The Archaeology and Restoration of the William Paca Garden, Annapolis, Maryland: 1966-1990



University of Maryland Master of Applied Anthropology Internship Report

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Introductionpage 1
Chapter I:
William Paca and his Annapolis Homepage 5
Chapter II:
Bruce Powell's Excavationspage 16
Chapter III:
Glenn Little's Excavationspage 26
Chapter IV:
Kenneth and Ronald Orr's Excavationspage 52
Chapter V:
Reconstruction of the William Paca Gardenpage 67
Chapter VI:
Anne Yentsch's Excavationspage 82
Chapter VII:
Laura Galke's Excavationspage 85
Chapter VIII:
Conclusionpage 94
Bibliographypage 96
Appendix A:
Botanical Analysis of Wood Remains: 1967-1968page 101
Appendix B:
Barbara Paca-Steele's drawings of Glenn Little's excavationspage 105

Table of Contents

Index of Tables and Figures

Tables		
1. Coordinates of Bruce Powell's	excavation trenches	17
Figures		
1. Charles Willson Peale's portra	it of William Paca	12
2. Frank B. Mayer's 1884 sketch	of the William Paca Garden	13
3. Map of Bruce Powell's excava	tion trenches	18
4. Photograph of the southwester	n portion of the garden wall	21
5. Photograph of Powell's structu	re 2	23
6. The fourth structure Powell dis	covered during his excavation	24
7. Map of the William Paca Gard	en topography	26
8. A photograph of the exposed s	ection of the north wall looking east	29
9. Map of the east garden profile		30
10. A portion of the west garden w	all	31
11. Map of Glenn Little's 1967 ex	cavation trenches	32
12. Map of the features discovered	during the 1967 excavation	34
13. Map of Glenn Little's 1968 exc	cavation trenches	39
14. Map of the features discovered	during the 1968 excavation	40
15. Glenn Little's plan view drawi	ng of the springhouse	41
16. Two views of Glenn Little's ex	cavation of the springhouse	42
17. Glenn Little's measured profile	e drawing of the springhouse floor	43
18. The brick drains discovered du	ring Glenn Little's excavation	47
19. A photograph taken of the Wil	liam Paca House	48
20. A photograph of the fill placed	within the springhouse	54
21. Photograph of the springhouse	floor following the removal of the fill zone	55
22. Photograph of the northeast spi	ringhouse drain	56
23. Map of Kenneth and Ronald O	rr's excavation units	58
24. Orr's excavation of Bruce Pow	vell's Structure 2	59
25. Photograph of Feature B		61
26. The remaining portion of the P	aca Garden wall	69
27. A close up of the photograph ta	aken from the State House	70
28. Photograph of the Paca garden	's first terrace and fall	73
29. Map of the restored William Pa	aca Garden	74
30. A second map of the restored V	William Paca Garden	75
31. Close up of the Charles Willso	n Peale portrait of William Paca	79
32. Map of Laura Galke's excavati	on units in the William Paca Garden	87
33. Photograph of the excavation of		88
34. A plan view photograph of the	19th century surface level	89
35. Photograph of the excavation of	of test unit 2	90

Introduction

Located at 186 Prince George Street, the William Paca House stands in the center of the Historical District of the City of Annapolis. Directly behind the restored mansion sits a large 2-acre 18th century pleasure garden, a garden that up until 40 years ago was lost to history. William Paca, signer of the Declaration of Independence and former governor of Maryland built his Annapolis house and garden in the early 1760s. Paca owned the property until 1780. Through the remainder of the 18th and all of the 19th centuries, the house and garden had a succession of private owners (Historic Annapolis Foundation 2002). While the house had been maintained over the years, Paca's garden fell into disrepair. The historic garden met its final end in 1901 when the property was sold and a hotel was constructed overtop the historic landscape.

When Carvel Hall Hotel was demolished, Historic Annapolis Foundation raised the money to purchase the historic William Paca House. Following the acquisition of the William Paca House and Garden in 1965, Historic Annapolis, Inc. began drawing up plans for reconstruction of William Paca's 18th century garden. Although the garden property was under the ownership of the State of Maryland, the Maryland Historical Trust turned responsibility for the restoration of the garden over to Historic Annapolis. In 1966, the Garden Committee was formed. From 1966 to 1973, the Garden Committee, headed by St. Clair Wright, was responsible for making all decisions related to the garden reconstruction.

The Garden Committee initially believed an exact reproduction of the original garden design would not be possible. Any documentation of the construction of the garden had been lost, believed to have been destroyed during the fire at his Wye Island

home 1879. In addition, construction of Carvel Hall Hotel erased all physical evidence of the historic landscape that may have existed through the 19th century. As a result, the Garden Committee decided the only alternative would be construction of a fanciful garden on the site of William Paca's "lost garden" (Wright 1966). The plan called for the creation of a garden that would reflect typical landscape styles found in England during William Paca's time period and not Paca's actual garden.

As plans for the garden were in development, Historic Annapolis contracted National Park Service archaeologist, Bruce Powell, to conduct an archaeological investigation of the site. Powell's investigation led to the discovery of several features dating to Paca's period. As St. Clair Wright stated in her report, *The Once and Future Garden of William Paca*:

"Rather than lose these valuable resources of the original form of the 18th century garden, Maryland Historic Trust, with commendable resiliency, decide to pursue the additional archaeological work that would make it possible to restore and reconstruct, when necessary, the original garden instead of creating a fanciful one." (Wright 1976).

Historic Annapolis's new commitment to reconstruct William Paca's historic garden began in 1967. At that time, the Garden Committee contracted with archaeologists and researchers to recover as much information about William Paca's garden as possible, both through historical documentation and archaeologically. Those charged with conducting the garden restoration utilized all available information in order to rebuild Paca's garden as accurately as possible.

The information obtained about the historic garden by archaeologists Bruce Powell (1966) and Glenn Little (1967-68) was surprising. They discovered William

Paca's garden had not been destroyed, only hidden over the years. Excavations of the north half of the property by King George Street uncovered a number of historic features including: a pond, canal, bridge, outbuildings, and drainage system all dating to William Paca's time. Bruce Powell and Glenn Little found that the original grade of the landscape was untouched.

Landscape designer Laurance Brigham and architect Orin Bullock conducted the restoration of William Paca's garden in the early 1970s. Drawing on archaeological data and historical documentation regarding the William Paca Garden and other similar period gardens, Brigham and Bullock resurrected a significant aspect of Annapolis history. Major restoration of the William Paca Garden concluded in 1972, however additional archaeological testing of the landscape continued for another twenty years.

In 1975, Kenneth and Ronald Orr conducted additional archaeological testing of the lower garden in and around the vicinity of the fourth garden fall and terrace. The work they did provided Historic Annapolis with the information needed to determine the location of the garden pavilion as well as the interior design of the garden springhouse. Eight years later Ann Yentsch conducted additional testing of the springhouse interior. The project sought to determine whether any additional 18th century materials could be located. The final excavation of the William Paca Garden began in 1990. Laura Galke, Historic Annapolis Curator of Archaeology, performed additional testing around the artificial brick stream located below the third garden fall. The excavations by conducted by Kenneth and Ronald Orr, Ann Yentsch and Laura Galke were comparatively smaller in scale to that of Bruce Powell and Glenn Little, however the information they provided is just as valuable to understanding William Paca's historic garden.

Using the archaeological data collected by Bruce Powell, Glenn Little, and Kenneth and Ronald Orr, in conjunction with historical records, garden dictionaries, photographs and portraits, Brigham and Bullock directed a scientifically accurate restoration of the two-acre landscape Paca built (Leone 1987). The restored William Paca Garden is unique. The garden built by William Paca in 1765 is the only opportunity in Annapolis to see what an 18th century city garden actually looked like (Leone 1987).

Chapter I:

William Paca and his Annapolis Home

Life of William Paca

On May 30, 1763, William Paca purchased two adjacent plots of land between Prince George Street and King George Street in Annapolis, Maryland. Over the next two years, Paca designed and oversaw the construction of his home and garden. The home was designed in the Georgian five-part architectural style. The garden adjoining Paca's house was a progressive design for this period in American history. The pleasure garden implemented the use of geometric principles in order to control views. While this style of pleasure garden had been used in Europe for nearly fifty years before Paca constructed his garden, it was only just beginning to find a place in colonial American landscape design. What led William Paca to utilize such a progressive garden designs? A lawyer by profession, what skill did he have in creating such a landscape? To answer these questions it is important to understand Paca's life prior to his purchases of lots 93 and 104.

William Paca was born on October 31, 1740 at his family home in Baltimore County. The second of six children, he was the son of John and Elizabeth Smith Paca, and a member of the fourth generation of Pacas in Maryland (Russo 1999). At the age of eleven, William and his older brother Aquila were sent to Philadelphia to attend the Philadelphia Academy and Charity School.

By 1756, William finished his secondary school education at the Academy. That same year the Philadelphia Academy expanded to include a college education. At age 15, William enrolled in Philadelphia College. Over the next three years, he received a

progressive education that was very different than the typical colonial curriculum offered for the period. Rather than attend classes designed to follow the seven liberal arts, Paca's classes were divided among three specific categories. One third of the courses was devoted to the classics, which included history, Latin, and Greek (Russo 1999). The second section was designed to focus on mathematics and the natural sciences. Paca's courses would have included geometry, trigonometry, physics, chemistry, astrology, and botany (Russo 1999). The final third of Paca's education at the College would have focused on logic, ethics, metaphysics, public law, and oratory. The curriculum was designed to last three years, and on April 6, 1759, William Paca graduated from Philadelphia College with a Bachelors of Arts degree.

Rather than return to Baltimore County following his graduation, Paca relocated to Annapolis, Maryland to pursue a career in law. Once in Annapolis, he began the study of law with Stephen Bordley. At fifty, Bordley was an accomplished colonial lawyer practicing law in various county and provincial courts, held the position of naval officer for the Annapolis district, and provincial attorney general. By 1761, Paca was admitted to practice law at the Annapolis Mayor's Court, indicating that he was qualified to practice law independently in at least one jurisdiction.

The same year, William Paca was enrolled at the Inner Temple of the Inns of Court in London. The Inns of Court served as lodging for law students and young barristers. While there were no formal programs or exams, students like Paca would often attend court sessions and participate in moot court sessions, but the only requirement was to appear at their lodging's dinner a set number of times over a three year period to be looked over and approved by the senior barristers (Russo 1999). The

extent to which William Paca attended the Inner Temple is uncertain. Annapolis records indicate he was in Annapolis at least once while attending the London school. Additional records show Paca had permanently left the Inner Temple by 1762.

William Paca's time at the Inns of Court would not have been spent entirely in the London courts. Typically those colonial students who came to study in London rarely took time to tour the continent, however, many found time to see the sights in England. Edward Tilghman, Jr., a contemporary of Paca, wrote his father in 1773 that: "...In a few days I propose going to Oxford... shall return in a week after I set out and will endeavor to write you by some vessel or other before I take my grand country jaunt" (Russo 1999). Almost certainly William Paca had an opportunity to tour England. While traveling, Paca would have had a chance to observe local architecture, gardens, and decorative arts in London and the English countryside.

Upon returning to Annapolis in 1762, Paca began his own practice in the county and provincial courts. In 1763, Paca ensured his social and economic position by his marriage to Mary Chew, the daughter of a wealthy and prominent family at the pinnacle of Maryland society. Just four days after the wedding, Paca purchased lots 93 and 104 on Prince George Street in Annapolis. Shortly after Paca began construction of his town home and garden.

The William Paca House and Garden

It is likely Paca was responsible for the design of his house and garden (Paca-Steele 1987). Paca's studies in geometry and architecture would have provided him with the basic skills necessary for their design. Assuming Paca traveled the English

countryside, he would have been exposed to a variety of architectural and landscape design styles seen as modern by colonial American standards.

Paca would have had a number of gardening dictionaries available to him in order to plan the design of his adjoining pleasure garden. Philip Miller's Gardening Dictionary (1748), Alexander Le Blond's *The Theory in the Practice of Gardening* (1722), and Batty Langley's New Principles in Gardening (1728) were all known to be available in Annapolis prior to and during the time Paca constructed his garden. Published in Europe in the early 18th century, these dictionaries provide instruction on how to design a pleasure garden according to the ideals of symmetry and order. Any formal garden in the city or on a manor in the country would have been built using these detailed books (Leone 1987). The books contained descriptions of landscape engineering, buildings, and water control. In early 18th century England, overt geometric garden patterns utilizing terraces and parterres were popular. Closer to Paca's time, naturalistic gardens were becoming more popular. While still employing geometric principles, naturalistic gardens, like their predecessors, were created for the purpose of controlling views toward focal points. Paca may have incorporated both earlier and more modern designs in his formal garden.

Paca lived at his Annapolis home until 1780. In those15 years Paca became increasingly involved in events that led to the American Revolution. It culminated in 1774 when Paca attended the Continental Congress. In 1776, Paca voted for and subsequently signed the Declaration of Independence. He later resigned his position as delegate and took a position as a judge of the Admiralty Court, which tried cases

involving maritime issues. On July 25,1780, Paca sold his Annapolis home to Thomas Jenings, Attorney General of Maryland.

For sixteen years, the Jenings family lived at the estate. In 1796, Thomas Jenings died and nine months later his family moved out of the Annapolis home. The Jenings family continued to own the home for another seven years, during which time they used the house as a rental property. In 1802, the Jenings family sold the property to Lewis Neth, a local Annapolis Merchant. After Neth's death in 1832, the property fell into disrepair over the next thirty-two years. In the 84 years following Paca's sale of the property, historical documentation indicates the condition and function of the Georgian house, but the condition of the garden remains unknown.

By 1864, the property was bought by Catherine Ray. Records from 1866 indicate Ray made extensive repairs to the home and possibly the garden. By 1870, Ray was forced to sell the property due to irresolvable debt. By 1874, the house and garden fell into the hands of Richard Swann. It is during Swann's ownership of the house where records finally indicate the condition of Paca's garden. Richard Swann served as a purveyor to the Naval Academy. The Paca House and Garden remained in the Swann family until 1901. During that time the house was in a state of constant change. With the death of Richard Swann in 1877, the family decided to renovate the property so the house and wings could be rented separately. From 1884 to 1901 the property served as a boarding house as well as a doctor's office.

In 1901, the Swann family finally sold the Paca House and Garden to the Annapolis Hotel Corporation at which point the property underwent its greatest changes since William Paca built the historic house and garden 136 years before. Following its

acquisition of the property, Annapolis Hotel Corporation renovated the Paca House to serve as the new hotel's lobby. Directly behind the house on the site of the historic garden, a 200-room hotel was constructed, completely erasing any evidence of the historic pleasure garden above ground. Named Carvel Hall, the hotel opened in 1906. From 1906 to 1965 Carvel Hall served as Annapolis' most popular residence for members of the Maryland legislature, naval officers, and families visiting the state capital.

In 1911, a fire burned through Carvel Hall Hotel. While the fire devastated the 200-room structure, the building was eventually rebuilt and continued to serve Annapolis for another 54 years. In 1965 the hotel and historic Paca House were purchased as part of a plan to use the land to construct a new apartment/office complex, destroying the existing hotel and historic Paca House.

A decade earlier, in 1952, Historic Annapolis Incorporated (H.A.I.) had been established. At that time, Historic Annapolis' mission was to preserve threatened buildings of historical and cultural significance in Annapolis and Anne Arundel County. When it was made public that the William Paca House and Carvel Hall were to be razed, Historic Annapolis raised \$250,000 and purchased the house but was unable to raise the money to purchase the adjoining 2 acres. Urged by Historic Annapolis Inc., the Maryland General Assembly purchased the remaining land that was once the site of William Paca's historic garden. Shortly after H.A.I. acquired the properties, efforts were undertaken to restore both the house and garden properties to their appearance in William Paca's time.

William Paca's records regarding the construction of the house and garden were not available to restoration architects. In 1879, Paca's Wye Hall home caught fire causing extensive damage to the house as well as the items inside. Because no records could be located at the time of the restoration process, it is presumed that any extant records kept by Paca about the construction of his house and garden were lost in this fire. As a result, restoration architects and landscapers sought information on the house and garden in alternative materials, such as letters, as well as the existing remains on the property. Aside from some minor structural changes to the house's exterior and wings, much of the original house remained intact and in good condition. However, the restoration of the garden was a different matter. While much of the historic garden remained mostly untouched for 120 years after Paca sold the property, construction of Carvel Hall Hotel in 1901 erased any surface evidence of the original landscape.

Archival Information

Years before the construction of Carvel Hall Hotel, two paintings, one in 1772 and another in 1884, were created of the historic garden. Charles Willson Peale, a renowned painter, was hired by William Paca to paint his portrait in 1772 (Figure 1.1). The painting depicts Paca standing along a wall with his Annapolis garden in the background. While Paca is the focus of the portrait, a number of garden features can be identified as well:



Figure 1.1 Charles Willson Peale's portrait of William Paca standing at his garden. (South 1967)

summerhouse in the center rear of the garden, a one story brick structure with a pyramid roof to the right of the pavilion, a slotted brick wall behind the two structures running along King George Street, and finally a small pond located just in front of the pavilion. The Peale painting identifies several of the garden's outbuildings, but fails to provide any detailed information about the landscape of the garden aside from the pond and pavilion.

American artist Frank B. Mayer, created a second painting of the garden in 1884 (Figure 1.2). The painting depicts the upper garden elevation as well as the rear of the house. In the Mayer sketch one can identify a slotted brick wall along the southwest portion of the garden, identical to the wall depicted in the Peale portrait. In addition,



Figure 1.2 Frank B. Mayer's 1884 sketch of the William Paca Garden (South 1967).

two falls and three terraces are shown extending toward King George Street with a central pathway originating at the upper terrace directly across from the southeast hyphen and bisecting the garden. While the portrait was created in the late 19th century, little

modification to the landscape is recorded to have been done between 1765 and 1884 suggesting that many of the features identified in the Mayer sketch may have existed during Paca's ownership of the house and garden.

Additional information about the garden was also found in a number of documents from the 19th and early 20th centuries:

"Our new house is enormously big, four rooms below, three large and two small ones on the second floor besides the staircase, and the finest garden in Annapolis in which there is a spring, a cold bath house well fitted up and a running stream. What more could I wish for?" (Stier 1797)

"This garden, perhaps, more than any other spot, indicated the delightful life of Annapolis a century ago. The springhouse, the expanse of trees and shrubbery, the octagonal two-story summerhouse, that represented 'My lady's bower', the artificial brook, fed by two springs of water, that went rippling along to the bath house that refreshed in the sultry days, and gave delight to the occupants, form a picture tradition loves to dwell upon to this day." (Riley 1887)

"...on the ground before mentioned is a spring of flowing water, highly valued, being an original feature of the place, having a right of way through an arch in the boundary wall." (Evening Capital 1905)

The historical documents serve to verify the existence of several outbuildings and features identified in the Mayer and Peale paintings, specifically the summerhouse and bathhouse. In addition, the documents also describe a number of other features not found in the paintings such as the artificial stream and the springhouse. However, the documents, like the paintings, failed to provide enough information to accurately reconstruct the historic landscape. While the paintings and documentation do suggest which buildings and features may have existed in Paca's garden, the overall topography

of the area remained a mystery. As a result, in 1966 Historic Annapolis Inc. began the first of a series of archaeological excavations at the William Paca Garden. Over the next nine years, archaeology, aided by the historical documentation, served as Historic Annapolis' primary means of identifying the original landscape of the William Paca Garden.

Chapter II:

Bruce Powell's 1966 Excavation of the William Paca Garden Introduction

The first series of excavations conducted at the William Paca Garden was carried out during the period of August 15 through August 26, 1966. National Park Service archaeologist Bruce Powell conducted the project. While the William Paca Garden is entrusted to Historic Annapolis Foundation, the site is a part of the National Historic District of Annapolis and a registered National Historic Landmark. As such, the National Park Service of the United States Department of the Interior provided the direction of the excavation.

Prior to Mr. Powell's excavation, little was known about the design of William Paca's Annapolis garden. Historical documentation related to the garden landscape is sparse and the construction and subsequent demolition of Carvel Hall Hotel on the garden property erased all surface features of the 18th century landscape. As a result, Powell's excavation served as the best means to recover information about the landscape in order to produce a more accurate restoration of William Paca's garden.

Powell employed a field crew of four students as well as a backhoe rented from Stehle Equipment, Inc. Mrs. J.M.P. Wright of Historic Annapolis Foundation and Orlando Ridout, IV, of the Maryland Historical Trust, provided support for the excavations by making available the tools and specialists demanded by the archaeology. In addition, James Wood Burch, restoration architect, provided Powell with the necessary plans and historical documentation related to the Paca Garden property.

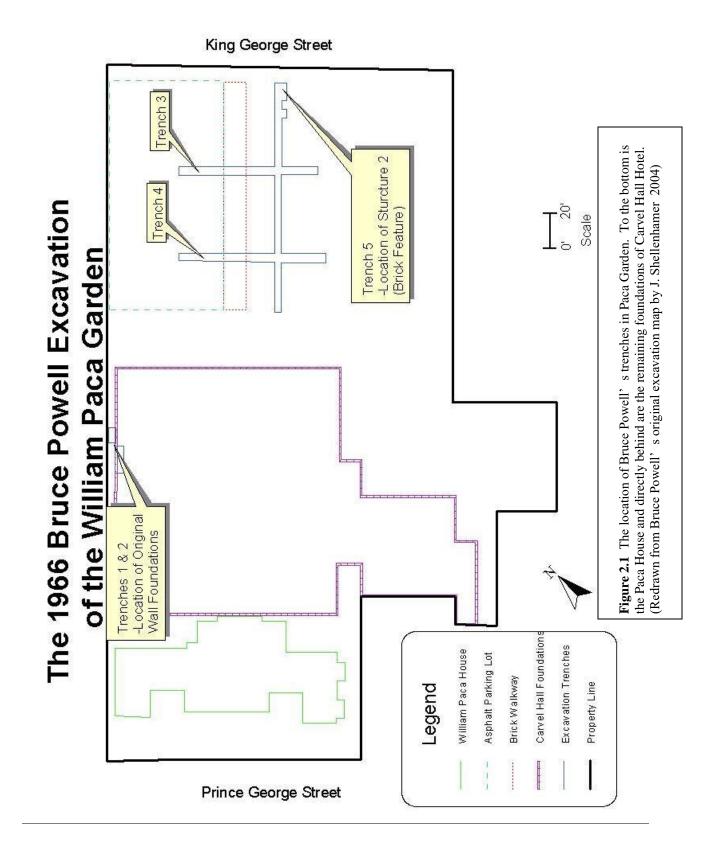
The Excavations

Because of the limited amount of time available to Bruce Powell to complete his research, the decision was made to employ the use of mechanical digging equipment to excavate test trenches covering as much of the garden area as possible.

A grid system was laid out using King George Street as the north-south line. The datum for the grid was set at the northeast corner of the property. In total, five test trenches were laid out in the garden (Figure 2.1). All test trenches were laid out in reference to the established grid. The first trenches to be laid out were test trenches one and two. Both trenches were laid out along the west side of the garden property in order to test the depth of the foundations of Carvel Hall and to determine whether anything remained of the historic wall along the north property line.

Two additional trenches, test trenches three and four, were placed in a north-south orientation across a grass plot and into the Carvel Hall parking lot located in the eastern third of the garden area (Powell 1966). Finally, the fifth test trench was laid in an east-west orientation. Test trench five began along the east boundary of the property and extended one hundred thirty-two feet towards the William Paca House. According to Bruce Powell (1966), test trench five would have extended the full extent of the garden, but the trenching was cut short possibly due to project time restrictions. The grid locations of the Powell test trenches were as follows (Table 2.1):

Test Trench	S.W. Corner	N.W. Corner	N.E. Corner	S.E. Corner		
1	N273:E486	N273:E490	N288:E490	N288:E486		
2	N290:E486	N290:E490	N298:E490	N298:E486		
3	N447:E376.3	N447:E454.3	N450:E454.3	N450:E376.3		
4	N397:E370.8	N397:E454.8	N400:E454.8	N400:E370.8		
5	N368:E398	N368:E400	N500:E400	N500:E398		
Table 2.1 Bruce Powell's coordinates for his five test trenches within the William Paca Garden.						



According to Powell, test trench 5 was widened later in the excavation in order that the south face of the trench would lie along Powell's E395 line. Test trench one was excavated to a depth of 9.4 feet; test trench two to a depth of 6.2; and test trenches three, four and five to a depth of 9 feet. From the trenching, Powell was able to determine the existence of four distinct surface levels within the William Paca Garden, ranging from the modern surface to the original garden surface or surface level related to William Paca's construction of the garden.

The modern surface of the garden rests on only several inches of topsoil over a clay base (Powell 1966). According to the Powell report, this surface was constructed around the time a brick walkway was added to the King George Street side of the Carvel Hall Hotel. Powell dated this resurfacing of the garden area to approximately 1930.

The second surface level Powell identified was found at a depth of 1.5 feet below the 1966 surface level. Artifacts associated with this surface are of 20th century origin, and most seem to be from Carvel Hall Hotel (Powell 1966). According to Powell, many of the artifacts from this level showed signs of fire damage, an indication that they were present during the period when a major fire burned through the hotel in 1911. In addition, large deposits of ash were present in this level, further indicating that this surface dates to the years just after construction of the hotel.

The third major surface identified by the excavations dates to the late 18th and early 19th centuries. The 19th century surface appears 2.5 feet below the 1966 surface of the garden. Artifacts recovered from the 19th century surface level, according to Bruce Powell, dated to no later than the 19th century. The fill used in the 19th century resurfacing of the garden consisted of heavy yellow clay with inclusions of sand and

some rubble (Powell 1966). According to paper Powell calls the Jacobson report, this period of resurfacing of the garden occurred due to the laying of pipes to facilitate water drainage in the garden. Powell explains that the Jacobson Report was a undated manuscript supplied to him by Mr. James Wood Burch. The report deals mainly with genealogical and land title manners, and contains some information on the physical history of the William Paca House and Garden.

The final surface located during the Powell excavations was that of the original William Paca Garden was located in trenches 3-5. The original garden surface lies at a depth of six or more feet below the 1966 ground level. The grade is marked by a concentration of brick, mortar, and plaster rubble resting on a thin layer of brown sand and thick black mud. While the original garden grade began to appear at a depth of six feet, this measurement is in no way consistent through the garden plot. Powell found that the historic ground surface grades downward from the house to King George Street, as it is shown in the Mayer painting. The historic surface reached a low point about 80 feet from the north garden wall at which time the level rose slightly until it reached the back of the garden along King George Street.

Structures

According to Powell, four structural features were identified during his excavation of the garden. Structures one and two were identified as remnants of the original garden wall. They were found in the southwestern portion of the garden along the west property line. The southwestern portion is documented in Frank B. Mayer's

1884 sketch of the rear of the William Paca House. The section of the brick wall located in the southwestern side of the garden was found in test trenches one and two.

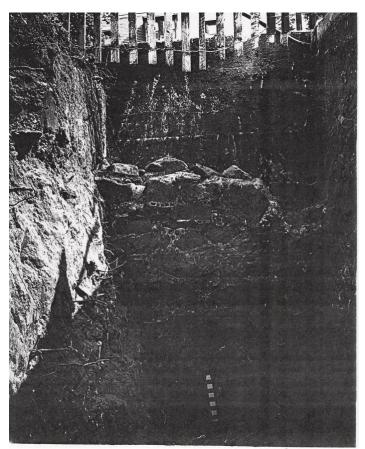


Figure 2.2 Photograph of the southwestern portion of the garden wall, discovered by Bruce Powell in 1966 (Powell 1966).

The top of the wall was 0.8 feet below the 1966 surface, while the base of the wall was 6.2 feet below the surface (Figure 2.2). The base of the wall consisted of stone typically found in use throughout Annapolis (Powell 1966). The foundation of the section of wall was laid in irregular courses; however, at a depth above 3.5 feet, the inside face of the wall became more carefully aligned suggesting this area of the wall was visible during the period of Paca's use of the garden. Unfortunately, Bruce Powell could not confirm

this theory through an examination of the soils due to the extensive disruption of the area by construction of Carvel Hall Hotel.

In test trench 5, the foundation of another portion of the wall was located along the north property line, or King George Street side of the garden (Figure 2.1). At this location, the top of the foundation's stonework lay 2.1 feet below the 1966 surface, and the base was at a depth of 7.3 feet. The wall was one foot thick. According to Powell, evidence of the original garden surface did survive in test trench 5. As such he was able to determine the historic surface met the wall foundation at a depth of 2.5 feet. In addition, Powell was able conclude that the base of the wall along the north side of the property extended nearly three feet below the surface of William Paca's garden.

Powell found a third structure located in test trench five (Figure 2.1). According to Powell, the feature (structure 2) was of unknown use, measuring 3 feet 9 inches long by 1 foot 10.5 inches wide (Figure 2.3). The bricks that made up the structure were large, measuring 9 by 4 by 2 ³/₄ inches. They were laid in a common bond with a poor clay mortar mixture. In the northwest corner, the feature was seven courses high but in the other areas the feature only measured 5-6 courses. In the northern side of the structure a semicircular hole extended from the top to the bottom of the feature. At the top of the hole a coating of mortar surrounded the opening, giving the hole its circular shape.

According to Powell, there was no indication in the hole or in the surrounding soils as to what the hole may have held. No remains of wood were observed, nor were there any signs of metal (Powell 1966). Powell never came to any final interpretation or any reasonable explanation for this structure. Powell did, however, offer some suggestions: a flagpole base, a gate foundation, a pump, or drain housing.

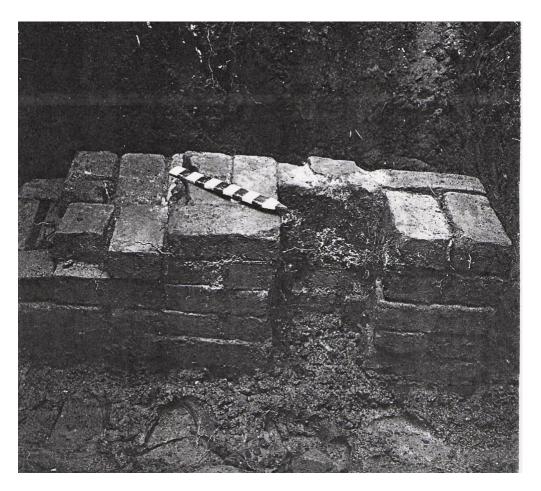


Figure 2.3 Photograph of Powell's structure 2. Located in test trench 5 (Figure 2.1), this feature was photographed looking south toward the William Paca House. In later excavations structure 2 is determined to be a portion of the original summerhouse (Powell 1966).

The final structure (Figure 2.4) located by the Powell excavations was also found in test trench five. The structure was a line of unbonded brick, two rows wide and one course deep. It was found crossing test trench five in an east-west direction at a depth 7.5 feet below the surface. Because of the depth of the structure, Powell identified it as being associated with the historic Paca period of the garden. Unfortunately, as with the previous structure, Powell was unable to offer any interpretations as to the purpose of the feature.

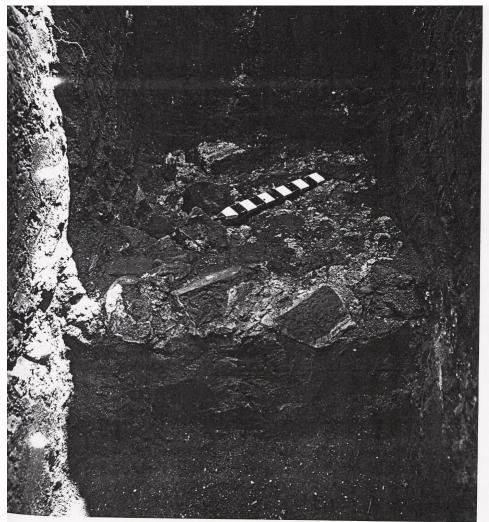


Figure 2.4 The fourth structure Powell discovered during his excavation of the William Paca Garden, also located in test trench 5 (Figure 2.1), Powell was unable to determine its purpose (Powell 1966).

Bruce Powell's excavations of the William Paca Garden were limited by both time and area. At the time of Powell's research, remnants of Carvel Hall Hotel were still in place on the property. As such, the project area was limited to those places on the property that were clear at the time. However, given the restrictions placed on the project, the Powell excavations revealed two important details about the garden's construction and design. Three of five trenches excavated by Powell provided evidence of the historic garden wall that bordered Paca's garden. The discovery of the wall confirmed the extent of the dimensions along the north and eastern sides of the property. Additionally, analysis of the remains revealed the design and materials used in the construction of the original garden wall.

The excavation of trench five also provided evidence of the original grade of the garden surface. While Powell's excavation and analysis of the grade did not prove that the garden was terraced, the excavation of trench five did reveal the historic garden sloped downward from the Paca House toward King George Street.

Aside from the discovery of the walls and garden grade, the excavations failed to produce a substantial amount of artifacts from the 18th century. In addition, the Powell excavations were not able to locate the historic stream, pond, or outbuildings of William Paca's garden. Powell recommended that no further information could be gathered about the garden through archaeology. Historic Annapolis Inc. felt the excavations in fact demonstrated that additional archaeological testing would be an invaluable resource in gaining a greater understanding of the design of the William Paca Garden.

Chapter III:

Glenn Little's 1967-68 Excavation of the William Paca Garden

Introduction

In light of the discoveries made during the Powell excavations in 1966, Historic Annapolis, Inc., decided additional archaeological testing would reveal more information regarding the 18th century design of the garden. While the Powell excavations were able to identify the 18th century surface of the garden, his testing area was too small to make an accurate analysis of the exact topography during William Paca's occupation of the site.

Glenn Little, of Contract Archaeology Inc. (C.A.I.), was hired to conduct a more thorough excavation of the garden property. By the time Glenn Little was hired in 1967, the demolition of Carvel Hall had been completed allowing excavations to be conducted over the entire surface of the garden, an opportunity unavailable to Bruce Powell.

Glenn Little's excavations were conducted in two field seasons over a one-year period from 1967 to 1968. The first phase of Little's excavations began on March 30, 1967 and continued until December 1, 1967. The second phase of testing picked up the following year on August 1_{st} concluded by the end of September 1968.

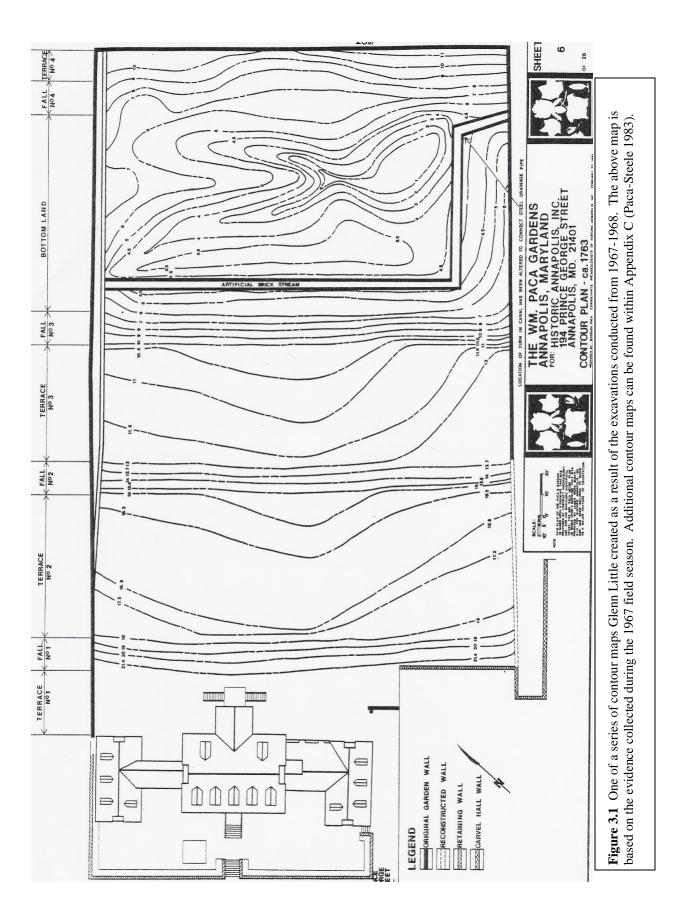
The 1967 Excavations

On March 19, 1967, eleven days prior to the start of the project, Glenn Little contacted Historic Annapolis, Inc. with his plan on how to approach the excavation of the William Paca Garden. The plan first called for the excavation of a series of trenches bordering on north, east, and west sides of the garden property with the intent of uncovering all remaining features related to the historic garden walls. In addition to the trenches, a series of core-drillings were to be placed at ten-foot intervals over the entire garden area. Little predicted the archaeological information gathered from the drillings would produce the most accurate analysis of the exact position of the 1760-1780 surface grade, the location of the historic pond, and any additional structures described in the historical documents.

Little began excavating the William Paca Garden on March 30, 1967. Using information from the Bruce Powell excavation a year earlier, Little placed a series of 19 trenches along the west, north, and eastern sides of the garden. The core drillings were also done through the rest of the garden area in order to reveal any information related to the 18th - century surface of the garden. The core drillings and trench excavations revealed that an enormous amount of fill and rubble covered much of the historic garden surface. The testing also showed, aside from some isolated areas along the east and west sides of the garden, very little of the northern half of the historic garden surface had been disturbed by 19th or 20th century construction on the site. As for the southern half of the garden, Little found the soils in that area to have been too heavily disturbed by the construction of Carvel Hall to produce any meaningful information.

The Historic Garden Topography

Based on analysis of the core drillings, Little was able to produce a contour map (Figure 3.1) identifying the original grade of the William Paca Garden (Little, March 1967). Glenn Little suggests the 18th - century surface was designed as a terraced garden



sloping in a south- north direction from the William Paca House toward King George Street. Additional evidence of the terraced garden was also found during the excavation of trenches along the east and west sides of the garden area were evidence of original walls were unearthed.

During the excavation of the garden, Little uncovered several portions of the historic garden wall (Figure 3.2), similar to those found by Bruce Powell a year earlier. Little found the original walls consisted of a stone foundation with brick courses laid on top. Along the eastern side of the garden, Little found that the base of the wall was not at a constant elevation. The southern most portion of the excavated wall was found at an elevation of roughly 11 feet above sea level.

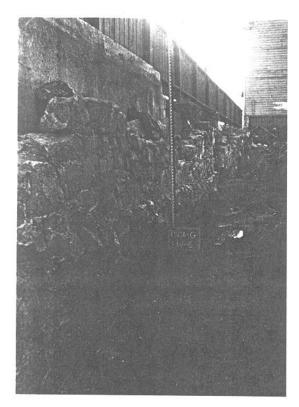
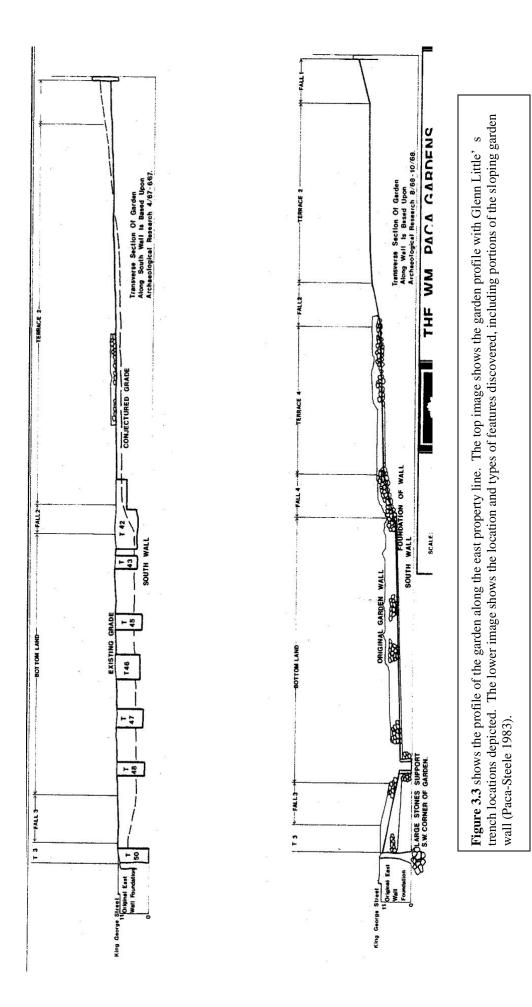


Figure 3.2 shows exposed section of the north wall looking east (Figure 3.5 #1). Unearthed during the Little excavations (Little 1967).

Progressing north toward King George Street, the wall appeared to match the sloping topography of the historic garden surface (Figure 3.3). At about 20 feet from King George Street, the wall was found to be at a slightly higher elevation of 9 to 10 feet above sea level. The change in the wall's elevation was evident during the excavation of the southeasternmost trench (Trench 42).

Little found that brick and stone courses of the wall were laid in a downward slope with the southernmost portion of the



wall's base measuring 11 feet above sea level. The feature was found to grade downward an additional 6 feet to the north where it became level at an elevation of 5 feet above sea level. From this information, Glenn Little concluded that the wall represented a single sloping fall measuring about 15-16 feet from top to bottom. This evidence further suggested to Little that the wall was constructed to correspond with the change in the garden topography (Figure 3.4).

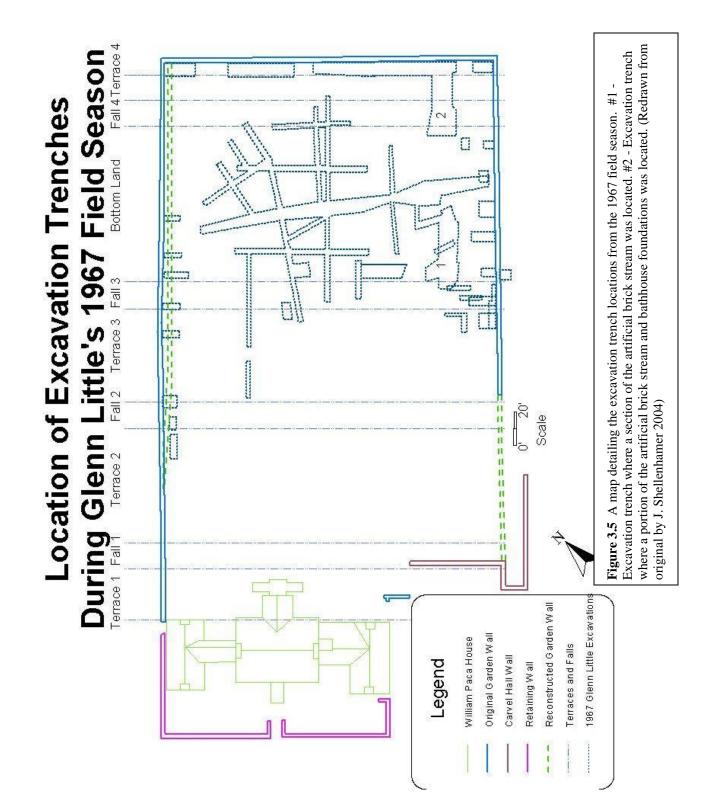


Figure 3.4 shows a portion of the west garden wall excavated by Glenn Little during the 1967 field season. The photograph shows the wall's fieldstone and mortar base sloping down toward King George Street. Atop the fieldstone, brick courses were laid to correspond with the terracing of the garden surface (Little 1967)

The Garden Pond

In addition to identifying the terraces and falls of the William Paca Garden, Little also found evidence that led to the possible location of the pond. In the Peale portrait of William Paca, a pond is seen near the rear of the garden, just in front of the

summerhouse. In two separate locations within this garden area, evidence for a pond or

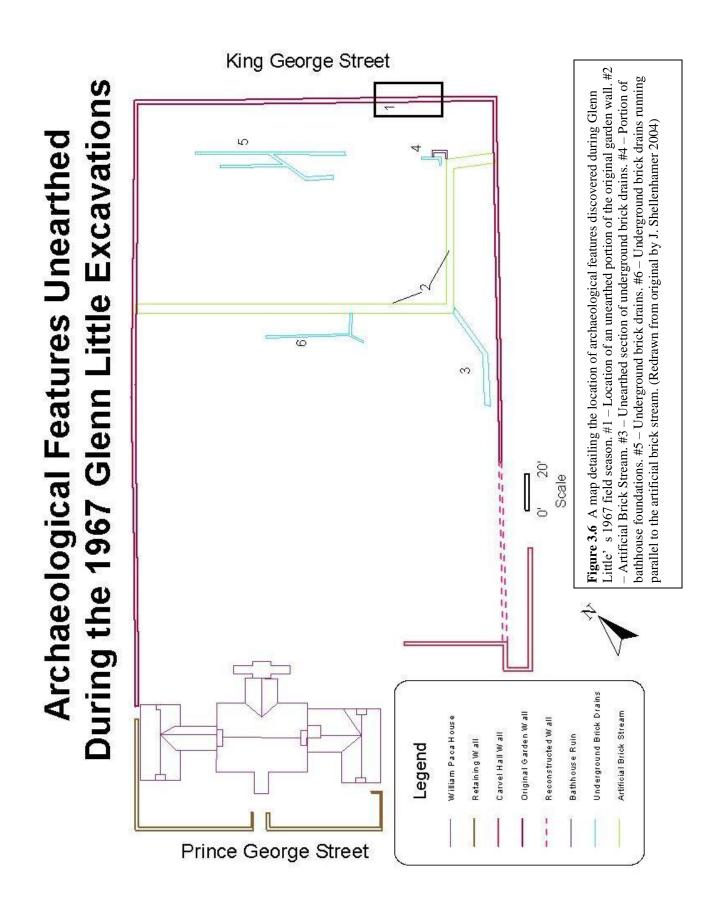


collecting area for water were found. Little's interpretation for these areas was based the on stratigraphic evidence that suggests the two as being the areas of lowest elevation within the garden (Little, November 1967). Little was unable to determine whether or not the two locations were part of a single collecting basin. However, if they were related, it suggested that the pond or collecting basin may have run diagonally through the lower garden starting at the base of the third fall and continuing to the base of the fourth fall.

The information gathered during the initial core drillings and trenching was deemed important enough to merit additional excavations and the removal of the majority of the 19th - century fill as well as those materials associated with Carvel Hall (Little 1990). Glenn Little placed an additional 31 trenches (Figure 3.5) within the lower garden area, just below the established third fall where intact archaeological remains were concentrated. Thirteen trenches were placed in an east-west orientation while the other eighteen ran in a north-south direction. While the purpose of the trenches was to verify the information gathered during the initial phase of testing, during the process of their excavation, a number of architectural features were unearthed including a series of underground canals, the bathhouse, and an artificial brick drain.

Artificial Brick Stream

During the excavation of trenches 7, 14, 24, 30, 34, and 49, evidence of an artificial brick stream was found within the 18th century surface of the historic garden (Figure 3.5, #1). Located fifteen feet from the base of the third fall, the stream runs in an eastward direction to a distance of 25 feet from the east wall (Little, November 1967).



According to Little, the artificial brick drain floor represents the lowest grade of the Paca period garden (Little, November 1967). The bricks used in the construction of the drain measured 9 by 2 ½ by 4 inches with a color ranging from light salmon to a dark red-purple. Excavation of trench 34 revealed the artificial stream then makes a right angle turn and continues northward for an additional 95 feet (Figure 3.6, #2). The artificial stream was located again during the excavation of trench 49, where Little found that the feature joins up with the foundation of a rectangular brick structure. At the point where the two features meet, the artificial stream was found to turn east toward the eastern garden wall.

Excavation of trenches 7 and 48 showed that the artificial brick stream originated along the west garden wall. A four-foot wide arch was found to be constructed in the foundation of the west wall, approximately 15 feet from the base of the third fall, allowing water to flow through the wall from the adjacent property and into the connecting artificial brick stream. A second arch was found during the excavation of trench 48. This arch allowed water from the artificial stream to flow out of the garden in the northeast corner at the base of the fourth fall (Little, November 1967).

Further excavation of trench 34 revealed the existence of an additional brick arch located at the southeast corner of the artificial stream. Believing this feature to be an underground canal, Little opened four additional trenches to the southeast of the archway. Excavation of the trenches unearthed an underground drain running parallel to the east garden wall (Figure 3.6, #3). Measuring roughly 3 feet wide, the attached drain was found to extend 50 feet stopping at approximately the middle of the third terrace. According to the drawings created by Contract Archaeology Inc., Little came conclusion

that the canal may have extended to the northeastern corner of the William Paca House and may have served as a waste disposal system for the nearby kitchen.

The Bathhouse and Underground Brick Drains

Remains of a structure was unearthed during the excavation of the artificial brick stream in trench 49 (Figure 3.5, #2). While excavating the brick stream, Little uncovered the foundations of a structure in the northeast corner of the garden. Excavation of trench 49 did reveal an underground drain running through the excavated portions of the foundation (Figure 3.6, #4). According to a letter written by Glenn Little on December 5, 1967, a drainage system for the garden was being installed during the excavation of the bathhouse foundation. As a result, Little was unable to fully excavate the structure in the time allotted to him. The canal measured about 2 feet wide and 10 feet long. It extended in an west-east direction with the eastern portion of the drain veering to the southeast toward the artificial brick stream. Little concluded that the foundations and canal could be the remains of the bathhouse mentioned in the site's historical documentation.

Approximately 42 feet to the west of the bathhouse canal, a series of square brick pipes were found running in a west-east direction toward the bathhouse (Figure 3.6, #5). The longest drain extended approximately 80 feet, originating close to the natural spring located in the northwestern portion of the garden. Located below the Paca Garden surface level, the pipes were found to be carrying clear water with heavy mineral content in the direction of the bathhouse structure (Little, November 1967). If the structure in the northeast corner was the Paca Garden bathhouse, Little concluded that water would have

been carried from the natural spring through the square brick drains and eventually carried out of the garden area by way of the artificial brick stream.

The final feature that was identified during the 1967 excavations was a brick drain running parallel to the artificial brick stream (Figure 3.6, #6). The drain extended in an east/west direction under the third garden fall. Approximately 80 feet from the east garden wall, the drain turned at a right angle to connect perpendicularly with the artificial brick stream.

Conclusion of the 1967 Field Season

Following the completion of the field season, Glenn Little provided a brief report of his findings to Historic Annapolis, Inc., on December 5, 1967. In the report Little states:

"Paca's Garden was undoubtedly a very fine garden in its day with three elegant falls and terraces, a sunken portion with both artificial and natural streams flowing west to east, and a fall and terrace rising at the King George end of the garden. The fact that the garden wall was built prior to the interior landscaping indicates a considerable degree of planning prior to construction..." (Little 1967).

The report also called for additional archaeological testing of the garden area. Little suggested that further testing would be an opportunity to locate a number of important features that went undiscovered during the first field season such as the garden pavilion, as seen in the Peale portrait, as well as the central axis of the garden. Little believed continued testing would provide an opportunity to explore the nature of the identified features in the northern most portion of the garden. The following year, Historic

Annapolis, Inc. contracted with Glenn Little and Contract Archaeology Inc. to conduct a second, 10 week, excavation of the William Paca Garden.

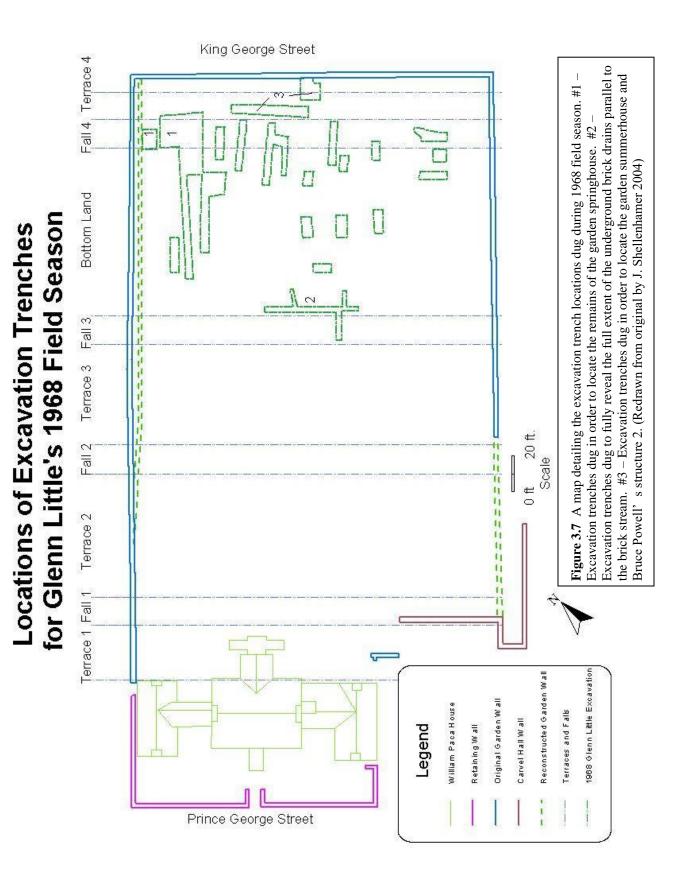
The 1968 Excavations

On August 1, 1968, Glenn Little and Contract Archaeology Inc. began the second phase of archaeological testing at the William Paca Garden. A series of 22 trenches (Figure 3.7) were placed throughout the lower garden area beginning at the third fall and extending to the north garden wall along King George Street. The purpose of the excavation was to conduct additional analysis of the drain features identified during the 1967 excavation as well as to attempt to determine the historic locations of the pavilion and springhouse.

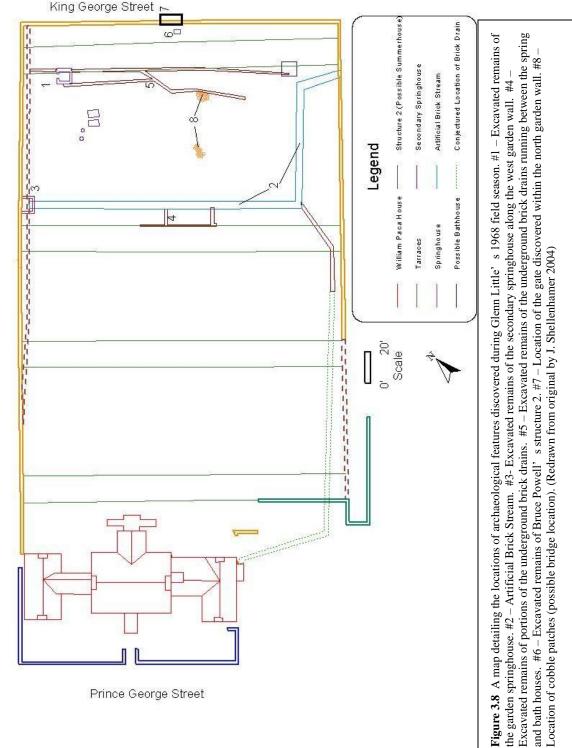
The Springhouse

Through the course of the 1967 excavation a series of underground square brick pipes were found running in a west to east direction along the base of the fourth fall. Although during the pervious excavation Little was unable to unearth the full extent of the drains, he believed they may have originated somewhere along the northwest side of the garden. Little also believed the springhouse and bathhouse were located on opposite sides of the garden. The excavation of trench 49 revealed the remains of a foundation in the northeast corner of the garden. Little placed two trenches, T57 and T58, in the northwest garden area with the hope of uncovering the remains of Paca's garden springhouse (Figure 3.7 #1).

Excavation of trench 57 revealed the foundations of a nine-foot square structure



Archaeological Features Unearthed During the 1968 Glenn Little Excavations



with the north wall of the structure measuring roughly 33 feet from the north garden wall (Figure 3.8 #1). The structure consisted of a base of mortared fieldstones just below the 1780 surface level of the garden. According to Little, the fieldstones were large, creating a massive foundation for the structure (Little 1990). The stones measured roughly from .5 to 1.5 feet wide and were cut nearly three feet into the subsoil creating a firm base for the structure.

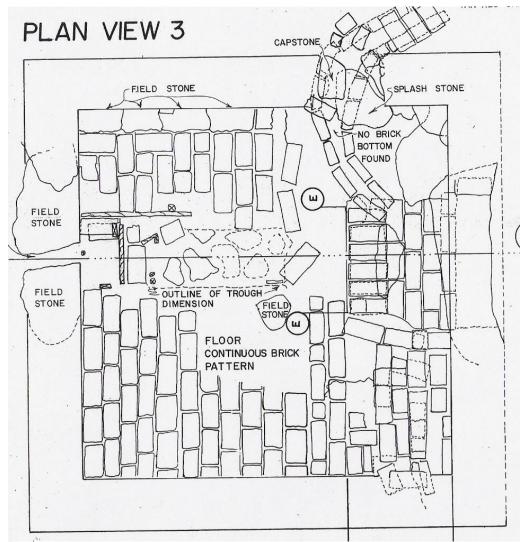


Figure 3.9 Glenn Little's plan view drawing of the springhouse as it appeared following the 1968 excavation of the structure. The top of the drawing is the west interior wall. The outermost area of the structure is comprised of a fieldstone base. On top, brick courses were laid to form the springhouse's walls (Little 1974).

The walls of the structure consisted of brick courses mortared directly to the fieldstone base (Figure 3.9). The bricks measured 9 by 2 ½ by 4 inches and were of a salmon color, identical to those found in the artificial brick stream as well as in the construction of the William Paca House. According to Little, the brick walls consisted of finished English Bond brickwork (Little 1990). Along the western wall of the structure, a three foot area was found to be absent of brick courses, suggesting the area was designed to serve as the structure's entrance (Figure 3.10). At the base of the entrance, a series of mortared fieldstones were in place serving as a step into the structure.



Figure 3.10 Two views of Glenn Little's excavation of the springhouse. To the left is a view of the springhouse from the west garden wall. Looking at the base of the structure's west wall, one can see the center area is void of brick with a fieldstone step exposed. The photograph to the right is a close up of the east interior wall of the springhouse. In both photographs, the brick floors and wall are present as well as the 19th century collecting basin and trough (Little 1968).

Excavation of the interior of the building was not extensive, allowing the excavation of the area to extend only to the topmost surface level. The interior of the structure consisted of brick flooring. A collecting basin and trough were found built on

top of the brick floor (Figure 3.10). The trough and basin were made of wooden boards. Wooden stakes were found along the exterior of the trough and basin serving as the boards' support (Figure 3.11).

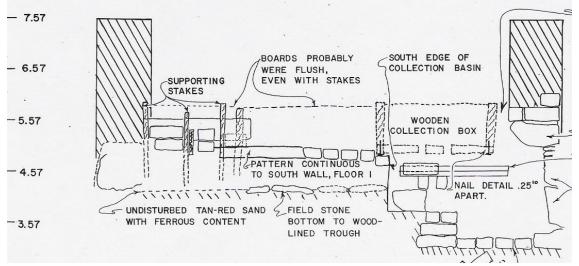


Figure 3.11 Glenn Little's measured profile drawing of the springhouse floor. In the drawing the 19_{th} century surface is visible. Left of the north wall (right side) is the wooden collecting basin. Directly to its left is the wooden trough. Also visible are the various support stakes holding the wooden structures upright (Little 1974).

To the west of the collecting basin, a curved square brick drain (as seen in Figure 3.9) was identified originating just below the fieldstone step at the west side of the structure and extending into the west side of the basin. The brick drain was built using four courses of brick, one for the top, two for the sides of the drain, and one course for the bottom. Where the drain met the collecting basin, the bottom course was absent, allowing water to flow through to the bottom of the basin (Orr 1975). The drain was believed to serve as a feeder from the natural spring located in the northwest corner of the garden. To the south of the trough a second drain was found to run from the canal through the field stone base of the south wall of the springhouse. Further excavation of the brick structure also revealed a third drain extending away from the eastern side of the

collecting basin. The drain exited through the east wall of the structure out to the garden area.

Little concluded the structure found in trench 57 was indeed William Paca's garden springhouse. Additionally, Little deduced how the springhouse functioned during the Paca Period:

"...water is collected from the springhouse to the northwest and west feeder drain, underneath the collecting box and rises to the top by pressure. The force obviously provided water for the adjacent trough also....the overflow exited through the north (east) brick drain." (Little 1990).

The Artificial Brick Stream

The second feature Glenn Little pursued during the 1968 excavation was the artificial brick stream. During the 1967 excavation, Little unearthed several portions of the stream below the third fall and eastern wall of the garden. Following the completion of the excavation in December 1967, Little was uncertain whether or not the stream dated to the Paca period. In analyzing the stratigraphy of the soils around the stream, Little ruled out the possibility of it being constructed after the Paca occupation; however, there was still the question of whether the artificial stream pre-dated the Paca period. The 1967 excavations also revealed a series of drains connected to the artificial stream just below the third garden fall. At the conclusion of the excavation, Little was unable to develop a conclusive explanation of the relationship between the drains and the stream.

A series of trenches were placed along the conjectured path of the artificial brick stream. In addition, Little conducted a more extensive excavation at the locations of the two arched openings found in the east and west garden walls. Parallel to the artificial stream, a second trench was placed running east to west within the third garden fall in

order to uncover the remainder of the drain found in 1967. Excavation of these four areas provided Little with a wealth of information regarding the historic water system located below the garden's third fall.

Upon completing excavation of the artificial brick stream (Figure 3.8 #2), Little found the conjectured path of the stream to be correct with the canal originating along the west garden wall 15 feet from the base of the third fall. From there the stream extended eastward across the garden where it made a right angle turn 25 feet from the east garden wall. The canal then extended north an additional 80 feet, just in front of the bathhouse foundations. From the bathhouse the canal veered to the right running directly toward the northeast corner of the garden wall roughly three feet from the bottom of the fourth fall.

The floor of the canal was comprised of mortared brick forming a flat surface from the west wall archway to the archway located in the northeast corner of the garden (Little 1974). The majority of the artificial canal's walls were also constructed of brick; however, mortared stones were found to be used in construction of portions of the canal walls roughly 90 feet east from the west garden wall. The rock walls extended 15 feet east at which point the wall returned to brick. The walls of the stream were vertical with the garden surface abutting the top (Little 1974).

Examination of the arch along the west garden wall exposed evidence of a small brick structure extending about two feet east from the wall (Figure 3.8 #3). According to Little's excavation drawings, the small structure served as a secondary springhouse connecting the west archway to the artificial brick stream. Excavation of the area showed the base of the west arch to be at an elevation of 2.5 feet above sea level. The artificial brick stream connected to the arch at an elevation of 1.5 feet suggesting spring water

would have run through the archway flowing over its base down into the stream. The stream would then carry the water through the Paca Garden toward the archway in the northeast corner of the site.

At the base of the third fall Little examined the series of drain openings into the canal and found they were at an elevation approximately .5 foot above the bottom of the brick stream floor (Little 1974). An east/west trench, T54, was opened within the third garden fall based on the features found during the 1967 excavation (Figure 3.7 #2). The examination revealed the drain ran parallel to the brick stream in a west to east direction (Figure 3.7 #4). Analysis determined the features to be French drains contemporary to the construction of the artificial brick stream. Little suggests they possibly aided in the drainage of water on the third garden terrace and fall.

The Garden Drainage System

Additional testing was conducted in the location where the brick drains were found during the 1967 excavation of the fourth garden fall. During the excavation of the springhouse area, Little found a brick drain extending away from the east wall toward the underground brick drains located between the springhouse and bathhouse. Tests found the brick drains unearthed in 1967 were part of a system of drains running through the lower garden in a west to east direction connecting the springhouse and bathhouse (Figure 3.8 #5). Roughly 40 feet east of the springhouse structure, the brick drain was found to fork in two directions (Figure 3.12), with one drain continuing toward the bathhouse while a second drain veered south at approximately a 45 degree angle towards the conjectured location of the pond. As a result, Little concluded the drain system was

built to provide a constant flow of water from the springhouse to both the bathhouse and garden pond (Little 1990).

Additional Archaeological Finds

During the 1968 excavation, Little decided to revisit Bruce Powell's excavation of structure 2 located along the north garden wall. Based on the Charles Willson Peale portrait of Paca, Glenn Little hypothesized that the summerhouse must have been located near the center of the garden area along the north garden wall. Furthermore, Little believed the garden summerhouse was located between the pond and fourth fall.

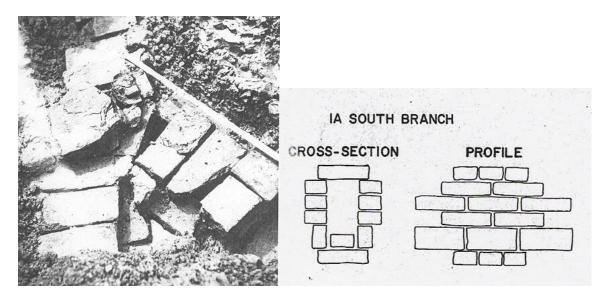


Figure 3.12 Left, a photograph of the brick drains discovered during Glenn Little's excavation within the fourth fall of the William Paca Garden. The photograph shows a single drain at the top which forks into two directions. Right, Glenn Little's drawing of the drain showing both a cross-section and a profile (Little 1974).

Two trenches were excavated in and around the fourth terrace and fall, one within the fall and the other placed where Powell located structure 2 (Figure 3.7 #3). Following the examination of structure 2, Little suspected that it might have been the remains of the rear portion of the summerhouse foundation (Figure 3.8 #6). He further hypothesized that the foundations of the summerhouse may not have been as substantial as that of the bathhouse or springhouse. While both the springhouse and bathhouse were constructed entirely of stone and brick, it is possible that only brickwork was used in the construction of the summerhouse floor. The remainder of the structure may have consisted of wood with plaster walls, and may have been more susceptible to deterioration.

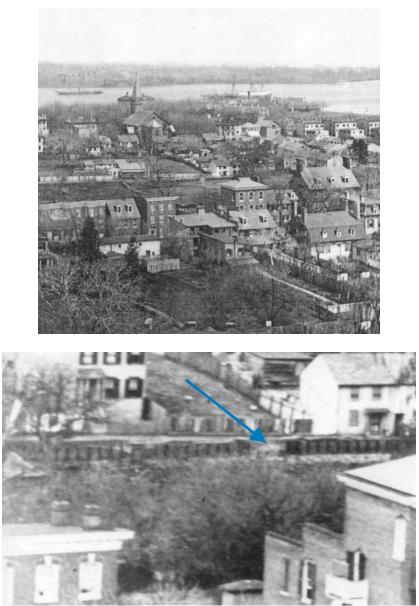


Figure 3.13 Top: A photograph taken of the William Paca House prior to the construction of Carvel Hall Hotel. **Bottom:** A close up of the same photograph. The picture shows the north garden wall. Near the center of the photograph a large portion of the wall is missing, providing access to the garden from King George Street (South 1967).

During the excavations along the north wall, Little found that a gate opening was cut through the wall directly behind structure 2 (Figure 3.8 #7). A late 19th - century photograph (Figure 3.13) of the garden taken from the State House dome further supports the existence of the gate. Given that a gate may have existed in the north garden wall directly behind the summerhouse, the summerhouse would have prevented clear direct access in and out of the garden for pedestrians and wagons. Little further believed constant foot and cart traffic coming in and out of the gate must have destroyed most of the structure's remaining foundations (Eareckson 1977).

A number of additional features were also discovered during the 1968 excavation of the garden. During the excavation of trenches T65 and T68, Little discovered two cobblestone features located directly on top of the 1780 garden surface (Figure 3.8 #8). One cobblestone feature was found in trench 65 located roughly 80 feet from the north garden wall and 90 feet from the east garden wall. The second cobblestone feature was found parallel to the first approximately 40 feet to the north. Based on his stratigraphic maps of the area, Little believed the two cobblestone areas might have served as foundations for a bridge spanning the historic garden pond, which is pictured in the Peale portrait of William Paca.

The 1968 excavations also uncovered materials predating Paca's occupation of the site. During the excavation of trenches along the northwest side of the lower garden, a number of wooden barrels and boxes were unearthed. The tanning boxes and barrels may have belonged to John Woolf. Woolf, a shoemaker, had owned and lived on the property around 1727 and a deed dated to September 1730 mentions of a tan yard.

Botanical Analysis

During the course of the excavations at the William Paca Garden, Glenn Little recovered 146 individual wooden artifacts below the third garden fall. The materials ranged in size from small indistinguishable samples to larger pieces such as barrel staves and complete wooden boxes. Following the completion of Glenn Little's 1968 excavation the samples were sent to the College of William and Mary for analysis.

A total of 24 different wood varieties were recovered from below the third fall in the William Paca Garden with dates ranging from about 1740 to the present. Of samples taken, Pitch Pine and Atlantic White Cedar were the most numerous with the highest concentrations being found in and around the springhouse. The earliest dated samples (1740-1760) of Pitch Pine and Atlantic White Cedar were found to be used in the construction of the tanning barrels and boxes located south of the springhouse. Other samples dated to the same time were also located below the 19th century springhouse collecting basin and trough.

High concentrations of Pitch Pine and Atlantic White Cedar samples dating to William Paca's occupation of the site were also found below the collecting basin and trough features. The samples were found to have a date range from 1763 to 1845. Additional Pitch Pine barrel staves with the same date range were also found just below the third fall.

Additional wood samples dating to William Paca's occupation of the site were also found in other locations throughout the garden. A single sample of West Indies Mahogany (1763-1800) was discovered among a series of field stones located in the northwest corner of the springhouse. Samples of grape, hickory and sycamore dating to

1763 were all found with in the fourth garden fall. The samples were located under the system of brick drains running away from the springhouse.

The wood analysis was also able to provide a date range for the wooden trough and collecting basin unearthed during the excavation of the springhouse. Analysis of five samples taken from the features showed that the trough and basin were constructed from Pitch Pine, Eastern Red Cedar, and Spruce. Further analysis showed the features were constructed no earlier that 1840, suggesting the wood trough and basin features were not contemporary to William Paca but rather that they were part of a later redesign of the structure.

Chapter IV:

The 1975 Orr Excavation of the Garden

In the spring of 1975, Historic Annapolis, Inc. sought to conduct further archaeological testing on the William Paca Garden. Historic Annapolis thought additional testing in and around the reconstructed springhouse and summerhouse sites would provide information regarding their design. Previous excavations conducted by Glenn Little provided Historic Annapolis with the location of the springhouse; however, they remained uncertain about the interior design of the structure. In addition, Historic Annapolis was not convinced of the exact location of the summerhouse seen in the 1772 Charles Willson Peale portrait of William Paca. Historic Annapolis, Inc. contracted with Dr. Kenneth Orr and Ronald Orr to carry out the fourth phase of garden excavation in order to answer these questions. The archaeological investigations by the Orrs included excavation of the lower garden area, analysis of previous digs, and consultation with Orin M. Bullock, Jr., the architect in charge of reconstructing the garden outbuildings (Orr 1975). The excavations were carried out from March 19th through April 15th 1975.

The Orrs investigation of the garden followed three earlier excavations by Bruce Powell and Glenn Little whose primary purposes were to gather archaeological information to be used in the reconstruction of the garden as a whole. Over the course of Powell's dig, three sections of the historic wall were uncovered as well as two additional brick and rubble features of unknown purpose near the King George Street wall. Like Glenn Little before them, the Orrs concluded one of the brick features, Structure 2, may have been related to the presumed summerhouse house. Contract Archaeology, Inc. conducted the second and third phases of excavation at the William Paca Garden under the direction of Glenn Little. The second phase was carried out over the summer and fall of 1967. The third phase of excavation was conducted the following year over the fall of 1968. The investigations were more extensive than the 1966 Powell excavations. Over the two-year period, 72 trenches were laid out and excavated within the lower, wilderness garden. The excavations by Little revealed a number of features including the brick stream and the springhouse (Orr and Orr 1975).

Springhouse Excavation

The purpose of the 1975 excavation was to uncover the remains of the springhouse interior prior to its reconstruction (Orr and Orr 1975). The exterior of the structure had already been reconstructed following the Glenn Little excavations. The reconstructed springhouse consisted of a 9-foot square structure with a pyramidal roof, similar to appearance of the bathhouse in the Peale portrait. The excavation began by removing the interior fill which had been replaced there by Glenn Little in 1968 (Figure 4.1). The fill was about three feet thick and contained quantities of fieldstone, brick, and 19th and 20th century artifacts. Once the fill was removed, the interior of the springhouse had to be drained of water in order for excavations to be carried out below the water table.

The Little excavations exposed a series of wood lined features identified as a water catchment basin and a trough. Little also determined that the springhouse structure measured nine feet square with one foot thick walls. The door to the structure

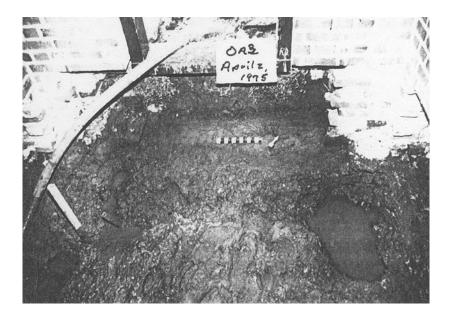


Figure 4.1 A photograph of the fill placed within the springhouse following the conclusion of Glenn Little's excavations in 1968 (Orr and Orr 1975).

was believed to be located in the middle of the west wall. This determination was made by Little due to a series of bricks, resembling a "stoop" that were found in the area. The Orr excavation sought to extend past the Little excavations by first locating the features identified by Glenn Little, and then by expanding the excavation in and around these features.

Just below the 1968 fill zone, the Orrs located the historic interior surface of the structure (identified by the Orrs in their report as floor 1). According to their report, the basin and trough feature were clearly identifiable as outlined pools of mud (Figure 4.2). While none of the wood lining described by Little was present, the wooden stakes used to support the boards were still visible.

Close examination of the trough, basin, and surrounding bricks led Kenneth and Ronald Orr to determine initially that the trough and basin feature were not constructed with the historic, or Paca period, floor. According to their report, the bricks immediately

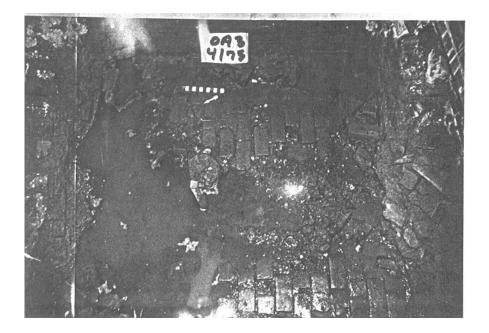


Figure 4.2 Photograph of the springhouse floor following the removal of the fill zone (Orr and Orr 1975).

surrounding the trough and basin were aligned in a non-conforming manner, suggesting the features cut through the historic floor rather than having been built contemporary with it (Orr and Orr 1975). Their excavation also found that the bricks to the east of the trough were set in a uniform manner to run to a drain located in the northeastern side of the springhouse (Figure 4.3). Their resulting interpretation was that while the trough and basin features may not have been contemporary with the Paca period, the northeastern drain was, keeping the spring water below the level of the historic surface.

A second drain was located within the springhouse next to the trough, along the south wall of the structure. Examination of the south drain by Kenneth and Ronald Orr revealed that it was located at an elevation too high for it to effectively drain water from the historic floor (Orr and Orr 1975). The Orrs determined that the basin and trough features identified during the 1968 Glenn Little excavations were constructed during a



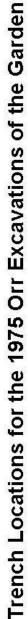
Figure 4.3 Photograph of the northeast springhouse drain. The photograph was taken from the exterior of the structure (Orr and Orr 1975).

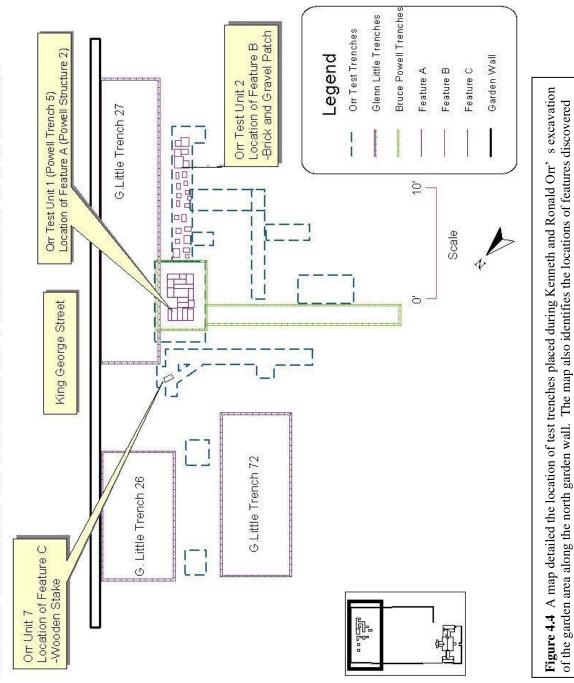
period post-dating William Paca's construction of the springhouse.

The brick floor found during the excavation of the 19th century level was constructed when Paca occupied the site. The bricks were salmon red in color and measured 8 ½ by 4 by 2 inches. According to the Orrs, the bricks making up the historic floor were identical to those that were used in construction of the original walls of the springhouse (Orr and Orr 1975). For the most part, the historic floor was visible after the removal of the fill zone. In order to locate the remainder of the historic surface, Kenneth and Ronald Orr were required to remove the wooden trough and basin features. Below the trough and basin support stakes, the Orrs exposed the rest of the historic brick floor. According to the Orrs report on the excavation, this area of the floor was utilized as the base of the post-Paca period trough and basin feature. Directly below the same area, the Orrs unearthed a level of fieldstones directly below the bricks, possibly used to serve as the building's base. A level of mud was identified to the north of the fieldstones. Excavation of this strata revealed a second catchment basin constructed of brick and foundation stones located at an elevation of 3.17 feet. During the process of excavating the basin, the Orrs unearthed a bottle base fragment made of dark glass with a conical hollow base and globular body (Orr and Orr 1975). Examination of the artifact dated it to the 18th century. According to their report, the Orrs determined that this lower basin was constructed and utilized during the William Paca period. Further investigation shows water from the natural spring ran into the basin from the north of the feature. Once collected, water then flowed out of the springhouse through the drain at the south east of the structure.

Summerhouse Excavation

Following their excavation of the springhouse area, Kenneth and Ronald Orr began testing possible locations of the summerhouse. A grid, 15 square feet, was set up adjacent to the northern garden wall. The previous excavation by Bruce Powell uncovered a feature believed by Kenneth and Ronald Orr to be associated with the historic pavilion site. The purpose of this phase of excavation was to locate the feature found by Bruce Powell and then to test the remaining area in order to reveal the presence or absence of other features associated with the summerhouse.





over the course of the project. The individual red rectangular objects represent the bricks recorded by

Kenneth and Ronald Orr in 1975. (Redrawn from original by J. Shellenhamer 2004)

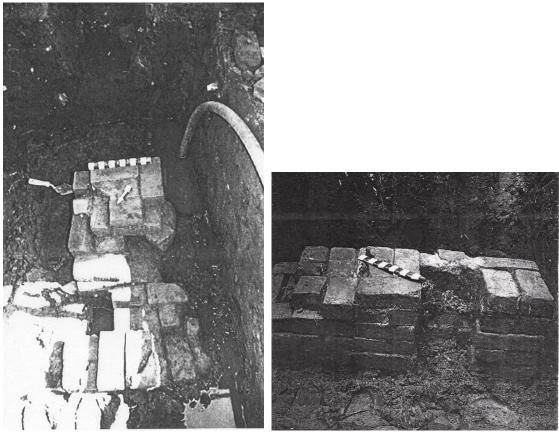


Figure 4.5 Left: Photograph of Kenneth and Ronald Orr's excavation of Bruce Powell's Structure 2. The photograph was taken from the west side of the structure, facing east. **Right:** A photograph of the original excavation of Structure 2 by Bruce Powell. The photograph was taken from the structure's north side facing south (Orr and Orr 1975).

The Orrs first goal was to locate the feature Powell called Structure 2. Once the Orrs rediscovered Structure 2 (Figure 4.4), they noticed the feature had been reduced from 5-6 brick courses down to three, with some bricks dislodged in the structure and others scattered around the base of the trench (Figure 4.5). The base of structure 2 was found to be at an elevation of 6.31 feet above sea level. Examination of structure 2 revealed additional information not identified during Bruce Powell's excavation in 1966. According to Powell's report, structure 2 was a rectangular feature composed of mortared brick. Additionally, on the northern area of the structure, an 8-1/2 inch semicircular hole was found to run through the feature originating at the top of the structure and running

down through the base. During the examination of the feature, the Orrs found an unexcavated posthole at the base of the semicircular hole. The hole was rectangular in shape roughly two to three inches in length. Inside the post, several pieces of wood, 3-5 inches in length, were recovered. Kenneth and Ronald Orr suggest that the pole would have served as a supporting timber for the summerhouse.

Located in close vicinity to structure 2, Kenneth and Ronald Orr unearthed a section of cut brick. According to the contractor in charge of the springhouse restoration, the section of brick, typically called an interior corner brick, would be used the construction of flooring around the interior walls of a structure (Orr and Orr 1975). Bricks would be cut into smaller sizes so the floor of a structure would meet flush with the building's walls. This led the Orrs to further conclude that structure 2 is located within the immediate vicinity if not part of the historic summerhouse.

Once the examination of structure 2 was complete, Kenneth and Ronald Orr laid in eleven additional trenches to the east, south, and west of the feature (Figure 4.4). The test trenches measured 1 ¹/₂ foot wide and were dug down to subsoil. Their intent was to uncover additional features that related to structure 2.

The excavation of two trenches located immediately to the west and east of structure 2 produced some additional evidence. Within test trench 2, brick and mortar rubble was found (Figure 4.6). The rubble patch, Feature B, originated roughly 1 ½- 2 feet to the east of structure 2, Feature A (Figure 4.4). From this location the rubble feature extended an additional 12 feet toward the eastern garden wall. The base of the rubble patch was located at the same elevation as the base of structure 2 (Feature A).

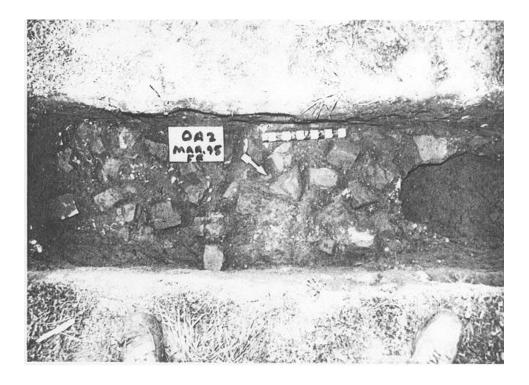


Figure 4.6 Photograph of Feature B, located adjacent to Powell's brick Structure 2. The photograph was taken just north of Feature B, facing south towards the William Paca House (Orr and Orr 1975).

The brick and mortar was identified by the Orrs as being of the same type as that found in structure 2, suggesting to the excavators that both features may be evidence of a wall of a structure (Orr and Orr 1975).

To the west of structure 2, excavators found a wooden stake within test trench 7 (Figure 4.4). The stake, measuring 1 ½ by 4 inches, was driven into the subsoil with its broken top at 11 inches below the garden surface (Orr and Orr 1975). The stake was found lined up directly with the north edge of Structure 2 and Feature B. Further examination of the stakes showed that the base was at the same elevation as the base of structure 2. While the Orrs were not able to provide a definitive interpretation of the stake, they did suggest that it might have been part of a builder's platform for the construction of the garden wall or summerhouse (Orr and Orr 1975).

Following the excavation of the test trenches, three additional test units were laid in to the west of structure 2 at roughly 10 foot intervals parallel to the north garden wall. The purpose of the three trenches was to test whether more substantial evidence for the summerhouse could be found elsewhere. No additional units were placed to the south of structure 2. Because of to the regrading of the surface prior to excavation, any possible historic features would have been disturbed or completely erased (Orr and Orr 1975). Excavation of the three test units failed to expose any additional evidence of the summerhouse or other features related to the William Paca period. As a result, Kenneth and Ronald Orr concluded that according to the archaeological evidence, the most likely location of the summerhouse would have been in the vicinity of Features A and B.

Stratigraphic Analysis of the Site

For the most part, the stratigraphy the Orr excavations encountered in the lower garden is similar to those identified by the previous two excavations. According to the report compiled by the Orr's, the subsoil of the lower garden consisted of a red-tan clay with ferrous intrusion (Orr and Orr 1975). This red-tan clay was found to be sterile with natural stone fragments extending downward into the soil for an unknown depth. Just above the subsoil, the excavations identified a level of black mud. The same black mud was also found to line the bottom of both the 1966 Powell trenches and several of the trenches excavated by Glenn Little in 1967-68 (Orr and Orr 1975).

In the 1966 Powell report of the garden archaeology, the black mud is described as being found in relation to a thin layer of brown sand that contains a concentration of brick, mortar and plaster (Powell 1966). Furthermore, Powell identifies this layer as

being the level of the original garden surface. According to the Orr excavations the black mud is not a subsoil as described by Powell, rather is a specific layer lying over the subsoil in the areas occupied by the stream. Three of the five trenches excavated by Powell were cut into the area later identified as the pond and canal beds. The black mud Powell encountered in these areas was the result of saturation of the soil by the natural spring water.

According to Stanley South (1967), the archaeologist charged with the excavation of the William Paca House, at the time of the house's construction in 1765, the ground consisted of an orange clay with no evidence of top soil being found in situ anywhere on the site. From this, South concluded that construction of the house began at the subsoil level with fill added against the house after construction was completed in order to landscape the surrounding area.

South's description led the Orr's to believe a similar method of construction was used in the creation of the garden outbuildings, namely the summerhouse and springhouse. Using South's interpretation of the building of the Paca's house, the Orrs suggest the brick and mortar rubble area found in test trench 2 possibly is the remains of a wall, built during the Paca period. Furthermore, they suggest the remains of structure 2 could then be interpreted as part of the same building, dug into the subsoil in order to support special stress, possibly from a wall.

The evidence recovered by the excavations conducted by the Orr's provided important information for the design and construction of the outbuildings located in the lower William Paca garden. Comparative analysis of the archaeological findings and

historical information allowed the Orr's to develop a feasible interpretation of the interior design of the springhouse as well as a possible location of the summerhouse.

The Orrs concluded that the area of the presumed summerhouse site had been thoroughly tested by the three phases of excavation conducted by Bruce Powell, Glenn Little, and themselves. According to their report, the archaeological and archival data show that features A, B, and C are likely to have been connected to a structure that was erected in the mid 18th century and that continued to exist into the 19th century (Orr and Orr 1975). The Orr's further suggest features A and B are the remains of the east wall of the summerhouse and the corner of feature A (Structure 2) is the north west corner of the structure. The lack of evidence of the other walls of the structure can be attributed to the regrading of the lower garden in order to facilitate reconstruction of the historic William Paca Garden (Orr and Orr 1975).

The Orrs conclude their report by suggesting the reconstructed summerhouse be placed in a location relative to features A, B, and C and that the materials used in the reconstruction be based on the archaeological evidence discovered during the excavation. In addition to determining the location of the summerhouse site, the Orr excavation was also able to create a stratigraphic history of the interior of the springhouse in order to facilitate future reconstruction. They determined the existence of five distinct levels of use for the springhouse area ranging from the prehistoric period to the final use of the spring in the 19th century.

Their research suggests the spring that fed the springhouse was undoubtedly used during the prehistoric period (Orr and Orr 1975). According to their analysis of the lower, original catchment basin, the excavation determined the subsoil to exist in an

irregular pattern, suggesting that the area around the spring had been scooped out to facilitate the collection of water. The subsoil at this level consists of a mix of red-yellow and red-tan sand, .5-foot thick, indicating water deposited sand (Orr and Orr 1975). In addition, the strata of water-deposited sand lacked any trace of historic artifacts. Their interpretation is not conclusive and they suggest that further excavation of the lower strata could reveal Native American artifacts to substantiate their hypothesis.

The next stratum above the subsoil was found within the original catchment basin. It consisted of a tan and gray-green sand with small brick speck inclusions. This evidence suggested that the spring was probably open, with sand and brick being deposited in the area. According to the Orrs, the presence of brick particles in the soil indicate the presence of colonial construction in the vicinity.

The third phase of occupation of the area dates to the William Paca period. The stratum includes the brick floor (Floor 1), lower catchment basin, southeast drain, and brick step, located along the southern interior of the catchment basin. The bricks and mortar found in this level resemble the same style of brick and mortar used in construction of the main house. The presence of the mid 18th century bottle base from the basin further supports the dates to the William Paca period. The brick step located in the basin was probably used to support jars and bottles for cooling. The southeast drain, functioned at the same time as Floor 1, carrying water to the pond (Orr and Orr 1975).

Sometime after 1825, the floor of the springhouse was raised about a foot, to the level of Floor 2. The soil used in the fill consisted mainly of the tan-red subsoil with a presence of coal inclusions. The coal found in the level provided the Orrs with the 1825 date, because coal was first introduced into the area around that time (Orr and Orr 1975).

The trough and catchment basin discovered during the Little excavations are contemporary with floor 2, possibly as an improvement on the earlier catchment basin found in the stratum below. The Orrs suggest the south feeder drain was also constructed at this time to provide additional water from the second spring located along the western garden wall.

The final phase of the springhouse's use is believed to date to the later half of the 19th century. However, to what extent the springhouse still operated is unknown. Prior to the construction of Carvel Hall in 1901, a final layer of fill was placed on top of the springhouse to bring the garden area level with King George Street. It was this period of filling that destroyed all surface evidence of the springhouse.

Chapter V:

Reconstruction of the William Paca Garden

Introduction

The restoration of the William Paca Garden was conducted in two major phases. The first phase took place from 1966 to 1967. James Wollon Jr. of Locke & Jackson was hired to begin reconstruction of the historic garden walls as well as some of the landscaping of the upper garden area.

The second and final phase of restoration took place from 1967 to 1973 when Laurance Brigham, a specialist in the restoration of period gardens, was hired to take over from Wollon. Brigham was charged with restoration and design of the upper and lower garden areas. Orin Bullock, Chief Architect for Colonial Williamsburg, was also hired by Historic Annapolis to oversee the construction and design of the various garden out buildings, including the springhouse and summerhouse. Both Brigham's and Bullock's designs for the William Paca Garden were in some degree based on general 18th century landscape and architectural theory. The majority of their designs were based on the information obtained through the excavations of Glenn Little and Bruce Powell. Laurance Brigham explains his reasoning in a 1967 letter to St. Clair Wright:

"The Garden should be as nearly that as planned by the original owner, as this is to be a restoration as near as research can make it. However, where research fails the design would follow those 18th century gardens of England... For an honest restoration there should be exhaustive study of any available archives as well as digging of the area to endeavor to locate all out buildings, walks, brooks, pond, and original grades and possible locations of plant materials before an architect puts pencil on his drafting paper." (Brigham 1967).

The First Phase of Restoration

The degree to which James Wollon was involved in the overall design of the William Paca Garden is uncertain. Records from Historic Annapolis Foundation show that Wollon was indeed involved during the restoration of the garden walls. The reports also state that Wollon was charged with the restoration of the garden landscape, however the documents fail to show what actual involvement he truly had. It could be assumed that Wollon's short tenure at Historic Annapolis was spent solely on the restoration of the historic garden walls with the restoration and design of the garden landscape falling to Laurance Brigham a year later.

James Wollon's basic design of the garden walls was founded on historic photographs and paintings and the substantial remains of the original wall standing above ground or discovered archaeologically (Wright 1976). The 1772 Charles Willson Peale portrait of William Paca clearly shows a brick wall along the north elevation of the garden, directly behind the summerhouse. A second painting by Frank Mayer (1884) provided Wollon with additional evidence of the brick wall. The picture shows the southern-most portion of the garden with the house standing in the background. The northwest portion of the garden wall is clearly seen. In addition to the historical paintings, an 1890 photograph taken from the Maryland State House dome provided Wollon with further evidence of the historic garden wall. In the photograph, the north wall and portions of the west wall are clearly identified.

Several portions of the wall were found above ground as well as archaeologically. A standing section of the wall, which included a fall, was found on the northwest side of the garden, near the Paca House. Another standing section of the wall (Figure 5.1) was

found in the backyards of the houses between the Brice and Paca mansions (Wright 1976). The archaeological excavations by Powell (1966) and Little (1967) also located remains of the walls along the east, west, and north sides of the garden.



Figure 5.1 Photograph of the remaining portion of the Paca Garden wall located between the Paca and Brice houses.

Using the historical and archaeological information, James Wollon began restoration of the garden walls. The reconstructed wall was built upon the original foundations, when these were available. However, where remains of the walls were missing, the alignment of the reconstructed walls was based on the archaeological findings. Unfortunately the modern property lines in 1967 did not match those during Paca's time. As a result, several foundations along the west elevation of the garden were found to exist outside the Paca Garden property line. As a consequence, the western wall was required to be established 3 ¹/₂ feet east of the historic foundations.

The thickness of the reconstructed walls was based on the dimensions of the two standing portions as well as the remains found archaeologically. Wollon was unable to determine the height based on the remains of the historic wall. To resolve this issue, the restored walls were made to be consistent with other period walls found in Annapolis.



Figure 5.2 A close up of the photograph taken from the State House. The picture shows slots clearly existed in the walls. In addition a gate is visible near the center of the wall. Glenn Little found evidence of the gate during his excavation in 1967-68 (South 1967).

Wollon felt it necessary to include slots in the north and southwestern portions of the wall. In the historic photographs (Figure 5.2) as well as the Peale and Mayer paintings, slots are clearly visible. Slots in the other portions of the wall could not be verified archaeologically or through historical documents. As a result, Wollon decided to include slots where indicated, but nowhere else (Wright 1976).

The Second Phase of Restoration

Between 1967 and 1968, Laurance Brigham began the first design for the restored William Paca Garden. At that time, the findings from the Powell excavations were available to Brigham. Contract Archaeology supplied Brigham with charts and oral consultations based on Glenn Little's first phase of excavations in 1967 (Wright 1973). With all available archaeological information at his disposal, Brigham was aware of the locations of the bathhouse, artificial brick stream, and pond.

The first garden design was completed in February 1968. Brigham proposed: "...the garden to be quite formal in character and design...the accustomed center walk or 'Grand Allee' that led to the focal point of the walk, which was usually at the rear of the garden, will be the general theme of the plan." (Wright 1976).

The initial plan called for the central walk to be constructed on axis with the house. The main garden area was to extend the length of the property, while the width only extended from the end of the east wing to the end of the west wing. The remaining area along the eastern side of the garden proposed to be segmented into several smaller informal gardens. Shortly after the completion of the first design, Brigham was informed that it was archaeologically determined, through topographical analysis, the central walkway was on axis with the kitchen or east hyphen and not with the center of the house. Brigham designed a new plan according to the archaeological findings. The second plan, completed in 1969, carried the names of both Laurance Brigham and Contract Archaeology, showing that the plan was a joint decision between architect and archaeologist (Wright 1973). The plan called for the construction of a terraced garden in the south portion of the property to be partially conjectural. As for the north portion of

the garden, the abundance of historical and archaeological information available suggested Paca once had a wilderness style garden in the area closest to King George Street.

The foundation of Carvel Hall Hotel occupied roughly 7/8 of the top two terraces. Because of the hotel's intrusion into the historic soil levels, archaeological evidence regarding the area's original design was lacking. Historical research also did not provide many clues as to how Paca organized the upper garden. The 1884 Frank Mayer sketch and a photograph taken prior to the construction of Carvel Hall (Figure 5.3) show the southern most portion of the garden. Both provide evidence that a terrace existed directly behind the house. The discovery of several sections of sloping walls also indicated the locations of the two additional terraces. In addition, the Mayer Sketch depicts a central pathway originating behind the kitchen and running down the middle of the garden property, a central path that was verified by the archaeological investigation.

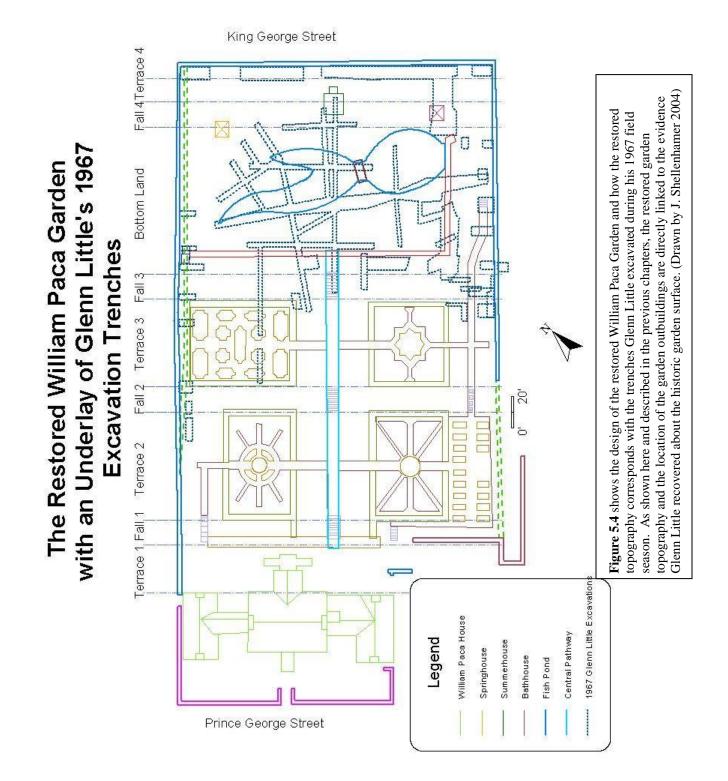
As one can observe today, Laurance Brigham took the historical and archaeological information regarding the upper garden to heart. The central path was aligned with the rear of the kitchen and extended down the three terraces splitting the garden into two equal halves. Aside from this, the remaining surface aspects of the upper garden are conjectural.

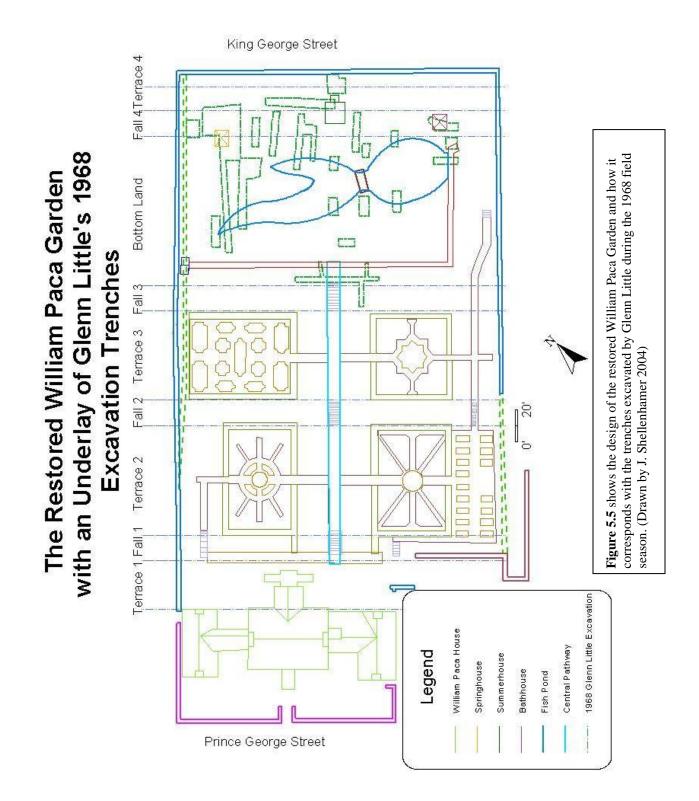


Figure 5.3 A photograph of the Paca garden's first terrace and fall. The photograph was taken prior to construction of the Carvel Hall Hotel.

The parterres designed by Laurance Brigham for the terraces occupying the upper garden are conjectural (Wright 1973). Brigham's decision to include parterres was based on their being typical for the period. Both the archaeology conducted in the garden as well as the historical documentation fail to suggest that Paca once had parterres on either side of the central walk. In addition both the 1884 Mayer drawing and the 19th century photograph show the terrace to be bare.

Although archaeology played a role in the restoration of portions of the upper garden, it was most significant during restoration of the area below the third fall. The reconstruction of the lower garden was based almost entirely on the information gathered during the Bruce Powell and Glenn Little excavations (Figures 5.4 and 5.5). Aside from the archaeological evidence, the only other document that provides any indication of the





original design of Paca's lower garden is the Peale portrait. Looking at the Charles Wilson Peale portrait of William Paca, one can see a two-story summerhouse and a onestory brick structure in the background. Closer examination of the painting also reveals a Chippendale bridge spanning a pond. While they are clearly visible in the painting, Laurance Brigham and the Garden Committee were not entirely certain of their actual location in the garden area aside from their being adjacent to the north garden wall.

The archaeological work conducted in the lower third of the garden found much of the original Paca landscape to be intact. Glenn Little's excavation of the garden in 1967 provided Laurance Brigham and Orin Bullock with the exact location of many of the original garden features: the springhouse, the summerhouse, the bathhouse, the pond, as well as numerous artificial drains and streams.

In order to restore the original surface grade of the lower garden, Laurance Brigham used the wall foundations discovered by Powell and Little as a guide. At the base of the third fall, the east and west garden walls appeared to level out and extend north for about 80 feet at which point the grade of the walls sloped up. Using the archaeological information, Brigham designed the lower garden to include a fourth fall and terrace adjacent to the north wall. The ground between the third and fourth fall was brought down to the 18th century surface level and a fish-shaped pond was constructed according to the contours found during Glenn Little's excavations in 1967-68.

At the base of the third fall, the artificial brick stream was restored based on the information provided by Contract Archaeology. Brigham ran into some difficulties when trying to make the brick stream functional. At some point in the 19th century, the water from a spring located behind the west wall arch was diverted through underground

culverts into the Annapolis drain system. In order to restore the flow of water back through the garden, pipes were attached from the culverts through the restored arch.

Following the restoration of the garden surfaces, Orin Bullock began reconstruction of the three garden outbuildings. During Glenn Little's excavations, the foundations of both the springhouse and bathhouse were unearthed. In 1975, Kenneth and Ronald Orr's archaeological investigation revealed the possible location of the garden's summerhouse as well as provided additional evidence regarding the interior design of the springhouse.

Bullock's design of the restored springhouse and bathhouse is based on the archaeological remains of the original structures as well as the portrait by Charles Wilson Peale. The dimensions of both restored structures measure 9 feet square and were constructed using materials similar to those found during the excavations. In order to preserve the original foundations of both buildings, concrete bases were built around the corners of the historic walls. The new structures were then built upon these bases, leaving the archaeological remains untouched and preserved (Eareckson 1977). Bullock based the interior design of the restored springhouse on the information gathered during the Orr excavations. Bullocks' decision to make the structures one story in height with a pyramidal style roof was based on the evidence of a similar structure in the Charles Wilson Peale painting.

The final outbuilding to be restored at the garden was the pavilion, or summerhouse. Not until the conclusion of the Orr excavations in 1975 was Bullock or the Garden Committee convinced of the structure's original location. During both the Powell and Little excavations, a feature was unearthed directly in line with the central

walkway on top of the fourth terrace. In 1975 the same feature was unearthed once again and examined. Bullock determined that it was a remnant of the original summerhouse.

Little of the original foundation of the structure remained through to the 20th century. As a result, Bullock based his design of the summerhouse on the Peale portrait (Figure 5.6). The building was restored as a two-story structure with an octagonal roof. The restored structure also included a statue of the god Mercury as to correspond with the Peale painting. The placement of Mercury was further supported by 18th century literature. Batty Langley suggests in his book, *New Principles in Gardening* (1728):

"For private cabinets in a Wilderness or Grove: Harpocrates God, and Agerona Goddess of Silence, Mercury God of Eloquence."

In his book, Langley provides a variety of suggestions on how gentlemen of the time should decorate their garden. Langley offers suggestions for thirteen types of gardens with each style given specific ornamentation. Mercury is the only suggestion for wilderness-style gardens.

The restored William Paca Garden was made complete with the addition of garden decorations and vegetation. A Chippendale style bridge was constructed across the fish-shaped pond. It was placed in accordance with the cobble foundations found during Little's archaeological investigations of the area. The architectural style of the bridge was based directly on the evidence from the Peale portrait and from the stair rails in the Paca House.

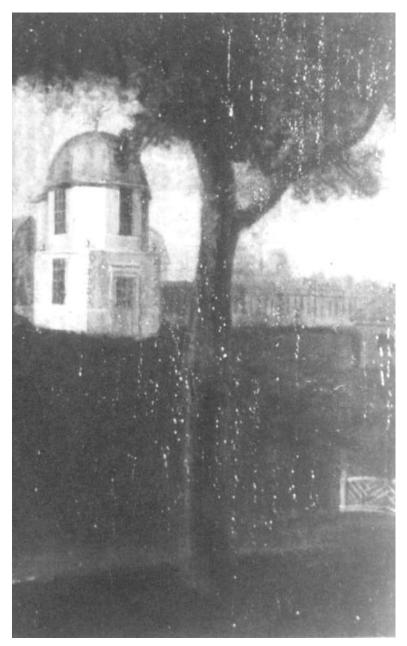


Figure 5.6 A close up of the Charles Willson Peale portrait of William Paca. Along the right edge of the picture the small brick structure is clearly visible. Also looking directly to the right of the summerhouse, part of the north garden wall is visible. Looking closely at the wall, small slots can be seen (South 1967).

The placement and types of plants used in the garden were purely conjectural on the part of Laurance Brigham. There was no archaeological evidence that could determine how Paca planted his garden. As a result, Brigham turned to designs typical to the 18th century. Langley (1728) states: "That walks of a wilderness be so placed as to respect the best views of the Country."

and

"That such walks whos views cannot be extended, terminate in Woods, Forefts, misshapen Rocks, strange Precipices, Mountains, old Ruins, grand Buildings, etc..."

The problem Brigham faced was that in Paca's day the view would have overlooked the Severn River. However, today the view is of the Naval Academy. To correct this, Brigham decided to plant out the view of the academy with trees and shrubs. In doing so he used Langley's gardening principle of making the summerhouse and pond the terminating view. Furthermore, this made the summerhouse the focal point of the garden much as it was during Paca's day. While Brigham felt his design would not have the same depth as Paca's original view, he believed the feeling of distance would be maintained in the way the trees were planted at the rear of the garden (Wright 1976).

Conclusions

The restoration of the William Paca Garden was a combined effort between restoration architects and archaeology. Using information archaeologists discovered about the historic garden, preservationists Laurance Brigham and Orin Bullock were able to reconstruct a lost landscape. For Brigham, the restored views he created were to him his most important contribution. A scholar of period gardening, Brigham was very much aware of the importance of views in 18th century gardens. The various gardening dictionaries of the period like Langley, Miller, and Leblond suggest gardens be places where the views of the participants are controlled by the landscape. This was accomplished with the creation of focal points. In the William Paca Garden the

summerhouse in Paca's time and in the present serve this purpose. As Brigham described to St. Clair Wright in 1976:

"You ask me how the pond and terraces will affect the design, I can only say that the Grand Allee will lead directly to the focal points which will be the lake, and of course, the Pavilion, and these two items will be the most important features of the whole design, not to mention that these features in one garden of the Colonial period were not only different, but completely unique."

Chapter VI:

Anne Yentsch's 1982 Excavation of the William Paca Garden Introduction

In January 1982, preparations began for additional renovations of the springhouse's interior. Russell Wright projected the renovations to include a complete restoration of the interior to its 18th century appearance. The project included reopening the north drain at the east interior wall, repairs and renovations of the basin area, and repairs to the 18th century floor (Yentsch 1982). Wright presumed that during Paca's time a shallow box would have existed in the basin serving as a ledge for the storage of dairy vessels.

In order to determine if any materials from the 18th century still remained, Yentsch proposed the excavation focus on the collecting basin area. From there she expected to cut through the surface layers to be sure no earlier strata remained beneath. Prior to the March 1982 excavation, the springhouse had flooded. Russell Wright and workmen from Brown Engineering attempted to resolve the water problem. By the time excavations began the interior of the springhouse consisted of a level of mud covering the 18th century floor of the structure.

Excavation

The 1982 excavation of the Springhouse interior began with the removal of a mud layer from the floor's surface. Yentsch also removed several large fieldstones that were no longer in place from the interior. Soon after excavation began, Yentsch came to realize the process was ineffective. A constant stream of water continued to pour into the

springhouse from the north wall. As Yentsch's team attempted to remove mud from the basin area, the water quickly forced new deposits into the area making further excavation impossible. The mud contained a small number of 19th century artifacts: a painted tin handle, a red transfer-print rim fragment, a piece of thick white English porcelain, and pieces of thick and thin glass (Yentsch 1982). Organic fragments were also present in the mud deposit: a bone, a piece of wood, as well as numerous oyster shells. While the basin dates to the 18th century, the presence of 19th century artifacts within the feature is not surprising (Yentsch 1982). Prior to the construction of the 19th century collecting basin (discovered during the 1968 Little excavation), it would be typical for the owner to fill in the older basin. The artifacts discovered would have been included in the fill.

Using a metal rod, Yentsch continued to probe below the mud level to identify the full extent of the springhouse's 18th century floor. It quickly became apparent that the basin area's brick floor was more extensive than Little's map suggested (Yentsch 1982). Yentsch's team discovered the solid brick floor was also located in the northwest corner of the springhouse near the west drain. This discovery is interesting due to the fact that Little's excavation of the structure in 1968 found that the floor in that area was not made of brick.

Following Yentsch's probing of the northwest corner, she turned back to her examination of the basin area. Probing of the basin provided additional information not shown in the Glenn Little drawings of the '68 springhouse excavation. First, Little found that the 18th century collecting basin extended away from the north interior wall southward. In addition Little identified the basin as remaining closer to the center of the springhouse with the basin's west side located away from the west interior wall of the

springhouse. Yentsch found that Little's dimensions for the collecting basin were inaccurate. She discovered that the west side of the basin extended all the way to the west interior wall. Also the floor of the collecting basin was not flat, as previously suspected. It was found that the basin's floor sloped upward toward the north drain located in the east side of the basin. Further probing also revealed that the basin floor closest to the springhouse's north interior wall was much deeper that the rest of the basin floor, allowing water to rapidly drain into the basin from the natural spring (Yentsch 1982). As a result of these discoveries, Yentsch concluded that while the Little drawings are helpful, for the most part they are incomplete and inaccurate.

Conclusions

The goal of the excavation conducted by Yentsch in 1982 was to determine whether any additional features existed within the springhouse collecting basin excavated by Little (1967-68) and the Orr's (1975). Because of to rising water levels and high mud content within the springhouse, Yentsch was unable to conduct a thorough excavation. Although Yentsch was unable to locate any new features; probing the basin area revealed some information regarding the dimensions of the structure.

Following the conclusion of her excavation, Yentsch made several recommendations to Historic Annapolis suggesting detailed profiles of the springhouse be created prior to any restoration efforts. Once 18th the century surface was thoroughly explored and detailed profiles of the area created, Yentsch believed an accurate restoration of the springhouse interior could be accomplished.

Chapter VII:

Laura Galke's 1990 Excavation of the William Paca Garden

Introduction

During the summer of 1990, Historic Annapolis Foundation conducted repairs of the artificial brick stream located directly below the third fall of the William Paca Garden. These repairs provided the opportunity for archaeological investigations to be conducted in the surrounding area. During July of that year, Archaeology in Annapolis was allowed to conduct investigations to enhance the previous archaeological work that had taken place at the garden from 1966-1975 (Galke 1990). From July 9-14 excavations were conducted under the supervision of Laura Galke, Curator of Archaeology at Historic Annapolis Foundation. The project crew consisted of members of the University of Maryland's summer field school.

The first goal of the excavation was to determine whether any intact 18th century surfaces had survived since earlier excavations. Bruce Powell and Glenn Little found evidence of both the 18th century surface and garden structures during the previous excavations in the area. Unlike the previous excavations, Galke did not expect to discover any evidence of additional 18th century structures; however, she anticipated that evidence of other garden activity might still be present such as planting holes and shovel divots. Three excavation units were placed within the lower terrace of the garden to explore this possibility (Galke 1990).

The second goal of the project was to form a comprehensive interpretation of the archaeology of the Paca Garden in the area around the third fall and terrace. In order to

accomplish this goal, Galke intended to compare Glenn Little's 1968 profile maps with her own findings. Because of the lack of field notes about Little's year-long excavation of the garden, Galke felt such a comparison was extremely important to the project (Galke 1990). In order to accomplish this goal, Galke placed three excavation units in proximity to where Little had placed three of his trenches. Unit one was placed close to Little's trench 54; unit two near Little trench 29; and unit three near Little trench 34. If Galke were to discover at least one of the former archaeological trenches, an accurate physical relationship would be created between the current and previous excavations. If one of Little's original trenches was not discovered, Galke could at least compare her excavated stratigraphy with the stratigraphy documented by Glenn Little in 1968.

Excavation

Because of the location of the repair work conducted on the artificial brick stream, Galke's excavation was limited to a small portion of the William Paca Garden along the west garden wall on and around the third fall. Three units were placed in the area (Figure 7.1). Unit 1 was placed on the third fall at its base (Figure 7.2). Unit 2 and Unit 3 were placed below the third fall located in close proximity to the artificial stream. Units 1 and 2 were designed to give information concerning intact layers and were placed to avoid the earlier Glenn Little excavations. However they were placed close enough to previous trenches so that comparisons could be made. Unit 3 was placed to intersect with one of the trenches (trench 34) excavated by Glenn Little in 1967-68 (Galke 1990). Each unit measured 2.5ft. x 5 ft. and was excavated until subsoil was reached.

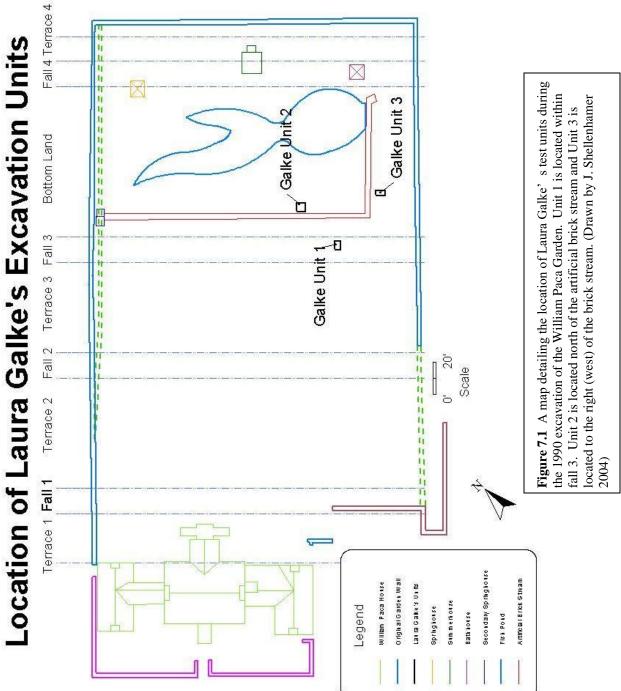




Figure 7.2 A photograph of University of Maryland field school students excavating test unit 1, located within the third garden fall. Beyond the students, portions of the restored east garden wall are visible. Across the artificial brick stream, students are excavating test unit 2 (Galke 1990).

During the course of the excavation, Galke identified four major stratigraphic levels at the William Paca Garden. The top-most strata found in the units dated to the twentieth century. Galke found substantial evidence for the 1971 topsoil that was brought in to restore the garden to its current form (Galke 1990). The 20th century layer of fill varied in depth from .6 to 1.2 feet and contained a mixture of artifacts dating from the 18th to 20th centuries.

The next stratum identified during the excavation was found to represent an earlier fill layer dating to the late 19th century. The same stratum is also described in the Bruce Powell report from 1966 (Galke 1990). Galke found numerous planting features intruding into this level suggesting that the garden was replanted in the late 19th century following raising of the garden surface (Figure 7.3). During the excavation of the



Figure 7.3 A plan view photograph of the 19th century surface level that was exposed during the excavation of test Unit 2. The photograph shows evidence of a planting feature (southwest corner) as well as granite and mortar building materials along the eastern side of the unit (Galke 1990).

planting features, a variety of building materials were found such as brick, mortar, and granite. Additional artifacts such as coal and shell were also discovered during the excavation of the strata.

Galke identified a third stratigraphic level dating to the late 18th or early 19th century. Evidence for this level was only found during the excavation of Unit 2 (Figure 7.4). Within the stratum only a handful of artifacts was discovered which were used in dating the soil level. Tin-glazed earthenware and blue-on-white porcelain were among the findings in the stratum. Unlike the previous level, no features were found in the stratum to indicate a living surface of any kind (Galke 1990).



Figure 7.4 A photograph of field school students excavating test Unit 2. Beyond the excavation, to the north, the restored summerhouse and Chippendale bridge are visible (Galke 1990).

Sterile subsoil was found below the late 18th early 19th century level. The color of the subsoil varied among the three excavation units. Within Unit 1 the subsoil consisted of a very dark grayish brown sandy clay mottled with dark reddish brown sandy clay containing iron laden sandstone (Galke 1990). In Unit 2, Galke found the subsoil to range from dark olive gray sandy clay to pure clay. Finally in Unit 3, the subsoil varied from a soil similar to Unit 1 to dark reddish brown sandy clay mixed with olive brown sandy clay, similar to that found in Unit 2.

Correlation with Earlier Excavations

In several cases, Galke was able to link strata excavated in 1990 with those excavated years earlier, specifically the 1967-68 excavations by Glenn Little.

Comparison of Galke's Unit 1 and Little's Trench 54 demonstrated two layers that may correspond between the two excavations. The third layer in Trench 54 was found to be similar to Galke's Layer D, a dark olive clay mottled with strong brown sandy clay, 5Y 3/2 and 7.5 YR 4/6 respectively (Galke 1990). Directly beneath this layer, Little describes the next stratum as consisting of yellow-brown sandy clay. A similar stratigraphic level was found during Galke's excavation of Level E in Unit 1. Aside from these two correlations, a distinct difference was found in comparing the levels closest to the surface. Galke suggests these differences were the result of the disturbance of the soils during the garden restoration in 1971.

Unit 2, closest to Glenn Little's Trench 29, contained a late 19th century fill layer (Galke 1990). In Unit 2, this 19th century level was found with Layer D, 10YR 3/3 dark brown clay containing fragments of brick, coal, and mortar. Galke's examination of Glenn Little's profile of Trench 29 revealed the same level to be the uppermost layer in his trench. Little described the stratum as a yellow, brown and green with brick bats, mortar, coal ash, and black organic matter. Using the information available, Galke concluded the similarity of the soil inclusions suggests that the layers were the same. Further examining Little's profile of Trench 29, Galke found that the next two levels directly below the trench's surface level also corresponded with those found in Unit 2, Layers E and F.

The excavation of Unit 3 was unsuccessful in intersecting Glenn Little's Trench 34; however, Galke believed a comparison between the trench and unit would still be worth examination. According to Little's profile drawing, Trench 34 was excavated to a depth of 5 feet and contained three distinct strata. The topmost layer was a dark olive

green and contained scattered brick bats. The next level consisted of coal ash with a heavy concentration of artifacts, and the lowest stratum is described by Little as being dark green with scattered mortar and brick bats.

Laura Galke's excavation of Unit 3 was unable to locate any of the soil strata Little described in 1967-68. In fact, Unit 3 was found to be distinctly different from Trench 34 in soil type and content. During the excavation of the topmost levels in Unit 3, a 1970 penny was found indicating at least the topmost levels (.8 ft. from the surface) were deposited after the Little excavation. Galke concluded that due to the clear difference between her unit and the Glenn Little trench, no comparison was possible (Galke 1990). Furthermore, Galke suggests that the evidence shows this area of the garden was significantly disturbed by the 1970s restoration. This explanation would also account for the reason that Trench 34 was not encountered (Galke 1990).

Conclusions

Laura Galke's excavation of the William Paca Garden in 1990 provided valuable information regarding both the post-Paca use of the garden as well as the condition of the historical landscape following its restoration in the 1970s. Galke concluded that the excavation of the area to the south and east of the artificial brick stream contained no significant intact 18th or 19th century layers (Galke 1990). As a result of the garden restoration project, twentieth century fill now rests directly on top of sterile subsoil. To the west and north of the artificial canal, the investigation showed that the stratigraphy remains intact. Excavations in this area revealed 20th century fill episodes, the late 19th century fill episode, and finally, some evidence of an 18th century layer (Galke 1990).

The excavations also provided evidence of numerous planting features found within the 19th century level. This indicates that the garden was still active during the 19th century. Galke concludes her report by stating that the excavations she carried out in 1990 suggest that much of the historic garden surface has been to a great extent destroyed by fill activity in the 19th and 20th centuries. However, further excavation to the north and west of the artificial stream may provide additional information regarding the 18th century topography of the garden.

Chapter VIII:

Conclusions

Today the William Paca Garden has emerged from its past. Although once thought to be one of the grandest gardens in all of 18th century Annapolis, neglect and progress wiped the landscape from history. Historic Annapolis Foundation, recognizing the need to save the William Paca Garden, turned to the only resource capable of determining its original design, archaeology. Much of what is known of the William Paca Garden today is based on the excavations conducted from 1966 to 1975.

The archaeology conducted by Bruce Powell, Glenn Little, Kenneth and Ronald Orr, Anne Yentsch and Laura Galke revealed a landscape previously unknown to contemporary Annapolis. Prior to the work they did, little was known about Paca's garden landscape save a small number of historical documents alluding to its existence. The 1966 Powell excavations provided evidence of the brick wall surrounding the garden. Following Powell, Glenn Little was able to determine how the garden landscape was designed during Paca's time. From 1967 to 1968 Little found evidence of the original grade as well as a number of structures and features that Paca had constructed on the property such as the springhouse, pond, brick stream, and underground drainage.

Additional excavations conducted by the Orrs in 1975 revealed the existence of a summerhouse located in the rear of the garden as well as the interior design of the property's springhouse. Anne Yentsch and Laura Galke's excavations in 1983 and 1990, respectively, aided in corroborating the previous excavations as well as supplied additional archaeological information regarding Paca's historic garden.

Using the information provided by the archaeologists in conjunction with a variety of 18th century gardening dictionaries, historical portraits, photographs, and archival records, Laurance Brigham and Orin Bullock restored the garden to the landscape Paca originally built two centuries before. The carefully executed restoration of the William Paca Garden is of great historical and cultural importance to the City of Annapolis. Although several historic gardens remain in Annapolis to this day, the William Paca Garden is the only landscape resembling its original design. As a result, the garden serves as an important example of the city's past to all who view it.

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Appendix A

William Paca Garden

Glenn Little's 1967-68 Analysis of Botanical Remains

(Study Performed at William and Mary College, Virginia)

Location

NE Corner of garden Below third fall Below third fall. NE corner Below third fall NE corner of garden Bottom of third fall Below third fall Unknown Unknown Over springhouse drains Below third fall Unknown Unknown Unknown Unknown Unknown Unknown Unknown Unknown Bottom of third fall Bottom of third fall Out of Wooden Boxes Out of Wooden Boxes Out of Wooden Boxes Out of Wooden Boxes Below third fall, west side Below third fall, west side Below third fall Below third fall Below third fall Below third fall Inside springhouse Inside springhouse Inside springhouse Below third fall, west side Below third fall Below third fall Below third fall Below third fall

Sample Paca Garden Surface Lathing, garden surface Unknown Board (1/2" thick 1" wide) Garden surface Block of wood Unknown Sawn lathing Split lathing Unknown Unknown Wooden Block Cork Stopper Wooden Board **Oval Block** Section of Wood Unknown Unknown Unknown Unknown Unknown Unknown Unknown Unknown Unknown Board Board Unknown Unknown Lathing Point below board Springhouse box Springhouse box Springhouse box Unknown Unknown Unknown Unknown Unknown Unknown Unknown Unknown

Type Black Locust Northern white cedar Mid 19th century Black Cherry Beach Pitch pine Hemlock Grape Hemlock Atlantic white cedar Red oak Pitch pine Pitch pine Unknown Pitch pine White Oak Pitch pine Atlantic white cedar Atlantic white cedar Sweet Gum Willow Willow Pitch pine Chestnut Atlantic white cedar Pitch pine Pitch pine Eastern white pine Chestnut Pitch pine Spruce split White oak split Pitch pine Eastern red cedar Bark Eastern white pine Pitch pine Pitch pine Hickory White Oak Willow Pitch pine Pitch pine

18th century 1750-1800 1850-1875 1750-1795 1750-1795 1800-1850 1800-1825 1750-1760 Unknown 1775-1800 Unknown

Unknown

Unknown

Unknown

Unknown

Unknown

Unknown

Unknown

1765-1780+

1765-1780+

1740-1760

1740-1760

1740-1760

1740-1760

1850-1875

1850-1875

Post 1800

Post 1800

1985-1825

Post 1800

Post 1800

Post 1800

Post 1800

Post 1800

Post 1775

Post 1775

1775

1775

1840+

1840+

1840 +

Date

Below third fall Wooden Boxes Below third fall Unknown Below third fall Near Springhouse Near Springhouse Near Springhouse Below third fall Springhouse rubble NE exterior corner of springhouse Unknown Wooden Boxes Unknown Unknown Unknown Unknown Unknown Unknown Unknown Unknown Sawn lathing Fish scale shingle Sawn lathing Sawn lathing Sawn lathing Split lathing Split lathing Split lathing Split lathing Barrel stave Unknown Unknown Unknown Vine Split lathing Scrap (unknown) Split lathing Springhouse box Springhouse box Unknown Unknown Unknown Unknown Unknown Barrel stave Split lathing Split lathing Live oak

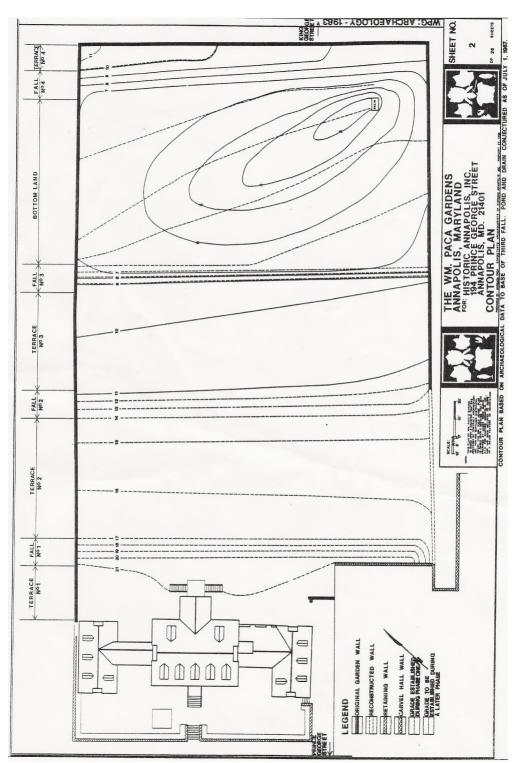
Eastern white pine 1775 Bald cypress 1740-1760 Pitch pine 1740-1760 Atlantic white cedar 1740-1760 Chestnut 1740-1760 White Oak 1740-1760 Hickory 1740-1760 Hickory 1740-1760 Pitch pine 1740-1760 Pitch pine 1740-1760 White Oak 1740-1760 1740-1760 Pitch pine Hemlock Pre-1840 Pre-1840 Bark Elderberry Pre-1840 Hemlock Pre-1840 Shrub Pre-1840 Pitch pine Pre-1840 Hickorv Pre-1840 Eastern red cedar Unknown Eastern red cedar 1780-1850 Sycamore 1780-1850 Bald cypress 1780-1850 Bald cypress 1780-1850 Bald cypress 1780-1850 Black Locust 1780-1850 Chestnut 1780-1850 Bald cypress 1780-1850 Eastern white pine 1780-1850 Black Locust 1780-1850 Balsam fir 1780-1850 Bald cypress 1780-1850 Atlantic white cedar 1780-1800 Atlantic white cedar 1780-1800 Atlantic white cedar 1780-1800 Black Locust 1760-1800 Black Locust 1760-1800 Pitch pine 1760-1800 1760-1800 Spruce Cork 1760-1800 Chestnut 1760-1800 Smilax 1760-1800 American Elm 1760-1800 Pitch pine 1760-1800 Pitch pine 1760-1800 Pitch pine Post 1845 Spruce Post 1845 Atlantic white cedar Post 1845 Atlantic white cedar Post 1845 Atlantic white cedar Post 1845 Eastern white pine Post 1845 Spruce Post 1845 Eastern white pine Post 1845 Atlantic white cedar Post 1845 Post 1845 Atlantic white cedar Live oak Same as springhouse

Springhouse box	Springhouse box	Spruce	Mid 19th century
Below springhouse box	Fish scale shingle	Bald cypress	1763-1845
Below springhouse box	Unknown	Unknown	1763-1845
Below springhouse box	Unknown	Atlantic white cedar	1763-1845
Below springhouse box	Unknown	Pitch pine	1763-1845
Below springhouse box	Unknown	Black Locust	1763-1845
Below springhouse box	Unknown	Pitch pine	1763-1845
Below springhouse box	Unknown	Pitch pine	1763-1845
Below springhouse box	Unknown	Pitch pine	1763-1845
	Unknown	Chestnut	1763-1845
Below springhouse box			
Below springhouse box	Unknown	Pitch pine	1763-1845
NW corner of fieldstones.	Unknown		1763-1800
Springhouse		Mahogany	D
Springhouse brick rubble	Unknown	Atlantic white cedar	Post 1845
Springhouse brick rubble	Unknown	Black Locust	Post 1845
Springhouse brick rubble	Unknown	Eastern red cedar	Post 1845
South of springhouse	Barrel stave	White oak	1740-1760
South of springhouse	Unknown	Grape	1740-1760
South of springhouse	Unknown	Eastern white pine	1740-1760
South of springhouse	Unknown	Grape	1740-1760
South of springhouse	Unknown	Sycamore	1740-1760
Large tree below third fall	Large tree below third fall	Willow	Present
Under board and brick drain in 4th		Sycamore	1763
fall		- ,	
Under board and brick drain in 4th	Unknown	Sycamore	1763
fall		0)000	
Under board and brick drain in 4th	Unknown	Grape	1763
fall		Chapo	
Under board and brick drain in 4th	Unknown	Hickory	1763
fall	Children	Thereby	1700
Under board and brick drain in 4th	Linknown	Grape	1763
fall	Shikhewh	Grape	1700
Under board and brick drain in 4th	Linknown	Hickory	1763
fall	Shikhewh	Thereby	1700
Under board and brick drain in 4th	Linknown	Grape	1763
fall	CHRIGWI	Olape	1705
Under board and brick drain in 4th	Linknown	Grape	1763
fall	UTKHOWH	Grape	1705
Under board and brick drain in 4th		Cropp	1763
	UTIKHUWH	Grape	1703
fall		Crono	1763
Under board and brick drain in 4th	UNKNOWN	Grape	1703
fall		L Balaam .	4700
Under board and brick drain in 4th	Unknown	Hickory	1763
fall		L Palaa	4700
Under board and brick drain in 4th	Unknown	Hickory	1763
fall			
South of springhouse	Barrel stave	Red oak	1740-1760
Springhouse	Unknown	Red oak	1800-1860
Springhouse	Unknown	Spruce	1800-1860
Springhouse	Unknown	Spruce	1800-1860
Springhouse	Unknown	Sugar Maple	1800-1860
Below springhouse box	Unknown	Atlantic white cedar	1740-1760
Below springhouse box	Unknown	Pitch pine	1740-1760
Below springhouse box	Unknown	Pitch pine	1740-1760
Below springhouse box	Unknown	Chestnut	1740-1760
Below springhouse box	Barrel stave	Chestnut	1740-1760

Below springhouse box	Barrel stave	Pitch pine	1740-1760
Below springhouse box	Barrel stave	White oak	1740-1760
Below springhouse box	Barrel stave	Pitch pine	1740-1760
Below springhouse box	Barrel stave	White oak	1740-1760

Appendix B:

Glenn Little's Trench and Garden Profiles created by Contract Archaeology, Inc.



As redrawn by Barbara Paca-Steele (1983)

