan of Richard Kemp's House at Rich Neck in James City County.

England but not yet seen in Virginia architecture. One contemporary example of this in England would be the birthplace of Sir Walter Raleigh in East Budleigh, Devon.

The interior of the manor house included "six great rooms, or apartments, as many closets, a spacious hall and two passages with garret rooms and dormer windows" as well as numerous cellars (Caywood 1955: 8). Multiple fireplaces existed within the structure, including those found in the northeast and southwest corner rooms. Debris excavated from within the structure's cellars and in surrounding areas hints that the interior was at least partially plastered and had diamond-paned casement windows throughout. Burnt brick, plaster, and other artifacts recovered during excavations indicate that the building was either partially or entirely consumed by fire sometime in the 1660s. It was later repaired or rebuilt and was at least temporarily incorporated into the second manor house. A plat map of 1683 shows a sketch of the first manor house with the second manor house constructed adjacent to it (William Salt Library 1683).

In 1636, another political leader, Secretary of the Colony Richard Kemp, acquired land north of Jamestown in Middle Plantation which he named Rich Neck. He was living at this plantation by the 1640s as evidenced by the presence of two wine bottle seals bearing the initials "RK." These were found near a brick foundation during excavations conducted by the Colonial Williamsburg Foundation from 1992 to 1998. Constructed during the 1640s, the two-and-a-half brick wide founda-

tion of this hall-and-parlor structure had a central chimney that was offset along the rear wall creating a 6 ft (1.83 m) deep lobby entrance (FIG. 6) (McFaden, Muraca, and Jones 1994: np). Glass and turned lead fragments recovered during excavations suggest the house had windows, but no other evidence of roof type or interior or exterior embellishment can be related to Kemp's occupation.

Presumably, Richard Kemp's structure stood at a story-and-a-half with access to the upper floor through a ladder stair located in the hall (McFaden, Muraca, and Jones 1994: np). Two contemporary structures, Mayflower Cottage in England and Fairbanks House in Dedham, Massachusetts, were constructed with similar floor plans and central, set-back chimneys (Cummings 1979: 7, 23). Richard Kemp's structure was acquired and subsequently renovated by Thomas Ludwell in the 1660s. No other additions can be firmly dated to periods contemporary with Kemp's occupation of Rich Neck.

### 1660–1676

During this period the colony was growing at an astounding rate both in population and geographic extent. By 1668, additional counties had been formed, many from divided older counties, expanding the limits of the colony to Westmoreland County in the north and to Surry County in the south (FIG. 7). As the number of wealthier colonists increased and individuals began investing in activities other than growing tobacco, more permanent forms of construction began to appear along the Virginia landscape. Far from common, brick or stone construction was now visibly associated with the houses of the political elite. Four prominent individuals, John Page, Arthur Allen, Edward Digges, and Thomas Ludwell, either constructed or renovated brick homes during the 1660s.

John Page came to Virginia in 1650. He was a member of the House of Burgesses and the Governor's Council, the High Sheriff of York County, and a commander of the Militia. He also obtained over 10,000 acres of land throughout Virginia, including 330 acres within Middle Plantation, where he built his home in 1662 (Pickett 1995: 9). The founda-



**Key:**

- |  |  |
|--|--|
| <ol style="list-style-type: none"> <li>1. Jamestown</li> <li>2. Governor Berkeley's Greenspring I (16406) + II (1670-76)</li> <li>3. Richneck (Kemp/Ludwell) (1640s/1660s)</li> <li>4. Middle Plantation                         <ul style="list-style-type: none"> <li>John Page House (1662)</li> <li>Francis Page House (1670s)</li> <li>House 2-2G (pre-1699)</li> <li>Thomas Jones House (1680s)</li> <li>Hornsby Property House (1650-1700)</li> </ul> </li> <li>5. Arthur Allen House (1665)</li> <li>6. John Custis House (1670-1676)</li> </ol> | <ol style="list-style-type: none"> <li>7. Miles Cary II House (1670s)</li> <li>8. Nathaniel Bacon Jr. House (1674)</li> <li>9. Edward Digges House (1650-1675)</li> <li>10. Lewis Burwell House (1692)</li> <li>11. George Poindexter House (1690s)</li> <li>12. Joseph Foster House (1690s)</li> <li>13. Thomas Swann House ((1650-1675)</li> <li>14. John and Robert Carter Houses (1680s/1690s)</li> <li>15. Edmund Swaney House (1675-1700)</li> <li>16. The Stone House</li> <li>17. Nominy Pinatation House</li> </ol> |
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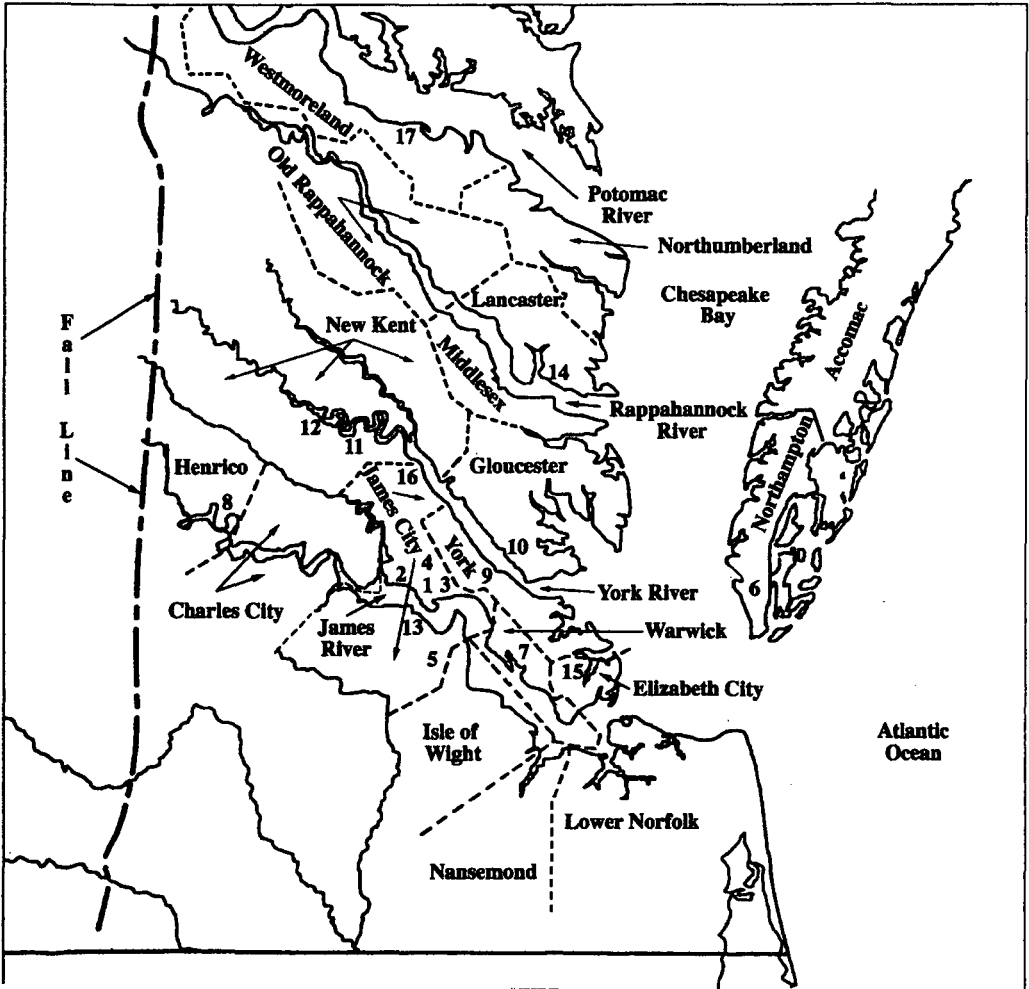


Figure 7. Counties in Virginia after 1668 with the locations of contemporary masonry domestic structures.

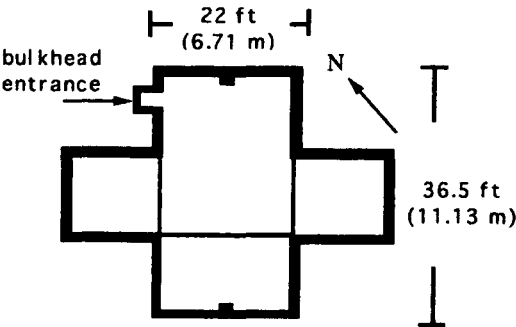


Figure 8. The foundation plan of John Page's House in James City County.

tion, located near the outskirts of the future planned city of Williamsburg, was first discovered in the 1950s, when it was bisected with a pipe trench and then covered by a parking lot (Fig. 8). The cross-patterned foundation was recently rediscovered and excavated in 1995

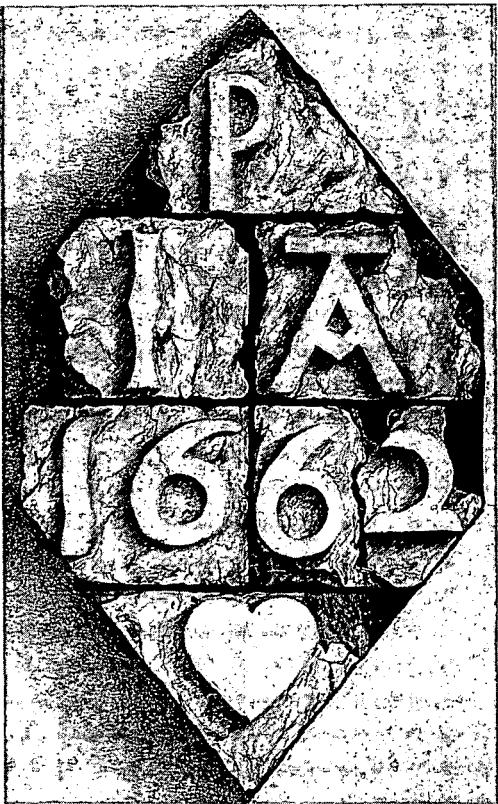


Figure 9. A cartouche recovered from the John Page House.

by the Colonial Williamsburg Foundation's Department of Archaeological Research. No evidence of chimneys was found during the excavations, suggesting that the house's two end chimneys, laid directly on the ground surface, were destroyed by the construction of the parking lot. Excavations revealed a brick-lined full cellar under the center hall and parlor. The porch and stair towers, each measuring 13 ft 5.5 in  $\times$  13 ft 11 in (4.10  $\times$  4.24 m), had ceramic-tiled floors. Throughout these cellars a sequence of sumps and contoured brickwork assisted in drainage. The construction date for John Page's house was discovered on a set of carved bricks forming a diamond-shaped cartouche with the initials P[age] and A[llice] (the I or J[ohn] was missing), the date 1662, and a heart (Fig. 9). The John Page house likely had an elaborately decorated exterior as well. The structure was covered by a ceramic tiled roof and probably stood at a story-and-a-half with two-story towers. It was abandoned and later destroyed by fire around 1730.

Arthur Allen, Justice of the Peace for Surry County and member of the Governor's Council, built his home in 1665. Better known as Bacon's Castle for the role it played during Bacon's Rebellion, this structure is the only surviving building from this period in Virginia. Cary Carson states that "Bacon's Castle was abreast of the latest building innovations in mid-century England" (Carson 1969: 248). The three-brick-wide foundation supports an entirely brick building two stories tall with a full cellar and garret (Fig. 10). The house origi-

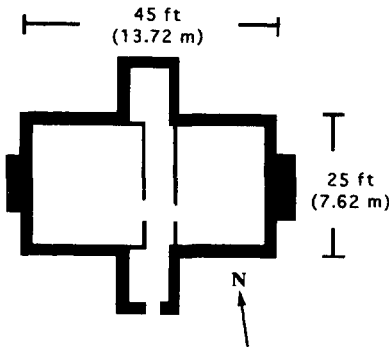


Figure 10 The foundation plan of Arthur Allen's House, Bacon's Castle, in Surry County.

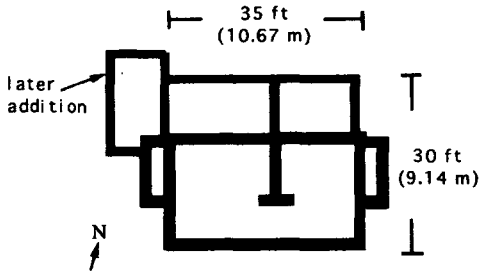


Figure 11. The foundation plan of Thomas Ludwell's House at Rich Neck in James City County.

nally had a hall-and-parlor layout with symmetrical porch and stair towers forming a cross-patterned foundation. The building had leaded casement windows, plastered interior walls and a full English cellar with ceramic tiled floors. Between 1978 and 1987, Nicholas Lucchetti and the Virginia Research Center for Archaeology undertook excavations surrounding the building, now owned by the Association for the Preservation of Virginia Antiquities. They uncovered a bulkhead entrance to the cellar, evidence of the first roof that was made of imported rectangular sandstone roofing tiles, and an extensive 1680s garden (Lucchetti 1984).

The diagonally set chimney stacks and the curvilinear Dutch gables of the Allen house exemplify an "English flare" seen on country houses of wealthy gentlemen in 16th-century England and throughout Europe during the 17th century (Pickett 1995). Comparable structures that still stand in England include "The Old Swan and Salmon" in Huntingdonshire and Crossways Farm in Surrey, both constructed during the second half of the 17th century (Reiff 1986: 197, 200). The chimneystacks also have parallels within the colony, including Fairfield in Gloucester County and Winona, a standing early 18th-century home, in Northampton County. Other exterior embellishments include a stringcourse along the porch tower with a cut and molded brick hood and pediment over the doorway (Carson 1969: 248).

With Secretary Kemp's death at mid-century, Rich Neck plantation changed hands to Thomas Ludwell, another Secretary of the Colony and member of the Governor's Council. Excavations by the Colonial Williamsburg Foundation's Department of

Archaeological Research between 1992 and 1998 revealed that Ludwell took Kemp's structure and introduced numerous renovations and improvements during the 1660s (FIG. 11) (CWDAR Interim reports 1995, 1996, 1997). Ludwell's addition of at least two rooms to the rear of the structure doubled the size of the dwelling (McFaden, Muraca, and Jones 1994: np). Similar additions were made during the same period to two contemporary structures, the Mayflower Cottage in England and the Fairbanks House in Dedham, Massachusetts (Cummings 1979: 7, 23). The central chimney was dismantled and two large end chimneys were added, allowing for increased air circulation and interior space while maintaining an ample supply of heat. It is also likely that Ludwell replastered the interior while replacing the wooden-framed walls with brick walls and leaded casement windows (McFaden, Muraca, and Jones 1994: np). The wood-shingled roof was replaced with pan-tiles, and decorative Dutch tiles were placed around one of the new hearths on the structure's interior. An 18 × 10 ft (5.49 × 3.05 m) addition with a plastered and tiled full cellar was likely added to the northwest corner of the expanded structure well after the initial renovation. The building was abandoned and destroyed before the end of the 17th century.

Edward Digges, a member of the Governor's Council, Auditor General, and Receiver General, was the interim Governor of the colony in 1655. In addition to being one of the wealthiest planters in Virginia, his "E.D.'s Tobacco" brand was internationally known as one of the best quality tobaccos in the world. Between 1934 and 1935, the National Park Service conducted excavations at Digges's house, Bellfield (FIG 12). Built during the third

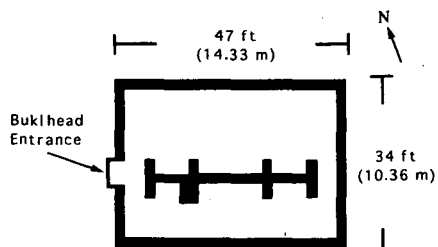


Figure 12. The foundation plan of Edward Digges's home, Bellfield, in York County.

quarter of the 17th century, its foundation plan reveals a massive, double-pile building with four interior chimneys. The width of the foundation (28 in [0.71 m]) suggests that Digges's home was at least two-and-a-half stories tall. The height and double-pile plan of the house is substantiated by an extant 1692 inventory for the structure that mentions more than ten separate rooms (Hatch 1970a: 97). The house had an extensive brick-paved English cellar extending 6 ft (1.83 m) below ground surface and contained a brick-vaulted drain leading directly into the York River. The roof type of the building is unknown but the exterior of the structure's foundation was laid in Flemish bond with glazed headers and tooled joints (Hatch 1970a: 142). Bellfield was destroyed by fire in the 1750s.

The construction of masonry architecture increased near the end of the third quarter of the 17th century. As the colony expanded so did the availability of positions within the growing political structure. Masonry architecture continued to be associated with the political and economic elite. Homes built by Miles Cary II, Francis Page, Nathaniel Bacon Jr., Thomas Swann, and John Custis are included in this period. Governor Berkeley may have also built his second home at Green Spring at the end of this time.

Miles Cary II, Justice of the Peace, Sheriff, Surveyor, and Naval Officer in Warwick County, built his house in the early 1670s using the cross-patterned style of construction seen in the Page and Allen houses (FIG. 13). Its form is strikingly similar to these earlier

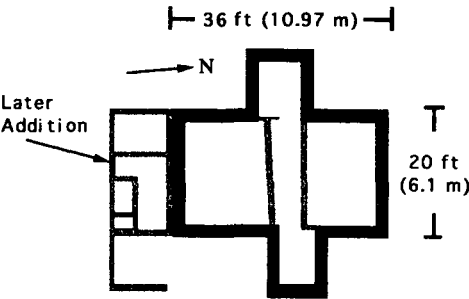


Figure 13. The foundation plan of Miles Cary II's home, Rich Neck, in Warwick County.

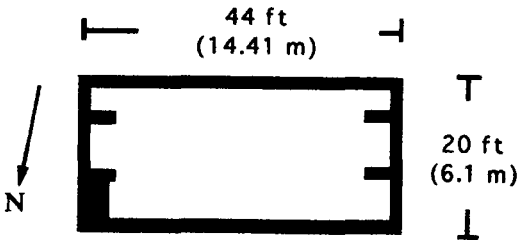


Figure 14. The foundation plan of Francis Page's house in James City County.

homes except for the partial offset relationship of the 10 ft (3.05 m) square porch and stair towers, creating an asymmetrical layout. The two-brick-wide foundation, which had a two-and-a-half-brick-wide spread footing, likely supported a brick-walled structure of one-and-a-half stories with an undetermined roof type (Hudgins 1976: 34).

Excavations in 1976 by Carter Hudgins of the Virginia Research Center for Archaeology uncovered a series of room partitions within the central cellar. One partition initially created two rooms out of a single large room. Later, a divided hallway was made by the construction of an additional partition within the center of the cellar. It is unclear exactly when these renovations were made to the structure as it was destroyed shortly after the Civil War. Hudgins suggests that these divisions likely supported similar room divisions on the above floors (Hudgins 1976: 42–43). Excavations recovered little evidence of interior and exterior embellishment from the original construction of the house. Limits in funding have prevented analysis of much of the material collected.

In the 1670s, Francis Page, a member and clerk of the House of Burgesses, built his house within sight of his father John's home in what would later become the city of Williamsburg. The Colonial Williamsburg Foundation partially excavated the foundation in 1940, uncovering a hall-and-parlor-designed building with a partially brick-paved cellar (FIG. 14) (Knight 1942). The two-brick-wide foundation likely supported a one-and-a-half story brick-walled structure with interior end chimneys and a roof of flat ceramic tiles. At

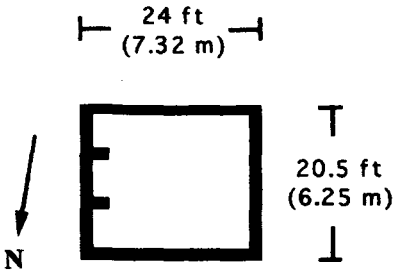


Figure 15. Nathaniel Bacon, Jr.'s house at Curles Neck in Henrico County.

least one of these chimneys heated the cellar. The use of leaded casement windows throughout the building was seen in the recovery of an in situ example found on the floor of the structure's cellar (Knight 1942: 2). Excavation also revealed evidence of demolition near the turn of the century. With the founding of Williamsburg, a town plan was implemented based on the cardinal directions of the compass. Francis Page's house did not conform to this plan and became a victim of urban restructuring. Limited information is available concerning its 1950s excavation but additional work on the structure is anticipated in the summer of 1999 (David F. Muraca, personal communication, 1998).

The infamous Nathaniel Bacon, Jr., Governor's Council Member and rebel, constructed his own brick home during his short, three-year life in Virginia. Coincidentally, he occupied Thomas Harris's plantation at Curles Neck. Documents that evaluated the estates of individuals involved in Bacon's Rebellion refer to his home as a "small, new, brick house" (Colonial Records 1677). This two-brick-wide foundation, with a tiled cellar floor, leaded casement windows, and plastered walls and ceiling, was constructed near the ruins of the Thomas Harris house in 1674 (FIG. 15). Nathaniel Bacon, Jr. incorporated the standing hall portion of that structure into his own domestic complex (Mouer n.d.: 36).

Bacon's single-story home, with possible garret, was brick walled with a single exterior end chimney and flat-tiled roof. The large amount of ornamental brickwork recovered during excavation suggests that size did not correlate to the quality or level of design of the building. Mouer's excavations recovered

mitered and cut, Cyma, half- and three-quarter-round, and compass bricks. This evidence suggests a possible water table course, barrel vault or massive relieving arch, a parapet gable and other formal classical treatments (Mouer n.d.: 36). Imported limestone fragments were also found indicating a possible fireplace surround.

Bacon may have constructed his small brick structure as a replacement for Harris's ruined parlor and then connected it with a post-in-ground addition. Evidence recovered during excavations between 1987 and 1998 indicates that Bacon renovated the hall portion of Harris's home and at the very least replaced its roof with ceramic tiles identical to those of his new brick building (Mouer n.d.: 41). Mouer attributes Bacon's design choices to his knowledge of Renaissance architecture and landscape design as well as his experience with military fortifications. Excavations have revealed an intricate military enclosure throughout Bacon's building complex, including a deep trench or tunnel leading from the parlor portion of Harris's 1630s home to the cellar of Bacon's little brick house. Bacon's small brick home was abandoned after 1677, and the buildings were destroyed by fire in 1680.

Another structure within Middle Plantation was discovered in 1989 by Colonial Williamsburg's Department of Archaeological Research while surveying a lot owned by Bruce Hornsby (Brown 1989; David F. Muraca, personal communication, 1998) (FIG. 16). Partial excavation uncovered a two-brick-wide foundation, limited to the gabled ends of the

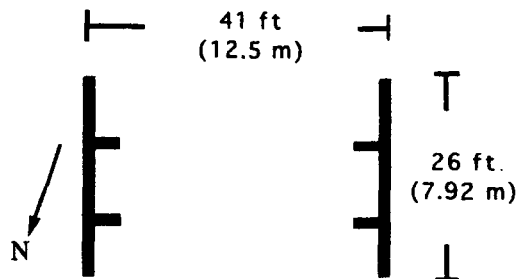


Figure 16. The foundation plan of Hornsby Property house in James City County.

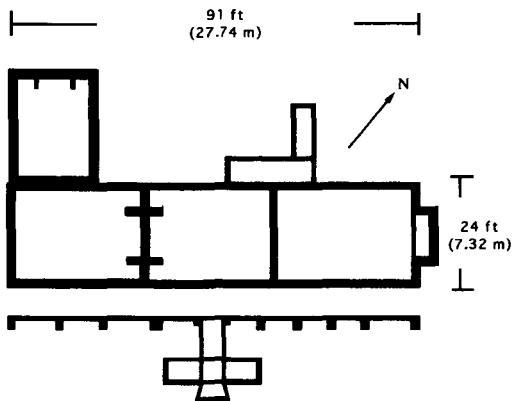


Figure 17. The foundation plan of Governor William Berkeley's second house at Green Spring in James City County.

structure, that may have been constructed as early as mid-century. These two ends were connected by post-set wooden beams that made up the front and rear of the house. Referred to as brick enders, houses of this form of architectural design are rare in Virginia during the 17th century. Thomas Harris's home may have used a similar technique yet had front and rear walls constructed with brick nogging. The one-and-a-half story hall-and-parlor structure also had leaded casement windows. No other comparable example has been found from the 17th century in Virginia. The building was probably abandoned between 1690 and 1710. The limited nature of the initial excavation restricts interpretation of this dwelling, and the property owners opted to preserve rather than excavate the remainder of the site (Brown 1989: 5).

Sometime during the 1670s, Governor Berkeley designed and built a new house next to his manor at Green Spring. This event may have coincided with his marriage to his second wife or possibly with repairs following Bacon's Rebellion. As with Bellfield and Arlington (see below), this second manor house combined massive construction techniques and contemporary English architectural style. By 1683, the new brick-walled house consisted of a series of three single-pile

rooms along the façade (FIG. 17). This room placement is similar to the double-parlor plan wherein the central room is assigned the function of a hall while the flanking rooms become parlors. Chimneys were constructed at the east end of the house and along either side of the west partition wall. A  $24.5 \times 19.5$  ft ( $7.47 \times 5.94$  m) addition, possibly used as a kitchen, was later built along the northwest corner of the structure (Caywood 1955: 8). The relative size of the 2 ft 4 in (0.71 m) wide foundation and its L shape "falls into a familiar category, although it is common to England rather than to this country" (Waterman and Barrows 1932: 11). It has been speculated that an additional matching wing was planned for the northeast corner, creating a U-shaped plan, but no evidence for this was uncovered during excavations.

The owner of the property in the late 18th century, William Ludwell Lee, contracted Benjamin Latrobe to design renovations for the manor house. The architect drew the second manor house when it was in ill repair. This sketch captured the image of a three-story building with a double set of dormers on the roof. The exterior, while severely damaged, showed evidence of ornate brickwork and a decorative embellishment, possibly similar to the cartouche at John Page's home. Unfortunately, Latrobe was not impressed with its design or potential and recommended its destruction to make room for the new Lee mansion. He viewed the second manor house at Green Spring as "a brick building of great solidity, but no attempt at grandeur" (Carter 1977: 181). The Lee's new home was constructed nearby soon after Green Spring was razed around 1806.

It may have been unimpressive at the time Latrobe viewed it but when it was initially constructed Berkeley's second manor house could be rivaled by few structures in the colonies. Waterman and Barrows comment that the "forecourt treatment unearthed before the house [during excavation] is the most ambitious and monumental in Virginia" (1932: 12). Berkeley's new house incorporated both end and interior chimneys. This made it possible to heat the central room. Ventilation and

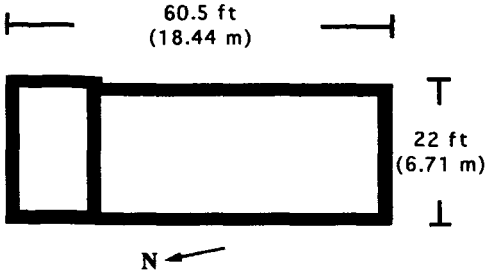


Figure 18. The foundation plan of Thomas Swann's house at Swann's Point in Surry County.

interior space would not have played a factor in this design because of the already gargantuan size of the structure, in comparison to the other structures in the colony, and the single-placement of the rooms.

Thomas Swann, a Colonel in the militia, Tobacco Viewer, Sheriff and Justice of Surry County, and member of the General Court, House of Burgesses, and Governor's Council, built his brick home directly across from Jamestown during the third quarter of the 17th century. Very limited excavations were undertaken by the Virginia Historic Landmarks Commission in 1973 and 1974, revealing a two-brick-wide foundation approximately 60.5 × 23 ft (18.44 × 7.01 m) wide (FIG. 18) (NRHP 1974). These dimensions include a 15 × 23 ft (4.57 × 7.01 m) brick-lined cellar with tiled floor on the north end of the structure. The excavators concluded that the foundation supported a two-story frame dwelling. The building was destroyed sometime between 1706 and 1707.

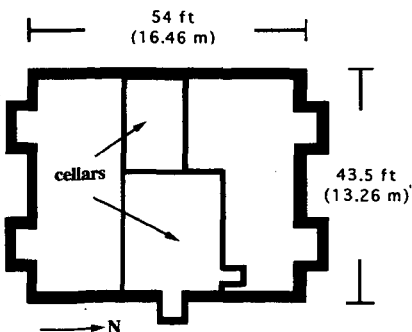


Figure 19. The foundation plan of John Custis's home, Arlington, in Northampton County.

John Custis, a Justice of the Peace, Sheriff, Vestryman, and a member of the Governor's Council, built his home on the Eastern Shore between 1670 and 1676. Its double-pile plan with central hall and stairway was one of the first of its kind in Virginia (FIG. 19). Custis must have known that having rooms stacked in such a manner would present a problem in the hot and humid Virginia summers. His use of four brick end chimneys and a central hall, though, solved the ventilation problem and at the same time allowed for greeting and restricting visitors by combining the function of porch and stair towers into one room. In a document answering the suit of the heirs of Daniel Parke by John Custis, a description of the structure is given as follows:

Dwelling house built of brick abt the year 1676 of the Dimensions of upwards of 80 (30) foot [by] 60 three storys high besides garrets which House was commonly called Arlington. (Emmett Collection, New York Public Library)

The massive three-brick-wide foundations support this description, and the remains of two cellars, 22 × 17.5 ft (6.71 × 5.33 m) and 22 × 10 ft (6.71 × 3.05 m), beneath the dwelling add to the extravagant nature of the building. The two cellars had paved floors, plastered walls, and a sump for drainage. The foundations for these interior cellars were one-and-a-half bricks wide. Excavations by the James River Institute for Archaeology also recovered fragments of a plaster heart and multiple recessed motifs with complex shapes once laid against finished exterior brickwork (Chappell 1996).

Governor Berkeley fled Jamestown and Green Spring and stayed with John Custis during Bacon's Rebellion. Arlington was destroyed sometime around the beginning of the 18th century. No evidence was found for its destruction by fire, leaving the possibility that neglect and poor upkeep caused its demise. Interestingly, Arlington's grand size and symmetrical design provoke images of the Georgian mansions of 18th-century Virginia. There are no parallels to this type of construction in the colony for the remainder of the 17th century. The only similar structures were Berkeley's first manor house at Green Spring and Bellfield in York County. This compar-

ison is strictly limited to total size and the use of a great hall versus a central hall. Construction at this scale and at this time was a bold statement for John Custis. Although a site report does exist concerning the excavations at Arlington, more work is expected in the future and further analysis will have to wait until the results of this work are made available (Bedell and Lucchetti 1988).

### 1676–1700

The last 24 years of the 17th century were a period of continued growth and prosperity. These advances did not come without cost, however. The entire colony was recovering from the effects of a rebellion over trade, security, and human rights that had challenged colonial law, unseated a governor, and reduced the Native American population to subjugation to Virginia authority (Mouer n.d.: 9). With the rapid influx of African slaves and an expansion of western settlement fueled by an increasing class of newly freed men, Virginia was experiencing a monumental change in the social and economic structure of its population (Morgan 1975: 295). Also, the number of wealthy individuals throughout the region increased, many of whom did not hold political office.

The increase in masonry construction continued during this period. The Carter brothers of Lancaster County built two masonry buildings. Joseph Foster built one near the turn of the century in New Kent County, and Lewis Burwell II constructed another in Gloucester County. Men outside of the political elite, such as Edmund Swaney, George Poindexter, and the merchant Thomas Jones, could now afford to build in brick or stone as well. Also, the population increase resulted in a greater accessibility and demand for masons and brick makers. While earlier forms of house design, such as the cross-patterned or hall-and-parlor plan, experienced continued use, new forms of design, including the central passage plan, found acceptance with the population. An increase in variability is also seen in the decoration and subtle design differences of houses from the late 17th century.

John Carter, a member of the House of Burgesses, County Justice, and Colonel in the

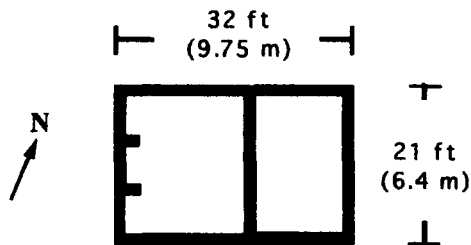


Figure 20. The foundation plan of John Carter's house at Corotoman in Lancaster County.

County Militia, built his home in the 1680s near the northern edge of the colony in Lancaster County. The two-room structure had a single exterior end chimney (FIG. 20). Archaeological excavations by the Virginia Research Center for Archaeology between 1977 and 1980 discovered that the one-and-a-half-brick-wide foundation of Carter's home probably supported a wooden-frame building with interior plastered walls (Hudgins 1979: 12). An addition was added to the structure in 1820 doubling its size. An early 20th-century photograph shows the structure after it was abandoned revealing a riven clapboard roof underneath a later shingle roof (Hudgins 1981: 90). This may have either been the original roofing material or possibly a renovation coinciding with the addition's construction. The building was dismantled in the 1930s (Hudgins 1979: 13).

Between 1685 and 1690, Robert "King" Carter, Treasurer of the Colony, President of the Governors Council, Interim Governor, and Speaker of the House of Burgesses, built his own home less than 300 ft (93 m) from his brother's house (FIG. 21). Found during the same excavations, the two-brick-wide foundation of Robert's home suggests that this three-

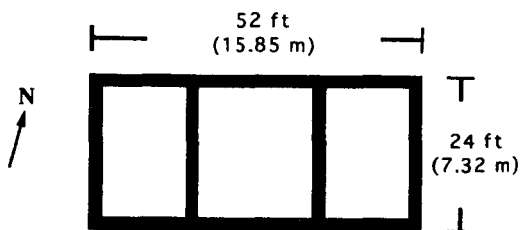


Figure 21. The foundation plan of Robert Carter's house at Corotoman in Lancaster County.



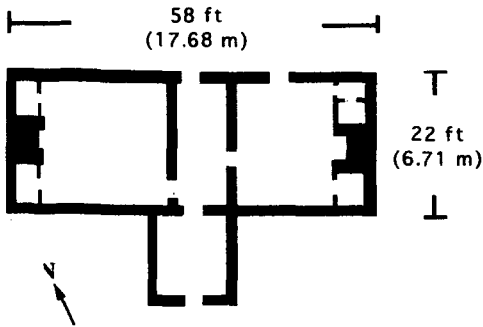


Figure 22. The foundation plan of Joseph Foster's home, Foster's Castle, in New Kent County.

room, one-and-a-half story lobby entrance house was brick-walled (FIG. 21) (Hudgins 1979: 15). An exceptionally deep foundation, laid 2.5 ft (68 cm) below grade, supports this conclusion. Limited excavations did not uncover evidence of a cellar within the structure but the house likely had leaded casement windows and a stone floor. The building was abandoned and dismantled by the 1840s (Hudgins 1979: 18).

Closer to the western part of the colony, Joseph Foster constructed his brick home, Foster's Castle, in New Kent County between 1670 and 1690. Foster was a Civil Officer, Sheriff, and Justice for New Kent County, as well as Lieutenant Colonel in the Militia and a member of the House of Burgesses and General Assembly. His brick-walled cross-patterned house is still standing, and although subjected to major alterations and renovations, reveals evidence of a cellar beneath the east room and the cross passage (FIG. 22). The two-brick-wide foundation originally supported a one-and-a-half story building with a two-story porch tower. The roofing material used in the building's initial construction is unknown. Archaeological excavations have not been conducted on the property, but architectural studies suggest the possibility that leaded casement windows were originally used and there was a circular window near the top of the porch tower (Carson 1969: 219). Foster's Castle may have originally incorporated a central hall as well. It is this central hall, which is comparable to examples in the 18th century more than the 17th, that has led some scholars

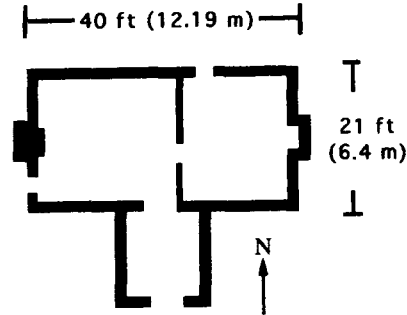


Figure 23. The foundation plan of George Poindexter's home, Criss Cross, in New Kent County.

to assign the building a later construction date (Carson 1969: 222–224).

George Poindexter built his home, Criss Cross, sometime between 1690 and 1700 in New Kent County. The one-and-a-half story building, sometimes referred to as Christ's Cross, still stands and contains a single partition between the hall and parlor, two exterior end chimneys, and a two-story porch tower (FIG. 23). No archaeological excavations have been conducted on the property, yet architectural analysis suggests that leaded casement windows were originally used. A cellar under the western room of the house also dates to the construction of the building. The exterior of the building includes a water table with beveled bricks and a string course around the porch tower. It is unknown what was first used to roof the structure, and the width of the foundation, while probably two bricks wide, has not been determined. Cary Carson explains that this building "bears all the marks of an older building tradition free from any of the tell-tale signs of early eighteenth-century innovation" (Carson 1969: 214).

Near the end of the 17th century, Lewis Burwell II, a County Justice, Major in the County Militia, and once named to the Governor's Council, built his manor house, Fairfield, in Gloucester County. Architectural historians in the 20th century have viewed the building as a "curious transitional house" and possibly the key in representing "the transition from Colonial to Georgian style" within Virginia (Waterman 1946: 25; Morrison 1952). Burwell completed the first phase of the house's con-

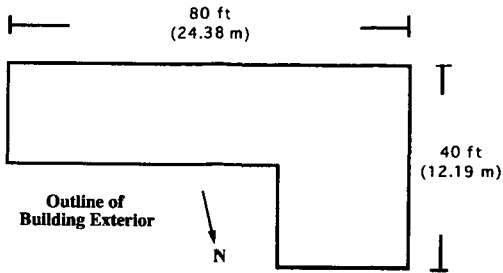


Figure 24. The foundation plan of Lewis Burwell II's home, Fairfield, in Gloucester County.

struction, a two-story brick home, by 1692. Architectural historian Robert A. Lancaster (1915: 225–230) explains that this date is confirmed by accounts of a decorative iron support rod with the initials L[ewis], A[lice], and B[urwell], and the date 1692. The structure contained one interior and one exterior end chimney, each with double diamond-shaped stacks. The entrance was “uniquely placed at one side of the façade” and the leaded casement windows were topped by flat arches (Forman 1948). No archaeological work has been performed on the foundation of the main house, and floor plans of the structure do not exist. Only a rough sketch of the foundation's boundaries and a few old photographs survive (FIG. 24). The house was destroyed by fire in 1897.

Multiple additions were constructed onto the initial house but their sequence is questionable. The end result of construction left an L-shaped foundation similar in size to Berkeley's second manor house at Green Spring and to Thomas Swann's home in Surry County. The appendage forming the L shape was a single, large room known as the ballroom. This section of the house may have been built shortly after 1692 as a support building and later connected with an addition. Kimball (1950: 272) states that a matching wing once stood before the ballroom was connected to the original house, but it was “burned, or torn away, long ago, though the foundation can still be traced.”

Regarding the building's transitional classification, Brownell and his colleagues state

that “with a combination of clustered Jacobean chimneys, a Classical cornice, and the horizontal mass of a Classical building, Fairfield adapted two styles of architecture the old [medieval] and the new [Georgian] to a regional plan” (Brownell et al. 1992: 3). The ballroom addition was covered by a hipped roof, one of the first in the colony. An end chimney consisting of a triple-set, diamond-shaped chimneystack, similar to those at the Allen house, heated this room. The exterior also incorporated the use of dovescotes and a modillioned cornice, a feature commonly found on Georgian houses (Morrison 1952).

Although he was not a member of the political elite, Edmund Swaney built his stone and brick home around 1680 at Oares Plantation in present-day Hampton. This structure seems to have been initially designed as a one-and-a-half story, single-room home with loft that was expanded in the 1720s into a two-room hall-and-parlor home (FIG. 25). The 17th-century portion of the 1.5 ft (0.46 m) wide foundation was constructed of cut fieldstone and contained a full cellar with dirt floor. The house was partially excavated from the late 1970s until 1981 by avocational archaeologists in cooperation with the National Aeronautics and Space Administration (NASA). The majority of the fieldwork focused on the early 18th-century addition, a 20 × 21 ft (6.10 × 6.40 m) cobblestone foundation that may have been covered by a story-and-a-half wood-framed room. Very little is known about the planta-

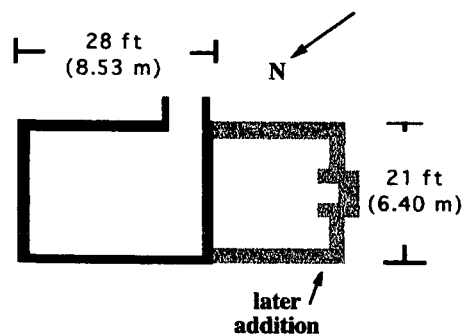


Figure 25. The foundation plan of Edmund Swaney's house at Oares Plantation in Elizabeth City County.

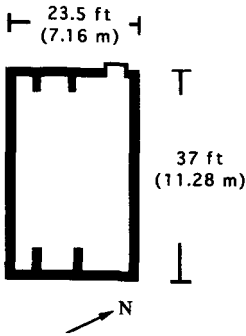


Figure 26. The foundation plan of Thomas Jones's house in James City County.

tion's 17th-century occupants. During the 1770s the home was used as a storage area and was soon thereafter destroyed by fire (Langley Research Center Historical and Archaeological Society n.d.).

The merchant Thomas Jones occupied a previously built home near many of his most important customers in Middle Plantation. The one-and-a-half-brick-wide foundation was identified during excavations at the public hospital site in Colonial Williamsburg in the early 1980s (FIG. 26). A wine bottle seal bearing the initials of Governor Francis Nicholson was found in the brick cellar of Jones's adjacent outbuilding. The original owner of Jones's house is unknown. During the 18th century, the merchant provided housing for the Governor (Colonial Williamsburg Foundation Archaeological Reports 1983, 1984). Jones's one-and-a-half story home may have instituted a central hall plan and used a combination of wood-framed walls resting on brick piers. The flanking end chimneys, which may have incorporated a water table course, were all but destroyed by the construction of the public hospital (Blades 1974: 3). A full English cellar constructed after the initial building of the structure survived, however. The building likely had a wooden roof, leaded casement windows, interior plastered walls, and decorative delft tiles around its fireplace (Colonial Williamsburg Foundation Archaeological Reports 1983: 19, 22). This structure, while not on line with the plan for Williamsburg, was abandoned and destroyed by fire in

the 1750s (Colonial Williamsburg Foundation Archaeological Reports 1983: 1, 15).

House 2-2G, so named because of its grid location within the city of Williamsburg, was located by the Colonial Williamsburg Foundation in the 1940s. Very little research has been undertaken concerning the history of this structure, yet its conflict with the town plan suggests it was constructed prior to 1699. The owner of the property at the time of the dwelling's construction is unknown. The 14-in (0.36 m) brick foundation likely supported a one-and-a-half story frame building (FIG. 27) (Duke 1941: 3). In addition, the foundation conforms to the cross-patterned design, incorporating a porch tower on the front façade and end chimneys along the gabled ends. The 12.5 ft (3.81 m) square porch tower contains a brick-paved cellar with sump (Duke 1941: 4). Each end chimney is flanked by two individual "closet" additions, built after the initial construction of the building. The original roofing material is unknown. Excavations suggest that it was likely torn down shortly after the 1720s to make way for the expanding city of Williamsburg.

In the case of two additional buildings there is insufficient evidence to tie their construction dates firmly within the 17th century. The Adam Thoroughgood House and Malvern Hill have each been attributed to the 17th century as well as to the 18th century, but the majority of the evidence has been inconclusive. Similar problems have been experienced with construction dates for both Foster's Castle and Criss Cross, yet architectural studies have, perhaps hopefully, suggested that an earlier date is more likely than one in the 18th century (Carson 1969). Future archae-

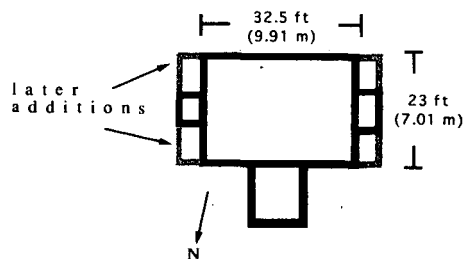


Figure 27. The foundation plan of House 2-2G in James City County.

ological, historical, and architectural analyses are necessary to further refine the construction dates for these buildings. A list of additional structures, identified through documents or limited excavations as possibly dating to the 17th century (is included as Appendix A).

## Discussion

At the center of all analyses of masonry architecture is the debate over the way individuals designed and built their homes. This discussion must include responses both to the environmental and economic considerations seen in the type of building construction, as well as the conscious or unconscious symbolic nature of the structures. Most important, though, is the proper contextualization of the buildings themselves.

Seventeenth-century Chesapeake society was highly unstable. Attitudes and fashions fluctuated as commonly as population and economic conditions. These evolutions affected different regions at different times and in dissimilar ways. In addition, the geographic location of a given structure greatly influenced its construction. The functional and symbolic purpose of the building depended on a number of factors, including defense and possibly the representation of stability and economic success (Mouer 1998a; Muraca 1994). An individual's choice of construction material depended on the surrounding physical and economic environment, as well as the concerns and needs of the individuals who lived within the building.

## Reasons for Building in Brick or Stone

During the early 17th century, most settlers invested the bulk of their resources in their tobacco crop. Both brick and stone construction were expensive and unnecessary for the majority of the population (Main 1982: 151). Post-in-ground construction was cheaper to build and easier to repair. Deciding between these building materials was an important economic decision (Carson et al. 1981: 138). Carson and his colleagues (1981: 155) explain that "newcomers to virtually all the American colonies frequently exercised that choice in favor of building expediently for the present

so as to husband their labor and capital for the future."

A significant amount of time must have been spent in the repair and upkeep of a post-in-ground structure. Archaeological investigations have revealed that the average post-in-ground structure will last only 10 to 15 years without major repairs (Carson et al. 1981: 150). The money and labor invested in the maintenance of these structures, however, may have been an accepted part of everyday life (Carson et al. 1981: 150). In late 16th-century England, the repair and improvement of a medieval home was more common than a complete rebuilding (Cummings 1979: 4). Again, archaeological excavations of house sites in the Chesapeake have revealed that some post-in-ground homes underwent structural repairs more than once in their lifetime (Carson et al. 1981: 150). In the case of major renovations, an aspect of community assistance may have been involved. Fixing the thatch or shingles of a roof or filling a hole in the wall of a house may have involved help from neighbors. This theory is directly related to Robert St. George's (1983) concept of maintenance relations, wherein a bond of reciprocity is created between members of similar social and economic status.

The post-in-ground homes constructed in Virginia had for centuries been a part of a longstanding building tradition in England (Carson et al. 1981: 138). The majority of the population of early 17th-century England was familiar with "houses with 'walles of earth, low thatched roofes, few partitions, no planchings or glasse windows, and scarcely any chimnies, other than a hole in the wall to let out the smoke'" (Cummings 1979: 4). Care must be taken, though, to avoid the assumption that these homes, or their masonry counterparts, were viewed by the settlers as either permanent or impermanent. These notions are more a construction of today's society than an adequate representation of what was acceptable 300 years ago (Mary Beaudry, personal communication, 1998). The architecture of early colonial settlement may have actually been an "outgrowth of the medieval village pattern of building for the present generation" (Mary Beaudry, personal communication, 1998). As there were limited numbers of

masons or skilled carpenters, settlers probably built what they knew, or at least what their neighbors had already built nearby.

The construction of masonry structures seems to logically fit into the domain of the wealthy. The difference between the gentry and the common farm owner's choice of building material seems to exist in each group's level of disposable income and the accessibility of specific resources. These include the availability of brick makers and masons and the ability to pay them (Main 1982: 149, 151). In addition, wages were not high enough in the Chesapeake to attract skilled workers in large numbers, especially when there was already enough work in England (Horn 1991: 95).

While not all wealthy individuals chose to build masonry homes, as the 17th century progressed, the ability to choose among different building materials grew. The expansion in population and settlement north and west of Jamestown made sources of fieldstone more accessible. Also, as more brick and stone structures were built, the demand for them increased. These structures were now seen as a design option. Lastly, as the population grew so did the demand for skilled craftsmen. While this demand included brick makers and masons, the demand was never fully met. In fact, the Rutmans' research on Middlesex County reveals that finding an affordable bricklayer was difficult into the 19th century (Rutman and Rutman 1984: 65; Metz and Russ 1991: 104).

In addition to the reasons stated above, a number of physical and environmental conditions factored into the choice of construction material. Starting in the 16th century, brick was becoming a more common building material in England. People also believed that brick and stone lasted longer and were less susceptible to fire than wood. After the fire of 1666 in London, most buildings were rebuilt with brick walls and ceramic or slate roofing tile to help prevent future fires. Also, a brick home was healthier, more comfortable, and more durable than its post-in-ground equivalent (Pickett 1996: 7).

The reasons for building a brick or stone home cannot be adequately discussed without looking at issues of symbolic representation.

Wealth and political power alone cannot explain why people built such structures (Pickett 1996: viii). In fact, brick and stone architecture during the 17th century in Virginia may have symbolized power and the unity of the political elite (McFaden, Muraca, and Jones 1994: np). This overwhelming association influenced many of the men interested in becoming involved in the politics of Virginia to build with that material.

Masonry architecture's power was derived from its inaccessibility to the majority of settlers in the colony. It visually separated those individuals who held economic and political power from the rest of society (Metz and Russ 1991: 103-4). It also created an artificial level of status, one which must be obtained in order to achieve and maintain membership among the colony's elite. Markell (1994: 52) elaborates on the meaning and context of collective group identity, as discussed by Weber (1961) and Spicer (1971). She explains that material symbols, in this case brick or stone homes, communicate group membership and maintain boundaries between groups.

The construction of brick and stone homes not only caused a series of changes that effected divisions between the gentry and lower classes but also within the gentry itself. King and Chaney (1999: 51) explain that "brick houses served as physical manifestations of social boundary markers for an emerging class of elite Chesapeake planters." Pickett (1996: 34) adds that it "also reinforced a political ideology that created a sense of belonging among members of the ruling class." In effect, the stone and brick used in the construction of these homes symbolized both division and unity within different levels of colonial society.

Masonry structures, therefore, may have symbolized unity not so much *between* classes as within a restricted and rarified group of the gentry. The lower class settlers saw the uniformity of construction material as a boundary that separated them from the gentry. King and Chaney (1999: 52) suggest that the gentry also used masonry architecture to maintain boundaries within their own group. Their work in Maryland has shown that "intragroup competition, negotiation, and compromise were as important for defining boundaries as

was a sense of group identity," adding that "these tensions played an important role in the shaping of the domestic landscape" (1999: 52).

The popularity of brick and stone homes may have created a rift in the dynamics of the 17th-century community. Relationships that previously depended on mutual assistance, specifically repairing damage to a post-in-ground home, were no longer necessary. Markell (1994: 61) explains that "the brick [or stone] fabric of the house effectively diminished the social exchange relationship between groups and created a more solid wall between them." This architectural change marked an increase in individuality among the gentry resulting in a shift in community relationships (Shackell 1994: 93).

Surprisingly, not all members of the upper class built with brick or stone. In Pickett's (1996: 66–73) discussion of this phenomenon he explains that a number of wealthy settlers, including Nathaniel Pope of Westmoreland County and Colonel Thomas Pettus of James City County, lived in post-in-ground structures. Each gentleman was active within colonial politics and had homes that were extravagant for post-in-ground structures of their day. Moreover, both houses included multiple wings and additions with leaded casement windows and partial brick paving within interior cellars (Neiman 1980; Kelso 1984: 76–79). Why these individuals did not build masonry homes is unclear. They were undoubtedly aware of the their contemporaries' homes and current English fashion. According to Pickett's research, failure to build in brick or stone seems to have marked the demise of their families' prominence among Virginia's gentry. In fact, those who constructed Virginia houses after mid-century either "could not, or chose not to, compete for power like those who constructed substantial brick homes" leaving them "self-consciously in the shadow of the more impressive homes of wealthier men" (Pickett 1996: 73; Levy 1998: n.p.)

### The Advance of Masonry Construction

In Virginia, the use of brick and stone in the design of domestic architecture was inconsistent throughout the 17th century. In fact, the pace at which these structures were con-

structed was erratic, experiencing a lull in the 1650s and a rapid increase beginning in the last quarter of the century after Bacon's Rebellion. This inconsistency may have been caused by a number of different social, economic, and political factors. Over the course of the 17th century, population, mortality, and economic stability constantly fluctuated. The population was also affected by the political climate both within the colony's government as well as in England. With the colony in a constant state of flux, it is understandable that the state of masonry architecture followed suit.

The lack of masonry structures outside of Jamestown during the first quarter of the 17th century was likely a result of two key factors. First, the construction of masonry homes implied a certain confidence in Virginia as a profitable, long-term agricultural venture. Second, it involved a considerable monetary investment. The majority of the early settlers in Virginia may have lacked both of these elements and therefore did not see the construction of a brick or stone home as a necessity. Horn (1991: 103) explains that the early emigration of wealthy individuals focused on easy profit or military adventure. He adds that "a number of early arrivals may best be described as *hobereaux*, impoverished gentry who gambled on Virginia to recoup dwindling fortunes at home" (Horn 1991: 103).

In 1624, Virginia became a royal colony, and during the next two decades a new sense of confidence and security emerged as population increased and the mortality rate began to decline. While farming tobacco still offered the possibility of quick profits, settlers may have realized that prosperity was more likely when undertaking a long-term investment. By the 1640s, the Governor was building a massive home at Green Spring, showing his fellow gentry that he now considered Virginia his new home. This action signified a major shift towards constructing homes that the gentry expected to live in for more than just a few short years. Also, those who built masonry homes not only saw themselves as investing in their future but in the future of their children as well.

The drop in masonry home construction in the 1650s is peculiar. Until this time brick and

stone houses developed steadily along the James River, including homes built by the highest members of the politically elite. Also, as the transient nature of early colonial settlement was slowly changing to more permanent forms in the 1640s, a growing sense of stability emerged throughout the population (Rutman 1994: 189). The decrease may be related to an unstable economy caused by a change in immigration or a fluctuation in tobacco prices. It may also have focused on the instability of the political climate in England. The English Civil War (1649–60) had caused the removal of Governor Berkeley from office with his replacement by governors loyal to Cromwell's regime. The political climate created by the war may have resulted in uncertainty and confusion among Virginia's elite, causing some to refrain from building masonry homes. In contrast, the very cause of the lack of masonry home construction in the 1650s may explain their increase in the next decade.

The 1660s mark the beginning of consistent growth in the construction of brick and stone homes in Virginia. Dwayne Pickett (1996: 18–20) suggests that the increase may be a result of the influx of royalist elite fleeing repercussions from the English Civil War. He explains that with the execution of Charles I in 1649, a large number of elite Englishmen, loyal to the crown, fled England fearing reprisals from the new Commonwealth. Many of them came to Virginia, drawn largely by Governor Berkeley's recruiting, and brought their money and high-class lifestyle with them. "Numerically, royalists were insignificant, but in local as well as provincial politics they exercised an influence wholly disproportionate to their numbers" (Horn 1991: 108). Given a few years to acclimate to the region and for the political turmoil in England to settle, these new immigrants could have constructed masonry structures by the early 1660s. Pickett adds that this emigration may have marked a shift within Virginia society, increasing the cohesion of the elite while further segregating the lower classes (Pickett 1996: 20–23).

Brick construction in Virginia continued to increase during the 1670s. Fewer individuals were getting rich quick through tobacco farming while agricultural production in Virginia as a long-term investment had solidified.

The colony's population was continuing to rise and other settlements were expanding throughout the eastern half of North America. The colony's farmers and new settlers were beginning to realize that a greater chance at prosperity existed by staying in Virginia than returning home to England (Mouer n.d.: 38).

But with the increase in the colony's size and population came a level of discontent. Mouer (1998b: 38) explains that "by the end of the third quarter of the 17th century, there were undoubtedly rising expectations among new colonists, frontier settlers, recently freed servants, and many others." The gentry were now grudgingly forced to make room for more of their peers. This resulted in an artificial land shortage, created by the gentry, and an increase in competition for political positions. In order to maintain the level of wealth and stature the gentry had grown accustomed to, they instituted "high taxes to maintain ineffectual frontier forts and ranger troops" and permitted "huge grants to proprietors" (Mouer n.d.: 38). These conflicting pressures resulted in a short-lived rebellion of lower class settlers and servants in 1676. Led by a member of the gentry, Nathaniel Bacon, Junior, a combination of frontier landholders, indentured servants, and recently freed men, fought the colonial elite over issues of inadequate protection and unfair trading rights. Within a year, though, the rebellion's leader was dead and the gentry had regained control over the colony's population.

Even though the primary goals of Bacon's Rebellion failed, the conflict did attract the attention of the King in England. The level of self-rule that Virginia's elite had enjoyed up until that time was reduced as royal appointees took a more avid interest in controlling the colony. While Governor Berkeley was removed from office, the stability of the gentry was otherwise restored and the increase in the construction of brick houses continued through the last two decades of the 17th century. A visiting Frenchman wrote in 1687, "they have started making bricks in quantities, and I have seen several houses where the walls were entirely made of them" (Chinard 1934: 119–120). Recent research has shown that a steady increase in domestic masonry architecture led directly into the

"great rebuilding" of the 18th century (Pickett 1996; Brown 1996; Levy 1998). The transition resulted more from the growth of an architectural tradition, though, than a sudden explosion of brick and stone structures across the Chesapeake landscape.

### **The Location of Masonry Architecture**

The geographic location of masonry architecture during the 17th century corresponds directly to the expansion of settlement throughout Virginia. As settlement extended in all directions from Jamestown, the gentry, and the construction of their masonry homes, soon followed. Particular concentrations of these homes along the landscape require further explanation as they may represent more than a response to population expansion. For instance, Thomas Harris's home on the far western frontier of 1630s Virginia may have been constructed with brick because of its defensive qualities (Mouer 1998a). The great solidity of such a structure, believed to function both as a home and a garrison for the local militia, may have been one reason behind its use of masonry construction. While this is only the first such structure found along the frontier of early Virginia, other structures might exist that were built in brick or stone for the same reasons.

A distinct concentration of brick buildings exists in Middle Plantation, specifically in the area surrounding the future city of Williamsburg. In the 1680s, at least six brick homes were present within Middle Plantation. Furthermore, before the end of the 17th century, a brick church, a brick college building, and other structures were built or planned. This indicated an increase in the stature of the area's population. The only area within the colony that had a greater number of public and private buildings, of either wood or brick, was Jamestown. It is possible that masonry structures were purposely constructed in large numbers within Middle Plantation to help attract the capital away from Jamestown, a plan that succeeded in 1699 (Muraca 1994: 11).

### **Design Choice in Masonry Architecture**

The brick and stone fabric of these structures was not the only factor in their definition

as the homes of the colonial elite. Indeed, the arrangement of rooms within these homes may indicate more about the persons who built these buildings than the material used to build them. Main (1982: 143) explains that "English immigrants to the New World carried with them not a single homogeneous building tradition but a bundle of possible housing styles from which to choose." The majority of 17th-century masonry house forms in Virginia, with some variations, fit into two basic groups: the hall-and-parlor and the cross-patterned house plans. First, the hall-and-parlor "Virginia House," including Richard Kemp's house at Rich Neck, contained two ground-floor rooms and loft space above with either central or end chimneys. Second, the cross-patterned or T-shaped house, such as the John Page house, similar to the hall-and-parlor, contained an additional porch and/or stair tower or back room. A final group of houses is seen as anomalous as each has a unique plan differing greatly from either of the first two groups. This last group includes both early double-pile structures, such as John Custis's Arlington, and elongated single-pile, L-shaped homes, such as Governor Berkeley's second manor house at Green Spring. In addition, earthfast equivalents of most of these house forms can be found throughout the colony.

The different environmental conditions in Virginia played an important role in the settlers' choice of home design. Cummings (1979: 209) adds that "the immigrant English carpenters were forced from the first moment of their landing to come to grips with a new environment and to find technical solutions for new problems." Some of the changing trends in Virginia's architecture may be a direct response to those environmental conditions. Design characteristics common to England and Europe, such as central chimneys, may have fallen out of favor in the colony because of the discomfort associated with their use during Virginia's hot summers. The architecture of 17th-century Virginia then truly represents an amalgam of English architectural traditions adapted to the social and environmental conditions of the Chesapeake region.

The problems inherent in building a fashionable English country home in Virginia are



clearly seen in the design of Governor Berkeley's 1640s home at Green Spring. While his efforts to instill a sense of confidence and security in the colony's elite were embodied in the construction of this house, there were undoubtedly numerous disadvantages in the structure's design. Brownell and his colleagues explain that the first manor house at Green Spring "was built with sadly insufficient attention to design and planning: rooms were massed three-deep and covered by parallel gable roofs" (Brownell et al. 1992: 3). This unfortunate obstacle in design highlights the problems of using English architectural styles in a very different Virginia environment. Other members of the gentry may have learned from this example. Many continued to implement design characteristics borrowed from English and European structures that worked well within the colony. This demonstrated the colonists' ability to adapt traditional designs to a new area.

In the 1660s, Thomas Ludwell's extravagant renovations of Richard Kemp's 1640s Rich Neck home coincided with the growing trend for the gentry in Virginia to emulate high society in England (Levy 1998: n.p.). While these alterations made Ludwell's house more attractive by 17th-century English standards, they also increased its stability, ventilation, and interior space. Levy (1998: n.p.) adds that these modifications "ultimately changed the hall and parlor structure into a five-room (excluding loft space) outshut whose plan approximated that of a double-pile dwelling." This noticeably different version of Kemp's original home would have been better suited to comfortably house a high official in Virginia's government as well as to entertain others.

The design and arrangement of rooms within the homes of the elite can be interpreted from various perspectives. The elements involved in the construction of these residences go beyond the brick and stone materials involved in their construction. A concern for adequate space and comfort was only one contributing factor to the changing design of masonry homes. In some cases, design elements symbolized a response to the changing demographic structure of the colony. In others, there were modifications based on a

concern for privacy and individual space. And in almost all other cases, there was a desire to display one's knowledge of current English fashion.

The construction of the Arthur Allen and John Page homes indicates the increasing popularity of porch towers and the cross-patterned design. Porch towers provide a formalized entryway into a structure's interior, allowing the screening of visitors and the further isolation of outsiders from the interior. Evidence of porch towers at Mathews Manor, Peirse's stone house, Berkeley's possible porch tower on his first manor house, and Kemp's restricted entryway at Rich Neck begin to show the wealthier planter's desire for an increase in privacy. The Virginia gentry may have also found the porch tower to be a convenient way of increasing the separation between public and individual space. This trend continued in both brick and wood construction through to the 18th century but disappeared by the 1750s (Upton 1980: 106). One example of an earthfast structure with a porch tower was Nathaniel Pope's house at Clifts Plantation (Neiman 1980: 296).

The popularity of cross-patterned homes may be the reflection of common building practice in England at the time. The use of a cross-patterned design allowed a wealthy planter, by the colony's standards, to construct a fashionable English-style house. While at a decidedly different scale, the symbolism of the tower may have triggered memories of castles and keeps, the powerful and dominating architecture of the medieval period in England. Also, Pickett (1996: 76) adds, the gentry wanted to display their knowledge of current English fashion "creating an American landscape more English in nature than it had ever been before."

The size of a structure also had a profound effect on its symbolic value. This contrast is embodied in the comparison between Richard Kemp's house at Rich Neck and the first manor house at Green Spring. Evidence supports the use of similar building materials, such as plaster interiors and leaded casement windows, for both buildings, but the similarity between the structures ends there. Berkeley's home was over two times the size and had at least seven more rooms than Kemp's. This

could have simply been the embodiment of the difference between the position of Governor and that of Secretary, both politically and economically. It could also represent the role competitive placement and design of structures played in the maintenance of boundaries between the colony's political elite (King and Chaney 1999: 52).

The evolution of the architecture of Virginia's 17th-century elite can be directly compared to similar trends in England and Europe. The most significant modifications in house forms occurred during the second half of the 17th century as the changing form of the English family coincided with a massive rebuilding in the center of elite architecture, London, following the fire of 1666 (Levy 1998: n.p.). In Virginia and England, the number of rooms in elite homes increased as there was a growing demand for individual space. This was in response to "the developing seventeenth-century idea of the family as [a] closely connected domestic unit tied together by affective bonds" (Levy 1998: n.p.). During this period, there were shifts in architectural design throughout the American colonies. As in Virginia, Cummings (1979: 207) suggests that in New England "there are indeed measurable differences in style and technology between the buildings of 1650 and 1700."

The concept of what characterized elite architecture, aesthetically speaking, also evolved during this period. Levy (1998) discusses this topic focusing on the evolution of Rich Neck plantation, from its construction by Richard Kemp to its renovation by Thomas Ludwell. Each building was an example of the response to changes in English architectural fashion. Levy (1998: n.p.) concludes that many of Virginia's elite "were acutely aware of changing trends and styles in the era's increasingly trendy metropole," namely London, and that "these elites were particularly attuned to the life and values of England's towns in general." As the architecture of the elite in England changed, the definition of what was considered appropriate elite housing in Virginia changed as well.

There still remains the question of what effect these buildings instilled on the individuals who viewed them. Who was intended to see these structures? Masonry architecture

must be examined within its own immediate context and viewed through the eye of both its constructor and "receiver." Matthew Johnson's work on the transition from the medieval house to great house of the early modern period in England is centered on this question of context (Johnson 1996: 119–154). As these buildings changed in form, they also changed in the way they related to the landscape that surrounded them (Johnson 1996: 121). These landscapes we then viewed differently and reordered. To truly understand this architectural transition, though, it is necessary to "grasp the way in which these changes in form and style related to these and other changes in the landed elite" (Johnson 1996: 136).

### **The Destruction of Masonry Structures through Time**

The demise of 17th-century masonry homes and their designs highlight their surprisingly brief existence. Only 3 of the 24 homes inventoried survive to the present day, all of them having undergone extensive renovations and repairs. While the typical post-ground home had a relatively short life span, it may be expected that a masonry structure would be more resistant to the ravages of time. In fact, eight of the structures did not survive the 17th century and eight more were destroyed by the mid-18th century. Nine homes burned down, five were torn down, and of these 14, at least 11 were abandoned before they were destroyed. In contrast to the wood and masonry homes of 17th-century New England, numerous examples of which still stand, there are less than a handful of Virginia's early homes left to see. If brick and stone homes of the elite were so highly valued in the 17th century, why were over half of them in ruins by 1750?

The reasons for the disappearance of Virginia's first examples of masonry architecture have as much to do with changes in fashion and family organization as they do with issues of environmental or economic conditions (Levy 1998). As the 18th century progressed, the increase in size, ornamentation, and design of homes, first seen in Arlington, the second manor house at Green Spring, and Bellfield, more than the strict use of brick or stone, began to separate society's architecture. Even

at the end of the 17th century, individuals like John Custis and William Berkeley were building much larger homes reflecting the changing tastes that would lead to the so-called "great rebuilding" of the 18th century. A shift in style towards the more symmetrical, "Georgian" design occurred that was so dramatic as to make the rebuilding of many structures both economically and socially inadvisable. In addition, the succeeding generation of Virginia's elite families found themselves owning land and raising families at the same time as their fathers. This prompted a choice between building a fashionable new home on one's own land, or waiting to inherit a smaller, older structure. These first and second sons may have been more inclined to move to their own land rather than return to their father's property.

The lack of surviving 17th-century masonry domestic structures, though, is not surprising when one looks at Virginia's environment and the 300 years since their construction. What is curious are the reasons behind their demise. In Middle Plantation, the destruction of the majority of its masonry homes, ironically, made way for the building of the city of Williamsburg. During probably the first case of large-scale urban renewal in Virginia, at least a handful of masonry structures were destroyed. Even with those structures that survived the mid-18th century, though, there are few that did not undergo major renovations in an attempt to bring them more in line with current fashion. In addition, adaptations were made to these buildings to make them more comfortable, involving decreasing the size of fireplaces, partitioning spaces, and adding additional exterior rooms (Hudgins 1976; Andrews 1984). Still, other buildings such as Nathaniel Bacon Jr.'s and Miles Cary II's homes, were neither victims of fashion nor urban renewal, but were destroyed as a result of war.

There seem to be have been as many reasons behind the destruction and abandonment of Virginia's 17th-century masonry homes as there was for their construction. Investigating these reasons within both individual contexts and more generally is crucial to understanding the emergence of masonry architecture in Vir-

ginia. It will also provide insight into the changing social structure of the gentry in the late 17th and 18th centuries.

## Conclusion

In the last 20 years, archaeological and documentary research on 17th-century architecture in Virginia has increased dramatically. As a result, knowledge provided by earlier research has been updated and made more significant. Three of the remaining early brick structures, Bacon's Castle, Criss Cross, and Foster's Castle, are no longer seen as anomalous entities on the Virginia landscape, but as a sampling of the numerous examples of an evolving architectural tradition. With this new information, studies such as *Domestic Architecture of the American Colonies and of the Early Republic* by Fiske Kimball (1950) and *The Architecture of the Old South: The Medieval Style, 1585-1850* by Henry Chandlee Forman (1948) can be reevaluated. These sources, although still useful, are now known to contain inaccurate information about building construction dates. As more data become available and research continues in the fields of history, architectural history, and archaeology, the theories originally proposed by Kimball, Forman, and others must be examined anew.

The structures discussed in this article represent the known corpus of 17th-century domestic masonry structures outside of Jamestown in Virginia. Research on these buildings has revealed that wealthy colonists throughout Virginia employed a more diverse array of design and construction techniques than previously thought. As a group, the buildings provide scholars with insight into the social, economic, and political worlds within which domestic masonry architecture played an important role. Each structure allows a compelling glimpse into the lives of the individuals who built and lived in these houses. Within the proper context we can see multiple factors that guided each building's construction, meaning, and destruction. These factors played a significant role in the emergence domestic masonry homes as a distinct architectural tradition within 17th-century Virginia.

This architectural tradition, however, developed at a "sporadic but determined" pace and experienced changes in both form and meaning with the "gradual addition of new materials and techniques" (Markell 1994: 56). The choice to build a masonry home was affected by various environmental and economic considerations. This included the builder's level of disposable income and the accessibility of specific resources, such as bricklayers. In addition, there was both a conscious and unconscious symbolism inherent in each building. Masonry architecture symbolized both division and unity within different levels of colonial society. While it represented the power of the political elite over other settlers, it also expressed division and competition among members of the gentry. The buildings symbolize the "new order" of Virginia gentry who were establishing "clear boundaries between themselves and the landless freemen and servants, and between themselves and England in order to maintain their status and power" (Markell 1994: 60–61).

Beyond the basic fabric of these buildings, there existed a conscious design decision. Changes in the layout of a building involved adaptations to new environmental and social conditions. With the demographic structure of the colony changing as the century progressed, there evolved a concern for privacy and individual space, as seen in the popularity of porch towers and later, central halls. There was also a desire to display one's awareness of current English fashion. This required knowledge of the proper level of ornamentation and size suitable for a particular home design.

It is also necessary to understand the reasons behind the disappearance of almost all of Virginia's 17th-century domestic masonry architecture. While there are numerous examples of these homes in New England, few of Virginia's structures could avoid the fires, renovations, and dismantling that destroyed the colony's earliest masonry homes. Their excavation reveals that many were abandoned, some within a century of their construction. The shells of many masonry homes were left to deteriorate or were dismantled for their materials, leaving only the documents and the archaeological record to prove their once prominent existence. But why were so many

of these highly valued objects of status simply left to deteriorate? While each building should be analyzed within its own circumstances, it seems that many of these structures fell victim to shifts in architectural design, fashion, and family organization.

Through the excavations of the buildings reported in this article, there is proof that more 17th-century masonry homes were built than scholars had once thought. Only three of the known domestic masonry structures still stand, providing an inaccurate view of colonial architecture for this period. If assumptions were based strictly on these structures, brick and stone house designs would be seen as limited to the cross-patterned house design. The grasp of contemporary English architectural style seen in the Berkeley, Custis, and Burwell homes would go unnoticed. The variant construction techniques seen in Mathews Manor, the Thomas Harris house, and the house on the Hornsby property would never be seen. While the rate of masonry construction in the 17th century never rivaled that of the 18th, it was more prevalent than first thought. As additional buildings are discovered, it may be revealed that even the "great mansions of the eighteenth-century Tidewater are not a departure from seventeenth-century architecture, but rather the culmination of the aspirations and experiences of seventeenth-century elite home builders" (Levy 1998: n.p.).

This study is far from complete and does not claim to fully address the many issues that need to be discussed on this subject. King and Chaney (1999) suggest that "the significance of regional as well as chronological variation in the distribution of house types, the individual histories of the planters who built them, and the nature of intraregional variability in the Chesapeake economy and society all need to be investigated." Research by John Coombs and Phil Levy is currently focusing on the change in design and layout of the homes of Virginia's elite during the 17th century (Levy 1998). Their preliminary work suggests that the gentry in Virginia had a much tighter connection with English urban society than was previously suspected. Other important topics worthy of debate include the influence of Virginia architecture on the colonies to the north and south (and vice versa) and the effect of

17th-century masonry home designs on their 18th- and 19th-century counterparts. Research must also be continued on brick kilns. As Metz and Russ explain, "brick kilns 'complete the construction story of a structure and may reveal otherwise obscured details of a structure' and the cultural processes active in its planning and completion" (1991: 96; Heite 1968: 46). In addition, many of the gentlemen included in this analysis, including Richard Kemp, Thomas Ludwell, and John Page, constructed masonry outbuildings. These structures need to be analyzed to the same degree as domestic residences as they constitute a major part of the intended domestic landscape.

The focus of this study is to provide an easily accessible source of information on domestic masonry architecture in 17th-century Virginia. As research begins on a similar study in Maryland, it is important to realize that, as different as these two colonies were in the 17th century, no cultural study of the Chesapeake area would be complete without an equal analysis of both. This article is simply a beginning and with time my study will be expanded and revised to include new information and theories exploring issues related to domestic masonry architecture in the 17th-century Chesapeake.

## Appendix A: Possibilities and Rumors

Following is a list of structures that could not be included in my discussion because insufficient information was available concerning their layout or location. Also, some of the structures on this list have either not been excavated or there is inconclusive evidence as to whether they were constructed in the 17th century.

**Thomas Stegge II house (1650s), Henrico County.** Thomas Stegge II, a Justice of the Peace, Auditor General, and member of the Governor's Council, built his stone building near present-day Richmond off of Goodes Creek. An image of it appears on a contemporary plat, left in a will to William Byrd. It was likely destroyed by a quarry excavated in the mid-20th century (L. Daniel Mouer, personal

communication, 1996).

**William Byrd house (1679), Henrico County.** William Byrd, a Colonel in the County Militia, Auditor General, Receiver General, and member of the Governor's Council and House of Burgesses, also built his stone home near present-day Richmond off Goodes Creek near Thomas Stegge II's house. It appears on a contemporary surveyor's plat as a two-story house with a central chimney and gabled ends. Curiously, the door is placed on one of the gabled ends of the house. This home was likely destroyed by the same 20th-century quarry that destroyed the Stegge House (L. Daniel Mouer, personal communication, 1996).

### Stone house foundation, James City County.

This 2 ft (0.61 m) wide foundation, constructed of rough sandstone, is located near Ware Creek in James City County (FIG. 28). Excavations by numerous groups, including Colonial Williamsburg, the Virginia Department of Historic Landmarks, and Virginia Archaeological Services, failed to conclude the purpose or construction date of this foundation. While this one room building has been associated with the everything from the failed 16th-century Spanish Jesuit mission to a fortification during Bacon's Rebellion, the lack of diagnostic artifacts has prevented scholars from learning much about this structure (NRHP; Virginia Archaeological Services 1997; David

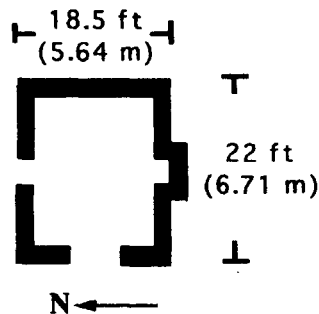


Figure 28. The foundation plan of The Stone house in James City County.

F. Muraca, personal communication, 1998).

**Half-Sinke house, Henrico County.** This structure consists of a possible 17th-century brick cellar located along Telegraph Road in northwest Henrico County (L. Daniel Mouer, personal communication, 1996).

**Abraham Wood house, Henrico County.** Abraham Wood, a Colonel in the county militia, Justice of the Peace, and member of the Governor's Council and House of Burgesses, may have built his house with stone foundation along the road to Petersburg (L. Daniel Mouer, personal communication, 1996).

**Rolph/Thomas Warren house (pre-1652), Henrico County.** The standing structure of similar name is of a definitive 18th-century style, yet 17th-century documents suggest a structure built by Thomas Warren, a member of the House of Burgesses, of similar dimensions and materials was constructed before 1652 elsewhere on the property (L. Daniel Mouer, personal communication, 1996).

**Structure behind the Wythe house, Williamsburg.** Discovered during utility installation in 1939 and 1975, a pair of 17th-century brick foundations as recorded behind the 18th-century George Wythe house in Colonial Williamsburg. The 1939 excavations located a 20 × 28 ft (6.67 m × 9.33 m) foundation oriented northeast-southwest. The 1975 excavation of a utility trench uncovered a small portion of a similarly oriented 2-ft-wide foundation measuring at least 23 ft × 24 ft (7.67 m × 8 m). The latter building also had a chimney along the west wall foundation as well as a brick-filled cellar. Documentation has not been found concerning the building uncovered during the 1939 excavations but a monitoring and mitigation report was filed with the Department of Archaeological Research at Colonial Williamsburg the 1975 utility trench excavation (David F. Muraca, personal com-

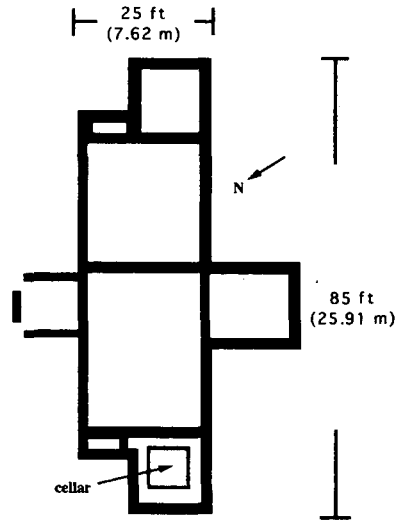


Figure 29. The foundation plan of Nominy Plantation house in Westmoreland County.

munication, 1998).

**Nominy Plantation, Westmoreland County.** Excavations by Vivienne Mitchell in 1973 and 1974 revealed a massive, cross-patterned brick foundation associated with a site occupied from the second half of the 17th century until the end of the 18th century (Fig. 29). Mitchell's summaries of the wine bottle glass and red clay tobacco pipes found during her excavations do not mention a construction date for the building (Hudson and Mitchell 1974; Mitchell 1975, 1976, 1978; Mitchell and Mitchell 1982).

**Matthew Page house (post-1694), at Rosewell Plantation, Gloucester County.** During test excavations in the early 1990s, two foundations were uncovered that were not aligned with the ruins of the Rosewell mansion. These foundations may have been associated with an earlier home built sometime after 1694 by Matthew Page, a member of both the Governor's Council and House of Burgesses, which was destroyed by fire in 1721 (Nicholas

Lucchetti, personal communication, 1996).

**Bray property, behind Basset Hall, Williamsburg.** In 1932, Colonial Williamsburg excavated a large brick foundation 80 ft (26.67 m) east of 18th-century Basset Hall. The 2-brick-wide foundation, on property once owned by James Bray who built a home there between 1671 and 1677, was laid out in English bond with oyster shell mortar (Kelso 1984; Muraca 1994). The remaining portions of the foundation suggest a 2-roomed, hall-and-parlor structure with one interior and one exterior chimney. The northern end chimney was two-and-a-half bricks wide, 8 ft 10 in in length and 4 ft 8.5 in deep (3 m  $\times$  1.62 m). The southern end chimney was not placed symmetrically with the northern end chimney, was smaller in width, and may have been part of later construction. A cellar underlies the southern third of the structure and was constructed after the original foundations. The cellar walls were one brick thick and a bulkhead entrance west of the southern chimney was also added after the original foundation. A one-and-a-half-brick-wide foundation for a two-room addition was uncovered on the east side of the original structure as well. Turned leads were recovered during the excavations (Ragland 1932: 2).

**Wilson Creek site, Gloucester County.** A brick foundation was discovered near a concentration of mid-17th-century artifacts. Probing for the extent of the foundation revealed a rectangular plan of roughly 20  $\times$  37 ft (6.10  $\times$  11.28 m). Test excavations of the structure's English cellar revealed a probable wood floor and plastered interior. The building was likely destroyed shortly after the 1720s (Dwayne W. Pickett, personal communication, 1996).

**Adam Thoroughgood I House, Virginia Beach.** The 1640 will of Adam Thoroughgood I, a Justice of the Peace, Captain of the County Militia, and member of the Governor's Council and House of Burgesses, mentions a brick house. This house likely predates the standing

structure in present-day Virginia Beach now believed to have been built in the early 18th century (Morrison 1956: 143; Dwayne W. Pickett, personal communication, 1996).

**Ringfield Plantation, York County.** A probate inventory from 1698 suggests that a "Great House" on King's Creek in York County was constructed between 1693 and 1698 by Joseph Ring, a member of the House of Burgesses. This house contained two storeys with basement. Photographs exist of a structure near this location that was destroyed by fire in the 1920s. Limited excavations were undertaken by the National Park Service on this building's foundation in the 1930s. No documentation or measured drawings exist, though, that document this work (Hatch 1970b).

**Joseph Croshaw's House, York County.** The 1668 estate inventory of Major Joseph Croshaw, a Justice of the Peace, Major in the county militia, High Sheriff of York County, and member of the House of Burgesses, describes a house with at least six different rooms including a "porch chamber." The presence of this chamber, the affluence of the house's owner, and his rivalry with John Page of Middle Plantation, suggests that, while no mention of construction materials were found in the documentation, this structure may have been constructed of brick. The site is currently located on Camp Perry and no known archaeological work has been found relating to the specific location of this structure (McKinney 1995).

**Houses damaged during Bacon's Rebellion.** Numerous suits were filed in England claiming expenses for damages resulting from looting related to Bacon's Rebellion. A list of these suits is available from the British Colonial Records Office and through the Virginia Colonial Records Project. Included on the list are descriptions of buildings, such as Nathaniel Bacon Jr.'s "small, new, brick house." While no other buildings are referred to as built with brick, a number of entries

describe framed dwellings. These dwellings are owned by Captain James Crews, Captain William Carter of James City County, William Rookins of Surry County, and William Starbrough of Surry County. There are also references to "good" or "very good dwelling houses" owned by Robert Joans, Thomas Hansford, and Thomas Young. Any of these 17th-century structures could have used a masonry foundation in its construction.

**Thomas Ballard I or II house, Williamsburg.**

In the summer of 1997, a foundation was discovered to the immediate north of the Wren Building in Williamsburg. While the artifacts recovered during limited test excavations were inconclusive, the orientation of the building suggests that it existed before the construction of the Wren Building in 1698. The foundation may be associated with either Thomas Ballard I, a Justice of the Peace for York County, Clerk of the County Court, Colonel in the county militia, member of the Governor's Council, and Speaker of the House of Burgesses, or Thomas Ballard II, a Colonel in the County Militia, Justice of the Peace, and member of the House of Burgesses (David F. Muraca, personal communication, 1998).

**Claremont Manor House, Surry County.** A late 17th-century brick foundation with hall-and-parlor layout was destroyed and replaced with an early 18th-century structure of similar design. This building had two exterior end chimneys and was owned at one time by Arthur Allen (Leverette Gregory, personal communication, 1997).

**Ravencroft Site, James City County.** A one-and-a-half-brick-wide foundation was discovered in 1954 by James Knight during the reconstruction of Colonial Williamsburg. In 1998, an adjacent late 17th- to early 18th-century midden was excavated by the Colonial Williamsburg Foundation Department of Archaeological Research (Cooper 1998). The analysis of the artifacts and features from these excavations suggests that the foundation was constructed between 1675 and 1725. In

addition to the recovery of many mid- to late 17th-century domestic artifacts, evidence for a 17th-century construction date is seen in the presence of flat roofing tiles produced in John Page's 17th-century kiln, wall plaster fragments, dressed slate, and portions of leaded casement windows. These artifact types are found more commonly on other 17th-century buildings located within Middle Plantation. Additional research is currently underway to reveal more information regarding the owner of the property during this period and the building's possible function as a combination store and dwelling (Cooper 1998: 23).

**Kingsmill Site (44JC915) (1620s–1660s), Jamestown Island.**

The remains of numerous above- and below-ground features relating to the 17th-century occupation of this site were identified by the William and Mary Center for Archaeological Research during their survey of Jamestown Island in 1996 (Blanton et al. 1999). Limited excavations resulted in the recovery of over 1000 artifacts dating between 1620 and 1660. Although no foundation was uncovered during these excavations, the discovery of pan tile and slate roofing tile fragments, paving tile fragments, and large piles of hand-made brick rubble suggests that a structure with a brick foundation once existed on this site. Documents refer to an "Island House" in 1661 and a "brick house" in 1668, yet artifacts from the second quarter of the 17th century indicate that the building may have been built earlier than that period (Blanton et al. 1999: 3). The structure was probably built by Richard Kingsmill, a burgess and church warden, between 1626 and his death in 1638. The recovery of turned lead fragments indicates the presence of casement windows. Excavations also indicated that after the site was destroyed, many of the materials were robbed from the ruin and possibly recycled in other buildings.

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